

Appendix B

Laboratory Data Package

ANALYTICAL REPORT

Job Number: 440-222284-1

Job Description: NERT M16

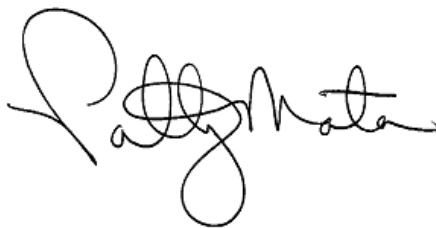
For:

Tetra Tech, Inc.

17885 Von Karman Ave, Ste 500

Irvine, CA 92614

Attention: Jeff Richeson



Approved for release.
Patty Mata
Senior Project Manager
10/29/2018 4:30 PM

Patty Mata, Senior Project Manager
17461 Derian Ave, Irvine, CA, 92614-5817
patty.mata@testamericainc.com
10/29/2018

Table of Contents

Cover Title Page	1
Data Summaries	6
Definitions	6
Case Narrative	7
Detection Summary	8
Client Sample Results	9
Default Detection Limits	19
Surrogate Summary	21
QC Sample Results	22
QC Association	37
Chronicle	40
Certification Summary	42
Method Summary	43
Sample Summary	44
Manual Integration Summary	45
Reagent Traceability	55
COAs	80
Organic Sample Data	235
GC/MS VOA	235
Method 8260B Low Level	235
Method 8260B Low Level QC Summary	236
Method 8260B Low Level Sample Data	250
Standards Data	285
Method 8260B Low Level ICAL Data	285
Method 8260B Low Level CCAL Data	416
Raw QC Data	442

Table of Contents

Method 8260B Low Level Tune Data	442
Method 8260B Low Level Blank Data	450
Method 8260B Low Level LCS/LCSD Data	457
Method 8260B Low Level MS/MSD Data	471
Method 8260B Low Level Run Logs	501
Method 8260B Low Level Prep Data	503
HPLC/IC	507
314.0_LL	507
314.0_LL QC Summary	508
314.0_LL Sample Data	527
Standards Data	540
314.0_LL ICAL Data	540
314.0_LL CCAL Data	595
Raw QC Data	652
314.0_LL Blank Data	652
314.0_LL LCS/LCSD Data	703
314.0_LL MS/MSD Data	735
314.0_LL Run Logs	756
314.0_LL Prep Data	765
Method 7199	768
Method 7199 QC Summary	769
Method 7199 Sample Data	775
Standards Data	788
Method 7199 ICAL Data	788
Method 7199 CCAL Data	806
Raw QC Data	822

Table of Contents

Method 7199 Blank Data	822
Method 7199 LCS/LCSD Data	837
Method 7199 MS/MSD Data	843
Method 7199 Run Logs	849
Method 7199 Prep Data	853
Method 300.1	855
Method 300.1 QC Summary	856
Method 300.1 Sample Data	877
Standards Data	911
Method 300.1 ICAL Data	911
Method 300.1 CCAL Data	965
Raw QC Data	1018
Method 300.1 Blank Data	1018
Method 300.1 LCS/LCSD Data	1092
Method 300.1 MS/MSD Data	1127
Method 300.1 Run Logs	1165
Method 300.1 Prep Data	1173
Inorganic Sample Data	1179
Metals Data	1179
Met Cover Page	1180
Met Sample Data	1181
Met QC Data	1185
Met ICV/CCV	1185
Met CRQL	1187
Met Blanks	1188
Met ICSA/ICSAB	1190

Table of Contents

Met MS/MSD/PDS	1192
Met LCS/LCSD	1195
Met Serial Dilution	1196
Met MDL	1197
Met IECF	1199
Met Linear Ranges	1203
Met Preparation Log	1204
Met Analysis Run Log	1205
Met Internal Standards	1206
Met Prep Data	1207
Met Raw Data	1209
Shipping and Receiving Documents	1559
Client Chain of Custody	1560
Sample Receipt Checklist	1561

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
440-222284-1

Comments

No additional comments

Receipt

The samples were received on 10/16/2018 7:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01D-20181015

Lab Sample ID: 440-222284-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.3		0.50	0.25	ug/L	1		8260B	Total/NA
Chlorate	9100		1000	100	ug/L	50		300.1B	Total/NA
Perchlorate	3600		100	50	ug/L	100		314.0 LL	Total/NA
Chromium, hexavalent	4.3		2.0	0.25	ug/L	1		7199	Total/NA
Chromium	0.028		0.0050	0.0025	mg/L	1		6010B	Total Recoverable

Client Sample ID: VER-01I-20181015

Lab Sample ID: 440-222284-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.29	J	0.50	0.25	ug/L	1		8260B	Total/NA
Chloroform	120		0.50	0.25	ug/L	1		8260B	Total/NA
Chlorite	210		100	20	ug/L	5		300.1B	Total/NA
Chlorate	740000		100000	10000	ug/L	5000		300.1B	Total/NA
Perchlorate	300000		10000	5000	ug/L	10000		314.0 LL	Total/NA
Chromium, hexavalent	2300		200	25	ug/L	100		7199	Total/NA
Chromium	2.6		0.0050	0.0025	mg/L	1		6010B	Total Recoverable

Client Sample ID: VER-20181015-TB

Lab Sample ID: 440-222284-3

No Detections.

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

No Detections.

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Irvine

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01D-20181015

Lab Sample ID: 440-222284-1

Date Collected: 10/15/18 13:15

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			10/22/18 13:11	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 13:11	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 13:11	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 13:11	1
Chloroform	2.3		0.50	0.25	ug/L			10/22/18 13:11	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 13:11	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 13:11	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 13:11	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 13:11	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 13:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 13:11	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 13:11	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 13:11	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 13:11	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Styrene	ND		0.50	0.25	ug/L			10/22/18 13:11	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01D-20181015

Lab Sample ID: 440-222284-1

Date Collected: 10/15/18 13:15

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 13:11	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 13:11	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 13:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 13:11	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 13:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 13:11	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		10/22/18 13:11	1
Dibromofluoromethane (Surr)	106		76 - 132		10/22/18 13:11	1
Toluene-d8 (Surr)	106		80 - 128		10/22/18 13:11	1

Method: 300.1B - Disinfection By-Products, (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	ND		1000	200	ug/L			10/17/18 17:15	50
Chlorate	9100		1000	100	ug/L			10/17/18 17:15	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	101		90 - 115		10/17/18 17:15	50
Dichloroacetic acid(Surr)	101		90 - 115		10/17/18 17:15	50

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	3600		100	50	ug/L			10/23/18 16:08	100

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	4.3		2.0	0.25	ug/L			10/16/18 09:01	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.028		0.0050	0.0025	mg/L		10/18/18 09:37	10/19/18 12:46	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01I-20181015

Lab Sample ID: 440-222284-2

Date Collected: 10/15/18 11:40

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			10/22/18 10:28	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 10:28	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 10:28	1
Carbon tetrachloride	0.29	J	0.50	0.25	ug/L			10/22/18 10:28	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 10:28	1
Chloroform	120		0.50	0.25	ug/L			10/22/18 10:28	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 10:28	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 10:28	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 10:28	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 10:28	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 10:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 10:28	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 10:28	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 10:28	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 10:28	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 10:28	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Styrene	ND		0.50	0.25	ug/L			10/22/18 10:28	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01I-20181015

Lab Sample ID: 440-222284-2

Date Collected: 10/15/18 11:40

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 10:28	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 10:28	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 10:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 10:28	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 10:28	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 10:28	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 10:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		10/22/18 10:28	1
Dibromofluoromethane (Surr)	109		76 - 132		10/22/18 10:28	1
Toluene-d8 (Surr)	102		80 - 128		10/22/18 10:28	1

Method: 300.1B - Disinfection By-Products, (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	210		100	20	ug/L			10/21/18 21:04	5
Chlorate	740000		100000	10000	ug/L			10/19/18 09:20	5000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	103		90 - 115		10/19/18 09:20	5000
Dichloroacetic acid(Surr)	100		90 - 115		10/21/18 21:04	5

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	300000		10000	5000	ug/L			10/24/18 23:18	10000

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	2300		200	25	ug/L			10/16/18 09:13	100

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.6		0.0050	0.0025	mg/L		10/18/18 09:37	10/19/18 12:34	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-TB

Lab Sample ID: 440-222284-3

Date Collected: 10/15/18 08:00

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			10/22/18 13:38	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 13:38	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 13:38	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 13:38	1
Chloroform	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 13:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 13:38	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 13:38	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 13:38	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 13:38	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 13:38	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 13:38	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 13:38	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 13:38	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Styrene	ND		0.50	0.25	ug/L			10/22/18 13:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-TB

Lab Sample ID: 440-222284-3

Date Collected: 10/15/18 08:00

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 13:38	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 13:38	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 13:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 13:38	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 13:38	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 13:38	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		10/22/18 13:38	1
Dibromofluoromethane (Surr)	107		76 - 132		10/22/18 13:38	1
Toluene-d8 (Surr)	111		80 - 128		10/22/18 13:38	1

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

Date Collected: 10/15/18 14:15

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			10/22/18 14:06	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 14:06	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 14:06	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 14:06	1
Chloroform	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1

TestAmerica Irvine

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

Date Collected: 10/15/18 14:15

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 14:06	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 14:06	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 14:06	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 14:06	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 14:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 14:06	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 14:06	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 14:06	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 14:06	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 14:06	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Styrene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 14:06	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 14:06	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 14:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 14:06	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 14:06	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:06	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

Date Collected: 10/15/18 14:15

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 14:06	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					10/22/18 14:06	1
Dibromofluoromethane (Surr)	105		76 - 132					10/22/18 14:06	1
Toluene-d8 (Surr)	109		80 - 128					10/22/18 14:06	1

Method: 300.1B - Disinfection By-Products, (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	ND		20	4.0	ug/L			10/17/18 17:45	1
Chlorate	ND		20	2.0	ug/L			10/17/18 17:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	100		90 - 115					10/17/18 17:45	1
Dichloroacetic acid(Surr)	100		90 - 115					10/17/18 17:45	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			10/23/18 16:53	1

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.0	0.25	ug/L			10/16/18 09:25	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0050	0.0025	mg/L		10/18/18 09:37	10/19/18 12:10	1

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

Date Collected: 10/15/18 14:00

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			10/22/18 14:33	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 14:33	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 14:33	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 14:33	1
Chloroform	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:33	1

TestAmerica Irvine

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

Date Collected: 10/15/18 14:00

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 14:33	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 14:33	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 14:33	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 14:33	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 14:33	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 14:33	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 14:33	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 14:33	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 14:33	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Styrene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 14:33	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 14:33	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 14:33	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 14:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

Date Collected: 10/15/18 14:00

Matrix: Water

Date Received: 10/16/18 07:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 14:33	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		10/22/18 14:33	1
Dibromofluoromethane (Surr)	112		76 - 132		10/22/18 14:33	1
Toluene-d8 (Surr)	110		80 - 128		10/22/18 14:33	1

Method: 300.1B - Disinfection By-Products, (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	ND		20	4.0	ug/L			10/17/18 18:14	1
Chlorate	ND		20	2.0	ug/L			10/17/18 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	101		90 - 115		10/17/18 18:14	1
Dichloroacetic acid(Surr)	101		90 - 115		10/17/18 18:14	1

Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			10/23/18 17:10	1

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.0	0.25	ug/L			10/16/18 09:38	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0050	0.0025	mg/L		10/18/18 09:37	10/19/18 12:12	1

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	0.50	0.25	ug/L	8260B
1,1,1-Trichloroethane	0.50	0.25	ug/L	8260B
1,1,2,2-Tetrachloroethane	0.50	0.25	ug/L	8260B
1,1,2-Trichloroethane	0.50	0.25	ug/L	8260B
1,1-Dichloroethane	0.50	0.25	ug/L	8260B
1,1-Dichloroethene	0.50	0.25	ug/L	8260B
1,1-Dichloropropene	0.50	0.25	ug/L	8260B
1,2,3-Trichlorobenzene	1.0	0.40	ug/L	8260B
1,2,3-Trichloropropane	1.0	0.40	ug/L	8260B
1,2,4-Trichlorobenzene	1.0	0.40	ug/L	8260B
1,2,4-Trimethylbenzene	0.50	0.25	ug/L	8260B
1,2-Dibromo-3-Chloropropane	1.0	0.50	ug/L	8260B
1,2-Dibromoethane (EDB)	0.50	0.25	ug/L	8260B
1,2-Dichlorobenzene	0.50	0.25	ug/L	8260B
1,2-Dichloroethane	0.50	0.25	ug/L	8260B
1,2-Dichloropropane	0.50	0.25	ug/L	8260B
1,3,5-Trimethylbenzene	0.50	0.25	ug/L	8260B
1,3-Dichlorobenzene	0.50	0.25	ug/L	8260B
1,3-Dichloropropane	0.50	0.25	ug/L	8260B
1,4-Dichlorobenzene	0.50	0.25	ug/L	8260B
2,2-Dichloropropane	1.0	0.40	ug/L	8260B
2-Butanone (MEK)	5.0	2.5	ug/L	8260B
2-Chlorotoluene	0.50	0.25	ug/L	8260B
2-Hexanone	5.0	2.5	ug/L	8260B
4-Chlorotoluene	0.50	0.25	ug/L	8260B
4-Methyl-2-pentanone (MIBK)	5.0	2.5	ug/L	8260B
Acetone	20	10	ug/L	8260B
Benzene	0.50	0.25	ug/L	8260B
Bromobenzene	0.50	0.25	ug/L	8260B
Bromochloromethane	0.50	0.25	ug/L	8260B
Bromodichloromethane	0.50	0.25	ug/L	8260B
Bromoform	1.0	0.40	ug/L	8260B
Bromomethane	0.50	0.25	ug/L	8260B
Carbon tetrachloride	0.50	0.25	ug/L	8260B
Chlorobenzene	0.50	0.25	ug/L	8260B
Chloroethane	1.0	0.40	ug/L	8260B
Chloroform	0.50	0.25	ug/L	8260B
Chloromethane	0.50	0.25	ug/L	8260B
cis-1,2-Dichloroethene	0.50	0.25	ug/L	8260B
cis-1,3-Dichloropropene	0.50	0.25	ug/L	8260B
Dibromochloromethane	0.50	0.25	ug/L	8260B
Dibromomethane	0.50	0.25	ug/L	8260B
Dichlorodifluoromethane	1.0	0.40	ug/L	8260B
Ethylbenzene	0.50	0.25	ug/L	8260B
Ethyl-t-butyl ether (ETBE)	0.50	0.25	ug/L	8260B
Hexachlorobutadiene	0.50	0.25	ug/L	8260B
Isopropyl Ether (DIPE)	0.50	0.25	ug/L	8260B
Isopropylbenzene	0.50	0.25	ug/L	8260B
m,p-Xylene	1.0	0.50	ug/L	8260B
Methylene Chloride	2.0	0.88	ug/L	8260B
Methyl-t-Butyl Ether (MTBE)	0.50	0.25	ug/L	8260B
Naphthalene	1.0	0.40	ug/L	8260B

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	RL	MDL	Units	Method
n-Butylbenzene	1.0	0.40	ug/L	8260B
N-Propylbenzene	0.50	0.25	ug/L	8260B
o-Xylene	0.50	0.25	ug/L	8260B
p-Isopropyltoluene	0.50	0.25	ug/L	8260B
sec-Butylbenzene	0.50	0.25	ug/L	8260B
Styrene	0.50	0.25	ug/L	8260B
Tert-amyl-methyl ether (TAME)	0.50	0.25	ug/L	8260B
tert-Butyl alcohol (TBA)	10	5.0	ug/L	8260B
tert-Butylbenzene	0.50	0.25	ug/L	8260B
Tetrachloroethene	0.50	0.25	ug/L	8260B
Toluene	0.50	0.25	ug/L	8260B
trans-1,2-Dichloroethene	0.50	0.25	ug/L	8260B
trans-1,3-Dichloropropene	0.50	0.25	ug/L	8260B
Trichloroethene	0.50	0.25	ug/L	8260B
Trichlorofluoromethane	0.50	0.25	ug/L	8260B
Vinyl chloride	0.50	0.25	ug/L	8260B
Xylenes, Total	1.0	0.50	ug/L	8260B

Method: 300.1B - Disinfection By-Products, (IC)

Analyte	RL	MDL	Units	Method
Chlorate	20	2.0	ug/L	300.1B
Chlorite	20	4.0	ug/L	300.1B

Method: 314.0 LL - Perchlorate (IC)

Analyte	RL	MDL	Units	Method
Perchlorate	1.0	0.50	ug/L	314.0 LL

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	RL	MDL	Units	Method
Chromium, hexavalent	2.0	0.25	ug/L	7199

Method: 6010B - Metals (ICP) - Total Recoverable

Prep: 3005A

Analyte	RL	MDL	Units	Method
Chromium	0.0050	0.0025	mg/L	6010B

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (76-132)	TOL (80-128)
440-222284-1	VER-01D-20181015	105	106	106
440-222284-2	VER-01I-20181015	102	109	102
440-222284-2 MS	VER-01I-20181015	95	105	105
440-222284-2 MSD	VER-01I-20181015	94	108	102
440-222284-3	VER-20181015-TB	99	107	111
440-222284-4	VER-20181015-FB	102	105	109
440-222284-5	VER-20181015-EB	104	112	110
LCS 440-506588/5	Lab Control Sample	95	104	101
MB 440-506588/7	Method Blank	100	103	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 300.1B - Disinfection By-Products, (IC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCAA (90-115)	DCAA (90-115)
440-222284-1	VER-01D-20181015	101	101
440-222284-2	VER-01I-20181015	103	103
440-222284-2	VER-01I-20181015	100	100
440-222284-2 MS	VER-01I-20181015	103	103
440-222284-2 MSD	VER-01I-20181015	98	98
440-222284-2 MSD	VER-01I-20181015	104	104
440-222284-2 MSD	VER-01I-20181015	101	101
440-222284-4	VER-20181015-FB	100	100
440-222284-5	VER-20181015-EB	101	101
550-111664-B-1 MS	Matrix Spike	100	100
550-111664-B-1 MSD	Matrix Spike Duplicate	101	101
LCS 440-505657/12	Lab Control Sample	101	101
LCS 440-505658/12	Lab Control Sample	101	101
LCS 440-506165/4	Lab Control Sample	104	104
LCS 440-506501/4	Lab Control Sample	102	102
MB 440-505657/13	Method Blank	100	100
MB 440-505658/13	Method Blank	100	100
MB 440-506165/5	Method Blank	102	102
MB 440-506501/5	Method Blank	101	101
MRL 440-505657/11	Lab Control Sample	100	100
MRL 440-505658/11	Lab Control Sample	100	100
MRL 440-506165/3	Lab Control Sample	103	103
MRL 440-506501/3	Lab Control Sample	100	100

Surrogate Legend

DCAA = Dichloroacetic acid(Surr)

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-506588/7

Matrix: Water

Analysis Batch: 506588

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			10/22/18 10:00	1
Benzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Bromobenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Bromochloromethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Bromodichloromethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Bromoform	ND		1.0	0.40	ug/L			10/22/18 10:00	1
Bromomethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			10/22/18 10:00	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Chlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Chloroethane	ND		1.0	0.40	ug/L			10/22/18 10:00	1
Chloroform	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Chloromethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Dibromochloromethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			10/22/18 10:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Dibromomethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			10/22/18 10:00	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			10/22/18 10:00	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Ethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Hexachlorobutadiene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
2-Hexanone	ND		5.0	2.5	ug/L			10/22/18 10:00	1
Isopropylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Methylene Chloride	ND		2.0	0.88	ug/L			10/22/18 10:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			10/22/18 10:00	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			10/22/18 10:00	1
m,p-Xylene	ND		1.0	0.50	ug/L			10/22/18 10:00	1
Naphthalene	ND		1.0	0.40	ug/L			10/22/18 10:00	1
n-Butylbenzene	ND		1.0	0.40	ug/L			10/22/18 10:00	1
N-Propylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
o-Xylene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-506588/7

Matrix: Water

Analysis Batch: 506588

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Styrene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			10/22/18 10:00	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			10/22/18 10:00	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Tetrachloroethene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Toluene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 10:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			10/22/18 10:00	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Trichloroethene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			10/22/18 10:00	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Vinyl chloride	ND		0.50	0.25	ug/L			10/22/18 10:00	1
Xylenes, Total	ND		1.0	0.50	ug/L			10/22/18 10:00	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		10/22/18 10:00	1
Dibromofluoromethane (Surr)	103		76 - 132		10/22/18 10:00	1
Toluene-d8 (Surr)	107		80 - 128		10/22/18 10:00	1

Lab Sample ID: LCS 440-506588/5

Matrix: Water

Analysis Batch: 506588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.4		ug/L		102	68 - 130
Bromobenzene	25.0	26.4		ug/L		105	70 - 130
Bromochloromethane	25.0	27.5		ug/L		110	70 - 130
Bromodichloromethane	25.0	28.7		ug/L		115	70 - 132
Bromoform	25.0	28.6		ug/L		114	60 - 148
Bromomethane	25.0	26.8		ug/L		107	64 - 139
2-Butanone (MEK)	25.0	25.3		ug/L		101	44 - 150
Carbon tetrachloride	25.0	29.0		ug/L		116	60 - 150
Chlorobenzene	25.0	25.3		ug/L		101	70 - 130
Chloroethane	25.0	25.5		ug/L		102	64 - 135
Chloroform	25.0	26.9		ug/L		107	70 - 130
Chloromethane	25.0	25.5		ug/L		102	47 - 140
2-Chlorotoluene	25.0	24.8		ug/L		99	70 - 130
4-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 133

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-506588/5

Matrix: Water

Analysis Batch: 506588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	70 - 133
Dibromochloromethane	25.0	28.6		ug/L		115	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	27.4		ug/L		109	52 - 140
1,2-Dibromoethane (EDB)	25.0	26.7		ug/L		107	70 - 130
Dibromomethane	25.0	27.6		ug/L		110	70 - 130
1,2-Dichlorobenzene	25.0	26.7		ug/L		107	70 - 130
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	24.7		ug/L		99	29 - 150
1,1-Dichloroethane	25.0	25.1		ug/L		100	64 - 130
1,2-Dichloroethane	25.0	26.6		ug/L		106	57 - 138
1,1-Dichloroethene	25.0	27.4		ug/L		110	70 - 130
1,2-Dichloropropane	25.0	25.7		ug/L		103	67 - 130
1,3-Dichloropropane	25.0	25.3		ug/L		101	70 - 130
2,2-Dichloropropane	25.0	29.3		ug/L		117	68 - 141
1,1-Dichloropropene	25.0	27.0		ug/L		108	70 - 130
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	25.9		ug/L		103	60 - 136
Hexachlorobutadiene	25.0	27.1		ug/L		108	10 - 150
2-Hexanone	25.0	25.3		ug/L		101	10 - 150
Isopropylbenzene	25.0	27.6		ug/L		110	70 - 136
Isopropyl Ether (DIPE)	25.0	25.6		ug/L		102	58 - 139
Methylene Chloride	25.0	23.4		ug/L		94	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	27.0		ug/L		108	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	26.6		ug/L		106	63 - 131
m,p-Xylene	25.0	27.0		ug/L		108	70 - 130
Naphthalene	25.0	27.5		ug/L		110	60 - 140
n-Butylbenzene	25.0	25.5		ug/L		102	65 - 150
N-Propylbenzene	25.0	25.6		ug/L		102	67 - 139
o-Xylene	25.0	27.5		ug/L		110	70 - 130
p-Isopropyltoluene	25.0	25.9		ug/L		104	70 - 132
sec-Butylbenzene	25.0	26.4		ug/L		106	70 - 138
Styrene	25.0	26.6		ug/L		106	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	25.9		ug/L		104	57 - 139
tert-Butyl alcohol (TBA)	250	275		ug/L		110	70 - 130
tert-Butylbenzene	25.0	26.1		ug/L		104	70 - 130
1,1,1,2-Tetrachloroethane	25.0	28.6		ug/L		114	60 - 141
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	63 - 130
Tetrachloroethene	25.0	27.4		ug/L		110	70 - 130
Toluene	25.0	25.4		ug/L		102	70 - 130
trans-1,2-Dichloroethene	25.0	27.1		ug/L		109	70 - 130
trans-1,3-Dichloropropene	25.0	27.5		ug/L		110	70 - 132
1,2,3-Trichlorobenzene	25.0	27.1		ug/L		108	60 - 140
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		107	60 - 140
1,1,1-Trichloroethane	25.0	27.5		ug/L		110	70 - 130
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	70 - 130
Trichloroethene	25.0	26.7		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	26.7		ug/L		107	60 - 150

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-506588/5

Matrix: Water

Analysis Batch: 506588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	63 - 130
1,2,4-Trimethylbenzene	25.0	26.6		ug/L		106	70 - 135
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 136
Vinyl chloride	25.0	26.3		ug/L		105	59 - 133
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	95		80 - 120				
Dibromofluoromethane (Surr)	104		76 - 132				
Toluene-d8 (Surr)	101		80 - 128				

Lab Sample ID: 440-222284-2 MS

Matrix: Water

Analysis Batch: 506588

Client Sample ID: VER-011-20181015

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	25.1		ug/L		101	10 - 150
Benzene	ND		25.0	25.8		ug/L		103	66 - 130
Bromobenzene	ND		25.0	25.2		ug/L		101	70 - 130
Bromochloromethane	ND		25.0	25.9		ug/L		104	70 - 130
Bromodichloromethane	ND		25.0	29.7		ug/L		119	70 - 138
Bromoform	ND		25.0	28.0		ug/L		112	59 - 150
Bromomethane	ND		25.0	26.7		ug/L		107	62 - 131
2-Butanone (MEK)	ND		25.0	23.7		ug/L		95	48 - 140
Carbon tetrachloride	0.29	J	25.0	30.4		ug/L		120	60 - 150
Chlorobenzene	ND		25.0	25.1		ug/L		100	70 - 130
Chloroethane	ND		25.0	26.6		ug/L		106	68 - 130
Chloroform	120		25.0	150	4	ug/L		102	70 - 130
Chloromethane	ND		25.0	24.0		ug/L		96	39 - 144
2-Chlorotoluene	ND		25.0	24.4		ug/L		97	70 - 130
4-Chlorotoluene	ND		25.0	25.4		ug/L		102	70 - 130
cis-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	70 - 130
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	70 - 133
Dibromochloromethane	ND		25.0	29.1		ug/L		116	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	23.7		ug/L		95	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	26.2		ug/L		105	70 - 131
Dibromomethane	ND		25.0	26.4		ug/L		105	70 - 130
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	ND		25.0	25.5		ug/L		102	70 - 130
Dichlorodifluoromethane	ND		25.0	22.7		ug/L		91	25 - 142
1,1-Dichloroethane	ND		25.0	25.7		ug/L		103	65 - 130
1,2-Dichloroethane	ND		25.0	26.7		ug/L		107	56 - 146
1,1-Dichloroethene	ND		25.0	27.4		ug/L		109	70 - 130
1,2-Dichloropropane	ND		25.0	26.6		ug/L		106	69 - 130
1,3-Dichloropropane	ND		25.0	24.6		ug/L		99	70 - 130
2,2-Dichloropropane	ND		25.0	29.9		ug/L		119	69 - 138
1,1-Dichloropropene	ND		25.0	26.3		ug/L		105	64 - 130
Ethylbenzene	ND		25.0	25.9		ug/L		103	70 - 130

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-222284-2 MS

Matrix: Water

Analysis Batch: 506588

Client Sample ID: VER-011-20181015

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.8		ug/L		107	70 - 130
Hexachlorobutadiene	ND		25.0	25.7		ug/L		103	10 - 150
2-Hexanone	ND		25.0	24.2		ug/L		97	10 - 150
Isopropylbenzene	ND		25.0	27.8		ug/L		111	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	25.8		ug/L		103	64 - 138
Methylene Chloride	ND		25.0	19.8		ug/L		79	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.4		ug/L		98	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.0		ug/L		108	70 - 130
m,p-Xylene	ND		25.0	26.9		ug/L		107	70 - 133
Naphthalene	ND		25.0	26.0		ug/L		104	60 - 140
n-Butylbenzene	ND		25.0	26.4		ug/L		106	61 - 149
N-Propylbenzene	ND		25.0	25.9		ug/L		104	66 - 135
o-Xylene	ND		25.0	27.8		ug/L		111	70 - 133
p-Isopropyltoluene	ND		25.0	26.0		ug/L		104	70 - 130
sec-Butylbenzene	ND		25.0	25.7		ug/L		103	67 - 134
Styrene	ND		25.0	27.6		ug/L		110	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	25.5		ug/L		102	68 - 133
tert-Butyl alcohol (TBA)	ND		250	287		ug/L		115	70 - 130
tert-Butylbenzene	ND		25.0	25.8		ug/L		103	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	28.0		ug/L		112	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	22.8		ug/L		91	63 - 130
Tetrachloroethane	ND		25.0	26.8		ug/L		107	70 - 137
Toluene	ND		25.0	25.4		ug/L		102	70 - 130
trans-1,2-Dichloroethene	ND		25.0	26.5		ug/L		106	70 - 130
trans-1,3-Dichloropropene	ND		25.0	27.1		ug/L		109	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	26.9		ug/L		108	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	26.6		ug/L		106	60 - 140
1,1,1-Trichloroethane	ND		25.0	28.0		ug/L		112	70 - 130
1,1,2-Trichloroethane	ND		25.0	26.4		ug/L		106	70 - 130
Trichloroethene	ND		25.0	27.3		ug/L		109	70 - 130
Trichlorofluoromethane	ND		25.0	28.3		ug/L		113	60 - 150
1,2,3-Trichloropropane	ND		25.0	23.4		ug/L		93	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	26.6		ug/L		106	70 - 130
Vinyl chloride	ND		25.0	26.4		ug/L		106	50 - 137

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	105		76 - 132
Toluene-d8 (Surr)	105		80 - 128

Lab Sample ID: 440-222284-2 MSD

Matrix: Water

Analysis Batch: 506588

Client Sample ID: VER-011-20181015

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	26.4		ug/L		106	10 - 150	5	35
Benzene	ND		25.0	24.6		ug/L		99	66 - 130	5	20

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-222284-2 MSD

Matrix: Water

Analysis Batch: 506588

Client Sample ID: VER-011-20181015

Prep Type: Total/NA

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result			Result	Qualifier				Limits		Limit
Bromobenzene	ND		25.0	25.8		ug/L		103	70 - 130	2	20
Bromochloromethane	ND		25.0	27.5		ug/L		110	70 - 130	6	25
Bromodichloromethane	ND		25.0	27.9		ug/L		112	70 - 138	6	20
Bromoform	ND		25.0	28.7		ug/L		115	59 - 150	2	25
Bromomethane	ND		25.0	26.0		ug/L		104	62 - 131	3	25
2-Butanone (MEK)	ND		25.0	25.6		ug/L		103	48 - 140	8	40
Carbon tetrachloride	0.29	J	25.0	26.2		ug/L		104	60 - 150	15	25
Chlorobenzene	ND		25.0	24.4		ug/L		98	70 - 130	3	20
Chloroethane	ND		25.0	24.3		ug/L		97	68 - 130	9	25
Chloroform	120		25.0	139	4	ug/L		56	70 - 130	8	20
Chloromethane	ND		25.0	22.3		ug/L		89	39 - 144	7	25
2-Chlorotoluene	ND		25.0	22.9		ug/L		92	70 - 130	6	20
4-Chlorotoluene	ND		25.0	24.1		ug/L		97	70 - 130	5	20
cis-1,2-Dichloroethene	ND		25.0	26.5		ug/L		106	70 - 130	4	20
cis-1,3-Dichloropropene	ND		25.0	28.2		ug/L		113	70 - 133	3	20
Dibromochloromethane	ND		25.0	29.0		ug/L		116	70 - 148	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	25.9		ug/L		104	48 - 140	9	30
1,2-Dibromoethane (EDB)	ND		25.0	26.3		ug/L		105	70 - 131	1	25
Dibromomethane	ND		25.0	27.1		ug/L		109	70 - 130	3	25
1,2-Dichlorobenzene	ND		25.0	26.2		ug/L		105	70 - 130	0	20
1,3-Dichlorobenzene	ND		25.0	23.8		ug/L		95	70 - 130	4	20
1,4-Dichlorobenzene	ND		25.0	23.9		ug/L		96	70 - 130	6	20
Dichlorodifluoromethane	ND		25.0	21.2		ug/L		85	25 - 142	7	30
1,1-Dichloroethane	ND		25.0	25.0		ug/L		100	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	27.5		ug/L		110	56 - 146	3	20
1,1-Dichloroethene	ND		25.0	24.9		ug/L		100	70 - 130	9	20
1,2-Dichloropropane	ND		25.0	25.8		ug/L		103	69 - 130	3	20
1,3-Dichloropropane	ND		25.0	24.7		ug/L		99	70 - 130	0	25
2,2-Dichloropropane	ND		25.0	28.0		ug/L		112	69 - 138	6	25
1,1-Dichloropropene	ND		25.0	24.9		ug/L		100	64 - 130	5	20
Ethylbenzene	ND		25.0	24.4		ug/L		98	70 - 130	6	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.1		ug/L		104	70 - 130	2	25
Hexachlorobutadiene	ND		25.0	23.7		ug/L		95	10 - 150	8	20
2-Hexanone	ND		25.0	26.3		ug/L		105	10 - 150	8	35
Isopropylbenzene	ND		25.0	26.8		ug/L		107	70 - 132	4	20
Isopropyl Ether (DIPE)	ND		25.0	25.9		ug/L		103	64 - 138	0	25
Methylene Chloride	ND		25.0	22.8		ug/L		91	52 - 130	14	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.9		ug/L		107	52 - 150	10	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.7		ug/L		107	70 - 130	1	25
m,p-Xylene	ND		25.0	26.2		ug/L		105	70 - 133	2	25
Naphthalene	ND		25.0	25.8		ug/L		103	60 - 140	1	30
n-Butylbenzene	ND		25.0	23.3		ug/L		93	61 - 149	12	20
N-Propylbenzene	ND		25.0	23.4		ug/L		94	66 - 135	10	20
o-Xylene	ND		25.0	26.7		ug/L		107	70 - 133	4	20
p-Isopropyltoluene	ND		25.0	23.6		ug/L		94	70 - 130	10	20
sec-Butylbenzene	ND		25.0	23.7		ug/L		95	67 - 134	8	20
Styrene	ND		25.0	26.4		ug/L		106	29 - 150	4	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.8		ug/L		103	68 - 133	1	30

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-222284-2 MSD

Matrix: Water

Analysis Batch: 506588

Client Sample ID: VER-011-20181015

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	ND		250	282		ug/L		113	70 - 130	2	25
tert-Butylbenzene	ND		25.0	24.4		ug/L		97	70 - 130	6	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	60 - 149	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.8		ug/L		95	63 - 130	4	30
Tetrachloroethene	ND		25.0	24.8		ug/L		99	70 - 137	8	20
Toluene	ND		25.0	24.3		ug/L		97	70 - 130	5	20
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	70 - 130	2	20
trans-1,3-Dichloropropene	ND		25.0	26.8		ug/L		107	70 - 138	1	25
1,2,3-Trichlorobenzene	ND		25.0	25.9		ug/L		104	60 - 140	4	20
1,2,4-Trichlorobenzene	ND		25.0	25.5		ug/L		102	60 - 140	4	20
1,1,1-Trichloroethane	ND		25.0	25.8		ug/L		103	70 - 130	8	20
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	70 - 130	3	25
Trichloroethene	ND		25.0	25.9		ug/L		104	70 - 130	5	20
Trichlorofluoromethane	ND		25.0	24.9		ug/L		100	60 - 150	13	25
1,2,3-Trichloropropane	ND		25.0	25.9		ug/L		104	60 - 130	10	30
1,2,4-Trimethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	8	25
1,3,5-Trimethylbenzene	ND		25.0	24.1		ug/L		96	70 - 130	10	20
Vinyl chloride	ND		25.0	25.8		ug/L		103	50 - 137	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	108		76 - 132
Toluene-d8 (Surr)	102		80 - 128

Method: 300.1B - Disinfection By-Products, (IC)

Lab Sample ID: MB 440-505657/13

Matrix: Water

Analysis Batch: 505657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorate	ND		20	2.0	ug/L			10/17/18 14:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	100		90 - 115		10/17/18 14:45	1

Lab Sample ID: LCS 440-505657/12

Matrix: Water

Analysis Batch: 505657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	100	99.9		ug/L		100	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dichloroacetic acid(Surr)	101		90 - 115

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 300.1B - Disinfection By-Products, (IC) (Continued)

Lab Sample ID: MRL 440-505657/11
Matrix: Water
Analysis Batch: 505657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	20.0	19.9	J	ug/L		100	50 - 150
Surrogate	%Recovery	MRL	MRL Qualifier	Limits			
Dichloroacetic acid(Surr)	100			90 - 115			

Lab Sample ID: 550-111664-B-1 MS
Matrix: Water
Analysis Batch: 505657

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	110		200	305		ug/L		100	75 - 125
Surrogate	%Recovery	MS	MS Qualifier	Limits					
Dichloroacetic acid(Surr)	100			90 - 115					

Lab Sample ID: 550-111664-B-1 MSD
Matrix: Water
Analysis Batch: 505657

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorate	110		200	298		ug/L		96	75 - 125	2	25
Surrogate	%Recovery	MSD	MSD Qualifier	Limits							
Dichloroacetic acid(Surr)	101			90 - 115							

Lab Sample ID: MB 440-505658/13
Matrix: Water
Analysis Batch: 505658

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	ND		20	4.0	ug/L			10/17/18 14:45	1
Surrogate	%Recovery	MB	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	100			90 - 115				10/17/18 14:45	1

Lab Sample ID: LCS 440-505658/12
Matrix: Water
Analysis Batch: 505658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	100	98.4		ug/L		98	85 - 115
Surrogate	%Recovery	LCS	LCS Qualifier	Limits			
Dichloroacetic acid(Surr)	101			90 - 115			

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 300.1B - Disinfection By-Products, (IC) (Continued)

Lab Sample ID: MRL 440-505658/11
Matrix: Water
Analysis Batch: 505658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	20.0	21.9		ug/L		109	10 - 200
Surrogate	%Recovery	MRL	MRL Qualifier	Limits			
Dichloroacetic acid(Surr)	100			90 - 115			

Lab Sample ID: 550-111664-B-1 MS
Matrix: Water
Analysis Batch: 505658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	390		200	553		ug/L		81	75 - 125
Surrogate	%Recovery	MS	MS Qualifier	Limits					
Dichloroacetic acid(Surr)	100			90 - 115					

Lab Sample ID: 550-111664-B-1 MSD
Matrix: Water
Analysis Batch: 505658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorite	390		200	565		ug/L		87	75 - 125	2	25
Surrogate	%Recovery	MSD	MSD Qualifier	Limits							
Dichloroacetic acid(Surr)	101			90 - 115							

Lab Sample ID: MB 440-506165/5
Matrix: Water
Analysis Batch: 506165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorate	ND		20	2.0	ug/L			10/19/18 06:51	1
Surrogate	%Recovery	MB	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	102			90 - 115				10/19/18 06:51	1

Lab Sample ID: LCS 440-506165/4
Matrix: Water
Analysis Batch: 506165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	100	99.5		ug/L		100	75 - 125
Surrogate	%Recovery	LCS	LCS Qualifier	Limits			
Dichloroacetic acid(Surr)	104			90 - 115			

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 300.1B - Disinfection By-Products, (IC) (Continued)

Lab Sample ID: MRL 440-506165/3
Matrix: Water
Analysis Batch: 506165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	20.0	20.8		ug/L		104	50 - 150
Surrogate	%Recovery	MRL	MRL Qualifier	Limits			
Dichloroacetic acid(Surr)	103			90 - 115			

Lab Sample ID: 440-222284-2 MS
Matrix: Water
Analysis Batch: 506165

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorate	740000		200	759000	4	ug/L		10168	75 - 125
Surrogate	%Recovery	MS	MS Qualifier	Limits					
Dichloroacetic acid(Surr)	103			90 - 115					

Lab Sample ID: 440-222284-2 MSD
Matrix: Water
Analysis Batch: 506165

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorate	740000		200	748000	4	ug/L		4606	75 - 125	1	25
Surrogate	%Recovery	MSD	MSD Qualifier	Limits							
Dichloroacetic acid(Surr)	104			90 - 115							

Lab Sample ID: MB 440-506501/5
Matrix: Water
Analysis Batch: 506501

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorite	ND		20	4.0	ug/L			10/21/18 07:47	1
Surrogate	%Recovery	MB	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dichloroacetic acid(Surr)	101			90 - 115				10/21/18 07:47	1

Lab Sample ID: LCS 440-506501/4
Matrix: Water
Analysis Batch: 506501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	100	99.8		ug/L		100	85 - 115
Surrogate	%Recovery	LCS	LCS Qualifier	Limits			
Dichloroacetic acid(Surr)	102			90 - 115			

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 300.1B - Disinfection By-Products, (IC) (Continued)

Lab Sample ID: MRL 440-506501/3
Matrix: Water
Analysis Batch: 506501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	20.0	21.7		ug/L		108	10 - 200
Surrogate	%Recovery	MRL	MRL Qualifier	Limits			
Dichloroacetic acid(Surr)	100			90 - 115			

Lab Sample ID: 440-222284-2 MS
Matrix: Water
Analysis Batch: 506501

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorite	210		200	407		ug/L		100	75 - 125
Surrogate	%Recovery	MS	MS Qualifier	Limits					
Dichloroacetic acid(Surr)	98			90 - 115					

Lab Sample ID: 440-222284-2 MSD
Matrix: Water
Analysis Batch: 506501

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorite	210		200	404		ug/L		99	75 - 125	1	25
Surrogate	%Recovery	MSD	MSD Qualifier	Limits							
Dichloroacetic acid(Surr)	101			90 - 115							

Method: 314.0 LL - Perchlorate (IC)

Lab Sample ID: MB 440-506828/6
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			10/23/18 08:03	1

Lab Sample ID: LCS 440-506828/5
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	10.0	10.3		ug/L		103	85 - 115

Lab Sample ID: MRL 440-506828/14
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	4.00	4.11		ug/L		103	75 - 125

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 314.0 LL - Perchlorate (IC) (Continued)

Lab Sample ID: MRL 440-506828/4
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	0.958	J	ug/L		96	75 - 125

Lab Sample ID: 720-89201-A-3 MS
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		10.0	10.0		ug/L		100	80 - 120

Lab Sample ID: 720-89201-A-3 MSD
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		10.0	10.0		ug/L		100	80 - 120	0	20

Lab Sample ID: MB 440-506935/6
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			10/23/18 13:24	1

Lab Sample ID: LCS 440-506935/5
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.0		ug/L		104	85 - 115

Lab Sample ID: MRL 440-506935/9
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	1.02		ug/L		102	75 - 125

Lab Sample ID: 720-89236-D-6 MS
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	8.3		25.0	35.9		ug/L		111	80 - 120

Lab Sample ID: 720-89236-D-6 MSD
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	8.3		25.0	36.6		ug/L		113	80 - 120	2	20

TestAmerica Irvine

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Lab Sample ID: MB 440-507219/6
Matrix: Water
Analysis Batch: 507219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.50	ug/L			10/24/18 14:56	1

Lab Sample ID: LCS 440-507219/5
Matrix: Water
Analysis Batch: 507219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.1		ug/L		104	85 - 115

Lab Sample ID: MRL 440-507219/4
Matrix: Water
Analysis Batch: 507219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	1.00	1.13		ug/L		113	75 - 125

Lab Sample ID: 440-222284-2 MS
Matrix: Water
Analysis Batch: 507219

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	300000		2500	282000	4	ug/L		-807	80 - 120

Lab Sample ID: 440-222284-2 MSD
Matrix: Water
Analysis Batch: 507219

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	300000		2500	273000	4	ug/L		-1161	80 - 120	3	20

Lab Sample ID: INF 440-506828/7
Matrix: Water
Analysis Batch: 506828

Client Sample ID: Lab Control Sample

Analyte	Spike Added	INF Result	INF Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	10.0	10.0		ug/L		100	80 - 120

Lab Sample ID: INF 440-506935/8
Matrix: Water
Analysis Batch: 506935

Client Sample ID: Lab Control Sample

Analyte	Spike Added	INF Result	INF Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	24.1		ug/L		96	80 - 120

Lab Sample ID: INF 440-507219/7
Matrix: Water
Analysis Batch: 507219

Client Sample ID: Lab Control Sample

Analyte	Spike Added	INF Result	INF Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	25.0	26.3		ug/L		105	80 - 120

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 440-505406/6
Matrix: Water
Analysis Batch: 505406

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		2.0	0.25	ug/L			10/16/18 07:19	1

Lab Sample ID: LCS 440-505406/5
Matrix: Water
Analysis Batch: 505406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	49.6		ug/L		99	90 - 110

Lab Sample ID: MRL 440-505406/4
Matrix: Water
Analysis Batch: 505406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	1.00	0.968	J	ug/L		97	50 - 150

Lab Sample ID: 440-222284-2 MS
Matrix: Water
Analysis Batch: 505406

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	2300		1500	3700		ug/L		90	85 - 115

Lab Sample ID: 440-222284-2 MSD
Matrix: Water
Analysis Batch: 505406

Client Sample ID: VER-011-20181015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	2300		1500	3680		ug/L		89	85 - 115	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-505985/1-A
Matrix: Water
Analysis Batch: 506733

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 505985

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0050	0.0025	mg/L		10/18/18 09:37	10/19/18 12:07	1

Lab Sample ID: LCS 440-505985/2-A
Matrix: Water
Analysis Batch: 506733

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 505985

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	1.07		mg/L		107	80 - 120

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-222284-2 MS
Matrix: Water
Analysis Batch: 506733

Client Sample ID: VER-01I-20181015
Prep Type: Total Recoverable
Prep Batch: 505985

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chromium	2.6		1.00	3.64		mg/L		106	75 - 125

Lab Sample ID: 440-222284-2 MSD
Matrix: Water
Analysis Batch: 506733

Client Sample ID: VER-01I-20181015
Prep Type: Total Recoverable
Prep Batch: 505985

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chromium	2.6		1.00	3.49		mg/L		91	75 - 125	4	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

GC/MS VOA

Analysis Batch: 506588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total/NA	Water	8260B	
440-222284-2	VER-01I-20181015	Total/NA	Water	8260B	
440-222284-3	VER-20181015-TB	Total/NA	Water	8260B	
440-222284-4	VER-20181015-FB	Total/NA	Water	8260B	
440-222284-5	VER-20181015-EB	Total/NA	Water	8260B	
MB 440-506588/7	Method Blank	Total/NA	Water	8260B	
LCS 440-506588/5	Lab Control Sample	Total/NA	Water	8260B	
440-222284-2 MS	VER-01I-20181015	Total/NA	Water	8260B	
440-222284-2 MSD	VER-01I-20181015	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 505406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total/NA	Water	7199	
440-222284-2	VER-01I-20181015	Total/NA	Water	7199	
440-222284-4	VER-20181015-FB	Total/NA	Water	7199	
440-222284-5	VER-20181015-EB	Total/NA	Water	7199	
MB 440-505406/6	Method Blank	Total/NA	Water	7199	
LCS 440-505406/5	Lab Control Sample	Total/NA	Water	7199	
MRL 440-505406/4	Lab Control Sample	Total/NA	Water	7199	
440-222284-2 MS	VER-01I-20181015	Total/NA	Water	7199	
440-222284-2 MSD	VER-01I-20181015	Total/NA	Water	7199	

Analysis Batch: 505657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total/NA	Water	300.1B	
440-222284-4	VER-20181015-FB	Total/NA	Water	300.1B	
440-222284-5	VER-20181015-EB	Total/NA	Water	300.1B	
MB 440-505657/13	Method Blank	Total/NA	Water	300.1B	
LCS 440-505657/12	Lab Control Sample	Total/NA	Water	300.1B	
MRL 440-505657/11	Lab Control Sample	Total/NA	Water	300.1B	
550-111664-B-1 MS	Matrix Spike	Total/NA	Water	300.1B	
550-111664-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.1B	

Analysis Batch: 505658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total/NA	Water	300.1B	
440-222284-4	VER-20181015-FB	Total/NA	Water	300.1B	
440-222284-5	VER-20181015-EB	Total/NA	Water	300.1B	
MB 440-505658/13	Method Blank	Total/NA	Water	300.1B	
LCS 440-505658/12	Lab Control Sample	Total/NA	Water	300.1B	
MRL 440-505658/11	Lab Control Sample	Total/NA	Water	300.1B	
550-111664-B-1 MS	Matrix Spike	Total/NA	Water	300.1B	
550-111664-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.1B	

Analysis Batch: 506165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-2	VER-01I-20181015	Total/NA	Water	300.1B	
MB 440-506165/5	Method Blank	Total/NA	Water	300.1B	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

HPLC/IC (Continued)

Analysis Batch: 506165 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-506165/4	Lab Control Sample	Total/NA	Water	300.1B	
MRL 440-506165/3	Lab Control Sample	Total/NA	Water	300.1B	
440-222284-2 MS	VER-011-20181015	Total/NA	Water	300.1B	
440-222284-2 MSD	VER-011-20181015	Total/NA	Water	300.1B	

Analysis Batch: 506501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-2	VER-011-20181015	Total/NA	Water	300.1B	
MB 440-506501/5	Method Blank	Total/NA	Water	300.1B	
LCS 440-506501/4	Lab Control Sample	Total/NA	Water	300.1B	
MRL 440-506501/3	Lab Control Sample	Total/NA	Water	300.1B	
440-222284-2 MS	VER-011-20181015	Total/NA	Water	300.1B	
440-222284-2 MSD	VER-011-20181015	Total/NA	Water	300.1B	

Analysis Batch: 506828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-4	VER-20181015-FB	Total/NA	Water	314.0 LL	
440-222284-5	VER-20181015-EB	Total/NA	Water	314.0 LL	
MB 440-506828/6	Method Blank	Total/NA	Water	314.0 LL	
INF 440-506828/7	Lab Control Sample		Water	314.0 LL	
LCS 440-506828/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-506828/14	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-506828/4	Lab Control Sample	Total/NA	Water	314.0 LL	
720-89201-A-3 MS	Matrix Spike	Total/NA	Water	314.0 LL	
720-89201-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	

Analysis Batch: 506935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total/NA	Water	314.0 LL	
MB 440-506935/6	Method Blank	Total/NA	Water	314.0 LL	
INF 440-506935/8	Lab Control Sample		Water	314.0 LL	
LCS 440-506935/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-506935/9	Lab Control Sample	Total/NA	Water	314.0 LL	
720-89236-D-6 MS	Matrix Spike	Total/NA	Water	314.0 LL	
720-89236-D-6 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	

Analysis Batch: 507219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-2	VER-011-20181015	Total/NA	Water	314.0 LL	
MB 440-507219/6	Method Blank	Total/NA	Water	314.0 LL	
INF 440-507219/7	Lab Control Sample		Water	314.0 LL	
LCS 440-507219/5	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-507219/4	Lab Control Sample	Total/NA	Water	314.0 LL	
440-222284-2 MS	VER-011-20181015	Total/NA	Water	314.0 LL	
440-222284-2 MSD	VER-011-20181015	Total/NA	Water	314.0 LL	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Metals

Prep Batch: 505985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total Recoverable	Water	3005A	
440-222284-2	VER-01I-20181015	Total Recoverable	Water	3005A	
440-222284-4	VER-20181015-FB	Total Recoverable	Water	3005A	
440-222284-5	VER-20181015-EB	Total Recoverable	Water	3005A	
MB 440-505985/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-505985/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-222284-2 MS	VER-01I-20181015	Total Recoverable	Water	3005A	
440-222284-2 MSD	VER-01I-20181015	Total Recoverable	Water	3005A	

Analysis Batch: 506733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-222284-1	VER-01D-20181015	Total Recoverable	Water	6010B	505985
440-222284-2	VER-01I-20181015	Total Recoverable	Water	6010B	505985
440-222284-4	VER-20181015-FB	Total Recoverable	Water	6010B	505985
440-222284-5	VER-20181015-EB	Total Recoverable	Water	6010B	505985
MB 440-505985/1-A	Method Blank	Total Recoverable	Water	6010B	505985
LCS 440-505985/2-A	Lab Control Sample	Total Recoverable	Water	6010B	505985
440-222284-2 MS	VER-01I-20181015	Total Recoverable	Water	6010B	505985
440-222284-2 MSD	VER-01I-20181015	Total Recoverable	Water	6010B	505985

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-01D-20181015

Lab Sample ID: 440-222284-1

Date Collected: 10/15/18 13:15

Matrix: Water

Date Received: 10/16/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506588	10/22/18 13:11	RM	TAL IRV
Total/NA	Analysis	300.1B		50	505657	10/17/18 17:15	YZ	TAL IRV
Total/NA	Analysis	300.1B		50	505658	10/17/18 17:15	YZ	TAL IRV
Total/NA	Analysis	314.0 LL		100	506935	10/23/18 16:08	PS	TAL IRV
Total/NA	Analysis	7199		1	505406	10/16/18 09:01	MN	TAL IRV
Total Recoverable	Prep	3005A			505985	10/18/18 09:37	KE	TAL IRV
Total Recoverable	Analysis	6010B		1	506733	10/19/18 12:46	TQN	TAL IRV

Client Sample ID: VER-01I-20181015

Lab Sample ID: 440-222284-2

Date Collected: 10/15/18 11:40

Matrix: Water

Date Received: 10/16/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506588	10/22/18 10:28	RM	TAL IRV
Total/NA	Analysis	300.1B		5000	506165	10/19/18 09:20	YZ	TAL IRV
Total/NA	Analysis	300.1B		5	506501	10/21/18 21:04	YZ	TAL IRV
Total/NA	Analysis	314.0 LL		10000	507219	10/24/18 23:18	PS	TAL IRV
Total/NA	Analysis	7199		100	505406	10/16/18 09:13	MN	TAL IRV
Total Recoverable	Prep	3005A			505985	10/18/18 09:37	KE	TAL IRV
Total Recoverable	Analysis	6010B		1	506733	10/19/18 12:34	TQN	TAL IRV

Client Sample ID: VER-20181015-TB

Lab Sample ID: 440-222284-3

Date Collected: 10/15/18 08:00

Matrix: Water

Date Received: 10/16/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506588	10/22/18 13:38	RM	TAL IRV

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

Date Collected: 10/15/18 14:15

Matrix: Water

Date Received: 10/16/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506588	10/22/18 14:06	RM	TAL IRV
Total/NA	Analysis	300.1B		1	505657	10/17/18 17:45	YZ	TAL IRV
Total/NA	Analysis	300.1B		1	505658	10/17/18 17:45	YZ	TAL IRV
Total/NA	Analysis	314.0 LL		1	506828	10/23/18 16:53	CTH	TAL IRV
Total/NA	Analysis	7199		1	505406	10/16/18 09:25	MN	TAL IRV
Total Recoverable	Prep	3005A			505985	10/18/18 09:37	KE	TAL IRV
Total Recoverable	Analysis	6010B		1	506733	10/19/18 12:10	TQN	TAL IRV

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

Date Collected: 10/15/18 14:00

Matrix: Water

Date Received: 10/16/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	506588	10/22/18 14:33	RM	TAL IRV
Total/NA	Analysis	300.1B		1	505657	10/17/18 18:14	YZ	TAL IRV
Total/NA	Analysis	300.1B		1	505658	10/17/18 18:14	YZ	TAL IRV
Total/NA	Analysis	314.0 LL		1	506828	10/23/18 17:10	CTH	TAL IRV
Total/NA	Analysis	7199		1	505406	10/16/18 09:38	MN	TAL IRV
Total Recoverable	Prep	3005A			505985	10/18/18 09:37	KE	TAL IRV
Total Recoverable	Analysis	6010B		1	506733	10/19/18 12:12	TQN	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-19
Arizona	State Program	9	AZ0671	10-14-18 *
California	LA Cty Sanitation Districts	9	10256	06-30-19
California	State Program	9	CA ELAP 2706	06-30-19
Guam	State Program	9	Cert. No. 17-003R	01-23-19
Hawaii	State Program	9	N/A	01-29-19
Kansas	NELAP	7	E-10420	07-31-19
Nevada	State Program	9	CA015312018-1	07-31-19
New Mexico	State Program	6	N/A	01-29-19
Oregon	NELAP	10	4028	01-29-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-15-00184	07-09-21
Washington	State Program	10	C900	09-03-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
300.1B	Disinfection By-Products, (IC)	EPA	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV
7199	Chromium, Hexavalent (IC)	SW846	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: NERT M16

TestAmerica Job ID: 440-222284-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-222284-1	VER-01D-20181015	Water	10/15/18 13:15	10/16/18 07:10
440-222284-2	VER-01I-20181015	Water	10/15/18 11:40	10/16/18 07:10
440-222284-3	VER-20181015-TB	Water	10/15/18 08:00	10/16/18 07:10
440-222284-4	VER-20181015-FB	Water	10/15/18 14:15	10/16/18 07:10
440-222284-5	VER-20181015-EB	Water	10/15/18 14:00	10/16/18 07:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: GCMS45 Analysis Batch Number: 505728Lab Sample ID: STD1 440-505728/7 IC Client Sample ID: _____Date Analyzed: 10/17/18 15:33 Lab File ID: AHJ17027.D GC Column: DB-VRX D ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromoform	11.23	Peak assignment corrected	ibasitasa	10/18/18 11:52

Lab Sample ID: STD5 440-505728/9 IC Client Sample ID: _____Date Analyzed: 10/17/18 16:27 Lab File ID: AHJ17029.D GC Column: DB-VRX D ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	4.50	Peak assignment corrected	ibasitasa	10/18/18 12:03
Acetone	4.64	Peak assignment corrected	ibasitasa	10/18/18 12:04
2-Butanone (MEK)	6.48	Assign Peak	ibasitasa	10/18/18 12:40

Lab Sample ID: STD10 440-505728/10 IC Client Sample ID: _____Date Analyzed: 10/17/18 16:55 Lab File ID: AHJ17030.D GC Column: DB-VRX D ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloroethyl vinyl ether	8.66	Peak assignment corrected	ibasitasa	10/18/18 11:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Analysis Batch Number: 505657

Lab Sample ID: STD0 440-505657/3 IC Client Sample ID: _____

Date Analyzed: 10/17/18 09:24 Lab File ID: 440-0110603-003.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromate		Unspecified		

Lab Sample ID: ICB 440-505657/10 Client Sample ID: _____

Date Analyzed: 10/17/18 13:15 Lab File ID: 440-0110603-010.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.59	Peak assignment corrected	zakhrabov y	10/19/18 03:49

Lab Sample ID: MRL 440-505657/11 Client Sample ID: _____

Date Analyzed: 10/17/18 13:45 Lab File ID: 440-0110603-011.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.57	Peak assignment corrected	zakhrabov y	10/19/18 03:49

Lab Sample ID: MB 440-505657/13 Client Sample ID: _____

Date Analyzed: 10/17/18 14:45 Lab File ID: 440-0110603-013.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.57	Peak assignment corrected	zakhrabov y	10/19/18 03:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Analysis Batch Number: 505658

Lab Sample ID: ICB 440-505658/10 Client Sample ID: _____

Date Analyzed: 10/17/18 13:15 Lab File ID: 440-0110603-010.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.59	Peak assignment corrected	zakhrabov y	10/19/18 03:49

Lab Sample ID: MRL 440-505658/11 Client Sample ID: _____

Date Analyzed: 10/17/18 13:45 Lab File ID: 440-0110603-011.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.57	Peak assignment corrected	zakhrabov y	10/19/18 03:49

Lab Sample ID: MB 440-505658/13 Client Sample ID: _____

Date Analyzed: 10/17/18 14:45 Lab File ID: 440-0110603-013.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichloroacetic acid(Surr)	15.57	Peak assignment corrected	zakhrabov y	10/19/18 03:50

Lab Sample ID: CCB 440-505658/22 Client Sample ID: _____

Date Analyzed: 10/17/18 19:14 Lab File ID: 440-0110603-022.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite		Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Analysis Batch Number: 505658

Lab Sample ID: 550-111664-B-1 MS Client Sample ID: _____

Date Analyzed: 10/17/18 23:13 Lab File ID: 440-0110603-030.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	8.20	Baseline Smoothing	zakhrabov y	10/19/18 05:02

Lab Sample ID: 550-111664-B-1 MSD Client Sample ID: _____

Date Analyzed: 10/17/18 23:43 Lab File ID: 440-0110603-031.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	8.20	Baseline Smoothing	zakhrabov y	10/19/18 05:02

Lab Sample ID: CCB 440-505658/34 Client Sample ID: _____

Date Analyzed: 10/18/18 01:12 Lab File ID: 440-0110603-034.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite		Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Analysis Batch Number: 506165

Lab Sample ID: MRL 440-506165/3 Client Sample ID: _____

Date Analyzed: 10/19/18 05:51 Lab File ID: 440-0110708-003.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorate	20.26	Baseline Smoothing	zakhrabov y	10/19/18 07:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-8 Analysis Batch Number: 506501

Lab Sample ID: CCV 440-506501/25 Client Sample ID: _____

Date Analyzed: 10/21/18 19:52 Lab File ID: 440-0110792-025.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	7.21	Baseline Smoothing	zakhrabov y	10/22/18 03:47

Lab Sample ID: 440-222284-2 Client Sample ID: VER-01I-20181015

Date Analyzed: 10/21/18 21:04 Lab File ID: 440-0110792-027.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	6.95	Peak not integrated	zakhrabov y	10/22/18 03:58
Dichloroacetic acid(Surr)	13.27	Baseline Smoothing	zakhrabov y	10/22/18 03:47

Lab Sample ID: 440-222284-2 MS Client Sample ID: VER-01I-20181015 MS

Date Analyzed: 10/21/18 21:41 Lab File ID: 440-0110792-028.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	7.03	Incomplete Integration	zakhrabov y	10/22/18 03:48
Dichloroacetic acid(Surr)	13.24	Incomplete Integration	zakhrabov y	10/22/18 03:48

Lab Sample ID: 440-222284-2 MSD Client Sample ID: VER-01I-20181015 MSD

Date Analyzed: 10/21/18 22:17 Lab File ID: 440-0110792-029.d GC Column: AS9-HC ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorite	7.02	Baseline Smoothing	zakhrabov y	10/22/18 03:48
Dichloroacetic acid(Surr)	13.23	Baseline Smoothing	zakhrabov y	10/22/18 03:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-23 Analysis Batch Number: 506935

Lab Sample ID: CCV 440-506935/2 Client Sample ID: _____

Date Analyzed: 10/23/18 11:56 Lab File ID: 440-0110895-002_02_ECD_1. GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	10.17	Peak assignment corrected	hoangch	10/23/18 12:20

Lab Sample ID: INF 440-506935/8 Client Sample ID: _____

Date Analyzed: 10/23/18 15:07 Lab File ID: 440-0110895-008_08_ECD_1. GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	10.29	Incomplete Integration	hoangch	10/23/18 15:30

Lab Sample ID: 440-222284-1 Client Sample ID: VER-01D-20181015

Date Analyzed: 10/23/18 16:08 Lab File ID: 440-0110895-010_10_ECD_1. GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	10.20	Incomplete Integration	hoangch	10/23/18 16:41

Lab Sample ID: 720-89236-D-6 MS Client Sample ID: _____

Date Analyzed: 10/23/18 18:19 Lab File ID: 440-0110895-016_16_ECD_1. GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	10.23	Incomplete Integration	saraubonp	10/24/18 16:34

Lab Sample ID: 720-89236-D-6 MSD Client Sample ID: _____

Date Analyzed: 10/23/18 18:39 Lab File ID: 440-0110895-017_17_ECD_1. GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	10.24	Incomplete Integration	saraubonp	10/24/18 16:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-24 Analysis Batch Number: 506781

Lab Sample ID: STD1 440-506781/2 IC Client Sample ID: _____

Date Analyzed: 10/22/18 16:54 Lab File ID: 440-0110854-00202ECD_1.d GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	13.37	Peak assignment corrected	hoangch	10/22/18 18:11

Lab Sample ID: STD2 440-506781/3 IC Client Sample ID: _____

Date Analyzed: 10/22/18 17:12 Lab File ID: 440-0110854-00303ECD_1.d GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	13.34	Peak assignment corrected	hoangch	10/22/18 18:12

Lab Sample ID: STD3 440-506781/4 IC Client Sample ID: _____

Date Analyzed: 10/22/18 17:31 Lab File ID: 440-0110854-00404ECD_1.d GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	13.33	Peak assignment corrected	hoangch	10/22/18 18:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-24 Analysis Batch Number: 507219

Lab Sample ID: INF 440-507219/7 Client Sample ID: _____

Date Analyzed: 10/24/18 15:14 Lab File ID: 440-0110956-00707ECD_1.d GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	12.95	Incomplete Integration	hoangch	10/24/18 15:34

Lab Sample ID: 440-222284-2 MS Client Sample ID: VER-01I-20181015 MS

Date Analyzed: 10/24/18 23:37 Lab File ID: 440-0110956-03131ECD_1.d GC Column: AS16 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perchlorate	13.06	Incomplete Integration	hoangch	10/25/18 06:29

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-20 Analysis Batch Number: 505406

Lab Sample ID: 440-222284-5 Client Sample ID: VER-20181015-EB

Date Analyzed: 10/16/18 09:38 Lab File ID: Info 2_IRVINSTIC20_Hexava GC Column: AS7 A ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chromium, hexavalent		Unspecified		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ME HCL_00423	09/26/22		Avantor, Lot 0000184873		(Purchased Reagent)		Stock Chemical	100 %
ME HNO3_00460	01/04/23		Macron Fine Chemicals, Lot 0000200458		(Purchased Reagent)		Nitric acid	63.01 %
ME ICP ICV2_01988	10/20/18	10/19/18	1%HNO3/2%HCl, Lot N/A	100 mL	ME ICP SPKE A_00033	1 mL	Chromium	1 mg/L
.ME ICP SPKE A_00033	07/15/19		ACCUSTANDARD, Lot 217065079		(Purchased Reagent)		Chromium	100 ug/mL
ME ICP IFA_02008	10/20/18	10/19/18	1%HNO3/2%HCl, Lot NA	50 mL	ME ICP_ICSA_00040	5 mL	Al	600 mg/L
							Ca	600 mg/L
							Fe	600 mg/L
							Mg	600 mg/L
.ME ICP_ICSA_00040	09/06/19		o2si, Lot 10064997-7		(Purchased Reagent)		Al	6000 mg/L
							Ca	6000 mg/L
							Fe	6000 mg/L
							Mg	6000 mg/L
ME ICP IFB_02026	10/20/18	10/19/18	1%HNO3/2%HCl, Lot NA	50 mL	ME ICP_ICSA_00040	5 mL	Al	600.5 mg/L
							Ca	602.5 mg/L
							Fe	600.5 mg/L
							Mg	602.5 mg/L
					ME ICP2 ICV1A_00057	0.25 mL	Ag	0.25 mg/L
							Al	600.5 mg/L
							As	0.5 mg/L
							B	0.5 mg/L
							Ba	0.5 mg/L
							Be	0.5 mg/L
							Ca	602.5 mg/L
							Cd	0.5 mg/L
							Chromium	0.5 mg/L
							Co	0.5 mg/L
							Cu	0.5 mg/L
							Fe	600.5 mg/L
							K	10 mg/L
							Li	0.5 mg/L
							Mg	602.5 mg/L
							Mn	0.5 mg/L
							Na	10 mg/L
							Ni	0.5 mg/L
							P	0.5 mg/L
							Pb	0.5 mg/L
							Se	0.5 mg/L
							Sr	0.5 mg/L
							Tl	0.5 mg/L
							V	0.5 mg/L
							Zn	0.5 mg/L
					ME ICP2 ICV1B_00049	0.25 mL	Mo	0.5 mg/L
							Sb	0.5 mg/L
							Si	2.5 mg/L
							Sn	0.5 mg/L
							Ti	0.5 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							W	0.5 mg/L
							Zr	0.5 mg/L
					ME K 00007	0.25 mL	K	10 mg/L
					ME Na 00010	0.25 mL	Na	10 mg/L
.ME ICP_ICSA_00040	09/06/19		o2si, Lot 10064997-7		(Purchased Reagent)		Al	6000 mg/L
							Ca	6000 mg/L
							Fe	6000 mg/L
							Mg	6000 mg/L
.ME ICP2 ICV1A_00057	09/27/19		INORGANIC VENTURES, Lot N2-MEB670088		(Purchased Reagent)		Ag	50 mg/L
							Al	100 mg/L
							As	100 mg/L
							B	100 mg/L
							Ba	100 mg/L
							Be	100 mg/L
							Ca	500 mg/L
							Cd	100 mg/L
							Chromium	100 mg/L
							Co	100 mg/L
							Cu	100 mg/L
							Fe	100 mg/L
							K	1000 mg/L
							Li	100 mg/L
							Mg	500 mg/L
							Mn	100 mg/L
							Na	1000 mg/L
							Ni	100 mg/L
							P	100 mg/L
							Pb	100 mg/L
							Se	100 mg/L
							Sr	100 mg/L
							Tl	100 mg/L
							V	100 mg/L
							Zn	100 mg/L
.ME ICP2 ICV1B_00049	09/27/19		INORGANIC VENTURES, Lot N2-MEB670089		(Purchased Reagent)		Mo	100 mg/L
							Sb	100 mg/L
							Si	500 mg/L
							Sn	100 mg/L
							Ti	100 mg/L
							W	100 mg/L
							Zr	100 mg/L
.ME K 00007	08/17/18		O2SI, Lot 1103100		(Purchased Reagent)		K	1000 mg/L
.ME Na 00010	08/17/18		O2SI, Lot 1103103		(Purchased Reagent)		Na	1000 mg/L
ME ICP RL_00405	10/20/18	10/19/18	1%HNO3/2%HCL, Lot 211065110	100 mL	ME ICP STD3_02307	2 mL	Chromium	0.01 ug/mL
.ME ICP STD3_02307	10/20/18	10/19/18	1%HNO3/2%HCL, Lot 211065110	100 mL	Custom mix A_00001	1 mL	Chromium	0.5 ug/mL
..Custom mix A_00001	10/26/20		INORGANIC VENTURES, Lot M2-MEB662656		(Purchased Reagent)		Chromium	50 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ME ICP STD3_02308	10/20/18	10/19/18	1%HNO3/2%HCL, Lot 211065110	100 mL	ME ICP2 ICV1A_00057	1 mL	Chromium	1 ug/mL
.ME ICP2 ICV1A 00057	09/27/19	INORGANIC VENTURES, Lot N2-MEB670088		(Purchased Reagent)		Chromium	100 mg/L	
							Ag	50 mg/L
							Al	100 mg/L
							As	100 mg/L
							B	100 mg/L
							Ba	100 mg/L
							Be	100 mg/L
							Ca	500 mg/L
							Cd	100 mg/L
							Chromium	100 mg/L
							Co	100 mg/L
							Cu	100 mg/L
							Fe	100 mg/L
							K	1000 mg/L
							Li	100 mg/L
							Mg	500 mg/L
							Mn	100 mg/L
							Na	1000 mg/L
							Ni	100 mg/L
							P	100 mg/L
							Pb	100 mg/L
							Se	100 mg/L
							Sr	100 mg/L
							Tl	100 mg/L
							V	100 mg/L
							Zn	100 mg/L
ME ICP2 ICV1B_00049	09/27/19	INORGANIC VENTURES, Lot N2-MEB670089		(Purchased Reagent)		Mo	100 mg/L	
							Sb	100 mg/L
							Si	500 mg/L
							SiO2	1071.15 mg/L
							Sn	100 mg/L
							Ti	100 mg/L
							W	100 mg/L
							Zr	100 mg/L
VMW8260TUNE1_00453							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							BTEX, Total	
							Tentatively Identified Compound	
							Total Volatile Organic Compounds	
							Trihalomethanes, Total	
							Xylenes, Total	
.VMA8260BFB1 00043	11/21/18	Absolute Standards, Lot 112514		VMA8260BFB1 00043	10 uL	BFB	25 ug/mL	
							(Purchased Reagent)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMW8260TUNE1_00456							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							BTEX, Total	
							Tentatively Identified Compound	
							Total Volatile Organic Compounds	
							Trihalomethanes, Total	
					VMA8260BFB1_00043	10 uL	BFB	25 ug/mL
.VMA8260BFB1_00043	11/21/18		Absolute Standards, Lot 112514			(Purchased Reagent)	BFB	2500 ug/mL
VMWNU8260002_00628	10/23/18	10/16/18	Methanol, Lot 3143686	1 mL	VMWNU8260200_00219	10 uL	2-Chloroethyl vinyl ether	2 ug/mL
							Bromomethane	2 ug/mL
							Butadiene	2 ug/mL
							Chloroethane	2 ug/mL
							Chloromethane	2 ug/mL
							Dichlorodifluoromethane	2 ug/mL
							Dichlorofluoromethane	2 ug/mL
							Trichlorofluoromethane	2 ug/mL
							Vinyl chloride	2 ug/mL
							2-Butanone (MEK)	2 ug/mL
							2-Hexanone	2 ug/mL
							4-Methyl-2-pentanone (MIBK)	2 ug/mL
							Acetone	2 ug/mL
							Vinyl acetate	2 ug/mL
							Ethanol	100 ug/mL
							1,1,1,2-Tetrachloroethane	2 ug/mL
							1,1,1-Trichloroethane	2 ug/mL
							1,1,2,2-Tetrachloroethane	2 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2 ug/mL
							1,1,2-Trichloroethane	2 ug/mL
							1,1-Dichloroethane	2 ug/mL
							1,1-Dichloroethene	2 ug/mL
							1,1-Dichloropropene	2 ug/mL
							1,2,3-Trichlorobenzene	2 ug/mL
							1,2,3-Trichloropropane	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2,4-Trimethylbenzene	2 ug/mL
							1,2-Dibromo-3-Chloropropane	2 ug/mL
							1,2-Dibromoethane (EDB)	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Dichloroethane	2 ug/mL
							1,2-Dichloropropane	2 ug/mL
							1,3,5-Trimethylbenzene	2 ug/mL
1,3-Dichlorobenzene	2 ug/mL							
1,3-Dichloropropane	2 ug/mL							
1,4-Dichlorobenzene	2 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2-Dichloropropane	2 ug/mL
							2-Chlorotoluene	2 ug/mL
							3-Chloro-1-propene	2 ug/mL
							4-Chlorotoluene	2 ug/mL
							Acrylonitrile	20 ug/mL
							Benzene	2 ug/mL
							Bromobenzene	2 ug/mL
							Bromochloromethane	2 ug/mL
							Bromodichloromethane	2 ug/mL
							Bromoform	2 ug/mL
							Carbon disulfide	2 ug/mL
							Carbon tetrachloride	2 ug/mL
							Chlorobenzene	2 ug/mL
							Chloroform	2 ug/mL
							cis-1,2-Dichloroethene	2 ug/mL
							cis-1,3-Dichloropropene	2 ug/mL
							Cyclohexane	2 ug/mL
							Dibromochloromethane	2 ug/mL
							Dibromomethane	2 ug/mL
							Ethyl ether	2 ug/mL
							Ethyl methacrylate	2 ug/mL
							Ethylbenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexane	2 ug/mL
							Iodomethane	2 ug/mL
							Isobutyl alcohol	50 ug/mL
							Isopropylbenzene	2 ug/mL
							m,p-Xylene	2 ug/mL
							Methyl acetate	4 ug/mL
							Methyl-t-Butyl Ether (MTBE)	2 ug/mL
							Methylcyclohexane	2 ug/mL
							Methylene Chloride	2 ug/mL
							n-Butylbenzene	2 ug/mL
							n-Heptane	2 ug/mL
							N-Propylbenzene	2 ug/mL
							Naphthalene	2 ug/mL
							o-Xylene	2 ug/mL
							p-Isopropyltoluene	2 ug/mL
							sec-Butylbenzene	2 ug/mL
							Styrene	2 ug/mL
							tert-Butyl alcohol (TBA)	20 ug/mL
							tert-Butylbenzene	2 ug/mL
							Tetrachloroethene	2 ug/mL
							Tetrahydrofuran	4 ug/mL
							Toluene	2 ug/mL
							trans-1,2-Dichloroethene	2 ug/mL
							trans-1,3-Dichloropropene	2 ug/mL
							trans-1,4-Dichloro-2-butene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2 ug/mL
							Acetonitrile	20 ug/mL
							Ethyl-t-butyl ether (ETBE)	2 ug/mL
							Isopropyl Ether (DIPE)	2 ug/mL
							Propionitrile	20 ug/mL
							Tert-amyl-methyl ether (TAME)	2 ug/mL
							Acrolein	2 ug/mL
.VMWNU8260200_00219	10/23/18	10/16/18	Methanol, Lot 5088669	1 mL	VMA1582602CV1_00039	80 uL	2-Chloroethyl vinyl ether	200 ug/mL
					VMA158260GAS1_00286	80 uL	Bromomethane	200 ug/mL
							Butadiene	200 ug/mL
							Chloroethane	200 ug/mL
							Chloromethane	200 ug/mL
							Dichlorodifluoromethane	200 ug/mL
							Dichlorofluoromethane	200 ug/mL
							Trichlorofluoromethane	200 ug/mL
							Vinyl chloride	200 ug/mL
					VMA158260KET1_00053	16 uL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VMA158260VA1_00058	40 uL	Vinyl acetate	200 ug/mL
					VMA178260ETH1_00019	100 uL	Ethanol	10000 ug/mL
					VMA178260MEG1_00009	80 uL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
		1,3,5-Trimethylbenzene	200 ug/mL					
		1,3-Dichlorobenzene	200 ug/mL					
		1,3-Dichloropropane	200 ug/mL					
		1,4-Dichlorobenzene	200 ug/mL					
		2,2-Dichloropropane	200 ug/mL					
		2-Chlorotoluene	200 ug/mL					
		3-Chloro-1-propene	200 ug/mL					
		4-Chlorotoluene	200 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Dibromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m,p-Xylene	200 ug/mL
							Methyl acetate	400 ug/mL
							Methyl-t-Butyl Ether (MTBE)	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							p-Isopropyltoluene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butyl alcohol (TBA)	2000 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
					VMA178260POL1_00019	80 uL	Acetonitrile	2000 ug/mL
							Ethyl-t-butyl ether (ETBE)	200 ug/mL
							Isopropyl Ether (DIPE)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propionitrile	2000 ug/mL
							Tert-amyl-methyl ether (TAME)	200 ug/mL
					VMANU8260ACR1_00114	10 uL	Acrolein	200 ug/mL
..VMA1582602CV1_00039	03/25/19		Restek, Lot A0123891		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VMA158260GAS1_00286	10/23/18		Restek, Lot A0137097		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
..VMA158260KET1_00053	03/25/19		Restek, Lot A0131486		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VMA158260VA1_00058	12/31/18		Restek, Lot A0138862		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VMA178260ETH1_00019	03/25/19		Restek, Lot A0135657		(Purchased Reagent)		Ethanol	100000 ug/mL
..VMA178260MEG1_00009	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m,p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl-t-Butyl Ether (MTBE)	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
..VMA178260POL1_00019	03/25/19		Restek, Lot A0132831			(Purchased Reagent)	Acetonitrile	25000 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Isopropyl Ether (DIPE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
..VMANU8260ACR1_00114	10/31/18		Restek, Lot A0137497			(Purchased Reagent)	Acrolein	20000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMWNU8260200_00219	10/23/18	10/16/18	Methanol, Lot 5088669	1 mL	VMA1582602CV1_00039	80 uL	2-Chloroethyl vinyl ether	200 ug/mL
					VMA158260GAS1_00286	80 uL	Bromomethane	200 ug/mL
							Butadiene	200 ug/mL
							Chloroethane	200 ug/mL
							Chloromethane	200 ug/mL
							Dichlorodifluoromethane	200 ug/mL
							Dichlorofluoromethane	200 ug/mL
							Trichlorofluoromethane	200 ug/mL
							Vinyl chloride	200 ug/mL
					VMA158260KET1_00053	16 uL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VMA158260VA1_00058	40 uL	Vinyl acetate	200 ug/mL
					VMA178260ETH1_00019	100 uL	Ethanol	10000 ug/mL
					VMA178260MEG1_00009	80 uL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
		Acrylonitrile	2000 ug/mL					
		Benzene	200 ug/mL					
		Bromobenzene	200 ug/mL					
		Bromochloromethane	200 ug/mL					
		Bromodichloromethane	200 ug/mL					
		Bromoform	200 ug/mL					
		Carbon disulfide	200 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							Carbon tetrachloride	200 ug/mL	
							Chlorobenzene	200 ug/mL	
							Chloroform	200 ug/mL	
							cis-1,2-Dichloroethene	200 ug/mL	
							cis-1,3-Dichloropropene	200 ug/mL	
							Cyclohexane	200 ug/mL	
							Dibromochloromethane	200 ug/mL	
							Dibromomethane	200 ug/mL	
							Ethyl ether	200 ug/mL	
							Ethyl methacrylate	200 ug/mL	
							Ethylbenzene	200 ug/mL	
							Hexachlorobutadiene	200 ug/mL	
							Hexane	200 ug/mL	
							Iodomethane	200 ug/mL	
							Isobutyl alcohol	5000 ug/mL	
							Isopropylbenzene	200 ug/mL	
							m,p-Xylene	200 ug/mL	
							Methyl acetate	400 ug/mL	
							Methyl-t-Butyl Ether (MTBE)	200 ug/mL	
							Methylcyclohexane	200 ug/mL	
							Methylene Chloride	200 ug/mL	
							n-Butylbenzene	200 ug/mL	
							n-Heptane	200 ug/mL	
							N-Propylbenzene	200 ug/mL	
							Naphthalene	200 ug/mL	
							o-Xylene	200 ug/mL	
							p-Isopropyltoluene	200 ug/mL	
							sec-Butylbenzene	200 ug/mL	
							Styrene	200 ug/mL	
							tert-Butyl alcohol (TBA)	2000 ug/mL	
							tert-Butylbenzene	200 ug/mL	
							Tetrachloroethene	200 ug/mL	
							Tetrahydrofuran	400 ug/mL	
							Toluene	200 ug/mL	
							trans-1,2-Dichloroethene	200 ug/mL	
							trans-1,3-Dichloropropene	200 ug/mL	
							trans-1,4-Dichloro-2-butene	200 ug/mL	
							Trichloroethene	200 ug/mL	
					VMA178260POL1_00019	80 uL	Acetonitrile	2000 ug/mL	
							Ethyl-t-butyl ether (ETBE)	200 ug/mL	
							Isopropyl Ether (DIPE)	200 ug/mL	
							Propionitrile	2000 ug/mL	
							Tert-amyl-methyl ether (TAME)	200 ug/mL	
					VMANU8260ACR1_00114	10 uL	Acrolein	200 ug/mL	
.VMA1582602CV1_00039	03/25/19		Restek, Lot A0123891				(Purchased Reagent)	2-Chloroethyl vinyl ether	2500 ug/mL
.VMA158260GAS1_00286	10/23/18		Restek, Lot A0137097				(Purchased Reagent)	Bromomethane	2500 ug/mL
								Butadiene	2500 ug/mL
								Chloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VMA158260KET1_00053	03/25/19		Restek, Lot A0131486		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.VMA158260VA1_00058	12/31/18		Restek, Lot A0138862		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.VMA178260ETH1_00019	03/25/19		Restek, Lot A0135657		(Purchased Reagent)		Ethanol	100000 ug/mL
.VMA178260MEG1_00009	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m,p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl-t-Butyl Ether (MTBE)	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.VMA178260POL1_00019	03/25/19		Restek, Lot A0132831			(Purchased Reagent)	Acetonitrile	25000 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Isopropyl Ether (DIPE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
.VMANU8260ACR1_00114	10/31/18		Restek, Lot A0137497			(Purchased Reagent)	Acrolein	20000 ug/mL
VMWNU8260CCV1_01080	10/23/18	10/16/18	Methanol, Lot 5088669	1 mL	VMA1582602CV1_00039	20 uL	2-Chloroethyl vinyl ether	50 ug/mL
					VMA158260GAS1_00286	20 uL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
					VMA158260KET1_00053	4 uL	2-Butanone (MEK)	50 ug/mL
							2-Hexanone	50 ug/mL
							4-Methyl-2-pentanone (MIBK)	50 ug/mL
							Acetone	50 ug/mL
					VMA158260VA1_00058	8 uL	Vinyl acetate	40 ug/mL
					VMA178260ETH1_00019	20 uL	Ethanol	2000 ug/mL
					VMA178260MEG1_00009	20 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m,p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl-t-Butyl Ether (MTBE)	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol (TBA)	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VMA178260POL1_00019	20 uL	Acetonitrile	500 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Isopropyl Ether (DIPE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
					VMANU8260ACR1_00114	2.5 uL	Acrolein	50 ug/mL
.VMA1582602CV1_00039	03/25/19		Restek, Lot A0123891				2-Chloroethyl vinyl ether	2500 ug/mL
.VMA158260GAS1_00286	10/23/18		Restek, Lot A0137097				Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VMA158260KET1_00053	03/25/19		Restek, Lot A0131486				2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.VMA158260VA1_00058	12/31/18		Restek, Lot A0138862			(Purchased Reagent)	Vinyl acetate	5000 ug/mL
.VMA178260ETH1_00019	03/25/19		Restek, Lot A0135657			(Purchased Reagent)	Ethanol	100000 ug/mL
.VMA178260MEG1_00009	12/31/18		Restek, Lot A0123711			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m,p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl-t-Butyl Ether (MTBE)	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.VMA178260POL1_00019	03/25/19		Restek, Lot A0132831			(Purchased Reagent)	Acetonitrile	25000 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Isopropyl Ether (DIPE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
.VMANU8260ACR1_00114	10/31/18		Restek, Lot A0137497			(Purchased Reagent)	Acrolein	20000 ug/mL
VMWNU8260IS_00216	10/18/18	09/18/18	Methanol, Lot 5013768	1 mL	VMANU8260ISD1_00223	20 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
					VMANU8260TD91_00247	25 uL	TBA-d9 (IS)	500 ug/mL
.VMANU8260ISD1_00223	03/04/19		Restek, Lot A0138856			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
.VMANU8260TD91_00247	03/04/19		Restek, Lot A0135055			(Purchased Reagent)	TBA-d9 (IS)	20000 ug/mL
VMWNU8260ISS_00160	11/03/18	10/03/18	Methanol, Lot 4950977	40 mL	VMANU8260ISD1_00224	800 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
					VMANU8260TD91_00243	1000 uL	TBA-d9 (IS)	500 ug/mL
.VMANU8260ISD1_00224	04/03/19		Restek, Lot A0138856			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMANU8260TD91_00243	03/20/19		Restek, Lot A0135055			(Purchased Reagent)	Fluorobenzene (IS)	2500 ug/mL
VMWNU8260ISS_00160	11/03/18	10/03/18	Methanol, Lot 4950977	40 mL	VMANU8260SUR2_00045	800 uL	TBA-d9 (IS)	20000 ug/mL
							1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VMANU8260SUR2_00045	03/20/19		Restek, Lot A0132615			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMWNU8260ISS_00161	11/12/18	10/12/18	Methanol, Lot 4950977	40 mL	VMANU8260ISD1_00225	800 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
					VMANU8260TD91_00250	1000 uL	TBA-d9 (IS)	500 ug/mL
.VMANU8260ISD1_00225	04/12/19		Restek, Lot A0138856			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
.VMANU8260TD91_00250	04/12/19		Restek, Lot A0135055			(Purchased Reagent)	TBA-d9 (IS)	20000 ug/mL
VMWNU8260ISS_00161	11/12/18	10/12/18	Methanol, Lot 4950977	40 mL	VMANU8260SUR2_00045	800 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VMANU8260SUR2_00045	03/20/19		Restek, Lot A0132615			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMWNU8260LCS2_00215	10/18/18	10/11/18	Methanol, Lot 5088669	10 mL	VMA158260GAS2_00308	200 uL	Bromomethane	50 ppm
							Chloroethane	50 ppm
							Chloromethane	50 ppm
							Dichlorodifluoromethane	50 ppm
							Trichlorofluoromethane	50 ppm
							Vinyl chloride	50 ppm
					VMA158260KET2_00051	40 uL	2-Butanone (MEK)	50 ppm
							2-Hexanone	50 ppm
							4-Methyl-2-pentanone (MIBK)	50 ppm
							Acetone	50 ppm
					VMA178260MEG2_00002	200 uL	1,1,1,2-Tetrachloroethane	50 ppm
							1,1,1-Trichloroethane	50 ppm
							1,1,2,2-Tetrachloroethane	50 ppm
							1,1,2-Trichloroethane	50 ppm
							1,1-Dichloroethane	50 ppm
							1,1-Dichloroethene	50 ppm
							1,1-Dichloropropene	50 ppm
							1,2,3-Trichlorobenzene	50 ppm
							1,2,3-Trichloropropane	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2,4-Trimethylbenzene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	50 ppm
							1,2-Dibromoethane (EDB)	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Dichloroethane	50 ppm
							1,2-Dichloropropane	50 ppm
							1,3,5-Trimethylbenzene	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,3-Dichloropropane	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2-Dichloropropane	50 ppm
							2-Chlorotoluene	50 ppm
							4-Chlorotoluene	50 ppm
							Benzene	50 ppm
							Bromobenzene	50 ppm
							Bromochloromethane	50 ppm
							Bromodichloromethane	50 ppm
							Bromoform	50 ppm
							Carbon tetrachloride	50 ppm
							Chlorobenzene	50 ppm
							Chloroform	50 ppm
							cis-1,2-Dichloroethene	50 ppm
							cis-1,3-Dichloropropene	50 ppm
							Dibromochloromethane	50 ppm
							Dibromomethane	50 ppm
							Ethylbenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Isopropylbenzene	50 ppm
							m,p-Xylene	50 ppm
							Methyl-t-Butyl Ether (MTBE)	50 ppm
							Methylene Chloride	50 ppm
							n-Butylbenzene	50 ppm
							N-Propylbenzene	50 ppm
							Naphthalene	50 ppm
							o-Xylene	50 ppm
							p-Isopropyltoluene	50 ppm
							sec-Butylbenzene	50 ppm
							Styrene	50 ppm
							tert-Butyl alcohol (TBA)	500 ppm
							tert-Butylbenzene	50 ppm
							Tetrachloroethene	50 ppm
							Toluene	50 ppm
							trans-1,2-Dichloroethene	50 ppm
trans-1,3-Dichloropropene	50 ppm							
Trichloroethene	50 ppm							
VMA178260POL2_00019	200 uL	Ethyl-t-butyl ether (ETBE)	50 ppm					
		Isopropyl Ether (DIPE)	50 ppm					
		Tert-amyl-methyl ether (TAME)	50 ppm					
.VMA158260GAS2_00308	04/11/19	Restek, Lot A0136781	(Purchased Reagent)	Bromomethane	2500 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VMA158260KET2_00051	01/26/19		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.VMA178260MEG2_00002	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m,p-Xylene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl-t-Butyl Ether (MTBE)	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
Trichloroethene	2500 ug/mL							
.VMA178260POL2_00019	01/26/19		Restek, Lot A0126826		(Purchased Reagent)		Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Isopropyl Ether (DIPE)	2500 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
VMWNU8260LCS2_00216	10/25/18	10/18/18	Methanol, Lot 5088669	10 mL	VMA158260GAS2_00310	200 uL	Bromomethane	50 ppm
							Chloroethane	50 ppm
							Chloromethane	50 ppm
							Dichlorodifluoromethane	50 ppm
							Trichlorofluoromethane	50 ppm
							Vinyl chloride	50 ppm
					VMA158260KET2_00051	40 uL	2-Butanone (MEK)	50 ppm
							2-Hexanone	50 ppm
							4-Methyl-2-pentanone (MIBK)	50 ppm
					VMA178260MEG2_00002	200 uL	Acetone	50 ppm
							1,1,1,2-Tetrachloroethane	50 ppm
							1,1,1-Trichloroethane	50 ppm
							1,1,2,2-Tetrachloroethane	50 ppm
							1,1,2-Trichloroethane	50 ppm
							1,1-Dichloroethane	50 ppm
							1,1-Dichloroethene	50 ppm
							1,1-Dichloropropene	50 ppm
							1,2,3-Trichlorobenzene	50 ppm
							1,2,3-Trichloropropane	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2,4-Trimethylbenzene	50 ppm
							1,2-Dibromo-3-Chloropropane	50 ppm
							1,2-Dibromoethane (EDB)	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,2-Dichloroethane	50 ppm
							1,2-Dichloropropane	50 ppm
							1,3,5-Trimethylbenzene	50 ppm
1,3-Dichlorobenzene	50 ppm							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2-Dichloropropane	50 ppm
							2-Chlorotoluene	50 ppm
							4-Chlorotoluene	50 ppm
							Benzene	50 ppm
							Bromobenzene	50 ppm
							Bromochloromethane	50 ppm
							Bromodichloromethane	50 ppm
							Bromoform	50 ppm
							Carbon tetrachloride	50 ppm
							Chlorobenzene	50 ppm
							Chloroform	50 ppm
							cis-1,2-Dichloroethene	50 ppm
							cis-1,3-Dichloropropene	50 ppm
							Dibromochloromethane	50 ppm
							Dibromomethane	50 ppm
							Ethylbenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Isopropylbenzene	50 ppm
							m,p-Xylene	50 ppm
							Methyl-t-Butyl Ether (MTBE)	50 ppm
							Methylene Chloride	50 ppm
							n-Butylbenzene	50 ppm
							N-Propylbenzene	50 ppm
							Naphthalene	50 ppm
							o-Xylene	50 ppm
							p-Isopropyltoluene	50 ppm
							sec-Butylbenzene	50 ppm
							Styrene	50 ppm
							tert-Butyl alcohol (TBA)	500 ppm
							tert-Butylbenzene	50 ppm
							Tetrachloroethene	50 ppm
							Toluene	50 ppm
							trans-1,2-Dichloroethene	50 ppm
							trans-1,3-Dichloropropene	50 ppm
							Trichloroethene	50 ppm
					VMA178260POL2_00019	200 uL	Ethyl-t-butyl ether (ETBE)	50 ppm
							Isopropyl Ether (DIPE)	50 ppm
							Tert-amyl-methyl ether (TAME)	50 ppm
.VMA158260GAS2_00310	04/18/19		Restek, Lot A0136781			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VMA158260KET2_00051	01/26/19		Restek, Lot A0133078			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMA178260MEG2_00002	12/31/18		Restek, Lot A0123775			(Purchased Reagent)	4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
							1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
m,p-Xylene	2500 ug/mL							
Methyl-t-Butyl Ether (MTBE)	2500 ug/mL							
Methylene Chloride	2500 ug/mL							
n-Butylbenzene	2500 ug/mL							
N-Propylbenzene	2500 ug/mL							
Naphthalene	2500 ug/mL							
o-Xylene	2500 ug/mL							
p-Isopropyltoluene	2500 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol (TBA)	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.VMA178260POL2_00019	01/26/19		Restek, Lot A0126826			(Purchased Reagent)	Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Isopropyl Ether (DIPE)	2500 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
VMWNUSURR200_00211	10/18/18	09/18/18	Methanol, Lot 5013768	1 mL	VMANU8260SUR1_00074	80 uL	1,2-Dichloroethane-d4 (Surr)	200 ug/mL
							4-Bromofluorobenzene (Surr)	200 ug/mL
							Dibromofluoromethane (Surr)	200 ug/mL
							Toluene-d8 (Surr)	200 ug/mL
.VMANU8260SUR1_00074	03/18/19		Restek, Lot A0132615			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMWNUSURR50_00211	10/18/18	09/18/18	Methanol, Lot 5013768	1 mL	VMANU8260SUR1_00074	20 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VMANU8260SUR1_00074	03/18/19		Restek, Lot A0132615			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
WC3001ICV_00043	11/30/18	08/10/18	Di Water, Lot 20180810	100 mL	WC2CHLORITE_00020	0.4 mL	Chlorite	4 mg/L
.WC2CHLORITE_00020	11/30/18		Ultra Scientific, Lot CS-1703			(Purchased Reagent)	Chlorite	1000 mg/L
WC3001ICV_00044	11/30/18	10/04/18	Di Water, Lot 20181004	100 mL	WC2CHLORATE_00004	0.4 mL	Chlorate	4.004 mg/L
					WC2CHLORITE_00020	0.4 mL	Chlorite	4 mg/L
.WC2CHLORATE_00004	11/30/20		Ultra Scientific, Lot CP-5286			(Purchased Reagent)	Chlorate	1001 mg/L
.WC2CHLORITE_00020	11/30/18		Ultra Scientific, Lot CS-1703			(Purchased Reagent)	Chlorite	1000 mg/L
WC3001LCS_00075	09/28/18	08/14/18	Di Water, Lot 20180814	100 mL	WC1CHLORITE_00008	0.4 mL	Chlorite	4 mg/L
.WC1CHLORITE_00008	11/27/19		O2Si, Lot 146667-16			(Purchased Reagent)	Chlorite	1000 mg/L
WC3001LCS_00077	01/01/19	10/04/18	Di Water, Lot 20181004	100 mL	WC1BROMATE_00008	0.1 mL	Bromate	1 mg/L
					WC1CHLORATE_00009	0.4 mL	Chlorate	4 mg/L
					WC1CHLORITE_00008	0.4 mL	Chlorite	4 mg/L
					wcbromide_00016	0.1 mL	Bromide	10 mg/L
.WC1BROMATE_00008	01/01/19		O2Si, Lot 131599-4			(Purchased Reagent)	Bromate	1000 mg/L
.WC1CHLORATE_00009	01/01/19		O2Si, Lot 142627-2			(Purchased Reagent)	Chlorate	1000 mg/L
.WC1CHLORITE_00008	11/27/19		O2Si, Lot 146667-16			(Purchased Reagent)	Chlorite	1000 mg/L
.wcbromide_00016	02/28/20		Hgh Purity Standards, Lot 1807216			(Purchased Reagent)	Bromide	10000 ug/mL
WC314.INF_10_00069	10/24/18	10/23/18	2% NaOH, Lot 20181023	50 mL	WCCL041st-10_00016	0.05 mL	Perchlorate	10 ppb

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.WCCLO41st-10_00016	10/29/18	07/29/18	Di Water, Lot 20180729	100 mL	WCCLO4-1st_00004	1 mL	Perchlorate	10 mg/L
..WCCLO4-1st_00004	12/30/18		SPEX CertiPrep, Lot 4-88CLO4-2Y		(Purchased Reagent)		Perchlorate	1000 mg/L
WC314.INF_00538	10/24/18	10/23/18	2% NaOH, Lot 20181023	50 mL	WCCLO41st-10_00016	0.125 mL	Perchlorate	25 ppb
.WCCLO41st-10_00016	10/29/18	07/29/18	Di Water, Lot 20180729	100 mL	WCCLO4-1st_00004	1 mL	Perchlorate	10 mg/L
..WCCLO4-1st_00004	12/30/18		SPEX CertiPrep, Lot 4-88CLO4-2Y		(Purchased Reagent)		Perchlorate	1000 mg/L
WC314.INF_00539	10/25/18	10/24/18	2% NaOH, Lot 20181024	50 mL	WCCLO41st-10_00016	0.125 mL	Perchlorate	25 ppb
.WCCLO41st-10_00016	10/29/18	07/29/18	Di Water, Lot 20180729	100 mL	WCCLO4-1st_00004	1 mL	Perchlorate	10 mg/L
..WCCLO4-1st_00004	12/30/18		SPEX CertiPrep, Lot 4-88CLO4-2Y		(Purchased Reagent)		Perchlorate	1000 mg/L
							Perchlorate	1000 mg/L
WCCLO41st-10_00016	10/29/18	07/29/18	Di Water, Lot 20180729	100 mL	WCCLO4-1st_00004	1 mL	Perchlorate	10 mg/L
..WCCLO4-1st_00004	12/30/18		SPEX CertiPrep, Lot 4-88CLO4-2Y		(Purchased Reagent)		Perchlorate	1000 mg/L
WCCLO4ICV10_00032	10/29/18	07/29/18	Di Water, Lot 07/29/2018	100 mL	WCCLO4ICV_00016	1 mL	Perchlorate	10.0002 mg/L
..WCCLO4ICV_00016	12/10/18	12/08/17	Di Water, Lot 12/10/2017	250 mL	WCCLO4ICVSOLI_00002	0.3078 g	Perchlorate	1000.02 mg/L
..WCCLO4ICVSOLI_00002	06/01/22		SPECTRUM, Lot 2FH0070		(Purchased Reagent)		Perchlorate	0.81223 g/g
WCCR6ICV5PPM_00058	08/22/18	07/23/18	Di Water, Lot 20180607	50 mL	WCCR6ICV_00024	5 mL	Chromium, hexavalent	4.99849 mg/L
.WCCR6ICV_00024	08/22/18	03/22/18	Di Water, Lot 20180322	1000 mL	WCK2CR2O7_00003	0.1414 g	Chromium, hexavalent	49.9849 mg/L
..WCK2CR2O7_00003	03/22/22		FISHER, Lot 166724		(Purchased Reagent)		Chromium, hexavalent	0.3535 g/g
WCCR6LCS50PPM_00043	03/27/19	10/08/18	Di Water, Lot 20180927	100 mL	WCCR6 K2Cr2O4_00009	5 mL	Chromium, hexavalent	50 mg/L
..WCCR6 K2Cr2O4_00009	04/30/19		ERA, Lot 040416		(Purchased Reagent)		Chromium, hexavalent	1000 mg/L
WCCR6LCS50PPM_00114	08/21/18	07/23/18	Di Water, Lot 20180723	50 mL	WCCR6LCS50PPM_00039	5 mL	Chromium, hexavalent	5 mg/L
.WCCR6LCS50PPM_00039	08/21/18	02/21/18	Di Water, Lot 20180221	100 mL	WCCR6 K2Cr2O4_00009	5 mL	Chromium, hexavalent	50 mg/L
..WCCR6 K2Cr2O4_00009	04/30/19		ERA, Lot 040416		(Purchased Reagent)		Chromium, hexavalent	1000 mg/L
WCCR6LCS50PPM_00116	10/21/18	09/20/18	Di Water, Lot 20180921	50 mL	WCCR6LCS50PPM_00041	5 mL	Chromium, hexavalent	5 mg/L
.WCCR6LCS50PPM_00041	02/21/19	08/20/18	Di Water, Lot 20180820	100 mL	WCCR6 K2Cr2O4_00009	5 mL	Chromium, hexavalent	50 mg/L
..WCCR6 K2Cr2O4_00009	04/30/19		ERA, Lot 040416		(Purchased Reagent)		Chromium, hexavalent	1000 mg/L
WCKDCA_00068	12/22/18	08/22/18	Di Water, Lot 20180822	100 mL	WCKDCA_00003	0.065 g	Dichloroacetic acid(Surr)	496.855 mg/L
..WCKDCA_00003	02/28/20		Aldrich, Lot MKBR8264V		(Purchased Reagent)		Dichloroacetic acid(Surr)	0.764393 g/g
WCKDCA_00070	01/04/19	10/04/18	Di Water, Lot 20181004	100 mL	WCKDCA_00003	0.065 g	Dichloroacetic acid(Surr)	496.855 mg/L
..WCKDCA_00003	02/28/20		Aldrich, Lot MKBR8264V		(Purchased Reagent)		Dichloroacetic acid(Surr)	0.764393 g/g

Reagent

Custom mix A_00001

Rec. 10/31/17
ID 4457188

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution		
Catalog Number:	TA-86REV1		
Lot Number:	M2-MEB662656		
Matrix:	5% (v/v) HNO ₃		
Value / Analyte(s):	5 000 µg/mL ea:	Potassium,	Sodium,
	2 000 µg/mL ea:	Phosphorus,	
	1 000 µg/mL ea:	Iron,	Aluminum,
	500 µg/mL ea:	Boron,	Lithium,
	200 µg/mL ea:	Magnesium,	Manganese,
	Zinc,		Strontium,
	100 µg/mL ea:	Thallium,	Vanadium,
	Nickel,		Selenium,
	Barium,		Silver,
	50 µg/mL ea:		Arsenic,
	Chromium,		Cobalt,
	20 µg/mL ea:		
	Beryllium		Lead,

3.0 CERTIFIED VALUES AND UNCERTAINTIES

25



ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 3 µg/mL	Arsenic, As	100.0 ± 0.6 µg/mL
Barium, Ba	100.0 ± 0.4 µg/mL	Beryllium, Be	20.00 ± 0.12 µg/mL
Boron, B	500.0 ± 3.0 µg/mL	Cadmium, Cd	50.00 ± 0.21 µg/mL
Calcium, Ca	1 000 ± 4 µg/mL	Chromium, Cr	50.00 ± 0.31 µg/mL
Cobalt, Co	100.0 ± 0.5 µg/mL	Copper, Cu	100.0 ± 0.4 µg/mL
Iron, Fe	1 000 ± 4 µg/mL	Lead, Pb	50.00 ± 0.22 µg/mL
Lithium, Li	500.0 ± 2.1 µg/mL	Magnesium, Mg	200.0 ± 0.8 µg/mL
Manganese, Mn	200.0 ± 0.8 µg/mL	Nickel, Ni	100.0 ± 0.4 µg/mL
<u>Phosphorus, P</u>	<u>2 000 ± 9 µg/mL</u>	Potassium, K	5 000 ± 19 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Silver, Ag	100.0 ± 0.4 µg/mL
Sodium, Na	5 000 ± 19 µg/mL	Strontium, Sr	200.0 ± 0.8 µg/mL
Thallium, Tl	100.0 ± 0.5 µg/mL	Vanadium, V	100.0 ± 0.4 µg/mL
Zinc, Zn	200.0 ± 0.8 µg/mL		

Density: 1.074 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 3 µg/mL	Arsenic, As	100.0 ± 0.6 µg/mL
Barium, Ba	100.0 ± 0.4 µg/mL	Beryllium, Be	20.00 ± 0.12 µg/mL
Boron, B	500.0 ± 3.0 µg/mL	Cadmium, Cd	50.00 ± 0.21 µg/mL
Calcium, Ca	1 000 ± 4 µg/mL	Chromium, Cr	50.00 ± 0.31 µg/mL
Cobalt, Co	100.0 ± 0.5 µg/mL	Copper, Cu	100.0 ± 0.4 µg/mL
Iron, Fe	1 000 ± 4 µg/mL	Lead, Pb	50.00 ± 0.22 µg/mL
Lithium, Li	500.0 ± 2.1 µg/mL	Magnesium, Mg	200.0 ± 0.8 µg/mL
Manganese, Mn	200.0 ± 0.8 µg/mL	Nickel, Ni	100.0 ± 0.4 µg/mL
<u>Phosphorus, P</u>	<u>2 000 ± 9 µg/mL</u>	Potassium, K	5 000 ± 19 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Silver, Ag	100.0 ± 0.4 µg/mL
Sodium, Na	5 000 ± 19 µg/mL	Strontium, Sr	200.0 ± 0.8 µg/mL
Thallium, Tl	100.0 ± 0.5 µg/mL	Vanadium, V	100.0 ± 0.4 µg/mL
Zinc, Zn	200.0 ± 0.8 µg/mL		

Density: 1.074 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	EDTA	928	928
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric		traceable to 84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Tl	ICP Assay	3158	993012
Tl	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{\text{CRM/RM}}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{\text{CRM/RM}} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{\text{char a}}$

X_b = mean of Assay Method B with standard uncertainty $u_{\text{char b}}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{\text{char a}})^2 / ((1/u_{\text{char a}})^2 + (1/u_{\text{char b}})^2)$$

$$w_b = (1/u_{\text{char b}})^2 / ((1/u_{\text{char a}})^2 + (1/u_{\text{char b}})^2)$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char a\&b}}^2 + u_{\text{bb}}^2 + u_{\text{tts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{\text{char a\&b}}$ = $[(w_a)^2 (u_{\text{char a}})^2 + (w_b)^2 (u_{\text{char b}})^2]^{1/2}$, where $u_{\text{char a}}$ and $u_{\text{char b}}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{tts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = \text{mean of Assay Method A with standard uncertainty } u_{\text{char a}}$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char a}}^2 + u_{\text{bb}}^2 + u_{\text{tts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{\text{char a}}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{tts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Characterization of CRM by two independent methods Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char a})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$w_b = (1/u_{char b})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a \& b}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a \& b} = [(w_a)^2 (u_{char a})^2 + (w_b)^2 (u_{char b})^2]^{1/2}$ where $u_{char a}$ and $u_{char b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char a}$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Handwritten signature of Michael Booth in cursive script.

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Handwritten signature of Paul R. Gaines in cursive script.

Reagent

ME ICP SPKE A_00033

125 Market Street
New Haven, CT 06513
USA

 **AccuStandard® Inc.**

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

4810477

AccuTrace™ Reference Standard

Catalog No: QCS-01-5
Description: ICP Quality Control Standard #1
Lot: 217065079
Matrix: 5% Nitric acid, tr HF
Hazards: Refer to SDS for complete safety information

Date Certified: Jun 15, 2017
Expiration: Jul 15, 2019
Sample Size: 500 mL
Components: 23
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes
Included on ISO Guide 34 Scope of Accreditation: Yes



Signal Word: Danger

Component	SRM #	Prepared Concentration (µg/mL)	
Sb	Antimony	3102a	100
As	Arsenic	3103a	100
Be	Beryllium	3105a	100
Cd	Cadmium	3108	100
Ca	Calcium	3109a	100
Cr	Chromium	3112a	100
Co	Cobalt	3113	100
Cu	Copper	3114	100
Fe	Iron	3126a	100
Pb	Lead	3128	100
Li	Lithium	3129a	100
Mg	Magnesium	3131a	100
Mn	Manganese	3132	100
Mo	Molybdenum	3134	100
Ni	Nickel	3136	100
P	Phosphorus	3139a	100
Se	Selenium	3149	100
Sr	Strontium	3153a	100
Tl	Thallium	3158	100
Sn	Tin	3161a	100
Ti	Titanium	3162a	100
V	Vanadium	3165	100
Zn	Zinc	3168a	100

The gravimetric uncertainty for this product is $\pm 0.24\%$. See reverse side for details.

In order to verify the concentration(s), the final solution was checked by plasma emission spectroscopy (ICP) against material traceable to the above listed NIST SRM(s).

We use the highest purity raw materials available to minimize impurity levels in the final solution. Typically 99.999%+ pure starting materials are used as well as high purity acids and ASTM Type I 18 megohm deionized water.


All glassware used in preparation is Class A and calibrated regularly.

All weights are traceable through NIST, Test No. 822-275872-11

All bottles are acid leached and triple rinsed with deionized water prior to use.

Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be $\pm 0.5\%$ of the stated value until its expiration date provided it is kept tightly capped and stored under the conditions stated above.

Certified By: 
Meigan O'Leary, Inorganic QC Manager

Reagent

ME ICP_ICSA_00040

REPORT OF ANALYSIS

Multi-Element Aqueous RM

Interference Check Standard Solution A

Product #: 160005-07-03

Matrix: 5% HNO₃

Lot #: 10064997-7

Element	Certified Concentration	Element	Certified Concentration
Al	6001 µg/mL	Fe	6000 µg/mL
Ca	6001 µg/mL	Mg	6000 µg/mL

Intended Use: This solution is intended for use as a reference material (RM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This RM was prepared to the certified concentrations shown above by gravimetric methods using single-element concentrates, and was stabilized using high purity nitric acid (HNO₃) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with the certified concentration is ±0.5% relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution, and transpiration through the container. This represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: O2Si ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.



Chuck Goudreau, Certifying Officer

July 12, 2018

Certification Date

O2Si waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

This RM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	1077a	Hf	3122	—	S	3154	2770
Al	3101a	1075a	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	—	Sc	3148a	3148a
Au	3121	—	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	1066a
Ba	3104a	1051b	La	3127a	3127a	Sm	3147a	—
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	1057b
Bi	3106	3106	Lu	3130a	—	SO ₄ ²⁻	3181	—
Br	3184	—	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	—
Cd	3108	1053a	Mo	3134	3134	Tb	3157a	—
Ce	3110	3110	Na	3152a	3152a	Te	3156	—
Cl	3182	1818a	Nb	3137	—	Th	3159	—
Co	3113	3113	Nd	3135a	—	Ti	3162a	3162a
Cr	3112a	1078b	Ni	3136	1065b	Tl	3158	3158
Cs	3111a	—	NO ₃ ⁻	3185	—	Tm	3160a	—
Cu	3114	1080a	P	3139a	3139a	U	3164	—
Dy	3115a	—	Pb	3128	3128	V	3165	1052b
Er	3116a	—	Pd	3138	—	W	3163	3163
Eu	3117a	—	PO ₄ ³⁻	3186	—	Y	3167a	3167a
F	3183	—	Pr	3142a	—	Yb	3166a	—
Fe	3126a	1079b	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	—	Rb	3145a	—	Zr	3169	3169
Gd	3118a	—	Re	3143	—			
Ge	3120a	—	Rh	3144	3144			

Reagent

ME K_00007

4121951



Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2008

Certificate of Analysis



ISO 17025 Accredited
Chemical Testing Lab
Cert. No. 3031.01

Rev 0

Catalog No. 060019-02-02

Lot No. 1103100

Storage Ambient

Specific Gravity 1.0160

Matrix 1% HNO₃

Description Potassium 1,000 mg/L in 1% HNO₃, 250 mL (KNO₃)

Date Received _____

Expiration Date 17-Aug-2018

Certification Date 13-Feb-2017

<u>Element</u>	<u>Symbol</u>	<u>CAS No</u>	<u>Source Lot No</u>	<u>Purity %</u>	<u>Concentration mg/L</u>
Potassium	K	7440-09-7	7013.409.5P	99.999	1000 +/- 3

This standard has been prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only Class-A volumetric glassware was used to prepare this product. The concentration and uncertainty of this standard are calculated based on the weight and volumes used in the manufacturing process. The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been certified by ICP against an independent source which is directly traceable to NIST SRM 3141

This standard was analyzed by ICP-MS for trace impurities. A = Major component, INT = Interferent from the major component.

Trace impurity analysis in µg/L

Li	<0.1	Ca	15	Cu	<0.1	Y	<0.1	Cd	<0.1	Ce	<0.1	Ho	<0.1	Re	<0.1	Bi	<0.1
Be	<0.1	Ti	<0.1	Zn	3	Zr	<0.1	In	<0.1	Pr	<0.1	Er	<0.1	Os	<0.1	Th	<0.1
B	<1.0	V	<0.1	Ga	<0.1	Nb	<0.1	Sn	<0.1	Nd	<0.1	Tm	<0.1	Ir	<0.1	U	<0.1
Na	5	Cr	<0.1	Ge	<0.1	Mo	<0.1	Sb	<0.1	Sm	<0.1	Yb	<0.1	Pt	<0.1		
Mg	10	Mn	<0.1	As	<0.1	Ru	<0.1	Te	<0.1	Eu	<0.1	Lu	<0.1	Au	<0.1		
Al	<1.0	Fe	10	Se	<0.1	Rh	<0.1	Cs	<0.1	Gd	<0.1	Hf	<0.1	Hg	<0.1		
P	<1.0	Co	<0.1	Rb	<0.1	Pd	<0.1	Ba	<0.1	Tb	<0.1	Ta	<0.1	Tl	<0.1		
K	A	Ni	<0.1	Sr	<0.1	Ag	<0.1	La	<0.1	Dy	<0.1	W	<0.1	Pb	<0.1		

Amanda Frazier

Certified By: _____

Amanda Frazier

Reagent

ME Na_00010

4121952



Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2008

Certificate of Analysis



ISO 17025 Accredited
Chemical Testing Lab
Cert. No. 3031.01

Rev 1

Catalog No. 060011-02-02

Lot No. 1103103

Storage Ambient

Specific Gravity 1.0157

Matrix 1% HNO₃

Description Sodium 1,000 mg/L in 1% HNO₃,
250 mL (NaNO₃)

Expiration Date 17-Aug-2018

Certification Date 13-Feb-2017

Date Received _____

<u>Element</u>	<u>Symbol</u>	<u>CAS No</u>	<u>Source Lot No</u>	<u>Purity %</u>	<u>Concentration mg/L</u>
Sodium	Na	7440-23-5	7020.409.1P	99.999	1000 +/- 3

This standard has been prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only Class-A volumetric glassware was used to prepare this product. The concentration and uncertainty of this standard are calculated based on the weight and volumes used in the manufacturing process. The uncertainty value is calculated for a 95% confidence interval with a *t* value of 2. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been certified by ICP against an independent source which is directly traceable to NIST SRM 3152

This standard was analyzed by ICP-MS for trace impurities. A = Major component, INT = Interferent from the major component.

Trace impurity analysis in µg/L

Li	<0.1	Ca	50	Cu	INT	Y	<0.1	Cd	<0.1	Ce	<0.1	Ho	<0.1	Re	<0.1	Bi	<0.1
Be	<0.1	Ti	<0.1	Zn	<0.1	Zr	<0.1	In	<0.1	Pr	<0.1	Er	<0.1	Os	<0.1	Th	<0.1
B	<1.0	V	<0.1	Ga	<0.1	Nb	<0.1	Sn	<0.1	Nd	<0.1	Tm	<0.1	Ir	<0.1	U	<0.1
Na	A	Cr	<0.1	Ge	<0.1	Mo	<0.1	Sb	<0.1	Sm	<0.1	Yb	<0.1	Pt	<0.1		
Mg	<1.0	Mn	<0.1	As	<0.1	Ru	<0.1	Te	<0.1	Eu	<0.1	Lu	<0.1	Au	<0.1		
Al	<1.0	Fe	<0.1	Se	<0.1	Rh	<0.1	Cs	<0.1	Gd	<0.1	Hf	<0.1	Hg	<0.1		
P	<1.0	Co	<0.1	Rb	<0.1	Pd	<0.1	Ba	<0.1	Tb	<0.1	Ta	<0.1	Tl	1		
K	INT	Ni	<0.1	Sr	<0.1	Ag	<0.1	La	<0.1	Dy	<0.1	W	<0.1	Pb	4		

Amanda Frazier

Certified By: _____

Amanda Frazier

Reagent

VMA1582602CV1_00039



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 Lot No.: A0123891

Description : 8260 List 1 / Std #4 2-CEVE (2015)
8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : January 31, 2020 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether CAS # 110-75-8 Purity 98% (Lot MKBS6526V)	2,503.5 µg/mL	+/- 14.5556 µg/mL Gravimetric +/- 53.6004 µg/mL Unstressed +/- 55.1587 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMA 158260 2CV 1 - 00039, 40, 41, 42, 43.
R: 5/23/2018 ML

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

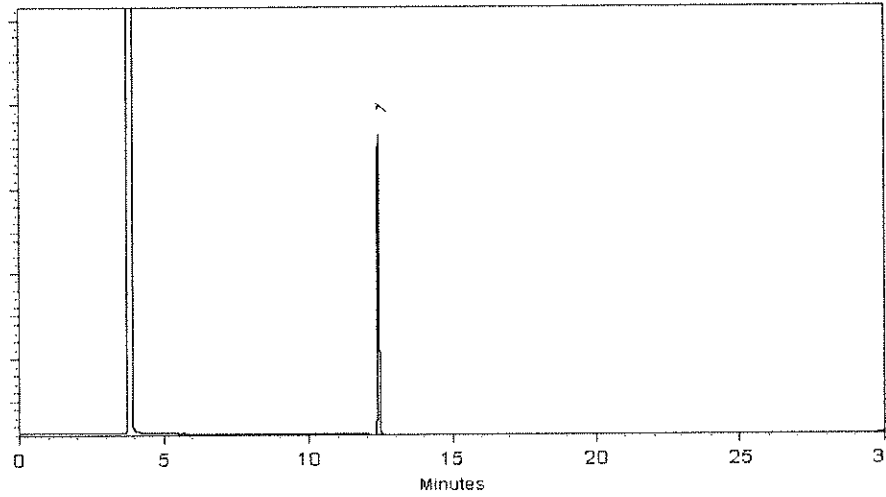
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis

Cathleen Soltis - Mix Technician

Date Mixed: 03-Jan-2017

Balance: 1125113331

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Jan-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260GAS1_00286

VMANU 158260 GAS I - 00283, 284, 285, 286, 287, 288, 289, 290.

R: 9/26/2018
ML



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

Certificate of Analysis



www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 Lot No.: A0137097
 Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : April 30, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
			+/-	µg/mL	µg/mL	Method
1	Dichlorodifluoromethane (CFC-12)	2,500.0 µg/mL	+/-	22.9036	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	141.2851	µg/mL	Unstressed
	Purity 99%		+/-	144.5397	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.4 µg/mL	+/-	22.5304	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBG9707V)		+/-	141.2449	µg/mL	Unstressed
	Purity 99%		+/-	144.5013	µg/mL	Stressed
3	Vinyl chloride	2,500.8 µg/mL	+/-	27.1599	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00012557)		+/-	142.0793	µg/mL	Unstressed
	Purity 99%		+/-	145.3181	µg/mL	Stressed
4	1,3-Butadiene	2,500.3 µg/mL	+/-	21.1380	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBH7966)		+/-	141.0267	µg/mL	Unstressed
	Purity 99%		+/-	144.2880	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.2 µg/mL	+/-	23.4868	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3935	µg/mL	Unstressed
	Purity 99%		+/-	144.6462	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.8 µg/mL	+/-	27.2063	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	142.0899	µg/mL	Unstressed
	Purity 99%		+/-	145.3285	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,500.4 µg/mL	+/- 24.1438	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBH4155V)		+/- 141.5140	µg/mL	Unstressed
	Purity 99%		+/- 144.7645	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

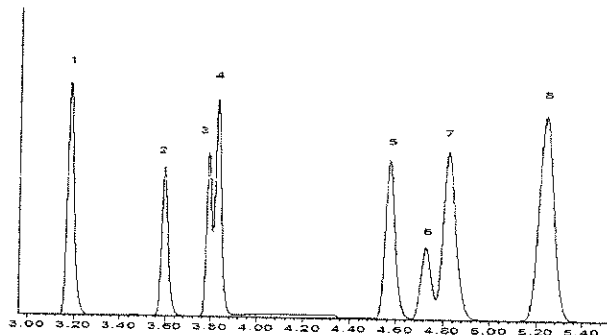
Carrier Gas:
 helium-constant flow 2.0 mL/min.

Temp. Program:
 40°C (hold 6 min.) to 100°C
 @ 6°C/min.

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 12-Apr-2018 **Balance:** B251644995

Justin Albers
 Justin Albers - Operations Tech-ARM GC

Date Passed: 16-Apr-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260GAS2_00308

VMA 158260 GAS 2. - 00309, 306, 307, 308, 309, 310, 311, 312.

R: 9/26/2018

ML



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0136781
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Gray. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.6714	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 4938100)		+/-	140.1867	µg/mL	Unstressed
	Purity 99%		+/-	143.4662	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,501.1 µg/mL	+/-	24.9837	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.6954	µg/mL	Unstressed
	Purity 99%		+/-	144.9435	µg/mL	Stressed
3	Vinyl chloride	2,505.9 µg/mL	+/-	25.2544	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	142.0117	µg/mL	Unstressed
	Purity 99%		+/-	145.2653	µg/mL	Stressed
4	1,3-Butadiene	2,504.1 µg/mL	+/-	25.9046	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	142.0301	µg/mL	Unstressed
	Purity 99%		+/-	145.2786	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.8 µg/mL	+/-	25.7987	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.8830	µg/mL	Unstressed
	Purity 99%		+/-	145.1289	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,497.5 µg/mL	+/-	19.4010	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	140.6211	µg/mL	Unstressed
	Purity 99%		+/-	143.8842	µg/mL	Stressed
7	Dichlorodifluoromethane (CFC-12)	2,503.8 µg/mL	+/-	25.6582	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24186)		+/-	141.9667	µg/mL	Unstressed
	Purity 99%		+/-	145.2158	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,495.4	µg/mL	+/-	20.4202	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)			+/-	140.6511	µg/mL	Unstressed
	Purity 99%			+/-	143.9082	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

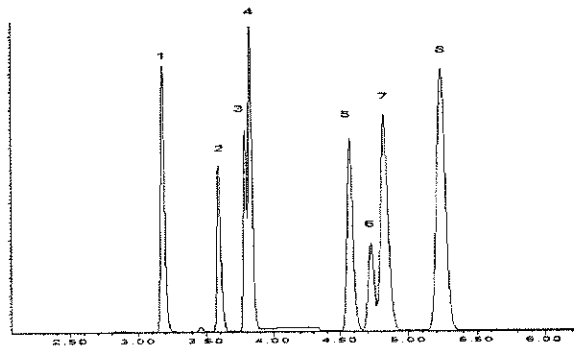
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 5°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maje

Date Mixed: 03-Apr-2018 **Balance:** 1127510105

Justin Albertson
Justin Albertson - Operations Tech-ARM GC

Date Passed: 05-Apr-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260GAS2_00310

VMA 158260 GAS 2. - 00309, 306, 307, 308, 309, 310, 311, 312.

R: 9/26/2018

ML



CERTIFIED REFERENCE MATERIAL



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

Certificate of Analysis



www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0136781
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Gray. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.6714	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 4938100)		+/-	140.1867	µg/mL	Unstressed
	Purity 99%		+/-	143.4662	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,501.1 µg/mL	+/-	24.9837	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.6954	µg/mL	Unstressed
	Purity 99%		+/-	144.9435	µg/mL	Stressed
3	Vinyl chloride	2,505.9 µg/mL	+/-	25.2544	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	142.0117	µg/mL	Unstressed
	Purity 99%		+/-	145.2653	µg/mL	Stressed
4	1,3-Butadiene	2,504.1 µg/mL	+/-	25.9046	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	142.0301	µg/mL	Unstressed
	Purity 99%		+/-	145.2786	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,501.8 µg/mL	+/-	25.7987	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.8830	µg/mL	Unstressed
	Purity 99%		+/-	145.1289	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,497.5 µg/mL	+/-	19.4010	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	140.6211	µg/mL	Unstressed
	Purity 99%		+/-	143.8842	µg/mL	Stressed
7	Dichlorodifluoromethane (CFC-12)	2,503.8 µg/mL	+/-	25.6582	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24186)		+/-	141.9667	µg/mL	Unstressed
	Purity 99%		+/-	145.2158	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,495.4	µg/mL	+/-	20.4202	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)			+/-	140.6511	µg/mL	Unstressed
	Purity 99%			+/-	143.9082	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

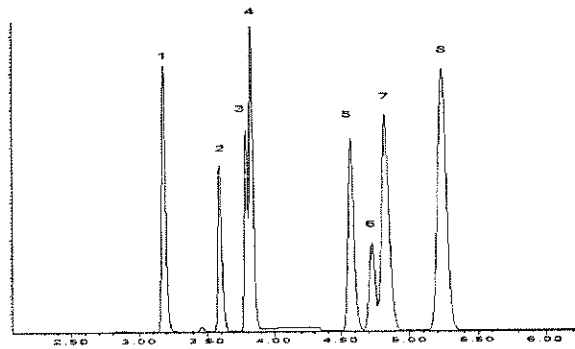
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 5°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maje

Date Mixed: 03-Apr-2018 **Balance:** 1127510105

Justin Albertson
Justin Albertson - Operations Tech-ARM GC

Date Passed: 05-Apr-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260KET1_00053



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0131486
Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2020 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone CAS # 67-64-1 Purity 99% (Lot SHBG8398V)	12,466.0 µg/mL	+/- 72.9912	µg/mL	Gravimetric	
			+/- 752.1786	µg/mL	Unstressed	
			+/- 753.9642	µg/mL	Stressed	
2	2-Butanone (MEK) CAS # 78-93-3 Purity 99% (Lot SHBF2461V)	12,475.5 µg/mL	+/- 73.0468	µg/mL	Gravimetric	
			+/- 752.7518	µg/mL	Unstressed	
			+/- 754.5387	µg/mL	Stressed	
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 Purity 99% (Lot SHBG7318V)	12,539.0 µg/mL	+/- 73.4186	µg/mL	Gravimetric	
			+/- 756.5833	µg/mL	Unstressed	
			+/- 758.3793	µg/mL	Stressed	
4	2-Hexanone CAS # 591-78-6 Purity 99% (Lot MKBW0198V)	12,496.0 µg/mL	+/- 73.1668	µg/mL	Gravimetric	
			+/- 753.9888	µg/mL	Unstressed	
			+/- 755.7786	µg/mL	Stressed	

Solvent: P&T Methanol/Water (90:10)
 CAS # 67-56-1/7732-18-5
 Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

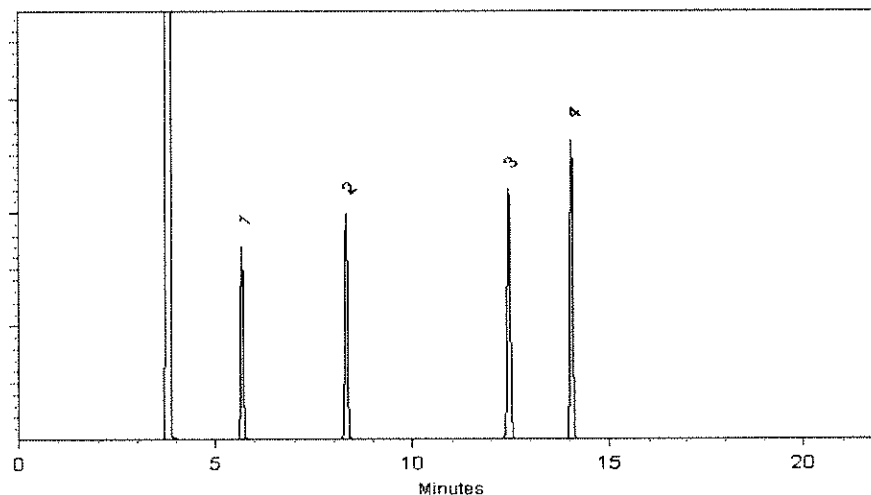
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydney L. Crust
Cydney L. Crust - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B707717271

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260KET2_00051

VMA 15 8260 KET 2- 00051, 52, 53, 54, 55. R: 4/2/2018 ML



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0133078
Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1.SEC (Lot P14A572) Purity 99%	0.0 µg/mL	+/- < 0.0001 Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3.SEC (Lot RA58J) Purity 99%	0.0 µg/mL	+/- < 0.0001 Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC (Lot E29T040) Purity 99%	0.0 µg/mL	+/- < 0.0001 Unstressed Stressed
4	2-Hexanone CAS # 591-78-6.SEC (Lot V3NRA) Purity 99%	0.0 µg/mL	+/- < 0.0001 Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
 CAS # 67-56-1/7732-18-5
 Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

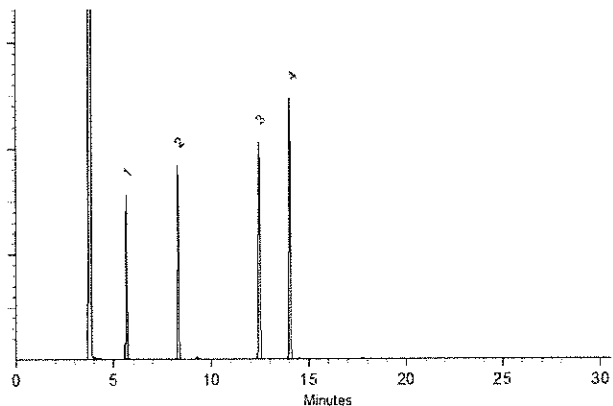
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 07-Dec-2017 **Balance:** 1127510105

Justin Albertson
Justin Albertson - Operations Tech-AREM QC

Date Passed: 12-Dec-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA158260VA1_00058



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 Lot No.: A0138862

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)
8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : December 31, 2018 Storage: 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate CAS # 108-05-4 Purity 99% (Lot STBD7333V)	5,015.0 µg/mL	+/- 29.4308	µg/mL	Gravimetric
			+/- 302.6036	µg/mL	Unstressed
			+/- 303.3219	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMA 8260 VA 1 - 00057, 58. R: 8/10/2018 ML

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

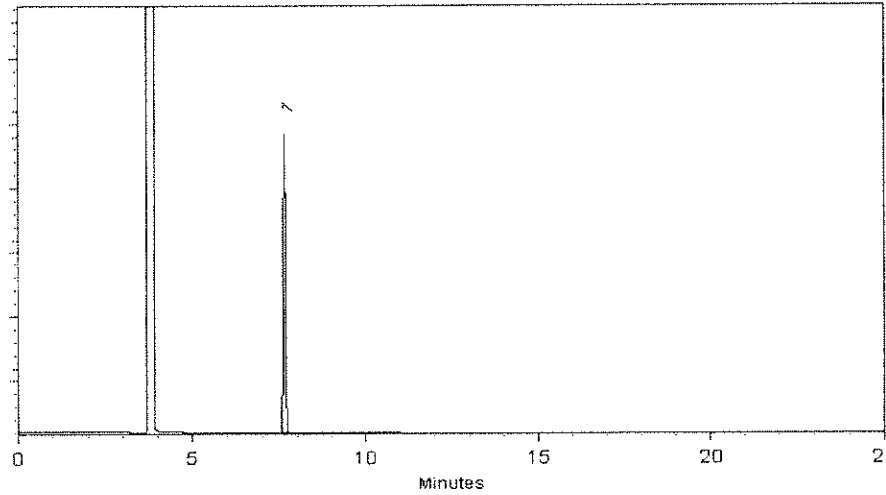
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

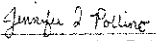


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


E. Joseph Tallon - Mix Technician

Date Mixed: 14-Jun-2018

Balance: B251644995


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Jun-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA178260ETH1_00019

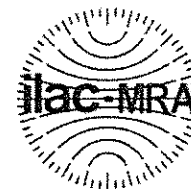


CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571994 Lot No.: A0135657
 Description : 8260 Ethanol Standard
8260 Ethanol Standard 100,000µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : February 28, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Ethanol CAS # 64-17-5 (Lot SHBJ0994) Purity 99%	100,474.0 µg/mL	+/- 588.2670 µg/mL Gravimetric +/- 2,152.2780 µg/mL Unstressed +/- 2,214.7844 µg/mL Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

VMA-178260 ETH 1 - 00019, 20, 21. R: 7/3/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

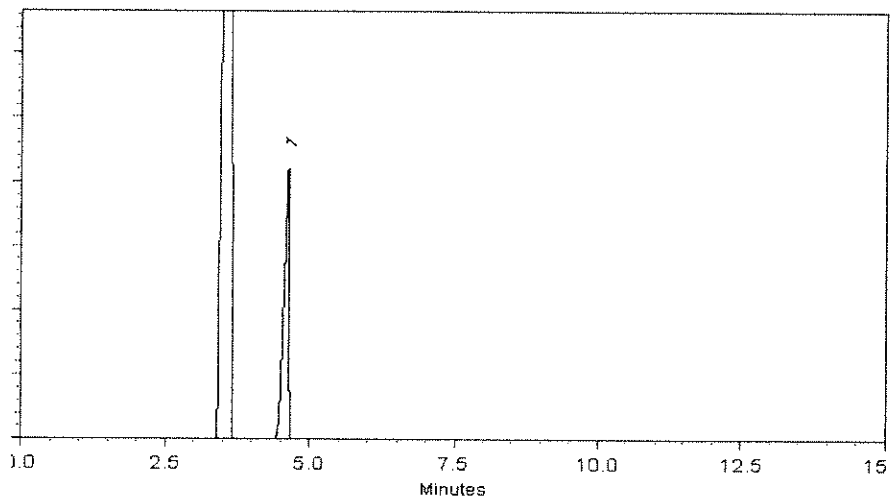
Carrier Gas:
hydrogen-constant pressure 11 psi.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brown

Dawn Brownson - Mix Technician

Date Mixed: 27-Feb-2018

Balance: B707717271

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 02-Mar-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA178260MEG1_00009



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

Certificate of Analysis



www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 Lot No.: A0123711
 Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : December 31, 2018 Storage: 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBG1462V)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%		+/-	151.2698	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,505.1 µg/mL	+/-	14.5650	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/-	151.1453	µg/mL	Unstressed
	Purity 99%		+/-	151.5041	µg/mL	Stressed
3	1,1-dichloroethene	2,511.5 µg/mL	+/-	14.6021	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/-	151.5299	µg/mL	Unstressed
	Purity 99%		+/-	151.8897	µg/mL	Stressed
4	tert-Butanol (TBA)	25,001.8 µg/mL	+/-	145.3547	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBF0688V)		+/-	1,508.4656	µg/mL	Unstressed
	Purity 99%		+/-	1,512.0470	µg/mL	Stressed
5	Methyl acetate	5,000.5 µg/mL	+/-	29.0733	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/-	301.7023	µg/mL	Unstressed
	Purity 99%		+/-	302.4186	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBF2149V)		+/-	151.0095	µg/mL	Unstressed
	Purity 99%		+/-	151.3681	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,517.1 µg/mL	+/-	14.6348	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot SHBF8133V)		+/-	151.8693	µg/mL	Unstressed
	Purity 99%		+/-	152.2299	µg/mL	Stressed

8	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBH2578V) Purity 99%	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide CAS # 75-15-0 (Lot S20A856) Purity 99%	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile CAS # 107-13-1 (Lot T07B2030) Purity 99%	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBG2655V) Purity 99%	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBV2831V) Purity 98%	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) CAS # 110-54-3 (Lot SHBG2674V) Purity 99%	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane CAS # 75-34-3 (Lot 00008621) Purity 99%	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBR0622V) Purity 98%	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot 09431AEV) Purity 99%	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 (Lot SHBG8201V) Purity 99%	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform CAS # 67-66-3 (Lot MKBV2089V) Purity 99%	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane CAS # 74-97-5 (Lot 00004559) Purity 99%	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran CAS # 109-99-9 (Lot SHBG2910V) Purity 99%	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane CAS # 71-55-6 (Lot B15W12061) Purity 99%	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane CAS # 110-82-7 (Lot MKBX4768V) Purity 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene CAS # 563-58-6 (Lot 160727JLM) Purity 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG1763V)			+/-	151.0322	µg/mL	Unstressed
	Purity 99%				+/-	151.3907	µg/mL	Stressed
25	n-Heptane (C7)		2,505.5	µg/mL	+/-	14.5672	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBG6171V)			+/-	151.1679	µg/mL	Unstressed
	Purity 99%				+/-	151.5268	µg/mL	Stressed
26	1,2-Dichloroethane		2,504.8	µg/mL	+/-	14.5628	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot SHBF9313V)			+/-	151.1227	µg/mL	Unstressed
	Purity 99%				+/-	151.4815	µg/mL	Stressed
27	Benzene		2,506.9	µg/mL	+/-	14.5752	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBH2056V)			+/-	151.2509	µg/mL	Unstressed
	Purity 99%				+/-	151.6100	µg/mL	Stressed
28	Trichloroethene		2,502.4	µg/mL	+/-	14.5490	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBH1955V)			+/-	150.9794	µg/mL	Unstressed
	Purity 99%				+/-	151.3378	µg/mL	Stressed
29	Methylcyclohexane		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBG0634V)			+/-	150.8570	µg/mL	Unstressed
	Purity 98%				+/-	151.2152	µg/mL	Stressed
30	1,2-Dichloropropane		2,503.0	µg/mL	+/-	14.5527	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot 01113D0V)			+/-	151.0171	µg/mL	Unstressed
	Purity 99%				+/-	151.3756	µg/mL	Stressed
31	1,4-Dioxane		50,011.4	µg/mL	+/-	290.7552	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBH2584V)			+/-	3,017.4064	µg/mL	Unstressed
	Purity 99%				+/-	3,024.5702	µg/mL	Stressed
32	Dibromomethane		2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10183283)			+/-	150.9531	µg/mL	Unstressed
	Purity 98%				+/-	151.3115	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 22622)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
34	Toluene		2,504.3	µg/mL	+/-	14.5599	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBH1932V)			+/-	151.0925	µg/mL	Unstressed
	Purity 99%				+/-	151.4512	µg/mL	Stressed
35	Ethyl methacrylate		2,506.9	µg/mL	+/-	14.5752	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBD9190V)			+/-	151.2509	µg/mL	Unstressed
	Purity 99%				+/-	151.6100	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,503.6	µg/mL	+/-	14.5563	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot C584177)			+/-	151.0548	µg/mL	Unstressed
	Purity 99%				+/-	151.4134	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
38	1,3-Dichloropropane		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)			+/-	151.0472	µg/mL	Unstressed
	Purity 99%				+/-	151.4059	µg/mL	Stressed
39	Tetrachloroethene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBD9374V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane CAS # 75-27-4 Purity 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot MKBD4032V)		+/-	151.2584	µg/mL	Unstressed
	Purity	99%			+/-	151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBQ2165V)		+/-	150.9040	µg/mL	Unstressed
	Purity	99%			+/-	151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS #	95-49-8	(Lot MKBW5554V)		+/-	150.8738	µg/mL	Unstressed
	Purity	99%			+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS #	106-43-4	(Lot MKBL7753V)		+/-	150.9115	µg/mL	Unstressed
	Purity	99%			+/-	151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS #	98-06-6	(Lot S52237V)		+/-	151.2584	µg/mL	Unstressed
	Purity	99%			+/-	151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS #	95-63-6	(Lot MKBJ6229V)		+/-	150.8866	µg/mL	Unstressed
	Purity	98%			+/-	151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4	µg/mL	+/-	14.5665	µg/mL	Gravimetric
	CAS #	135-98-8	(Lot MKBR9260V)		+/-	151.1604	µg/mL	Unstressed
	Purity	99%			+/-	151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS #	99-87-6	(Lot MKBS2604V)		+/-	151.0623	µg/mL	Unstressed
	Purity	99%			+/-	151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9	µg/mL	+/-	14.5577	µg/mL	Gravimetric
	CAS #	541-73-1	(Lot BCBM5751V)		+/-	151.0699	µg/mL	Unstressed
	Purity	99%			+/-	151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9	µg/mL	+/-	14.5926	µg/mL	Gravimetric
	CAS #	106-46-7	(Lot MKBS1350V)		+/-	151.4319	µg/mL	Unstressed
	Purity	99%			+/-	151.7914	µg/mL	Stressed
66	n-Butylbenzene		2,503.3	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS #	104-51-8	(Lot 09418JJV)		+/-	151.0322	µg/mL	Unstressed
	Purity	99%			+/-	151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,503.8	µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS #	95-50-1	(Lot SHBD7331V)		+/-	151.0623	µg/mL	Unstressed
	Purity	99%			+/-	151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0	µg/mL	+/-	14.5643	µg/mL	Gravimetric
	CAS #	96-12-8	(Lot FBL01)		+/-	151.1378	µg/mL	Unstressed
	Purity	99%			+/-	151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3	µg/mL	+/-	14.5657	µg/mL	Gravimetric
	CAS #	120-82-1	(Lot SHBC5541V)		+/-	151.1528	µg/mL	Unstressed
	Purity	99%			+/-	151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5	µg/mL	+/-	14.5728	µg/mL	Gravimetric
	CAS #	87-68-3	(Lot J31X013)		+/-	151.2266	µg/mL	Unstressed
	Purity	98%			+/-	151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS #	91-20-3	(Lot MKBW2603V)		+/-	150.8889	µg/mL	Unstressed
	Purity	99%			+/-	151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/- 14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/- 151.5073	µg/mL	Unstressed
	Purity 99%			+/- 151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-S02.2 (cat.#10916)

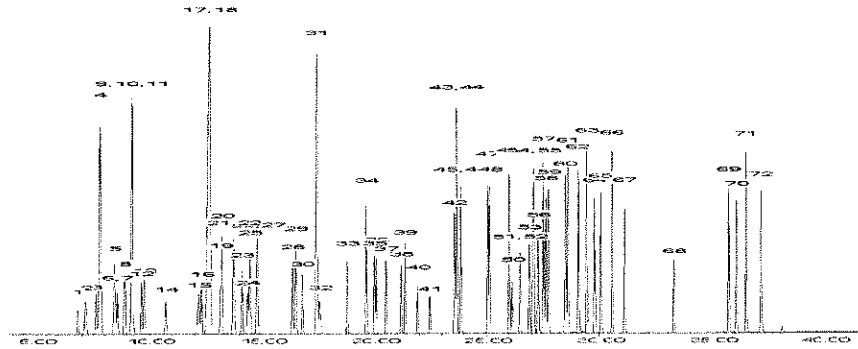
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA178260MEG2_00002



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

Certificate of Analysis



www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2018 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,501.2 µg/mL	+/-	14.5422	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	150.9088	µg/mL	Unstressed
	Purity 98%		+/-	151.2671	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	150.9040	µg/mL	Unstressed
	Purity 99%		+/-	151.2622	µg/mL	Stressed
3	1,1-Dichloroethene	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 2767000)		+/-	150.8662	µg/mL	Unstressed
	Purity 99%		+/-	151.2244	µg/mL	Stressed
4	tert-Butanol (TBA)	25,003.1 µg/mL	+/-	145.3626	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/-	1,508.5475	µg/mL	Unstressed
	Purity 98%		+/-	1,512.1291	µg/mL	Stressed
5	Methyl acetate	5,000.4 µg/mL	+/-	29.0726	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot YDGVD)		+/-	301.6948	µg/mL	Unstressed
	Purity 99%		+/-	302.4111	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.4 µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	150.8587	µg/mL	Unstressed
	Purity 99%		+/-	151.2169	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,500.1 µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot VEBOC)		+/-	150.8423	µg/mL	Unstressed
	Purity 98%		+/-	151.2004	µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
10	Acrylonitrile		25,000.9	µg/mL	+/-	145.3496	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4128	µg/mL	Unstressed
	Purity 99%				+/-	1,511.9941	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
13	n-Hexane (C6)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8466	µg/mL	Unstressed
	Purity 97%				+/-	151.2048	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,506.9	µg/mL	+/-	363.4014	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot 83NHH)			+/-	3,771.3149	µg/mL	Unstressed
	Purity 99%				+/-	3,780.2687	µg/mL	Stressed
18	Chloroform		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
19	Bromochloromethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
20	Tetrahydrofuran		5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot K3V7J-SJ)			+/-	301.8079	µg/mL	Unstressed
	Purity 99%				+/-	302.5245	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot CS160712)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
22	Cyclohexane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
23	1,1-Dichloropropene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9133	µg/mL	Unstressed
	Purity 96%				+/-	151.2716	µg/mL	Stressed

24	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot I1466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
27	Benzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1	µg/mL	+/-	290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)			+/-	3,017.1500	µg/mL	Unstressed
	Purity 99%				+/-	3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
34	Toluene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	2,500.4 µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,250.9 µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,250.5 µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01-KTPK)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 99%	(Lot 5139000)	2,502.3 µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,1,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC-IT)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric	
	CAS #	108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity	99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric	
	CAS #	108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity	99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric	
	CAS #	95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity	99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric	
	CAS #	106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity	99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric	
	CAS #	98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity	99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric	
	CAS #	95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity	99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric	
	CAS #	135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity	99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric	
	CAS #	99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity	99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric	
	CAS #	541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity	99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric	
	CAS #	106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric	
	CAS #	104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity	99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric	
	CAS #	95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity	99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric	
	CAS #	96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity	98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric	
	CAS #	120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity	99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric	
	CAS #	87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity	97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric	
	CAS #	91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity	99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/- 14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 150.8792	µg/mL	Unstressed
	Purity 98%			+/- 151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

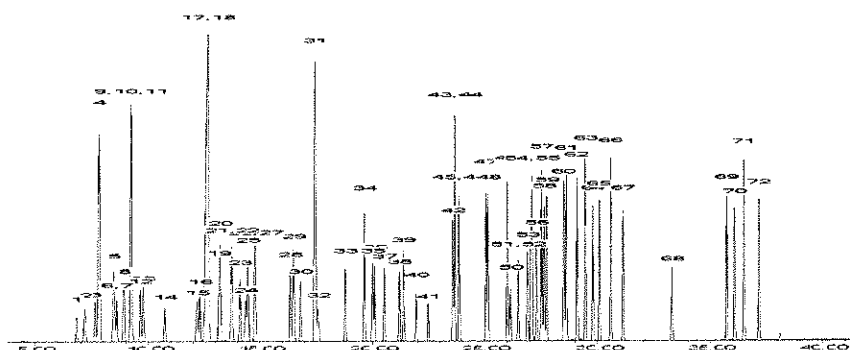
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maje

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA178260POL1_00019



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 Lot No.: A0132831

Description : 8260 List 3/ Std#1 Polar Additions (2017)
8260 List 3/ Std#1 Polar Additions (2017) 2,500-25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : November 30, 2019 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetonitrile CAS # 75-05-8 (Lot SHBB1630V) Purity 99%	25,004.8 µg/mL	+/- 146.4086 µg/mL	+/- 1,237.0550 µg/mL	+/- 1,267.8094 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) CAS # 108-20-3 (Lot SHBC0391V) Purity 99%	2,501.6 µg/mL	+/- 14.6808 µg/mL	+/- 123.7649 µg/mL	+/- 126.8416 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 (Lot MKCC2702) Purity 99%	2,502.0 µg/mL	+/- 14.6831 µg/mL	+/- 123.7846 µg/mL	+/- 126.8619 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile CAS # 107-12-0 (Lot BCBQ1587V) Purity 99%	25,006.0 µg/mL	+/- 146.4156 µg/mL	+/- 1,237.1143 µg/mL	+/- 1,267.8703 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol CAS # 75-85-4 (Lot STBB1898V) Purity 99%	25,005.2 µg/mL	+/- 146.4109 µg/mL	+/- 1,237.0747 µg/mL	+/- 1,267.8297 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8 (Lot HMBD8698V) Purity 98%	2,506.1 µg/mL	+/- 14.7069 µg/mL	+/- 123.9853 µg/mL	+/- 127.0675 µg/mL	Gravimetric Unstressed Stressed

VMA 178260 POL 1- 00019, 20, 21.
R: 7/3/2018 ML

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

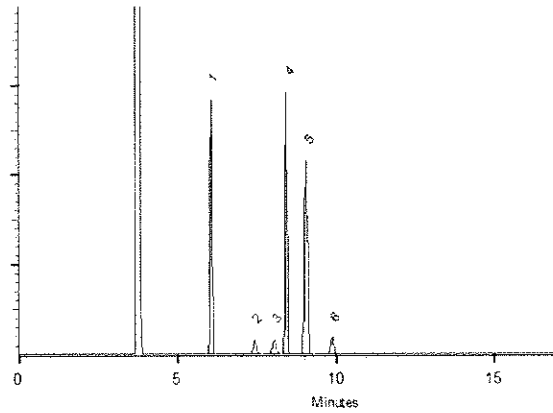
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kendra Jozefick - Mix Technician

Date Mixed: 30-Nov-2017 **Balance:** B707717271


Justine Albertson - Operations Tech-ARM GC

Date Passed: 05-Dec-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMA178260POL2_00019



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

Certificate of Analysis



www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993.SEC Lot No.: A0126826
 Description : 8260 List 3/ Std#1 Polar Additions (2017)
8260 List 3/ Std#1 Polar Additions (2017) 2500-25,000 µg/ml, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : April 30, 2019 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetonitrile CAS # 75-05-8.SEC (Lot 7KGDA) Purity 99%	25,066.5 µg/mL	+/- 146.7699 µg/mL	Gravimetric	
			+/- 1,240.1074 µg/mL	Unstressed	
			+/- 1,270.9378 µg/mL	Stressed	
2	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC (Lot LL7TN-SH) Purity 98%	2,510.3 µg/mL	+/- 14.7317 µg/mL	Gravimetric	
			+/- 124.1938 µg/mL	Unstressed	
			+/- 127.2812 µg/mL	Stressed	
3	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC (Lot MHBIG-QK) Purity 99%	2,508.5 µg/mL	+/- 14.7213 µg/mL	Gravimetric	
			+/- 124.1062 µg/mL	Unstressed	
			+/- 127.1914 µg/mL	Stressed	
4	Propionitrile CAS # 107-12-0.SEC (Lot SASVN) Purity 99%	25,096.0 µg/mL	+/- 146.9426 µg/mL	Gravimetric	
			+/- 1,241.5669 µg/mL	Unstressed	
			+/- 1,272.4335 µg/mL	Stressed	
5	tert-Amyl alcohol CAS # 75-85-4.SEC (Lot MMGO1) Purity 99%	25,012.0 µg/mL	+/- 146.4508 µg/mL	Gravimetric	
			+/- 1,237.4112 µg/mL	Unstressed	
			+/- 1,268.1745 µg/mL	Stressed	
6	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC (Lot 5614600) Purity 99%	2,499.0 µg/mL	+/- 14.6655 µg/mL	Gravimetric	
			+/- 123.6362 µg/mL	Unstressed	
			+/- 126.7098 µg/mL	Stressed	

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

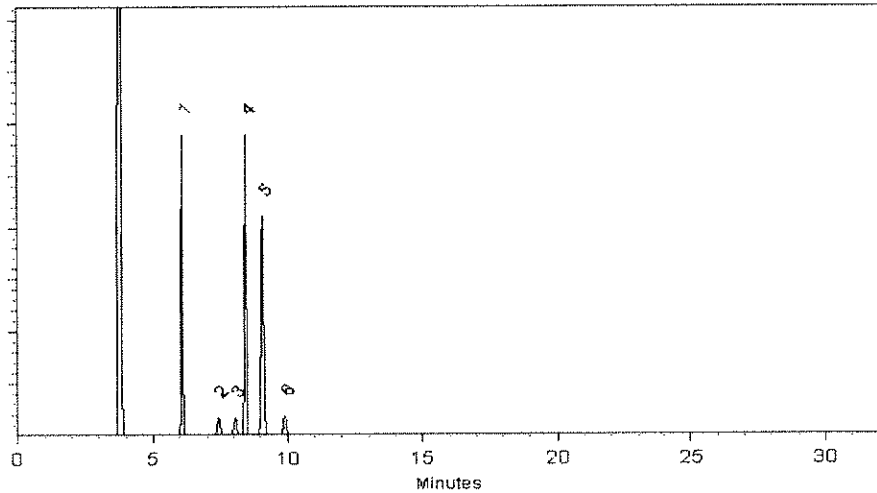
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi
Matt Fragassi - Mix Technician

Date Mixed: 17-Apr-2017 Balance: 1128342314

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Apr-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

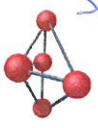
Reagent

VMA8260BFB1_00043



Certified Reference Material CRM

VMA 8260 BFB1 - 00043, 44, 45.



CERTIFIED WEIGHT REPORT

Part Number: 19167
Lot Number: 112514
Description: CLP - Instrument Performance Check Solution
 p-Bromofluorobenzene
Expiration Date: 112519
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2500
NIST Test ID#: 792/245790

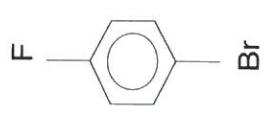
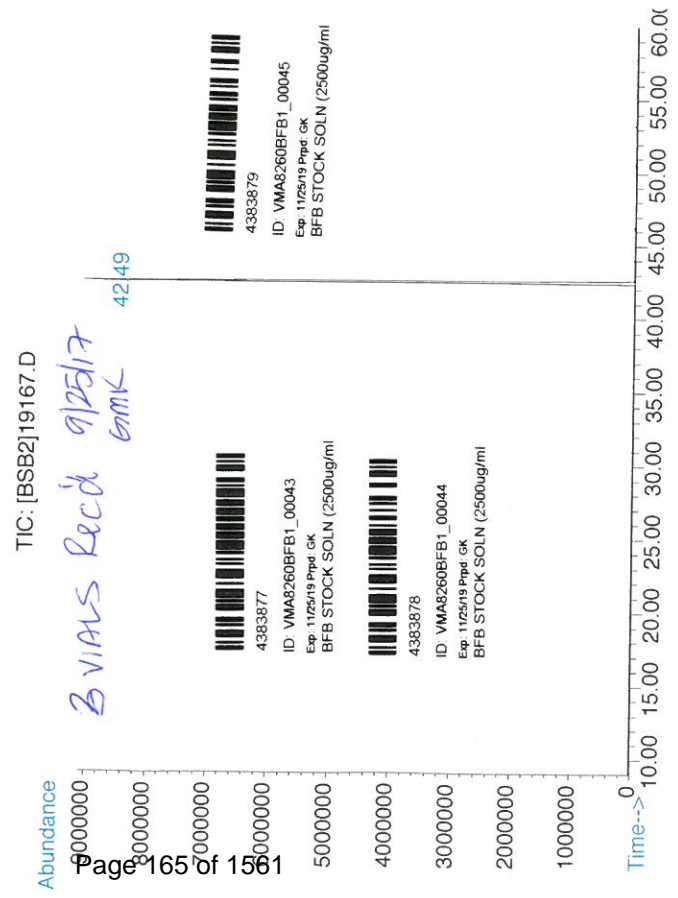
Solvent(s): Methanol
Lot# DK793
Formulated By: Paul Barron
Reviewed By: Pedro L. Rentas

Formulated By:	Paul Barron	112514	DATE
Reviewed By:	Pedro L. Rentas	112514	DATE

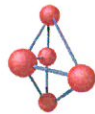
Weight(s) shown below were combined and diluted to (mL):
 5E-05 Balance Uncertainty
 0.006 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information	
										(Solvent Safety Info. On Attached pg.)	CAS#
1. p-Bromofluorobenzene	48	01127COV	2500	99	0.2	0.25254	0.25282	2502.8	10.2	460-00-4	N/A

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Solvent vent time = 6 min. Analysis performed by Candice Warren.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
 * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
 * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
 * All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
 * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



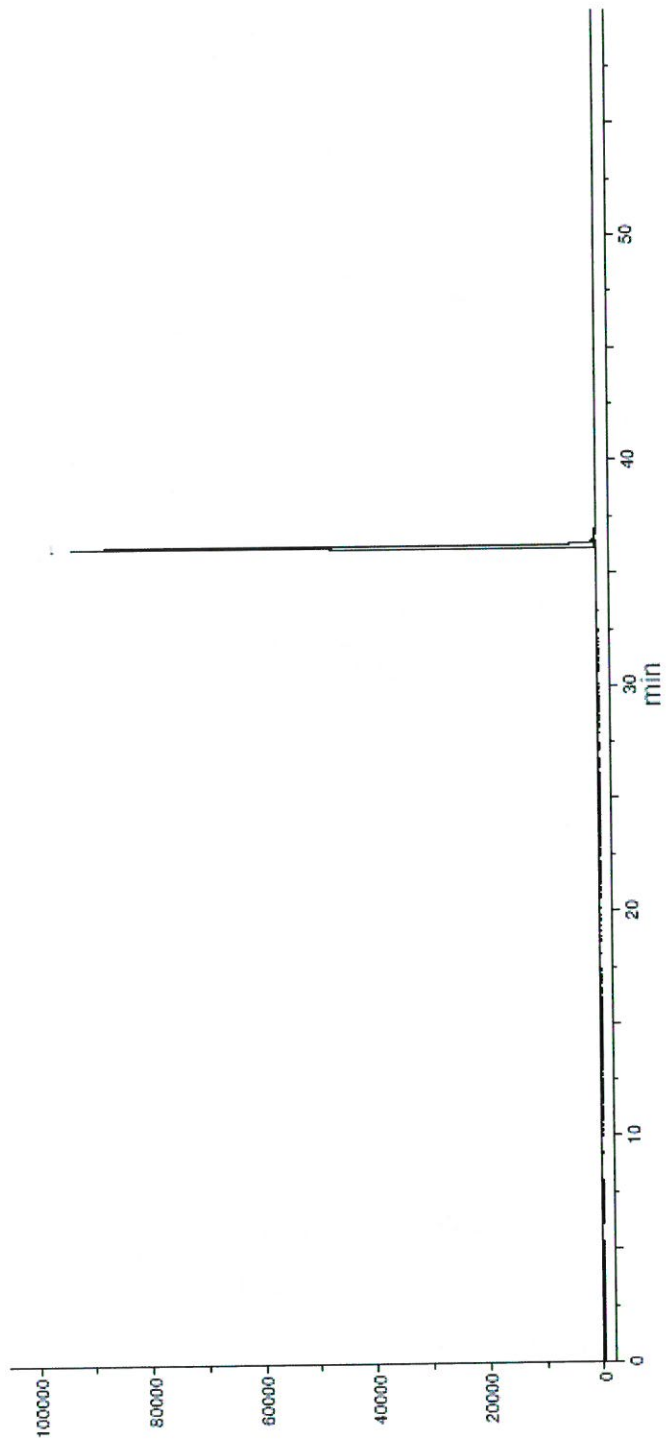
Run 30, "P19167 L112514 [2500µg/mL in MeOH]"

Run Length: 59.99 min, 35996 points at 10 points/second.
Created: Wed, Nov 26, 2014 at 3:27:40 PM.
Sampled: Sequence "112514-GC1", Method "GC1-M7".
Analyzed using Method "GC1-M7".

Comments

GC1-M7 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow = 150mL/min., Helium (carrier) = 10mL/min.,
Helium (make-up) = 40mL/min., Hydrogen (make-up) = 100mL/min.,
Oven Profile: Temp. 1 = 35°C (Time 1 = 10 min.), Temp 2 = 200°C (Time 2 = 8.75 min.),
Rate = 4°C/min., Total run time = 60 min. Injector temp. = 200°C, PID Temp. = 200°C.
ELCD Signal = Edaq Channel 1 PID Signal = Edaq Channel 2
Standard injection = 0.5µL, Range=4 Purge Valve = 8 min

Name	PID RT (min.)
p-Bromofluorobenzene	36.19



Reagent

VMANU8260ACR1_00114



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 Lot No.: A0137497

Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : October 31, 2018 Storage: 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acrolein CAS # 107-02-8 Purity 99% (Lot 171116JLM)	19,757.3 µg/mL	+/- 115.6835 µg/mL Gravimetric +/- 633.4822 µg/mL Unstressed +/- 736.3538 µg/mL Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

VMANU 8260 ACR-1 - 00113, 114.

R: 7/30/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

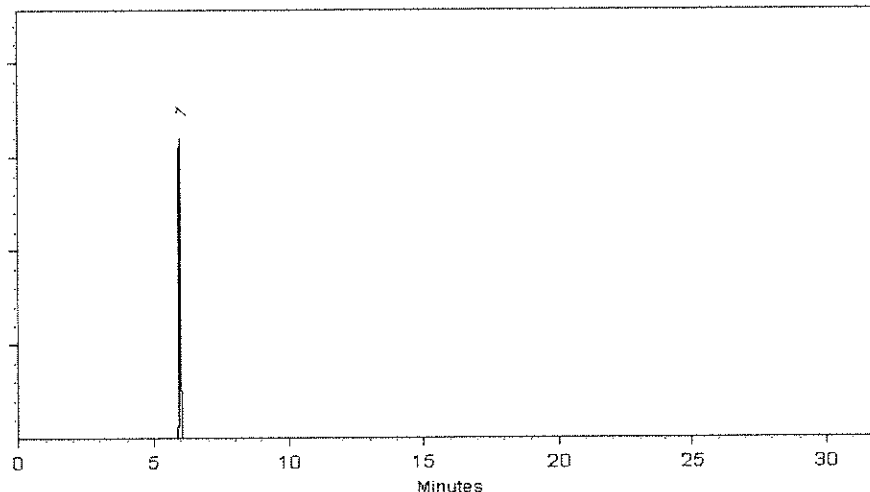
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

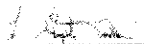
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

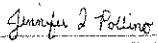


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


F. Joseph Tallon - Mix Technician

Date Mixed: 25-Apr-2018

Balance: B251644995


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Apr-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260ISD1_00223



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 Lot No.: A0138856

Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : June 30, 2023 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,519.8 µg/mL (Lot BCBK8171V)	+/-	14.6503	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	141.2827	µg/mL	Unstressed
	Purity 99%		+/-	144.5885	µg/mL	Stressed
2	Chlorobenzene-d5	2,506.4 µg/mL (Lot PR-23926)	+/-	14.5724	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	140.5314	µg/mL	Unstressed
	Purity 99%		+/-	143.8196	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,516.5 µg/mL (Lot PR-18488)	+/-	14.6311	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	141.0977	µg/mL	Unstressed
	Purity 99%		+/-	144.3992	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMANU8260 ISD 1 - 00223, 224, 225, 226,
227, 228, 229, 230.
R: 7/30/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

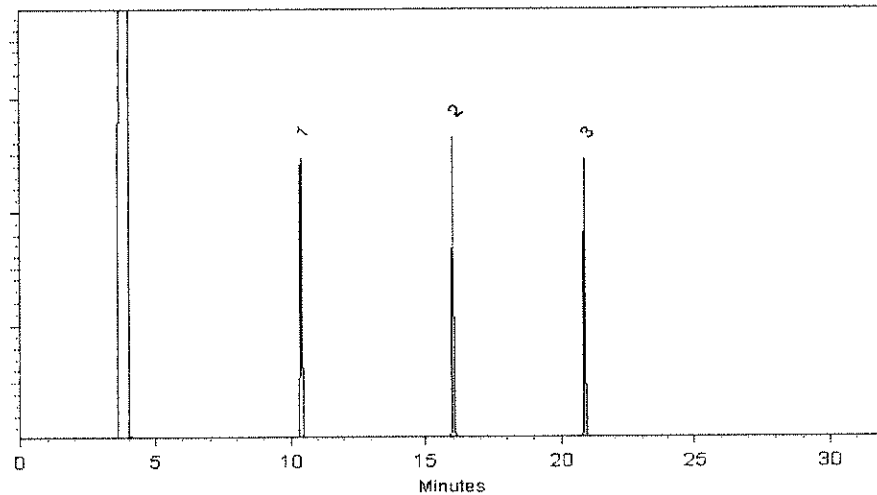
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Larry J. Moore - Mix Technician

Date Mixed: 13-Jun-2018

Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Jun-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260ISD1_00224



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 Lot No.: A0138856
 Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : June 30, 2023 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,519.8 µg/mL (Lot BCBK8171V)	+/-	14.6503	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	141.2827	µg/mL	Unstressed
	Purity 99%		+/-	144.5885	µg/mL	Stressed
2	Chlorobenzene-d5	2,506.4 µg/mL (Lot PR-23926)	+/-	14.5724	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	140.5314	µg/mL	Unstressed
	Purity 99%		+/-	143.8196	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,516.5 µg/mL (Lot PR-18488)	+/-	14.6311	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	141.0977	µg/mL	Unstressed
	Purity 99%		+/-	144.3992	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

VMANU8260 ISD 1 - 00223, 224, 225, 226,
 227, 228, 229, 230.
 R: 7/30/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

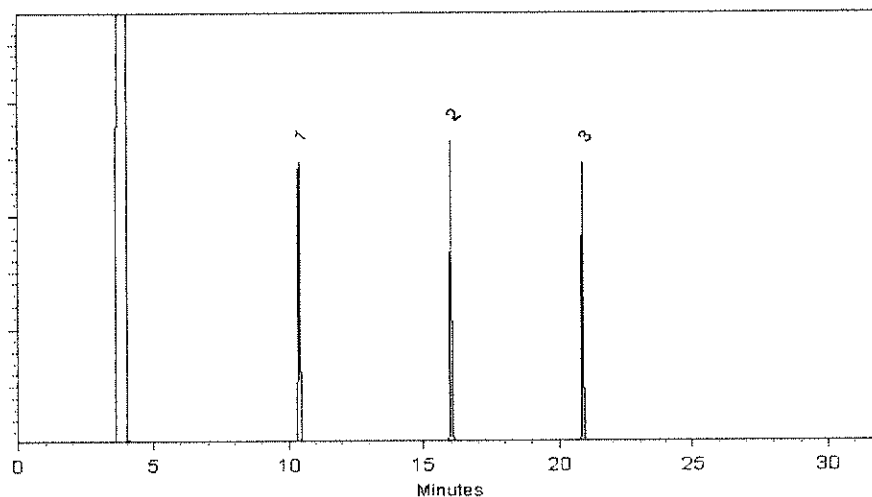
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C


Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Larry J. Moore - Mix Technician

Date Mixed: 13-Jun-2018 Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Jun-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260ISD1_00225



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 Lot No.: A0138856

Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : June 30, 2023 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,519.8 µg/mL (Lot BCBK8171V)	+/- 14.6503	µg/mL	Gravimetric	
	CAS # 462-06-6		+/- 141.2827	µg/mL	Unstressed	
	Purity 99%		+/- 144.5885	µg/mL	Stressed	
2	Chlorobenzene-d5	2,506.4 µg/mL (Lot PR-23926)	+/- 14.5724	µg/mL	Gravimetric	
	CAS # 3114-55-4		+/- 140.5314	µg/mL	Unstressed	
	Purity 99%		+/- 143.8196	µg/mL	Stressed	
3	1,4-Dichlorobenzene-d4	2,516.5 µg/mL (Lot PR-18488)	+/- 14.6311	µg/mL	Gravimetric	
	CAS # 3855-82-1		+/- 141.0977	µg/mL	Unstressed	
	Purity 99%		+/- 144.3992	µg/mL	Stressed	

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMANU8260 ISD 1 - 00223, 224, 225, 226,
227, 228, 229, 230.
R: 7/30/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

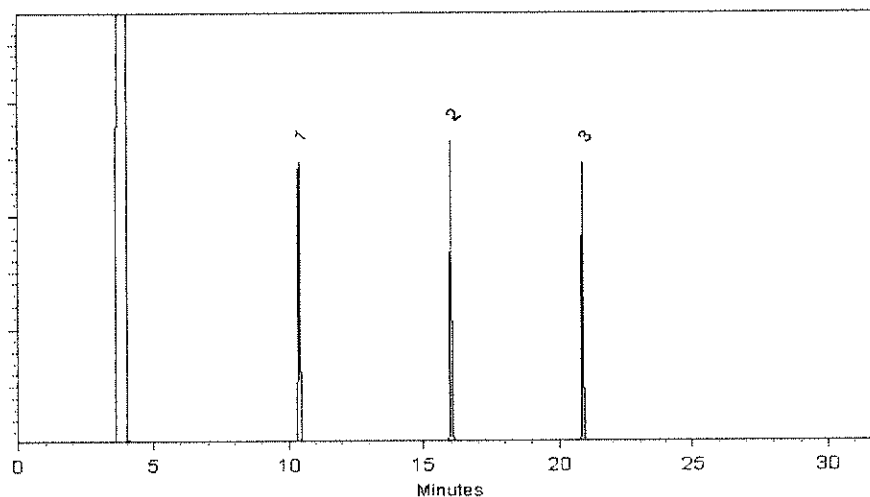
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C


Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Larry J. Moore - Mix Technician

Date Mixed: 13-Jun-2018 Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Jun-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260SUR1_00074



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 Lot No.: A0132615
 Description : 8260 Surrogate Standard
8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul
 Container Size : 5 mL Pkg Amt: > 5 mL
 Expiration Date : November 30, 2022 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,500.2 µg/mL	+/-	14.5364	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012017)		+/-	140.1837	µg/mL	Unstressed
	Purity 99.8%		+/-	143.4639	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.2 µg/mL	+/-	14.5361	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-26748)		+/-	140.1809	µg/mL	Unstressed
	Purity 99%		+/-	143.4610	µg/mL	Stressed
3	Toluene-d8	2,500.2 µg/mL	+/-	14.5364	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/-	140.1837	µg/mL	Unstressed
	Purity 99%		+/-	143.4639	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.3 µg/mL	+/-	14.5370	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/-	140.1893	µg/mL	Unstressed
	Purity 99%		+/-	143.4696	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMA NU 8260 SUR 1 (CHECKED) - 000 71, 72, 73, 74, 75.
ML 1/26/2018.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

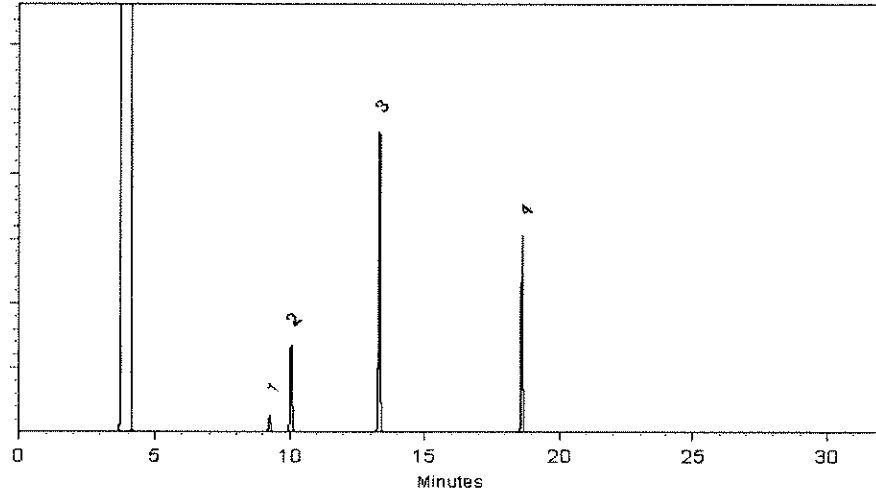
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 21-Nov-2017

Balance: 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260SUR2_00045



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 Lot No.: A0132615
 Description : 8260 Surrogate Standard
8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul
 Container Size : 5 mL Pkg Amt: > 5 mL
 Expiration Date : November 30, 2022 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,500.2 µg/mL	+/-	14.5364	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012017)		+/-	140.1837	µg/mL	Unstressed
	Purity 99.8%		+/-	143.4639	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.2 µg/mL	+/-	14.5361	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-26748)		+/-	140.1809	µg/mL	Unstressed
	Purity 99%		+/-	143.4610	µg/mL	Stressed
3	Toluene-d8	2,500.2 µg/mL	+/-	14.5364	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/-	140.1837	µg/mL	Unstressed
	Purity 99%		+/-	143.4639	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.3 µg/mL	+/-	14.5370	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/-	140.1893	µg/mL	Unstressed
	Purity 99%		+/-	143.4696	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VMA NU 8260 SUR 2 (UN CHECKED) - 00041, 42, 43, 44, 45.
R: 1/26/2018 ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

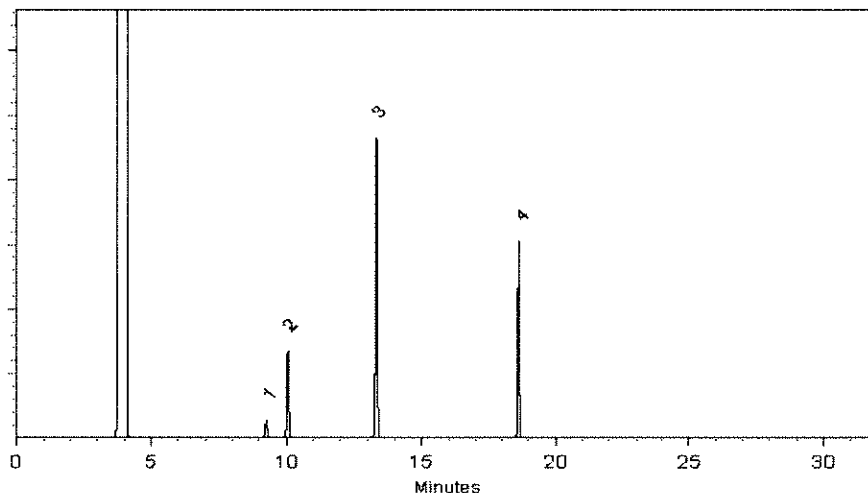
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 21-Nov-2017 **Balance:** 1127510105

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260TD91_00243



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01



ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30618 Lot No.: A0135055

Description : tert-Butanol-d9 Standard
tert-Butanol-d9 Standard 20,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : February 28, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 98%	20,139.0 µg/mL (Lot CD-107)	+/- 117.9183 µg/mL Gravimetric +/- 431.4041 µg/mL Unstressed +/- 443.9328 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

UMANU 8260 TD 91 - 00242, 243, 244, 245.
R: 8/10/2018. ML

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

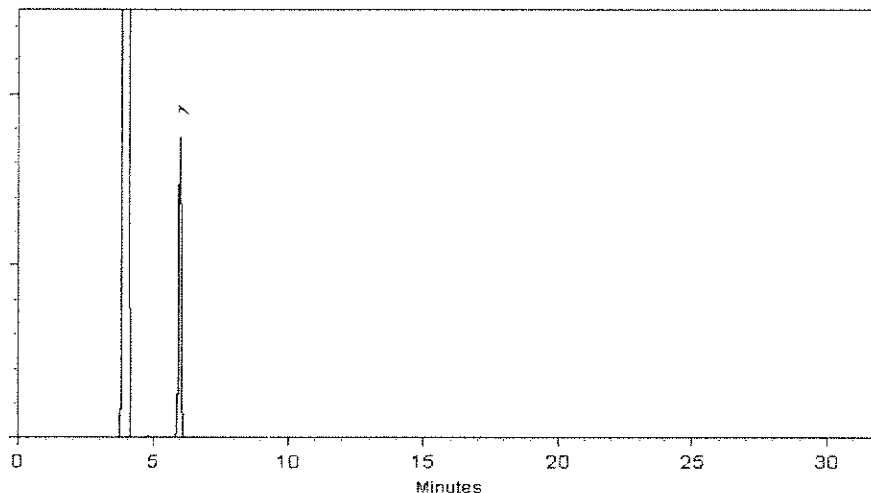
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ceryl Graham

Ceryl Graham - Mix Technician

Date Mixed: 11-Feb-2018

Balance: 6707717271

Jennifer J. Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Feb-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (U) includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260TD91_00247



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30618 Lot No.: A0135055
 Description : tert-Butanol-d9 Standard
tert-Butanol-d9 Standard 20,000 µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : February 28, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
J	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 98% (Lot CD-107)	20,139.0 µg/mL	+/- 117.9183	µg/mL	Gravimetric	
			+/- 431.4041	µg/mL	Unstressed	
			+/- 443.9328	µg/mL	Stressed	

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

UMA NU 8260 TD 91 - 00246, 247, 248, 249.
 R: 8/10/2018 ML.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

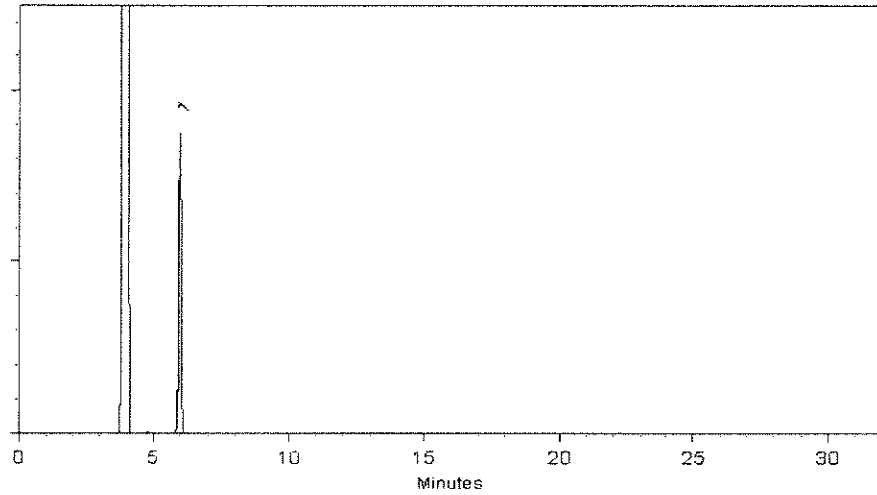
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham

Cheryl Graham - Mix Technician

Date Mixed: 11-Feb-2018

Balance: B707717271

Jennifer Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Feb-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMANU8260TD91_00250



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

440-5027126

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30618 Lot No.: A0135055
 Description : tert-Butanol-d9 Standard
tert-Butanol-d9 Standard 20,000 µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : February 28, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 (Lot CD-107) Purity 98%	20,139.0 µg/mL	+/- 117.9183	µg/mL	Gravimetric
			+/- 431.4041	µg/mL	Unstressed
			+/- 443.9328	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

V MANU 8260TD 91 - 00250, 251, 252, 253
 R: 8/28/2018 ML



5027126
 ID: VMANU8260TD91_00250
 Exp: 02/28/21 Prpd: MM/L
 8260 TBA-d9 @20000ug/ml P



5027127
 ID: VMANU8260TD91_00251
 Exp: 02/28/21 Prpd: MM/L
 8260 TBA-d9 @20000ug/ml P



5027128
 ID: VMANU8260TD91_00252
 Exp: 02/28/21 Prpd: MM/L
 8260 TBA-d9 @20000ug/ml P



5027129
 ID: VMANU8260TD91_00253
 Exp: 02/28/21 Prpd: MM/L
 8260 TBA-d9 @20000ug/ml P

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

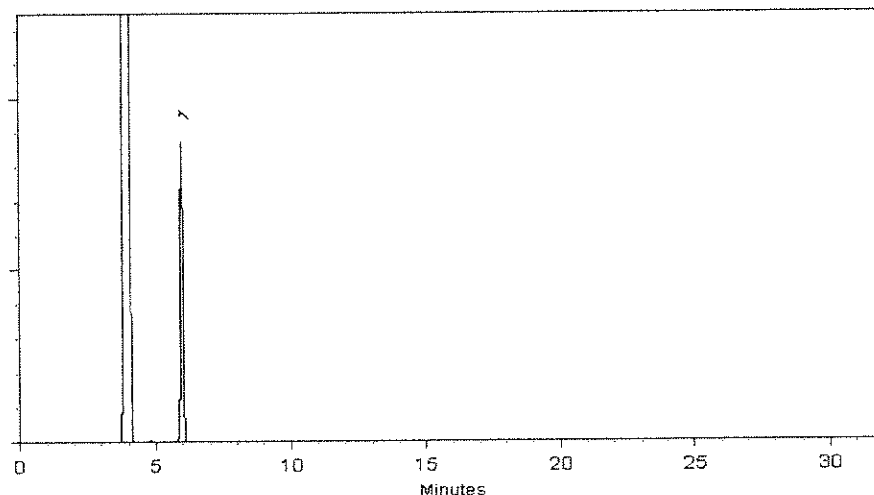
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham
Cheryl Graham - Mix Technician

Date Mixed: 11-Feb-2018 **Balance:** B707717271

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Feb-2018

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

WC1BROMATE_00008



4245863

ID: WC1BROMATE_00008

Exp:01/01/19 Prp:YZ Opn:07/12/17

300.1 -Standard Bromate 1

REPORT OF ANALYSIS

Ion Chromatography RM

Bromate (BrO_3^-) – 1000 $\mu\text{g/mL}$

Product #: 062015-01-01

Matrix: H_2O

Lot #: 131599-4

Ion	Certified Concentration
BrO_3^-	1000 $\mu\text{g/mL}$

Intended Use: This solution is intended for use as a reference material (RM) or calibration standard for ion chromatography (IC) or techniques using other modes of aqueous ion detection.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This RM was prepared to a nominal concentration of 1000 $\mu\text{g/mL}$ by gravimetric methods using 99.9% pure bromate (BrO_3^-) dissolved and diluted with filtered (0.22 μm), 18 M-ohm deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration was determined based upon gravimetric procedures. Secondary verification of the certified concentration was performed using ion chromatography (IC) or inductively coupled plasma optical emission spectroscopy (ICP-OES), which was calibrated and/or referenced against **NIST SRM 3184**. The uncertainty associated with the certified concentration is $\pm 0.5\%$ relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution, and transpiration through the container. This represents the expanded uncertainty at the 95% confidence level using a coverage factor of $k=2$.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 μL , and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: O2Si ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

July 5, 2017

Certification Date

O2Si waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Reagent

WC1CHLORATE_00009



REPORT OF ANALYSIS

Ion Chromatography RM

Chlorate (ClO_3^-) – 1000 $\mu\text{g/mL}$

Product #: 062014-01-01

Matrix: H_2O

Lot #: 142627-2

Ion	Certified Concentration
ClO_3^-	1000 $\mu\text{g/mL}$

Intended Use: This solution is intended for use as a reference material (RM) or calibration standard for ion chromatography (IC) or techniques using other modes of aqueous ion detection.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This RM was prepared to a nominal concentration of 1000 $\mu\text{g/mL}$ by gravimetric methods using 99% pure sodium chlorate (NaClO_3) dissolved and diluted with filtered (0.22 μm), 18 M-ohm deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration was determined based upon gravimetric procedures. Secondary verification of the certified concentration was performed using ion chromatography (IC) or inductively coupled plasma optical emission spectroscopy (ICP-OES), which was calibrated and/or referenced against NIST SRM when available. The uncertainty associated with the certified concentration is $\pm 0.5\%$ relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution, and transpiration through the container. This represents the expanded uncertainty at the 95% confidence level using a coverage factor of $k=2$.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 μL , and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: O2Si ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

July 5, 2017

Certification Date

O2Si waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Reagent

WC1CHLORITE_00008



REPORT OF ANALYSIS

Ion Chromatography RM

Chlorite (ClO₂⁻) – 1000 µg/mL

Product #: 062016-01-01

Matrix: H₂O

Lot #: 146667-16

Ion	Certified Concentration
ClO ₂ ⁻	1000 µg/mL

Intended Use: This solution is intended for use as a reference material (RM) or calibration standard for ion chromatography (IC) or techniques using other modes of aqueous ion detection.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This RM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using sodium chlorite (NaClO₂) dissolved and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration was determined based upon gravimetric procedures. Secondary verification of the certified concentration was performed using ion chromatography (IC) or inductively coupled plasma optical emission spectroscopy (ICP-OES), which was calibrated and/or referenced against NIST SRM when available. The uncertainty associated with the certified concentration is ±0.5% relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution, and transpiration through the container. This represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: O2Si ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

November 27, 2017
Certification Date

O2Si waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Reagent

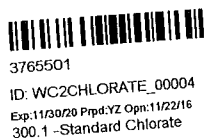
WC2CHLORATE_00004

Certificate of Analysis



ISO Guide 34 Reference Material

Product Number: ICC-011
Lot Number: CP-5286



Lot Issue Date: 20-Oct 2016
Expiration Date: 30-Nov 2020

Product Name: Chlorate IC Standard

Description:

This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under ULTRA Scientific's ISO 9001 registered quality system. The neat materials used for this product have been verified by ULTRA's ISO 17025 laboratory and under ULTRA's ISO Guide 34 accreditation. The analyte concentrations were verified by ULTRA's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
chlorate	potassium chlorate	RM07983	99	1001 ± 5 µg/mL	3-150CLO3-2Y; IC NIST SRM 3141a; ICP-OES

Solvent: water (low TOC, < 50 ppb)

Storage: Store at Room Temperature (15° to 30°C).

Traceability:

Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:

The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:

This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:

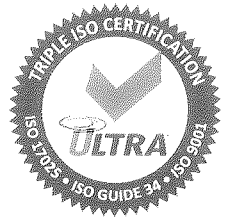
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



Certificate of Analysis



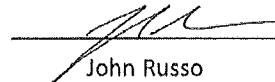
ISO Guide 34 Reference Material

Product Number: ICC-011
Lot Number: CP-5286

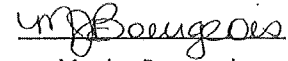
Lot Issue Date: 20-Oct 2016
Expiration Date: 30-Nov 2020

Maintenance of Certification:

The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, ULTRA Scientific will notify the purchaser.



John Russo
President



Monica Bourgeois
Director of QA/RA

Reagent

WC2CHLORITE_00020

Certificate of Analysis



ISO Guide 34 Reference Material

Product Number: ICC-012

Lot Number: CS-1703

Product Name: Chlorite IC Standard

Description:

This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under ULTRA Scientific's ISO 9001 registered quality system. The neat materials used for this product have been verified by ULTRA's ISO 17025 laboratory and under ULTRA's ISO Guide 34 accreditation. The analyte concentrations were verified by ULTRA's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.



4863438
ID: WC2CHLORITE_00020
Exp:11/09/18 Ppd:YZ Opm:05/27/18
300.1- Standard Chlorite

Lot Issue Date: 06-Apr 2018
Expiration Date: 30-Nov 2018

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
chlorite	sodium chlorite	RM07982	99	1000 ± 5 µg/mL	3-157CLO2-2Y; IC NIST SRM 3152; ICP-OES

Solvent: water (low TOC, < 50 ppb)

Storage: Store Refrigerated (2° - 8°C), Do Not Freeze. Light Sensitive.

Traceability:

Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:

The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:

This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:

Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



Reagent

wcbromide_00016

Certificate of Analysis

Certified Reference Material



Product Description:

Bromide

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Number: **IC-BR-10M**
Lot Number: **1807216**
Matrix: **H₂O**

Certified Value:

<u>Analyte</u>	<u>($\mu\text{g/mL}$)</u>	<u>SRM ID</u>	<u>SRM Lot#</u>
Bromide	10,000 \pm 100	3184	020701

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available, via ion chromatography (IC) and/or inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: **August 2018**
Certificate Issue Date: **March 14, 2018**

Moven Mututuvvari
Moven Mututuvvari, Ph. D, Laboratory Manager

Reagent

WCCLO4-1st_00004



Reference Materials Producer
Cert #2495.01



Chemical Testing
Cert #2495.02

SPEXertificate®

Certificate of Reference Material

Catalog Number: AS-CLO49-2Y

Lot No. 4-88CLO4-2Y

Description: 1000 µg/mL Perchlorate

Matrix: H₂O



4572807

ID: WCCLO4-1st_00004

Exp:12/30/18 Prpd:Y2 Opn:01/02/18

PERCHLORATE- 1000 PPM fir

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1003 µg/mL ±5 µg/mL

Certified Value is Traceable to: 0917A†

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Perchlorate, Lot# F10T022. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 1004 µg/mL

Method: Evaporate to dryness. Ignite and weigh as KClO₄.

Instrumental Analysis by Ion Chromatography: 1002 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br ⁻	<0.03	NO ₃ ⁻	<0.02
Cl ⁻	<0.05	PO ₄ ⁻³	<0.03
F ⁻	<0.005	SO ₄ ⁻²	<0.5
NO ₂ ⁻	<0.02		

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: DEC -- 2017

Certifying Officer: Walter Cull

Reagent

WCCLO4ICVSOLI_00002

Item Number	S1377	Lot Number	2FH0070
Item	Sodium Perchlorate, Anhydrous, Reagent, ACS		
CAS Number	7601-89-0		
Molecular Formula	NaClO ₄	Molecular Weight	122.44

Test	Specification		Result
	min	max	
ASSAY (NaClO ₄)	98.0-102.0 %		99.7 %
pH OF A 5% SOLUTION @ 25°C	6.0 - 8.0		6.8
INSOLUBLE MATTER		0.005 %	<0.005 %
CHLORIDE (Cl)		0.003 %	<0.003 %
SULFATES (SO ₄)		0.002 %	<0.002 %
CALCIUM (Ca)		0.02 %	<0.02 %
HEAVY METALS (as Pb)		5 ppm	<5 ppm
IRON (Fe)		5 ppm	<5 ppm
POTASSIUM (K)		0.05 %	<0.05 %
DATE OF MANUFACTURE			28-JUL-2016

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



Certificate Of Analysis Results Certified by

Ibad Tirmizi
Director of Quality
Spectrum Chemical Mfg. Corp.


All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and MSDS/SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personal only. The customer must ensure to provide its users adequate hazardous material training and appropriate protective gears before handling our chemicals.

Reagent

WCCr6 K2Cr2O4_00009

Certificate of Analysis


3692087
ID: WCCr6 K2Cr2O4_00009
Exp:10/21/17 Ppd:YZ Opm:10/21/16
Cr-1000ppm 1st

PRODUCT:	1000 mg/L Hexavalent Chromium
CATALOG NUMBER:	019
LOT NUMBER:	040416
ISSUE DATE:	April 14, 2016
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Dichromate ($K_2Cr_2O_7$)
CERTIFIED CONCENTRATION¹:	1000 mg/L
UNCERTAINTY²:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0001 ± 0.0008 g/mL at 21.5°C and 758 mm Hg
TRACEABILITY³:	101%
NIST/SRM:	SRM 136f Potassium Dichromate
VERIFICATION METHOD:	Spectrophotometry
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.
2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor which is equal to the student t factor at a 95% confidence interval at n-1 degrees of freedom. The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.
3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))*100.

The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

This standard **expires 4/2019**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller

ISO/IEC GUIDE 34:2009



REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005



CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

Reagent

WCK2CR207_00003



1 Reagent Lane
 Fair Lawn, NJ 07410
 201.796.7100 tel
 201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	P188	Quality Test / Release Date 10/5/2016	
Lot Number	166724		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	* Suggested Retest Date	Oct-2021
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange red crystals.
ASSAY	%	>= 99	100.0
CALCIUM	%	<= 0.003	<0.0030
CHLORIDE	%	<= 0.001	<0.0010
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	%	<= 0.001	<0.0010
LOSS ON DRYING @ 105 C	%	<= 0.05	0.02
SODIUM (Na)	%	<= 0.02	0.001
SULFATE (SO4)	%	<= 0.005	<0.005



Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
 *Based on suggested storage condition.

Reagent

WCKDCA_00003

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com



2430125

ID: WCKDCA_00003

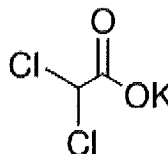
Exp 02/28/20 Pipd YZ Oph 02/28/15
300.1- Potassium Dichloro

Certificate of Analysis

Product Name:

Potassium dichloroacetate - 98%

Product Number: 348082
Batch Number: MKBR8264V
Brand: ALDRICH
CAS Number: 19559-59-2
MDL Number: MFCD00075411
Formula: C₂HCl₂KO₂
Formula Weight: 167.03 g/mol
Quality Release Date: 26 JUN 2014



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystal or Chunk(s)	Crystals with Chunk(s)
Infrared Spectrum	Conforms to Structure	Conforms
Purity (Titration by HClO ₄)	97.5 - 102.5 %	99.7 %

Ali Ataei, Manager
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Method 8260B Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260B Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): DB-VRX D ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	TOL #	BFB #
VER-01D-20181015	440-222284-1	106	106	105
VER-01I-20181015	440-222284-2	109	102	102
VER-20181015-TB	440-222284-3	107	111	99
VER-20181015-FB	440-222284-4	105	109	102
VER-20181015-EB	440-222284-5	112	110	104
	MB 440-506588/7	103	107	100
	LCS 440-506588/5	104	101	95
VER-01I-20181015 MS	440-222284-2 MS	105	105	95
VER-01I-20181015 MSD	440-222284-2 MSD	108	102	94

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS
76-132
80-128
80-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: AHJ22005.D

Lab ID: LCS 440-506588/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	25.0	23.0	92	10-150	
Benzene	25.0	25.4	102	68-130	
Bromobenzene	25.0	26.4	105	70-130	
Bromochloromethane	25.0	27.5	110	70-130	
Bromodichloromethane	25.0	28.7	115	70-132	
Bromoform	25.0	28.6	114	60-148	
Bromomethane	25.0	26.8	107	64-139	
2-Butanone (MEK)	25.0	25.3	101	44-150	
Carbon tetrachloride	25.0	29.0	116	60-150	
Chlorobenzene	25.0	25.3	101	70-130	
Chloroethane	25.0	25.5	102	64-135	
Chloroform	25.0	26.9	107	70-130	
Chloromethane	25.0	25.5	102	47-140	
2-Chlorotoluene	25.0	24.8	99	70-130	
4-Chlorotoluene	25.0	25.5	102	70-130	
cis-1,2-Dichloroethene	25.0	26.2	105	70-133	
cis-1,3-Dichloropropene	25.0	28.3	113	70-133	
Dibromochloromethane	25.0	28.6	115	69-145	
1,2-Dibromo-3-Chloropropane	25.0	27.4	109	52-140	
1,2-Dibromoethane (EDB)	25.0	26.7	107	70-130	
Dibromomethane	25.0	27.6	110	70-130	
1,2-Dichlorobenzene	25.0	26.7	107	70-130	
1,3-Dichlorobenzene	25.0	24.4	98	70-130	
1,4-Dichlorobenzene	25.0	25.4	102	70-130	
Dichlorodifluoromethane	25.0	24.7	99	29-150	
1,1-Dichloroethane	25.0	25.1	100	64-130	
1,2-Dichloroethane	25.0	26.6	106	57-138	
1,1-Dichloroethene	25.0	27.4	110	70-130	
1,2-Dichloropropane	25.0	25.7	103	67-130	
1,3-Dichloropropane	25.0	25.3	101	70-130	
2,2-Dichloropropane	25.0	29.3	117	68-141	
1,1-Dichloropropene	25.0	27.0	108	70-130	
Ethylbenzene	25.0	26.0	104	70-130	
Ethyl-t-butyl ether (ETBE)	25.0	25.9	103	60-136	
Hexachlorobutadiene	25.0	27.1	108	10-150	
2-Hexanone	25.0	25.3	101	10-150	
Isopropylbenzene	25.0	27.6	110	70-136	
Isopropyl Ether (DIPE)	25.0	25.6	102	58-139	
Methylene Chloride	25.0	23.4	94	52-130	
4-Methyl-2-pentanone (MIBK)	25.0	27.0	108	59-149	
Methyl-t-Butyl Ether (MTBE)	25.0	26.6	106	63-131	
m,p-Xylene	25.0	27.0	108	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: AHJ22005.D

Lab ID: LCS 440-506588/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Naphthalene	25.0	27.5	110	60-140	
n-Butylbenzene	25.0	25.5	102	65-150	
N-Propylbenzene	25.0	25.6	102	67-139	
o-Xylene	25.0	27.5	110	70-130	
p-Isopropyltoluene	25.0	25.9	104	70-132	
sec-Butylbenzene	25.0	26.4	106	70-138	
Styrene	25.0	26.6	106	70-134	
Tert-amyl-methyl ether (TAME)	25.0	25.9	104	57-139	
tert-Butyl alcohol (TBA)	250	275	110	70-130	
tert-Butylbenzene	25.0	26.1	104	70-130	
1,1,1,2-Tetrachloroethane	25.0	28.6	114	60-141	
1,1,2,2-Tetrachloroethane	25.0	24.8	99	63-130	
Tetrachloroethene	25.0	27.4	110	70-130	
Toluene	25.0	25.4	102	70-130	
trans-1,2-Dichloroethene	25.0	27.1	109	70-130	
trans-1,3-Dichloropropene	25.0	27.5	110	70-132	
1,2,3-Trichlorobenzene	25.0	27.1	108	60-140	
1,2,4-Trichlorobenzene	25.0	26.6	107	60-140	
1,1,1-Trichloroethane	25.0	27.5	110	70-130	
1,1,2-Trichloroethane	25.0	26.2	105	70-130	
Trichloroethene	25.0	26.7	107	70-130	
Trichlorofluoromethane	25.0	26.7	107	60-150	
1,2,3-Trichloropropane	25.0	26.2	105	63-130	
1,2,4-Trimethylbenzene	25.0	26.6	106	70-135	
1,3,5-Trimethylbenzene	25.0	26.2	105	70-136	
Vinyl chloride	25.0	26.3	105	59-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: AHJ22009.D

Lab ID: 440-222284-2 MS

Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	25.0	ND	25.1	101	10-150	
Benzene	25.0	ND	25.8	103	66-130	
Bromobenzene	25.0	ND	25.2	101	70-130	
Bromochloromethane	25.0	ND	25.9	104	70-130	
Bromodichloromethane	25.0	ND	29.7	119	70-138	
Bromoform	25.0	ND	28.0	112	59-150	
Bromomethane	25.0	ND	26.7	107	62-131	
2-Butanone (MEK)	25.0	ND	23.7	95	48-140	
Carbon tetrachloride	25.0	0.29 J	30.4	120	60-150	
Chlorobenzene	25.0	ND	25.1	100	70-130	
Chloroethane	25.0	ND	26.6	106	68-130	
Chloroform	25.0	120	150	102	70-130	4
Chloromethane	25.0	ND	24.0	96	39-144	
2-Chlorotoluene	25.0	ND	24.4	97	70-130	
4-Chlorotoluene	25.0	ND	25.4	102	70-130	
cis-1,2-Dichloroethene	25.0	ND	27.4	110	70-130	
cis-1,3-Dichloropropene	25.0	ND	29.2	117	70-133	
Dibromochloromethane	25.0	ND	29.1	116	70-148	
1,2-Dibromo-3-Chloropropane	25.0	ND	23.7	95	48-140	
1,2-Dibromoethane (EDB)	25.0	ND	26.2	105	70-131	
Dibromomethane	25.0	ND	26.4	105	70-130	
1,2-Dichlorobenzene	25.0	ND	26.3	105	70-130	
1,3-Dichlorobenzene	25.0	ND	24.7	99	70-130	
1,4-Dichlorobenzene	25.0	ND	25.5	102	70-130	
Dichlorodifluoromethane	25.0	ND	22.7	91	25-142	
1,1-Dichloroethane	25.0	ND	25.7	103	65-130	
1,2-Dichloroethane	25.0	ND	26.7	107	56-146	
1,1-Dichloroethene	25.0	ND	27.4	109	70-130	
1,2-Dichloropropane	25.0	ND	26.6	106	69-130	
1,3-Dichloropropane	25.0	ND	24.6	99	70-130	
2,2-Dichloropropane	25.0	ND	29.9	119	69-138	
1,1-Dichloropropene	25.0	ND	26.3	105	64-130	
Ethylbenzene	25.0	ND	25.9	103	70-130	
Ethyl-t-butyl ether (ETBE)	25.0	ND	26.8	107	70-130	
Hexachlorobutadiene	25.0	ND	25.7	103	10-150	
2-Hexanone	25.0	ND	24.2	97	10-150	
Isopropylbenzene	25.0	ND	27.8	111	70-132	
Isopropyl Ether (DIPE)	25.0	ND	25.8	103	64-138	
Methylene Chloride	25.0	ND	19.8	79	52-130	
4-Methyl-2-pentanone (MIBK)	25.0	ND	24.4	98	52-150	
Methyl-t-Butyl Ether (MTBE)	25.0	ND	27.0	108	70-130	
m,p-Xylene	25.0	ND	26.9	107	70-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: AHJ22009.D

Lab ID: 440-222284-2 MS

Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Naphthalene	25.0	ND	26.0	104	60-140	
n-Butylbenzene	25.0	ND	26.4	106	61-149	
N-Propylbenzene	25.0	ND	25.9	104	66-135	
o-Xylene	25.0	ND	27.8	111	70-133	
p-Isopropyltoluene	25.0	ND	26.0	104	70-130	
sec-Butylbenzene	25.0	ND	25.7	103	67-134	
Styrene	25.0	ND	27.6	110	29-150	
Tert-amyl-methyl ether (TAME)	25.0	ND	25.5	102	68-133	
tert-Butyl alcohol (TBA)	250	ND	287	115	70-130	
tert-Butylbenzene	25.0	ND	25.8	103	70-130	
1,1,1,2-Tetrachloroethane	25.0	ND	28.0	112	60-149	
1,1,2,2-Tetrachloroethane	25.0	ND	22.8	91	63-130	
Tetrachloroethene	25.0	ND	26.8	107	70-137	
Toluene	25.0	ND	25.4	102	70-130	
trans-1,2-Dichloroethene	25.0	ND	26.5	106	70-130	
trans-1,3-Dichloropropene	25.0	ND	27.1	109	70-138	
1,2,3-Trichlorobenzene	25.0	ND	26.9	108	60-140	
1,2,4-Trichlorobenzene	25.0	ND	26.6	106	60-140	
1,1,1-Trichloroethane	25.0	ND	28.0	112	70-130	
1,1,2-Trichloroethane	25.0	ND	26.4	106	70-130	
Trichloroethene	25.0	ND	27.3	109	70-130	
Trichlorofluoromethane	25.0	ND	28.3	113	60-150	
1,2,3-Trichloropropane	25.0	ND	23.4	93	60-130	
1,2,4-Trimethylbenzene	25.0	ND	26.5	106	70-130	
1,3,5-Trimethylbenzene	25.0	ND	26.6	106	70-130	
Vinyl chloride	25.0	ND	26.4	106	50-137	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: AHJ22010.D

Lab ID: 440-222284-2 MSD

Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	25.0	26.4	106	5	35	10-150	
Benzene	25.0	24.6	99	5	20	66-130	
Bromobenzene	25.0	25.8	103	2	20	70-130	
Bromochloromethane	25.0	27.5	110	6	25	70-130	
Bromodichloromethane	25.0	27.9	112	6	20	70-138	
Bromoform	25.0	28.7	115	2	25	59-150	
Bromomethane	25.0	26.0	104	3	25	62-131	
2-Butanone (MEK)	25.0	25.6	103	8	40	48-140	
Carbon tetrachloride	25.0	26.2	104	15	25	60-150	
Chlorobenzene	25.0	24.4	98	3	20	70-130	
Chloroethane	25.0	24.3	97	9	25	68-130	
Chloroform	25.0	139	56	8	20	70-130	4
Chloromethane	25.0	22.3	89	7	25	39-144	
2-Chlorotoluene	25.0	22.9	92	6	20	70-130	
4-Chlorotoluene	25.0	24.1	97	5	20	70-130	
cis-1,2-Dichloroethene	25.0	26.5	106	4	20	70-130	
cis-1,3-Dichloropropene	25.0	28.2	113	3	20	70-133	
Dibromochloromethane	25.0	29.0	116	0	25	70-148	
1,2-Dibromo-3-Chloropropane	25.0	25.9	104	9	30	48-140	
1,2-Dibromoethane (EDB)	25.0	26.3	105	1	25	70-131	
Dibromomethane	25.0	27.1	109	3	25	70-130	
1,2-Dichlorobenzene	25.0	26.2	105	0	20	70-130	
1,3-Dichlorobenzene	25.0	23.8	95	4	20	70-130	
1,4-Dichlorobenzene	25.0	23.9	96	6	20	70-130	
Dichlorodifluoromethane	25.0	21.2	85	7	30	25-142	
1,1-Dichloroethane	25.0	25.0	100	3	20	65-130	
1,2-Dichloroethane	25.0	27.5	110	3	20	56-146	
1,1-Dichloroethene	25.0	24.9	100	9	20	70-130	
1,2-Dichloropropane	25.0	25.8	103	3	20	69-130	
1,3-Dichloropropane	25.0	24.7	99	0	25	70-130	
2,2-Dichloropropane	25.0	28.0	112	6	25	69-138	
1,1-Dichloropropene	25.0	24.9	100	5	20	64-130	
Ethylbenzene	25.0	24.4	98	6	20	70-130	
Ethyl-t-butyl ether (ETBE)	25.0	26.1	104	2	25	70-130	
Hexachlorobutadiene	25.0	23.7	95	8	20	10-150	
2-Hexanone	25.0	26.3	105	8	35	10-150	
Isopropylbenzene	25.0	26.8	107	4	20	70-132	
Isopropyl Ether (DIPE)	25.0	25.9	103	0	25	64-138	
Methylene Chloride	25.0	22.8	91	14	20	52-130	
4-Methyl-2-pentanone (MIBK)	25.0	26.9	107	10	35	52-150	
Methyl-t-Butyl Ether (MTBE)	25.0	26.7	107	1	25	70-130	
m,p-Xylene	25.0	26.2	105	2	25	70-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: AHJ22010.D

Lab ID: 440-222284-2 MSD

Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Naphthalene	25.0	25.8	103	1	30	60-140	
n-Butylbenzene	25.0	23.3	93	12	20	61-149	
N-Propylbenzene	25.0	23.4	94	10	20	66-135	
o-Xylene	25.0	26.7	107	4	20	70-133	
p-Isopropyltoluene	25.0	23.6	94	10	20	70-130	
sec-Butylbenzene	25.0	23.7	95	8	20	67-134	
Styrene	25.0	26.4	106	4	35	29-150	
Tert-amyl-methyl ether (TAME)	25.0	25.8	103	1	30	68-133	
tert-Butyl alcohol (TBA)	250	282	113	2	25	70-130	
tert-Butylbenzene	25.0	24.4	97	6	20	70-130	
1,1,1,2-Tetrachloroethane	25.0	27.5	110	2	20	60-149	
1,1,2,2-Tetrachloroethane	25.0	23.8	95	4	30	63-130	
Tetrachloroethene	25.0	24.8	99	8	20	70-137	
Toluene	25.0	24.3	97	5	20	70-130	
trans-1,2-Dichloroethene	25.0	26.0	104	2	20	70-130	
trans-1,3-Dichloropropene	25.0	26.8	107	1	25	70-138	
1,2,3-Trichlorobenzene	25.0	25.9	104	4	20	60-140	
1,2,4-Trichlorobenzene	25.0	25.5	102	4	20	60-140	
1,1,1-Trichloroethane	25.0	25.8	103	8	20	70-130	
1,1,2-Trichloroethane	25.0	25.7	103	3	25	70-130	
Trichloroethene	25.0	25.9	104	5	20	70-130	
Trichlorofluoromethane	25.0	24.9	100	13	25	60-150	
1,2,3-Trichloropropane	25.0	25.9	104	10	30	60-130	
1,2,4-Trimethylbenzene	25.0	24.6	98	8	25	70-130	
1,3,5-Trimethylbenzene	25.0	24.1	96	10	20	70-130	
Vinyl chloride	25.0	25.8	103	3	30	50-137	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: AHJ22007.D Lab Sample ID: MB 440-506588/7
 Matrix: Water Heated Purge: (Y/N) Y
 Instrument ID: GCMS45 Date Analyzed: 10/22/2018 10:00
 GC Column: DB-VRX D ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 440-506588/5	AHJ22005.D	10/22/2018 09:06
VER-01I-20181015	440-222284-2	AHJ22008.D	10/22/2018 10:28
VER-01I-20181015 MS	440-222284-2 MS	AHJ22009.D	10/22/2018 10:55
VER-01I-20181015 MSD	440-222284-2 MSD	AHJ22010.D	10/22/2018 11:22
VER-01D-20181015	440-222284-1	AHJ22012.D	10/22/2018 13:11
VER-20181015-TB	440-222284-3	AHJ22013.D	10/22/2018 13:38
VER-20181015-FB	440-222284-4	AHJ22014.D	10/22/2018 14:06
VER-20181015-EB	440-222284-5	AHJ22015.D	10/22/2018 14:33

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: AHJ17021.D BFB Injection Date: 10/17/2018
 Instrument ID: GCMS45 BFB Injection Time: 12:26
 Analysis Batch No.: 505728

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	50.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	91.9	
175	5.0 - 9.0 % of mass 174	6.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	89.6	(97.5) 1
177	5.0 - 9.0 % of mass 176	6.2	(6.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD02 440-505728/4	AHJ17024.D	10/17/2018	14:08
	STD04 440-505728/5	AHJ17025.D	10/17/2018	14:35
	STD05 440-505728/6	AHJ17026.D	10/17/2018	15:06
	STD1 440-505728/7	AHJ17027.D	10/17/2018	15:33
	STD2 440-505728/8	AHJ17028.D	10/17/2018	16:00
	STD5 440-505728/9	AHJ17029.D	10/17/2018	16:27
	STD10 440-505728/10	AHJ17030.D	10/17/2018	16:55
	ICIS 440-505728/11	AHJ17031.D	10/17/2018	17:22
	STD50 440-505728/12	AHJ17032.D	10/17/2018	17:49
	STD100 440-505728/13	AHJ17033.D	10/17/2018	18:17
	STD200 440-505728/14	AHJ17034.D	10/17/2018	18:44
	STD300 440-505728/15	AHJ17035.D	10/17/2018	19:11
	ICV 440-505728/18	AHJ17038.D	10/17/2018	20:33

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: AHJ22002.D BFB Injection Date: 10/22/2018
 Instrument ID: GCMS45 BFB Injection Time: 07:44
 Analysis Batch No.: 506588

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.6	
75	30.0 - 60.0 % of mass 95	51.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	50.0 - 120.00 % of mass 95	96.0	
175	5.0 - 9.0 % of mass 174	7.2	(7.5) 1
176	95.0 - 101.0 % of mass 174	91.9	(95.8) 1
177	5.0 - 9.0 % of mass 176	6.4	(6.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 440-506588/4	AHJ22004.D	10/22/2018	08:38
	LCS 440-506588/5	AHJ22005.D	10/22/2018	09:06
	MB 440-506588/7	AHJ22007.D	10/22/2018	10:00
VER-01I-20181015	440-222284-2	AHJ22008.D	10/22/2018	10:28
VER-01I-20181015 MS	440-222284-2 MS	AHJ22009.D	10/22/2018	10:55
VER-01I-20181015 MSD	440-222284-2 MSD	AHJ22010.D	10/22/2018	11:22
VER-01D-20181015	440-222284-1	AHJ22012.D	10/22/2018	13:11
VER-20181015-TB	440-222284-3	AHJ22013.D	10/22/2018	13:38
VER-20181015-FB	440-222284-4	AHJ22014.D	10/22/2018	14:06
VER-20181015-EB	440-222284-5	AHJ22015.D	10/22/2018	14:33

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Sample No.: ICIS 440-505728/11 Date Analyzed: 10/17/2018 17:22
 Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm)
 Lab File ID (Standard): AHJ17031.D Heated Purge: (Y/N) Y
 Calibration ID: 20180

	TBA _d 9		FB		CBN _{Zd} 5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	119548	5.01	627796	7.93	509143	10.71
UPPER LIMIT	239096	5.31	1255592	8.23	1018286	11.01
LOWER LIMIT	59774	4.71	313898	7.63	254572	10.41
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 440-505728/18	154885	5.01	800515	7.93	644187	10.70
CCVIS 440-506588/4	103280	5.02	520768	7.93	436870	10.71

TBA_d9 = TBA-d₉ (IS)
 FB = Fluorobenzene (IS)
 CBN_{Zd}5 = Chlorobenzene-d₅

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.3 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Sample No.: ICIS 440-505728/11 Date Analyzed: 10/17/2018 17:22
 Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm)
 Lab File ID (Standard): AHJ17031.D Heated Purge: (Y/N) Y
 Calibration ID: 20180

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	300549	13.17				
UPPER LIMIT	601098	13.47				
LOWER LIMIT	150275	12.87				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 440-505728/18		357077	13.17			
CCVIS 440-506588/4		263950	13.17			

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.3 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Sample No.: CCVIS 440-506588/4 Date Analyzed: 10/22/2018 08:38
 Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm)
 Lab File ID (Standard): AHJ22004.D Heated Purge: (Y/N) Y
 Calibration ID: 20180

	TBA _d 9		FB		CBN _{Zd} 5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	103280	5.02	520768	7.93	436870	10.71	
UPPER LIMIT	206560	5.32	1041536	8.23	873740	11.01	
LOWER LIMIT	51640	4.72	260384	7.63	218435	10.41	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 440-506588/5		115345	5.02	512378	7.93	433501	10.71
MB 440-506588/7		99858	5.01	480723	7.93	391581	10.71
440-222284-2	VER-01I-20181015	104543	5.02	471740	7.93	397523	10.71
440-222284-2 MS	VER-01I-20181015 MS	93453	5.01	481978	7.93	410858	10.71
440-222284-2 MSD	VER-01I-20181015 MSD	108074	5.01	501796	7.93	426665	10.71
440-222284-1	VER-01D-20181015	109090	5.01	476819	7.93	389326	10.71
440-222284-3	VER-20181015-TB	95486	5.01	447069	7.93	361459	10.71
440-222284-4	VER-20181015-FB	86880	5.01	460091	7.93	368788	10.71
440-222284-5	VER-20181015-EB	118885	5.01	444908	7.93	358419	10.71

TBA_d9 = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBN_{Zd}5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.3 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Sample No.: CCVIS 440-506588/4 Date Analyzed: 10/22/2018 08:38
 Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm)
 Lab File ID (Standard): AHJ22004.D Heated Purge: (Y/N) Y
 Calibration ID: 20180

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	263950	13.17				
UPPER LIMIT	527900	13.47				
LOWER LIMIT	131975	12.87				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 440-506588/5	260938	13.17				
MB 440-506588/7	217050	13.17				
440-222284-2	VER-01I-20181015	225694	13.17			
440-222284-2 MS	VER-01I-20181015 MS	254252	13.17			
440-222284-2 MSD	VER-01I-20181015 MSD	259453	13.17			
440-222284-1	VER-01D-20181015	205836	13.17			
440-222284-3	VER-20181015-TB	208045	13.17			
440-222284-4	VER-20181015-FB	204139	13.17			
440-222284-5	VER-20181015-EB	203742	13.17			

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.3 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: AHJ22012.D
 Analysis Method: 8260B Date Collected: 10/15/2018 13:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	2.3		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: AHJ22012.D
 Analysis Method: 8260B Date Collected: 10/15/2018 13:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: AHJ22012.D
 Analysis Method: 8260B Date Collected: 10/15/2018 13:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		76-132
2037-26-5	Toluene-d8 (Surr)	106		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22012.D
 Lims ID: 440-222284-B-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 22-Oct-2018 13:11:30 ALS Bottle#: 29 Worklist Smp#: 12
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-012
 Misc. Info.: 440-222284-b-1
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 14:56:54 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 14:23:33

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)									
	65	5.005	5.015	-0.010	100	109090	250.0		
* 2 Fluorobenzene (IS)									
	96	7.932	7.932	0.000	98	476819	25.0	70- 130	100
	97	7.932	7.932	0.000		31642		0.0- 36.8	6.6
* 3 Chlorobenzene-d5									
	117	10.706	10.706	0.000	87	389326	25.0	70- 130	100
	82	10.696	10.706	-0.010		198299		21.9- 81.9	50.9
* 4 1,4-Dichlorobenzene-d4									
	152	13.167	13.167	0.000	96	205836	25.0	70- 130	100
	150	13.167	13.167	0.000		321640		152- 212	156
	115	13.167	13.167	0.000		125841		31.1- 91.1	61.1
\$ 6 Dibromofluoromethane (Surr)									
	113	6.889	6.889	0.000	92	154403	26.6	70- 130	100
	111	6.889	6.889	0.000		158754		74- 134	103
	192	6.889	6.889	0.000		25520		0.0- 46.6	16.5
\$ 8 Toluene-d8 (Surr)									
	98	9.420	9.420	0.000	93	465443	26.6	70- 130	100
	100	9.420	9.420	0.000		323473		40- 100	69.5
\$ 9 4-Bromofluorobenzene (Surr)									
	95	11.891	11.891	0.000	92	179236	26.3	70- 130	100
	174	11.891	11.891	0.000		169652		62- 122	94.7
	176	11.891	11.891	0.000		155797		59- 119	86.9
54 Chloroform									
	83	6.777	6.777	0.000	94	23223	2.34	70- 130	100
	85	6.777	6.777	0.000		15308		35.3- 95.3	65.9
	47	6.777	6.777	0.000		5466		0.0- 54.5	23.5

Reagents:

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22012.D

Injection Date: 22-Oct-2018 13:11:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-B-1

Lab Sample ID: 440-222284-1

Worklist Smp#: 12

Client ID: VER-01D-20181015

Purge Vol: 10.000 mL

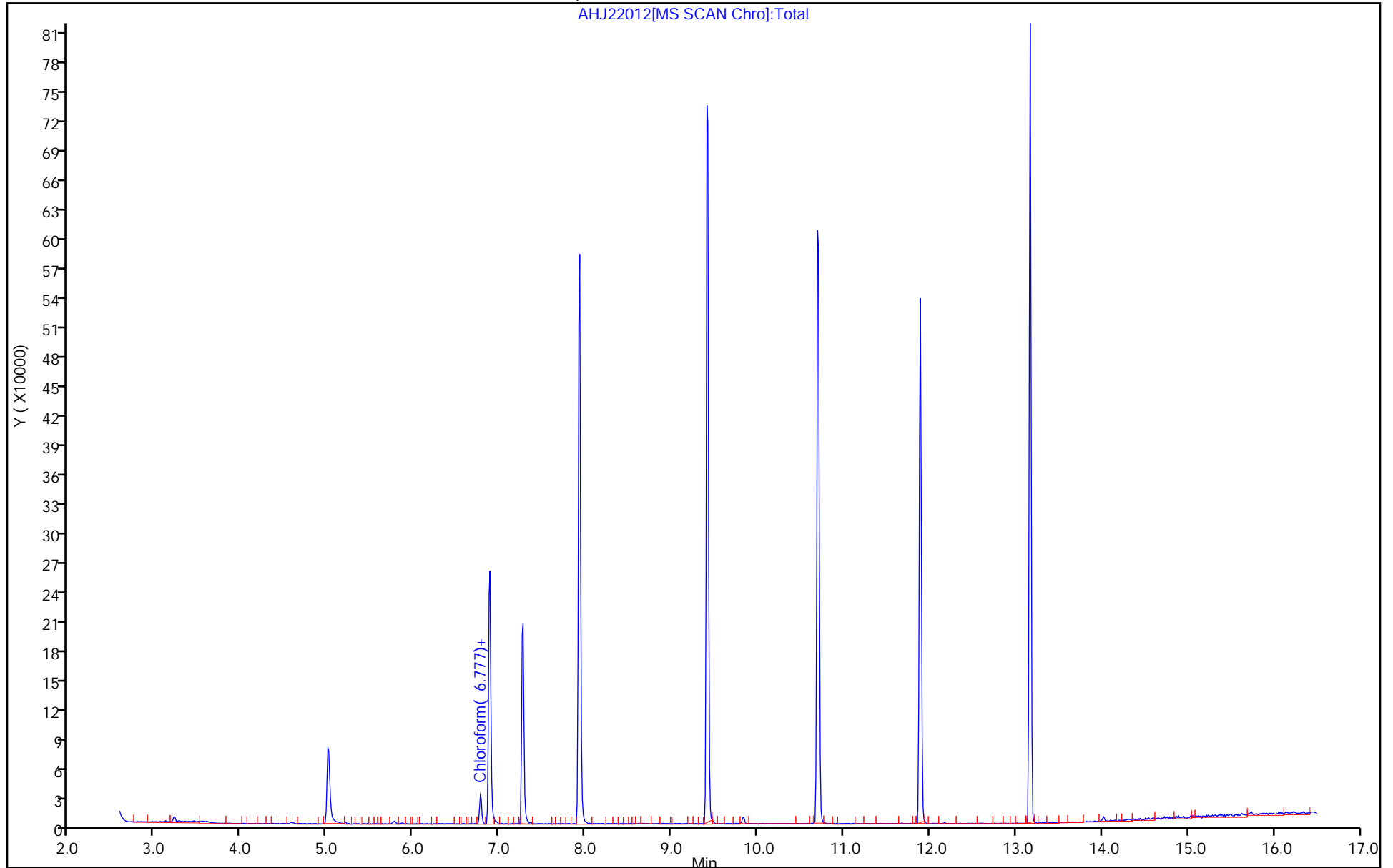
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: 45_8260

Limit Group: MSV-8260-624

AHJ22012[MS SCAN Chro]:Total



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22012.D
 Lims ID: 440-222284-B-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 22-Oct-2018 13:11:30 ALS Bottle#: 29 Worklist Smp#: 12
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-012
 Misc. Info.: 440-222284-b-1
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 14:56:54 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 14:23:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	26.6	106.37
\$ 7 1,2-Dichloroethane-d4 (Surr)	0.0	0	0.00
\$ 8 Toluene-d8 (Surr)	25.0	26.6	106.32
\$ 9 4-Bromofluorobenzene (Surr)	25.0	26.3	105.32

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22012.D

Injection Date: 22-Oct-2018 13:11:30

Instrument ID: GCMS45

Lims ID: 440-222284-B-1

Lab Sample ID: 440-222284-1

Client ID: VER-01D-20181015

Operator ID: RRT

ALS Bottle#: 29

Worklist Smp#: 12

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

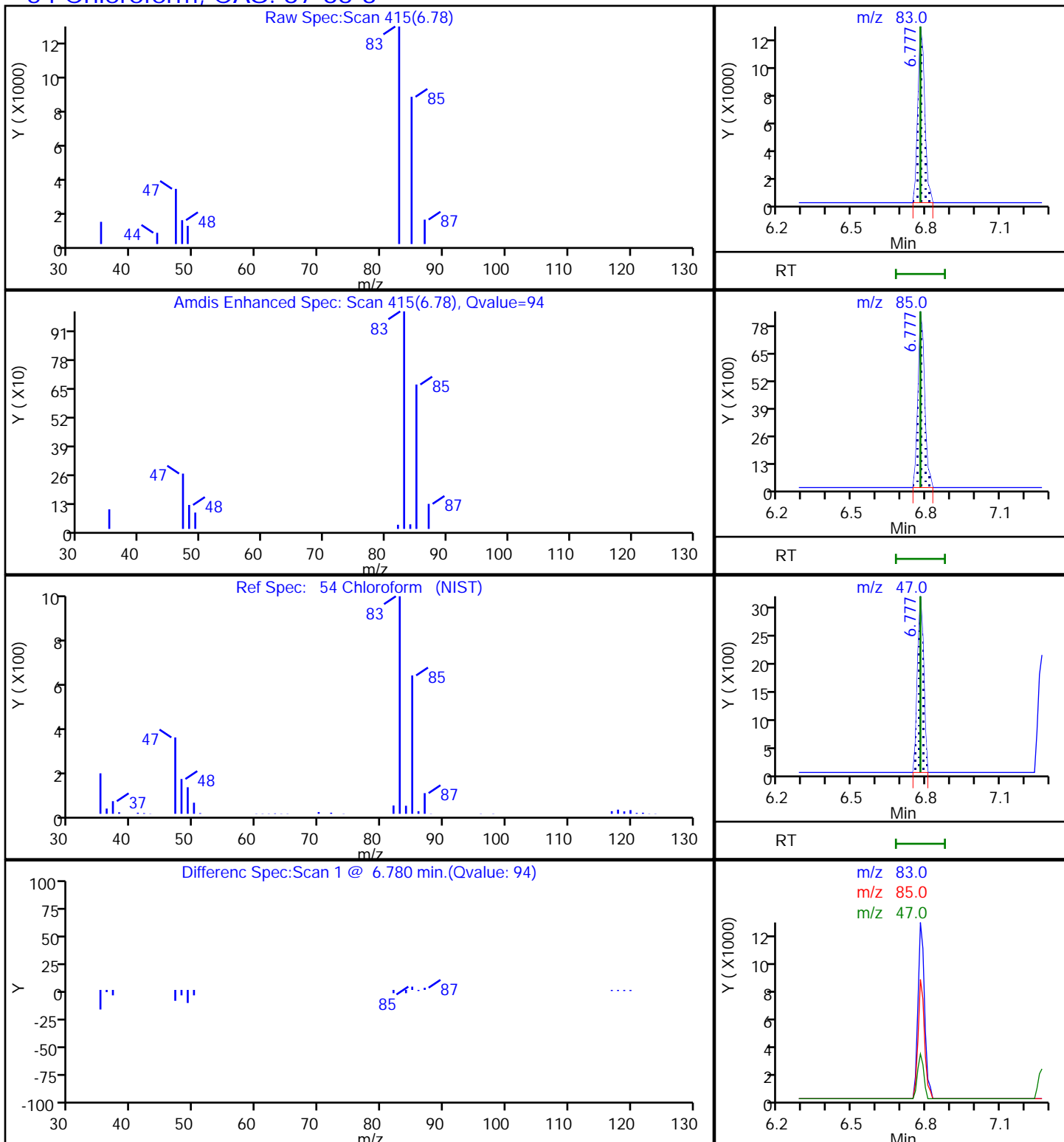
Method: 45_8260

Limit Group: MSV-8260-624

Column:

Detector: MS SCAN

54 Chloroform, CAS: 67-66-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: AHJ22008.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	0.29	J	0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	120		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: AHJ22008.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: AHJ22008.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		76-132
2037-26-5	Toluene-d8 (Surr)	102		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22008.D
 Lims ID: 440-222284-B-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 22-Oct-2018 10:28:30 ALS Bottle#: 23 Worklist Smp#: 8
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-008
 Misc. Info.: 440-222284-b-2
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:16:19

Sig	RT (min.)	Adj RT (min.)	DI RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	--------------	---	----------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)

65 5.015 5.015 0.000 98 104543 250.0

* 2 Fluorobenzene (IS)

96 7.932 7.932 0.000 98 471740 25.0 70- 130 100

97 7.932 7.932 0.000 31403 0.0- 36.8 6.7

* 3 Chlorobenzene-d5

117 10.706 10.706 0.000 85 397523 25.0 70- 130 100

82 10.696 10.706 -0.010 197866 21.9- 81.9 49.8

* 4 1,4-Dichlorobenzene-d4

152 13.167 13.167 0.000 95 225694 25.0 70- 130 100

150 13.167 13.167 0.000 342844 152- 212 152

115 13.167 13.167 0.000 132707 31.1- 91.1 58.8

\$ 6 Dibromofluoromethane (Surr)

113 6.889 6.889 0.000 91 156548 27.3 70- 130 100

111 6.889 6.889 0.000 161695 74- 134 103

192 6.889 6.889 0.000 26530 0.0- 46.6 16.9

\$ 7 1,2-Dichloroethane-d4 (Surr)

65 7.273 7.263 0.010 94 164493 28.6 70- 130 100

67 7.273 7.263 0.010 73961 15.9- 75.9 45.0

102 7.273 7.263 0.010 22423 0.0- 45.2 13.6

\$ 8 Toluene-d8 (Surr)

98 9.410 9.420 -0.010 93 458076 25.6 70- 130 100

100 9.420 9.420 0.000 319702 40- 100 69.8

\$ 9 4-Bromofluorobenzene (Surr)

95 11.891 11.891 0.000 91 190960 25.6 70- 130 100

174 11.891 11.891 0.000 169548 62- 122 88.8

176 11.891 11.891 0.000 164544 59- 119 86.2

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	----------------	-------------	-------	-------

54 Chloroform									
83	6.777	6.777	0.000	95	1223046	124.6	70- 130	100	
85	6.777	6.777	0.000		772488		35.3- 95.3	63.2	
47	6.777	6.777	0.000		290147		0.0- 54.5	23.7	
71 Carbon tetrachloride									
117	7.719	7.729	-0.010	89	3355	0.2873	70- 130	100	
119	7.729	7.729	0.000		2787		65- 125	83.1	
82	7.729	7.729	0.000		711		0.0- 51.0	21.2	
79 Trichloroethene									
130	8.286	8.286	0.000	89	1484	0.2304	70- 130	100	
95	8.286	8.286	0.000		1480		63- 123	100	
132	8.286	8.286	0.000		1677		71- 131	113	
60	0.000	8.286	0.000		0		20.6- 80.6		
A 140 C6-C10									
1	9.327	(5.660-12.995)		0	3249867	0			
A 141 C4-C12									
1	10.276	(4.965-15.587)		0	3577057	NC			
A 155 C6-C12									
1	11.000	(6.413-15.587)		0	3351842	0			

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22008.D

Injection Date: 22-Oct-2018 10:28:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-B-2

Lab Sample ID: 440-222284-2

Worklist Smp#: 8

Client ID: VER-01I-20181015

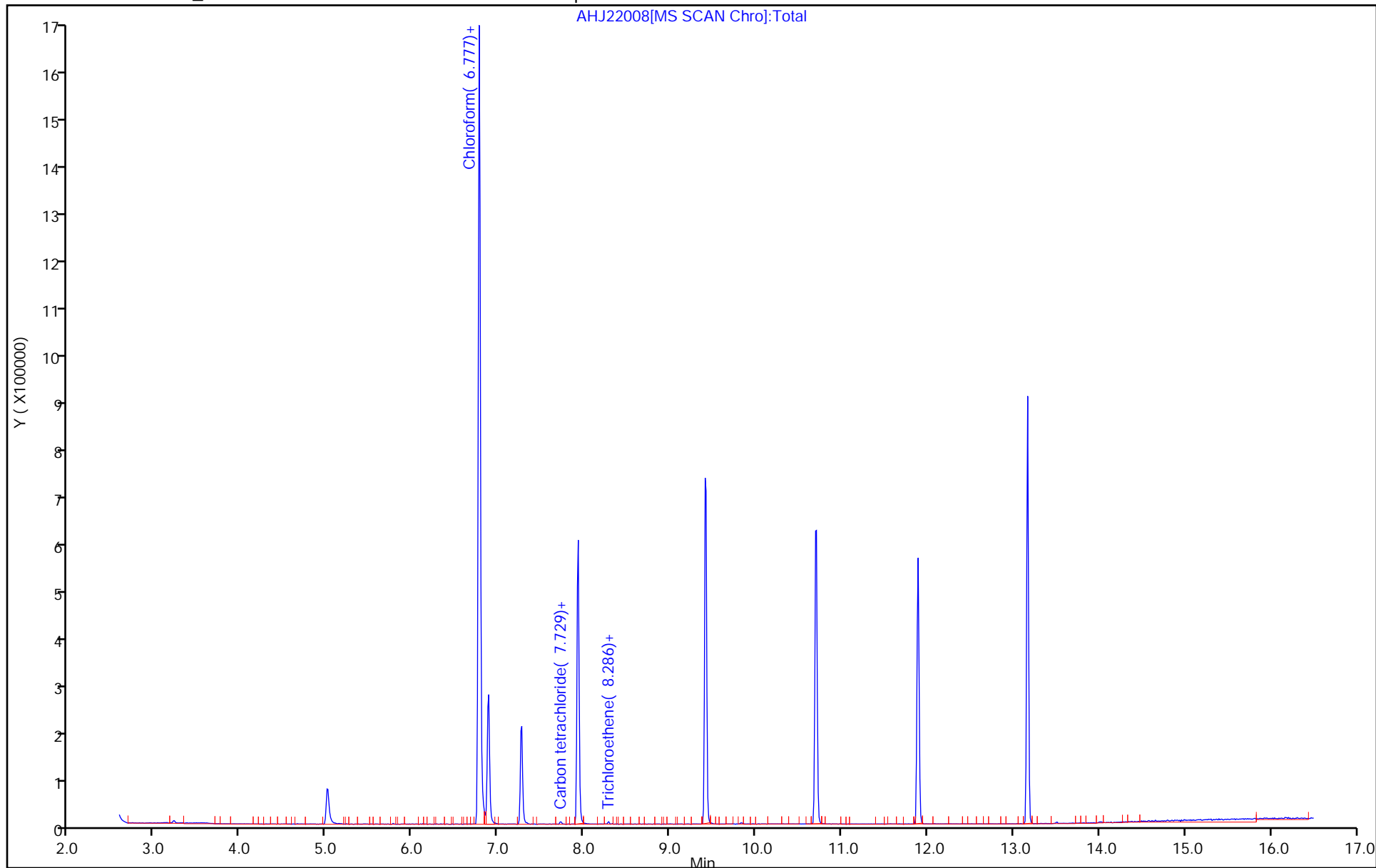
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 23

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22008.D
 Lims ID: 440-222284-B-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 22-Oct-2018 10:28:30 ALS Bottle#: 23 Worklist Smp#: 8
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-008
 Misc. Info.: 440-222284-b-2
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:16:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	27.3	109.01
\$ 7 1,2-Dichloroethane-d4 (Surr)	25.0	28.6	114.20
\$ 8 Toluene-d8 (Surr)	25.0	25.6	102.47
\$ 9 4-Bromofluorobenzene (Surr)	25.0	25.6	102.33

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22008.D

Injection Date: 22-Oct-2018 10:28:30

Instrument ID: GCMS45

Lims ID: 440-222284-B-2

Lab Sample ID: 440-222284-2

Client ID: VER-01I-20181015

Operator ID: RRT

ALS Bottle#: 23

Worklist Smp#: 8

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

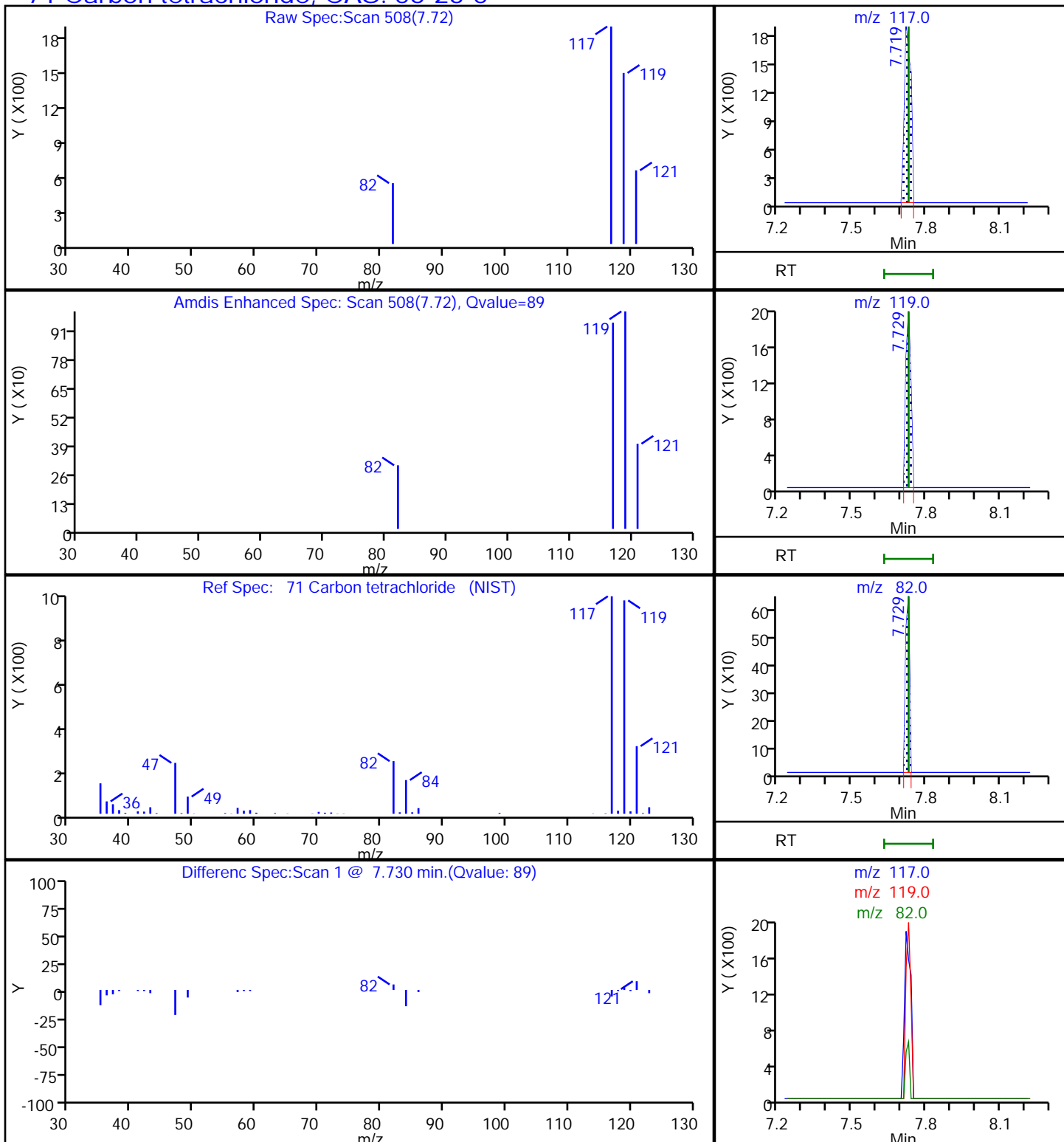
Method: 45_8260

Limit Group: MSV-8260-624

Column:

Detector MS SCAN

71 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22008.D

Injection Date: 22-Oct-2018 10:28:30

Instrument ID: GCMS45

Lims ID: 440-222284-B-2

Lab Sample ID: 440-222284-2

Client ID: VER-01I-20181015

Operator ID: RRT

ALS Bottle#: 23

Worklist Smp#: 8

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

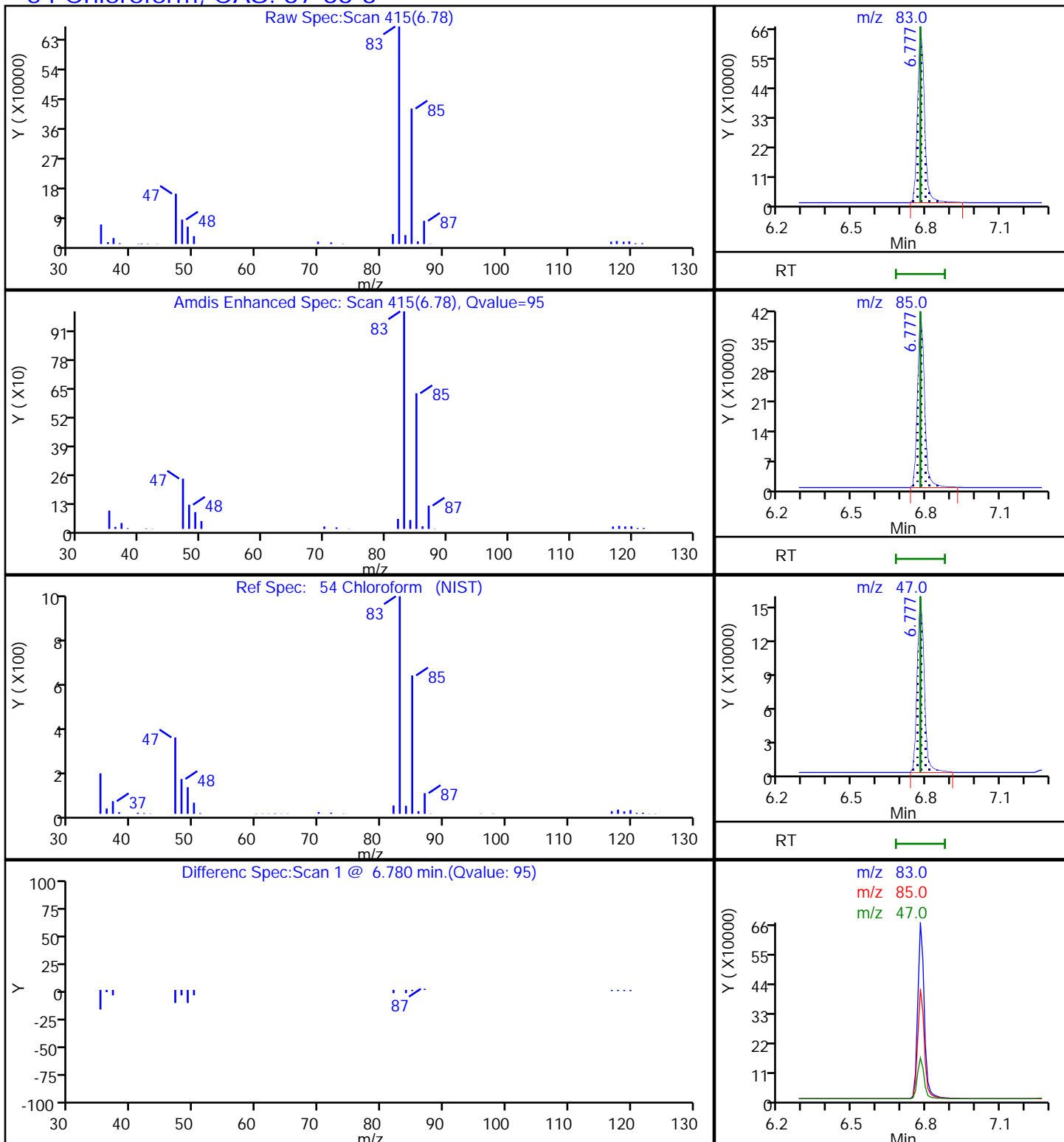
Method: 45_8260

Limit Group: MSV-8260-624

Column:

Detector: MS SCAN

54 Chloroform, CAS: 67-66-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-TB Lab Sample ID: 440-222284-3
 Matrix: Water Lab File ID: AHJ22013.D
 Analysis Method: 8260B Date Collected: 10/15/2018 08:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-TB Lab Sample ID: 440-222284-3
 Matrix: Water Lab File ID: AHJ22013.D
 Analysis Method: 8260B Date Collected: 10/15/2018 08:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-TB Lab Sample ID: 440-222284-3
 Matrix: Water Lab File ID: AHJ22013.D
 Analysis Method: 8260B Date Collected: 10/15/2018 08:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 13:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		76-132
2037-26-5	Toluene-d8 (Surr)	111		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22013.D
 Lims ID: 440-222284-A-3
 Client ID: VER-20181015-TB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 13:38:30 ALS Bottle#: 30 Worklist Smp#: 13
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-013
 Misc. Info.: 440-222284-a-3
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 14:56:54 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 14:23:51

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)									
65	5.005	5.015	-0.010	99	95486	250.0			
* 2 Fluorobenzene (IS)									
96	7.932	7.932	0.000	98	447069	25.0	70- 130	100	
97	7.922	7.932	-0.010		29662		0.0- 36.8	6.6	
* 3 Chlorobenzene-d5									
117	10.706	10.706	0.000	86	361459	25.0	70- 130	100	
82	10.696	10.706	-0.010		182313		21.9- 81.9	50.4	
* 4 1,4-Dichlorobenzene-d4									
152	13.167	13.167	0.000	95	208045	25.0	70- 130	100	
150	13.167	13.167	0.000		314643		152- 212	151	
115	13.167	13.167	0.000		119838		31.1- 91.1	57.6	
\$ 6 Dibromofluoromethane (Surr)									
113	6.889	6.889	0.000	92	145856	26.8	70- 130	100	
111	6.889	6.889	0.000		149976		74- 134	103	
192	6.889	6.889	0.000		22928		0.0- 46.6	15.7	
\$ 8 Toluene-d8 (Surr)									
98	9.420	9.420	0.000	94	449265	27.6	70- 130	100	
100	9.410	9.420	-0.010		302720		40- 100	67.4	
\$ 9 4-Bromofluorobenzene (Surr)									
95	11.891	11.891	0.000	89	170486	24.8	70- 130	100	
174	11.891	11.891	0.000		151312		62- 122	88.8	
176	11.891	11.891	0.000		148237		59- 119	86.9	

Reagents:

VMWNU8260ISS_00160 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22013.D

Injection Date: 22-Oct-2018 13:38:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-A-3

Lab Sample ID: 440-222284-3

Worklist Smp#: 13

Client ID: VER-20181015-TB

Purge Vol: 10.000 mL

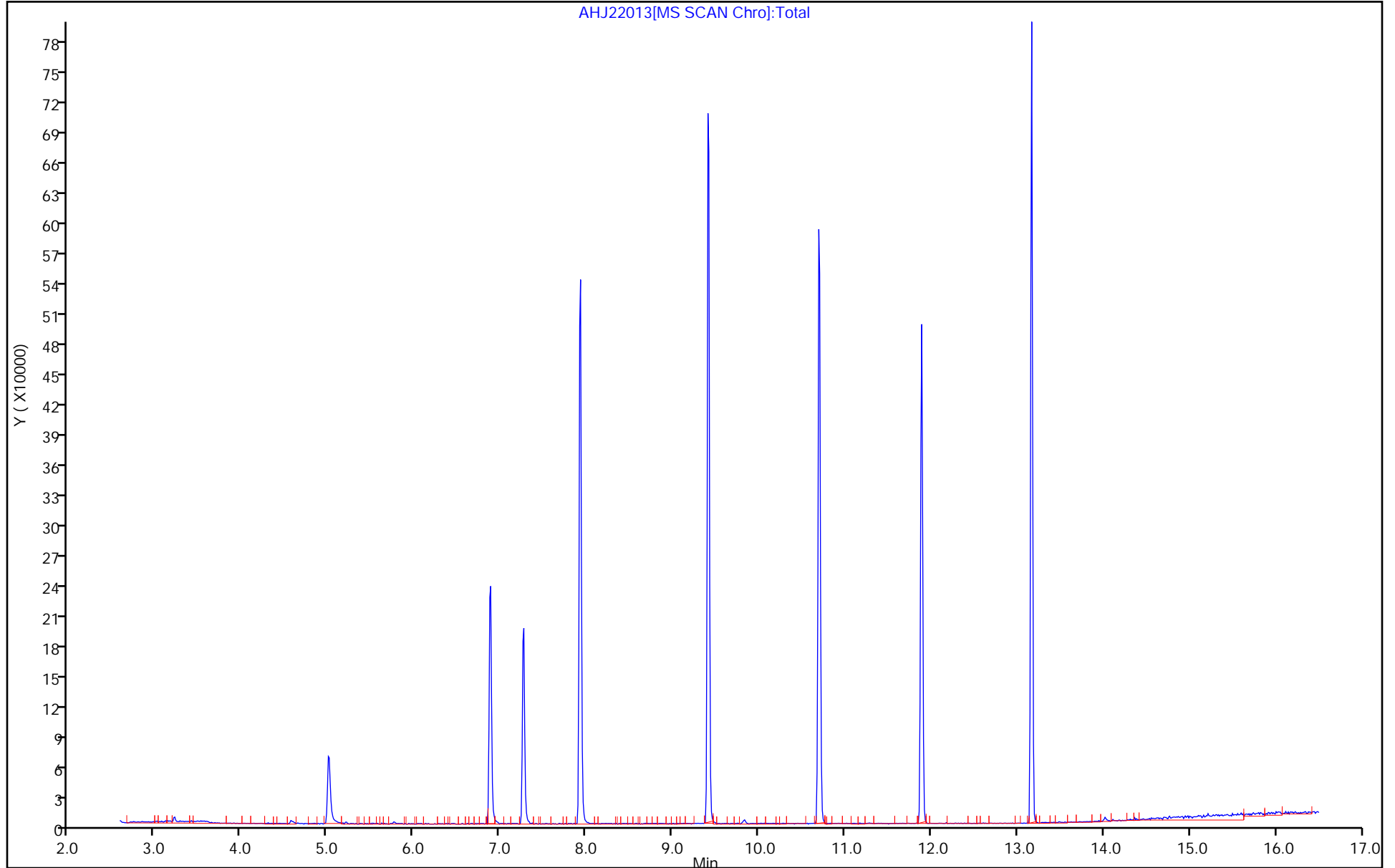
Dil. Factor: 1.0000

ALS Bottle#: 30

Method: 45_8260

Limit Group: MSV-8260-624

AHJ22013[MS SCAN Chro]:Total



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22013.D
 Lims ID: 440-222284-A-3
 Client ID: VER-20181015-TB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 13:38:30 ALS Bottle#: 30 Worklist Smp#: 13
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-013
 Misc. Info.: 440-222284-a-3
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 14:56:54 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr

Date: 22-Oct-2018 14:23:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	26.8	107.17
\$ 7 1,2-Dichloroethane-d4 (Surr)	0.0	0	0.00
\$ 8 Toluene-d8 (Surr)	25.0	27.6	110.53
\$ 9 4-Bromofluorobenzene (Surr)	25.0	24.8	99.11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: AHJ22014.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: AHJ22014.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: AHJ22014.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:15
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		76-132
2037-26-5	Toluene-d8 (Surr)	109		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22014.D
 Lims ID: 440-222284-A-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 14:06:30 ALS Bottle#: 31 Worklist Smp#: 14
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-014
 Misc. Info.: 440-222284-a-4
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 18:34:31 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: XAWRK014

First Level Reviewer: chanw Date: 22-Oct-2018 17:37:49

Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	----------------	---	----------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)									
65	5.005	5.015	-0.010	98	86880	250.0			
* 2 Fluorobenzene (IS)									
96	7.932	7.932	0.000	98	460091	25.0	70- 130	100	
97	7.932	7.932	0.000		29467		0.0- 36.8	6.4	
* 3 Chlorobenzene-d5									
117	10.706	10.706	0.000	86	368788	25.0	70- 130	100	
82	10.696	10.706	-0.010		193218		21.9- 81.9	52.4	
* 4 1,4-Dichlorobenzene-d4									
152	13.167	13.167	0.000	96	204139	25.0	70- 130	100	
150	13.167	13.167	0.000		316907		152- 212	155	
115	13.167	13.167	0.000		119876		31.1- 91.1	58.7	
\$ 6 Dibromofluoromethane (Surr)									
113	6.889	6.889	0.000	91	147166	26.3	70- 130	100	
111	6.889	6.889	0.000		154800		74- 134	105	
192	6.889	6.889	0.000		23756		0.0- 46.6	16.1	
\$ 8 Toluene-d8 (Surr)									
98	9.420	9.420	0.000	93	450378	27.2	70- 130	100	
100	9.420	9.420	0.000		311888		40- 100	69.3	
\$ 9 4-Bromofluorobenzene (Surr)									
95	11.891	11.891	0.000	90	171649	25.4	70- 130	100	
174	11.891	11.891	0.000		153030		62- 122	89.2	
176	11.891	11.891	0.000		147417		59- 119	85.9	

Reagents:

VMWNU8260ISS_00160 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22014.D

Injection Date: 22-Oct-2018 14:06:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-A-4

Lab Sample ID: 440-222284-4

Worklist Smp#: 14

Client ID: VER-20181015-FB

Purge Vol: 10.000 mL

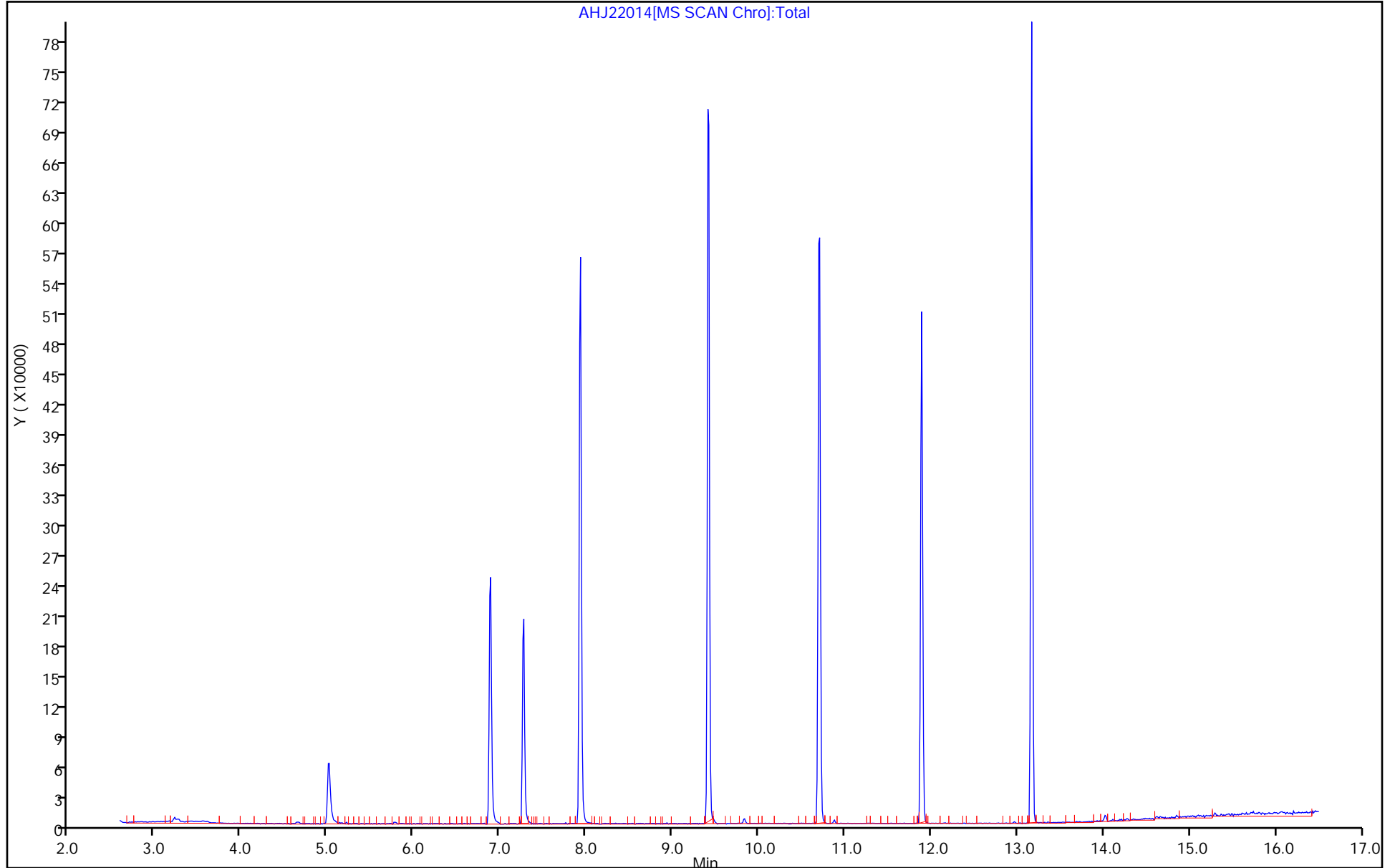
Dil. Factor: 1.0000

ALS Bottle#: 31

Method: 45_8260

Limit Group: MSV-8260-624

AHJ22014[MS SCAN Chro]:Total



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22014.D
 Lims ID: 440-222284-A-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 14:06:30 ALS Bottle#: 31 Worklist Smp#: 14
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-014
 Misc. Info.: 440-222284-a-4
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 18:34:31 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: XAWRK014

First Level Reviewer: chanw Date: 22-Oct-2018 17:37:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	26.3	105.07
\$ 7 1,2-Dichloroethane-d4 (Surr)	0.0	0	0.00
\$ 8 Toluene-d8 (Surr)	25.0	27.2	108.60
\$ 9 4-Bromofluorobenzene (Surr)	25.0	25.4	101.70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: AHJ22015.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: AHJ22015.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: AHJ22015.D
 Analysis Method: 8260B Date Collected: 10/15/2018 14:00
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 14:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		76-132
2037-26-5	Toluene-d8 (Surr)	110		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22015.D
 Lims ID: 440-222284-A-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 14:33:30 ALS Bottle#: 32 Worklist Smp#: 15
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-015
 Misc. Info.: 440-222284-a-5
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 18:34:31 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: XAWRK014

First Level Reviewer: chanw Date: 22-Oct-2018 17:38:13

Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	----------------	---	----------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)									
65	5.005	5.015	-0.010	98	118885	250.0			
* 2 Fluorobenzene (IS)									
96	7.932	7.932	0.000	98	444908	25.0	70- 130	100	
97	7.932	7.932	0.000		28813		0.0- 36.8	6.5	
* 3 Chlorobenzene-d5									
117	10.706	10.706	0.000	87	358419	25.0	70- 130	100	
82	10.696	10.706	-0.010		186435		21.9- 81.9	52.0	
* 4 1,4-Dichlorobenzene-d4									
152	13.167	13.167	0.000	96	203742	25.0	70- 130	100	
150	13.167	13.167	0.000		318349		152- 212	156	
115	13.167	13.167	0.000		125202		31.1- 91.1	61.5	
\$ 6 Dibromofluoromethane (Surr)									
113	6.889	6.889	0.000	91	151590	28.0	70- 130	100	
111	6.889	6.889	0.000		155421		74- 134	103	
192	6.889	6.889	0.000		24049		0.0- 46.6	15.9	
\$ 8 Toluene-d8 (Surr)									
98	9.420	9.420	0.000	94	441970	27.4	70- 130	100	
100	9.420	9.420	0.000		305062		40- 100	69.0	
\$ 9 4-Bromofluorobenzene (Surr)									
95	11.891	11.891	0.000	90	175060	26.0	70- 130	100	
174	11.891	11.891	0.000		152241		62- 122	87.0	
176	11.891	11.891	0.000		146930		59- 119	83.9	

Reagents:

VMWNU8260ISS_00160 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22015.D

Injection Date: 22-Oct-2018 14:33:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-A-5

Lab Sample ID: 440-222284-5

Worklist Smp#: 15

Client ID: VER-20181015-EB

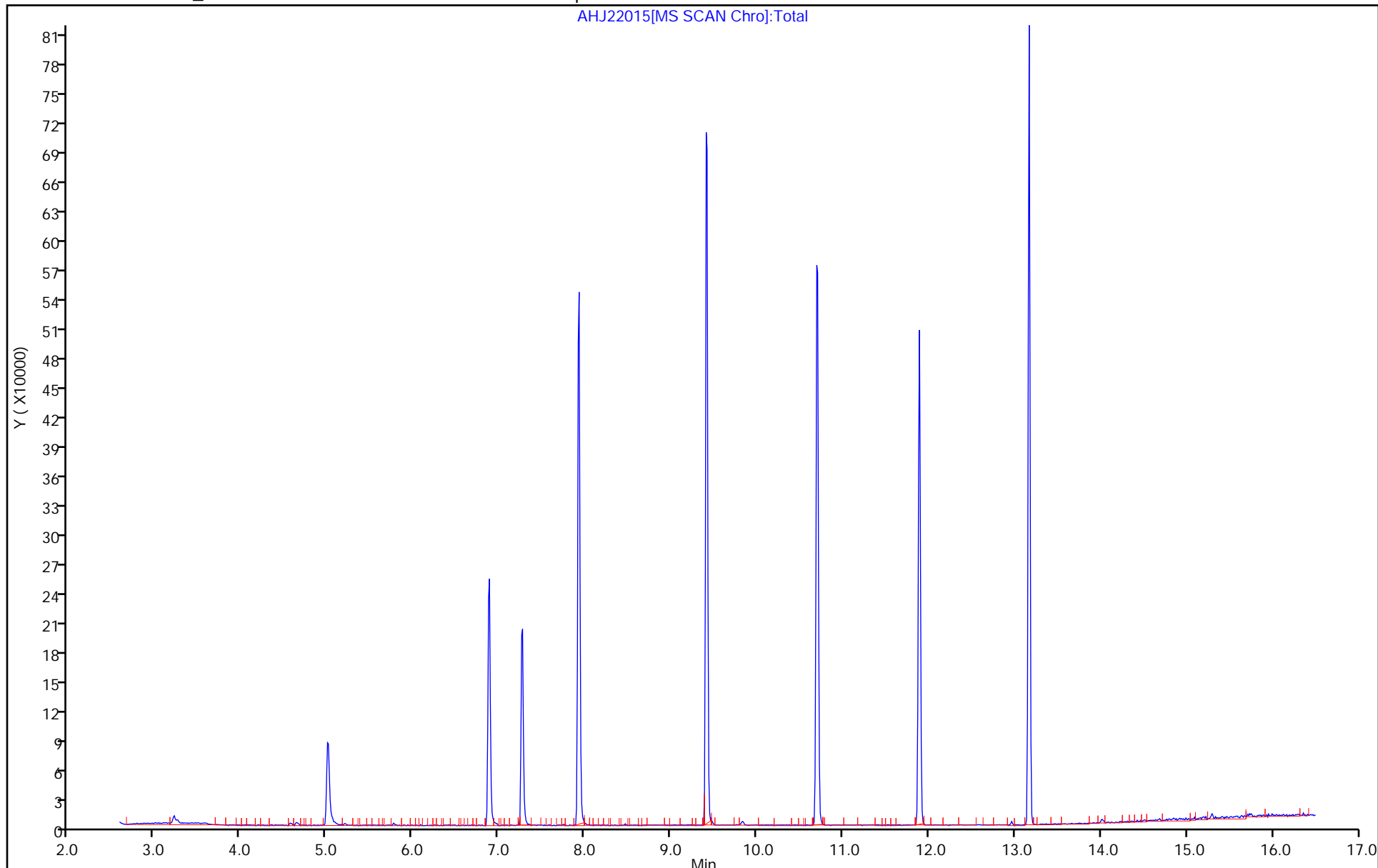
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 32

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22015.D
 Lims ID: 440-222284-A-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 22-Oct-2018 14:33:30 ALS Bottle#: 32 Worklist Smp#: 15
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-015
 Misc. Info.: 440-222284-a-5
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 18:34:31 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: XAWRK014

First Level Reviewer: chanw Date: 22-Oct-2018 17:38:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	28.0	111.92
\$ 7 1,2-Dichloroethane-d4 (Surr)	0.0	0	0.00
\$ 8 Toluene-d8 (Surr)	25.0	27.4	109.66
\$ 9 4-Bromofluorobenzene (Surr)	25.0	26.0	103.92

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD02 440-505728/4	AHJ17024.D
Level 2	STD04 440-505728/5	AHJ17025.D
Level 3	STD05 440-505728/6	AHJ17026.D
Level 4	STD1 440-505728/7	AHJ17027.D
Level 5	STD2 440-505728/8	AHJ17028.D
Level 6	STD5 440-505728/9	AHJ17029.D
Level 7	STD10 440-505728/10	AHJ17030.D
Level 8	ICIS 440-505728/11	AHJ17031.D
Level 9	STD50 440-505728/12	AHJ17032.D
Level 10	STD100 440-505728/13	AHJ17033.D
Level 11	STD200 440-505728/14	AHJ17034.D
Level 12	STD300 440-505728/15	AHJ17035.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Dichlorodifluoromethane	+++++ 0.6063 0.4653	+++++ 0.6097 +++++	0.5057 0.5894	0.5080 0.5550	0.5310 0.5094	Ave		0.5422			9.4		15.0				
Chloromethane	+++++ 0.2881 0.2369	+++++ 0.2813 +++++	0.2602 0.2753	0.3006 0.2675	0.2566 0.2502	Ave		0.2685		0.1000	7.4		15.0				
Vinyl chloride	+++++ 0.2949 0.2541	0.2811 0.2932 +++++	0.2934 0.2894	0.2803 0.2815	0.2858 0.2579	Ave		0.2812			5.1		30.0				
1,3-Butadiene	+++++ 0.2551 0.2235	+++++ 0.2494 +++++	0.2220 0.2440	0.2426 0.2482	0.2450 0.2274	Ave		0.2397			5.1		15.0				
Bromomethane	+++++ 0.2180 0.2110	+++++ 0.2243 0.1832	0.2289 0.2333	0.2005 0.2128	0.1942 0.2072	Ave		0.2113			7.4		15.0				
Chloroethane	+++++ 0.1675 0.1670	+++++ 0.1739 0.1385	+++++ 0.1815	0.1223 0.1694	0.1831 0.1639	Ave		0.1630			12.3		15.0				
Ethanol	+++++ 0.1007 0.1074	+++++ 0.1094 0.0962	+++++ 0.1216	+++++ 0.1032	0.0826 0.1092	Ave		0.1038			11.0		15.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Dichlorofluoromethane	+++++	+++++	0.4477	0.5648	0.5466	Ave		0.5177			9.2		15.0				
	0.5437	0.5690	0.5479	0.5117	0.4695												
	0.4584	+++++															
Acrolein	+++++	+++++	+++++	+++++	+++++	Lin2	-0.028	0.0127						0.9950		0.9900	
	0.0078	0.0086	0.0108	0.0128	0.0131												
	0.0129	0.0125															
Trichlorofluoromethane	+++++	+++++	0.7087	0.8314	0.7910	Ave		0.7836			8.3		15.0				
	0.8491	0.8462	0.8393	0.7816	0.7288												
	0.6765	+++++															
Acetonitrile	+++++	+++++	+++++	+++++	0.0161	Ave		0.0156			7.8		15.0				
	0.0169	0.0169	0.0156	0.0154	0.0144												
	0.0137	+++++															
Acetone	+++++	+++++	+++++	+++++	+++++	Ave		0.0543			12.4		15.0				
	0.0604	0.0636	0.0555	0.0503	0.0468												
	0.0490	+++++															
Diethyl ether	+++++	+++++	+++++	0.0906	0.1154	Ave		0.1274			13.2		15.0				
	0.1219	0.1383	0.1418	0.1386	0.1373												
	0.1405	0.1218															
1,1-Dichloroethene	+++++	+++++	0.1607	0.2304	0.2437	Ave		0.2380			13.3		30.0				
	0.2537	0.2733	0.2622	0.2521	0.2431												
	0.2469	0.2144															
tert-Butyl alcohol (TBA)	+++++	+++++	0.7861	1.0083	1.1071	Ave		1.1505			14.6		15.0				
	1.2230	1.2750	1.3846	1.2221	1.2457												
	1.1953	1.0582															
Iodomethane	+++++	+++++	0.4865	0.4877	0.4869	Ave		0.4928			7.2		15.0				
	0.5053	0.5338	0.5339	0.5075	0.4914												
	0.4893	0.4060															
Acrylonitrile	0.0305	0.0339	0.0448	0.0479	0.0508	Lin2	-0.047	0.0520						0.9930		0.9900	
	0.0552	0.0568	0.0517	0.0518	0.0493												
	0.0460	+++++															
Methylene Chloride	+++++	+++++	+++++	1.2138	0.7097	Lin1	1.0712	0.1920						0.9960		0.9900	
	0.3842	0.3434	0.2687	0.2368	0.1956												
	0.1977	0.1902															
Methyl acetate	+++++	+++++	+++++	+++++	0.0902	Ave		0.1004			7.4		15.0				
	0.1084	0.1044	0.1016	0.1091	0.0955												
	0.0936	+++++															
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	+++++	0.3453	0.4046	0.3783	Ave		0.3801			6.6		15.0				
	0.4136	0.4087	0.3849	0.3749	0.3627												
	0.3485	+++++															

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Allyl chloride	++++ 0.3405 0.3081	++++ 0.3737 ++++	0.3209 0.3565	0.3052 0.3506	0.3156 0.3232	Ave		0.3327			7.1		15.0				
Carbon disulfide	++++ 0.7795 0.6741	++++ 0.8109 ++++	0.7070 0.7720	0.7220 0.7562	0.7549 0.7015	Ave		0.7420			5.9		15.0				
trans-1,2-Dichloroethene	++++ 0.2648 0.2603	0.2360 0.2795 0.2292	0.2279 0.2765	0.2586 0.2700	0.2599 0.2607	Ave		0.2567			7.0		15.0				
Methyl-t-Butyl Ether (MTBE)	++++ 0.4650 0.4480	++++ 0.5030 0.3768	0.4082 0.4978	0.4455 0.4825	0.4499 0.4697	Ave		0.4546			8.6		15.0				
1,1-Dichloroethane	++++ 0.4612 0.4057	++++ 0.4875 ++++	0.4143 0.4719	0.4635 0.4436	0.4515 0.4112	Ave		0.4456		0.1000	6.5		15.0				
Propionitrile	++++ 0.0209 0.0209	++++ 0.0227 0.0184	++++ 0.0214	++++ 0.0231	0.0181 0.0208	Ave		0.0208			8.6		15.0				
Vinyl acetate	++++ 0.2753 0.3092	++++ 0.3066 0.2654	++++ 0.3022	++++ 0.3324	0.2360 0.3263	Ave		0.2942			11.1		15.0				
Hexane	++++ 0.4455 0.4008	++++ 0.4576 ++++	++++ 0.4351	0.4466 0.4242	0.3893 0.3973	Ave		0.4245			6.1		15.0				
2-Butanone (MEK)	++++ 0.0073 0.0197	++++ 0.0145 0.0185	++++ 0.0172	++++ 0.0189	++++ 0.0192	Lin2	-0.060	0.0197						0.9990		0.9900	
Isopropyl Ether (DIPE)	++++ 0.6643 0.5618	++++ 0.7038 ++++	0.6060 0.6973	0.6174 0.6543	0.6756 0.5941	Ave		0.6416			7.7		15.0				
cis-1,2-Dichloroethene	++++ 0.2719 0.2610	0.2159 0.2788 0.2291	0.2469 0.2664	0.2429 0.2614	0.2740 0.2611	Ave		0.2554			7.7		15.0				
Bromochloromethane	++++ 0.1197 0.1298	++++ 0.1327 0.1198	0.0956 0.1315	0.1312 0.1270	0.1233 0.1244	Ave		0.1235			8.8		15.0				
Chloroform	++++ 0.5272 0.4582	++++ 0.5488 ++++	0.5184 0.5409	0.5390 0.5172	0.5374 0.4936	Ave		0.5201			5.5		30.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Ethyl-t-butyl ether (ETBE)	++++ 0.4901 0.4868	++++ 0.5668 ++++	0.4781 0.5701	0.5000 0.5514	0.5150 0.5231	Ave		0.5202			6.8		15.0				
2,2-Dichloropropane	++++ 0.4616 0.3851	++++ 0.4964 ++++	0.3921 0.4749	0.4291 0.4539	0.4562 0.4366	Ave		0.4429			8.2		15.0				
Isobutyl alcohol	++++ 0.5075 0.4327	++++ 0.5370 ++++	++++ 0.5644	0.4383 0.5014	0.4347 0.4910	Ave		0.4884			10.1		15.0				
Tetrahydrofuran	++++ 0.0462 0.0446	++++ 0.0515 0.0409	++++ 0.0467	++++ 0.0485	0.0432 0.0445	Ave		0.0458			7.2		15.0				
1,2-Dichloroethane	++++ 0.3540 0.3062	0.3470 0.3835 ++++	0.3574 0.3810	0.3520 0.3494	0.3697 0.3268	Ave		0.3527			6.6		15.0				
1,1,1-Trichloroethane	++++ 0.6691 0.5641	++++ 0.6767 ++++	0.6238 0.6729	0.6354 0.6461	0.6377 0.6139	Ave		0.6377			5.5		15.0				
1,1-Dichloropropene	++++ 0.4292 0.3808	++++ 0.4364 ++++	0.3581 0.4252	0.3913 0.4087	0.3868 0.3940	Ave		0.4012			6.4		15.0				
Cyclohexane	++++ 0.5280 0.4413	++++ 0.5098 ++++	0.4155 0.5316	0.4629 0.5027	0.4519 0.4712	Ave		0.4794			8.5		15.0				
Carbon tetrachloride	++++ 0.6293 0.5792	++++ 0.6645 ++++	0.5379 0.6829	0.5667 0.6804	0.6035 0.6258	Ave		0.6189			8.3		15.0				
Benzene	++++ 0.8710 0.7012	++++ 0.9011 ++++	0.8094 0.8767	0.8771 0.8254	0.8742 0.7844	Ave		0.8356			7.6		15.0				
Tert-amyl-methyl ether (TAME)	++++ 0.3657 0.4095	++++ 0.4117 0.3525	0.3694 0.4431	0.3815 0.4309	0.4069 0.4146	Ave		0.3986			7.5		15.0				
n-Heptane	++++ 0.4406 0.3663	++++ 0.4815 ++++	++++ 0.4541	0.4223 0.4512	0.4264 0.4038	Ave		0.4308			8.1		15.0				
Dibromomethane	++++ 0.1361 0.1351	++++ 0.1478 0.1202	0.1249 0.1483	0.1075 0.1403	0.1386 0.1373	Ave		0.1336			9.5		15.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
1,2-Dichloropropane	++++ 0.1946 0.1977	++++ 0.2078 0.1717	0.1650 0.2105	0.1881 0.2013	0.1962 0.1959	Ave		0.1929			7.5		30.0				
Trichloroethene	++++ 0.3527 0.3403	++++ 0.3682 0.2948	0.3102 0.3669	0.3579 0.3488	0.3334 0.3399	Ave		0.3413			6.9		15.0				
Bromodichloromethane	++++ 0.3413 0.3576	++++ 0.3925 0.2949	0.3397 0.3875	0.3371 0.3829	0.3437 0.3643	Ave		0.3541			8.3		15.0				
2-Chloroethyl vinyl ether	++++ ++++ 0.0125	++++ ++++ 0.0136	++++ 0.0072	++++ 0.0079	++++ 0.0097	Lin1	-0.227	0.0137						0.9900		0.9900	
Methylcyclohexane	++++ 0.5155 0.4806	++++ 0.5227 0.3981	0.3909 0.5281	0.4895 0.5146	0.4810 0.4942	Ave		0.4815			10.2		15.0				
cis-1,3-Dichloropropene	++++ 0.3568 0.3722	++++ 0.3818 0.3039	0.3204 0.4235	0.3517 0.3681	0.3388 0.3587	Ave		0.3576			9.3		15.0				
4-Methyl-2-pentanone (MIBK)	++++ 0.1881 0.1789	++++ 0.1992 0.1553	++++ 0.2058	++++ 0.1928	0.1683 0.1793	Ave		0.1835			9.0		15.0				
trans-1,3-Dichloropropene	++++ 0.3172 0.3611	++++ 0.3433 ++++	0.2264 0.3883	0.2950 0.3669	0.2848 0.3552	Lin2	-0.068	0.3560						0.9950		0.9900	
1,1,2-Trichloroethane	++++ 0.1703 0.1626	++++ 0.1730 0.1405	0.1631 0.1740	0.1537 0.1612	0.1732 0.1507	Ave		0.1623			6.9		15.0				
Toluene	++++ 1.3552 ++++	++++ 1.3369 ++++	1.2794 1.3552	1.2646 1.2274	1.2929 1.0519	Ave		1.2705			7.8		30.0				
Ethyl methacrylate	++++ 0.1910 0.2362	++++ 0.2176 0.2040	++++ 0.2413	++++ 0.2295	0.1496 0.2241	Ave		0.2117			14.2		15.0				
1,3-Dichloropropene	++++ 0.3485 0.3033	++++ 0.3486 ++++	0.3284 0.3564	0.3123 0.3266	0.3288 0.3007	Ave		0.3282			6.1		15.0				
2-Hexanone	++++ 0.1207 0.1337	++++ 0.1348 0.1204	++++ 0.1400	++++ 0.1362	++++ 0.1292	Ave		0.1307			5.8		15.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Dibromochloromethane	++++ 0.2953 0.3404	++++ 0.3205 0.2993	0.3042 0.3540	0.2946 0.3405	0.2811 0.3403	Ave		0.3170			8.0		15.0				
1,2-Dibromoethane (EDB)	++++ 0.2467 0.2370	++++ 0.2332 0.2094	0.2171 0.2492	0.2062 0.2367	0.2207 0.2257	Ave		0.2282			6.5		15.0				
Tetrachloroethene	++++ 0.3898 0.3681	++++ 0.3755 0.3038	0.3402 0.4030	0.3857 0.3652	0.3738 0.3503	Ave		0.3655			7.8		15.0				
1,1,1,2-Tetrachloroethane	++++ 0.3589 0.3852	++++ 0.3784 0.3262	0.3706 0.4084	0.3463 0.3853	0.3436 0.3648	Ave		0.3668			6.6		15.0				
Chlorobenzene	++++ 0.9492 0.7903	++++ 0.9468 ++++	1.0090 1.0067	1.0342 0.8831	0.9476 0.8169	Ave		0.9315		0.3000	9.2		15.0				
Ethylbenzene	++++ 1.6646 ++++	++++ 1.6906 ++++	1.6211 1.7924	1.5802 1.5698	1.5779 1.3386	Ave		1.6044			8.2		30.0				
m,p-Xylene	++++ 0.6144 0.5915	++++ 0.6189 0.4885	0.5029 0.6554	0.5784 0.6099	0.5540 0.5790	Ave		0.5793			9.0		15.0				
Bromoform	++++ 0.1697 0.2267	++++ 0.1784 0.2062	++++ 0.2011	0.1532 0.2028	0.1511 0.2043	Ave		0.1882		0.1000	13.9		15.0				
Styrene	++++ 0.7885 0.7905	++++ 0.8909 ++++	0.7459 0.9546	0.7424 0.8903	0.7325 0.8044	Ave		0.8155			9.6		15.0				
1,1,2,2-Tetrachloroethane	++++ 0.4631 0.4081	++++ 0.5096 0.3856	0.3484 0.4449	0.4647 0.4511	0.4263 0.4308	Ave		0.4333		0.3000	10.4		15.0				
o-Xylene	++++ 0.5868 0.5567	0.4310 0.6189 ++++	0.5072 0.6429	0.5047 0.5749	0.5544 0.5428	Ave		0.5520			11.0		15.0				
1,2,3-Trichloropropane	++++ 0.1830 0.1666	++++ 0.1897 0.1533	++++ 0.1805	0.1508 0.1733	0.1522 0.1684	Ave		0.1686			8.5		15.0				
trans-1,4-Dichloro-2-butene	++++ 0.1087 0.1344	++++ 0.1228 0.1229	++++ 0.1291	++++ 0.1358	++++ 0.1365	Ave		0.1272			7.8		15.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Isopropylbenzene	++++ 1.8189	++++ 1.8207	1.6651 1.9809	1.6153 1.7313	1.6456 1.4627	Ave		1.7176			9.2		15.0				
Bromobenzene	++++ 0.7397	++++ 0.7763	0.6427 0.7734	0.7407 0.7737	0.7036 0.7332	Ave		0.7224			6.9		15.0				
N-Propylbenzene	++++ 3.6571	++++ 3.7292	3.0594 3.6843	3.3876 3.3647	3.1493 2.8250	Ave		3.3571			9.8		15.0				
2-Chlorotoluene	++++ 2.1205	++++ 2.1892	1.9504 2.1576	2.1925 2.0364	2.0186 1.8549	Ave		2.0650			5.9		15.0				
4-Chlorotoluene	++++ 2.1674	++++ 2.2663	1.9459 2.1975	2.0221 2.0886	2.0141 1.8658	Ave		2.0710			6.5		15.0				
1,3,5-Trimethylbenzene	++++ 2.6259	++++ 2.8400	2.2352 2.8018	2.4784 2.6080	2.4543 2.2937	Ave		2.5422			8.6		15.0				
tert-Butylbenzene	++++ 2.5772	++++ 2.6872	2.2019 2.6607	2.3746 2.6057	2.4034 2.2962	Ave		2.4759			7.3		15.0				
1,2,4-Trimethylbenzene	++++ 2.6497	++++ 2.7668	2.1191 2.7939	2.5207 2.6385	2.4360 2.2642	Ave		2.5236			9.5		15.0				
sec-Butylbenzene	++++ 3.8745	++++ 3.8601	3.1377 3.8436	3.5278 3.4815	3.4882 2.9182	Ave		3.5164			9.9		15.0				
1,3-Dichlorobenzene	++++ 1.6154	++++ 1.6142	1.6240 1.6439	1.6970 1.6232	1.6192 1.4275	Ave		1.6081			4.8		15.0				
1,4-Dichlorobenzene	++++ 1.6047	++++ 1.6779	1.6743 1.6315	1.6063 1.5068	1.6500 1.4039	Ave		1.5944			5.9		15.0				
p-Isopropyltoluene	++++ 3.4116	++++ 3.5687	2.9794 3.4477	3.1484 3.1754	3.1759 2.6570	Ave		3.1955			9.1		15.0				
1,2-Dichlorobenzene	++++ 1.4018	++++ 1.4160	1.3687 1.4988	1.3637 1.4278	1.3000 1.3091	Ave		1.3597			7.3		15.0				
	1.1513	++++															

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
n-Butylbenzene	++++ 2.9448 ++++	++++ 2.9982 ++++	2.4383 3.1448	2.6426 2.7959	2.6413 2.3060	Ave		2.7390			10.5		15.0				
1,2-Dibromo-3-Chloropropane	++++ 0.1165 0.1261	++++ 0.1153 0.1107	++++ 0.1168	0.1098 0.1222	0.0994 0.1227	Ave		0.1155			7.0		15.0				
1,2,4-Trichlorobenzene	++++ 0.9800 0.9263	++++ 1.1081 ++++	0.9121 1.1217	1.0661 1.0806	0.9164 0.9914	Ave		1.0114			8.3		15.0				
Naphthalene	++++ 1.9022 1.5764	++++ 2.0461 ++++	1.7825 2.2146	1.8730 2.1373	1.7739 1.9177	Ave		1.9137			10.3		15.0				
Hexachlorobutadiene	++++ 0.8474 0.7341	++++ 0.8568 ++++	0.6946 0.8327	0.7757 0.7917	0.7969 0.7379	Ave		0.7853			7.1		15.0				
1,2,3-Trichlorobenzene	++++ 0.9030 0.8733	++++ 1.0188 0.7557	0.8752 1.0150	0.8392 0.9883	0.9604 0.9180	Ave		0.9147			9.1		15.0				
Dibromofluoromethane (Surr)	0.3078	0.3173	0.2995	0.3047	0.2928	Ave		0.3044			3.0		15.0				
1,2-Dichloroethane-d4 (Surr)	0.3062	0.3364	0.3051	0.2960	0.2830	Ave		0.3053			6.5		15.0				
Toluene-d8 (Surr)	1.1935	1.1884	1.1636	1.0985	0.9786	Ave		1.1245			8.0		15.0				
4-Bromofluorobenzene (Surr)	0.8781	0.8518	0.8125	0.8132	0.7784	Ave		0.8268			4.7		15.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD02 440-505728/4	AHJ17024.D
Level 2	STD04 440-505728/5	AHJ17025.D
Level 3	STD05 440-505728/6	AHJ17026.D
Level 4	STD1 440-505728/7	AHJ17027.D
Level 5	STD2 440-505728/8	AHJ17028.D
Level 6	STD5 440-505728/9	AHJ17029.D
Level 7	STD10 440-505728/10	AHJ17030.D
Level 8	ICIS 440-505728/11	AHJ17031.D
Level 9	STD50 440-505728/12	AHJ17032.D
Level 10	STD100 440-505728/13	AHJ17033.D
Level 11	STD200 440-505728/14	AHJ17034.D
Level 12	STD300 440-505728/15	AHJ17035.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Dichlorodifluoromethane	FB	Ave	++++ 69084 2744527	++++ 142263 ++++	6254 370032	11943 725423	25283 1460602	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Chloromethane	FB	Ave	++++ 32831 1397370	++++ 65632 ++++	3218 172809	7067 349662	12217 717343	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Vinyl chloride	FB	Ave	++++ 33600 1498709	2818 68417 ++++	3628 181706	6591 367948	13606 739371	++++ 5.00 200	0.400 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,3-Butadiene	FB	Ave	++++ 29072 1318385	++++ 58186 ++++	2746 153166	5704 324388	11664 652089	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Bromomethane	FB	Ave	++++ 24842 1244638	++++ 52330 2021829	2831 146492	4715 278060	9249 593962	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Chloroethane	FB	Ave	++++ 19090 984831	++++ 40586 1528101	++++ 113960	2876 221357	8716 470079	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
Ethanol	TBAd 9	Ave	++++ 9924 680350	++++ 22712 1131307	++++ 58144	++++ 147441	4364 323145	++++ 200 10000	++++ 400 15000	++++ 1000	++++ 2500	100 5000
Dichlorofluoromethane	FB	Ave	++++ 61957 2704273	++++ 132774 ++++	5537 343958	13279 668719	26028 1346230	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Acrolein	FB	Lin2	++++ 892 76183	++++ 2016 137843	++++ 6808	++++ 16705	++++ 37533	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	++++ 100
Trichlorofluoromethane	FB	Ave	++++ 96759 3990745	++++ 197437	8764 526892	19548 1021499	37662 2089619	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Acetonitrile	FB	Ave	++++ 19257 807416	++++ 39498 ++++	++++ 97888	++++ 201672	7655 413082	++++ 50.0 2000	++++ 100 ++++	++++ 250	++++ 500	20.0 1000
Acetone	FB	Ave	++++ 6880 288911	++++ 14848 ++++	++++ 34853	++++ 65798	++++ 134304	++++ 5.00 200	++++ 10.0 ++++	++++ 25.0	++++ 50.0	++++ 100
Diethyl ether	FB	Ave	++++ 13894 828978	++++ 32277 1344540	++++ 89007	2131 181096	5493 393627	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
1,1-Dichloroethene	FB	Ave	++++ 28909 1456629	++++ 63772 2365361	1987 164590	5417 329457	11603 696975	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
tert-Butyl alcohol (TBA)	TBA 9	Ave	++++ 30140 1514986	++++ 66196 2488060	2132 165527	5054 349267	11697 737569	++++ 50.0 2000	++++ 100 3000	5.00 250	10.0 500	20.0 1000
Iodomethane	FB	Ave	++++ 57576 2886213	++++ 124545 4480004	6017 335160	11467 663336	23181 1408982	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Acrylonitrile	FB	Lin2	1549 62881 2714772	3395 132424 ++++	5535 324373	11268 676780	24187 1412740	2.00 50.0 2000	4.00 100 ++++	5.00 250	10.0 500	20.0 1000
Methylene Chloride	FB	Lin1	++++ 43775 1165950	++++ 80118 2098524	++++ 168660	28538 309524	33790 560874	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
Methyl acetate	FB	Ave	++++ 24702 1104178	++++ 48713 ++++	++++ 127516	++++ 285102	8586 547530	++++ 10.0 400	++++ 20.0 ++++	++++ 50.0	++++ 100	4.00 200
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	++++ 47130 2055587	++++ 95369 ++++	4270 241612	9512 489973	18010 1039873	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Allyl chloride	FB	Ave	++++ 38803 1817681	++++ 87197 ++++	3969 223807	7176 458187	15026 926707	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Carbon disulfide	FB	Ave	++++ 88828 3976110	++++ 189202 ++++	8743 484660	16975 988309	35945 2011491	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
trans-1,2-Dichloroethene	FB	Ave	++++ 30173 1535647	2366 65206 2528756	2819 173583	6081 352843	12373 747589	++++ 5.00 200	0.400 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Methyl-t-Butyl Ether (MTBE)	FB	Ave	++++ 52984 2642459	++++ 117372 4157806	5048 312493	10474 630577	21421 1346843	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
1,1-Dichloroethane	FB	Ave	++++ 52550 2393162	++++ 113746 ++++	5123 296286	10898 579717	21498 1178958	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Propionitrile	FB	Ave	++++ 23785 1233535	++++ 52862 2026161	++++ 134134	++++ 302165	8626 595248	++++ 50.0 2000	++++ 100 3000	++++ 250	++++ 500	20.0 1000
Vinyl acetate	FB	Ave	++++ 25093 1824195	++++ 57231 2928258	++++ 151800	++++ 434440	11238 935602	++++ 4.00 200	++++ 8.00 300	++++ 20.0	++++ 50.0	2.00 100
Hexane	FB	Ave	++++ 50764 2364336	++++ 106772 ++++	++++ 273132	10500 554447	18536 1139123	++++ 5.00 200	++++ 10.0 ++++	++++ 25.0	1.00 50.0	2.00 100
2-Butanone (MEK)	FB	Lin2	++++ 830 115967	++++ 3381 203677	++++ 10803	++++ 24700	++++ 54932	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	++++ 100
Isopropyl Ether (DIPE)	FB	Ave	++++ 75697 3313936	++++ 164221 ++++	7494 437758	14516 855127	32169 1703442	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
cis-1,2-Dichloroethene	FB	Ave	++++ 30981 1539364	2164 65053 2528397	3053 167238	5711 341587	13044 748646	++++ 5.00 200	0.400 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Bromochloromethane	FB	Ave	++++ 13643 765623	++++ 30960 1321871	1182 82580	3085 165989	5869 356670	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Chloroform	FB	Ave	++++ 60080 2702684	++++ 128042 ++++	6411 339552	12672 675905	25589 1415431	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Ethyl-t-butyl ether (ETBE)	FB	Ave	++++ 55846 2871613	++++ 132239 ++++	5913 357885	11755 720685	24522 1499956	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
2,2-Dichloropropane	FB	Ave	++++ 52599 2271820	++++ 115819 ++++	4849 298124	10090 593227	21723 1251918	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Isobutyl alcohol	TBAd 9	Ave	++++ 31265 1371260	++++ 69696 ++++	++++ 168697	5493 358274	11482 726775	++++ 125 5000	++++ 250 ++++	++++ 625	25.0 1250	50.0 2500
Tetrahydrofuran	FB	Ave	++++ 10540 526162	++++ 24048 902790	++++ 58586	++++ 126655	4111 254902	++++ 10.0 400	++++ 20.0 600	++++ 50.0	++++ 100	4.00 200
1,2-Dichloroethane	FB	Ave	++++ 40338 1806195	++++ 3479 89486 ++++	4420 239219	8275 456671	17602 937112	++++ 5.00 200	0.400 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,1,1-Trichloroethane	FB	Ave	++++ 76244 3327779	++++ 157902 ++++	7714 422457	14939 844448	30362 1760136	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,1-Dichloropropene	FB	Ave	++++ 48906 2246489	++++ 101832 ++++	4429 266934	9200 534214	18418 1129799	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Cyclohexane	FB	Ave	++++ 60166 2603043	++++ 118953 ++++	5138 333706	10883 657023	21515 1350929	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Carbon tetrachloride	FB	Ave	++++ 71707 3416420	++++ 155035 ++++	6652 428733	13325 889259	28737 1794324	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Benzene	FB	Ave	++++ 99257 4136052	++++ 210249 ++++	10010 550415	20622 1078710	41622 2249123	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Tert-amyl-methyl ether (TAME)	FB	Ave	++++ 41673 2415790	++++ 96057 3889729	4568 278175	8969 563190	19375 1188842	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
n-Heptane	FB	Ave	++++ 50212 2160728	++++ 112338 ++++	++++ 285102	9929 589739	20302 1157739	++++ 5.00 200	++++ 10.0 ++++	++++ 25.0	1.00 50.0	2.00 100
Dibromomethane	FB	Ave	++++ 15507 796824	++++ 34476 1326056	1545 93100	2528 183390	6599 393802	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
1,2-Dichloropropane	FB	Ave	++++ 22175 1165979	++++ 48496 1894656	2040 132171	4422 263030	9342 561810	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Trichloroethene	FB	Ave	++++ 40189 2007103	++++ 85906 3253597	3836 230350	8416 455816	15873 974703	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Bromodichloromethane	FB	Ave	++++ 38893 2109382	++++ 91571 3254084	4201 243248	7926 500424	16364 1044412	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
2-Chloroethyl vinyl ether	CBNZ d5	Lin1	++++ ++++ 63692	++++ ++++ 133298	++++ 3647	++++ 8858	++++ 24740	++++ ++++ 200	++++ ++++ 300	++++ 25.0	++++ 50.0	++++ 100
Methylcyclohexane	FB	Ave	++++ 58745 2834774	++++ 121964 4393577	4834 331533	11510 672553	22901 1417042	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
cis-1,3-Dichloropropene	CBNZ d5	Ave	++++ 32529 1903021	++++ 74936 2970344	3095 215634	6769 413838	13282 918371	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	++++ 17145 914551	++++ 39104 1518587	++++ 104762	++++ 216698	6598 458985	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	2.00 100
trans-1,3-Dichloropropene	CBNZ d5	Lin2	++++ 28919 1846239	++++ 67378 ++++	2187 197717	5679 412433	11166 909399	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,1,2-Trichloroethane	CBNZ d5	Ave	++++ 15530 831410	++++ 33960 1372950	1576 88597	2959 181248	6791 385906	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Toluene	CBNZ d5	Ave	++++ 123555 ++++	++++ 262409 ++++	12360 690010	24342 1379855	50683 2692953	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Ethyl methacrylate	CBNZ d5	Ave	++++ 17418 1207585	++++ 42704 1994193	++++ 122875	++++ 257957	5866 573815	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	2.00 100
1,3-Dichloropropane	CBNZ d5	Ave	++++ 31776 1550563	++++ 68416 ++++	3173 181463	6011 367214	12891 769766	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
2-Hexanone	CBNZ d5	Ave	++++ 11005 683357	++++ 26451 1176815	++++ 71260	++++ 153112	++++ 330672	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	++++ 100
Dibromochloromethane	CBNZ d5	Ave	++++ 26919 1740431	++++ 62915 2925869	2939 180244	5671 382762	11018 871079	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	++++ 22489 1211562	++++ 45776 2046686	2097 126853	3969 266080	8650 577699	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Tetrachloroethene	CBNZ d5	Ave	++++ 35542 1881736	++++ 73707 2969347	3287 205179	7424 410591	14655 896720	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	++++ 32720 1969552	++++ 74266 3188477	3580 207918	6665 433102	13470 933851	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Chlorobenzene	CBNZ d5	Ave	++++ 86535 4040445	++++ 185841 ++++	9748 512533	19906 992798	37146 2091227	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Ethylbenzene	CBNZ d5	Ave	++++ 151758 ++++	++++ 331826 ++++	15661 912570	30415 1764693	61856 3426882	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
m,p-Xylene	CBNZ d5	Ave	++++ 56018 3023834	++++ 121487 4775236	4858 333688	11134 685629	21719 1482135	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Bromoform	CBNZ d5	Ave	++++ 15467 1158856	++++ 35020 2016044	++++ 102414	2948 228040	5923 522882	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
Styrene	CBNZ d5	Ave	++++ 71887 4041416	++++ 174864 ++++	7206 486052	14289 1000830	28715 2059181	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	++++ 23554 1262708	++++ 54404 2145114	1891 133705	4774 288084	9302 610149	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
o-Xylene	CBNZ d5	Ave	++++ 53497 2845873	3361 121487 ++++	4900 327347	9715 646328	21732 1389687	++++ 5.00 200	0.400 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,2,3-Trichloropropane	DCBd 4	Ave	++++ 9309 515462	++++ 20256 852638	++++ 54243	1549 110681	3320 238446	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	++++ 5529 415828	++++ 13111 683541	++++ 38794	++++ 86712	++++ 193367	++++ 5.00 200	++++ 10.0 300	++++ 25.0	++++ 50.0	++++ 100
Isopropylbenzene	CBNZ d5	Ave	++++ 165832 ++++	++++ 357375 ++++	16086 1008562	31091 1946311	64511 3744422	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45

GC Column: DB-VRX D

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08

Calibration End Date: 10/17/2018 19:11

Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Bromobenzene	DCBd 4	Ave	++++ 37623 2163007	++++ 82878 3568583	3488 232458	7610 494067	15352 1038409	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
N-Propylbenzene	DCBd 4	Ave	++++ 186018 ++++	++++ 398148 ++++	16604 1107320	34803 2148615	68718 4001093	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
2-Chlorotoluene	DCBd 4	Ave	++++ 107856 ++++	++++ 233733 ++++	10585 648472	22525 1300384	44046 2627092	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
4-Chlorotoluene	DCBd 4	Ave	++++ 110243 ++++	++++ 241968 ++++	10561 660469	20775 1333736	43948 2642488	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,3,5-Trimethylbenzene	DCBd 4	Ave	++++ 133565 ++++	++++ 303218 ++++	12131 842066	25463 1665392	53554 3248521	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
tert-Butylbenzene	DCBd 4	Ave	++++ 131088 ++++	++++ 286906 ++++	11950 799678	24396 1663948	52443 3252072	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,2,4-Trimethylbenzene	DCBd 4	Ave	++++ 134773 ++++	++++ 295399 ++++	11501 839704	25897 1684905	53154 3206788	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
sec-Butylbenzene	DCBd 4	Ave	++++ 197075 ++++	++++ 412126 ++++	17029 1155181	36244 2223180	76113 4133004	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,3-Dichlorobenzene	DCBd 4	Ave	++++ 82167 ++++	++++ 172339 ++++	8814 494063	17435 1036558	35332 2021778	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,4-Dichlorobenzene	DCBd 4	Ave	++++ 81621 ++++	++++ 179143 ++++	9087 490336	16503 962198	36003 1988324	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
p-Isopropyltoluene	DCBd 4	Ave	++++ 173527 ++++	++++ 381015 ++++	16170 1036194	32346 2027705	69298 3763029	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,2-Dichlorobenzene	DCBd 4	Ave	++++ 71302 3561827	++++ 151184 ++++	7428 450464	14010 911773	28366 1854026	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
n-Butylbenzene	DCBd 4	Ave	++++ 149783 ++++	++++ 320111 ++++	13233 945159	27149 1785400	57634 3265955	++++ 5.00 ++++	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505728

SDG No.: _____

Instrument ID: GCMS45 GC Column: DB-VRX D ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/17/2018 14:08 Calibration End Date: 10/17/2018 19:11 Calibration ID: 20180

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	++++ 5927 390217	++++ 12313 615500	++++ 35101	1128 78045	2170 173816	++++ 5.00 200	++++ 10.0 300	++++ 25.0	1.00 50.0	2.00 100
1,2,4-Trichlorobenzene	DCBd 4	Ave	++++ 49848 2865582	++++ 118312 ++++	4950 337117	10953 690021	19995 1404147	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Naphthalene	DCBd 4	Ave	++++ 96756 4876835	++++ 218457 ++++	9674 665585	19243 1364824	38706 2716023	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
Hexachlorobutadiene	DCBd 4	Ave	++++ 43103 2271258	++++ 91474 ++++	3770 250253	7969 505530	17388 1045079	++++ 5.00 200	++++ 10.0 ++++	0.500 25.0	1.00 50.0	2.00 100
1,2,3-Trichlorobenzene	DCBd 4	Ave	++++ 45929 2701649	++++ 108776 4203394	4750 305048	8622 631075	20955 1300134	++++ 5.00 200	++++ 10.0 300	0.500 25.0	1.00 50.0	2.00 100
Dibromofluoromethane (Surr)	FB	Ave	35076	74042	188016	398192	839602	5.00	10.0	25.0	50.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	34889	78498	191510	386831	811420	5.00	10.0	25.0	50.0	100
Toluene-d8 (Surr)	CBNZ d5	Ave	108807	233257	592415	1234931	2505176	5.00	10.0	25.0	50.0	100
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	44664	90947	244191	519304	1102421	5.00	10.0	25.0	50.0	100

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17024.D
 Lims ID: STD02
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 17-Oct-2018 14:08:30 ALS Bottle#: 20 Worklist Smp#: 4
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-004
 Misc. Info.: STD02
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:00 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:47:26

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	100	132126	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	635547	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		41149			0.0- 36.8	6.5	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	85	496493	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		253947			21.9- 81.9	51.1	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	268577	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		436551			152- 212	163	
115	13.167	13.167	0.000		162637			31.1- 91.1	60.6	
13 Vinyl chloride										
62	3.213	3.213	0.000	61	1296	0.2000	0.1813	70- 130	100	
64	3.213	3.213	0.000		1730			3.0- 63.0	133	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	91	3362	0.2000	0.1688	70- 130	100	
103	4.499	4.499	0.000		1877			33.3- 93.3	55.8	
66	0.000	4.499	0.000		0			0.0- 39.9		
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	18	693	0.2000	0.1145	70- 130	100	
61	5.066	5.056	0.010		1801			159- 219	260	
98	0.000	5.056	0.000		0			34.3- 94.3		
29 Iodomethane										
142	5.086	5.096	-0.010	93	2168	0.2000	0.1730	70- 130	100	
127	5.096	5.096	0.000		816			24.1- 84.1	37.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
31 Acrylonitrile										
53	5.137	5.117	0.020	77	1549	2.00	2.07	70- 130	100	
52	5.137	5.117	0.020		1299			58- 118	83.9	
51	0.000	5.117	0.000		0			11.2- 71.2		
32 Methylene Chloride										
84	5.208	5.208	0.000	96	25591	0.2000	-0.3360	70- 130	100	
49	5.208	5.208	0.000		35725			108- 168	140	
51	5.208	5.208	0.000		10828			14.8- 74.8	42.3	
86	5.208	5.208	0.000		16080			34.0- 94.0	62.8	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	77	1328	0.2000	0.1374	70- 130	100	
151	5.269	5.269	0.000		1041			56- 116	78.4	
85	0.000	5.269	0.000		0			14.8- 74.8		
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	0	1382	0.2000	0.1634	70- 130	100	
39	5.299	5.299	0.000		814			50- 110	58.9	
76	0.000	5.299	0.000		0			4.5- 64.5		
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	87	1269	0.2000	0.1945	70- 130	100	
61	5.856	5.856	0.000		1777			119- 179	140	
98	0.000	5.856	0.000		0			33.6- 93.6		
50 cis-1,2-Dichloroethene										
96	6.605	6.595	0.010	71	796	0.2000	0.1226	70- 130	100	
61	6.595	6.595	0.000		1329			113- 173	167	
98	0.000	6.595	0.000		0			35.8- 95.8		
54 Chloroform										
83	6.777	6.777	0.000	83	2047	0.2000	0.1548	70- 130	100	
85	6.777	6.777	0.000		1498			35.3- 95.3	73.2	
47	0.000	6.777	0.000		0			0.0- 54.5		
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	85	2762	0.2000	0.1704	70- 130	100	
99	7.425	7.415	0.010		1718			35.9- 95.9	62.2	
61	0.000	7.415	0.000		0			9.0- 69.0		
68 1,1-Dichloropropene										
75	7.567	7.577	-0.010	72	1412	0.2000	0.1384	70- 130	100	
110	7.567	7.577	-0.010		715			8.5- 68.5	50.6	
77	0.000	7.577	0.000		0			0.9- 60.9		
69 Cyclohexane										
56	7.658	7.658	0.000	76	2076	0.2000	0.1703	70- 130	100	
84	7.648	7.658	-0.010		1563			49- 109	75.3	
69	0.000	7.658	0.000		0			0.0- 56.1		
71 Carbon tetrachloride										
117	7.729	7.729	0.000	81	2367	0.2000	0.1504	70- 130	100	
119	7.729	7.729	0.000		2422			65- 125	102	
82	0.000	7.729	0.000		0			0.0- 51.0		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
72 Benzene										
78	7.760	7.760	0.000	88	3967	0.2000	0.1867	70- 130	100	
51	7.760	7.760	0.000		745			0.0- 53.4	18.8	
77	0.000	7.760	0.000		0			0.0- 53.9		
75 n-Heptane										
43	8.185	8.185	0.000	87	1739	0.2000	0.1588	70- 130	100	
57	8.175	8.185	-0.010		696			25.7- 85.7	40.0	
71	0.000	8.185	0.000		0			23.7- 83.7		
100	0.000	8.185	0.000		0			0.0- 50.5		
79 Trichloroethene										
130	8.286	8.286	0.000	77	1514	0.2000	0.1745	70- 130	100	
95	8.286	8.286	0.000		1001			63- 123	66.1	
132	8.286	8.286	0.000		1555			71- 131	103	
60	0.000	8.286	0.000		0			20.6- 80.6		
81 Dichlorobromomethane										
83	8.317	8.327	-0.010	1	1001	0.2000	0.1112	70- 130	100	
85	8.317	8.327	-0.010		770			36.1- 96.1	76.9	
129	0.000	8.327	0.000		0			0.0- 44.5		
159 Methylcyclohexane										
83	8.701	8.701	0.000	1	2011	0.2000	0.1643	70- 130	100	
55	8.701	8.701	0.000		1171			87.9- 87.9	58.2	
98	8.701	8.701	0.000		727			19.2- 79.2	36.2	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	1	918	0.2000	0.1293	70- 130	100	
39	8.843	8.843	0.000		634			21.3- 81.3	69.1	
77	0.000	8.843	0.000		0			1.0- 61.0		
90 Toluene										
91	9.471	9.471	0.000	96	5290	0.2000	0.2097	70- 130	100	
92	9.471	9.471	0.000		2866			29.8- 89.8	54.2	
65	0.000	9.471	0.000		0			0.0- 43.1		
97 Tetrachloroethene										
164	10.099	10.099	0.000	15	863	0.2000	0.1189	70- 130	100	
166	10.099	10.099	0.000		1418			95- 155	164	
129	10.099	10.099	0.000		925			64- 124	107	
102 Ethylbenzene										
91	10.909	10.909	0.000	93	6766	0.2000	0.2123	70- 130	100	
106	10.909	10.909	0.000		1600			0.2- 60.2	23.6	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	88	1705	0.2000	0.1482	70- 130	100	
91	11.091	11.091	0.000		4091			180- 240	240	
105	0.000	11.091	0.000		0			14.5- 74.5		
106 Styrene										
104	11.415	11.415	0.000	83	3065	0.2000	0.1892	70- 130	100	
103	11.415	11.415	0.000		1128			17.4- 77.4	36.8	
78	11.415	11.415	0.000		1226			15.1- 75.1	40.0	
51	0.000	11.415	0.000		0			0.0- 53.9		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
108 o-Xylene										
106	11.486	11.486	0.000	89	1694	0.2000	0.1545	70- 130	100	
91	11.486	11.486	0.000		4176			197- 257	247	
105	0.000	11.486	0.000		0			10.8- 70.8		
112 Isopropylbenzene										
105	11.840	11.841	-0.001	87	5738	0.2000	0.1682	70- 130	100	
120	11.840	11.841	-0.001		1367			0.0- 55.6	23.8	
77	0.000	11.841	0.000		0			0.0- 45.8		
113 Bromobenzene										
156	12.104	12.104	0.000	67	1136	0.2000	0.1464	70- 130	100	
77	12.104	12.104	0.000		1735			91- 151	153	
158	12.104	12.104	0.000		883			67- 127	77.7	
114 N-Propylbenzene										
91	12.286	12.286	0.000	96	6332	0.2000	0.1756	70- 130	100	
120	12.286	12.286	0.000		1353			0.0- 54.5	21.4	
65	0.000	12.286	0.000		0			0.0- 42.2		
115 2-Chlorotoluene										
91	12.387	12.387	0.000	91	3782	0.2000	0.1705	70- 130	100	
126	12.397	12.387	0.010		1077			7.2- 67.2	28.5	
75	0.000	12.387	0.000		0			0.0- 32.9		
116 4-Chlorotoluene										
91	12.468	12.468	0.000	88	3991	0.2000	0.1794	70- 130	100	
126	12.468	12.468	0.000		944			7.3- 67.3	23.7	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	1	4572	0.2000	0.1674	70- 130	100	
120	12.580	12.570	0.010		2178			18.4- 78.4	47.6	
91	0.000	12.570	0.000		0			0.0- 41.8		
119 tert-Butylbenzene										
119	12.843	12.853	-0.010	84	4704	0.2000	0.1769	70- 130	100	
91	12.843	12.853	-0.010		3524			41- 101	74.9	
134	0.000	12.853	0.000		0			0.0- 54.6		
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	88	4672	0.2000	0.1723	70- 130	100	
120	12.954	12.954	0.000		1891			15.7- 75.7	40.5	
77	0.000	12.954	0.000		0			0.0- 42.4		
121 sec-Butylbenzene										
105	13.056	13.056	0.000	87	7601	0.2000	0.2012	70- 130	100	
134	13.056	13.056	0.000		1634			0.0- 52.3	21.5	
91	13.056	13.056	0.000		994			0.0- 47.8	13.1	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	83	3300	0.2000	0.1910	70- 130	100	
111	13.127	13.127	0.000		1120			10.6- 70.6	33.9	
148	13.137	13.127	0.010		1658			34.6- 94.6	50.2	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	86	2965	0.2000	0.1731	70- 130	100	
111	13.167	13.187	-0.020		5524			8.8- 68.8	186	
148	13.187	13.187	0.000		2958			35.7- 95.7	100	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	91	6377	0.2000	0.1858	70- 130	100	
134	13.218	13.218	0.000		1820			0.0- 57.7	28.5	
91	13.218	13.218	0.000		1800			0.0- 56.0	28.2	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	80	2614	0.2000	0.1790	70- 130	100	
111	13.511	13.501	0.010		885			10.1- 70.1	33.9	
148	13.511	13.501	0.010		1437			32.6- 92.6	55.0	
128 n-Butylbenzene										
91	13.572	13.572	0.000	92	5314	0.2000	0.1806	70- 130	100	
92	13.572	13.572	0.000		2692			24.4- 84.4	50.7	
134	13.572	13.572	0.000		1601			0.0- 59.7	30.1	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	74	1903	0.2000	0.1751	70- 130	100	
182	15.071	15.061	0.010		1597			67- 127	83.9	
145	0.000	15.061	0.000		0			4.2- 64.2		
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	68	1079	0.2000	0.1279	70- 130	100	
223	15.334	15.334	0.000		915			33.1- 93.1	84.8	
227	0.000	15.334	0.000		0			33.2- 93.2		
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	80	1767	0.2000	0.1798	70- 130	100	
182	15.476	15.476	0.000		1451			64- 124	82.1	
145	0.000	15.476	0.000		0			5.8- 65.8		

S 144 Xylenes, Total

1 0 0.3027

S 145 1,2-Dichloroethene, Total

1 0 0.3171

Reagents:

VMWNU8260002_00628

Amount Added: 1.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17024.D

Injection Date: 17-Oct-2018 14:08:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD02

Worklist Smp#: 4

Client ID:

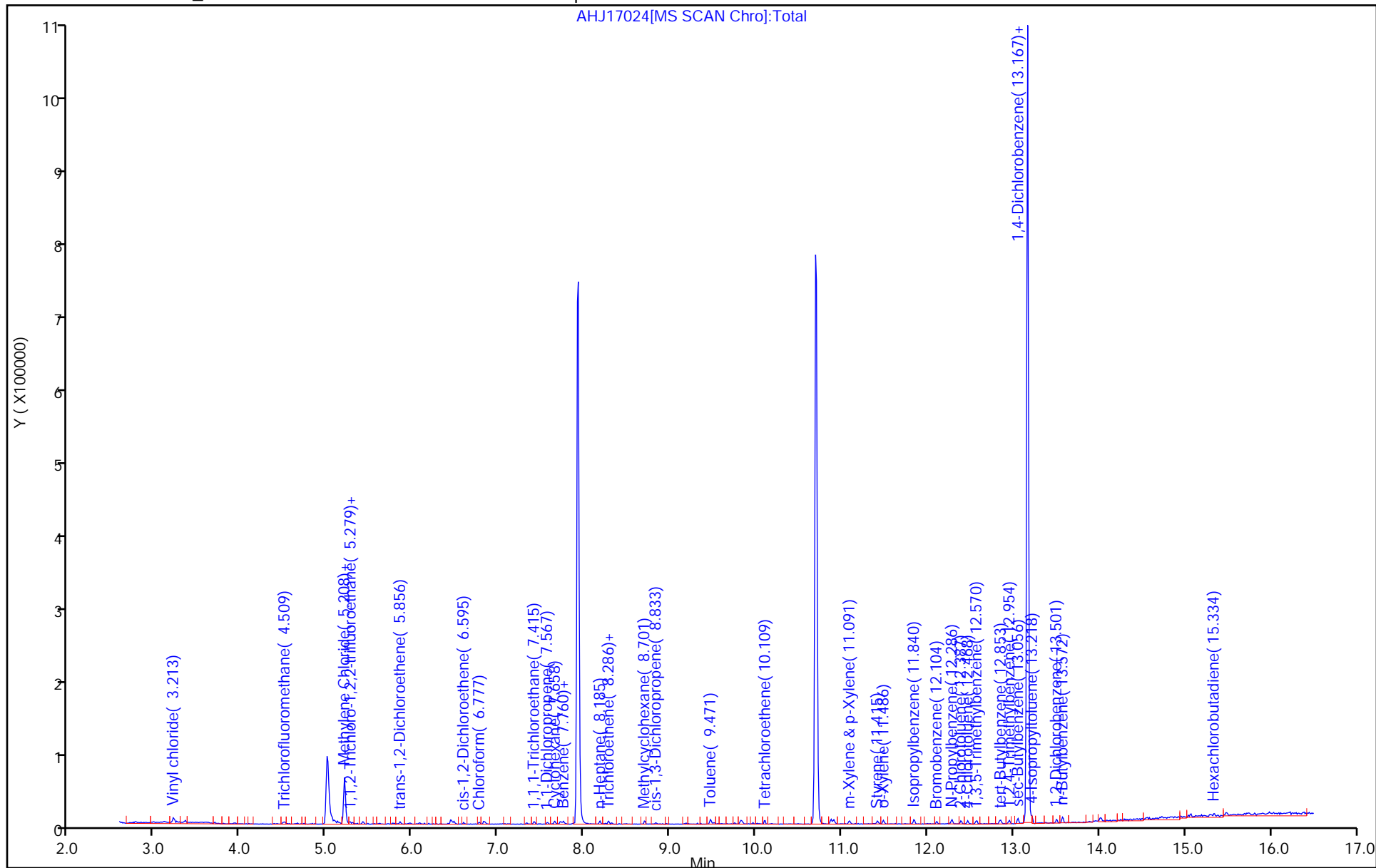
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 20

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17025.D
 Lims ID: STD04
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 17-Oct-2018 14:35:30 ALS Bottle#: 21 Worklist Smp#: 5
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-005
 Misc. Info.: STD04
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:07 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:48:35

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	122000	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	626543	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		43078			0.0- 36.8	6.9	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	85	487336	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		240896			21.9- 81.9	49.4	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	267644	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		405650			152- 212	152	
115	13.167	13.167	0.000		157595			31.1- 91.1	58.9	
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	94	4452	0.4000	0.3276	70- 130	100	
87	2.767	2.778	-0.011		1032			2.5- 62.5	23.2	
50	0.000	2.778	0.000		0			0.0- 40.2		
12 Chloromethane										
50	2.980	2.980	0.000	94	2788	0.4000	0.4143	70- 130	100	
52	2.980	2.980	0.000		780			3.7- 63.7	28.0	
13 Vinyl chloride										
62	3.213	3.213	0.000	90	2818	0.4000	0.3999	70- 130	100	
64	3.223	3.213	0.010		1123			3.0- 63.0	39.9	
14 Butadiene										
54	3.355	3.355	0.000	77	2003	0.4000	0.3334	70- 130	100	
53	3.355	3.355	0.000		1260			39- 99	62.9	
39	3.355	3.355	0.000		3006			62- 122	150	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.699	3.699	0.000	11	1198	0.4000	0.2262	70- 130	100	
94	3.699	3.699	0.000		1767			72- 132	147	
79	0.000	3.699	0.000		0			0.0- 50.2		
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	93	4689	0.4000	0.3614	70- 130	100	
69	3.932	3.932	0.000		1354			2.6- 62.6	28.9	
47	0.000	3.932	0.000		0			0.0- 41.5		
22 Trichlorofluoromethane										
101	4.499	4.499	0.000	94	6484	0.4000	0.3302	70- 130	100	
103	4.499	4.499	0.000		4385			33.3- 93.3	67.6	
66	0.000	4.499	0.000		0			0.0- 39.9		
23 Acetonitrile										
41	4.540	4.509	0.031	29	1096	4.00	2.81	70- 130	100	
40	4.529	4.509	0.020		3850			26.9- 86.9	351	
39	0.000	4.509	0.000		0			0.0- 52.0		
28 1,1-Dichloroethene										
96	5.066	5.056	0.010	38	1835	0.4000	0.3076	70- 130	100	
61	5.056	5.056	0.000		4598			159- 219	251	
98	5.056	5.056	0.000		1217			34.3- 94.3	66.3	
30 2-Methyl-2-propanol										
59	5.097	5.096	0.001	59	1774	4.00	3.16	70- 130	100	
57	0.000	5.096	0.000		0			0.0- 39.8		
41	0.000	5.096	0.000		0			0.0- 56.4		
29 Iodomethane										
142	5.097	5.096	0.001	89	3892	0.4000	0.3151	70- 130	100	
127	5.097	5.096	0.001		2004			24.1- 84.1	51.5	
31 Acrylonitrile										
53	5.127	5.117	0.010	93	3395	4.00	3.51	70- 130	100	
52	5.137	5.117	0.020		2968			58- 118	87.4	
51	5.137	5.117	0.020		1299			11.2- 71.2	38.3	
32 Methylene Chloride										
84	5.208	5.208	0.000	96	25378	0.4000	-0.3049	70- 130	100	
49	5.208	5.208	0.000		35879			108- 168	141	
51	5.208	5.208	0.000		10416			14.8- 74.8	41.0	
86	5.208	5.208	0.000		15908			34.0- 94.0	62.7	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	80	2898	0.4000	0.3042	70- 130	100	
151	5.279	5.269	0.010		2779			56- 116	95.9	
85	5.279	5.269	0.010		684			14.8- 74.8	23.6	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	89	3002	0.4000	0.3600	70- 130	100	
39	5.299	5.299	0.000		2049			50- 110	68.3	
76	5.309	5.299	0.010		683			4.5- 64.5	22.8	
38 trans-1,2-Dichloroethene										
96	5.866	5.856	0.010	50	2366	0.4000	0.3678	70- 130	100	
61	5.856	5.856	0.000		3375			119- 179	143	
98	5.856	5.856	0.000		1423			33.6- 93.6	60.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	90	3858	0.4000	0.3455	70- 130	100	
65	6.079	6.079	0.000		898			0.5- 60.5	23.3	
83	0.000	6.079	0.000		0			0.0- 45.0		
47 Isopropyl ether										
45	6.484	6.484	0.000	95	5453	0.4000	0.3391	70- 130	100	
87	6.494	6.484	0.010		703			0.0- 55.7	12.9	
59	0.000	6.484	0.000		0			0.0- 40.7		
50 cis-1,2-Dichloroethene										
96	6.605	6.595	0.010	71	2164	0.4000	0.3381	70- 130	100	
61	6.595	6.595	0.000		3144			113- 173	145	
98	6.595	6.595	0.000		1042			35.8- 95.8	48.2	
54 Chloroform										
83	6.777	6.777	0.000	87	4484	0.4000	0.3440	70- 130	100	
85	6.777	6.777	0.000		3054			35.3- 95.3	68.1	
47	0.000	6.777	0.000		0			0.0- 54.5		
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	4411	0.4000	0.3384	70- 130	100	
87	6.828	6.828	0.000		1348			9.5- 69.5	30.6	
57	6.828	6.828	0.000		1246			0.0- 59.8	28.2	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	90	3479	0.4000	0.3936	70- 130	100	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	92	5332	0.4000	0.3336	70- 130	100	
99	7.426	7.415	0.011		3398			35.9- 95.9	63.7	
61	7.426	7.415	0.011		1771			9.0- 69.0	33.2	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	90	3864	0.4000	0.3843	70- 130	100	
110	7.577	7.577	0.000		890			8.5- 68.5	23.0	
77	7.577	7.577	0.000		786			0.9- 60.9	20.3	
69 Cyclohexane										
56	7.658	7.658	0.000	88	4092	0.4000	0.3406	70- 130	100	
84	7.658	7.658	0.000		3406			49- 109	83.2	
69	0.000	7.658	0.000		0			0.0- 56.1		
71 Carbon tetrachloride										
117	7.729	7.729	0.000	89	5442	0.4000	0.3508	70- 130	100	
119	7.729	7.729	0.000		5327			65- 125	97.9	
82	7.719	7.729	-0.010		663			0.0- 51.0	12.2	
72 Benzene										
78	7.760	7.760	0.000	94	8351	0.4000	0.3988	70- 130	100	
51	7.760	7.760	0.000		1484			0.0- 53.4	17.8	
77	7.760	7.760	0.000		1519			0.0- 53.9	18.2	
75 n-Heptane										
43	8.185	8.185	0.000	87	3213	0.4000	0.2976	70- 130	100	
57	8.185	8.185	0.000		1770			25.7- 85.7	55.1	
71	8.185	8.185	0.000		1848			23.7- 83.7	57.5	
100	0.000	8.185	0.000		0			0.0- 50.5		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
77 Dibromomethane										
93	8.226	8.225	0.001	17	1048	0.4000	0.3130	70- 130	100	
95	8.226	8.225	0.001		991			54- 114	94.6	
174	8.226	8.225	0.001		918			78- 138	87.6	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	77	1987	0.4000	0.4111	70- 130	100	
62	8.246	8.246	0.000		1403			42- 102	70.6	
41	8.246	8.246	0.000		1484			45- 105	74.7	
79 Trichloroethene										
130	8.286	8.286	0.000	92	2975	0.4000	0.3478	70- 130	100	
95	8.286	8.286	0.000		3280			63- 123	110	
132	8.286	8.286	0.000		3347			71- 131	113	
60	8.276	8.286	-0.010		1017			20.6- 80.6	34.2	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	91	3168	0.4000	0.3569	70- 130	100	
85	8.317	8.327	-0.010		1804			36.1- 96.1	56.9	
129	0.000	8.327	0.000		0			0.0- 44.5		
159 Methylcyclohexane										
83	8.701	8.701	0.000	90	3805	0.4000	0.3153	70- 130	100	
55	8.701	8.701	0.000		3991			87.9- 87.9	105	
98	8.712	8.701	0.011		1915			19.2- 79.2	50.3	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	86	2310	0.4000	0.3314	70- 130	100	
39	8.833	8.843	-0.010		950			21.3- 81.3	41.1	
77	0.000	8.843	0.000		0			1.0- 61.0		
90 Toluene										
91	9.471	9.471	0.000	96	8957	0.4000	0.3617	70- 130	100	
92	9.471	9.471	0.000		4796			29.8- 89.8	53.5	
65	0.000	9.471	0.000		0			0.0- 43.1		
94 Chlorodibromomethane										
129	9.755	9.744	0.011	1	1770	0.4000	0.2864	70- 130	100	
127	9.744	9.744	0.000		1223			47- 107	69.1	
79	0.000	9.744	0.000		0			0.0- 44.5		
208	0.000	9.744	0.000		0			0.0- 33.6		
96 Ethylene Dibromide										
107	9.967	9.957	0.010	81	1348	0.4000	0.3031	70- 130	100	
109	9.967	9.957	0.010		949			64- 124	70.4	
81	0.000	9.957	0.000		0			0.0- 39.1		
97 Tetrachloroethene										
164	10.109	10.099	0.010	90	2511	0.4000	0.3524	70- 130	100	
166	10.109	10.099	0.010		3857			95- 155	154	
129	10.109	10.099	0.010		2593			64- 124	103	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	65	3177	0.4000	0.4444	70- 130	100	
133	10.656	10.656	0.000		2158			67- 127	67.9	
119	0.000	10.656	0.000		0			35.9- 95.9		
102 Ethylbenzene										
91	10.909	10.909	0.000	95	12219	0.4000	0.3907	70- 130	100	
106	10.909	10.909	0.000		3655			0.2- 60.2	29.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
103 m-Xylene & p-Xylene										
106	11.101	11.091	0.010	93	3993	0.4000	0.3536	70- 130	100	
91	11.091	11.091	0.000		9224			180- 240	231	
105	11.091	11.091	0.000		1516			14.5- 74.5	38.0	
106 Styrene										
104	11.415	11.415	0.000	89	5441	0.4000	0.3422	70- 130	100	
103	11.415	11.415	0.000		2554			17.4- 77.4	46.9	
78	11.415	11.415	0.000		2106			15.1- 75.1	38.7	
51	11.415	11.415	0.000		1220			0.0- 53.9	22.4	
109 1,1,2,2-Tetrachloroethane										
83	11.476	11.486	-0.010	1	1406	0.4000	0.3031	70- 130	100	
85	11.486	11.486	0.000		787			35.7- 95.7	56.0	
131	0.000	11.486	0.000		0			0.0- 45.0		
108 o-Xylene										
106	11.486	11.486	0.000	92	3361	0.4000	0.3123	70- 130	100	
91	11.486	11.486	0.000		8880			197- 257	264	
105	11.486	11.486	0.000		1096			10.8- 70.8	32.6	
112 Isopropylbenzene										
105	11.841	11.841	0.000	92	12809	0.4000	0.3826	70- 130	100	
120	11.841	11.841	0.000		2971			0.0- 55.6	23.2	
77	11.841	11.841	0.000		1483			0.0- 45.8	11.6	
113 Bromobenzene										
156	12.114	12.104	0.010	80	2958	0.4000	0.3825	70- 130	100	
77	12.114	12.104	0.010		3757			91- 151	127	
158	12.114	12.104	0.010		2560			67- 127	86.5	
114 N-Propylbenzene										
91	12.286	12.286	0.000	97	13631	0.4000	0.3793	70- 130	100	
120	12.286	12.286	0.000		2614			0.0- 54.5	19.2	
65	12.286	12.286	0.000		1034			0.0- 42.2	7.6	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	93	8600	0.4000	0.3890	70- 130	100	
126	12.398	12.387	0.011		2870			7.2- 67.2	33.4	
75	0.000	12.387	0.000		0			0.0- 32.9		
116 4-Chlorotoluene										
91	12.468	12.468	0.000	91	7436	0.4000	0.3354	70- 130	100	
126	12.468	12.468	0.000		2358			7.3- 67.3	31.7	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	91	9272	0.4000	0.3407	70- 130	100	
120	12.570	12.570	0.000		4287			18.4- 78.4	46.2	
91	12.560	12.570	-0.010		726			0.0- 41.8	7.8	
119 tert-Butylbenzene										
119	12.843	12.853	-0.010	91	8921	0.4000	0.3366	70- 130	100	
91	12.843	12.853	-0.010		6381			41- 101	71.5	
134	12.853	12.853	0.000		2225			0.0- 54.6	24.9	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	93	9341	0.4000	0.3457	70- 130	100	
120	12.954	12.954	0.000		3421			15.7- 75.7	36.6	
77	12.954	12.954	0.000		1009			0.0- 42.4	10.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
121 sec-Butylbenzene										
105	13.056	13.056	0.000	92	14092	0.4000	0.3743	70- 130	100	
134	13.056	13.056	0.000		2725			0.0- 52.3	19.3	
91	13.056	13.056	0.000		2247			0.0- 47.8	15.9	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	92	7122	0.4000	0.4137	70- 130	100	
111	13.137	13.127	0.010		2537			10.6- 70.6	35.6	
148	13.137	13.127	0.010		4365			34.6- 94.6	61.3	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	91	6558	0.4000	0.3842	70- 130	100	
111	13.167	13.187	-0.020		6276			8.8- 68.8	95.7	
148	13.187	13.187	0.000		5364			35.7- 95.7	81.8	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	94	13178	0.4000	0.3852	70- 130	100	
134	13.218	13.218	0.000		2880			0.0- 57.7	21.9	
91	13.218	13.218	0.000		3307			0.0- 56.0	25.1	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	94	5592	0.4000	0.3842	70- 130	100	
111	13.511	13.501	0.010		2141			10.1- 70.1	38.3	
148	13.511	13.501	0.010		3619			32.6- 92.6	64.7	
128 n-Butylbenzene										
91	13.572	13.572	0.000	94	10534	0.4000	0.3592	70- 130	100	
92	13.572	13.572	0.000		5647			24.4- 84.4	53.6	
134	13.572	13.572	0.000		3211			0.0- 59.7	30.5	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	85	4267	0.4000	0.3941	70- 130	100	
182	15.061	15.061	0.000		3624			67- 127	84.9	
145	15.061	15.061	0.000		1031			4.2- 64.2	24.2	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	84	2884	0.4000	0.3430	70- 130	100	
223	15.334	15.334	0.000		2096			33.1- 93.1	72.7	
227	15.334	15.334	0.000		1883			33.2- 93.2	65.3	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	90	3742	0.4000	0.3821	70- 130	100	
182	15.476	15.476	0.000		3506			64- 124	93.7	
145	0.000	15.476	0.000		0			5.8- 65.8		

S 144 Xylenes, Total

1 0 0.6659

S 145 1,2-Dichloroethene, Total

1 0 0.7059

Reagents:

VMWNU8260002_00628

Amount Added: 2.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17025.D

Injection Date: 17-Oct-2018 14:35:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD04

Worklist Smp#: 5

Client ID:

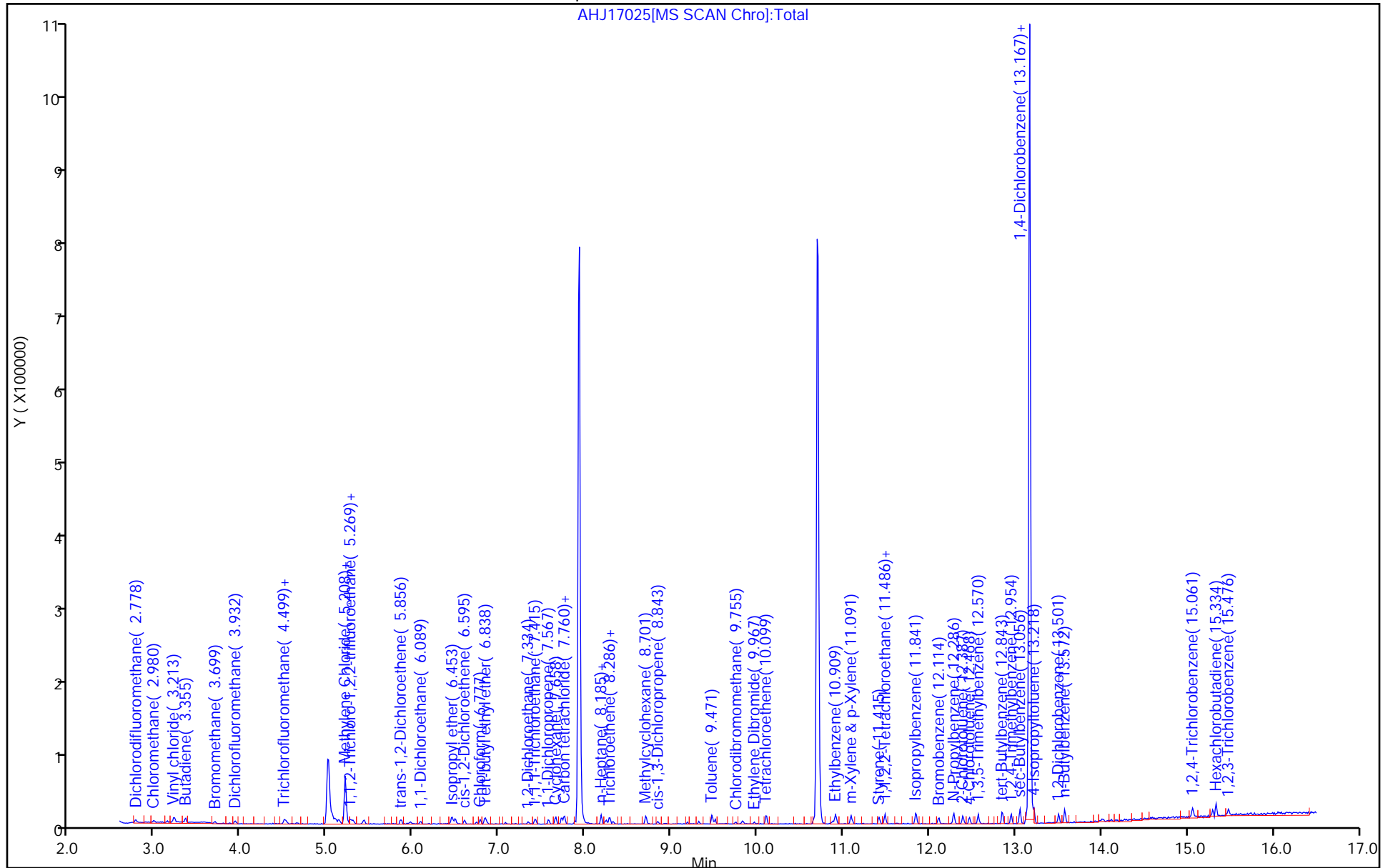
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 21

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17026.D
 Lims ID: STD05
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 17-Oct-2018 15:06:30 ALS Bottle#: 22 Worklist Smp#: 6
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-006
 Misc. Info.: STD05
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:14 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:49:06

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	98	135603	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	618345	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		38165			0.0- 36.8	6.2	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	88	483037	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		252879			21.9- 81.9	52.4	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	271361	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		413869			152- 212	153	
115	13.167	13.167	0.000		158687			31.1- 91.1	58.5	
11 Dichlorodifluoromethane										
85	2.767	2.778	-0.011	94	6254	0.5000	0.4663	70- 130	100	
87	2.767	2.778	-0.011		1088			2.5- 62.5	17.4	
50	0.000	2.778	0.000		0			0.0- 40.2		
12 Chloromethane										
50	2.980	2.980	0.000	94	3218	0.5000	0.4845	70- 130	100	
52	2.990	2.980	0.010		856			3.7- 63.7	26.6	
13 Vinyl chloride										
62	3.213	3.213	0.000	85	3628	0.5000	0.5217	70- 130	100	
64	3.213	3.213	0.000		2468			3.0- 63.0	68.0	
14 Butadiene										
54	3.355	3.355	0.000	87	2746	0.5000	0.4632	70- 130	100	
53	3.355	3.355	0.000		1393			39- 99	50.7	
39	3.355	3.355	0.000		3142			62- 122	114	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.699	3.699	0.000	77	2831	0.5000	0.5416	70- 130	100	
94	3.689	3.699	-0.010		2961			72- 132	105	
79	0.000	3.699	0.000		0			0.0- 50.2		
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	94	5537	0.5000	0.4324	70- 130	100	
69	3.932	3.932	0.000		1451			2.6- 62.6	26.2	
47	0.000	3.932	0.000		0			0.0- 41.5		
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	94	8764	0.5000	0.4522	70- 130	100	
103	4.509	4.499	0.010		5412			33.3- 93.3	61.8	
66	0.000	4.499	0.000		0			0.0- 39.9		
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	37	1987	0.5000	0.3375	70- 130	100	
61	5.066	5.056	0.010		5368			159- 219	270	
98	5.056	5.056	0.000		971			34.3- 94.3	48.9	
30 2-Methyl-2-propanol										
59	5.096	5.096	0.000	52	2132	5.00	3.42	70- 130	100	
57	0.000	5.096	0.000		0			0.0- 39.8		
41	0.000	5.096	0.000		0			0.0- 56.4		
29 Iodomethane										
142	5.096	5.096	0.000	90	6017	0.5000	0.4936	70- 130	100	
127	5.096	5.096	0.000		3071			24.1- 84.1	51.0	
31 Acrylonitrile										
53	5.127	5.117	0.010	93	5535	5.00	5.21	70- 130	100	
52	5.127	5.117	0.010		4415			58- 118	79.8	
51	5.137	5.117	0.020		2016			11.2- 71.2	36.4	
32 Methylene Chloride										
84	5.208	5.208	0.000	98	24895	0.5000	-0.3367	70- 130	100	
49	5.208	5.208	0.000		39703			108- 168	159	
51	5.208	5.208	0.000		11143			14.8- 74.8	44.8	
86	5.208	5.208	0.000		16823			34.0- 94.0	67.6	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.268	5.269	-0.001	81	4270	0.5000	0.4541	70- 130	100	
151	5.268	5.269	-0.001		2905			56- 116	68.0	
85	5.279	5.269	0.010		1261			14.8- 74.8	29.5	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	85	3969	0.5000	0.4823	70- 130	100	
39	5.309	5.299	0.010		3082			50- 110	77.7	
76	5.309	5.299	0.010		1242			4.5- 64.5	31.3	
37 Carbon disulfide										
76	5.420	5.420	0.000	98	8743	0.5000	0.4764	70- 130	100	
78	5.420	5.420	0.000		696			0.0- 39.4	8.0	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	94	2819	0.5000	0.4440	70- 130	100	
61	5.856	5.856	0.000		4558			119- 179	162	
98	5.856	5.856	0.000		1492			33.6- 93.6	52.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	90	5048	0.5000	0.4489	70- 130	100	
40 1,1-Dichloroethane										
63	6.079	6.079	-0.001	89	5123	0.5000	0.4648	70- 130	100	
65	6.079	6.079	-0.001		1472			0.5- 60.5	28.7	
83	0.000	6.079	0.000		0			0.0- 45.0		
47 Isopropyl ether										
45	6.484	6.484	0.000	93	7494	0.5000	0.4722	70- 130	100	
87	6.494	6.484	0.010		1786			0.0- 55.7	23.8	
59	0.000	6.484	0.000		0			0.0- 40.7		
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	75	3053	0.5000	0.4833	70- 130	100	
61	6.595	6.595	0.000		4060			113- 173	133	
98	6.605	6.595	0.010		1747			35.8- 95.8	57.2	
52 Chlorobromomethane										
128	6.737	6.737	0.000	84	1182	0.5000	0.3870	70- 130	100	
49	6.737	6.737	0.000		1856			125- 185	157	
54 Chloroform										
83	6.777	6.777	0.000	89	6411	0.5000	0.4984	70- 130	100	
85	6.787	6.777	0.010		3473			35.3- 95.3	54.2	
47	6.777	6.777	0.000		1291			0.0- 54.5	20.1	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	83	5913	0.5000	0.4596	70- 130	100	
87	6.828	6.828	0.000		1693			9.5- 69.5	28.6	
57	6.828	6.828	0.000		1429			0.0- 59.8	24.2	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	85	4849	0.5000	0.4427	70- 130	100	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	92	4420	0.5000	0.5067	70- 130	100	
64	7.334	7.334	0.000		971			1.8- 61.8	22.0	
49	0.000	7.334	0.000		0			0.0- 52.2		
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	92	7714	0.5000	0.4890	70- 130	100	
99	7.415	7.415	0.000		4606			35.9- 95.9	59.7	
61	7.415	7.415	0.000		2542			9.0- 69.0	33.0	
68 1,1-Dichloropropene										
75	7.567	7.577	-0.010	90	4429	0.5000	0.4463	70- 130	100	
110	7.567	7.577	-0.010		1268			8.5- 68.5	28.6	
77	7.577	7.577	0.000		998			0.9- 60.9	22.5	
69 Cyclohexane										
56	7.658	7.658	0.000	91	5138	0.5000	0.4333	70- 130	100	
84	7.668	7.658	0.010		3972			49- 109	77.3	
69	7.658	7.658	0.000		957			0.0- 56.1	18.6	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	94	6652	0.5000	0.4345	70- 130	100	
119	7.729	7.729	0.000		6504			65- 125	97.8	
82	7.719	7.729	-0.010		1313			0.0- 51.0	19.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
72 Benzene										
78	7.759	7.760	-0.001	96	10010	0.5000	0.4843	70- 130	100	
51	7.749	7.760	-0.011		1929			0.0- 53.4	19.3	
77	7.759	7.760	-0.001		2088			0.0- 53.9	20.9	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	88	4568	0.5000	0.4634	70- 130	100	
87	7.891	7.881	0.010		1209			0.0- 56.3	26.5	
43	7.881	7.881	0.000		1381			4.4- 64.4	30.2	
55	0.000	7.881	0.000		0			0.0- 58.6		
75 n-Heptane										
43	8.185	8.185	0.000	78	3995	0.5000	0.3749	70- 130	100	
57	8.185	8.185	0.000		2273			25.7- 85.7	56.9	
71	8.185	8.185	0.000		2574			23.7- 83.7	64.4	
100	0.000	8.185	0.000		0			0.0- 50.5		
77 Dibromomethane										
93	8.225	8.225	0.000	77	1545	0.5000	0.4675	70- 130	100	
95	8.225	8.225	0.000		789			54- 114	51.1	
174	8.235	8.225	0.010		1745			78- 138	113	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	81	2040	0.5000	0.4276	70- 130	100	
62	8.256	8.246	0.010		1427			42- 102	70.0	
41	8.246	8.246	0.000		1586			45- 105	77.7	
79 Trichloroethene										
130	8.286	8.286	0.000	90	3836	0.5000	0.4544	70- 130	100	
95	8.276	8.286	-0.010		3364			63- 123	87.7	
132	8.286	8.286	0.000		3814			71- 131	99	
60	8.276	8.286	-0.010		1634			20.6- 80.6	42.6	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	90	4201	0.5000	0.4796	70- 130	100	
85	8.316	8.327	-0.011		2151			36.1- 96.1	51.2	
129	0.000	8.327	0.000		0			0.0- 44.5		
159 Methylcyclohexane										
83	8.701	8.701	0.000	90	4834	0.5000	0.4059	70- 130	100	
55	8.701	8.701	0.000		4610			87.9- 87.9	95.4	
98	8.701	8.701	0.000		2656			19.2- 79.2	54.9	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	90	3095	0.5000	0.4480	70- 130	100	
39	8.843	8.843	0.000		1671			21.3- 81.3	54.0	
77	8.843	8.843	0.000		828			1.0- 61.0	26.8	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	82	2187	0.5000	0.5104	70- 130	100	
39	9.187	9.187	0.000		1272			15.4- 75.4	58.2	
110	0.000	9.187	0.000		0			0.0- 53.8		
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	84	1576	0.5000	0.5027	70- 130	100	
97	9.319	9.319	0.000		1802			97- 157	114	
61	0.000	9.319	0.000		0			62- 122		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
90 Toluene										
91	9.471	9.471	0.000	96	12360	0.5000	0.5035	70- 130	100	
92	9.471	9.471	0.000		6338			29.8- 89.8	51.3	
65	9.471	9.471	0.000		955			0.0- 43.1	7.7	
92 Ethyl methacrylate										
69	9.521	9.511	0.010	73	1425	0.5000	0.3484	70- 130	100	
41	9.511	9.511	0.000		2905			151- 211	204	
99	0.000	9.511	0.000		0			0.0- 53.8		
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	90	3173	0.5000	0.5004	70- 130	100	
94 Chlorodibromomethane										
129	9.754	9.744	0.010	81	2939	0.5000	0.4798	70- 130	100	
127	9.744	9.744	0.000		1562			47- 107	53.1	
79	0.000	9.744	0.000		0			0.0- 44.5		
208	0.000	9.744	0.000		0			0.0- 33.6		
96 Ethylene Dibromide										
107	9.967	9.957	0.010	94	2097	0.5000	0.4757	70- 130	100	
109	9.967	9.957	0.010		1892			64- 124	90.2	
81	0.000	9.957	0.000		0			0.0- 39.1		
97 Tetrachloroethene										
164	10.099	10.099	0.000	88	3287	0.5000	0.4654	70- 130	100	
166	10.109	10.099	0.010		4138			95- 155	126	
129	10.109	10.099	0.010		3116			64- 124	94.8	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	68	3580	0.5000	0.5052	70- 130	100	
133	10.666	10.656	0.010		3082			67- 127	86.1	
119	0.000	10.656	0.000		0			35.9- 95.9		
101 Chlorobenzene										
112	10.737	10.737	0.000	94	9748	0.5000	0.5416	70- 130	100	
77	10.726	10.737	-0.011		5815			19.9- 79.9	59.7	
114	10.737	10.737	0.000		2879			1.4- 61.4	29.5	
102 Ethylbenzene										
91	10.909	10.909	0.000	95	15661	0.5000	0.5052	70- 130	100	
106	10.909	10.909	0.000		4822			0.2- 60.2	30.8	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	91	4858	0.5000	0.4340	70- 130	100	
91	11.091	11.091	0.000		10594			180- 240	218	
105	11.101	11.091	0.010		2150			14.5- 74.5	44.3	
106 Styrene										
104	11.415	11.415	0.000	89	7206	0.5000	0.4573	70- 130	100	
103	11.425	11.415	0.010		2637			17.4- 77.4	36.6	
78	11.415	11.415	0.000		2817			15.1- 75.1	39.1	
51	11.415	11.415	0.000		868			0.0- 53.9	12.0	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	53	1891	0.5000	0.4021	70- 130	100	
85	11.476	11.486	-0.010		1059			35.7- 95.7	56.0	
131	0.000	11.486	0.000		0			0.0- 45.0		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
108 o-Xylene										
106	11.486	11.486	0.000	94	4900	0.5000	0.4594	70- 130	100	
91	11.486	11.486	0.000		10868			197- 257	222	
105	11.486	11.486	0.000		1342			10.8- 70.8	27.4	
112 Isopropylbenzene										
105	11.850	11.841	0.009	93	16086	0.5000	0.4847	70- 130	100	
120	11.840	11.841	-0.001		4112			0.0- 55.6	25.6	
77	11.840	11.841	-0.001		1855			0.0- 45.8	11.5	
113 Bromobenzene										
156	12.114	12.104	0.010	80	3488	0.5000	0.4448	70- 130	100	
77	12.104	12.104	0.000		4386			91- 151	126	
158	12.104	12.104	0.000		3519			67- 127	101	
114 N-Propylbenzene										
91	12.286	12.286	0.000	97	16604	0.5000	0.4557	70- 130	100	
120	12.286	12.286	0.000		3247			0.0- 54.5	19.6	
65	12.286	12.286	0.000		1671			0.0- 42.2	10.1	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	92	10585	0.5000	0.4722	70- 130	100	
126	12.387	12.387	0.000		3337			7.2- 67.2	31.5	
75	0.000	12.387	0.000		0			0.0- 32.9		
116 4-Chlorotoluene										
91	12.468	12.468	0.000	93	10561	0.5000	0.4698	70- 130	100	
126	12.468	12.468	0.000		3801			7.3- 67.3	36.0	
117 1,3,5-Trimethylbenzene										
105	12.569	12.570	-0.001	91	12131	0.5000	0.4396	70- 130	100	
120	12.569	12.570	-0.001		5411			18.4- 78.4	44.6	
91	12.569	12.570	-0.001		905			0.0- 41.8	7.5	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	89	11950	0.5000	0.4447	70- 130	100	
91	12.853	12.853	0.000		8544			41- 101	71.5	
134	12.843	12.853	-0.010		3119			0.0- 54.6	26.1	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	92	11501	0.5000	0.4199	70- 130	100	
120	12.954	12.954	0.000		4978			15.7- 75.7	43.3	
77	12.954	12.954	0.000		1373			0.0- 42.4	11.9	
121 sec-Butylbenzene										
105	13.055	13.056	-0.001	92	17029	0.5000	0.4461	70- 130	100	
134	13.055	13.056	-0.001		3613			0.0- 52.3	21.2	
91	13.055	13.056	-0.001		2624			0.0- 47.8	15.4	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.009	92	8814	0.5000	0.5050	70- 130	100	
111	13.126	13.127	-0.001		3260			10.6- 70.6	37.0	
148	13.126	13.127	-0.001		5495			34.6- 94.6	62.3	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	90	9087	0.5000	0.5251	70- 130	100	
111	13.187	13.187	0.000		4433			8.8- 68.8	48.8	
148	13.187	13.187	0.000		6173			35.7- 95.7	67.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	16170	0.5000	0.4662	70- 130	100	
134	13.218	13.218	0.000		3722			0.0- 57.7	23.0	
91	13.218	13.218	0.000		3864			0.0- 56.0	23.9	
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	94	7428	0.5000	0.5033	70- 130	100	
111	13.511	13.501	0.010		2887			10.1- 70.1	38.9	
148	13.501	13.501	0.000		4292			32.6- 92.6	57.8	
128 n-Butylbenzene										
91	13.572	13.572	0.000	96	13233	0.5000	0.4451	70- 130	100	
92	13.572	13.572	0.000		7243			24.4- 84.4	54.7	
134	13.582	13.572	0.010		3508			0.0- 59.7	26.5	
133 1,2,4-Trichlorobenzene										
180	15.060	15.061	-0.001	93	4950	0.5000	0.4509	70- 130	100	
182	15.060	15.061	-0.001		4917			67- 127	99	
145	15.060	15.061	-0.001		1906			4.2- 64.2	38.5	
134 Naphthalene										
128	15.293	15.294	-0.001	94	9674	0.5000	0.4657	70- 130	100	
127	15.293	15.294	-0.001		956			0.0- 42.9	9.9	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	85	3770	0.5000	0.4423	70- 130	100	
223	15.334	15.334	0.000		2525			33.1- 93.1	67.0	
227	15.334	15.334	0.000		2123			33.2- 93.2	56.3	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	91	4750	0.5000	0.4784	70- 130	100	
182	15.476	15.476	0.000		4559			64- 124	96.0	
145	15.486	15.476	0.010		1376			5.8- 65.8	29.0	
S 144 Xylenes, Total										
1				0			0.8934			
S 145 1,2-Dichloroethene, Total										
1				0			0.9274			

Reagents:

VMWNU8260002_00628

Amount Added: 2.50

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17026.D

Injection Date: 17-Oct-2018 15:06:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD05

Worklist Smp#: 6

Client ID:

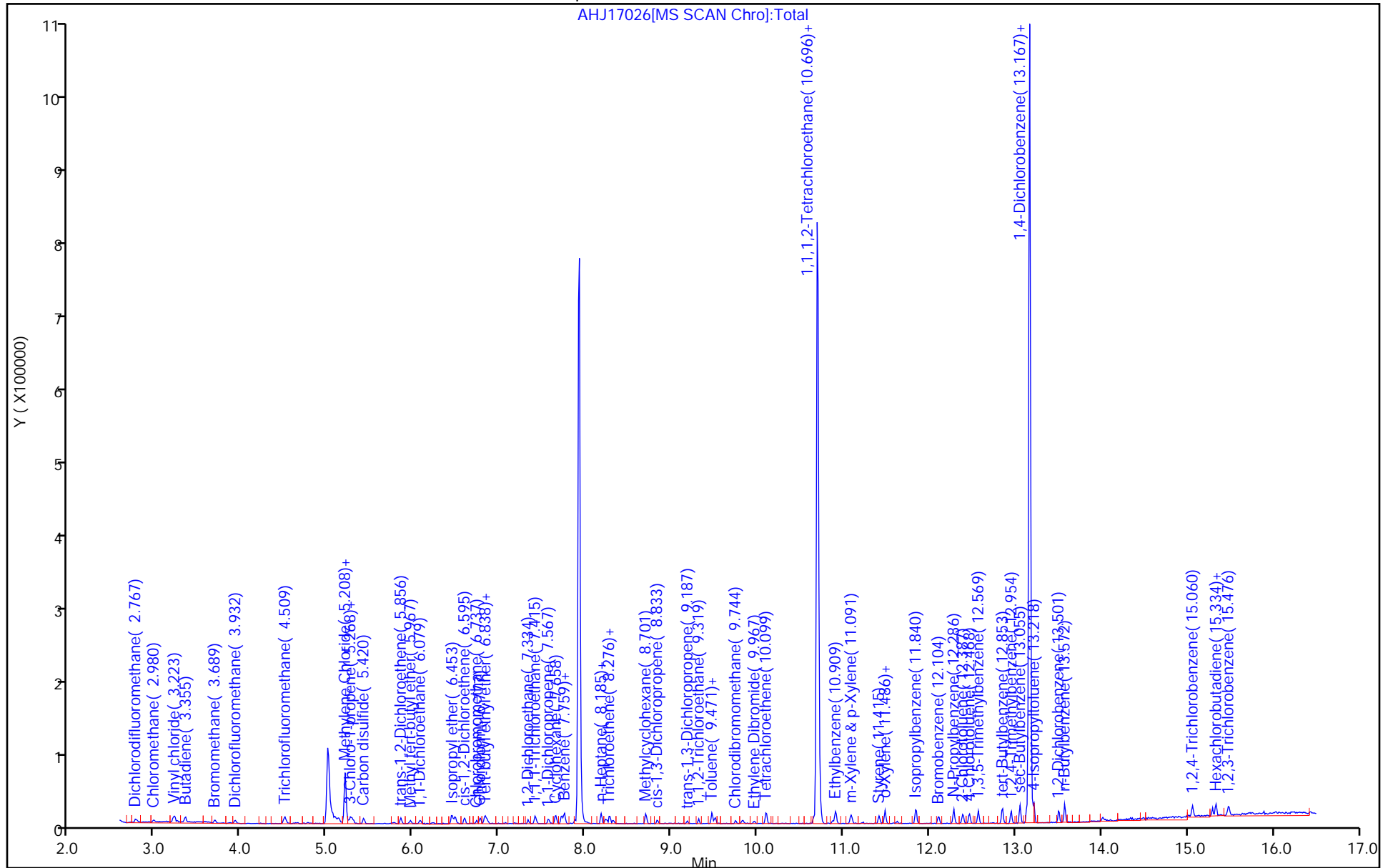
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 22

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17027.D
 Lims ID: STD1
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 17-Oct-2018 15:33:30 ALS Bottle#: 23 Worklist Smp#: 7
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-007
 Misc. Info.: STD1
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:22 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:52:44

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	125314	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	98	587792	25.0	25.0	70- 130	100	
97	7.922	7.932	-0.010		40994			0.0- 36.8	7.0	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	86	481201	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		243789			21.9- 81.9	50.7	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	96	256844	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		400083			152- 212	156	
115	13.167	13.167	0.000		160043			31.1- 91.1	62.3	
11 Dichlorodifluoromethane										
85	2.777	2.778	-0.001	95	11943	1.00	0.9369	70- 130	100	
87	2.777	2.778	-0.001		4130			2.5- 62.5	34.6	
50	2.767	2.778	-0.011		743			0.0- 40.2	6.2	
12 Chloromethane										
50	2.980	2.980	0.000	97	7067	1.00	1.12	70- 130	100	
52	2.980	2.980	0.000		2414			3.7- 63.7	34.2	
13 Vinyl chloride										
62	3.213	3.213	0.000	92	6591	1.00	1.00	70- 130	100	
64	3.223	3.213	0.010		2973			3.0- 63.0	45.1	
14 Butadiene										
54	3.355	3.355	0.000	84	5704	1.00	1.01	70- 130	100	
53	3.355	3.355	0.000		3845			39- 99	67.4	
39	3.355	3.355	0.000		5817			62- 122	102	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.689	3.699	-0.010	93	4715	1.00	0.9489	70- 130	100	
94	3.699	3.699	0.000		5573			72- 132	118	
79	3.689	3.699	-0.010		883			0.0- 50.2	18.7	
16 Chloroethane										
64	3.871	3.861	0.010	94	2876	1.00	0.7504	70- 130	100	
66	3.871	3.861	0.010		1218			0.0- 59.6	42.4	
49	3.861	3.861	0.000		754			2.2- 62.2	26.2	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	96	13279	1.00	1.09	70- 130	100	
69	3.932	3.932	0.000		4054			2.6- 62.6	30.5	
47	3.932	3.932	0.000		1154			0.0- 41.5	8.7	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	97	19548	1.00	1.06	70- 130	100	
103	4.509	4.499	0.010		12305			33.3- 93.3	62.9	
66	4.499	4.499	0.000		1369			0.0- 39.9	7.0	
23 Acetonitrile										
41	4.519	4.509	0.010	35	2791	10.0	7.62	70- 130	100	
40	4.519	4.509	0.010		4894			26.9- 86.9	175	
39	0.000	4.509	0.000		0			0.0- 52.0		
27 Ethyl ether										
59	4.772	4.762	0.010	94	2131	1.00	0.7116	70- 130	100	
45	4.772	4.762	0.010		2044			43- 103	95.9	
74	4.762	4.762	0.000		1017			32.9- 92.9	47.7	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	95	5417	1.00	0.9679	70- 130	100	
61	5.066	5.056	0.010		11186			159- 219	206	
98	5.056	5.056	0.000		3451			34.3- 94.3	63.7	
30 2-Methyl-2-propanol										
59	5.107	5.096	0.010	45	5054	10.0	8.76	70- 130	100	
57	0.000	5.096	0.000		0			0.0- 39.8		
41	0.000	5.096	0.000		0			0.0- 56.4		
29 Iodomethane										
142	5.096	5.096	0.000	93	11467	1.00	0.9896	70- 130	100	
127	5.096	5.096	0.000		6057			24.1- 84.1	52.8	
31 Acrylonitrile										
53	5.127	5.117	0.010	92	11268	10.0	10.1	70- 130	100	
52	5.127	5.117	0.010		9269			58- 118	82.3	
51	5.127	5.117	0.010		4324			11.2- 71.2	38.4	
32 Methylene Chloride										
84	5.208	5.208	0.000	97	28538	1.00	0.7429	70- 130	100	
49	5.208	5.208	0.000		40864			108- 168	143	
51	5.208	5.208	0.000		13195			14.8- 74.8	46.2	
86	5.208	5.208	0.000		17977			34.0- 94.0	63.0	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	87	9512	1.00	1.06	70- 130	100	
151	5.279	5.269	0.010		7749			56- 116	81.5	
85	5.269	5.269	0.000		3627			14.8- 74.8	38.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	85	7176	1.00	0.9174	70- 130	100	
39	5.299	5.299	0.000		5882			50- 110	82.0	
76	5.309	5.299	0.010		1925			4.5- 64.5	26.8	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	16975	1.00	0.9730	70- 130	100	
78	5.420	5.420	0.000		986			0.0- 39.4	5.8	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	96	6081	1.00	1.01	70- 130	100	
61	5.856	5.856	0.000		8990			119- 179	148	
98	5.856	5.856	0.000		3783			33.6- 93.6	62.2	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	94	10474	1.00	0.9799	70- 130	100	
57	5.967	5.967	0.000		1466			0.0- 50.7	14.0	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	96	10898	1.00	1.04	70- 130	100	
65	6.079	6.079	0.000		2737			0.5- 60.5	25.1	
83	6.089	6.079	0.010		955			0.0- 45.0	8.8	
45 Hexane										
57	6.453	6.453	0.000	80	10500	1.00	1.05	70- 130	100	
86	6.453	6.453	0.000		1208			0.0- 46.0	11.5	
47 Isopropyl ether										
45	6.484	6.484	0.000	92	14516	1.00	0.9622	70- 130	100	
87	6.484	6.484	0.000		3283			0.0- 55.7	22.6	
59	6.484	6.484	0.000		1187			0.0- 40.7	8.2	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	79	5711	1.00	0.9511	70- 130	100	
61	6.595	6.595	0.000		8406			113- 173	147	
98	6.595	6.595	0.000		3610			35.8- 95.8	63.2	
52 Chlorobromomethane										
128	6.747	6.737	0.010	87	3085	1.00	1.06	70- 130	100	
49	6.737	6.737	0.000		4845			125- 185	157	
54 Chloroform										
83	6.777	6.777	0.000	91	12672	1.00	1.04	70- 130	100	
85	6.777	6.777	0.000		8086			35.3- 95.3	63.8	
47	6.777	6.777	0.000		2901			0.0- 54.5	22.9	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	11755	1.00	0.9612	70- 130	100	
87	6.838	6.828	0.010		5136			9.5- 69.5	43.7	
57	6.828	6.828	0.000		3090			0.0- 59.8	26.3	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	90	10090	1.00	0.9690	70- 130	100	
97	6.848	6.848	0.000		1392			0.0- 47.8	13.8	
59 Isobutyl alcohol										
43	6.868	6.858	0.010	92	5493	25.0	22.4	70- 130	100	
41	6.838	6.858	-0.020		11205			158- 218	204	
42	6.868	6.858	0.010		1966			24.6- 84.6	35.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	94	8275	1.00	1.00	70- 130	100	
64	7.334	7.334	0.000		2626			1.8- 61.8	31.7	
49	7.334	7.334	0.000		1493			0.0- 52.2	18.0	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	95	14939	1.00	1.00	70- 130	100	
99	7.415	7.415	0.000		9386			35.9- 95.9	62.8	
61	7.415	7.415	0.000		6231			9.0- 69.0	41.7	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	93	9200	1.00	0.9753	70- 130	100	
110	7.567	7.577	-0.010		3145			8.5- 68.5	34.2	
77	7.577	7.577	0.000		2845			0.9- 60.9	30.9	
69 Cyclohexane										
56	7.658	7.658	0.000	91	10883	1.00	0.9655	70- 130	100	
84	7.658	7.658	0.000		8946			49- 109	82.2	
69	7.648	7.658	-0.010		2663			0.0- 56.1	24.5	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	95	13325	1.00	0.9157	70- 130	100	
119	7.729	7.729	0.000		12911			65- 125	96.9	
82	7.729	7.729	0.000		2850			0.0- 51.0	21.4	
72 Benzene										
78	7.760	7.760	0.000	96	20622	1.00	1.05	70- 130	100	
51	7.760	7.760	0.000		4838			0.0- 53.4	23.5	
77	7.760	7.760	0.000		4485			0.0- 53.9	21.7	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	92	8969	1.00	0.9571	70- 130	100	
87	7.881	7.881	0.000		2031			0.0- 56.3	22.6	
43	7.881	7.881	0.000		3009			4.4- 64.4	33.5	
55	7.881	7.881	0.000		2398			0.0- 58.6	26.7	
75 n-Heptane										
43	8.185	8.185	0.000	91	9929	1.00	0.9803	70- 130	100	
57	8.185	8.185	0.000		5433			25.7- 85.7	54.7	
71	8.185	8.185	0.000		5302			23.7- 83.7	53.4	
100	8.185	8.185	0.000		1723			0.0- 50.5	17.4	
77 Dibromomethane										
93	8.225	8.225	0.000	95	2528	1.00	0.8047	70- 130	100	
95	8.225	8.225	0.000		2620			54- 114	104	
174	8.225	8.225	0.000		3462			78- 138	137	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	79	4422	1.00	0.9751	70- 130	100	
62	8.246	8.246	0.000		3974			42- 102	89.9	
41	8.246	8.246	0.000		3854			45- 105	87.2	
79 Trichloroethene										
130	8.286	8.286	0.000	94	8416	1.00	1.05	70- 130	100	
95	8.286	8.286	0.000		6952			63- 123	82.6	
132	8.286	8.286	0.000		7763			71- 131	92.2	
60	8.276	8.286	-0.010		3722			20.6- 80.6	44.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
81 Dichlorobromomethane										
83	8.327	8.327	0.000	96	7926	1.00	0.9519	70- 130	100	
85	8.327	8.327	0.000		5645			36.1- 96.1	71.2	
129	8.327	8.327	0.000		804			0.0- 44.5	10.1	
159 Methylcyclohexane										
83	8.701	8.701	0.000	93	11510	1.00	1.02	70- 130	100	
55	8.701	8.701	0.000		10396			87.9- 87.9	90.3	
98	8.711	8.701	0.010		4976			19.2- 79.2	43.2	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	93	6769	1.00	0.9834	70- 130	100	
39	8.843	8.843	0.000		3087			21.3- 81.3	45.6	
77	8.833	8.843	-0.010		1648			1.0- 61.0	24.3	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	89	5679	1.00	1.02	70- 130	100	
39	9.187	9.187	0.000		2231			15.4- 75.4	39.3	
110	9.187	9.187	0.000		1033			0.0- 53.8	18.2	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	90	2959	1.00	0.9475	70- 130	100	
97	9.319	9.319	0.000		3720			97- 157	126	
61	0.000	9.319	0.000		0			62- 122		
90 Toluene										
91	9.471	9.471	0.000	96	24342	1.00	1.00	70- 130	100	
92	9.471	9.471	0.000		13670			29.8- 89.8	56.2	
65	9.471	9.471	0.000		2235			0.0- 43.1	9.2	
92 Ethyl methacrylate										
69	9.522	9.511	0.011	73	2531	1.00	0.6212	70- 130	100	
41	9.511	9.511	0.000		6637			151- 211	262	
99	0.000	9.511	0.000		0			0.0- 53.8		
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	88	6011	1.00	0.9516	70- 130	100	
78	9.511	9.511	0.000		1524			1.6- 61.6	25.4	
49	9.511	9.511	0.000		1241			0.0- 48.7	20.6	
94 Chlorodibromomethane										
129	9.754	9.744	0.010	83	5671	1.00	0.9294	70- 130	100	
127	9.754	9.744	0.010		4346			47- 107	76.6	
79	0.000	9.744	0.000		0			0.0- 44.5		
208	0.000	9.744	0.000		0			0.0- 33.6		
96 Ethylene Dibromide										
107	9.967	9.957	0.010	92	3969	1.00	0.9037	70- 130	100	
109	9.967	9.957	0.010		4128			64- 124	104	
81	0.000	9.957	0.000		0			0.0- 39.1		
97 Tetrachloroethene										
164	10.109	10.099	0.010	93	7424	1.00	1.06	70- 130	100	
166	10.109	10.099	0.010		9800			95- 155	132	
129	10.099	10.099	0.000		7492			64- 124	101	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	73	6665	1.00	0.9441	70- 130	100	
133	10.656	10.656	0.000		6159			67- 127	92.4	
119	0.000	10.656	0.000		0			35.9- 95.9		
101 Chlorobenzene										
112	10.737	10.737	0.000	95	19906	1.00	1.11	70- 130	100	
77	10.727	10.737	-0.010		11153			19.9- 79.9	56.0	
114	10.737	10.737	0.000		5679			1.4- 61.4	28.5	
102 Ethylbenzene										
91	10.909	10.909	0.000	98	30415	1.00	0.9849	70- 130	100	
106	10.909	10.909	0.000		8988			0.2- 60.2	29.6	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	11134	1.00	1.00	70- 130	100	
91	11.091	11.091	0.000		21957			180- 240	197	
105	11.091	11.091	0.000		4644			14.5- 74.5	41.7	
105 Bromoform										
173	11.233	11.233	0.000	87	2948	1.00	0.8140	70- 130	100	a
175	0.000	11.233	0.005		0			19.7- 79.7		a
79	0.000	11.233	0.005		0			0.0- 49.9		
252	0.000	11.233	0.005		0			0.0- 36.9		
106 Styrene										
104	11.415	11.415	0.000	94	14289	1.00	0.9103	70- 130	100	
103	11.415	11.415	0.000		6177			17.4- 77.4	43.2	
78	11.415	11.415	0.000		5825			15.1- 75.1	40.8	
51	11.415	11.415	0.000		2837			0.0- 53.9	19.9	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	55	4774	1.00	1.07	70- 130	100	
85	11.486	11.486	0.000		3013			35.7- 95.7	63.1	
131	0.000	11.486	0.000		0			0.0- 45.0		
108 o-Xylene										
106	11.486	11.486	0.000	97	9715	1.00	0.9143	70- 130	100	
91	11.486	11.486	0.000		23653			197- 257	243	
105	11.486	11.486	0.000		4230			10.8- 70.8	43.5	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	82	1549	1.00	0.8941	70- 130	100	
77	11.628	11.628	0.000		1335			58- 118	86.2	
112 Isopropylbenzene										
105	11.840	11.841	-0.001	95	31091	1.00	0.9404	70- 130	100	
120	11.840	11.841	-0.001		7356			0.0- 55.6	23.7	
77	11.840	11.841	-0.001		4479			0.0- 45.8	14.4	
113 Bromobenzene										
156	12.114	12.104	0.010	85	7610	1.00	1.03	70- 130	100	
77	12.104	12.104	0.000		9766			91- 151	128	
158	12.114	12.104	0.010		6914			67- 127	90.9	
114 N-Propylbenzene										
91	12.286	12.286	0.000	99	34803	1.00	1.01	70- 130	100	
120	12.286	12.286	0.000		7395			0.0- 54.5	21.2	
65	12.286	12.286	0.000		3720			0.0- 42.2	10.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	22525	1.00	1.06	70- 130	100	
126	12.387	12.387	0.000		7763			7.2- 67.2	34.5	
75	0.000	12.387	0.000		0			0.0- 32.9		
116 4-Chlorotoluene										
91	12.468	12.468	0.000	95	20775	1.00	0.9764	70- 130	100	
126	12.468	12.468	0.000		7558			7.3- 67.3	36.4	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	92	25463	1.00	0.9749	70- 130	100	
120	12.570	12.570	0.000		12133			18.4- 78.4	47.6	
91	12.570	12.570	0.000		2499			0.0- 41.8	9.8	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	90	24396	1.00	0.9591	70- 130	100	
91	12.853	12.853	0.000		17861			41- 101	73.2	
134	12.853	12.853	0.000		6108			0.0- 54.6	25.0	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	96	25897	1.00	1.00	70- 130	100	
120	12.954	12.954	0.000		11272			15.7- 75.7	43.5	
77	12.954	12.954	0.000		2630			0.0- 42.4	10.2	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	94	36244	1.00	1.00	70- 130	100	
134	13.056	13.056	0.000		7737			0.0- 52.3	21.3	
91	13.056	13.056	0.000		6076			0.0- 47.8	16.8	
122 1,3-Dichlorobenzene										
146	13.126	13.127	-0.001	96	17435	1.00	1.06	70- 130	100	
111	13.137	13.127	0.010		6628			10.6- 70.6	38.0	
148	13.126	13.127	-0.001		11137			34.6- 94.6	63.9	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	92	16503	1.00	1.01	70- 130	100	
111	13.187	13.187	0.000		11612			8.8- 68.8	70.4	
148	13.187	13.187	0.000		11930			35.7- 95.7	72.3	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	32346	1.00	0.9853	70- 130	100	
134	13.218	13.218	0.000		8212			0.0- 57.7	25.4	
91	13.218	13.218	0.000		8865			0.0- 56.0	27.4	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	95	14010	1.00	1.00	70- 130	100	
111	13.501	13.501	0.000		5982			10.1- 70.1	42.7	
148	13.501	13.501	0.000		9074			32.6- 92.6	64.8	
128 n-Butylbenzene										
91	13.572	13.572	0.000	97	27149	1.00	0.9648	70- 130	100	
92	13.572	13.572	0.000		14443			24.4- 84.4	53.2	
134	13.572	13.572	0.000		7724			0.0- 59.7	28.5	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	1	1128	1.00	0.9505	70- 130	100	
155	13.896	13.896	0.000		809			65- 125	71.7	
157	13.906	13.896	0.010		1235			86- 146	109	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

133 1,2,4-Trichlorobenzene

180	15.061	15.061	0.000	92	10953	1.00	1.05	70- 130	100	
182	15.061	15.061	0.000		9729			67- 127	88.8	
145	15.061	15.061	0.000		3050			4.2- 64.2	27.8	

134 Naphthalene

128	15.294	15.294	0.000	94	19243	1.00	0.9787	70- 130	100	
127	15.294	15.294	0.000		2064			0.0- 42.9	10.7	
129	15.294	15.294	0.000		1563			0.0- 41.7	8.1	

135 Hexachlorobutadiene

225	15.334	15.334	0.000	87	7969	1.00	0.9877	70- 130	100	
223	15.334	15.334	0.000		4626			33.1- 93.1	58.0	
227	15.334	15.334	0.000		5440			33.2- 93.2	68.3	

137 1,2,3-Trichlorobenzene

180	15.476	15.476	0.000	93	8622	1.00	0.9175	70- 130	100	
182	15.486	15.476	0.010		8965			64- 124	104	
145	15.486	15.476	0.010		2986			5.8- 65.8	34.6	

S 144 Xylenes, Total

1				0			1.91			
---	--	--	--	---	--	--	------	--	--	--

S 145 1,2-Dichloroethene, Total

1				0			1.96			
---	--	--	--	---	--	--	------	--	--	--

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMWNU8260002_00628

Amount Added: 5.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNAI\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17027.D

Injection Date: 17-Oct-2018 15:33:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD1

Worklist Smp#: 7

Client ID:

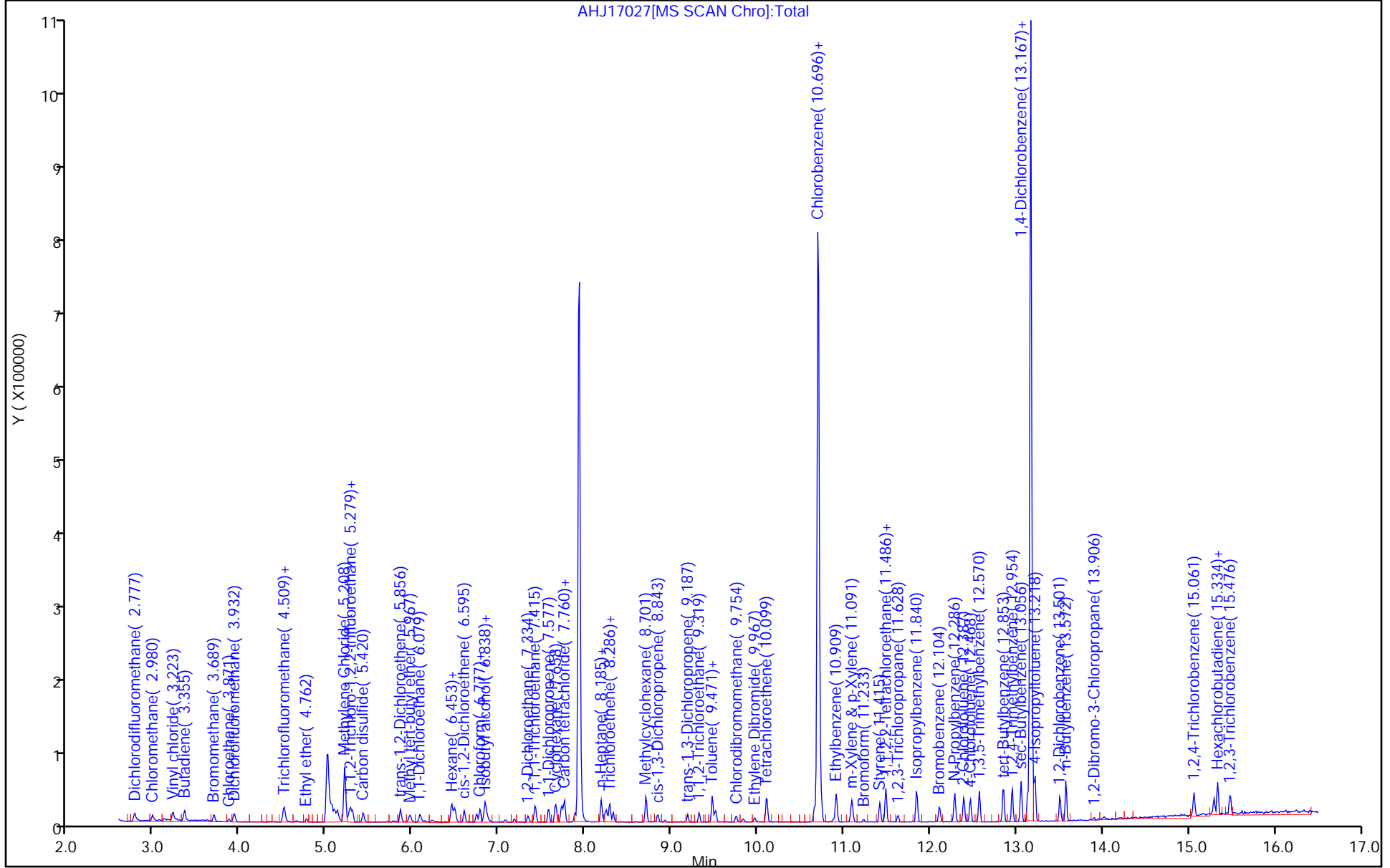
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 23

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine

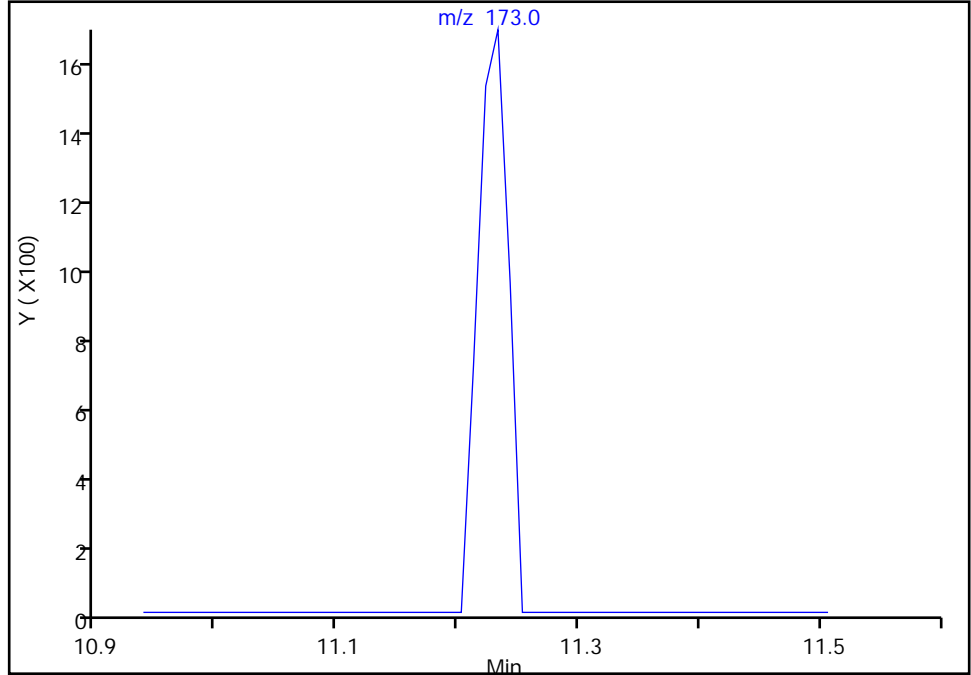
Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17027.D
Injection Date: 17-Oct-2018 15:33:30 Instrument ID: GCMS45
Lims ID: STD1
Client ID:
Operator ID: AI ALS Bottle#: 23 Worklist Smp#: 7
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 45_8260 Limit Group: MSV-8260-624
Column: Detector MS SCAN

105 Bromoform, CAS: 75-25-2

Signal: 1

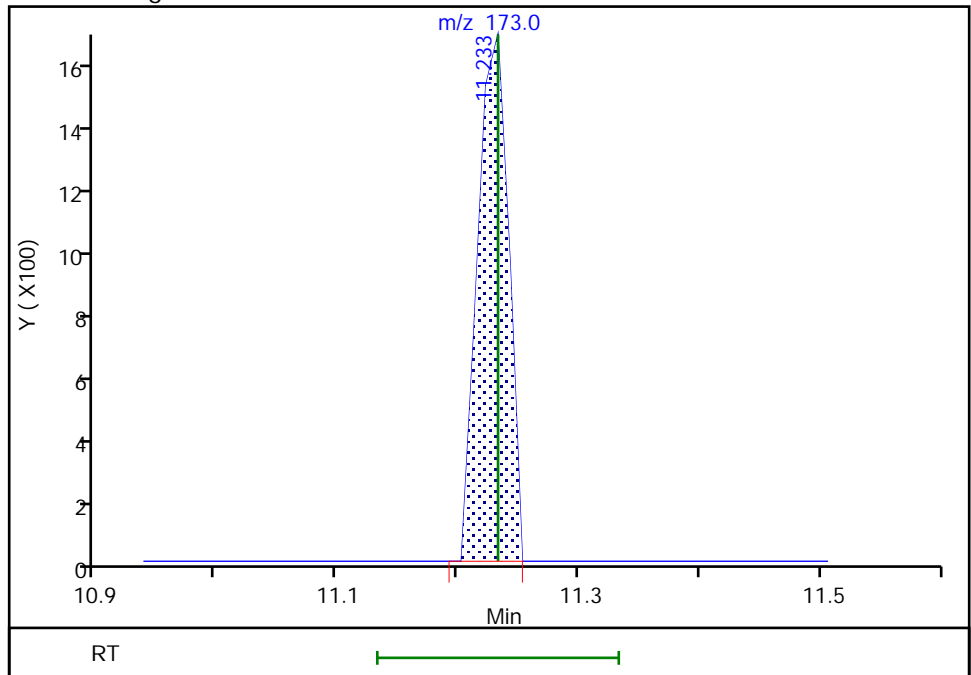
Not Detected
Expected RT: 11.23

Processing Integration Results



RT: 11.23
Area: 2948
Amount: 0.813960
Amount Units: ug/l

Manual Integration Results



Reviewer: ibasitasa, 18-Oct-2018 11:52:23
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17028.D
 Lims ID: STD2
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 17-Oct-2018 16:00:30 ALS Bottle#: 24 Worklist Smp#: 8
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-008
 Misc. Info.: STD2
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:30 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:57:17

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	132073	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	595175	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		39186			0.0- 36.8	6.6	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	86	490020	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		250771			21.9- 81.9	51.2	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	272752	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		422526			152- 212	155	
115	13.167	13.167	0.000		158600			31.1- 91.1	58.1	
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	98	25283	2.00	1.96	70- 130	100	
87	2.778	2.778	0.000		7919			2.5- 62.5	31.3	
50	2.778	2.778	0.000		3257			0.0- 40.2	12.9	
12 Chloromethane										
50	2.980	2.980	0.000	99	12217	2.00	1.91	70- 130	100	
52	2.980	2.980	0.000		4062			3.7- 63.7	33.2	
13 Vinyl chloride										
62	3.213	3.213	0.000	96	13606	2.00	2.03	70- 130	100	
64	3.213	3.213	0.000		5065			3.0- 63.0	37.2	
14 Butadiene										
54	3.345	3.355	-0.010	82	11664	2.00	2.04	70- 130	100	
53	3.355	3.355	0.000		8148			39- 99	69.9	
39	3.355	3.355	0.000		11119			62- 122	95.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.699	3.699	0.000	95	9249	2.00	1.84	70- 130	100	
94	3.699	3.699	0.000		11100			72- 132	120	
79	3.689	3.699	-0.010		2302			0.0- 50.2	24.9	
16 Chloroethane										
64	3.871	3.861	0.010	96	8716	2.00	2.25	70- 130	100	
66	3.871	3.861	0.010		2224			0.0- 59.6	25.5	
49	3.871	3.861	0.010		2235			2.2- 62.2	25.6	
17 Ethanol										
45	3.912	3.902	0.010	22	4364	100.0	79.6	70- 130	100	
46	3.902	3.902	0.000		1194			7.2- 67.2	27.4	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	96	26028	2.00	2.11	70- 130	100	
69	3.922	3.932	-0.010		8702			2.6- 62.6	33.4	
47	3.922	3.932	-0.010		2928			0.0- 41.5	11.2	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	98	37662	2.00	2.02	70- 130	100	
103	4.509	4.499	0.010		25101			33.3- 93.3	66.6	
66	4.509	4.499	0.010		3407			0.0- 39.9	9.0	
23 Acetonitrile										
41	4.519	4.509	0.010	26	7655	20.0	20.6	70- 130	100	
40	4.519	4.509	0.010		7999			26.9- 86.9	104	
39	4.509	4.509	0.000		1046			0.0- 52.0	13.7	
27 Ethyl ether										
59	4.762	4.762	0.000	97	5493	2.00	1.81	70- 130	100	
45	4.762	4.762	0.000		4007			43- 103	72.9	
74	4.762	4.762	0.000		3194			32.9- 92.9	58.1	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	96	11603	2.00	2.05	70- 130	100	
61	5.056	5.056	0.000		21413			159- 219	185	
98	5.066	5.056	0.010		7532			34.3- 94.3	64.9	
30 2-Methyl-2-propanol										
59	5.096	5.096	0.000	53	11697	20.0	19.2	70- 130	100	
57	0.000	5.096	0.000		0			0.0- 39.8		
41	5.096	5.096	0.000		2273			0.0- 56.4	19.4	
29 Iodomethane										
142	5.096	5.096	0.000	93	23181	2.00	1.98	70- 130	100	
127	5.096	5.096	0.000		12005			24.1- 84.1	51.8	
31 Acrylonitrile										
53	5.127	5.117	0.010	89	24187	20.0	20.4	70- 130	100	
52	5.127	5.117	0.010		21295			58- 118	88.0	
51	5.127	5.117	0.010		9723			11.2- 71.2	40.2	
32 Methylene Chloride										
84	5.208	5.208	0.000	95	33790	2.00	1.81	70- 130	100	
49	5.208	5.208	0.000		47842			108- 168	142	
51	5.208	5.208	0.000		15412			14.8- 74.8	45.6	
86	5.208	5.208	0.000		20880			34.0- 94.0	61.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	91	18010	2.00	1.99	70- 130	100	
151	5.279	5.269	0.010		15086			56- 116	83.8	
85	5.269	5.269	0.000		7624			14.8- 74.8	42.3	
158 Methyl acetate										
43	5.279	5.269	0.010	64	8586	4.00	3.59	70- 130	100	
74	5.289	5.269	0.020		1298			19.8- 19.8	15.1	
59	5.279	5.269	0.010		766			0.0- 42.9	8.9	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	85	15026	2.00	1.90	70- 130	100	
39	5.299	5.299	0.000		13037			50- 110	86.8	
76	5.299	5.299	0.000		4510			4.5- 64.5	30.0	
37 Carbon disulfide										
76	5.421	5.420	0.001	99	35945	2.00	2.03	70- 130	100	
78	5.431	5.420	0.011		3331			0.0- 39.4	9.3	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	95	12373	2.00	2.02	70- 130	100	
61	5.856	5.856	0.000		19889			119- 179	161	
98	5.856	5.856	0.000		7469			33.6- 93.6	60.4	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	97	21421	2.00	1.98	70- 130	100	
57	5.967	5.967	0.000		4187			0.0- 50.7	19.5	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	95	21498	2.00	2.03	70- 130	100	
65	6.079	6.079	0.000		6593			0.5- 60.5	30.7	
83	6.089	6.079	0.010		3096			0.0- 45.0	14.4	
42 Propionitrile										
54	6.099	6.089	0.010	92	8626	20.0	17.4	70- 130	100	
52	6.099	6.089	0.010		1314			0.0- 53.7	15.2	
55	0.000	6.089	0.000		0			0.0- 45.5		
43 Vinyl acetate										
43	6.220	6.210	0.010	97	11238	2.00	1.60	70- 130	100	
45 Hexane										
57	6.453	6.453	0.000	88	18536	2.00	1.83	70- 130	100	
86	6.443	6.453	-0.010		2582			0.0- 46.0	13.9	
47 Isopropyl ether										
45	6.484	6.484	0.000	97	32169	2.00	2.11	70- 130	100	
87	6.484	6.484	0.000		7643			0.0- 55.7	23.8	
59	6.484	6.484	0.000		2926			0.0- 40.7	9.1	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	81	13044	2.00	2.15	70- 130	100	
61	6.595	6.595	0.000		18052			113- 173	138	
98	6.595	6.595	0.000		8014			35.8- 95.8	61.4	
52 Chlorobromomethane										
128	6.737	6.737	0.000	78	5869	2.00	2.00	70- 130	100	
49	6.737	6.737	0.000		8280			125- 185	141	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
54 Chloroform										
83	6.777	6.777	0.000	93	25589	2.00	2.07	70- 130	100	
85	6.777	6.777	0.000		16725			35.3- 95.3	65.4	
47	6.777	6.777	0.000		6040			0.0- 54.5	23.6	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	97	24522	2.00	1.98	70- 130	100	
87	6.828	6.828	0.000		10164			9.5- 69.5	41.4	
57	6.828	6.828	0.000		6740			0.0- 59.8	27.5	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	93	21723	2.00	2.06	70- 130	100	
97	6.848	6.848	0.000		3890			0.0- 47.8	17.9	
59 Isobutyl alcohol										
43	6.869	6.858	0.011	91	11482	50.0	44.5	70- 130	100	
41	6.838	6.858	-0.020		24574			158- 218	214	
42	6.869	6.858	0.011		5732			24.6- 84.6	49.9	
60 Tetrahydrofuran										
42	7.071	7.061	0.010	84	4111	4.00	3.77	70- 130	100	
71	7.081	7.061	0.020		1387			5.2- 65.2	33.7	
72	7.071	7.061	0.010		1344			8.9- 68.9	32.7	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	96	17602	2.00	2.10	70- 130	100	
64	7.334	7.334	0.000		5286			1.8- 61.8	30.0	
49	7.334	7.334	0.000		3677			0.0- 52.2	20.9	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	95	30362	2.00	2.00	70- 130	100	
99	7.415	7.415	0.000		19905			35.9- 95.9	65.6	
61	7.415	7.415	0.000		11499			9.0- 69.0	37.9	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	94	18418	2.00	1.93	70- 130	100	
110	7.577	7.577	0.000		6978			8.5- 68.5	37.9	
77	7.577	7.577	0.000		5071			0.9- 60.9	27.5	
69 Cyclohexane										
56	7.658	7.658	0.000	92	21515	2.00	1.89	70- 130	100	
84	7.658	7.658	0.000		17944			49- 109	83.4	
69	7.658	7.658	0.000		5519			0.0- 56.1	25.7	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	28737	2.00	1.95	70- 130	100	
119	7.729	7.729	0.000		26801			65- 125	93.3	
82	7.729	7.729	0.000		5685			0.0- 51.0	19.8	
72 Benzene										
78	7.760	7.760	0.000	97	41622	2.00	2.09	70- 130	100	
51	7.760	7.760	0.000		8442			0.0- 53.4	20.3	
77	7.760	7.760	0.000		9060			0.0- 53.9	21.8	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	93	19375	2.00	2.04	70- 130	100	
87	7.881	7.881	0.000		4845			0.0- 56.3	25.0	
43	7.881	7.881	0.000		7123			4.4- 64.4	36.8	
55	7.881	7.881	0.000		6402			0.0- 58.6	33.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
75 n-Heptane										
43	8.185	8.185	0.000	91	20302	2.00	1.98	70- 130	100	
57	8.185	8.185	0.000		11412			25.7- 85.7	56.2	
71	8.185	8.185	0.000		10462			23.7- 83.7	51.5	
100	8.185	8.185	0.000		3629			0.0- 50.5	17.9	
77 Dibromomethane										
93	8.225	8.225	0.000	93	6599	2.00	2.07	70- 130	100	
95	8.225	8.225	0.000		5386			54- 114	81.6	
174	8.225	8.225	0.000		7022			78- 138	106	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	83	9342	2.00	2.03	70- 130	100	
62	8.246	8.246	0.000		8100			42- 102	86.7	
41	8.246	8.246	0.000		7476			45- 105	80.0	
79 Trichloroethene										
130	8.286	8.286	0.000	92	15873	2.00	1.95	70- 130	100	
95	8.286	8.286	0.000		16158			63- 123	102	
132	8.286	8.286	0.000		17106			71- 131	108	
60	8.276	8.286	-0.010		7372			20.6- 80.6	46.4	
81 Dichlorobromomethane										
83	8.317	8.327	-0.010	97	16364	2.00	1.94	70- 130	100	
85	8.327	8.327	0.000		10618			36.1- 96.1	64.9	
129	8.327	8.327	0.000		1911			0.0- 44.5	11.7	
159 Methylcyclohexane										
83	8.701	8.701	0.000	94	22901	2.00	2.00	70- 130	100	
55	8.701	8.701	0.000		20172			87.9- 87.9	88.1	
98	8.712	8.701	0.011		11295			19.2- 79.2	49.3	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	13282	2.00	1.89	70- 130	100	
39	8.833	8.843	-0.010		7197			21.3- 81.3	54.2	
77	8.843	8.843	0.000		4069			1.0- 61.0	30.6	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	94	6598	2.00	1.83	70- 130	100	
58	8.924	8.924	0.000		1948			8.0- 68.0	29.5	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	92	11166	2.00	1.79	70- 130	100	
39	9.187	9.187	0.000		5455			15.4- 75.4	48.9	
110	9.187	9.187	0.000		2325			0.0- 53.8	20.8	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	90	6791	2.00	2.14	70- 130	100	
97	9.319	9.319	0.000		8179			97- 157	120	
61	9.319	9.319	0.000		5667			62- 122	83.4	
90 Toluene										
91	9.471	9.471	0.000	97	50683	2.00	2.04	70- 130	100	
92	9.471	9.471	0.000		28363			29.8- 89.8	56.0	
65	9.471	9.471	0.000		5148			0.0- 43.1	10.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
92 Ethyl methacrylate										
69	9.512	9.511	0.001	78	5866	2.00	1.41	70- 130	100	
41	9.512	9.511	0.001		14005			151- 211	239	
99	9.512	9.511	0.001		992			0.0- 53.8	16.9	
91 1,3-Dichloropropane										
76	9.512	9.511	0.001	90	12891	2.00	2.00	70- 130	100	
78	9.512	9.511	0.001		4063			1.6- 61.6	31.5	
49	9.512	9.511	0.001		2017			0.0- 48.7	15.6	
93 2-Hexanone										
43	9.633	9.623	0.010	92	3411	2.00	1.33	70- 130	100	
58	9.633	9.623	0.010		1403			22.9- 82.9	41.1	
100	0.000	9.623	0.000		0			0.0- 41.9		
94 Chlorodibromomethane										
129	9.744	9.744	0.000	86	11018	2.00	1.77	70- 130	100	
127	9.744	9.744	0.000		8252			47- 107	74.9	
79	9.744	9.744	0.000		1516			0.0- 44.5	13.8	
208	0.000	9.744	0.000		0			0.0- 33.6		
96 Ethylene Dibromide										
107	9.967	9.957	0.010	98	8650	2.00	1.93	70- 130	100	
109	9.967	9.957	0.010		8495			64- 124	98.2	
81	0.000	9.957	0.000		0			0.0- 39.1		
97 Tetrachloroethene										
164	10.099	10.099	0.000	93	14655	2.00	2.05	70- 130	100	
166	10.109	10.099	0.010		18850			95- 155	129	
129	10.099	10.099	0.000		15017			64- 124	102	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	74	13470	2.00	1.87	70- 130	100	
133	10.656	10.656	0.000		13246			67- 127	98.3	
119	0.000	10.656	0.000		0			35.9- 95.9		
101 Chlorobenzene										
112	10.737	10.737	0.000	96	37146	2.00	2.03	70- 130	100	
77	10.727	10.737	-0.010		23693			19.9- 79.9	63.8	
114	10.737	10.737	0.000		11818			1.4- 61.4	31.8	
102 Ethylbenzene										
91	10.909	10.909	0.000	98	61856	2.00	1.97	70- 130	100	
106	10.909	10.909	0.000		19075			0.2- 60.2	30.8	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	95	21719	2.00	1.91	70- 130	100	
91	11.091	11.091	0.000		48771			180- 240	225	
105	11.091	11.091	0.000		10713			14.5- 74.5	49.3	
105 Bromoform										
173	11.233	11.233	0.000	91	5923	2.00	1.61	70- 130	100	
175	11.233	11.233	0.000		2761			19.7- 79.7	46.6	
79	0.000	11.233	0.000		0			0.0- 49.9		
252	0.000	11.233	0.000		0			0.0- 36.9		

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
106 Styrene										
104	11.415	11.415	0.000	94	28715	2.00	1.80	70- 130	100	
103	11.415	11.415	0.000		13508			17.4- 77.4	47.0	
78	11.415	11.415	0.000		12263			15.1- 75.1	42.7	
51	11.415	11.415	0.000		6501			0.0- 53.9	22.6	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	88	9302	2.00	1.97	70- 130	100	
85	11.486	11.486	0.000		5978			35.7- 95.7	64.3	
131	11.486	11.486	0.000		1290			0.0- 45.0	13.9	
108 o-Xylene										
106	11.486	11.486	0.000	97	21732	2.00	2.01	70- 130	100	
91	11.486	11.486	0.000		49529			197- 257	228	
105	11.486	11.486	0.000		8911			10.8- 70.8	41.0	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	66	2028	2.00	1.46	70- 130	100	
89	11.628	11.628	0.000		784			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	87	3320	2.00	1.80	70- 130	100	
77	11.628	11.628	0.000		2917			58- 118	87.9	
112 Isopropylbenzene										
105	11.841	11.841	0.000	95	64511	2.00	1.92	70- 130	100	
120	11.841	11.841	0.000		15766			0.0- 55.6	24.4	
77	11.841	11.841	0.000		9808			0.0- 45.8	15.2	
113 Bromobenzene										
156	12.114	12.104	0.010	89	15352	2.00	1.95	70- 130	100	
77	12.104	12.104	0.000		18997			91- 151	124	
158	12.114	12.104	0.010		14809			67- 127	96.5	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	68718	2.00	1.88	70- 130	100	
120	12.286	12.286	0.000		16641			0.0- 54.5	24.2	
65	12.286	12.286	0.000		8329			0.0- 42.2	12.1	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	96	44046	2.00	1.96	70- 130	100	
126	12.387	12.387	0.000		15591			7.2- 67.2	35.4	
75	0.000	12.387	0.000		0			0.0- 32.9		
116 4-Chlorotoluene										
91	12.468	12.468	0.000	96	43948	2.00	1.95	70- 130	100	
126	12.468	12.468	0.000		16031			7.3- 67.3	36.5	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	53554	2.00	1.93	70- 130	100	
120	12.570	12.570	0.000		25140			18.4- 78.4	46.9	
91	12.570	12.570	0.000		6211			0.0- 41.8	11.6	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	93	52443	2.00	1.94	70- 130	100	
91	12.853	12.853	0.000		35053			41- 101	66.8	
134	12.853	12.853	0.000		12003			0.0- 54.6	22.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	96	53154	2.00	1.93	70- 130	100	
120	12.954	12.954	0.000		23179			15.7- 75.7	43.6	
77	12.944	12.954	-0.010		6389			0.0- 42.4	12.0	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	94	76113	2.00	1.98	70- 130	100	
134	13.056	13.056	0.000		15753			0.0- 52.3	20.7	
91	13.056	13.056	0.000		13800			0.0- 47.8	18.1	
122 1,3-Dichlorobenzene										
146	13.127	13.127	0.000	94	35332	2.00	2.01	70- 130	100	
111	13.127	13.127	0.000		14777			10.6- 70.6	41.8	
148	13.137	13.127	0.010		22301			34.6- 94.6	63.1	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	95	36003	2.00	2.07	70- 130	100	
111	13.187	13.187	0.000		16448			8.8- 68.8	45.7	
148	13.187	13.187	0.000		22902			35.7- 95.7	63.6	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	69298	2.00	1.99	70- 130	100	
134	13.218	13.218	0.000		18808			0.0- 57.7	27.1	
91	13.218	13.218	0.000		18098			0.0- 56.0	26.1	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	94	28366	2.00	1.91	70- 130	100	
111	13.501	13.501	0.000		11668			10.1- 70.1	41.1	
148	13.511	13.501	0.010		19916			32.6- 92.6	70.2	
128 n-Butylbenzene										
91	13.572	13.572	0.000	98	57634	2.00	1.93	70- 130	100	
92	13.572	13.572	0.000		30604			24.4- 84.4	53.1	
134	13.572	13.572	0.000		15507			0.0- 59.7	26.9	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	1	2170	2.00	1.72	70- 130	100	
155	13.906	13.896	0.010		1535			65- 125	70.7	
157	13.896	13.896	0.000		2189			86- 146	101	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	19995	2.00	1.81	70- 130	100	
182	15.061	15.061	0.000		19418			67- 127	97.1	
145	15.061	15.061	0.000		7682			4.2- 64.2	38.4	
134 Naphthalene										
128	15.294	15.294	0.000	96	38706	2.00	1.85	70- 130	100	
127	15.294	15.294	0.000		4527			0.0- 42.9	11.7	
129	15.294	15.294	0.000		4338			0.0- 41.7	11.2	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	92	17388	2.00	2.03	70- 130	100	
223	15.334	15.334	0.000		10644			33.1- 93.1	61.2	
227	15.334	15.334	0.000		10505			33.2- 93.2	60.4	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	20955	2.00	2.10	70- 130	100	
182	15.476	15.476	0.000		18932			64- 124	90.3	
145	15.476	15.476	0.000		7048			5.8- 65.8	33.6	

S 144 Xylenes, Total

1

0

3.92

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

S 145 1,2-Dichloroethene, Total

1 0 4.17

Reagents:

VMWNU8260002_00628

Amount Added: 10.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17029.D
 Lims ID: STD5
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 17-Oct-2018 16:27:30 ALS Bottle#: 25 Worklist Smp#: 9
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-009
 Misc. Info.: STD5
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:34 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 12:05:00

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	123218	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	569759	25.0	25.0	70- 130	100	
97	7.922	7.932	-0.010		37109			0.0- 36.8	6.5	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	86	455850	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		224654			21.9- 81.9	49.3	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	254321	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		410426			152- 212	161	
115	13.167	13.167	0.000		150639			31.1- 91.1	59.2	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	92	35076	5.00	5.06	70- 130	100	
111	6.889	6.889	0.000		36552			74- 134	104	
192	6.889	6.889	0.000		6057			0.0- 46.6	17.3	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.274	7.274	0.000	96	34889	5.00	5.01	70- 130	100	
67	7.274	7.274	0.000		16640			15.9- 75.9	47.7	
102	7.274	7.274	0.000		5112			0.0- 45.2	14.7	
\$ 8 Toluene-d8 (Surr)										
98	9.420	9.410	0.010	92	108807	5.00	5.31	70- 130	100	
100	9.420	9.410	0.010		75102			40- 100	69.0	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	92	44664	5.00	5.31	70- 130	100	
174	11.891	11.891	0.000		38548			62- 122	86.3	
176	11.891	11.891	0.000		38086			59- 119	85.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	99	69084	5.00	5.59	70- 130	100	
87	2.778	2.778	0.000		21693			2.5- 62.5	31.4	
50	2.778	2.778	0.000		7510			0.0- 40.2	10.9	
12 Chloromethane										
50	2.980	2.980	0.000	99	32831	5.00	5.36	70- 130	100	
52	2.980	2.980	0.000		10038			3.7- 63.7	30.6	
13 Vinyl chloride										
62	3.223	3.213	0.010	96	33600	5.00	5.24	70- 130	100	
64	3.223	3.213	0.010		11617			3.0- 63.0	34.6	
14 Butadiene										
54	3.355	3.355	0.000	86	29072	5.00	5.32	70- 130	100	
53	3.355	3.355	0.000		21008			39- 99	72.3	
39	3.355	3.355	0.000		27090			62- 122	93.2	
15 Bromomethane										
96	3.699	3.699	0.000	93	24842	5.00	5.16	70- 130	100	
94	3.699	3.699	0.000		26579			72- 132	107	
79	3.699	3.699	0.000		5347			0.0- 50.2	21.5	
16 Chloroethane										
64	3.871	3.861	0.010	97	19090	5.00	5.14	70- 130	100	
66	3.871	3.861	0.010		6193			0.0- 59.6	32.4	
49	3.871	3.861	0.010		6192			2.2- 62.2	32.4	
17 Ethanol										
45	3.902	3.902	0.000	94	9924	200.0	194.0	70- 130	100	
46	3.902	3.902	0.000		2872			7.2- 67.2	28.9	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	61957	5.00	5.25	70- 130	100	
69	3.932	3.932	0.000		19791			2.6- 62.6	31.9	
47	3.932	3.932	0.000		6874			0.0- 41.5	11.1	
21 Acrolein										
56	4.499	4.499	0.000	1	892	5.00	5.28	70- 130	100	a
55	0.000	4.499	0.000		0			32.9- 92.9		a
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	98	96759	5.00	5.42	70- 130	100	
103	4.499	4.499	0.000		66651			33.3- 93.3	68.9	
66	4.499	4.499	0.000		9570			0.0- 39.9	9.9	
23 Acetonitrile										
41	4.519	4.509	0.010	99	19257	50.0	54.3	70- 130	100	
40	4.519	4.509	0.010		14306			26.9- 86.9	74.3	
39	4.509	4.509	0.000		3545			0.0- 52.0	18.4	
25 Acetone										
43	4.641	4.631	0.010	89	6880	5.00	5.56	70- 130	100	a
58	0.000	4.631	0.000		0			0.0- 52.7		a
27 Ethyl ether										
59	4.762	4.762	0.000	93	13894	5.00	4.79	70- 130	100	
45	4.762	4.762	0.000		9863			43- 103	71.0	
74	4.762	4.762	0.000		8302			32.9- 92.9	59.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	94	28909	5.00	5.33	70- 130	100	
61	5.056	5.056	0.000		55483			159- 219	192	
98	5.066	5.056	0.010		18111			34.3- 94.3	62.6	
30 2-Methyl-2-propanol										
59	5.096	5.096	0.000	53	30140	50.0	53.2	70- 130	100	
57	5.096	5.096	0.000		2912			0.0- 39.8	9.7	
41	5.096	5.096	0.000		8313			0.0- 56.4	27.6	
29 Iodomethane										
142	5.096	5.096	0.000	95	57576	5.00	5.13	70- 130	100	
127	5.096	5.096	0.000		31386			24.1- 84.1	54.5	
31 Acrylonitrile										
53	5.117	5.117	0.000	96	62881	50.0	54.0	70- 130	100	
52	5.117	5.117	0.000		57577			58- 118	91.6	
51	5.117	5.117	0.000		24636			11.2- 71.2	39.2	
32 Methylene Chloride										
84	5.208	5.208	0.000	98	43775	5.00	4.43	70- 130	100	
49	5.208	5.208	0.000		69548			108- 168	159	
51	5.208	5.208	0.000		20747			14.8- 74.8	47.4	
86	5.208	5.208	0.000		30704			34.0- 94.0	70.1	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	92	47130	5.00	5.44	70- 130	100	
151	5.279	5.269	0.010		40084			56- 116	85.0	
85	5.269	5.269	0.000		21362			14.8- 74.8	45.3	
158 Methyl acetate										
43	5.269	5.269	0.000	64	24702	10.0	10.8	70- 130	100	
74	5.269	5.269	0.000		3804			19.8- 19.8	15.4	
59	5.269	5.269	0.000		2378			0.0- 42.9	9.6	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	88	38803	5.00	5.12	70- 130	100	
39	5.299	5.299	0.000		30972			50- 110	79.8	
76	5.299	5.299	0.000		12529			4.5- 64.5	32.3	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	88828	5.00	5.25	70- 130	100	
78	5.431	5.420	0.011		7504			0.0- 39.4	8.4	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	95	30173	5.00	5.16	70- 130	100	
61	5.856	5.856	0.000		48062			119- 179	159	
98	5.856	5.856	0.000		20753			33.6- 93.6	68.8	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	95	52984	5.00	5.11	70- 130	100	
57	5.967	5.967	0.000		10654			0.0- 50.7	20.1	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	97	52550	5.00	5.17	70- 130	100	
65	6.079	6.079	0.000		15107			0.5- 60.5	28.7	
83	6.079	6.079	0.000		7528			0.0- 45.0	14.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.099	6.089	0.010	98	23785	50.0	50.2	70- 130	100	
52	6.099	6.089	0.010		4669			0.0- 53.7	19.6	
55	6.089	6.089	0.000		3182			0.0- 45.5	13.4	
43 Vinyl acetate										
43	6.210	6.210	0.000	97	25093	4.00	3.74	70- 130	100	
86	6.220	6.210	0.010		1485			0.0- 38.1	5.9	
45 Hexane										
57	6.453	6.453	0.000	92	50764	5.00	5.25	70- 130	100	
86	6.453	6.453	0.000		7456			0.0- 46.0	14.7	
46 2-Butanone (MEK)										
72	6.484	6.474	0.010	1	830	5.00	4.89	70- 130	100	M
43	0.000	6.474	0.000		0			3898- 3958		M
57	0.000	6.474	0.000		0			2498- 2558		
47 Isopropyl ether										
45	6.484	6.484	0.000	94	75697	5.00	5.18	70- 130	100	
87	6.484	6.484	0.000		18094			0.0- 55.7	23.9	
59	6.484	6.484	0.000		7327			0.0- 40.7	9.7	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	83	30981	5.00	5.32	70- 130	100	
61	6.595	6.595	0.000		42205			113- 173	136	
98	6.595	6.595	0.000		19246			35.8- 95.8	62.1	
52 Chlorobromomethane										
128	6.737	6.737	0.000	84	13643	5.00	4.85	70- 130	100	
49	6.737	6.737	0.000		21995			125- 185	161	
54 Chloroform										
83	6.777	6.777	0.000	93	60080	5.00	5.07	70- 130	100	
85	6.777	6.777	0.000		39945			35.3- 95.3	66.5	
47	6.777	6.777	0.000		15164			0.0- 54.5	25.2	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	97	55846	5.00	4.71	70- 130	100	
87	6.828	6.828	0.000		23415			9.5- 69.5	41.9	
57	6.828	6.828	0.000		17202			0.0- 59.8	30.8	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	91	52599	5.00	5.21	70- 130	100	
97	6.848	6.848	0.000		9234			0.0- 47.8	17.6	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	96	31265	125.0	129.9	70- 130	100	
41	6.848	6.858	-0.010		57724			158- 218	185	
42	6.858	6.858	0.000		15717			24.6- 84.6	50.3	
60 Tetrahydrofuran										
42	7.071	7.061	0.010	82	10540	10.0	10.1	70- 130	100	
71	7.071	7.061	0.010		3847			5.2- 65.2	36.5	
72	7.061	7.061	0.000		4062			8.9- 68.9	38.5	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	97	40338	5.00	5.02	70- 130	100	
64	7.334	7.334	0.000		13847			1.8- 61.8	34.3	
49	7.334	7.334	0.000		8723			0.0- 52.2	21.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	76244	5.00	5.25	70- 130	100	
99	7.415	7.415	0.000		48542			35.9- 95.9	63.7	
61	7.415	7.415	0.000		29287			9.0- 69.0	38.4	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	97	48906	5.00	5.35	70- 130	100	
110	7.577	7.577	0.000		16766			8.5- 68.5	34.3	
77	7.577	7.577	0.000		13548			0.9- 60.9	27.7	
69 Cyclohexane										
56	7.658	7.658	0.000	93	60166	5.00	5.51	70- 130	100	
84	7.658	7.658	0.000		45871			49- 109	76.2	
69	7.658	7.658	0.000		15155			0.0- 56.1	25.2	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	97	71707	5.00	5.08	70- 130	100	
119	7.729	7.729	0.000		69742			65- 125	97.3	
82	7.729	7.729	0.000		14463			0.0- 51.0	20.2	
72 Benzene										
78	7.760	7.760	0.000	98	99257	5.00	5.21	70- 130	100	
51	7.760	7.760	0.000		23162			0.0- 53.4	23.3	
77	7.760	7.760	0.000		23549			0.0- 53.9	23.7	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	95	41673	5.00	4.59	70- 130	100	
87	7.881	7.881	0.000		11435			0.0- 56.3	27.4	
43	7.881	7.881	0.000		14660			4.4- 64.4	35.2	
55	7.881	7.881	0.000		13395			0.0- 58.6	32.1	
75 n-Heptane										
43	8.185	8.185	0.000	90	50212	5.00	5.11	70- 130	100	
57	8.185	8.185	0.000		27801			25.7- 85.7	55.4	
71	8.185	8.185	0.000		26156			23.7- 83.7	52.1	
100	8.185	8.185	0.000		8898			0.0- 50.5	17.7	
77 Dibromomethane										
93	8.225	8.225	0.000	94	15507	5.00	5.09	70- 130	100	
95	8.225	8.225	0.000		12418			54- 114	80.1	
174	8.225	8.225	0.000		16386			78- 138	106	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	85	22175	5.00	5.04	70- 130	100	
62	8.246	8.246	0.000		16335			42- 102	73.7	
41	8.246	8.246	0.000		17256			45- 105	77.8	
79 Trichloroethene										
130	8.286	8.286	0.000	94	40189	5.00	5.17	70- 130	100	
95	8.286	8.286	0.000		38984			63- 123	97.0	
132	8.286	8.286	0.000		39611			71- 131	98.6	
60	8.286	8.286	0.000		19424			20.6- 80.6	48.3	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	97	38893	5.00	4.82	70- 130	100	
85	8.327	8.327	0.000		26336			36.1- 96.1	67.7	
129	8.327	8.327	0.000		4992			0.0- 44.5	12.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
159 Methylcyclohexane										
83	8.701	8.701	0.000	92	58745	5.00	5.35	70- 130	100	
55	8.701	8.701	0.000		51307			87.9- 87.9	87.3	
98	8.711	8.701	0.010		29389			19.2- 79.2	50.0	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	92	32529	5.00	4.99	70- 130	100	
39	8.833	8.843	-0.010		19260			21.3- 81.3	59.2	
77	8.843	8.843	0.000		9785			1.0- 61.0	30.1	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	96	17145	5.00	5.13	70- 130	100	
100	8.924	8.924	0.000		2297			0.0- 44.9	13.4	
58	8.924	8.924	0.000		5914			8.0- 68.0	34.5	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	28919	5.00	4.65	70- 130	100	
39	9.187	9.187	0.000		13536			15.4- 75.4	46.8	
110	9.187	9.187	0.000		6886			0.0- 53.8	23.8	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	95	15530	5.00	5.25	70- 130	100	
97	9.319	9.319	0.000		19648			97- 157	127	
61	9.319	9.319	0.000		14539			62- 122	93.6	
90 Toluene										
91	9.471	9.471	0.000	97	123555	5.00	5.33	70- 130	100	
92	9.471	9.471	0.000		71346			29.8- 89.8	57.7	
65	9.471	9.471	0.000		15182			0.0- 43.1	12.3	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	79	17418	5.00	4.51	70- 130	100	
41	9.511	9.511	0.000		38008			151- 211	218	
99	9.511	9.511	0.000		3825			0.0- 53.8	22.0	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	89	31776	5.00	5.31	70- 130	100	
78	9.511	9.511	0.000		9794			1.6- 61.6	30.8	
49	9.511	9.511	0.000		6311			0.0- 48.7	19.9	
93 2-Hexanone										
43	9.623	9.623	0.000	96	11005	5.00	4.62	70- 130	100	
58	9.623	9.623	0.000		5757			22.9- 82.9	52.3	
100	9.623	9.623	0.000		1378			0.0- 41.9	12.5	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	26919	5.00	4.66	70- 130	100	
127	9.744	9.744	0.000		21639			47- 107	80.4	
79	9.744	9.744	0.000		3887			0.0- 44.5	14.4	
208	9.754	9.744	0.010		741			0.0- 33.6	2.8	
96 Ethylene Dibromide										
107	9.967	9.957	0.010	96	22489	5.00	5.41	70- 130	100	
109	9.957	9.957	0.000		20595			64- 124	91.6	
81	9.957	9.957	0.000		1142			0.0- 39.1	5.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
97 Tetrachloroethene										
164	10.109	10.099	0.010	95	35542	5.00	5.33	70- 130	100	
166	10.109	10.099	0.010		47676			95- 155	134	
129	10.099	10.099	0.000		36610			64- 124	103	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	80	32720	5.00	4.89	70- 130	100	
133	10.656	10.656	0.000		31362			67- 127	95.8	
119	10.706	10.656	0.050		157471			35.9- 95.9	481	
101 Chlorobenzene										
112	10.737	10.737	0.000	96	86535	5.00	5.09	70- 130	100	
77	10.727	10.737	-0.010		49358			19.9- 79.9	57.0	
114	10.737	10.737	0.000		28649			1.4- 61.4	33.1	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	151758	5.00	5.19	70- 130	100	
106	10.909	10.909	0.000		46480			0.2- 60.2	30.6	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	56018	5.00	5.30	70- 130	100	
91	11.091	11.091	0.000		115375			180- 240	206	
105	11.091	11.091	0.000		24691			14.5- 74.5	44.1	
105 Bromoform										
173	11.233	11.233	0.000	95	15467	5.00	4.51	70- 130	100	
175	11.233	11.233	0.000		7355			19.7- 79.7	47.6	
79	11.223	11.233	-0.010		2389			0.0- 49.9	15.4	
252	11.233	11.233	0.000		987			0.0- 36.9	6.4	
106 Styrene										
104	11.415	11.415	0.000	94	71887	5.00	4.83	70- 130	100	
103	11.415	11.415	0.000		34425			17.4- 77.4	47.9	
78	11.415	11.415	0.000		31969			15.1- 75.1	44.5	
51	11.415	11.415	0.000		16433			0.0- 53.9	22.9	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	95	23554	5.00	5.34	70- 130	100	
85	11.476	11.486	-0.010		15674			35.7- 95.7	66.5	
131	11.486	11.486	0.000		3222			0.0- 45.0	13.7	
108 o-Xylene										
106	11.486	11.486	0.000	98	53497	5.00	5.31	70- 130	100	
91	11.486	11.486	0.000		121986			197- 257	228	
105	11.486	11.486	0.000		22665			10.8- 70.8	42.4	
111 trans-1,4-Dichloro-2-butene										
53	11.638	11.628	0.010	69	5529	5.00	4.27	70- 130	100	
89	11.628	11.628	0.000		3267			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	9309	5.00	5.43	70- 130	100	
77	11.628	11.628	0.000		7260			58- 118	78.0	
112 Isopropylbenzene										
105	11.840	11.841	-0.001	96	165832	5.00	5.30	70- 130	100	
120	11.840	11.841	-0.001		41777			0.0- 55.6	25.2	
77	11.840	11.841	-0.001		25421			0.0- 45.8	15.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
113 Bromobenzene										
156	12.114	12.104	0.010	88	37623	5.00	5.12	70- 130	100	
77	12.104	12.104	0.000		45054			91- 151	120	
158	12.104	12.104	0.000		36412			67- 127	96.8	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	186018	5.00	5.45	70- 130	100	
120	12.286	12.286	0.000		45624			0.0- 54.5	24.5	
65	12.286	12.286	0.000		21329			0.0- 42.2	11.5	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	96	107856	5.00	5.13	70- 130	100	
126	12.387	12.387	0.000		38691			7.2- 67.2	35.9	
75	12.387	12.387	0.000		2443			0.0- 32.9	2.3	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	110243	5.00	5.23	70- 130	100	
126	12.468	12.468	0.000		39811			7.3- 67.3	36.1	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	133565	5.00	5.16	70- 130	100	
120	12.570	12.570	0.000		64151			18.4- 78.4	48.0	
91	12.570	12.570	0.000		16389			0.0- 41.8	12.3	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	91	131088	5.00	5.20	70- 130	100	
91	12.843	12.853	-0.010		95229			41- 101	72.6	
134	12.853	12.853	0.000		32515			0.0- 54.6	24.8	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	97	134773	5.00	5.25	70- 130	100	
120	12.954	12.954	0.000		59682			15.7- 75.7	44.3	
77	12.954	12.954	0.000		15643			0.0- 42.4	11.6	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	197075	5.00	5.51	70- 130	100	
134	13.056	13.056	0.000		41359			0.0- 52.3	21.0	
91	13.056	13.056	0.000		33294			0.0- 47.8	16.9	
122 1,3-Dichlorobenzene										
146	13.127	13.127	0.000	97	82167	5.00	5.02	70- 130	100	
111	13.127	13.127	0.000		32215			10.6- 70.6	39.2	
148	13.137	13.127	0.010		51819			34.6- 94.6	63.1	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	96	81621	5.00	5.03	70- 130	100	
111	13.187	13.187	0.000		34681			8.8- 68.8	42.5	
148	13.187	13.187	0.000		52335			35.7- 95.7	64.1	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	173527	5.00	5.34	70- 130	100	
134	13.218	13.218	0.000		45889			0.0- 57.7	26.4	
91	13.218	13.218	0.000		43911			0.0- 56.0	25.3	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	98	71302	5.00	5.15	70- 130	100	
111	13.501	13.501	0.000		28452			10.1- 70.1	39.9	
148	13.511	13.501	0.010		45834			32.6- 92.6	64.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
128 n-Butylbenzene										
91	13.572	13.572	0.000	97	149783	5.00	5.38	70- 130	100	
92	13.572	13.572	0.000		80702			24.4- 84.4	53.9	
134	13.572	13.572	0.000		43854			0.0- 59.7	29.3	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	84	5927	5.00	5.04	70- 130	100	
155	13.896	13.896	0.000		4892			65- 125	82.5	
157	13.896	13.896	0.000		6370			86- 146	107	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	94	49848	5.00	4.84	70- 130	100	
182	15.061	15.061	0.000		47084			67- 127	94.5	
145	15.061	15.061	0.000		17447			4.2- 64.2	35.0	
134 Naphthalene										
128	15.294	15.294	0.000	96	96756	5.00	4.97	70- 130	100	
127	15.294	15.294	0.000		11942			0.0- 42.9	12.3	
129	15.294	15.294	0.000		10391			0.0- 41.7	10.7	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	93	43103	5.00	5.40	70- 130	100	
223	15.334	15.334	0.000		26759			33.1- 93.1	62.1	
227	15.334	15.334	0.000		26706			33.2- 93.2	62.0	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	95	45929	5.00	4.94	70- 130	100	
182	15.476	15.476	0.000		41948			64- 124	91.3	
145	15.476	15.476	0.000		17315			5.8- 65.8	37.7	
S 144 Xylenes, Total										
1				0					10.6	
S 145 1,2-Dichloroethene, Total										
1				0					10.5	

QC Flag Legend

Review Flags

- M - Manually Integrated
- a - User Assigned ID

Reagents:

VMWNUSURR50_00211	Amount Added: 1.00	Units: uL	
VMWNU8260CCV1_01080	Amount Added: 1.00	Units: uL	
VMWNU8260IS_00216	Amount Added: 5.00	Units: uL	Run Reagent

TestAmerica Irvine

Data File: \\ChromNAI\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17029.D

Injection Date: 17-Oct-2018 16:27:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD5

Worklist Smp#: 9

Client ID:

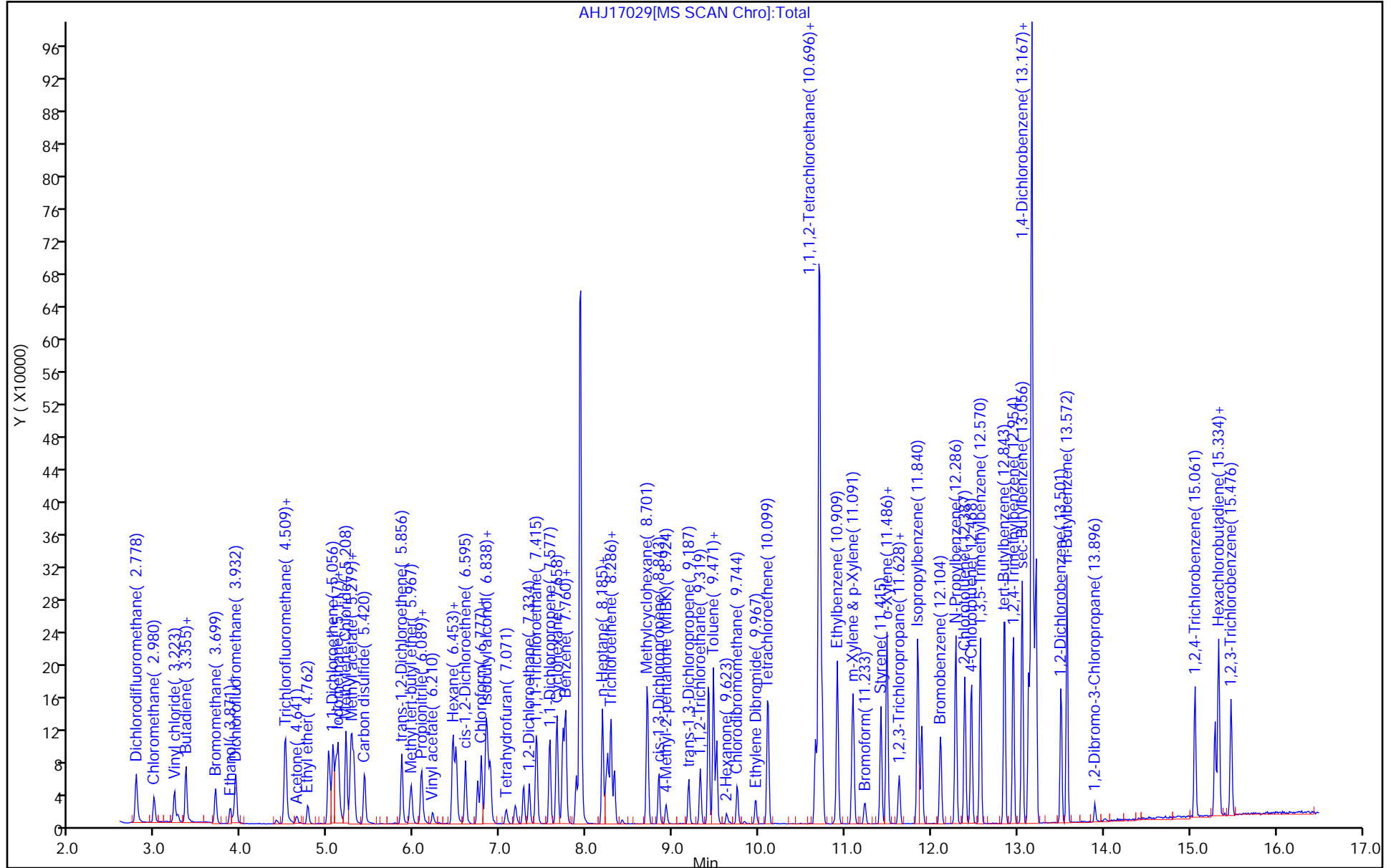
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 25

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine

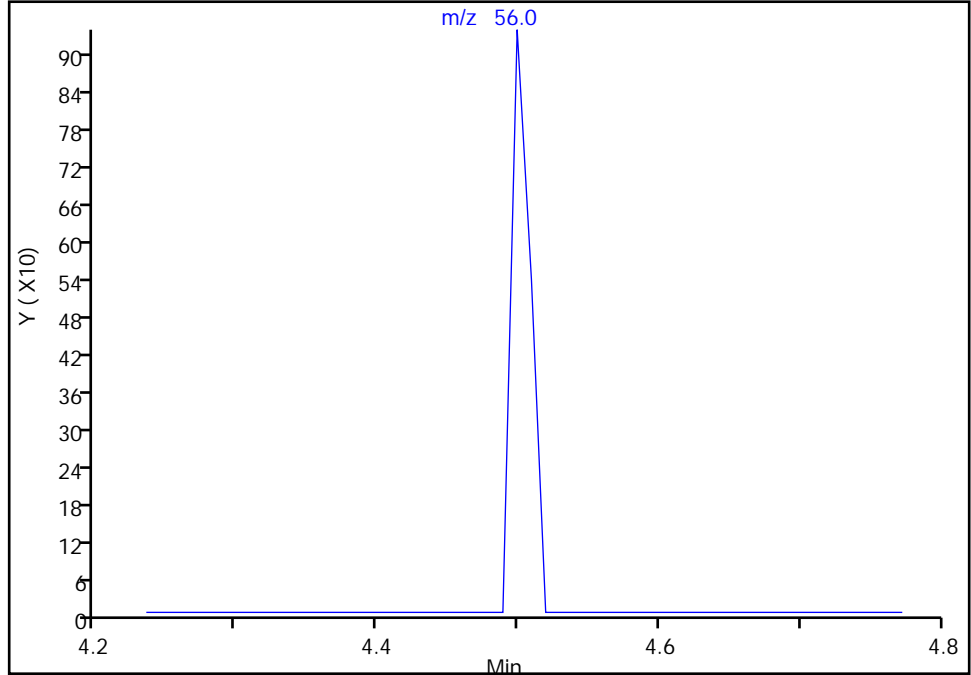
Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17029.D
Injection Date: 17-Oct-2018 16:27:30 Instrument ID: GCMS45
Lims ID: STD5
Client ID:
Operator ID: AI ALS Bottle#: 25 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 45_8260 Limit Group: MSV-8260-624
Column: Detector MS SCAN

21 Acrolein, CAS: 107-02-8

Signal: 1

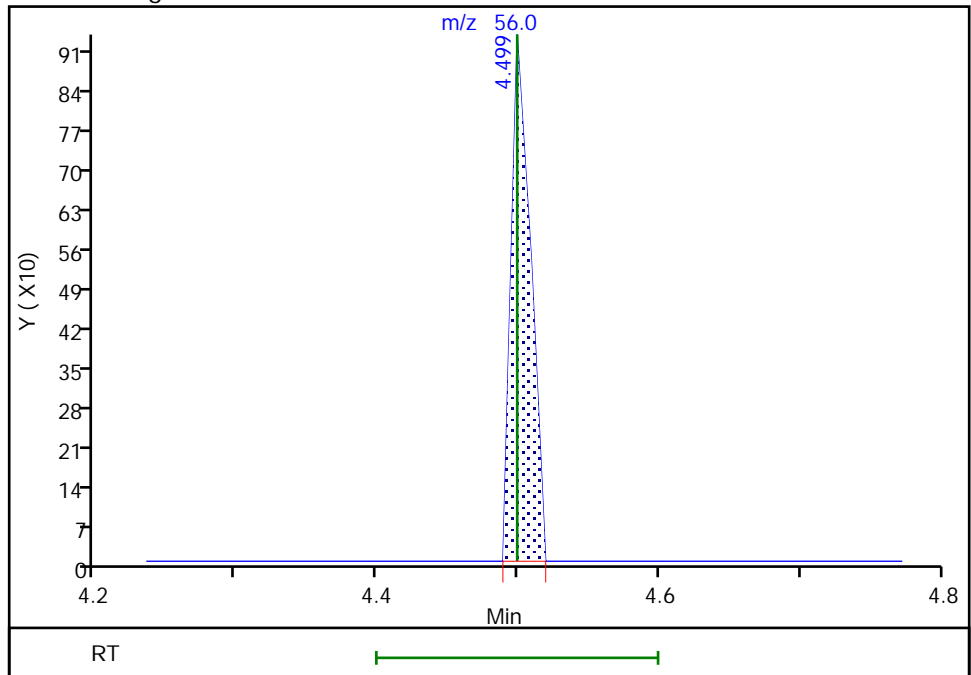
Not Detected
Expected RT: 4.50

Processing Integration Results



Manual Integration Results

RT: 4.50
Area: 892
Amount: 5.277255
Amount Units: ug/l



TestAmerica Irvine

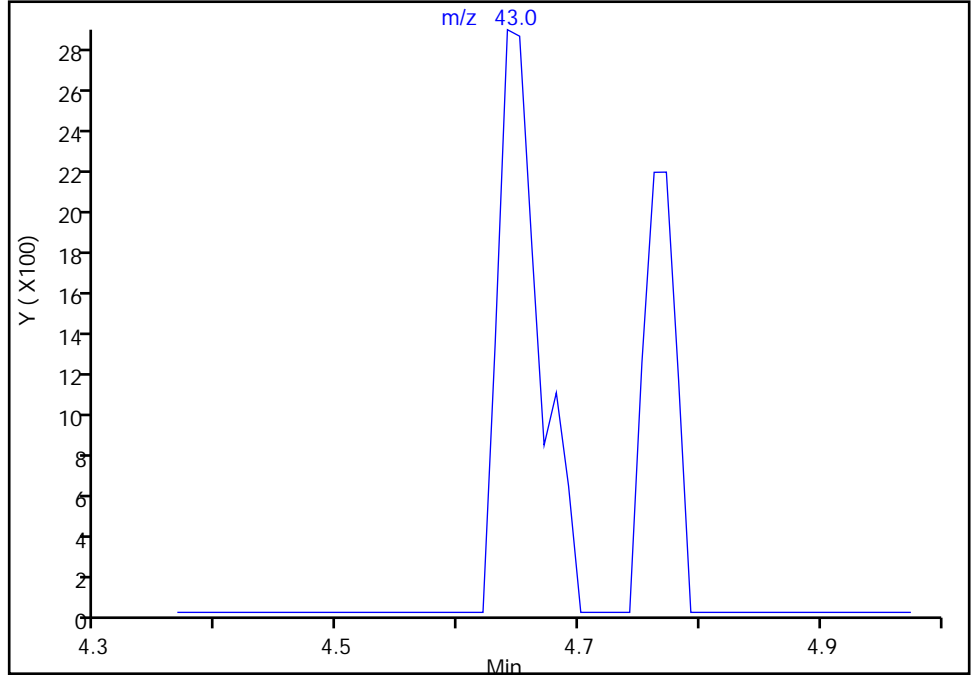
Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17029.D
Injection Date: 17-Oct-2018 16:27:30 Instrument ID: GCMS45
Lims ID: STD5
Client ID:
Operator ID: AI ALS Bottle#: 25 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 45_8260 Limit Group: MSV-8260-624
Column: Detector MS SCAN

25 Acetone, CAS: 67-64-1

Signal: 1

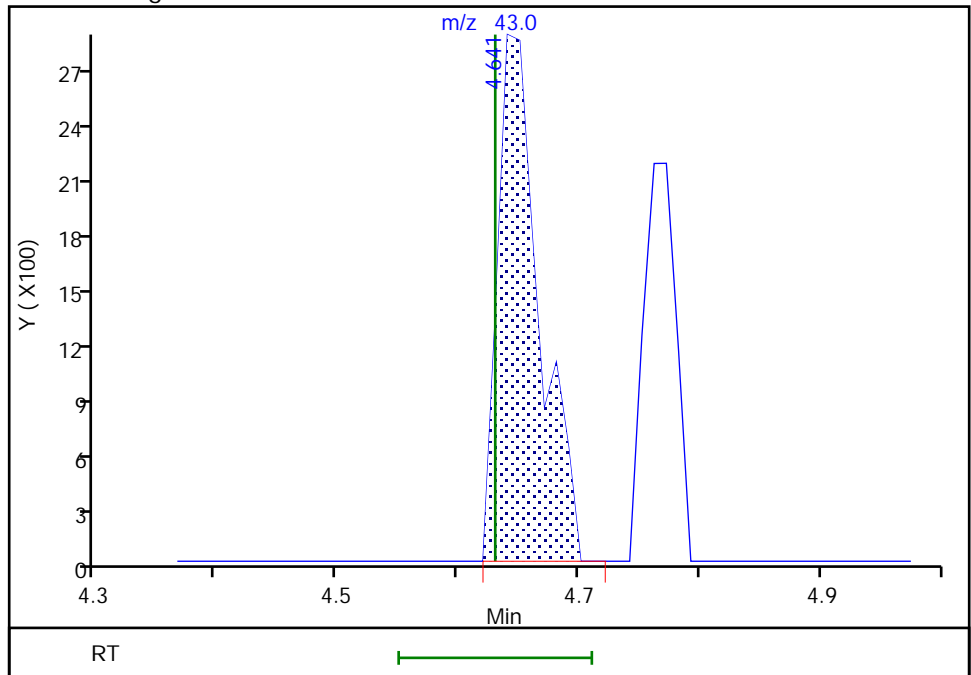
Not Detected
Expected RT: 4.63

Processing Integration Results



Manual Integration Results

RT: 4.64
Area: 6880
Amount: 5.561380
Amount Units: ug/l



TestAmerica Irvine

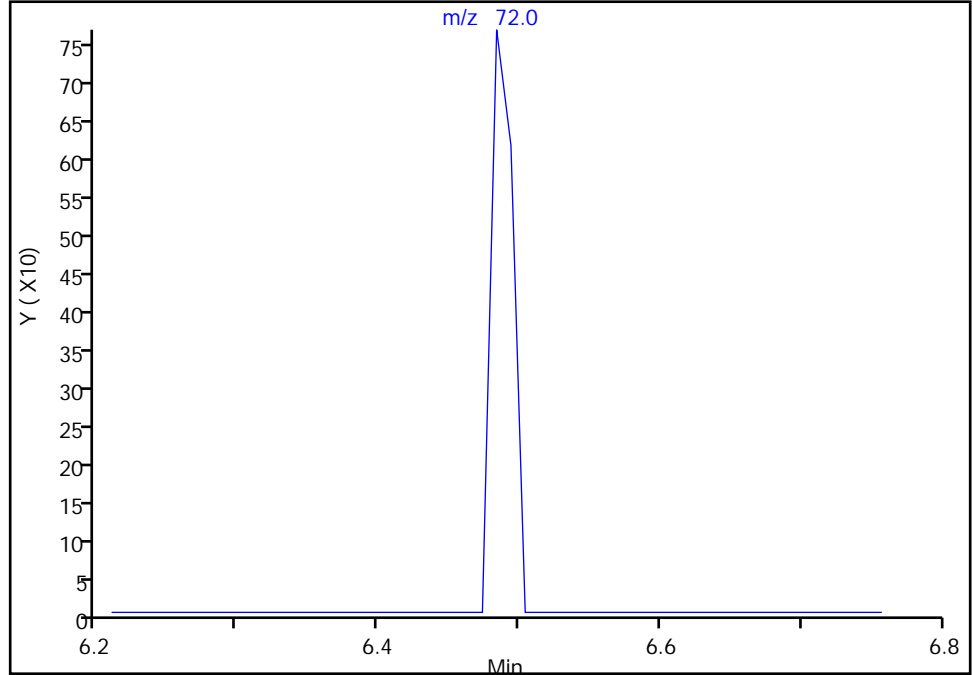
Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17029.D
Injection Date: 17-Oct-2018 16:27:30 Instrument ID: GCMS45
Lims ID: STD5
Client ID:
Operator ID: AI ALS Bottle#: 25 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 45_8260 Limit Group: MSV-8260-624
Column: Detector MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

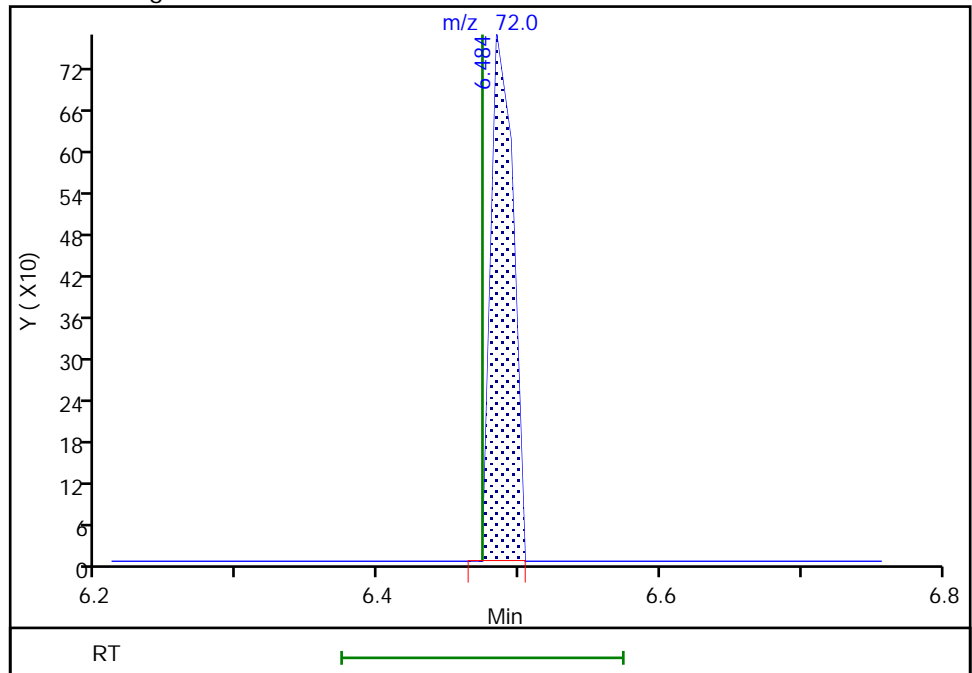
Not Detected
Expected RT: 6.47

Processing Integration Results



Manual Integration Results

RT: 6.48
Area: 830
Amount: 4.894890
Amount Units: ug/l



Reviewer: ibasitasa, 18-Oct-2018 12:40:41
Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17030.D
 Lims ID: STD10
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 17-Oct-2018 16:55:30 ALS Bottle#: 26 Worklist Smp#: 10
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-010
 Misc. Info.: STD10
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:41 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:58:33

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	129799	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	98	583316	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		39571			0.0- 36.8	6.8	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	86	490701	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		240866			21.9- 81.9	49.1	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	94	266916	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		456370			152- 212	171	
115	13.167	13.167	0.000		163069			31.1- 91.1	61.1	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	91	74042	10.0	10.4	70- 130	100	
111	6.879	6.889	-0.010		73458			74- 134	99	
192	6.889	6.889	0.000		11397			0.0- 46.6	15.4	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.274	7.274	0.000	92	78498	10.0	11.0	70- 130	100	
67	7.263	7.274	-0.011		34207			15.9- 75.9	43.6	
102	7.274	7.274	0.000		10718			0.0- 45.2	13.7	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.410	0.000	93	233257	10.0	10.6	70- 130	100	
100	9.410	9.410	0.000		155167			40- 100	66.5	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	91	90947	10.0	10.3	70- 130	100	
174	11.891	11.891	0.000		80881			62- 122	88.9	
176	11.891	11.891	0.000		78052			59- 119	85.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.778	-0.001	99	142263	10.0	11.2	70- 130	100	
87	2.777	2.778	-0.001		45337			2.5- 62.5	31.9	
50	2.777	2.778	-0.001		15028			0.0- 40.2	10.6	
12 Chloromethane										
50	2.980	2.980	0.000	99	65632	10.0	10.5	70- 130	100	
52	2.980	2.980	0.000		21892			3.7- 63.7	33.4	
13 Vinyl chloride										
62	3.213	3.213	0.000	97	68417	10.0	10.4	70- 130	100	
64	3.223	3.213	0.010		24521			3.0- 63.0	35.8	
14 Butadiene										
54	3.355	3.355	0.000	85	58186	10.0	10.4	70- 130	100	
53	3.355	3.355	0.000		41757			39- 99	71.8	
39	3.355	3.355	0.000		54725			62- 122	94.1	
15 Bromomethane										
96	3.699	3.699	0.000	95	52330	10.0	10.6	70- 130	100	
94	3.699	3.699	0.000		57470			72- 132	110	
79	3.699	3.699	0.000		11313			0.0- 50.2	21.6	
16 Chloroethane										
64	3.871	3.861	0.010	95	40586	10.0	10.7	70- 130	100	
66	3.871	3.861	0.010		13340			0.0- 59.6	32.9	
49	3.871	3.861	0.010		14158			2.2- 62.2	34.9	
17 Ethanol										
45	3.902	3.902	0.000	98	22712	400.0	421.6	70- 130	100	
46	3.912	3.902	0.010		7591			7.2- 67.2	33.4	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	132774	10.0	11.0	70- 130	100	
69	3.932	3.932	0.000		42583			2.6- 62.6	32.1	
47	3.932	3.932	0.000		14344			0.0- 41.5	10.8	
21 Acrolein										
56	4.499	4.499	0.000	1	2016	10.0	8.98	70- 130	100	
55	4.499	4.499	0.000		1946			32.9- 92.9	96.5	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	98	197437	10.0	10.8	70- 130	100	
103	4.509	4.499	0.010		132423			33.3- 93.3	67.1	
66	4.499	4.499	0.000		20684			0.0- 39.9	10.5	
23 Acetonitrile										
41	4.509	4.509	0.000	32	39498	100.0	108.7	70- 130	100	
40	4.509	4.509	0.000		27560			26.9- 86.9	69.8	
39	4.509	4.509	0.000		8811			0.0- 52.0	22.3	
25 Acetone										
43	4.641	4.631	0.010	93	14848	10.0	11.7	70- 130	100	
58	4.641	4.631	0.010		2774			0.0- 52.7	18.7	
27 Ethyl ether										
59	4.772	4.762	0.010	94	32277	10.0	10.9	70- 130	100	
45	4.762	4.762	0.000		23292			43- 103	72.2	
74	4.772	4.762	0.010		19921			32.9- 92.9	61.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.066	5.056	0.010	95	63772	10.0	11.5	70- 130	100	
61	5.056	5.056	0.000		115211			159- 219	181	
98	5.056	5.056	0.000		39513			34.3- 94.3	62.0	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	55	66196	100.0	110.8	70- 130	100	
57	5.096	5.096	0.000		5355			0.0- 39.8	8.1	
41	5.096	5.096	0.000		17910			0.0- 56.4	27.1	
29 Iodomethane										
142	5.096	5.096	0.000	96	124545	10.0	10.8	70- 130	100	
127	5.096	5.096	0.000		65471			24.1- 84.1	52.6	
31 Acrylonitrile										
53	5.117	5.117	0.000	96	132424	100.0	110.1	70- 130	100	
52	5.117	5.117	0.000		115822			58- 118	87.5	
51	5.117	5.117	0.000		53266			11.2- 71.2	40.2	
32 Methylene Chloride										
84	5.208	5.208	0.000	96	80118	10.0	12.3	70- 130	100	
49	5.208	5.208	0.000		111011			108- 168	139	
51	5.208	5.208	0.000		35750			14.8- 74.8	44.6	
86	5.208	5.208	0.000		49353			34.0- 94.0	61.6	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	91	95369	10.0	10.8	70- 130	100	
151	5.269	5.269	0.000		82578			56- 116	86.6	
85	5.269	5.269	0.000		40980			14.8- 74.8	43.0	
158 Methyl acetate										
43	5.269	5.269	0.000	71	48713	20.0	20.8	70- 130	100	
74	5.269	5.269	0.000		9647			19.8- 19.8	19.8	
59	5.269	5.269	0.000		6164			0.0- 42.9	12.7	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	88	87197	10.0	11.2	70- 130	100	
39	5.299	5.299	0.000		68301			50- 110	78.3	
76	5.299	5.299	0.000		27569			4.5- 64.5	31.6	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	189202	10.0	10.9	70- 130	100	
78	5.420	5.420	0.000		16685			0.0- 39.4	8.8	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	97	65206	10.0	10.9	70- 130	100	
61	5.856	5.856	0.000		98320			119- 179	151	
98	5.856	5.856	0.000		41471			33.6- 93.6	63.6	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	96	117372	10.0	11.1	70- 130	100	
57	5.967	5.967	0.000		23819			0.0- 50.7	20.3	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	97	113746	10.0	10.9	70- 130	100	
65	6.079	6.079	0.000		33369			0.5- 60.5	29.3	
83	6.089	6.079	0.010		16066			0.0- 45.0	14.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	97	52862	100.0	109.1	70- 130	100	
52	6.089	6.089	0.000		11775			0.0- 53.7	22.3	
55	6.089	6.089	0.000		7811			0.0- 45.5	14.8	
43 Vinyl acetate										
43	6.210	6.210	0.000	97	57231	8.00	8.34	70- 130	100	
86	6.210	6.210	0.000		3994			0.0- 38.1	7.0	
45 Hexane										
57	6.453	6.453	0.000	93	106772	10.0	10.8	70- 130	100	
86	6.453	6.453	0.000		14593			0.0- 46.0	13.7	
46 2-Butanone (MEK)										
72	6.484	6.474	0.010	66	3381	10.0	10.4	70- 130	100	
43	6.484	6.474	0.010		169116			3898- 3958	5002	
57	0.000	6.474	0.000		0			2498- 2558		
47 Isopropyl ether										
45	6.484	6.484	0.000	94	164221	10.0	11.0	70- 130	100	
87	6.484	6.484	0.000		41283			0.0- 55.7	25.1	
59	6.484	6.484	0.000		18821			0.0- 40.7	11.5	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	84	65053	10.0	10.9	70- 130	100	
61	6.595	6.595	0.000		90218			113- 173	139	
98	6.595	6.595	0.000		42422			35.8- 95.8	65.2	
52 Chlorobromomethane										
128	6.737	6.737	0.000	87	30960	10.0	10.7	70- 130	100	
49	6.737	6.737	0.000		43172			125- 185	139	
54 Chloroform										
83	6.777	6.777	0.000	94	128042	10.0	10.6	70- 130	100	
85	6.777	6.777	0.000		81913			35.3- 95.3	64.0	
47	6.777	6.777	0.000		29416			0.0- 54.5	23.0	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	132239	10.0	10.9	70- 130	100	
87	6.838	6.828	0.010		52921			9.5- 69.5	40.0	
57	6.828	6.828	0.000		39302			0.0- 59.8	29.7	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	115819	10.0	11.2	70- 130	100	
97	6.848	6.848	0.000		19118			0.0- 47.8	16.5	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	94	69696	250.0	274.9	70- 130	100	
41	6.838	6.858	-0.020		124635			158- 218	179	
42	6.858	6.858	0.000		37568			24.6- 84.6	53.9	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	86	24048	20.0	22.5	70- 130	100	
71	7.071	7.061	0.010		8419			5.2- 65.2	35.0	
72	7.071	7.061	0.010		8476			8.9- 68.9	35.2	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	89486	10.0	10.9	70- 130	100	
64	7.334	7.334	0.000		31821			1.8- 61.8	35.6	
49	7.334	7.334	0.000		20205			0.0- 52.2	22.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	157902	10.0	10.6	70- 130	100	
99	7.425	7.415	0.010		106256			35.9- 95.9	67.3	
61	7.415	7.415	0.000		63279			9.0- 69.0	40.1	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	98	101832	10.0	10.9	70- 130	100	
110	7.577	7.577	0.000		37475			8.5- 68.5	36.8	
77	7.567	7.577	-0.010		30500			0.9- 60.9	30.0	
69 Cyclohexane										
56	7.658	7.658	0.000	91	118953	10.0	10.6	70- 130	100	
84	7.658	7.658	0.000		97711			49- 109	82.1	
69	7.658	7.658	0.000		33753			0.0- 56.1	28.4	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	155035	10.0	10.7	70- 130	100	
119	7.729	7.729	0.000		147579			65- 125	95.2	
82	7.729	7.729	0.000		32267			0.0- 51.0	20.8	
72 Benzene										
78	7.760	7.760	0.000	98	210249	10.0	10.8	70- 130	100	
51	7.760	7.760	0.000		48741			0.0- 53.4	23.2	
77	7.760	7.760	0.000		47900			0.0- 53.9	22.8	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	94	96057	10.0	10.3	70- 130	100	
87	7.881	7.881	0.000		28224			0.0- 56.3	29.4	
43	7.881	7.881	0.000		34635			4.4- 64.4	36.1	
55	7.881	7.881	0.000		31091			0.0- 58.6	32.4	
75 n-Heptane										
43	8.185	8.185	0.000	92	112338	10.0	11.2	70- 130	100	
57	8.185	8.185	0.000		59290			25.7- 85.7	52.8	
71	8.185	8.185	0.000		58105			23.7- 83.7	51.7	
100	8.185	8.185	0.000		20266			0.0- 50.5	18.0	
77 Dibromomethane										
93	8.225	8.225	0.000	94	34476	10.0	11.1	70- 130	100	
95	8.225	8.225	0.000		30138			54- 114	87.4	
174	8.225	8.225	0.000		37337			78- 138	108	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	86	48496	10.0	10.8	70- 130	100	
62	8.246	8.246	0.000		35072			42- 102	72.3	
41	8.246	8.246	0.000		38136			45- 105	78.6	
79 Trichloroethene										
130	8.286	8.286	0.000	97	85906	10.0	10.8	70- 130	100	
95	8.276	8.286	-0.010		85473			63- 123	99	
132	8.286	8.286	0.000		84434			71- 131	98.3	
60	8.276	8.286	-0.010		42088			20.6- 80.6	49.0	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	91571	10.0	11.1	70- 130	100	
85	8.327	8.327	0.000		57355			36.1- 96.1	62.6	
129	8.327	8.327	0.000		12002			0.0- 44.5	13.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
83 2-Chloroethyl vinyl ether										a
63	8.661	8.651	0.010	1	1678	10.0	22.8	70- 130	100	a
65	0.000	8.651	0.003		0			162- 222		
106	0.000	8.651	0.003		0			0.0- 53.1		
159 Methylcyclohexane										
83	8.701	8.701	0.000	94	121964	10.0	10.9	70- 130	100	
55	8.701	8.701	0.000		109584			87.9- 87.9	89.8	
98	8.701	8.701	0.000		59045			19.2- 79.2	48.4	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	74936	10.0	10.7	70- 130	100	
39	8.833	8.843	-0.010		41041			21.3- 81.3	54.8	
77	8.843	8.843	0.000		23466			1.0- 61.0	31.3	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	97	39104	10.0	10.9	70- 130	100	
100	8.924	8.924	0.000		4881			0.0- 44.9	12.5	
58	8.924	8.924	0.000		14164			8.0- 68.0	36.2	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	67378	10.0	9.84	70- 130	100	
39	9.187	9.187	0.000		31638			15.4- 75.4	47.0	
110	9.187	9.187	0.000		15846			0.0- 53.8	23.5	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	96	33960	10.0	10.7	70- 130	100	
97	9.319	9.319	0.000		40706			97- 157	120	
61	9.319	9.319	0.000		31828			62- 122	93.7	
90 Toluene										
91	9.471	9.471	0.000	97	262409	10.0	10.5	70- 130	100	
92	9.471	9.471	0.000		155761			29.8- 89.8	59.4	
65	9.471	9.471	0.000		31261			0.0- 43.1	11.9	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	81	42704	10.0	10.3	70- 130	100	
41	9.511	9.511	0.000		83906			151- 211	196	
99	9.511	9.511	0.000		10015			0.0- 53.8	23.5	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	86	68416	10.0	10.6	70- 130	100	
78	9.511	9.511	0.000		21227			1.6- 61.6	31.0	
49	9.511	9.511	0.000		14415			0.0- 48.7	21.1	
93 2-Hexanone										
43	9.623	9.623	0.000	97	26451	10.0	10.3	70- 130	100	
58	9.623	9.623	0.000		13100			22.9- 82.9	49.5	
100	9.623	9.623	0.000		3072			0.0- 41.9	11.6	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	62915	10.0	10.1	70- 130	100	
127	9.744	9.744	0.000		47811			47- 107	76.0	
79	9.744	9.744	0.000		9285			0.0- 44.5	14.8	
208	9.754	9.744	0.010		2142			0.0- 33.6	3.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.957	0.000	97	45776	10.0	10.2	70- 130	100	
109	9.957	9.957	0.000		45747			64- 124	100	
81	9.957	9.957	0.000		4160			0.0- 39.1	9.1	
97 Tetrachloroethene										
164	10.109	10.099	0.010	94	73707	10.0	10.3	70- 130	100	
166	10.109	10.099	0.010		94297			95- 155	128	
129	10.099	10.099	0.000		74553			64- 124	101	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	85	74266	10.0	10.3	70- 130	100	
133	10.656	10.656	0.000		73785			67- 127	99	
119	10.706	10.656	0.050		189349			35.9- 95.9	255	
101 Chlorobenzene										
112	10.737	10.737	0.000	96	185841	10.0	10.2	70- 130	100	
77	10.727	10.737	-0.010		100427			19.9- 79.9	54.0	
114	10.737	10.737	0.000		60878			1.4- 61.4	32.8	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	331826	10.0	10.5	70- 130	100	
106	10.909	10.909	0.000		99210			0.2- 60.2	29.9	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	97	121487	10.0	10.7	70- 130	100	
91	11.091	11.091	0.000		253735			180- 240	209	
105	11.091	11.091	0.000		53635			14.5- 74.5	44.1	
105 Bromoform										
173	11.233	11.233	0.000	96	35020	10.0	9.48	70- 130	100	
175	11.233	11.233	0.000		17170			19.7- 79.7	49.0	
79	11.223	11.233	-0.010		6026			0.0- 49.9	17.2	
252	11.233	11.233	0.000		2151			0.0- 36.9	6.1	
106 Styrene										
104	11.415	11.415	0.000	94	174864	10.0	10.9	70- 130	100	
103	11.415	11.415	0.000		81681			17.4- 77.4	46.7	
78	11.415	11.415	0.000		73443			15.1- 75.1	42.0	
51	11.415	11.415	0.000		41086			0.0- 53.9	23.5	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	56	54404	10.0	11.8	70- 130	100	
85	11.486	11.486	0.000		32754			35.7- 95.7	60.2	
131	11.486	11.486	0.000		7050			0.0- 45.0	13.0	
108 o-Xylene										
106	11.486	11.486	0.000	98	121487	10.0	11.2	70- 130	100	
91	11.486	11.486	0.000		265945			197- 257	219	
105	11.486	11.486	0.000		48910			10.8- 70.8	40.3	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	79	13111	10.0	9.66	70- 130	100	
89	11.638	11.628	0.010		6781			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	20256	10.0	11.3	70- 130	100	
77	11.628	11.628	0.000		17300			58- 118	85.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.840	11.841	-0.001	96	357375	10.0	10.6	70- 130	100	
120	11.840	11.841	-0.001		95045			0.0- 55.6	26.6	
77	11.840	11.841	-0.001		56997			0.0- 45.8	15.9	
113 Bromobenzene										
156	12.104	12.104	0.000	88	82878	10.0	10.7	70- 130	100	
77	12.104	12.104	0.000		99437			91- 151	120	
158	12.104	12.104	0.000		79651			67- 127	96.1	
114 N-Propylbenzene										
91	12.286	12.286	0.000	99	398148	10.0	11.1	70- 130	100	
120	12.286	12.286	0.000		98580			0.0- 54.5	24.8	
65	12.286	12.286	0.000		45674			0.0- 42.2	11.5	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	233733	10.0	10.6	70- 130	100	
126	12.387	12.387	0.000		88186			7.2- 67.2	37.7	
75	12.387	12.387	0.000		6551			0.0- 32.9	2.8	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	241968	10.0	10.9	70- 130	100	
126	12.468	12.468	0.000		87996			7.3- 67.3	36.4	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	303218	10.0	11.2	70- 130	100	
120	12.570	12.570	0.000		138738			18.4- 78.4	45.8	
91	12.570	12.570	0.000		37023			0.0- 41.8	12.2	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	91	286906	10.0	10.9	70- 130	100	
91	12.843	12.853	-0.010		205162			41- 101	71.5	
134	12.853	12.853	0.000		68437			0.0- 54.6	23.9	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	295399	10.0	11.0	70- 130	100	
120	12.954	12.954	0.000		130443			15.7- 75.7	44.2	
77	12.954	12.954	0.000		36264			0.0- 42.4	12.3	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	412126	10.0	11.0	70- 130	100	
134	13.056	13.056	0.000		90545			0.0- 52.3	22.0	
91	13.056	13.056	0.000		75751			0.0- 47.8	18.4	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	97	172339	10.0	10.0	70- 130	100	
111	13.127	13.127	0.000		70824			10.6- 70.6	41.1	
148	13.137	13.127	0.010		111640			34.6- 94.6	64.8	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	96	179143	10.0	10.5	70- 130	100	
111	13.187	13.187	0.000		70118			8.8- 68.8	39.1	
148	13.187	13.187	0.000		114071			35.7- 95.7	63.7	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	381015	10.0	11.2	70- 130	100	
134	13.218	13.218	0.000		100896			0.0- 57.7	26.5	
91	13.218	13.218	0.000		92520			0.0- 56.0	24.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	96	151184	10.0	10.4	70- 130	100	
111	13.501	13.501	0.000		65699			10.1- 70.1	43.5	
148	13.501	13.501	0.000		100715			32.6- 92.6	66.6	
128 n-Butylbenzene										
91	13.572	13.572	0.000	98	320111	10.0	10.9	70- 130	100	
92	13.572	13.572	0.000		173896			24.4- 84.4	54.3	
134	13.572	13.572	0.000		96611			0.0- 59.7	30.2	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	84	12313	10.0	9.98	70- 130	100	
155	13.896	13.896	0.000		11838			65- 125	96.1	
157	13.896	13.896	0.000		14203			86- 146	115	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	93	118312	10.0	11.0	70- 130	100	
182	15.061	15.061	0.000		107758			67- 127	91.1	
145	15.061	15.061	0.000		39237			4.2- 64.2	33.2	
134 Naphthalene										
128	15.294	15.294	0.000	97	218457	10.0	10.7	70- 130	100	
127	15.294	15.294	0.000		27200			0.0- 42.9	12.5	
129	15.294	15.294	0.000		26734			0.0- 41.7	12.2	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	93	91474	10.0	10.9	70- 130	100	
223	15.334	15.334	0.000		56518			33.1- 93.1	61.8	
227	15.334	15.334	0.000		58336			33.2- 93.2	63.8	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	108776	10.0	11.1	70- 130	100	
182	15.476	15.476	0.000		101258			64- 124	93.1	
145	15.476	15.476	0.000		38102			5.8- 65.8	35.0	
S 144 Xylenes, Total										
1				0					21.9	
S 145 1,2-Dichloroethene, Total										
1				0					21.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMWNU5URR50_00211	Amount Added: 2.00	Units: uL	
VMWNU8260CCV1_01080	Amount Added: 2.00	Units: uL	
VMWNU8260IS_00216	Amount Added: 5.00	Units: uL	Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17030.D

Injection Date: 17-Oct-2018 16:55:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD10

Worklist Smp#: 10

Client ID:

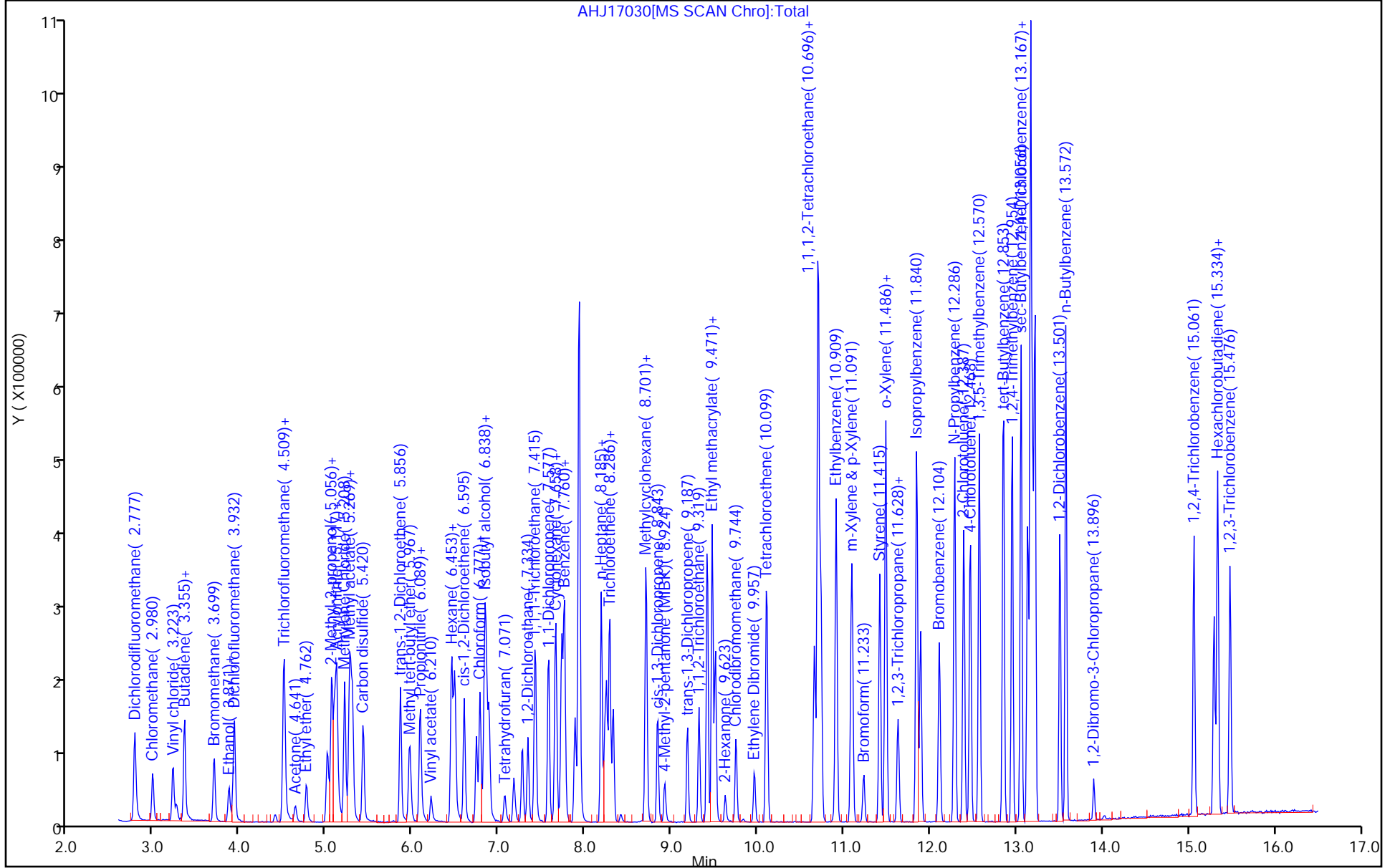
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 26

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine

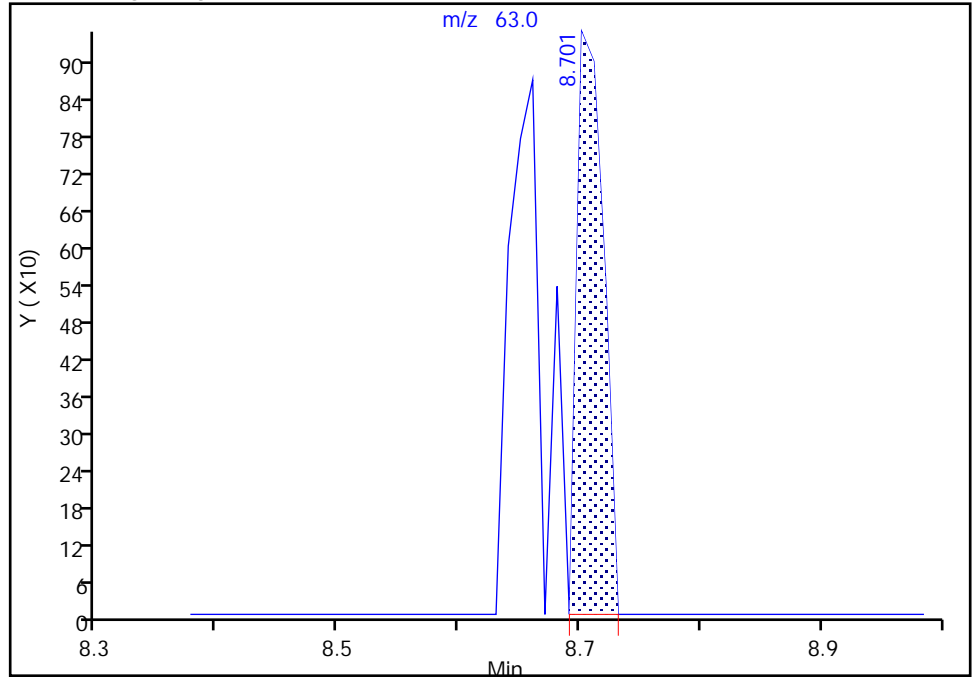
Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17030.D
Injection Date: 17-Oct-2018 16:55:30 Instrument ID: GCMS45
Lims ID: STD10
Client ID:
Operator ID: AI ALS Bottle#: 26 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 45_8260 Limit Group: MSV-8260-624
Column: Detector MS SCAN

83 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

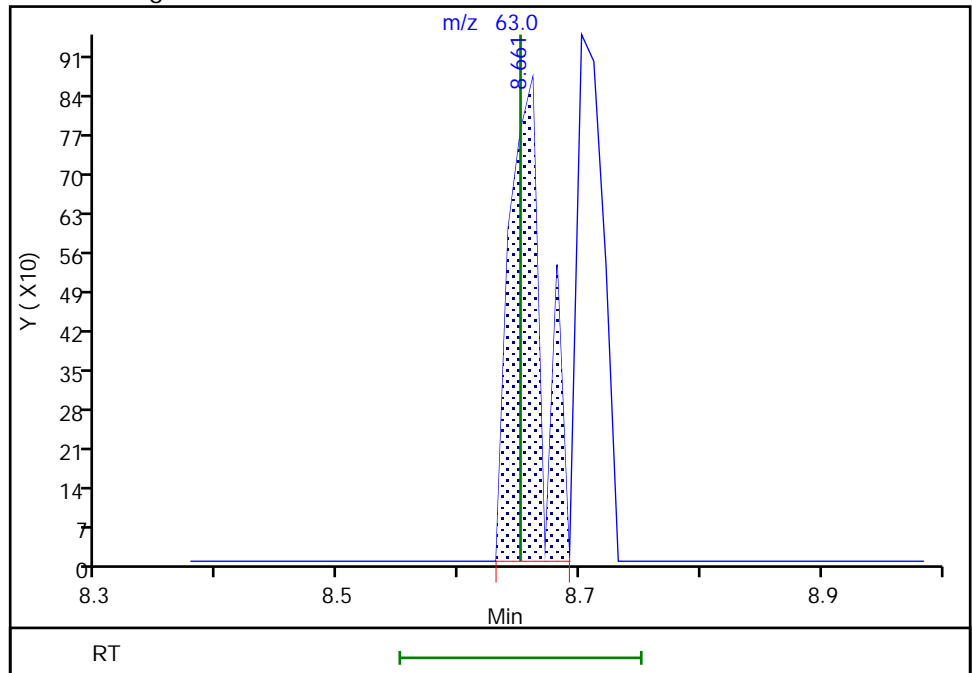
RT: 8.70
Area: 1438
Amount: 10.220911
Amount Units: ug/l

Processing Integration Results



RT: 8.66
Area: 1678
Amount: 22.767691
Amount Units: ug/l

Manual Integration Results



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17031.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 8
 Inject. Date: 17-Oct-2018 17:22:30 ALS Bottle#: 27 Worklist Smp#: 11
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-011
 Misc. Info.: ICIS
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:45 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:43:55

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	119548	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	98	627796	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		42382			0.0- 36.8	6.8	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	87	509143	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		264076			21.9- 81.9	51.9	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	300549	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		547167			152- 212	182	
115	13.167	13.167	0.000		183646			31.1- 91.1	61.1	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	92	188016	25.0	24.6	70- 130	100	
111	6.889	6.889	0.000		195168			74- 134	104	
192	6.889	6.889	0.000		31137			0.0- 46.6	16.6	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.274	7.274	0.000	94	191510	25.0	25.0	70- 130	100	
67	7.263	7.274	-0.011		87858			15.9- 75.9	45.9	
102	7.274	7.274	0.000		29175			0.0- 45.2	15.2	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.410	0.000	93	592415	25.0	25.9	70- 130	100	
100	9.410	9.410	0.000		416299			40- 100	70.3	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	93	244191	25.0	24.6	70- 130	100	
174	11.891	11.891	0.000		225696			62- 122	92.4	
176	11.891	11.891	0.000		217581			59- 119	89.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	99	370032	25.0	27.2	70- 130	100	
87	2.778	2.778	0.000		120158			2.5- 62.5	32.5	
50	2.778	2.778	0.000		37710			0.0- 40.2	10.2	
12 Chloromethane										
50	2.980	2.980	0.000	99	172809	25.0	25.6	70- 130	100	
52	2.980	2.980	0.000		58153			3.7- 63.7	33.7	
13 Vinyl chloride										
62	3.213	3.213	0.000	98	181706	25.0	25.7	70- 130	100	
64	3.213	3.213	0.000		60008			3.0- 63.0	33.0	
14 Butadiene										
54	3.355	3.355	0.000	84	153166	25.0	25.4	70- 130	100	
53	3.355	3.355	0.000		105916			39- 99	69.2	
39	3.355	3.355	0.000		140707			62- 122	91.9	
15 Bromomethane										
96	3.699	3.699	0.000	92	146492	25.0	27.6	70- 130	100	
94	3.699	3.699	0.000		149502			72- 132	102	
79	3.699	3.699	0.000		29607			0.0- 50.2	20.2	
16 Chloroethane										
64	3.861	3.861	0.000	97	113960	25.0	27.8	70- 130	100	
66	3.871	3.861	0.010		33726			0.0- 59.6	29.6	
49	3.871	3.861	0.010		36723			2.2- 62.2	32.2	
17 Ethanol										
45	3.902	3.902	0.000	99	58144	1000.0	1171.7	70- 130	100	
46	3.902	3.902	0.000		21624			7.2- 67.2	37.2	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	343958	25.0	26.5	70- 130	100	
69	3.932	3.932	0.000		112033			2.6- 62.6	32.6	
47	3.932	3.932	0.000		39529			0.0- 41.5	11.5	
21 Acrolein										
56	4.499	4.499	0.000	24	6808	25.0	23.5	70- 130	100	
55	4.499	4.499	0.000		4281			32.9- 92.9	62.9	
22 Trichlorofluoromethane										
101	4.499	4.499	0.000	98	526892	25.0	26.8	70- 130	100	
103	4.509	4.499	0.010		333496			33.3- 93.3	63.3	
66	4.509	4.499	0.010		52163			0.0- 39.9	9.9	
23 Acetonitrile										
41	4.509	4.509	0.000	98	97888	250.0	250.3	70- 130	100	
40	4.509	4.509	0.000		55742			26.9- 86.9	56.9	
39	4.509	4.509	0.000		21512			0.0- 52.0	22.0	
25 Acetone										
43	4.631	4.631	0.000	97	34853	25.0	25.6	70- 130	100	
58	4.641	4.631	0.010		7912			0.0- 52.7	22.7	
27 Ethyl ether										
59	4.762	4.762	0.000	95	89007	25.0	27.8	70- 130	100	
45	4.762	4.762	0.000		65363			43- 103	73.4	
74	4.762	4.762	0.000		55960			32.9- 92.9	62.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	95	164590	25.0	27.5	70- 130	100	
61	5.056	5.056	0.000		310628			159- 219	189	
98	5.056	5.056	0.000		105901			34.3- 94.3	64.3	
30 2-Methyl-2-propanol										
59	5.096	5.096	0.000	53	165527	250.0	300.9	70- 130	100	
57	5.096	5.096	0.000		16203			0.0- 39.8	9.8	
41	5.096	5.096	0.000		43652			0.0- 56.4	26.4	
29 Iodomethane										
142	5.096	5.096	0.000	96	335160	25.0	27.1	70- 130	100	
127	5.096	5.096	0.000		181385			24.1- 84.1	54.1	
31 Acrylonitrile										
53	5.117	5.117	0.000	95	324373	250.0	249.5	70- 130	100	
52	5.117	5.117	0.000		286573			58- 118	88.3	
51	5.117	5.117	0.000		133733			11.2- 71.2	41.2	
32 Methylene Chloride										
84	5.208	5.208	0.000	97	168660	25.0	29.4	70- 130	100	
49	5.208	5.208	0.000		232867			108- 168	138	
51	5.208	5.208	0.000		75636			14.8- 74.8	44.8	
86	5.208	5.208	0.000		107955			34.0- 94.0	64.0	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	91	241612	25.0	25.3	70- 130	100	
151	5.269	5.269	0.000		208198			56- 116	86.2	
85	5.269	5.269	0.000		108352			14.8- 74.8	44.8	
158 Methyl acetate										
43	5.269	5.269	0.000	97	127516	50.0	50.6	70- 130	100	
74	5.269	5.269	0.000		25200			19.8- 19.8	19.8	
59	5.269	5.269	0.000		16486			0.0- 42.9	12.9	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	88	223807	25.0	26.8	70- 130	100	
39	5.299	5.299	0.000		179384			50- 110	80.2	
76	5.299	5.299	0.000		77158			4.5- 64.5	34.5	
37 Carbon disulfide										
76	5.420	5.420	0.000	100	484660	25.0	26.0	70- 130	100	
78	5.420	5.420	0.000		45733			0.0- 39.4	9.4	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	96	173583	25.0	26.9	70- 130	100	
61	5.856	5.856	0.000		259248			119- 179	149	
98	5.856	5.856	0.000		110478			33.6- 93.6	63.6	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	96	312493	25.0	27.4	70- 130	100	
57	5.967	5.967	0.000		64625			0.0- 50.7	20.7	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	98	296286	25.0	26.5	70- 130	100	
65	6.079	6.079	0.000		90506			0.5- 60.5	30.5	
83	6.079	6.079	0.000		44572			0.0- 45.0	15.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	97	134134	250.0	257.2	70- 130	100	
52	6.089	6.089	0.000		31730			0.0- 53.7	23.7	
55	6.089	6.089	0.000		20797			0.0- 45.5	15.5	
43 Vinyl acetate										
43	6.210	6.210	0.000	98	151800	20.0	20.5	70- 130	100	
86	6.210	6.210	0.000		12369			0.0- 38.1	8.1	
45 Hexane										
57	6.453	6.453	0.000	94	273132	25.0	25.6	70- 130	100	
86	6.453	6.453	0.000		43717			0.0- 46.0	16.0	
46 2-Butanone (MEK)										
72	6.474	6.474	0.000	91	10803	25.0	24.9	70- 130	100	
43	6.484	6.474	0.010		424388			3898- 3958	3928	
57	6.453	6.474	-0.021		273144			2498- 2558	2528	
47 Isopropyl ether										
45	6.484	6.484	0.000	93	437758	25.0	27.2	70- 130	100	
87	6.484	6.484	0.000		112586			0.0- 55.7	25.7	
59	6.484	6.484	0.000		46875			0.0- 40.7	10.7	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	83	167238	25.0	26.1	70- 130	100	
61	6.595	6.595	0.000		238807			113- 173	143	
98	6.595	6.595	0.000		110066			35.8- 95.8	65.8	
52 Chlorobromomethane										
128	6.737	6.737	0.000	94	82580	25.0	26.6	70- 130	100	
49	6.737	6.737	0.000		128018			125- 185	155	
54 Chloroform										
83	6.777	6.777	0.000	93	339552	25.0	26.0	70- 130	100	
85	6.777	6.777	0.000		221669			35.3- 95.3	65.3	
47	6.777	6.777	0.000		83274			0.0- 54.5	24.5	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	357885	25.0	27.4	70- 130	100	
87	6.828	6.828	0.000		141311			9.5- 69.5	39.5	
57	6.828	6.828	0.000		106542			0.0- 59.8	29.8	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	298124	25.0	26.8	70- 130	100	
97	6.848	6.848	0.000		53098			0.0- 47.8	17.8	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	97	168697	625.0	722.3	70- 130	100	
41	6.848	6.858	-0.010		317756			158- 218	188	
42	6.858	6.858	0.000		92157			24.6- 84.6	54.6	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	86	58586	50.0	51.0	70- 130	100	
71	7.061	7.061	0.000		20648			5.2- 65.2	35.2	
72	7.071	7.061	0.010		22802			8.9- 68.9	38.9	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	239219	25.0	27.0	70- 130	100	
64	7.334	7.334	0.000		76030			1.8- 61.8	31.8	
49	7.334	7.334	0.000		53207			0.0- 52.2	22.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	422457	25.0	26.4	70- 130	100	
99	7.415	7.415	0.000		278490			35.9- 95.9	65.9	
61	7.415	7.415	0.000		164869			9.0- 69.0	39.0	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	94	266934	25.0	26.5	70- 130	100	
110	7.577	7.577	0.000		102801			8.5- 68.5	38.5	
77	7.577	7.577	0.000		82452			0.9- 60.9	30.9	
69 Cyclohexane										
56	7.658	7.658	0.000	92	333706	25.0	27.7	70- 130	100	
84	7.658	7.658	0.000		262781			49- 109	78.7	
69	7.658	7.658	0.000		87034			0.0- 56.1	26.1	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	428733	25.0	27.6	70- 130	100	
119	7.729	7.729	0.000		406401			65- 125	94.8	
82	7.729	7.729	0.000		90082			0.0- 51.0	21.0	
72 Benzene										
78	7.760	7.760	0.000	98	550415	25.0	26.2	70- 130	100	
51	7.760	7.760	0.000		128944			0.0- 53.4	23.4	
77	7.760	7.760	0.000		131518			0.0- 53.9	23.9	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	96	278175	25.0	27.8	70- 130	100	
87	7.881	7.881	0.000		73267			0.0- 56.3	26.3	
43	7.881	7.881	0.000		95634			4.4- 64.4	34.4	
55	7.881	7.881	0.000		79559			0.0- 58.6	28.6	
75 n-Heptane										
43	8.185	8.185	0.000	92	285102	25.0	26.4	70- 130	100	
57	8.185	8.185	0.000		158717			25.7- 85.7	55.7	
71	8.185	8.185	0.000		153221			23.7- 83.7	53.7	
100	8.185	8.185	0.000		58322			0.0- 50.5	20.5	
77 Dibromomethane										
93	8.225	8.225	0.000	93	93100	25.0	27.7	70- 130	100	
95	8.225	8.225	0.000		78104			54- 114	83.9	
174	8.225	8.225	0.000		100769			78- 138	108	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	89	132171	25.0	27.3	70- 130	100	
62	8.246	8.246	0.000		95002			42- 102	71.9	
41	8.246	8.246	0.000		99267			45- 105	75.1	
79 Trichloroethene										
130	8.286	8.286	0.000	93	230350	25.0	26.9	70- 130	100	
95	8.286	8.286	0.000		214337			63- 123	93.0	
132	8.286	8.286	0.000		232114			71- 131	101	
60	8.286	8.286	0.000		116501			20.6- 80.6	50.6	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	243248	25.0	27.4	70- 130	100	
85	8.327	8.327	0.000		160807			36.1- 96.1	66.1	
129	8.327	8.327	0.000		35228			0.0- 44.5	14.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
83 2-Chloroethyl vinyl ether										
63	8.651	8.651	0.000	83	3647	25.0	29.6	70- 130	100	
106	8.651	8.651	0.000		841			0.0- 53.1	23.1	
159 Methylcyclohexane										
83	8.701	8.701	0.000	93	331533	25.0	27.4	70- 130	100	
55	8.701	8.701	0.000		291472			87.9- 87.9	87.9	
98	8.701	8.701	0.000		163109			19.2- 79.2	49.2	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	95	215634	25.0	29.6	70- 130	100	
39	8.833	8.843	-0.010		110551			21.3- 81.3	51.3	
77	8.843	8.843	0.000		66886			1.0- 61.0	31.0	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	97	104762	25.0	28.0	70- 130	100	
100	8.924	8.924	0.000		15616			0.0- 44.9	14.9	
58	8.924	8.924	0.000		39848			8.0- 68.0	38.0	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	197717	25.0	27.5	70- 130	100	
39	9.187	9.187	0.000		89789			15.4- 75.4	45.4	
110	9.187	9.187	0.000		47109			0.0- 53.8	23.8	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	95	88597	25.0	26.8	70- 130	100	
97	9.319	9.319	0.000		112664			97- 157	127	
61	9.319	9.319	0.000		81321			62- 122	91.8	
90 Toluene										
91	9.471	9.471	0.000	97	690010	25.0	26.7	70- 130	100	
92	9.471	9.471	0.000		412486			29.8- 89.8	59.8	
65	9.471	9.471	0.000		90499			0.0- 43.1	13.1	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	83	122875	25.0	28.5	70- 130	100	
41	9.511	9.511	0.000		222242			151- 211	181	
99	9.511	9.511	0.000		29289			0.0- 53.8	23.8	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	87	181463	25.0	27.1	70- 130	100	
78	9.511	9.511	0.000		57299			1.6- 61.6	31.6	
49	9.511	9.511	0.000		33939			0.0- 48.7	18.7	
93 2-Hexanone										
43	9.623	9.623	0.000	96	71260	25.0	26.8	70- 130	100	
58	9.623	9.623	0.000		37686			22.9- 82.9	52.9	
100	9.623	9.623	0.000		8454			0.0- 41.9	11.9	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	180244	25.0	27.9	70- 130	100	
127	9.744	9.744	0.000		139239			47- 107	77.3	
79	9.744	9.744	0.000		26104			0.0- 44.5	14.5	
208	9.755	9.744	0.011		6444			0.0- 33.6	3.6	
96 Ethylene Dibromide										
107	9.957	9.957	0.000	98	126853	25.0	27.3	70- 130	100	
109	9.957	9.957	0.000		119557			64- 124	94.2	
81	9.957	9.957	0.000		11491			0.0- 39.1	9.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
97 Tetrachloroethene										
164	10.099	10.099	0.000	94	205179	25.0	27.6	70- 130	100	
166	10.109	10.099	0.010		256335			95- 155	125	
129	10.099	10.099	0.000		193822			64- 124	94.5	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	91	207918	25.0	27.8	70- 130	100	
133	10.656	10.656	0.000		202455			67- 127	97.4	
119	10.656	10.656	0.000		136981			35.9- 95.9	65.9	
101 Chlorobenzene										
112	10.737	10.737	0.000	96	512533	25.0	27.0	70- 130	100	
77	10.737	10.737	0.000		255882			19.9- 79.9	49.9	
114	10.737	10.737	0.000		160780			1.4- 61.4	31.4	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	912570	25.0	27.9	70- 130	100	
106	10.909	10.909	0.000		275268			0.2- 60.2	30.2	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	333688	25.0	28.3	70- 130	100	
91	11.091	11.091	0.000		699404			180- 240	210	
105	11.091	11.091	0.000		148380			14.5- 74.5	44.5	
105 Bromoform										
173	11.233	11.233	0.000	96	102414	25.0	26.7	70- 130	100	
175	11.233	11.233	0.000		50905			19.7- 79.7	49.7	
79	11.223	11.233	-0.010		20390			0.0- 49.9	19.9	
252	11.233	11.233	0.000		7039			0.0- 36.9	6.9	
106 Styrene										
104	11.415	11.415	0.000	94	486052	25.0	29.3	70- 130	100	
103	11.415	11.415	0.000		230368			17.4- 77.4	47.4	
78	11.415	11.415	0.000		219075			15.1- 75.1	45.1	
51	11.415	11.415	0.000		116016			0.0- 53.9	23.9	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	55	133705	25.0	25.7	70- 130	100	
85	11.486	11.486	0.000		87845			35.7- 95.7	65.7	
131	11.486	11.486	0.000		20114			0.0- 45.0	15.0	
108 o-Xylene										
106	11.486	11.486	0.000	97	327347	25.0	29.1	70- 130	100	
91	11.486	11.486	0.000		743998			197- 257	227	
105	11.486	11.486	0.000		133584			10.8- 70.8	40.8	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	81	38794	25.0	25.4	70- 130	100	
89	11.638	11.628	0.010		22995			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	54243	25.0	26.8	70- 130	100	
77	11.628	11.628	0.000		47615			58- 118	87.8	
112 Isopropylbenzene										
105	11.841	11.841	0.000	96	1008562	25.0	28.8	70- 130	100	
120	11.841	11.841	0.000		257884			0.0- 55.6	25.6	
77	11.841	11.841	0.000		159636			0.0- 45.8	15.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
113 Bromobenzene										
156	12.104	12.104	0.000	91	232458	25.0	26.8	70- 130	100	
77	12.104	12.104	0.000		280870			91- 151	121	
158	12.104	12.104	0.000		226029			67- 127	97.2	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	1107320	25.0	27.4	70- 130	100	
120	12.286	12.286	0.000		271498			0.0- 54.5	24.5	
65	12.286	12.286	0.000		134827			0.0- 42.2	12.2	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	648472	25.0	26.1	70- 130	100	
126	12.387	12.387	0.000		241357			7.2- 67.2	37.2	
75	12.387	12.387	0.000		18670			0.0- 32.9	2.9	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	660469	25.0	26.5	70- 130	100	
126	12.468	12.468	0.000		246345			7.3- 67.3	37.3	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	842066	25.0	27.6	70- 130	100	
120	12.570	12.570	0.000		407754			18.4- 78.4	48.4	
91	12.570	12.570	0.000		99137			0.0- 41.8	11.8	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	91	799678	25.0	26.9	70- 130	100	
91	12.853	12.853	0.000		566641			41- 101	70.9	
134	12.853	12.853	0.000		196462			0.0- 54.6	24.6	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	839704	25.0	27.7	70- 130	100	
120	12.954	12.954	0.000		384055			15.7- 75.7	45.7	
77	12.954	12.954	0.000		103944			0.0- 42.4	12.4	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	1155181	25.0	27.3	70- 130	100	
134	13.056	13.056	0.000		257057			0.0- 52.3	22.3	
91	13.056	13.056	0.000		205671			0.0- 47.8	17.8	
122 1,3-Dichlorobenzene										
146	13.127	13.127	0.000	97	494063	25.0	25.6	70- 130	100	
111	13.127	13.127	0.000		200700			10.6- 70.6	40.6	
148	13.137	13.127	0.010		319265			34.6- 94.6	64.6	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	95	490336	25.0	25.6	70- 130	100	
111	13.187	13.187	0.000		190353			8.8- 68.8	38.8	
148	13.187	13.187	0.000		321908			35.7- 95.7	65.7	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	1036194	25.0	27.0	70- 130	100	
134	13.218	13.218	0.000		287061			0.0- 57.7	27.7	
91	13.218	13.218	0.000		269159			0.0- 56.0	26.0	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	98	450464	25.0	27.6	70- 130	100	
111	13.501	13.501	0.000		180489			10.1- 70.1	40.1	
148	13.501	13.501	0.000		282145			32.6- 92.6	62.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
128 n-Butylbenzene										
91	13.572	13.572	0.000	98	945159	25.0	28.7	70- 130	100	
92	13.572	13.572	0.000		514155			24.4- 84.4	54.4	
134	13.572	13.572	0.000		280982			0.0- 59.7	29.7	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	84	35101	25.0	25.3	70- 130	100	
155	13.896	13.896	0.000		33382			65- 125	95.1	
157	13.896	13.896	0.000		40608			86- 146	116	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	337117	25.0	27.7	70- 130	100	
182	15.061	15.061	0.000		327761			67- 127	97.2	
145	15.061	15.061	0.000		115452			4.2- 64.2	34.2	
134 Naphthalene										
128	15.294	15.294	0.000	96	665585	25.0	28.9	70- 130	100	
127	15.294	15.294	0.000		85532			0.0- 42.9	12.9	
129	15.294	15.294	0.000		77552			0.0- 41.7	11.7	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	93	250253	25.0	26.5	70- 130	100	
223	15.334	15.334	0.000		157954			33.1- 93.1	63.1	
227	15.334	15.334	0.000		158069			33.2- 93.2	63.2	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	305048	25.0	27.7	70- 130	100	
182	15.476	15.476	0.000		287966			64- 124	94.4	
145	15.476	15.476	0.000		109131			5.8- 65.8	35.8	

Reagents:

VMWNUSURR50_00211	Amount Added: 5.00	Units: uL	
VMWNU8260CCV1_01080	Amount Added: 5.00	Units: uL	
VMWNU8260IS_00216	Amount Added: 5.00	Units: uL	Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17031.D

Injection Date: 17-Oct-2018 17:22:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: ICIS

Worklist Smp#: 11

Client ID:

Purge Vol: 10.000 mL

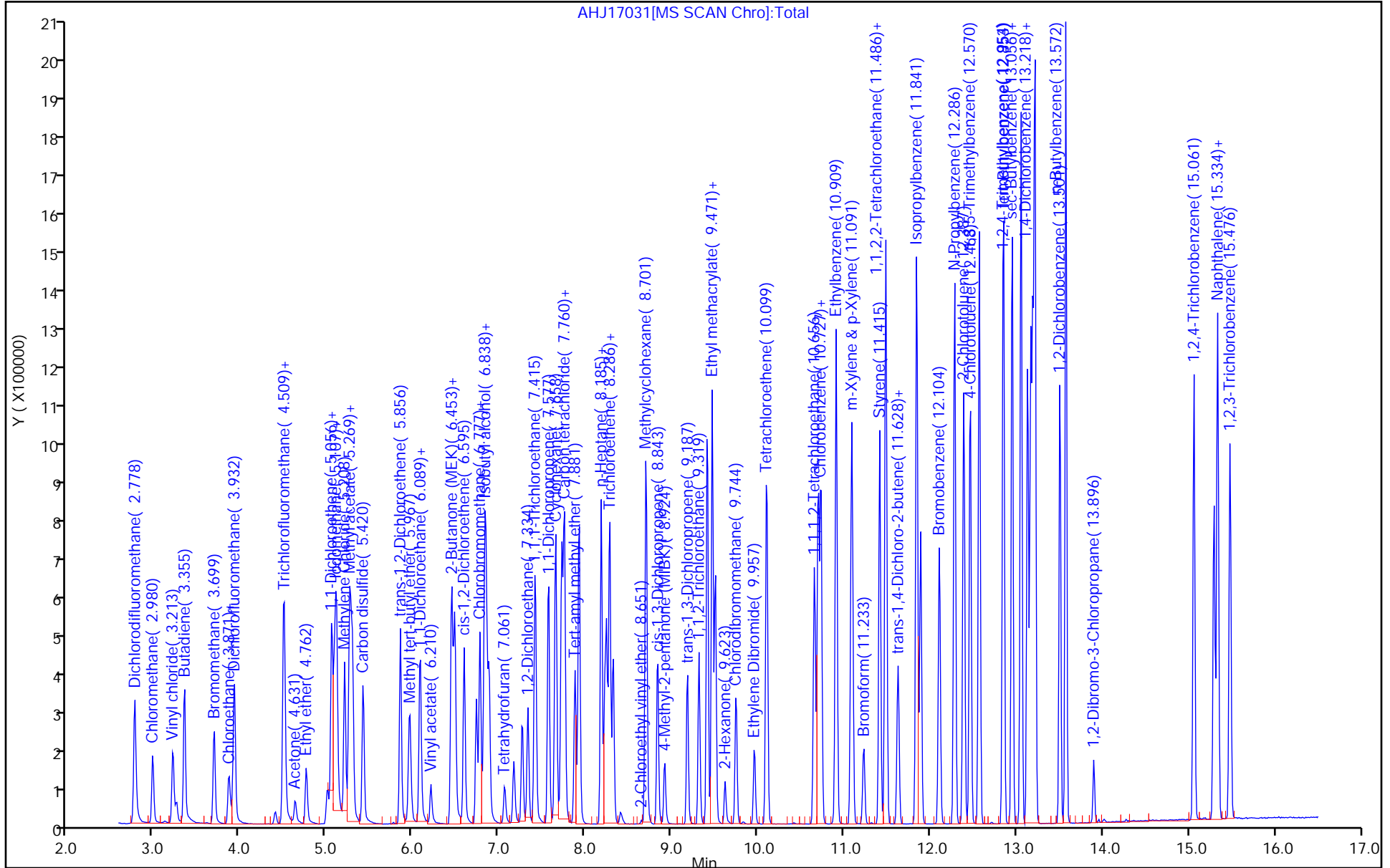
Dil. Factor: 1.0000

ALS Bottle#: 27

Method: 45_8260

Limit Group: MSV-8260-624

AHJ17031[MS SCAN Chro]:Total



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17032.D
 Lims ID: STD50
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 17-Oct-2018 17:49:30 ALS Bottle#: 28 Worklist Smp#: 12
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-012
 Misc. Info.: STD50
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:51 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 12:14:13

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	100	142896	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	653482	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		42302			0.0- 36.8	6.5	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	85	562091	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		275712			21.9- 81.9	49.1	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	94	319287	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		615363			152- 212	193	
115	13.167	13.167	0.000		191796			31.1- 91.1	60.1	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	92	398192	50.0	50.0	70- 130	100	
111	6.889	6.889	0.000		407350			74- 134	102	
192	6.889	6.889	0.000		65281			0.0- 46.6	16.4	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.263	7.274	-0.011	95	386831	50.0	48.5	70- 130	100	
67	7.273	7.274	-0.001		186368			15.9- 75.9	48.2	
102	7.273	7.274	-0.001		61715			0.0- 45.2	16.0	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.410	0.000	93	1234931	50.0	48.8	70- 130	100	
100	9.410	9.410	0.000		864793			40- 100	70.0	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	93	519304	50.0	49.2	70- 130	100	
174	11.891	11.891	0.000		489429			62- 122	94.2	
176	11.891	11.891	0.000		459939			59- 119	88.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.778	-0.001	99	725423	50.0	51.2	70- 130	100	
87	2.777	2.778	-0.001		236838			2.5- 62.5	32.6	
50	2.777	2.778	-0.001		76787			0.0- 40.2	10.6	
12 Chloromethane										
50	2.980	2.980	0.000	99	349662	50.0	49.8	70- 130	100	
52	2.980	2.980	0.000		117591			3.7- 63.7	33.6	
13 Vinyl chloride										
62	3.223	3.213	0.010	99	367948	50.0	50.1	70- 130	100	
64	3.223	3.213	0.010		122961			3.0- 63.0	33.4	
14 Butadiene										
54	3.355	3.355	0.000	85	324388	50.0	51.8	70- 130	100	
53	3.355	3.355	0.000		230429			39- 99	71.0	
39	3.355	3.355	0.000		291389			62- 122	89.8	
15 Bromomethane										
96	3.699	3.699	0.000	94	278060	50.0	50.3	70- 130	100	
94	3.699	3.699	0.000		295271			72- 132	106	
79	3.699	3.699	0.000		59669			0.0- 50.2	21.5	
16 Chloroethane										
64	3.871	3.861	0.010	97	221357	50.0	51.9	70- 130	100	
66	3.871	3.861	0.010		67883			0.0- 59.6	30.7	
49	3.871	3.861	0.010		72666			2.2- 62.2	32.8	
17 Ethanol										
45	3.901	3.902	-0.001	98	147441	2500.0	2485.8	70- 130	100	
46	3.901	3.902	-0.001		54968			7.2- 67.2	37.3	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	668719	50.0	49.4	70- 130	100	
69	3.932	3.932	0.000		221944			2.6- 62.6	33.2	
47	3.932	3.932	0.000		76673			0.0- 41.5	11.5	
21 Acrolein										
56	4.499	4.499	0.000	56	16705	50.0	52.3	70- 130	100	
55	4.489	4.499	-0.010		10981			32.9- 92.9	65.7	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	98	1021499	50.0	49.9	70- 130	100	
103	4.509	4.499	0.010		680705			33.3- 93.3	66.6	
66	4.499	4.499	0.000		107285			0.0- 39.9	10.5	
23 Acetonitrile										
41	4.509	4.509	0.000	35	201672	500.0	495.4	70- 130	100	
40	4.509	4.509	0.000		110558			26.9- 86.9	54.8	
39	4.509	4.509	0.000		47197			0.0- 52.0	23.4	
25 Acetone										
43	4.631	4.631	-0.001	92	65798	50.0	46.4	70- 130	100	
58	4.631	4.631	-0.001		16582			0.0- 52.7	25.2	
27 Ethyl ether										
59	4.762	4.762	0.000	96	181096	50.0	54.4	70- 130	100	
45	4.762	4.762	0.000		130450			43- 103	72.0	
74	4.762	4.762	0.000		111107			32.9- 92.9	61.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	95	329457	50.0	52.9	70- 130	100	
61	5.056	5.056	0.000		610826			159- 219	185	
98	5.066	5.056	0.010		221193			34.3- 94.3	67.1	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	98	349267	500.0	531.1	70- 130	100	
57	5.086	5.096	-0.010		34122			0.0- 39.8	9.8	
41	5.086	5.096	-0.010		88159			0.0- 56.4	25.2	
29 Iodomethane										
142	5.096	5.096	0.000	94	663336	50.0	51.5	70- 130	100	
127	5.096	5.096	0.000		369561			24.1- 84.1	55.7	
31 Acrylonitrile										
53	5.117	5.117	0.000	93	676780	500.0	499.1	70- 130	100	
52	5.117	5.117	0.000		609035			58- 118	90.0	
51	5.117	5.117	0.000		276218			11.2- 71.2	40.8	
32 Methylene Chloride										
84	5.208	5.208	0.000	96	309524	50.0	56.1	70- 130	100	
49	5.208	5.208	0.000		415325			108- 168	134	
51	5.208	5.208	0.000		137822			14.8- 74.8	44.5	
86	5.208	5.208	0.000		193535			34.0- 94.0	62.5	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.268	5.269	-0.001	91	489973	50.0	49.3	70- 130	100	
151	5.268	5.269	-0.001		424838			56- 116	86.7	
85	5.268	5.269	-0.001		208834			14.8- 74.8	42.6	
158 Methyl acetate										
43	5.268	5.269	-0.001	100	285102	100.0	108.7	70- 130	100	
74	5.268	5.269	-0.001		52530			19.8- 19.8	18.4	
59	5.268	5.269	-0.001		30264			0.0- 42.9	10.6	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	89	458187	50.0	52.7	70- 130	100	
39	5.299	5.299	0.000		354664			50- 110	77.4	
76	5.299	5.299	0.000		154855			4.5- 64.5	33.8	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	988309	50.0	51.0	70- 130	100	
78	5.420	5.420	0.000		85913			0.0- 39.4	8.7	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	97	352843	50.0	52.6	70- 130	100	
61	5.856	5.856	0.000		514337			119- 179	146	
98	5.856	5.856	0.000		225217			33.6- 93.6	63.8	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	95	630577	50.0	53.1	70- 130	100	
57	5.967	5.967	0.000		132011			0.0- 50.7	20.9	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	97	579717	50.0	49.8	70- 130	100	
65	6.079	6.079	0.000		183763			0.5- 60.5	31.7	
83	6.079	6.079	0.000		91015			0.0- 45.0	15.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	98	302165	500.0	556.6	70- 130	100	
52	6.089	6.089	0.000		70002			0.0- 53.7	23.2	
55	6.089	6.089	0.000		43684			0.0- 45.5	14.5	
43 Vinyl acetate										
43	6.210	6.210	0.000	98	434440	50.0	56.5	70- 130	100	
86	6.210	6.210	0.000		38700			0.0- 38.1	8.9	
45 Hexane										
57	6.453	6.453	0.000	94	554447	50.0	50.0	70- 130	100	
86	6.453	6.453	0.000		88733			0.0- 46.0	16.0	
46 2-Butanone (MEK)										
72	6.473	6.474	-0.001	93	24700	50.0	51.0	70- 130	100	
43	6.484	6.474	0.010		860926			3898- 3958	3486	
57	6.453	6.474	-0.021		554424			2498- 2558	2245	
47 Isopropyl ether										
45	6.484	6.484	0.000	95	855127	50.0	51.0	70- 130	100	
87	6.484	6.484	0.000		222481			0.0- 55.7	26.0	
59	6.484	6.484	0.000		94363			0.0- 40.7	11.0	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	83	341587	50.0	51.2	70- 130	100	
61	6.595	6.595	0.000		476681			113- 173	140	
98	6.595	6.595	0.000		220856			35.8- 95.8	64.7	
52 Chlorobromomethane										
128	6.737	6.737	0.000	88	165989	50.0	51.4	70- 130	100	
49	6.737	6.737	0.000		242778			125- 185	146	
54 Chloroform										
83	6.777	6.777	0.000	92	675905	50.0	49.7	70- 130	100	
85	6.777	6.777	0.000		464754			35.3- 95.3	68.8	
47	6.777	6.777	0.000		160670			0.0- 54.5	23.8	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	720685	50.0	53.0	70- 130	100	
87	6.828	6.828	0.000		294066			9.5- 69.5	40.8	
57	6.828	6.828	0.000		221911			0.0- 59.8	30.8	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	593227	50.0	51.2	70- 130	100	
97	6.848	6.848	0.000		107809			0.0- 47.8	18.2	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	97	358274	1250.0	1283.4	70- 130	100	
41	6.848	6.858	-0.010		619151			158- 218	173	
42	6.858	6.858	0.000		201337			24.6- 84.6	56.2	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	89	126655	100.0	105.9	70- 130	100	
71	7.061	7.061	0.000		45830			5.2- 65.2	36.2	
72	7.061	7.061	0.000		48325			8.9- 68.9	38.2	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	99	456671	50.0	49.5	70- 130	100	
64	7.334	7.334	0.000		153966			1.8- 61.8	33.7	
49	7.334	7.334	0.000		104965			0.0- 52.2	23.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	844448	50.0	50.7	70- 130	100	
99	7.415	7.415	0.000		549679			35.9- 95.9	65.1	
61	7.415	7.415	0.000		333667			9.0- 69.0	39.5	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	93	534214	50.0	50.9	70- 130	100	
110	7.577	7.577	0.000		207756			8.5- 68.5	38.9	
77	7.577	7.577	0.000		167471			0.9- 60.9	31.3	
69 Cyclohexane										
56	7.658	7.658	0.000	91	657023	50.0	52.4	70- 130	100	
84	7.658	7.658	0.000		536126			49- 109	81.6	
69	7.658	7.658	0.000		178311			0.0- 56.1	27.1	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	95	889259	50.0	55.0	70- 130	100	
119	7.729	7.729	0.000		834350			65- 125	93.8	
82	7.729	7.729	0.000		188419			0.0- 51.0	21.2	
72 Benzene										
78	7.760	7.760	0.000	98	1078710	50.0	49.4	70- 130	100	
51	7.760	7.760	0.000		256327			0.0- 53.4	23.8	
77	7.760	7.760	0.000		258462			0.0- 53.9	24.0	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	95	563190	50.0	54.1	70- 130	100	
87	7.881	7.881	0.000		152386			0.0- 56.3	27.1	
43	7.881	7.881	0.000		201014			4.4- 64.4	35.7	
55	7.881	7.881	0.000		160062			0.0- 58.6	28.4	
75 n-Heptane										
43	8.185	8.185	0.000	94	589739	50.0	52.4	70- 130	100	
57	8.185	8.185	0.000		315600			25.7- 85.7	53.5	
71	8.185	8.185	0.000		322625			23.7- 83.7	54.7	
100	8.185	8.185	0.000		118309			0.0- 50.5	20.1	
77 Dibromomethane										
93	8.225	8.225	0.000	94	183390	50.0	52.5	70- 130	100	
95	8.225	8.225	0.000		156852			54- 114	85.5	
174	8.225	8.225	0.000		200101			78- 138	109	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	89	263030	50.0	52.2	70- 130	100	
62	8.246	8.246	0.000		191706			42- 102	72.9	
41	8.246	8.246	0.000		195171			45- 105	74.2	
79 Trichloroethene										
130	8.286	8.286	0.000	94	455816	50.0	51.1	70- 130	100	
95	8.286	8.286	0.000		434458			63- 123	95.3	
132	8.286	8.286	0.000		459653			71- 131	101	
60	8.276	8.286	-0.010		220434			20.6- 80.6	48.4	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	500424	50.0	54.1	70- 130	100	
85	8.327	8.327	0.000		320887			36.1- 96.1	64.1	
129	8.327	8.327	0.000		70909			0.0- 44.5	14.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
83 2-Chloroethyl vinyl ether										
63	8.651	8.651	0.000	92	8858	50.0	45.3	70- 130	100	
65	8.651	8.651	0.000		2499			162- 222	28.2	
106	8.651	8.651	0.000		2455			0.0- 53.1	27.7	
159 Methylcyclohexane										
83	8.701	8.701	0.000	93	672553	50.0	53.4	70- 130	100	
55	8.701	8.701	0.000		581184			87.9- 87.9	86.4	
98	8.701	8.701	0.000		337535			19.2- 79.2	50.2	
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	413838	50.0	51.5	70- 130	100	
39	8.833	8.843	-0.010		225055			21.3- 81.3	54.4	
77	8.843	8.843	0.000		135806			1.0- 61.0	32.8	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	96	216698	50.0	52.5	70- 130	100	
100	8.924	8.924	0.000		32738			0.0- 44.9	15.1	
58	8.924	8.924	0.000		87434			8.0- 68.0	40.3	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	412433	50.0	51.7	70- 130	100	
39	9.177	9.187	-0.010		185171			15.4- 75.4	44.9	
110	9.187	9.187	0.000		102374			0.0- 53.8	24.8	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	96	181248	50.0	49.7	70- 130	100	
97	9.319	9.319	0.000		227558			97- 157	126	
61	9.319	9.319	0.000		166004			62- 122	91.6	
90 Toluene										
91	9.471	9.471	0.000	98	1379855	50.0	48.3	70- 130	100	
92	9.471	9.471	0.000		826592			29.8- 89.8	59.9	
65	9.471	9.471	0.000		180419			0.0- 43.1	13.1	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	84	257957	50.0	54.2	70- 130	100	
41	9.511	9.511	0.000		437272			151- 211	170	
99	9.511	9.511	0.000		62072			0.0- 53.8	24.1	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	88	367214	50.0	49.8	70- 130	100	
78	9.511	9.511	0.000		117746			1.6- 61.6	32.1	
49	9.511	9.511	0.000		76223			0.0- 48.7	20.8	
93 2-Hexanone										
43	9.623	9.623	0.000	96	153112	50.0	52.1	70- 130	100	
58	9.623	9.623	0.000		83004			22.9- 82.9	54.2	
100	9.623	9.623	0.000		17387			0.0- 41.9	11.4	
94 Chlorodibromomethane										
129	9.754	9.744	0.010	89	382762	50.0	53.7	70- 130	100	
127	9.744	9.744	0.000		289391			47- 107	75.6	
79	9.744	9.744	0.000		54177			0.0- 44.5	14.2	
208	9.754	9.744	0.010		13659			0.0- 33.6	3.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.957	0.000	98	266080	50.0	51.9	70- 130	100	
109	9.957	9.957	0.000		247611			64- 124	93.1	
81	9.957	9.957	0.000		23844			0.0- 39.1	9.0	
97 Tetrachloroethene										
164	10.109	10.099	0.010	95	410591	50.0	50.0	70- 130	100	
166	10.109	10.099	0.010		508707			95- 155	124	
129	10.099	10.099	0.000		409535			64- 124	100	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	92	433102	50.0	52.5	70- 130	100	
133	10.656	10.656	0.000		419590			67- 127	96.9	
119	10.656	10.656	0.000		254777			35.9- 95.9	58.8	
101 Chlorobenzene										
112	10.737	10.737	0.000	96	992798	50.0	47.4	70- 130	100	
77	10.737	10.737	0.000		509544			19.9- 79.9	51.3	
114	10.737	10.737	0.000		327506			1.4- 61.4	33.0	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	1764693	50.0	48.9	70- 130	100	
106	10.909	10.909	0.000		556510			0.2- 60.2	31.5	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	97	685629	50.0	52.6	70- 130	100	
91	11.091	11.091	0.000		1413376			180- 240	206	
105	11.091	11.091	0.000		314044			14.5- 74.5	45.8	
105 Bromoform										
173	11.233	11.233	0.000	97	228040	50.0	53.9	70- 130	100	
175	11.233	11.233	0.000		109794			19.7- 79.7	48.1	
79	11.223	11.233	-0.010		43812			0.0- 49.9	19.2	
252	11.233	11.233	0.000		16303			0.0- 36.9	7.1	
106 Styrene										
104	11.415	11.415	0.000	94	1000830	50.0	54.6	70- 130	100	
103	11.415	11.415	0.000		485602			17.4- 77.4	48.5	
78	11.415	11.415	0.000		444628			15.1- 75.1	44.4	
51	11.415	11.415	0.000		237823			0.0- 53.9	23.8	
109 1,1,2,2-Tetrachloroethane										
83	11.476	11.486	-0.010	59	288084	50.0	52.1	70- 130	100	
85	11.486	11.486	0.000		187489			35.7- 95.7	65.1	
131	11.486	11.486	0.000		42008			0.0- 45.0	14.6	
108 o-Xylene										
106	11.486	11.486	0.000	97	646328	50.0	52.1	70- 130	100	
91	11.486	11.486	0.000		1396273			197- 257	216	
105	11.486	11.486	0.000		269156			10.8- 70.8	41.6	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	81	86712	50.0	53.4	70- 130	100	
89	11.638	11.628	0.010		54506			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	110681	50.0	51.4	70- 130	100	
77	11.628	11.628	0.000		101950			58- 118	92.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.840	11.841	-0.001	97	1946311	50.0	50.4	70- 130	100	
120	11.840	11.841	-0.001		552468			0.0- 55.6	28.4	
77	11.840	11.841	-0.001		313630			0.0- 45.8	16.1	
113 Bromobenzene										
156	12.104	12.104	0.000	88	494067	50.0	53.6	70- 130	100	
77	12.104	12.104	0.000		569332			91- 151	115	
158	12.104	12.104	0.000		466774			67- 127	94.5	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	2148615	50.0	50.1	70- 130	100	
120	12.286	12.286	0.000		562537			0.0- 54.5	26.2	
65	12.286	12.286	0.000		259948			0.0- 42.2	12.1	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	1300384	50.0	49.3	70- 130	100	
126	12.387	12.387	0.000		496244			7.2- 67.2	38.2	
75	12.387	12.387	0.000		37522			0.0- 32.9	2.9	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	1333736	50.0	50.4	70- 130	100	
126	12.468	12.468	0.000		496072			7.3- 67.3	37.2	
117 1,3,5-Trimethylbenzene										
105	12.569	12.570	-0.001	95	1665392	50.0	51.3	70- 130	100	
120	12.569	12.570	-0.001		820149			18.4- 78.4	49.2	
91	12.569	12.570	-0.001		203131			0.0- 41.8	12.2	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	92	1663948	50.0	52.6	70- 130	100	
91	12.853	12.853	0.000		1134030			41- 101	68.2	
134	12.853	12.853	0.000		413313			0.0- 54.6	24.8	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	1684905	50.0	52.3	70- 130	100	
120	12.954	12.954	0.000		779000			15.7- 75.7	46.2	
77	12.954	12.954	0.000		208488			0.0- 42.4	12.4	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	2223180	50.0	49.5	70- 130	100	
134	13.056	13.056	0.000		522932			0.0- 52.3	23.5	
91	13.056	13.056	0.000		416843			0.0- 47.8	18.7	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	98	1036558	50.0	50.5	70- 130	100	
111	13.126	13.127	-0.001		393278			10.6- 70.6	37.9	
148	13.126	13.127	-0.001		657028			34.6- 94.6	63.4	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	94	962198	50.0	47.3	70- 130	100	
111	13.187	13.187	0.000		380662			8.8- 68.8	39.6	
148	13.187	13.187	0.000		634878			35.7- 95.7	66.0	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	95	2027705	50.0	49.7	70- 130	100	
134	13.218	13.218	0.000		592625			0.0- 57.7	29.2	
91	13.218	13.218	0.000		531999			0.0- 56.0	26.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	98	911773	50.0	52.5	70- 130	100	
111	13.501	13.501	0.000		368103			10.1- 70.1	40.4	
148	13.511	13.501	0.010		602094			32.6- 92.6	66.0	
128 n-Butylbenzene										
91	13.572	13.572	0.000	96	1785400	50.0	51.0	70- 130	100	
92	13.572	13.572	0.000		1017299			24.4- 84.4	57.0	
134	13.572	13.572	0.000		570802			0.0- 59.7	32.0	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	86	78045	50.0	52.9	70- 130	100	
155	13.896	13.896	0.000		74712			65- 125	95.7	
157	13.896	13.896	0.000		93842			86- 146	120	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	96	690021	50.0	53.4	70- 130	100	
182	15.061	15.061	0.000		653567			67- 127	94.7	
145	15.061	15.061	0.000		237229			4.2- 64.2	34.4	
134 Naphthalene										
128	15.293	15.294	-0.001	97	1364824	50.0	55.8	70- 130	100	
127	15.293	15.294	-0.001		180522			0.0- 42.9	13.2	
129	15.293	15.294	-0.001		159876			0.0- 41.7	11.7	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	93	505530	50.0	50.4	70- 130	100	
223	15.334	15.334	0.000		320784			33.1- 93.1	63.5	
227	15.334	15.334	0.000		345229			33.2- 93.2	68.3	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	631075	50.0	54.0	70- 130	100	
182	15.476	15.476	0.000		599791			64- 124	95.0	
145	15.476	15.476	0.000		228436			5.8- 65.8	36.2	
S 144 Xylenes, Total										
1				0					104.7	
S 145 1,2-Dichloroethene, Total										
1				0					103.8	

Reagents:

VMWNU8260200_00219	Amount Added: 2.50	Units: uL
VMWNUSURR200_00211	Amount Added: 2.50	Units: uL
VMWNU8260IS_00216	Amount Added: 5.00	Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17032.D

Injection Date: 17-Oct-2018 17:49:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD50

Worklist Smp#: 12

Client ID:

Purge Vol: 10.000 mL

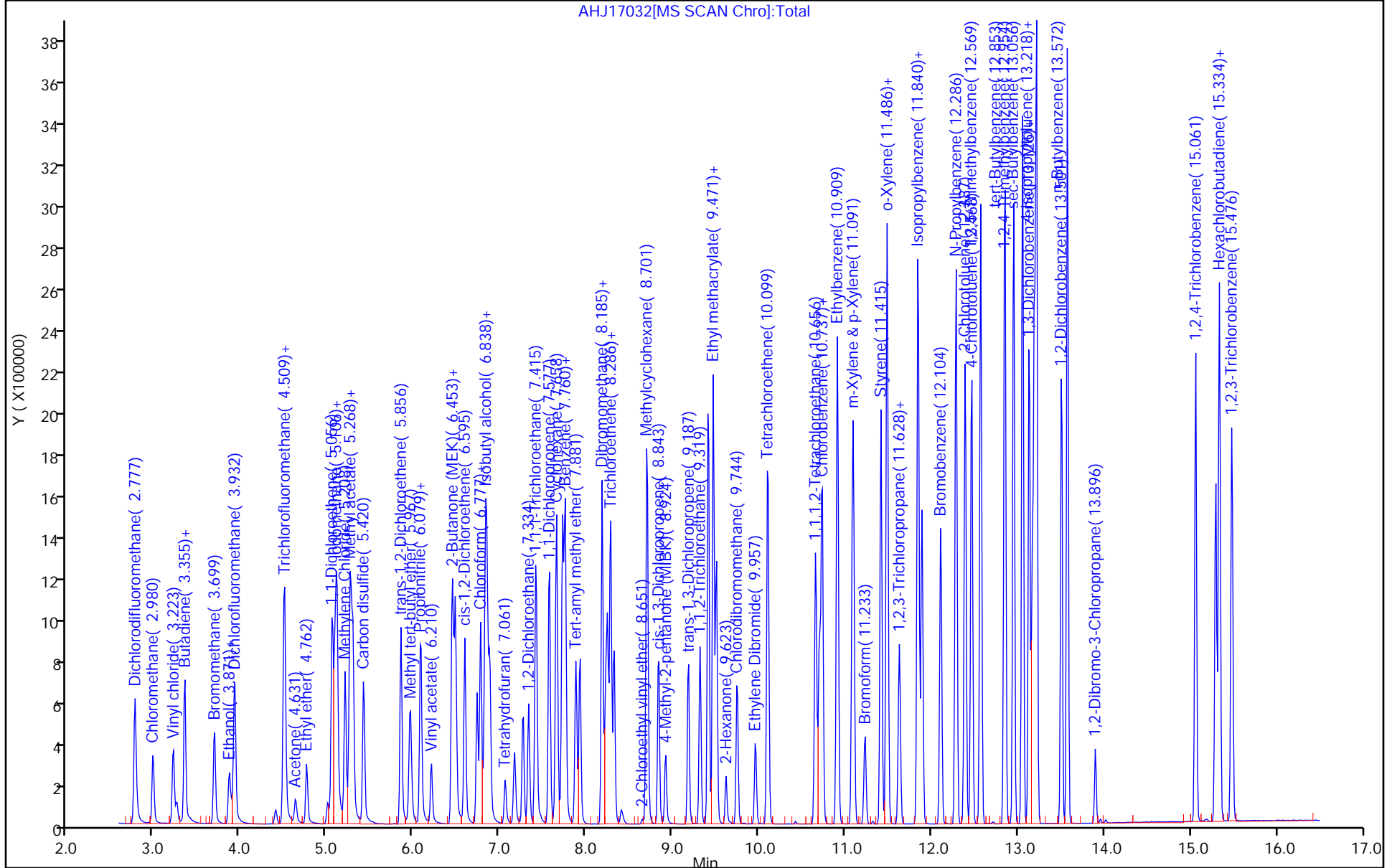
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: 45_8260

Limit Group: MSV-8260-624

AHJ17032[MS SCAN Chro]:Total



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17033.D
 Lims ID: STD100
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 17-Oct-2018 18:17:30 ALS Bottle#: 29 Worklist Smp#: 13
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-013
 Misc. Info.: STD100
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:07:57 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 12:15:29

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.015	5.005	0.010	100	148022	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	716821	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		48026			0.0- 36.8	6.7	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	85	640002	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		302871			21.9- 81.9	47.3	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	93	354074	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		800780			152- 212	226	
115	13.167	13.167	0.000		208318			31.1- 91.1	58.8	
\$ 6 Dibromofluoromethane (Surr)										
113	6.879	6.889	-0.010	92	839602	100.0	96.2	70- 130	100	
111	6.879	6.889	-0.010		841085			74- 134	100	
192	6.889	6.889	0.000		144646			0.0- 46.6	17.2	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.264	7.274	-0.010	95	811420	100.0	92.7	70- 130	100	
67	7.264	7.274	-0.010		386327			15.9- 75.9	47.6	
102	7.274	7.274	0.000		127330			0.0- 45.2	15.7	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.410	0.000	93	2505176	100.0	87.0	70- 130	100	
100	9.420	9.410	0.010		1821477			40- 100	72.7	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	93	1102421	100.0	94.1	70- 130	100	
174	11.891	11.891	0.000		1007667			62- 122	91.4	
176	11.891	11.891	0.000		982341			59- 119	89.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	99	1460602	100.0	94.0	70- 130	100	
87	2.778	2.778	0.000		482093			2.5- 62.5	33.0	
50	2.778	2.778	0.000		151647			0.0- 40.2	10.4	
12 Chloromethane										
50	2.980	2.980	0.000	99	717343	100.0	93.2	70- 130	100	
52	2.980	2.980	0.000		241381			3.7- 63.7	33.6	
13 Vinyl chloride										
62	3.213	3.213	0.000	98	739371	100.0	91.7	70- 130	100	
64	3.213	3.213	0.000		252446			3.0- 63.0	34.1	
14 Butadiene										
54	3.355	3.355	0.000	85	652089	100.0	94.9	70- 130	100	
53	3.355	3.355	0.000		464322			39- 99	71.2	
39	3.355	3.355	0.000		610347			62- 122	93.6	
15 Bromomethane										
96	3.699	3.699	0.000	94	593962	100.0	98.0	70- 130	100	
94	3.699	3.699	0.000		625471			72- 132	105	
79	3.689	3.699	-0.010		123915			0.0- 50.2	20.9	
16 Chloroethane										
64	3.871	3.861	0.010	97	470079	100.0	100.6	70- 130	100	
66	3.861	3.861	0.000		145253			0.0- 59.6	30.9	
49	3.871	3.861	0.010		150746			2.2- 62.2	32.1	
17 Ethanol										
45	3.902	3.902	0.000	99	323145	5000.0	5259.5	70- 130	100	
46	3.902	3.902	0.000		122154			7.2- 67.2	37.8	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	1346230	100.0	90.7	70- 130	100	
69	3.932	3.932	0.000		455794			2.6- 62.6	33.9	
47	3.932	3.932	0.000		161232			0.0- 41.5	12.0	
21 Acrolein										
56	4.489	4.499	-0.010	97	37533	100.0	104.9	70- 130	100	
55	4.489	4.499	-0.010		25438			32.9- 92.9	67.8	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	99	2089619	100.0	93.0	70- 130	100	
103	4.509	4.499	0.010		1377813			33.3- 93.3	65.9	
66	4.499	4.499	0.000		226868			0.0- 39.9	10.9	
23 Acetonitrile										
41	4.499	4.509	-0.010	39	413082	1000.0	925.0	70- 130	100	
40	4.499	4.509	-0.010		230688			26.9- 86.9	55.8	
39	4.499	4.509	-0.010		95806			0.0- 52.0	23.2	
25 Acetone										
43	4.631	4.631	0.000	92	134304	100.0	86.3	70- 130	100	
58	4.631	4.631	0.000		35226			0.0- 52.7	26.2	
27 Ethyl ether										
59	4.762	4.762	0.000	94	393627	100.0	107.8	70- 130	100	
45	4.762	4.762	0.000		271589			43- 103	69.0	
74	4.762	4.762	0.000		241831			32.9- 92.9	61.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	96	696975	100.0	102.1	70- 130	100	
61	5.056	5.056	0.000		1270813			159- 219	182	
98	5.066	5.056	0.010		466894			34.3- 94.3	67.0	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	99	737569	1000.0	1082.7	70- 130	100	
57	5.086	5.096	-0.010		75727			0.0- 39.8	10.3	
41	5.086	5.096	-0.010		190327			0.0- 56.4	25.8	
29 Iodomethane										
142	5.096	5.096	0.000	97	1408982	100.0	99.7	70- 130	100	
127	5.096	5.096	0.000		736943			24.1- 84.1	52.3	
31 Acrylonitrile										
53	5.117	5.117	0.000	96	1412740	1000.0	949.0	70- 130	100	
52	5.117	5.117	0.000		1205297			58- 118	85.3	
51	5.117	5.117	0.000		568960			11.2- 71.2	40.3	
32 Methylene Chloride										
84	5.208	5.208	0.000	97	560874	100.0	96.3	70- 130	100	
49	5.208	5.208	0.000		804316			108- 168	143	
51	5.208	5.208	0.000		266188			14.8- 74.8	47.5	
86	5.208	5.208	0.000		400842			34.0- 94.0	71.5	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	91	1039873	100.0	95.4	70- 130	100	
151	5.269	5.269	0.000		918245			56- 116	88.3	
85	5.269	5.269	0.000		450351			14.8- 74.8	43.3	
158 Methyl acetate										
43	5.259	5.269	-0.011	98	547530	200.0	190.2	70- 130	100	
74	5.259	5.269	-0.011		121305			19.8- 19.8	22.2	
59	5.259	5.269	-0.011		67331			0.0- 42.9	12.3	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	88	926707	100.0	97.1	70- 130	100	
39	5.299	5.299	0.000		725764			50- 110	78.3	
76	5.299	5.299	0.000		336293			4.5- 64.5	36.3	
37 Carbon disulfide										
76	5.421	5.420	0.001	99	2011491	100.0	94.5	70- 130	100	
78	5.421	5.420	0.001		191958			0.0- 39.4	9.5	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	98	747589	100.0	101.6	70- 130	100	
61	5.856	5.856	0.000		1051825			119- 179	141	
98	5.856	5.856	0.000		472678			33.6- 93.6	63.2	
39 Methyl tert-butyl ether										
73	5.957	5.967	-0.010	95	1346843	100.0	103.3	70- 130	100	
57	5.967	5.967	0.000		276931			0.0- 50.7	20.6	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	97	1178958	100.0	92.3	70- 130	100	
65	6.079	6.079	0.000		374852			0.5- 60.5	31.8	
83	6.079	6.079	0.000		180296			0.0- 45.0	15.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	98	595248	1000.0	999.5	70- 130	100	
52	6.089	6.089	0.000		137787			0.0- 53.7	23.1	
55	6.089	6.089	0.000		91048			0.0- 45.5	15.3	
43 Vinyl acetate										
43	6.210	6.210	0.000	97	935602	100.0	110.9	70- 130	100	
86	6.210	6.210	0.000		83746			0.0- 38.1	9.0	
45 Hexane										
57	6.453	6.453	0.000	94	1139123	100.0	93.6	70- 130	100	
86	6.453	6.453	0.000		185596			0.0- 46.0	16.3	
46 2-Butanone (MEK)										
72	6.474	6.474	0.000	92	54932	100.0	100.3	70- 130	100	
43	6.484	6.474	0.010		1691058			3898- 3958	3078	
57	6.453	6.474	-0.021		1139123			2498- 2558	2074	
47 Isopropyl ether										
45	6.484	6.484	0.000	92	1703442	100.0	92.6	70- 130	100	
87	6.484	6.484	0.000		485996			0.0- 55.7	28.5	
59	6.484	6.484	0.000		199357			0.0- 40.7	11.7	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	81	748646	100.0	102.2	70- 130	100	
61	6.595	6.595	0.000		994308			113- 173	133	
98	6.595	6.595	0.000		477879			35.8- 95.8	63.8	
52 Chlorobromomethane										
128	6.737	6.737	0.000	86	356670	100.0	100.7	70- 130	100	
49	6.737	6.737	0.000		498189			125- 185	140	
54 Chloroform										
83	6.777	6.777	0.000	93	1415431	100.0	94.9	70- 130	100	
85	6.777	6.777	0.000		925926			35.3- 95.3	65.4	
47	6.777	6.777	0.000		307185			0.0- 54.5	21.7	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	94	1499956	100.0	100.6	70- 130	100	
87	6.828	6.828	0.000		630128			9.5- 69.5	42.0	
57	6.828	6.828	0.000		460918			0.0- 59.8	30.7	
58 2,2-Dichloropropane										
77	6.838	6.848	-0.010	93	1251918	100.0	98.6	70- 130	100	
97	6.848	6.848	0.000		232981			0.0- 47.8	18.6	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	96	726775	2500.0	2513.3	70- 130	100	
41	6.848	6.858	-0.010		1237322			158- 218	170	
42	6.858	6.858	0.000		412432			24.6- 84.6	56.7	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	84	254902	200.0	194.3	70- 130	100	
71	7.061	7.061	0.000		104590			5.2- 65.2	41.0	
72	7.061	7.061	0.000		106986			8.9- 68.9	42.0	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	99	937112	100.0	92.7	70- 130	100	
64	7.334	7.334	0.000		324493			1.8- 61.8	34.6	
49	7.334	7.334	0.000		215007			0.0- 52.2	22.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	1760136	100.0	96.3	70- 130	100	
99	7.415	7.415	0.000		1148520			35.9- 95.9	65.3	
61	7.415	7.415	0.000		677309			9.0- 69.0	38.5	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	94	1129799	100.0	98.2	70- 130	100	
110	7.577	7.577	0.000		456535			8.5- 68.5	40.4	
77	7.577	7.577	0.000		357622			0.9- 60.9	31.7	
69 Cyclohexane										
56	7.658	7.658	0.000	90	1350929	100.0	98.3	70- 130	100	
84	7.658	7.658	0.000		1138694			49- 109	84.3	
69	7.658	7.658	0.000		392281			0.0- 56.1	29.0	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	97	1794324	100.0	101.1	70- 130	100	
119	7.729	7.729	0.000		1752333			65- 125	97.7	
82	7.729	7.729	0.000		387376			0.0- 51.0	21.6	
72 Benzene										
78	7.760	7.760	0.000	98	2249123	100.0	93.9	70- 130	100	
51	7.760	7.760	0.000		519399			0.0- 53.4	23.1	
77	7.760	7.760	0.000		568480			0.0- 53.9	25.3	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	96	1188842	100.0	104.0	70- 130	100	
87	7.881	7.881	0.000		342448			0.0- 56.3	28.8	
43	7.881	7.881	0.000		418351			4.4- 64.4	35.2	
55	7.881	7.881	0.000		331279			0.0- 58.6	27.9	
75 n-Heptane										
43	8.185	8.185	0.000	89	1157739	100.0	93.7	70- 130	100	
57	8.185	8.185	0.000		676325			25.7- 85.7	58.4	
71	8.185	8.185	0.000		671946			23.7- 83.7	58.0	
100	8.185	8.185	0.000		256147			0.0- 50.5	22.1	
77 Dibromomethane										
93	8.225	8.225	0.000	94	393802	100.0	102.8	70- 130	100	
95	8.225	8.225	0.000		338431			54- 114	85.9	
174	8.225	8.225	0.000		428787			78- 138	109	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	88	561810	100.0	101.6	70- 130	100	
62	8.246	8.246	0.000		392651			42- 102	69.9	
41	8.246	8.246	0.000		398873			45- 105	71.0	
79 Trichloroethene										
130	8.286	8.286	0.000	94	974703	100.0	99.6	70- 130	100	
95	8.286	8.286	0.000		917994			63- 123	94.2	
132	8.286	8.286	0.000		977343			71- 131	100	
60	8.276	8.286	-0.010		459575			20.6- 80.6	47.2	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	1044412	100.0	102.9	70- 130	100	
85	8.327	8.327	0.000		676063			36.1- 96.1	64.7	
129	8.327	8.327	0.000		149815			0.0- 44.5	14.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
83 2-Chloroethyl vinyl ether										
63	8.651	8.651	0.000	93	24740	100.0	87.0	70- 130	100	
65	8.651	8.651	0.000		7242			162- 222	29.3	
106	8.651	8.651	0.000		8494			0.0- 53.1	34.3	
159 Methylcyclohexane										
83	8.701	8.701	0.000	93	1417042	100.0	102.6	70- 130	100	
55	8.701	8.701	0.000		1249313			87.9- 87.9	88.2	
98	8.701	8.701	0.000		724545			19.2- 79.2	51.1	
86 cis-1,3-Dichloropropene										
75	8.833	8.843	-0.010	95	918371	100.0	100.3	70- 130	100	
39	8.833	8.843	-0.010		475163			21.3- 81.3	51.7	
77	8.833	8.843	-0.010		301454			1.0- 61.0	32.8	
87 4-Methyl-2-pentanone (MIBK)										
43	8.914	8.924	-0.010	95	458985	100.0	97.7	70- 130	100	
100	8.924	8.924	0.000		76407			0.0- 44.9	16.6	
58	8.924	8.924	0.000		186137			8.0- 68.0	40.6	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	92	909399	100.0	100.0	70- 130	100	
39	9.177	9.187	-0.010		382838			15.4- 75.4	42.1	
110	9.187	9.187	0.000		222266			0.0- 53.8	24.4	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	94	385906	100.0	92.9	70- 130	100	
97	9.319	9.319	0.000		501397			97- 157	130	
61	9.319	9.319	0.000		337991			62- 122	87.6	
90 Toluene										
91	9.471	9.471	0.000	97	2692953	100.0	82.8	70- 130	100	
92	9.471	9.471	0.000		1706480			29.8- 89.8	63.4	
65	9.471	9.471	0.000		379111			0.0- 43.1	14.1	
92 Ethyl methacrylate										
69	9.501	9.511	-0.010	86	573815	100.0	105.9	70- 130	100	
41	9.501	9.511	-0.010		906927			151- 211	158	
99	9.512	9.511	0.001		141348			0.0- 53.8	24.6	
91 1,3-Dichloropropane										
76	9.512	9.511	0.001	91	769766	100.0	91.6	70- 130	100	
78	9.512	9.511	0.001		256801			1.6- 61.6	33.4	
49	9.512	9.511	0.001		145330			0.0- 48.7	18.9	
93 2-Hexanone										
43	9.623	9.623	0.000	95	330672	100.0	98.8	70- 130	100	
58	9.623	9.623	0.000		185257			22.9- 82.9	56.0	
100	9.623	9.623	0.000		41889			0.0- 41.9	12.7	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	871079	100.0	107.3	70- 130	100	
127	9.744	9.744	0.000		672773			47- 107	77.2	
79	9.744	9.744	0.000		119898			0.0- 44.5	13.8	
208	9.755	9.744	0.011		35449			0.0- 33.6	4.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.957	0.000	98	577699	100.0	98.9	70- 130	100	
109	9.957	9.957	0.000		543050			64- 124	94.0	
81	9.957	9.957	0.000		49398			0.0- 39.1	8.6	
97 Tetrachloroethene										
164	10.109	10.099	0.010	95	896720	100.0	95.8	70- 130	100	
166	10.109	10.099	0.010		1096100			95- 155	122	
129	10.099	10.099	0.000		867843			64- 124	96.8	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	93	933851	100.0	99.5	70- 130	100	
133	10.656	10.656	0.000		919173			67- 127	98.4	
119	10.656	10.656	0.000		695483			35.9- 95.9	74.5	
101 Chlorobenzene										
112	10.737	10.737	0.000	94	2091227	100.0	87.7	70- 130	100	
77	10.727	10.737	-0.010		1069828			19.9- 79.9	51.2	
114	10.737	10.737	0.000		732939			1.4- 61.4	35.0	
102 Ethylbenzene										
91	10.909	10.909	0.000	98	3426882	100.0	83.4	70- 130	100	
106	10.909	10.909	0.000		1184384			0.2- 60.2	34.6	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	98	1482135	100.0	99.9	70- 130	100	
91	11.091	11.091	0.000		2906617			180- 240	196	
105	11.091	11.091	0.000		673465			14.5- 74.5	45.4	
105 Bromoform										
173	11.233	11.233	0.000	97	522882	100.0	108.5	70- 130	100	
175	11.233	11.233	0.000		256784			19.7- 79.7	49.1	
79	11.223	11.233	-0.010		98117			0.0- 49.9	18.8	
252	11.233	11.233	0.000		40524			0.0- 36.9	7.8	
106 Styrene										
104	11.415	11.415	0.000	94	2059181	100.0	98.6	70- 130	100	
103	11.415	11.415	0.000		1021825			17.4- 77.4	49.6	
78	11.415	11.415	0.000		924254			15.1- 75.1	44.9	
51	11.415	11.415	0.000		507447			0.0- 53.9	24.6	
109 1,1,2,2-Tetrachloroethane										
83	11.476	11.486	-0.010	60	610149	100.0	99.4	70- 130	100	
85	11.476	11.486	-0.010		413824			35.7- 95.7	67.8	
131	11.486	11.486	0.000		91487			0.0- 45.0	15.0	
108 o-Xylene										
106	11.486	11.486	0.000	96	1389687	100.0	98.3	70- 130	100	
91	11.486	11.486	0.000		2801185			197- 257	202	
105	11.486	11.486	0.000		579446			10.8- 70.8	41.7	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	82	193367	100.0	107.4	70- 130	100	
89	11.628	11.628	0.000		127915			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	238446	100.0	99.8	70- 130	100	
77	11.628	11.628	0.000		230201			58- 118	96.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.841	11.841	0.000	97	3744422	100.0	85.2	70- 130	100	
120	11.841	11.841	0.000		1156040			0.0- 55.6	30.9	
77	11.841	11.841	0.000		662810			0.0- 45.8	17.7	
113 Bromobenzene										
156	12.104	12.104	0.000	88	1038409	100.0	101.5	70- 130	100	
77	12.104	12.104	0.000		1174050			91- 151	113	
158	12.104	12.104	0.000		1011842			67- 127	97.4	
114 N-Propylbenzene										
91	12.286	12.286	0.000	96	4001093	100.0	84.2	70- 130	100	
120	12.286	12.286	0.000		1190753			0.0- 54.5	29.8	
65	12.286	12.286	0.000		549394			0.0- 42.2	13.7	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	2627092	100.0	89.8	70- 130	100	
126	12.387	12.387	0.000		1045721			7.2- 67.2	39.8	
75	12.387	12.387	0.000		80323			0.0- 32.9	3.1	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	96	2642488	100.0	90.1	70- 130	100	
126	12.468	12.468	0.000		1053266			7.3- 67.3	39.9	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	96	3248521	100.0	90.2	70- 130	100	
120	12.570	12.570	0.000		1742235			18.4- 78.4	53.6	
91	12.570	12.570	0.000		440123			0.0- 41.8	13.5	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	90	3252072	100.0	92.7	70- 130	100	
91	12.843	12.853	-0.010		2292648			41- 101	70.5	
134	12.853	12.853	0.000		925551			0.0- 54.6	28.5	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	96	3206788	100.0	89.7	70- 130	100	
120	12.954	12.954	0.000		1653449			15.7- 75.7	51.6	
77	12.954	12.954	0.000		448009			0.0- 42.4	14.0	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	94	4133004	100.0	83.0	70- 130	100	
134	13.056	13.056	0.000		1128258			0.0- 52.3	27.3	
91	13.056	13.056	0.000		862077			0.0- 47.8	20.9	
122 1,3-Dichlorobenzene										
146	13.127	13.127	0.000	95	2021778	100.0	88.8	70- 130	100	
111	13.127	13.127	0.000		837715			10.6- 70.6	41.4	
148	13.137	13.127	0.010		1401960			34.6- 94.6	69.3	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	93	1988324	100.0	88.1	70- 130	100	
111	13.187	13.187	0.000		804532			8.8- 68.8	40.5	
148	13.187	13.187	0.000		1322248			35.7- 95.7	66.5	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	93	3763029	100.0	83.1	70- 130	100	
134	13.218	13.218	0.000		1242193			0.0- 57.7	33.0	
91	13.218	13.218	0.000		1109926			0.0- 56.0	29.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	97	1854026	100.0	96.3	70- 130	100	
111	13.501	13.501	0.000		780402			10.1- 70.1	42.1	
148	13.501	13.501	0.000		1214972			32.6- 92.6	65.5	
128 n-Butylbenzene										
91	13.572	13.572	0.000	92	3265955	100.0	84.2	70- 130	100	
92	13.572	13.572	0.000		2006182			24.4- 84.4	61.4	
134	13.572	13.572	0.000		1221044			0.0- 59.7	37.4	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	91	173816	100.0	106.2	70- 130	100	
155	13.896	13.896	0.000		169862			65- 125	97.7	
157	13.896	13.896	0.000		221316			86- 146	127	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	1404147	100.0	98.0	70- 130	100	
182	15.061	15.061	0.000		1340653			67- 127	95.5	
145	15.061	15.061	0.000		488454			4.2- 64.2	34.8	
134 Naphthalene										
128	15.294	15.294	0.000	97	2716023	100.0	100.2	70- 130	100	
127	15.294	15.294	0.000		382727			0.0- 42.9	14.1	
129	15.294	15.294	0.000		341722			0.0- 41.7	12.6	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	93	1045079	100.0	94.0	70- 130	100	
223	15.334	15.334	0.000		677002			33.1- 93.1	64.8	
227	15.334	15.334	0.000		675553			33.2- 93.2	64.6	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	95	1300134	100.0	100.4	70- 130	100	
182	15.476	15.476	0.000		1263981			64- 124	97.2	
145	15.476	15.476	0.000		472724			5.8- 65.8	36.4	
S 144 Xylenes, Total										
1				0			198.3			
S 145 1,2-Dichloroethene, Total										
1				0			203.8			

Reagents:

VMWNU8260200_00219	Amount Added: 5.00	Units: uL	
VMWNUSURR200_00211	Amount Added: 5.00	Units: uL	
VMWNU8260IS_00216	Amount Added: 5.00	Units: uL	Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17033.D

Injection Date: 17-Oct-2018 18:17:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD100

Worklist Smp#: 13

Client ID:

Purge Vol: 10.000 mL

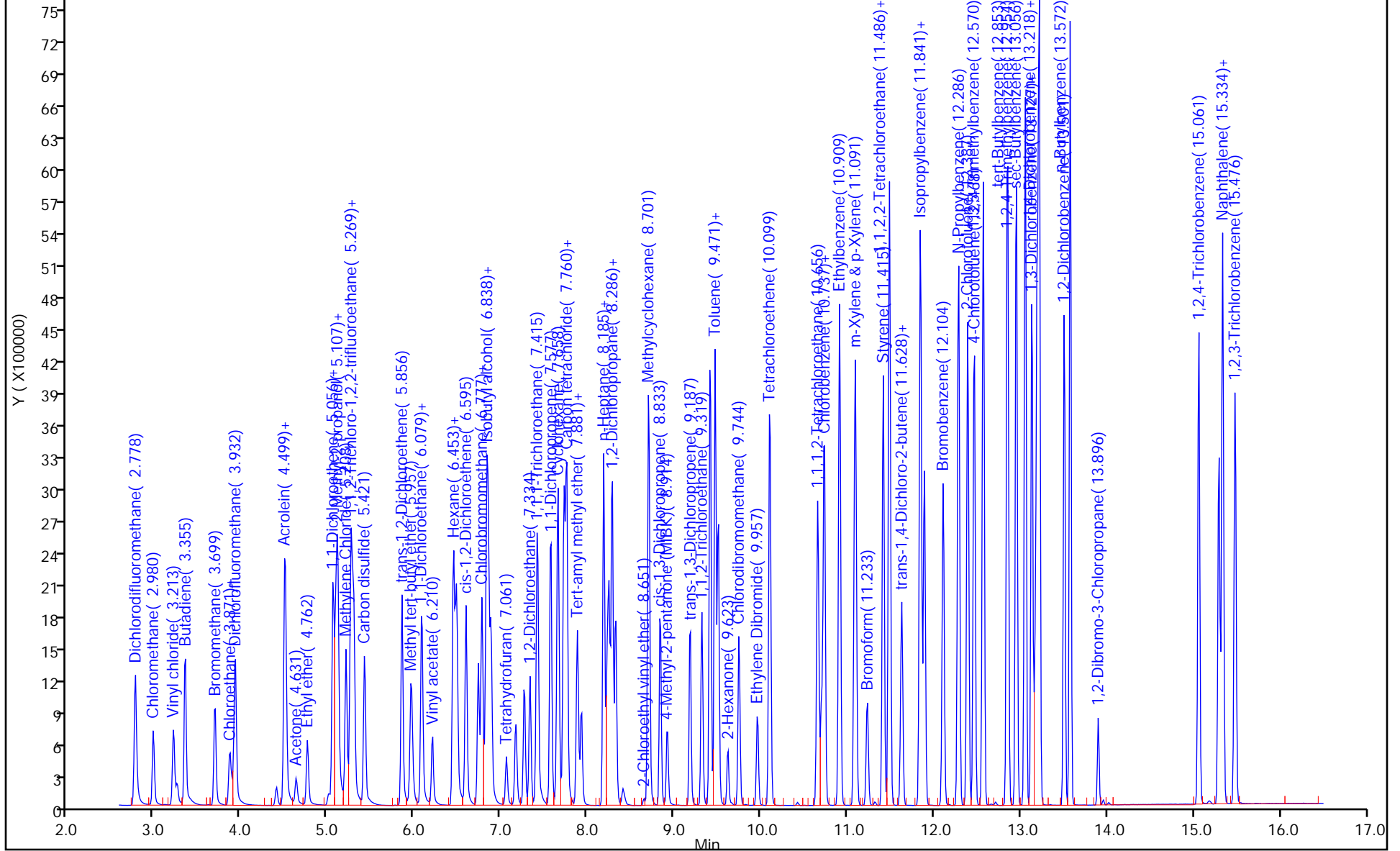
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: 45_8260

Limit Group: MSV-8260-624

AHJ17033[MS SCAN Chrom]:Total



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17034.D
 Lims ID: STD200
 Client ID:
 Sample Type: IC Calib Level: 11
 Inject. Date: 17-Oct-2018 18:44:30 ALS Bottle#: 30 Worklist Smp#: 14
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-014
 Misc. Info.: STD200
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:08:04 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 12:16:06

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	98	158436	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	737352	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		50933			0.0- 36.8	6.9	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	82	639050	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		316225			21.9- 81.9	49.5	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	94	386717	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		280479			152- 212	72.5	
115	13.167	13.167	0.000		235778			31.1- 91.1	61.0	
11 Dichlorodifluoromethane										
85	2.778	2.778	0.000	98	2744527	200.0	171.6	70- 130	100	
87	2.778	2.778	0.000		933571			2.5- 62.5	34.0	
50	2.778	2.778	0.000		286447			0.0- 40.2	10.4	
12 Chloromethane										
50	2.980	2.980	0.000	98	1397370	200.0	176.4	70- 130	100	
52	2.980	2.980	0.000		492120			3.7- 63.7	35.2	
13 Vinyl chloride										
62	3.213	3.213	0.000	98	1498709	200.0	180.7	70- 130	100	
64	3.213	3.213	0.000		511297			3.0- 63.0	34.1	
14 Butadiene										
54	3.355	3.355	0.000	81	1318385	200.0	186.5	70- 130	100	
53	3.355	3.355	0.000		952182			39- 99	72.2	
39	3.345	3.355	-0.010		1207273			62- 122	91.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.699	3.699	0.000	93	1244638	200.0	199.7	70- 130	100	
94	3.699	3.699	0.000		1321439			72- 132	106	
79	3.689	3.699	-0.010		241826			0.0- 50.2	19.4	
16 Chloroethane										
64	3.861	3.861	0.000	98	984831	200.0	204.8	70- 130	100	
66	3.871	3.861	0.010		300076			0.0- 59.6	30.5	
49	3.861	3.861	0.000		299336			2.2- 62.2	30.4	
17 Ethanol										
45	3.891	3.902	-0.011	99	680350	10000	10345	70- 130	100	
46	3.891	3.902	-0.011		257612			7.2- 67.2	37.9	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	97	2704273	200.0	177.1	70- 130	100	
69	3.932	3.932	0.000		939995			2.6- 62.6	34.8	
47	3.932	3.932	0.000		319872			0.0- 41.5	11.8	
21 Acrolein										
56	4.489	4.499	-0.010	99	76183	200.0	204.8	70- 130	100	
55	4.489	4.499	-0.010		56672			32.9- 92.9	74.4	
22 Trichlorofluoromethane										
101	4.499	4.499	0.000	98	3990745	200.0	172.7	70- 130	100	
103	4.509	4.499	0.010		2703989			33.3- 93.3	67.8	
66	4.499	4.499	0.000		448917			0.0- 39.9	11.2	
23 Acetonitrile										
41	4.499	4.509	-0.010	37	807416	2000.0	1757.7	70- 130	100	
40	4.499	4.509	-0.010		449503			26.9- 86.9	55.7	
39	4.499	4.509	-0.010		172216			0.0- 52.0	21.3	
25 Acetone										
43	4.631	4.631	0.000	97	288911	200.0	180.5	70- 130	100	
58	4.631	4.631	0.000		79276			0.0- 52.7	27.4	
27 Ethyl ether										
59	4.762	4.762	0.000	93	828978	200.0	220.7	70- 130	100	
45	4.762	4.762	0.000		552725			43- 103	66.7	
74	4.762	4.762	0.000		518289			32.9- 92.9	62.5	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	98	1456629	200.0	207.5	70- 130	100	
61	5.056	5.056	0.000		2558919			159- 219	176	
98	5.056	5.056	0.000		970714			34.3- 94.3	66.6	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	64	1514986	2000.0	2077.8	70- 130	100	
57	5.086	5.096	-0.010		154903			0.0- 39.8	10.2	
41	5.086	5.096	-0.010		357324			0.0- 56.4	23.6	
29 Iodomethane										
142	5.097	5.096	0.000	96	2886213	200.0	198.6	70- 130	100	
127	5.097	5.096	0.000		1500160			24.1- 84.1	52.0	
31 Acrylonitrile										
53	5.117	5.117	0.000	95	2714772	2000.0	1772.1	70- 130	100	
52	5.117	5.117	0.000		2313123			58- 118	85.2	
51	5.117	5.117	0.000		1104594			11.2- 71.2	40.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
32 Methylene Chloride										
84	5.208	5.208	0.000	93	1165950	200.0	200.3	70- 130	100	
49	5.208	5.208	0.000		1543935			108- 168	132	
51	5.208	5.208	0.000		537145			14.8- 74.8	46.1	
86	5.208	5.208	0.000		817449			34.0- 94.0	70.1	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.269	0.000	89	2055587	200.0	183.3	70- 130	100	
151	5.269	5.269	0.000		1905948			56- 116	92.7	
85	5.269	5.269	0.000		888202			14.8- 74.8	43.2	
158 Methyl acetate										
43	5.259	5.269	-0.010	98	1104178	400.0	373.0	70- 130	100	
74	5.269	5.269	0.000		259784			19.8- 19.8	23.5	
59	5.259	5.269	-0.010		150456			0.0- 42.9	13.6	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	86	1817681	200.0	185.2	70- 130	100	
39	5.299	5.299	0.000		1456848			50- 110	80.1	
76	5.299	5.299	0.000		715435			4.5- 64.5	39.4	
37 Carbon disulfide										
76	5.421	5.420	0.001	99	3976110	200.0	181.7	70- 130	100	
78	5.421	5.420	0.001		424111			0.0- 39.4	10.7	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	97	1535647	200.0	202.9	70- 130	100	
61	5.856	5.856	0.000		2122968			119- 179	138	
98	5.856	5.856	0.000		1005463			33.6- 93.6	65.5	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	95	2642459	200.0	197.1	70- 130	100	
57	5.957	5.967	-0.010		582282			0.0- 50.7	22.0	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	96	2393162	200.0	182.1	70- 130	100	
65	6.079	6.079	0.000		791149			0.5- 60.5	33.1	
83	6.079	6.079	0.000		392585			0.0- 45.0	16.4	
42 Propionitrile										
54	6.089	6.089	0.000	97	1233535	2000.0	2013.6	70- 130	100	
52	6.089	6.089	0.000		285026			0.0- 53.7	23.1	
55	6.089	6.089	0.000		197891			0.0- 45.5	16.0	
43 Vinyl acetate										
43	6.200	6.210	-0.010	98	1824195	200.0	210.2	70- 130	100	
86	6.210	6.210	0.000		180578			0.0- 38.1	9.9	
45 Hexane										
57	6.453	6.453	0.000	92	2364336	200.0	188.8	70- 130	100	
86	6.453	6.453	0.000		395241			0.0- 46.0	16.7	
46 2-Butanone (MEK)										
72	6.464	6.474	-0.010	92	115967	200.0	202.7	70- 130	100	
43	6.484	6.474	0.010		3224107			3898- 3958	2780	
57	6.453	6.474	-0.021		2364336			2498- 2558	2039	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
47 Isopropyl ether										
45	6.484	6.484	0.000	91	3313936	200.0	175.1	70- 130	100	
87	6.484	6.484	0.000		1047935			0.0- 55.7	31.6	
59	6.484	6.484	0.000		415372			0.0- 40.7	12.5	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	81	1539364	200.0	204.4	70- 130	100	
61	6.595	6.595	0.000		1976938			113- 173	128	
98	6.595	6.595	0.000		1016569			35.8- 95.8	66.0	
52 Chlorobromomethane										
128	6.737	6.737	0.000	83	765623	200.0	210.2	70- 130	100	
49	6.737	6.737	0.000		934707			125- 185	122	
54 Chloroform										
83	6.777	6.777	0.000	93	2702684	200.0	176.2	70- 130	100	
85	6.777	6.777	0.000		1849156			35.3- 95.3	68.4	
47	6.777	6.777	0.000		613397			0.0- 54.5	22.7	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	2871613	200.0	187.2	70- 130	100	
87	6.828	6.828	0.000		1282178			9.5- 69.5	44.7	
57	6.828	6.828	0.000		925349			0.0- 59.8	32.2	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	2271820	200.0	173.9	70- 130	100	
97	6.848	6.848	0.000		447307			0.0- 47.8	19.7	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	95	1371260	5000.0	4430.4	70- 130	100	
41	6.848	6.858	-0.010		2234978			158- 218	163	
42	6.858	6.858	0.000		780159			24.6- 84.6	56.9	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	84	526162	400.0	389.9	70- 130	100	
71	7.061	7.061	0.000		221280			5.2- 65.2	42.1	
72	7.061	7.061	0.000		237077			8.9- 68.9	45.1	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	1806195	200.0	173.6	70- 130	100	
64	7.334	7.334	0.000		626998			1.8- 61.8	34.7	
49	7.334	7.334	0.000		437687			0.0- 52.2	24.2	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	96	3327779	200.0	176.9	70- 130	100	
99	7.415	7.415	0.000		2296603			35.9- 95.9	69.0	
61	7.415	7.415	0.000		1348964			9.0- 69.0	40.5	
68 1,1-Dichloropropene										
75	7.567	7.577	-0.010	94	2246489	200.0	189.9	70- 130	100	
110	7.577	7.577	0.000		933367			8.5- 68.5	41.5	
77	7.577	7.577	0.000		731813			0.9- 60.9	32.6	
69 Cyclohexane										
56	7.658	7.658	0.000	89	2603043	200.0	184.1	70- 130	100	
84	7.658	7.658	0.000		2304405			49- 109	88.5	
69	7.658	7.658	0.000		815808			0.0- 56.1	31.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
71 Carbon tetrachloride										
117	7.729	7.729	0.000	97	3416420	200.0	187.2	70- 130	100	
119	7.729	7.729	0.000		3336609			65- 125	97.7	
82	7.729	7.729	0.000		762567			0.0- 51.0	22.3	
72 Benzene										
78	7.760	7.760	0.000	97	4136052	200.0	167.8	70- 130	100	
51	7.760	7.760	0.000		1017416			0.0- 53.4	24.6	
77	7.760	7.760	0.000		1115900			0.0- 53.9	27.0	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	96	2415790	200.0	205.5	70- 130	100	
87	7.881	7.881	0.000		727313			0.0- 56.3	30.1	
43	7.881	7.881	0.000		823531			4.4- 64.4	34.1	
55	7.881	7.881	0.000		657774			0.0- 58.6	27.2	
75 n-Heptane										
43	8.185	8.185	0.000	87	2160728	200.0	170.1	70- 130	100	
57	8.185	8.185	0.000		1304621			25.7- 85.7	60.4	
71	8.185	8.185	0.000		1379014			23.7- 83.7	63.8	
100	8.185	8.185	0.000		518444			0.0- 50.5	24.0	
77 Dibromomethane										
93	8.226	8.225	0.001	91	796824	200.0	202.2	70- 130	100	
95	8.226	8.225	0.001		646765			54- 114	81.2	
174	8.226	8.225	0.001		934371			78- 138	117	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	90	1165979	200.0	205.0	70- 130	100	
62	8.246	8.246	0.000		1075575			42- 102	92.2	
41	8.246	8.246	0.000		745456			45- 105	63.9	
79 Trichloroethene										
130	8.286	8.286	0.000	93	2007103	200.0	199.4	70- 130	100	
95	8.286	8.286	0.000		1882264			63- 123	93.8	
132	8.286	8.286	0.000		2019473			71- 131	101	
60	8.276	8.286	-0.010		891808			20.6- 80.6	44.4	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	97	2109382	200.0	202.0	70- 130	100	
85	8.327	8.327	0.000		1386556			36.1- 96.1	65.7	
129	8.327	8.327	0.000		314439			0.0- 44.5	14.9	
83 2-Chloroethyl vinyl ether										
63	8.651	8.651	0.000	93	63692	200.0	198.3	70- 130	100	
65	8.651	8.651	0.000		19239			162- 222	30.2	
106	8.651	8.651	0.000		19422			0.0- 53.1	30.5	
159 Methylcyclohexane										
83	8.701	8.701	0.000	92	2834774	200.0	199.6	70- 130	100	
55	8.701	8.701	0.000		2348707			87.9- 87.9	82.9	
98	8.701	8.701	0.000		1493074			19.2- 79.2	52.7	
86 cis-1,3-Dichloropropene										
75	8.833	8.843	-0.010	95	1903021	200.0	208.2	70- 130	100	
39	8.833	8.843	-0.010		921659			21.3- 81.3	48.4	
77	8.833	8.843	-0.010		629978			1.0- 61.0	33.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
87 4-Methyl-2-pentanone (MIBK)										
43	8.914	8.924	-0.010	94	914551	200.0	195.0	70- 130	100	
100	8.924	8.924	0.000		172273			0.0- 44.9	18.8	
58	8.914	8.924	-0.010		408905			8.0- 68.0	44.7	
88 trans-1,3-Dichloropropene										
75	9.177	9.187	-0.010	93	1846239	200.0	203.1	70- 130	100	
39	9.177	9.187	-0.010		758274			15.4- 75.4	41.1	
110	9.188	9.187	0.001		490782			0.0- 53.8	26.6	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	93	831410	200.0	200.5	70- 130	100	
97	9.319	9.319	0.000		1072996			97- 157	129	
61	9.319	9.319	0.000		705818			62- 122	84.9	
90 Toluene										
91	9.471	9.471	0.000	91	4738528	200.0	145.9	70- 130	100	
92	9.471	9.471	0.000		3405893			29.8- 89.8	71.9	
65	9.471	9.471	0.000		782336			0.0- 43.1	16.5	
92 Ethyl methacrylate										
69	9.501	9.511	-0.010	89	1207585	200.0	223.2	70- 130	100	
41	9.501	9.511	-0.010		1691427			151- 211	140	
99	9.512	9.511	0.001		309552			0.0- 53.8	25.6	
91 1,3-Dichloropropane										
76	9.512	9.511	0.001	89	1550563	200.0	184.8	70- 130	100	
78	9.512	9.511	0.001		529685			1.6- 61.6	34.2	
49	9.512	9.511	0.001		288622			0.0- 48.7	18.6	
93 2-Hexanone										
43	9.613	9.623	-0.010	96	683357	200.0	204.6	70- 130	100	
58	9.623	9.623	0.000		400340			22.9- 82.9	58.6	
100	9.623	9.623	0.000		93772			0.0- 41.9	13.7	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	1740431	200.0	214.8	70- 130	100	
127	9.744	9.744	0.000		1360868			47- 107	78.2	
79	9.744	9.744	0.000		243212			0.0- 44.5	14.0	
208	9.755	9.744	0.011		75674			0.0- 33.6	4.3	
96 Ethylene Dibromide										
107	9.957	9.957	0.000	100	1211562	200.0	207.7	70- 130	100	
109	9.957	9.957	0.000		1179302			64- 124	97.3	
81	9.957	9.957	0.000		95961			0.0- 39.1	7.9	
97 Tetrachloroethene										
164	10.099	10.099	0.000	92	1881736	200.0	201.4	70- 130	100	
166	10.109	10.099	0.010		2309120			95- 155	123	
129	10.099	10.099	0.000		1759129			64- 124	93.5	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	93	1969552	200.0	210.1	70- 130	100	
133	10.656	10.656	0.000		1925487			67- 127	97.8	
119	10.656	10.656	0.000		1332502			35.9- 95.9	67.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
101 Chlorobenzene										
112	10.737	10.737	0.000	92	4040445	200.0	169.7	70- 130	100	
77	10.737	10.737	0.000		2173565			19.9- 79.9	53.8	
114	10.737	10.737	0.000		1507221			1.4- 61.4	37.3	
102 Ethylbenzene										
91	10.909	10.909	0.000	93	5884170	200.0	143.5	70- 130	100	
106	10.909	10.909	0.000		2521885			0.2- 60.2	42.9	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	3023834	200.0	204.2	70- 130	100	
91	11.091	11.091	0.000		5284479			180- 240	175	
105	11.091	11.091	0.000		1461337			14.5- 74.5	48.3	
105 Bromoform										
173	11.233	11.233	0.000	98	1158856	200.0	240.9	70- 130	100	
175	11.233	11.233	0.000		570100			19.7- 79.7	49.2	
79	11.223	11.233	-0.010		208050			0.0- 49.9	18.0	
252	11.233	11.233	0.000		89253			0.0- 36.9	7.7	
106 Styrene										
104	11.415	11.415	0.000	93	4041416	200.0	193.9	70- 130	100	
103	11.415	11.415	0.000		2156126			17.4- 77.4	53.4	
78	11.415	11.415	0.000		1935163			15.1- 75.1	47.9	
51	11.415	11.415	0.000		1017939			0.0- 53.9	25.2	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	97	1262708	200.0	188.4	70- 130	100	
85	11.486	11.486	0.000		848109			35.7- 95.7	67.2	
131	11.486	11.486	0.000		194820			0.0- 45.0	15.4	
108 o-Xylene										
106	11.486	11.486	0.000	93	2845873	200.0	201.7	70- 130	100	
91	11.486	11.486	0.000		4971534			197- 257	175	
105	11.486	11.486	0.000		1259253			10.8- 70.8	44.2	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	82	415828	200.0	211.4	70- 130	100	
89	11.628	11.628	0.000		290016			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	87	515462	200.0	197.6	70- 130	100	
77	11.628	11.628	0.000		511925			58- 118	99	
112 Isopropylbenzene										
105	11.841	11.841	0.000	94	6229421	200.0	141.9	70- 130	100	
120	11.841	11.841	0.000		2383506			0.0- 55.6	38.3	
77	11.841	11.841	0.000		1372538			0.0- 45.8	22.0	
113 Bromobenzene										
156	12.104	12.104	0.000	88	2163007	200.0	193.6	70- 130	100	
77	12.104	12.104	0.000		2473269			91- 151	114	
158	12.104	12.104	0.000		2121759			67- 127	98.1	
114 N-Propylbenzene										
91	12.286	12.286	0.000	90	6503862	200.0	125.2	70- 130	100	
120	12.286	12.286	0.000		2469153			0.0- 54.5	38.0	
65	12.286	12.286	0.000		1140851			0.0- 42.2	17.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
115 2-Chlorotoluene										
91	12.387	12.387	0.000	92	4701409	200.0	147.2	70- 130	100	
126	12.387	12.387	0.000		2191366			7.2- 67.2	46.6	
75	12.387	12.387	0.000		166248			0.0- 32.9	3.5	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	92	4843770	200.0	151.2	70- 130	100	
126	12.468	12.468	0.000		2241678			7.3- 67.3	46.3	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	95	5599620	200.0	142.4	70- 130	100	
120	12.570	12.570	0.000		3456038			18.4- 78.4	61.7	
91	12.570	12.570	0.000		914690			0.0- 41.8	16.3	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	88	5462619	200.0	142.6	70- 130	100	
91	12.853	12.853	0.000		4238666			41- 101	77.6	
134	12.853	12.853	0.000		1873266			0.0- 54.6	34.3	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	91	5417736	200.0	138.8	70- 130	100	
120	12.954	12.954	0.000		3226846			15.7- 75.7	59.6	
77	12.954	12.954	0.000		909380			0.0- 42.4	16.8	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	90	6496086	200.0	119.4	70- 130	100	
134	13.056	13.056	0.000		2341010			0.0- 52.3	36.0	
91	13.056	13.056	0.000		1770088			0.0- 47.8	27.2	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	93	3873181	200.0	155.7	70- 130	100	
111	13.127	13.127	0.000		1773065			10.6- 70.6	45.8	
148	13.137	13.127	0.010		2819057			34.6- 94.6	72.8	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	90	3842961	200.0	155.8	70- 130	100	
111	13.187	13.187	0.000		1724280			8.8- 68.8	44.9	
148	13.198	13.187	0.011		2764535			35.7- 95.7	71.9	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	5990236	200.0	121.2	70- 130	100	
134	13.218	13.218	0.000		2587677			0.0- 57.7	43.2	
91	13.218	13.218	0.000		2254990			0.0- 56.0	37.6	
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	93	3561827	200.0	169.3	70- 130	100	
111	13.501	13.501	0.000		1672779			10.1- 70.1	47.0	
148	13.511	13.501	0.010		2561488			32.6- 92.6	71.9	
128 n-Butylbenzene										
91	13.572	13.572	0.000	84	5247454	200.0	123.9	70- 130	100	
92	13.572	13.572	0.000		3742638			24.4- 84.4	71.3	
134	13.572	13.572	0.000		2450622			0.0- 59.7	46.7	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	90	390217	200.0	218.4	70- 130	100	
155	13.896	13.896	0.000		381348			65- 125	97.7	
157	13.896	13.896	0.000		488914			86- 146	125	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

133 1,2,4-Trichlorobenzene

180	15.061	15.061	0.000	97	2865582	200.0	183.2	70- 130	100	
182	15.061	15.061	0.000		2779421			67- 127	97.0	
145	15.061	15.061	0.000		1062341			4.2- 64.2	37.1	

134 Naphthalene

128	15.294	15.294	0.000	99	4876835	200.0	164.7	70- 130	100	
127	15.294	15.294	0.000		824072			0.0- 42.9	16.9	
129	15.294	15.294	0.000		739337			0.0- 41.7	15.2	

135 Hexachlorobutadiene

225	15.334	15.334	0.000	93	2271258	200.0	187.0	70- 130	100	
223	15.334	15.334	0.000		1496036			33.1- 93.1	65.9	
227	15.334	15.334	0.000		1443631			33.2- 93.2	63.6	

137 1,2,3-Trichlorobenzene

180	15.476	15.476	0.000	94	2701649	200.0	190.9	70- 130	100	
182	15.476	15.476	0.000		2666992			64- 124	98.7	
145	15.476	15.476	0.000		1038755			5.8- 65.8	38.4	

S 144 Xylenes, Total

1				0			405.9			
---	--	--	--	---	--	--	-------	--	--	--

S 145 1,2-Dichloroethene, Total

1				0			407.2			
---	--	--	--	---	--	--	-------	--	--	--

Reagents:

VMWNU8260200_00219

Amount Added: 10.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17034.D

Injection Date: 17-Oct-2018 18:44:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD200

Worklist Smp#: 14

Client ID:

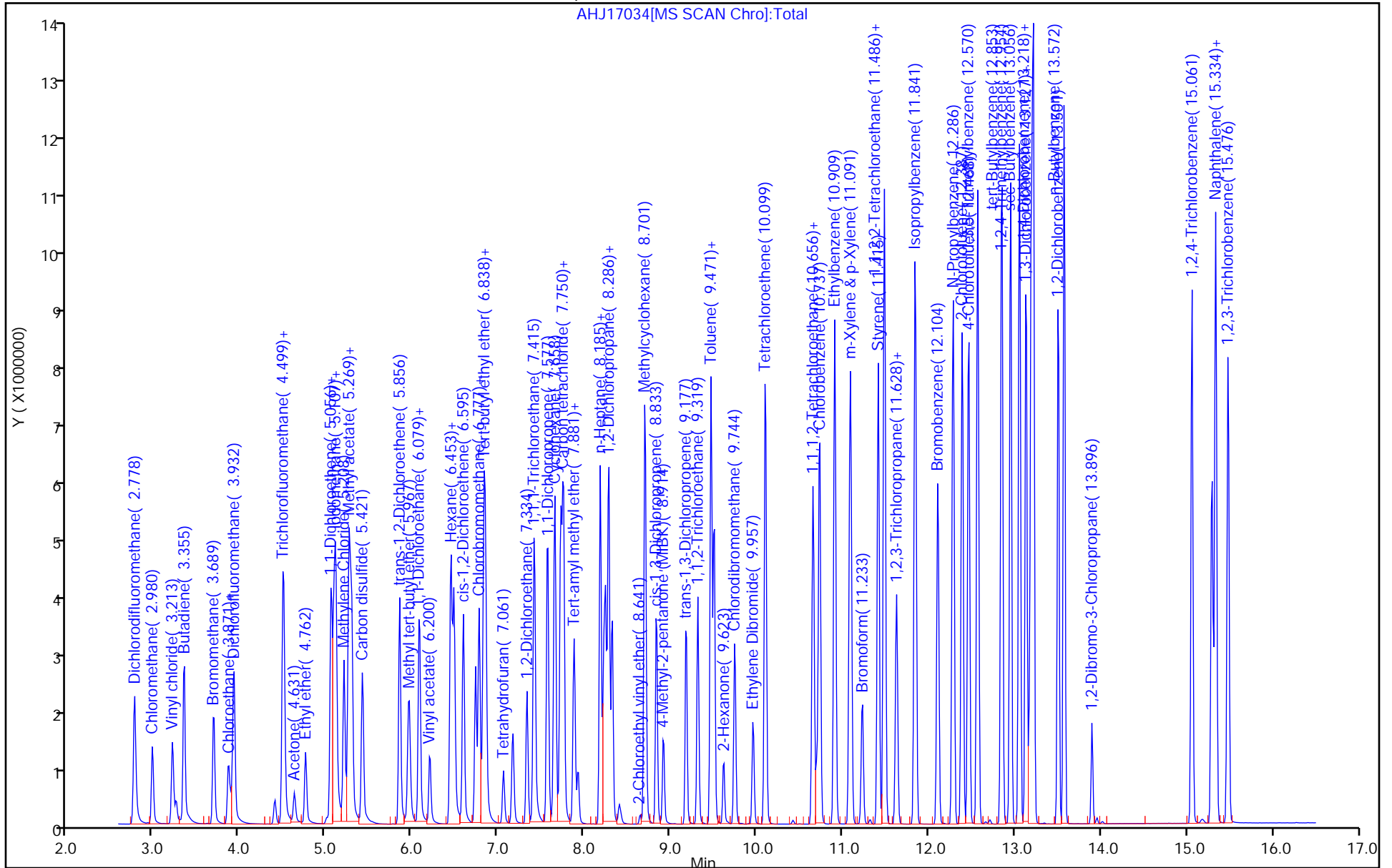
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 30

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Lims ID: STD300
 Client ID:
 Sample Type: IC Calib Level: 12
 Inject. Date: 17-Oct-2018 19:11:30 ALS Bottle#: 31 Worklist Smp#: 15
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-015
 Misc. Info.: STD300
 Operator ID: AI Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub2
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:08:09 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 12:16:45

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.015	5.005	0.010	98	195935	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	919585	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		63055			0.0- 36.8	6.9	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	86	814611	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		395098			21.9- 81.9	48.5	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	92	463535	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		759387			152- 212	164	
115	13.167	13.167	0.000		271048			31.1- 91.1	58.5	
11 Dichlorodifluoromethane										
85	2.777	2.778	-0.001	97	4069224	300.0	204.0	70- 130	100	
87	2.777	2.778	-0.001		1476316			2.5- 62.5	36.3	
50	2.777	2.778	-0.001		456160			0.0- 40.2	11.2	
12 Chloromethane										
50	2.980	2.980	0.000	97	2101184	300.0	212.7	70- 130	100	
52	2.980	2.980	0.000		768405			3.7- 63.7	36.6	
13 Vinyl chloride										
62	3.213	3.213	0.000	97	2217631	300.0	214.4	70- 130	100	
64	3.213	3.213	0.000		783490			3.0- 63.0	35.3	
14 Butadiene										
54	3.344	3.355	-0.011	83	1963076	300.0	222.7	70- 130	100	
53	3.344	3.355	-0.011		1437471			39- 99	73.2	
39	3.344	3.355	-0.011		1771150			62- 122	90.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
15 Bromomethane										
96	3.689	3.699	-0.010	92	2021829	300.0	260.1	70- 130	100	
94	3.689	3.699	-0.010		2074140			72- 132	103	
79	3.689	3.699	-0.010		360861			0.0- 50.2	17.8	
16 Chloroethane										
64	3.871	3.861	0.010	98	1528101	300.0	254.8	70- 130	100	
66	3.871	3.861	0.010		487447			0.0- 59.6	31.9	
49	3.861	3.861	0.000		452673			2.2- 62.2	29.6	
17 Ethanol										
45	3.891	3.902	-0.011	99	1131307	15000	13910	70- 130	100	
46	3.901	3.902	-0.001		436810			7.2- 67.2	38.6	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	96	3979238	300.0	209.0	70- 130	100	
69	3.932	3.932	0.000		1492413			2.6- 62.6	37.5	
47	3.932	3.932	0.000		480948			0.0- 41.5	12.1	
21 Acrolein										
56	4.489	4.499	-0.010	97	137843	300.0	296.2	70- 130	100	
55	4.489	4.499	-0.010		91410			32.9- 92.9	66.3	
22 Trichlorofluoromethane										
101	4.499	4.499	0.000	98	5584492	300.0	193.7	70- 130	100	
103	4.509	4.499	0.010		3951679			33.3- 93.3	70.8	
66	4.499	4.499	0.000		669277			0.0- 39.9	12.0	
23 Acetonitrile										
41	4.499	4.509	-0.010	40	1256250	3000.0	2192.8	70- 130	100	
40	4.499	4.509	-0.010		691221			26.9- 86.9	55.0	
39	4.499	4.509	-0.010		265955			0.0- 52.0	21.2	
25 Acetone										
43	4.630	4.631	-0.001	99	454264	300.0	227.5	70- 130	100	
58	4.630	4.631	-0.001		139189			0.0- 52.7	30.6	
27 Ethyl ether										
59	4.762	4.762	0.000	92	1344540	300.0	287.0	70- 130	100	
45	4.762	4.762	0.000		915900			43- 103	68.1	
74	4.762	4.762	0.000		897106			32.9- 92.9	66.7	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	98	2365361	300.0	270.1	70- 130	100	
61	5.056	5.056	0.000		3775383			159- 219	160	
98	5.056	5.056	0.000		1621130			34.3- 94.3	68.5	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	70	2488060	3000.0	2759.2	70- 130	100	
57	5.086	5.096	-0.010		279516			0.0- 39.8	11.2	
41	5.086	5.096	-0.010		572679			0.0- 56.4	23.0	
29 Iodomethane										
142	5.096	5.096	0.000	96	4480004	300.0	247.1	70- 130	100	
127	5.096	5.096	0.000		2305551			24.1- 84.1	51.5	
31 Acrylonitrile										
53	5.117	5.117	0.000	94	4217827	3000.0	2207.5	70- 130	100	
52	5.117	5.117	0.000		3599087			58- 118	85.3	
51	5.117	5.117	0.000		1799968			11.2- 71.2	42.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
32 Methylene Chloride										
84	5.208	5.208	0.000	90	2098524	300.0	291.6	70- 130	100	
49	5.208	5.208	0.000		2349539			108- 168	112	
51	5.208	5.208	0.000		824142			14.8- 74.8	39.3	
86	5.208	5.208	0.000		1351704			34.0- 94.0	64.4	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.268	5.269	-0.001	88	3255130	300.0	232.8	70- 130	100	
151	5.268	5.269	-0.001		3024328			56- 116	92.9	
85	5.268	5.269	-0.001		1415738			14.8- 74.8	43.5	
158 Methyl acetate										
43	5.258	5.269	-0.011	98	1759905	600.0	476.7	70- 130	100	
74	5.258	5.269	-0.011		436074			19.8- 19.8	24.8	
59	5.258	5.269	-0.011		216073			0.0- 42.9	12.3	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	86	2681027	300.0	219.1	70- 130	100	
39	5.299	5.299	0.000		2086625			50- 110	77.8	
76	5.299	5.299	0.000		1149371			4.5- 64.5	42.9	
37 Carbon disulfide										
76	5.420	5.420	0.000	98	5885521	300.0	215.6	70- 130	100	
78	5.420	5.420	0.000		718633			0.0- 39.4	12.2	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	95	2528756	300.0	267.8	70- 130	100	
61	5.856	5.856	0.000		3346928			119- 179	132	
98	5.856	5.856	0.000		1692238			33.6- 93.6	66.9	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	96	4157806	300.0	248.6	70- 130	100	
57	5.967	5.967	0.000		948261			0.0- 50.7	22.8	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	96	3681597	300.0	224.6	70- 130	100	
65	6.079	6.079	0.000		1301272			0.5- 60.5	35.3	
83	6.079	6.079	0.000		627814			0.0- 45.0	17.1	
42 Propionitrile										
54	6.089	6.089	0.000	98	2026161	3000.0	2652.0	70- 130	100	
52	6.089	6.089	0.000		471564			0.0- 53.7	23.3	
55	6.089	6.089	0.000		333641			0.0- 45.5	16.5	
43 Vinyl acetate										
43	6.200	6.210	-0.010	98	2928258	300.0	270.6	70- 130	100	
86	6.210	6.210	0.000		328996			0.0- 38.1	11.2	
45 Hexane										
57	6.453	6.453	0.000	93	3612113	300.0	231.3	70- 130	100	
86	6.453	6.453	0.000		662839			0.0- 46.0	18.4	
46 2-Butanone (MEK)										
72	6.463	6.474	-0.011	94	203677	300.0	284.2	70- 130	100	
43	6.484	6.474	0.010		4928763			3898- 3958	2420	
57	6.453	6.474	-0.021		3612158			2498- 2558	1773	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
47 Isopropyl ether										
45	6.484	6.484	0.000	89	4743145	300.0	201.0	70- 130	100	
87	6.484	6.484	0.000		1774352			0.0- 55.7	37.4	
59	6.484	6.484	0.000		718654			0.0- 40.7	15.2	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	78	2528397	300.0	269.2	70- 130	100	
61	6.595	6.595	0.000		3081724			113- 173	122	
98	6.595	6.595	0.000		1719271			35.8- 95.8	68.0	
52 Chlorobromomethane										
128	6.737	6.737	0.000	83	1321871	300.0	291.0	70- 130	100	
49	6.737	6.737	0.000		1611658			125- 185	122	
54 Chloroform										
83	6.777	6.777	0.000	91	4168613	300.0	217.9	70- 130	100	
85	6.777	6.777	0.000		2960558			35.3- 95.3	71.0	
47	6.777	6.777	0.000		1066589			0.0- 54.5	25.6	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	93	4392309	300.0	229.6	70- 130	100	
87	6.828	6.828	0.000		2111686			9.5- 69.5	48.1	
57	6.828	6.828	0.000		1484446			0.0- 59.8	33.8	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	94	3363857	300.0	206.5	70- 130	100	
97	6.848	6.848	0.000		702406			0.0- 47.8	20.9	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	96	2219192	7500.0	5797.8	70- 130	100	
41	6.848	6.858	-0.010		3239432			158- 218	146	
42	6.858	6.858	0.000		1275723			24.6- 84.6	57.5	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	83	902790	600.0	536.4	70- 130	100	
71	7.061	7.061	0.000		406380			5.2- 65.2	45.0	
72	7.061	7.061	0.000		432162			8.9- 68.9	47.9	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	2826429	300.0	217.9	70- 130	100	
64	7.334	7.334	0.000		1016546			1.8- 61.8	36.0	
49	7.334	7.334	0.000		688758			0.0- 52.2	24.4	
65 1,1,1-Trichloroethane										
97	7.425	7.415	0.010	96	4911153	300.0	209.4	70- 130	100	
99	7.415	7.415	0.000		3582766			35.9- 95.9	73.0	
61	7.415	7.415	0.000		2094429			9.0- 69.0	42.6	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	91	3528780	300.0	239.1	70- 130	100	
110	7.577	7.577	0.000		1568122			8.5- 68.5	44.4	
77	7.577	7.577	0.000		1219015			0.9- 60.9	34.5	
69 Cyclohexane										
56	7.658	7.658	0.000	86	3990265	300.0	226.3	70- 130	100	
84	7.658	7.658	0.000		3749555			49- 109	94.0	
69	7.658	7.658	0.000		1402667			0.0- 56.1	35.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	4976500	300.0	218.6	70- 130	100	
119	7.729	7.729	0.000		4893769			65- 125	98.3	
82	7.729	7.729	0.000		1200827			0.0- 51.0	24.1	
72 Benzene										
78	7.759	7.760	-0.001	93	6080202	300.0	197.8	70- 130	100	
51	7.759	7.760	-0.001		1606776			0.0- 53.4	26.4	
77	7.759	7.760	-0.001		1920706			0.0- 53.9	31.6	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	95	3889729	300.0	265.3	70- 130	100	
87	7.881	7.881	0.000		1194442			0.0- 56.3	30.7	
43	7.881	7.881	0.000		1295228			4.4- 64.4	33.3	
55	7.881	7.881	0.000		1087469			0.0- 58.6	28.0	
75 n-Heptane										
43	8.185	8.185	0.000	79	3110884	300.0	196.3	70- 130	100	
57	8.185	8.185	0.000		2109839			25.7- 85.7	67.8	
71	8.185	8.185	0.000		2240938			23.7- 83.7	72.0	
100	8.185	8.185	0.000		891526			0.0- 50.5	28.7	
77 Dibromomethane										
93	8.225	8.225	0.000	92	1326056	300.0	269.8	70- 130	100	
95	8.225	8.225	0.000		1132239			54- 114	85.4	
174	8.225	8.225	0.000		1590191			78- 138	120	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	93	1894656	300.0	267.1	70- 130	100	
62	8.246	8.246	0.000		1518610			42- 102	80.2	
41	8.246	8.246	0.000		1146128			45- 105	60.5	
79 Trichloroethene										
130	8.286	8.286	0.000	93	3253597	300.0	259.2	70- 130	100	
95	8.286	8.286	0.000		2870437			63- 123	88.2	
132	8.286	8.286	0.000		3242817			71- 131	100	
60	8.286	8.286	0.000		1362542			20.6- 80.6	41.9	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	96	3254084	300.0	249.8	70- 130	100	
85	8.327	8.327	0.000		2227492			36.1- 96.1	68.5	
129	8.327	8.327	0.000		524894			0.0- 44.5	16.1	
83 2-Chloroethyl vinyl ether										
63	8.651	8.651	0.000	93	133298	300.0	314.9	70- 130	100	
65	8.651	8.651	0.000		41183			162- 222	30.9	
106	8.651	8.651	0.000		43245			0.0- 53.1	32.4	
159 Methylcyclohexane										
83	8.701	8.701	0.000	91	4393577	300.0	248.1	70- 130	100	
55	8.701	8.701	0.000		3592939			87.9- 87.9	81.8	
98	8.711	8.701	0.010		2464725			19.2- 79.2	56.1	
86 cis-1,3-Dichloropropene										
75	8.833	8.843	-0.010	93	2970344	300.0	254.9	70- 130	100	
39	8.833	8.843	-0.010		1411659			21.3- 81.3	47.5	
77	8.843	8.843	0.000		1070711			1.0- 61.0	36.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
87 4-Methyl-2-pentanone (MIBK)										
43	8.914	8.924	-0.010	92	1518587	300.0	254.0	70- 130	100	
100	8.924	8.924	0.000		310510			0.0- 44.9	20.4	
58	8.924	8.924	0.000		725755			8.0- 68.0	47.8	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	90	2822738	300.0	243.6	70- 130	100	
39	9.177	9.187	-0.010		1147351			15.4- 75.4	40.6	
110	9.187	9.187	0.000		829904			0.0- 53.8	29.4	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	94	1372950	300.0	259.7	70- 130	100	
97	9.319	9.319	0.000		1739212			97- 157	127	
61	9.319	9.319	0.000		1089573			62- 122	79.4	
90 Toluene										
91	9.471	9.471	0.000	89	6444116	300.0	155.7	70- 130	100	
92	9.471	9.471	0.000		4878582			29.8- 89.8	75.7	
65	9.471	9.471	0.000		1293485			0.0- 43.1	20.1	
92 Ethyl methacrylate										
69	9.501	9.511	-0.010	94	1994193	300.0	289.1	70- 130	100	
41	9.511	9.511	0.000		2524842			151- 211	127	
99	9.511	9.511	0.000		539899			0.0- 53.8	27.1	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	96	2509447	300.0	234.7	70- 130	100	
78	9.511	9.511	0.000		891261			1.6- 61.6	35.5	
49	9.511	9.511	0.000		450996			0.0- 48.7	18.0	
93 2-Hexanone										
43	9.623	9.623	0.000	91	1176815	300.0	276.3	70- 130	100	
58	9.623	9.623	0.000		739323			22.9- 82.9	62.8	
100	9.623	9.623	0.000		174055			0.0- 41.9	14.8	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	90	2925869	300.0	283.2	70- 130	100	
127	9.744	9.744	0.000		2266799			47- 107	77.5	
79	9.744	9.744	0.000		371388			0.0- 44.5	12.7	
208	9.754	9.744	0.010		134389			0.0- 33.6	4.6	
96 Ethylene Dibromide										
107	9.957	9.957	0.000	99	2046686	300.0	275.3	70- 130	100	
109	9.957	9.957	0.000		1962101			64- 124	95.9	
81	9.957	9.957	0.000		152467			0.0- 39.1	7.4	
97 Tetrachloroethene										
164	10.109	10.099	0.010	93	2969347	300.0	249.3	70- 130	100	
166	10.109	10.099	0.010		3673909			95- 155	124	
129	10.099	10.099	0.000		2837436			64- 124	95.6	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	95	3188477	300.0	266.8	70- 130	100	
133	10.656	10.656	0.000		3145151			67- 127	98.6	
119	10.656	10.656	0.000		2171009			35.9- 95.9	68.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
101 Chlorobenzene										
112	10.737	10.737	0.000	86	5880267	300.0	193.7	70- 130	100	
77	10.737	10.737	0.000		3461634			19.9- 79.9	58.9	
114	10.737	10.737	0.000		2529049			1.4- 61.4	43.0	
102 Ethylbenzene										
91	10.909	10.909	0.000	89	7717794	300.0	147.6	70- 130	100	
106	10.909	10.909	0.000		3891665			0.2- 60.2	50.4	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	90	4775236	300.0	253.0	70- 130	100	
91	11.091	11.091	0.000		7389790			180- 240	155	
105	11.091	11.091	0.000		2400651			14.5- 74.5	50.3	
105 Bromoform										
173	11.233	11.233	0.000	97	2016044	300.0	328.8	70- 130	100	
175	11.233	11.233	0.000		1036504			19.7- 79.7	51.4	
79	11.223	11.233	-0.010		334206			0.0- 49.9	16.6	
252	11.233	11.233	0.000		173779			0.0- 36.9	8.6	
106 Styrene										
104	11.415	11.415	0.000	87	5789811	300.0	217.9	70- 130	100	
103	11.415	11.415	0.000		3393399			17.4- 77.4	58.6	
78	11.415	11.415	0.000		3053127			15.1- 75.1	52.7	
51	11.415	11.415	0.000		1602856			0.0- 53.9	27.7	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	97	2145114	300.0	267.0	70- 130	100	
85	11.486	11.486	0.000		1459136			35.7- 95.7	68.0	
131	11.486	11.486	0.000		332766			0.0- 45.0	15.5	
108 o-Xylene										
106	11.486	11.486	0.000	88	4287971	300.0	238.4	70- 130	100	
91	11.486	11.486	0.000		6817932			197- 257	159	
105	11.486	11.486	0.000		1980658			10.8- 70.8	46.2	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	82	683541	300.0	289.9	70- 130	100	
89	11.638	11.628	0.010		519764			70- 130	100	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	86	852638	300.0	272.7	70- 130	100	
77	11.628	11.628	0.000		868683			58- 118	102	
112 Isopropylbenzene										
105	11.851	11.841	0.009	88	8180539	300.0	146.2	70- 130	100	
120	11.840	11.841	-0.001		3848474			0.0- 55.6	47.0	
77	11.840	11.841	-0.001		2130737			0.0- 45.8	26.0	
113 Bromobenzene										
156	12.114	12.104	0.010	82	3568583	300.0	266.4	70- 130	100	
77	12.104	12.104	0.000		3730234			91- 151	105	
158	12.114	12.104	0.010		3522563			67- 127	98.7	
114 N-Propylbenzene										
91	12.286	12.286	0.000	84	8430318	300.0	135.4	70- 130	100	
120	12.286	12.286	0.000		3922885			0.0- 54.5	46.5	
65	12.286	12.286	0.000		1755720			0.0- 42.2	20.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
115 2-Chlorotoluene										
91	12.387	12.387	0.000	85	6509099	300.0	170.0	70- 130	100	
126	12.397	12.387	0.010		3529937			7.2- 67.2	54.2	
75	12.387	12.387	0.000		268437			0.0- 32.9	4.1	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	86	6616913	300.0	172.3	70- 130	100	
126	12.468	12.468	0.000		3539558			7.3- 67.3	53.5	
117 1,3,5-Trimethylbenzene										
105	12.569	12.570	-0.001	89	7410792	300.0	157.2	70- 130	100	
120	12.569	12.570	-0.001		5128884			18.4- 78.4	69.2	
91	12.569	12.570	-0.001		1404342			0.0- 41.8	18.9	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	85	7321835	300.0	159.5	70- 130	100	
91	12.853	12.853	0.000		5807974			41- 101	79.3	
134	12.853	12.853	0.000		3002558			0.0- 54.6	41.0	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	85	7121616	300.0	152.2	70- 130	100	
120	12.954	12.954	0.000		4814133			15.7- 75.7	67.6	
77	12.954	12.954	0.000		1442545			0.0- 42.4	20.3	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	84	8222251	300.0	126.1	70- 130	100	
134	13.056	13.056	0.000		3587916			0.0- 52.3	43.6	
91	13.056	13.056	0.000		2697572			0.0- 47.8	32.8	
122 1,3-Dichlorobenzene										
146	13.137	13.127	0.010	89	5493304	300.0	184.2	70- 130	100	
111	13.137	13.127	0.010		2836060			10.6- 70.6	51.6	
148	13.137	13.127	0.010		4237343			34.6- 94.6	77.1	
124 1,4-Dichlorobenzene										
146	13.197	13.187	0.010	86	5362749	300.0	181.4	70- 130	100	
111	13.197	13.187	0.010		2652566			8.8- 68.8	49.5	
148	13.197	13.187	0.010		4004158			35.7- 95.7	74.7	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	87	7585735	300.0	128.0	70- 130	100	
134	13.218	13.218	0.000		3830622			0.0- 57.7	50.5	
91	13.218	13.218	0.000		3232615			0.0- 56.0	42.6	
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	88	4999138	300.0	198.3	70- 130	100	
111	13.501	13.501	0.000		2606365			10.1- 70.1	52.1	
148	13.511	13.501	0.010		3746016			32.6- 92.6	74.9	
128 n-Butylbenzene										
91	13.572	13.572	0.000	79	6759682	300.0	133.1	70- 130	100	
92	13.572	13.572	0.000		5127671			24.4- 84.4	75.9	
134	13.572	13.572	0.000		3783556			0.0- 59.7	56.0	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	93	615500	300.0	287.4	70- 130	100	
155	13.896	13.896	0.000		674401			65- 125	110	
157	13.896	13.896	0.000		863086			86- 146	140	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

133 1,2,4-Trichlorobenzene

180	15.061	15.061	0.000	95	4374312	300.0	233.3	70- 130	100	
182	15.061	15.061	0.000		4201941			67- 127	96.1	
145	15.061	15.061	0.000		1745013			4.2- 64.2	39.9	

134 Naphthalene

128	15.293	15.294	-0.001	97	6639960	300.0	187.1	70- 130	100	
127	15.293	15.294	-0.001		1411121			0.0- 42.9	21.3	
129	15.293	15.294	-0.001		1317353			0.0- 41.7	19.8	

135 Hexachlorobutadiene

225	15.334	15.334	0.000	91	3474166	300.0	238.6	70- 130	100	
223	15.334	15.334	0.000		2331425			33.1- 93.1	67.1	
227	15.334	15.334	0.000		2285321			33.2- 93.2	65.8	

137 1,2,3-Trichlorobenzene

180	15.486	15.476	0.010	95	4203394	300.0	247.9	70- 130	100	
182	15.486	15.476	0.010		3979644			64- 124	94.7	
145	15.476	15.476	0.000		1700467			5.8- 65.8	40.5	

S 144 Xylenes, Total

1				0			491.4			
---	--	--	--	---	--	--	-------	--	--	--

S 145 1,2-Dichloroethene, Total

1				0			537.0			
---	--	--	--	---	--	--	-------	--	--	--

Reagents:

VMWNU8260200_00219

Amount Added: 15.00

Units: uL

VMWNU8260IS_00216

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Injection Date: 17-Oct-2018 19:11:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: STD300

Worklist Smp#: 15

Client ID:

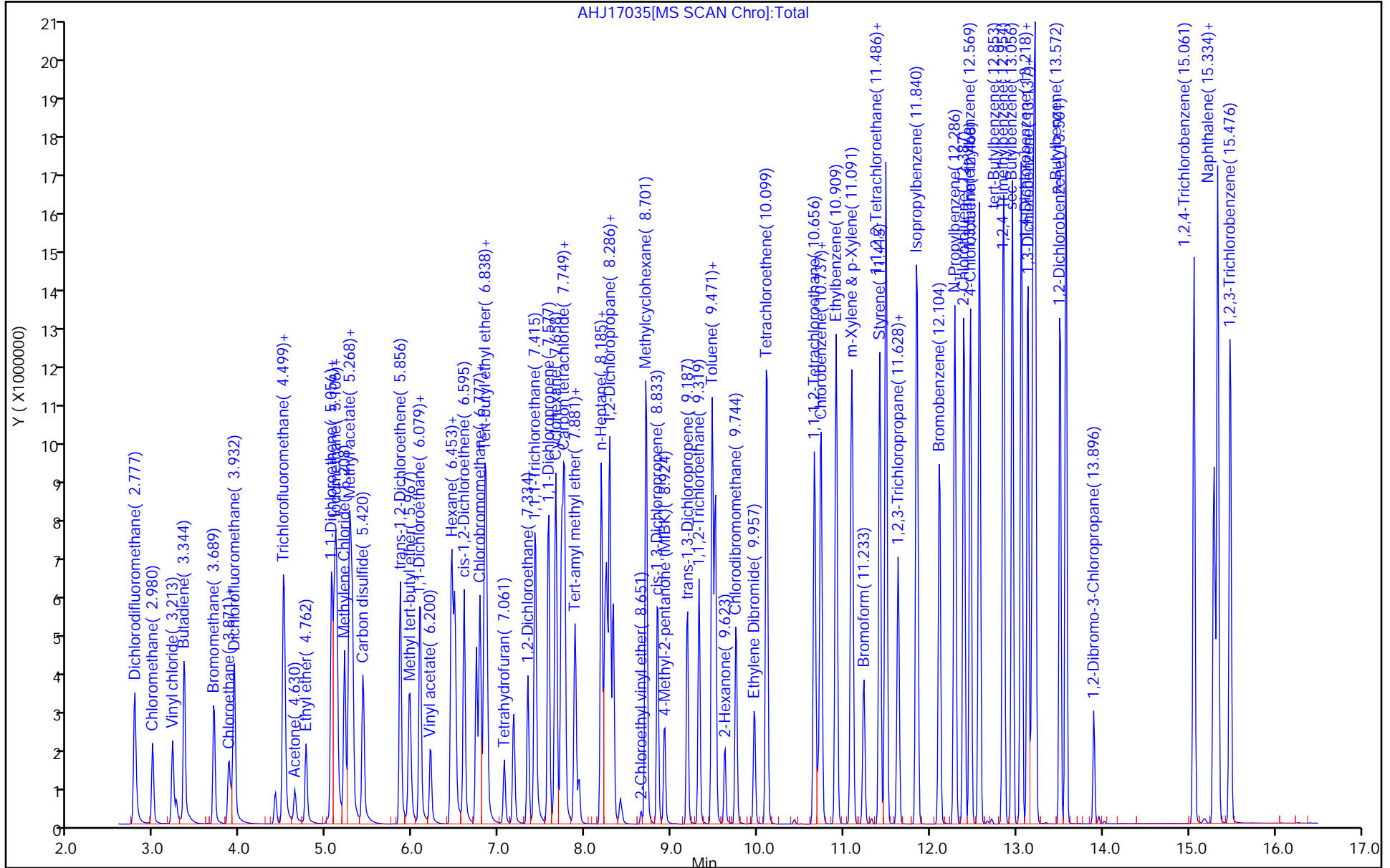
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 31

Method: 45_8260

Limit Group: MSV-8260-624



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505728/18 Calibration Date: 10/17/2018 20:33
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ17038.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5422	0.3726		17.2	25.0	-31.3	40.0
Chloromethane	Ave	0.2685	0.2116	0.1000	19.7	25.0	-21.2	40.0
Vinyl chloride	Ave	0.2812	0.2338		20.8	25.0	-16.9	30.0
1,3-Butadiene	Ave	0.2397	0.2085		21.7	25.0	-13.0	30.0
Bromomethane	Ave	0.2113	0.2201		26.0	25.0	4.2	30.0
Chloroethane	Ave	0.1630	0.1758		27.0	25.0	7.8	30.0
Ethanol	Ave	0.1038	0.1178		1140	1000	13.6	40.0
Dichlorofluoromethane	Ave	0.5177	0.4948		23.9	25.0	-4.4	40.0
Acrolein	Lin2		0.0192		39.8	25.0	59.3*	40.0
Acetonitrile	Ave	0.0156	0.0156		251	250	0.2	40.0
Trichlorofluoromethane	Ave	0.7836	0.7196		23.0	25.0	-8.2	40.0
Acetone	Ave	0.0543	0.0463		21.3	25.0	-14.7	40.0
Diethyl ether	Ave	0.1274	0.1466		28.8	25.0	15.1	30.0
1,1-Dichloroethene	Ave	0.2380	0.2840		29.8	25.0	19.3	30.0
tert-Butyl alcohol (TBA)	Ave	1.151	1.348		293	250	17.2	30.0
Iodomethane	Ave	0.4928	0.5503		27.9	25.0	11.7	40.0
Acrylonitrile	Lin2		0.0543		262	250	4.9	40.0
Methylene Chloride	Lin1		0.2357		25.1	25.0	0.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3801	0.3908		25.7	25.0	2.8	40.0
Methyl acetate	Ave	0.1004	0.1041		51.9	50.0	3.7	30.0
Allyl chloride	Ave	0.3327	0.3319		24.9	25.0	-0.2	40.0
Carbon disulfide	Ave	0.7420	0.8158		27.5	25.0	9.9	40.0
trans-1,2-Dichloroethene	Ave	0.2567	0.2945		28.7	25.0	14.7	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	0.4546	0.4978		27.4	25.0	9.5	30.0
1,1-Dichloroethane	Ave	0.4456	0.4531	0.1000	25.4	25.0	1.7	30.0
Propionitrile	Ave	0.0208	0.0230		277	250	10.9	40.0
Vinyl acetate	Ave	0.2942	0.2942		25.0	25.0	-0.0	40.0
Hexane	Ave	0.4245	0.4652		27.4	25.0	9.6	40.0
2-Butanone (MEK)	Lin2		0.0188		26.9	25.0	7.7	40.0
Isopropyl Ether (DIPE)	Ave	0.6416	0.6338		24.7	25.0	-1.2	30.0
cis-1,2-Dichloroethene	Ave	0.2554	0.2859		28.0	25.0	12.0	30.0
Bromochloromethane	Ave	0.1235	0.1370		27.7	25.0	10.9	30.0
Chloroform	Ave	0.5201	0.5042		24.2	25.0	-3.1	30.0
Ethyl-t-butyl ether (ETBE)	Ave	0.5202	0.5417		26.0	25.0	4.1	30.0
2,2-Dichloropropane	Ave	0.4429	0.4135		23.3	25.0	-6.6	30.0
Isobutyl alcohol	Ave	0.4884	0.5406		692	625	10.7	40.0
Tetrahydrofuran	Ave	0.0458	0.0470		51.4	50.0	2.8	40.0
1,2-Dichloroethane	Ave	0.3527	0.3127		22.2	25.0	-11.4	30.0
1,1,1-Trichloroethane	Ave	0.6377	0.6064		23.8	25.0	-4.9	30.0
1,1-Dichloropropene	Ave	0.4012	0.4197		26.2	25.0	4.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505728/18 Calibration Date: 10/17/2018 20:33
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ17038.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Cyclohexane	Ave	0.4794	0.5342		27.9	25.0	11.4	30.0
Carbon tetrachloride	Ave	0.6189	0.6039		24.4	25.0	-2.4	40.0
Benzene	Ave	0.8356	0.8970		26.8	25.0	7.3	30.0
Tert-amyl-methyl ether (TAME)	Ave	0.3986	0.4372		27.4	25.0	9.7	30.0
n-Heptane	Ave	0.4308	0.4623		26.8	25.0	7.3	30.0
Dibromomethane	Ave	0.1336	0.1385		25.9	25.0	3.7	30.0
1,2-Dichloropropane	Ave	0.1929	0.2158		28.0	25.0	11.9	30.0
Trichloroethene	Ave	0.3413	0.3826		28.0	25.0	12.1	30.0
Bromodichloromethane	Ave	0.3541	0.3589		25.3	25.0	1.4	30.0
2-Chloroethyl vinyl ether	Lin1		0.0106		35.8	25.0	43.2*	40.0
Methylcyclohexane	Ave	0.4815	0.5722		29.7	25.0	18.8	30.0
cis-1,3-Dichloropropene	Ave	0.3576	0.4139		28.9	25.0	15.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1835	0.2005		27.3	25.0	9.3	40.0
trans-1,3-Dichloropropene	Lin2		0.3632		25.7	25.0	2.8	30.0
1,1,2-Trichloroethane	Ave	0.1623	0.1835		28.3	25.0	13.1	30.0
Toluene	Ave	1.270	1.399		27.5	25.0	10.1	30.0
Ethyl methacrylate	Ave	0.2117	0.2486		29.4	25.0	17.4	40.0
1,3-Dichloropropane	Ave	0.3282	0.3577		27.2	25.0	9.0	30.0
2-Hexanone	Ave	0.1307	0.1399		26.8	25.0	7.0	40.0
Dibromochloromethane	Ave	0.3170	0.3475		27.4	25.0	9.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.2282	0.2587		28.3	25.0	13.4	30.0
Tetrachloroethene	Ave	0.3655	0.4124		28.2	25.0	12.8	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3668	0.4035		27.5	25.0	10.0	40.0
Chlorobenzene	Ave	0.9315	1.013	0.3000	27.2	25.0	8.7	30.0
Ethylbenzene	Ave	1.604	1.738		27.1	25.0	8.3	30.0
m,p-Xylene	Ave	0.5793	0.6985		30.1	25.0	20.6	30.0
Bromoform	Ave	0.1882	0.2077	0.1000	27.6	25.0	10.4	40.0
Styrene	Ave	0.8155	0.9498		29.1	25.0	16.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4333	0.5027	0.3000	29.0	25.0	16.0	30.0
o-Xylene	Ave	0.5520	0.6486		29.4	25.0	17.5	30.0
1,2,3-Trichloropropane	Ave	0.1686	0.1899		28.2	25.0	12.6	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1272	0.1243		24.4	25.0	-2.3	40.0
Isopropylbenzene	Ave	1.718	2.001		29.1	25.0	16.5	30.0
Bromobenzene	Ave	0.7224	0.8668		30.0	25.0	20.0	30.0
N-Propylbenzene	Ave	3.357	3.859		28.7	25.0	15.0	30.0
2-Chlorotoluene	Ave	2.065	2.223		26.9	25.0	7.6	30.0
4-Chlorotoluene	Ave	2.071	2.304		27.8	25.0	11.3	30.0
1,3,5-Trimethylbenzene	Ave	2.542	2.920		28.7	25.0	14.9	30.0
tert-Butylbenzene	Ave	2.476	2.833		28.6	25.0	14.4	30.0
1,2,4-Trimethylbenzene	Ave	2.524	2.838		28.1	25.0	12.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505728/18 Calibration Date: 10/17/2018 20:33
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ17038.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	3.516	4.056		28.8	25.0	15.3	30.0
1,3-Dichlorobenzene	Ave	1.608	1.717		26.7	25.0	6.8	30.0
1,4-Dichlorobenzene	Ave	1.594	1.662		26.1	25.0	4.3	30.0
p-Isopropyltoluene	Ave	3.195	3.705		29.0	25.0	15.9	30.0
1,2-Dichlorobenzene	Ave	1.360	1.550		28.5	25.0	14.0	30.0
n-Butylbenzene	Ave	2.739	3.020		27.6	25.0	10.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1155	0.1173		25.4	25.0	1.5	40.0
1,2,4-Trichlorobenzene	Ave	1.011	1.120		27.7	25.0	10.7	40.0
Naphthalene	Ave	1.914	2.278		29.8	25.0	19.0	40.0
Hexachlorobutadiene	Ave	0.7853	0.8896		28.3	25.0	13.3	40.0
1,2,3-Trichlorobenzene	Ave	0.9147	1.081		29.5	25.0	18.2	40.0
Dibromofluoromethane (Surr)	Ave	0.3044	0.2785		22.9	25.0	-8.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3053	0.2527		20.7	25.0	-17.2	
Toluene-d8 (Surr)	Ave	1.124	1.195		26.6	25.0	6.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8268	0.8402		25.4	25.0	1.6	20.0

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17038.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 17-Oct-2018 20:33:30 ALS Bottle#: 34 Worklist Smp#: 18
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-018
 Misc. Info.: ICV
 Operator ID: AI Instrument ID: GCMS45
 Sublist:

Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:44:00 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: ibasitasa Date: 18-Oct-2018 13:14:34

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.005	5.005	0.000	99	154885	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	800515	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		53260			0.0- 36.8	6.7	
* 3 Chlorobenzene-d5										
117	10.696	10.706	-0.010	85	644187	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		315944			21.9- 81.9	49.0	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	93	357077	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		644507			152- 212	180	
115	13.167	13.167	0.000		206633			31.1- 91.1	57.9	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	-0.001	93	222958	25.0	22.9	70- 130	100	
111	6.878	6.889	-0.011		227657			74- 134	102	
192	6.889	6.889	-0.001		41505			0.0- 46.6	18.6	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.263	7.273	-0.011	97	202282	25.0	20.7	70- 130	100	
67	7.263	7.273	-0.011		97485			15.9- 75.9	48.2	
102	7.263	7.273	-0.011		37759			0.0- 45.2	18.7	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.401	0.000	92	769896	25.0	26.6	70- 130	100	
100	9.410	9.401	0.000		538737			40- 100	70.0	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	95	300016	25.0	25.4	70- 130	100	
174	11.891	11.891	0.000		275672			62- 122	91.9	
176	11.891	11.891	0.000		275225			59- 119	91.7	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.777	-0.001	99	298283	25.0	17.2	70- 130	100	
87	2.777	2.777	-0.001		96871			2.5- 62.5	32.5	
50	2.777	2.777	-0.001		30680			0.0- 40.2	10.3	
12 Chloromethane										
50	2.980	2.980	0.000	99	169378	25.0	19.7	70- 130	100	
52	2.980	2.980	0.000		57773			3.7- 63.7	34.1	
13 Vinyl chloride										
62	3.223	3.213	0.010	99	187139	25.0	20.8	70- 130	100	
64	3.223	3.213	0.010		61918			3.0- 63.0	33.1	
14 Butadiene										
54	3.354	3.355	-0.001	84	166868	25.0	21.7	70- 130	100	
53	3.354	3.355	-0.001		118346			39- 99	70.9	
39	3.354	3.355	-0.001		149065			62- 122	89.3	
15 Bromomethane										
96	3.699	3.699	0.000	91	176222	25.0	26.0	70- 130	100	
94	3.699	3.699	0.000		181173			72- 132	103	
79	3.699	3.699	0.000		28859			0.0- 50.2	16.4	
16 Chloroethane										
64	3.871	3.861	0.010	98	140690	25.0	27.0	70- 130	100	
66	3.871	3.861	0.010		40944			0.0- 59.6	29.1	
49	3.861	3.861	0.000		39565			2.2- 62.2	28.1	
17 Ethanol										
45	3.901	3.901	-0.001	100	73005	1000.0	1135.6	70- 130	100	
46	3.901	3.901	-0.001		27210			7.2- 67.2	37.3	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	396129	25.0	23.9	70- 130	100	
69	3.932	3.932	0.000		130810			2.6- 62.6	33.0	
47	3.932	3.932	0.000		39396			0.0- 41.5	9.9	
21 Acrolein										
56	4.499	4.499	0.000	96	15358	25.0	39.8	70- 130	100	
55	4.499	4.499	0.000		10922			32.9- 92.9	71.1	
22 Trichlorofluoromethane										
101	4.509	4.499	0.010	98	576031	25.0	23.0	70- 130	100	
103	4.509	4.499	0.010		367122			33.3- 93.3	63.7	
66	4.499	4.499	0.000		55920			0.0- 39.9	9.7	
23 Acetonitrile										
41	4.509	4.509	0.000	36	124964	250.0	250.6	70- 130	100	
40	4.509	4.509	0.000		78360			26.9- 86.9	62.7	
39	4.509	4.509	0.000		27375			0.0- 52.0	21.9	
25 Acetone										
43	4.640	4.630	0.009	94	37047	25.0	21.3	70- 130	100	
58	4.630	4.630	-0.001		10864			0.0- 52.7	29.3	
27 Ethyl ether										
59	4.762	4.762	0.000	93	117320	25.0	28.8	70- 130	100	
45	4.762	4.762	0.000		79799			43- 103	68.0	
74	4.762	4.762	0.000		76993			32.9- 92.9	65.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	98	227328	25.0	29.8	70- 130	100	
61	5.056	5.056	0.000		375213			159- 219	165	
98	5.056	5.056	0.000		142937			34.3- 94.3	62.9	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	52	208808	250.0	292.9	70- 130	100	
57	5.086	5.096	-0.010		19605			0.0- 39.8	9.4	
41	5.086	5.096	-0.010		51507			0.0- 56.4	24.7	
29 Iodomethane										
142	5.096	5.096	0.000	99	440482	25.0	27.9	70- 130	100	
127	5.096	5.096	0.000		203267			24.1- 84.1	46.1	
31 Acrylonitrile										
53	5.116	5.117	-0.001	96	434960	250.0	262.3	70- 130	100	
52	5.116	5.117	-0.001		373853			58- 118	86.0	
51	5.116	5.117	-0.001		164852			11.2- 71.2	37.9	
32 Methylene Chloride										
84	5.208	5.208	0.000	93	188708	25.0	25.1	70- 130	100	
49	5.208	5.208	0.000		254162			108- 168	135	
51	5.208	5.208	0.000		84478			14.8- 74.8	44.8	
86	5.208	5.208	0.000		131350			34.0- 94.0	69.6	
158 Methyl acetate										
43	5.268	5.268	-0.001	98	166730	50.0	51.9	70- 130	100	
74	5.268	5.268	-0.001		35469			19.8- 19.8	21.3	
59	5.268	5.268	-0.001		21433			0.0- 42.9	12.9	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.268	5.268	-0.001	90	312873	25.0	25.7	70- 130	100	
151	5.268	5.268	-0.001		284115			56- 116	90.8	
85	5.268	5.268	-0.001		132166			14.8- 74.8	42.2	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	90	265715	25.0	24.9	70- 130	100	
39	5.299	5.299	0.000		195271			50- 110	73.5	
76	5.299	5.299	0.000		102442			4.5- 64.5	38.6	
37 Carbon disulfide										
76	5.420	5.420	0.000	100	653049	25.0	27.5	70- 130	100	
78	5.420	5.420	0.000		57238			0.0- 39.4	8.8	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	99	235728	25.0	28.7	70- 130	100	
61	5.856	5.856	0.000		324313			119- 179	138	
98	5.856	5.856	0.000		150754			33.6- 93.6	64.0	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	94	398520	25.0	27.4	70- 130	100	
57	5.957	5.967	-0.010		82023			0.0- 50.7	20.6	
40 1,1-Dichloroethane										
63	6.078	6.078	-0.001	97	362696	25.0	25.4	70- 130	100	
65	6.078	6.078	-0.001		114337			0.5- 60.5	31.5	
83	6.078	6.078	-0.001		52688			0.0- 45.0	14.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	98	184315	250.0	277.1	70- 130	100	
52	6.089	6.089	0.000		38440			0.0- 53.7	20.9	
55	6.089	6.089	0.000		28075			0.0- 45.5	15.2	
43 Vinyl acetate										
43	6.210	6.210	0.000	97	235479	25.0	25.0	70- 130	100	
86	6.210	6.210	0.000		20955			0.0- 38.1	8.9	
45 Hexane										
57	6.453	6.453	0.000	91	372433	25.0	27.4	70- 130	100	
86	6.453	6.453	0.000		61701			0.0- 46.0	16.6	
46 2-Butanone (MEK)										
72	6.473	6.473	-0.001	92	15057	25.0	26.9	70- 130	100	
43	6.483	6.473	0.009		507205			3898- 3958	3369	
57	6.453	6.473	-0.021		372415			2498- 2558	2473	
47 Isopropyl ether										
45	6.483	6.483	-0.001	93	507352	25.0	24.7	70- 130	100	
87	6.483	6.483	-0.001		149895			0.0- 55.7	29.5	
59	6.483	6.483	-0.001		62998			0.0- 40.7	12.4	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	82	228898	25.0	28.0	70- 130	100	
61	6.595	6.595	0.000		301993			113- 173	132	
98	6.595	6.595	0.000		149966			35.8- 95.8	65.5	
52 Chlorobromomethane										
128	6.737	6.737	0.000	84	109627	25.0	27.7	70- 130	100	
49	6.737	6.737	0.000		142375			125- 185	130	
54 Chloroform										
83	6.777	6.777	0.000	92	403591	25.0	24.2	70- 130	100	
85	6.777	6.777	0.000		268488			35.3- 95.3	66.5	
47	6.777	6.777	0.000		92416			0.0- 54.5	22.9	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	433624	25.0	26.0	70- 130	100	
87	6.828	6.828	0.000		182765			9.5- 69.5	42.1	
57	6.828	6.828	0.000		135429			0.0- 59.8	31.2	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	94	331036	25.0	23.3	70- 130	100	
97	6.848	6.848	0.000		65448			0.0- 47.8	19.8	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	95	209329	625.0	691.8	70- 130	100	
41	6.848	6.858	-0.010		332378			158- 218	159	
42	6.858	6.858	0.000		114996			24.6- 84.6	54.9	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	84	75276	50.0	51.4	70- 130	100	
71	7.061	7.061	0.000		31556			5.2- 65.2	41.9	
72	7.061	7.061	0.000		32386			8.9- 68.9	43.0	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	99	250301	25.0	22.2	70- 130	100	
64	7.334	7.334	0.000		84424			1.8- 61.8	33.7	
49	7.334	7.334	0.000		60106			0.0- 52.2	24.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	96	485445	25.0	23.8	70- 130	100	
99	7.415	7.415	0.000		330889			35.9- 95.9	68.2	
61	7.415	7.415	0.000		189302			9.0- 69.0	39.0	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	96	335998	25.0	26.2	70- 130	100	
110	7.577	7.577	0.000		135901			8.5- 68.5	40.4	
77	7.577	7.577	0.000		104973			0.9- 60.9	31.2	
69 Cyclohexane										
56	7.658	7.658	0.000	88	427644	25.0	27.9	70- 130	100	
84	7.658	7.658	0.000		366724			49- 109	85.8	
69	7.658	7.658	0.000		122646			0.0- 56.1	28.7	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	483409	25.0	24.4	70- 130	100	
119	7.729	7.729	0.000		466509			65- 125	96.5	
82	7.729	7.729	0.000		94953			0.0- 51.0	19.6	
72 Benzene										
78	7.759	7.759	-0.001	98	718030	25.0	26.8	70- 130	100	
51	7.759	7.759	-0.001		147875			0.0- 53.4	20.6	
77	7.759	7.759	-0.001		169655			0.0- 53.9	23.6	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	98	350006	25.0	27.4	70- 130	100	
87	7.881	7.881	0.000		93422			0.0- 56.3	26.7	
43	7.881	7.881	0.000		109339			4.4- 64.4	31.2	
55	7.881	7.881	0.000		95849			0.0- 58.6	27.4	
75 n-Heptane										
43	8.185	8.185	0.000	91	370073	25.0	26.8	70- 130	100	
57	8.185	8.185	0.000		209148			25.7- 85.7	56.5	
71	8.185	8.185	0.000		214705			23.7- 83.7	58.0	
100	8.185	8.185	0.000		80887			0.0- 50.5	21.9	
77 Dibromomethane										
93	8.225	8.225	0.000	93	110866	25.0	25.9	70- 130	100	
95	8.225	8.225	0.000		93231			54- 114	84.1	
174	8.225	8.225	0.000		129439			78- 138	117	
78 1,2-Dichloropropane										
63	8.245	8.245	-0.001	93	172724	25.0	28.0	70- 130	100	
62	8.245	8.245	-0.001		135584			42- 102	78.5	
41	8.245	8.245	-0.001		107182			45- 105	62.1	
79 Trichloroethene										
130	8.286	8.286	0.000	93	306261	25.0	28.0	70- 130	100	
95	8.286	8.286	0.000		267322			63- 123	87.3	
132	8.286	8.286	0.000		300810			71- 131	98.2	
60	8.276	8.286	-0.010		122060			20.6- 80.6	39.9	
81 Dichlorobromomethane										
83	8.326	8.326	-0.001	97	287327	25.0	25.3	70- 130	100	
85	8.326	8.326	-0.001		187110			36.1- 96.1	65.1	
129	8.326	8.326	-0.001		39871			0.0- 44.5	13.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
83 2-Chloroethyl vinyl ether										
63	8.650	8.642	-0.001	84	6811	25.0	35.8	70- 130	100	
65	8.650	8.642	-0.001		2078			162- 222	30.5	
106	8.650	8.642	-0.001		1536			0.0- 53.1	22.6	
159 Methylcyclohexane										
83	8.701	8.701	0.000	90	458021	25.0	29.7	70- 130	100	
55	8.701	8.701	0.000		366848			87.9- 87.9	80.1	
98	8.701	8.701	0.000		220815			19.2- 79.2	48.2	
86 cis-1,3-Dichloropropene										
75	8.843	8.835	0.000	96	266605	25.0	28.9	70- 130	100	
39	8.833	8.835	-0.010		120571			21.3- 81.3	45.2	
77	8.843	8.835	0.000		85238			1.0- 61.0	32.0	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.915	0.000	95	129188	25.0	27.3	70- 130	100	
100	8.924	8.915	0.000		21199			0.0- 44.9	16.4	
58	8.924	8.915	0.000		54189			8.0- 68.0	41.9	
88 trans-1,3-Dichloropropene										
75	9.187	9.179	0.000	91	233967	25.0	25.7	70- 130	100	
39	9.177	9.179	-0.010		94929			15.4- 75.4	40.6	
110	9.187	9.179	0.000		62008			0.0- 53.8	26.5	
89 1,1,2-Trichloroethane										
83	9.319	9.310	0.000	93	118216	25.0	28.3	70- 130	100	
97	9.319	9.310	0.000		152845			97- 157	129	
61	9.319	9.310	0.000		94209			62- 122	79.7	
90 Toluene										
91	9.471	9.462	0.000	99	901020	25.0	27.5	70- 130	100	
92	9.471	9.462	0.000		558094			29.8- 89.8	61.9	
65	9.471	9.462	0.000		110165			0.0- 43.1	12.2	
91 1,3-Dichloropropane										
76	9.511	9.502	0.000	90	230394	25.0	27.2	70- 130	100	
78	9.511	9.502	0.000		73151			1.6- 61.6	31.8	
49	9.511	9.502	0.000		38871			0.0- 48.7	16.9	
92 Ethyl methacrylate										
69	9.501	9.502	-0.010	86	160146	25.0	29.4	70- 130	100	
41	9.511	9.502	0.000		253662			151- 211	158	
99	9.511	9.502	0.000		39498			0.0- 53.8	24.7	
93 2-Hexanone										
43	9.623	9.614	0.000	94	90100	25.0	26.8	70- 130	100	
58	9.623	9.614	0.000		51486			22.9- 82.9	57.1	
100	9.623	9.614	0.000		12325			0.0- 41.9	13.7	
94 Chlorodibromomethane										
129	9.744	9.735	0.000	90	223874	25.0	27.4	70- 130	100	
127	9.744	9.735	0.000		174857			47- 107	78.1	
79	9.744	9.735	0.000		28341			0.0- 44.5	12.7	
208	9.754	9.735	0.010		9696			0.0- 33.6	4.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.947	0.000	99	166662	25.0	28.3	70- 130	100	
109	9.957	9.947	0.000		159691			64- 124	95.8	
81	9.957	9.947	0.000		11455			0.0- 39.1	6.9	
97 Tetrachloroethene										
164	10.109	10.089	0.010	97	265653	25.0	28.2	70- 130	100	
166	10.109	10.089	0.010		341490			95- 155	129	
129	10.099	10.089	0.000		251363			64- 124	94.6	
100 1,1,1,2-Tetrachloroethane										
131	10.655	10.645	-0.001	92	259941	25.0	27.5	70- 130	100	
133	10.655	10.645	-0.001		252793			67- 127	97.3	
119	10.696	10.645	0.040		361154			35.9- 95.9	139	
101 Chlorobenzene										
112	10.736	10.726	-0.001	97	652330	25.0	27.2	70- 130	100	
77	10.736	10.726	-0.001		318962			19.9- 79.9	48.9	
114	10.736	10.726	-0.001		212078			1.4- 61.4	32.5	
102 Ethylbenzene										
91	10.909	10.898	0.000	98	1119433	25.0	27.1	70- 130	100	
106	10.909	10.898	0.000		362879			0.2- 60.2	32.4	
103 m-Xylene & p-Xylene										
106	11.091	11.080	0.000	97	449956	25.0	30.1	70- 130	100	
91	11.091	11.080	0.000		902394			180- 240	201	
105	11.091	11.080	0.000		200383			14.5- 74.5	44.5	
105 Bromoform										
173	11.233	11.222	0.000	97	133788	25.0	27.6	70- 130	100	
175	11.233	11.222	0.000		63330			19.7- 79.7	47.3	
79	11.223	11.222	-0.010		20974			0.0- 49.9	15.7	
252	11.233	11.222	0.000		10392			0.0- 36.9	7.8	
106 Styrene										
104	11.415	11.404	0.000	94	611825	25.0	29.1	70- 130	100	
103	11.415	11.404	0.000		294905			17.4- 77.4	48.2	
78	11.415	11.404	0.000		248819			15.1- 75.1	40.7	
51	11.415	11.404	0.000		138941			0.0- 53.9	22.7	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	97	179515	25.0	29.0	70- 130	100	
85	11.486	11.486	0.000		115943			35.7- 95.7	64.6	
131	11.486	11.486	0.000		24687			0.0- 45.0	13.8	
108 o-Xylene										
106	11.486	11.475	0.000	97	417830	25.0	29.4	70- 130	100	
91	11.486	11.475	0.000		883918			197- 257	212	
105	11.486	11.475	0.000		174678			10.8- 70.8	41.8	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	87	67820	25.0	28.2	70- 130	100	
77	11.628	11.628	0.000		61749			58- 118	91.0	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.628	0.000	80	44378	25.0	24.4	70- 130	100	
89	11.638	11.628	0.010		29523			70- 130	100	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.840	11.829	-0.001	95	1288915	25.0	29.1	70- 130	100	
120	11.840	11.829	-0.001		347589			0.0- 55.6	27.0	
77	11.840	11.829	-0.001		194447			0.0- 45.8	15.1	
113 Bromobenzene										
156	12.114	12.104	0.010	84	309526	25.0	30.0	70- 130	100	
77	12.104	12.104	0.000		345750			91- 151	112	
158	12.104	12.104	0.000		294929			67- 127	95.3	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	1377998	25.0	28.7	70- 130	100	
120	12.286	12.286	0.000		353113			0.0- 54.5	25.6	
65	12.286	12.286	0.000		146529			0.0- 42.2	10.6	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	793734	25.0	26.9	70- 130	100	
126	12.387	12.387	0.000		309933			7.2- 67.2	39.0	
75	12.387	12.387	0.000		20977			0.0- 32.9	2.6	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	96	822816	25.0	27.8	70- 130	100	
126	12.468	12.468	0.000		310229			7.3- 67.3	37.7	
117 1,3,5-Trimethylbenzene										
105	12.569	12.569	-0.001	95	1042580	25.0	28.7	70- 130	100	
120	12.569	12.569	-0.001		513540			18.4- 78.4	49.3	
91	12.569	12.569	-0.001		118086			0.0- 41.8	11.3	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	92	1011712	25.0	28.6	70- 130	100	
91	12.843	12.853	-0.010		669445			41- 101	66.2	
134	12.853	12.853	0.000		261491			0.0- 54.6	25.8	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	97	1013208	25.0	28.1	70- 130	100	
120	12.954	12.954	0.000		477670			15.7- 75.7	47.1	
77	12.944	12.954	-0.010		117132			0.0- 42.4	11.6	
121 sec-Butylbenzene										
105	13.055	13.055	-0.001	94	1448163	25.0	28.8	70- 130	100	
134	13.055	13.055	-0.001		331275			0.0- 52.3	22.9	
91	13.055	13.055	-0.001		253888			0.0- 47.8	17.5	
122 1,3-Dichlorobenzene										
146	13.126	13.126	-0.001	97	613181	25.0	26.7	70- 130	100	
111	13.126	13.126	-0.001		230394			10.6- 70.6	37.6	
148	13.136	13.126	0.009		394300			34.6- 94.6	64.3	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	95	593556	25.0	26.1	70- 130	100	
111	13.187	13.187	0.000		226579			8.8- 68.8	38.2	
148	13.187	13.187	0.000		387239			35.7- 95.7	65.2	
125 4-Isopropyltoluene										
119	13.217	13.217	-0.001	96	1323007	25.0	29.0	70- 130	100	
134	13.217	13.217	-0.001		359796			0.0- 57.7	27.2	
91	13.217	13.217	-0.001		299193			0.0- 56.0	22.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	99	553437	25.0	28.5	70- 130	100	
111	13.501	13.501	0.000		217258			10.1- 70.1	39.3	
148	13.501	13.501	0.000		356752			32.6- 92.6	64.5	
128 n-Butylbenzene										
91	13.572	13.572	0.000	96	1078400	25.0	27.6	70- 130	100	
92	13.572	13.572	0.000		601702			24.4- 84.4	55.8	
134	13.572	13.572	0.000		349070			0.0- 59.7	32.4	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	91	41883	25.0	25.4	70- 130	100	
155	13.896	13.896	0.000		42487			65- 125	101	
157	13.896	13.896	0.000		57052			86- 146	136	
133 1,2,4-Trichlorobenzene										
180	15.060	15.060	-0.001	95	399845	25.0	27.7	70- 130	100	
182	15.060	15.060	-0.001		394959			67- 127	98.8	
145	15.060	15.060	-0.001		131938			4.2- 64.2	33.0	
134 Naphthalene										
128	15.293	15.293	-0.001	96	813384	25.0	29.8	70- 130	100	
127	15.293	15.293	-0.001		100834			0.0- 42.9	12.4	
129	15.293	15.293	-0.001		95082			0.0- 41.7	11.7	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	94	317671	25.0	28.3	70- 130	100	
223	15.334	15.334	0.000		200114			33.1- 93.1	63.0	
227	15.334	15.334	0.000		206277			33.2- 93.2	64.9	
137 1,2,3-Trichlorobenzene										
180	15.476	15.475	0.000	96	385950	25.0	29.5	70- 130	100	
182	15.476	15.475	0.000		363868			64- 124	94.3	
145	15.476	15.475	0.000		136040			5.8- 65.8	35.2	
A 141 C4-C12										
1	10.276	(4.965-15.587)		0	99915171	NC	NC			

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260ISS_00161

Amount Added: 5.00

Units: uL

VMWNU8260LCS2_00215

Amount Added: 5.00

Units: uL

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17038.D

Injection Date: 17-Oct-2018 20:33:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: ICV

Worklist Smp#: 18

Client ID:

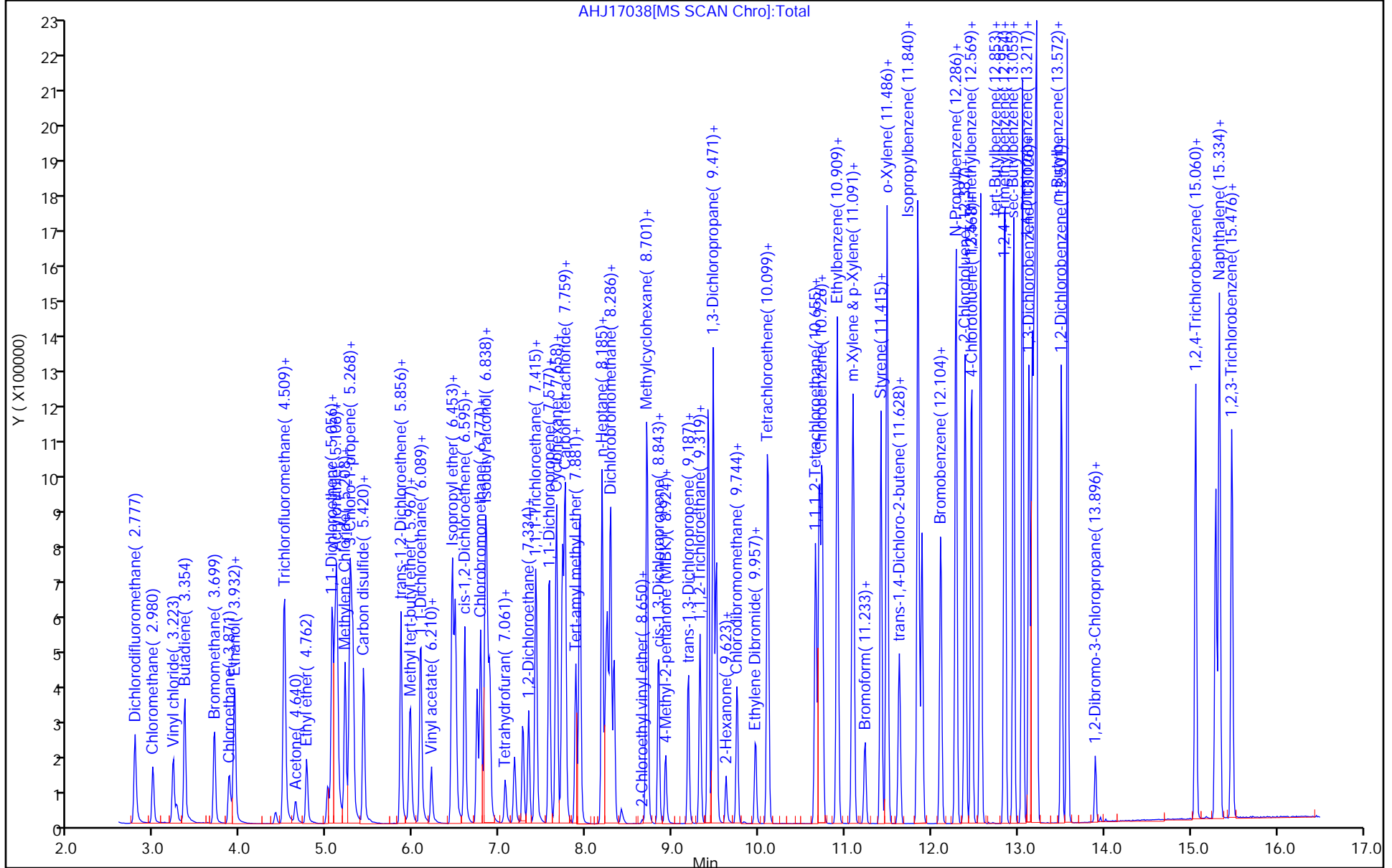
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 34

Method: 45_8260

Limit Group: MSV-8260-624



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCVIS 440-506588/4 Calibration Date: 10/22/2018 08:38
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ22004.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.5422	0.4815		22.2	25.0	-11.2	40.0
Chloromethane	Ave	0.2685	0.2417	0.1000	22.5	25.0	-10.0	40.0
Vinyl chloride	Ave	0.2812	0.2716		24.2	25.0	-3.4	20.0
1,3-Butadiene	Ave	0.2397	0.2269		23.7	25.0	-5.3	30.0
Bromomethane	Ave	0.2113	0.1969		23.3	25.0	-6.8	30.0
Chloroethane	Ave	0.1630	0.1451		22.3	25.0	-11.0	30.0
Ethanol	Ave	0.1038	0.0964		929	1000	-7.1	40.0
Dichlorofluoromethane	Ave	0.5177	0.4615		22.3	25.0	-10.9	40.0
Acrolein	Lin2		0.0082		18.3	25.0	-26.9	40.0
Acetonitrile	Ave	0.0156	0.0115		185	250	-25.9	40.0
Trichlorofluoromethane	Ave	0.7836	0.7143		22.8	25.0	-8.8	40.0
Acetone	Ave	0.0543	0.0436		20.1	25.0	-19.8	40.0
Diethyl ether	Ave	0.1274	0.1165		22.9	25.0	-8.5	30.0
1,1-Dichloroethene	Ave	0.2380	0.2271		23.8	25.0	-4.6	20.0
Iodomethane	Ave	0.4928	0.4724		24.0	25.0	-4.1	40.0
tert-Butyl alcohol (TBA)	Ave	1.151	1.122		244	250	-2.5	30.0
Acrylonitrile	Lin2		0.0401		194	250	-22.4	40.0
Methylene Chloride	Lin1		0.1893		19.1	25.0	-23.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3801	0.3327		21.9	25.0	-12.5	40.0
Methyl acetate	Ave	0.1004	0.0825		41.1	50.0	-17.8	30.0
Allyl chloride	Ave	0.3327	0.3023		22.7	25.0	-9.2	40.0
Carbon disulfide	Ave	0.7420	0.6522		22.0	25.0	-12.1	40.0
trans-1,2-Dichloroethene	Ave	0.2567	0.2361		23.0	25.0	-8.0	30.0
Methyl-t-Butyl Ether (MTBE)	Ave	0.4546	0.4103		22.6	25.0	-9.8	30.0
1,1-Dichloroethane	Ave	0.4456	0.4053	0.1000	22.7	25.0	-9.1	30.0
Propionitrile	Ave	0.0208	0.0165		198	250	-20.7	40.0
Vinyl acetate	Ave	0.2942	0.2636		17.9	20.0	-10.4	40.0
Hexane	Ave	0.4245	0.3727		21.9	25.0	-12.2	40.0
2-Butanone (MEK)	Lin2		0.0141		20.9	25.0	-16.4	40.0
Isopropyl Ether (DIPE)	Ave	0.6416	0.5545		21.6	25.0	-13.6	30.0
cis-1,2-Dichloroethene	Ave	0.2554	0.2358		23.1	25.0	-7.7	30.0
Bromochloromethane	Ave	0.1235	0.1110		22.5	25.0	-10.1	30.0
Chloroform	Ave	0.5201	0.4907		23.6	25.0	-5.6	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.5202	0.4495		21.6	25.0	-13.6	30.0
2,2-Dichloropropane	Ave	0.4429	0.4532		25.6	25.0	2.3	30.0
Isobutyl alcohol	Ave	0.4884	0.4224		541	625	-13.5	40.0
Tetrahydrofuran	Ave	0.0458	0.0359		39.2	50.0	-21.5	40.0
1,2-Dichloroethane	Ave	0.3527	0.3194		22.6	25.0	-9.4	30.0
1,1,1-Trichloroethane	Ave	0.6377	0.6058		23.7	25.0	-5.0	30.0
1,1-Dichloropropene	Ave	0.4012	0.3582		22.3	25.0	-10.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCVIS 440-506588/4 Calibration Date: 10/22/2018 08:38
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ22004.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Cyclohexane	Ave	0.4794	0.4156		21.7	25.0	-13.3	30.0
Carbon tetrachloride	Ave	0.6189	0.6423		25.9	25.0	3.8	40.0
Benzene	Ave	0.8356	0.7285		21.8	25.0	-12.8	30.0
Tert-amyl-methyl ether (TAME)	Ave	0.3986	0.3374		21.2	25.0	-15.3	30.0
n-Heptane	Ave	0.4308	0.3635		21.1	25.0	-15.6	30.0
Dibromomethane	Ave	0.1336	0.1228		23.0	25.0	-8.1	30.0
1,2-Dichloropropane	Ave	0.1929	0.1727		22.4	25.0	-10.4	20.0
Trichloroethene	Ave	0.3413	0.3169		23.2	25.0	-7.2	30.0
Bromodichloromethane	Ave	0.3541	0.3419		24.1	25.0	-3.5	30.0
2-Chloroethyl vinyl ether	Lin1		0.0072		29.6	25.0	18.3	40.0
Methylcyclohexane	Ave	0.4815	0.4386		22.8	25.0	-8.9	30.0
cis-1,3-Dichloropropene	Ave	0.3576	0.3358		23.5	25.0	-6.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1835	0.1554		21.2	25.0	-15.3	40.0
trans-1,3-Dichloropropene	Lin2		0.3315		23.5	25.0	-6.1	30.0
1,1,2-Trichloroethane	Ave	0.1623	0.1366		21.1	25.0	-15.8	30.0
Toluene	Ave	1.270	1.149		22.6	25.0	-9.6	20.0
1,3-Dichloropropane	Ave	0.3282	0.2822		21.5	25.0	-14.0	30.0
Ethyl methacrylate	Ave	0.2117	0.1845		21.8	25.0	-12.8	40.0
2-Hexanone	Ave	0.1307	0.1049		20.1	25.0	-19.8	40.0
Dibromochloromethane	Ave	0.3170	0.3116		24.6	25.0	-1.7	30.0
1,2-Dibromoethane (EDB)	Ave	0.2282	0.2015		22.1	25.0	-11.7	30.0
Tetrachloroethene	Ave	0.3655	0.3549		24.3	25.0	-2.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3668	0.3582		24.4	25.0	-2.3	40.0
Chlorobenzene	Ave	0.9315	0.8065	0.3000	21.6	25.0	-13.4	30.0
Ethylbenzene	Ave	1.604	1.483		23.1	25.0	-7.6	20.0
m,p-Xylene	Ave	0.5793	0.5681		24.5	25.0	-1.9	30.0
Bromoform	Ave	0.1882	0.1829	0.1000	24.3	25.0	-2.8	40.0
Styrene	Ave	0.8155	0.7776		23.8	25.0	-4.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4333	0.3489	0.3000	20.1	25.0	-19.5	30.0
o-Xylene	Ave	0.5520	0.5309		24.0	25.0	-3.8	30.0
1,2,3-Trichloropropane	Ave	0.1686	0.1412		20.9	25.0	-16.3	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1272	0.1097		21.6	25.0	-13.7	40.0
Isopropylbenzene	Ave	1.718	1.676		24.4	25.0	-2.4	30.0
Bromobenzene	Ave	0.7224	0.6434		22.3	25.0	-10.9	30.0
N-Propylbenzene	Ave	3.357	2.978		22.2	25.0	-11.3	30.0
2-Chlorotoluene	Ave	2.065	1.811		21.9	25.0	-12.3	30.0
4-Chlorotoluene	Ave	2.071	1.828		22.1	25.0	-11.7	30.0
1,3,5-Trimethylbenzene	Ave	2.542	2.474		24.3	25.0	-2.7	30.0
tert-Butylbenzene	Ave	2.476	2.232		22.5	25.0	-9.8	30.0
1,2,4-Trimethylbenzene	Ave	2.524	2.356		23.3	25.0	-6.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCVIS 440-506588/4 Calibration Date: 10/22/2018 08:38
 Instrument ID: GCMS45 Calib Start Date: 10/17/2018 14:08
 GC Column: DB-VRX D ID: 0.18 (mm) Calib End Date: 10/17/2018 19:11
 Lab File ID: AHJ22004.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	3.516	3.165		22.5	25.0	-10.0	30.0
1,3-Dichlorobenzene	Ave	1.608	1.402		21.8	25.0	-12.8	30.0
1,4-Dichlorobenzene	Ave	1.594	1.382		21.7	25.0	-13.3	30.0
p-Isopropyltoluene	Ave	3.195	2.922		22.9	25.0	-8.6	30.0
1,2-Dichlorobenzene	Ave	1.360	1.261		23.2	25.0	-7.2	30.0
n-Butylbenzene	Ave	2.739	2.548		23.3	25.0	-7.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1155	0.0985		21.3	25.0	-14.8	40.0
1,2,4-Trichlorobenzene	Ave	1.011	0.9373		23.2	25.0	-7.3	40.0
Naphthalene	Ave	1.914	1.719		22.5	25.0	-10.2	40.0
Hexachlorobutadiene	Ave	0.7853	0.7477		23.8	25.0	-4.8	40.0
1,2,3-Trichlorobenzene	Ave	0.9147	0.8589		23.5	25.0	-6.1	40.0
Dibromofluoromethane (Surr)	Ave	0.3044	0.3154		25.9	25.0	3.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3053	0.3145		25.8	25.0	3.0	
Toluene-d8 (Surr)	Ave	1.124	1.169		26.0	25.0	4.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8268	0.8035		24.3	25.0	-2.8	20.0

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22004.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 22-Oct-2018 08:38:30 ALS Bottle#: 19 Worklist Smp#: 4
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-004
 Misc. Info.: CCVIS
 Operator ID: RRT Instrument ID: GCMS45
 Sublist: chrom-45_8260*sub1
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:14:30 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:14:30

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
* 1 TBA-d9 (IS)										
65	5.015	5.015	0.000	99	103280	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	99	520768	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		33768			0.0- 36.8	6.5	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	85	436870	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		216460			21.9- 81.9	49.5	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	94	263950	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		468294			152- 212	177	
115	13.167	13.167	0.000		164159			31.1- 91.1	62.2	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	92	164267	25.0	25.9	70- 130	100	
111	6.889	6.889	0.000		168262			74- 134	102	
192	6.889	6.889	0.000		27844			0.0- 46.6	17.0	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.263	7.263	0.000	93	163784	25.0	25.8	70- 130	100	
67	7.273	7.263	0.010		74070			15.9- 75.9	45.2	
102	7.273	7.263	0.010		23761			0.0- 45.2	14.5	
\$ 8 Toluene-d8 (Surr)										
98	9.420	9.420	0.000	93	510839	25.0	26.0	70- 130	100	
100	9.410	9.420	-0.010		356520			40- 100	69.8	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	94	212072	25.0	24.3	70- 130	100	
174	11.891	11.891	0.000		193270			62- 122	91.1	
176	11.891	11.891	0.000		192497			59- 119	90.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.777	0.000	99	250766	25.0	22.2	70- 130	100	
87	2.777	2.777	0.000		80719			2.5- 62.5	32.2	
50	2.777	2.777	0.000		25752			0.0- 40.2	10.3	
12 Chloromethane										
50	2.980	2.980	0.000	99	125886	25.0	22.5	70- 130	100	
52	2.980	2.980	0.000		41782			3.7- 63.7	33.2	
13 Vinyl chloride										
62	3.213	3.213	0.000	98	141441	25.0	24.2	70- 130	100	
64	3.223	3.213	0.010		45757			3.0- 63.0	32.4	
14 Butadiene										
54	3.355	3.355	0.000	85	118146	25.0	23.7	70- 130	100	
53	3.355	3.355	0.000		84444			39- 99	71.5	
39	3.355	3.355	0.000		107433			62- 122	90.9	
15 Bromomethane										
96	3.699	3.699	0.000	94	102555	25.0	23.3	70- 130	100	
94	3.699	3.699	0.000		110008			72- 132	107	
79	3.699	3.699	0.000		21961			0.0- 50.2	21.4	
16 Chloroethane										
64	3.871	3.871	0.000	97	75559	25.0	22.3	70- 130	100	
66	3.871	3.871	0.000		22591			0.0- 59.6	29.9	
49	3.871	3.871	0.000		25023			2.2- 62.2	33.1	
17 Ethanol										
45	3.901	3.901	0.000	97	39832	1000.0	929.2	70- 130	100	
46	3.901	3.901	0.000		13527			7.2- 67.2	34.0	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	240335	25.0	22.3	70- 130	100	
69	3.932	3.932	0.000		78906			2.6- 62.6	32.8	
47	3.932	3.932	0.000		26378			0.0- 41.5	11.0	
21 Acrolein										
56	4.499	4.499	0.000	24	4266	25.0	18.3	70- 130	100	
55	4.499	4.499	0.000		2786			32.9- 92.9	65.3	
22 Trichlorofluoromethane										
101	4.509	4.509	0.000	99	371972	25.0	22.8	70- 130	100	
103	4.509	4.509	0.000		249803			33.3- 93.3	67.2	
66	4.499	4.509	-0.010		37674			0.0- 39.9	10.1	
23 Acetonitrile										
41	4.509	4.509	0.000	95	60097	250.0	185.2	70- 130	100	
40	4.509	4.509	0.000		36073			26.9- 86.9	60.0	
39	4.509	4.509	0.000		12951			0.0- 52.0	21.6	
25 Acetone										
43	4.641	4.641	0.000	82	22685	25.0	20.1	70- 130	100	
58	4.641	4.641	0.000		4633			0.0- 52.7	20.4	
27 Ethyl ether										
59	4.762	4.762	0.000	94	60687	25.0	22.9	70- 130	100	
45	4.762	4.762	0.000		40355			43- 103	66.5	
74	4.762	4.762	0.000		35754			32.9- 92.9	58.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	96	118250	25.0	23.8	70- 130	100	
61	5.056	5.056	0.000		217844			159- 219	184	
98	5.056	5.056	0.000		73780			34.3- 94.3	62.4	
30 2-Methyl-2-propanol										
59	5.096	5.096	0.000	53	115866	250.0	243.8	70- 130	100	
57	5.096	5.096	0.000		10138			0.0- 39.8	8.7	
41	5.086	5.096	-0.010		32440			0.0- 56.4	28.0	
29 Iodomethane										
142	5.096	5.096	0.000	95	246008	25.0	24.0	70- 130	100	
127	5.096	5.096	0.000		135768			24.1- 84.1	55.2	
31 Acrylonitrile										
53	5.117	5.117	0.000	97	209024	250.0	194.0	70- 130	100	
52	5.117	5.117	0.000		188023			58- 118	90.0	
51	5.117	5.117	0.000		86635			11.2- 71.2	41.4	
32 Methylene Chloride										
84	5.208	5.208	0.000	95	98565	25.0	19.1	70- 130	100	
49	5.208	5.208	0.000		130981			108- 168	133	
51	5.208	5.208	0.000		43778			14.8- 74.8	44.4	
86	5.208	5.208	0.000		57646			34.0- 94.0	58.5	
158 Methyl acetate										
43	5.268	5.268	0.000	67	85897	50.0	41.1	70- 130	100	
74	5.268	5.268	0.000		17569			19.8- 19.8	20.5	
59	5.268	5.268	0.000		11697			0.0- 42.9	13.6	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.268	5.268	0.000	90	173262	25.0	21.9	70- 130	100	
151	5.268	5.268	0.000		153173			56- 116	88.4	
85	5.268	5.268	0.000		73293			14.8- 74.8	42.3	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	87	157404	25.0	22.7	70- 130	100	
39	5.299	5.299	0.000		131077			50- 110	83.3	
76	5.299	5.299	0.000		54433			4.5- 64.5	34.6	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	339618	25.0	22.0	70- 130	100	
78	5.420	5.420	0.000		31970			0.0- 39.4	9.4	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	97	122934	25.0	23.0	70- 130	100	
61	5.856	5.856	0.000		181732			119- 179	148	
98	5.856	5.856	0.000		80205			33.6- 93.6	65.2	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	96	213671	25.0	22.6	70- 130	100	
57	5.957	5.967	-0.010		43199			0.0- 50.7	20.2	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	98	211044	25.0	22.7	70- 130	100	
65	6.079	6.079	0.000		63263			0.5- 60.5	30.0	
83	6.079	6.079	0.000		31648			0.0- 45.0	15.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	97	85791	250.0	198.3	70- 130	100	
52	6.089	6.089	0.000		19759			0.0- 53.7	23.0	
55	6.089	6.089	0.000		11750			0.0- 45.5	13.7	
43 Vinyl acetate										
43	6.210	6.210	0.000	97	109809	20.0	17.9	70- 130	100	
86	6.210	6.210	0.000		8004			0.0- 38.1	7.3	
45 Hexane										
57	6.453	6.453	0.000	93	194105	25.0	21.9	70- 130	100	
86	6.453	6.453	0.000		28776			0.0- 46.0	14.8	
46 2-Butanone (MEK)										
72	6.484	6.484	0.000	61	7322	25.0	20.9	70- 130	100	
43	6.484	6.484	0.000		293077			3898- 3958	4003	
57	6.453	6.484	-0.031		194095			2498- 2558	2651	
47 Isopropyl ether										
45	6.484	6.484	0.000	95	288758	25.0	21.6	70- 130	100	
87	6.484	6.484	0.000		78925			0.0- 55.7	27.3	
59	6.484	6.484	0.000		31987			0.0- 40.7	11.1	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	85	122807	25.0	23.1	70- 130	100	
61	6.595	6.595	0.000		178025			113- 173	145	
98	6.595	6.595	0.000		77979			35.8- 95.8	63.5	
52 Chlorobromomethane										
128	6.737	6.737	0.000	83	57823	25.0	22.5	70- 130	100	
49	6.737	6.737	0.000		83482			125- 185	144	
54 Chloroform										
83	6.777	6.777	0.000	94	255552	25.0	23.6	70- 130	100	
85	6.777	6.777	0.000		161494			35.3- 95.3	63.2	
47	6.777	6.777	0.000		62959			0.0- 54.5	24.6	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	97	234074	25.0	21.6	70- 130	100	
87	6.828	6.828	0.000		93811			9.5- 69.5	40.1	
57	6.828	6.828	0.000		71088			0.0- 59.8	30.4	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	93	236033	25.0	25.6	70- 130	100	
97	6.848	6.848	0.000		42333			0.0- 47.8	17.9	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	95	109067	625.0	540.6	70- 130	100	
41	6.848	6.858	-0.010		228289			158- 218	209	
42	6.858	6.858	0.000		61454			24.6- 84.6	56.3	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	85	37404	50.0	39.2	70- 130	100	
71	7.061	7.061	0.000		13960			5.2- 65.2	37.3	
72	7.061	7.061	0.000		14802			8.9- 68.9	39.6	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	166323	25.0	22.6	70- 130	100	
64	7.334	7.334	0.000		54764			1.8- 61.8	32.9	
49	7.334	7.334	0.000		34706			0.0- 52.2	20.9	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	96	315484	25.0	23.7	70- 130	100	
99	7.415	7.415	0.000		206272			35.9- 95.9	65.4	
61	7.415	7.415	0.000		119029			9.0- 69.0	37.7	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	94	186549	25.0	22.3	70- 130	100	
110	7.577	7.577	0.000		72107			8.5- 68.5	38.7	
77	7.567	7.577	-0.010		58087			0.9- 60.9	31.1	
69 Cyclohexane										
56	7.658	7.658	0.000	91	216432	25.0	21.7	70- 130	100	
84	7.658	7.658	0.000		178713			49- 109	82.6	
69	7.658	7.658	0.000		61022			0.0- 56.1	28.2	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	334500	25.0	25.9	70- 130	100	
119	7.729	7.729	0.000		316787			65- 125	94.7	
82	7.729	7.729	0.000		68083			0.0- 51.0	20.4	
72 Benzene										
78	7.760	7.760	0.000	98	379396	25.0	21.8	70- 130	100	
51	7.760	7.760	0.000		90276			0.0- 53.4	23.8	
77	7.760	7.760	0.000		90070			0.0- 53.9	23.7	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	96	175729	25.0	21.2	70- 130	100	
87	7.881	7.881	0.000		47803			0.0- 56.3	27.2	
43	7.881	7.881	0.000		58558			4.4- 64.4	33.3	
55	7.881	7.881	0.000		51004			0.0- 58.6	29.0	
75 n-Heptane										
43	8.185	8.185	0.000	90	189287	25.0	21.1	70- 130	100	
57	8.185	8.185	0.000		109276			25.7- 85.7	57.7	
71	8.185	8.185	0.000		104621			23.7- 83.7	55.3	
100	8.185	8.185	0.000		39287			0.0- 50.5	20.8	
77 Dibromomethane										
93	8.225	8.225	0.000	95	63958	25.0	23.0	70- 130	100	
95	8.225	8.225	0.000		54009			54- 114	84.4	
174	8.225	8.225	0.000		70049			78- 138	110	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	86	89955	25.0	22.4	70- 130	100	
62	8.246	8.246	0.000		61675			42- 102	68.6	
41	8.246	8.246	0.000		70500			45- 105	78.4	
79 Trichloroethene										
130	8.286	8.286	0.000	94	165015	25.0	23.2	70- 130	100	
95	8.286	8.286	0.000		155310			63- 123	94.1	
132	8.286	8.286	0.000		167105			71- 131	101	
60	8.276	8.286	-0.010		80042			20.6- 80.6	48.5	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	178053	25.0	24.1	70- 130	100	
85	8.327	8.327	0.000		114391			36.1- 96.1	64.2	
129	8.327	8.327	0.000		25610			0.0- 44.5	14.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
159 Methylcyclohexane										
83	8.701	8.701	0.000	94	228423	25.0	22.8	70- 130	100	
55	8.701	8.701	0.000		197228			87.9- 87.9	86.3	
98	8.701	8.701	0.000		111201			19.2- 79.2	48.7	
83 2-Chloroethyl vinyl ether										
63	8.701	8.701	0.000	37	3124	25.0	29.6	70- 130	100	
65	8.701	8.701	0.000		5811			162- 222	186	
106	0.000	8.701	0.000		0			0.0- 53.1		
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	146695	25.0	23.5	70- 130	100	
39	8.833	8.843	-0.010		83462			21.3- 81.3	56.9	
77	8.843	8.843	0.000		47860			1.0- 61.0	32.6	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	96	67873	25.0	21.2	70- 130	100	
100	8.924	8.924	0.000		10298			0.0- 44.9	15.2	
58	8.924	8.924	0.000		26294			8.0- 68.0	38.7	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	144829	25.0	23.5	70- 130	100	
39	9.177	9.187	-0.010		65439			15.4- 75.4	45.2	
110	9.187	9.187	0.000		33271			0.0- 53.8	23.0	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	97	59694	25.0	21.1	70- 130	100	
97	9.319	9.319	0.000		76343			97- 157	128	
61	9.319	9.319	0.000		57581			62- 122	96.5	
90 Toluene										
91	9.471	9.471	0.000	97	501902	25.0	22.6	70- 130	100	
92	9.471	9.471	0.000		287922			29.8- 89.8	57.4	
65	9.471	9.471	0.000		63332			0.0- 43.1	12.6	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	88	123261	25.0	21.5	70- 130	100	
78	9.511	9.511	0.000		40761			1.6- 61.6	33.1	
49	9.511	9.511	0.000		26596			0.0- 48.7	21.6	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	81	80610	25.0	21.8	70- 130	100	
41	9.511	9.511	0.000		148177			151- 211	184	
99	9.511	9.511	0.000		20397			0.0- 53.8	25.3	
93 2-Hexanone										
43	9.623	9.623	0.000	95	45807	25.0	20.1	70- 130	100	
58	9.623	9.623	0.000		24663			22.9- 82.9	53.8	
100	9.623	9.623	0.000		5087			0.0- 41.9	11.1	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	136140	25.0	24.6	70- 130	100	
127	9.754	9.744	0.010		107543			47- 107	79.0	
79	9.744	9.744	0.000		19097			0.0- 44.5	14.0	
208	9.754	9.744	0.010		4747			0.0- 33.6	3.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.957	0.000	99	88038	25.0	22.1	70- 130	100	
109	9.957	9.957	0.000		83477			64- 124	94.8	
81	9.957	9.957	0.000		8152			0.0- 39.1	9.3	
97 Tetrachloroethene										
164	10.109	10.109	0.000	95	155052	25.0	24.3	70- 130	100	
166	10.109	10.109	0.000		187935			95- 155	121	
129	10.099	10.109	-0.010		144833			64- 124	93.4	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	89	156497	25.0	24.4	70- 130	100	
133	10.656	10.656	0.000		150738			67- 127	96.3	
119	10.656	10.656	0.000		101224			35.9- 95.9	64.7	
101 Chlorobenzene										
112	10.737	10.737	0.000	95	352315	25.0	21.6	70- 130	100	
77	10.727	10.737	-0.010		186737			19.9- 79.9	53.0	
114	10.737	10.737	0.000		115928			1.4- 61.4	32.9	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	647791	25.0	23.1	70- 130	100	
106	10.909	10.909	0.000		202987			0.2- 60.2	31.3	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	97	248172	25.0	24.5	70- 130	100	
91	11.091	11.091	0.000		500765			180- 240	202	
105	11.091	11.091	0.000		108347			14.5- 74.5	43.7	
105 Bromoform										
173	11.233	11.233	0.000	96	79900	25.0	24.3	70- 130	100	
175	11.233	11.233	0.000		37703			19.7- 79.7	47.2	
79	11.223	11.233	-0.010		14743			0.0- 49.9	18.5	
252	11.233	11.233	0.000		5351			0.0- 36.9	6.7	
106 Styrene										
104	11.415	11.415	0.000	94	339709	25.0	23.8	70- 130	100	
103	11.415	11.415	0.000		161604			17.4- 77.4	47.6	
78	11.415	11.415	0.000		150996			15.1- 75.1	44.4	
51	11.415	11.415	0.000		79310			0.0- 53.9	23.3	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	96	92090	25.0	20.1	70- 130	100	
85	11.486	11.486	0.000		60217			35.7- 95.7	65.4	
131	11.486	11.486	0.000		13176			0.0- 45.0	14.3	
108 o-Xylene										
106	11.486	11.486	0.000	98	231925	25.0	24.0	70- 130	100	
91	11.486	11.486	0.000		511522			197- 257	221	
105	11.486	11.486	0.000		96563			10.8- 70.8	41.6	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	37260	25.0	20.9	70- 130	100	
77	11.628	11.628	0.000		32896			58- 118	88.3	
111 trans-1,4-Dichloro-2-butene										
53	11.638	11.638	0.000	82	28953	25.0	21.6	70- 130	100	
89	11.638	11.638	0.000		16987			70- 130	100	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.840	11.840	0.000	96	732404	25.0	24.4	70- 130	100	
120	11.840	11.840	0.000		189618			0.0- 55.6	25.9	
77	11.840	11.840	0.000		113825			0.0- 45.8	15.5	
113 Bromobenzene										
156	12.114	12.114	0.000	87	169826	25.0	22.3	70- 130	100	
77	12.104	12.114	-0.010		197949			91- 151	117	
158	12.114	12.114	0.000		167166			67- 127	98.4	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	785953	25.0	22.2	70- 130	100	
120	12.286	12.286	0.000		200356			0.0- 54.5	25.5	
65	12.286	12.286	0.000		89163			0.0- 42.2	11.3	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	96	478122	25.0	21.9	70- 130	100	
126	12.387	12.387	0.000		175898			7.2- 67.2	36.8	
75	12.387	12.387	0.000		13346			0.0- 32.9	2.8	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	98	482549	25.0	22.1	70- 130	100	
126	12.468	12.468	0.000		174378			7.3- 67.3	36.1	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	93	653004	25.0	24.3	70- 130	100	
120	12.570	12.570	0.000		299428			18.4- 78.4	45.9	
91	12.570	12.570	0.000		73793			0.0- 41.8	11.3	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	92	589173	25.0	22.5	70- 130	100	
91	12.843	12.853	-0.010		416078			41- 101	70.6	
134	12.853	12.853	0.000		145321			0.0- 54.6	24.7	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	621879	25.0	23.3	70- 130	100	
120	12.954	12.954	0.000		276859			15.7- 75.7	44.5	
77	12.954	12.954	0.000		73799			0.0- 42.4	11.9	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	835357	25.0	22.5	70- 130	100	
134	13.056	13.056	0.000		185973			0.0- 52.3	22.3	
91	13.056	13.056	0.000		145591			0.0- 47.8	17.4	
122 1,3-Dichlorobenzene										
146	13.137	13.137	0.000	97	369925	25.0	21.8	70- 130	100	
111	13.126	13.137	-0.011		139224			10.6- 70.6	37.6	
148	13.126	13.137	-0.011		246395			34.6- 94.6	66.6	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	96	364731	25.0	21.7	70- 130	100	
111	13.187	13.187	0.000		142654			8.8- 68.8	39.1	
148	13.187	13.187	0.000		232043			35.7- 95.7	63.6	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	771211	25.0	22.9	70- 130	100	
134	13.218	13.218	0.000		209312			0.0- 57.7	27.1	
91	13.218	13.218	0.000		195593			0.0- 56.0	25.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	98	332894	25.0	23.2	70- 130	100	
111	13.501	13.501	0.000		129721			10.1- 70.1	39.0	
148	13.501	13.501	0.000		208531			32.6- 92.6	62.6	
128 n-Butylbenzene										
91	13.572	13.572	0.000	97	672420	25.0	23.3	70- 130	100	
92	13.572	13.572	0.000		373135			24.4- 84.4	55.5	
134	13.572	13.572	0.000		201541			0.0- 59.7	30.0	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	88	25986	25.0	21.3	70- 130	100	
155	13.896	13.896	0.000		23906			65- 125	92.0	
157	13.896	13.896	0.000		31710			86- 146	122	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	247401	25.0	23.2	70- 130	100	
182	15.061	15.061	0.000		232559			67- 127	94.0	
145	15.061	15.061	0.000		86450			4.2- 64.2	34.9	
134 Naphthalene										
128	15.293	15.293	0.000	97	453709	25.0	22.5	70- 130	100	
127	15.293	15.293	0.000		58006			0.0- 42.9	12.8	
129	15.293	15.293	0.000		53103			0.0- 41.7	11.7	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	94	197341	25.0	23.8	70- 130	100	
223	15.334	15.334	0.000		120344			33.1- 93.1	61.0	
227	15.334	15.334	0.000		123395			33.2- 93.2	62.5	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	97	226701	25.0	23.5	70- 130	100	
182	15.476	15.476	0.000		208606			64- 124	92.0	
145	15.476	15.476	0.000		83103			5.8- 65.8	36.7	

Reagents:

VMWNU8260CCV1_01080

Amount Added: 5.00

Units: uL

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNAI\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22004.D

Injection Date: 22-Oct-2018 08:38:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

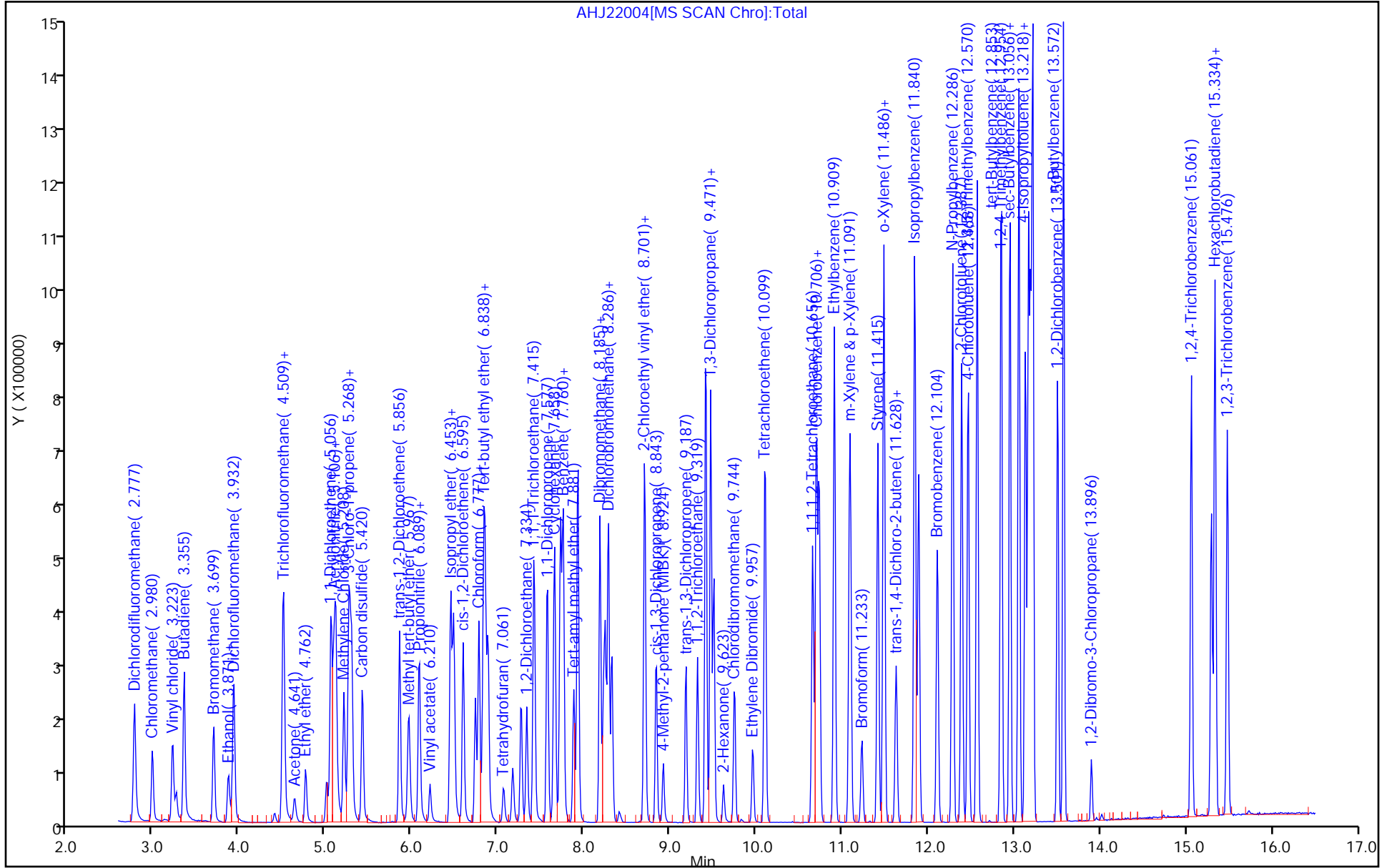
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 19

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17021.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 17-Oct-2018 12:26:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 10.0 mL Dil. Factor: 1.0000
 Sample Info: 440-0110626-001
 Misc. Info.: BFB
 Operator ID: AI Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 18-Oct-2018 13:15:39 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0316

First Level Reviewer: ibasitasa Date: 18-Oct-2018 11:45:14

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

\$ 5 BFB

95	5.128	5.128	0.000	92	924274	NR	NR	90- 110		
50	0.000	5.128	0.010		0			15.0- 40.0		
75	0.000	5.128	0.010		0			30.0- 60.0		
96	0.000	5.128	0.010		0			5.0- 9.0		
173	0.000	5.128	0.010		0			-1.0- 2.0		
174	0.000	5.128	0.010		0			50- 120		
175	5.128	5.128	0.000		62760			5.0- 9.0		
176	0.000	5.128	0.010		0			-95.0--101.0		
177	5.128	5.128	0.000		58011			5.0- 9.0		

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

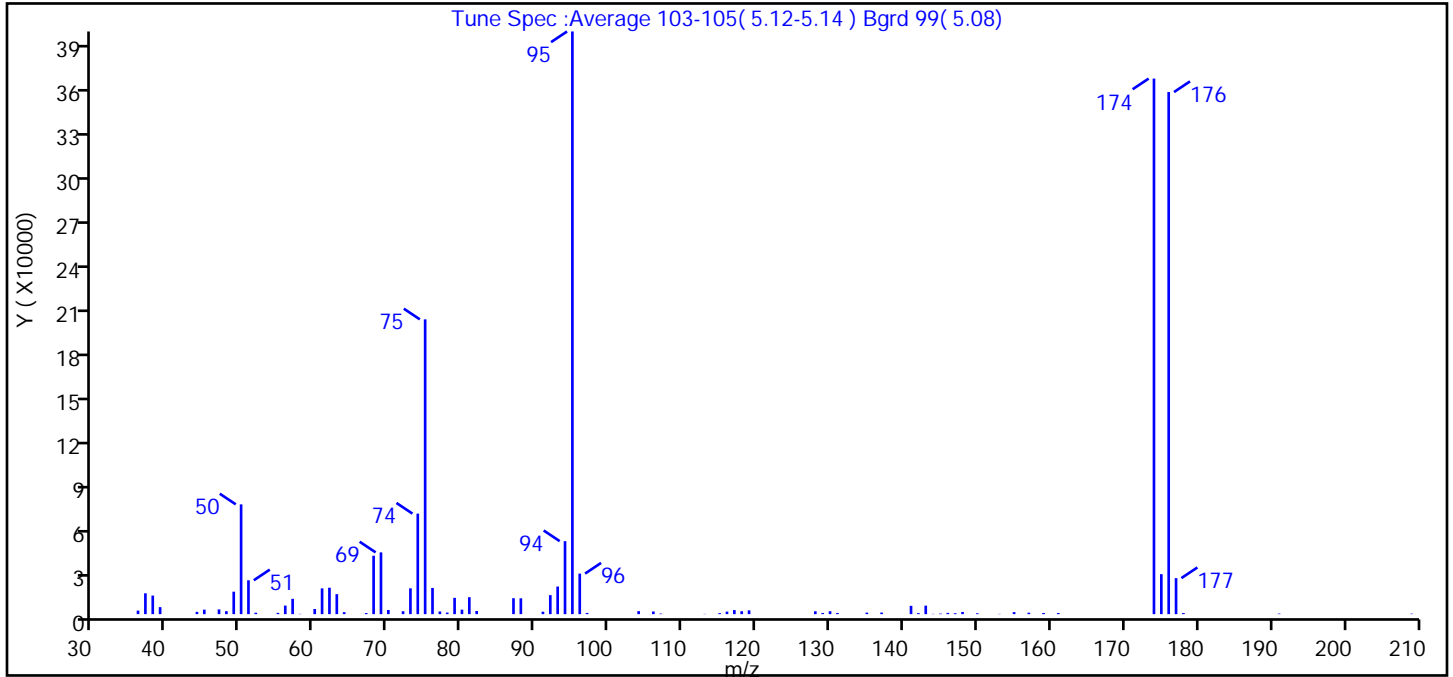
Reagents:

VMW8260TUNE1_00456 Amount Added: 2.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17021.D
 Injection Date: 17-Oct-2018 12:26:30 Instrument ID: GCMS45
 Lims ID: BFB
 Client ID:
 Operator ID: AI ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 10.0 mL Dil. Factor: 1.0000
 Method: 45_8260 Limit Group: MSV-8260-624
 Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.8
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	91.9
175	5 to 9% of m/z 174	6.9 (7.5)
176	Greater than 95% but less than 101% of m/z 174	89.6 (97.5)
177	5 to 9% of m/z 176	6.2 (6.9)

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17021.D\45_8260.rsl\spectra.d
Injection Date: 17-Oct-2018 12:26:30
Spectrum: Tune Spec :Average 103-105(5.12-5.14) Bgrd 99(5.08)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2399	67.00	728	95.00	393408	144.00	181
37.00	14091	68.00	39464	96.00	27384	145.00	388
38.00	12528	69.00	41696	97.00	825	146.00	851
39.00	4745	70.00	2802	104.00	2016	147.00	640
44.00	1535	72.00	1956	106.00	1793	148.00	1460
45.00	3042	73.00	17432	107.00	385	150.00	594
47.00	3197	74.00	67872	113.00	169	153.00	167
48.00	1986	75.00	199040	115.00	666	155.00	1380
49.00	15168	76.00	17696	116.00	1715	157.00	981
50.00	74120	77.00	1809	117.00	2761	159.00	779
51.00	22864	78.00	1067	118.00	1962	161.00	772
52.00	956	79.00	11000	119.00	2549	174.00	361600
55.00	868	80.00	3042	128.00	1935	175.00	26992
56.00	5774	81.00	11429	129.00	789	176.00	352512
57.00	10349	82.00	2133	130.00	1958	177.00	24320
58.00	191	87.00	10761	131.00	807	178.00	731
60.00	3478	88.00	10687	135.00	1032	191.00	375
61.00	17408	91.00	1660	137.00	1065	209.00	290
62.00	17832	92.00	12824	141.00	5615		
63.00	13501	93.00	18640	142.00	686		
64.00	1338	94.00	49280	143.00	5735		

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17021.D

Injection Date: 17-Oct-2018 12:26:30

Instrument ID: GCMS45

Operator ID: AI

Lims ID: BFB

Worklist Smp#: 1

Client ID:

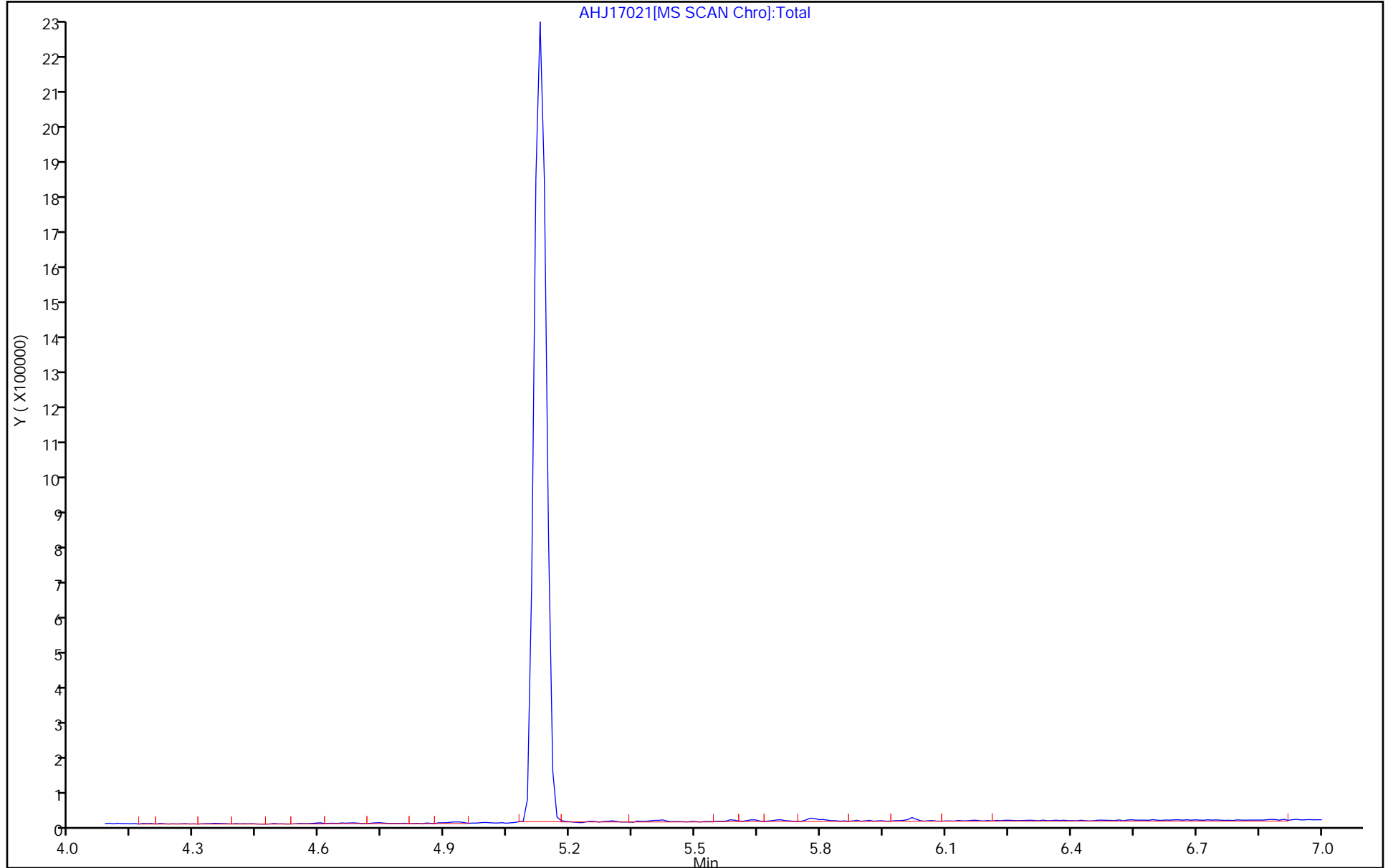
Injection Vol: 10.0 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22002.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 22-Oct-2018 07:44:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 10.0 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-002
 Misc. Info.: BFB
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 07:55:09 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 07:55:09

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

\$ 5 BFB

95	5.128	5.128	0.000	93	772188	NR	NR	90- 110		
50	0.000	5.128	0.000		0			15.0- 40.0		
75	0.000	5.128	0.000		0			30.0- 60.0		
96	0.000	5.128	0.000		0			5.0- 9.0		
173	0.000	5.128	0.000		0			-1.0- 2.0		
174	0.000	5.128	0.000		0			50- 120		
175	5.128	5.128	0.000		55589			5.0- 9.0		
176	0.000	5.128	0.000		0			-95.0--101.0		
177	5.138	5.128	0.010		49583			5.0- 9.0		

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

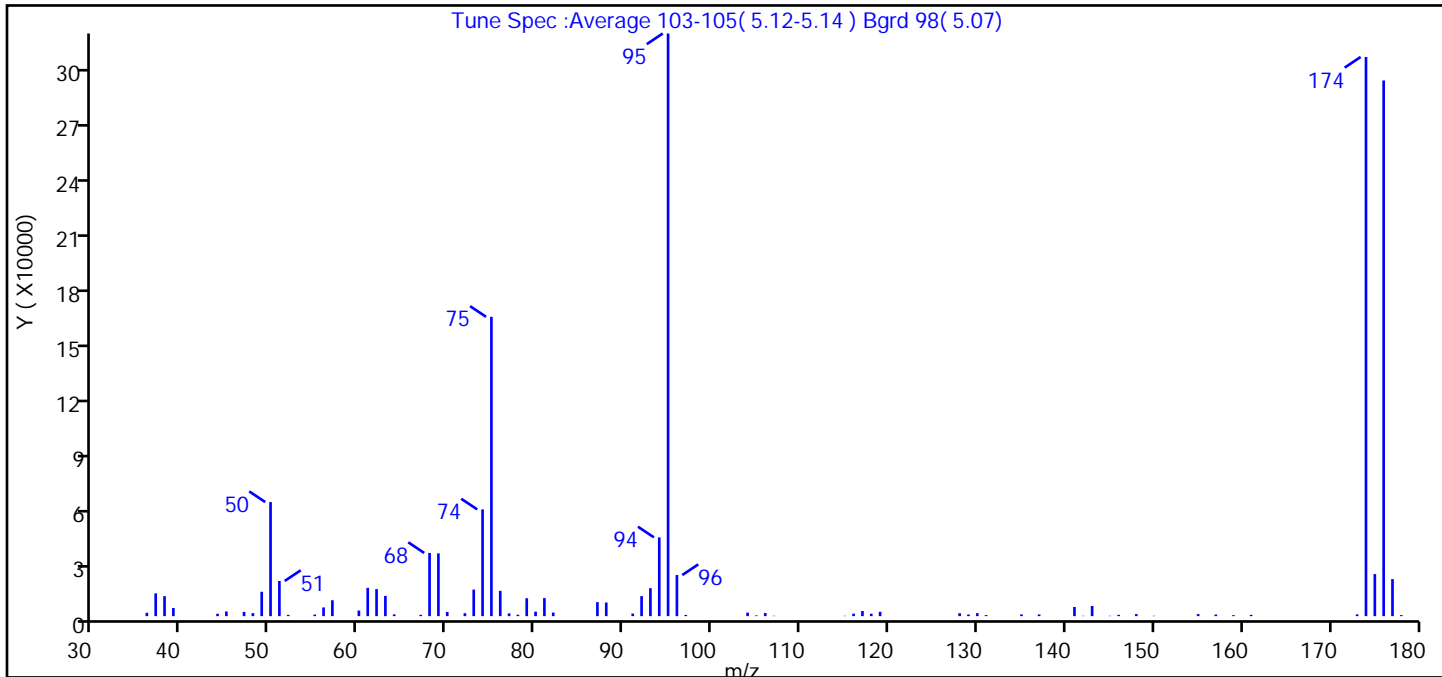
Reagents:

VMW8260TUNE1_00453 Amount Added: 2.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22002.D
 Injection Date: 22-Oct-2018 07:44:30 Instrument ID: GCMS45
 Lims ID: BFB
 Client ID:
 Operator ID: RRT ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 10.0 mL Dil. Factor: 1.0000
 Method: 45_8260 Limit Group: MSV-8260-624
 Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.6
75	30 to 60% of m/z 95	51.4
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	96.0
175	5 to 9% of m/z 174	7.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	91.9 (95.8)
177	5 to 9% of m/z 176	6.4 (6.9)

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22002.D\45_8260.rslt\spectra.d
Injection Date: 22-Oct-2018 07:44:30
Spectrum: Tune Spec :Average 103-105(5.12-5.14) Bgrd 98(5.07)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1812	64.00	960	92.00	10910	135.00	962
37.00	12419	67.00	726	93.00	15233	137.00	946
38.00	10883	68.00	34424	94.00	42920	141.00	4993
39.00	4452	69.00	34184	95.00	317440	142.00	183
44.00	1296	70.00	2287	96.00	22392	143.00	5544
45.00	2544	72.00	1607	97.00	662	145.00	189
47.00	2315	73.00	14472	104.00	1904	146.00	724
48.00	1630	74.00	58144	105.00	388	148.00	1114
49.00	13289	75.00	163072	106.00	1728	150.00	195
50.00	62160	76.00	13771	107.00	193	155.00	1132
51.00	19168	77.00	1512	115.00	171	157.00	881
52.00	687	78.00	783	116.00	1361	159.00	524
55.00	852	79.00	9745	117.00	2788	161.00	705
56.00	4745	80.00	2457	118.00	1333	173.00	972
57.00	8651	81.00	9827	119.00	2380	174.00	304640
60.00	3058	82.00	1947	128.00	1593	175.00	22912
61.00	15414	87.00	7618	129.00	917	176.00	291840
62.00	14720	88.00	7432	130.00	1617	177.00	20184
63.00	11028	91.00	1405	131.00	596	178.00	566

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22002.D

Injection Date: 22-Oct-2018 07:44:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: BFB

Worklist Smp#: 2

Client ID:

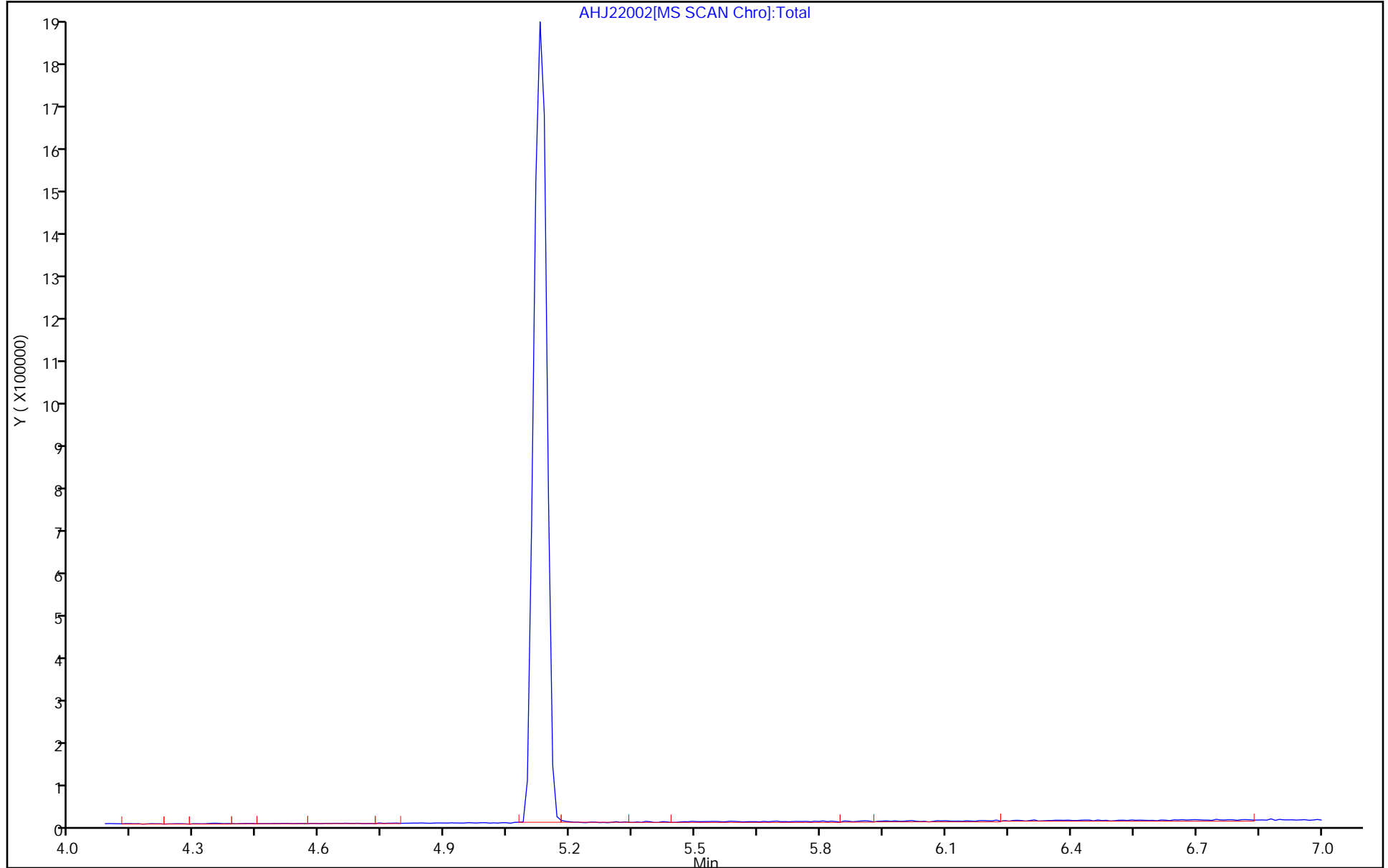
Injection Vol: 10.0 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 45_8260

Limit Group: MSV-8260-624



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506588/7
 Matrix: Water Lab File ID: AHJ22007.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		20	10
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		0.50	0.25
74-97-5	Bromochloromethane	ND		0.50	0.25
75-27-4	Bromodichloromethane	ND		0.50	0.25
75-25-2	Bromoform	ND		1.0	0.40
74-83-9	Bromomethane	ND		0.50	0.25
78-93-3	2-Butanone (MEK)	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		0.50	0.25
108-90-7	Chlorobenzene	ND		0.50	0.25
75-00-3	Chloroethane	ND		1.0	0.40
67-66-3	Chloroform	ND		0.50	0.25
74-87-3	Chloromethane	ND		0.50	0.25
95-49-8	2-Chlorotoluene	ND		0.50	0.25
106-43-4	4-Chlorotoluene	ND		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.25
124-48-1	Dibromochloromethane	ND		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.25
74-95-3	Dibromomethane	ND		0.50	0.25
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.25
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.25
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.25
75-71-8	Dichlorodifluoromethane	ND		1.0	0.40
75-34-3	1,1-Dichloroethane	ND		0.50	0.25
107-06-2	1,2-Dichloroethane	ND		0.50	0.25
75-35-4	1,1-Dichloroethene	ND		0.50	0.25
78-87-5	1,2-Dichloropropane	ND		0.50	0.25
142-28-9	1,3-Dichloropropane	ND		0.50	0.25
594-20-7	2,2-Dichloropropane	ND		1.0	0.40
563-58-6	1,1-Dichloropropene	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25
87-68-3	Hexachlorobutadiene	ND		0.50	0.25
591-78-6	2-Hexanone	ND		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506588/7
 Matrix: Water Lab File ID: AHJ22007.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	ND		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	ND		0.50	0.25
75-09-2	Methylene Chloride	ND		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25
179601-23-1	m,p-Xylene	ND		1.0	0.50
91-20-3	Naphthalene	ND		1.0	0.40
104-51-8	n-Butylbenzene	ND		1.0	0.40
103-65-1	N-Propylbenzene	ND		0.50	0.25
95-47-6	o-Xylene	ND		0.50	0.25
99-87-6	p-Isopropyltoluene	ND		0.50	0.25
135-98-8	sec-Butylbenzene	ND		0.50	0.25
100-42-5	Styrene	ND		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	ND		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	ND		10	5.0
98-06-6	tert-Butylbenzene	ND		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.25
127-18-4	Tetrachloroethene	ND		0.50	0.25
108-88-3	Toluene	ND		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.40
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.25
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.25
79-01-6	Trichloroethene	ND		0.50	0.25
75-69-4	Trichlorofluoromethane	ND		0.50	0.25
96-18-4	1,2,3-Trichloropropane	ND		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.25
75-01-4	Vinyl chloride	ND		0.50	0.25
1330-20-7	Xylenes, Total	ND		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506588/7
 Matrix: Water Lab File ID: AHJ22007.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:00
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		76-132
2037-26-5	Toluene-d8 (Surr)	107		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22007.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Oct-2018 10:00:30 ALS Bottle#: 22 Worklist Smp#: 7
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-007
 Misc. Info.: MB
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:15:49

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)										
65	5.005	5.015	-0.010	100	99858	250.0	250.0			
* 2 Fluorobenzene (IS)										
96	7.932	7.932	0.000	98	480723	25.0	25.0	70- 130	100	
97	7.932	7.932	0.000		31841			0.0- 36.8	6.6	
* 3 Chlorobenzene-d5										
117	10.706	10.706	0.000	86	391581	25.0	25.0	70- 130	100	
82	10.696	10.706	-0.010		195938			21.9- 81.9	50.0	
* 4 1,4-Dichlorobenzene-d4										
152	13.167	13.167	0.000	95	217050	25.0	25.0	70- 130	100	
150	13.167	13.167	0.000		335824			152- 212	155	
115	13.167	13.167	0.000		126065			31.1- 91.1	58.1	
\$ 6 Dibromofluoromethane (Surr)										
113	6.889	6.889	0.000	92	151454	25.0	25.9	70- 130	100	
111	6.889	6.889	0.000		158021			74- 134	104	
192	6.889	6.889	0.000		25959			0.0- 46.6	17.1	
\$ 7 1,2-Dichloroethane-d4 (Surr)										
65	7.263	7.263	0.000	93	160741	25.0	27.4	70- 130	100	
67	7.274	7.263	0.011		69471			15.9- 75.9	43.2	
102	7.274	7.263	0.011		22764			0.0- 45.2	14.2	
\$ 8 Toluene-d8 (Surr)										
98	9.410	9.420	-0.010	93	470471	25.0	26.7	70- 130	100	
100	9.410	9.420	-0.010		323866			40- 100	68.8	
\$ 9 4-Bromofluorobenzene (Surr)										
95	11.891	11.891	0.000	93	179081	25.0	24.9	70- 130	100	
174	11.891	11.891	0.000		160999			62- 122	89.9	
176	11.891	11.891	0.000		160724			59- 119	89.7	
A 140 C6-C10										
1	9.327	(5.660-12.995)		0	197786		0			

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

A 141 C4-C12
 1 10.276 (4.965-15.587) 0 539371 NC

A 155 C6-C12
 1 11.000 (6.413-15.587) 0 323209 0

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260ISS_00160 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22007.D

Injection Date: 22-Oct-2018 10:00:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: MB

Worklist Smp#: 7

Client ID:

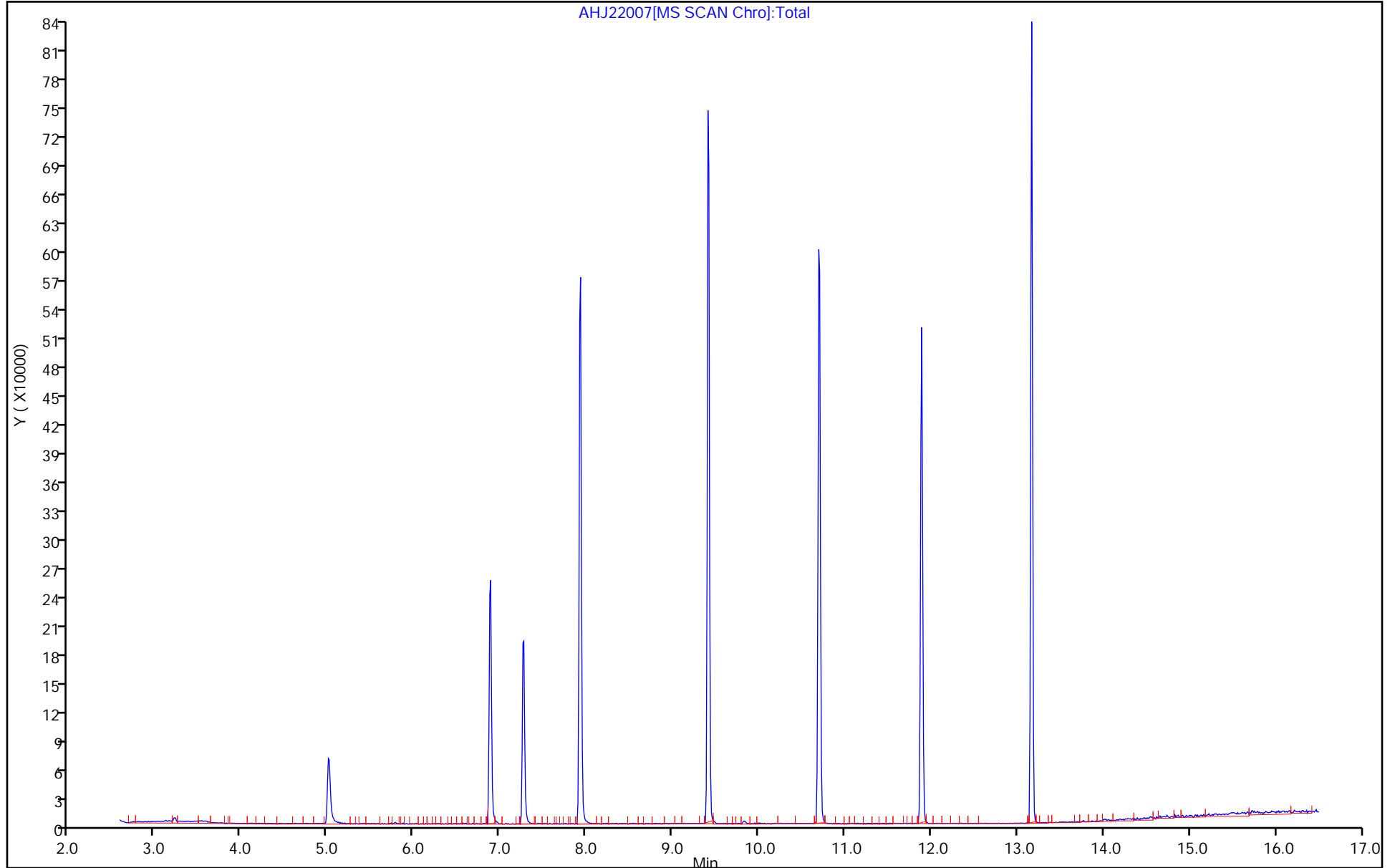
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 22

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22007.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Oct-2018 10:00:30 ALS Bottle#: 22 Worklist Smp#: 7
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-007
 Misc. Info.: MB
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr

Date: 22-Oct-2018 13:15:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	25.9	103.49
\$ 7 1,2-Dichloroethane-d4 (Surr)	25.0	27.4	109.51
\$ 8 Toluene-d8 (Surr)	25.0	26.7	106.84
\$ 9 4-Bromofluorobenzene (Surr)	25.0	24.9	99.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506588/5
 Matrix: Water Lab File ID: AHJ22005.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 09:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	23.0		20	10
71-43-2	Benzene	25.4		0.50	0.25
108-86-1	Bromobenzene	26.4		0.50	0.25
74-97-5	Bromochloromethane	27.5		0.50	0.25
75-27-4	Bromodichloromethane	28.7		0.50	0.25
75-25-2	Bromoform	28.6		1.0	0.40
74-83-9	Bromomethane	26.8		0.50	0.25
78-93-3	2-Butanone (MEK)	25.3		5.0	2.5
56-23-5	Carbon tetrachloride	29.0		0.50	0.25
108-90-7	Chlorobenzene	25.3		0.50	0.25
75-00-3	Chloroethane	25.5		1.0	0.40
67-66-3	Chloroform	26.9		0.50	0.25
74-87-3	Chloromethane	25.5		0.50	0.25
95-49-8	2-Chlorotoluene	24.8		0.50	0.25
106-43-4	4-Chlorotoluene	25.5		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	26.2		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	28.3		0.50	0.25
124-48-1	Dibromochloromethane	28.6		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	27.4		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	26.7		0.50	0.25
74-95-3	Dibromomethane	27.6		0.50	0.25
95-50-1	1,2-Dichlorobenzene	26.7		0.50	0.25
541-73-1	1,3-Dichlorobenzene	24.4		0.50	0.25
106-46-7	1,4-Dichlorobenzene	25.4		0.50	0.25
75-71-8	Dichlorodifluoromethane	24.7		1.0	0.40
75-34-3	1,1-Dichloroethane	25.1		0.50	0.25
107-06-2	1,2-Dichloroethane	26.6		0.50	0.25
75-35-4	1,1-Dichloroethene	27.4		0.50	0.25
78-87-5	1,2-Dichloropropane	25.7		0.50	0.25
142-28-9	1,3-Dichloropropane	25.3		0.50	0.25
594-20-7	2,2-Dichloropropane	29.3		1.0	0.40
563-58-6	1,1-Dichloropropene	27.0		0.50	0.25
100-41-4	Ethylbenzene	26.0		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	25.9		0.50	0.25
87-68-3	Hexachlorobutadiene	27.1		0.50	0.25
591-78-6	2-Hexanone	25.3		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506588/5
 Matrix: Water Lab File ID: AHJ22005.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 09:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	27.6		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	25.6		0.50	0.25
75-09-2	Methylene Chloride	23.4		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	27.0		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	26.6		0.50	0.25
179601-23-1	m,p-Xylene	27.0		1.0	0.50
91-20-3	Naphthalene	27.5		1.0	0.40
104-51-8	n-Butylbenzene	25.5		1.0	0.40
103-65-1	N-Propylbenzene	25.6		0.50	0.25
95-47-6	o-Xylene	27.5		0.50	0.25
99-87-6	p-Isopropyltoluene	25.9		0.50	0.25
135-98-8	sec-Butylbenzene	26.4		0.50	0.25
100-42-5	Styrene	26.6		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	25.9		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	275		10	5.0
98-06-6	tert-Butylbenzene	26.1		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	28.6		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	24.8		0.50	0.25
127-18-4	Tetrachloroethene	27.4		0.50	0.25
108-88-3	Toluene	25.4		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	27.1		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	27.5		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	27.1		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	26.6		1.0	0.40
71-55-6	1,1,1-Trichloroethane	27.5		0.50	0.25
79-00-5	1,1,2-Trichloroethane	26.2		0.50	0.25
79-01-6	Trichloroethene	26.7		0.50	0.25
75-69-4	Trichlorofluoromethane	26.7		0.50	0.25
96-18-4	1,2,3-Trichloropropane	26.2		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	26.6		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	26.2		0.50	0.25
75-01-4	Vinyl chloride	26.3		0.50	0.25
1330-20-7	Xylenes, Total	54.5		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506588/5
 Matrix: Water Lab File ID: AHJ22005.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 09:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		76-132
2037-26-5	Toluene-d8 (Surr)	101		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22005.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Oct-2018 09:06:30 ALS Bottle#: 20 Worklist Smp#: 5
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-005
 Misc. Info.: LCS
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:14:30 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:14:49

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)										
	65	5.015	5.015	0.000	99	115345	250.0	250.0		
* 2 Fluorobenzene (IS)										
	96	7.932	7.932	0.000	98	512378	25.0	25.0	70- 130	100
	97	7.932	7.932	0.000		34063			0.0- 36.8	6.6
* 3 Chlorobenzene-d5										
	117	10.706	10.706	0.000	85	433501	25.0	25.0	70- 130	100
	82	10.696	10.706	-0.010		209755			21.9- 81.9	48.4
* 4 1,4-Dichlorobenzene-d4										
	152	13.167	13.167	0.000	94	260938	25.0	25.0	70- 130	100
	150	13.167	13.167	0.000		490310			152- 212	188
	115	13.167	13.167	0.000		154717			31.1- 91.1	59.3
\$ 6 Dibromofluoromethane (Surr)										
	113	6.889	6.889	0.000	92	161466	25.0	25.9	70- 130	100
	111	6.889	6.889	0.000		164546			74- 134	102
	192	6.889	6.889	0.000		26875			0.0- 46.6	16.6
\$ 7 1,2-Dichloroethane-d4 (Surr)										
	65	7.274	7.263	0.011	94	161331	25.0	25.8	70- 130	100
	67	7.274	7.263	0.011		72778			15.9- 75.9	45.1
	102	7.274	7.263	0.011		23471			0.0- 45.2	14.5
\$ 8 Toluene-d8 (Surr)										
	98	9.410	9.420	-0.010	93	494675	25.0	25.4	70- 130	100
	100	9.420	9.420	0.000		342353			40- 100	69.2
\$ 9 4-Bromofluorobenzene (Surr)										
	95	11.891	11.891	0.000	93	205129	25.0	23.8	70- 130	100
	174	11.891	11.891	0.000		191140			62- 122	93.2
	176	11.891	11.891	0.000		187897			59- 119	91.6

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.777	0.000	99	274576	25.0	24.7	70- 130	100	
87	2.777	2.777	0.000		84987			2.5- 62.5	31.0	
50	2.777	2.777	0.000		27183			0.0- 40.2	9.9	
12 Chloromethane										
50	2.980	2.980	0.000	98	140255	25.0	25.5	70- 130	100	
52	2.980	2.980	0.000		48382			3.7- 63.7	34.5	
13 Vinyl chloride										
62	3.213	3.213	0.000	98	151486	25.0	26.3	70- 130	100	
64	3.213	3.213	0.000		51063			3.0- 63.0	33.7	
14 Butadiene										
54	3.355	3.355	0.000	85	133610	25.0	27.2	70- 130	100	
53	3.355	3.355	0.000		94449			39- 99	70.7	
39	3.355	3.355	0.000		124557			62- 122	93.2	
15 Bromomethane										
96	3.699	3.699	0.000	94	116222	25.0	26.8	70- 130	100	
94	3.699	3.699	0.000		122519			72- 132	105	
79	3.699	3.699	0.000		26214			0.0- 50.2	22.6	
16 Chloroethane										
64	3.871	3.871	0.000	97	85083	25.0	25.5	70- 130	100	
66	3.871	3.871	0.000		25896			0.0- 59.6	30.4	
49	3.871	3.871	0.000		28295			2.2- 62.2	33.3	
17 Ethanol										
45	3.901	3.901	0.000	98	51391	1000.0	1073.4	70- 130	100	
46	3.901	3.901	0.000		18117			7.2- 67.2	35.3	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	280079	25.0	26.4	70- 130	100	
69	3.932	3.932	0.000		91291			2.6- 62.6	32.6	
47	3.932	3.932	0.000		32497			0.0- 41.5	11.6	
21 Acrolein										
56	4.499	4.499	0.000	25	7326	25.0	30.2	70- 130	100	
55	4.499	4.499	0.000		5214			32.9- 92.9	71.2	
22 Trichlorofluoromethane										
101	4.509	4.509	0.000	99	428488	25.0	26.7	70- 130	100	
103	4.509	4.509	0.000		283324			33.3- 93.3	66.1	
66	4.509	4.509	0.000		45441			0.0- 39.9	10.6	
23 Acetonitrile										
41	4.509	4.509	0.000	98	75813	250.0	237.5	70- 130	100	
40	4.509	4.509	0.000		40974			26.9- 86.9	54.0	
39	4.509	4.509	0.000		17308			0.0- 52.0	22.8	
25 Acetone										
43	4.641	4.641	0.000	82	25602	25.0	23.0	70- 130	100	
58	4.641	4.641	0.000		5823			0.0- 52.7	22.7	
27 Ethyl ether										
59	4.762	4.762	0.000	94	68640	25.0	26.3	70- 130	100	
45	4.762	4.762	0.000		49353			43- 103	71.9	
74	4.762	4.762	0.000		42681			32.9- 92.9	62.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
28 1,1-Dichloroethene										
96	5.066	5.056	0.010	97	133711	25.0	27.4	70- 130	100	
61	5.056	5.056	0.000		247696			159- 219	185	
98	5.066	5.056	0.010		83156			34.3- 94.3	62.2	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	54	145764	250.0	274.6	70- 130	100	
57	5.096	5.096	0.000		14056			0.0- 39.8	9.6	
41	5.086	5.096	-0.010		38746			0.0- 56.4	26.6	
29 Iodomethane										
142	5.096	5.096	0.000	96	283656	25.0	28.1	70- 130	100	
127	5.096	5.096	0.000		153600			24.1- 84.1	54.2	
31 Acrylonitrile										
53	5.117	5.117	0.000	94	256470	250.0	241.7	70- 130	100	
52	5.117	5.117	0.000		225684			58- 118	88.0	
51	5.117	5.117	0.000		103411			11.2- 71.2	40.3	
32 Methylene Chloride										
84	5.208	5.208	0.000	97	114203	25.0	23.4	70- 130	100	
49	5.208	5.208	0.000		152358			108- 168	133	
51	5.208	5.208	0.000		49057			14.8- 74.8	43.0	
86	5.208	5.208	0.000		70867			34.0- 94.0	62.1	
158 Methyl acetate										
43	5.269	5.268	0.000	76	105229	50.0	51.2	70- 130	100	
74	5.269	5.268	0.000		20528			19.8- 19.8	19.5	
59	5.269	5.268	0.000		13455			0.0- 42.9	12.8	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.268	0.000	89	194078	25.0	24.9	70- 130	100	
151	5.269	5.268	0.000		171549			56- 116	88.4	
85	5.269	5.268	0.000		85604			14.8- 74.8	44.1	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	86	175102	25.0	25.7	70- 130	100	
39	5.299	5.299	0.000		147099			50- 110	84.0	
76	5.299	5.299	0.000		62799			4.5- 64.5	35.9	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	376137	25.0	24.7	70- 130	100	
78	5.431	5.420	0.011		33753			0.0- 39.4	9.0	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	96	142698	25.0	27.1	70- 130	100	
61	5.856	5.856	0.000		210304			119- 179	147	
98	5.856	5.856	0.000		90690			33.6- 93.6	63.6	
39 Methyl tert-butyl ether										
73	5.957	5.967	-0.010	95	247849	25.0	26.6	70- 130	100	
57	5.957	5.967	-0.010		50799			0.0- 50.7	20.5	
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	98	229194	25.0	25.1	70- 130	100	
65	6.079	6.079	0.000		70700			0.5- 60.5	30.8	
83	6.089	6.079	0.010		34632			0.0- 45.0	15.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
42 Propionitrile										
54	6.089	6.089	0.000	97	110424	250.0	259.4	70- 130	100	
52	6.089	6.089	0.000		24429			0.0- 53.7	22.1	
55	6.089	6.089	0.000		15149			0.0- 45.5	13.7	
43 Vinyl acetate										
43	6.210	6.210	0.000	98	150549	25.0	25.0	70- 130	100	
86	6.210	6.210	0.000		12885			0.0- 38.1	8.6	
45 Hexane										
57	6.453	6.453	0.000	93	205258	25.0	23.6	70- 130	100	
86	6.453	6.453	0.000		32583			0.0- 46.0	15.9	
46 2-Butanone (MEK)										
72	6.474	6.484	-0.010	68	8989	25.0	25.3	70- 130	100	
43	6.484	6.484	0.000		329797			3898- 3958	3669	
57	6.453	6.484	-0.031		205247			2498- 2558	2283	
47 Isopropyl ether										
45	6.484	6.484	0.000	94	336692	25.0	25.6	70- 130	100	
87	6.484	6.484	0.000		91514			0.0- 55.7	27.2	
59	6.484	6.484	0.000		39108			0.0- 40.7	11.6	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	85	137258	25.0	26.2	70- 130	100	
61	6.595	6.595	0.000		200742			113- 173	146	
98	6.595	6.595	0.000		90357			35.8- 95.8	65.8	
52 Chlorobromomethane										
128	6.737	6.737	0.000	83	69636	25.0	27.5	70- 130	100	
49	6.737	6.737	0.000		95710			125- 185	137	
54 Chloroform										
83	6.777	6.777	0.000	94	286276	25.0	26.9	70- 130	100	
85	6.777	6.777	0.000		186130			35.3- 95.3	65.0	
47	6.777	6.777	0.000		66120			0.0- 54.5	23.1	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	96	275841	25.0	25.9	70- 130	100	
87	6.828	6.828	0.000		112938			9.5- 69.5	40.9	
57	6.828	6.828	0.000		83929			0.0- 59.8	30.4	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	93	265550	25.0	29.3	70- 130	100	
97	6.848	6.848	0.000		46553			0.0- 47.8	17.5	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	96	137850	625.0	611.8	70- 130	100	
41	6.848	6.858	-0.010		259187			158- 218	188	
42	6.858	6.858	0.000		75237			24.6- 84.6	54.6	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	80	43990	50.0	46.9	70- 130	100	
71	7.061	7.061	0.000		17315			5.2- 65.2	39.4	
72	7.071	7.061	0.010		18100			8.9- 68.9	41.1	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	192345	25.0	26.6	70- 130	100	
64	7.334	7.334	0.000		65472			1.8- 61.8	34.0	
49	7.334	7.334	0.000		39983			0.0- 52.2	20.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	359541	25.0	27.5	70- 130	100	
99	7.415	7.415	0.000		235388			35.9- 95.9	65.5	
61	7.415	7.415	0.000		136921			9.0- 69.0	38.1	
68 1,1-Dichloropropene										
75	7.567	7.577	-0.010	95	222213	25.0	27.0	70- 130	100	
110	7.577	7.577	0.000		83463			8.5- 68.5	37.6	
77	7.577	7.577	0.000		67012			0.9- 60.9	30.2	
69 Cyclohexane										
56	7.658	7.658	0.000	92	244104	25.0	24.8	70- 130	100	
84	7.658	7.658	0.000		202761			49- 109	83.1	
69	7.658	7.658	0.000		68214			0.0- 56.1	27.9	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	95	368223	25.0	29.0	70- 130	100	
119	7.729	7.729	0.000		346583			65- 125	94.1	
82	7.729	7.729	0.000		74252			0.0- 51.0	20.2	
72 Benzene										
78	7.760	7.760	0.000	98	434660	25.0	25.4	70- 130	100	
51	7.760	7.760	0.000		99474			0.0- 53.4	22.9	
77	7.760	7.760	0.000		103846			0.0- 53.9	23.9	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	96	211629	25.0	25.9	70- 130	100	
87	7.881	7.881	0.000		55401			0.0- 56.3	26.2	
43	7.881	7.881	0.000		70499			4.4- 64.4	33.3	
55	7.881	7.881	0.000		60386			0.0- 58.6	28.5	
75 n-Heptane										
43	8.185	8.185	0.000	91	216361	25.0	24.5	70- 130	100	
57	8.185	8.185	0.000		117724			25.7- 85.7	54.4	
71	8.185	8.185	0.000		115997			23.7- 83.7	53.6	
100	8.185	8.185	0.000		44007			0.0- 50.5	20.3	
77 Dibromomethane										
93	8.225	8.225	0.000	93	75495	25.0	27.6	70- 130	100	
95	8.225	8.225	0.000		58679			54- 114	77.7	
174	8.225	8.225	0.000		81920			78- 138	109	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	85	101732	25.0	25.7	70- 130	100	
62	8.246	8.246	0.000		74026			42- 102	72.8	
41	8.246	8.246	0.000		82868			45- 105	81.5	
79 Trichloroethene										
130	8.286	8.286	0.000	94	187055	25.0	26.7	70- 130	100	
95	8.286	8.286	0.000		179631			63- 123	96.0	
132	8.286	8.286	0.000		189595			71- 131	101	
60	8.276	8.286	-0.010		89106			20.6- 80.6	47.6	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	99	208002	25.0	28.7	70- 130	100	
85	8.327	8.327	0.000		134906			36.1- 96.1	64.9	
129	8.327	8.327	0.000		28303			0.0- 44.5	13.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
159 Methylcyclohexane										
83	8.701	8.701	0.000	94	247212	25.0	25.0	70- 130	100	
55	8.701	8.701	0.000		222716			87.9- 87.9	90.1	
98	8.701	8.701	0.000		125765			19.2- 79.2	50.9	
83 2-Chloroethyl vinyl ether										
63	8.701	8.701	0.000	37	3519	25.0	31.3	70- 130	100	
65	8.701	8.701	0.000		6602			162- 222	188	
106	0.000	8.701	0.000		0			0.0- 53.1		
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	175286	25.0	28.3	70- 130	100	
39	8.833	8.843	-0.010		94430			21.3- 81.3	53.9	
77	8.843	8.843	0.000		55913			1.0- 61.0	31.9	
87 4-Methyl-2-pentanone (MIBK)										
43	8.914	8.924	-0.010	96	85892	25.0	27.0	70- 130	100	
100	8.924	8.924	0.000		13566			0.0- 44.9	15.8	
58	8.924	8.924	0.000		32408			8.0- 68.0	37.7	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	94	168441	25.0	27.5	70- 130	100	
39	9.177	9.187	-0.010		79267			15.4- 75.4	47.1	
110	9.187	9.187	0.000		38622			0.0- 53.8	22.9	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	95	73627	25.0	26.2	70- 130	100	
97	9.319	9.319	0.000		92841			97- 157	126	
61	9.319	9.319	0.000		68768			62- 122	93.4	
90 Toluene										
91	9.471	9.471	0.000	97	560088	25.0	25.4	70- 130	100	
92	9.471	9.471	0.000		332381			29.8- 89.8	59.3	
65	9.471	9.471	0.000		73662			0.0- 43.1	13.2	
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	87	144131	25.0	25.3	70- 130	100	
78	9.511	9.511	0.000		46268			1.6- 61.6	32.1	
49	9.511	9.511	0.000		26522			0.0- 48.7	18.4	
92 Ethyl methacrylate										
69	9.501	9.511	-0.010	83	98283	25.0	26.8	70- 130	100	
41	9.511	9.511	0.000		171879			151- 211	175	
99	9.511	9.511	0.000		24350			0.0- 53.8	24.8	
93 2-Hexanone										
43	9.623	9.623	0.000	97	57320	25.0	25.3	70- 130	100	
58	9.623	9.623	0.000		30864			22.9- 82.9	53.8	
100	9.623	9.623	0.000		7132			0.0- 41.9	12.4	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	157483	25.0	28.6	70- 130	100	
127	9.744	9.744	0.000		125175			47- 107	79.5	
79	9.744	9.744	0.000		21711			0.0- 44.5	13.8	
208	9.754	9.744	0.010		6625			0.0- 33.6	4.2	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
96 Ethylene Dibromide										
107	9.957	9.957	0.000	98	105656	25.0	26.7	70- 130	100	
109	9.957	9.957	0.000		98216			64- 124	93.0	
81	9.957	9.957	0.000		9354			0.0- 39.1	8.9	
97 Tetrachloroethene										
164	10.109	10.109	0.000	95	173566	25.0	27.4	70- 130	100	
166	10.109	10.109	0.000		214607			95- 155	124	
129	10.099	10.109	-0.010		163929			64- 124	94.4	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	91	181758	25.0	28.6	70- 130	100	
133	10.656	10.656	0.000		176093			67- 127	96.9	
119	10.656	10.656	0.000		116376			35.9- 95.9	64.0	
101 Chlorobenzene										
112	10.737	10.737	0.000	95	408882	25.0	25.3	70- 130	100	
77	10.737	10.737	0.000		212671			19.9- 79.9	52.0	
114	10.737	10.737	0.000		133145			1.4- 61.4	32.6	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	722992	25.0	26.0	70- 130	100	
106	10.909	10.909	0.000		221407			0.2- 60.2	30.6	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	270809	25.0	27.0	70- 130	100	
91	11.091	11.091	0.000		592419			180- 240	219	
105	11.091	11.091	0.000		126378			14.5- 74.5	46.7	
105 Bromoform										
173	11.233	11.233	0.000	97	93234	25.0	28.6	70- 130	100	
175	11.233	11.233	0.000		45675			19.7- 79.7	49.0	
79	11.223	11.233	-0.010		17539			0.0- 49.9	18.8	
252	11.233	11.233	0.000		6735			0.0- 36.9	7.2	
106 Styrene										
104	11.415	11.415	0.000	94	376136	25.0	26.6	70- 130	100	
103	11.415	11.415	0.000		182670			17.4- 77.4	48.6	
78	11.415	11.415	0.000		172838			15.1- 75.1	46.0	
51	11.415	11.415	0.000		87829			0.0- 53.9	23.4	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	96	112171	25.0	24.8	70- 130	100	
85	11.486	11.486	0.000		72884			35.7- 95.7	65.0	
131	11.486	11.486	0.000		16658			0.0- 45.0	14.9	
108 o-Xylene										
106	11.486	11.486	0.000	98	263000	25.0	27.5	70- 130	100	
91	11.486	11.486	0.000		590562			197- 257	225	
105	11.486	11.486	0.000		107525			10.8- 70.8	40.9	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	87	46194	25.0	26.2	70- 130	100	
77	11.628	11.628	0.000		40225			58- 118	87.1	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.638	-0.010	83	36187	25.0	27.3	70- 130	100	
89	11.638	11.638	0.000		21684			70- 130	100	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
112 Isopropylbenzene										
105	11.840	11.840	0.000	96	820888	25.0	27.6	70- 130	100	
120	11.840	11.840	0.000		217342			0.0- 55.6	26.5	
77	11.840	11.840	0.000		127798			0.0- 45.8	15.6	
113 Bromobenzene										
156	12.104	12.114	-0.010	91	198860	25.0	26.4	70- 130	100	
77	12.104	12.114	-0.010		232069			91- 151	117	
158	12.104	12.114	-0.010		190236			67- 127	95.7	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	897710	25.0	25.6	70- 130	100	
120	12.286	12.286	0.000		227485			0.0- 54.5	25.3	
65	12.286	12.286	0.000		105441			0.0- 42.2	11.7	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	96	535242	25.0	24.8	70- 130	100	
126	12.387	12.387	0.000		194699			7.2- 67.2	36.4	
75	12.387	12.387	0.000		15588			0.0- 32.9	2.9	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	552121	25.0	25.5	70- 130	100	
126	12.468	12.468	0.000		203949			7.3- 67.3	36.9	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	695016	25.0	26.2	70- 130	100	
120	12.570	12.570	0.000		324790			18.4- 78.4	46.7	
91	12.570	12.570	0.000		83721			0.0- 41.8	12.0	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	92	674334	25.0	26.1	70- 130	100	
91	12.843	12.853	-0.010		461363			41- 101	68.4	
134	12.853	12.853	0.000		162893			0.0- 54.6	24.2	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	700587	25.0	26.6	70- 130	100	
120	12.954	12.954	0.000		315492			15.7- 75.7	45.0	
77	12.944	12.954	-0.010		85719			0.0- 42.4	12.2	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	970603	25.0	26.4	70- 130	100	
134	13.056	13.056	0.000		210147			0.0- 52.3	21.7	
91	13.056	13.056	0.000		170363			0.0- 47.8	17.6	
122 1,3-Dichlorobenzene										
146	13.126	13.137	-0.011	97	410057	25.0	24.4	70- 130	100	
111	13.126	13.137	-0.011		166364			10.6- 70.6	40.6	
148	13.137	13.137	0.000		270250			34.6- 94.6	65.9	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	95	423288	25.0	25.4	70- 130	100	
111	13.187	13.187	0.000		164561			8.8- 68.8	38.9	
148	13.187	13.187	0.000		264113			35.7- 95.7	62.4	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	863612	25.0	25.9	70- 130	100	
134	13.218	13.218	0.000		237816			0.0- 57.7	27.5	
91	13.218	13.218	0.000		224992			0.0- 56.0	26.1	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	98	378496	25.0	26.7	70- 130	100	
111	13.501	13.501	0.000		153078			10.1- 70.1	40.4	
148	13.511	13.501	0.010		245500			32.6- 92.6	64.9	
128 n-Butylbenzene										
91	13.572	13.572	0.000	97	727867	25.0	25.5	70- 130	100	
92	13.572	13.572	0.000		400441			24.4- 84.4	55.0	
134	13.572	13.572	0.000		229609			0.0- 59.7	31.5	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	88	32980	25.0	27.4	70- 130	100	
155	13.896	13.896	0.000		30286			65- 125	91.8	
157	13.896	13.896	0.000		38551			86- 146	117	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	281234	25.0	26.6	70- 130	100	
182	15.061	15.061	0.000		274191			67- 127	97.5	
145	15.061	15.061	0.000		101856			4.2- 64.2	36.2	
134 Naphthalene										
128	15.293	15.293	0.000	97	548944	25.0	27.5	70- 130	100	
127	15.293	15.293	0.000		71723			0.0- 42.9	13.1	
129	15.293	15.293	0.000		62530			0.0- 41.7	11.4	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	94	222224	25.0	27.1	70- 130	100	
223	15.334	15.334	0.000		140232			33.1- 93.1	63.1	
227	15.334	15.334	0.000		135712			33.2- 93.2	61.1	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	95	258383	25.0	27.1	70- 130	100	
182	15.476	15.476	0.000		254989			64- 124	98.7	
145	15.476	15.476	0.000		95952			5.8- 65.8	37.1	

A 141 C4-C12

1	10.276	(4.965-15.587)	0	64057633	NC	NC
---	--------	----------------	---	----------	----	----

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260LCS2_00216

Amount Added: 5.00

Units: uL

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22005.D

Injection Date: 22-Oct-2018 09:06:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: LCS

Worklist Smp#: 5

Client ID:

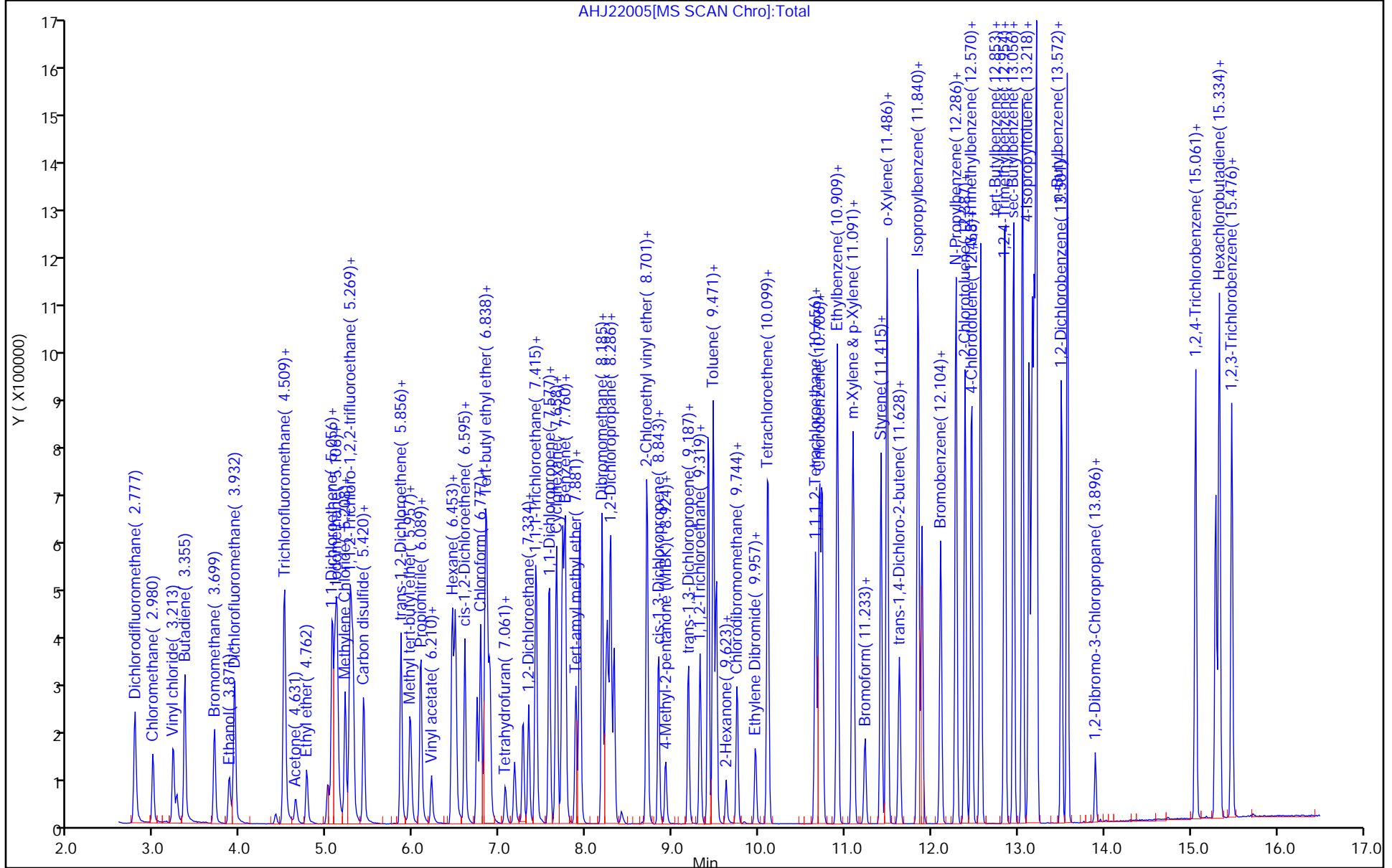
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 20

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22005.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Oct-2018 09:06:30 ALS Bottle#: 20 Worklist Smp#: 5
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-005
 Misc. Info.: LCS
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:14:30 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr

Date: 22-Oct-2018 13:14:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	25.9	103.52
\$ 7 1,2-Dichloroethane-d4 (Surr)	25.0	25.8	103.13
\$ 8 Toluene-d8 (Surr)	25.0	25.4	101.48
\$ 9 4-Bromofluorobenzene (Surr)	25.0	23.8	95.08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: AHJ22009.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:55
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	25.1		20	10
71-43-2	Benzene	25.8		0.50	0.25
108-86-1	Bromobenzene	25.2		0.50	0.25
74-97-5	Bromochloromethane	25.9		0.50	0.25
75-27-4	Bromodichloromethane	29.7		0.50	0.25
75-25-2	Bromoform	28.0		1.0	0.40
74-83-9	Bromomethane	26.7		0.50	0.25
78-93-3	2-Butanone (MEK)	23.7		5.0	2.5
56-23-5	Carbon tetrachloride	30.4		0.50	0.25
108-90-7	Chlorobenzene	25.1		0.50	0.25
75-00-3	Chloroethane	26.6		1.0	0.40
67-66-3	Chloroform	150		0.50	0.25
74-87-3	Chloromethane	24.0		0.50	0.25
95-49-8	2-Chlorotoluene	24.4		0.50	0.25
106-43-4	4-Chlorotoluene	25.4		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	27.4		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	29.2		0.50	0.25
124-48-1	Dibromochloromethane	29.1		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	23.7		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	26.2		0.50	0.25
74-95-3	Dibromomethane	26.4		0.50	0.25
95-50-1	1,2-Dichlorobenzene	26.3		0.50	0.25
541-73-1	1,3-Dichlorobenzene	24.7		0.50	0.25
106-46-7	1,4-Dichlorobenzene	25.5		0.50	0.25
75-71-8	Dichlorodifluoromethane	22.7		1.0	0.40
75-34-3	1,1-Dichloroethane	25.7		0.50	0.25
107-06-2	1,2-Dichloroethane	26.7		0.50	0.25
75-35-4	1,1-Dichloroethene	27.4		0.50	0.25
78-87-5	1,2-Dichloropropane	26.6		0.50	0.25
142-28-9	1,3-Dichloropropane	24.6		0.50	0.25
594-20-7	2,2-Dichloropropane	29.9		1.0	0.40
563-58-6	1,1-Dichloropropene	26.3		0.50	0.25
100-41-4	Ethylbenzene	25.9		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	26.8		0.50	0.25
87-68-3	Hexachlorobutadiene	25.7		0.50	0.25
591-78-6	2-Hexanone	24.2		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: AHJ22009.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:55
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	27.8		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	25.8		0.50	0.25
75-09-2	Methylene Chloride	19.8		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	24.4		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	27.0		0.50	0.25
179601-23-1	m,p-Xylene	26.9		1.0	0.50
91-20-3	Naphthalene	26.0		1.0	0.40
104-51-8	n-Butylbenzene	26.4		1.0	0.40
103-65-1	N-Propylbenzene	25.9		0.50	0.25
95-47-6	o-Xylene	27.8		0.50	0.25
99-87-6	p-Isopropyltoluene	26.0		0.50	0.25
135-98-8	sec-Butylbenzene	25.7		0.50	0.25
100-42-5	Styrene	27.6		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	25.5		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	287		10	5.0
98-06-6	tert-Butylbenzene	25.8		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	28.0		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	22.8		0.50	0.25
127-18-4	Tetrachloroethene	26.8		0.50	0.25
108-88-3	Toluene	25.4		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	26.5		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	27.1		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	26.9		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	26.6		1.0	0.40
71-55-6	1,1,1-Trichloroethane	28.0		0.50	0.25
79-00-5	1,1,2-Trichloroethane	26.4		0.50	0.25
79-01-6	Trichloroethene	27.3		0.50	0.25
75-69-4	Trichlorofluoromethane	28.3		0.50	0.25
96-18-4	1,2,3-Trichloropropane	23.4		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	26.5		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	26.6		0.50	0.25
75-01-4	Vinyl chloride	26.4		0.50	0.25
1330-20-7	Xylenes, Total	54.7		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: AHJ22009.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 10:55
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		76-132
2037-26-5	Toluene-d8 (Surr)	105		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22009.D
 Lims ID: 440-222284-B-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 22-Oct-2018 10:55:30 ALS Bottle#: 24 Worklist Smp#: 9
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-009
 Misc. Info.: 440-222284-b-2 ms
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:16:40

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)										
	65	5.005	5.015	-0.010	99	93453	250.0	250.0		
* 2 Fluorobenzene (IS)										
	96	7.932	7.932	0.000	98	481978	25.0	25.0	70- 130	100
	97	7.932	7.932	0.000		31864			0.0- 36.8	6.6
* 3 Chlorobenzene-d5										
	117	10.706	10.706	0.000	85	410858	25.0	25.0	70- 130	100
	82	10.696	10.706	-0.010		202453			21.9- 81.9	49.3
* 4 1,4-Dichlorobenzene-d4										
	152	13.167	13.167	0.000	94	254252	25.0	25.0	70- 130	100
	150	13.167	13.167	0.000		459216			152- 212	181
	115	13.167	13.167	0.000		150280			31.1- 91.1	59.1
\$ 6 Dibromofluoromethane (Surr)										
	113	6.889	6.889	0.000	92	154147	25.0	26.3	70- 130	100
	111	6.889	6.889	0.000		159591			74- 134	104
	192	6.889	6.889	0.000		26538			0.0- 46.6	17.2
\$ 7 1,2-Dichloroethane-d4 (Surr)										
	65	7.274	7.263	0.011	93	157748	25.0	26.8	70- 130	100
	67	7.274	7.263	0.011		72718			15.9- 75.9	46.1
	102	7.274	7.263	0.011		22729			0.0- 45.2	14.4
\$ 8 Toluene-d8 (Surr)										
	98	9.420	9.420	0.000	93	483668	25.0	26.2	70- 130	100
	100	9.420	9.420	0.000		331569			40- 100	68.6
\$ 9 4-Bromofluorobenzene (Surr)										
	95	11.891	11.891	0.000	93	200216	25.0	23.8	70- 130	100
	174	11.891	11.891	0.000		182864			62- 122	91.3
	176	11.891	11.891	0.000		180000			59- 119	89.9

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.777	2.777	0.000	99	237804	25.0	22.7	70- 130	100	
87	2.777	2.777	0.000		78334			2.5- 62.5	32.9	
50	2.777	2.777	0.000		25304			0.0- 40.2	10.6	
12 Chloromethane										
50	2.980	2.980	0.000	99	124243	25.0	24.0	70- 130	100	
52	2.980	2.980	0.000		42402			3.7- 63.7	34.1	
13 Vinyl chloride										
62	3.223	3.213	0.010	99	143354	25.0	26.4	70- 130	100	
64	3.223	3.213	0.010		48081			3.0- 63.0	33.5	
19 Butane										
43	3.324	3.290	0.034	1	1468		NC			
14 Butadiene										
54	3.355	3.355	0.000	84	124980	25.0	27.0	70- 130	100	
53	3.355	3.355	0.000		86684			39- 99	69.4	
39	3.355	3.355	0.000		114943			62- 122	92.0	
15 Bromomethane										
96	3.699	3.699	0.000	94	108774	25.0	26.7	70- 130	100	
94	3.699	3.699	0.000		114761			72- 132	106	
79	3.689	3.699	-0.010		25411			0.0- 50.2	23.4	
16 Chloroethane										
64	3.871	3.871	0.000	96	83557	25.0	26.6	70- 130	100	
66	3.871	3.871	0.000		25197			0.0- 59.6	30.2	
49	3.871	3.871	0.000		28173			2.2- 62.2	33.7	
17 Ethanol										
45	3.901	3.901	0.000	98	43210	1000.0	1113.9	70- 130	100	
46	3.901	3.901	0.000		14065			7.2- 67.2	32.6	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	99	270530	25.0	27.1	70- 130	100	
69	3.932	3.932	0.000		85123			2.6- 62.6	31.5	
47	3.932	3.932	0.000		31330			0.0- 41.5	11.6	
21 Acrolein										
56	4.499	4.499	0.000	25	6698	25.0	29.5	70- 130	100	
55	4.499	4.499	0.000		4164			32.9- 92.9	62.2	
22 Trichlorofluoromethane										
101	4.509	4.509	0.000	99	427083	25.0	28.3	70- 130	100	
103	4.509	4.509	0.000		274723			33.3- 93.3	64.3	
66	4.499	4.509	-0.010		42403			0.0- 39.9	9.9	
23 Acetonitrile										
41	4.509	4.509	0.000	98	70558	250.0	235.0	70- 130	100	
40	4.509	4.509	0.000		40014			26.9- 86.9	56.7	
39	4.509	4.509	0.000		16945			0.0- 52.0	24.0	
25 Acetone										
43	4.641	4.641	0.000	95	26305	25.0	25.1	70- 130	100	
58	4.641	4.641	0.000		5427			0.0- 52.7	20.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
27 Ethyl ether										
59	4.762	4.762	0.000	93	67145	25.0	27.3	70- 130	100	
45	4.762	4.762	0.000		47815			43- 103	71.2	
74	4.762	4.762	0.000		41818			32.9- 92.9	62.3	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	95	125544	25.0	27.4	70- 130	100	
61	5.056	5.056	0.000		239124			159- 219	190	
98	5.056	5.056	0.000		81130			34.3- 94.3	64.6	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	52	123540	250.0	287.2	70- 130	100	
57	5.086	5.096	-0.010		11539			0.0- 39.8	9.3	
41	5.086	5.096	-0.010		34320			0.0- 56.4	27.8	
29 Iodomethane										
142	5.096	5.096	0.000	95	268249	25.0	28.2	70- 130	100	
127	5.096	5.096	0.000		152834			24.1- 84.1	57.0	
31 Acrylonitrile										
53	5.117	5.117	0.000	95	226762	250.0	227.2	70- 130	100	
52	5.117	5.117	0.000		201157			58- 118	88.7	
51	5.117	5.117	0.000		95437			11.2- 71.2	42.1	
32 Methylene Chloride										
84	5.208	5.208	0.000	96	94119	25.0	19.8	70- 130	100	
49	5.208	5.208	0.000		143540			108- 168	153	
51	5.208	5.208	0.000		48921			14.8- 74.8	52.0	
86	5.208	5.208	0.000		67156			34.0- 94.0	71.4	
158 Methyl acetate										
43	5.269	5.268	0.001	71	94367	50.0	48.8	70- 130	100	
74	5.269	5.268	0.001		18154			19.8- 19.8	19.2	
59	5.269	5.268	0.001		12631			0.0- 42.9	13.4	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.268	0.001	89	179306	25.0	24.5	70- 130	100	
151	5.269	5.268	0.001		162813			56- 116	90.8	
85	5.269	5.268	0.001		78598			14.8- 74.8	43.8	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	86	167518	25.0	26.1	70- 130	100	
39	5.299	5.299	0.000		141357			50- 110	84.4	
76	5.299	5.299	0.000		57270			4.5- 64.5	34.2	
37 Carbon disulfide										
76	5.420	5.420	0.000	99	349212	25.0	24.4	70- 130	100	
78	5.420	5.420	0.000		32598			0.0- 39.4	9.3	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	95	131365	25.0	26.5	70- 130	100	
61	5.856	5.856	0.000		204963			119- 179	156	
98	5.856	5.856	0.000		85886			33.6- 93.6	65.4	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	95	236231	25.0	27.0	70- 130	100	
57	5.967	5.967	0.000		45646			0.0- 50.7	19.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	98	220749	25.0	25.7	70- 130	100	
65	6.079	6.079	0.000		68871			0.5- 60.5	31.2	
83	6.089	6.079	0.010		31889			0.0- 45.0	14.4	
42 Propionitrile										
54	6.089	6.089	0.000	97	96707	250.0	241.5	70- 130	100	
52	6.089	6.089	0.000		22919			0.0- 53.7	23.7	
55	6.089	6.089	0.000		13262			0.0- 45.5	13.7	
43 Vinyl acetate										
43	6.210	6.210	0.000	98	139178	25.0	24.5	70- 130	100	
86	6.210	6.210	0.000		10333			0.0- 38.1	7.4	
48 Methacrylonitrile										
41	6.453	6.382	0.071	63	217171		125.4	70- 130	100	
67	6.443	6.382	0.061		896			37.7- 97.7	0.4	
52	6.453	6.382	0.071		1491			0.9- 60.9	0.7	
45 Hexane										
57	6.453	6.453	0.000	93	197156	25.0	24.1	70- 130	100	
86	6.453	6.453	0.000		29176			0.0- 46.0	14.8	
46 2-Butanone (MEK)										
72	6.474	6.484	-0.010	91	7853	25.0	23.7	70- 130	100	
43	6.484	6.484	0.000		320100			3898- 3958	4076	
57	6.453	6.484	-0.031		197156			2498- 2558	2511	
47 Isopropyl ether										
45	6.484	6.484	0.000	97	319418	25.0	25.8	70- 130	100	
87	6.484	6.484	0.000		84427			0.0- 55.7	26.4	
59	6.484	6.484	0.000		35108			0.0- 40.7	11.0	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	82	134945	25.0	27.4	70- 130	100	
61	6.595	6.595	0.000		185507			113- 173	137	
98	6.595	6.595	0.000		88344			35.8- 95.8	65.5	
52 Chlorobromomethane										
128	6.737	6.737	0.000	83	61738	25.0	25.9	70- 130	100	
49	6.737	6.737	0.000		86628			125- 185	140	
54 Chloroform										
83	6.777	6.777	0.000	93	1504598	25.0	150.1	70- 130	100	
85	6.777	6.777	0.000		1004629			35.3- 95.3	66.8	
47	6.777	6.777	0.000		364533			0.0- 54.5	24.2	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	95	268254	25.0	26.8	70- 130	100	
87	6.828	6.828	0.000		110519			9.5- 69.5	41.2	
57	6.828	6.828	0.000		76553			0.0- 59.8	28.5	
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	255081	25.0	29.9	70- 130	100	
97	6.848	6.848	0.000		44618			0.0- 47.8	17.5	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	95	119359	625.0	653.8	70- 130	100	
41	6.848	6.858	-0.010		252876			158- 218	212	
42	6.858	6.858	0.000		66630			24.6- 84.6	55.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
60 Tetrahydrofuran										
42	7.061	7.061	0.000	83	38994	50.0	44.2	70- 130	100	
71	7.061	7.061	0.000		14238			5.2- 65.2	36.5	
72	7.071	7.061	0.010		15124			8.9- 68.9	38.8	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	181883	25.0	26.7	70- 130	100	
64	7.334	7.334	0.000		61608			1.8- 61.8	33.9	
49	7.334	7.334	0.000		38780			0.0- 52.2	21.3	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	96	344004	25.0	28.0	70- 130	100	
99	7.415	7.415	0.000		226004			35.9- 95.9	65.7	
61	7.415	7.415	0.000		134114			9.0- 69.0	39.0	
68 1,1-Dichloropropene										
75	7.577	7.577	0.000	95	203369	25.0	26.3	70- 130	100	
110	7.577	7.577	0.000		78589			8.5- 68.5	38.6	
77	7.577	7.577	0.000		60051			0.9- 60.9	29.5	
62 2-Methylhexane										
43	7.658	7.618	0.040	34	22070		1.72	70- 130	100	
85	7.658	7.618	0.040		12774			23.2- 83.2	57.9	
57	7.658	7.618	0.040		9534			6.3- 66.3	43.2	
56	7.658	7.618	0.040		217840			0.7- 60.7	987	
69 Cyclohexane										
56	7.658	7.658	0.000	91	217840	25.0	23.6	70- 130	100	
84	7.658	7.658	0.000		187386			49- 109	86.0	
69	7.658	7.658	0.000		61537			0.0- 56.1	28.2	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	94	362817	25.0	30.4	70- 130	100	
119	7.729	7.729	0.000		330764			65- 125	91.2	
82	7.729	7.729	0.000		74186			0.0- 51.0	20.4	
72 Benzene										
78	7.760	7.760	0.000	98	415893	25.0	25.8	70- 130	100	
51	7.760	7.760	0.000		96229			0.0- 53.4	23.1	
77	7.760	7.760	0.000		96009			0.0- 53.9	23.1	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	95	195719	25.0	25.5	70- 130	100	
87	7.881	7.881	0.000		53223			0.0- 56.3	27.2	
43	7.881	7.881	0.000		68327			4.4- 64.4	34.9	
55	7.881	7.881	0.000		58289			0.0- 58.6	29.8	
154 Isooctane										
57	8.185	8.144	0.041	45	110859		4.27	70- 130	100	
41	8.185	8.144	0.041		143632			24.3- 24.3	130	
56	8.185	8.144	0.041		73926			34.5- 34.5	66.7	
75 n-Heptane										
43	8.185	8.185	0.000	90	202263	25.0	24.4	70- 130	100	
57	8.185	8.185	0.000		110859			25.7- 85.7	54.8	
71	8.185	8.185	0.000		111518			23.7- 83.7	55.1	
100	8.185	8.185	0.000		39494			0.0- 50.5	19.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
77 Dibromomethane										
93	8.225	8.225	0.000	94	67916	25.0	26.4	70- 130	100	
95	8.225	8.225	0.000		59744			54- 114	88.0	
174	8.225	8.225	0.000		73772			78- 138	109	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	84	98800	25.0	26.6	70- 130	100	
62	8.246	8.246	0.000		68297			42- 102	69.1	
41	8.246	8.246	0.000		80896			45- 105	81.9	
79 Trichloroethene										
130	8.286	8.286	0.000	95	179597	25.0	27.3	70- 130	100	
95	8.286	8.286	0.000		170110			63- 123	94.7	
132	8.286	8.286	0.000		179389			71- 131	100	
60	8.276	8.286	-0.010		88570			20.6- 80.6	49.3	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	98	202907	25.0	29.7	70- 130	100	
85	8.327	8.327	0.000		129561			36.1- 96.1	63.9	
129	8.327	8.327	0.000		27543			0.0- 44.5	13.6	
159 Methylcyclohexane										
83	8.701	8.701	0.000	93	233915	25.0	25.2	70- 130	100	
55	8.701	8.701	0.000		202621			87.9- 87.9	86.6	
98	8.701	8.701	0.000		113677			19.2- 79.2	48.6	
83 2-Chloroethyl vinyl ether										
63	8.701	8.701	0.000	37	3125	25.0	30.4	70- 130	100	
65	8.701	8.701	0.000		6204			162- 222	199	
106	0.000	8.701	0.000		0			0.0- 53.1		
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	171493	25.0	29.2	70- 130	100	
39	8.833	8.843	-0.010		93175			21.3- 81.3	54.3	
77	8.843	8.843	0.000		53154			1.0- 61.0	31.0	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	96	73632	25.0	24.4	70- 130	100	
100	8.924	8.924	0.000		11069			0.0- 44.9	15.0	
58	8.924	8.924	0.000		28390			8.0- 68.0	38.6	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	93	157703	25.0	27.1	70- 130	100	
39	9.187	9.187	0.000		70028			15.4- 75.4	44.4	
110	9.187	9.187	0.000		36612			0.0- 53.8	23.2	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	97	70502	25.0	26.4	70- 130	100	
97	9.319	9.319	0.000		84193			97- 157	119	
61	9.319	9.319	0.000		65540			62- 122	93.0	
90 Toluene										
91	9.471	9.471	0.000	98	530235	25.0	25.4	70- 130	100	
92	9.471	9.471	0.000		313241			29.8- 89.8	59.1	
65	9.471	9.471	0.000		67922			0.0- 43.1	12.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
91 1,3-Dichloropropane										
76	9.511	9.511	0.000	85	132841	25.0	24.6	70- 130	100	
78	9.511	9.511	0.000		41757			1.6- 61.6	31.4	
49	9.511	9.511	0.000		27748			0.0- 48.7	20.9	
92 Ethyl methacrylate										
69	9.511	9.511	0.000	82	87679	25.0	25.2	70- 130	100	
41	9.511	9.511	0.000		161761			151- 211	184	
99	9.511	9.511	0.000		21726			0.0- 53.8	24.8	
93 2-Hexanone										
43	9.623	9.623	0.000	97	52076	25.0	24.2	70- 130	100	
58	9.623	9.623	0.000		26286			22.9- 82.9	50.5	
100	9.623	9.623	0.000		5829			0.0- 41.9	11.2	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	151630	25.0	29.1	70- 130	100	
127	9.754	9.744	0.010		117170			47- 107	77.3	
79	9.744	9.744	0.000		22009			0.0- 44.5	14.5	
208	9.754	9.744	0.010		5180			0.0- 33.6	3.4	
96 Ethylene Dibromide										
107	9.957	9.957	0.000	99	98269	25.0	26.2	70- 130	100	
109	9.957	9.957	0.000		91741			64- 124	93.4	
81	9.957	9.957	0.000		8861			0.0- 39.1	9.0	
97 Tetrachloroethene										
164	10.109	10.109	0.000	96	160715	25.0	26.8	70- 130	100	
166	10.109	10.109	0.000		204579			95- 155	127	
129	10.099	10.109	-0.010		157542			64- 124	98.0	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	90	168873	25.0	28.0	70- 130	100	
133	10.656	10.656	0.000		166149			67- 127	98.4	
119	10.656	10.656	0.000		107077			35.9- 95.9	63.4	
101 Chlorobenzene										
112	10.737	10.737	0.000	95	384280	25.0	25.1	70- 130	100	
77	10.737	10.737	0.000		200599			19.9- 79.9	52.2	
114	10.737	10.737	0.000		122029			1.4- 61.4	31.8	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	681611	25.0	25.9	70- 130	100	
106	10.909	10.909	0.000		213023			0.2- 60.2	31.3	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	255668	25.0	26.9	70- 130	100	
91	11.091	11.091	0.000		546426			180- 240	214	
105	11.091	11.091	0.000		116267			14.5- 74.5	45.5	
105 Bromoform										
173	11.233	11.233	0.000	96	86596	25.0	28.0	70- 130	100	
175	11.233	11.233	0.000		41485			19.7- 79.7	47.9	
79	11.223	11.233	-0.010		16621			0.0- 49.9	19.2	
252	11.233	11.233	0.000		5526			0.0- 36.9	6.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
106 Styrene										
104	11.415	11.415	0.000	94	369685	25.0	27.6	70- 130	100	
103	11.415	11.415	0.000		176891			17.4- 77.4	47.8	
78	11.415	11.415	0.000		163418			15.1- 75.1	44.2	
51	11.415	11.415	0.000		88851			0.0- 53.9	24.0	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	95	100521	25.0	22.8	70- 130	100	
85	11.486	11.486	0.000		65040			35.7- 95.7	64.7	
131	11.486	11.486	0.000		14907			0.0- 45.0	14.8	
108 o-Xylene										
106	11.486	11.486	0.000	98	252667	25.0	27.8	70- 130	100	
91	11.486	11.486	0.000		563784			197- 257	223	
105	11.486	11.486	0.000		102478			10.8- 70.8	40.6	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	40066	25.0	23.4	70- 130	100	
77	11.628	11.628	0.000		36035			58- 118	89.9	
111 trans-1,4-Dichloro-2-butene										
53	11.628	11.638	-0.010	80	31770	25.0	24.6	70- 130	100	
89	11.628	11.638	-0.010		18375			70- 130	100	
112 Isopropylbenzene										
105	11.840	11.840	0.000	96	783856	25.0	27.8	70- 130	100	
120	11.840	11.840	0.000		203974			0.0- 55.6	26.0	
77	11.840	11.840	0.000		123631			0.0- 45.8	15.8	
113 Bromobenzene										
156	12.104	12.114	-0.010	90	185180	25.0	25.2	70- 130	100	
77	12.104	12.114	-0.010		219617			91- 151	119	
158	12.104	12.114	-0.010		180547			67- 127	97.5	
114 N-Propylbenzene										
91	12.286	12.286	0.000	99	884827	25.0	25.9	70- 130	100	
120	12.286	12.286	0.000		212880			0.0- 54.5	24.1	
65	12.286	12.286	0.000		98176			0.0- 42.2	11.1	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	511440	25.0	24.4	70- 130	100	
126	12.387	12.387	0.000		191370			7.2- 67.2	37.4	
75	12.387	12.387	0.000		14637			0.0- 32.9	2.9	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	535542	25.0	25.4	70- 130	100	
126	12.468	12.468	0.000		197264			7.3- 67.3	36.8	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	688346	25.0	26.6	70- 130	100	
120	12.570	12.570	0.000		316245			18.4- 78.4	45.9	
91	12.570	12.570	0.000		85057			0.0- 41.8	12.4	
119 tert-Butylbenzene										
119	12.853	12.853	0.000	91	649381	25.0	25.8	70- 130	100	
91	12.853	12.853	0.000		461842			41- 101	71.1	
134	12.853	12.853	0.000		158207			0.0- 54.6	24.4	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	97	680704	25.0	26.5	70- 130	100	
120	12.954	12.954	0.000		298381			15.7- 75.7	43.8	
77	12.954	12.954	0.000		79508			0.0- 42.4	11.7	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	917851	25.0	25.7	70- 130	100	
134	13.056	13.056	0.000		201135			0.0- 52.3	21.9	
91	13.056	13.056	0.000		169689			0.0- 47.8	18.5	
122 1,3-Dichlorobenzene										
146	13.126	13.137	-0.011	97	404122	25.0	24.7	70- 130	100	
111	13.126	13.137	-0.011		153950			10.6- 70.6	38.1	
148	13.126	13.137	-0.011		267298			34.6- 94.6	66.1	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	95	413093	25.0	25.5	70- 130	100	
111	13.187	13.187	0.000		157668			8.8- 68.8	38.2	
148	13.197	13.187	0.010		263861			35.7- 95.7	63.9	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	845458	25.0	26.0	70- 130	100	
134	13.218	13.218	0.000		233350			0.0- 57.7	27.6	
91	13.218	13.218	0.000		219470			0.0- 56.0	26.0	
127 1,2-Dichlorobenzene										
146	13.511	13.501	0.010	98	363169	25.0	26.3	70- 130	100	
111	13.501	13.501	0.000		146742			10.1- 70.1	40.4	
148	13.501	13.501	0.000		235005			32.6- 92.6	64.7	
128 n-Butylbenzene										
91	13.572	13.572	0.000	97	736000	25.0	26.4	70- 130	100	
92	13.572	13.572	0.000		402498			24.4- 84.4	54.7	
134	13.572	13.572	0.000		219184			0.0- 59.7	29.8	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	85	27885	25.0	23.7	70- 130	100	
155	13.896	13.896	0.000		25549			65- 125	91.6	
157	13.896	13.896	0.000		33136			86- 146	119	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	273864	25.0	26.6	70- 130	100	
182	15.061	15.061	0.000		269126			67- 127	98.3	
145	15.061	15.061	0.000		97851			4.2- 64.2	35.7	
134 Naphthalene										
128	15.294	15.293	0.001	96	505655	25.0	26.0	70- 130	100	
127	15.294	15.293	0.001		64072			0.0- 42.9	12.7	
129	15.294	15.293	0.001		56634			0.0- 41.7	11.2	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	92	205559	25.0	25.7	70- 130	100	
223	15.334	15.334	0.000		128043			33.1- 93.1	62.3	
227	15.334	15.334	0.000		134032			33.2- 93.2	65.2	
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	250010	25.0	26.9	70- 130	100	
182	15.476	15.476	0.000		239705			64- 124	95.9	
145	15.476	15.476	0.000		90495			5.8- 65.8	36.2	

A 140 C6-C10

1 9.327 (5.660-12.995) 0 46170678 0

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
A 141	C4-C12									
1	10.276	(4.965-15.587)		0	62378908	NC	NC			
A 155	C6-C12									
1	11.000	(6.413-15.587)		0	55429753		0			
S 144	Xylenes, Total									
1				0			54.7			
S 145	1,2-Dichloroethene, Total									
1				0			54.0			

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260LCS2_00216

Amount Added: 5.00

Units: uL

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22009.D

Injection Date: 22-Oct-2018 10:55:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-B-2 MS

Worklist Smp#: 9

Client ID: VER-01I-20181015

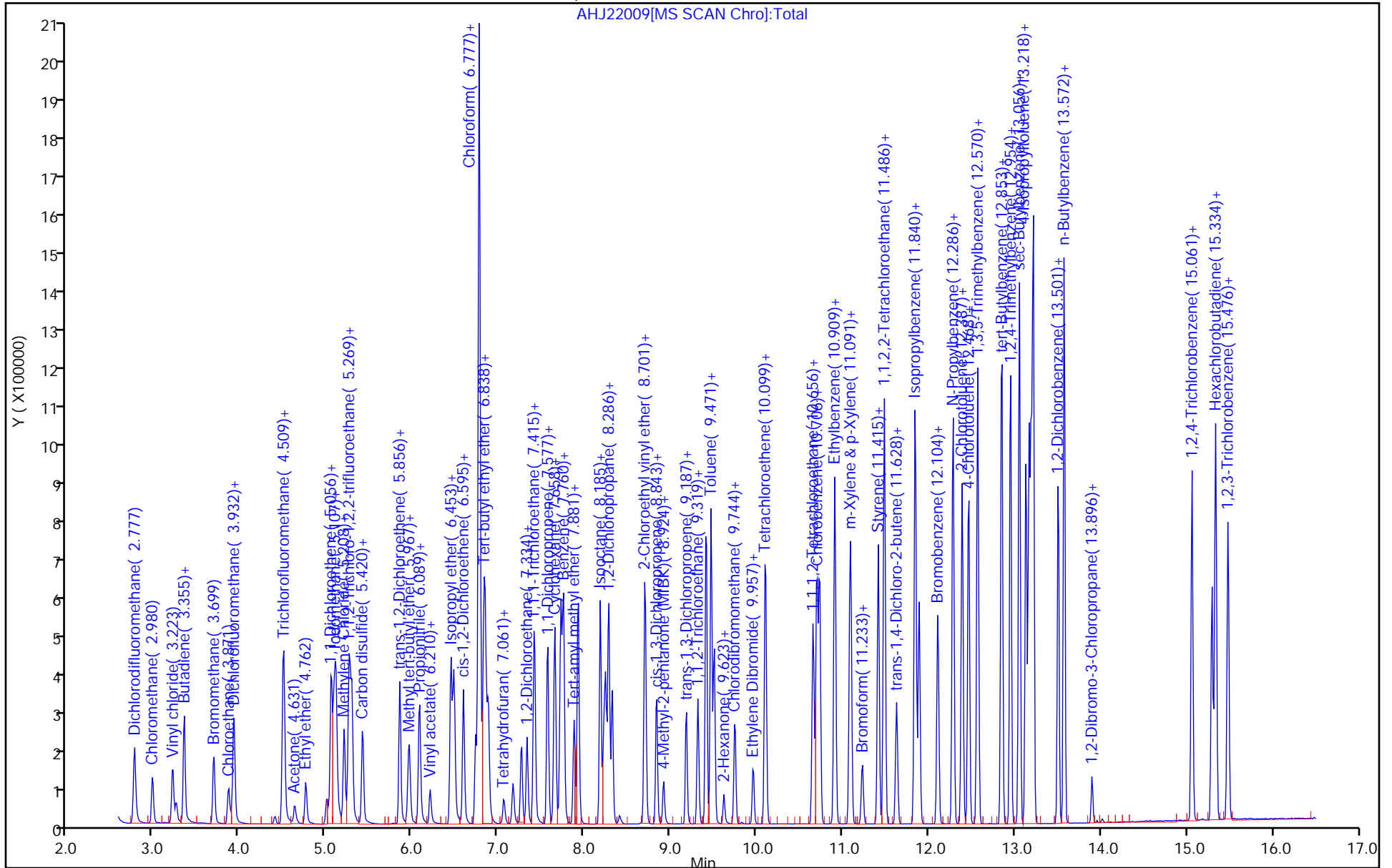
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 24

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22009.D
 Lims ID: 440-222284-B-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 22-Oct-2018 10:55:30 ALS Bottle#: 24 Worklist Smp#: 9
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-009
 Misc. Info.: 440-222284-b-2 ms
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr

Date: 22-Oct-2018 13:16:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	26.3	105.06
\$ 7 1,2-Dichloroethane-d4 (Surr)	25.0	26.8	107.20
\$ 8 Toluene-d8 (Surr)	25.0	26.2	104.69
\$ 9 4-Bromofluorobenzene (Surr)	25.0	23.8	95.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: AHJ22010.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 11:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	26.4		20	10
71-43-2	Benzene	24.6		0.50	0.25
108-86-1	Bromobenzene	25.8		0.50	0.25
74-97-5	Bromochloromethane	27.5		0.50	0.25
75-27-4	Bromodichloromethane	27.9		0.50	0.25
75-25-2	Bromoform	28.7		1.0	0.40
74-83-9	Bromomethane	26.0		0.50	0.25
78-93-3	2-Butanone (MEK)	25.6		5.0	2.5
56-23-5	Carbon tetrachloride	26.2		0.50	0.25
108-90-7	Chlorobenzene	24.4		0.50	0.25
75-00-3	Chloroethane	24.3		1.0	0.40
67-66-3	Chloroform	139		0.50	0.25
74-87-3	Chloromethane	22.3		0.50	0.25
95-49-8	2-Chlorotoluene	22.9		0.50	0.25
106-43-4	4-Chlorotoluene	24.1		0.50	0.25
156-59-2	cis-1,2-Dichloroethene	26.5		0.50	0.25
10061-01-5	cis-1,3-Dichloropropene	28.2		0.50	0.25
124-48-1	Dibromochloromethane	29.0		0.50	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	25.9		1.0	0.50
106-93-4	1,2-Dibromoethane (EDB)	26.3		0.50	0.25
74-95-3	Dibromomethane	27.1		0.50	0.25
95-50-1	1,2-Dichlorobenzene	26.2		0.50	0.25
541-73-1	1,3-Dichlorobenzene	23.8		0.50	0.25
106-46-7	1,4-Dichlorobenzene	23.9		0.50	0.25
75-71-8	Dichlorodifluoromethane	21.2		1.0	0.40
75-34-3	1,1-Dichloroethane	25.0		0.50	0.25
107-06-2	1,2-Dichloroethane	27.5		0.50	0.25
75-35-4	1,1-Dichloroethene	24.9		0.50	0.25
78-87-5	1,2-Dichloropropane	25.8		0.50	0.25
142-28-9	1,3-Dichloropropane	24.7		0.50	0.25
594-20-7	2,2-Dichloropropane	28.0		1.0	0.40
563-58-6	1,1-Dichloropropene	24.9		0.50	0.25
100-41-4	Ethylbenzene	24.4		0.50	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	26.1		0.50	0.25
87-68-3	Hexachlorobutadiene	23.7		0.50	0.25
591-78-6	2-Hexanone	26.3		5.0	2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: AHJ22010.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 11:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
98-82-8	Isopropylbenzene	26.8		0.50	0.25
108-20-3	Isopropyl Ether (DIPE)	25.9		0.50	0.25
75-09-2	Methylene Chloride	22.8		2.0	0.88
108-10-1	4-Methyl-2-pentanone (MIBK)	26.9		5.0	2.5
1634-04-4	Methyl-t-Butyl Ether (MTBE)	26.7		0.50	0.25
179601-23-1	m,p-Xylene	26.2		1.0	0.50
91-20-3	Naphthalene	25.8		1.0	0.40
104-51-8	n-Butylbenzene	23.3		1.0	0.40
103-65-1	N-Propylbenzene	23.4		0.50	0.25
95-47-6	o-Xylene	26.7		0.50	0.25
99-87-6	p-Isopropyltoluene	23.6		0.50	0.25
135-98-8	sec-Butylbenzene	23.7		0.50	0.25
100-42-5	Styrene	26.4		0.50	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	25.8		0.50	0.25
75-65-0	tert-Butyl alcohol (TBA)	282		10	5.0
98-06-6	tert-Butylbenzene	24.4		0.50	0.25
630-20-6	1,1,1,2-Tetrachloroethane	27.5		0.50	0.25
79-34-5	1,1,2,2-Tetrachloroethane	23.8		0.50	0.25
127-18-4	Tetrachloroethene	24.8		0.50	0.25
108-88-3	Toluene	24.3		0.50	0.25
156-60-5	trans-1,2-Dichloroethene	26.0		0.50	0.25
10061-02-6	trans-1,3-Dichloropropene	26.8		0.50	0.25
87-61-6	1,2,3-Trichlorobenzene	25.9		1.0	0.40
120-82-1	1,2,4-Trichlorobenzene	25.5		1.0	0.40
71-55-6	1,1,1-Trichloroethane	25.8		0.50	0.25
79-00-5	1,1,2-Trichloroethane	25.7		0.50	0.25
79-01-6	Trichloroethene	25.9		0.50	0.25
75-69-4	Trichlorofluoromethane	24.9		0.50	0.25
96-18-4	1,2,3-Trichloropropane	25.9		1.0	0.40
95-63-6	1,2,4-Trimethylbenzene	24.6		0.50	0.25
108-67-8	1,3,5-Trimethylbenzene	24.1		0.50	0.25
75-01-4	Vinyl chloride	25.8		0.50	0.25
1330-20-7	Xylenes, Total	52.9		1.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: AHJ22010.D
 Analysis Method: 8260B Date Collected: 10/15/2018 11:40
 Sample wt/vol: 10 (mL) Date Analyzed: 10/22/2018 11:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX D ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 506588 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		76-132
2037-26-5	Toluene-d8 (Surr)	102		80-128

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\AHJ22010.D
 Lims ID: 440-222284-B-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 22-Oct-2018 11:22:30 ALS Bottle#: 25 Worklist Smp#: 10
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-010
 Misc. Info.: 440-222284-b-2 msd
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNAIrvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNAIrvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D
 Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:17:02

Sig	RT (min.)	Adj RT (min.)	DI RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
-----	-----------	---------------	--------------	---	----------	--------------	----------------	-------------	-------	-------

* 1 TBA-d9 (IS)

65 5.005 5.015 -0.010 98 108074 250.0 250.0

* 2 Fluorobenzene (IS)

96 7.932 7.932 0.000 98 501796 25.0 25.0 70- 130 100

97 7.922 7.932 -0.010 32392 0.0- 36.8 6.5

* 3 Chlorobenzene-d5

117 10.706 10.706 0.000 86 426665 25.0 25.0 70- 130 100

82 10.696 10.706 -0.010 211118 21.9- 81.9 49.5

* 4 1,4-Dichlorobenzene-d4

152 13.167 13.167 0.000 94 259453 25.0 25.0 70- 130 100

150 13.167 13.167 0.000 458901 152- 212 177

115 13.167 13.167 0.000 159155 31.1- 91.1 61.3

\$ 6 Dibromofluoromethane (Surr)

113 6.889 6.889 0.000 92 165086 25.0 27.0 70- 130 100

111 6.889 6.889 0.000 167545 74- 134 101

192 6.889 6.889 0.000 26707 0.0- 46.6 16.2

\$ 7 1,2-Dichloroethane-d4 (Surr)

65 7.274 7.263 0.011 94 169509 25.0 27.7 70- 130 100

67 7.274 7.263 0.011 76465 15.9- 75.9 45.1

102 7.274 7.263 0.011 23636 0.0- 45.2 13.9

\$ 8 Toluene-d8 (Surr)

98 9.410 9.420 -0.010 93 489160 25.0 25.5 70- 130 100

100 9.410 9.420 -0.010 338723 40- 100 69.2

\$ 9 4-Bromofluorobenzene (Surr)

95 11.891 11.891 0.000 93 202543 25.0 23.6 70- 130 100

174 11.891 11.891 0.000 187812 62- 122 92.7

176 11.891 11.891 0.000 184085 59- 119 90.9

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
11 Dichlorodifluoromethane										
85	2.778	2.777	0.001	99	230550	25.0	21.2	70- 130	100	
87	2.778	2.777	0.001		71628			2.5- 62.5	31.1	
50	2.778	2.777	0.001		22290			0.0- 40.2	9.7	
12 Chloromethane										
50	2.980	2.980	0.000	100	120283	25.0	22.3	70- 130	100	
52	2.980	2.980	0.000		39937			3.7- 63.7	33.2	
13 Vinyl chloride										
62	3.213	3.213	0.000	99	145511	25.0	25.8	70- 130	100	
64	3.213	3.213	0.000		46186			3.0- 63.0	31.7	
19 Butane										
43	3.324	3.290	0.034	1	1539		NC			
14 Butadiene										
54	3.355	3.355	0.000	85	121736	25.0	25.3	70- 130	100	
53	3.355	3.355	0.000		85715			39- 99	70.4	
39	3.355	3.355	0.000		108899			62- 122	89.5	
15 Bromomethane										
96	3.699	3.699	0.000	93	110185	25.0	26.0	70- 130	100	
94	3.699	3.699	0.000		116360			72- 132	106	
79	3.689	3.699	-0.010		24009			0.0- 50.2	21.8	
16 Chloroethane										
64	3.861	3.871	-0.010	96	79590	25.0	24.3	70- 130	100	
66	3.861	3.871	-0.010		23121			0.0- 59.6	29.1	
49	3.861	3.871	-0.010		27116			2.2- 62.2	34.1	
17 Ethanol										
45	3.902	3.901	0.001	98	48144	1000.0	1073.2	70- 130	100	
46	3.902	3.901	0.001		16804			7.2- 67.2	34.9	
18 Dichlorofluoromethane										
67	3.932	3.932	0.000	98	254657	25.0	24.5	70- 130	100	
69	3.932	3.932	0.000		83541			2.6- 62.6	32.8	
47	3.922	3.932	-0.010		29792			0.0- 41.5	11.7	
21 Acrolein										
56	4.499	4.499	0.000	25	7634	25.0	32.0	70- 130	100	
55	4.499	4.499	0.000		5522			32.9- 92.9	72.3	
22 Trichlorofluoromethane										
101	4.509	4.509	0.000	99	391720	25.0	24.9	70- 130	100	
103	4.509	4.509	0.000		244996			33.3- 93.3	62.5	
66	4.499	4.509	-0.010		41425			0.0- 39.9	10.6	
23 Acetonitrile										
41	4.509	4.509	0.000	97	77011	250.0	246.3	70- 130	100	
40	4.509	4.509	0.000		43901			26.9- 86.9	57.0	
39	4.509	4.509	0.000		16320			0.0- 52.0	21.2	
25 Acetone										
43	4.641	4.641	0.000	84	28813	25.0	26.4	70- 130	100	
58	4.641	4.641	0.000		6220			0.0- 52.7	21.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
27 Ethyl ether										
59	4.762	4.762	0.000	94	72513	25.0	28.4	70- 130	100	
45	4.762	4.762	0.000		49446			43- 103	68.2	
74	4.762	4.762	0.000		42553			32.9- 92.9	58.7	
28 1,1-Dichloroethene										
96	5.056	5.056	0.000	94	119101	25.0	24.9	70- 130	100	
61	5.056	5.056	0.000		230531			159- 219	194	
98	5.066	5.056	0.010		76070			34.3- 94.3	63.9	
30 2-Methyl-2-propanol										
59	5.086	5.096	-0.010	57	140236	250.0	282.0	70- 130	100	
57	5.086	5.096	-0.010		13864			0.0- 39.8	9.9	
41	5.086	5.096	-0.010		39042			0.0- 56.4	27.8	
29 Iodomethane										
142	5.096	5.096	0.000	95	268471	25.0	27.1	70- 130	100	
127	5.096	5.096	0.000		146903			24.1- 84.1	54.7	
31 Acrylonitrile										
53	5.117	5.117	0.000	94	255517	250.0	245.9	70- 130	100	
52	5.117	5.117	0.000		220922			58- 118	86.5	
51	5.117	5.117	0.000		107562			11.2- 71.2	42.1	
32 Methylene Chloride										
84	5.208	5.208	0.000	95	109354	25.0	22.8	70- 130	100	
49	5.208	5.208	0.000		145174			108- 168	133	
51	5.208	5.208	0.000		46872			14.8- 74.8	42.9	
86	5.208	5.208	0.000		67183			34.0- 94.0	61.4	
158 Methyl acetate										
43	5.269	5.268	0.001	98	102284	50.0	50.8	70- 130	100	
74	5.269	5.268	0.001		20153			19.8- 19.8	19.7	
59	5.269	5.268	0.001		13644			0.0- 42.9	13.3	
33 1,1,2-Trichloro-1,2,2-trifluoroethane										
101	5.269	5.268	0.001	90	173183	25.0	22.7	70- 130	100	
151	5.269	5.268	0.001		155868			56- 116	90.0	
85	5.269	5.268	0.001		75401			14.8- 74.8	43.5	
35 3-Chloro-1-propene										
41	5.299	5.299	0.000	87	170852	25.0	25.6	70- 130	100	
39	5.299	5.299	0.000		140571			50- 110	82.3	
76	5.299	5.299	0.000		56836			4.5- 64.5	33.3	
37 Carbon disulfide										
76	5.421	5.420	0.000	99	346377	25.0	23.3	70- 130	100	
78	5.421	5.420	0.000		31339			0.0- 39.4	9.0	
38 trans-1,2-Dichloroethene										
96	5.856	5.856	0.000	96	133878	25.0	26.0	70- 130	100	
61	5.856	5.856	0.000		195982			119- 179	146	
98	5.856	5.856	0.000		83165			33.6- 93.6	62.1	
39 Methyl tert-butyl ether										
73	5.967	5.967	0.000	96	243640	25.0	26.7	70- 130	100	
57	5.967	5.967	0.000		50007			0.0- 50.7	20.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
40 1,1-Dichloroethane										
63	6.079	6.079	0.000	97	223874	25.0	25.0	70- 130	100	
65	6.079	6.079	0.000		69870			0.5- 60.5	31.2	
83	6.079	6.079	0.000		33496			0.0- 45.0	15.0	
42 Propionitrile										
54	6.089	6.089	0.000	97	106182	250.0	254.7	70- 130	100	
52	6.089	6.089	0.000		24980			0.0- 53.7	23.5	
55	6.089	6.089	0.000		15324			0.0- 45.5	14.4	
43 Vinyl acetate										
43	6.210	6.210	0.000	98	147279	25.0	24.9	70- 130	100	
86	6.210	6.210	0.000		11744			0.0- 38.1	8.0	
48 Methacrylonitrile										
41	6.453	6.382	0.071	65	211103		117.1	70- 130	100	
67	6.453	6.382	0.071		1052			37.7- 97.7	0.5	
52	6.453	6.382	0.071		1491			0.9- 60.9	0.7	
45 Hexane										
57	6.453	6.453	0.000	93	189234	25.0	22.2	70- 130	100	
86	6.453	6.453	0.000		30065			0.0- 46.0	15.9	
46 2-Butanone (MEK)										
72	6.474	6.484	-0.010	92	8934	25.0	25.6	70- 130	100	
43	6.484	6.484	0.000		324596			3898- 3958	3633	
57	6.453	6.484	-0.031		189234			2498- 2558	2118	
47 Isopropyl ether										
45	6.484	6.484	0.000	95	333050	25.0	25.9	70- 130	100	
87	6.484	6.484	0.000		87326			0.0- 55.7	26.2	
59	6.484	6.484	0.000		38176			0.0- 40.7	11.5	
50 cis-1,2-Dichloroethene										
96	6.595	6.595	0.000	84	135590	25.0	26.5	70- 130	100	
61	6.595	6.595	0.000		191053			113- 173	141	
98	6.595	6.595	0.000		86755			35.8- 95.8	64.0	
52 Chlorobromomethane										
128	6.737	6.737	0.000	80	68119	25.0	27.5	70- 130	100	
49	6.737	6.737	0.000		93123			125- 185	137	
54 Chloroform										
83	6.777	6.777	0.000	94	1447823	25.0	138.7	70- 130	100	
85	6.777	6.777	0.000		947641			35.3- 95.3	65.5	
47	6.777	6.777	0.000		358213			0.0- 54.5	24.7	
49 2,2-Dimethylpentane										
56	6.838	6.818	0.020	50	19485		2.52	70- 130	100	
43	6.858	6.818	0.040		134644			97- 157	691	
85	0.000	6.818	0.000		0			67- 127		
57	6.828	6.818	0.010		83114			201- 261	427	
55 Tert-butyl ethyl ether										
59	6.828	6.828	0.000	96	272727	25.0	26.1	70- 130	100	
87	6.828	6.828	0.000		114414			9.5- 69.5	42.0	
57	6.828	6.828	0.000		83114			0.0- 59.8	30.5	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
58 2,2-Dichloropropane										
77	6.848	6.848	0.000	92	249050	25.0	28.0	70- 130	100	
97	6.848	6.848	0.000		42296			0.0- 47.8	17.0	
59 Isobutyl alcohol										
43	6.858	6.858	0.000	96	135547	625.0	642.0	70- 130	100	
41	6.848	6.858	-0.010		259084			158- 218	191	
42	6.858	6.858	0.000		74690			24.6- 84.6	55.1	
60 Tetrahydrofuran										
42	7.061	7.061	0.000	82	43953	50.0	47.9	70- 130	100	
71	7.061	7.061	0.000		16530			5.2- 65.2	37.6	
72	7.071	7.061	0.010		17022			8.9- 68.9	38.7	
63 1,2-Dichloroethane										
62	7.334	7.334	0.000	98	194780	25.0	27.5	70- 130	100	
64	7.334	7.334	0.000		63354			1.8- 61.8	32.5	
49	7.334	7.334	0.000		41371			0.0- 52.2	21.2	
65 1,1,1-Trichloroethane										
97	7.415	7.415	0.000	97	330327	25.0	25.8	70- 130	100	
99	7.415	7.415	0.000		214403			35.9- 95.9	64.9	
61	7.415	7.415	0.000		125736			9.0- 69.0	38.1	
68 1,1-Dichloropropene										
75	7.567	7.577	-0.010	96	200540	25.0	24.9	70- 130	100	
110	7.577	7.577	0.000		76058			8.5- 68.5	37.9	
77	7.577	7.577	0.000		60198			0.9- 60.9	30.0	
69 Cyclohexane										
56	7.658	7.658	0.000	91	213513	25.0	22.2	70- 130	100	
84	7.658	7.658	0.000		180186			49- 109	84.4	
69	7.658	7.658	0.000		60804			0.0- 56.1	28.5	
71 Carbon tetrachloride										
117	7.729	7.729	0.000	96	325730	25.0	26.2	70- 130	100	
119	7.729	7.729	0.000		316022			65- 125	97.0	
82	7.729	7.729	0.000		69831			0.0- 51.0	21.4	
72 Benzene										
78	7.760	7.760	0.000	97	413289	25.0	24.6	70- 130	100	
51	7.760	7.760	0.000		102462			0.0- 53.4	24.8	
77	7.760	7.760	0.000		96834			0.0- 53.9	23.4	
74 Tert-amyl methyl ether										
73	7.881	7.881	0.000	95	206542	25.0	25.8	70- 130	100	
87	7.881	7.881	0.000		56768			0.0- 56.3	27.5	
43	7.881	7.881	0.000		72442			4.4- 64.4	35.1	
55	7.881	7.881	0.000		60023			0.0- 58.6	29.1	
154 Isooctane										
57	8.185	8.144	0.041	47	113091		4.18	70- 130	100	
41	8.185	8.144	0.041		136543			24.3- 24.3	121	
56	8.185	8.144	0.041		74411			34.5- 34.5	65.8	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
75 n-Heptane										
43	8.185	8.185	0.000	89	192522	25.0	22.3	70- 130	100	
57	8.185	8.185	0.000		113091			25.7- 85.7	58.7	
71	8.185	8.185	0.000		106242			23.7- 83.7	55.2	
100	8.185	8.185	0.000		41170			0.0- 50.5	21.4	
77 Dibromomethane										
93	8.225	8.225	0.000	94	72749	25.0	27.1	70- 130	100	
95	8.225	8.225	0.000		58946			54- 114	81.0	
174	8.225	8.225	0.000		82107			78- 138	113	
78 1,2-Dichloropropane										
63	8.246	8.246	0.000	85	99774	25.0	25.8	70- 130	100	
62	8.246	8.246	0.000		97211			42- 102	97.4	
41	8.246	8.246	0.000		78161			45- 105	78.3	
79 Trichloroethene										
130	8.286	8.286	0.000	94	177620	25.0	25.9	70- 130	100	
95	8.286	8.286	0.000		169221			63- 123	95.3	
132	8.286	8.286	0.000		176965			71- 131	100	
60	8.286	8.286	0.000		90948			20.6- 80.6	51.2	
81 Dichlorobromomethane										
83	8.327	8.327	0.000	96	198277	25.0	27.9	70- 130	100	
85	8.327	8.327	0.000		134993			36.1- 96.1	68.1	
129	8.327	8.327	0.000		27968			0.0- 44.5	14.1	
159 Methylcyclohexane										
83	8.701	8.701	0.000	92	228062	25.0	23.6	70- 130	100	
55	8.701	8.701	0.000		204290			87.9- 87.9	89.6	
98	8.712	8.701	0.011		109991			19.2- 79.2	48.2	
83 2-Chloroethyl vinyl ether										
63	8.701	8.701	0.000	37	3856	25.0	33.0	70- 130	100	
65	8.712	8.701	0.011		5873			162- 222	152	
106	0.000	8.701	0.000		0			0.0- 53.1		
86 cis-1,3-Dichloropropene										
75	8.843	8.843	0.000	94	172314	25.0	28.2	70- 130	100	
39	8.833	8.843	-0.010		93016			21.3- 81.3	54.0	
77	8.843	8.843	0.000		55101			1.0- 61.0	32.0	
87 4-Methyl-2-pentanone (MIBK)										
43	8.924	8.924	0.000	98	84114	25.0	26.9	70- 130	100	
100	8.924	8.924	0.000		12289			0.0- 44.9	14.6	
58	8.924	8.924	0.000		30475			8.0- 68.0	36.2	
88 trans-1,3-Dichloropropene										
75	9.187	9.187	0.000	94	161495	25.0	26.8	70- 130	100	
39	9.177	9.187	-0.010		74657			15.4- 75.4	46.2	
110	9.187	9.187	0.000		36522			0.0- 53.8	22.6	
89 1,1,2-Trichloroethane										
83	9.319	9.319	0.000	96	71090	25.0	25.7	70- 130	100	
97	9.319	9.319	0.000		90155			97- 157	127	
61	9.319	9.319	0.000		67049			62- 122	94.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
90 Toluene										
91	9.471	9.471	0.000	97	525936	25.0	24.3	70- 130	100	
92	9.471	9.471	0.000		312977			29.8- 89.8	59.5	
65	9.471	9.471	0.000		69876			0.0- 43.1	13.3	
91 1,3-Dichloropropane										
76	9.512	9.511	0.001	90	138209	25.0	24.7	70- 130	100	
78	9.512	9.511	0.001		44838			1.6- 61.6	32.4	
49	9.512	9.511	0.001		29355			0.0- 48.7	21.2	
92 Ethyl methacrylate										
69	9.512	9.511	0.001	84	95530	25.0	26.4	70- 130	100	
41	9.512	9.511	0.001		167321			151- 211	175	
99	9.512	9.511	0.001		23534			0.0- 53.8	24.6	
93 2-Hexanone										
43	9.623	9.623	0.000	96	58666	25.0	26.3	70- 130	100	
58	9.623	9.623	0.000		29199			22.9- 82.9	49.8	
100	9.623	9.623	0.000		6586			0.0- 41.9	11.2	
94 Chlorodibromomethane										
129	9.744	9.744	0.000	89	156992	25.0	29.0	70- 130	100	
127	9.744	9.744	0.000		121290			47- 107	77.3	
79	9.744	9.744	0.000		23213			0.0- 44.5	14.8	
208	9.755	9.744	0.011		5519			0.0- 33.6	3.5	
96 Ethylene Dibromide										
107	9.957	9.957	0.000	98	102597	25.0	26.3	70- 130	100	
109	9.957	9.957	0.000		96254			64- 124	93.8	
81	9.957	9.957	0.000		9265			0.0- 39.1	9.0	
97 Tetrachloroethene										
164	10.109	10.109	0.000	96	154744	25.0	24.8	70- 130	100	
166	10.109	10.109	0.000		197471			95- 155	128	
129	10.099	10.109	-0.010		150785			64- 124	97.4	
100 1,1,1,2-Tetrachloroethane										
131	10.656	10.656	0.000	90	172338	25.0	27.5	70- 130	100	
133	10.656	10.656	0.000		166643			67- 127	96.7	
119	10.656	10.656	0.000		108496			35.9- 95.9	63.0	
101 Chlorobenzene										
112	10.737	10.737	0.000	96	388154	25.0	24.4	70- 130	100	
77	10.737	10.737	0.000		200877			19.9- 79.9	51.8	
114	10.737	10.737	0.000		126399			1.4- 61.4	32.6	
102 Ethylbenzene										
91	10.909	10.909	0.000	99	669252	25.0	24.4	70- 130	100	
106	10.909	10.909	0.000		207528			0.2- 60.2	31.0	
103 m-Xylene & p-Xylene										
106	11.091	11.091	0.000	96	259371	25.0	26.2	70- 130	100	
91	11.091	11.091	0.000		557924			180- 240	215	
105	11.091	11.091	0.000		118380			14.5- 74.5	45.6	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
105 Bromoform										
173	11.233	11.233	0.000	95	92068	25.0	28.7	70- 130	100	
175	11.233	11.233	0.000		43427			19.7- 79.7	47.2	
79	11.223	11.233	-0.010		17619			0.0- 49.9	19.1	
252	11.233	11.233	0.000		6010			0.0- 36.9	6.5	
106 Styrene										
104	11.415	11.415	0.000	94	367119	25.0	26.4	70- 130	100	
103	11.415	11.415	0.000		175188			17.4- 77.4	47.7	
78	11.415	11.415	0.000		167931			15.1- 75.1	45.7	
51	11.415	11.415	0.000		87846			0.0- 53.9	23.9	
109 1,1,2,2-Tetrachloroethane										
83	11.486	11.486	0.000	56	107147	25.0	23.8	70- 130	100	
85	11.486	11.486	0.000		71053			35.7- 95.7	66.3	
131	11.486	11.486	0.000		15817			0.0- 45.0	14.8	
108 o-Xylene										
106	11.486	11.486	0.000	98	251292	25.0	26.7	70- 130	100	
91	11.486	11.486	0.000		551290			197- 257	219	
105	11.486	11.486	0.000		103265			10.8- 70.8	41.1	
110 1,2,3-Trichloropropane										
110	11.628	11.628	0.000	88	45341	25.0	25.9	70- 130	100	
77	11.628	11.628	0.000		40340			58- 118	89.0	
111 trans-1,4-Dichloro-2-butene										
53	11.638	11.638	0.000	82	35468	25.0	26.9	70- 130	100	
89	11.638	11.638	0.000		20729			70- 130	100	
112 Isopropylbenzene										
105	11.841	11.840	0.001	96	785052	25.0	26.8	70- 130	100	
120	11.841	11.840	0.001		197425			0.0- 55.6	25.1	
77	11.841	11.840	0.001		119094			0.0- 45.8	15.2	
113 Bromobenzene										
156	12.104	12.114	-0.010	88	193187	25.0	25.8	70- 130	100	
77	12.104	12.114	-0.010		217312			91- 151	112	
158	12.104	12.114	-0.010		184972			67- 127	95.7	
114 N-Propylbenzene										
91	12.286	12.286	0.000	98	816354	25.0	23.4	70- 130	100	
120	12.286	12.286	0.000		200961			0.0- 54.5	24.6	
65	12.286	12.286	0.000		96333			0.0- 42.2	11.8	
115 2-Chlorotoluene										
91	12.387	12.387	0.000	97	490669	25.0	22.9	70- 130	100	
126	12.387	12.387	0.000		188826			7.2- 67.2	38.5	
75	12.387	12.387	0.000		15552			0.0- 32.9	3.2	
116 4-Chlorotoluene										
91	12.468	12.468	0.000	97	518901	25.0	24.1	70- 130	100	
126	12.468	12.468	0.000		189833			7.3- 67.3	36.6	
117 1,3,5-Trimethylbenzene										
105	12.570	12.570	0.000	94	636190	25.0	24.1	70- 130	100	
120	12.570	12.570	0.000		301711			18.4- 78.4	47.4	
91	12.570	12.570	0.000		77979			0.0- 41.8	12.3	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
119 tert-Butylbenzene										
119	12.853	12.853	0.000	92	625912	25.0	24.4	70- 130	100	
91	12.843	12.853	-0.010		422410			41- 101	67.5	
134	12.853	12.853	0.000		141965			0.0- 54.6	22.7	
120 1,2,4-Trimethylbenzene										
105	12.954	12.954	0.000	98	643790	25.0	24.6	70- 130	100	
120	12.954	12.954	0.000		284509			15.7- 75.7	44.2	
77	12.954	12.954	0.000		76474			0.0- 42.4	11.9	
121 sec-Butylbenzene										
105	13.056	13.056	0.000	95	864742	25.0	23.7	70- 130	100	
134	13.056	13.056	0.000		193876			0.0- 52.3	22.4	
91	13.056	13.056	0.000		153245			0.0- 47.8	17.7	
122 1,3-Dichlorobenzene										
146	13.137	13.137	0.000	98	397617	25.0	23.8	70- 130	100	
111	13.127	13.137	-0.010		152894			10.6- 70.6	38.5	
148	13.127	13.137	-0.010		257756			34.6- 94.6	64.8	
124 1,4-Dichlorobenzene										
146	13.187	13.187	0.000	96	395161	25.0	23.9	70- 130	100	
111	13.187	13.187	0.000		153837			8.8- 68.8	38.9	
148	13.187	13.187	0.000		264869			35.7- 95.7	67.0	
125 4-Isopropyltoluene										
119	13.218	13.218	0.000	96	782285	25.0	23.6	70- 130	100	
134	13.218	13.218	0.000		215499			0.0- 57.7	27.5	
91	13.218	13.218	0.000		205145			0.0- 56.0	26.2	
127 1,2-Dichlorobenzene										
146	13.501	13.501	0.000	97	369946	25.0	26.2	70- 130	100	
111	13.501	13.501	0.000		149271			10.1- 70.1	40.3	
148	13.501	13.501	0.000		233237			32.6- 92.6	63.0	
128 n-Butylbenzene										
91	13.572	13.572	0.000	96	662907	25.0	23.3	70- 130	100	
92	13.572	13.572	0.000		369652			24.4- 84.4	55.8	
134	13.572	13.572	0.000		211993			0.0- 59.7	32.0	
130 1,2-Dibromo-3-Chloropropane										
75	13.896	13.896	0.000	85	31081	25.0	25.9	70- 130	100	
155	13.896	13.896	0.000		29598			65- 125	95.2	
157	13.896	13.896	0.000		36243			86- 146	117	
133 1,2,4-Trichlorobenzene										
180	15.061	15.061	0.000	95	267198	25.0	25.5	70- 130	100	
182	15.061	15.061	0.000		255504			67- 127	95.6	
145	15.061	15.061	0.000		92093			4.2- 64.2	34.5	
134 Naphthalene										
128	15.294	15.293	0.001	97	511441	25.0	25.8	70- 130	100	
127	15.294	15.293	0.001		66021			0.0- 42.9	12.9	
129	15.294	15.293	0.001		58647			0.0- 41.7	11.5	
135 Hexachlorobutadiene										
225	15.334	15.334	0.000	94	193419	25.0	23.7	70- 130	100	
223	15.334	15.334	0.000		112198			33.1- 93.1	58.0	
227	15.334	15.334	0.000		116099			33.2- 93.2	60.0	

Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Ratio Range	Ratio	Flags
137 1,2,3-Trichlorobenzene										
180	15.476	15.476	0.000	96	245745	25.0	25.9	70- 130	100	
182	15.476	15.476	0.000		233808			64- 124	95.1	
145	15.476	15.476	0.000		84664			5.8- 65.8	34.5	
A 140 C6-C10										
1	9.327	(5.660-12.995)		0	47102059		0			
A 141 C4-C12										
1	10.276	(4.965-15.587)		0	63906307	NC	NC			
A 155 C6-C12										
1	11.000	(6.413-15.587)		0	56896925		0			
S 144 Xylenes, Total										
1				0			52.9			
S 145 1,2-Dichloroethene, Total										
1				0			52.4			

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMWNU8260LCS2_00216

Amount Added: 5.00

Units: uL

VMWNU8260ISS_00160

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22010.D

Injection Date: 22-Oct-2018 11:22:30

Instrument ID: GCMS45

Operator ID: RRT

Lims ID: 440-222284-B-2 MSD

Worklist Smp#: 10

Client ID: VER-01I-20181015

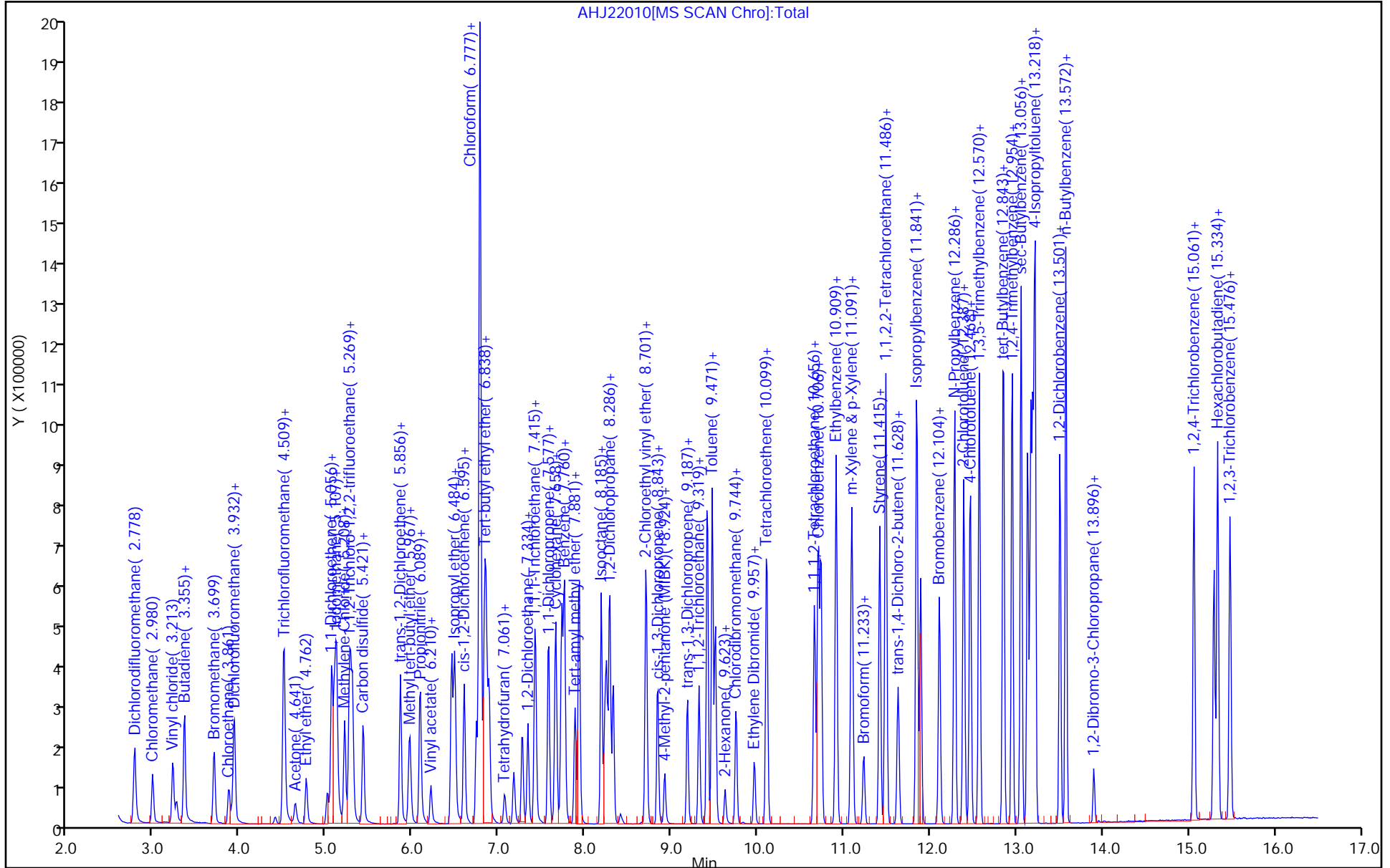
Purge Vol: 10.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 25

Method: 45_8260

Limit Group: MSV-8260-624



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\AHJ22010.D
 Lims ID: 440-222284-B-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 22-Oct-2018 11:22:30 ALS Bottle#: 25 Worklist Smp#: 10
 Purge Vol: 10.000 mL Dil. Factor: 1.0000
 Sample Info: 440-0110802-010
 Misc. Info.: 440-222284-b-2 msd
 Operator ID: RRT Instrument ID: GCMS45
 Method: \\ChromNA\Irvine\ChromData\GCMS45\20181022-110802.b\45_8260.m
 Limit Group: MSV-8260-624
 Last Update: 22-Oct-2018 13:15:49 Calib Date: 17-Oct-2018 19:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\GCMS45\20181017-110626.b\AHJ17035.D

Column 1 : Det: MS SCAN
 Process Host: CTX0319

First Level Reviewer: ramirezr Date: 22-Oct-2018 13:17:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dibromofluoromethane (Surr)	25.0	27.0	108.07
\$ 7 1,2-Dichloroethane-d4 (Surr)	25.0	27.7	110.64
\$ 8 Toluene-d8 (Surr)	25.0	25.5	101.95
\$ 9 4-Bromofluorobenzene (Surr)	25.0	23.6	94.42

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica IrvineJob No.: 440-222284-1

SDG No.: _____

Instrument ID: GCMS45Start Date: 10/17/2018 12:26Analysis Batch Number: 505728End Date: 10/17/2018 20:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 440-505728/1		10/17/2018 12:26	1	AHJ17021.D	DB-VRX D 0.18 (mm)
ZZZZZ		10/17/2018 13:13	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/17/2018 13:41	1		DB-VRX D 0.18 (mm)
STD02 440-505728/4 IC		10/17/2018 14:08	1	AHJ17024.D	DB-VRX D 0.18 (mm)
STD04 440-505728/5 IC		10/17/2018 14:35	1	AHJ17025.D	DB-VRX D 0.18 (mm)
STD05 440-505728/6 IC		10/17/2018 15:06	1	AHJ17026.D	DB-VRX D 0.18 (mm)
STD1 440-505728/7 IC		10/17/2018 15:33	1	AHJ17027.D	DB-VRX D 0.18 (mm)
STD2 440-505728/8 IC		10/17/2018 16:00	1	AHJ17028.D	DB-VRX D 0.18 (mm)
STD5 440-505728/9 IC		10/17/2018 16:27	1	AHJ17029.D	DB-VRX D 0.18 (mm)
STD10 440-505728/10 IC		10/17/2018 16:55	1	AHJ17030.D	DB-VRX D 0.18 (mm)
ICIS 440-505728/11		10/17/2018 17:22	1	AHJ17031.D	DB-VRX D 0.18 (mm)
STD50 440-505728/12 IC		10/17/2018 17:49	1	AHJ17032.D	DB-VRX D 0.18 (mm)
STD100 440-505728/13 IC		10/17/2018 18:17	1	AHJ17033.D	DB-VRX D 0.18 (mm)
STD200 440-505728/14 IC		10/17/2018 18:44	1	AHJ17034.D	DB-VRX D 0.18 (mm)
STD300 440-505728/15 IC		10/17/2018 19:11	1	AHJ17035.D	DB-VRX D 0.18 (mm)
ZZZZZ		10/17/2018 19:38	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/17/2018 20:06	1		DB-VRX D 0.18 (mm)
ICV 440-505728/18		10/17/2018 20:33	1	AHJ17038.D	DB-VRX D 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: GCMS45 Start Date: 10/22/2018 07:44Analysis Batch Number: 506588 End Date: 10/22/2018 17:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 440-506588/2		10/22/2018 07:44	1	AHJ22002.D	DB-VRX D 0.18 (mm)
CCVIS 440-506588/3		10/22/2018 08:11	1		DB-VRX D 0.18 (mm)
CCVIS 440-506588/4		10/22/2018 08:38	1	AHJ22004.D	DB-VRX D 0.18 (mm)
LCS 440-506588/5		10/22/2018 09:06	1	AHJ22005.D	DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 09:33	1		DB-VRX D 0.18 (mm)
MB 440-506588/7		10/22/2018 10:00	1	AHJ22007.D	DB-VRX D 0.18 (mm)
440-222284-2		10/22/2018 10:28	1	AHJ22008.D	DB-VRX D 0.18 (mm)
440-222284-2 MS		10/22/2018 10:55	1	AHJ22009.D	DB-VRX D 0.18 (mm)
440-222284-2 MSD		10/22/2018 11:22	1	AHJ22010.D	DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 11:49	10000		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 12:17	10000		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 12:44	1		DB-VRX D 0.18 (mm)
440-222284-1		10/22/2018 13:11	1	AHJ22012.D	DB-VRX D 0.18 (mm)
440-222284-3		10/22/2018 13:38	1	AHJ22013.D	DB-VRX D 0.18 (mm)
440-222284-4		10/22/2018 14:06	1	AHJ22014.D	DB-VRX D 0.18 (mm)
440-222284-5		10/22/2018 14:33	1	AHJ22015.D	DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 15:00	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 15:27	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 15:55	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 16:22	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 16:49	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 17:16	1		DB-VRX D 0.18 (mm)
ZZZZZ		10/22/2018 17:44	1		DB-VRX D 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505728 Batch Start Date: 10/17/18 12:26 Batch Analyst: Ibasitas, Arnel

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VMW8260TUNE1 00456	VMWNU8260002 00628	VMWNU8260200 00219	VMWNU8260CCV1 01080
BFB 440-505728/1		8260B		10 mL	10 mL	2 uL			
STD02 440-505728/4 IC		8260B		10 mL	10 mL		1 uL		
STD04 440-505728/5 IC		8260B		10 mL	10 mL		2 uL		
STD05 440-505728/6 IC		8260B		10 mL	10 mL		2.5 uL		
STD1 440-505728/7 IC		8260B		10 mL	10 mL		5 uL		
STD2 440-505728/8 IC		8260B		10 mL	10 mL		10 uL		
STD5 440-505728/9 IC		8260B		10 mL	10 mL				1 uL
STD10 440-505728/10 IC		8260B		10 mL	10 mL				2 uL
ICIS 440-505728/11		8260B		10 mL	10 mL				5 uL
STD50 440-505728/12 IC		8260B		10 mL	10 mL			2.5 uL	
STD100 440-505728/13 IC		8260B		10 mL	10 mL			5 uL	
STD200 440-505728/14 IC		8260B		10 mL	10 mL			10 uL	
STD300 440-505728/15 IC		8260B		10 mL	10 mL			15 uL	
ICV 440-505728/18		8260B		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMWNU8260IS 00216	VMWNU8260ISS 00161	VMWNU8260LCS2 00215	VMWNU8260SRR200 00211	VMWNU8260SRR50 00211
BFB 440-505728/1		8260B						
STD02 440-505728/4 IC		8260B		5 uL				
STD04 440-505728/5 IC		8260B		5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505728 Batch Start Date: 10/17/18 12:26 Batch Analyst: Ibasitas, Arnel

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMWNU8260IS 00216	VMWNU8260ISS 00161	VMWNU8260LCS2 00215	VMWNU8260LCS2 00211	VMWNU8260LCS2 00211	VMWNU8260LCS2 00211
STD05 440-505728/6 IC		8260B		5 uL					
STD1 440-505728/7 IC		8260B		5 uL					
STD2 440-505728/8 IC		8260B		5 uL					
STD5 440-505728/9 IC		8260B		5 uL					1 uL
STD10 440-505728/10 IC		8260B		5 uL					2 uL
ICIS 440-505728/11		8260B		5 uL					5 uL
STD50 440-505728/12 IC		8260B		5 uL				2.5 uL	
STD100 440-505728/13 IC		8260B		5 uL				5 uL	
STD200 440-505728/14 IC		8260B		5 uL					
STD300 440-505728/15 IC		8260B		5 uL					
ICV 440-505728/18		8260B			5 uL	5 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506588 Batch Start Date: 10/22/18 07:44 Batch Analyst: Ramirez, Ricardo

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VMW8260TUNE1 00453	VMWNU8260CCV1 01080	VMWNU8260ISS 00160
BFB 440-506588/2		8260B		10 mL	10 mL		2 uL		
CCVIS 440-506588/4		8260B		10 mL	10 mL			5 uL	5 uL
LCS 440-506588/5		8260B		10 mL	10 mL				5 uL
MB 440-506588/7		8260B		10 mL	10 mL				5 uL
440-222284-B-2	VER-01I-20181015	8260B	T	10 mL	10 mL	6 SU			5 uL
440-222284-B-2 MS	VER-01I-20181015	8260B	T	10 mL	10 mL	6 SU			5 uL
440-222284-B-2 MSD	VER-01I-20181015	8260B	T	10 mL	10 mL	6 SU			5 uL
440-222284-B-1	VER-01D-20181015	8260B	T	10 mL	10 mL	6 SU			5 uL
440-222284-A-3	VER-20181015-TB	8260B	T	10 mL	10 mL	5 SU			5 uL
440-222284-A-4	VER-20181015-FB	8260B	T	10 mL	10 mL	5 SU			5 uL
440-222284-A-5	VER-20181015-EB	8260B	T	10 mL	10 mL	5 SU			5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMWNU8260LCS2 00216					
BFB 440-506588/2		8260B							
CCVIS 440-506588/4		8260B							
LCS 440-506588/5		8260B		5 uL					
MB 440-506588/7		8260B							
440-222284-B-2	VER-01I-20181015	8260B	T						
440-222284-B-2 MS	VER-01I-20181015	8260B	T	5 uL					
440-222284-B-2 MSD	VER-01I-20181015	8260B	T	5 uL					
440-222284-B-1	VER-01D-20181015	8260B	T						
440-222284-A-3	VER-20181015-TB	8260B	T						
440-222284-A-4	VER-20181015-FB	8260B	T						
440-222284-A-5	VER-20181015-EB	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506588 Batch Start Date: 10/22/18 07:44 Batch Analyst: Ramirez, Ricardo

Batch Method: 8260B Batch End Date: _____

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

314.0_LL

Perchlorate (IC)

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110861-005_5_ECD_1.d

Lab ID: LCS 440-506828/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Perchlorate	10.0	10.3	103	85-115	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110895-005_05_ECD_1.d

Lab ID: LCS 440-506935/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Perchlorate	25.0	26.0	104	85-115	

Column to be used to flag recovery and RPD values

FORM III 314.0 LL

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110956-00505ECD_1.d

Lab ID: LCS 440-507219/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Perchlorate	25.0	26.1	104	85-115	

Column to be used to flag recovery and RPD values

FORM III 314.0 LL

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110861-004_4_ECD_1.d
 Lab ID: MRL 440-506828/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Perchlorate	1.00	0.958 J	96	75-125	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110861-014_14_ECD_1.d

Lab ID: MRL 440-506828/14 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Perchlorate	4.00	4.11	103	75-125	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110895-009_09_ECD_1.d

Lab ID: MRL 440-506935/9 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Perchlorate	1.00	1.02	102	75-125	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110956-00404ECD_1.d

Lab ID: MRL 440-507219/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Perchlorate	1.00	1.13	113	75-125	

Column to be used to flag recovery and RPD values

FORM III 314.0 LL

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110956-03131ECD_1.d
 Lab ID: 440-222284-2 MS Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Perchlorate	2500	300000	282000	-807	80-120	4

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110861-011_11_ECD_1.d
 Lab ID: 720-89201-A-3 MS Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Perchlorate	10.0	ND	10.0	100	80-120	

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110895-016_16_ECD_1.d
 Lab ID: 720-89236-D-6 MS Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Perchlorate	25.0	8.3	35.9	111	80-120	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110956-03232ECD_1.d
 Lab ID: 440-222284-2 MSD Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perchlorate	2500	273000	-1161	3	20	80-120	4

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110861-012_12_ECD_1.d
 Lab ID: 720-89201-A-3 MSD Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perchlorate	10.0	10.0	100	0	20	80-120	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110895-017_17_ECD_1.d
 Lab ID: 720-89236-D-6 MSD Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perchlorate	25.0	36.6	113	2	20	80-120	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC LC INTERFERENCE CHECK STANDARD RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110861-007_7_ECD_1.d
 Lab ID: INF 440-506828/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	INF CONCENTRATION (ug/L)	INF % REC	QC LIMITS REC	#
Perchlorate	10.0	10.0	100	80-120	

Column to be used to flag recovery and RPD values
FORM III 314.0 LL

FORM III
HPLC/IC LC INTERFERENCE CHECK STANDARD RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110895-008_08_ECD_1.d
 Lab ID: INF 440-506935/8 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	INF CONCENTRATION (ug/L)	INF % REC	QC LIMITS REC	#
Perchlorate	25.0	24.1	96	80-120	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM III
HPLC/IC LC INTERFERENCE CHECK STANDARD RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110956-00707ECD_1.d
 Lab ID: INF 440-507219/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	INF CONCENTRATION (ug/L)	INF % REC	QC LIMITS REC	#
Perchlorate	25.0	26.3	105	80-120	

Column to be used to flag recovery and RPD values
 FORM III 314.0 LL

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110895-006_06_ECD_1.d Lab Sample ID: MB 440-506935/6
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-23 Date Analyzed: 10/23/2018 13:24
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-506935/3	440-0110895-003_03_ECD_1.d	10/23/2018 12:21
	LCS 440-506935/5	440-0110895-005_05_ECD_1.d	10/23/2018 13:03
VER-01D-20181015	440-222284-1	440-0110895-010_10_ECD_1.d	10/23/2018 16:08
	CCB 440-506935/14	440-0110895-014_14_ECD_1.d	10/23/2018 17:38
	720-89236-D-6 MS	440-0110895-016_16_ECD_1.d	10/23/2018 18:19
	720-89236-D-6 MSD	440-0110895-017_17_ECD_1.d	10/23/2018 18:39
	CCB 440-506935/22	440-0110895-022_22_ECD_1.d	10/23/2018 20:21

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110956-00606ECD_1.d Lab Sample ID: MB 440-507219/6
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-24 Date Analyzed: 10/24/2018 14:56
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-507219/3	440-0110956-00303ECD_1.d	10/24/2018 13:48
	LCS 440-507219/5	440-0110956-00505ECD_1.d	10/24/2018 14:37
	CCB 440-507219/16	440-0110956-01616ECD_1.d	10/24/2018 19:01
	CCB 440-507219/27	440-0110956-02727ECD_1.d	10/24/2018 22:23
VER-01I-20181015	440-222284-2	440-0110956-03030ECD_1.d	10/24/2018 23:18
VER-01I-20181015 MS	440-222284-2 MS	440-0110956-03131ECD_1.d	10/24/2018 23:37
VER-01I-20181015 MSD	440-222284-2 MSD	440-0110956-03232ECD_1.d	10/24/2018 23:55
	CCB 440-507219/34	440-0110956-03434ECD_1.d	10/25/2018 00:32

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110861-006_6_ECD_1.d Lab Sample ID: MB 440-506828/6
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-25 Date Analyzed: 10/23/2018 08:03
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-506828/3	440-0110861-003_3_ECD_1.d	10/23/2018 07:06
	LCS 440-506828/5	440-0110861-005_5_ECD_1.d	10/23/2018 07:46
	720-89201-A-3 MS	440-0110861-011_11_ECD_1.d	10/23/2018 09:37
	720-89201-A-3 MSD	440-0110861-012_12_ECD_1.d	10/23/2018 09:53
	CCB 440-506828/16	440-0110861-016_16_ECD_1.d	10/23/2018 11:11
	CCB 440-506828/28	440-0110861-028_28_ECD_1.d	10/23/2018 15:09
VER-20181015-FB	440-222284-4	440-0110861-034_34_ECD_1.d	10/23/2018 16:53
VER-20181015-EB	440-222284-5	440-0110861-035_35_ECD_1.d	10/23/2018 17:10
	CCB 440-506828/39	440-0110861-039_39_ECD_1.d	10/23/2018 18:17

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: 440-0110895-010_10_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 13:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 16:08
 Con. Extract Vol.: _____ Dilution Factor: 100
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	3600		100	50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-010_10_ECD_1.d
 Lims ID: 440-222284-E-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 23-Oct-2018 16:08:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 100.0000
 Sample Info: 440-0110895-010
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 23-Oct-2018 16:41:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
2 Perchlorate	10.204	10.165	0.039	5199973	36.0	M

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-010_10_ECD_1.d

Injection Date: 23-Oct-2018 16:08:00

Instrument ID: IC-23

Operator ID:

Lims ID: 440-222284-E-1

Lab Sample ID: 440-222284-1

Worklist Smp#: 10

Client ID: VER-01D-20181015

Injection Vol: 1.0 ul

Dil. Factor: 100.0000

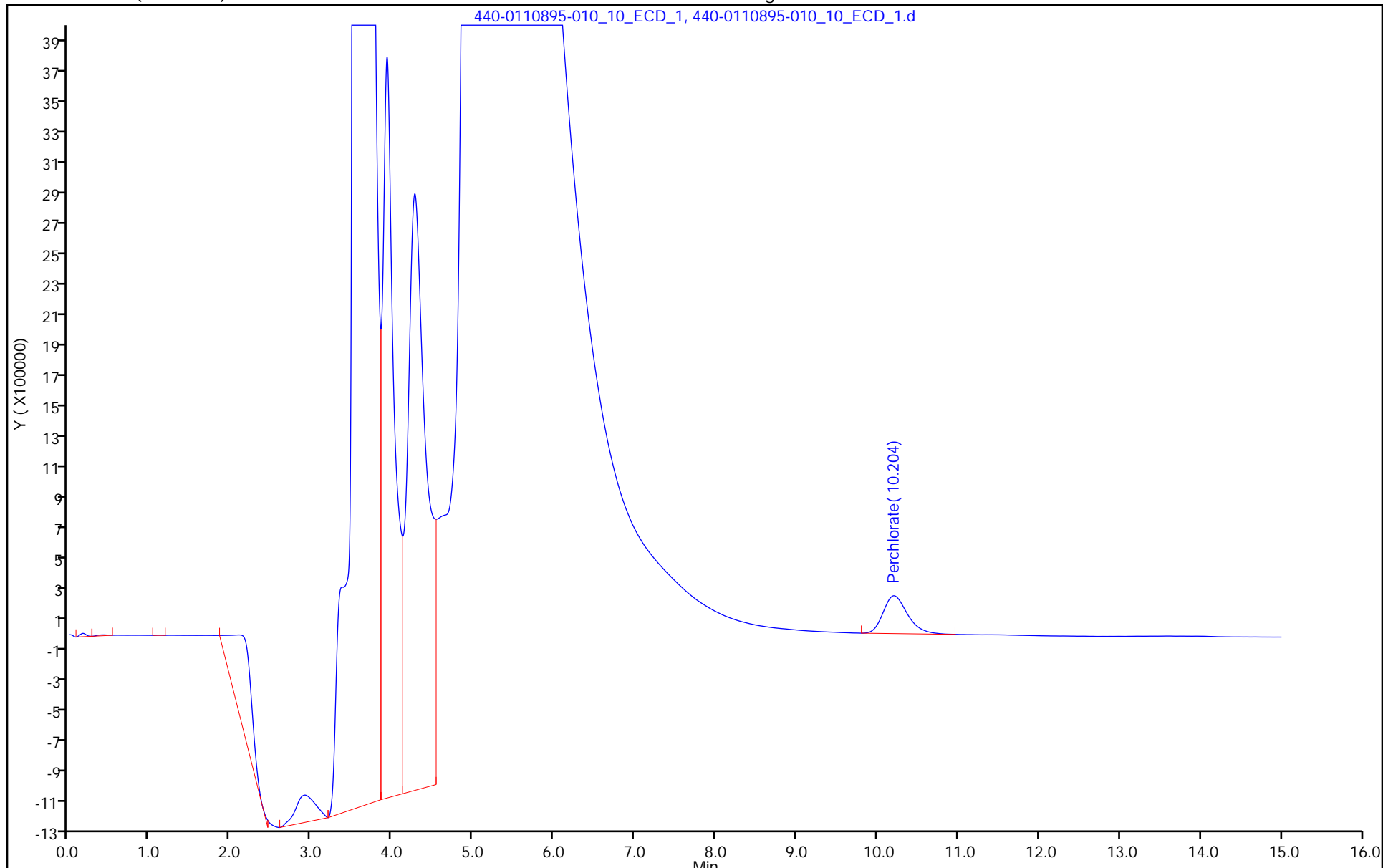
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

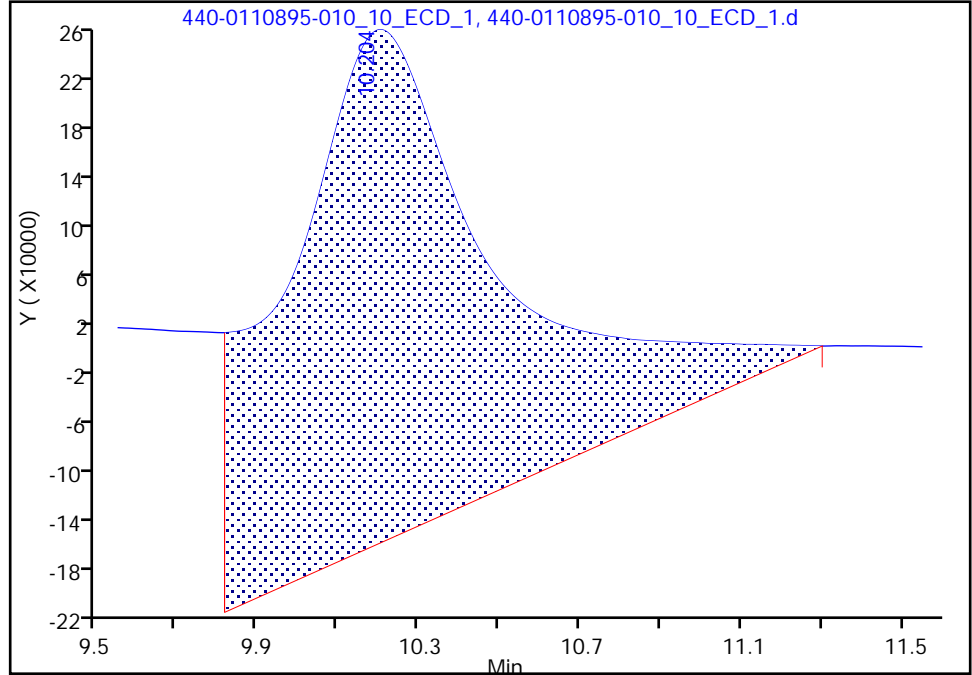
Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-010_10_ECD_1.d
Injection Date: 23-Oct-2018 16:08:00 Instrument ID: IC-23
Lims ID: 440-222284-E-1 Lab Sample ID: 440-222284-1
Client ID: VER-01D-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 100.0000
Method: 314_23PERC Limit Group: IC-314
Column: AS16 (4.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

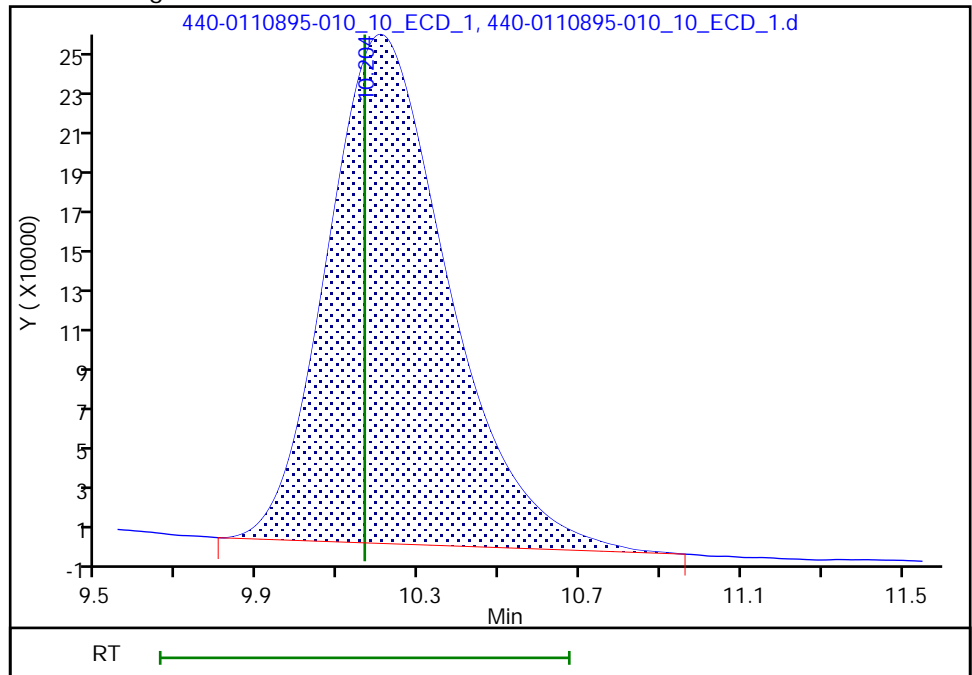
RT: 10.20
Area: 15307137
Amount: 95.653713
Amount Units: ug/l

Processing Integration Results



RT: 10.20
Area: 5199973
Amount: 36.025477
Amount Units: ug/l

Manual Integration Results



Reviewer: hoangch, 23-Oct-2018 16:41:44
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: 440-0110956-03030ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 23:18
 Con. Extract Vol.: _____ Dilution Factor: 10000
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	300000		10000	5000

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03030ECD_1.d
 Lims ID: 440-222284-E-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 24-Oct-2018 23:18:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 10000.0000
 Sample Info: 440-0110956-030
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 09:13:47 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: saraubonp Date: 25-Oct-2018 14:35:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
2 Perchlorate	13.057	13.080	-0.023	3827946	30.2	

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03030ECD_1.d

Injection Date: 24-Oct-2018 23:18:00

Instrument ID: IC-24

Operator ID:

Lims ID: 440-222284-E-2

Lab Sample ID: 440-222284-2

Worklist Smp#: 30

Client ID: VER-01I-20181015

Injection Vol: 1.0 ul

Dil. Factor: 10000.0000

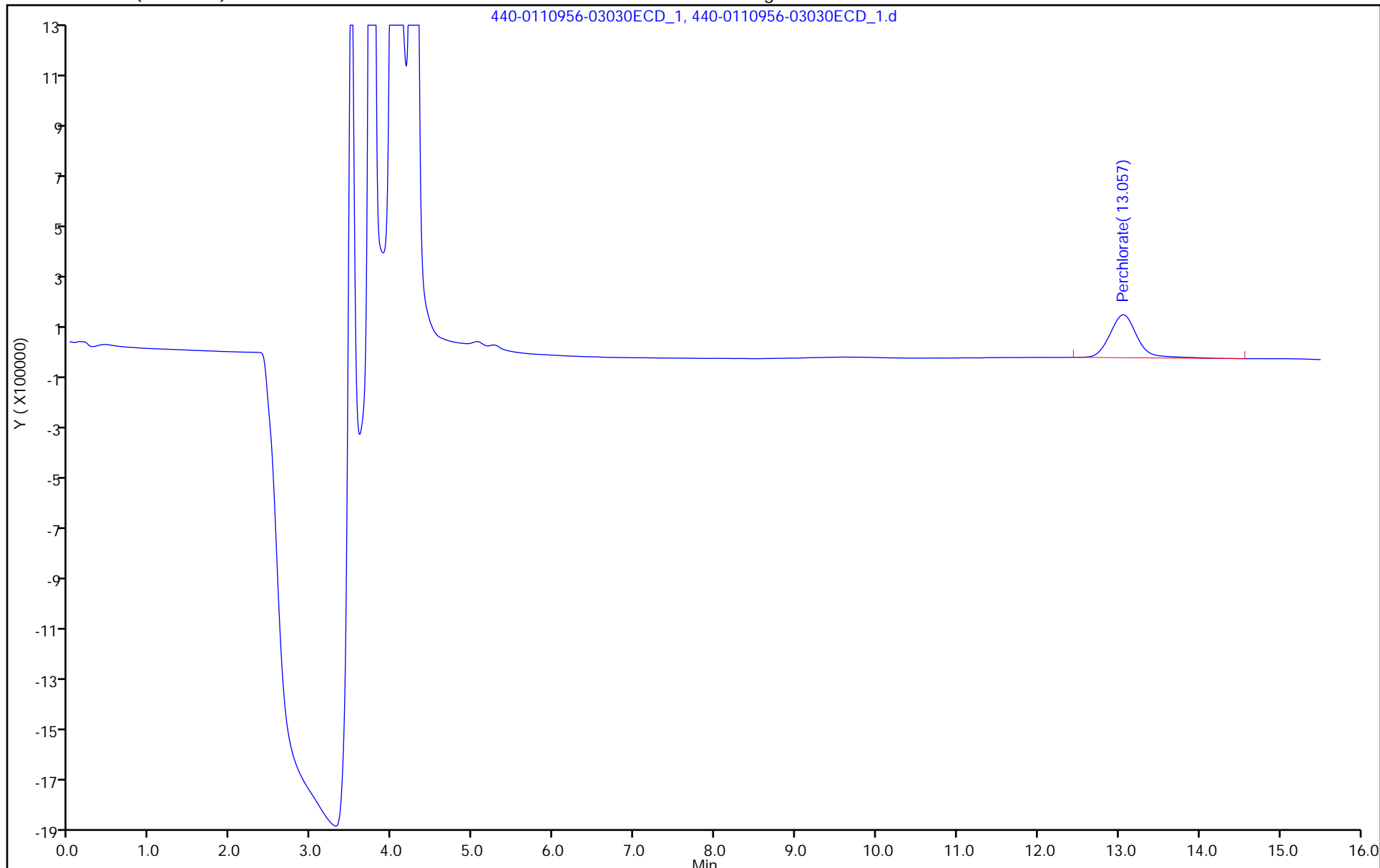
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: 440-0110861-034_34_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 14:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 16:53
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-034_34_ECD_1.d
 Lims ID: 440-222284-E-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 23-Oct-2018 16:53:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-034
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 02:03:31 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:55:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-034_34_ECD_1.d

Injection Date: 23-Oct-2018 16:53:00

Instrument ID: IC-25

Operator ID:

Lims ID: 440-222284-E-4

Lab Sample ID: 440-222284-4

Worklist Smp#: 34

Client ID: VER-20181015-FB

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

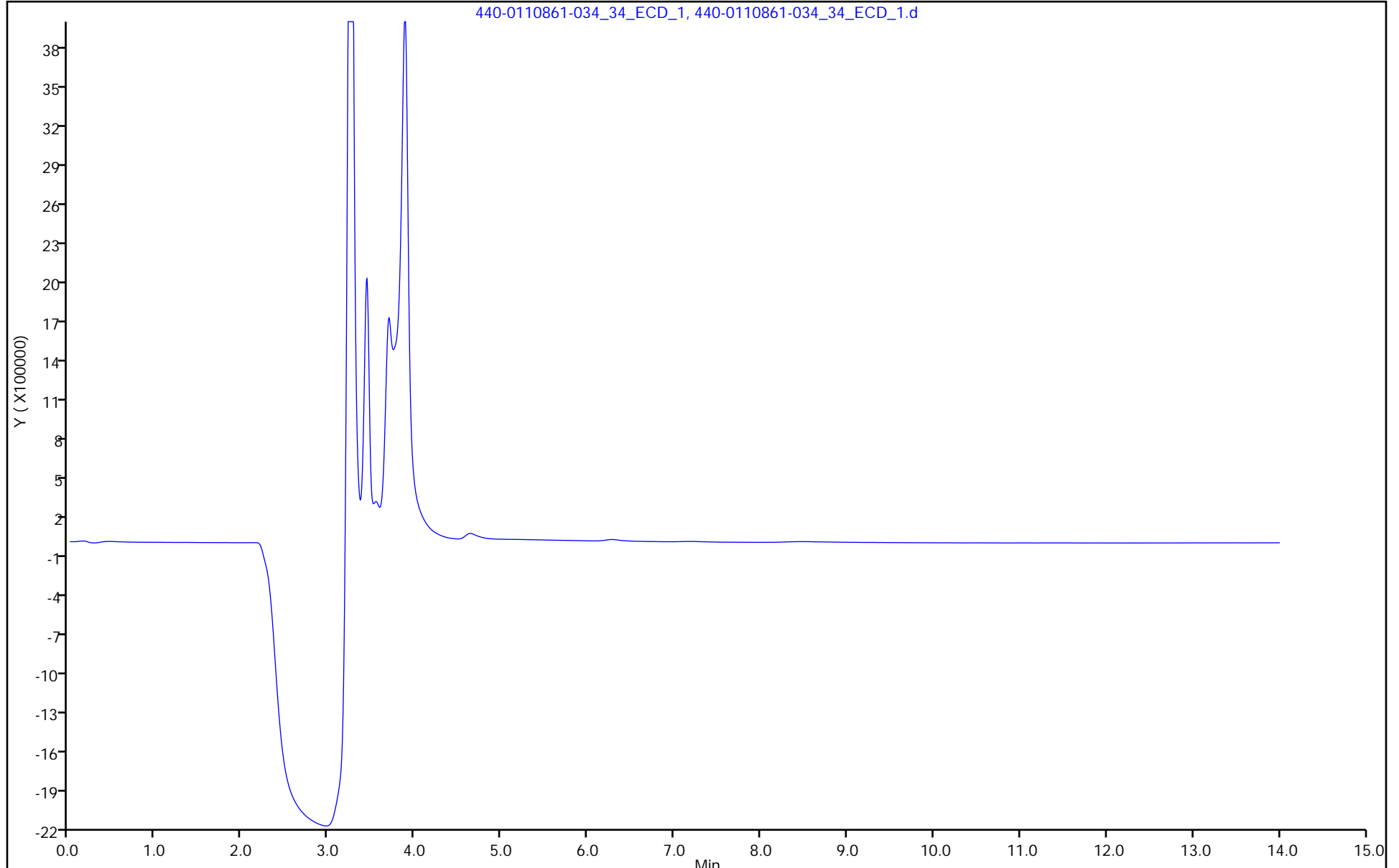
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: 440-0110861-035_35_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 14:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 17:10
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-035_35_ECD_1.d
 Lims ID: 440-222284-E-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 23-Oct-2018 17:10:00 ALS Bottle#: 0 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-035
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 02:03:31 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:55:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-035_35_ECD_1.d

Injection Date: 23-Oct-2018 17:10:00

Instrument ID: IC-25

Operator ID:

Lims ID: 440-222284-E-5

Lab Sample ID: 440-222284-5

Worklist Smp#: 35

Client ID: VER-20181015-EB

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

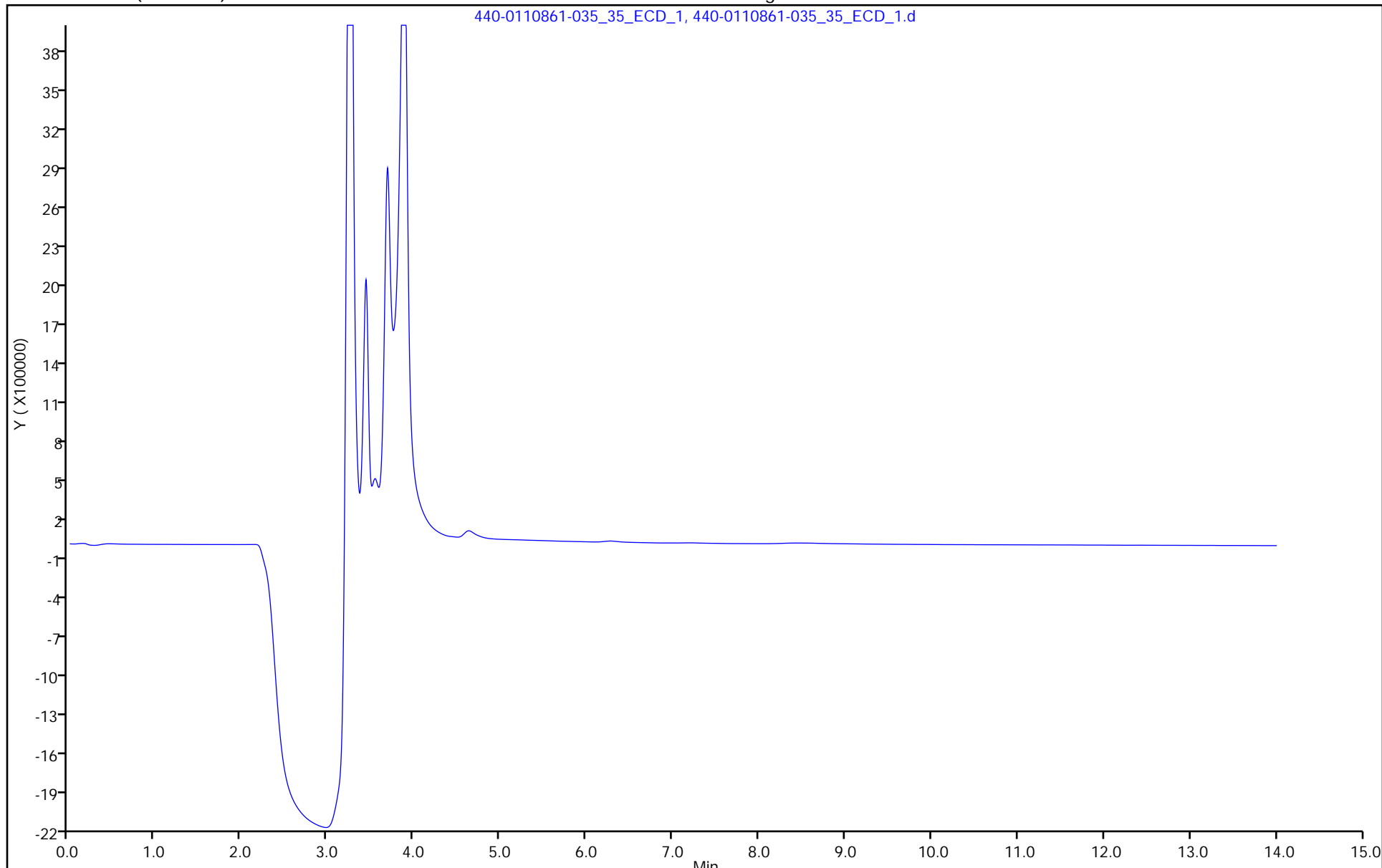
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 500813

SDG No.: _____

Instrument ID: IC-23 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2018 15:41 Calibration End Date: 09/24/2018 18:03 Calibration ID: 20020

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-500813/2	440-0109501-002_02_ECD_1.d
Level 2	STD2 440-500813/3	440-0109501-003_03_ECD_1.d
Level 3	STD3 440-500813/4	440-0109501-004_04_ECD_1.d
Level 4	STD4 440-500813/5	440-0109501-005_05_ECD_1.d
Level 5	STD5 440-500813/6	440-0109501-006_06_ECD_1.d
Level 6	STD6 440-500813/7	440-0109501-007_07_ECD_1.d
Level 7	STD7 440-500813/8	440-0109501-008_08_ECD_1.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perchlorate	10.713	10.715	10.718	10.716	10.694	10.684	10.674				10.178 - 11.249	10.702

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 500813

SDG No.: _____

Instrument ID: IC-23 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2018 15:41 Calibration End Date: 09/24/2018 18:03 Calibration ID: 20020

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-500813/2	440-0109501-002_02_ECD_1.d
Level 2	STD2 440-500813/3	440-0109501-003_03_ECD_1.d
Level 3	STD3 440-500813/4	440-0109501-004_04_ECD_1.d
Level 4	STD4 440-500813/5	440-0109501-005_05_ECD_1.d
Level 5	STD5 440-500813/6	440-0109501-006_06_ECD_1.d
Level 6	STD6 440-500813/7	440-0109501-007_07_ECD_1.d
Level 7	STD7 440-500813/8	440-0109501-008_08_ECD_1.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Perchlorate	129282 143782	114216 148000	127836 161129	123077	Qua	-37974.577	136316.245	252.027216					1.0000			0.9950

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 500813

SDG No.: _____

Instrument ID: IC-23 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2018 15:41 Calibration End Date: 09/24/2018 18:03 Calibration ID: 20020

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-500813/2	440-0109501-002_02_ECD_1.d
Level 2	STD2 440-500813/3	440-0109501-003_03_ECD_1.d
Level 3	STD3 440-500813/4	440-0109501-004_04_ECD_1.d
Level 4	STD4 440-500813/5	440-0109501-005_05_ECD_1.d
Level 5	STD5 440-500813/6	440-0109501-006_06_ECD_1.d
Level 6	STD6 440-500813/7	440-0109501-007_07_ECD_1.d
Level 7	STD7 440-500813/8	440-0109501-008_08_ECD_1.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perchlorate	Qua	129282 7399984	228432 16112904	511345	1230766	3594562	1.00 50.0	2.00 100	4.00	10.0	25.0

Curve Type Legend:

Qua = Quadratic

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-002_02_ECD_1.d
 Lims ID: std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-Sep-2018 16:01:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:03:55 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

First Level Reviewer: hoangch Date: 25-Sep-2018 07:01:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.713 10.713 0.000 129282 1.00 1.22

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-002_02_ECD_1.d

Injection Date: 24-Sep-2018 16:01:00

Instrument ID: IC-23

Operator ID:

Lims ID: std1

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

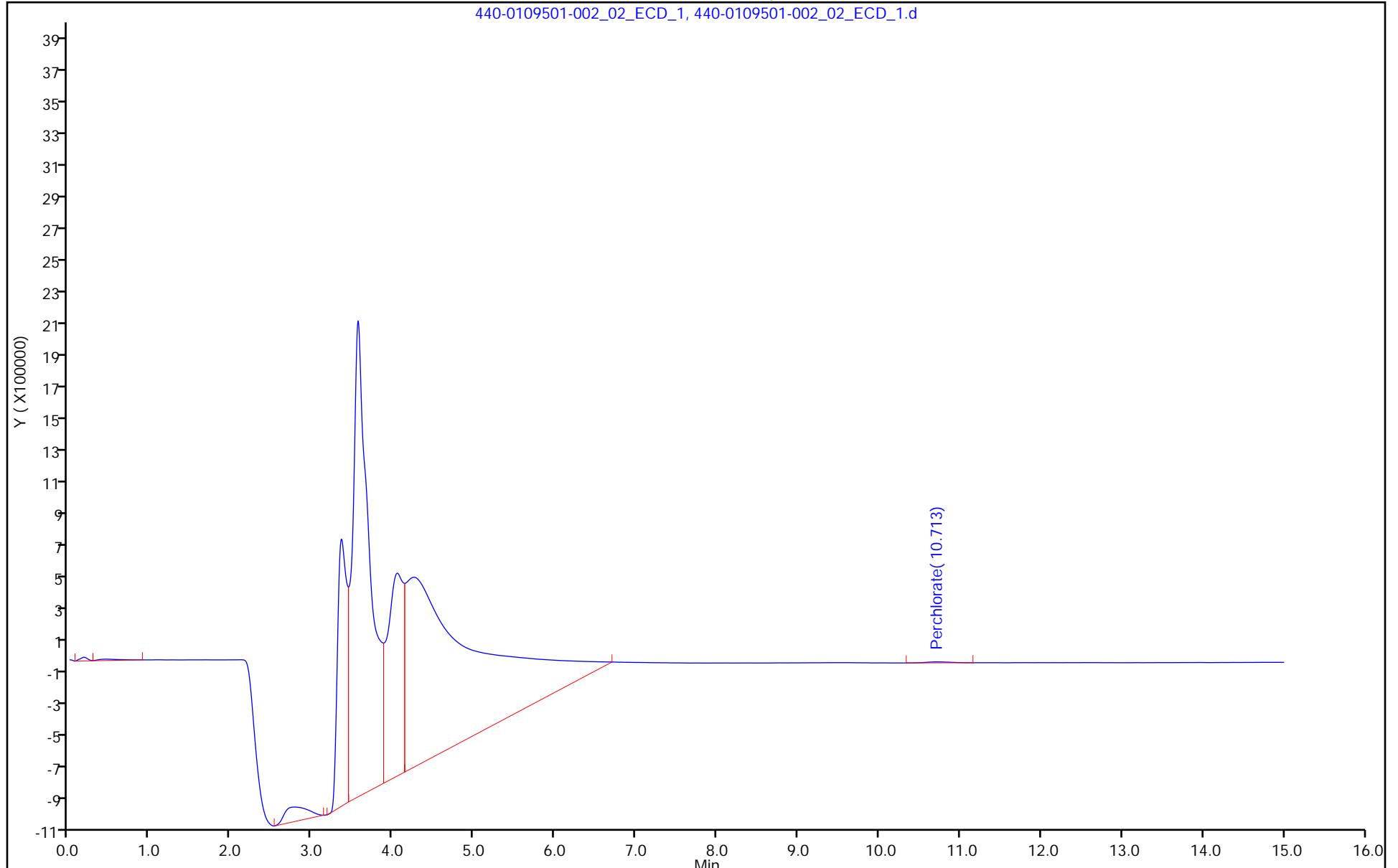
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-003_03_ECD_1.d
 Lims ID: std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-Sep-2018 16:21:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:03:57 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.715 10.713 0.002 228432 2.00 1.95

Reagents:

WCCLO41st-10_00016 Amount Added: 20.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-003_03_ECD_1.d

Injection Date: 24-Sep-2018 16:21:00

Instrument ID: IC-23

Operator ID:

Lims ID: std2

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

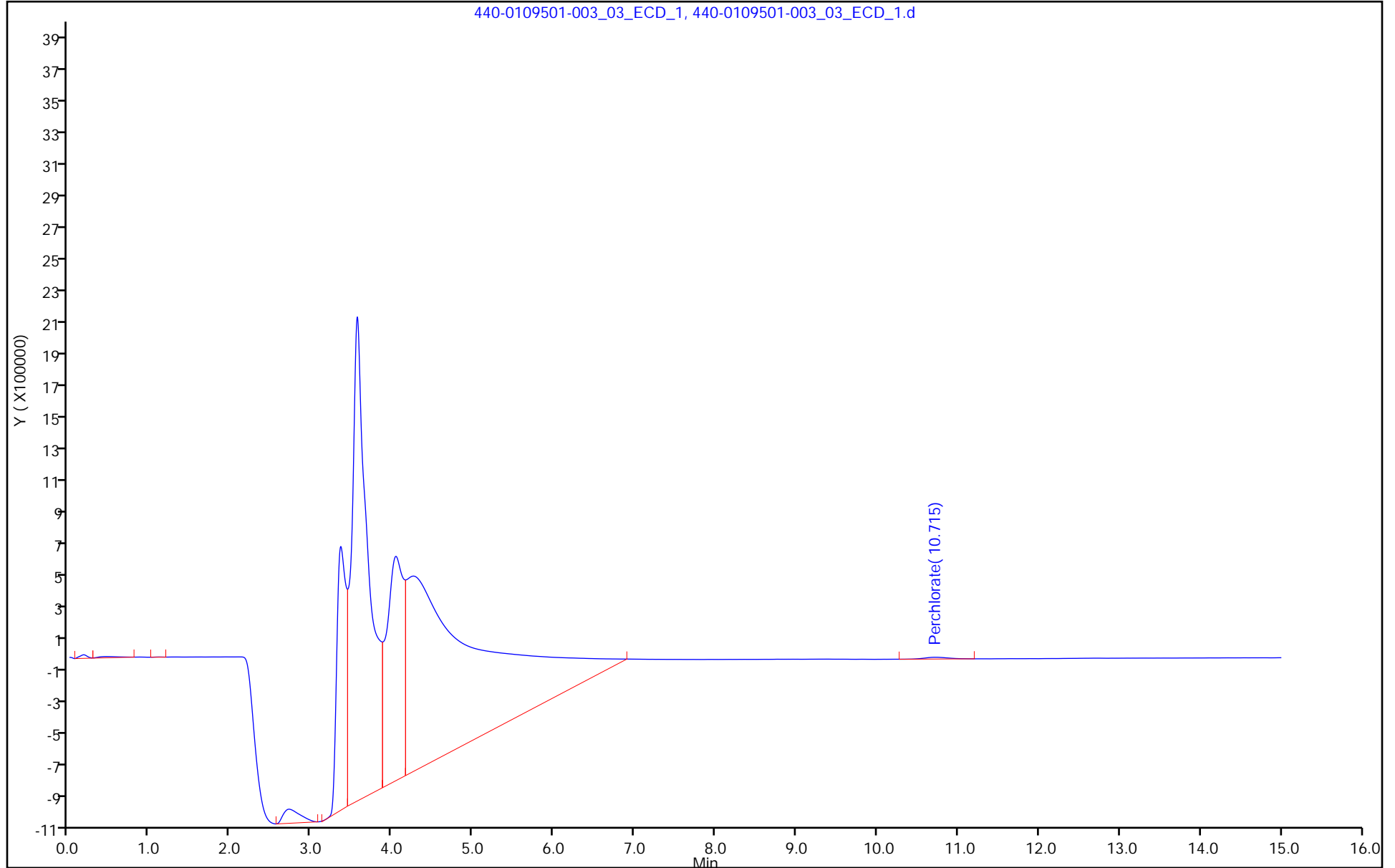
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-004_04_ECD_1.d
 Lims ID: std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 24-Sep-2018 16:41:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-004
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:01 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	10.718	10.713	0.005	511345	4.00	4.00	
---------------	--------	--------	-------	--------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 40.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-004_04_ECD_1.d

Injection Date: 24-Sep-2018 16:41:00

Instrument ID: IC-23

Operator ID:

Lims ID: std3

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

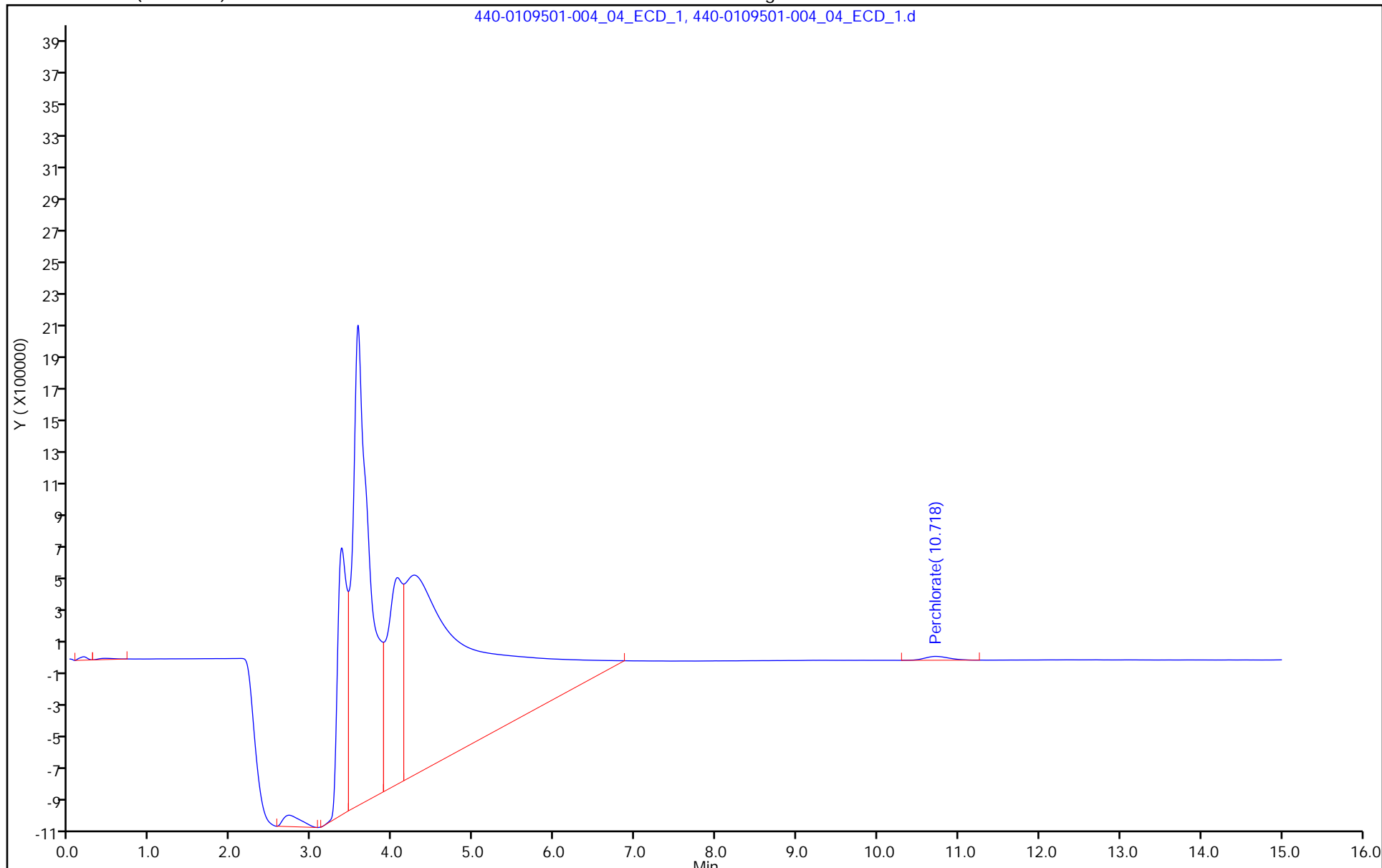
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-005_05_ECD_1.d
 Lims ID: std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-Sep-2018 17:02:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:03 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.716 10.713 0.003 1230766 10.0 9.15

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-005_05_ECD_1.d

Injection Date: 24-Sep-2018 17:02:00

Instrument ID: IC-23

Operator ID:

Lims ID: std4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

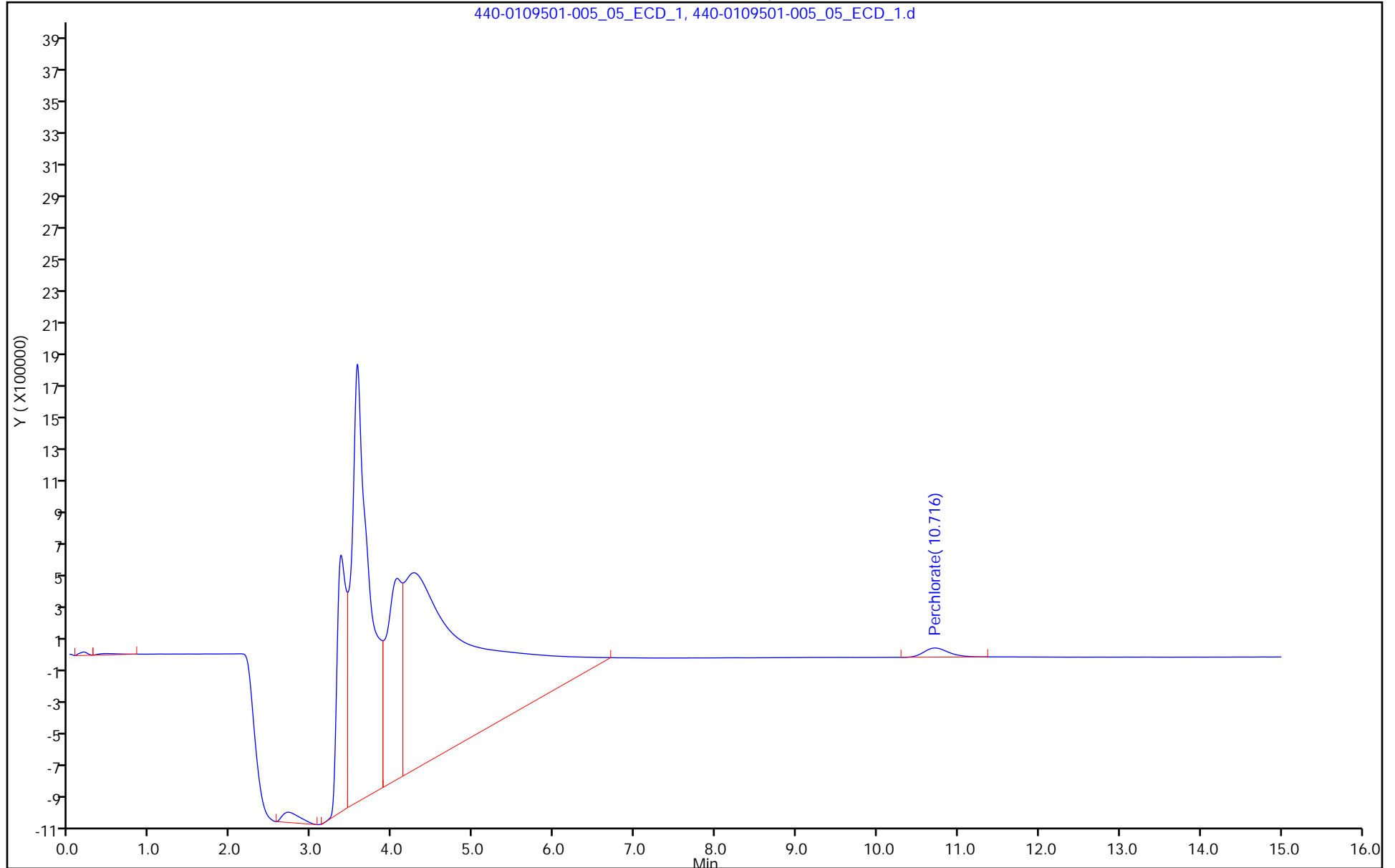
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-006_06_ECD_1.d
 Lims ID: std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 24-Sep-2018 17:22:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:04 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.694 10.713 -0.019 3594562 25.0 25.5

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-006_06_ECD_1.d

Injection Date: 24-Sep-2018 17:22:00

Instrument ID: IC-23

Operator ID:

Lims ID: std5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

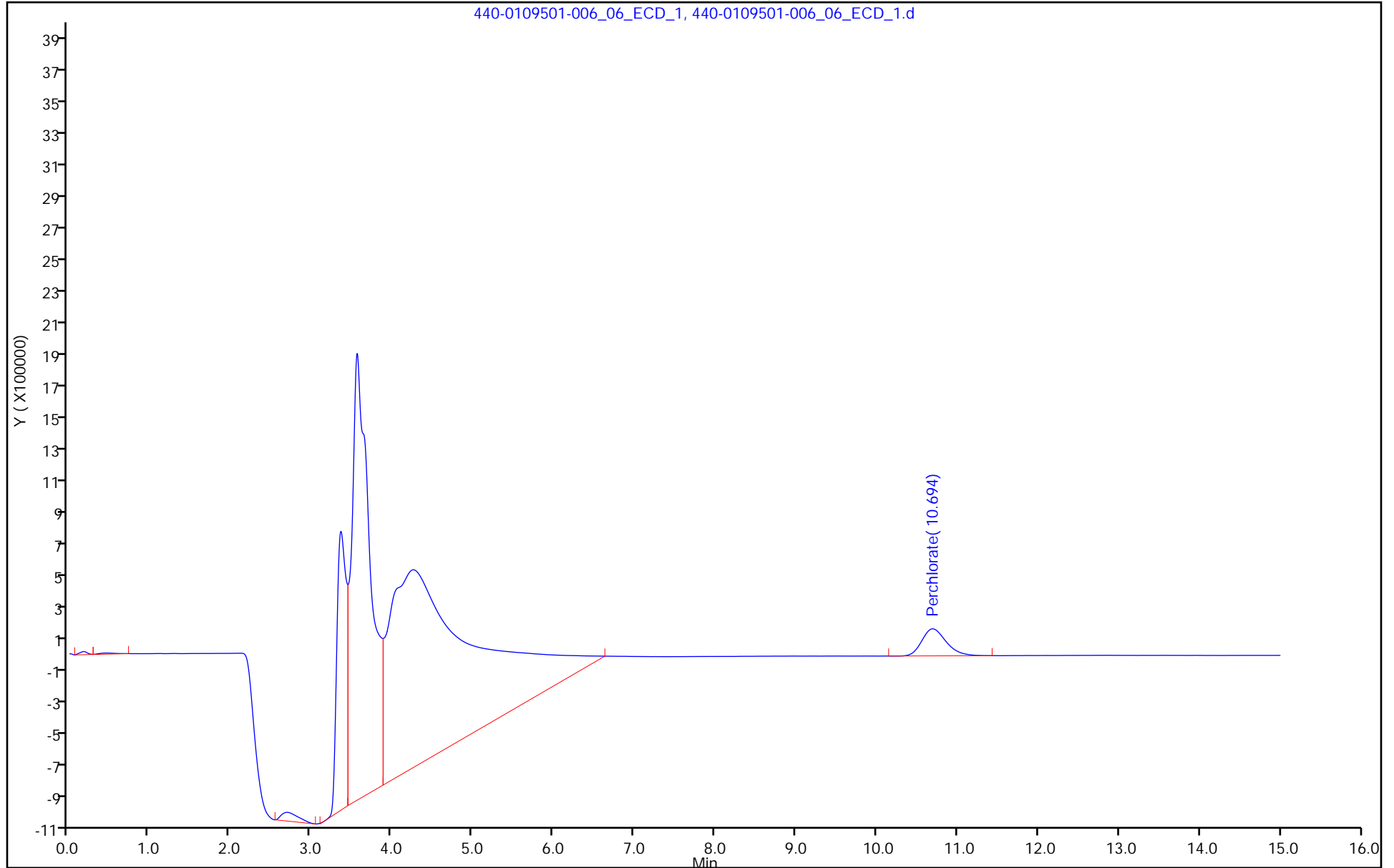
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-007_07_ECD_1.d
 Lims ID: std6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 24-Sep-2018 17:42:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-007
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:06 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.684 10.713 -0.029 7399984 50.0 50.0

Reagents:

WCCLO41st-10_00016 Amount Added: 500.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-007_07_ECD_1.d

Injection Date: 24-Sep-2018 17:42:00

Instrument ID: IC-23

Operator ID:

Lims ID: std6

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

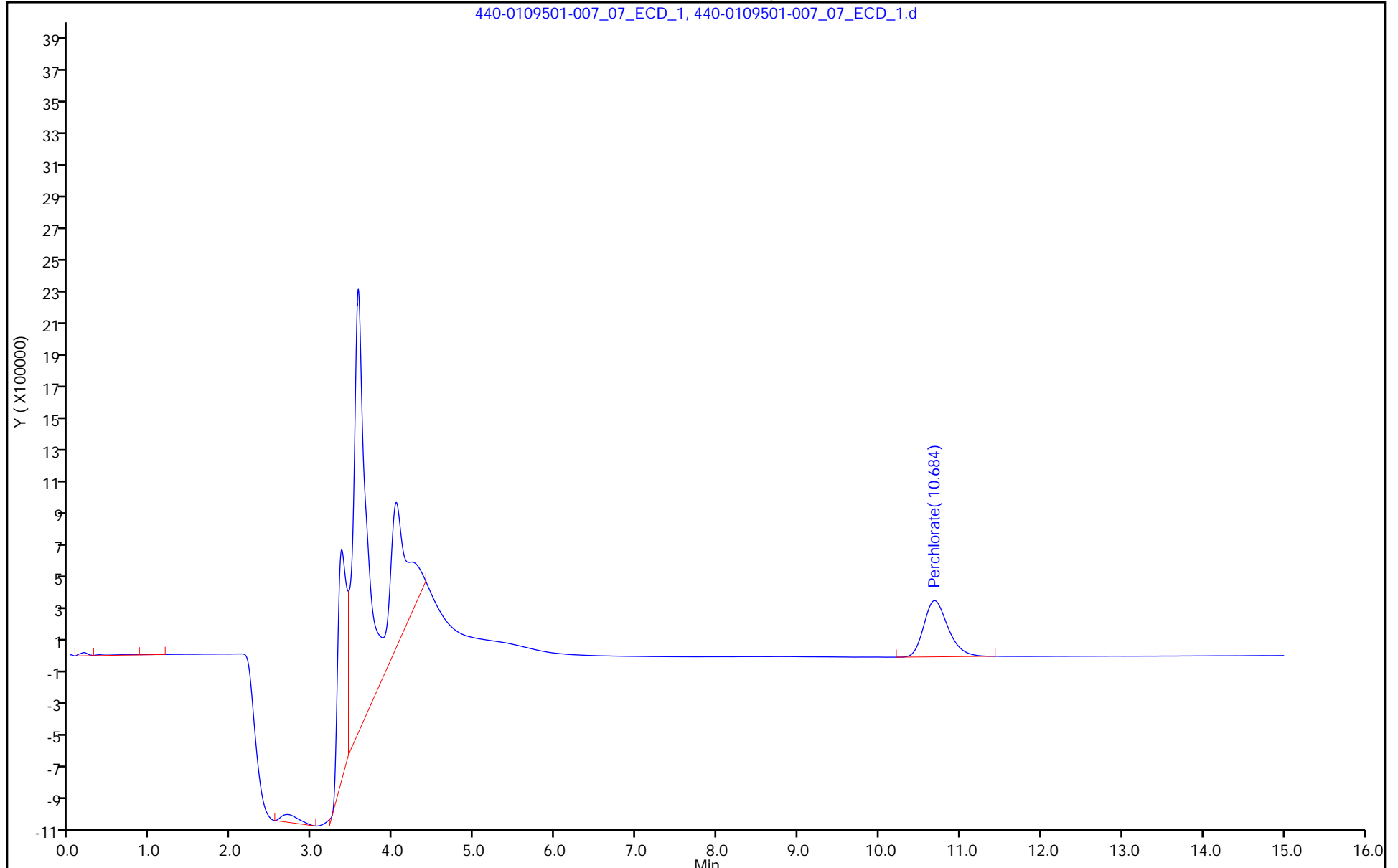
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Lims ID: std7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 24-Sep-2018 18:03:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-008
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:09 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.674 10.713 -0.039 16112904 100.0 100.0

Reagents:

WCCLO41st-10_00016 Amount Added: 1000.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d

Injection Date: 24-Sep-2018 18:03:00

Instrument ID: IC-23

Operator ID:

Lims ID: std7

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

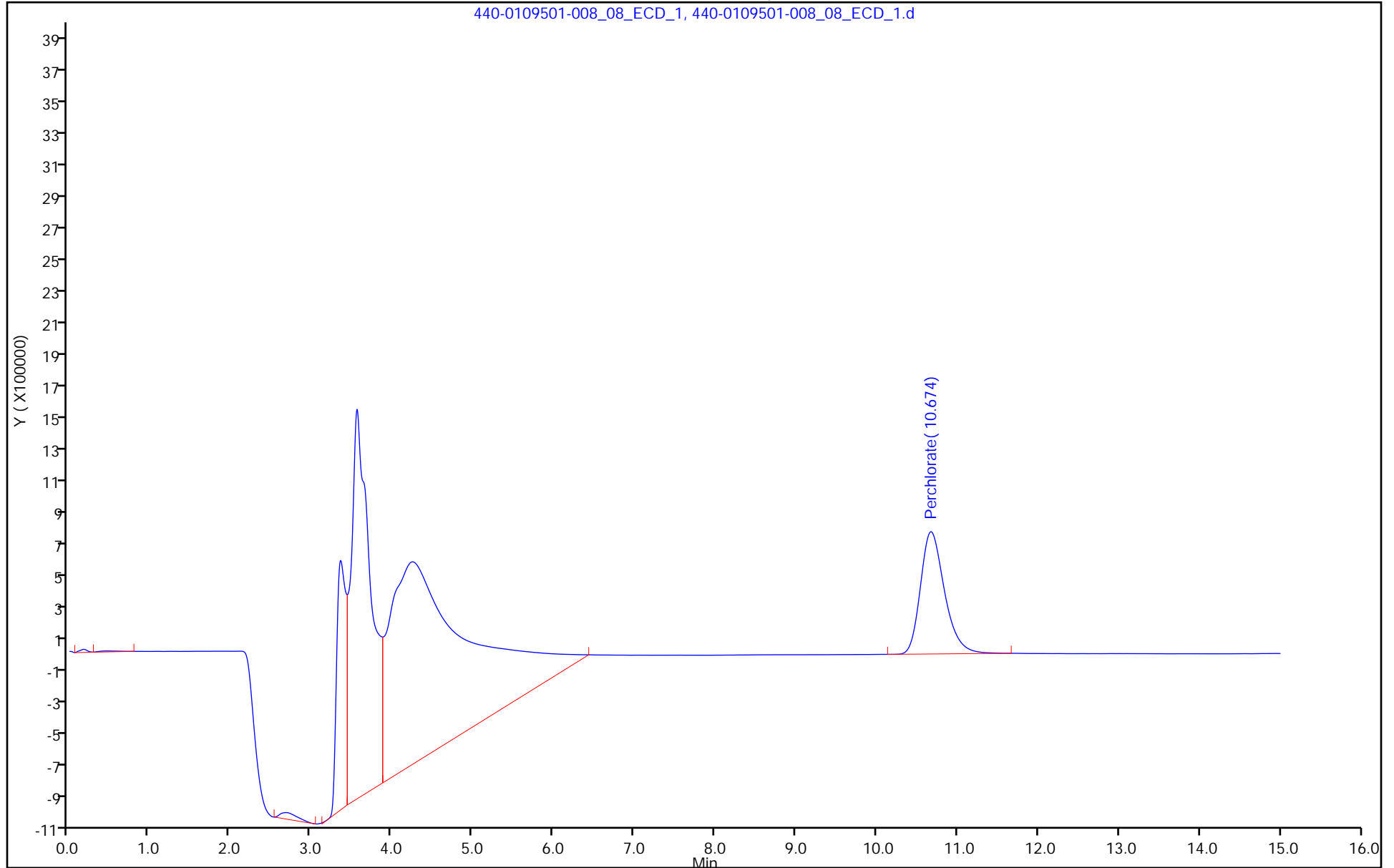
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



Calibration

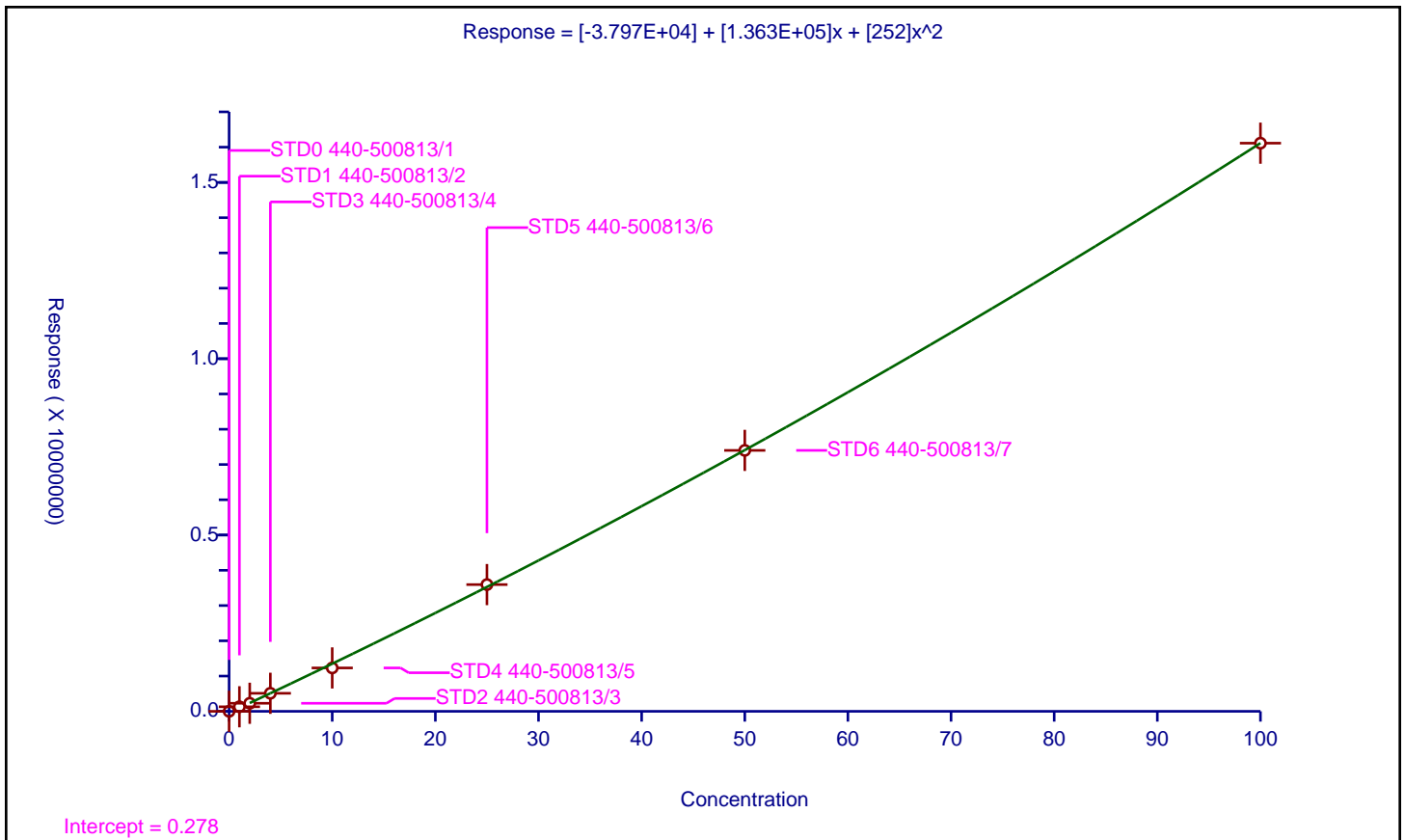
/ Perchlorate

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	-3.797E+04
Slope:	1.363E+05
Second Order:	252

Error Coefficients	
Standard Error:	65300
Relative Standard Error:	12.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-500813/1	0.0	0.0			NaN	Y
2	STD1 440-500813/2	1.0	129282.0			129282.0	Y
3	STD2 440-500813/3	2.0	228432.0			114216.0	Y
4	STD3 440-500813/4	4.0	511345.0			127836.25	Y
5	STD4 440-500813/5	10.0	1230766.0			123076.6	Y
6	STD5 440-500813/6	25.0	3594562.0			143782.48	Y
7	STD6 440-500813/7	50.0	7399984.0			147999.68	Y
8	STD7 440-500813/8	100.0	16112904.0			161129.04	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 506781

SDG No.: _____

Instrument ID: IC-24 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 16:36 Calibration End Date: 10/22/2018 19:08 Calibration ID: 20233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-506781/2	440-0110854-00202ECD_1.d
Level 2	STD2 440-506781/3	440-0110854-00303ECD_1.d
Level 3	STD3 440-506781/4	440-0110854-00404ECD_1.d
Level 4	STD4 440-506781/5	440-0110854-00505ECD_1.d
Level 5	STD5 440-506781/6	440-0110854-00606ECD_1.d
Level 6	STD6 440-506781/7	440-0110854-00707ECD_1.d
Level 7	STD7 440-506781/8	440-0110854-00808ECD_1.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perchlorate	13.367	13.341	13.331	13.317	13.307	13.287	13.267				12.699 - 14.036	13.317

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 506781

SDG No.: _____

Instrument ID: IC-24 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 16:36 Calibration End Date: 10/22/2018 19:08 Calibration ID: 20233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-506781/2	440-0110854-00202ECD_1.d
Level 2	STD2 440-506781/3	440-0110854-00303ECD_1.d
Level 3	STD3 440-506781/4	440-0110854-00404ECD_1.d
Level 4	STD4 440-506781/5	440-0110854-00505ECD_1.d
Level 5	STD5 440-506781/6	440-0110854-00606ECD_1.d
Level 6	STD6 440-506781/7	440-0110854-00707ECD_1.d
Level 7	STD7 440-506781/8	440-0110854-00808ECD_1.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Perchlorate	114767 121847	133739 130381	139032 136450	132967	Qua	23380.5494	121595.235	146.831609					1.0000			0.9950

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 506781

SDG No.: _____

Instrument ID: IC-24 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/22/2018 16:36 Calibration End Date: 10/22/2018 19:08 Calibration ID: 20233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-506781/2	440-0110854-00202ECD_1.d
Level 2	STD2 440-506781/3	440-0110854-00303ECD_1.d
Level 3	STD3 440-506781/4	440-0110854-00404ECD_1.d
Level 4	STD4 440-506781/5	440-0110854-00505ECD_1.d
Level 5	STD5 440-506781/6	440-0110854-00606ECD_1.d
Level 6	STD6 440-506781/7	440-0110854-00707ECD_1.d
Level 7	STD7 440-506781/8	440-0110854-00808ECD_1.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perchlorate	Qua	114767 6519038	267477 13644995	556129	1329674	3046181	1.00 50.0	2.00 100	4.00	10.0	25.0

Curve Type Legend:

Qua = Quadratic

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00202ECD_1.d
 Lims ID: std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Oct-2018 16:54:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:06 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 22-Oct-2018 18:12:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	13.367	13.367	0.000	114767	1.00	0.7509	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00202ECD_1.d

Injection Date: 22-Oct-2018 16:54:00

Instrument ID: IC-24

Operator ID:

Lims ID: std1

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

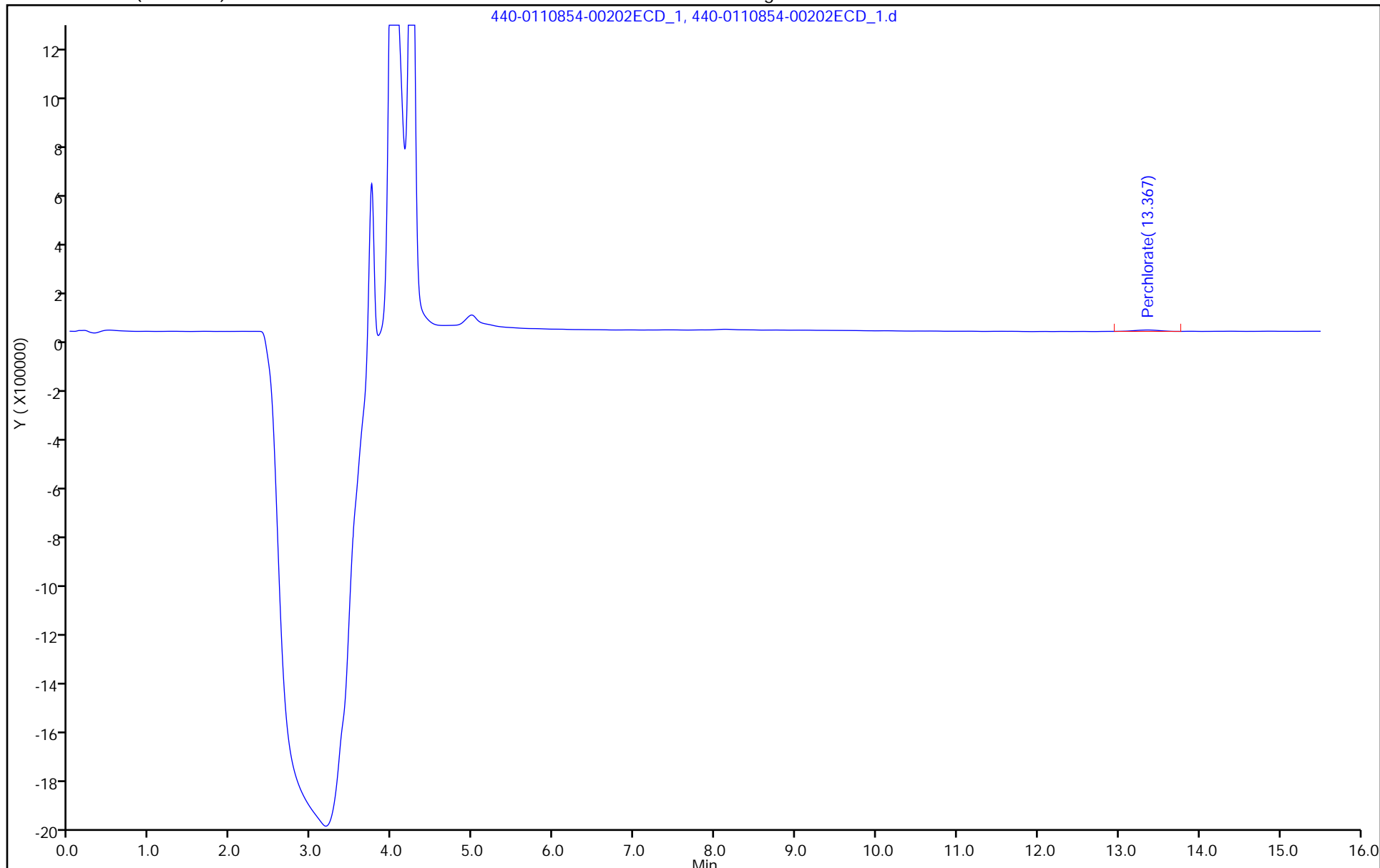
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

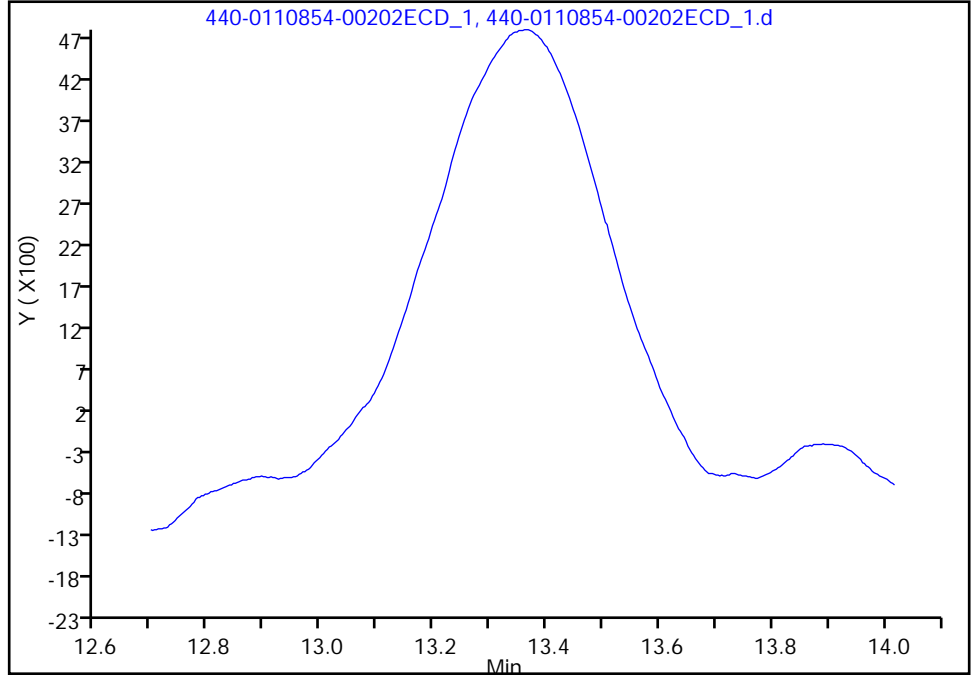
Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00202ECD_1.d
Injection Date: 22-Oct-2018 16:54:00 Instrument ID: IC-24
Lims ID: std1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_24Perchlorate Limit Group: IC-314
Column: AS16 (2.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

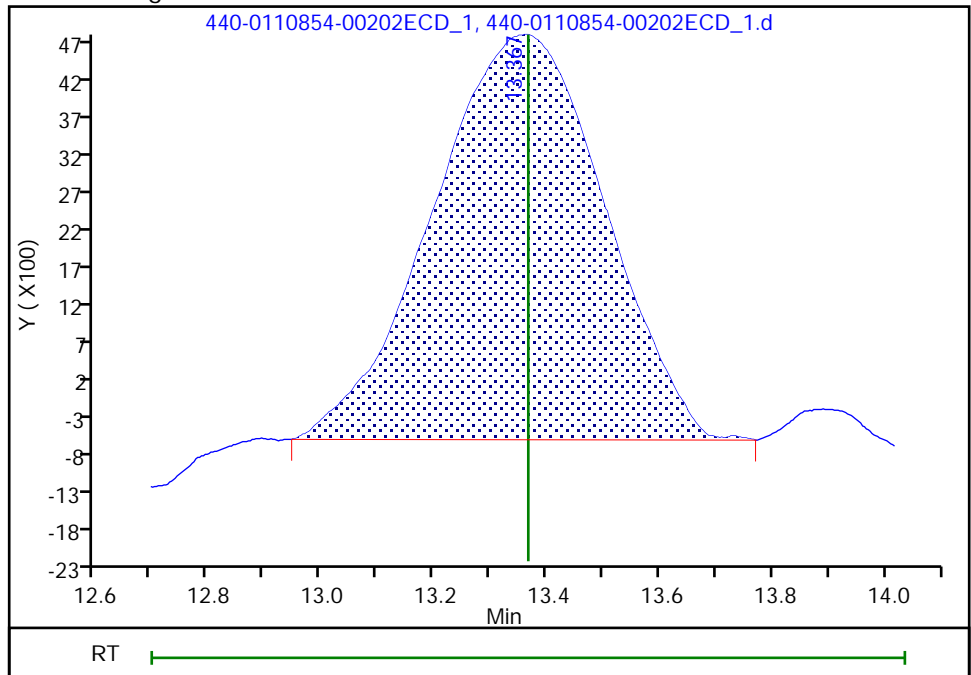
Signal: 1

Not Detected
Expected RT: 13.37

Processing Integration Results



Manual Integration Results



RT: 13.37
Area: 114767
Amount: 0.750882
Amount Units: ug/l

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00303ECD_1.d
 Lims ID: std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Oct-2018 17:12:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:07 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 22-Oct-2018 18:12:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	13.341	13.367	-0.026	267477	2.00	2.00	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

WCCLO41st-10_00016 Amount Added: 20.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00303ECD_1.d

Injection Date: 22-Oct-2018 17:12:00

Instrument ID: IC-24

Operator ID:

Lims ID: std2

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

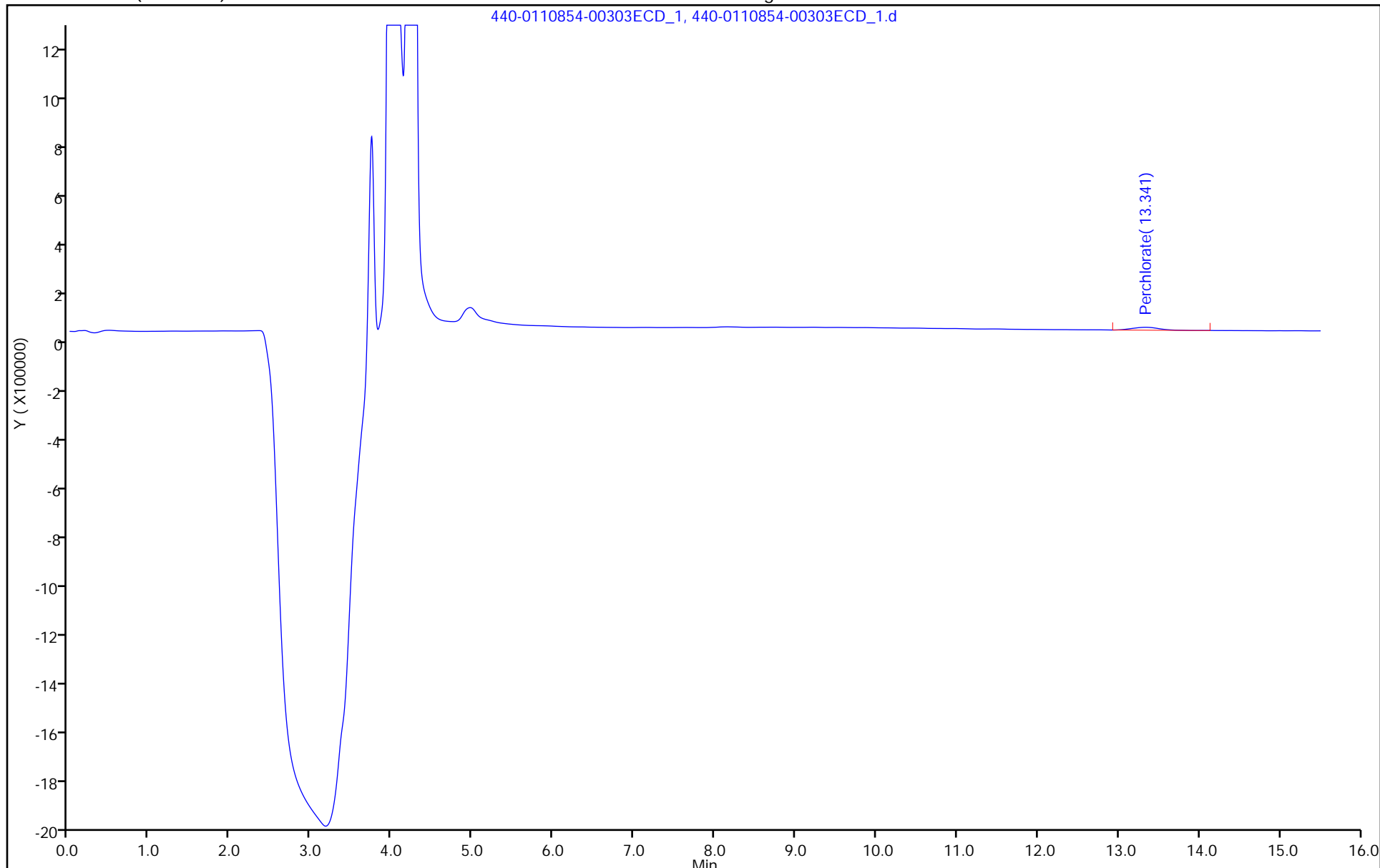
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

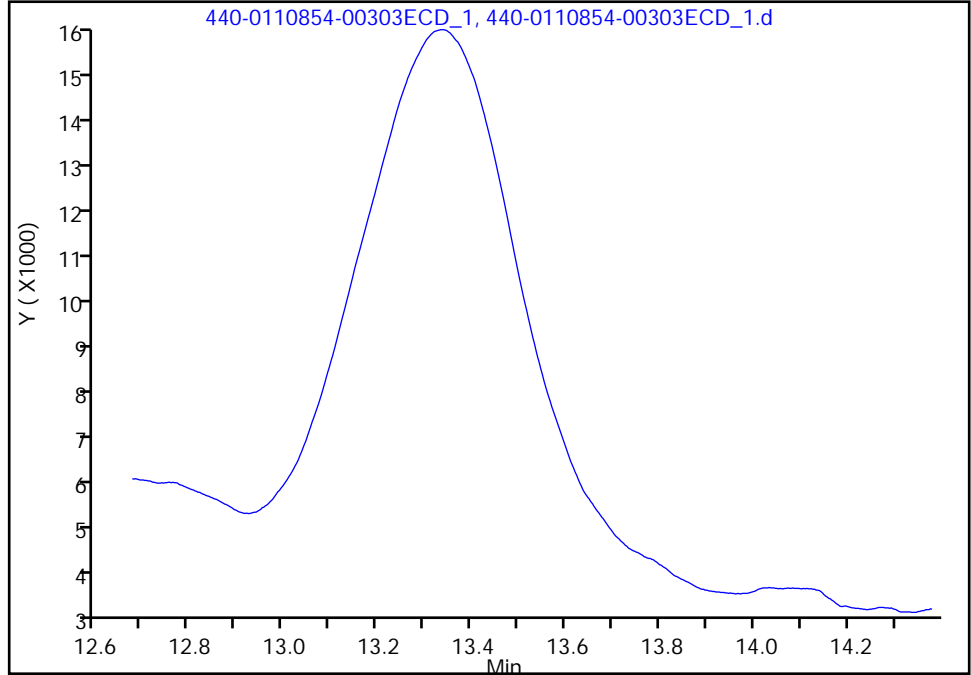
Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00303ECD_1.d
Injection Date: 22-Oct-2018 17:12:00 Instrument ID: IC-24
Lims ID: std2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_24Perchlorate Limit Group: IC-314
Column: AS16 (2.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

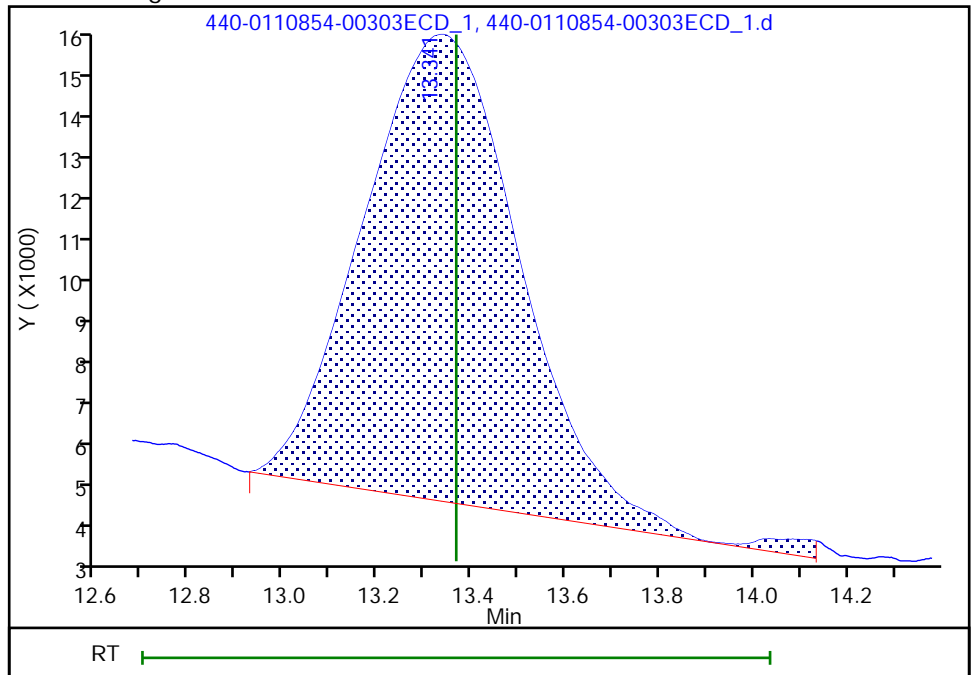
Not Detected
Expected RT: 13.37

Processing Integration Results



Manual Integration Results

RT: 13.34
Area: 267477
Amount: 2.002608
Amount Units: ug/l



Reviewer: hoangch, 22-Oct-2018 18:12:12
Audit Action: Assigned Compound ID

Audit Reason:

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00404ECD_1.d
 Lims ID: std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Oct-2018 17:31:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-004
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:09 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 22-Oct-2018 18:12:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	13.331	13.367	-0.036	556129	4.00	4.36	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

WCCLO41st-10_00016 Amount Added: 40.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00404ECD_1.d

Injection Date: 22-Oct-2018 17:31:00

Instrument ID: IC-24

Operator ID:

Lims ID: std3

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

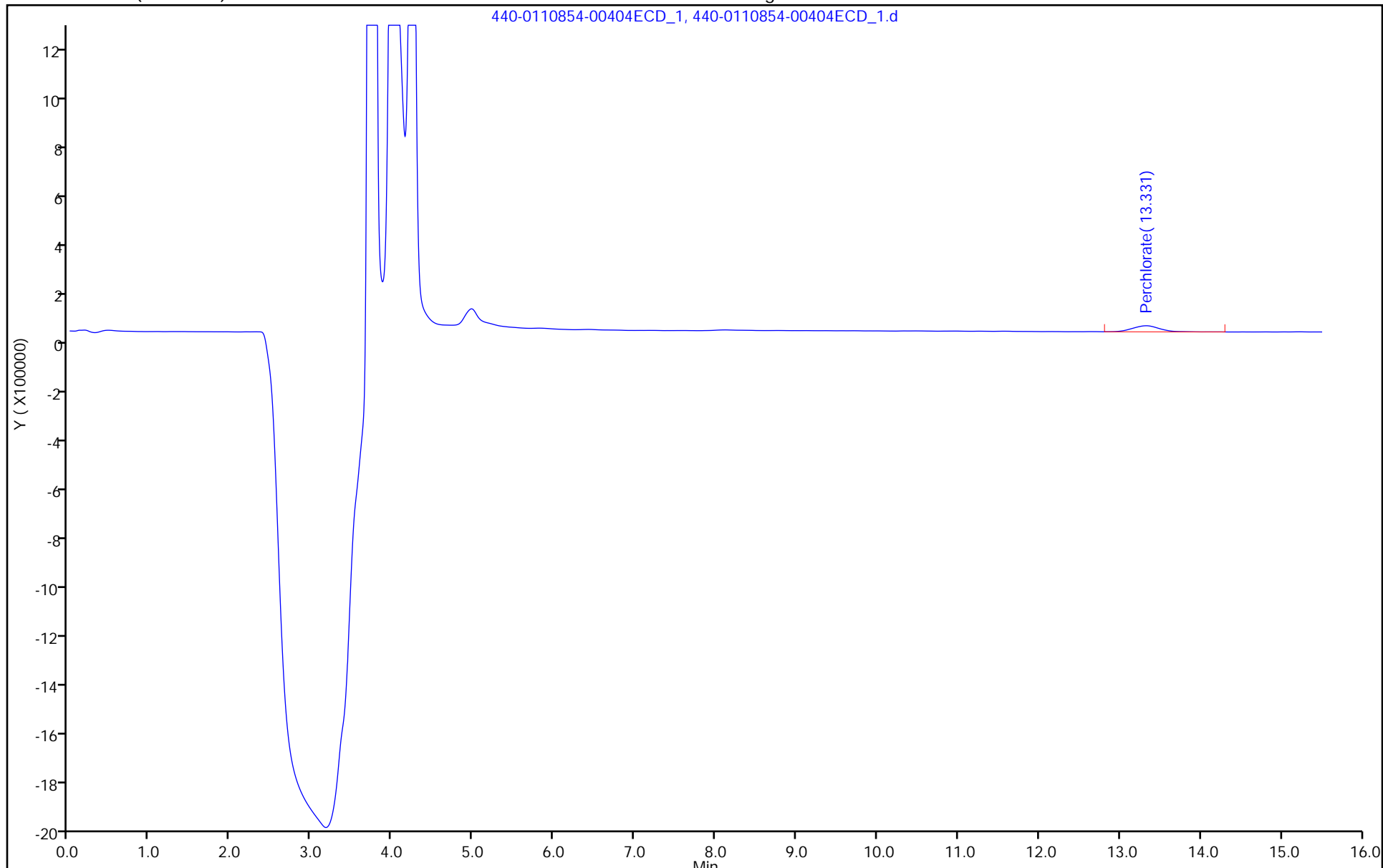
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

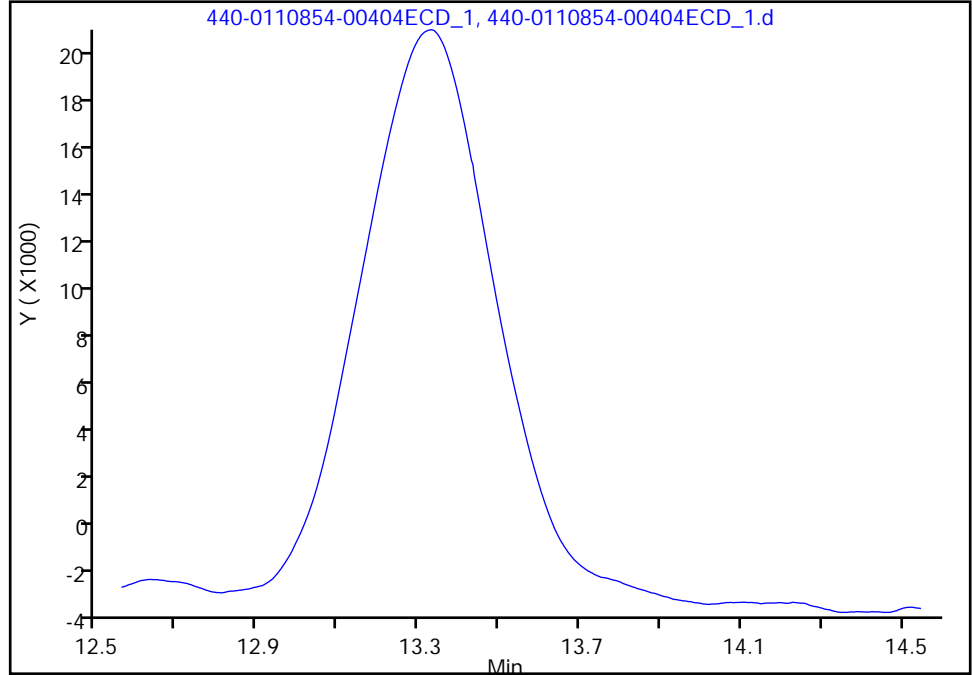
Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00404ECD_1.d
Injection Date: 22-Oct-2018 17:31:00 Instrument ID: IC-24
Lims ID: std3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_24Perchlorate Limit Group: IC-314
Column: AS16 (2.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

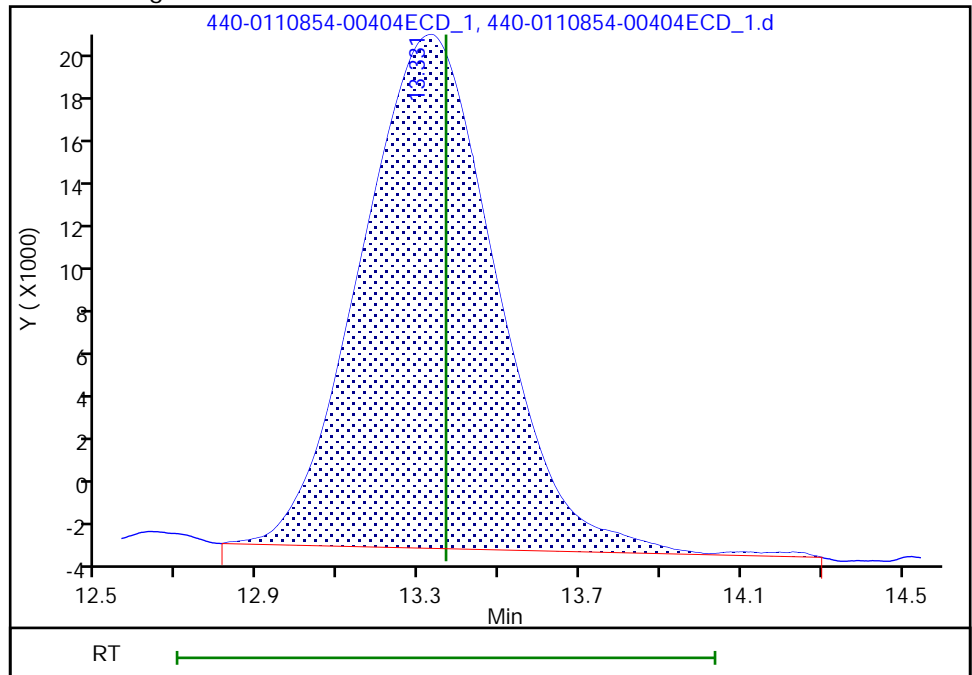
Not Detected
Expected RT: 13.37

Processing Integration Results



Manual Integration Results

RT: 13.33
Area: 556129
Amount: 4.358389
Amount Units: ug/l



Reviewer: hoangch, 22-Oct-2018 18:12:22
Audit Action: Assigned Compound ID

Audit Reason:

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00505ECD_1.d
 Lims ID: std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Oct-2018 18:13:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:13 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.317 13.367 -0.050 1329674 10.0 10.6

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00505ECD_1.d

Injection Date: 22-Oct-2018 18:13:00

Instrument ID: IC-24

Operator ID:

Lims ID: std4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

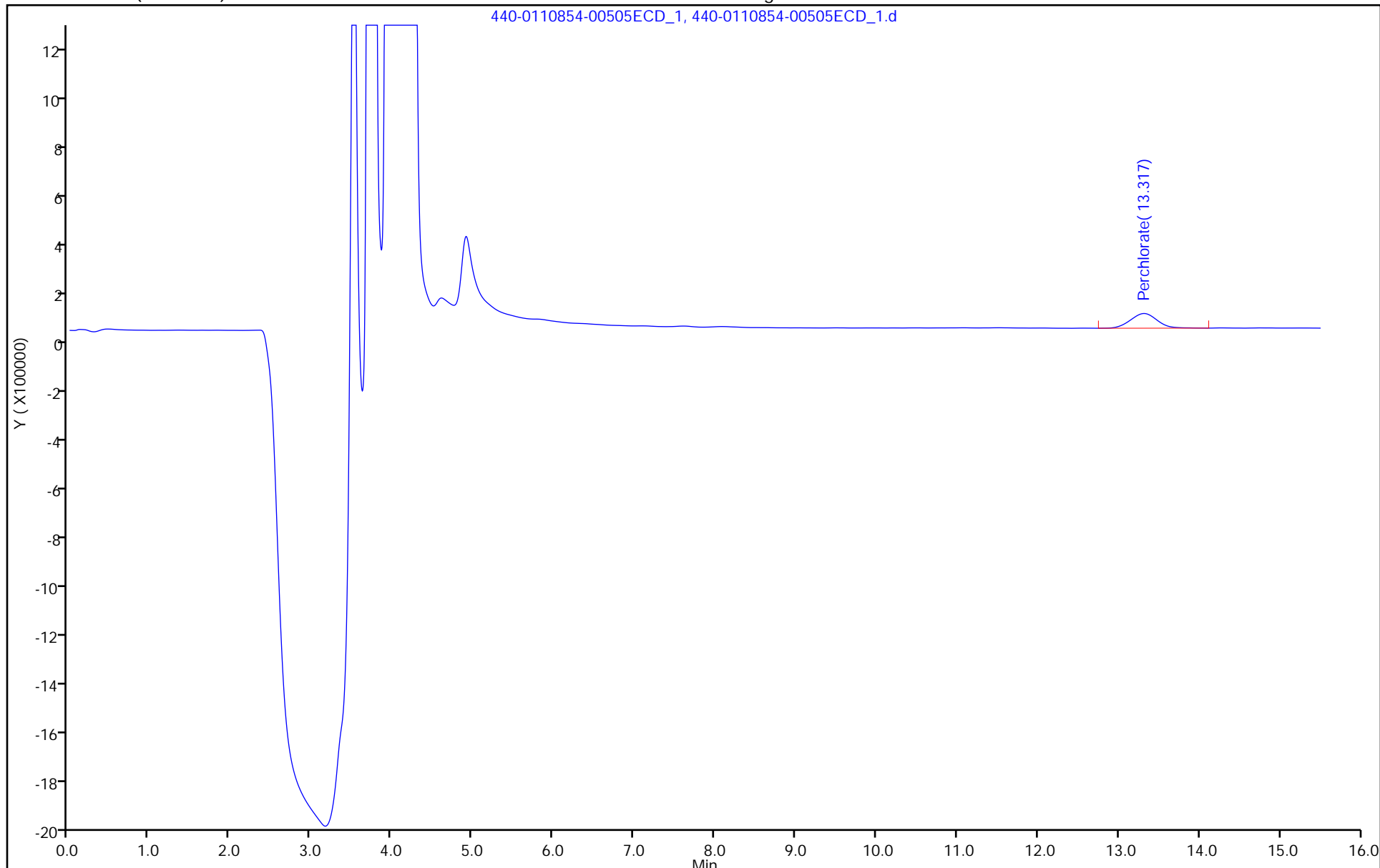
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00606ECD_1.d
 Lims ID: std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-Oct-2018 18:31:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:14 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	13.307	13.367	-0.060	3046181	25.0	24.2	
---------------	--------	--------	--------	---------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00606ECD_1.d

Injection Date: 22-Oct-2018 18:31:00

Instrument ID: IC-24

Operator ID:

Lims ID: std5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

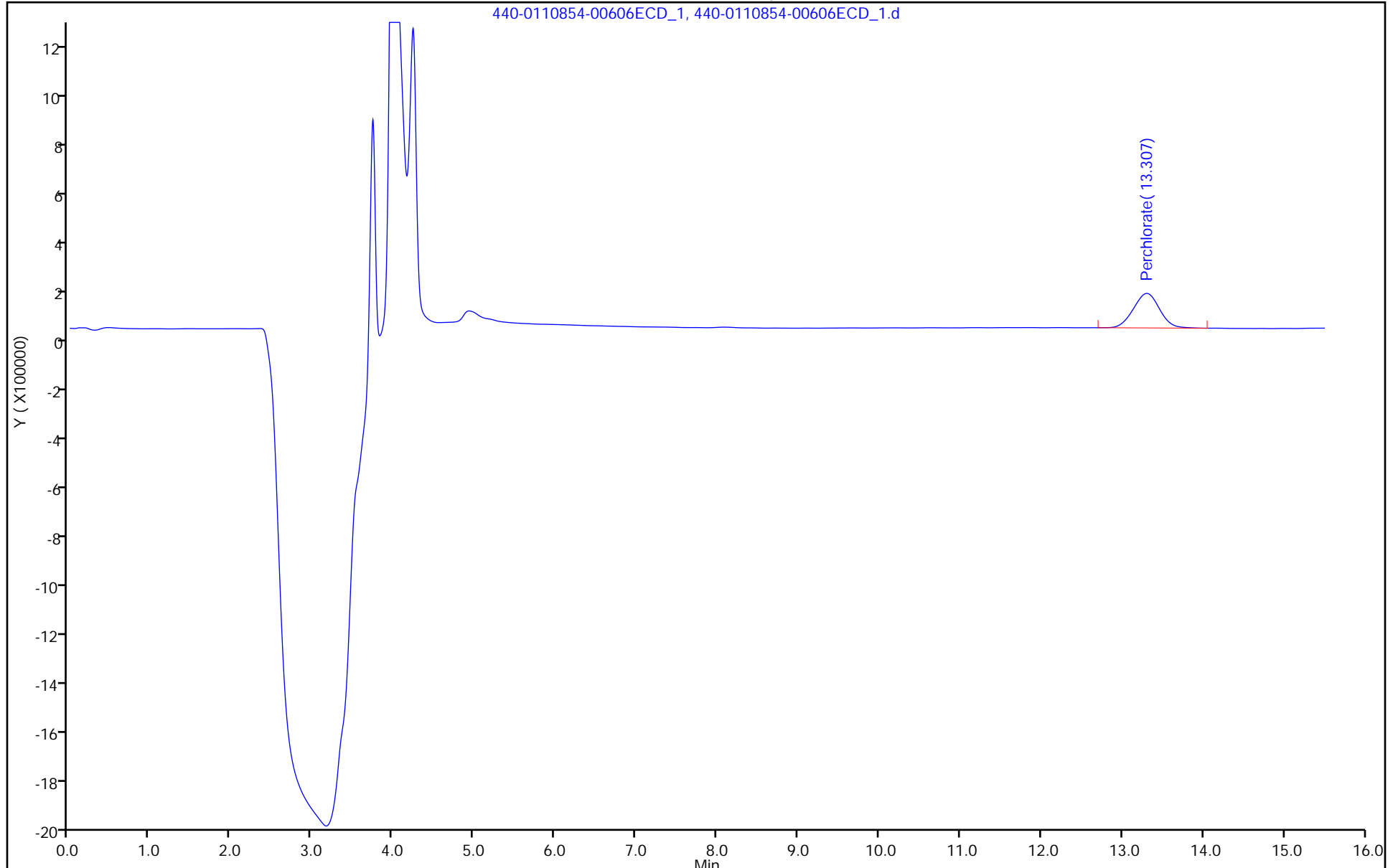
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00707ECD_1.d
 Lims ID: std6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-Oct-2018 18:50:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-007
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:15 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.287 13.367 -0.080 6519038 50.0 50.4

Reagents:

WCCLO41st-10_00016 Amount Added: 500.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00707ECD_1.d

Injection Date: 22-Oct-2018 18:50:00

Instrument ID: IC-24

Operator ID:

Lims ID: std6

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

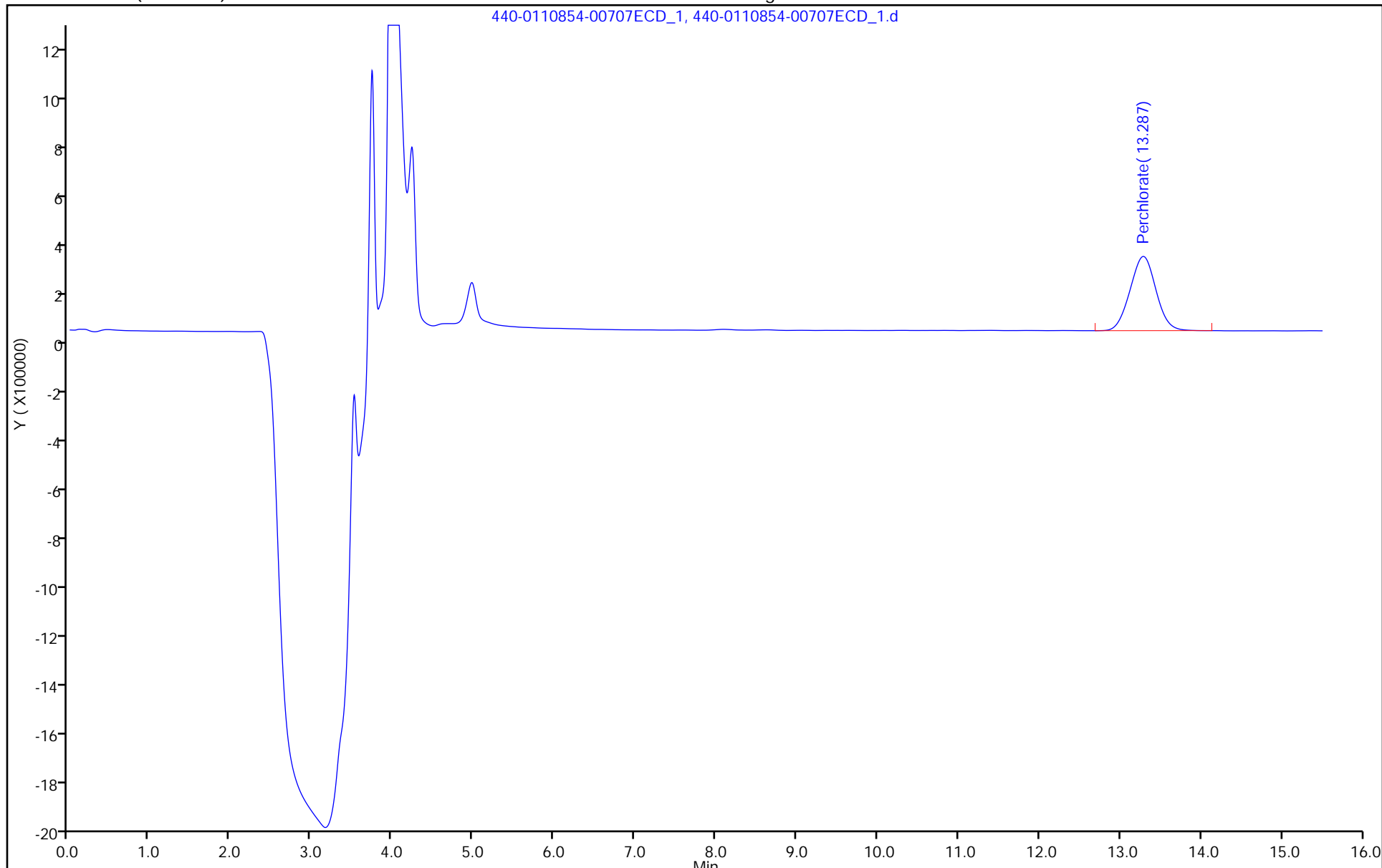
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Lims ID: std7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-Oct-2018 19:08:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-008
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:17 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.267 13.367 -0.100 13644995 100.0 100.0

Reagents:

WCCLO41st-10_00016 Amount Added: 1000.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d

Injection Date: 22-Oct-2018 19:08:00

Instrument ID: IC-24

Operator ID:

Lims ID: std7

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

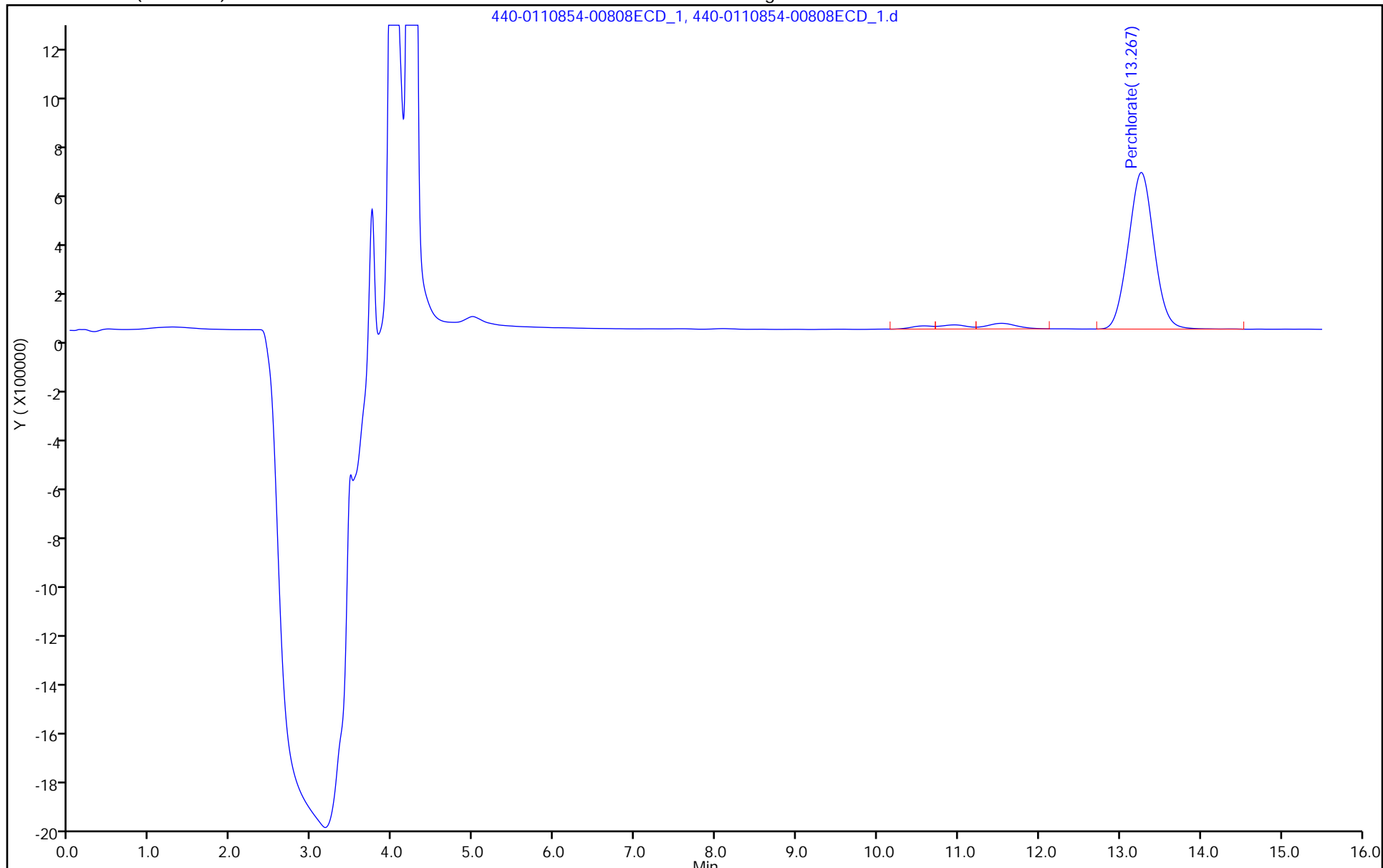
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



Calibration

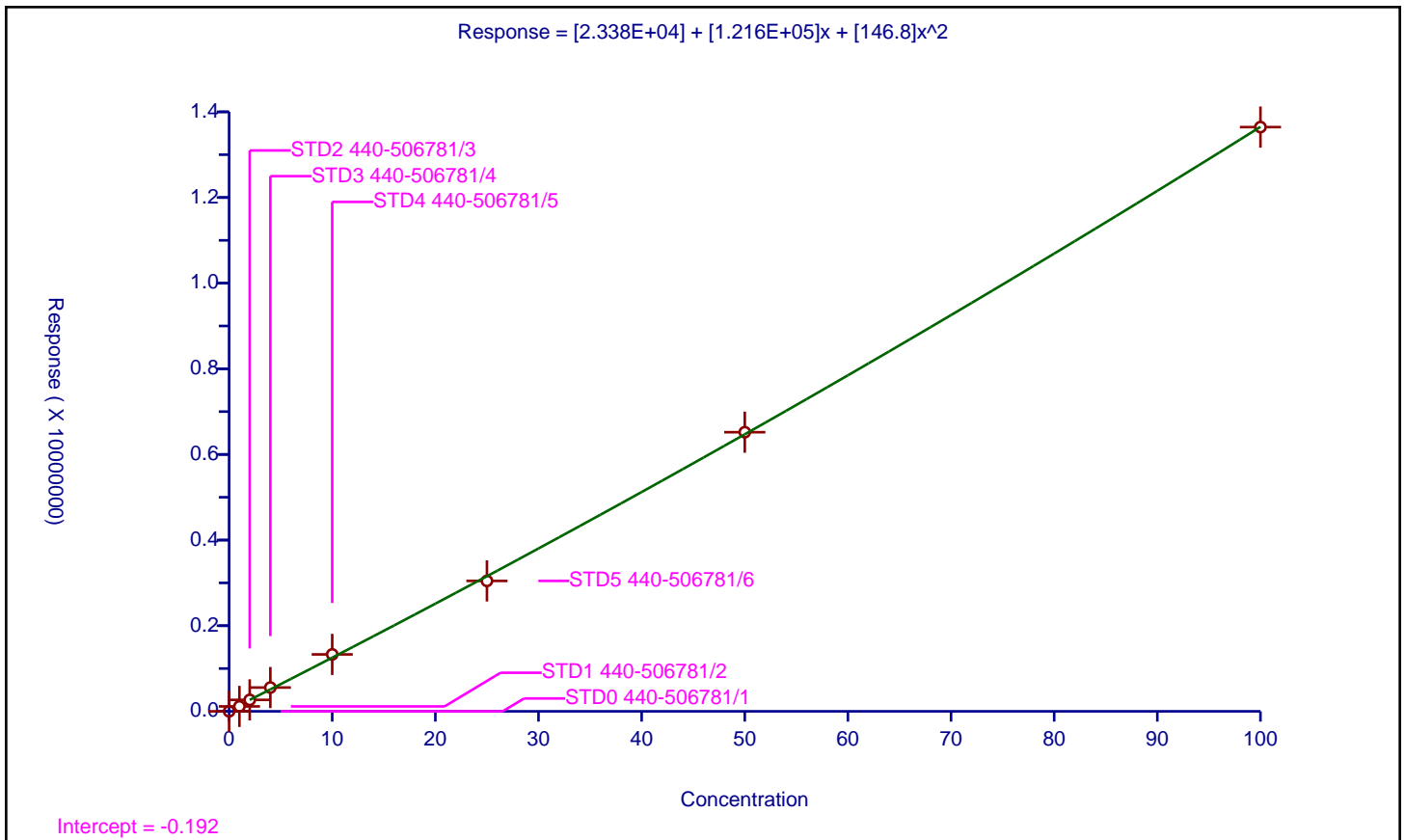
/ Perchlorate

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	2.338E+04
Slope:	1.216E+05
Second Order:	146.8

Error Coefficients	
Standard Error:	68400
Relative Standard Error:	13.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-506781/1	0.0	0.0			NaN	Y
2	STD1 440-506781/2	1.0	114767.0			114767.0	Y
3	STD2 440-506781/3	2.0	267477.0			133738.5	Y
4	STD3 440-506781/4	4.0	556129.0			139032.25	Y
5	STD4 440-506781/5	10.0	1329674.0			132967.4	Y
6	STD5 440-506781/6	25.0	3046181.0			121847.24	Y
7	STD6 440-506781/7	50.0	6519038.0			130380.76	Y
8	STD7 440-506781/8	100.0	13644995.0			136449.95	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 502906

SDG No.: _____

Instrument ID: IC-25 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2018 09:24 Calibration End Date: 10/04/2018 11:19 Calibration ID: 20074

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-502906/2	440-0109994-002_2_ECD_1.d
Level 2	STD2 440-502906/3	440-0109994-003_3_ECD_1.d
Level 3	STD3 440-502906/4	440-0109994-004_4_ECD_1.d
Level 4	STD4 440-502906/5	440-0109994-005_5_ECD_1.d
Level 5	STD5 440-502906/6	440-0109994-006_6_ECD_1.d
Level 6	STD6 440-502906/7	440-0109994-007_7_ECD_1.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Perchlorate	11.111	11.090	11.090	11.087	11.081	11.087					10.555 - 11.666	11.091

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 502906

SDG No.: _____

Instrument ID: IC-25 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2018 09:24 Calibration End Date: 10/04/2018 11:19 Calibration ID: 20074

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-502906/2	440-0109994-002_2_ECD_1.d
Level 2	STD2 440-502906/3	440-0109994-003_3_ECD_1.d
Level 3	STD3 440-502906/4	440-0109994-004_4_ECD_1.d
Level 4	STD4 440-502906/5	440-0109994-005_5_ECD_1.d
Level 5	STD5 440-502906/6	440-0109994-006_6_ECD_1.d
Level 6	STD6 440-502906/7	440-0109994-007_7_ECD_1.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Perchlorate	160084 124350	154806 122773	128049	115983	Qua	34929.1178	116156.308	217.175740						0.9990		0.9950

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 502906

SDG No.: _____

Instrument ID: IC-25 GC Column: AS16 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2018 09:24 Calibration End Date: 10/04/2018 11:19 Calibration ID: 20074

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-502906/2	440-0109994-002_2_ECD_1.d
Level 2	STD2 440-502906/3	440-0109994-003_3_ECD_1.d
Level 3	STD3 440-502906/4	440-0109994-004_4_ECD_1.d
Level 4	STD4 440-502906/5	440-0109994-005_5_ECD_1.d
Level 5	STD5 440-502906/6	440-0109994-006_6_ECD_1.d
Level 6	STD6 440-502906/7	440-0109994-007_7_ECD_1.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Perchlorate	Qua	160084 3069317	309612	512195	1159831	1865252	1.00 25.0	2.00	4.00	10.0	15.0

Curve Type Legend:

Qua = Quadratic

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-002_2_ECD_1.d
 Lims ID: std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Oct-2018 09:41:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:15 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.111 11.111 0.000 160084 1.00 1.08

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-002_2_ECD_1.d

Injection Date: 04-Oct-2018 09:41:00

Instrument ID: IC-25

Operator ID:

Lims ID: std1

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

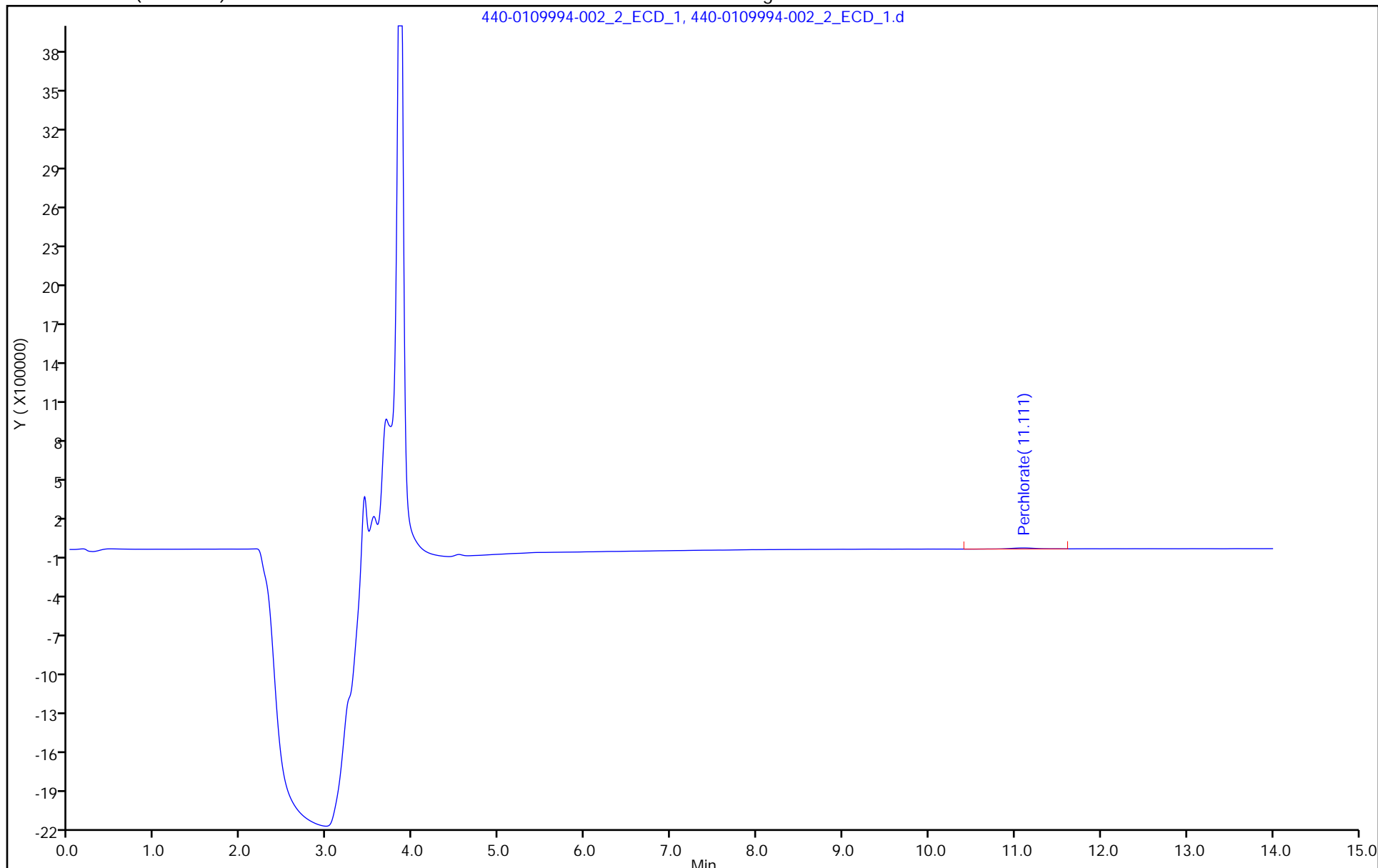
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-003_3_ECD_1.d
 Lims ID: std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Oct-2018 09:58:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:19 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

First Level Reviewer: hoangch Date: 04-Oct-2018 10:27:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.090 11.111 -0.021 309612 2.00 2.35

Reagents:

WCCLO41st-10_00016 Amount Added: 20.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-003_3_ECD_1.d

Injection Date: 04-Oct-2018 09:58:00

Instrument ID: IC-25

Operator ID:

Lims ID: std2

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

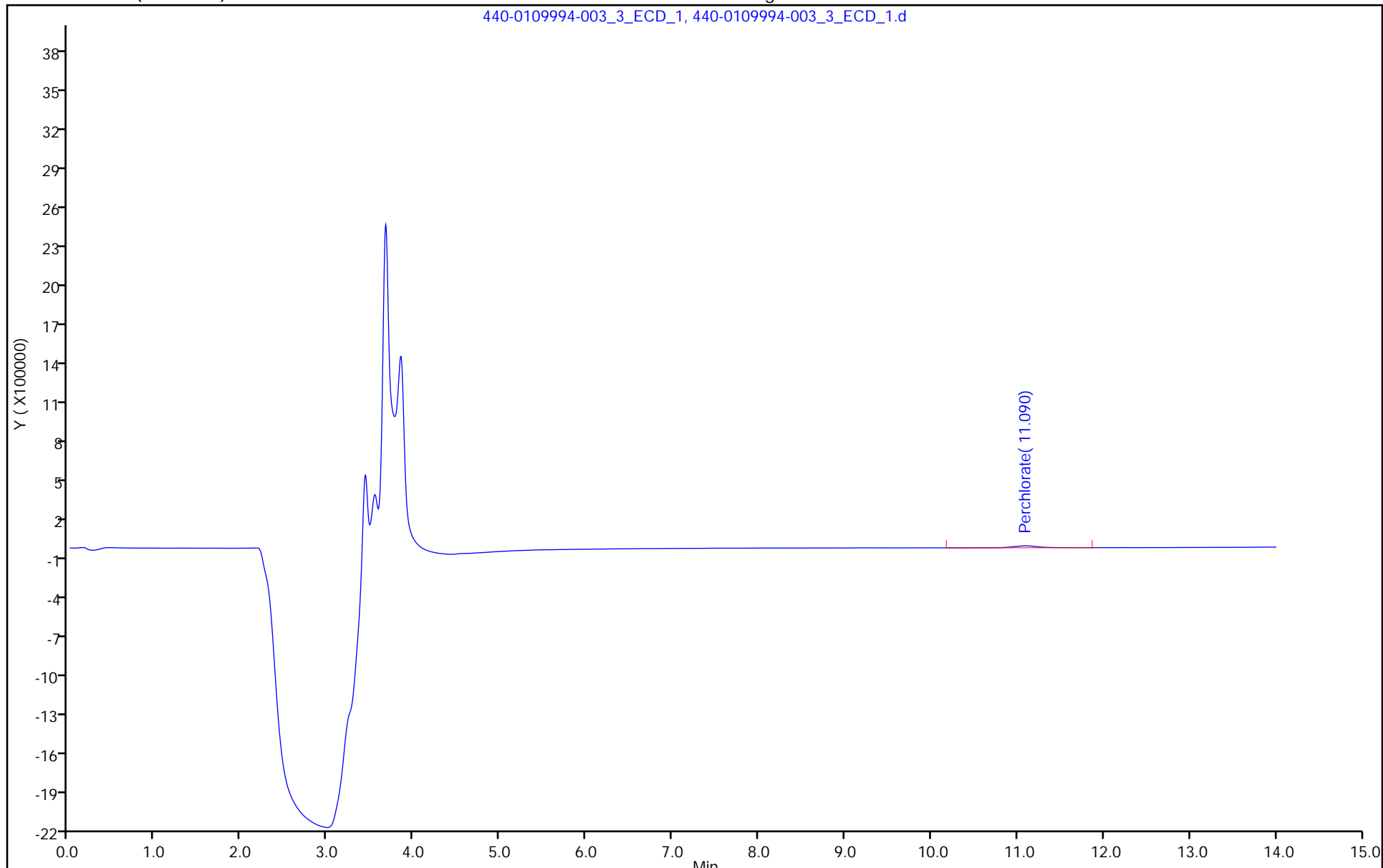
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-004_4_ECD_1.d
 Lims ID: std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Oct-2018 10:28:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-004
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:22 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.090 11.111 -0.021 512195 4.00 4.08

Reagents:

WCCLO41st-10_00016 Amount Added: 40.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-004_4_ECD_1.d

Injection Date: 04-Oct-2018 10:28:00

Instrument ID: IC-25

Operator ID:

Lims ID: std3

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

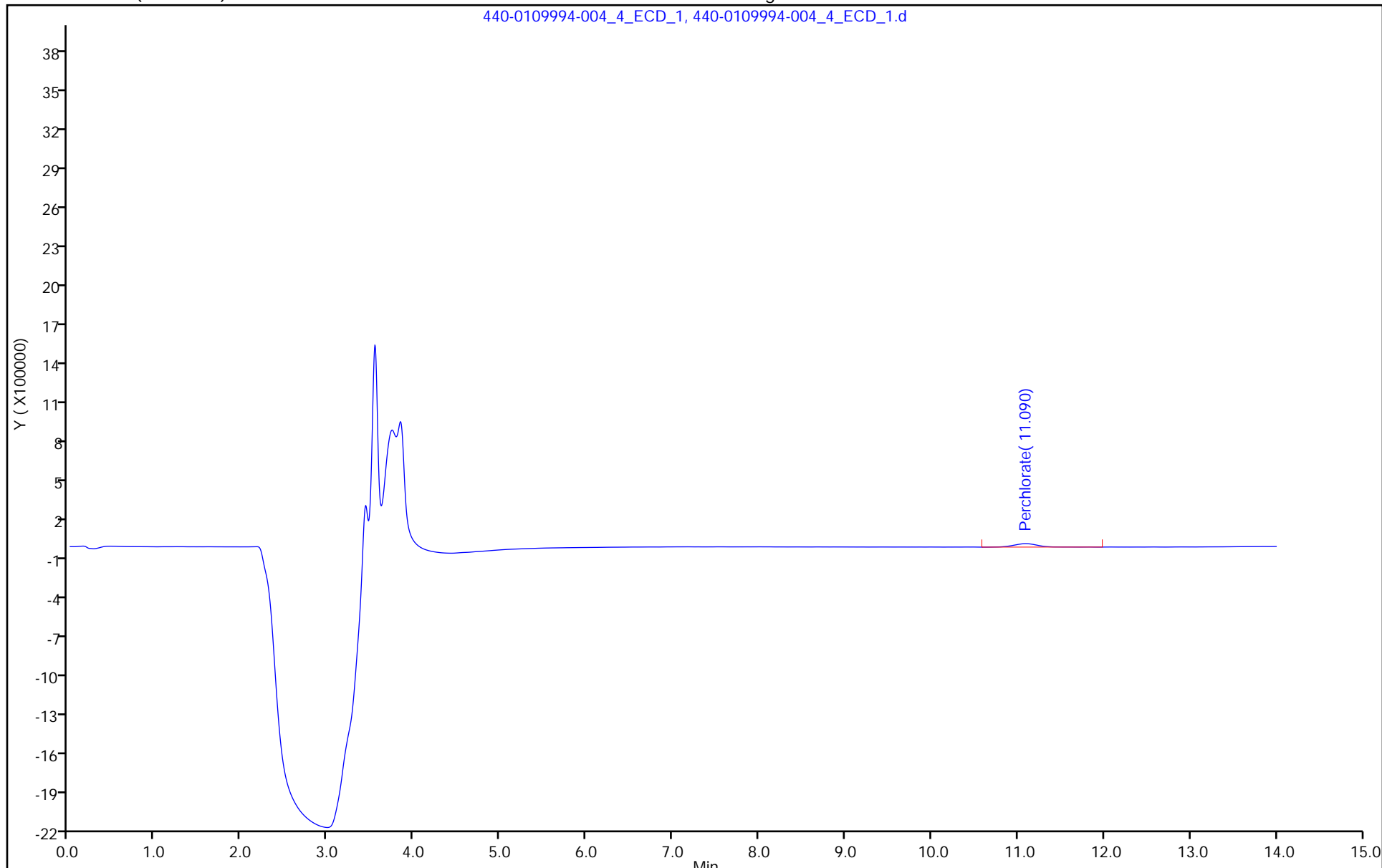
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-005_5_ECD_1.d
 Lims ID: std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Oct-2018 10:45:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:27 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.087 11.111 -0.024 1159831 10.0 9.52

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-005_5_ECD_1.d

Injection Date: 04-Oct-2018 10:45:00

Instrument ID: IC-25

Operator ID:

Lims ID: std4

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

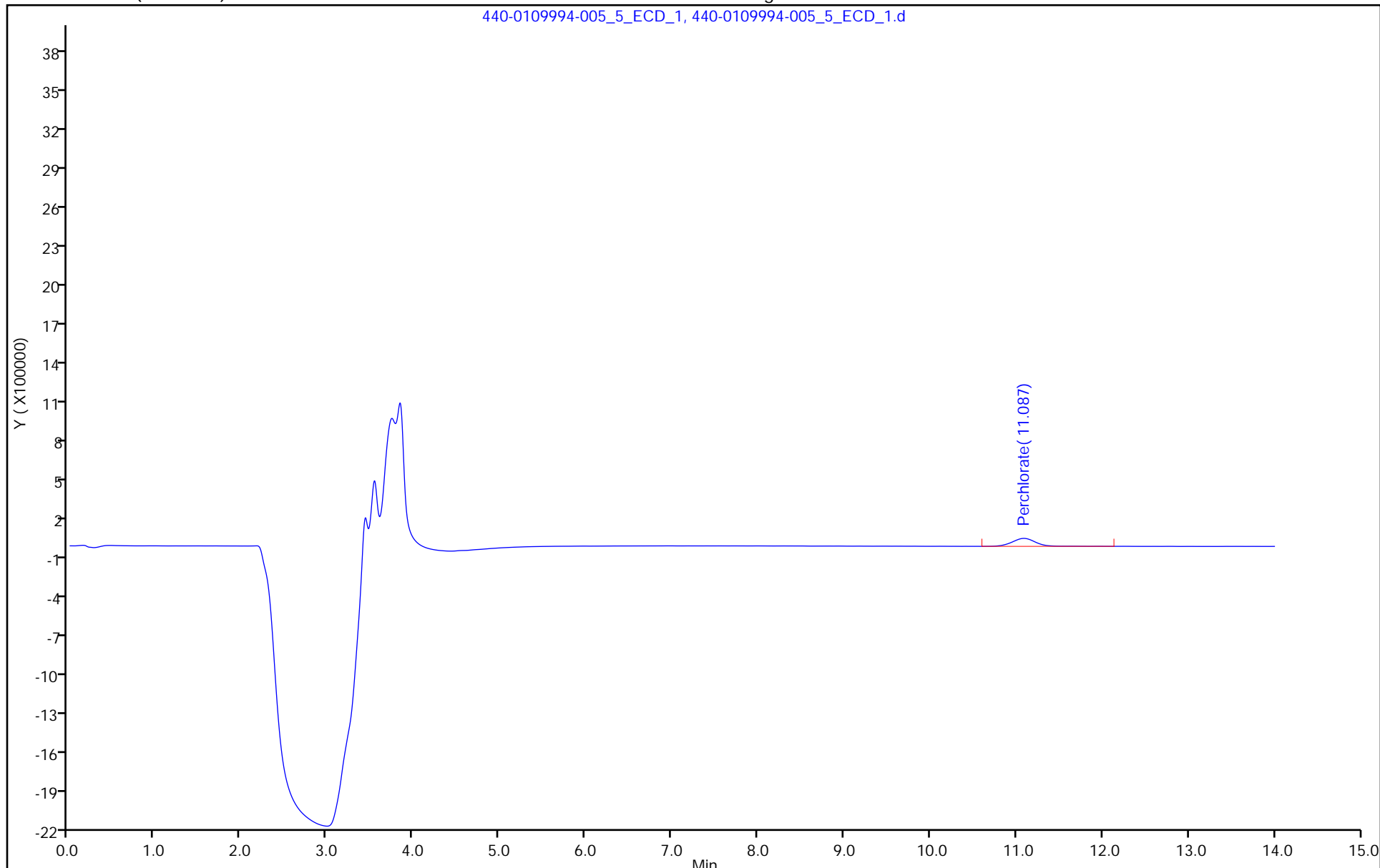
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-006_6_ECD_1.d
 Lims ID: std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 04-Oct-2018 11:02:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:29 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.081 11.111 -0.030 1865252 15.0 15.3

Reagents:

WCCLO41st-10_00016 Amount Added: 150.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-006_6_ECD_1.d

Injection Date: 04-Oct-2018 11:02:00

Instrument ID: IC-25

Operator ID:

Lims ID: std5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

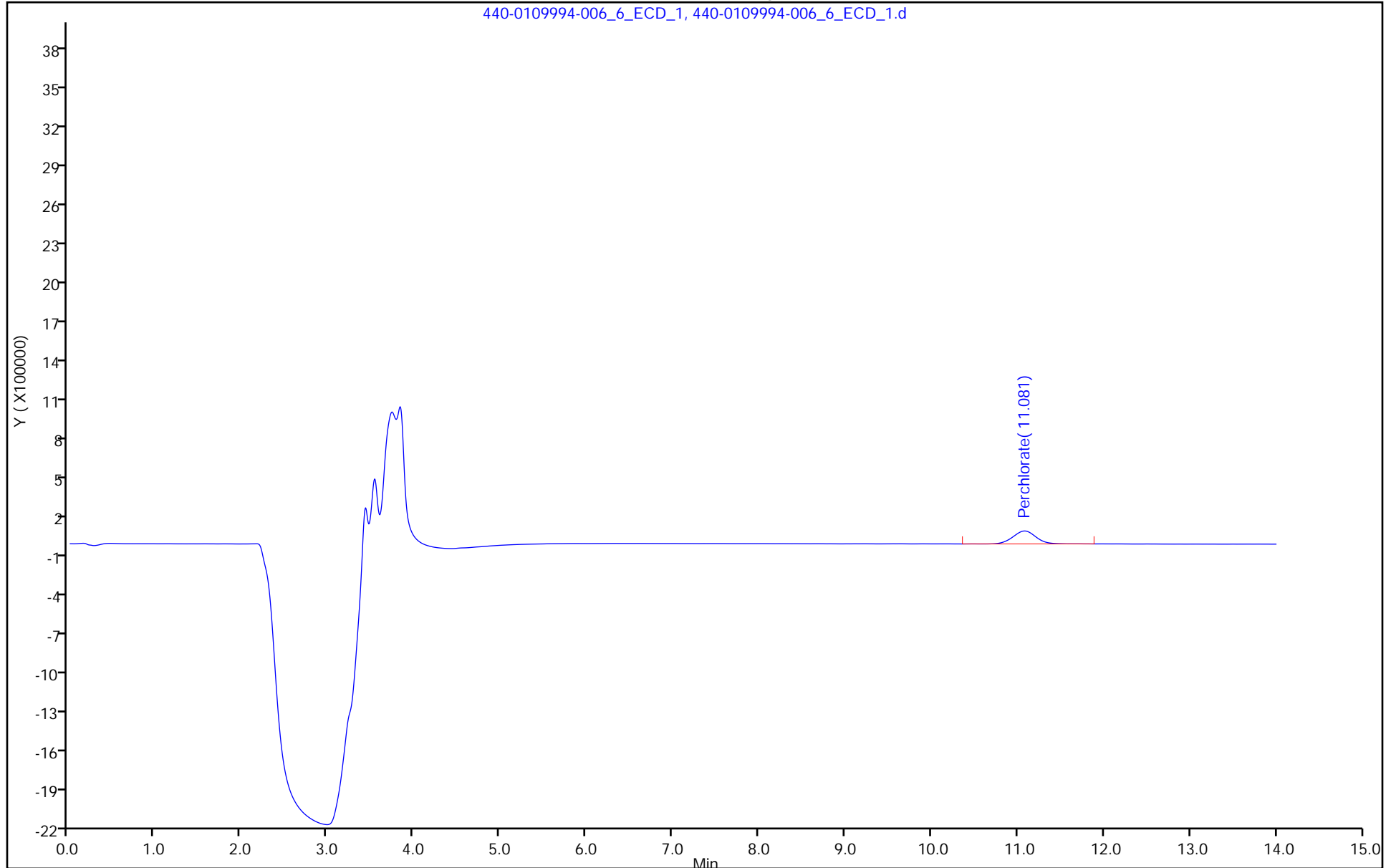
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Lims ID: std6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 04-Oct-2018 11:19:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-007
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:32 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.087 11.111 -0.024 3069317 25.0 25.0

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d

Injection Date: 04-Oct-2018 11:19:00

Instrument ID: IC-25

Operator ID:

Lims ID: std6

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

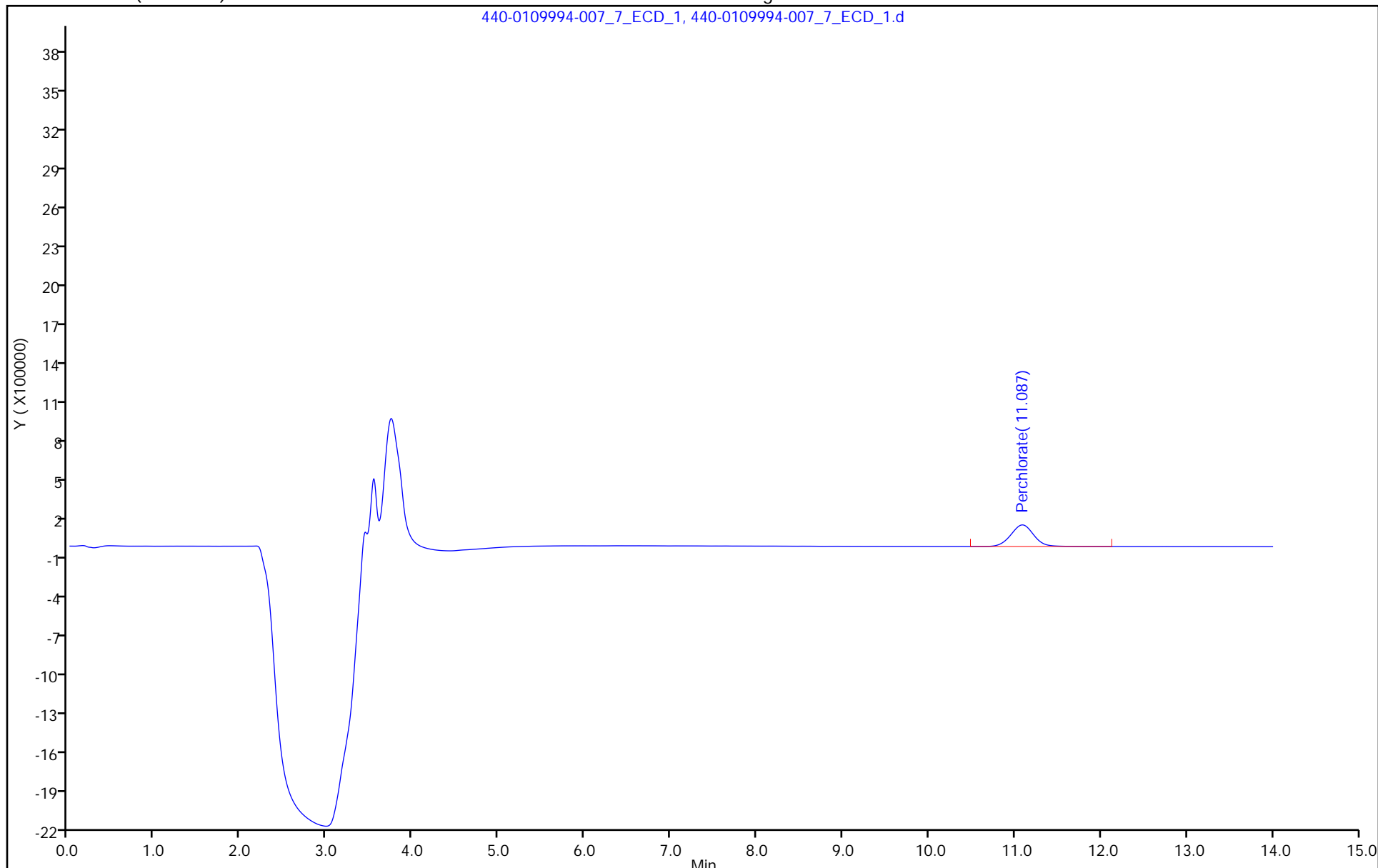
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



Calibration

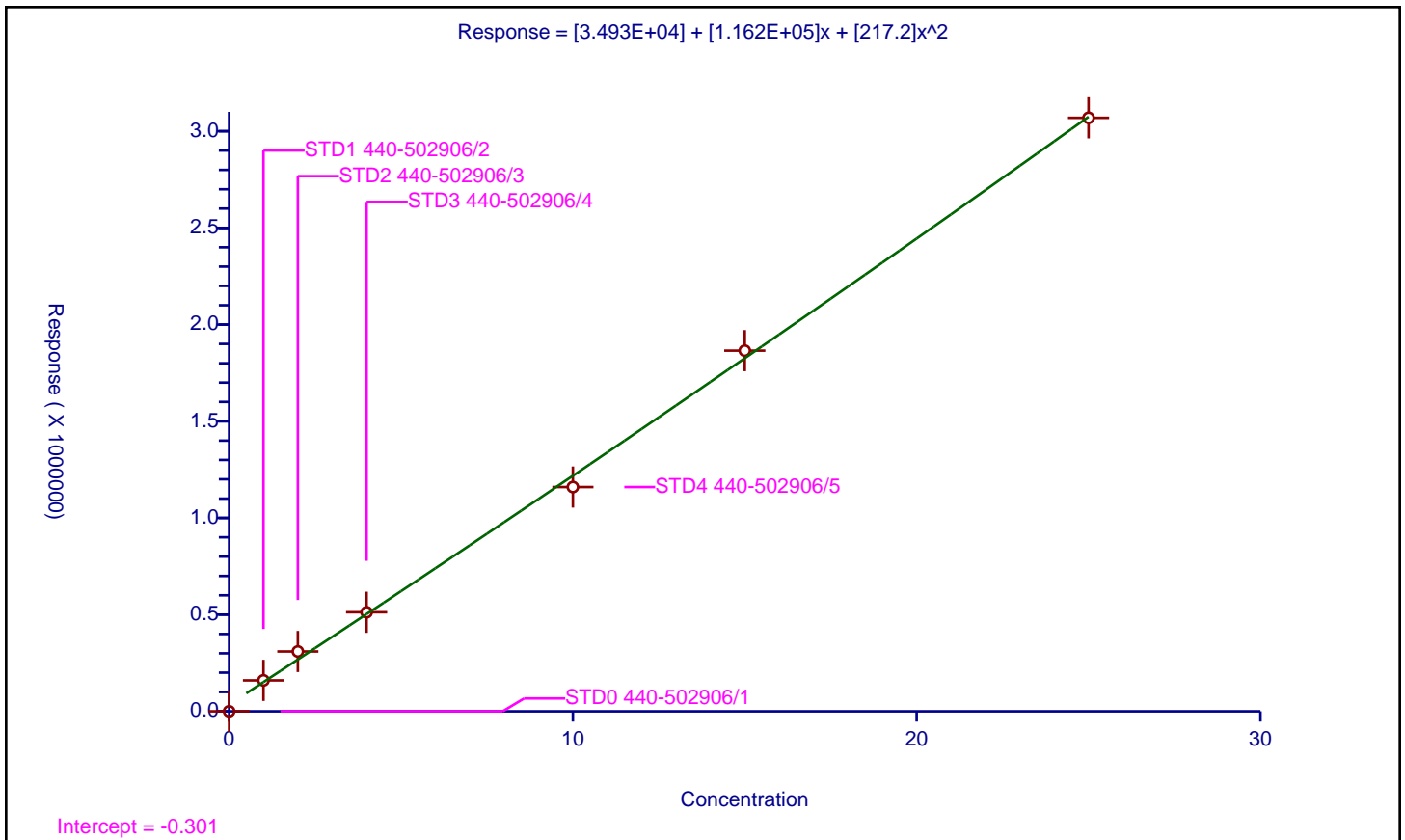
/ Perchlorate

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	3.493E+04
Slope:	1.162E+05
Second Order:	217.2

Error Coefficients	
Standard Error:	44900
Relative Standard Error:	11.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-502906/1	0.0	0.0			NaN	Y
2	STD1 440-502906/2	1.0	160084.0			160084.0	Y
3	STD2 440-502906/3	2.0	309612.0			154806.0	Y
4	STD3 440-502906/4	4.0	512195.0			128048.75	Y
5	STD4 440-502906/5	10.0	1159831.0			115983.1	Y
6	STD5 440-502906/6	15.0	1865252.0			124350.133333	Y
7	STD6 440-502906/7	25.0	3069317.0			122772.68	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-500813/9 Calibration Date: 09/24/2018 18:23
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0109501-009_09_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				49.4	50.0	99	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-500813/9 Calibration Date: 09/24/2018 18:23
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0109501-009_09_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	10.68	10.18	11.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-009_09_ECD_1.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-Sep-2018 18:23:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-009
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist:
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:09 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.681 10.713 -0.032 7318619 50.0 49.4

Reagents:

WCCLO4ICV10_00032 Amount Added: 500.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-009_09_ECD_1.d

Injection Date: 24-Sep-2018 18:23:00

Instrument ID: IC-23

Operator ID:

Lims ID: ICV

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

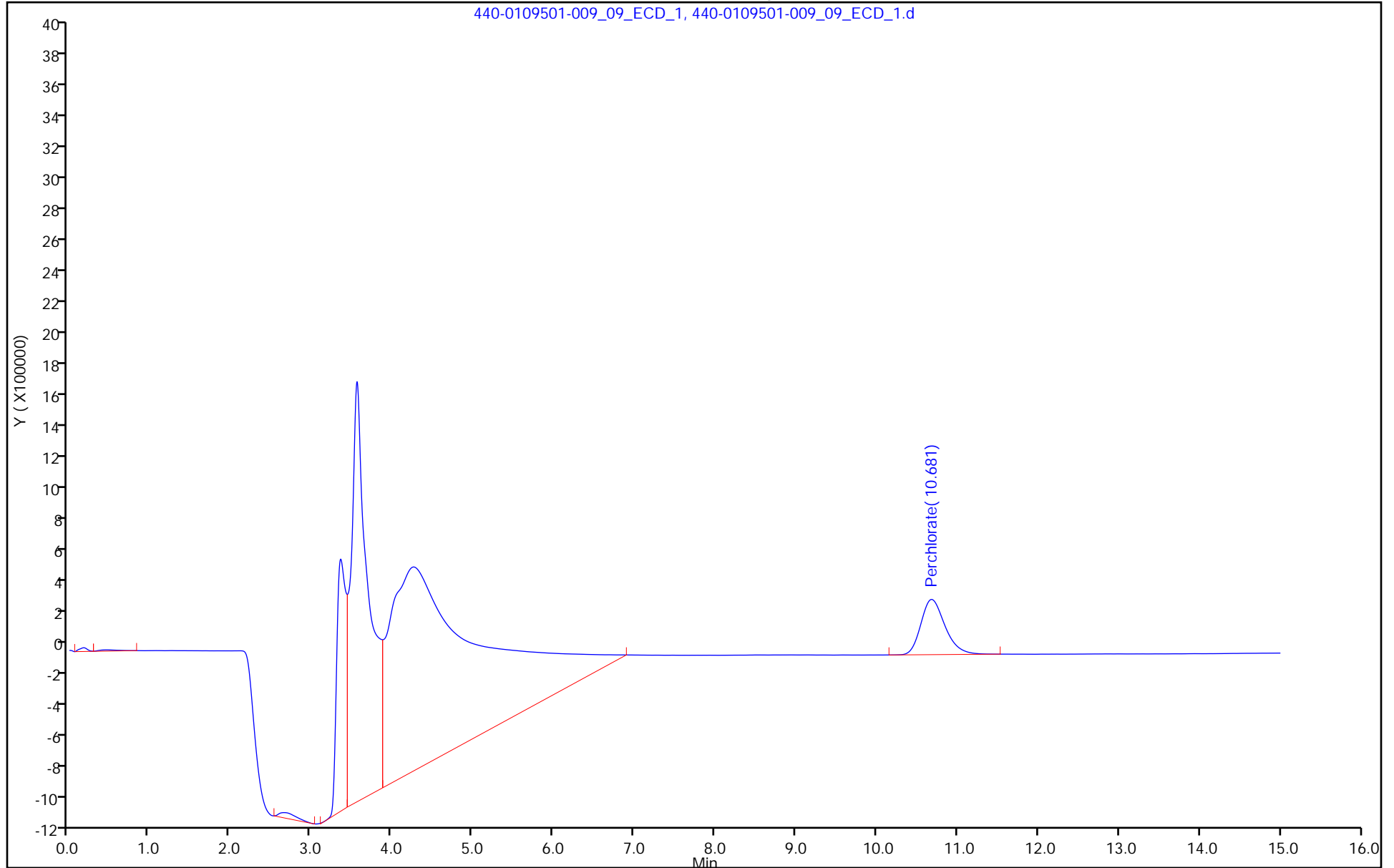
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/2 Calibration Date: 10/23/2018 11:56
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-002_02_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				26.2	25.0	105	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/2 Calibration Date: 10/23/2018 11:56
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-002_02_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	10.17	9.66	10.67

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-002_02_ECD_1.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 11:56:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 23-Oct-2018 12:20:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	10.165	10.165	0.000	3706875	25.0	26.2	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-002_02_ECD_1.d

Injection Date: 23-Oct-2018 11:56:00

Instrument ID: IC-23

Operator ID:

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

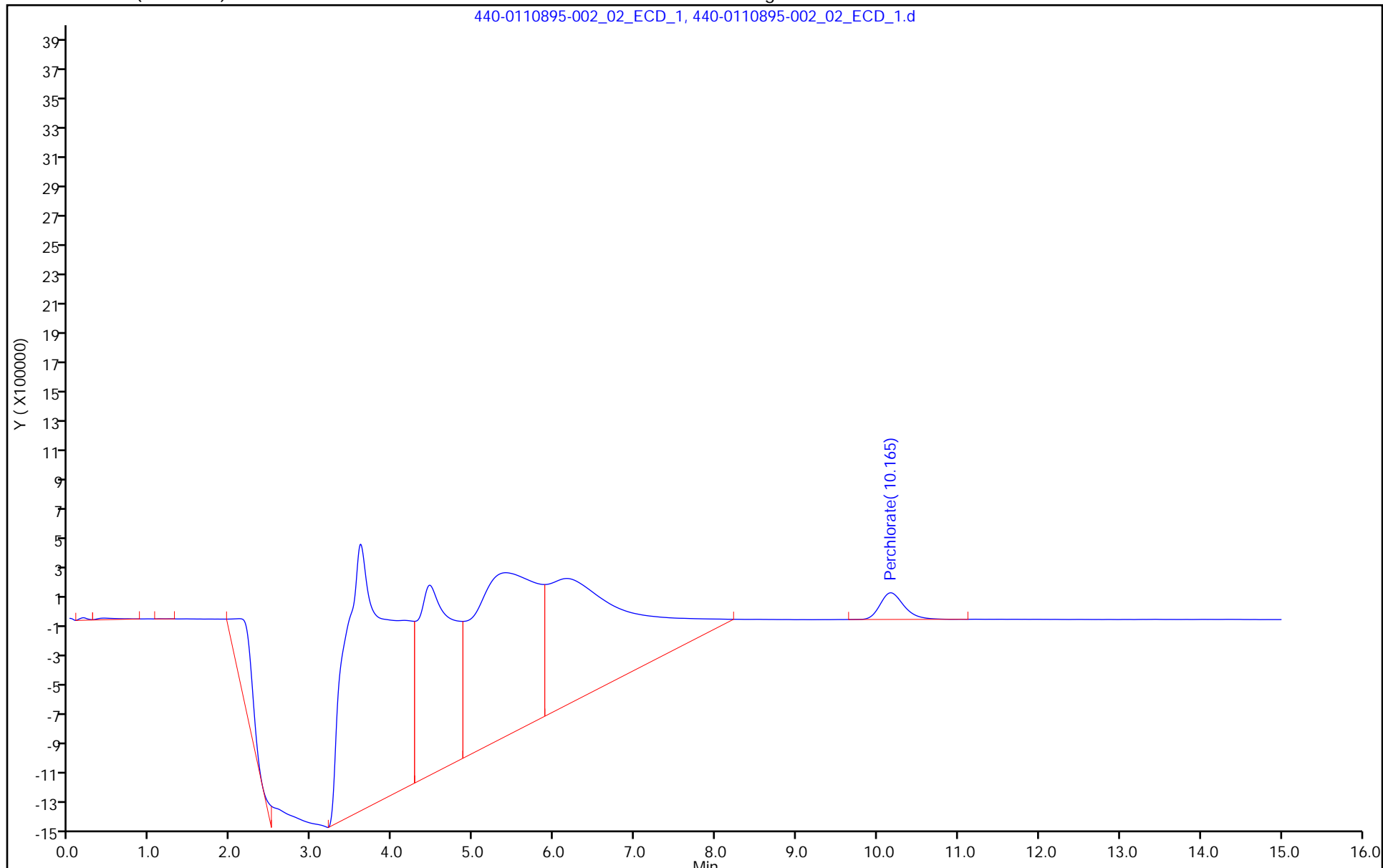
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

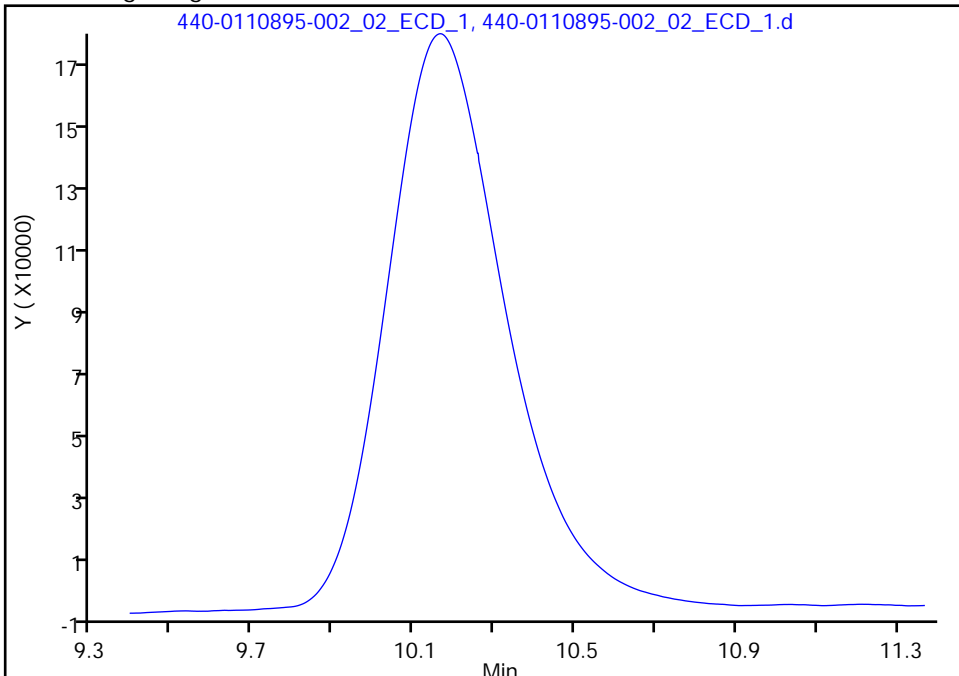
Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-002_02_ECD_1.d
Injection Date: 23-Oct-2018 11:56:00 Instrument ID: IC-23
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_23PERC Limit Group: IC-314
Column: AS16 (4.00 mm) Detector Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

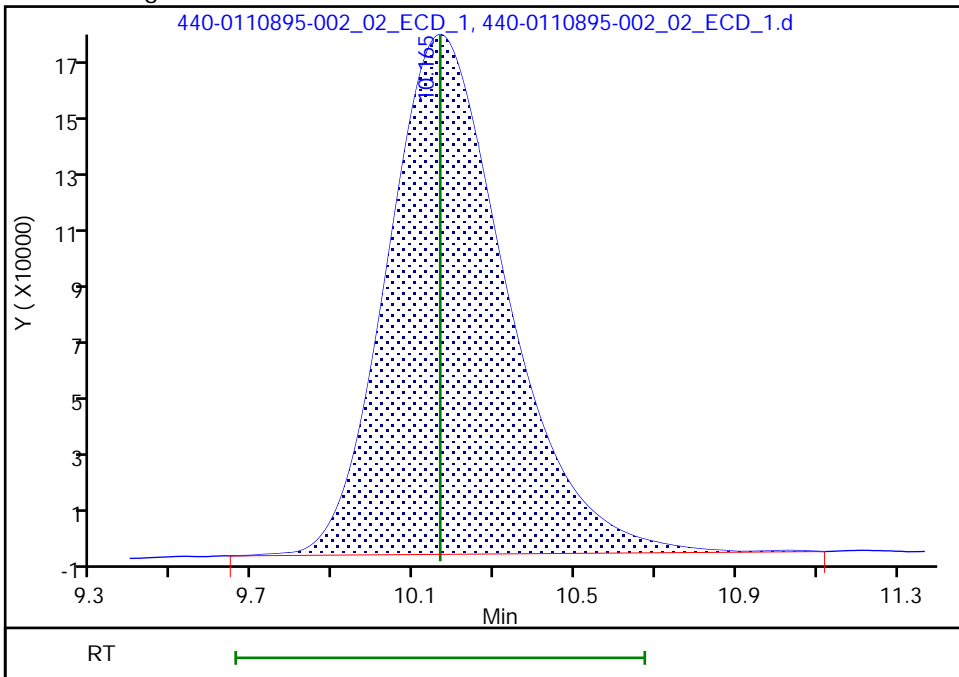
Signal: 1

Not Detected
Expected RT: 10.17

Processing Integration Results



Manual Integration Results



RT: 10.17
Area: 3706875
Amount: 26.202424
Amount Units: ug/l

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/13 Calibration Date: 10/23/2018 17:18
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-013_13_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				25.9	25.0	104	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/13 Calibration Date: 10/23/2018 17:18
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-013_13_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	10.24	9.66	10.67

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-013_13_ECD_1.d
 Lims ID: ccv 25
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 17:18:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-013
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:33:00 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:33:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.236 10.165 0.071 3666579 25.0 25.9

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-013_13_ECD_1.d

Injection Date: 23-Oct-2018 17:18:00

Instrument ID: IC-23

Operator ID:

Lims ID: ccv 25

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

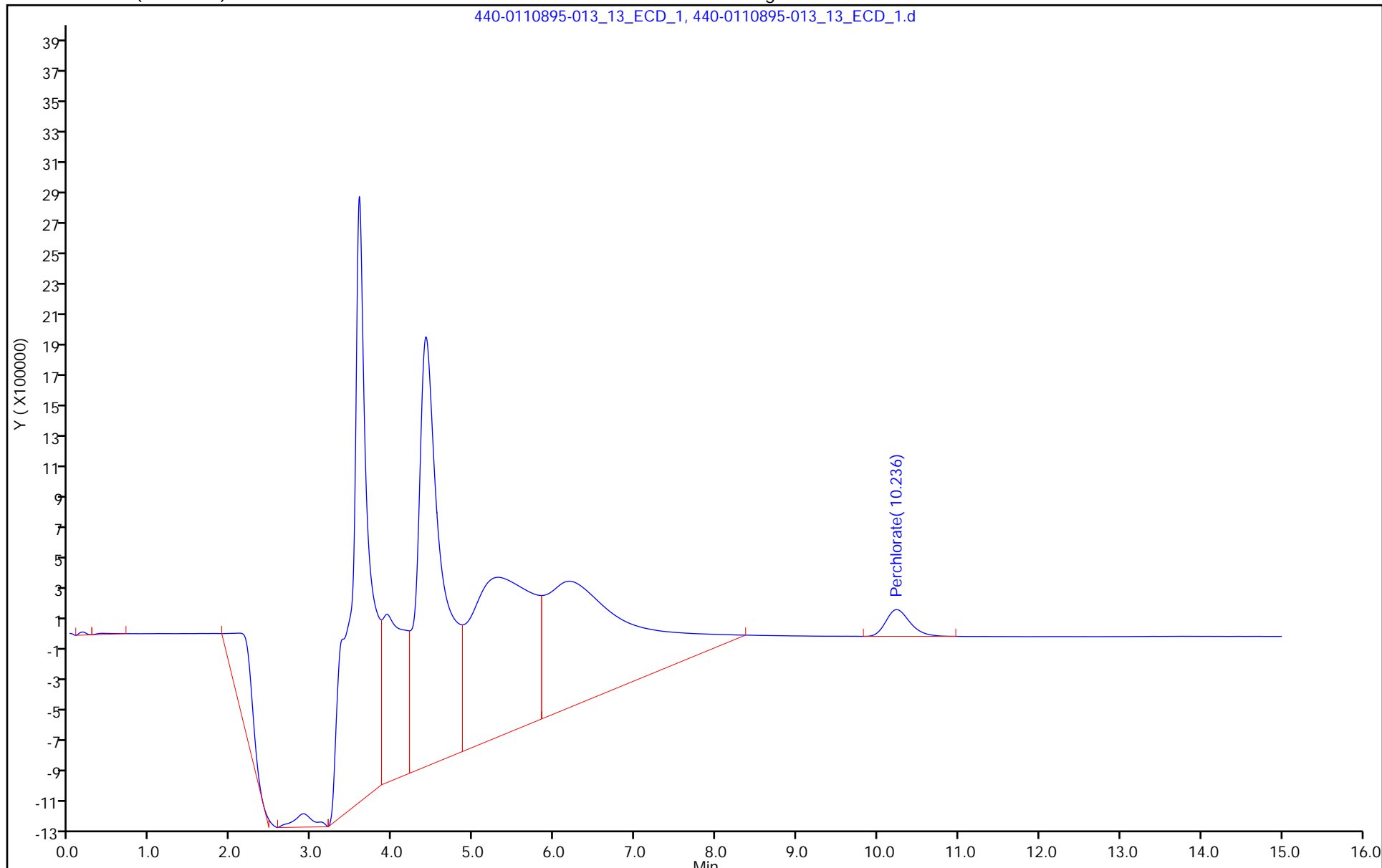
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/21 Calibration Date: 10/23/2018 20:01
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-021_21_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				77.5	75.0	103	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506935/21 Calibration Date: 10/23/2018 20:01
 Instrument ID: IC-23 Calib Start Date: 09/24/2018 15:41
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 09/24/2018 18:03
 Lab File ID: 440-0110895-021_21_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	10.23	9.66	10.67

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-021_21_ECD_1.d
 Lims ID: ccv 75
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 20:01:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-021
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist: chrom-314_23PERC*sub1
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 17:26:50 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:37:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 10.225 10.165 0.060 12042477 75.0 77.5

Reagents:

WCCLO41st-10_00016 Amount Added: 750.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-021_21_ECD_1.d

Injection Date: 23-Oct-2018 20:01:00

Instrument ID: IC-23

Operator ID:

Lims ID: ccv 75

Worklist Smp#: 21

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

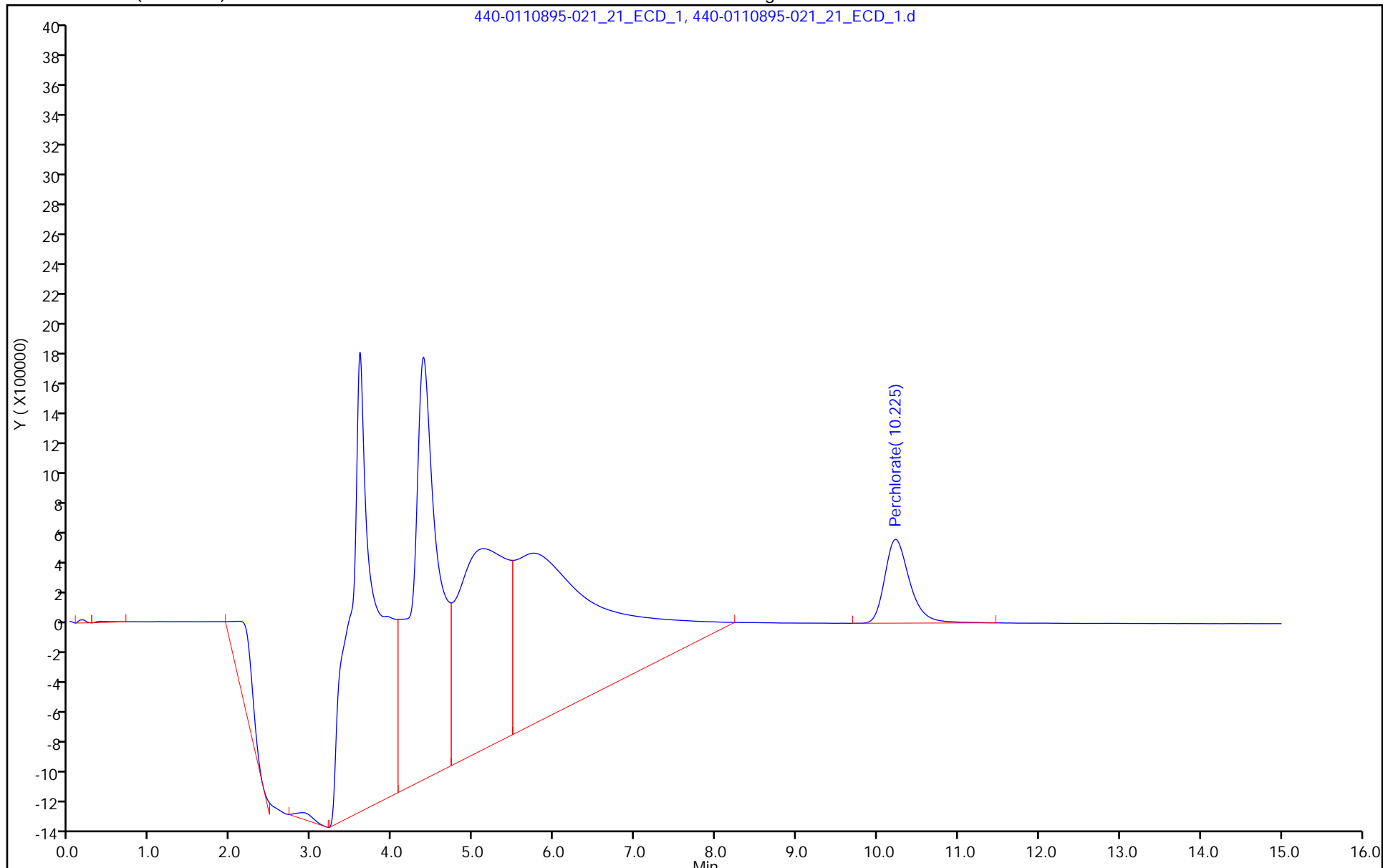
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-506781/9 Calibration Date: 10/22/2018 19:27
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110854-00909ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				49.8	50.0	100	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-506781/9 Calibration Date: 10/22/2018 19:27
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110854-00909ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	13.29	12.70	14.04

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00909ECD_1.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 22-Oct-2018 19:27:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-009
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist:
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:17 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	13.287	13.367	-0.080	6441485	50.0	49.8	
---------------	--------	--------	--------	---------	------	------	--

Reagents:

WCCLO4ICV10_00032 Amount Added: 500.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00909ECD_1.d

Injection Date: 22-Oct-2018 19:27:00

Instrument ID: IC-24

Operator ID:

Lims ID: ICV

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

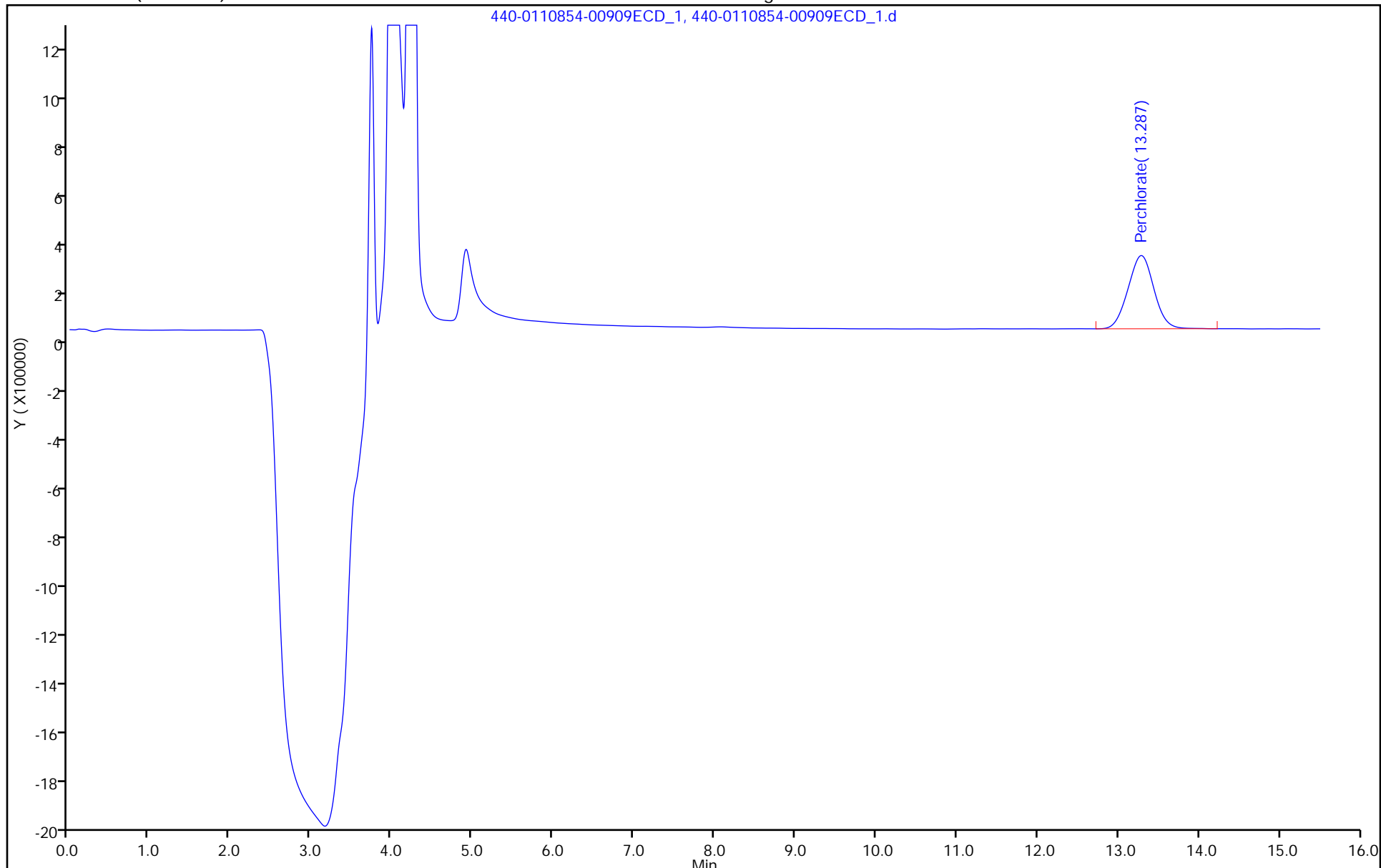
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/2 Calibration Date: 10/24/2018 13:30
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-00202ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				26.4	25.0	106	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/2 Calibration Date: 10/24/2018 13:30
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-00202ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	13.08	12.43	13.73

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00202ECD_1.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Oct-2018 13:30:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 14:37:26 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK015

First Level Reviewer: hoangch Date: 24-Oct-2018 14:03:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.080 13.080 0.000 3340500 25.0 26.4

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00202ECD_1.d

Injection Date: 24-Oct-2018 13:30:00

Instrument ID: IC-24

Operator ID:

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

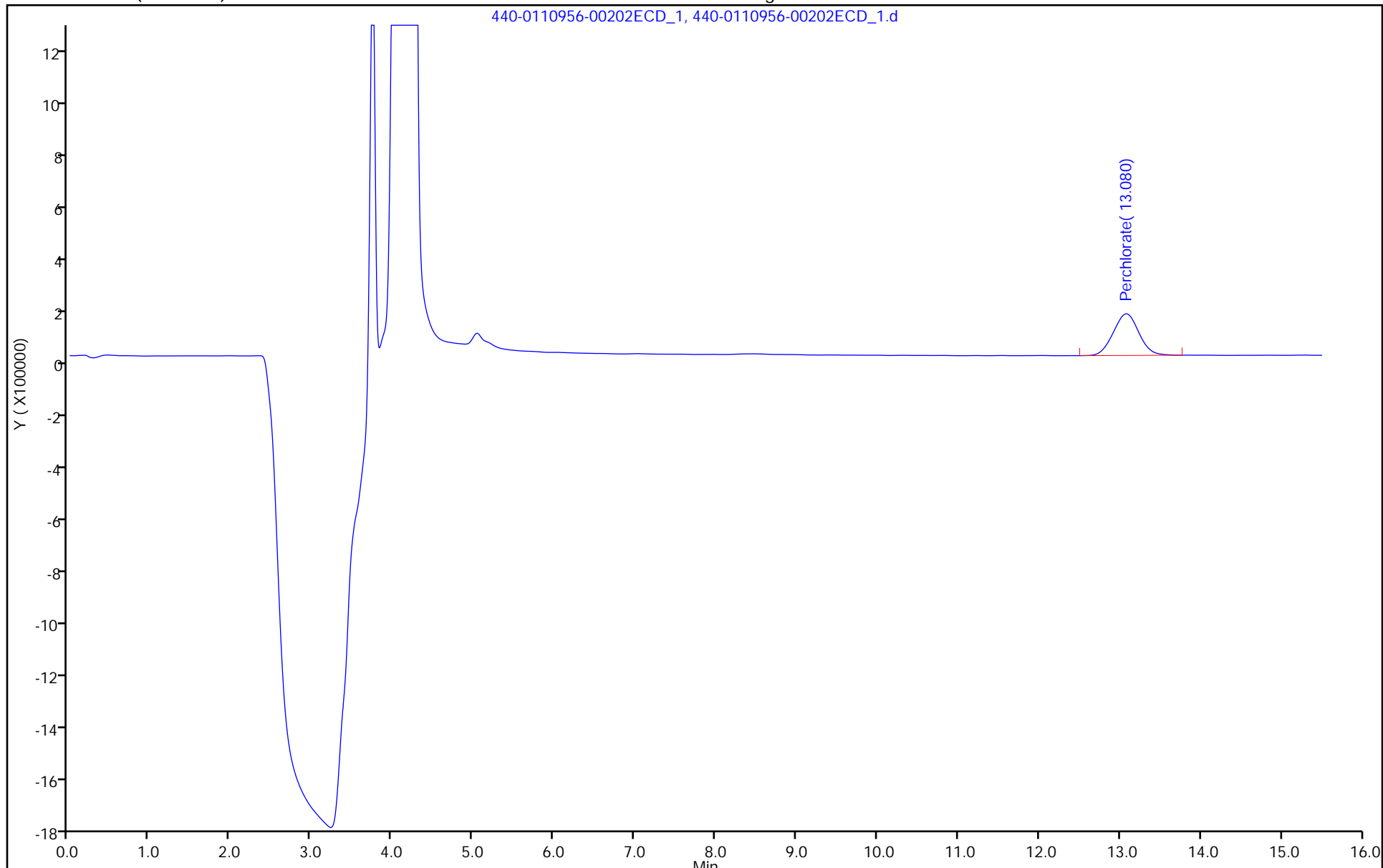
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/15 Calibration Date: 10/24/2018 18:40
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-01515ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				25.4	25.0	102	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/15 Calibration Date: 10/24/2018 18:40
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-01515ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	13.07	12.43	13.73

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-01515ECD_1.d
 Lims ID: ccv 25
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Oct-2018 18:40:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-015
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 14:30:24 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK015

First Level Reviewer: saraubonp Date: 25-Oct-2018 14:30:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.074 13.080 -0.006 3212994 25.0 25.4

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-01515ECD_1.d

Injection Date: 24-Oct-2018 18:40:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccv 25

Worklist Smp#: 15

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

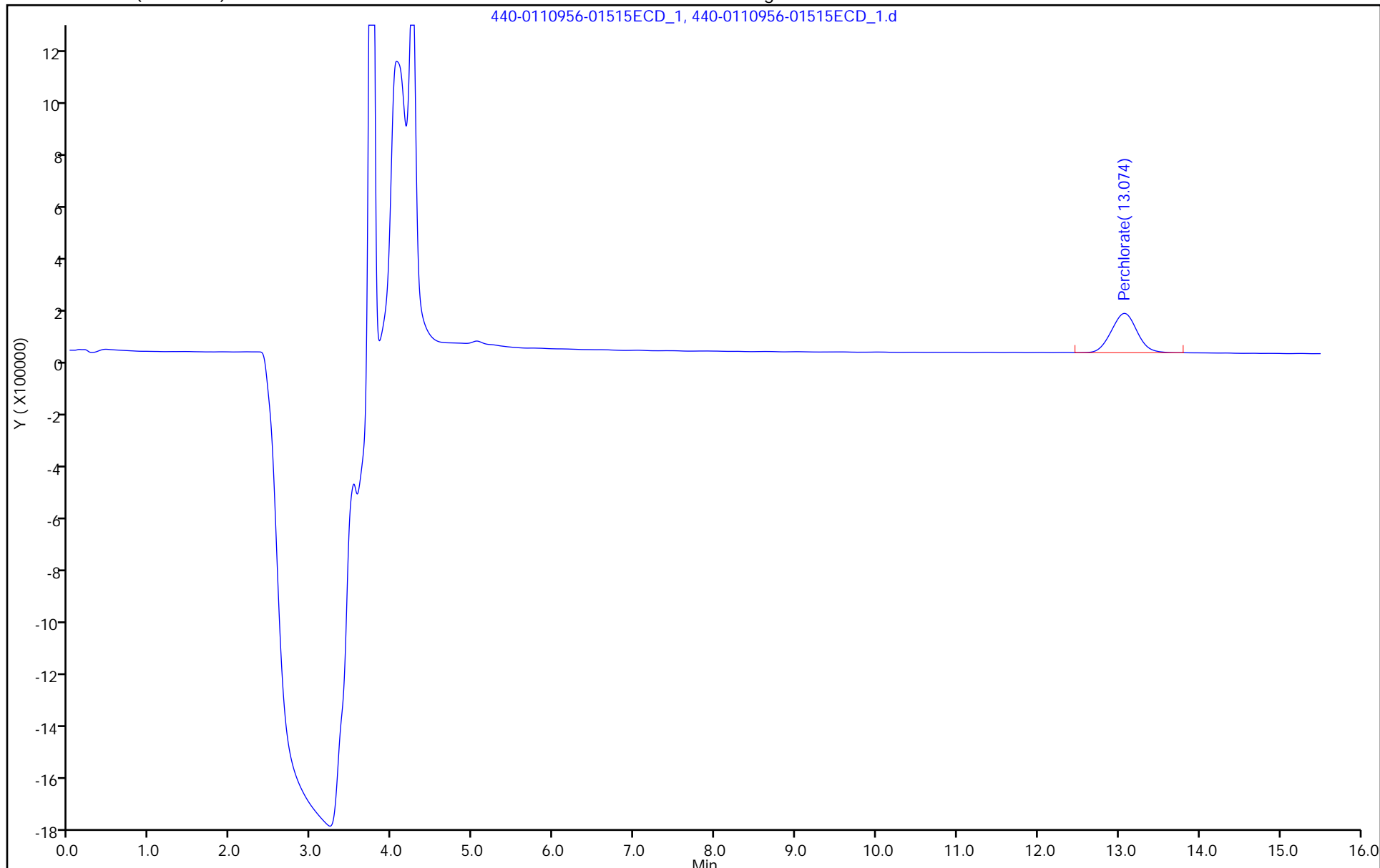
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/26 Calibration Date: 10/24/2018 22:05
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-02626ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				82.4	75.0	110	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/26 Calibration Date: 10/24/2018 22:05
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-02626ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	13.03	12.43	13.73

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-02626ECD_1.d
 Lims ID: ccv 75
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Oct-2018 22:05:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-026
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 14:34:00 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK015

First Level Reviewer: saraubonp Date: 25-Oct-2018 14:34:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.027 13.080 -0.053 11043157 75.0 82.4

Reagents:

WCCLO41st-10_00016 Amount Added: 750.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-02626ECD_1.d

Injection Date: 24-Oct-2018 22:05:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccv 75

Worklist Smp#: 26

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

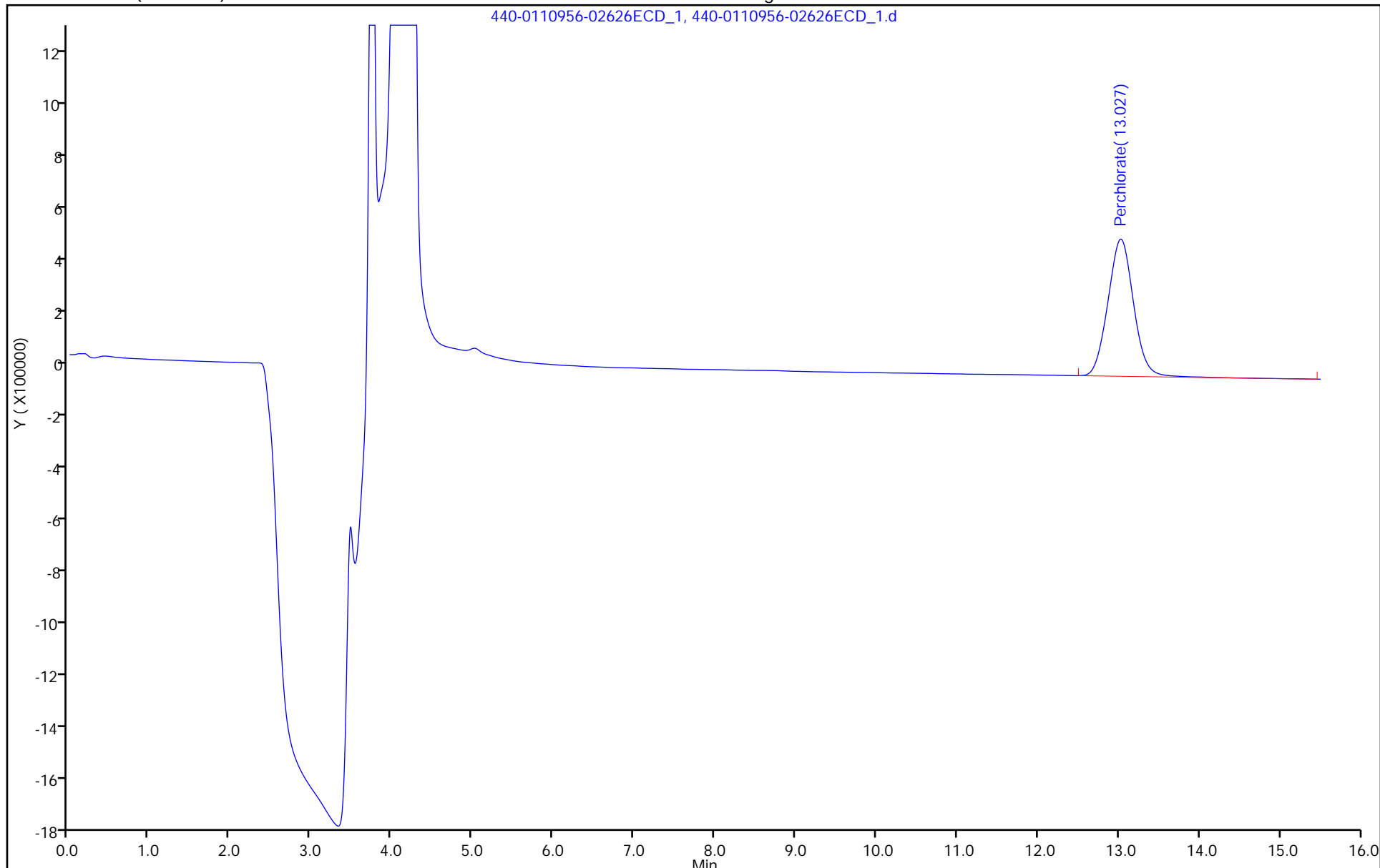
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/33 Calibration Date: 10/25/2018 00:13
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-03333ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				27.0	25.0	108	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-507219/33 Calibration Date: 10/25/2018 00:13
 Instrument ID: IC-24 Calib Start Date: 10/22/2018 16:36
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/22/2018 19:08
 Lab File ID: 440-0110956-03333ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	13.05	12.43	13.73

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03333ECD_1.d
 Lims ID: ccv 25
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-Oct-2018 00:13:00 ALS Bottle#: 0 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-033
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist: chrom-314_24Perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 17:23:08 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK008

First Level Reviewer: saraubonp Date: 25-Oct-2018 17:23:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.054 13.080 -0.026 3407582 25.0 27.0

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03333ECD_1.d

Injection Date: 25-Oct-2018 00:13:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccv 25

Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

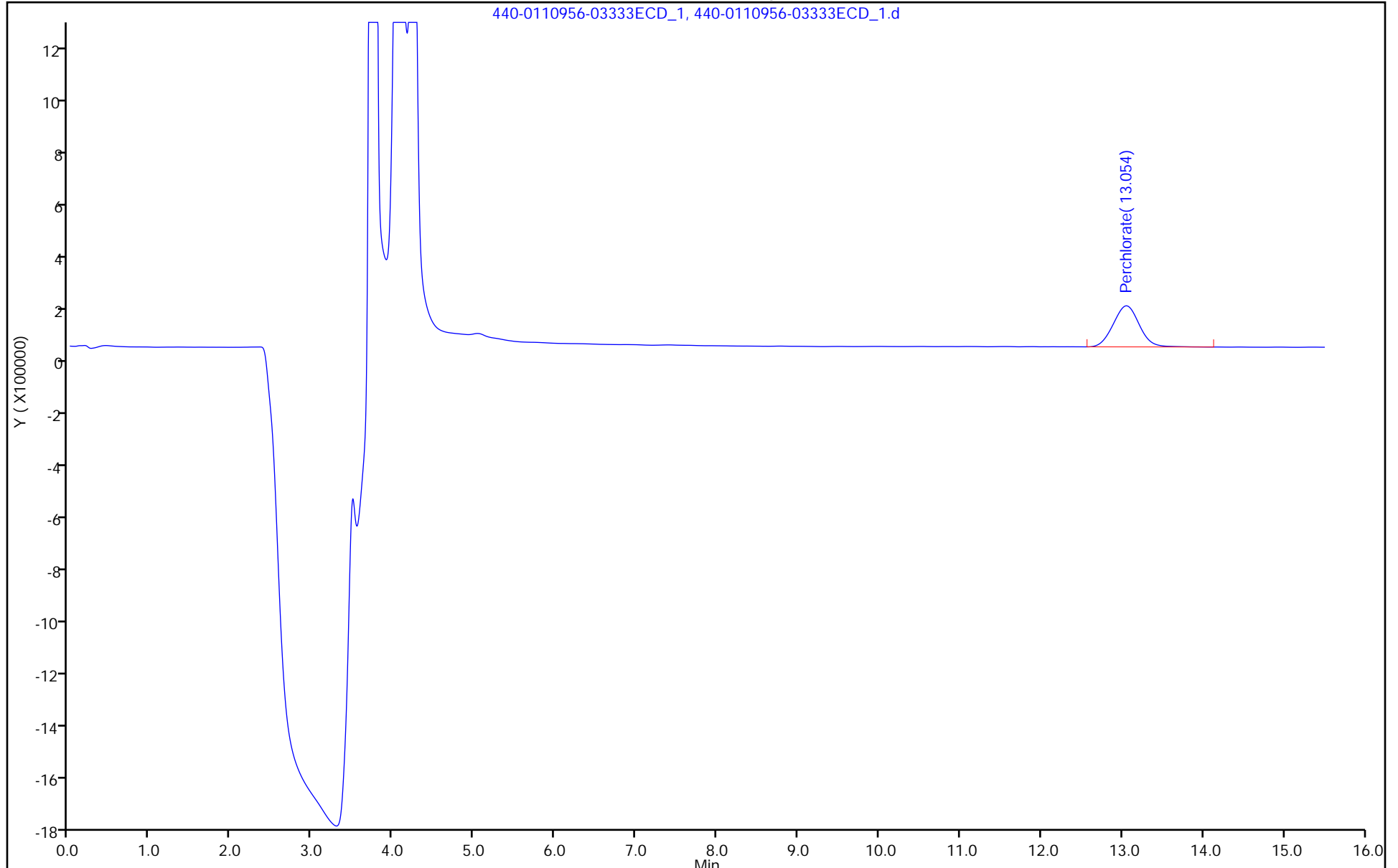
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-502906/8 Calibration Date: 10/04/2018 11:40
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0109994-008_8_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				9.24	10.0	92	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-502906/8 Calibration Date: 10/04/2018 11:40
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0109994-008_8_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	11.09	10.56	11.67

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-008_8_ECD_1.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Oct-2018 11:40:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-008
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 05-Oct-2018 16:50:02 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK008

First Level Reviewer: nguyent Date: 04-Oct-2018 12:45:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.094 11.111 -0.017 1126397 10.0 9.24

Reagents:

WCCLO4ICV10_00032 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-008_8_ECD_1.d

Injection Date: 04-Oct-2018 11:40:00

Instrument ID: IC-25

Operator ID:

Lims ID: ICV

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

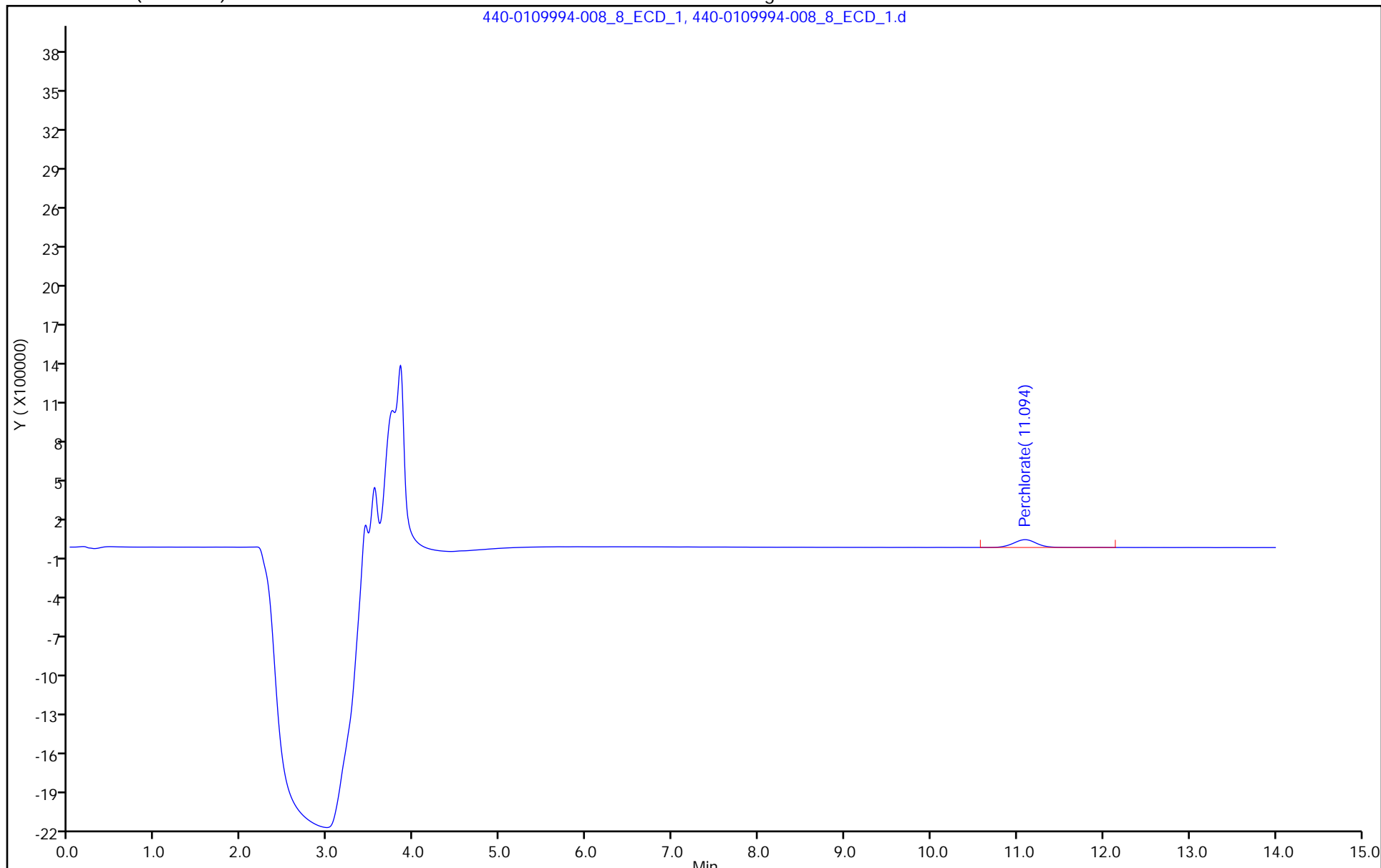
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/2 Calibration Date: 10/23/2018 06:44
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-002_2_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				10.3	10.0	103	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/2 Calibration Date: 10/23/2018 06:44
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-002_2_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	11.18	10.62	11.74

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-002_2_ECD_1.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 06:44:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-002
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 23-Oct-2018 07:06:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.180 11.180 0.000 1259342 10.0 10.3

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-002_2_ECD_1.d

Injection Date: 23-Oct-2018 06:44:00

Instrument ID: IC-25

Operator ID:

Lims ID: CCV

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

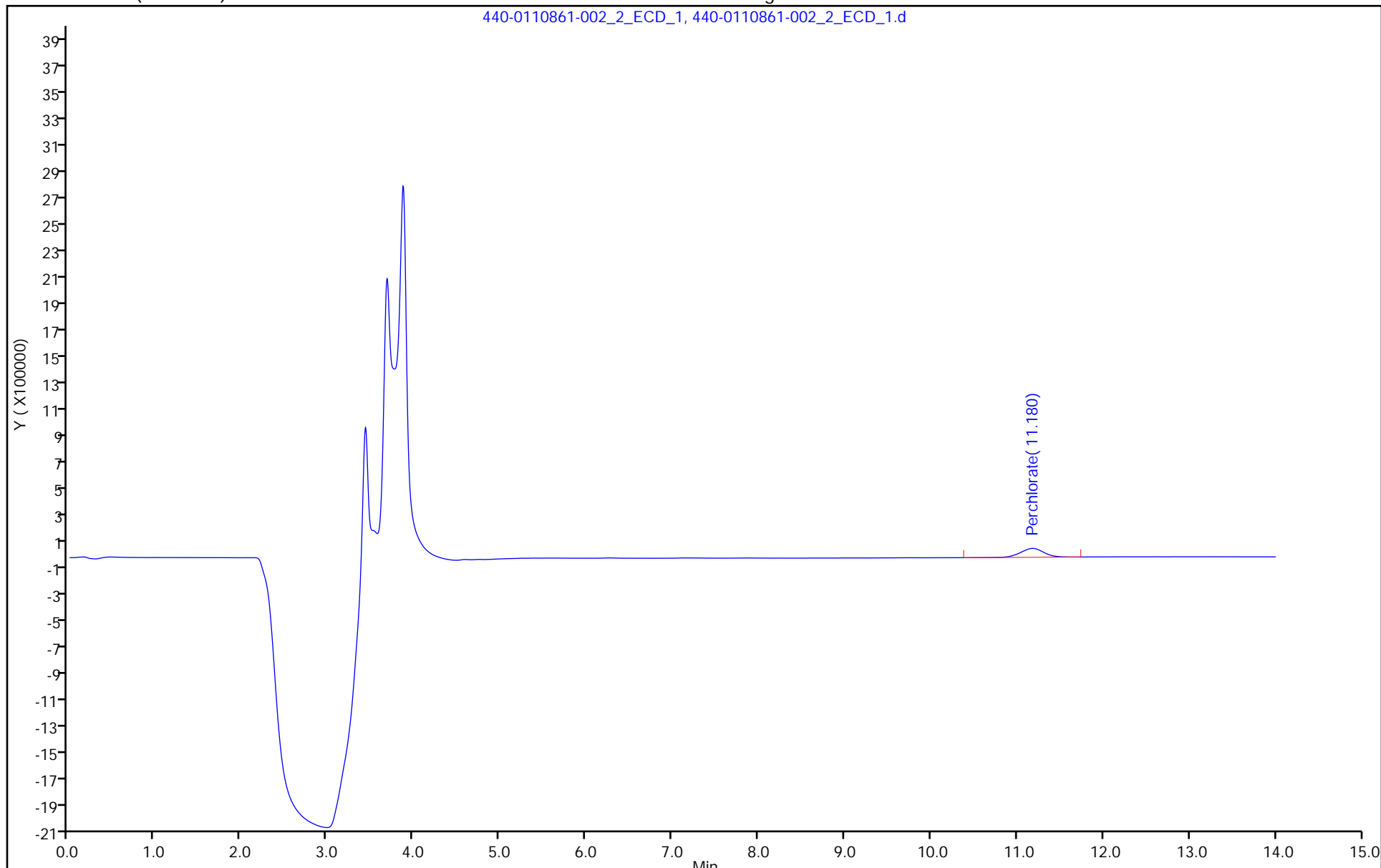
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/15 Calibration Date: 10/23/2018 10:54
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-015_15_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				10.6	10.0	106	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/15 Calibration Date: 10/23/2018 10:54
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-015_15_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	11.19	10.62	11.74

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-015_15_ECD_1.d
 Lims ID: ccv 10
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 10:54:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-015
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 11:26:58 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.187 11.180 0.007 1295569 10.0 10.6

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-015_15_ECD_1.d

Injection Date: 23-Oct-2018 10:54:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccv 10

Worklist Smp#: 15

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

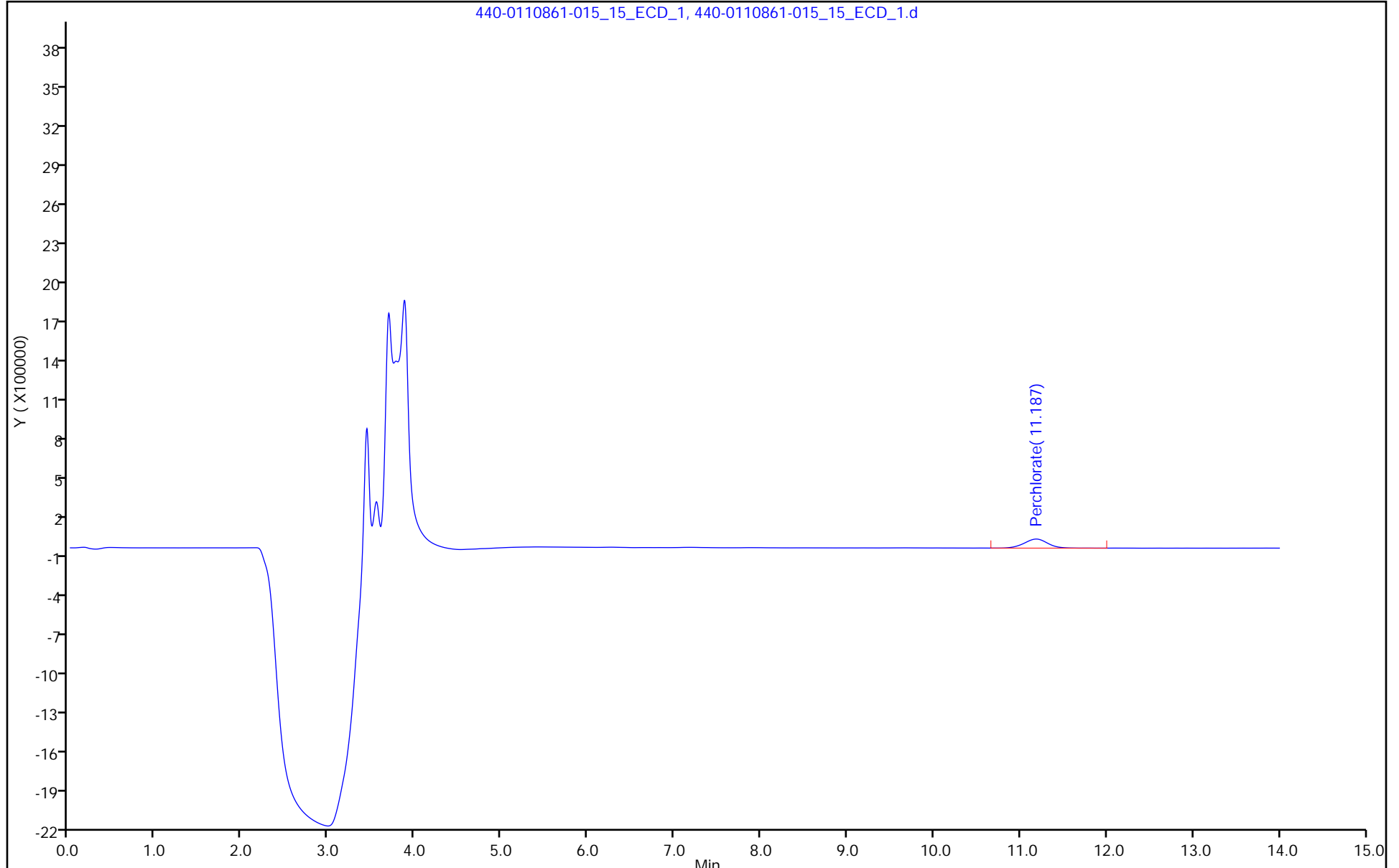
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/27 Calibration Date: 10/23/2018 14:52
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-027_27_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				22.1	20.0	110	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/27 Calibration Date: 10/23/2018 14:52
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-027_27_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	11.20	10.62	11.74

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-027_27_ECD_1.d
 Lims ID: ccv 20
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 14:52:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-027
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 15:11:37 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.197 11.180 0.017 2705981 20.0 22.1

Reagents:

WCCLO41st-10_00016 Amount Added: 200.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-027_27_ECD_1.d

Injection Date: 23-Oct-2018 14:52:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccv 20

Worklist Smp#: 27

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

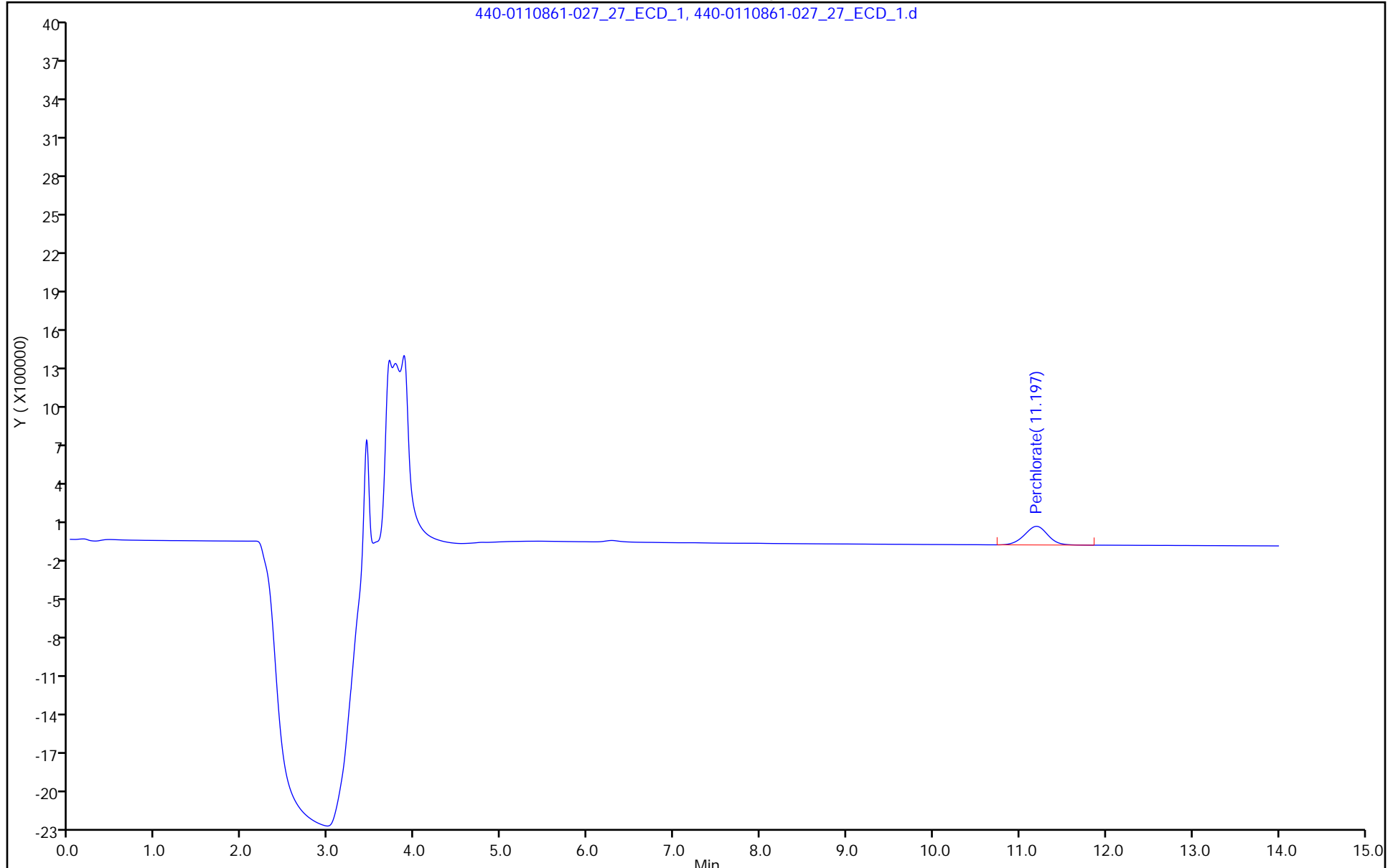
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/38 Calibration Date: 10/23/2018 18:00
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-038_38_ECD_1.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Perchlorate	Qua				10.6	10.0	106	85-115

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506828/38 Calibration Date: 10/23/2018 18:00
 Instrument ID: IC-25 Calib Start Date: 10/04/2018 09:24
 GC Column: AS16 ID: 4.00 (mm) Calib End Date: 10/04/2018 11:19
 Lab File ID: 440-0110861-038_38_ECD_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Perchlorate	11.19	10.62	11.74

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-038_38_ECD_1.d
 Lims ID: ccv 10
 Client ID:
 Sample Type: CCV
 Inject. Date: 23-Oct-2018 18:00:00 ALS Bottle#: 0 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-038
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist: chrom-314_25perchlorate*sub1
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:56:29 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:56:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.194 11.180 0.014 1289059 10.0 10.6

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-038_38_ECD_1.d

Injection Date: 23-Oct-2018 18:00:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccv 10

Worklist Smp#: 38

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

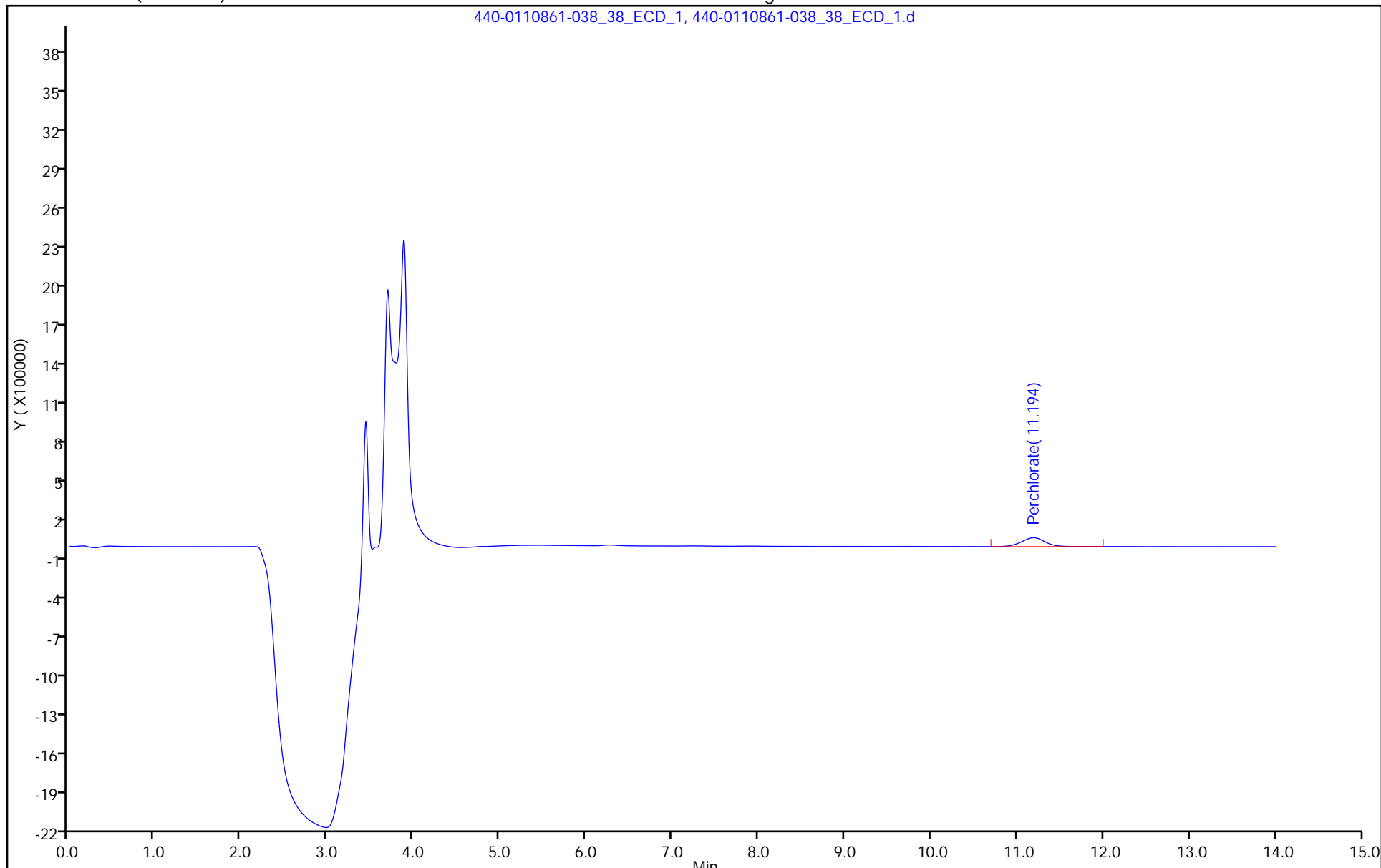
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506828/6
 Matrix: Water Lab File ID: 440-0110861-006_6_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 08:03
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-006_6_ECD_1.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 23-Oct-2018 08:03:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-006_6_ECD_1.d

Injection Date: 23-Oct-2018 08:03:00

Instrument ID: IC-25

Operator ID:

Lims ID: MB

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

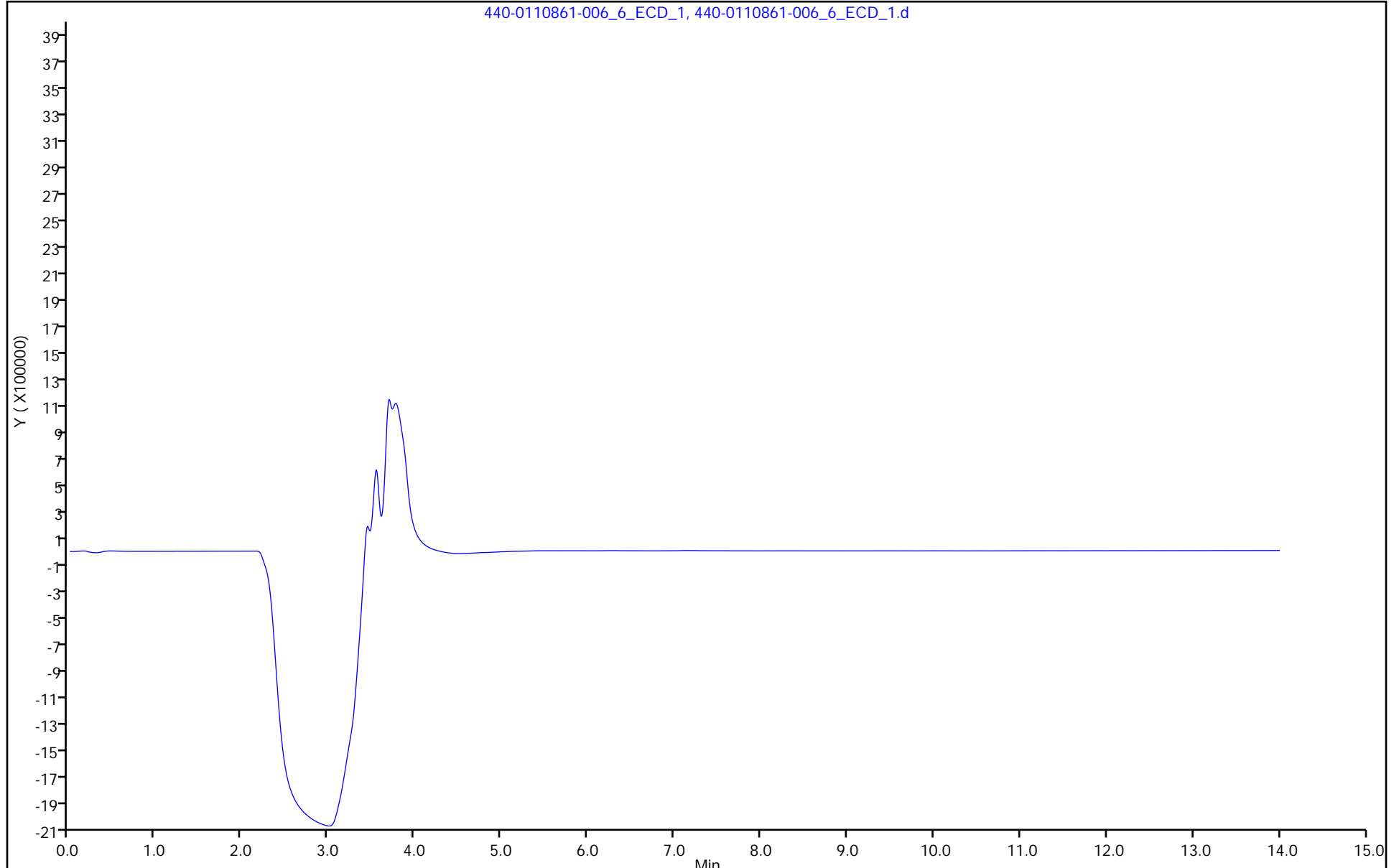
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506935/6
 Matrix: Water Lab File ID: 440-0110895-006_06_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 13:24
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-006_06_ECD_1.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 23-Oct-2018 13:24:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 4-Chlorobenzenesulfonic Ac	11.715	11.300	0.415	4548			NC

QC Flag Legend

Processing Flags

NC - Not Calibrated

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-006_06_ECD_1.d

Injection Date: 23-Oct-2018 13:24:00

Instrument ID: IC-23

Operator ID:

Lims ID: MB

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

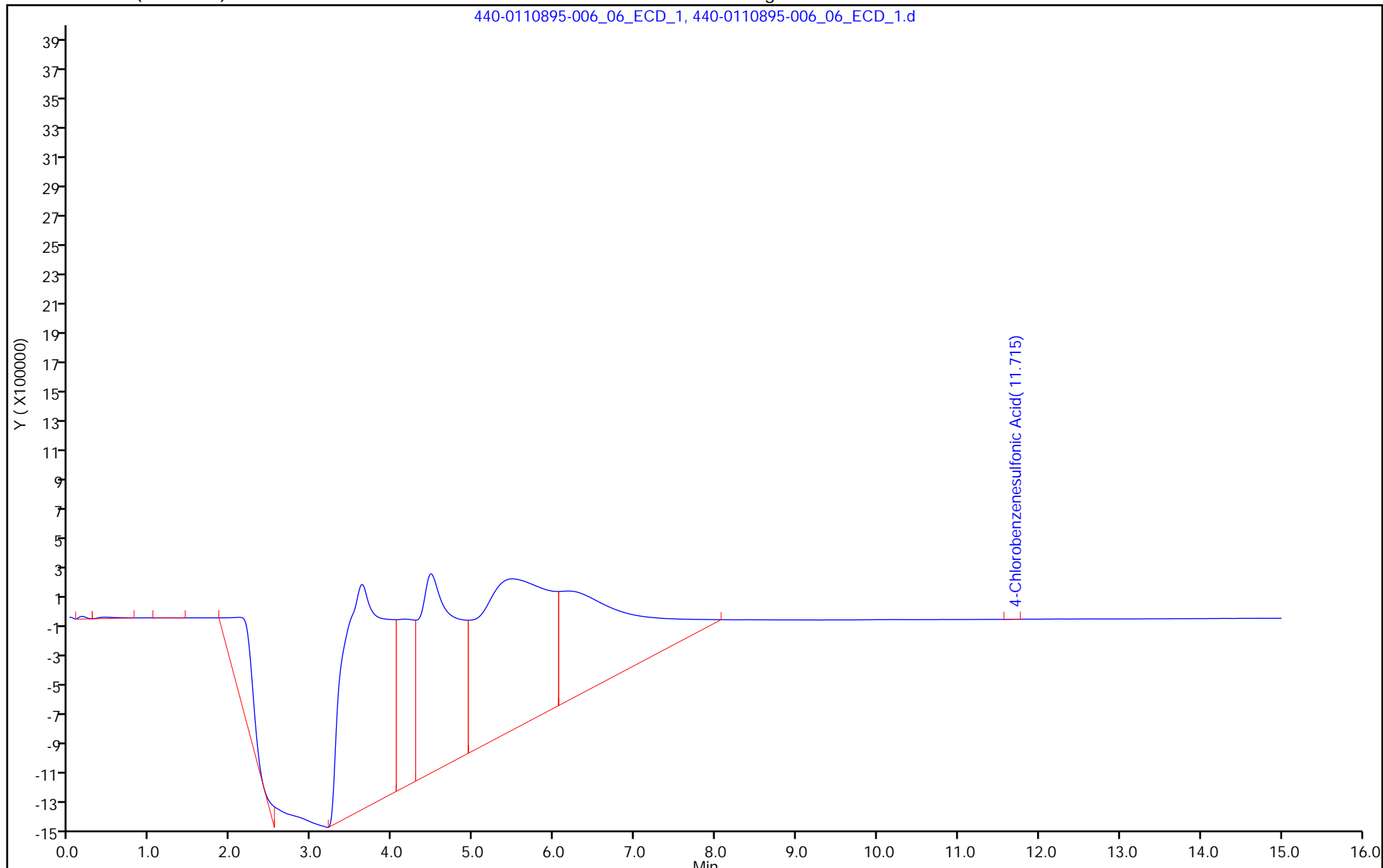
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-507219/6
 Matrix: Water Lab File ID: 440-0110956-00606ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 14:56
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00606ECD_1.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 24-Oct-2018 14:56:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-006
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 15:35:59 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0304

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00606ECD_1.d

Injection Date: 24-Oct-2018 14:56:00

Instrument ID: IC-24

Operator ID:

Lims ID: MB

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

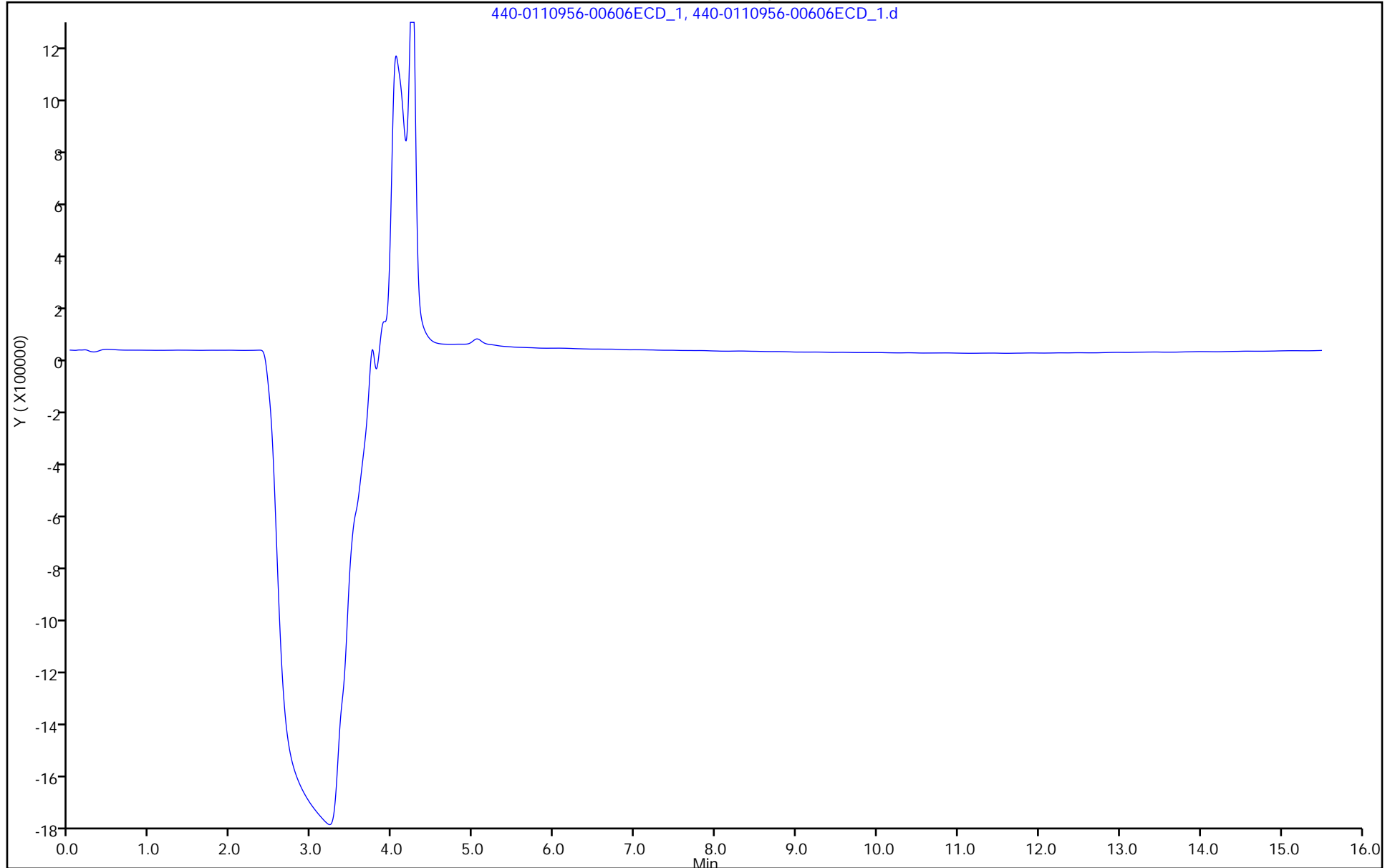
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506828/3
 Matrix: Water Lab File ID: 440-0110861-003_3_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 07:06
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-003_3_ECD_1.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 07:06:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-003_3_ECD_1.d

Injection Date: 23-Oct-2018 07:06:00

Instrument ID: IC-25

Operator ID:

Lims ID: CCB

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

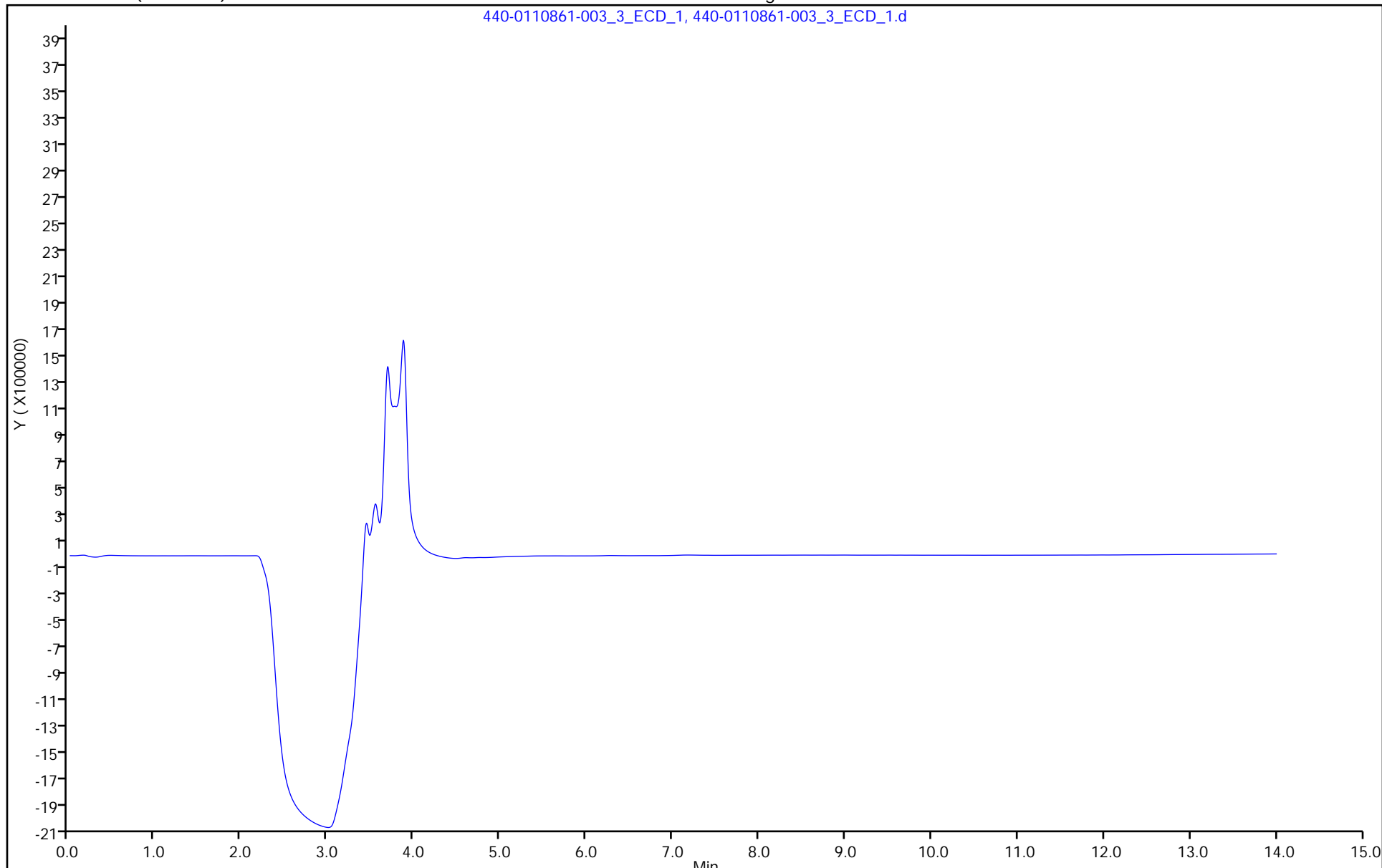
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506828/16
 Matrix: Water Lab File ID: 440-0110861-016_16_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 11:11
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-016_16_ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 11:11:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-016
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 11:26:58 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-016_16_ECD_1.d

Injection Date: 23-Oct-2018 11:11:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccb

Worklist Smp#: 16

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

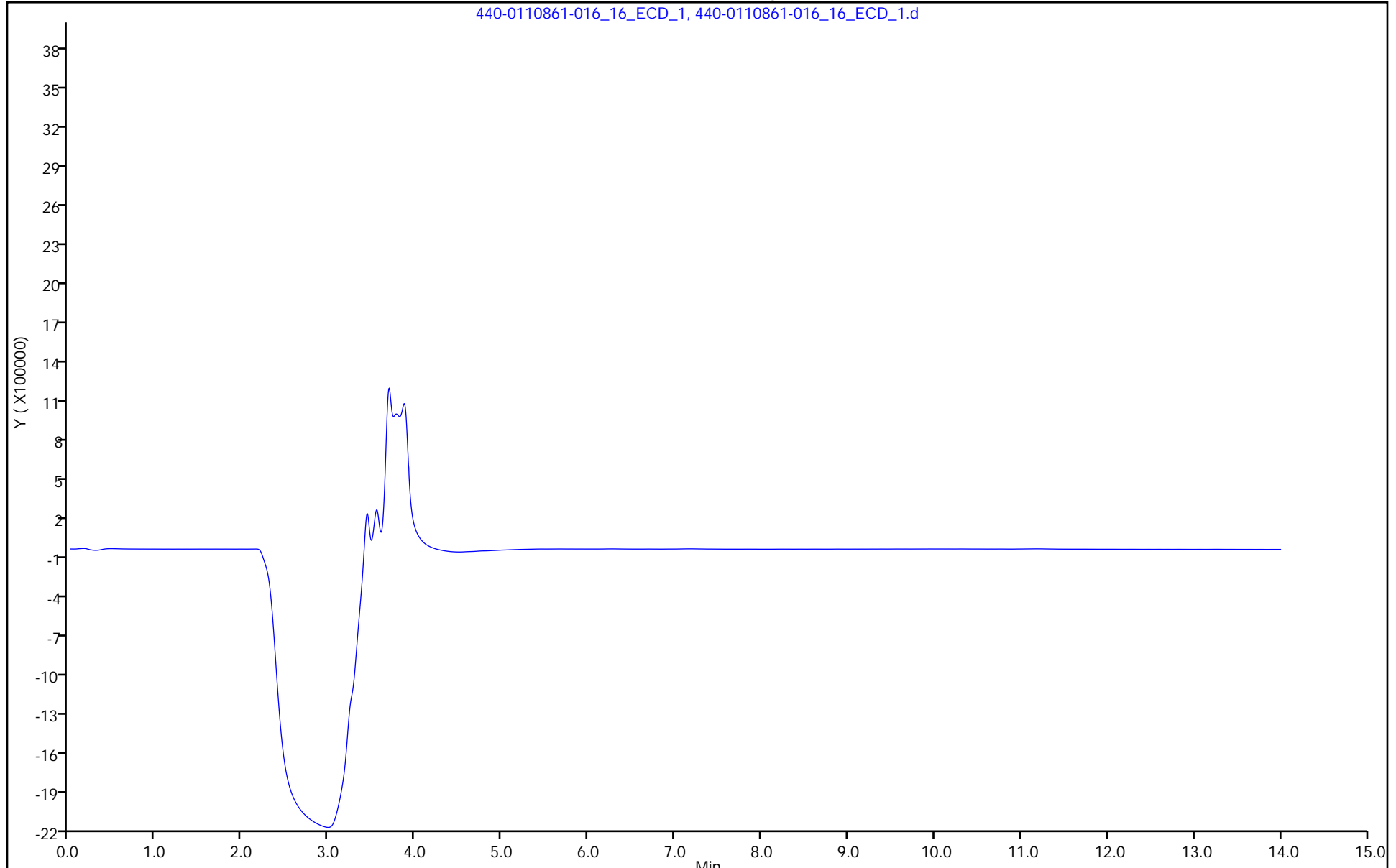
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506828/28
 Matrix: Water Lab File ID: 440-0110861-028_28_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 15:09
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-028_28_ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 15:09:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-028
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 15:11:37 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX1014

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-028_28_ECD_1.d

Injection Date: 23-Oct-2018 15:09:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccb

Worklist Smp#: 28

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

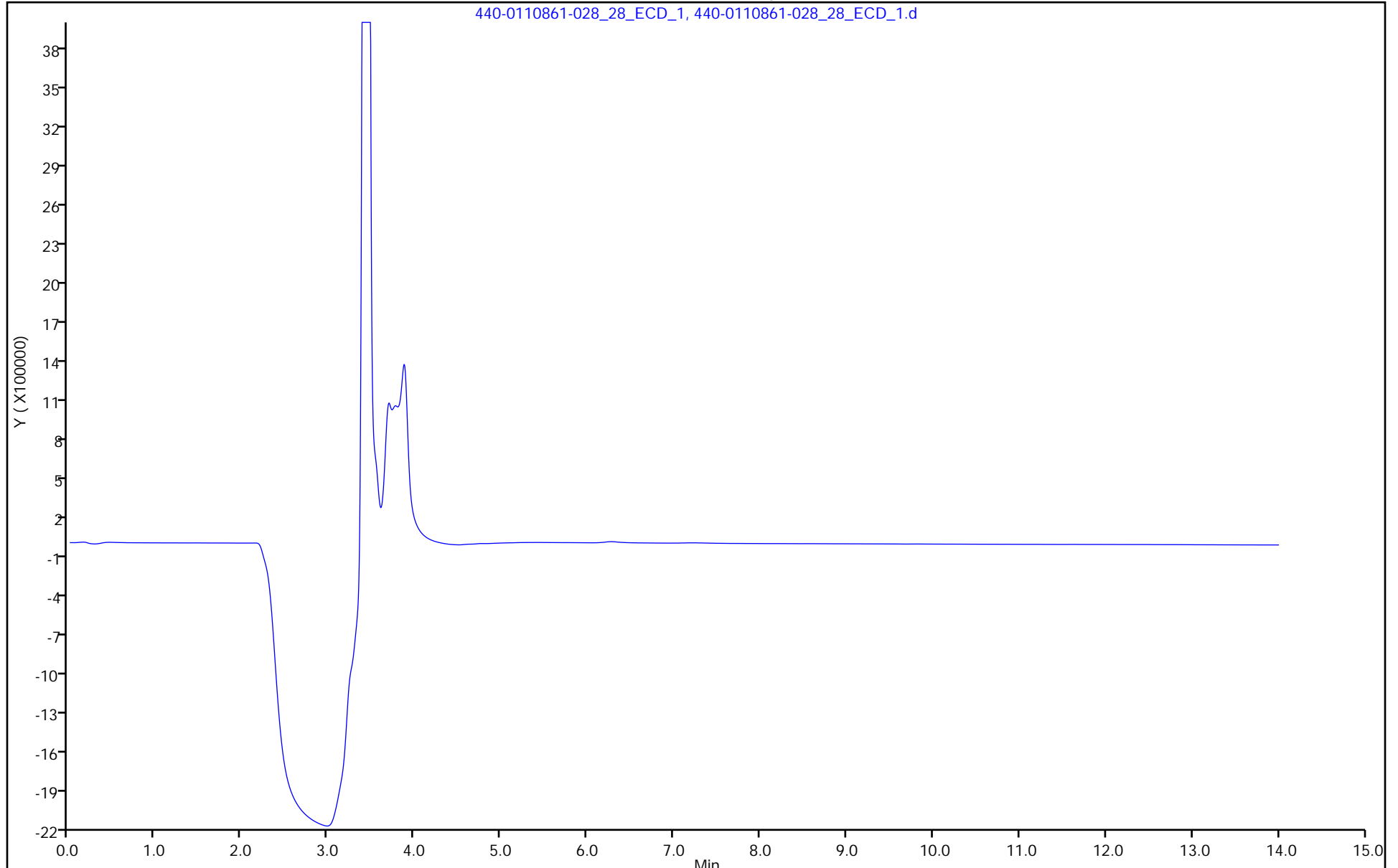
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506828/39
 Matrix: Water Lab File ID: 440-0110861-039_39_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 18:17
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-039_39_ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 18:17:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-039
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:56:29 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:56:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-039_39_ECD_1.d

Injection Date: 23-Oct-2018 18:17:00

Instrument ID: IC-25

Operator ID:

Lims ID: ccb

Worklist Smp#: 39

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

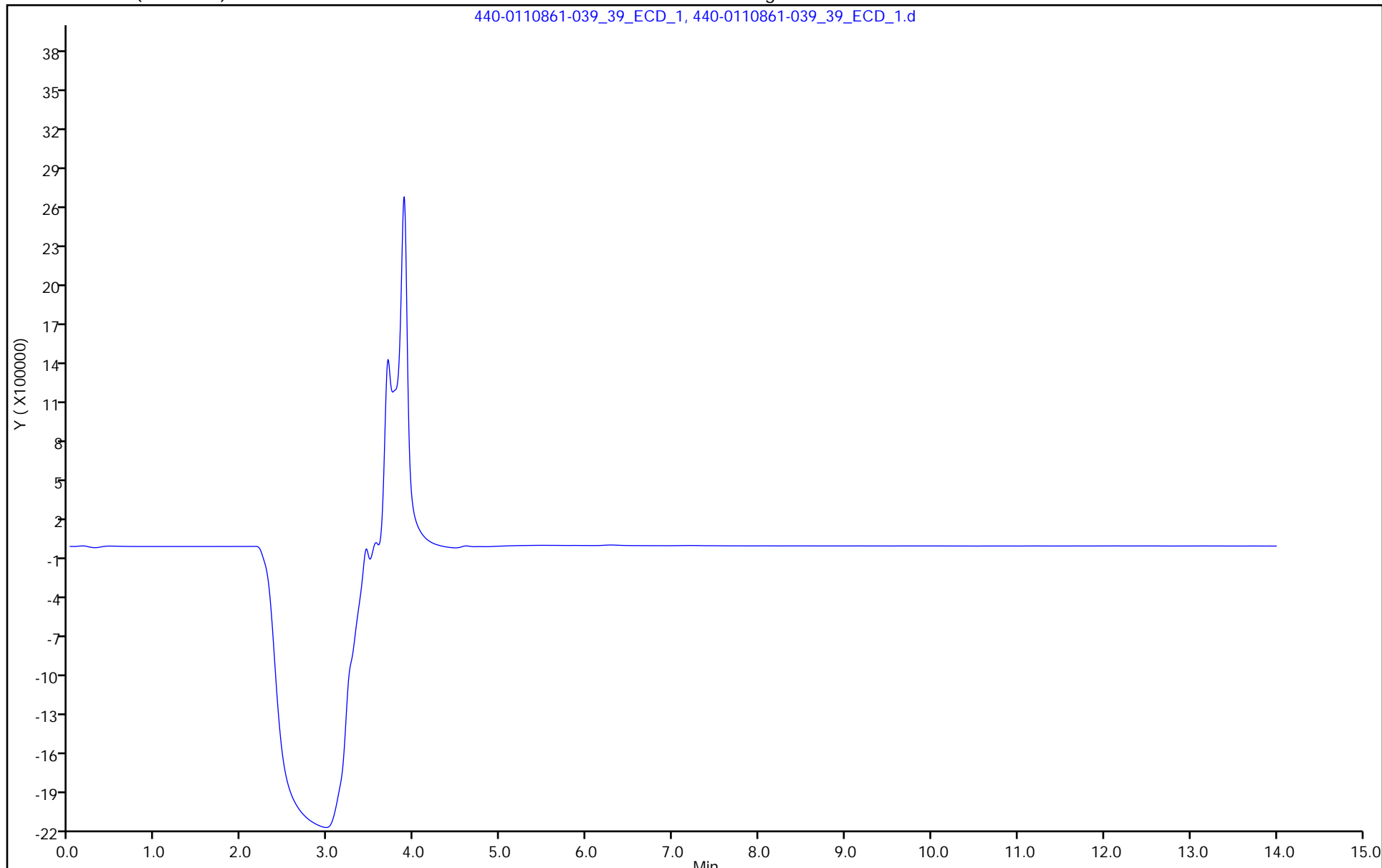
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506935/3
 Matrix: Water Lab File ID: 440-0110895-003_03_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 12:21
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-003_03_ECD_1.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 12:21:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-003_03_ECD_1.d

Injection Date: 23-Oct-2018 12:21:00

Instrument ID: IC-23

Operator ID:

Lims ID: CCB

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

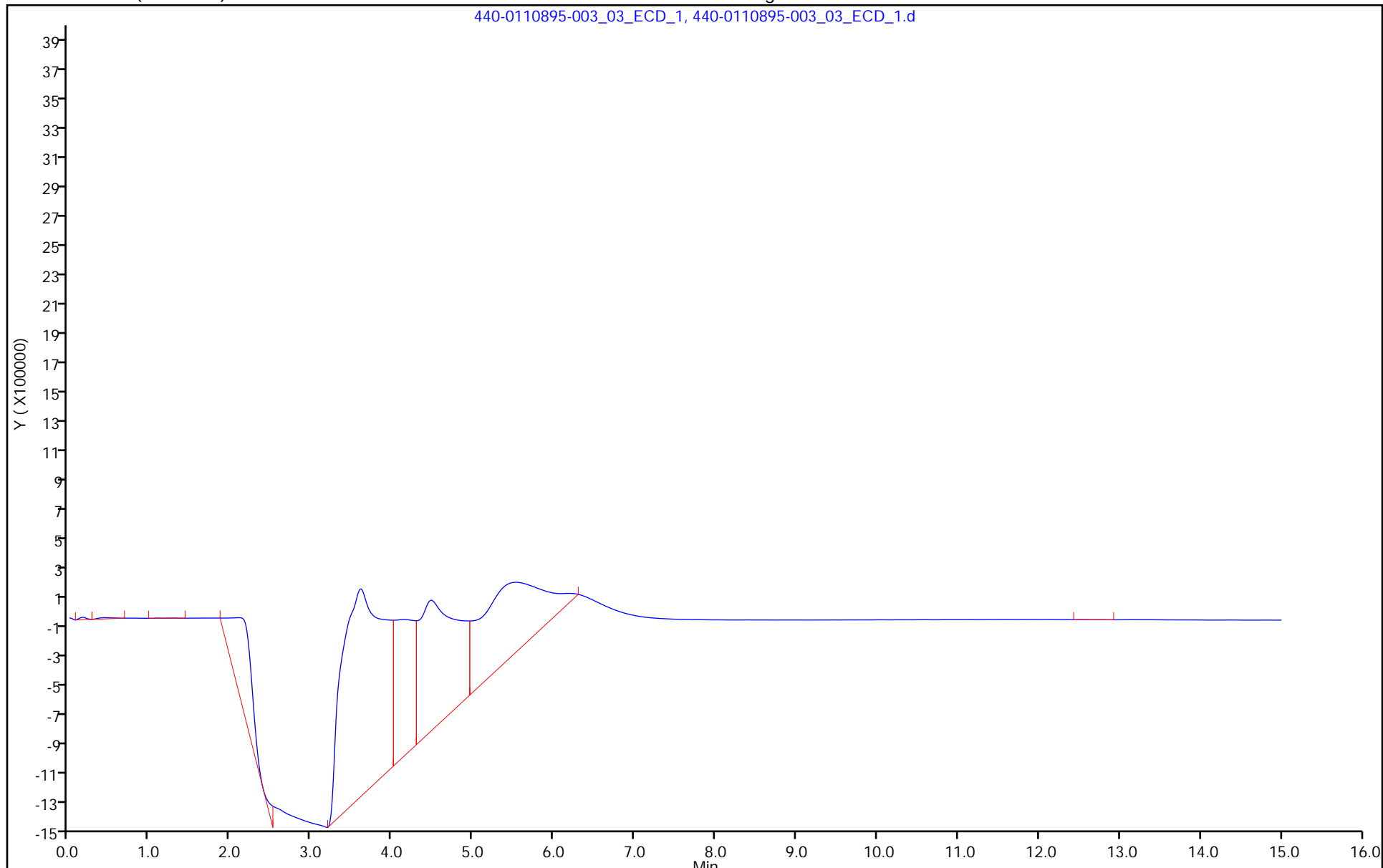
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506935/14
 Matrix: Water Lab File ID: 440-0110895-014_14_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 17:38
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-014_14_ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 17:38:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-014
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:33:00 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:33:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-014_14_ECD_1.d

Injection Date: 23-Oct-2018 17:38:00

Instrument ID: IC-23

Operator ID:

Lims ID: ccb

Worklist Smp#: 14

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

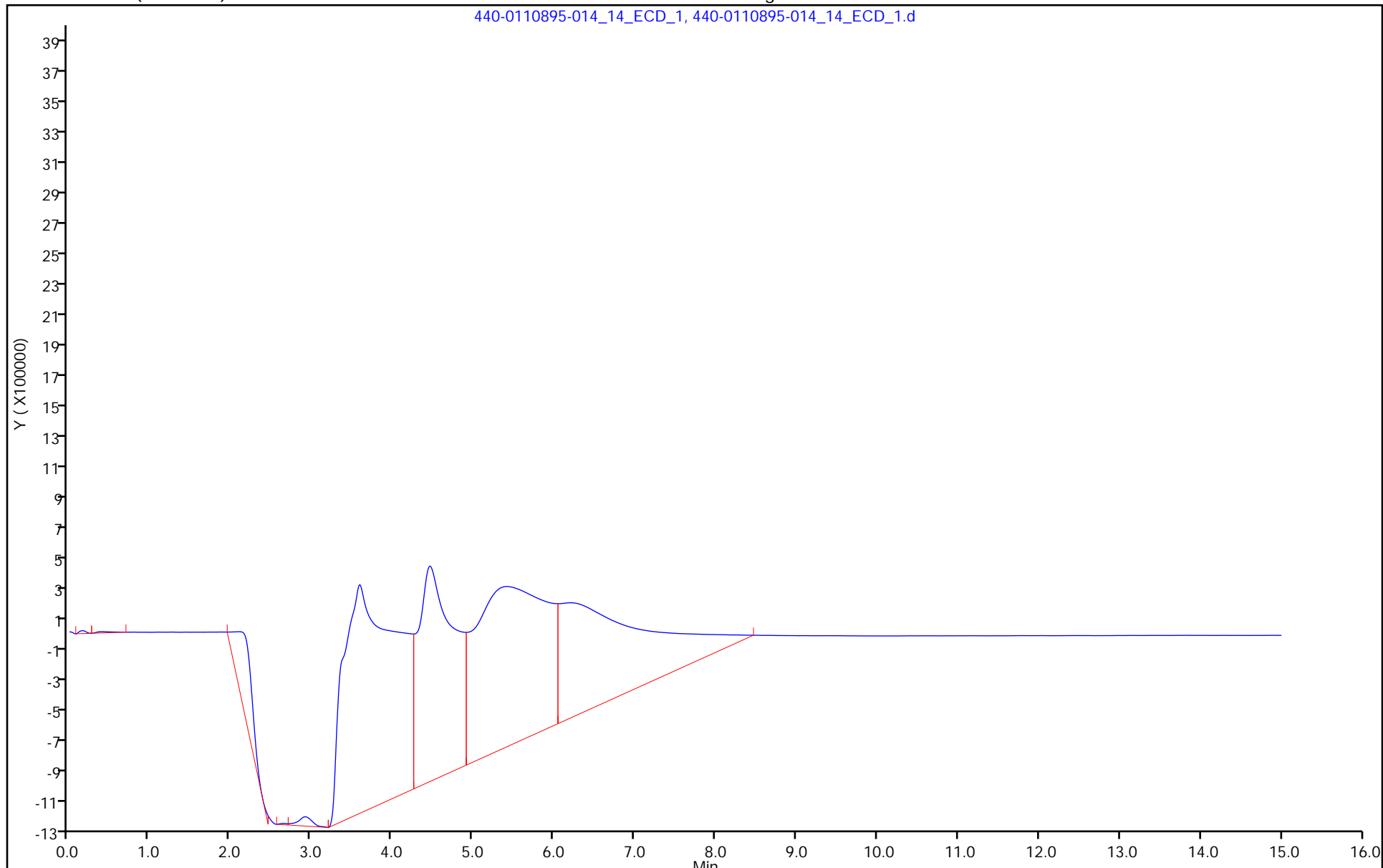
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506935/22
 Matrix: Water Lab File ID: 440-0110895-022_22_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 20:21
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-022_22_ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 23-Oct-2018 20:21:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-022
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:38:25 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:38:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-022_22_ECD_1.d

Injection Date: 23-Oct-2018 20:21:00

Instrument ID: IC-23

Operator ID:

Lims ID: ccb

Worklist Smp#: 22

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

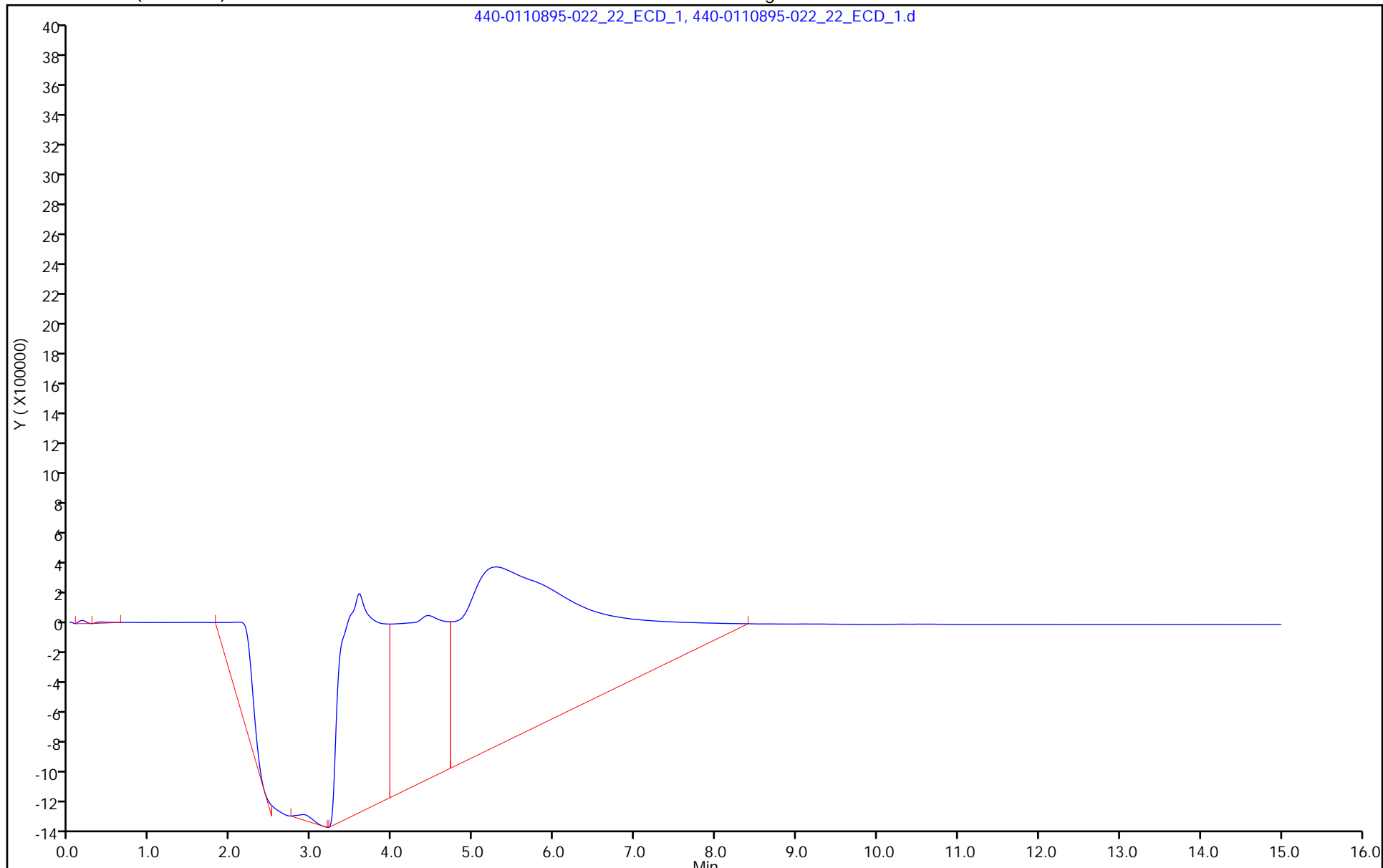
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-507219/3
 Matrix: Water Lab File ID: 440-0110956-00303ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 13:48
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00303ECD_1.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Oct-2018 13:48:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-003
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 15:35:59 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0304

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00303ECD_1.d

Injection Date: 24-Oct-2018 13:48:00

Instrument ID: IC-24

Operator ID:

Lims ID: CCB

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

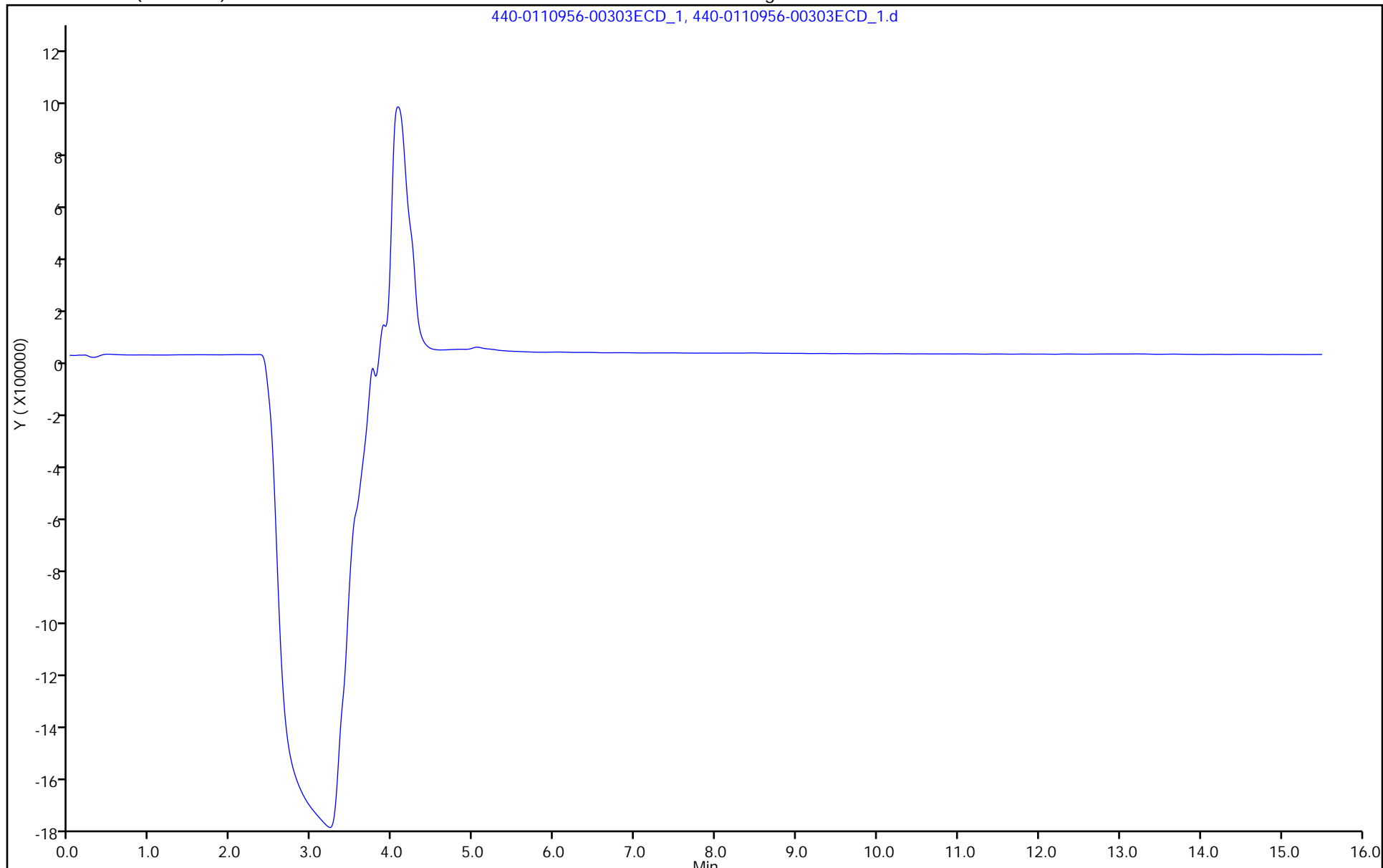
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-507219/16
 Matrix: Water Lab File ID: 440-0110956-01616ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 19:01
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-01616ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Oct-2018 19:01:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-016
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 06:26:10 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-01616ECD_1.d

Injection Date: 24-Oct-2018 19:01:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccb

Worklist Smp#: 16

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

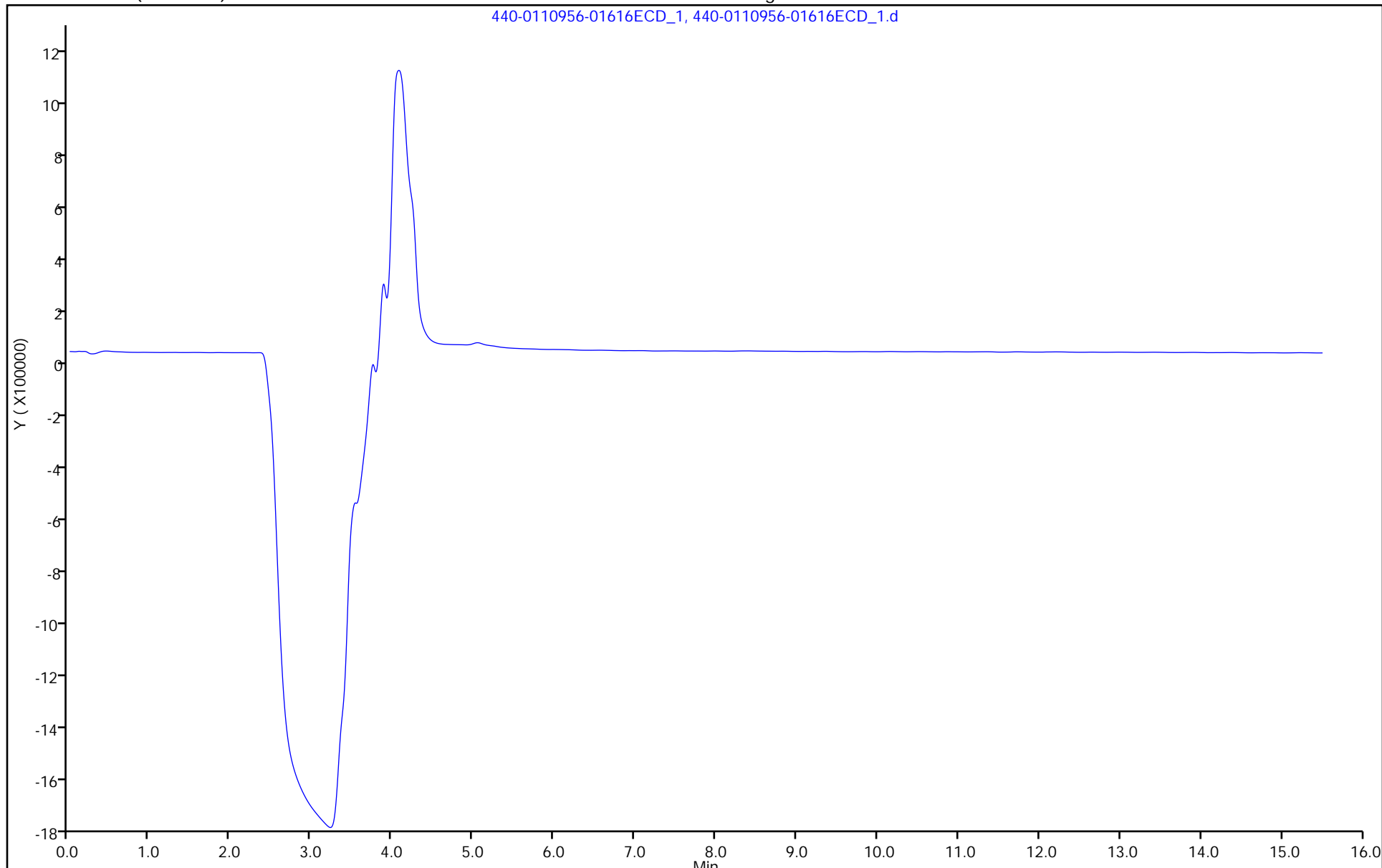
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-507219/27
 Matrix: Water Lab File ID: 440-0110956-02727ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 22:23
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-02727ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Oct-2018 22:23:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-027
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 06:30:01 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-02727ECD_1.d

Injection Date: 24-Oct-2018 22:23:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccb

Worklist Smp#: 27

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

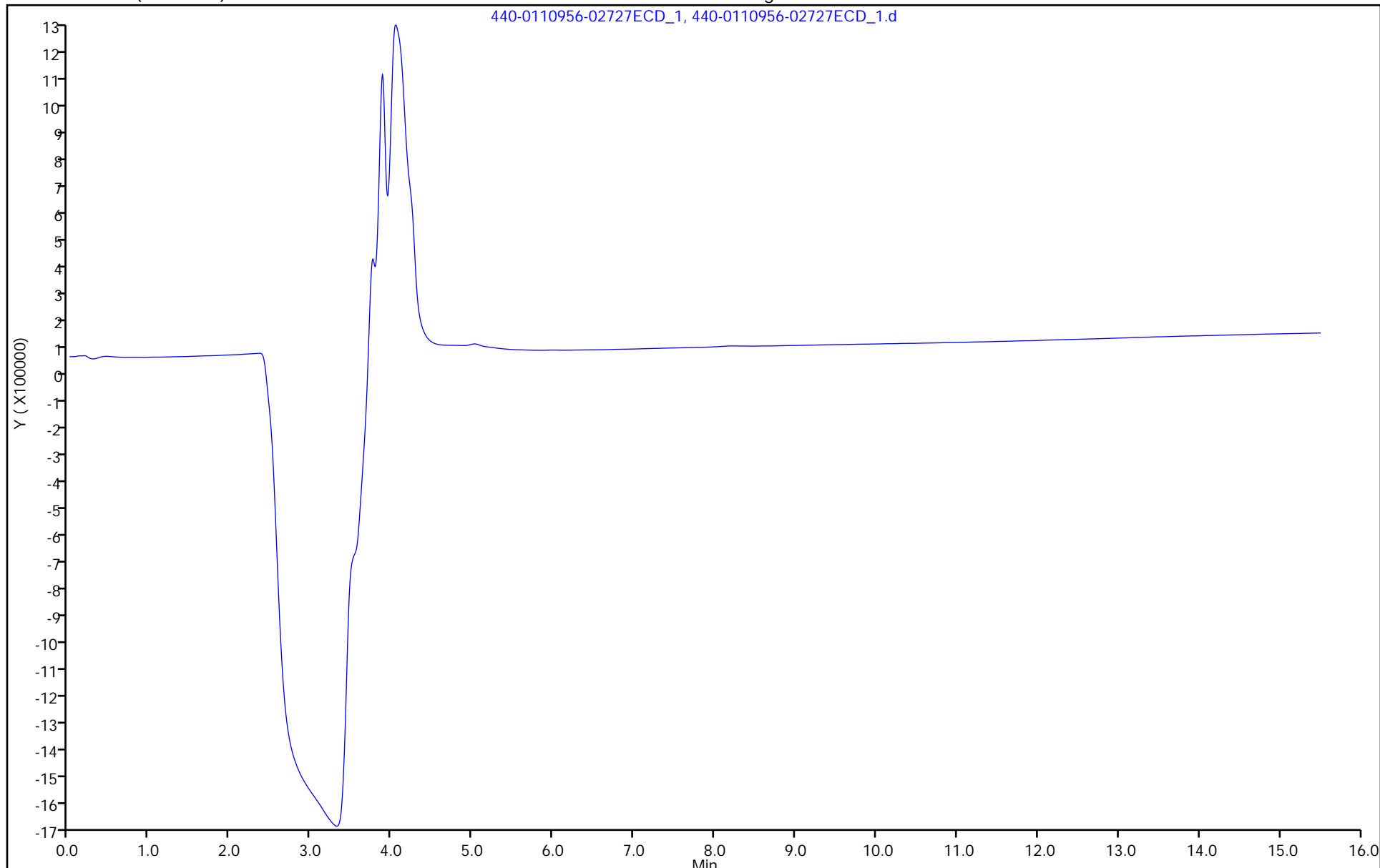
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-507219/34
 Matrix: Water Lab File ID: 440-0110956-03434ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/25/2018 00:32
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03434ECD_1.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 25-Oct-2018 00:32:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-034
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 17:23:08 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK008

First Level Reviewer: saraubonp Date: 25-Oct-2018 17:23:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03434ECD_1.d

Injection Date: 25-Oct-2018 00:32:00

Instrument ID: IC-24

Operator ID:

Lims ID: ccb

Worklist Smp#: 34

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

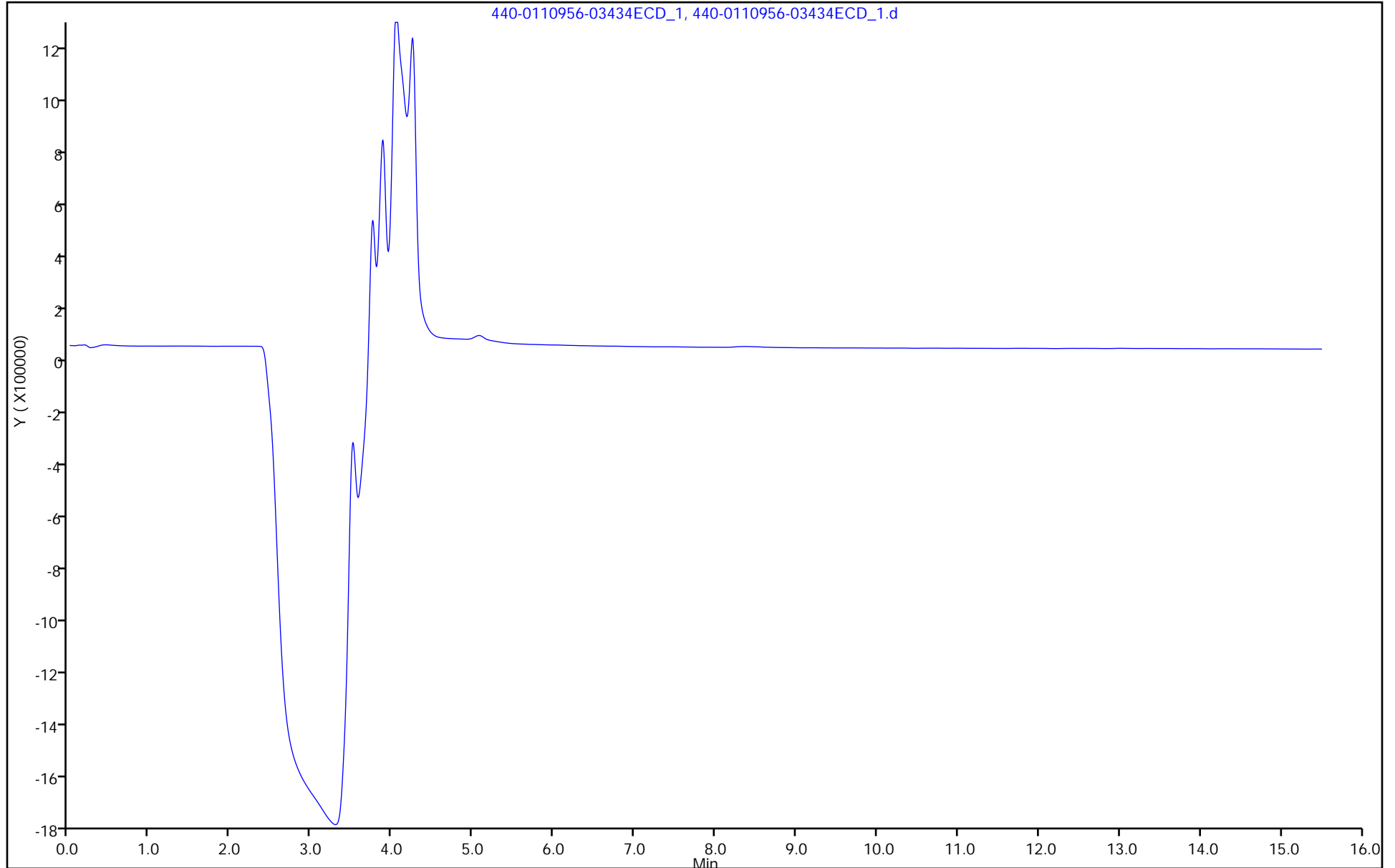
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-500813/10
 Matrix: Water Lab File ID: 440-0109501-010_10_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 09/24/2018 18:43
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 500813 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-010_10_ECD_1.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 24-Sep-2018 18:43:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109501-010
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Sep-2018 07:04:09 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK025

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-010_10_ECD_1.d

Injection Date: 24-Sep-2018 18:43:00

Instrument ID: IC-23

Operator ID:

Lims ID: ICB

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

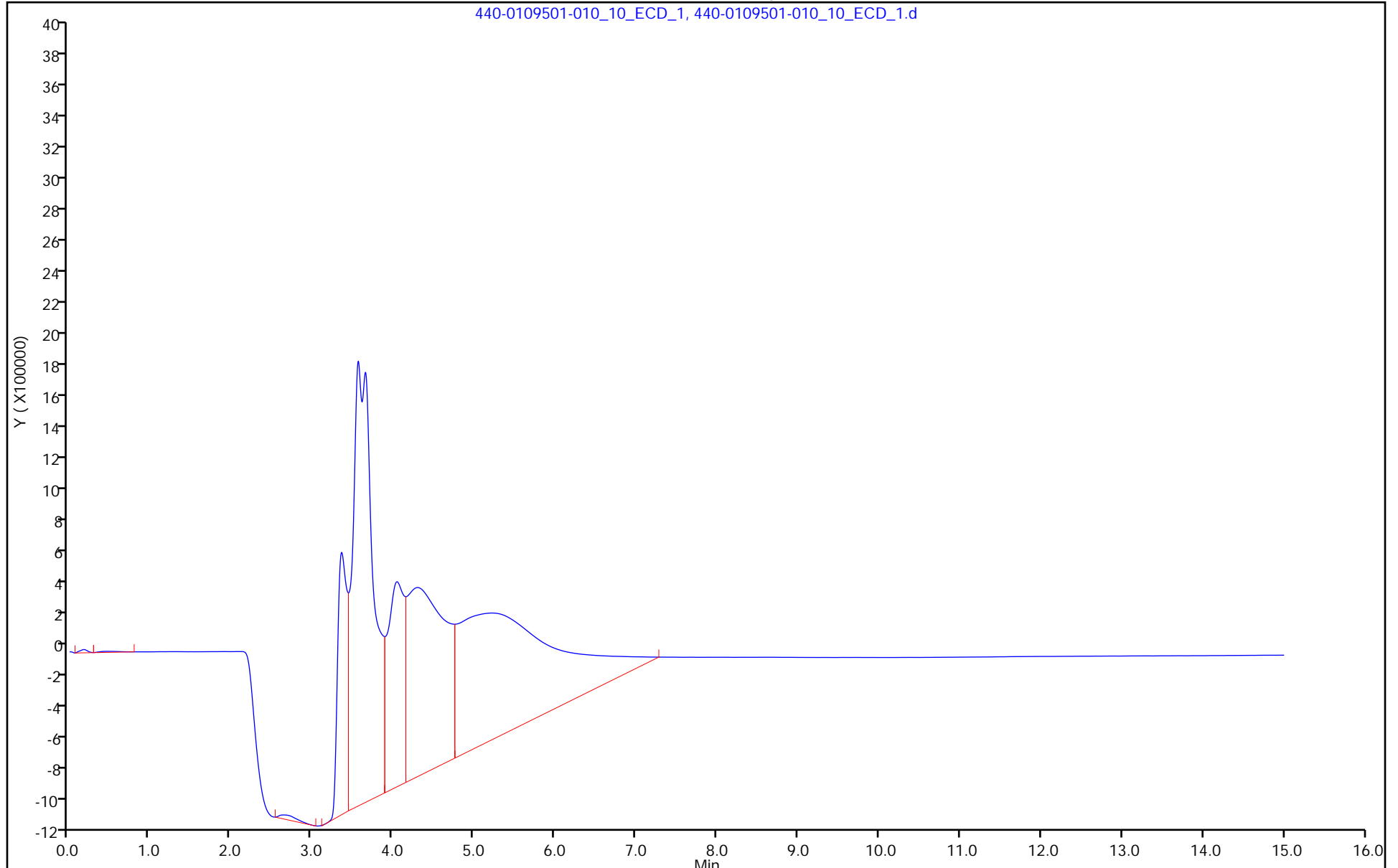
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-502906/9
 Matrix: Water Lab File ID: 440-0109994-009_9_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/04/2018 11:57
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 502906 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-009_9_ECD_1.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 04-Oct-2018 11:57:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0109994-009
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 04-Oct-2018 12:21:32 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK026

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-009_9_ECD_1.d

Injection Date: 04-Oct-2018 11:57:00

Instrument ID: IC-25

Operator ID:

Lims ID: ICB

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

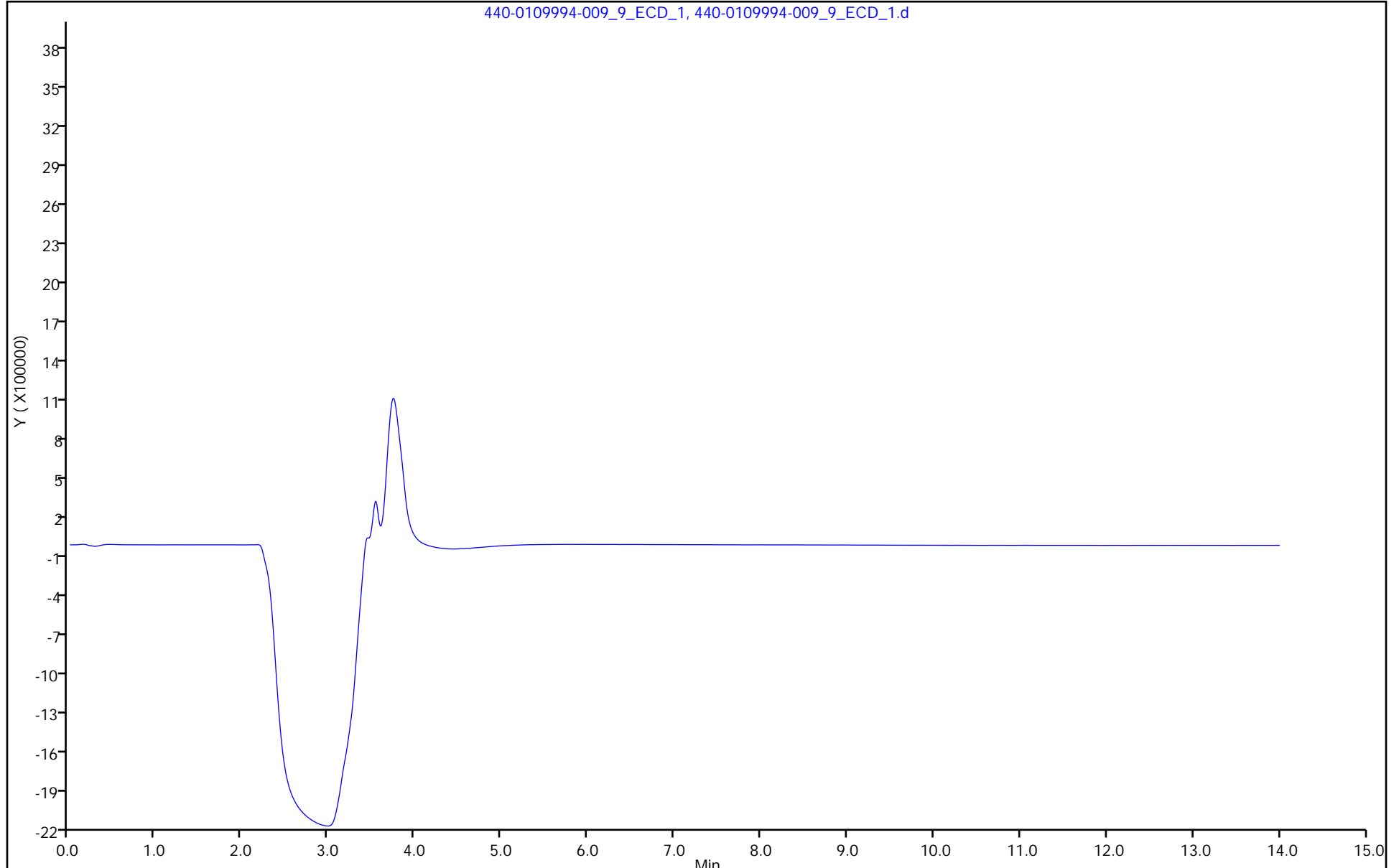
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-506781/10
 Matrix: Water Lab File ID: 440-0110854-01010ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/22/2018 19:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	ND		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-01010ECD_1.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 22-Oct-2018 19:45:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110854-010
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 06:27:17 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-01010ECD_1.d

Injection Date: 22-Oct-2018 19:45:00

Instrument ID: IC-24

Operator ID:

Lims ID: ICB

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

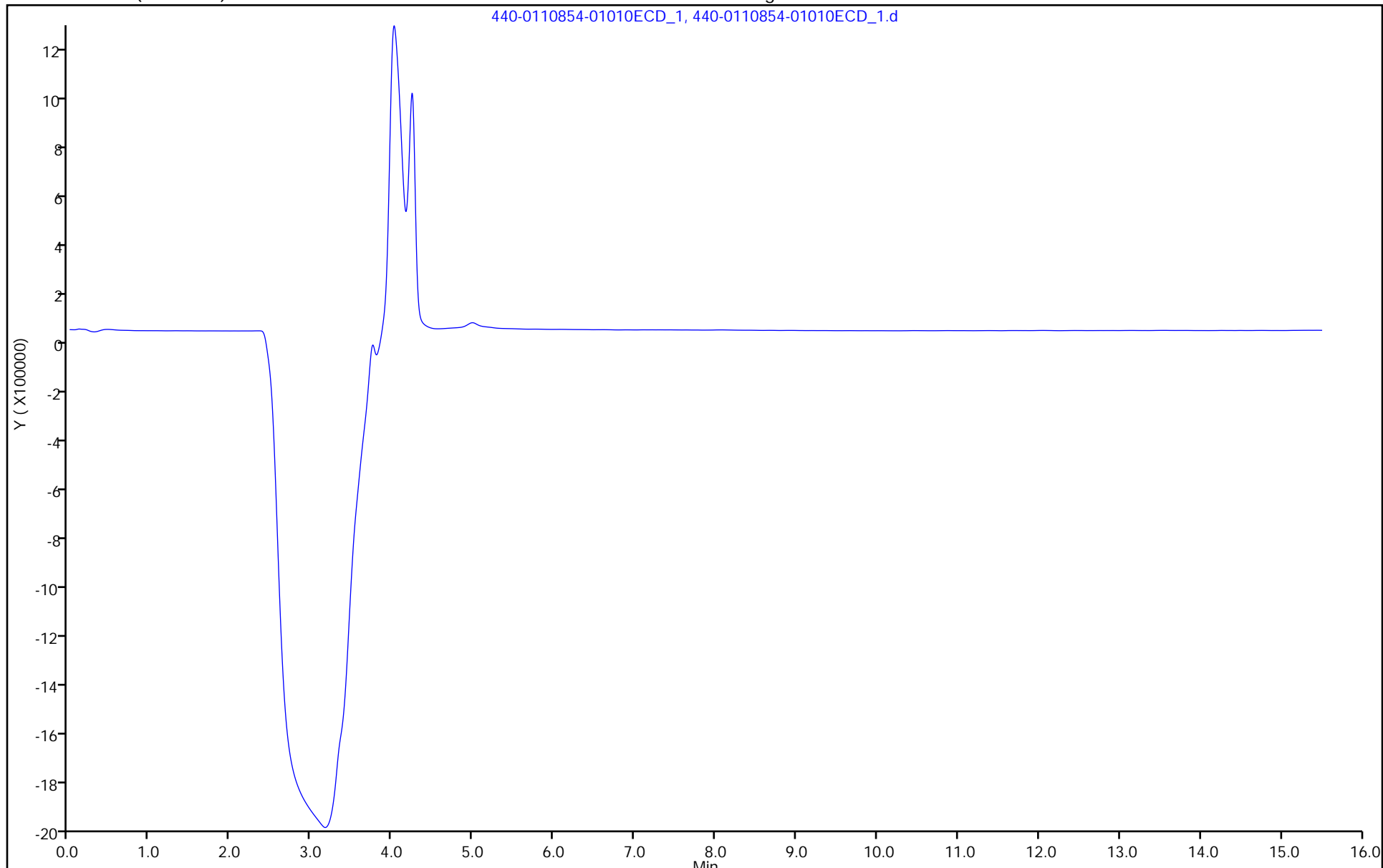
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506828/5
 Matrix: Water Lab File ID: 440-0110861-005_5_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 07:46
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	10.3		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-005_5_ECD_1.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 23-Oct-2018 07:46:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	11.187	11.180	0.007	1256353	10.0	10.3	
---------------	--------	--------	-------	---------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-005_5_ECD_1.d

Injection Date: 23-Oct-2018 07:46:00

Instrument ID: IC-25

Operator ID:

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

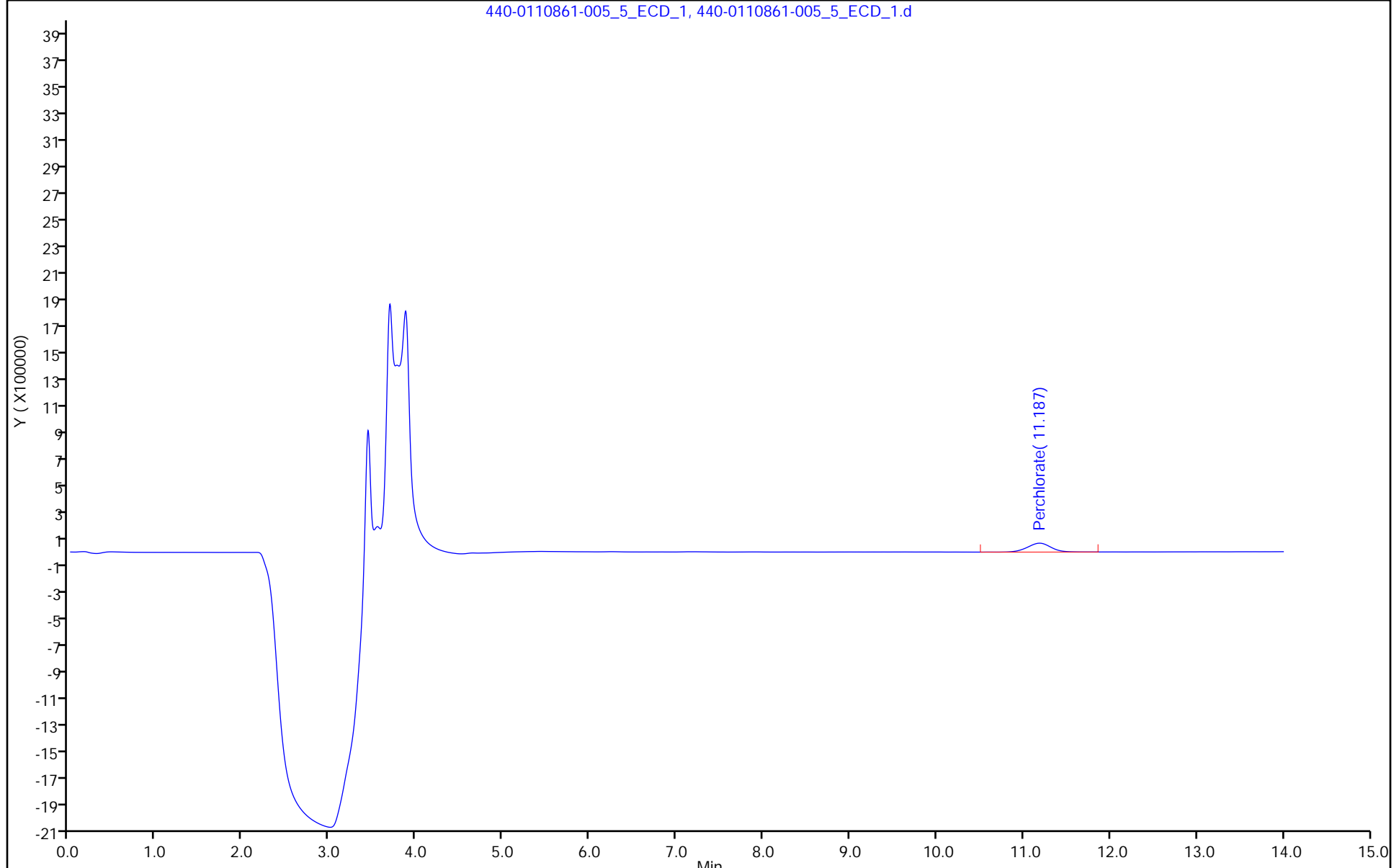
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506935/5
 Matrix: Water Lab File ID: 440-0110895-005_05_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 13:03
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	26.0		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-005_05_ECD_1.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 23-Oct-2018 13:03:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	10.170	10.165	0.005	3673842	25.0	26.0	
---------------	--------	--------	-------	---------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-005_05_ECD_1.d

Injection Date: 23-Oct-2018 13:03:00

Instrument ID: IC-23

Operator ID:

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

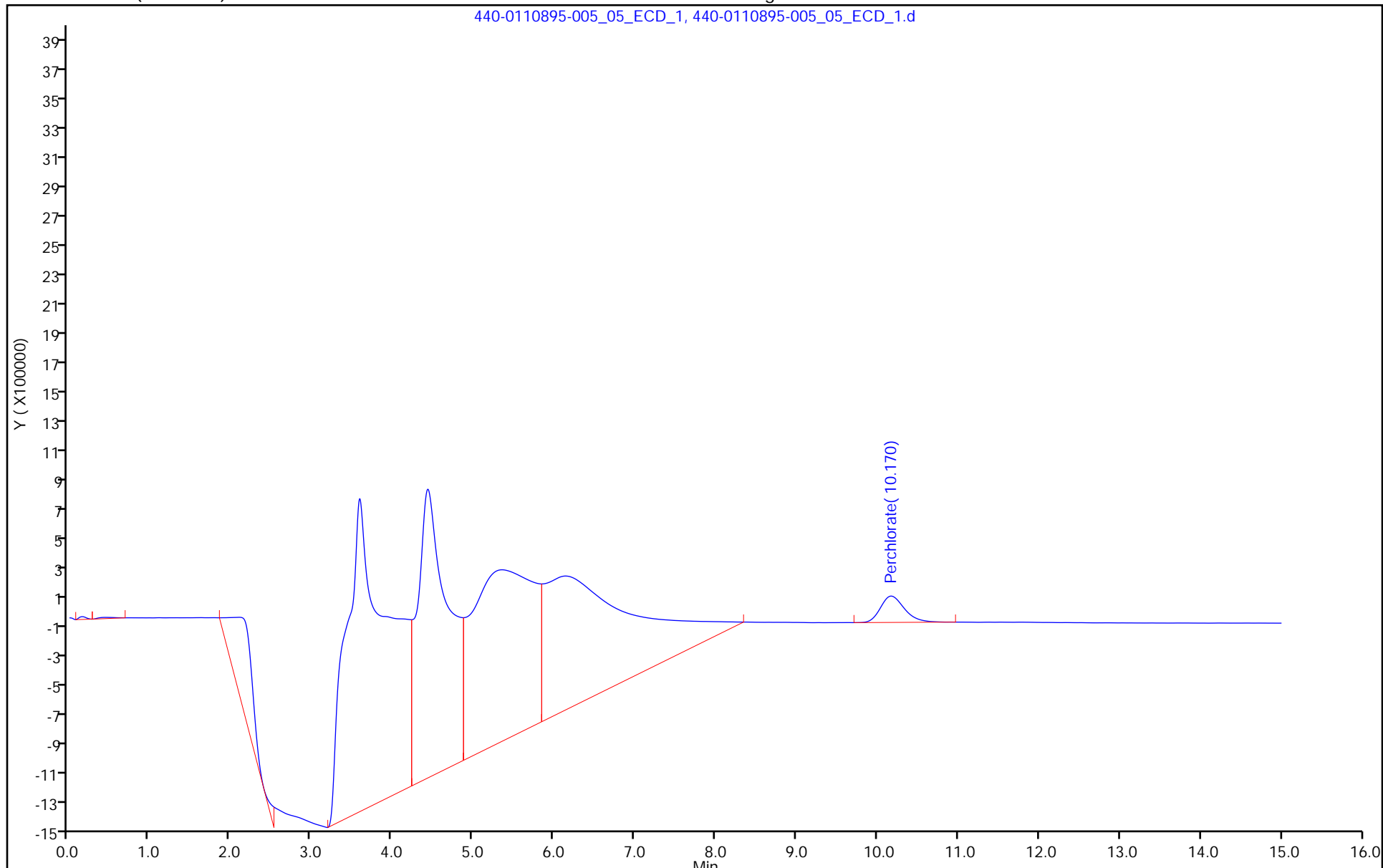
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-507219/5
 Matrix: Water Lab File ID: 440-0110956-00505ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 14:37
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	26.1		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00505ECD_1.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 24-Oct-2018 14:37:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-005
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 15:35:59 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0304

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	13.074	13.080	-0.006	3296237	25.0	26.1	
---------------	--------	--------	--------	---------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 250.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00505ECD_1.d

Injection Date: 24-Oct-2018 14:37:00

Instrument ID: IC-24

Operator ID:

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

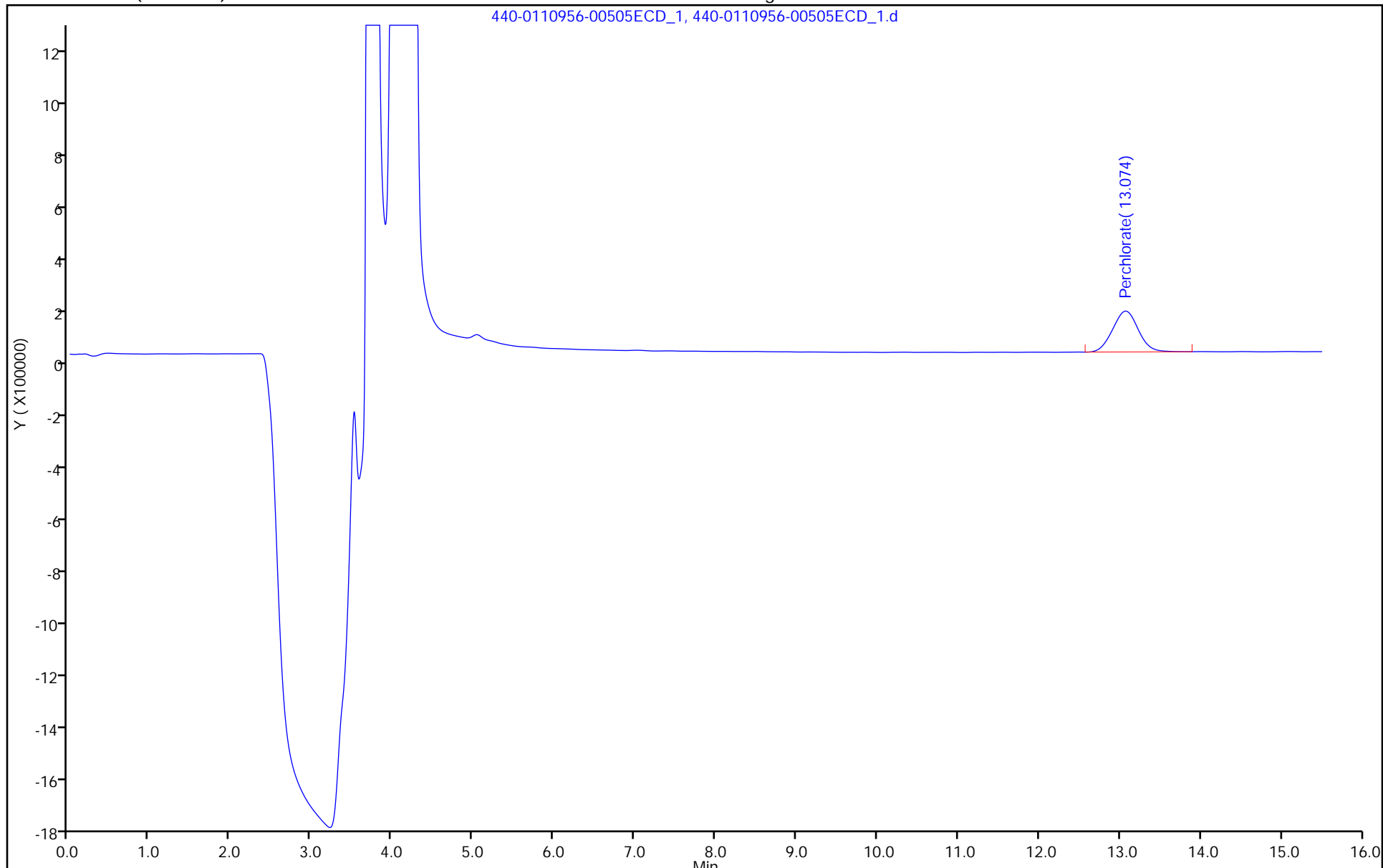
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-506828/4
 Matrix: Water Lab File ID: 440-0110861-004_4_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 07:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	0.958	J	1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-004_4_ECD_1.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 23-Oct-2018 07:29:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-004
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	11.207	11.180	0.027	146428	1.00	0.9582	
---------------	--------	--------	-------	--------	------	--------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-004_4_ECD_1.d

Injection Date: 23-Oct-2018 07:29:00

Instrument ID: IC-25

Operator ID:

Lims ID: MRL

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

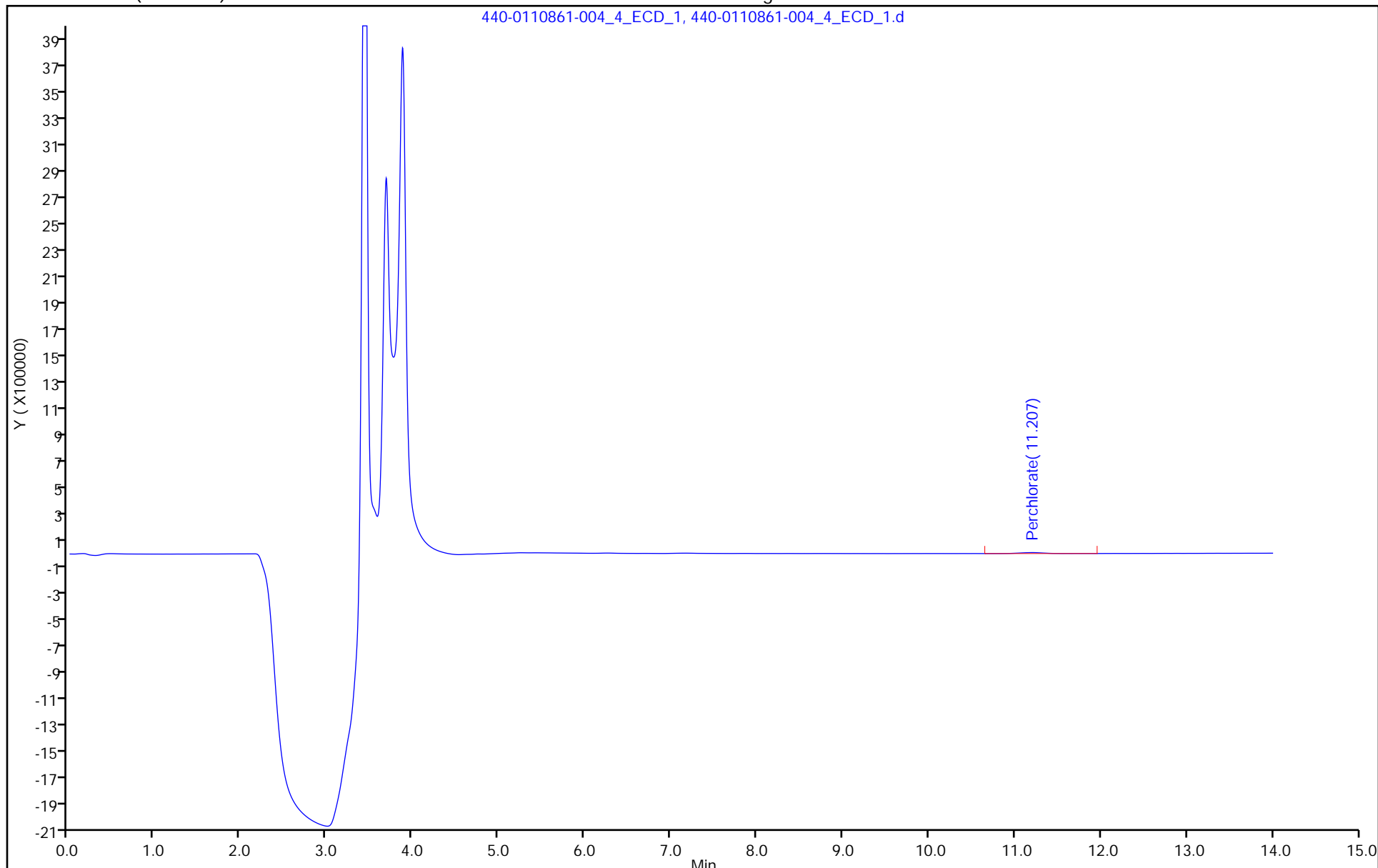
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-506828/14
 Matrix: Water Lab File ID: 440-0110861-014_14_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 10:38
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	4.11		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-014_14_ECD_1.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 23-Oct-2018 10:38:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-014
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 12:13:15 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	11.191	11.180	0.011	516437	4.00	4.11	
---------------	--------	--------	-------	--------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 40.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-014_14_ECD_1.d

Injection Date: 23-Oct-2018 10:38:00

Instrument ID: IC-25

Operator ID:

Lims ID: MRL

Worklist Smp#: 14

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

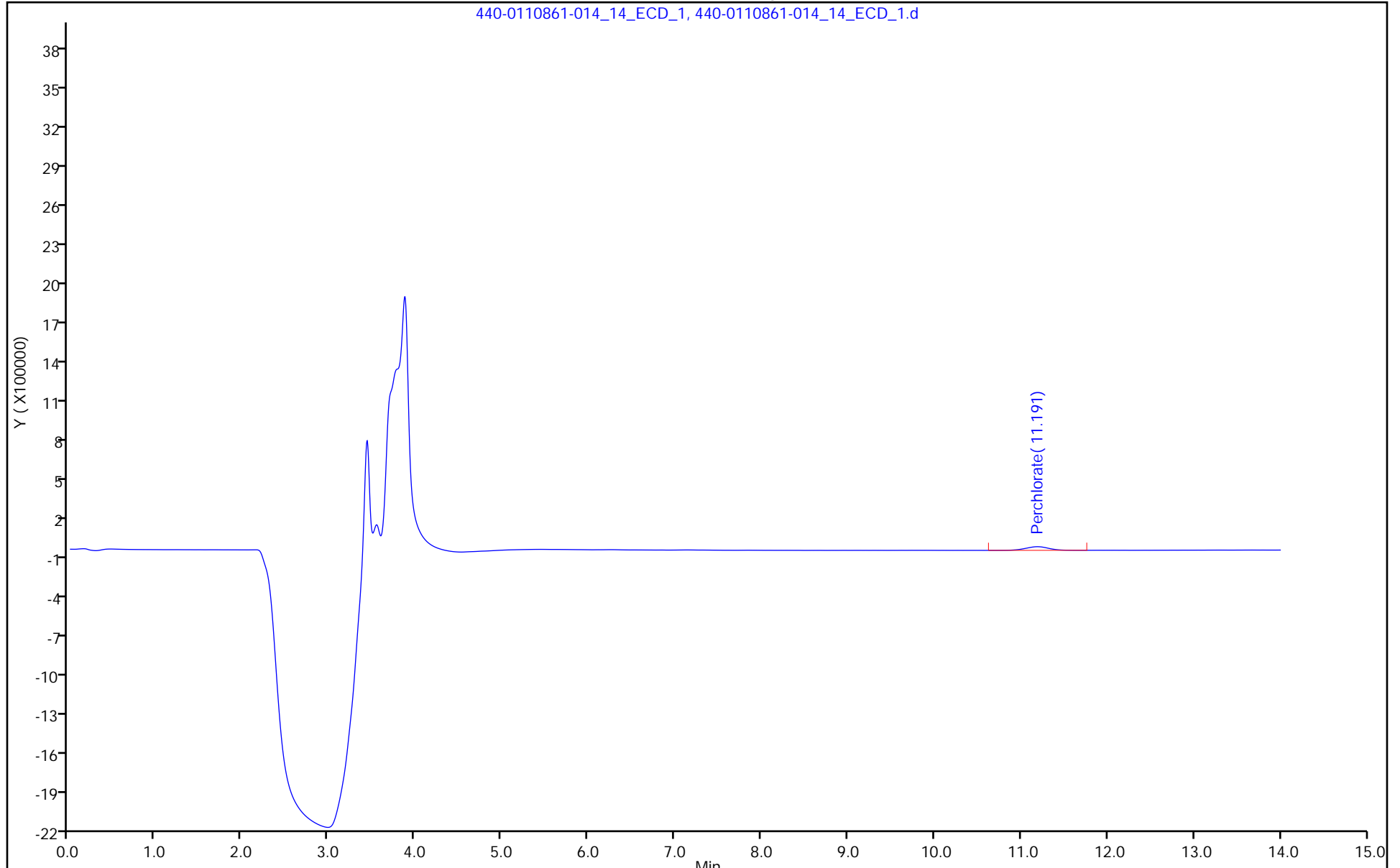
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-506935/9
 Matrix: Water Lab File ID: 440-0110895-009_09_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 15:32
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	1.02		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-009_09_ECD_1.d
 Lims ID: mrl
 Client ID:
 Sample Type: MRL
 Inject. Date: 23-Oct-2018 15:32:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-009
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	10.320	10.165	0.155	101001	1.00	1.02	
---------------	--------	--------	-------	--------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-009_09_ECD_1.d

Injection Date: 23-Oct-2018 15:32:00

Instrument ID: IC-23

Operator ID:

Lims ID: mrl

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

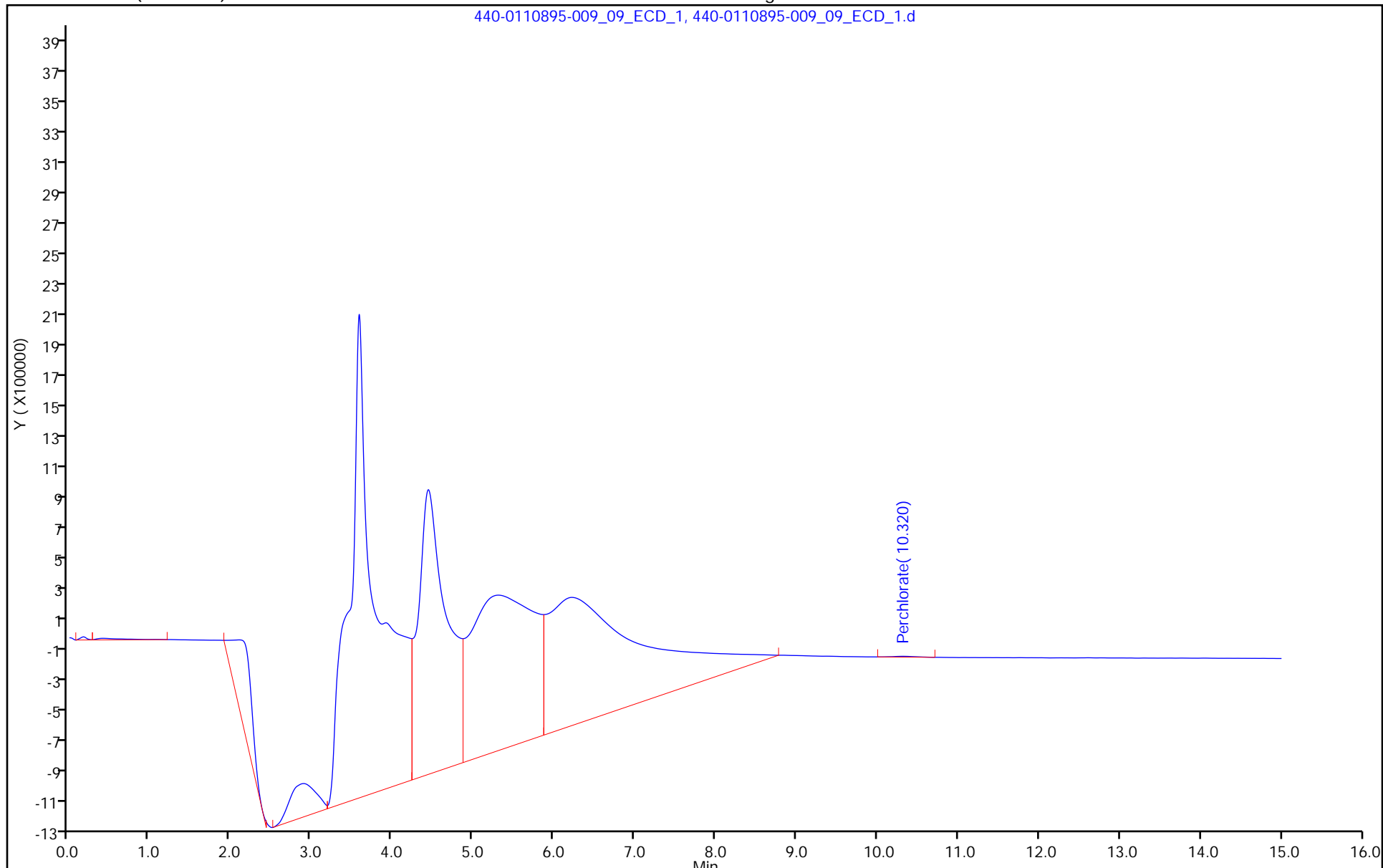
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-507219/4
 Matrix: Water Lab File ID: 440-0110956-00404ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 14:19
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	1.13		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00404ECD_1.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 24-Oct-2018 14:19:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-004
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 15:35:59 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0304

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	13.127	13.080	0.047	161376	1.00	1.13	
---------------	--------	--------	-------	--------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00404ECD_1.d

Injection Date: 24-Oct-2018 14:19:00

Instrument ID: IC-24

Operator ID:

Lims ID: MRL

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

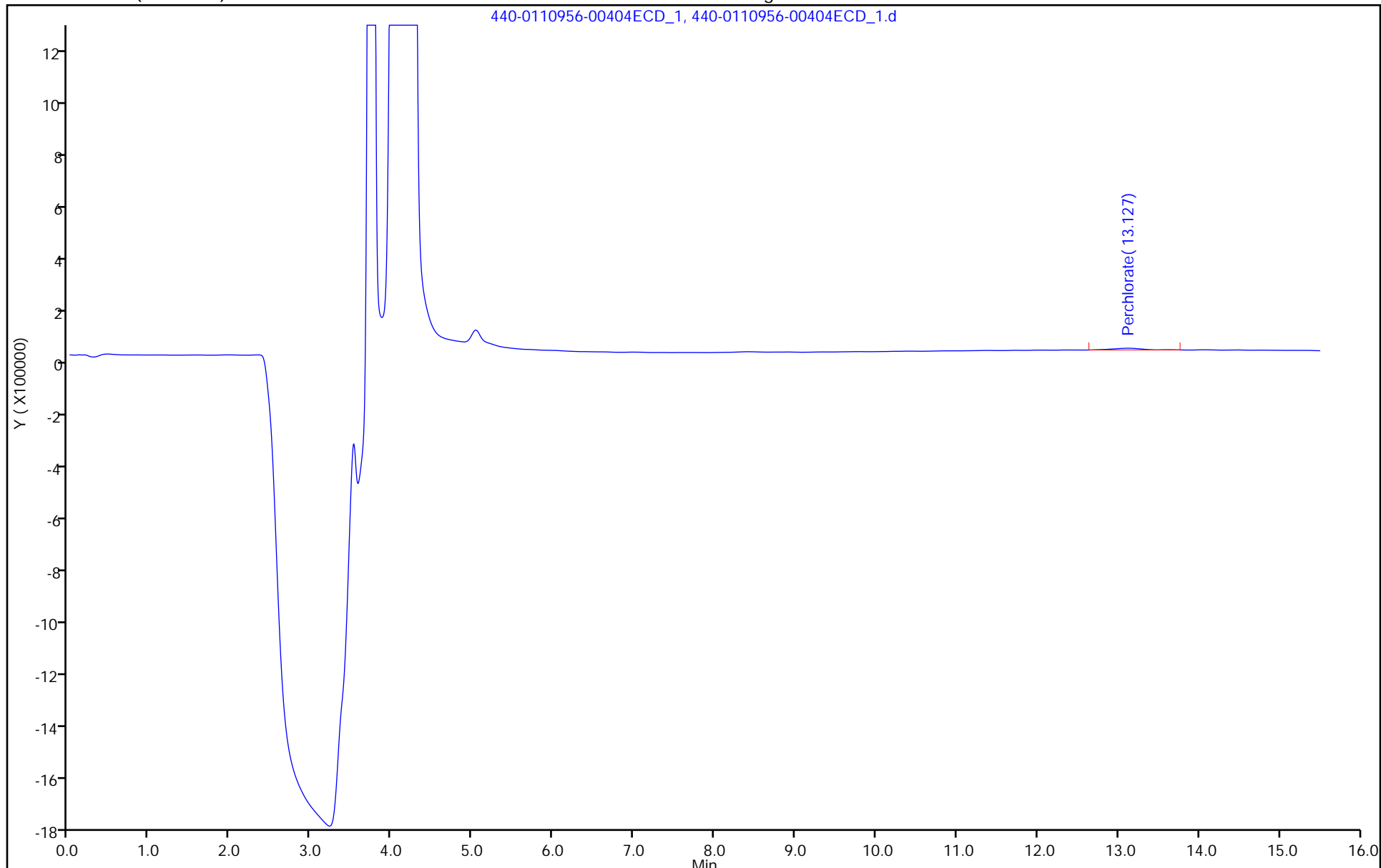
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: INF 440-506828/7
 Matrix: Water Lab File ID: 440-0110861-007_7_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 08:20
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	10.0		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-007_7_ECD_1.d
 Lims ID: INF
 Client ID:
 Sample Type: INF
 Inject. Date: 23-Oct-2018 08:20:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-007
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Sublist:
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 08:56:45 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	11.137	11.180	-0.043	1217934	10.0	10.0	
---------------	--------	--------	--------	---------	------	------	--

Reagents:

WC314.INF 10_00069 Amount Added: 5.00 Units: mL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-007_7_ECD_1.d

Injection Date: 23-Oct-2018 08:20:00

Instrument ID: IC-25

Operator ID:

Lims ID: INF

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

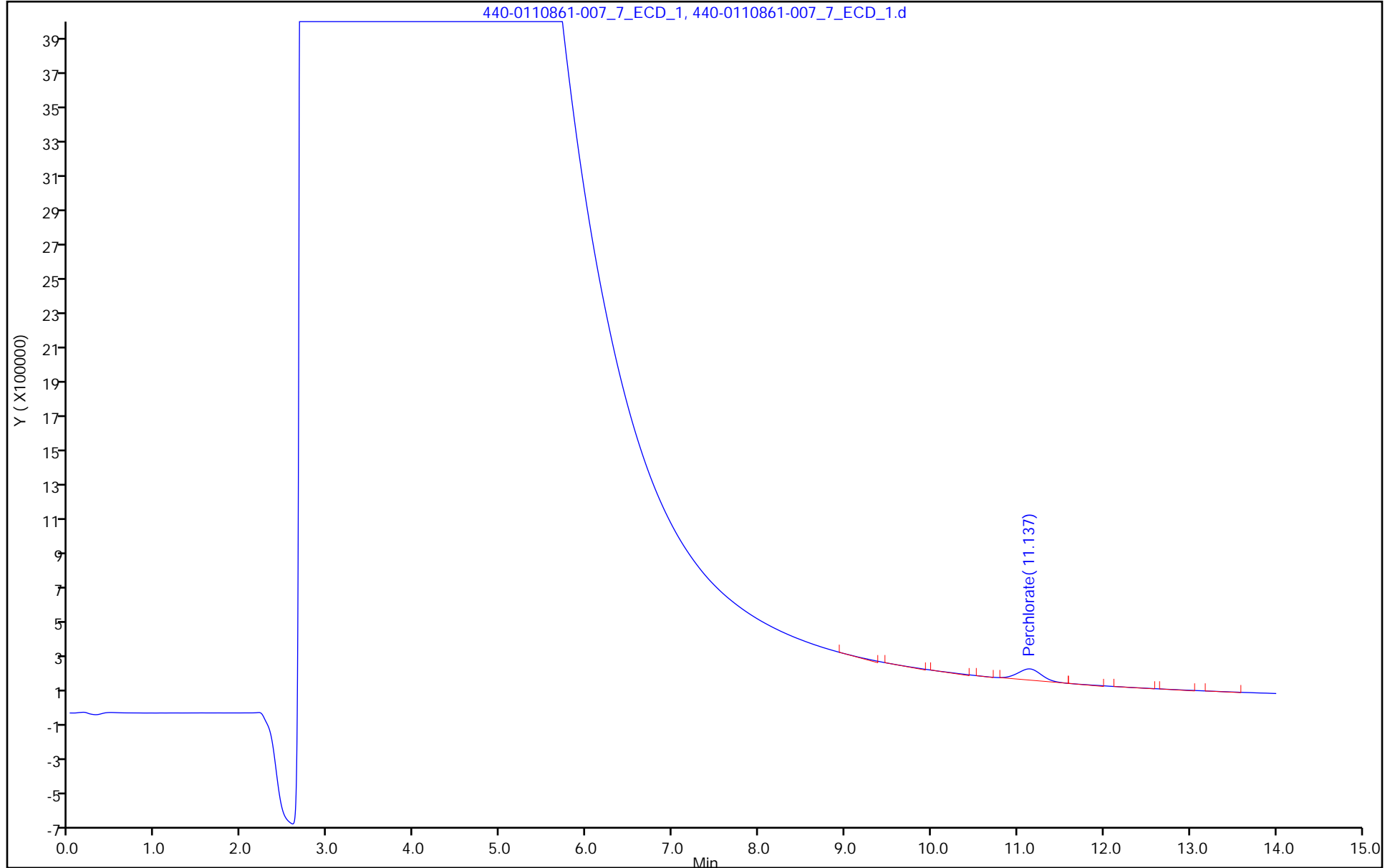
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: INF 440-506935/8
 Matrix: Water Lab File ID: 440-0110895-008_08_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 15:07
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	24.1		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-008_08_ECD_1.d
 Lims ID: inf
 Client ID:
 Sample Type: INF
 Inject. Date: 23-Oct-2018 15:07:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-008
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 16:41:54 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 23-Oct-2018 15:30:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	10.289	10.165	0.124	3390709	25.0	24.1	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

WC314.INF_00538 Amount Added: 5.00 Units: mL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-008_08_ECD_1.d

Injection Date: 23-Oct-2018 15:07:00

Instrument ID: IC-23

Operator ID:

Lims ID: inf

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

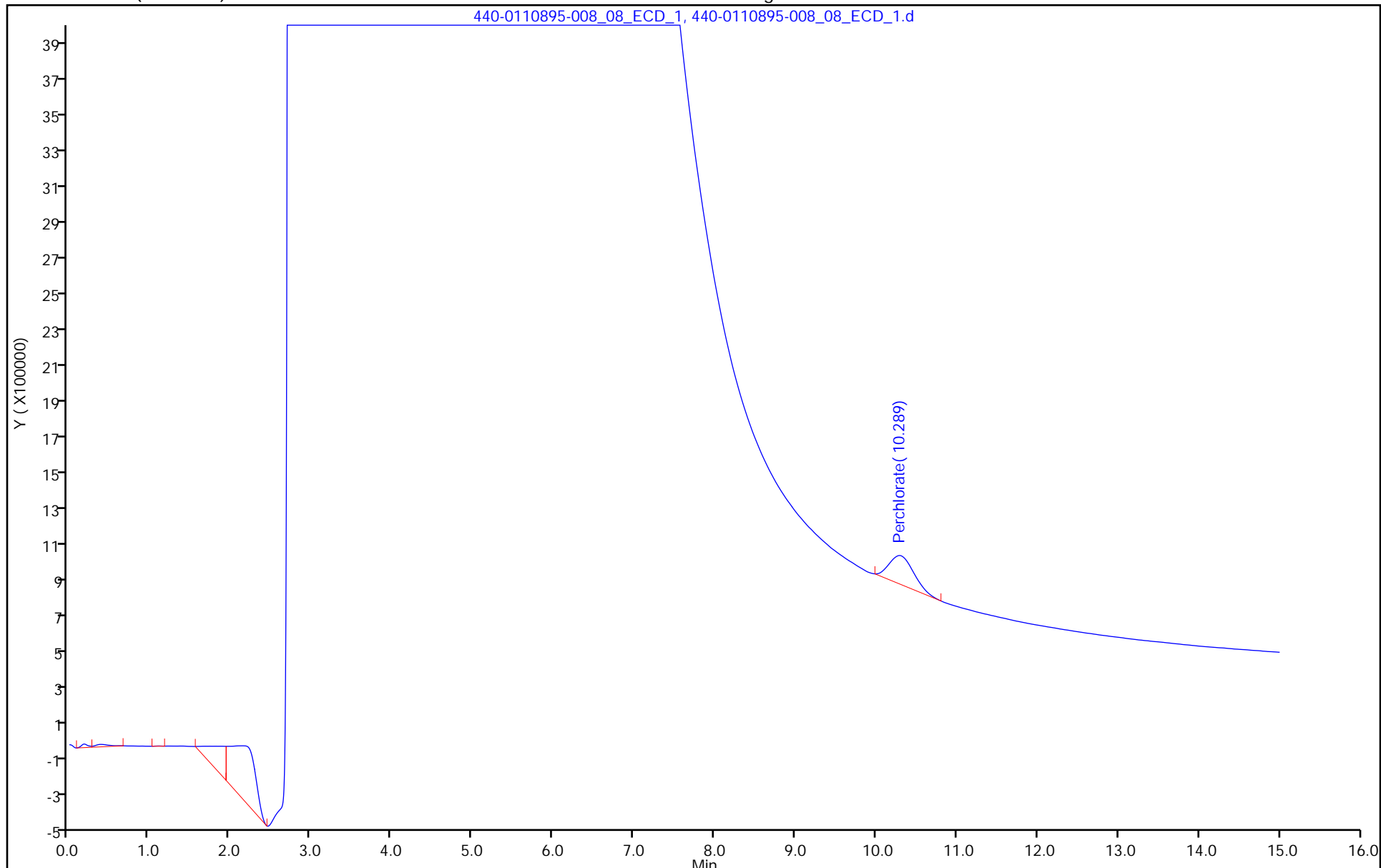
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

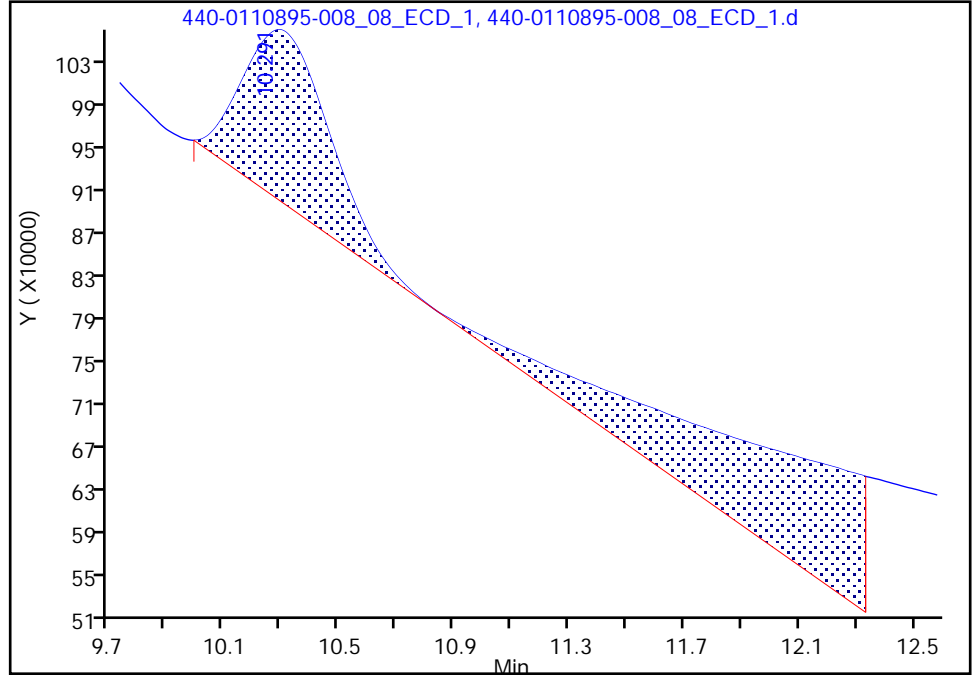
Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-008_08_ECD_1.d
Injection Date: 23-Oct-2018 15:07:00 Instrument ID: IC-23
Lims ID: inf
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_23PERC Limit Group: IC-314
Column: AS16 (4.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

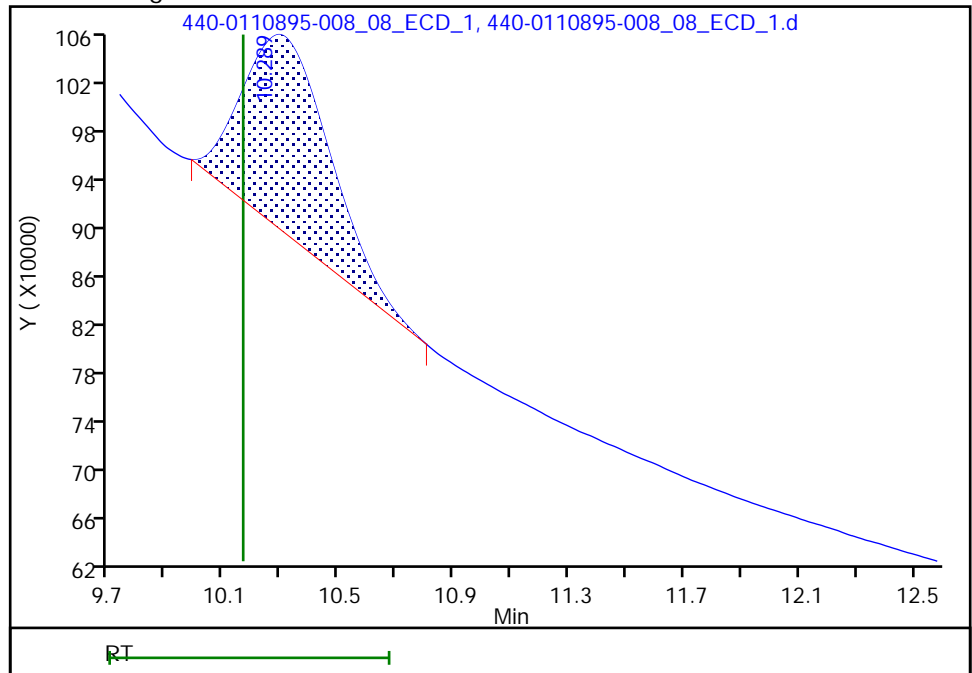
RT: 10.29
Area: 8159568
Amount: 54.620398
Amount Units: ug/l

Processing Integration Results



RT: 10.29
Area: 3390709
Amount: 24.080346
Amount Units: ug/l

Manual Integration Results



Reviewer: hoangch, 23-Oct-2018 15:30:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: INF 440-507219/7
 Matrix: Water Lab File ID: 440-0110956-00707ECD_1.d
 Analysis Method: 314.0 LL Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 15:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	26.3		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00707ECD_1.d
 Lims ID: INF
 Client ID:
 Sample Type: INF
 Inject. Date: 24-Oct-2018 15:14:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110956-007
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 15:35:59 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0304

First Level Reviewer: hoangch Date: 24-Oct-2018 15:34:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	12.947	13.080	-0.133	3317598	25.0	26.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

WC314.INF_00539 Amount Added: 5.00 Units: mL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00707ECD_1.d

Injection Date: 24-Oct-2018 15:14:00

Instrument ID: IC-24

Operator ID:

Lims ID: INF

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

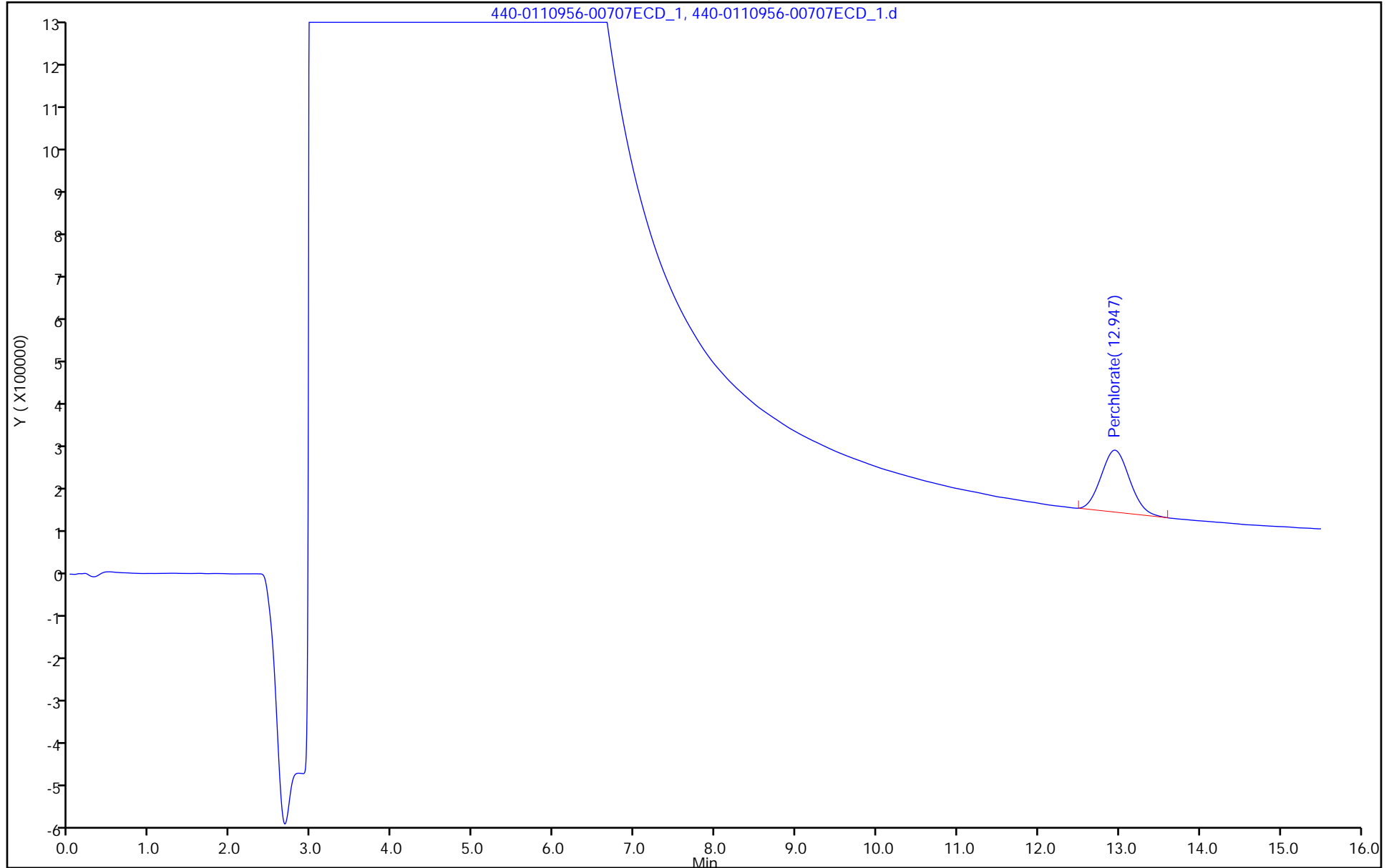
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

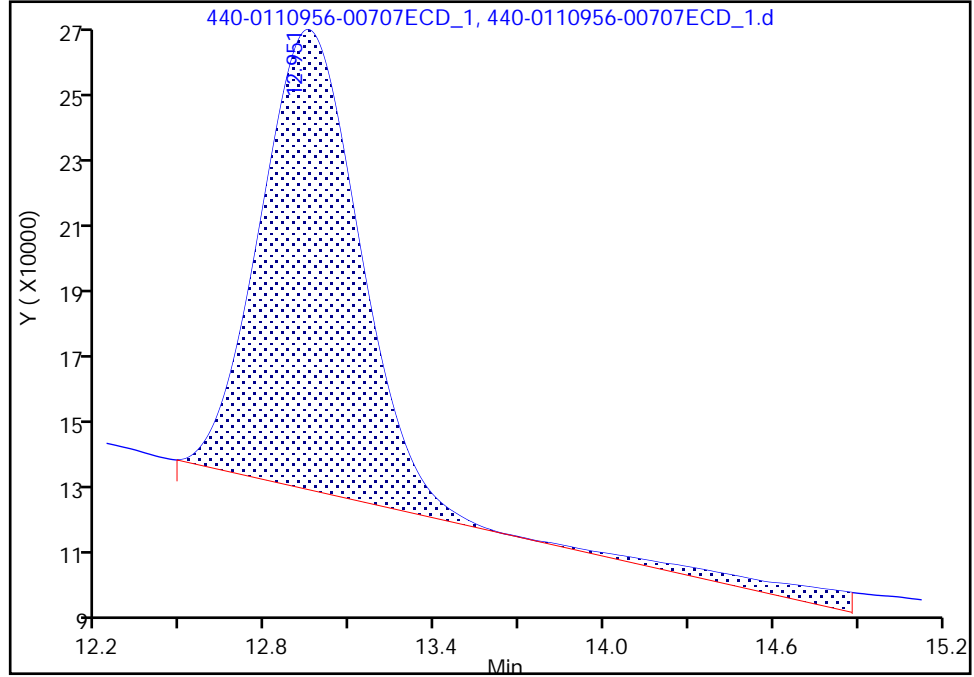
Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-00707ECD_1.d
Injection Date: 24-Oct-2018 15:14:00 Instrument ID: IC-24
Lims ID: INF
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_24Perchlorate Limit Group: IC-314
Column: AS16 (2.00 mm) Detector Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

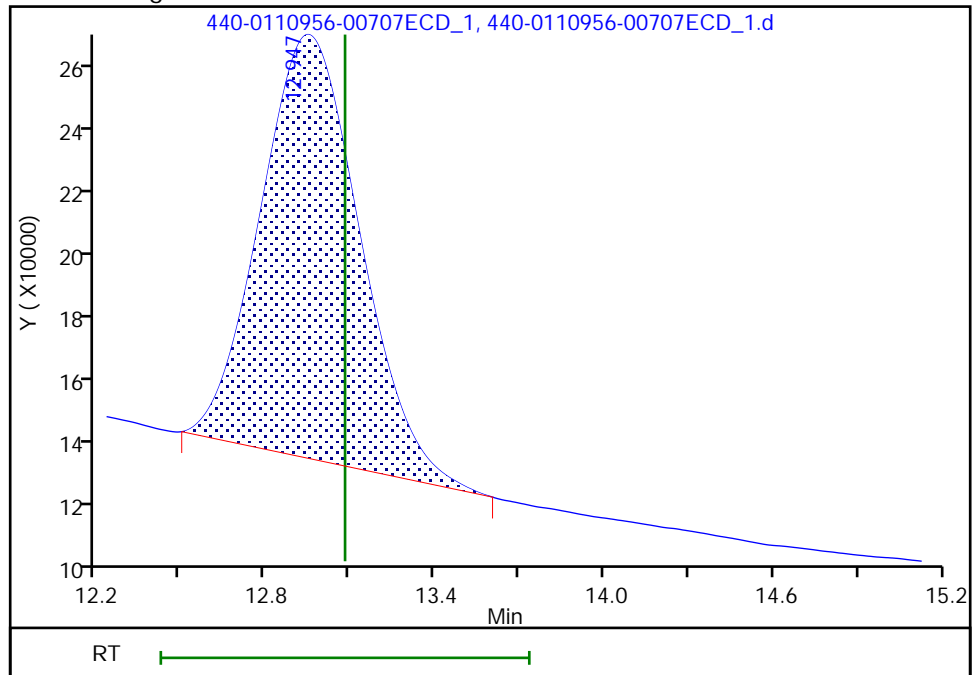
RT: 12.95
Area: 3510545
Amount: 27.748668
Amount Units: ug/l

Processing Integration Results



RT: 12.95
Area: 3317598
Amount: 26.259020
Amount Units: ug/l

Manual Integration Results



Reviewer: hoangch, 24-Oct-2018 15:34:53
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: 440-0110956-03131ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 23:37
 Con. Extract Vol.: _____ Dilution Factor: 10000
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	282000		10000	5000

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03131ECD_1.d
 Lims ID: 440-222284-E-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 24-Oct-2018 23:37:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 10000.0000
 Sample Info: 440-0110956-031
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 09:13:47 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: hoangch Date: 25-Oct-2018 06:30:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Perchlorate	13.057	13.080	-0.023	3565272	0.2500	28.2	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

WCCL04-1st_00004 Amount Added: 25.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03131ECD_1.d

Injection Date: 24-Oct-2018 23:37:00

Instrument ID: IC-24

Operator ID:

Lims ID: 440-222284-E-2 MS

Worklist Smp#: 31

Client ID: VER-01I-20181015

Injection Vol: 1.0 ul

Dil. Factor: 10000.0000

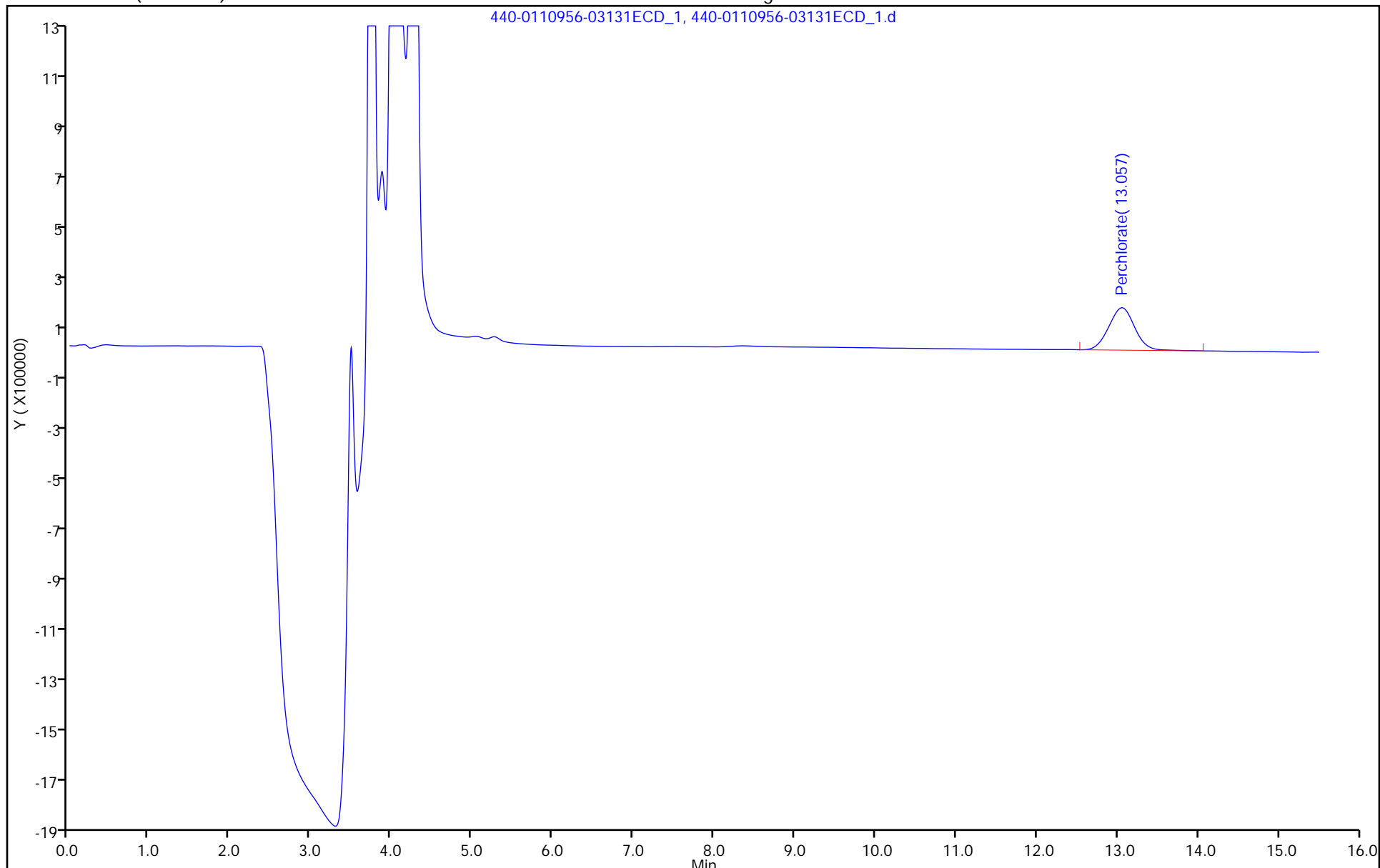
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

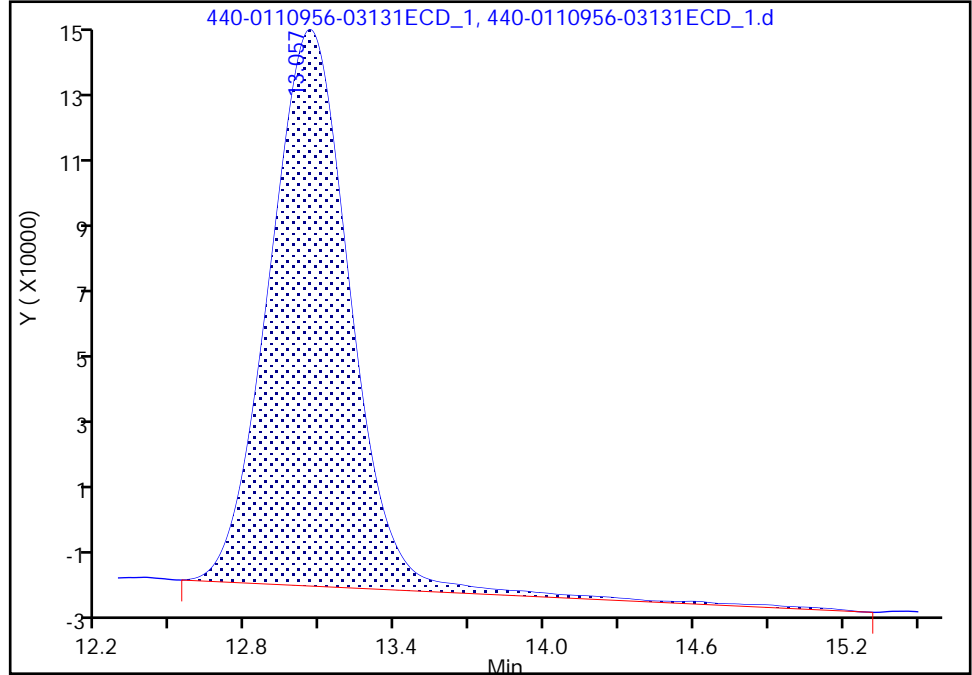
Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03131ECD_1.d
Injection Date: 24-Oct-2018 23:37:00 Instrument ID: IC-24
Lims ID: 440-222284-E-2 MS
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 10000.0000
Method: 314_24Perchlorate Limit Group: IC-314
Column: AS16 (2.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

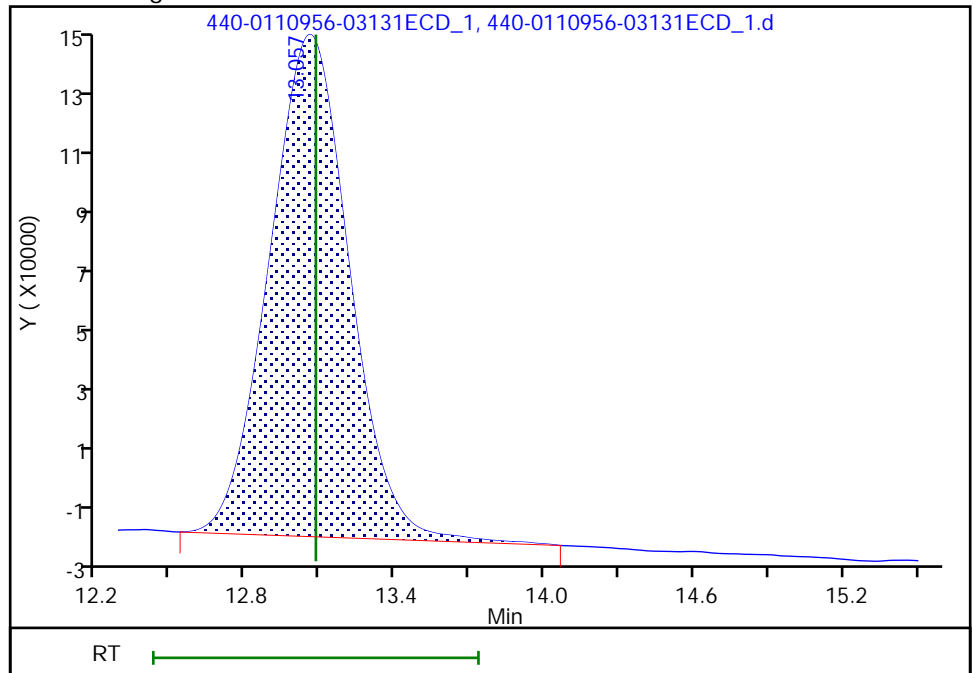
RT: 13.06
Area: 3639730
Amount: 28.743240
Amount Units: ug/l

Processing Integration Results



RT: 13.06
Area: 3565272
Amount: 28.170274
Amount Units: ug/l

Manual Integration Results



Reviewer: hoangch, 25-Oct-2018 06:29:59
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 720-89201-A-3 MS
 Matrix: Water Lab File ID: 440-0110861-011_11_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/17/2018 12:02
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 09:37
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	10.0		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-011_11_ECD_1.d
 Lims ID: 720-89201-A-3 MS
 Client ID: 09S03E34G002-B-EFF
 Sample Type: MS
 Inject. Date: 23-Oct-2018 09:37:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-011
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 11:12:58 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	11.201	11.180	0.021	1223882	10.0	10.0	
---------------	--------	--------	-------	---------	------	------	--

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-011_11_ECD_1.d

Injection Date: 23-Oct-2018 09:37:00

Instrument ID: IC-25

Operator ID:

Lims ID: 720-89201-A-3 MS

Worklist Smp#: 11

Client ID: 09S03E34G002-B-EFF

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

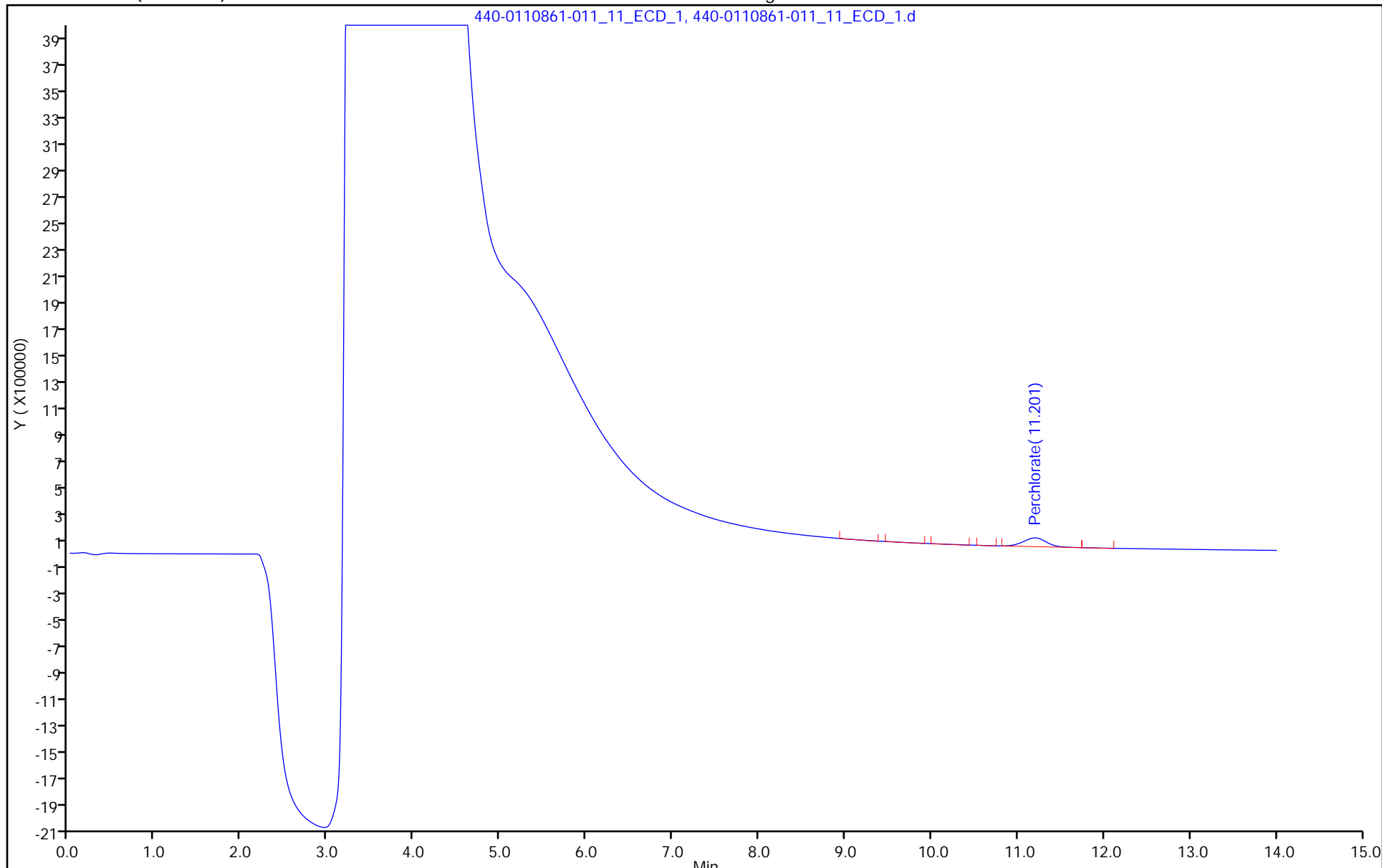
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 720-89236-D-6 MS
 Matrix: Water Lab File ID: 440-0110895-016_16_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/18/2018 11:20
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 18:19
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	35.9		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-016_16_ECD_1.d
 Lims ID: 720-89236-D-6 MS
 Client ID: RW-11-20181018-01-MS
 Sample Type: MS
 Inject. Date: 23-Oct-2018 18:19:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-016
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:35:02 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:35:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	10.229	10.165	0.064	5180067	25.0	35.9	M
---------------	--------	--------	-------	---------	------	------	---

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

WCCLO41st-10_00016 Amount Added: 25.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-016_16_ECD_1.d

Injection Date: 23-Oct-2018 18:19:00

Instrument ID: IC-23

Operator ID:

Lims ID: 720-89236-D-6 MS

Worklist Smp#: 16

Client ID: RW-11-20181018-01-MS

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

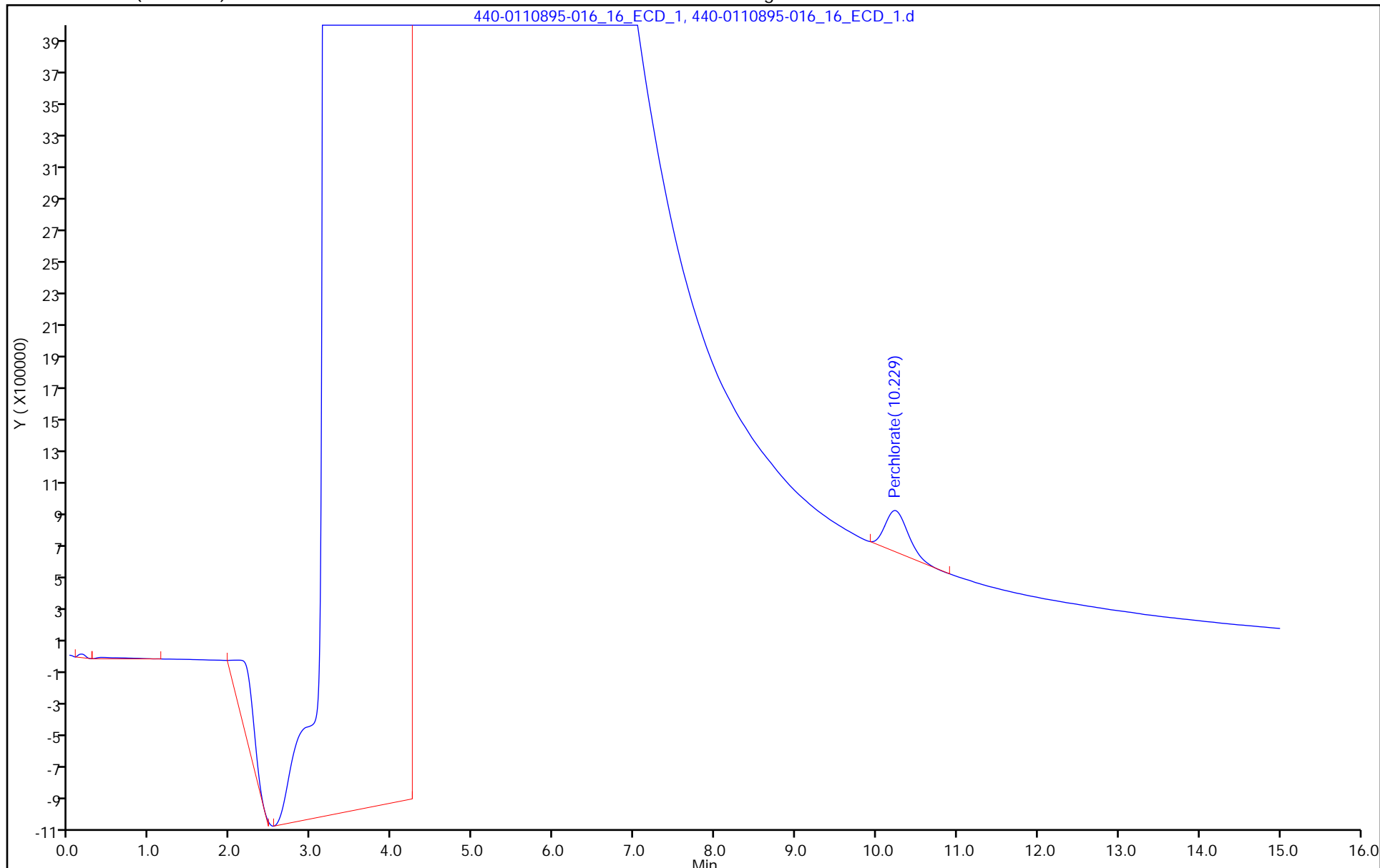
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

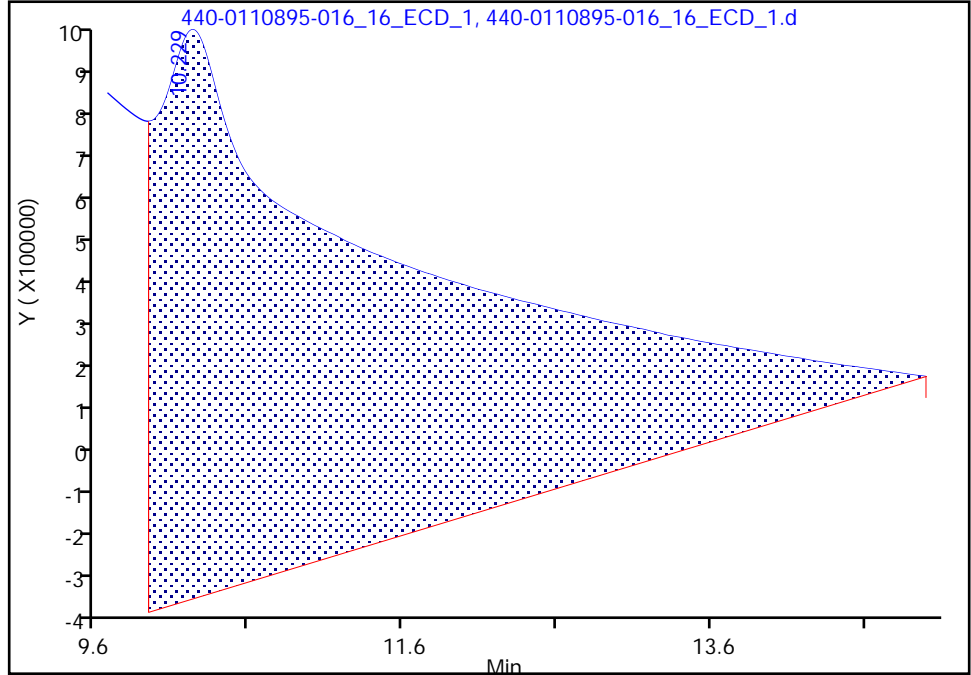
Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-016_16_ECD_1.d
Injection Date: 23-Oct-2018 18:19:00 Instrument ID: IC-23
Lims ID: 720-89236-D-6 MS
Client ID: RW-11-20181018-01-MS
Operator ID: ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_23PERC Limit Group: IC-314
Column: AS16 (4.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

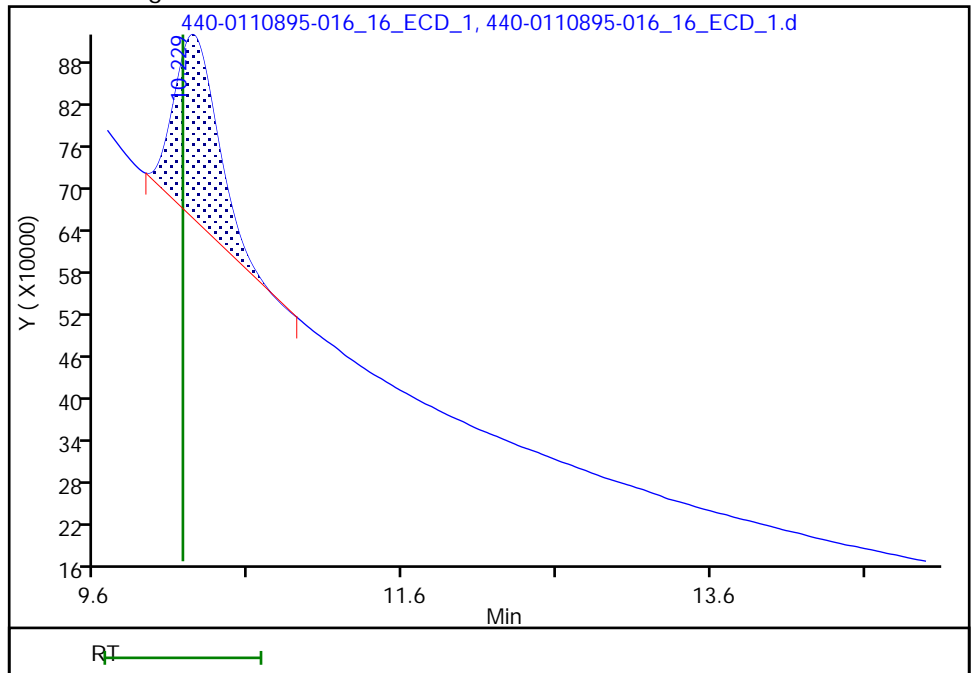
RT: 10.23
Area: 140946498
Amount: 524.8839
Amount Units: ug/l

Processing Integration Results



RT: 10.23
Area: 5180067
Amount: 35.896588
Amount Units: ug/l

Manual Integration Results



Reviewer: saraubonp, 24-Oct-2018 16:34:55
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: 440-0110956-03232ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/24/2018 23:55
 Con. Extract Vol.: _____ Dilution Factor: 10000
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 507219 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	273000		10000	5000

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03232ECD_1.d
 Lims ID: 440-222284-E-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 24-Oct-2018 23:55:00 ALS Bottle#: 0 Worklist Smp#: 32
 Injection Vol: 1.0 ul Dil. Factor: 10000.0000
 Sample Info: 440-0110956-032
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-24
 Method: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\314_24Perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 25-Oct-2018 09:13:47 Calib Date: 22-Oct-2018 19:08:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC24\20181022-110854.b\440-0110854-00808ECD_1.d
 Column 1 : AS16 (2.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

First Level Reviewer: saraubonp Date: 25-Oct-2018 14:36:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 13.057 13.080 -0.023 3450515 0.2500 27.3

Reagents:

WCCLO4-1st_00004 Amount Added: 25.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC24\20181024-110956.b\440-0110956-03232ECD_1.d

Injection Date: 24-Oct-2018 23:55:00

Instrument ID: IC-24

Operator ID:

Lims ID: 440-222284-E-2 MSD

Worklist Smp#: 32

Client ID: VER-01I-20181015

Injection Vol: 1.0 ul

Dil. Factor: 10000.0000

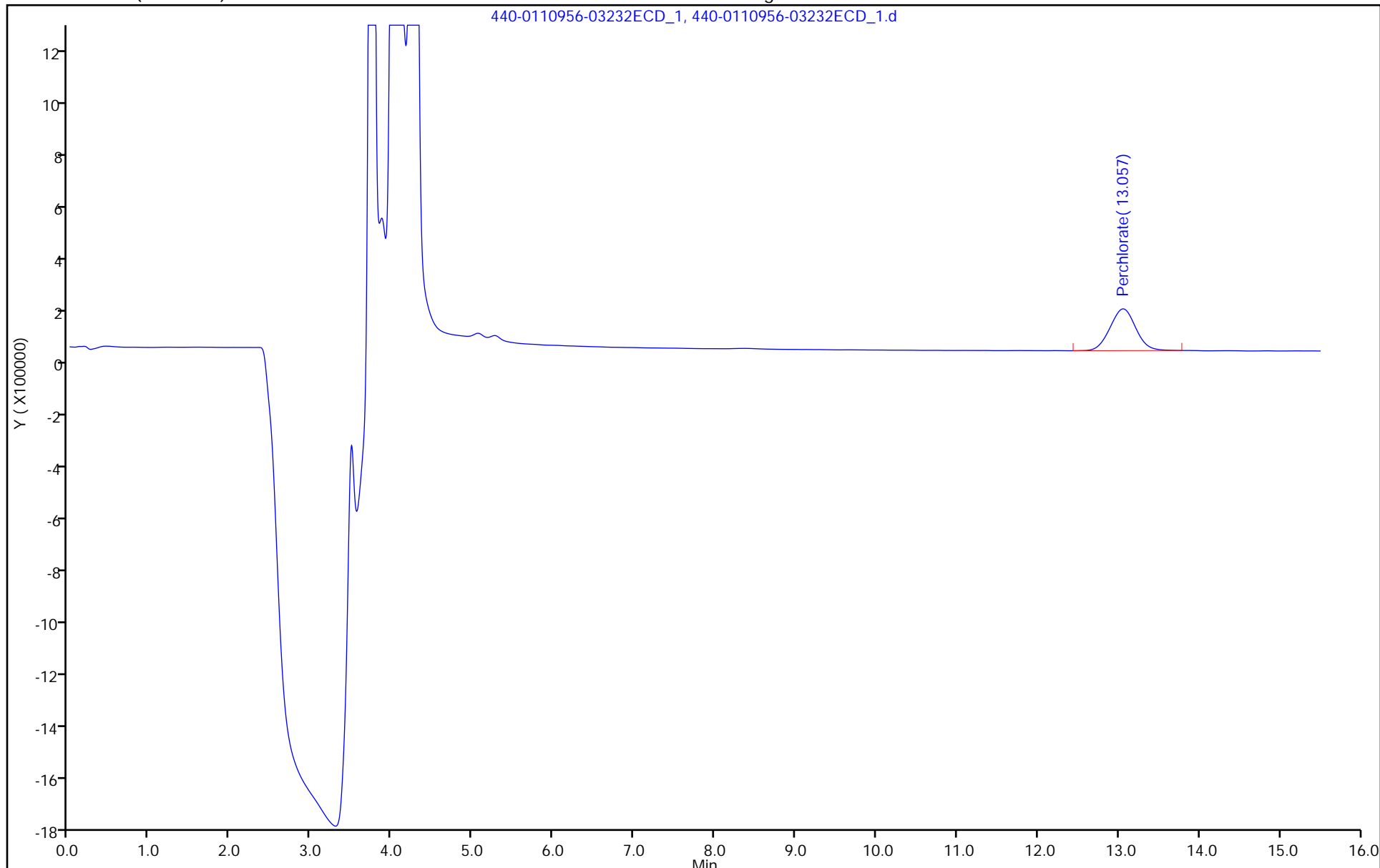
ALS Bottle#: 0

Method: 314_24Perchlorate

Limit Group: IC-314

Column: AS16 (2.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 720-89201-A-3 MSD
 Matrix: Water Lab File ID: 440-0110861-012_12_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/17/2018 12:02
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 09:53
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506828 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	10.0		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-012_12_ECD_1.d
 Lims ID: 720-89201-A-3 MSD
 Client ID: 09S03E34G002-B-EFF
 Sample Type: MSD
 Inject. Date: 23-Oct-2018 09:53:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110861-012
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-25
 Method: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\314_25perchlorate.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 23-Oct-2018 11:12:58 Calib Date: 04-Oct-2018 11:19:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC25\20181004-109994.b\440-0109994-007_7_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: CTX0313

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate 11.197 11.180 0.017 1222176 10.0 10.0

Reagents:

WCCLO41st-10_00016 Amount Added: 10.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC25\20181023-110861.b\440-0110861-012_12_ECD_1.d

Injection Date: 23-Oct-2018 09:53:00

Instrument ID: IC-25

Operator ID:

Lims ID: 720-89201-A-3 MSD

Worklist Smp#: 12

Client ID: 09S03E34G002-B-EFF

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

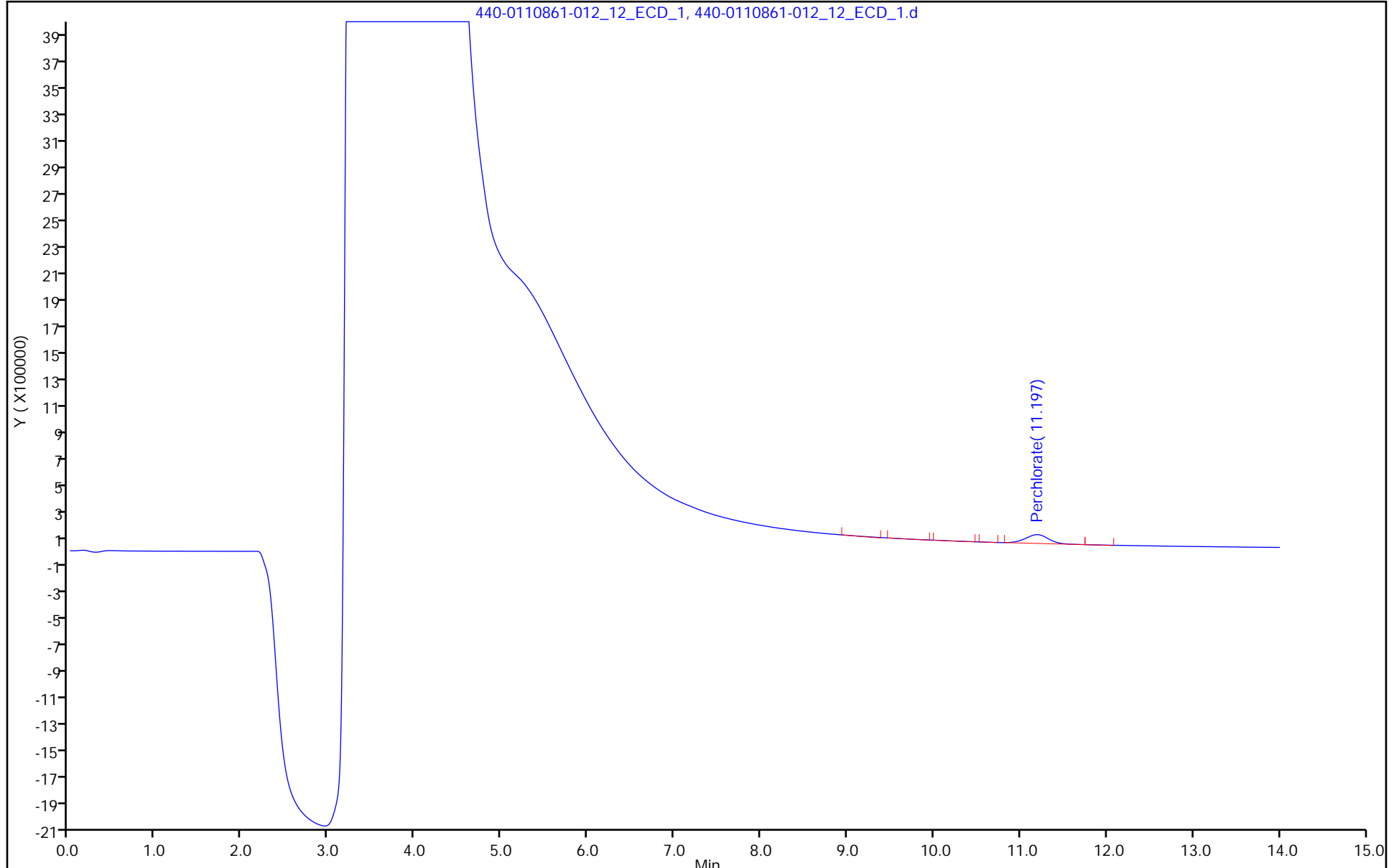
ALS Bottle#: 0

Method: 314_25perchlorate

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 720-89236-D-6 MSD
 Matrix: Water Lab File ID: 440-0110895-017_17_ECD_1.d
 Analysis Method: 314.0 LL Date Collected: 10/18/2018 11:20
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 10/23/2018 18:39
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: AS16 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-73-0	Perchlorate	36.6		1.0	0.50

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-017_17_ECD_1.d
 Lims ID: 720-89236-D-6 MSD
 Client ID: RW-11-20181018-01-MSD
 Sample Type: MSD
 Inject. Date: 23-Oct-2018 18:39:00 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110895-017
 Misc. Info.: ch
 Operator ID: Instrument ID: IC-23
 Method: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\314_23PERC.m
 Limit Group: IC-314
 Method Label: PERCHLORATE
 Last Update: 24-Oct-2018 16:36:04 Calib Date: 24-Sep-2018 18:03:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC23\20180924-109501.b\440-0109501-008_08_ECD_1.d
 Column 1 : AS16 (4.00 mm) Det: Ch-A-20111003029
 Process Host: XAWRK020

First Level Reviewer: saraubonp Date: 24-Oct-2018 16:36:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Perchlorate	10.238	10.165	0.073	5292009	25.0	36.6	M
---------------	--------	--------	-------	---------	------	------	---

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

WCCLO41st-10_00016 Amount Added: 25.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-017_17_ECD_1.d

Injection Date: 23-Oct-2018 18:39:00

Instrument ID: IC-23

Operator ID:

Lims ID: 720-89236-D-6 MSD

Worklist Smp#: 17

Client ID: RW-11-20181018-01-MSD

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

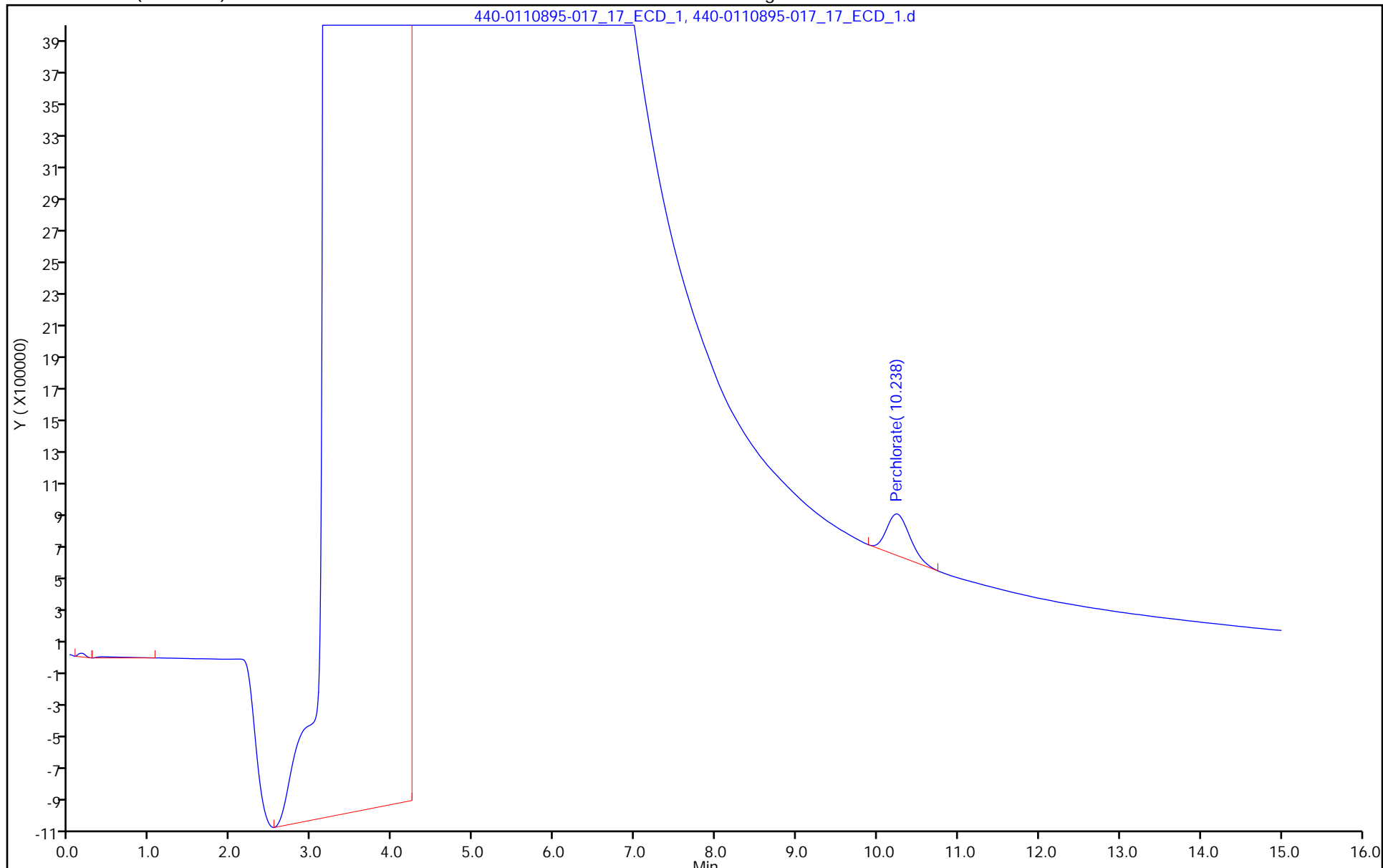
ALS Bottle#: 0

Method: 314_23PERC

Limit Group: IC-314

Column: AS16 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

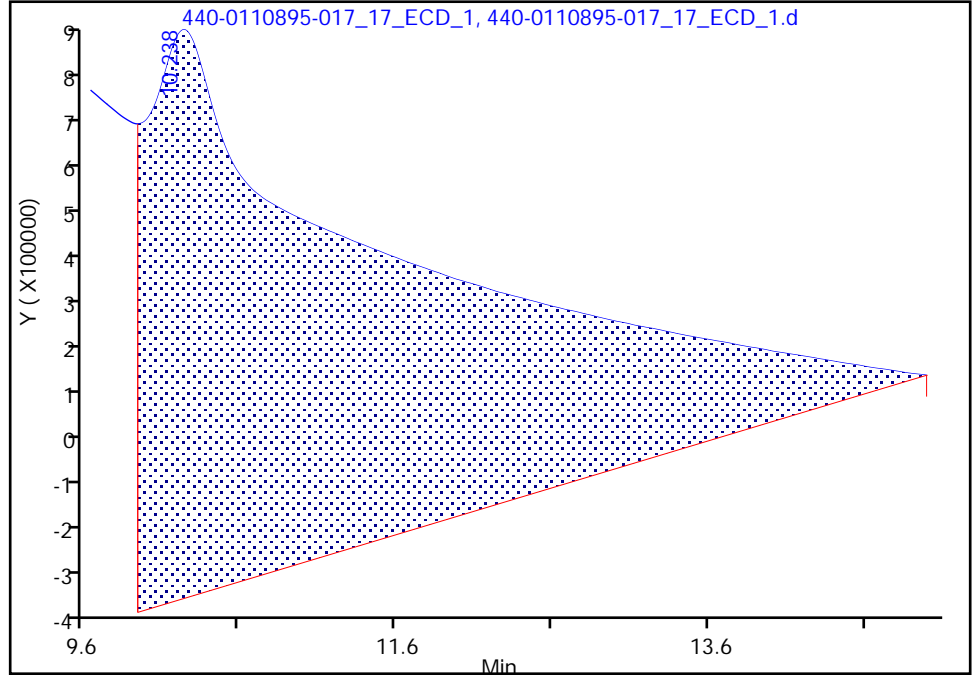
Data File: \\ChromNA\Irvine\ChromData\IC23\20181023-110895.b\440-0110895-017_17_ECD_1.d
Injection Date: 23-Oct-2018 18:39:00 Instrument ID: IC-23
Lims ID: 720-89236-D-6 MSD
Client ID: RW-11-20181018-01-MSD
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 314_23PERC Limit Group: IC-314
Column: AS16 (4.00 mm) Detector: Ch-A-20111003029

2 Perchlorate, CAS: 14797-73-0

Signal: 1

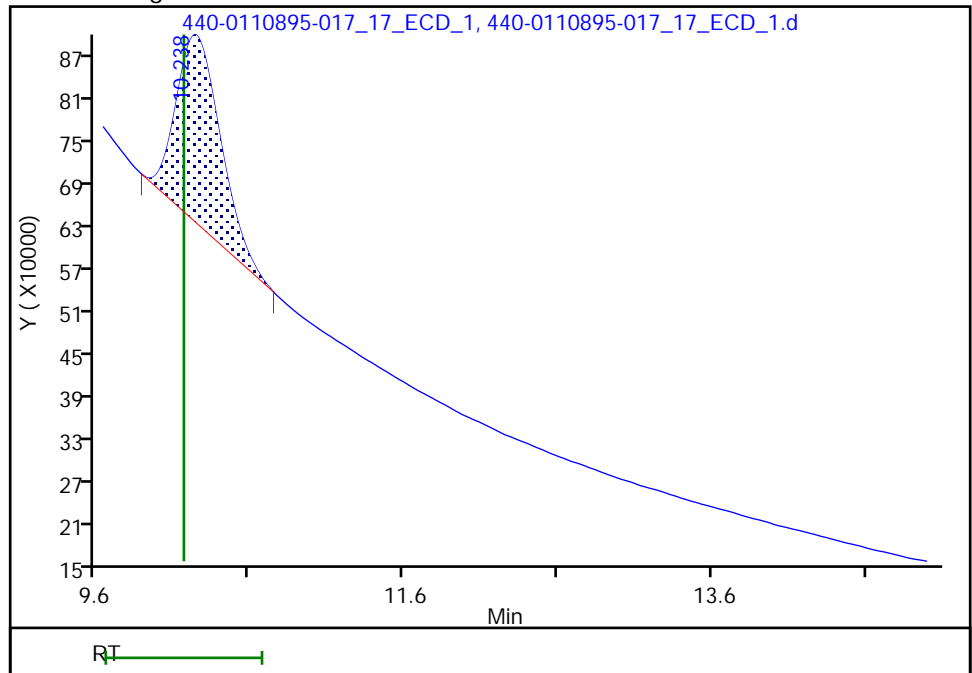
RT: 10.24
Area: 141717847
Amount: 526.8057
Amount Units: ug/l

Processing Integration Results



RT: 10.24
Area: 5292009
Amount: 36.620698
Amount Units: ug/l

Manual Integration Results



Reviewer: saraubonp, 24-Oct-2018 16:36:00
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-23 Start Date: 09/24/2018 15:41

Analysis Batch Number: 500813 End Date: 09/24/2018 18:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0 440-500813/1 IC		09/24/2018 15:41	1		AS16 4 (mm)
STD1 440-500813/2 IC		09/24/2018 16:01	1	440-0109501-002 02 ECD 1.d	AS16 4 (mm)
STD2 440-500813/3 IC		09/24/2018 16:21	1	440-0109501-003 03 ECD 1.d	AS16 4 (mm)
STD3 440-500813/4 IC		09/24/2018 16:41	1	440-0109501-004 04 ECD 1.d	AS16 4 (mm)
STD4 440-500813/5 IC		09/24/2018 17:02	1	440-0109501-005 05 ECD 1.d	AS16 4 (mm)
STD5 440-500813/6 IC		09/24/2018 17:22	1	440-0109501-006 06 ECD 1.d	AS16 4 (mm)
STD6 440-500813/7 IC		09/24/2018 17:42	1	440-0109501-007 07 ECD 1.d	AS16 4 (mm)
STD7 440-500813/8 IC		09/24/2018 18:03	1	440-0109501-008 08 ECD 1.d	AS16 4 (mm)
ICV 440-500813/9		09/24/2018 18:23	1	440-0109501-009 09 ECD 1.d	AS16 4 (mm)
ICB 440-500813/10		09/24/2018 18:43	1	440-0109501-010 10 ECD 1.d	AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-25 Start Date: 10/04/2018 09:24

Analysis Batch Number: 502906 End Date: 10/04/2018 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0 440-502906/1 IC		10/04/2018 09:24	1		AS16 4 (mm)
STD1 440-502906/2 IC		10/04/2018 09:41	1	440-0109994-002 2 ECD 1.d	AS16 4 (mm)
STD2 440-502906/3 IC		10/04/2018 09:58	1	440-0109994-003 3 ECD 1.d	AS16 4 (mm)
STD3 440-502906/4 IC		10/04/2018 10:28	1	440-0109994-004 4 ECD 1.d	AS16 4 (mm)
STD4 440-502906/5 IC		10/04/2018 10:45	1	440-0109994-005 5 ECD 1.d	AS16 4 (mm)
STD5 440-502906/6 IC		10/04/2018 11:02	1	440-0109994-006 6 ECD 1.d	AS16 4 (mm)
STD6 440-502906/7 IC		10/04/2018 11:19	1	440-0109994-007 7 ECD 1.d	AS16 4 (mm)
ICV 440-502906/8		10/04/2018 11:40	1	440-0109994-008 8 ECD 1.d	AS16 4 (mm)
ICB 440-502906/9		10/04/2018 11:57	1	440-0109994-009 9 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/04/2018 12:42	1		AS16 4 (mm)
ZZZZZ		10/04/2018 12:58	1		AS16 4 (mm)
ZZZZZ		10/04/2018 13:15	1		AS16 4 (mm)
INF 440-502906/13		10/04/2018 13:32	1		AS16 4 (mm)
ZZZZZ		10/04/2018 13:49	1		AS16 4 (mm)
ZZZZZ		10/04/2018 14:09	1		AS16 4 (mm)
ZZZZZ		10/04/2018 14:25	1		AS16 4 (mm)
ZZZZZ		10/04/2018 14:42	1		AS16 4 (mm)
CCV 440-502906/18		10/04/2018 14:59	1		AS16 4 (mm)
CCB 440-502906/19		10/04/2018 15:16	1		AS16 4 (mm)
ZZZZZ		10/04/2018 15:33	1		AS16 4 (mm)
ZZZZZ		10/04/2018 15:50	1		AS16 4 (mm)
ZZZZZ		10/04/2018 16:06	1		AS16 4 (mm)
ZZZZZ		10/04/2018 16:23	1		AS16 4 (mm)
ZZZZZ		10/04/2018 16:40	1		AS16 4 (mm)
ZZZZZ		10/04/2018 16:57	1		AS16 4 (mm)
ZZZZZ		10/04/2018 17:14	1		AS16 4 (mm)
ZZZZZ		10/04/2018 17:31	1		AS16 4 (mm)
ZZZZZ		10/04/2018 17:48	1		AS16 4 (mm)
ZZZZZ		10/04/2018 18:04	1		AS16 4 (mm)
CCV 440-502906/30		10/04/2018 18:21	1		AS16 4 (mm)
CCB 440-502906/31		10/04/2018 18:38	1		AS16 4 (mm)
ZZZZZ		10/04/2018 18:55	1		AS16 4 (mm)
ZZZZZ		10/04/2018 19:12	1		AS16 4 (mm)
ZZZZZ		10/04/2018 19:29	1		AS16 4 (mm)
ZZZZZ		10/04/2018 19:45	1		AS16 4 (mm)
ZZZZZ		10/04/2018 20:02	1		AS16 4 (mm)
ZZZZZ		10/04/2018 20:19	1		AS16 4 (mm)
ZZZZZ		10/04/2018 20:36	1000		AS16 4 (mm)
ZZZZZ		10/04/2018 20:53	50000		AS16 4 (mm)
ZZZZZ		10/04/2018 21:10	50000		AS16 4 (mm)
ZZZZZ		10/04/2018 21:27	50000		AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-25 Start Date: 10/04/2018 09:24

Analysis Batch Number: 502906 End Date: 10/04/2018 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-502906/42		10/04/2018 21:44	1		AS16 4 (mm)
CCB 440-502906/43		10/04/2018 22:00	1		AS16 4 (mm)
ZZZZZ		10/04/2018 22:17	1		AS16 4 (mm)
ZZZZZ		10/04/2018 22:34	1		AS16 4 (mm)
ZZZZZ		10/04/2018 22:51	1		AS16 4 (mm)
CCV 440-502906/47		10/04/2018 23:08	1		AS16 4 (mm)
CCB 440-502906/48		10/04/2018 23:25	1		AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-24 Start Date: 10/22/2018 16:36

Analysis Batch Number: 506781 End Date: 10/22/2018 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0 440-506781/1 IC		10/22/2018 16:36	1		AS16 4 (mm)
STD1 440-506781/2 IC		10/22/2018 16:54	1	440-0110854-002 02ECD 1.d	AS16 4 (mm)
STD2 440-506781/3 IC		10/22/2018 17:12	1	440-0110854-003 03ECD 1.d	AS16 4 (mm)
STD3 440-506781/4 IC		10/22/2018 17:31	1	440-0110854-004 04ECD 1.d	AS16 4 (mm)
STD4 440-506781/5 IC		10/22/2018 18:13	1	440-0110854-005 05ECD 1.d	AS16 4 (mm)
STD5 440-506781/6 IC		10/22/2018 18:31	1	440-0110854-006 06ECD 1.d	AS16 4 (mm)
STD6 440-506781/7 IC		10/22/2018 18:50	1	440-0110854-007 07ECD 1.d	AS16 4 (mm)
STD7 440-506781/8 IC		10/22/2018 19:08	1	440-0110854-008 08ECD 1.d	AS16 4 (mm)
ICV 440-506781/9		10/22/2018 19:27	1	440-0110854-009 09ECD 1.d	AS16 4 (mm)
ICB 440-506781/10		10/22/2018 19:45	1	440-0110854-010 10ECD 1.d	AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-25 Start Date: 10/23/2018 06:44

Analysis Batch Number: 506828 End Date: 10/24/2018 00:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-506828/2		10/23/2018 06:44	1	440-0110861-002 2 ECD 1.d	AS16 4 (mm)
CCB 440-506828/3		10/23/2018 07:06	1	440-0110861-003 3 ECD 1.d	AS16 4 (mm)
MRL 440-506828/4		10/23/2018 07:29	1	440-0110861-004 4 ECD 1.d	AS16 4 (mm)
LCS 440-506828/5		10/23/2018 07:46	1	440-0110861-005 5 ECD 1.d	AS16 4 (mm)
MB 440-506828/6		10/23/2018 08:03	1	440-0110861-006 6 ECD 1.d	AS16 4 (mm)
INF 440-506828/7		10/23/2018 08:20	1	440-0110861-007 7 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 08:37	1		AS16 4 (mm)
ZZZZZ		10/23/2018 08:54	1		AS16 4 (mm)
ZZZZZ		10/23/2018 09:20	1		AS16 4 (mm)
720-89201-A-3 MS		10/23/2018 09:37	1	440-0110861-011 11 ECD 1.d	AS16 4 (mm)
720-89201-A-3 MSD		10/23/2018 09:53	1	440-0110861-012 12 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 10:21	2		AS16 4 (mm)
MRL 440-506828/14		10/23/2018 10:38	1	440-0110861-014 14 ECD 1.d	AS16 4 (mm)
CCV 440-506828/15		10/23/2018 10:54	1	440-0110861-015 15 ECD 1.d	AS16 4 (mm)
CCB 440-506828/16		10/23/2018 11:11	1	440-0110861-016 16 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 11:36	100		AS16 4 (mm)
ZZZZZ		10/23/2018 11:53	4		AS16 4 (mm)
ZZZZZ		10/23/2018 12:10	4		AS16 4 (mm)
ZZZZZ		10/23/2018 12:26	4		AS16 4 (mm)
ZZZZZ		10/23/2018 12:43	4		AS16 4 (mm)
ZZZZZ		10/23/2018 13:00	4		AS16 4 (mm)
ZZZZZ		10/23/2018 13:17	4		AS16 4 (mm)
ZZZZZ		10/23/2018 13:34	5		AS16 4 (mm)
ZZZZZ		10/23/2018 13:56	5		AS16 4 (mm)
ZZZZZ		10/23/2018 14:35	5		AS16 4 (mm)
CCV 440-506828/27		10/23/2018 14:52	1	440-0110861-027 27 ECD 1.d	AS16 4 (mm)
CCB 440-506828/28		10/23/2018 15:09	1	440-0110861-028 28 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 15:30	2		AS16 4 (mm)
ZZZZZ		10/23/2018 15:46	2		AS16 4 (mm)
ZZZZZ		10/23/2018 16:03	1		AS16 4 (mm)
ZZZZZ		10/23/2018 16:20	1		AS16 4 (mm)
ZZZZZ		10/23/2018 16:37	1		AS16 4 (mm)
440-222284-4		10/23/2018 16:53	1	440-0110861-034 34 ECD 1.d	AS16 4 (mm)
440-222284-5		10/23/2018 17:10	1	440-0110861-035 35 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 17:27	50000		AS16 4 (mm)
ZZZZZ		10/23/2018 17:44	50000		AS16 4 (mm)
CCV 440-506828/38		10/23/2018 18:00	1	440-0110861-038 38 ECD 1.d	AS16 4 (mm)
CCB 440-506828/39		10/23/2018 18:17	1	440-0110861-039 39 ECD 1.d	AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-25 Start Date: 10/23/2018 06:44

Analysis Batch Number: 506828 End Date: 10/24/2018 00:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/23/2018 18:34	50		AS16 4 (mm)
ZZZZZ		10/23/2018 18:51	50		AS16 4 (mm)
ZZZZZ		10/23/2018 19:08	1		AS16 4 (mm)
ZZZZZ		10/23/2018 19:25	10000		AS16 4 (mm)
ZZZZZ		10/23/2018 19:42	5		AS16 4 (mm)
ZZZZZ		10/23/2018 19:58	5		AS16 4 (mm)
CCV 440-506828/46		10/23/2018 20:15	1		AS16 4 (mm)
CCB 440-506828/47		10/23/2018 20:32	1		AS16 4 (mm)
ZZZZZ		10/23/2018 20:49	100		AS16 4 (mm)
ZZZZZ		10/23/2018 21:06	1		AS16 4 (mm)
ZZZZZ		10/23/2018 21:23	1		AS16 4 (mm)
CCV 440-506828/51		10/23/2018 21:39	1		AS16 4 (mm)
CCB 440-506828/52		10/23/2018 21:56	1		AS16 4 (mm)
ZZZZZ		10/23/2018 22:13	1		AS16 4 (mm)
ZZZZZ		10/23/2018 22:30	1		AS16 4 (mm)
ZZZZZ		10/23/2018 22:47	1		AS16 4 (mm)
ZZZZZ		10/23/2018 23:04	1		AS16 4 (mm)
ZZZZZ		10/23/2018 23:21	1		AS16 4 (mm)
ZZZZZ		10/23/2018 23:37	1		AS16 4 (mm)
ZZZZZ		10/23/2018 23:54	1		AS16 4 (mm)
ZZZZZ		10/24/2018 00:11	1		AS16 4 (mm)
INF 440-506828/61		10/24/2018 00:28	1		AS16 4 (mm)
INF 440-506828/62		10/24/2018 00:45	1		AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-23 Start Date: 10/23/2018 11:56

Analysis Batch Number: 506935 End Date: 10/23/2018 20:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-506935/2		10/23/2018 11:56	1	440-0110895-002 02 ECD 1.d	AS16 4 (mm)
CCB 440-506935/3		10/23/2018 12:21	1	440-0110895-003 03 ECD 1.d	AS16 4 (mm)
LCS 440-506935/5		10/23/2018 13:03	1	440-0110895-005 05 ECD 1.d	AS16 4 (mm)
MB 440-506935/6		10/23/2018 13:24	1	440-0110895-006 06 ECD 1.d	AS16 4 (mm)
INF 440-506935/8		10/23/2018 15:07	1	440-0110895-008 08 ECD 1.d	AS16 4 (mm)
MRL 440-506935/9		10/23/2018 15:32	1	440-0110895-009 09 ECD 1.d	AS16 4 (mm)
440-222284-1		10/23/2018 16:08	100	440-0110895-010 10 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 16:27	1000		AS16 4 (mm)
ZZZZZ		10/23/2018 16:58	1		AS16 4 (mm)
CCV 440-506935/13		10/23/2018 17:18	1	440-0110895-013 13 ECD 1.d	AS16 4 (mm)
CCB 440-506935/14		10/23/2018 17:38	1	440-0110895-014 14 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 17:59	1		AS16 4 (mm)
720-89236-D-6 MS		10/23/2018 18:19	1	440-0110895-016 16 ECD 1.d	AS16 4 (mm)
720-89236-D-6 MSD		10/23/2018 18:39	1	440-0110895-017 17 ECD 1.d	AS16 4 (mm)
ZZZZZ		10/23/2018 19:00	100000 0		AS16 4 (mm)
ZZZZZ		10/23/2018 19:20	100000 0		AS16 4 (mm)
ZZZZZ		10/23/2018 19:40	100000 0		AS16 4 (mm)
CCV 440-506935/21		10/23/2018 20:01	1	440-0110895-021 21 ECD 1.d	AS16 4 (mm)
CCB 440-506935/22		10/23/2018 20:21	1	440-0110895-022 22 ECD 1.d	AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-24 Start Date: 10/24/2018 13:30

Analysis Batch Number: 507219 End Date: 10/25/2018 11:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-507219/2		10/24/2018 13:30	1	440-0110956-002 02ECD 1.d	AS16 4 (mm)
CCB 440-507219/3		10/24/2018 13:48	1	440-0110956-003 03ECD 1.d	AS16 4 (mm)
MRL 440-507219/4		10/24/2018 14:19	1	440-0110956-004 04ECD 1.d	AS16 4 (mm)
LCS 440-507219/5		10/24/2018 14:37	1	440-0110956-005 05ECD 1.d	AS16 4 (mm)
MB 440-507219/6		10/24/2018 14:56	1	440-0110956-006 06ECD 1.d	AS16 4 (mm)
INF 440-507219/7		10/24/2018 15:14	1	440-0110956-007 07ECD 1.d	AS16 4 (mm)
ZZZZZ		10/24/2018 15:35	1		AS16 4 (mm)
ZZZZZ		10/24/2018 15:56	1		AS16 4 (mm)
ZZZZZ		10/24/2018 16:14	1		AS16 4 (mm)
ZZZZZ		10/24/2018 16:33	1		AS16 4 (mm)
ZZZZZ		10/24/2018 16:51	1		AS16 4 (mm)
ZZZZZ		10/24/2018 17:09	1		AS16 4 (mm)
ZZZZZ		10/24/2018 17:28	1		AS16 4 (mm)
CCV 440-507219/15		10/24/2018 18:40	1	440-0110956-015 15ECD 1.d	AS16 4 (mm)
CCB 440-507219/16		10/24/2018 19:01	1	440-0110956-016 16ECD 1.d	AS16 4 (mm)
ZZZZZ		10/24/2018 19:20	1		AS16 4 (mm)
ZZZZZ		10/24/2018 19:38	1		AS16 4 (mm)
ZZZZZ		10/24/2018 19:56	1		AS16 4 (mm)
ZZZZZ		10/24/2018 20:15	1		AS16 4 (mm)
ZZZZZ		10/24/2018 20:33	1		AS16 4 (mm)
ZZZZZ		10/24/2018 20:51	1		AS16 4 (mm)
ZZZZZ		10/24/2018 21:10	1		AS16 4 (mm)
ZZZZZ		10/24/2018 21:28	1		AS16 4 (mm)
ZZZZZ		10/24/2018 21:47	1		AS16 4 (mm)
CCV 440-507219/26		10/24/2018 22:05	1	440-0110956-026 26ECD 1.d	AS16 4 (mm)
CCB 440-507219/27		10/24/2018 22:23	1	440-0110956-027 27ECD 1.d	AS16 4 (mm)
ZZZZZ		10/24/2018 22:42	2		AS16 4 (mm)
ZZZZZ		10/24/2018 23:00	2		AS16 4 (mm)
440-222284-2		10/24/2018 23:18	10000	440-0110956-030 30ECD 1.d	AS16 4 (mm)
440-222284-2 MS		10/24/2018 23:37	10000	440-0110956-031 31ECD 1.d	AS16 4 (mm)
440-222284-2 MSD		10/24/2018 23:55	10000	440-0110956-032 32ECD 1.d	AS16 4 (mm)
CCV 440-507219/33		10/25/2018 00:13	1	440-0110956-033 33ECD 1.d	AS16 4 (mm)
CCB 440-507219/34		10/25/2018 00:32	1	440-0110956-034 34ECD 1.d	AS16 4 (mm)
ZZZZZ		10/25/2018 00:50	1		AS16 4 (mm)
ZZZZZ		10/25/2018 01:09	1		AS16 4 (mm)
ZZZZZ		10/25/2018 01:27	1		AS16 4 (mm)
ZZZZZ		10/25/2018 01:45	1		AS16 4 (mm)
ZZZZZ		10/25/2018 02:04	1		AS16 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-24 Start Date: 10/24/2018 13:30

Analysis Batch Number: 507219 End Date: 10/25/2018 11:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/25/2018 02:22	1		AS16 4 (mm)
ZZZZZ		10/25/2018 02:40	1		AS16 4 (mm)
ZZZZZ		10/25/2018 02:59	1		AS16 4 (mm)
ZZZZZ		10/25/2018 03:17	1		AS16 4 (mm)
ZZZZZ		10/25/2018 03:36	1		AS16 4 (mm)
CCV 440-507219/45		10/25/2018 03:54	1		AS16 4 (mm)
CCB 440-507219/46		10/25/2018 04:12	1		AS16 4 (mm)
ZZZZZ		10/25/2018 04:31	1		AS16 4 (mm)
ZZZZZ		10/25/2018 04:49	1		AS16 4 (mm)
ZZZZZ		10/25/2018 05:07	1		AS16 4 (mm)
ZZZZZ		10/25/2018 05:26	1		AS16 4 (mm)
ZZZZZ		10/25/2018 05:44	1		AS16 4 (mm)
CCV 440-507219/52		10/25/2018 06:02	1		AS16 4 (mm)
CCB 440-507219/53		10/25/2018 06:21	1		AS16 4 (mm)
ZZZZZ		10/25/2018 06:39	1		AS16 4 (mm)
ZZZZZ		10/25/2018 06:58	1		AS16 4 (mm)
ZZZZZ		10/25/2018 07:16	1		AS16 4 (mm)
ZZZZZ		10/25/2018 07:34	1		AS16 4 (mm)
ZZZZZ		10/25/2018 07:53	1		AS16 4 (mm)
ZZZZZ		10/25/2018 08:11	1		AS16 4 (mm)
ZZZZZ		10/25/2018 08:29	1		AS16 4 (mm)
ZZZZZ		10/25/2018 08:48	1		AS16 4 (mm)
ZZZZZ		10/25/2018 09:06	10		AS16 4 (mm)
ZZZZZ		10/25/2018 09:25	10		AS16 4 (mm)
CCV 440-507219/64		10/25/2018 10:19	1		AS16 4 (mm)
CCB 440-507219/65		10/25/2018 11:04	1		AS16 4 (mm)

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506828 Batch Start Date: 10/23/18 06:44 Batch Analyst: Hoang, Christina T

Batch Method: 314.0 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC314.INF 10 00069	WCCL041st-10 00016				
CCV 440-506828/2		314.0 LL			100 uL				
MRL 440-506828/4		314.0 LL			10 uL				
LCS 440-506828/5		314.0 LL			100 uL				
INF 440-506828/7		314.0 LL		5 mL					
720-89201-A-3 MS	09S03E34G002-B-E FF	314.0 LL	T		10 uL				
720-89201-A-3 MSD	09S03E34G002-B-E FF	314.0 LL	T		10 uL				
MRL 440-506828/14		314.0 LL			40 uL				
CCV 440-506828/15		314.0 LL			100 uL				
CCV 440-506828/27		314.0 LL			200 uL				
CCV 440-506828/38		314.0 LL			100 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506935 Batch Start Date: 10/23/18 11:56 Batch Analyst: Saraubon, Phakchaya

Batch Method: 314.0 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC314.INF 00538	WCCL041st-10 00016				
CCV 440-506935/2		314.0 LL			250 uL				
LCS 440-506935/5		314.0 LL			250 uL				
INF 440-506935/8		314.0 LL		5 mL					
MRL 440-506935/9		314.0 LL			10 uL				
CCV 440-506935/13		314.0 LL			250 uL				
720-89236-D-6 MS	RW-11-20181018-0 1-MS	314.0 LL	T		25 uL				
720-89236-D-6 MSD	RW-11-20181018-0 1-MSD	314.0 LL	T		25 uL				
CCV 440-506935/21		314.0 LL			750 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 507219 Batch Start Date: 10/24/18 13:30 Batch Analyst: Saraubon, Phakchaya

Batch Method: 314.0 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC314.INF 00539	WCCL04-1st 00004	WCCL041st-10 00016			
CCV 440-507219/2		314.0 LL				250 uL			
MRL 440-507219/4		314.0 LL				10 uL			
LCS 440-507219/5		314.0 LL				250 uL			
INF 440-507219/7		314.0 LL		5 mL					
CCV 440-507219/15		314.0 LL				250 uL			
CCV 440-507219/26		314.0 LL				750 uL			
440-222284-E-2 MS	VER-01I-20181015	314.0 LL	T		25 uL				
440-222284-E-2 MSD	VER-01I-20181015	314.0 LL	T		25 uL				
CCV 440-507219/33		314.0 LL				250 uL			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 7199

Chromium, Hexavalent (IC) by Method
7199

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Lab ID: LCS 440-505406/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chromium, hexavalent	50.0	49.6	99	90-110	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Lab ID: MRL 440-505406/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Chromium, hexavalent	1.00	0.968 J	97	50-150	

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Lab ID: 440-222284-2 MS Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chromium, hexavalent	1500	2300	3700	90	85-115	

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Lab ID: 440-222284-2 MSD Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chromium, hexavalent	1500	3680	89	1	20	85-115	

Column to be used to flag recovery and RPD values
FORM III 7199

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Lab Sample ID: MB 440-505406/6
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-20 Date Analyzed: 10/16/2018 07:19
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-505406/3	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0654 33.d	10/16/2018 06:42
	LCS 440-505406/5	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0719 13.d	10/16/2018 07:06
VER-01D-20181015	440-222284-1	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0913 24.d	10/16/2018 09:01
VER-01I-20181015	440-222284-2	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0925 46.d	10/16/2018 09:13
VER-20181015-FB	440-222284-4	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0938 08.d	10/16/2018 09:25
VER-20181015-EB	440-222284-5	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-0950 32.d	10/16/2018 09:38

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Lab Sample ID: MB 440-505406/6
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-20 Date Analyzed: 10/16/2018 07:19
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-505406/15	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-1030 40.d	10/16/2018 10:18
VER-01I-20181015 MS	440-222284-2 MS	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-1043 03.d	10/16/2018 10:30
VER-01I-20181015 MSD	440-222284-2 MSD	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-1055 26.d	10/16/2018 10:43
	CCB 440-505406/21	Info 2_IRVINSTIC 20_Hexavale nt Chromium_20 181016-1150 42.d	10/16/2018 11:38

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 13:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 09:01
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	4.3		2.0	0.25

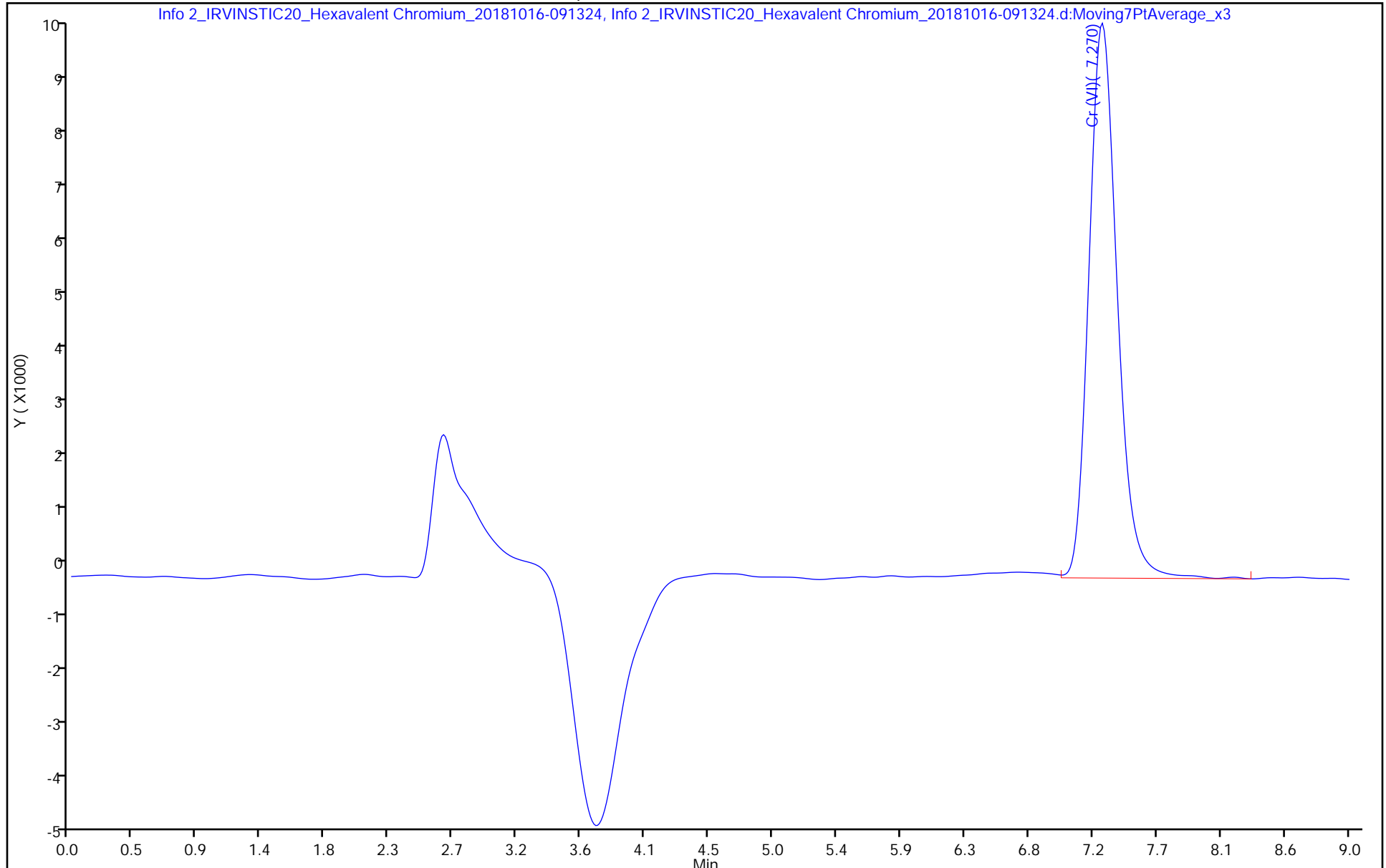
TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-1
 Client ID: VE R-01D-20181015
 Sample Type: Client
 Inject. Date: 16-Oct-2018 09:01:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-010
 Misc. Info.: 440-0110534-010
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 10:14:37 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Cr (VI)	7.270	7.295	-0.025	137107	4.27	

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-091324.d
Injection Date: 16-Oct-2018 09:01:00 Instrument ID: IC-20 Operator ID: irvinstic20
Lims ID: 440-222284-F-1 Lab Sample ID: 440-222284-1 Worklist Smp#: 10
Client ID: VE R-01D-20181015 Dil. Factor: 1.0000 ALS Bottle#: 0
Injection Vol: 1000.0 ul Limit Group: IC-7199
Method: 218.6_20



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 09:13
 Con. Extract Vol.: _____ Dilution Factor: 100
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	2300		200	25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-2
 Client ID: VE R-011-20181015
 Sample Type: Client
 Inject. Date: 16-Oct-2018 09:13:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1000.0 ul Dil. Factor: 100.0000
 Sample Info: 440-0110534-011
 Misc. Info.: 440-0110534-011
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 10:26:58 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

First Level Reviewer: nikbakhtm Date: 16-Oct-2018 09:27:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Cr (VI)	7.283	7.295	-0.012	739979	23.4	

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-092546.d

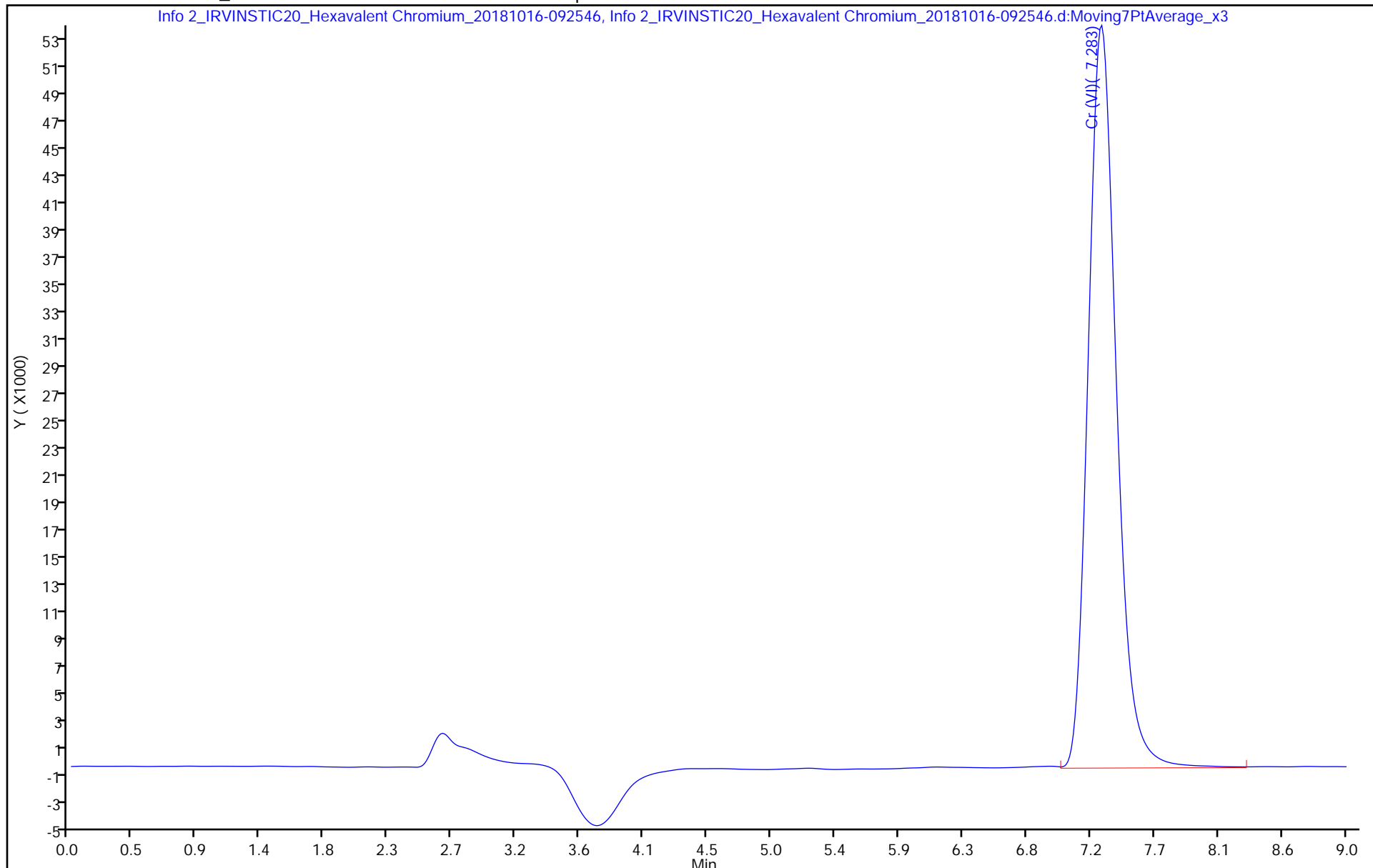
Injection Date: 16-Oct-2018 09:13:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: 440-222284-F-2 Lab Sample ID: 440-222284-2 Worklist Smp#: 11

Client ID: VE R-011-20181015

Injection Vol: 1000.0 ul Dil. Factor: 100.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 14:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 09:25
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-4
 Client ID: VE R-20181015-FB
 Sample Type: Client
 Inject. Date: 16-Oct-2018 09:25:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-012
 Misc. Info.: 440-0110534-012
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed

 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 10:26:58 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723

 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-093808.d

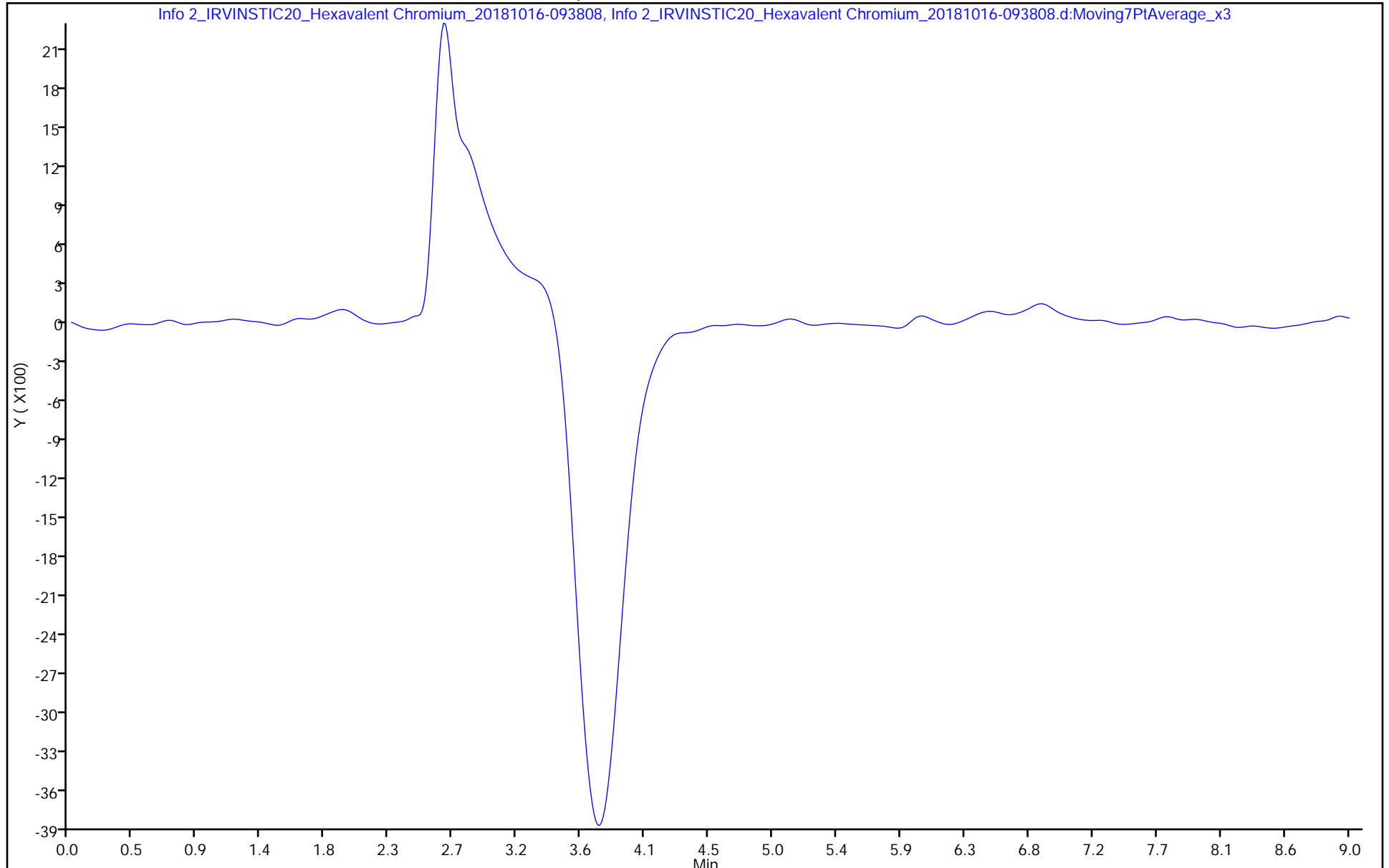
Injection Date: 16-Oct-2018 09:25:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: 440-222284-F-4 Lab Sample ID: 440-222284-4 Worklist Smp#: 12

Client ID: VE R-20181015-FB

Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 14:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 09:38
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-5
 Client ID: VE R-20181015-EB
 Sample Type: Client
 Inject. Date: 16-Oct-2018 09:38:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-013
 Misc. Info.: 440-0110534-013
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:05:11 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324
 First Level Reviewer: nikbakhtm Date: 16-Oct-2018 10:16:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-095032.d

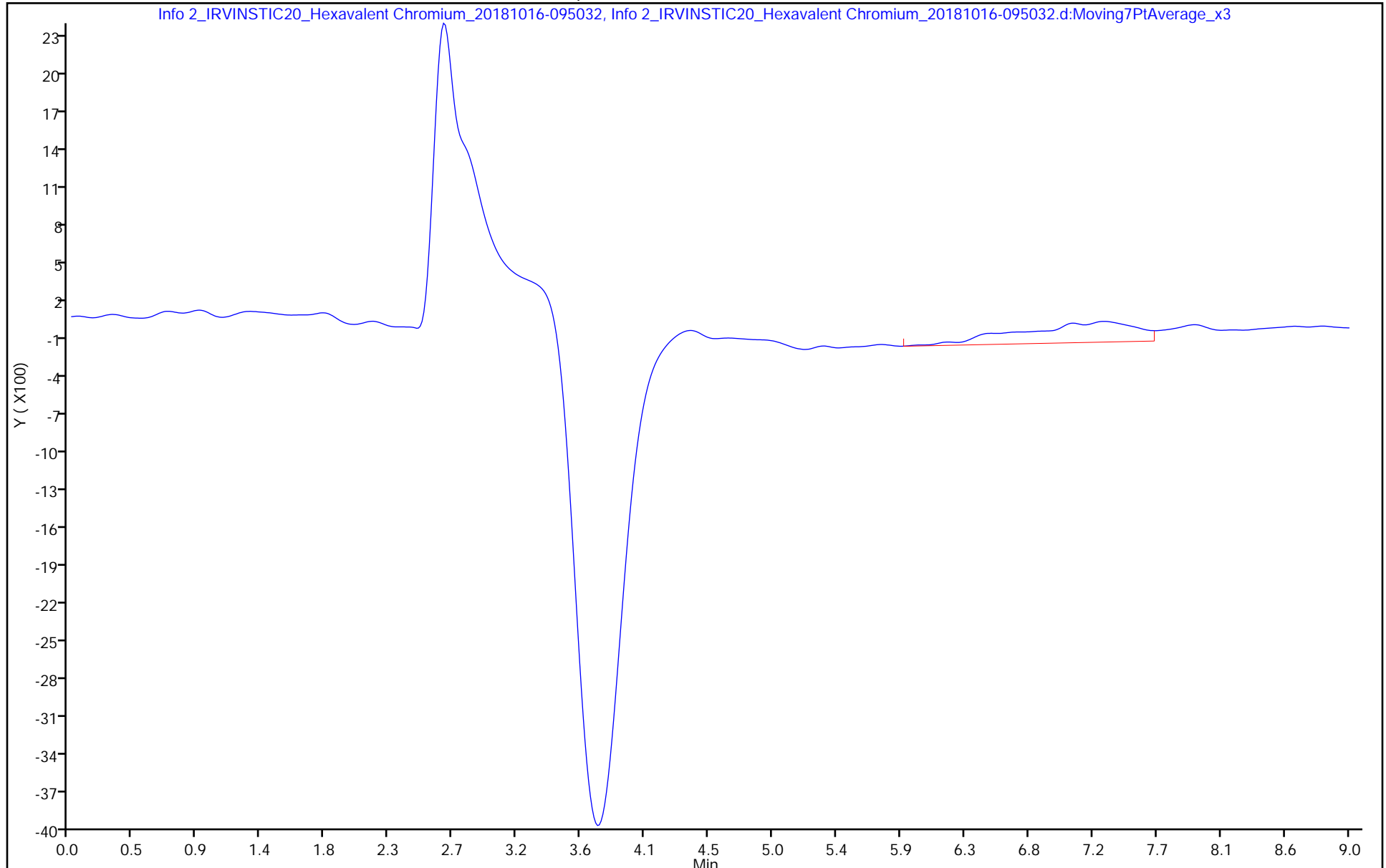
Injection Date: 16-Oct-2018 09:38:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: 440-222284-F-5 Lab Sample ID: 440-222284-5 Worklist Smp#: 13

Client ID: VE R-20181015-EB

Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199

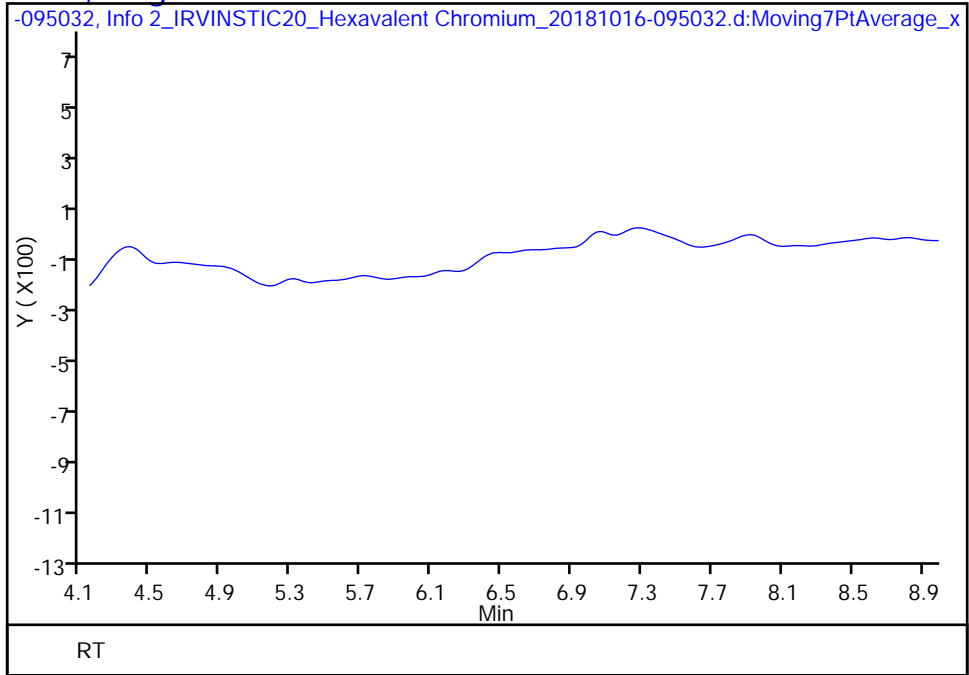


TestAmerica Irvine

Data File:	\\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016				
Injection Date:	16-Oct-2018 09:38:00	Instrument ID:	IC-20		
Lims ID:	440-222284-F-5	Lab Sample ID:	440-222284-5		
Client ID:	VE R-20181015-EB				
Operator ID:	irvinstic20	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	1000.0 ul	Dil. Factor:	1.0000		
Method:	218.6_20	Limit Group:	IC-7199		
Column:		Detector	Ch-A-20111004015		

1 Cr (VI), CAS: 18540-29-9, Signal: 1

RT: 7.07
Response: 9138
Amount: 0.196675



Reviewer: nikbakhtm, 16-Oct-2018 10:16:34
Audit Action: Manually Integrated

Audit Reason:

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 488960

SDG No.: _____

Instrument ID: IC-20 GC Column: AS7 A ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/23/2018 09:30 Calibration End Date: 07/23/2018 11:10 Calibration ID: 19633

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-488960/12	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-095757.d
Level 2	STD2 440-488960/13	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-101217.d
Level 3	STD3 440-488960/14	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-102637.d
Level 4	STD4 440-488960/15	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-104058.d
Level 5	STD5 440-488960/16	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-105520.d
Level 6	STD6 440-488960/17	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-110941.d
Level 7	STD7 440-488960/18	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-112403.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Chromium, hexavalent	7.472	7.459	7.472	7.459	7.447	7.459	7.459				7.098 - 7.845	7.461

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 488960

SDG No.: _____

Instrument ID: IC-20 GC Column: AS7 A ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/23/2018 09:30 Calibration End Date: 07/23/2018 11:10 Calibration ID: 19633

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-488960/12	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-095757.d
Level 2	STD2 440-488960/13	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-101217.d
Level 3	STD3 440-488960/14	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-102637.d
Level 4	STD4 440-488960/15	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-104058.d
Level 5	STD5 440-488960/16	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-105520.d
Level 6	STD6 440-488960/17	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-110941.d
Level 7	STD7 440-488960/18	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-112403.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Chromium, hexavalent	43090 31415	32729 31122	31851 31809	31364	Lin1	2955.94963	31432.7530							1.0000		0.9990

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 488960

SDG No.: _____

Instrument ID: IC-20 GC Column: AS7 A ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/23/2018 09:30 Calibration End Date: 07/23/2018 11:10 Calibration ID: 19633

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 440-488960/12	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-095757.d
Level 2	STD2 440-488960/13	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-101217.d
Level 3	STD3 440-488960/14	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-102637.d
Level 4	STD4 440-488960/15	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-104058.d
Level 5	STD5 440-488960/16	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-105520.d
Level 6	STD6 440-488960/17	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-110941.d
Level 7	STD7 440-488960/18	Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-112403.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chromium, hexavalent	Lin1	12927 2334114	32729 3180943	318514	784105	1570738	0.300 75.0	1.00 100	10.0	25.0	50.0

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 23-Jul-2018 09:44:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-012
 Misc. Info.: 440-0106906-012
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:46:28 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

First Level Reviewer: nikbakhtm Date: 23-Jul-2018 11:21:17

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.472	7.472	0.000	12927	0.3000	0.3172	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 0.60 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-095757.d

Injection Date: 23-Jul-2018 09:44:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: std1

Worklist Smp#: 12

Client ID:

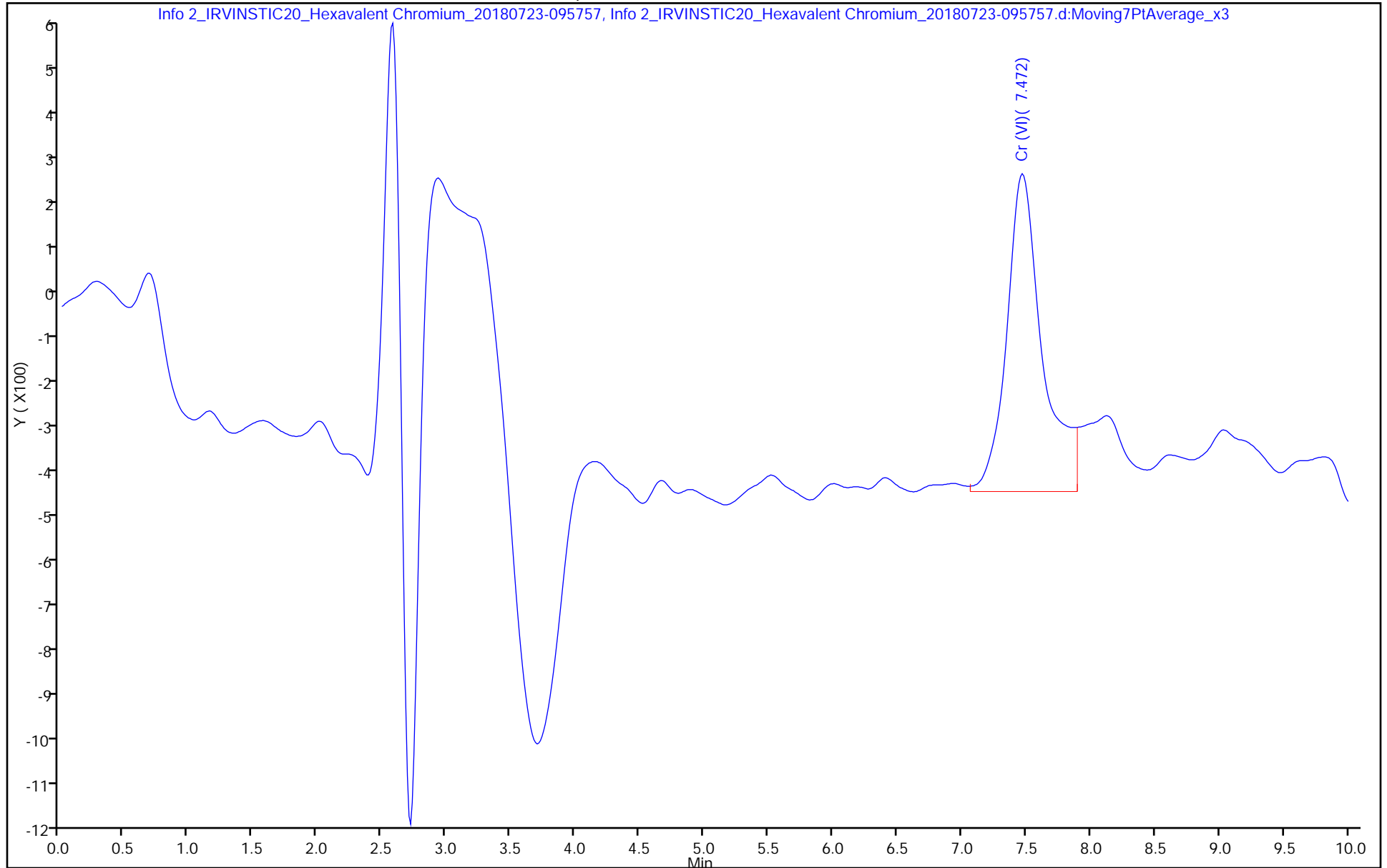
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 23-Jul-2018 09:58:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-013
 Misc. Info.: 440-0106906-013
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:49:24 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

First Level Reviewer: nikbakhtm Date: 23-Jul-2018 11:49:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.459	7.472	-0.013	32729	1.00	0.9472	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 2.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-101217.d

Injection Date: 23-Jul-2018 09:58:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: std2

Worklist Smp#: 13

Client ID:

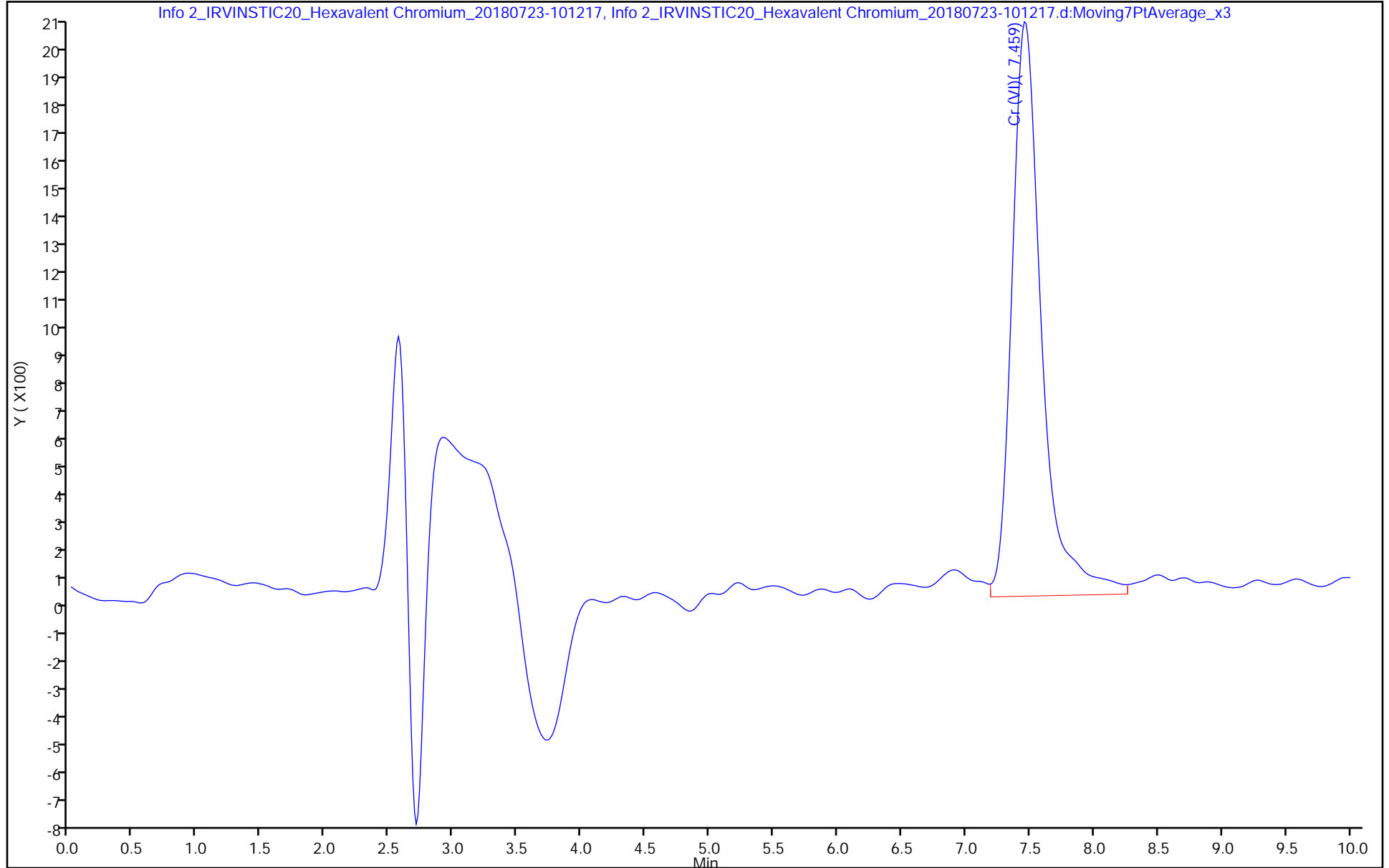
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 23-Jul-2018 10:13:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-014
 Misc. Info.: 440-0106906-014
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:46:33 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

First Level Reviewer: nikbakhtm Date: 23-Jul-2018 10:41:20

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.472	7.472	0.000	318514	10.0	10.0	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 20.00 Units: uL

TestAmerica Irvine

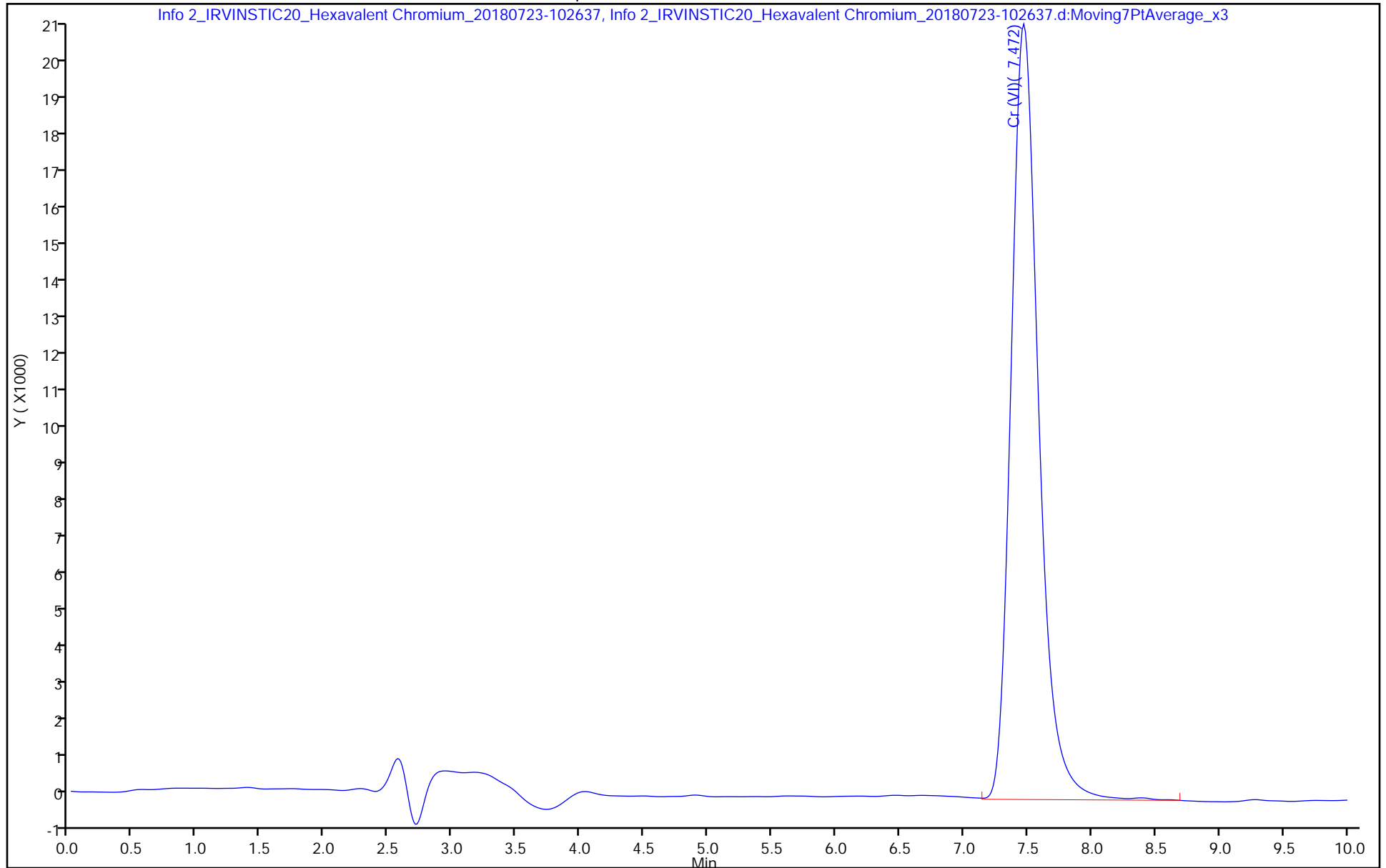
Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-102637.d

Injection Date: 23-Jul-2018 10:13:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: std3 Worklist Smp#: 14

Client ID: Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 23-Jul-2018 10:27:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-015
 Misc. Info.: 440-0106906-015
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:46:35 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

First Level Reviewer: nikbakhtm Date: 23-Jul-2018 10:44:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.459	7.472	-0.013	784105	25.0	24.9	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 50.00 Units: uL

TestAmerica Irvine

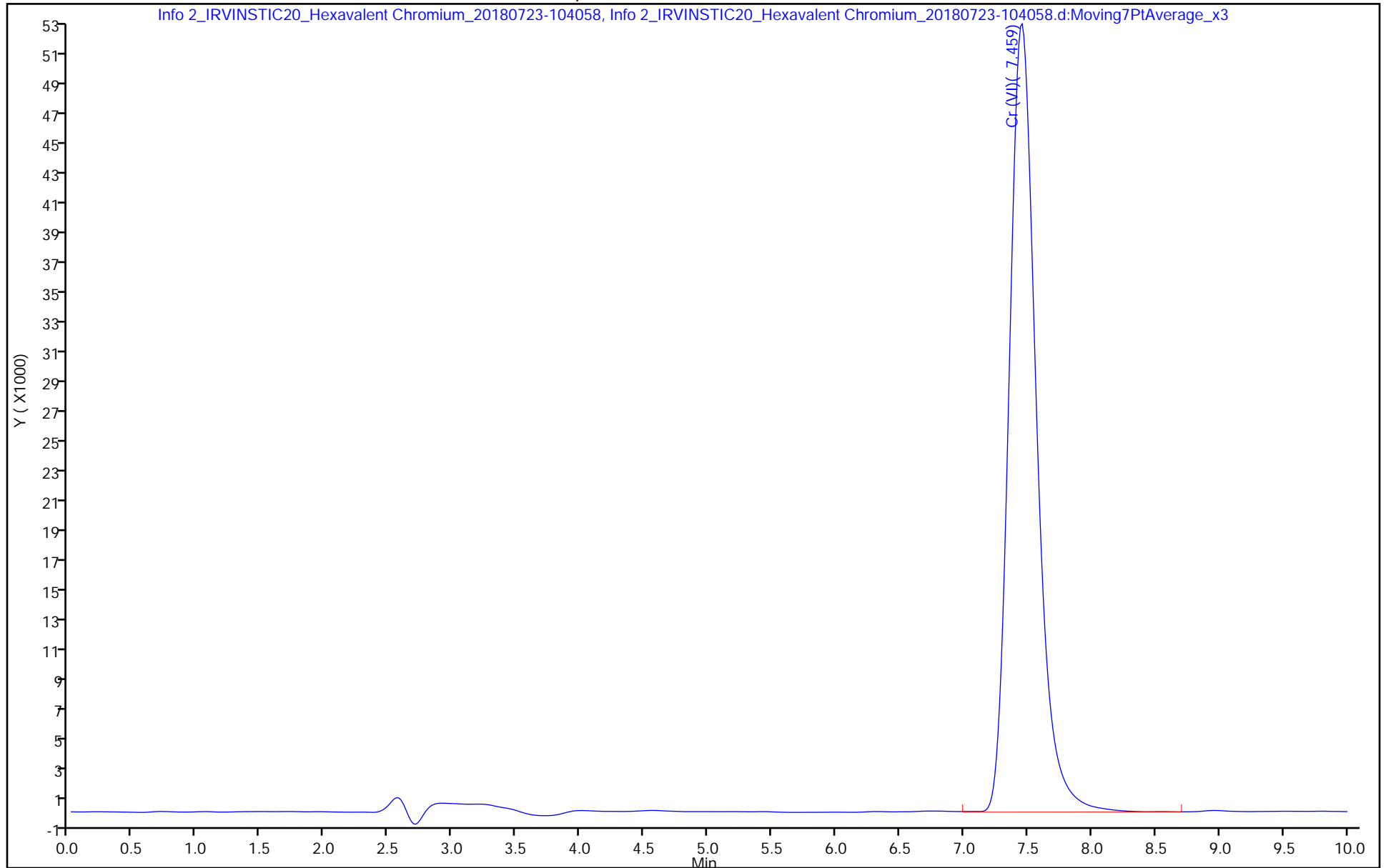
Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-104058.d

Injection Date: 23-Jul-2018 10:27:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: std4 Worklist Smp#: 15

Client ID: Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 23-Jul-2018 10:41:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-016
 Misc. Info.: 440-0106906-016
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:46:39 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.447	7.472	-0.025	1570738	50.0	49.9	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-105520.d

Injection Date: 23-Jul-2018 10:41:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: std5

Worklist Smp#: 16

Client ID:

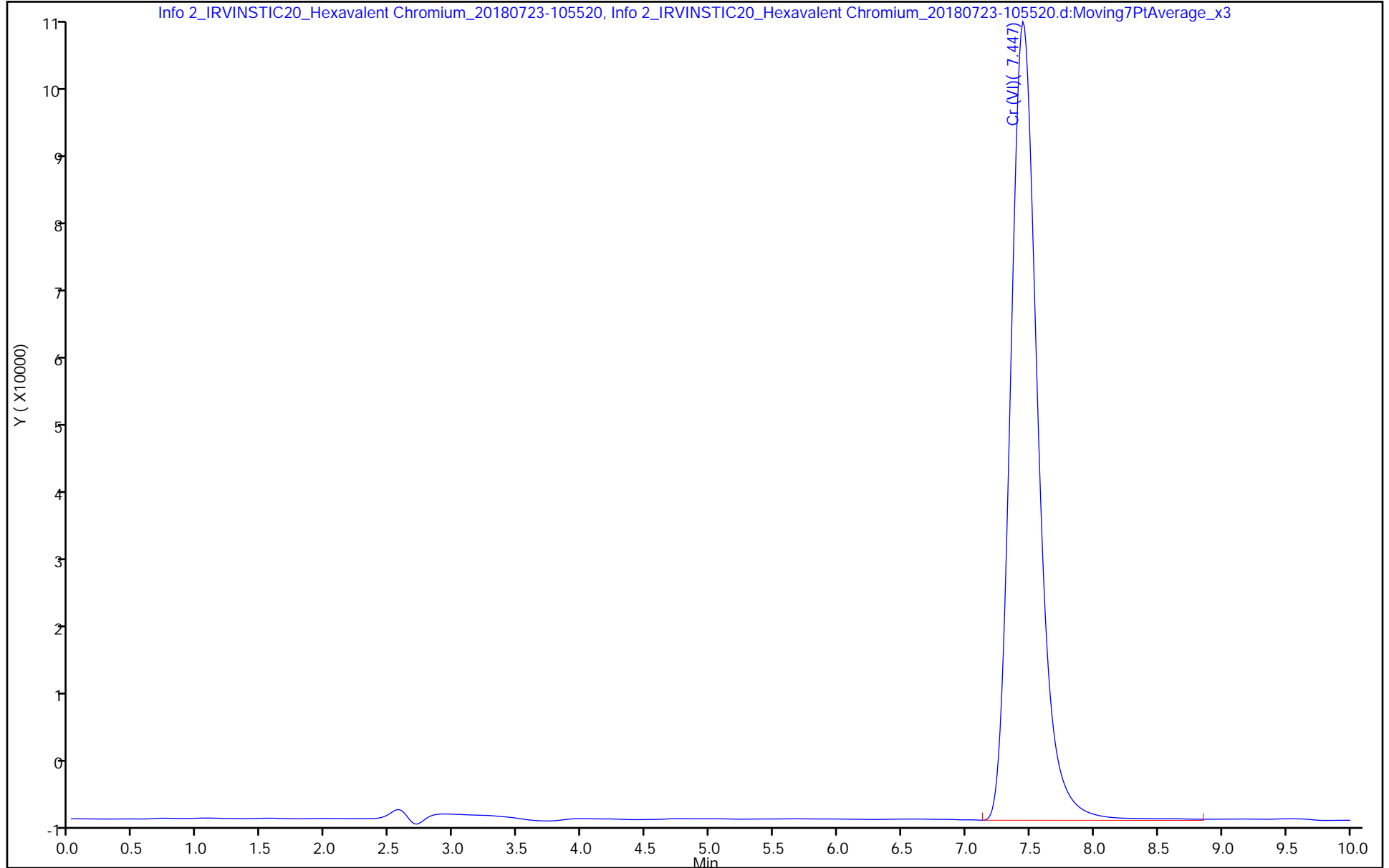
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: std6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 23-Jul-2018 10:56:00 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-017
 Misc. Info.: 440-0106906-017
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:46:41 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.459	7.472	-0.013	2334114	75.0	74.2	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 150.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-110941.d

Injection Date: 23-Jul-2018 10:56:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: std6

Worklist Smp#: 17

Client ID:

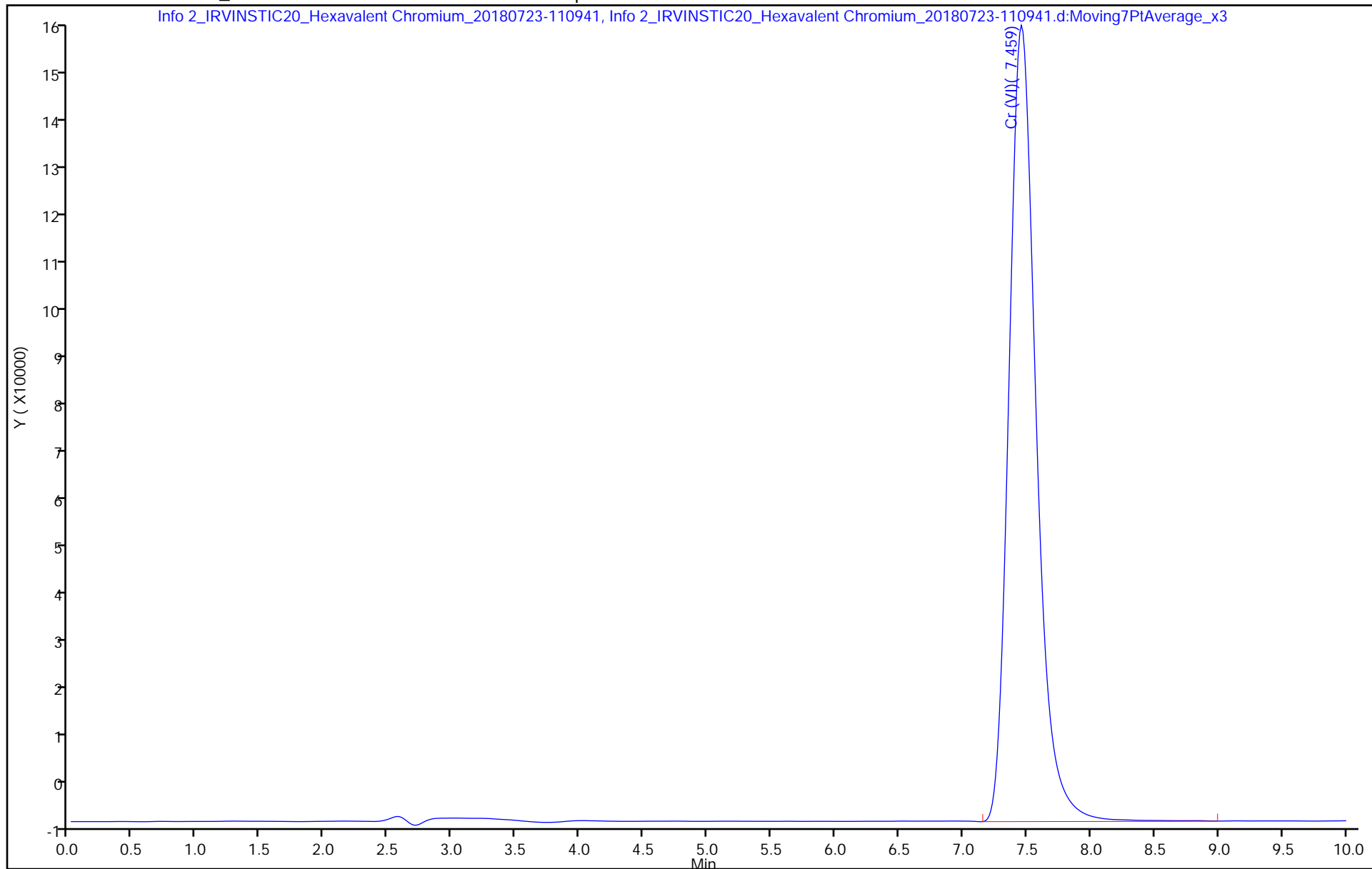
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-106906.b
 Lims ID: std7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 23-Jul-2018 11:10:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-018
 Misc. Info.: 440-0106906-018
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 11:48:25 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-106906.b
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK008

First Level Reviewer: nikbakhtm Date: 23-Jul-2018 11:36:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.459	7.472	-0.013	3180943	100.0	101.1	

Reagents:

WCCR6LCS5PPM_00114 Amount Added: 200.00 Units: uL

TestAmerica Irvine

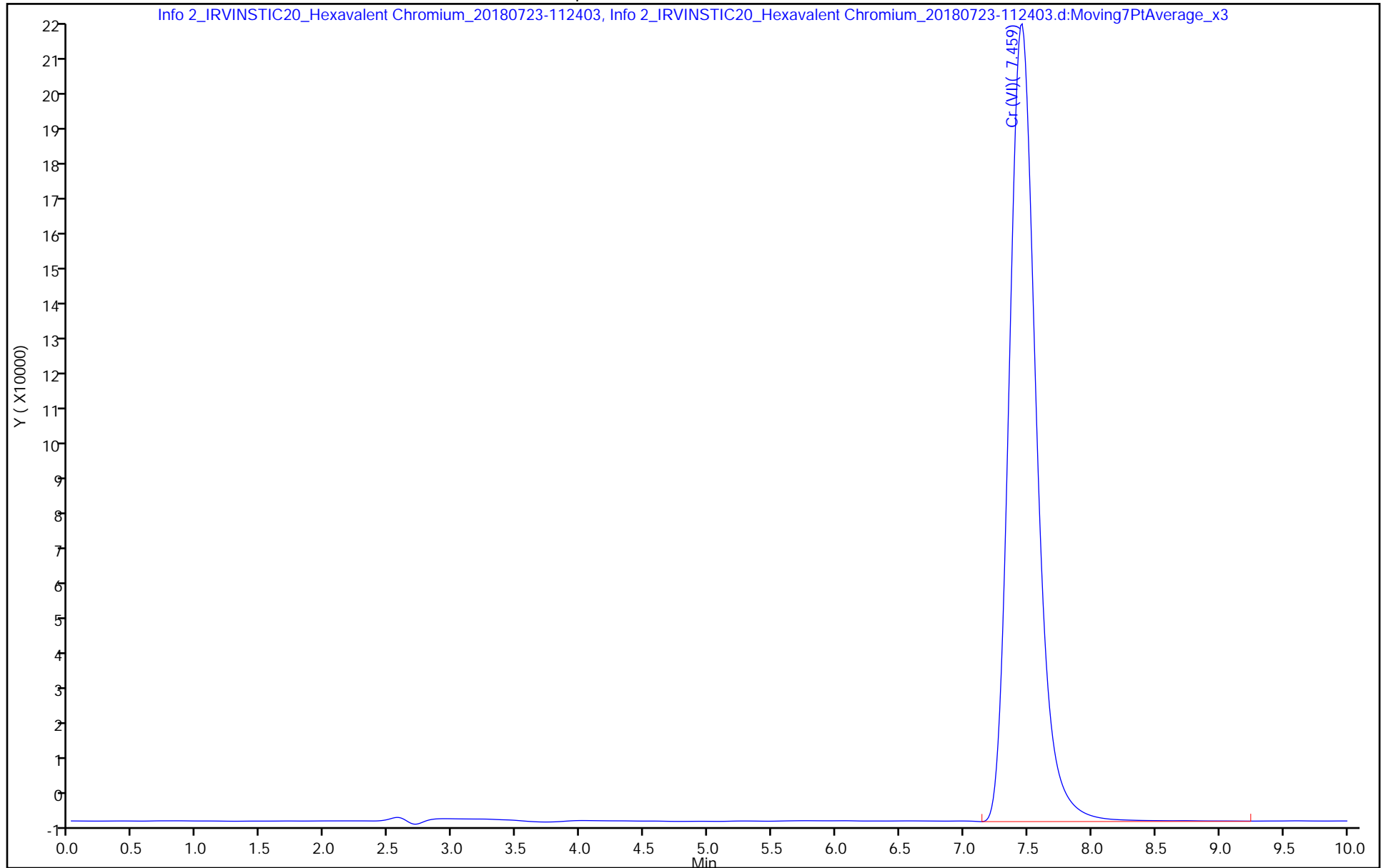
Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-112403.d

Injection Date: 23-Jul-2018 11:10:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: std7 Worklist Smp#: 18

Client ID: Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



Calibration

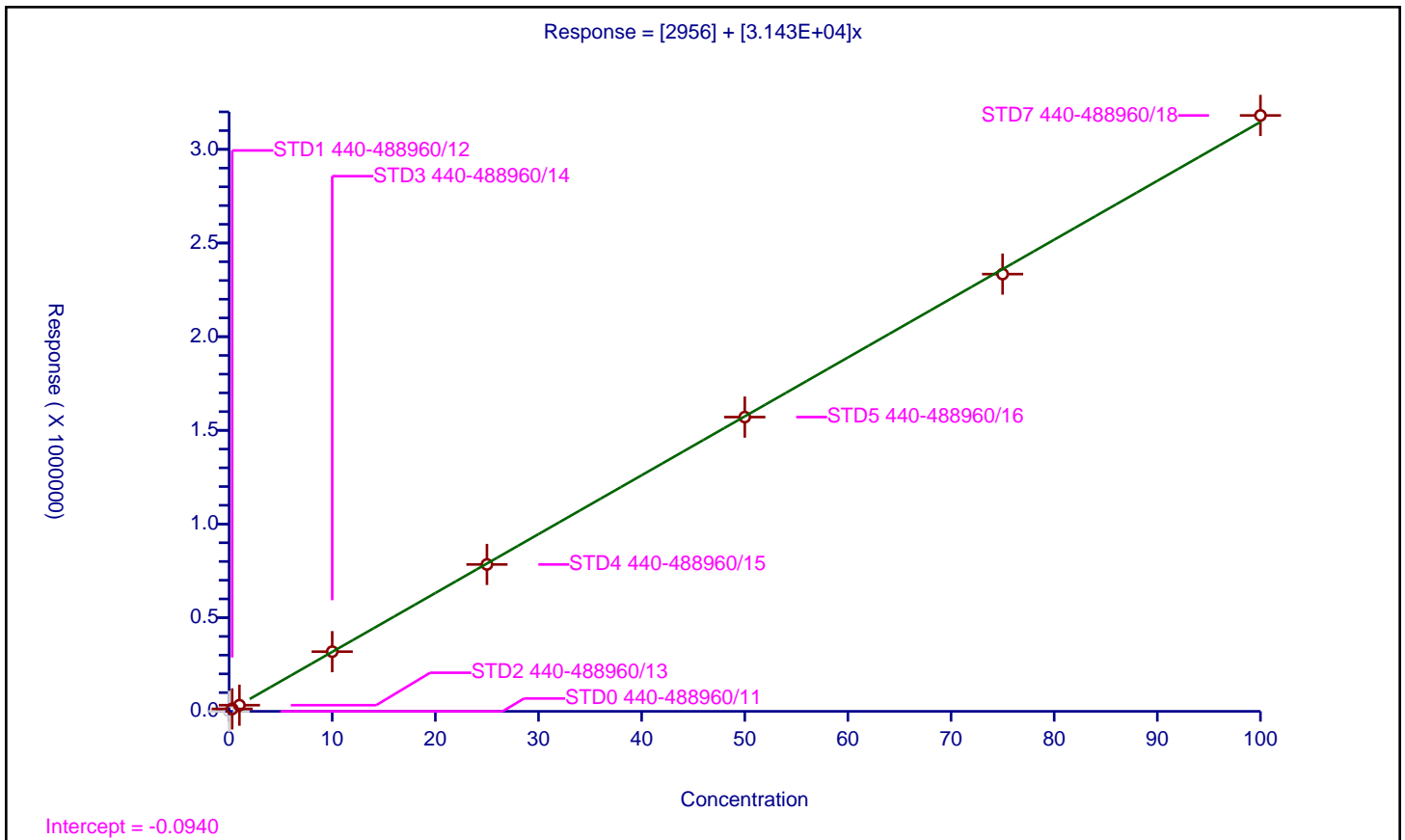
/ Cr (VI)

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	2956
Slope:	3.143E+04

Error Coefficients	
Standard Error:	19700
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-488960/11	0.0	0.0			NaN	N
2	STD1 440-488960/12	0.3	12927.0			43090.0	Y
3	STD2 440-488960/13	1.0	32729.0			32729.0	Y
4	STD3 440-488960/14	10.0	318514.0			31851.4	Y
5	STD4 440-488960/15	25.0	784105.0			31364.2	Y
6	STD5 440-488960/16	50.0	1570738.0			31414.76	Y
7	STD6 440-488960/17	75.0	2334114.0			31121.52	Y
8	STD7 440-488960/18	100.0	3180943.0			31809.43	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-488960/19 Calibration Date: 07/23/2018 12:08
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Chromium, hexavalent	Lin1				47.4	50.0	95	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-488960/19 Calibration Date: 07/23/2018 12:08
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr

Analyte	RT	RT WINDOW	
		FROM	TO
Chromium, hexavalent	7.46	7.10	7.85

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 23-Jul-2018 12:08:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-019
 Misc. Info.: 440-0106906-019
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist:
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 14:37:47 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.459	7.472	-0.013	1492477	50.0	47.4	

Reagents:

WCCR6ICV5PPM_00058 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-122139.d

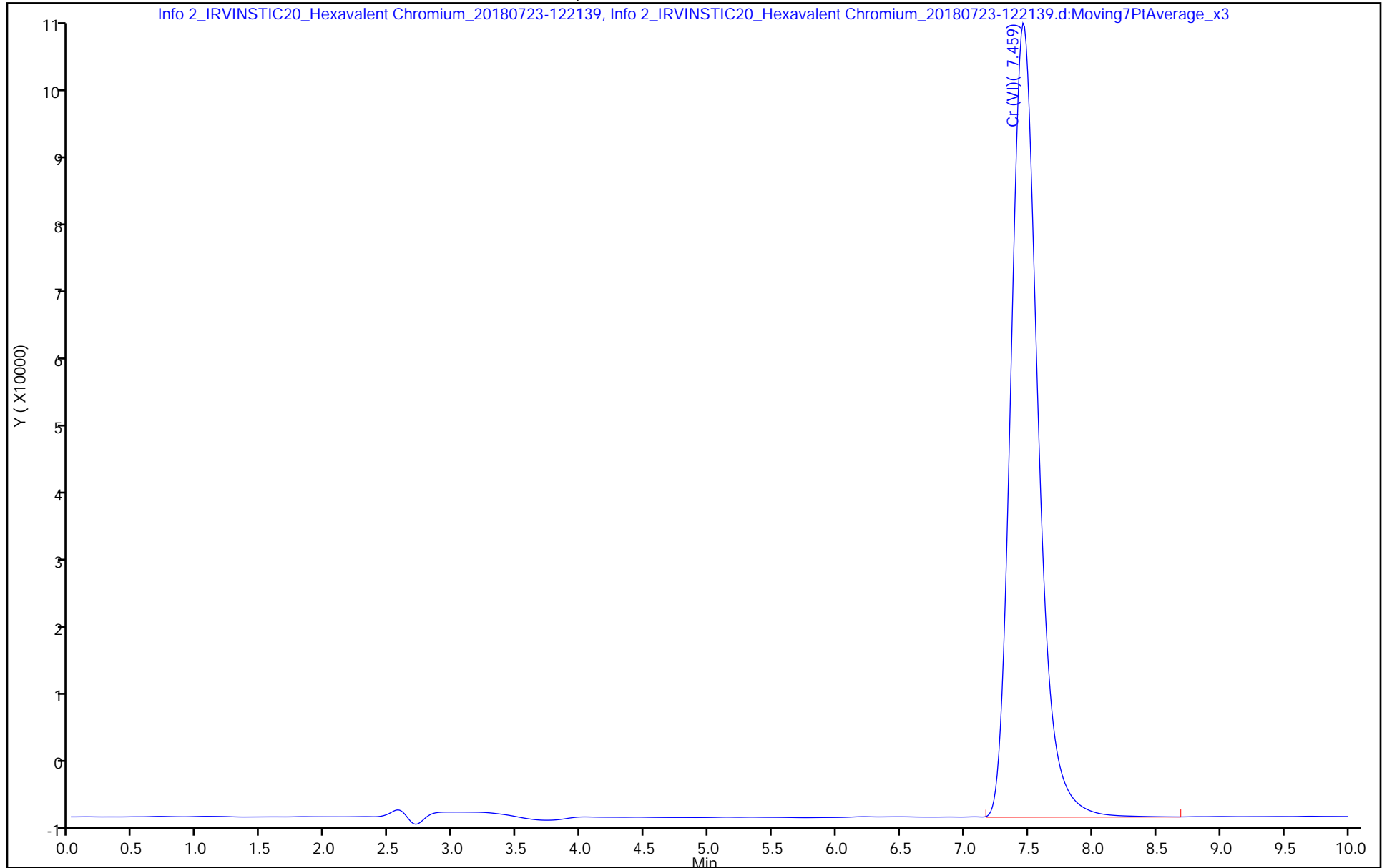
Injection Date: 23-Jul-2018 12:08:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: ICV Worklist Smp#: 19

Client ID:

Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/2 Calibration Date: 10/16/2018 06:25
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Chromium, hexavalent	Lin1				49.7	50.0	99	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/2 Calibration Date: 10/16/2018 06:25
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr

Analyte	RT	RT WINDOW	
		FROM	TO
Chromium, hexavalent	7.30	6.93	7.66

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 16-Oct-2018 06:25:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-002
 Misc. Info.: 440-0110534-002
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 07:33:10 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

First Level Reviewer: nikbakhtm Date: 16-Oct-2018 06:46:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.295	7.295	0.000	1565785	50.0	49.7	

Reagents:

WCCR6LCS5PPM_00116 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-063814.d

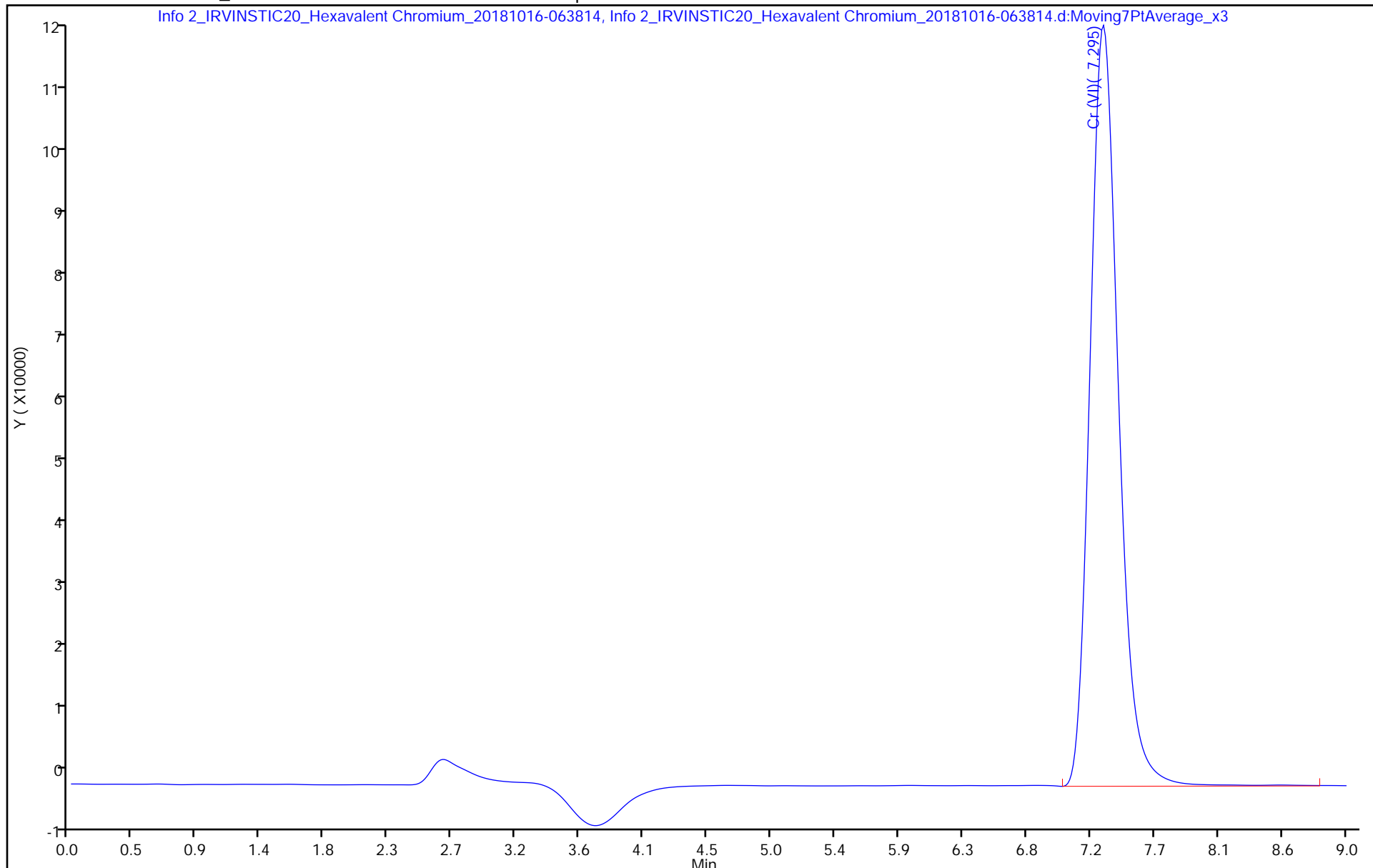
Injection Date: 16-Oct-2018 06:25:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: CCV Worklist Smp#: 2

Client ID: ALS Bottle#: 0

Injection Vol: 1000.0 ul Dil. Factor: 1.0000

Method: 218.6_20 Limit Group: IC-7199



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/14 Calibration Date: 10/16/2018 09:50
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Chromium, hexavalent	Lin1				49.7	50.0	99	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/14 Calibration Date: 10/16/2018 09:50
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr

Analyte	RT	RT WINDOW	
		FROM	TO
Chromium, hexavalent	7.26	6.93	7.66

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 16-Oct-2018 09:50:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-014
 Misc. Info.: 440-0110534-014
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 10:16:51 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.258	7.295	-0.037	1565558	50.0	49.7	

Reagents:

WCCR6LCS5PPM_00116 Amount Added: 100.00 Units: uL

TestAmerica Irvine

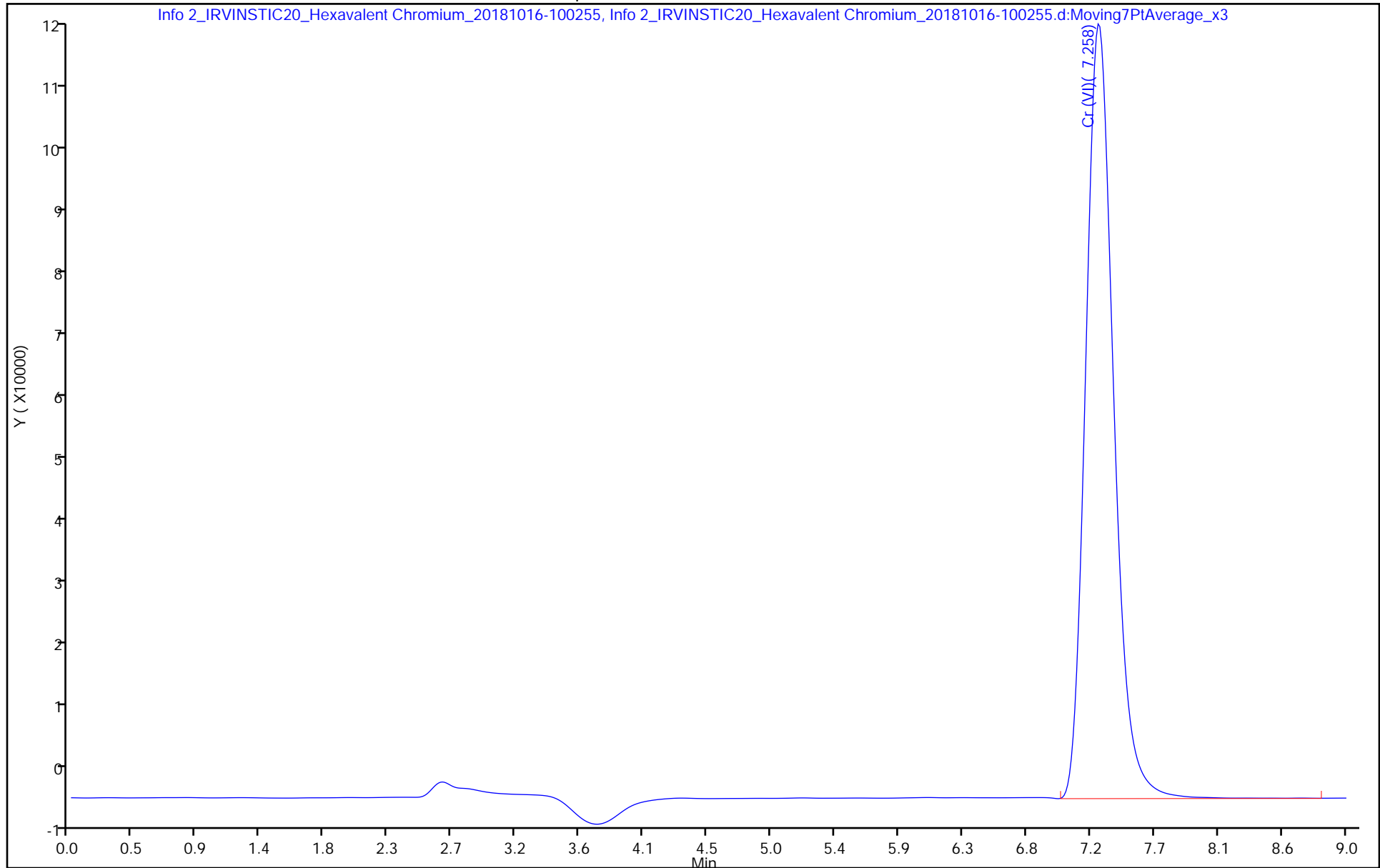
Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-100255.d

Injection Date: 16-Oct-2018 09:50:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: CCV Worklist Smp#: 14

Client ID: Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/20 Calibration Date: 10/16/2018 11:23
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
Chromium, hexavalent	Lin1				50.3	50.0	101	90-110

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505406/20 Calibration Date: 10/16/2018 11:23
 Instrument ID: IC-20 Calib Start Date: 07/23/2018 09:30
 GC Column: AS7 A ID: 4.00 (mm) Calib End Date: 07/23/2018 11:10
 Lab File ID: Info 2_IRVINSTIC20_Hexavalent Chr

Analyte	RT	RT WINDOW	
		FROM	TO
Chromium, hexavalent	7.23	6.93	7.66

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 16-Oct-2018 11:23:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-020
 Misc. Info.: 440-0110534-020
 Operator ID: irvinstic20 Instrument ID: IC-20
 Sublist: chrom-218.6_20*sub1
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:37:34 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0309

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.232	7.295	-0.063	1582857	50.0	50.3	

Reagents:

WCCR6LCS5PPM_00116 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-113530.d

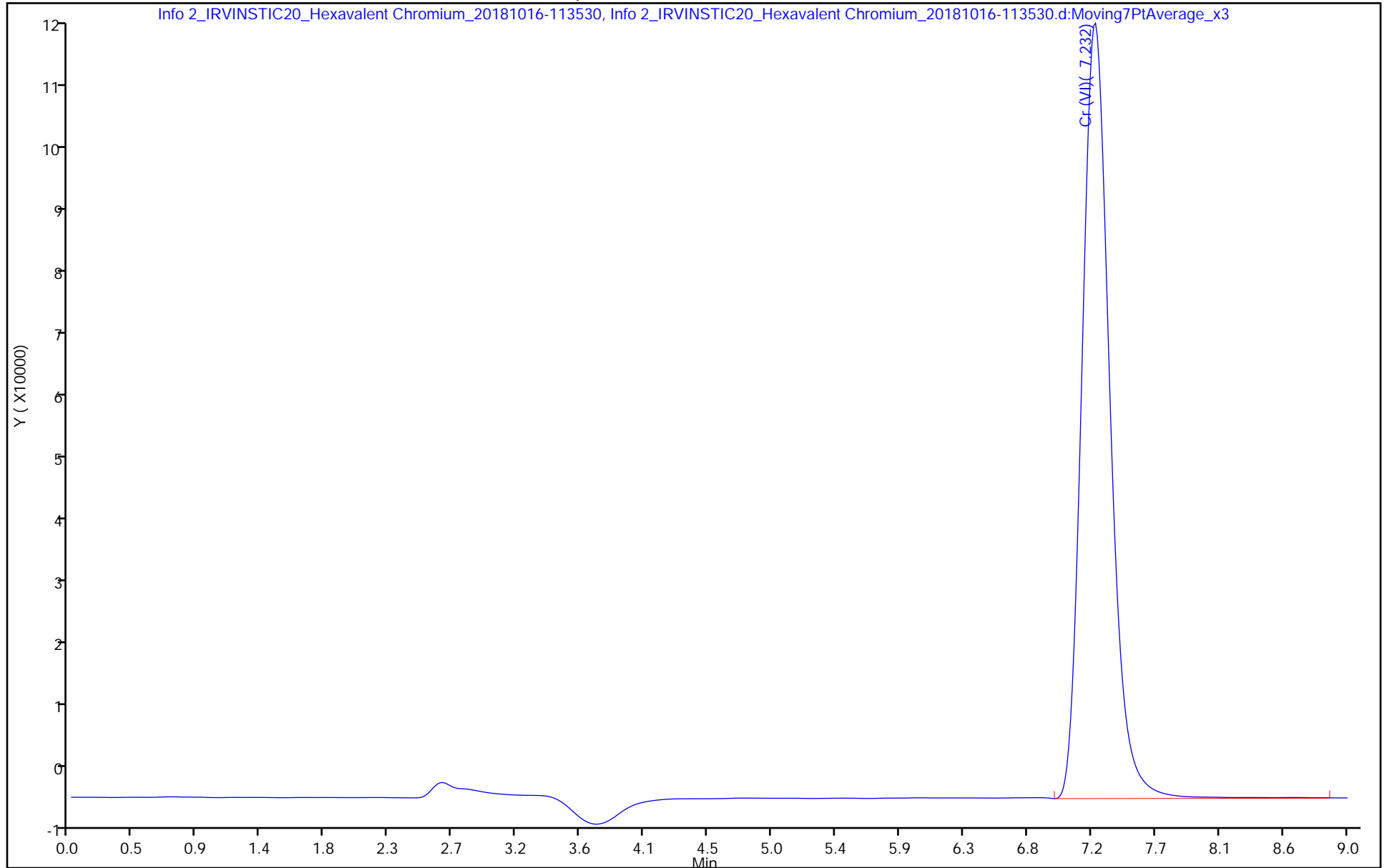
Injection Date: 16-Oct-2018 11:23:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: CCV Worklist Smp#: 20

Client ID:

Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-505406/6
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 07:19
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Oct-2018 07:19:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-006
 Misc. Info.: 440-0110534-006
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 07:33:10 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-073133.d

Injection Date: 16-Oct-2018 07:19:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: MB

Worklist Smp#: 6

Client ID:

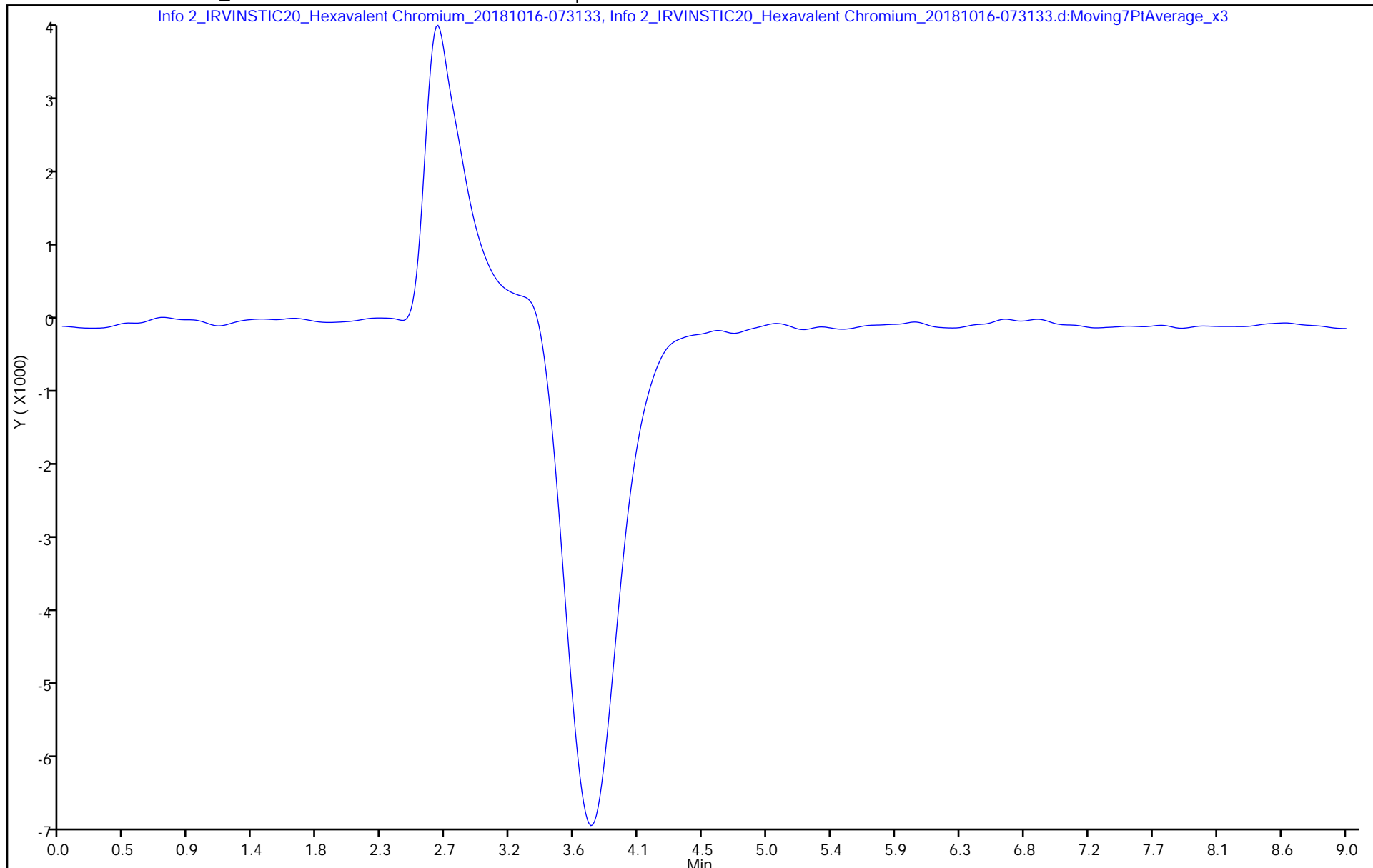
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505406/3
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 06:42
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 16-Oct-2018 06:42:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-003
 Misc. Info.: 440-0110534-003
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 07:33:10 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-065433.d

Injection Date: 16-Oct-2018 06:42:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: CCB Worklist Smp#: 3

Client ID: ALS Bottle#: 0

Injection Vol: 1000.0 ul Dil. Factor: 1.0000

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505406/15
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 10:18
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 16-Oct-2018 10:18:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-015
 Misc. Info.: 440-0110534-015
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:44:49 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-103040.d

Injection Date: 16-Oct-2018 10:18:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: CCB

Worklist Smp#: 15

Client ID:

Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505406/21
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 11:38
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 16-Oct-2018 11:38:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-021
 Misc. Info.: 440-0110534-021
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:37:34 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-115042.d

Injection Date: 16-Oct-2018 11:38:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: CCB

Worklist Smp#: 21

Client ID:

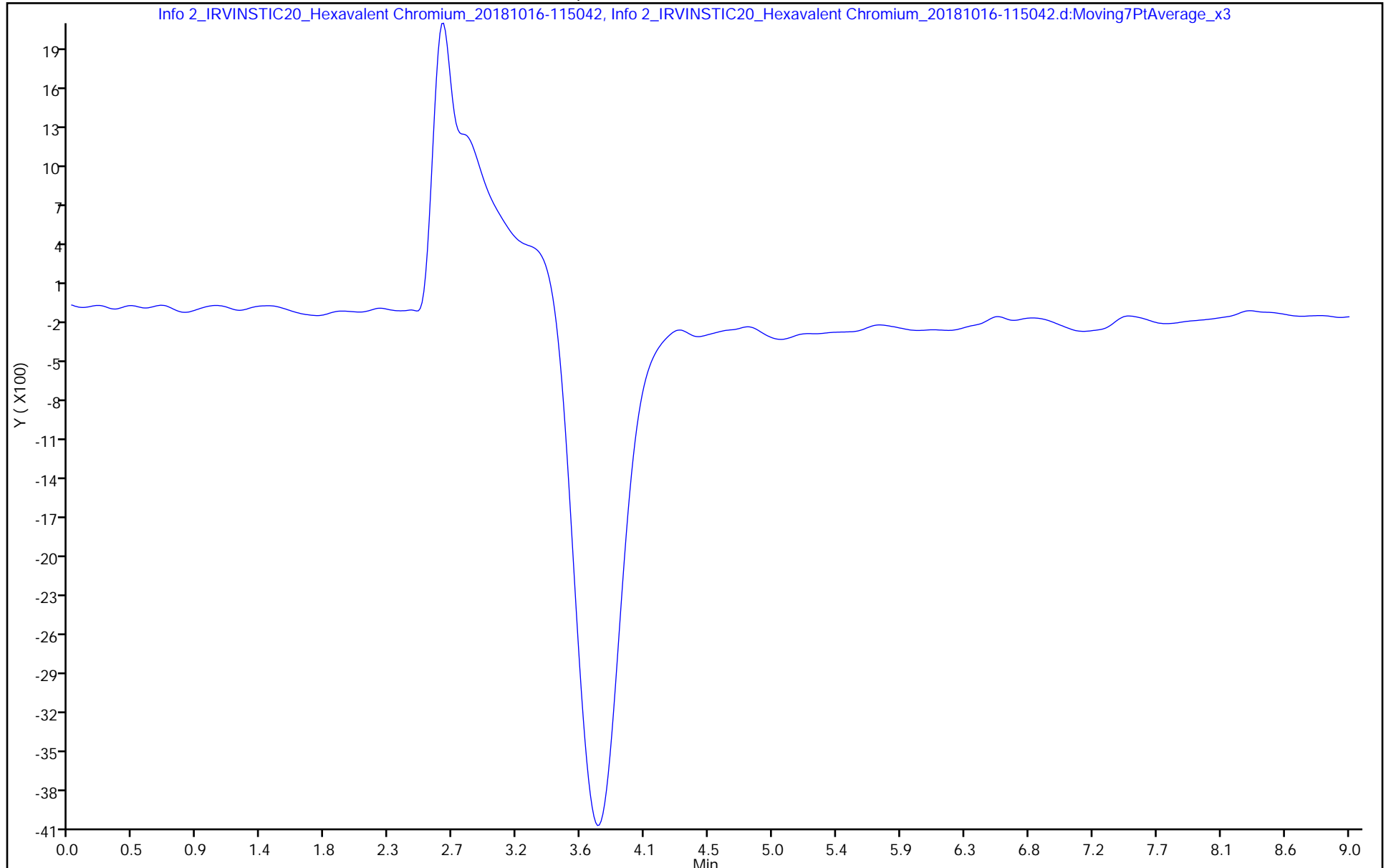
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-488960/20
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 07/23/2018 12:24
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 488960 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	ND		2.0	0.25

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 23-Jul-2018 12:24:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0106906-020
 Misc. Info.: 440-0106906-020
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 23-Jul-2018 14:37:47 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_2018072
 Column 1 : Det: Ch-A-20111004015
 Process Host: XAWRK012

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

TestAmerica Irvine

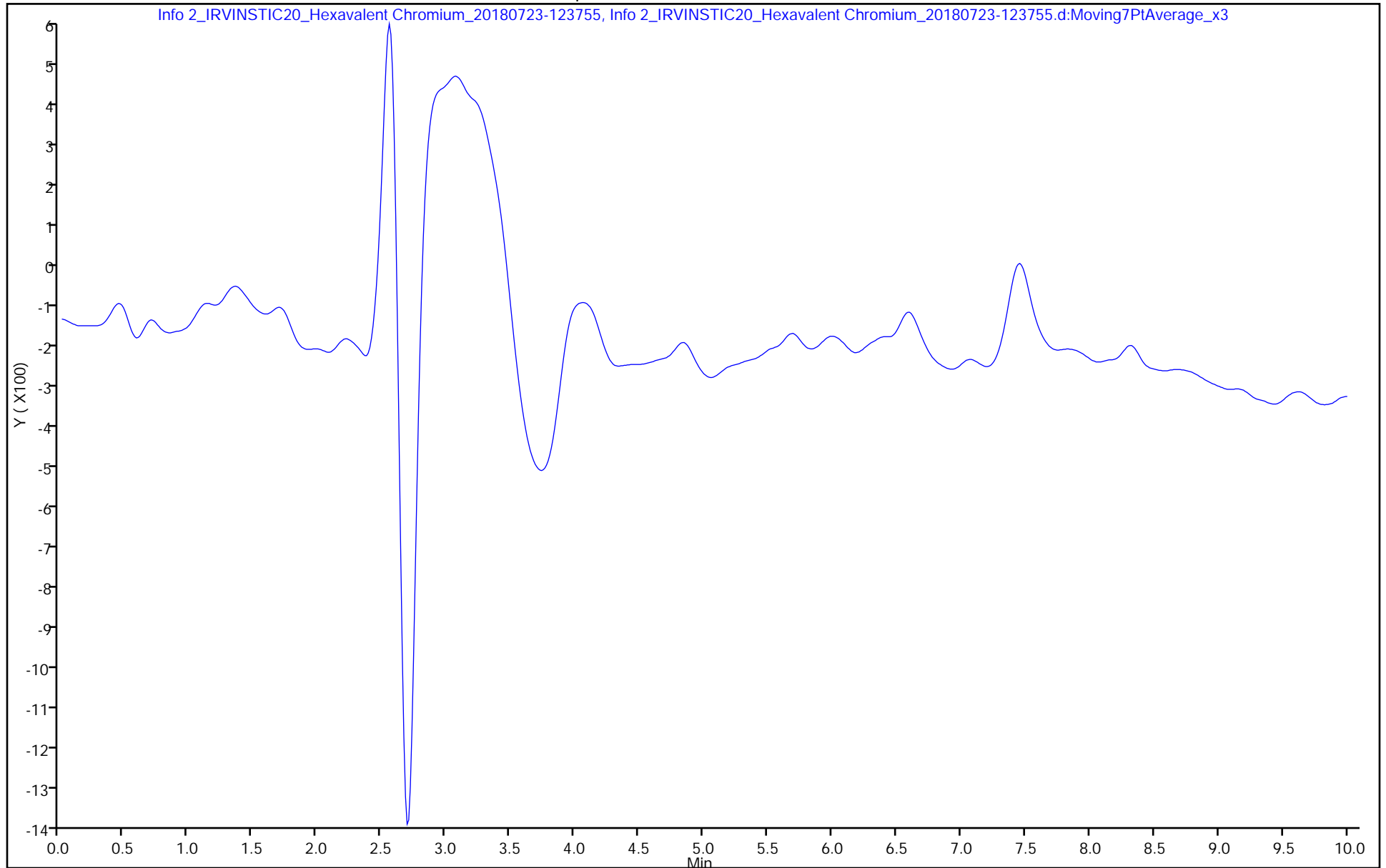
Data File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723-123755.d

Injection Date: 23-Jul-2018 12:24:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: ICB Worklist Smp#: 20

Client ID: Injection Vol: 1000.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-505406/5
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 07:06
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	49.6		2.0	0.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Oct-2018 07:06:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-005
 Misc. Info.: 440-0110534-005
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 07:33:10 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.295	7.295	0.000	1561668	50.0	49.6	

Reagents:

WCCR6LCS5PPM_00116 Amount Added: 100.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-071913.d

Injection Date: 16-Oct-2018 07:06:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: LCS

Worklist Smp#: 5

Client ID:

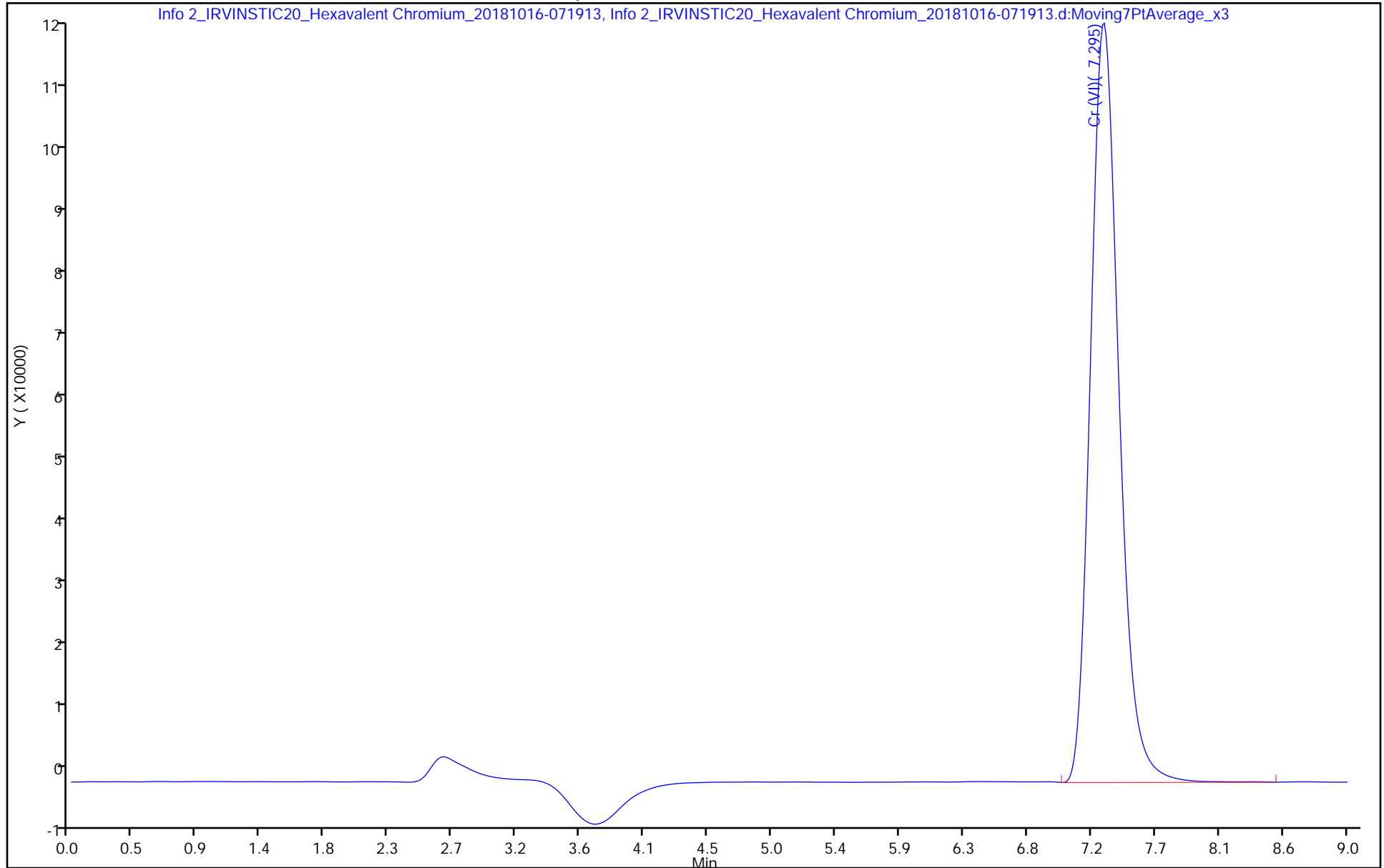
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-505406/4
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 06:54
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	0.968	J	2.0	0.25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 16-Oct-2018 06:54:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1000.0 ul Dil. Factor: 1.0000
 Sample Info: 440-0110534-004
 Misc. Info.: 440-0110534-004
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 07:45:49 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

First Level Reviewer: nikbakhtm Date: 16-Oct-2018 07:57:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Cr (VI) 7.295 7.295 0.000 33384 1.00 0.9680

Reagents:

WCCR6LCS5PPM_00116 Amount Added: 2.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-070652.d

Injection Date: 16-Oct-2018 06:54:00

Instrument ID: IC-20

Operator ID: irvinstic20

Lims ID: MRL

Worklist Smp#: 4

Client ID:

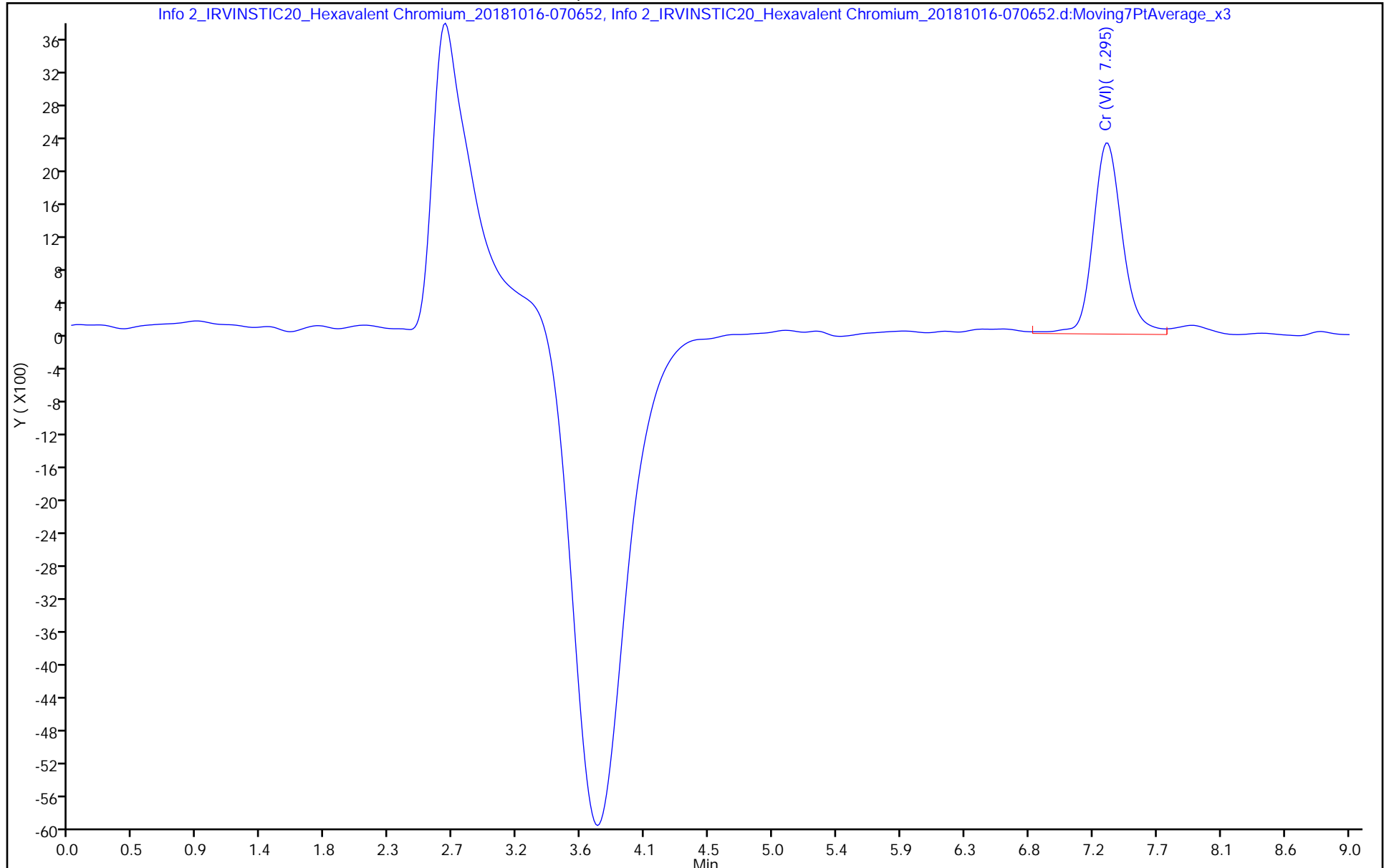
Injection Vol: 1000.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 218.6_20

Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 10:30
 Con. Extract Vol.: _____ Dilution Factor: 100
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	3700		200	25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-2 MS
 Client ID: VE R-011-20181015
 Sample Type: MS
 Inject. Date: 16-Oct-2018 10:30:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 1000.0 ul Dil. Factor: 100.0000
 Sample Info: 440-0110534-016
 Misc. Info.: 440-0110534-016
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:44:49 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.245	7.295	-0.050	1166524	15.0	37.0	

Reagents:

WCCR6LCS50PPM_00043 Amount Added: 300.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-104303.d

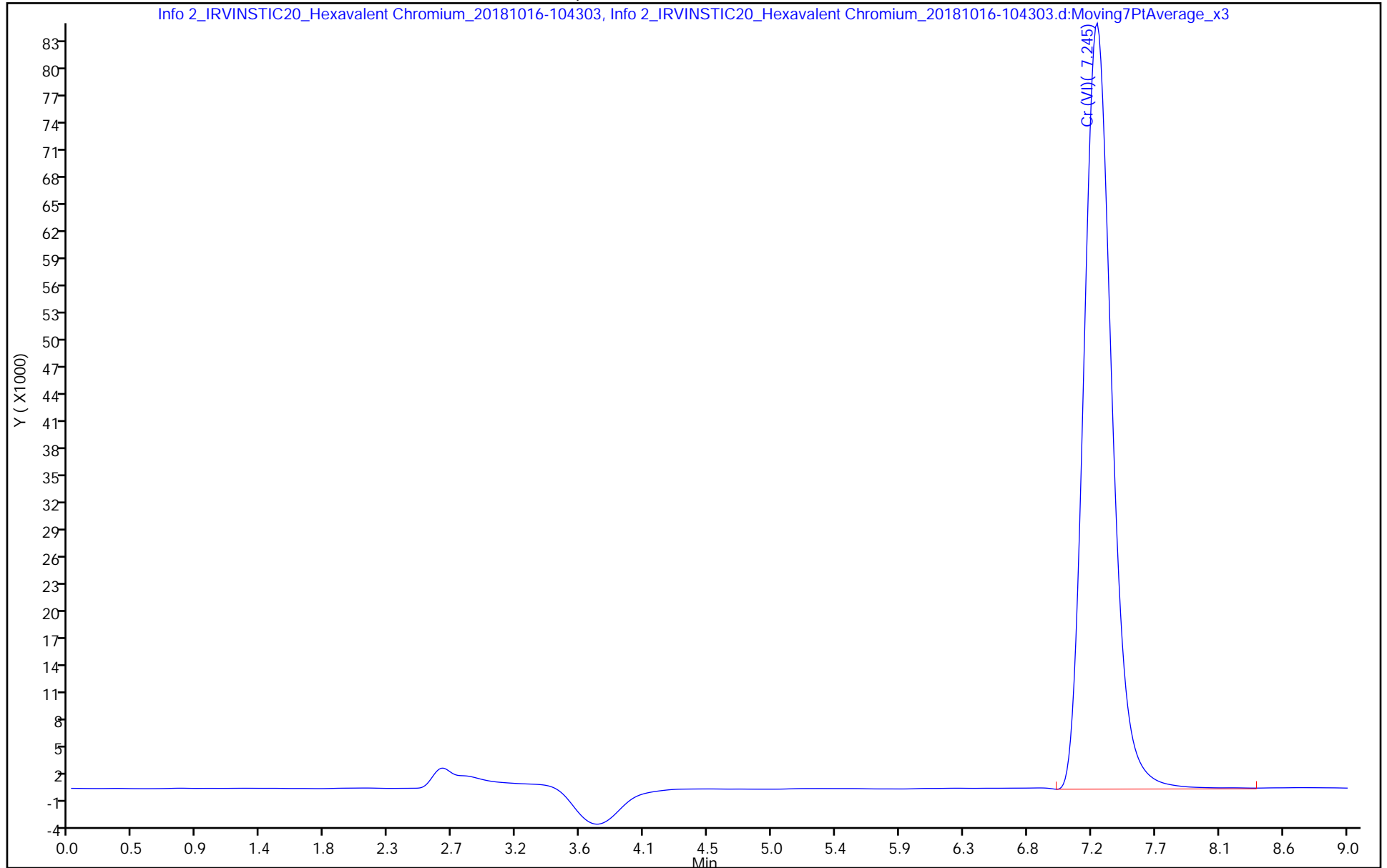
Injection Date: 16-Oct-2018 10:30:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: 440-222284-F-2 MS Worklist Smp#: 16

Client ID: VE R-01I-20181015

Injection Vol: 1000.0 ul Dil. Factor: 100.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: Info 2_IRVINSTIC20_Hexavalent
 Analysis Method: 7199 Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 10 (mL) Date Analyzed: 10/16/2018 10:43
 Con. Extract Vol.: _____ Dilution Factor: 100
 Injection Volume: 1000 (uL) GC Column: AS7 A ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505406 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
18540-29-9	Chromium, hexavalent	3680		200	25

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016
 Lims ID: 440-222284-F-2 MSD
 Client ID: VE R-011-20181015
 Sample Type: MSD
 Inject. Date: 16-Oct-2018 10:43:00 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 1000.0 ul Dil. Factor: 100.0000
 Sample Info: 440-0110534-017
 Misc. Info.: 440-0110534-017
 Operator ID: irvinstic20 Instrument ID: IC-20
 Raw Data: Smoothed
 Method: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\218.6_20.m
 Limit Group: IC-7199
 Method Label: HEX CHROME
 Last Update: 16-Oct-2018 11:56:32 Calib Date: 23-Jul-2018 11:10:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC20\20180723-106906.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20180723
 Column 1 : Det: Ch-A-20111004015
 Process Host: CTX0324

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Cr (VI)	7.245	7.295	-0.050	1160067	15.0	36.8	

Reagents:

WCCR6LCS50PPM_00043 Amount Added: 300.00 Units: uL

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC20\20181016-110534.b\Info 2_IRVINSTIC20_Hexavalent Chromium_20181016-105526.d

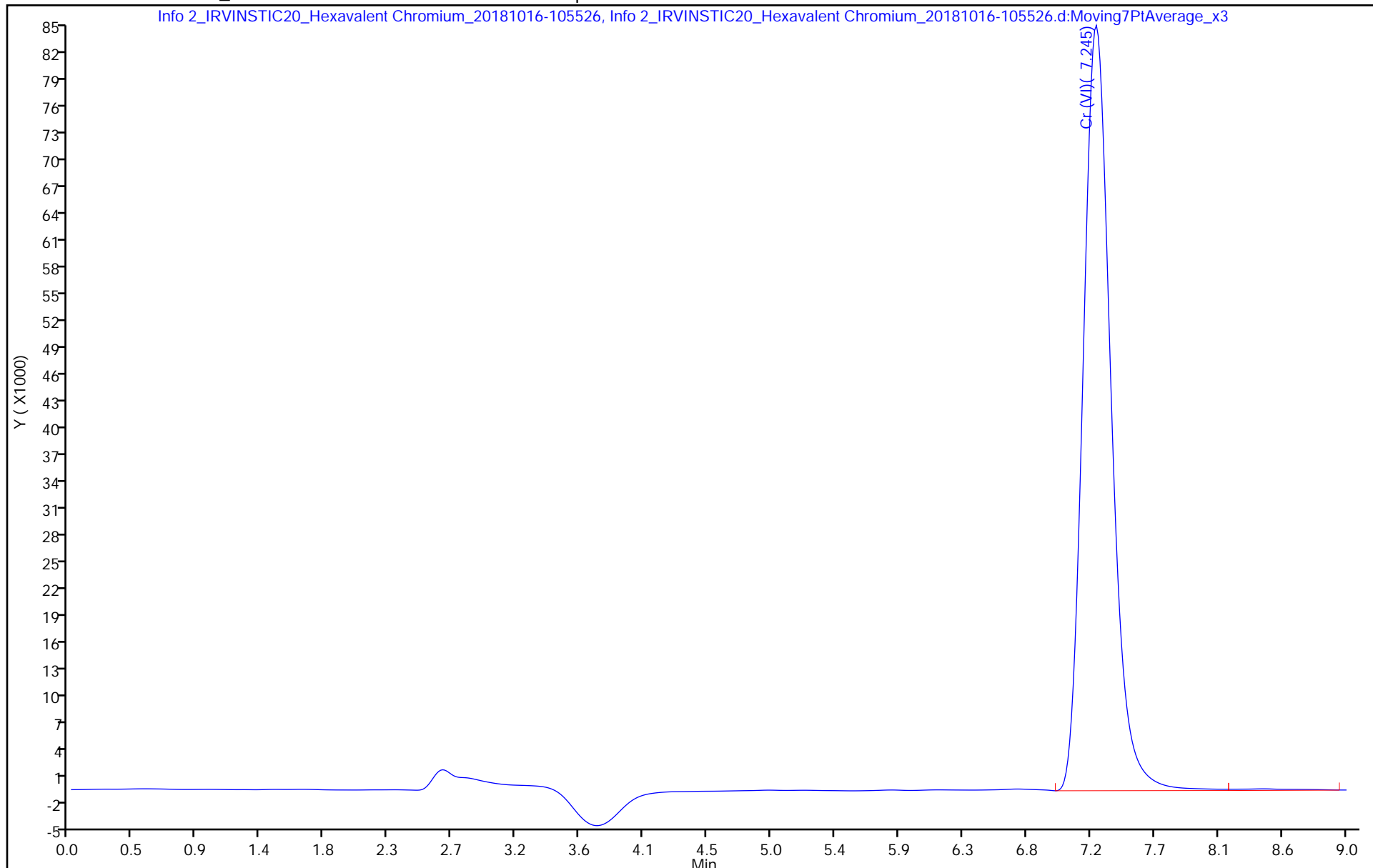
Injection Date: 16-Oct-2018 10:43:00 Instrument ID: IC-20 Operator ID: irvinstic20

Lims ID: 440-222284-F-2 MSD Worklist Smp#: 17

Client ID: VE R-01I-20181015

Injection Vol: 1000.0 ul Dil. Factor: 100.0000 ALS Bottle#: 0

Method: 218.6_20 Limit Group: IC-7199



HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-20 Start Date: 07/23/2018 09:30

Analysis Batch Number: 488960 End Date: 07/23/2018 13:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0 440-488960/11 IC		07/23/2018 09:30	1		AS7 A 4 (mm)
STD1 440-488960/12 IC		07/23/2018 09:44	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-095757.d	AS7 A 4 (mm)
STD2 440-488960/13 IC		07/23/2018 09:58	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-101217.d	AS7 A 4 (mm)
STD3 440-488960/14 IC		07/23/2018 10:13	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-102637.d	AS7 A 4 (mm)
STD4 440-488960/15 IC		07/23/2018 10:27	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-104058.d	AS7 A 4 (mm)
STD5 440-488960/16 IC		07/23/2018 10:41	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-105520.d	AS7 A 4 (mm)
STD6 440-488960/17 IC		07/23/2018 10:56	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-110941.d	AS7 A 4 (mm)
STD7 440-488960/18 IC		07/23/2018 11:10	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-112403.d	AS7 A 4 (mm)
ICV 440-488960/19		07/23/2018 12:08	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-122139.d	AS7 A 4 (mm)
ICB 440-488960/20		07/23/2018 12:24	1	Info 2_IRVINSTIC20_H exavalent Chromium_201807 23-123755.d	AS7 A 4 (mm)
ZZZZZ		07/23/2018 12:38	1		AS7 A 4 (mm)
ZZZZZ		07/23/2018 12:53	1		AS7 A 4 (mm)
ZZZZZ		07/23/2018 13:07	1		AS7 A 4 (mm)
ZZZZZ		07/23/2018 13:22	1		AS7 A 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-20 Start Date: 10/16/2018 06:13

Analysis Batch Number: 505406 End Date: 10/17/2018 03:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/16/2018 06:13	1		AS7 A 4 (mm)
CCV 440-505406/2		10/16/2018 06:25	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-063814.d	AS7 A 4 (mm)
CCB 440-505406/3		10/16/2018 06:42	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-065433.d	AS7 A 4 (mm)
MRL 440-505406/4		10/16/2018 06:54	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-070652.d	AS7 A 4 (mm)
LCS 440-505406/5		10/16/2018 07:06	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-071913.d	AS7 A 4 (mm)
MB 440-505406/6		10/16/2018 07:19	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-073133.d	AS7 A 4 (mm)
ZZZZZ		10/16/2018 07:31	1		AS7 A 4 (mm)
440-222284-1		10/16/2018 09:01	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-091324.d	AS7 A 4 (mm)
440-222284-2		10/16/2018 09:13	100	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-092546.d	AS7 A 4 (mm)
440-222284-4		10/16/2018 09:25	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-093808.d	AS7 A 4 (mm)
440-222284-5		10/16/2018 09:38	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-095032.d	AS7 A 4 (mm)
CCV 440-505406/14		10/16/2018 09:50	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-100255.d	AS7 A 4 (mm)
CCB 440-505406/15		10/16/2018 10:18	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-103040.d	AS7 A 4 (mm)
440-222284-2 MS		10/16/2018 10:30	100	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-104303.d	AS7 A 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-20 Start Date: 10/16/2018 06:13

Analysis Batch Number: 505406 End Date: 10/17/2018 03:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
440-222284-2 MSD		10/16/2018 10:43	100	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-105526.d	AS7 A 4 (mm)
440-222284-1		10/16/2018 10:55	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-110750.d	AS7 A 4 (mm)
440-222284-2		10/16/2018 11:10	100	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-112304.d	AS7 A 4 (mm)
CCV 440-505406/20		10/16/2018 11:23	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-113530.d	AS7 A 4 (mm)
CCB 440-505406/21		10/16/2018 11:38	1	Info 2_IRVINSTIC20_H exavalent Chromium_201810 16-115042.d	AS7 A 4 (mm)
ZZZZZ		10/16/2018 17:36	1		AS7 A 4 (mm)
CCV 440-505406/23		10/16/2018 17:49	1		AS7 A 4 (mm)
CCB 440-505406/24		10/16/2018 18:01	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 18:40	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 18:52	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 19:05	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 19:17	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 19:29	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 19:42	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 19:54	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 20:07	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 20:19	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 20:32	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 20:44	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 20:57	1		AS7 A 4 (mm)
CCV 440-505406/37		10/16/2018 22:42	1		AS7 A 4 (mm)
CCB 440-505406/38		10/16/2018 23:19	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 23:31	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 23:44	1		AS7 A 4 (mm)
ZZZZZ		10/16/2018 23:56	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 00:08	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 00:21	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 00:33	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 00:46	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 00:58	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 01:10	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 01:23	1		AS7 A 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-20 Start Date: 10/16/2018 06:13

Analysis Batch Number: 505406 End Date: 10/17/2018 03:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-505406/49		10/17/2018 01:46	1		AS7 A 4 (mm)
CCB 440-505406/50		10/17/2018 02:02	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 02:15	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 02:27	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 02:39	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 02:52	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 03:04	1		AS7 A 4 (mm)
ZZZZZ		10/17/2018 03:16	1		AS7 A 4 (mm)
CCV 440-505406/57		10/17/2018 03:29	1		AS7 A 4 (mm)
CCB 440-505406/58		10/17/2018 03:41	1		AS7 A 4 (mm)
CCB 440-505406/59		10/17/2018 03:53	1		AS7 A 4 (mm)

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505406 Batch Start Date: 10/16/18 06:13 Batch Analyst: Nikbakht-Sangari, Maryam

Batch Method: 7199 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCCR6LCS50PPM 00043	WCCR6LCS5PPM 00116			
CCV 440-505406/2		7199		10 mL		100 uL			
CCB 440-505406/3		7199		10 mL					
MRL 440-505406/4		7199		10 mL		2 uL			
LCS 440-505406/5		7199		10 mL		100 uL			
MB 440-505406/6		7199		10 mL					
440-222284-F-1	VE R-01D-20181015	7199	T	10 mL					
440-222284-F-2	VE R-01I-20181015	7199	T	10 mL					
440-222284-F-4	VE R-20181015-FB	7199	T	10 mL					
440-222284-F-5	VE R-20181015-EB	7199	T	10 mL					
CCV 440-505406/14		7199		10 mL		100 uL			
CCB 440-505406/15		7199		10 mL					
440-222284-F-2	VE R-01I-20181015	7199	T	10 mL	300 uL				
MS 440-222284-F-2	VE R-01I-20181015	7199	T	10 mL	300 uL				
MSD 440-222284-F-1	VE R-01D-20181015	7199	T	10 mL					
440-222284-F-2	VE R-01I-20181015	7199	T	10 mL					
CCV 440-505406/20		7199		10 mL		100 uL			
CCB 440-505406/21		7199		10 mL					

Batch Notes	
Buffer Lot #	5097410
Eluent 1 ID	5117911
Filter ID	lot # 80497103
pH Meter ID	06
Post Column Reagent ID	5117912

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505406 Batch Start Date: 10/16/18 06:13 Batch Analyst: Nikbakht-Sangari, Maryam

Batch Method: 7199 Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 300.1

Disinfection By-Products (IC) by
Method 300.1

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water

Level: Low

GC Column (1): AS9-HC ID: 4 (mm)

Client Sample ID	Lab Sample ID	DCAA #
VER-01D-20181015	440-222284-1	101
VER-01D-20181015	440-222284-1	101
VER-01I-20181015	440-222284-2	103
VER-01I-20181015	440-222284-2	100
VER-20181015-FB	440-222284-4	100
VER-20181015-FB	440-222284-4	100
VER-20181015-EB	440-222284-5	101
VER-20181015-EB	440-222284-5	101
	MB 440-505657/13	100
	MB 440-505658/13	100
	MB 440-506165/5	102
	MB 440-506501/5	101
	LCS 440-505657/12	101
	LCS 440-505658/12	101
	LCS 440-506165/4	104
	LCS 440-506501/4	102
	MRL 440-505657/11	100
	MRL 440-505658/11	100
	MRL 440-506165/3	103
	MRL 440-506501/3	100
VER-01I-20181015 MS	440-222284-2 MS	103
VER-01I-20181015 MS	440-222284-2 MS	98
	550-111664-B-1 MS	100
	550-111664-B-1 MS	100
VER-01I-20181015 MSD	440-222284-2 MSD	104
VER-01I-20181015 MSD	440-222284-2 MSD	101
	550-111664-B-1 MSD	101
	550-111664-B-1 MSD	101

DCAA = Dichloroacetic acid(Surr)

QC LIMITS
90-115

Column to be used to flag recovery values

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110603-012.d

Lab ID: LCS 440-505657/12 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chlorate	100	99.9	100	75-125	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110603-012.d

Lab ID: LCS 440-505658/12 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chlorite	100	98.4	98	85-115	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110708-004.d

Lab ID: LCS 440-506165/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chlorate	100	99.5	100	75-125	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110792-004.d

Lab ID: LCS 440-506501/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chlorite	100	99.8	100	85-115	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110603-011.d
 Lab ID: MRL 440-505657/11 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Chlorate	20.0	19.9 J	100	50-150	

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110603-011.d

Lab ID: MRL 440-505658/11 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Chlorite	20.0	21.9	109	10-200	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110708-003.d

Lab ID: MRL 440-506165/3 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Chlorate	20.0	20.8	104	50-150	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 440-0110792-003.d

Lab ID: MRL 440-506501/3 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
Chlorite	20.0	21.7	108	10-200	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110792-028.d
 Lab ID: 440-222284-2 MS Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chlorite	200	210	407	100	75-125	

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110708-011.d
 Lab ID: 440-222284-2 MS Client ID: VER-01I-20181015 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chlorate	200	740000	759000	10168	75-125	4

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110603-030.d
 Lab ID: 550-111664-B-1 MS Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chlorate	200	110	305	100	75-125	

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110603-030.d
 Lab ID: 550-111664-B-1 MS Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chlorite	200	390	553	81	75-125	

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110792-029.d
 Lab ID: 440-222284-2 MSD Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chlorite	200	404	99	1	25	75-125	

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110708-012.d
 Lab ID: 440-222284-2 MSD Client ID: VER-01I-20181015 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chlorate	200	748000	4606	1	25	75-125	4

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110603-031.d
 Lab ID: 550-111664-B-1 MSD Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chlorate	200	298	96	2	25	75-125	

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 440-0110603-031.d
 Lab ID: 550-111664-B-1 MSD Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chlorite	200	565	87	2	25	75-125	

Column to be used to flag recovery and RPD values
 FORM III 300.1B

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110603-013.d Lab Sample ID: MB 440-505657/13
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-32 Date Analyzed: 10/17/2018 14:45
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	ICB 440-505657/10	440-0110603-010.d	10/17/2018 13:15
	LCS 440-505657/12	440-0110603-012.d	10/17/2018 14:16
VER-01D-20181015	440-222284-1	440-0110603-018.d	10/17/2018 17:15
VER-20181015-FB	440-222284-4	440-0110603-019.d	10/17/2018 17:45
VER-20181015-EB	440-222284-5	440-0110603-020.d	10/17/2018 18:14
	CCB 440-505657/22	440-0110603-022.d	10/17/2018 19:14
	550-111664-B-1 MS	440-0110603-030.d	10/17/2018 23:13
	550-111664-B-1 MSD	440-0110603-031.d	10/17/2018 23:43
	CCB 440-505657/34	440-0110603-034.d	10/18/2018 01:12

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110603-013.d Lab Sample ID: MB 440-505658/13
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-32 Date Analyzed: 10/17/2018 14:45
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	ICB 440-505658/10	440-0110603-010.d	10/17/2018 13:15
	LCS 440-505658/12	440-0110603-012.d	10/17/2018 14:16
VER-01D-20181015	440-222284-1	440-0110603-018.d	10/17/2018 17:15
VER-20181015-FB	440-222284-4	440-0110603-019.d	10/17/2018 17:45
VER-20181015-EB	440-222284-5	440-0110603-020.d	10/17/2018 18:14
	CCB 440-505658/22	440-0110603-022.d	10/17/2018 19:14
	550-111664-B-1 MS	440-0110603-030.d	10/17/2018 23:13
	550-111664-B-1 MSD	440-0110603-031.d	10/17/2018 23:43
	CCB 440-505658/34	440-0110603-034.d	10/18/2018 01:12

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110708-005.d Lab Sample ID: MB 440-506165/5
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-32 Date Analyzed: 10/19/2018 06:51
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-506165/2	440-0110708-002.d	10/19/2018 05:21
	LCS 440-506165/4	440-0110708-004.d	10/19/2018 06:21
VER-01I-20181015	440-222284-2	440-0110708-010.d	10/19/2018 09:20
VER-01I-20181015 MS	440-222284-2 MS	440-0110708-011.d	10/19/2018 09:50
VER-01I-20181015 MSD	440-222284-2 MSD	440-0110708-012.d	10/19/2018 10:20
	CCB 440-506165/14	440-0110708-014.d	10/19/2018 13:05

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab File ID: 440-0110792-005.d Lab Sample ID: MB 440-506501/5
 Matrix: Water Date Extracted: _____
 Instrument ID: IC-8 Date Analyzed: 10/21/2018 07:47
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 440-506501/2	440-0110792-002.d	10/21/2018 05:58
	LCS 440-506501/4	440-0110792-004.d	10/21/2018 07:11
	CCB 440-506501/14	440-0110792-014.d	10/21/2018 13:13
	CCB 440-506501/26	440-0110792-026.d	10/21/2018 20:28
VER-01I-20181015	440-222284-2	440-0110792-027.d	10/21/2018 21:04
VER-01I-20181015 MS	440-222284-2 MS	440-0110792-028.d	10/21/2018 21:41
VER-01I-20181015 MSD	440-222284-2 MSD	440-0110792-029.d	10/21/2018 22:17
	CCB 440-506501/38	440-0110792-038.d	10/22/2018 03:43

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: 440-0110603-018.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 13:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 17:15
 Con. Extract Vol.: _____ Dilution Factor: 50
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	9100		1000	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d
 Lims ID: 440-222284-D-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:15:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1.0 uL Dil. Factor: 50.0000
 Sample Info: 440-0110603-018
 Misc. Info.: 440-222284-D-1
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

\$ 6 Dichloroacetic acid(Surr)	15.564	15.563	0.001	131066618	1001.4	
2 Chlorate	19.827	19.885	-0.058	37594038	182.6	

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d

Injection Date: 17-Oct-2018 17:15:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-1

Lab Sample ID: 440-222284-1

Worklist Smp#: 18

Client ID: VER-01D-20181015

Injection Vol: 1.0 uL

Dil. Factor: 50.0000

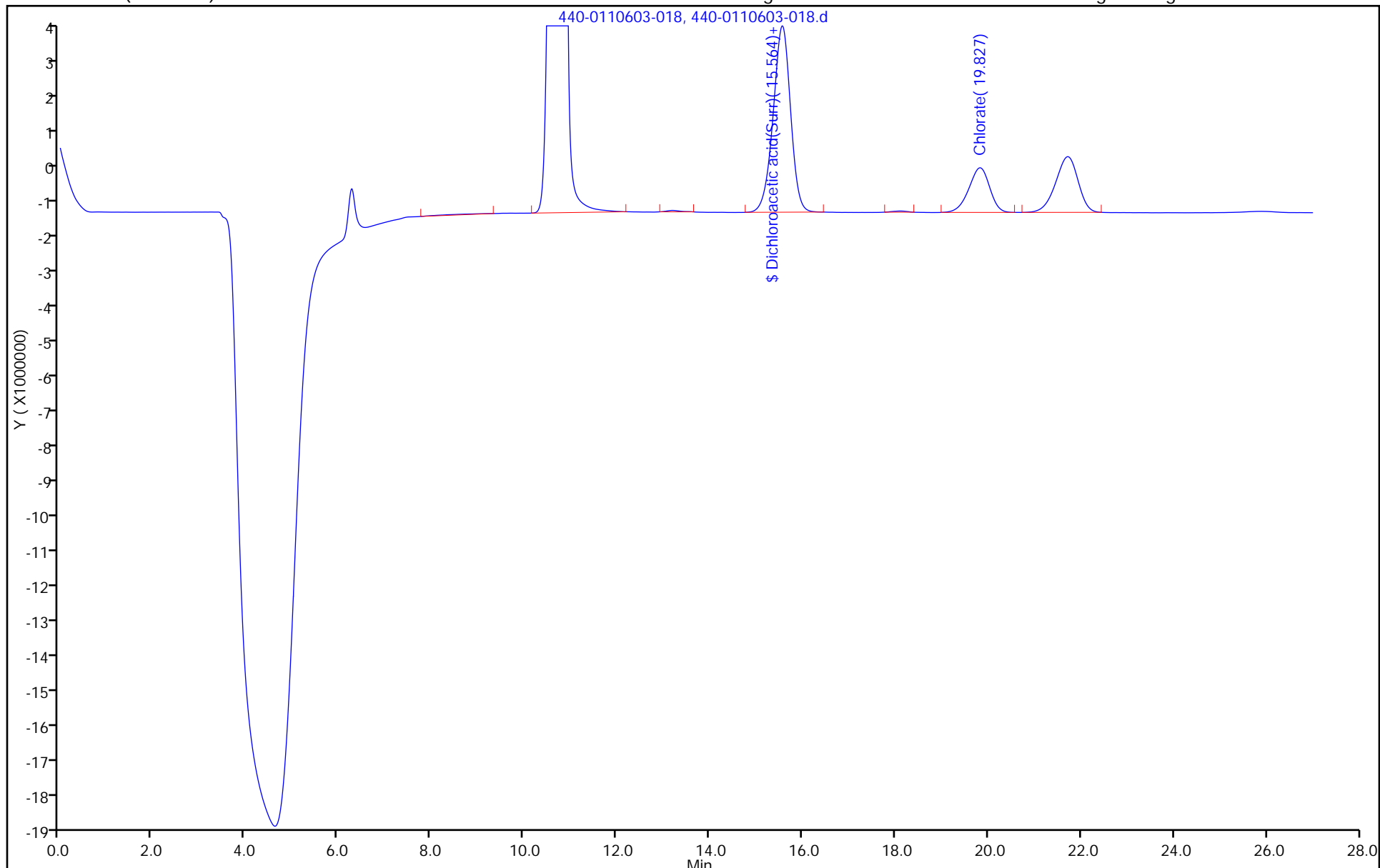
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d
 Lims ID: 440-222284-D-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:15:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1.0 uL Dil. Factor: 50.0000
 Sample Info: 440-0110603-018
 Misc. Info.: 440-222284-D-1
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1001.4	5038.85

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01D-20181015 Lab Sample ID: 440-222284-1
 Matrix: Water Lab File ID: 440-0110603-018.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 13:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 17:15
 Con. Extract Vol.: _____ Dilution Factor: 50
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		1000	200

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d
 Lims ID: 440-222284-D-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:15:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1.0 uL Dil. Factor: 50.0000
 Sample Info: 440-0110603-018
 Misc. Info.: 440-222284-D-1
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	15.564	15.563	0.001	131066618	1001.4	
2 Chlorate	19.827	19.885	-0.058	37594038	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d

Injection Date: 17-Oct-2018 17:15:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-1

Lab Sample ID: 440-222284-1

Worklist Smp#: 18

Client ID: VER-01D-20181015

Injection Vol: 1.0 uL

Dil. Factor: 50.0000

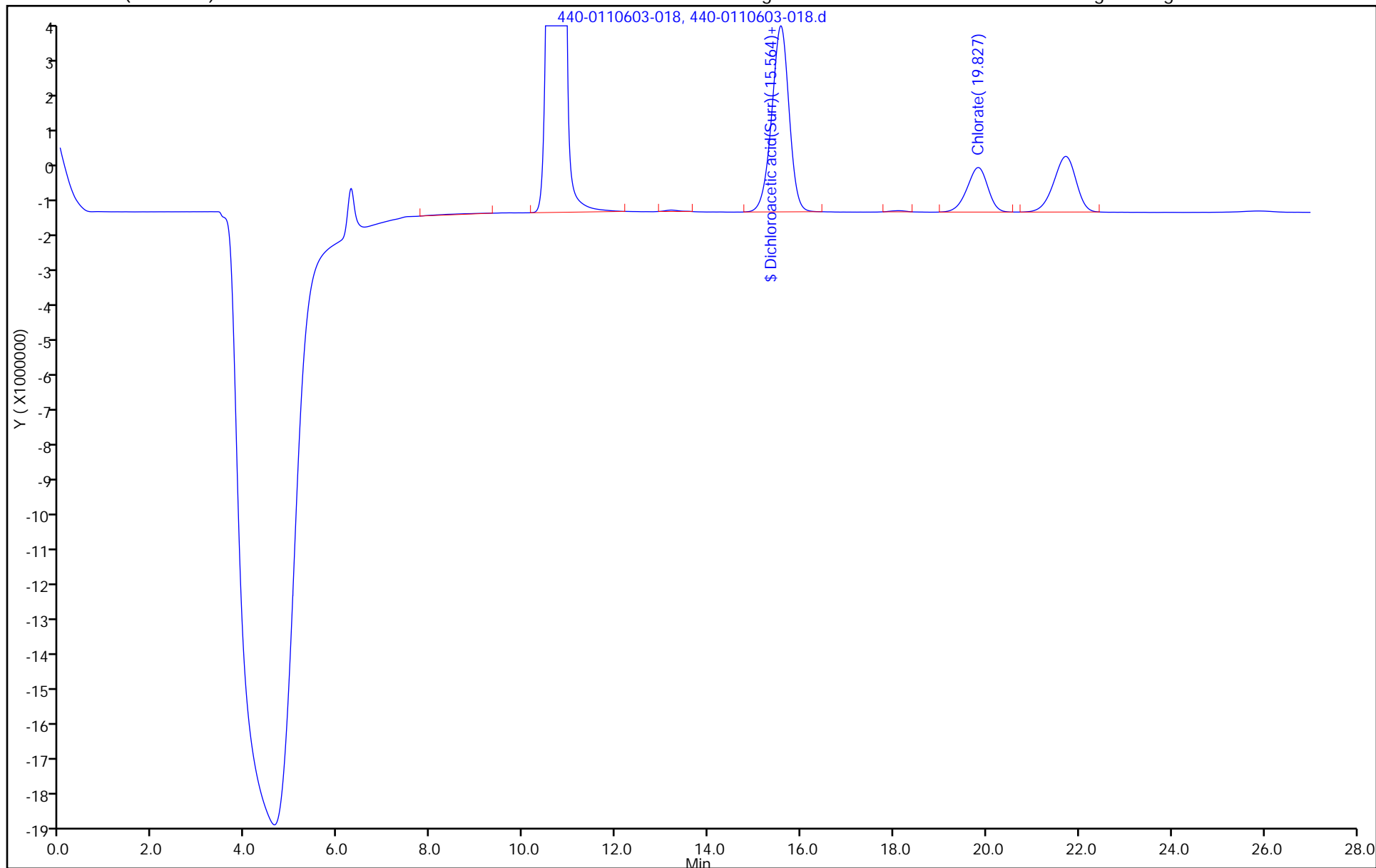
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-018.d
 Lims ID: 440-222284-D-1
 Client ID: VER-01D-20181015
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:15:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 1.0 uL Dil. Factor: 50.0000
 Sample Info: 440-0110603-018
 Misc. Info.: 440-222284-D-1
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:39:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1001.4	5038.85

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: 440-0110792-027.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 21:04
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	210		100	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-027.d
 Lims ID: 440-222284-D-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 21-Oct-2018 21:04:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-027
 Misc. Info.: 27 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:58:57 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:59:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
5 Chlorite	6.950	7.150	-0.200	6288656	41.2	Ma
3 Bromate	8.392	8.117	0.275	62782	NC	
\$ 6 Dichloroacetic acid(Surr)	13.267	13.200	0.067	83698007	990.2	M
\$ 1 Dichloroacetic acid	13.267	13.909	-0.642	83698007	NC	M
4 Bromide	15.400	15.209	0.191	32634823580	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-027.d

Injection Date: 21-Oct-2018 21:04:00

Instrument ID: IC-8

Operator ID:

Lims ID: 440-222284-D-2

Lab Sample ID: 440-222284-2

Worklist Smp#: 27

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

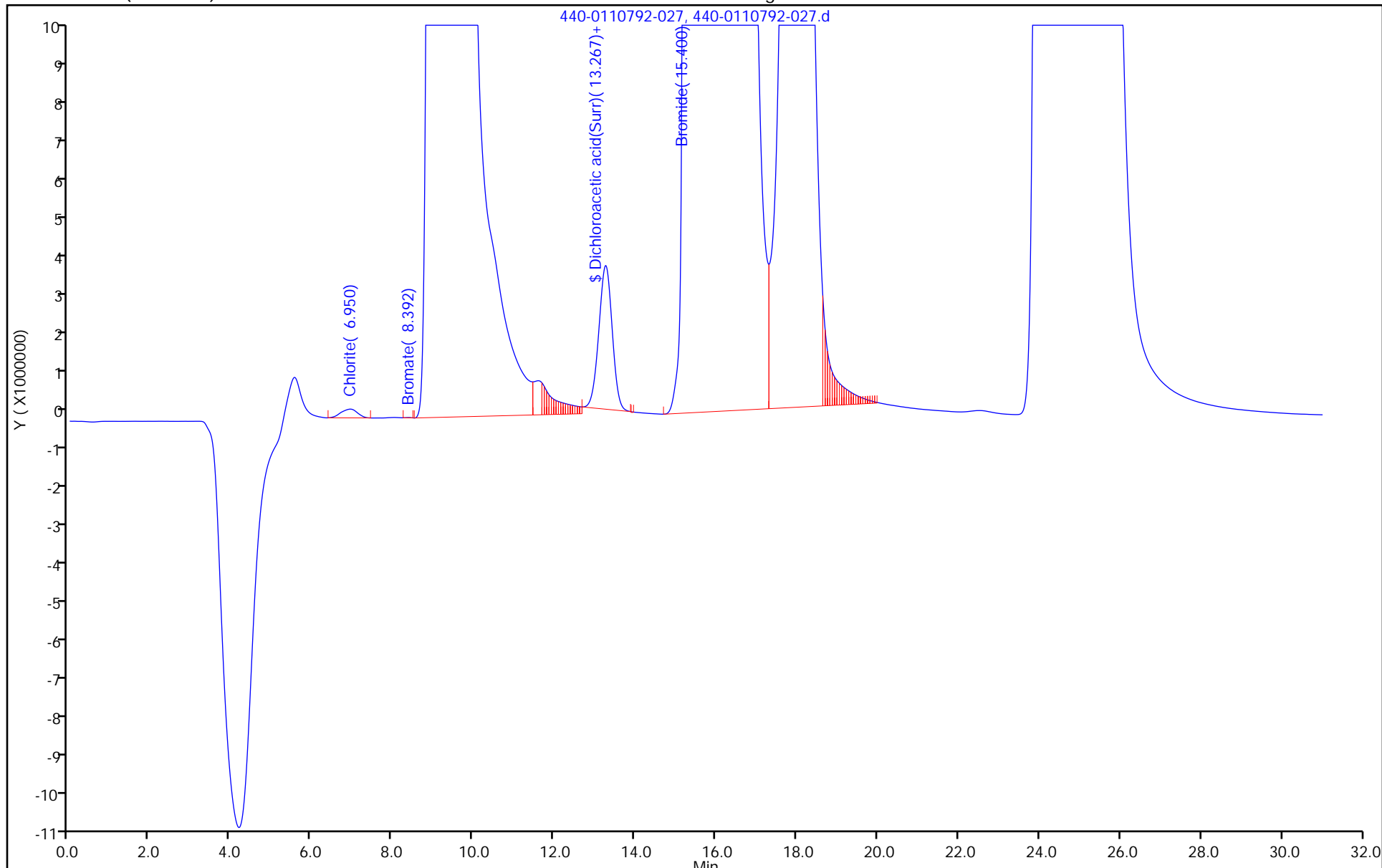
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-027.d
 Lims ID: 440-222284-D-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 21-Oct-2018 21:04:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-027
 Misc. Info.: 27 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:58:57 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:59:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	990.2	498.23

TestAmerica Irvine

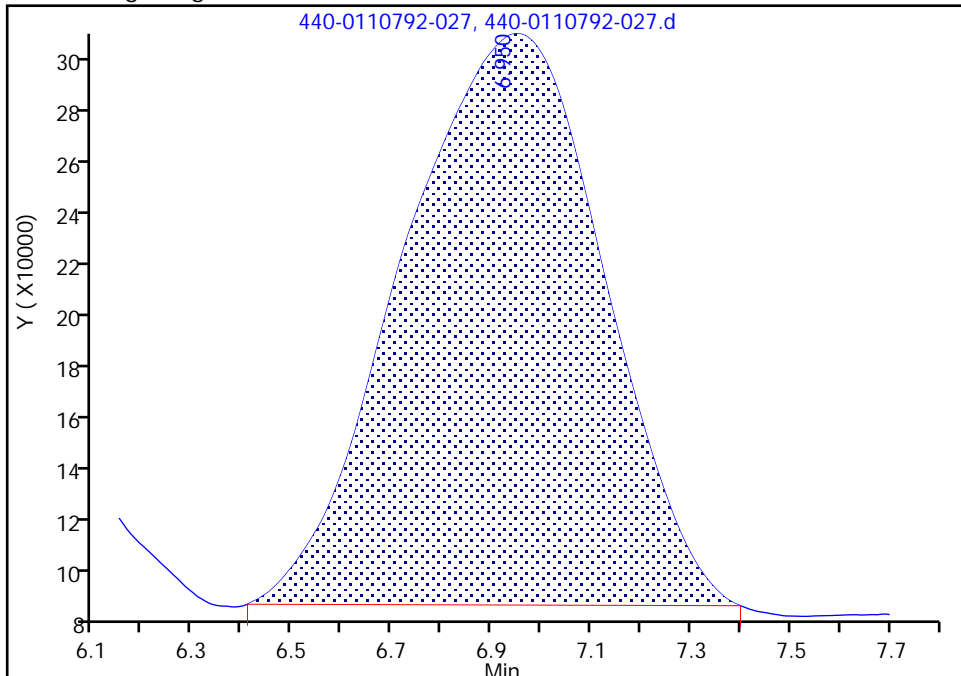
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-027.d
Injection Date: 21-Oct-2018 21:04:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 Lab Sample ID: 440-222284-2
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

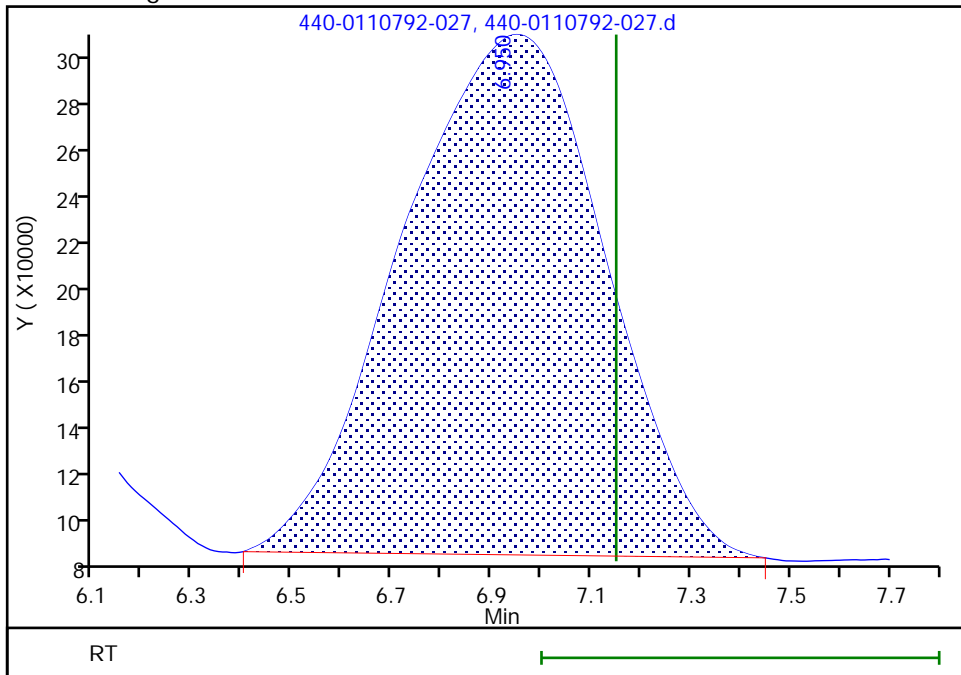
RT: 6.95
Area: 6191800
Amount: 40.623241
Amount Units: ug/l

Processing Integration Results



RT: 6.95
Area: 6288656
Amount: 41.225564
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:58:49
Audit Action: Manually Integrated

Audit Reason: Peak not integrated

TestAmerica Irvine

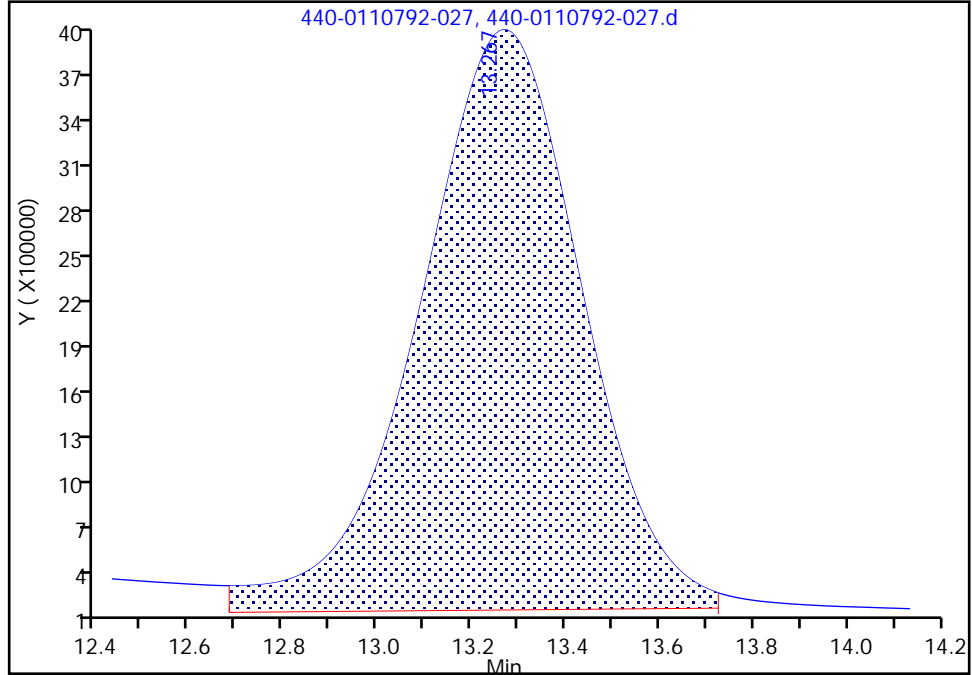
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-027.d
Injection Date: 21-Oct-2018 21:04:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 Lab Sample ID: 440-222284-2
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

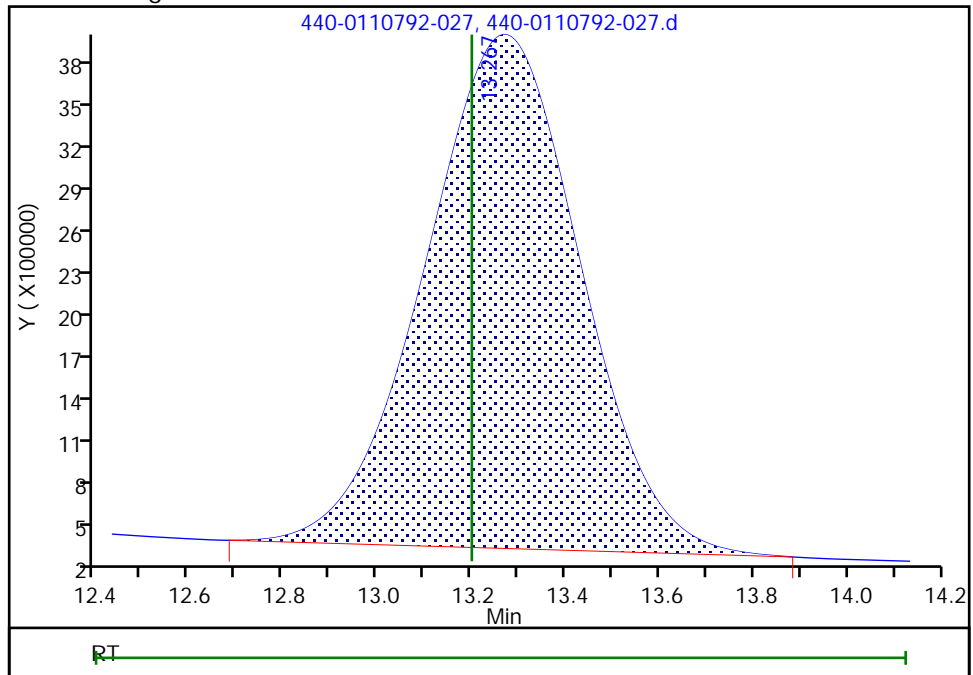
RT: 13.27
Area: 90186624
Amount: 1066.9676
Amount Units: ug/l

Processing Integration Results



RT: 13.27
Area: 83698007
Amount: 990.2030
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:47:49
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 Lab Sample ID: 440-222284-2
 Matrix: Water Lab File ID: 440-0110708-010.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 09:20
 Con. Extract Vol.: _____ Dilution Factor: 5000
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	740000		100000	10000

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	103		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-010.d
 Lims ID: 440-222284-D-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 19-Oct-2018 09:20:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-010
 Misc. Info.: 440-222284-d-2
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:12 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.551	15.563	-0.012	133884674	NC	
\$ 6 Dichloroacetic acid(Surr)	15.551	15.563	-0.012	133884674	1023.0	
2 Chlorate	19.807	19.885	-0.078	30346613	147.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-010.d

Injection Date: 19-Oct-2018 09:20:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-2

Lab Sample ID: 440-222284-2

Worklist Smp#: 10

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5000.0000

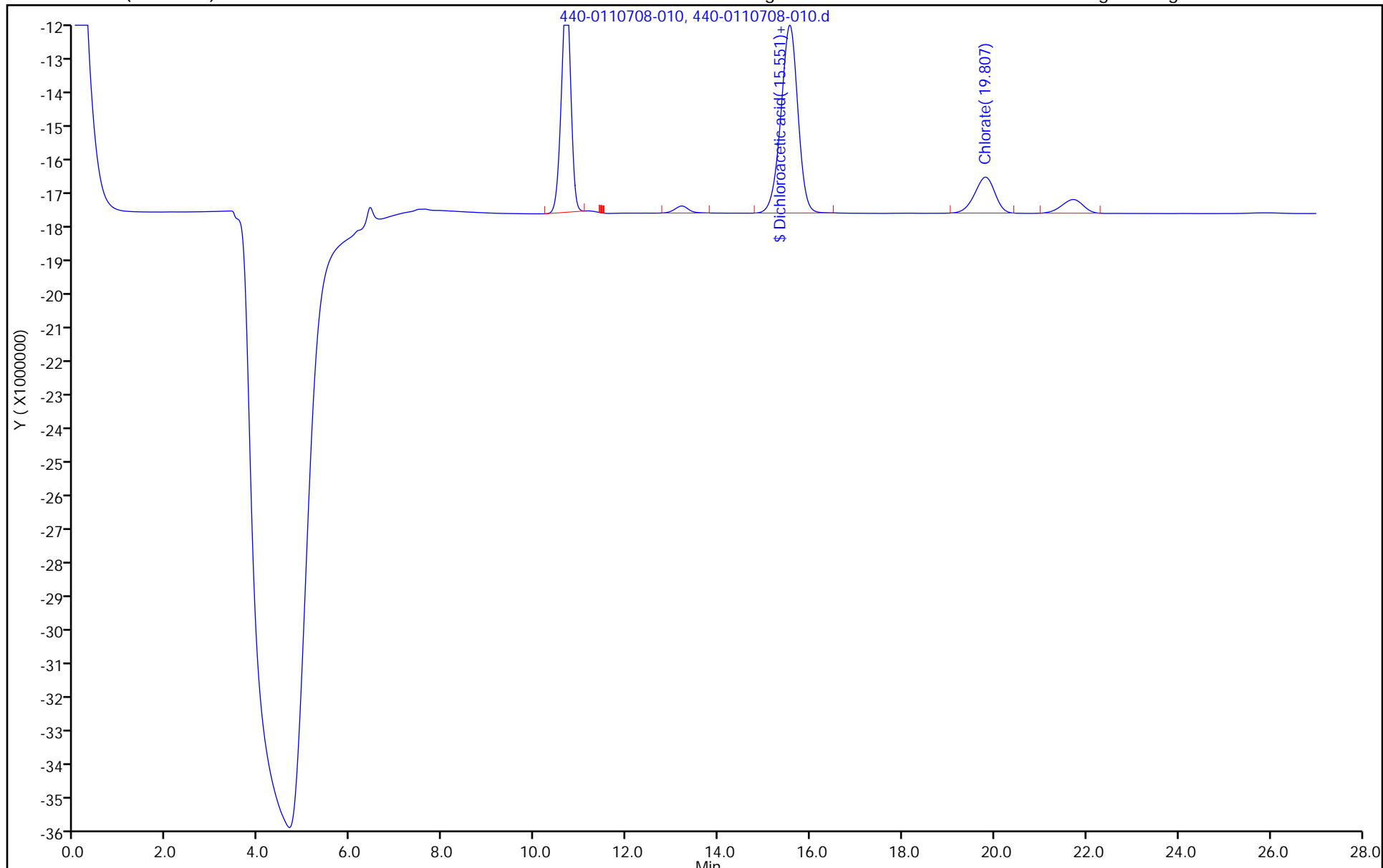
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-010.d
 Lims ID: 440-222284-D-2
 Client ID: VER-01I-20181015
 Sample Type: Client
 Inject. Date: 19-Oct-2018 09:20:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-010
 Misc. Info.: 440-222284-d-2
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:12 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1023.0	514718.90

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: 440-0110603-019.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 14:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 17:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d
 Lims ID: 440-222284-D-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:45:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-019
 Misc. Info.: 440-222284-D-4
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.500 15.563 -0.063 130705628 998.7

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d

Injection Date: 17-Oct-2018 17:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-4

Lab Sample ID: 440-222284-4

Worklist Smp#: 19

Client ID: VER-20181015-FB

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

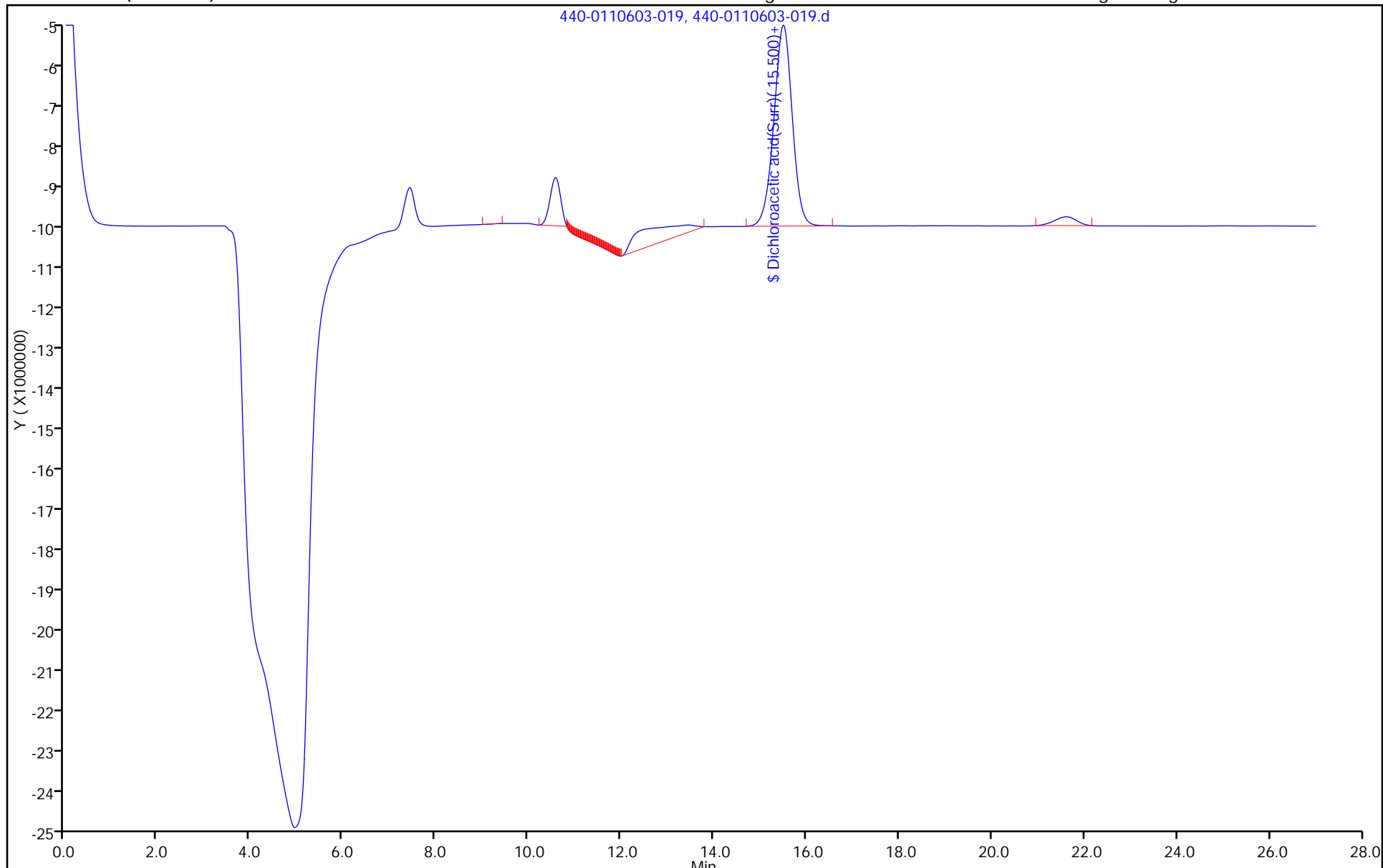
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d
 Lims ID: 440-222284-D-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:45:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-019
 Misc. Info.: 440-222284-D-4
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	998.7	100.50

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-FB Lab Sample ID: 440-222284-4
 Matrix: Water Lab File ID: 440-0110603-019.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 14:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 17:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
 Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d
 Lims ID: 440-222284-D-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:45:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-019
 Misc. Info.: 440-222284-D-4
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.500 15.563 -0.063 130705628 998.7

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d

Injection Date: 17-Oct-2018 17:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-4

Lab Sample ID: 440-222284-4

Worklist Smp#: 19

Client ID: VER-20181015-FB

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

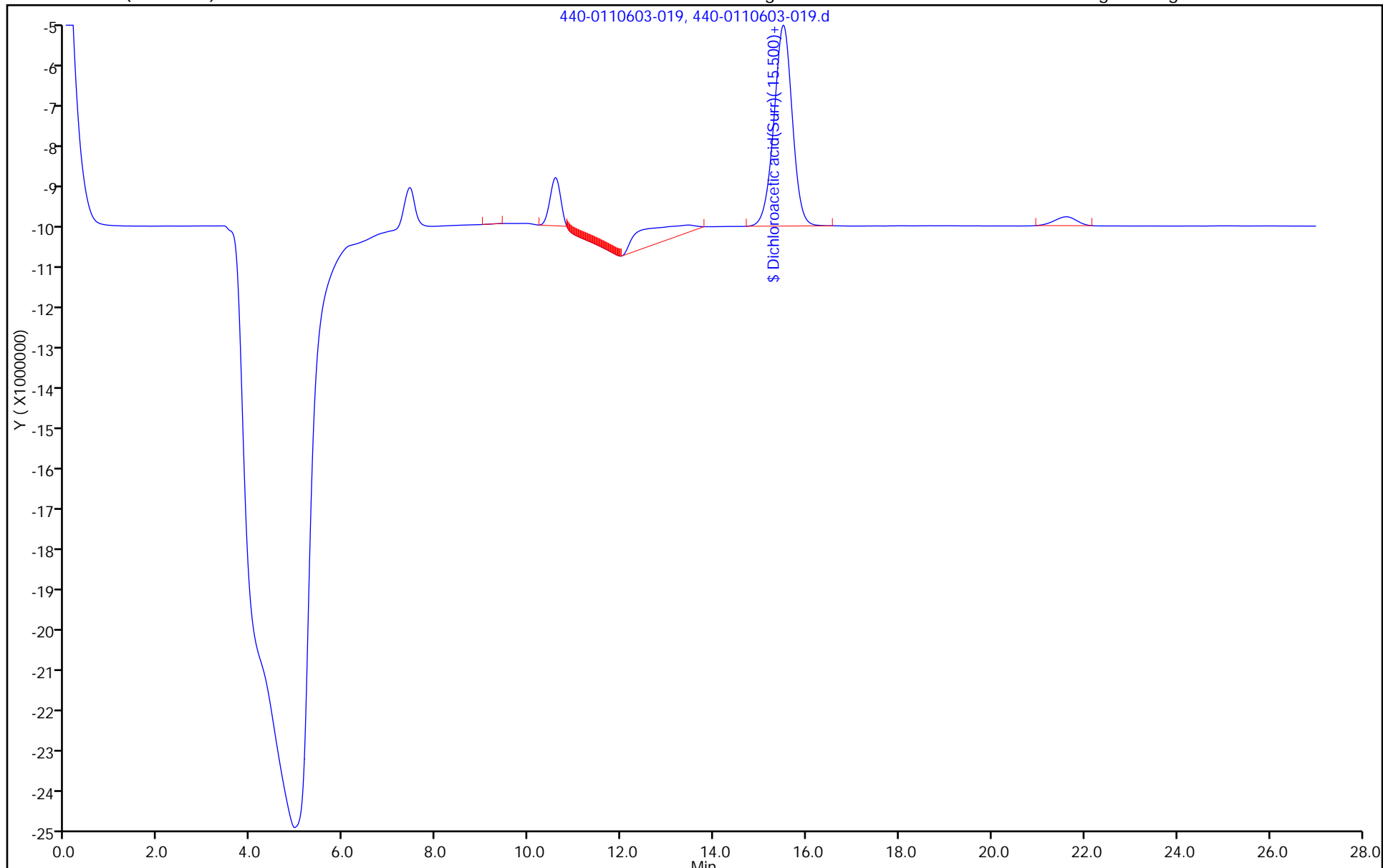
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-019.d
 Lims ID: 440-222284-D-4
 Client ID: VER-20181015-FB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 17:45:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-019
 Misc. Info.: 440-222284-D-4
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:39:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	998.7	100.50

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: 440-0110603-020.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 14:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 18:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d
 Lims ID: 440-222284-D-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 18:14:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-020
 Misc. Info.: 440-222284-D-5
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.496 15.563 -0.067 131236686 1002.7

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d

Injection Date: 17-Oct-2018 18:14:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-5

Lab Sample ID: 440-222284-5

Worklist Smp#: 20

Client ID: VER-20181015-EB

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

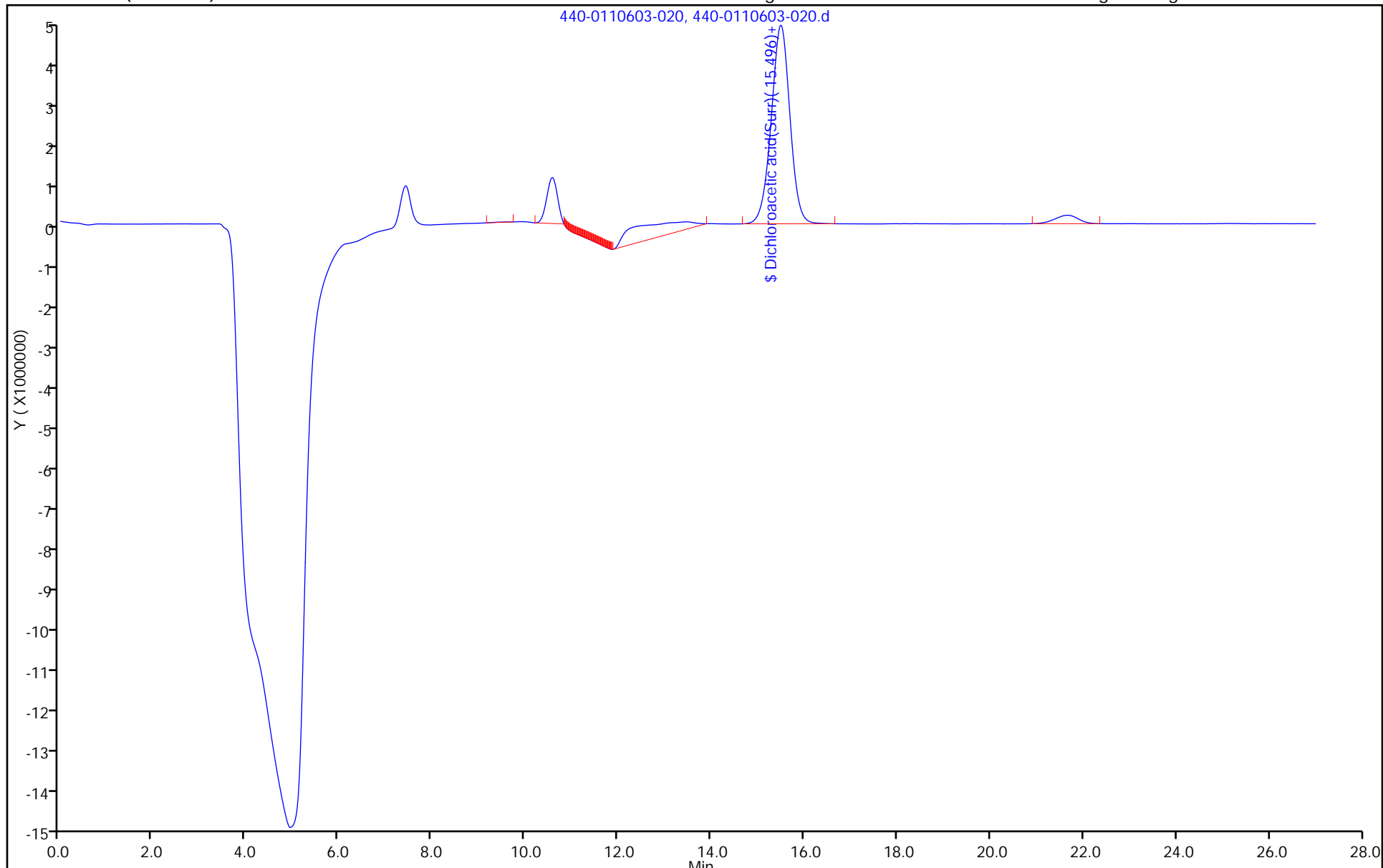
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d
 Lims ID: 440-222284-D-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 18:14:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-020
 Misc. Info.: 440-222284-D-5
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1002.7	100.91

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-20181015-EB Lab Sample ID: 440-222284-5
 Matrix: Water Lab File ID: 440-0110603-020.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 14:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 18:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d
 Lims ID: 440-222284-D-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 18:14:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-020
 Misc. Info.: 440-222284-D-5
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.496 15.563 -0.067 131236686 1002.7

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d

Injection Date: 17-Oct-2018 18:14:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-5

Lab Sample ID: 440-222284-5

Worklist Smp#: 20

Client ID: VER-20181015-EB

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

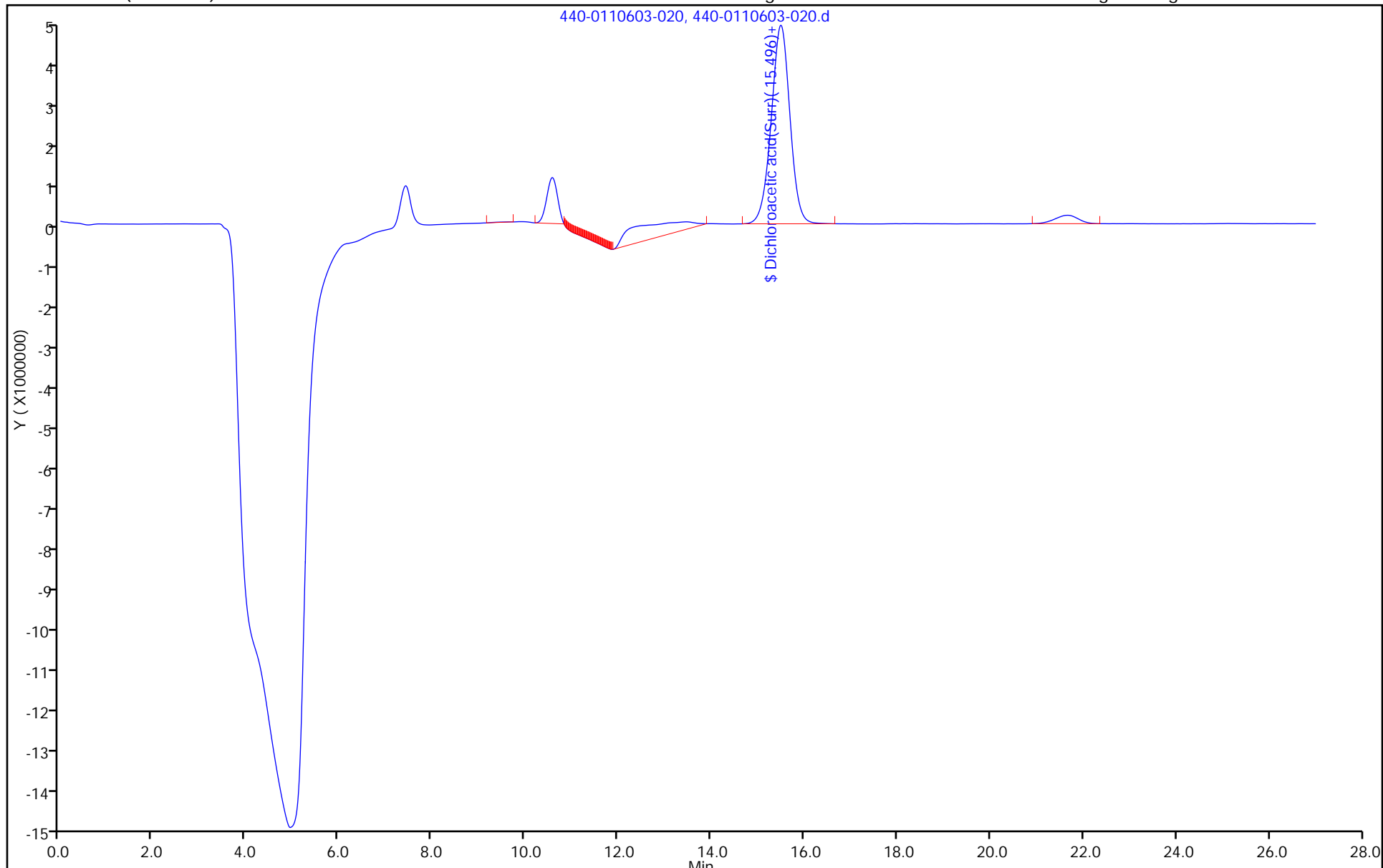
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-020.d
 Lims ID: 440-222284-D-5
 Client ID: VER-20181015-EB
 Sample Type: Client
 Inject. Date: 17-Oct-2018 18:14:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-020
 Misc. Info.: 440-222284-D-5
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:39:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1002.7	100.91

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505657

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505657/3	440-0110603-003.d
Level 2	STD1 440-505657/4	440-0110603-004.d
Level 3	STD2 440-505657/5	440-0110603-005.d
Level 4	STD3 440-505657/6	440-0110603-006.d
Level 5	STD4 440-505657/7	440-0110603-007.d
Level 6	STD5 440-505657/8	440-0110603-008.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Bromate		9.420	9.408	9.415	9.423	9.429					0.000 - 0.000	9.419
Bromide		18.235	18.163	18.229	18.243	18.266					0.000 - 0.000	18.227
Chlorate		19.968	19.897	19.957	19.966	19.980					0.000 - 0.000	19.954
Dichloroacetic acid(Surr)	15.558	15.557	15.559	15.559	15.566	15.565					14.468 - 16.646	15.561

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505657

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505657/3	440-0110603-003.d
Level 2	STD1 440-505657/4	440-0110603-004.d
Level 3	STD2 440-505657/5	440-0110603-005.d
Level 4	STD3 440-505657/6	440-0110603-006.d
Level 5	STD4 440-505657/7	440-0110603-007.d
Level 6	STD5 440-505657/8	440-0110603-008.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Bromate	132311	123667 133227	132002	135326	Lin	-11210.662	133283.366							1.0000		0.9950
Bromide	230887	221035 239713	223534	229551	Lin	-1668913.7	239767.165							1.0000		0.9950
Chlorate	203376	187772 207806	196885	203611	Lin	-414267.66	208108.954							1.0000		0.9950
Dichloroacetic acid(Surr)	131096 130641	130737 131451	130105	131244	Ave		130879.214			0.4		15.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505657

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505657/3	440-0110603-003.d
Level 2	STD1 440-505657/4	440-0110603-004.d
Level 3	STD2 440-505657/5	440-0110603-005.d
Level 4	STD3 440-505657/6	440-0110603-006.d
Level 5	STD4 440-505657/7	440-0110603-007.d
Level 6	STD5 440-505657/8	440-0110603-008.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromate	Lin	13322694	618335	1650031	3383157	6615567	0.000000 100	5.00	12.5	25.0	50.0
Bromide	Lin	239713443	11051750	27941696	57387713	115443708	0.000000 1000	50.0	125	250	500
Chlorate	Lin	83122376	3755443	9844253	20361050	40675167	0.000000 400	20.0	50.0	100	200
Dichloroacetic acid(Surr)	Ave	130271924 130624558	129914509	129287090	130418918	129819611	994 994	994	994	994	994

Curve Type Legend:

Ave = Average Lin = Linear

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-003.d
 Lims ID: STD0
 Client ID:
 Sample Type: IC Calib Level: 0
 Inject. Date: 17-Oct-2018 09:24:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-002
 Misc. Info.: EB
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:38:30 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:38:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.558 15.557 0.001 130271924 993.7 995.4

Reagents:

WC3001LCS_00077 Amount Added: 0.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-003.d

Injection Date: 17-Oct-2018 09:24:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD0

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

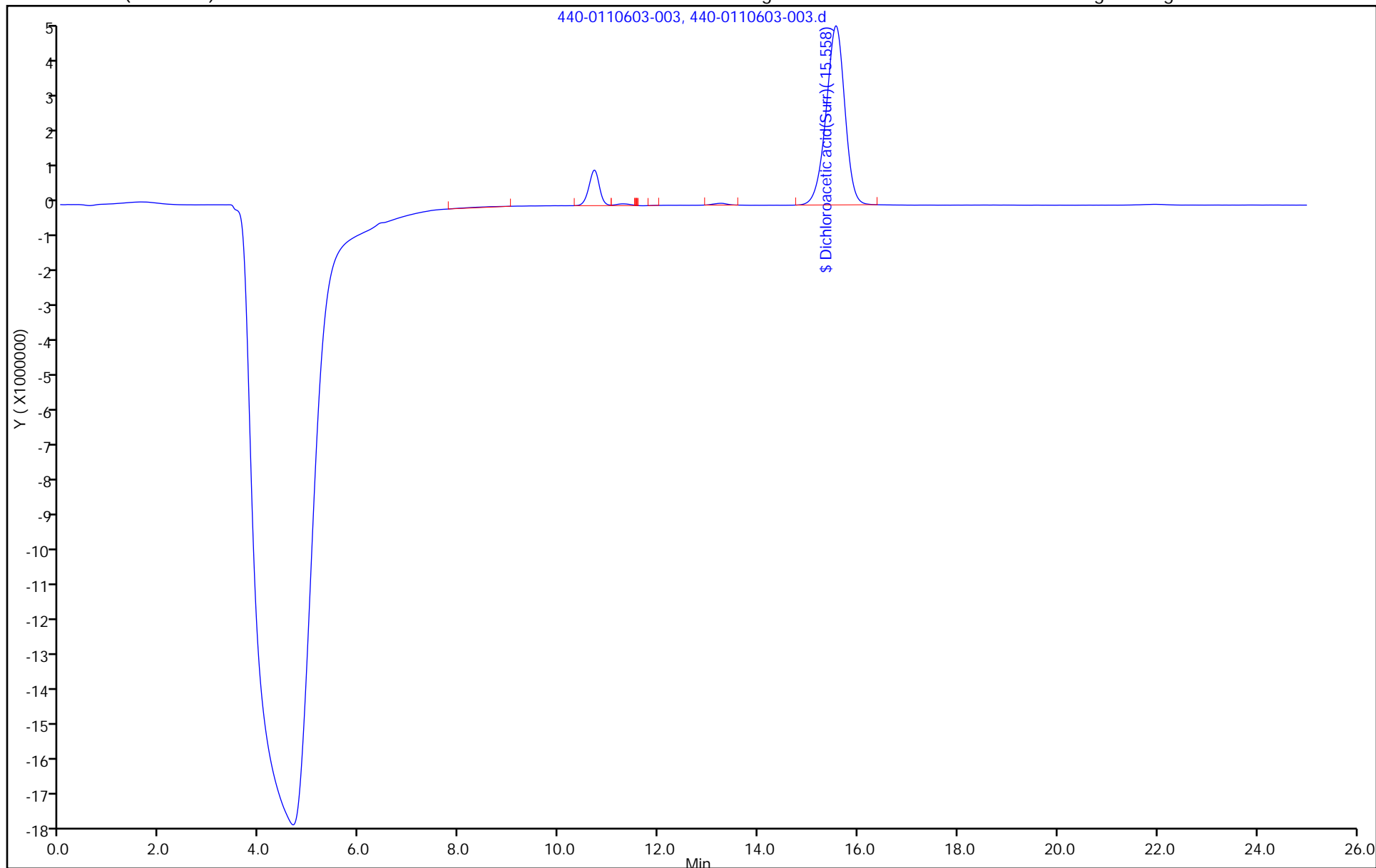
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

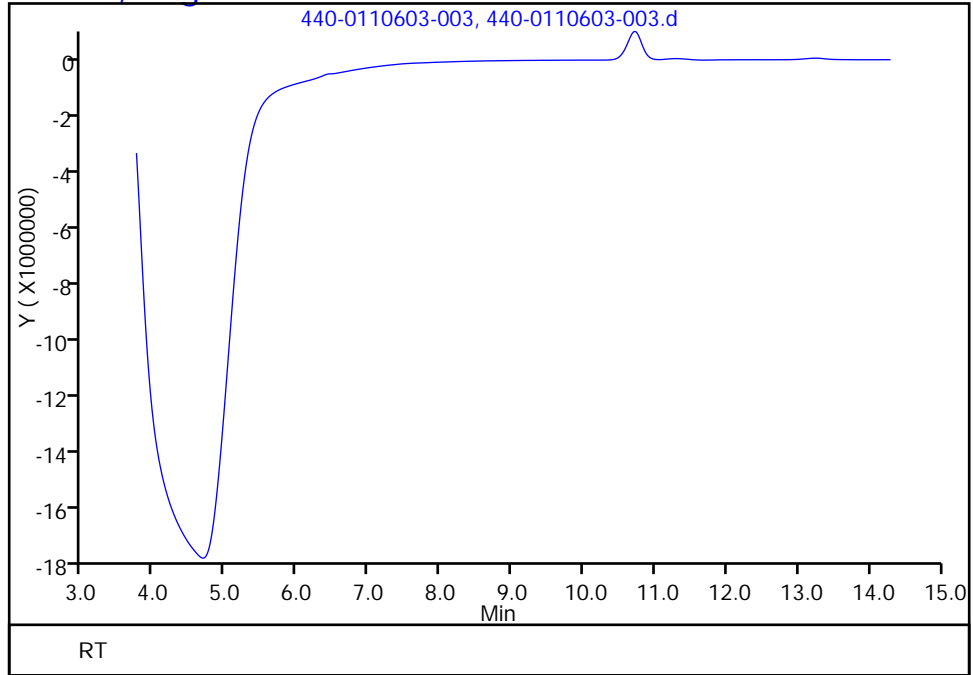


TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-003.d
Injection Date: 17-Oct-2018 09:24:00 Instrument ID: IC-32
Lims ID: STD0
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_28D
Column: AS9 (4.00 mm) Detector Ch-A-20110816009

3 Bromate, CAS: 15541-45-4, Signal: 1

RT: 9.02
Response: 688169
Amount: 0



Reviewer: zakhrabov, 17-Oct-2018 10:16:41
Audit Action: Manually Integrated

Audit Reason:

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-004.d
 Lims ID: STD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 17-Oct-2018 09:52:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-004
 Misc. Info.: STD1
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:10 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 10:25:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.217	8.227	-0.010	4636136	NC	NC	
3 Bromate	9.420	9.420	0.000	618335	5.00	4.72	
\$ 6 Dichloroacetic acid(Surr)	15.557	15.557	0.000	129914509	993.7	992.6	
4 Bromide	18.235	18.235	0.000	11051750	50.0	53.1	
2 Chlorate	19.968	19.968	0.000	3755443	20.0	20.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 25.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-004.d

Injection Date: 17-Oct-2018 09:52:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD1

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

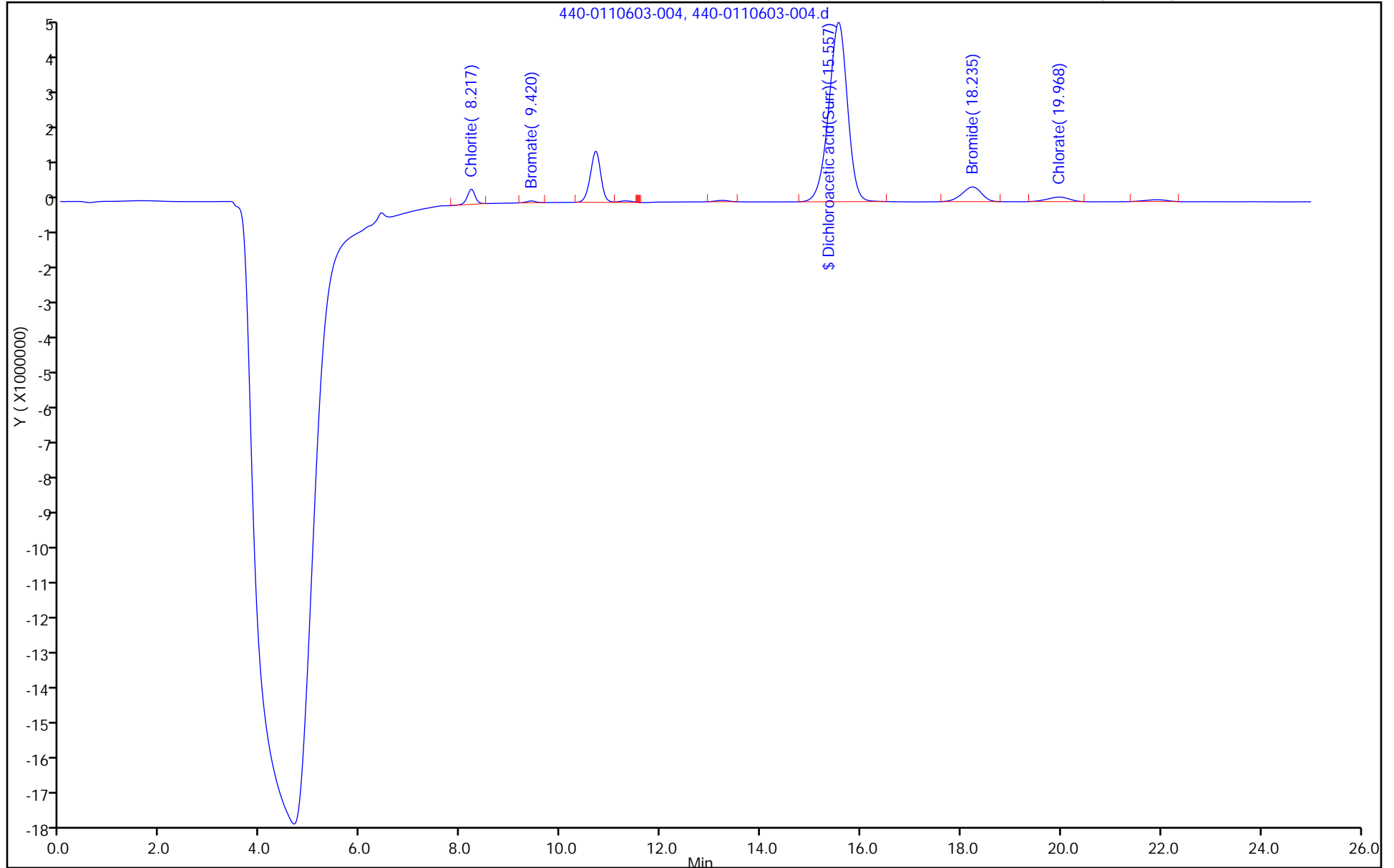
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-005.d
 Lims ID: STD2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 17-Oct-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-005
 Misc. Info.: STD2
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:08 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 10:59:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.213	8.227	-0.014	11776072	NC	NC	
3 Bromate	9.408	9.420	-0.012	1650031	12.5	12.5	
\$ 6 Dichloroacetic acid(Surr)	15.559	15.557	0.002	129287090	993.7	987.8	
4 Bromide	18.163	18.235	-0.072	27941696	125.0	123.5	
2 Chlorate	19.897	19.968	-0.071	9844253	50.0	49.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 62.50 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-005.d

Injection Date: 17-Oct-2018 10:20:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD2

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

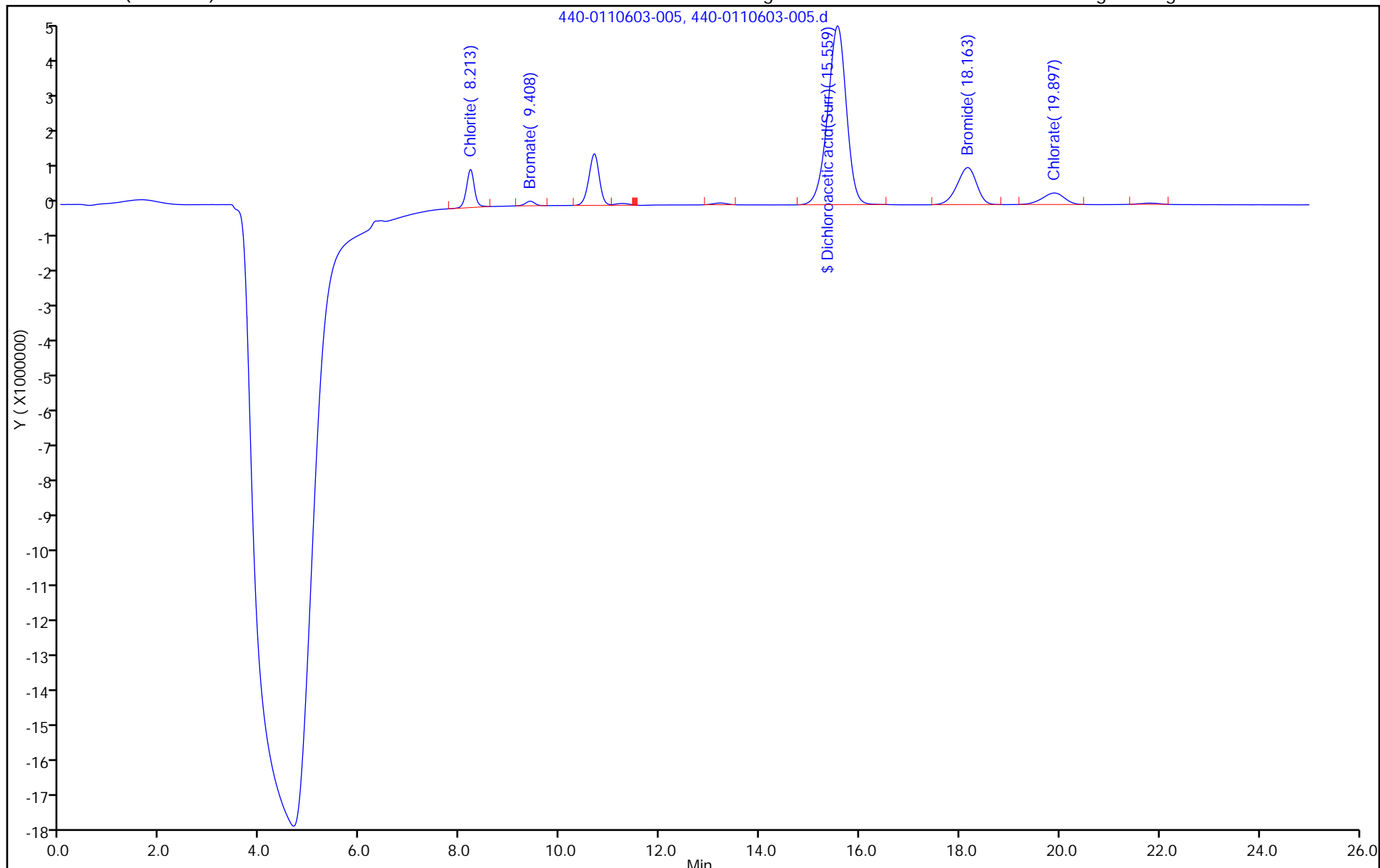
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-006.d
 Lims ID: STD3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 17-Oct-2018 10:57:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-006
 Misc. Info.: STD3
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:05 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 11:59:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.217	8.227	-0.010	23965105	NC	NC	
3 Bromate	9.415	9.420	-0.005	3383157	25.0	25.5	
\$ 6 Dichloroacetic acid(Surr)	15.559	15.557	0.002	130418918	993.7	996.5	
4 Bromide	18.229	18.235	-0.006	57387713	250.0	246.3	
2 Chlorate	19.957	19.968	-0.011	20361050	100.0	99.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-006.d

Injection Date: 17-Oct-2018 10:57:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD3

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

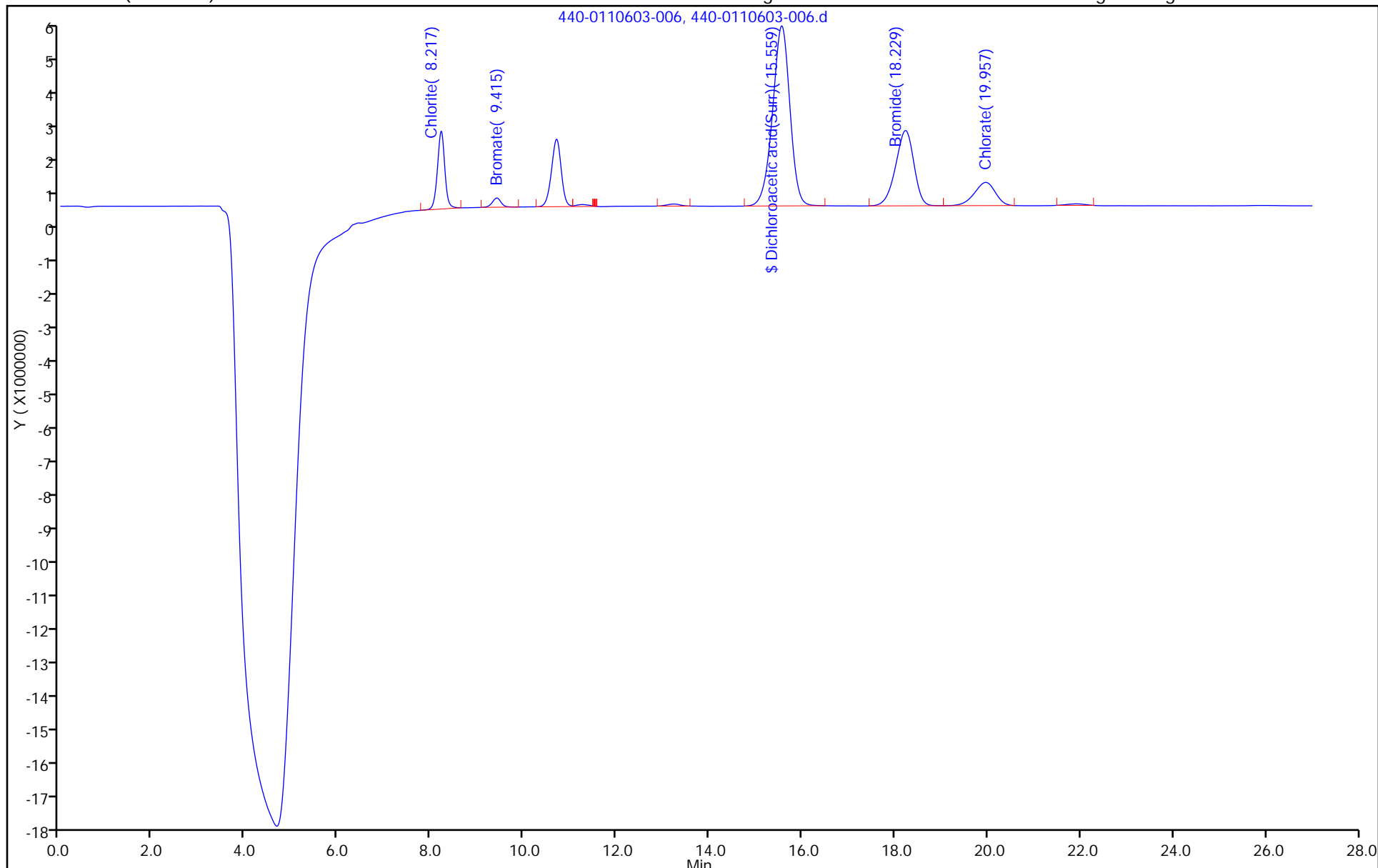
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-007.d
 Lims ID: STD4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 17-Oct-2018 11:27:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-007
 Misc. Info.: STD4
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:02 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 12:01:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.224	8.227	-0.003	47910143	NC	NC	
3 Bromate	9.423	9.420	0.003	6615567	50.0	49.7	
\$ 6 Dichloroacetic acid(Surr)	15.566	15.557	0.009	129819611	993.7	991.9	
4 Bromide	18.243	18.235	0.008	115443708	500.0	488.4	
2 Chlorate	19.966	19.968	-0.002	40675167	200.0	197.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-007.d

Injection Date: 17-Oct-2018 11:27:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

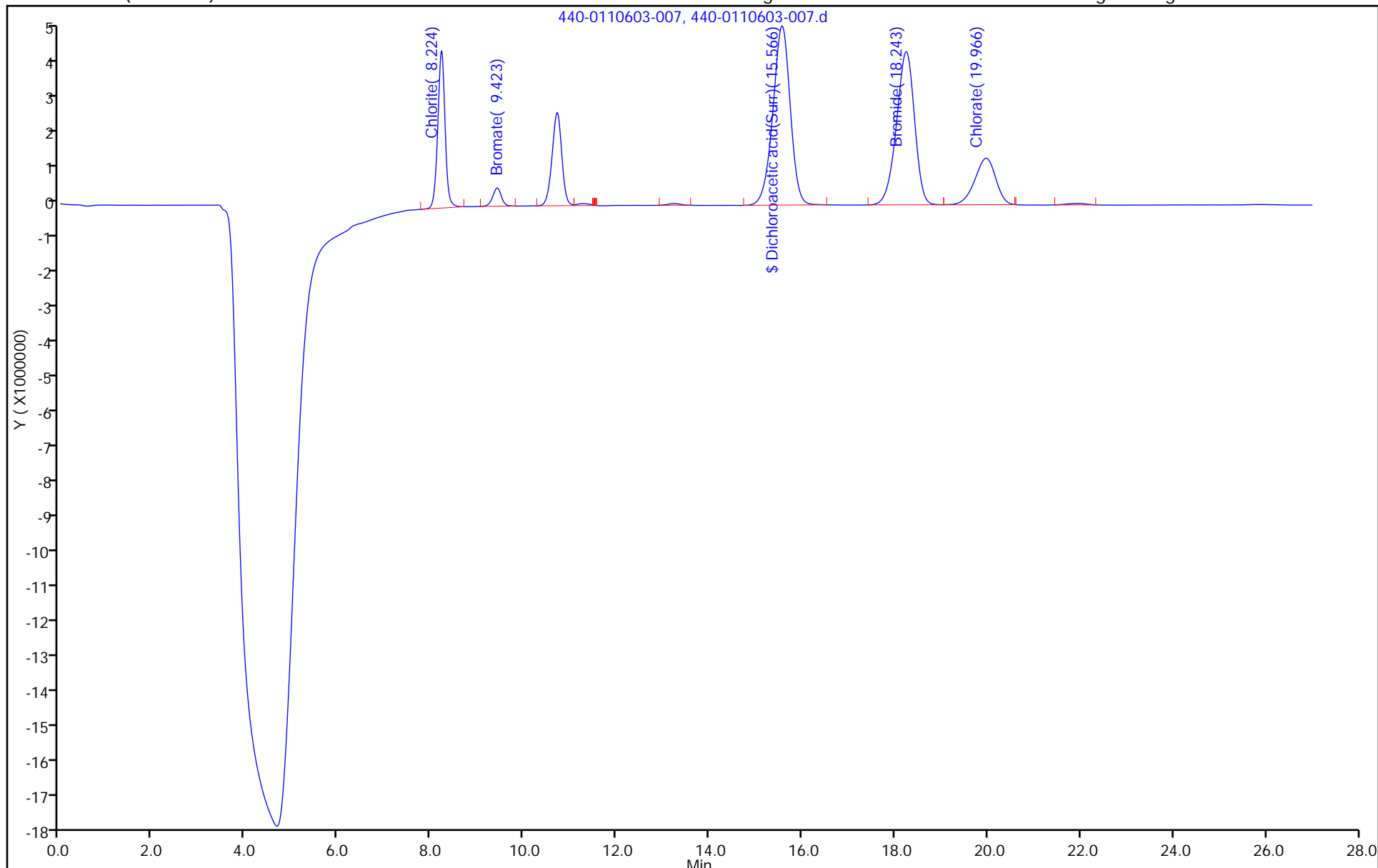
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Lims ID: STD5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 17-Oct-2018 11:56:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-008
 Misc. Info.: STD5
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:32:59 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 12:33:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.227	8.227	0.000	100954660	NC	NC	
3 Bromate	9.429	9.420	0.009	13322694	100.0	100.0	
\$ 6 Dichloroacetic acid(Surr)	15.565	15.557	0.008	130624558	993.7	998.1	
4 Bromide	18.266	18.235	0.031	239713443	1000.0	1006.7	
2 Chlorate	19.980	19.968	0.012	83122376	400.0	401.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 500.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d

Injection Date: 17-Oct-2018 11:56:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD5

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

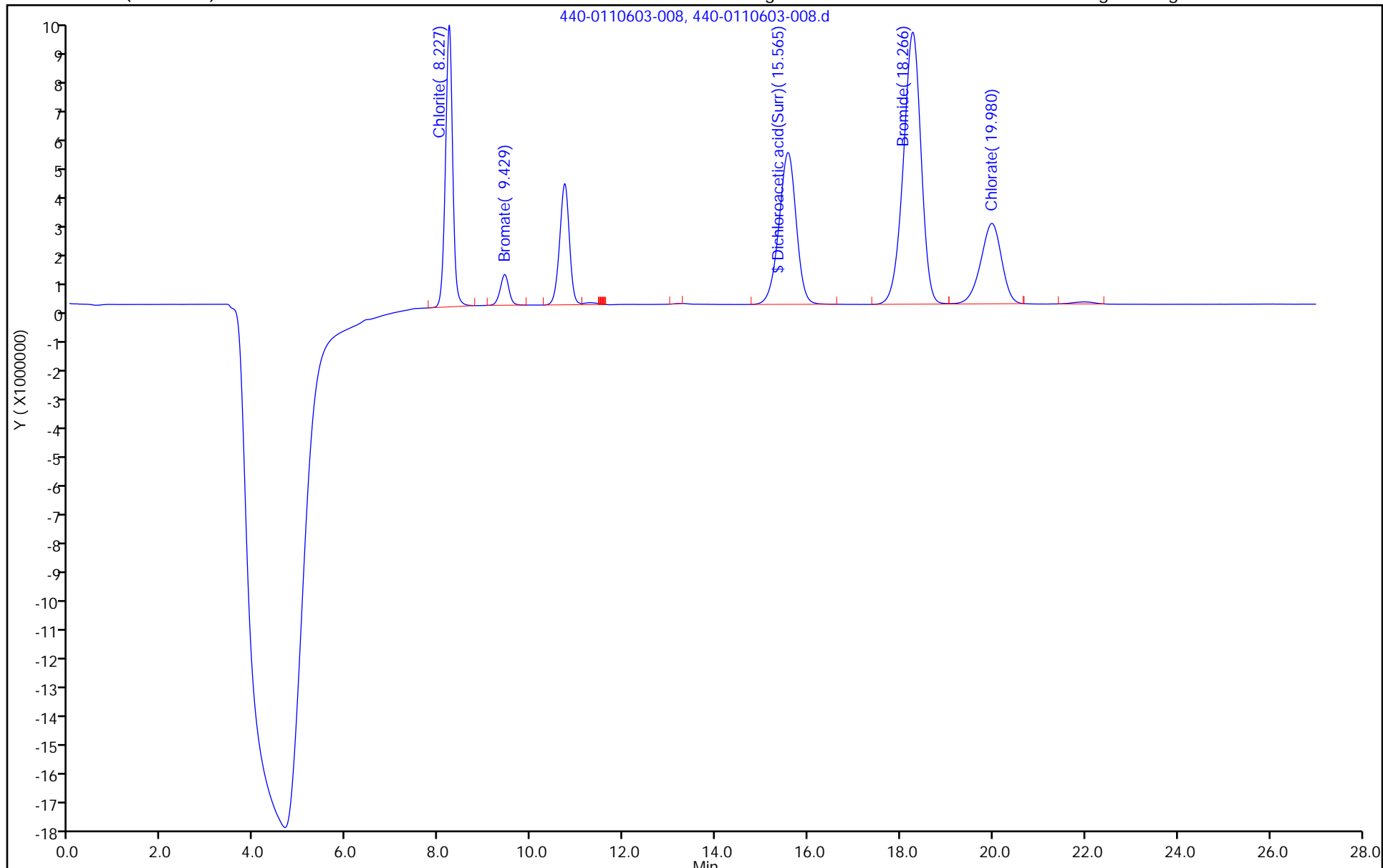
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

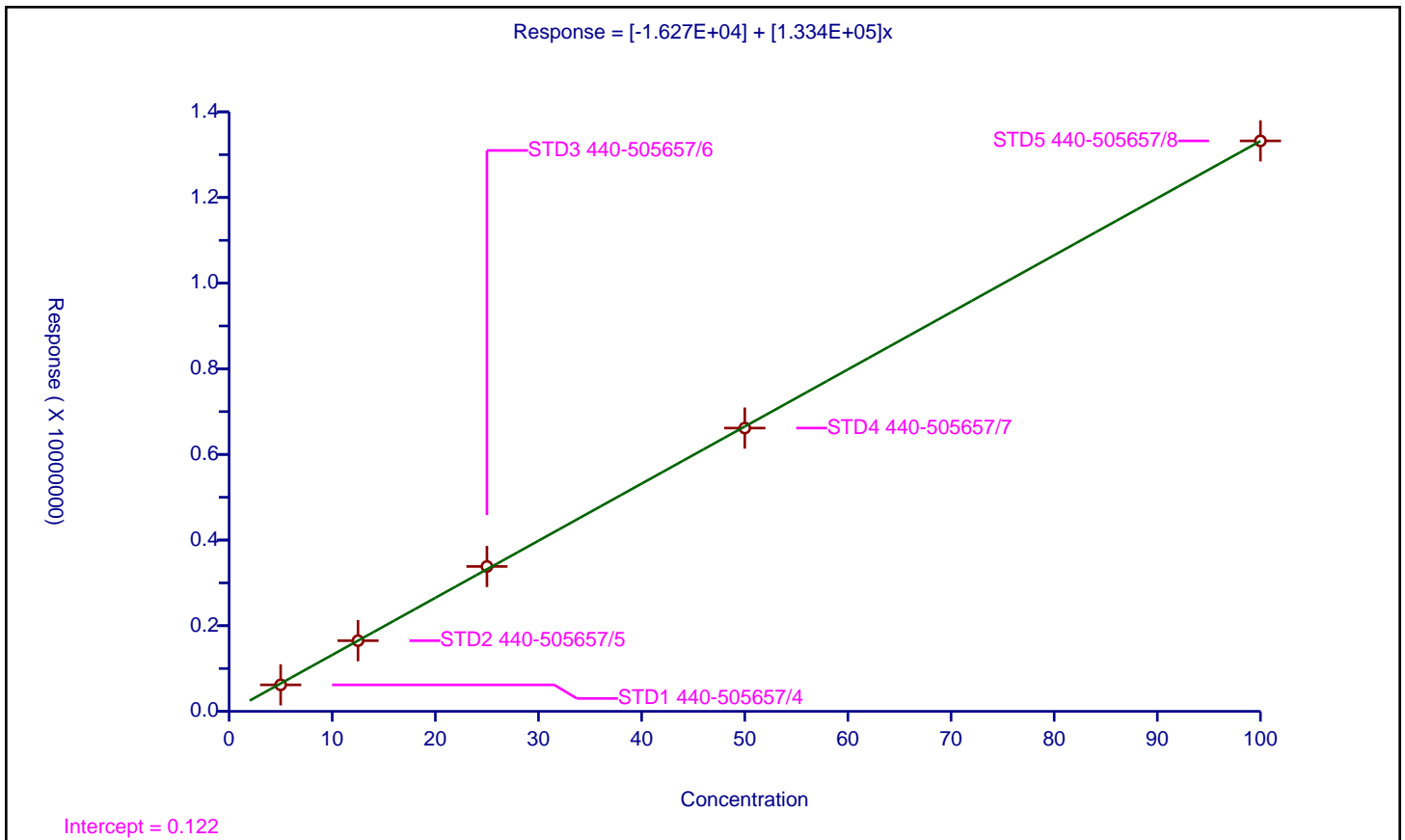
/ Bromate

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	-1.627E+04
Slope:	1.334E+05

Error Coefficients	
Standard Error:	47000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505657/4	5.0	618335.0			123667.0	Y
2	STD2 440-505657/5	12.5	1650031.0			132002.48	Y
3	STD3 440-505657/6	25.0	3383157.0			135326.28	Y
4	STD4 440-505657/7	50.0	6615567.0			132311.34	Y
5	STD5 440-505657/8	100.0	13322694.0			133226.94	Y



Calibration

/ Dichloroacetic acid(Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

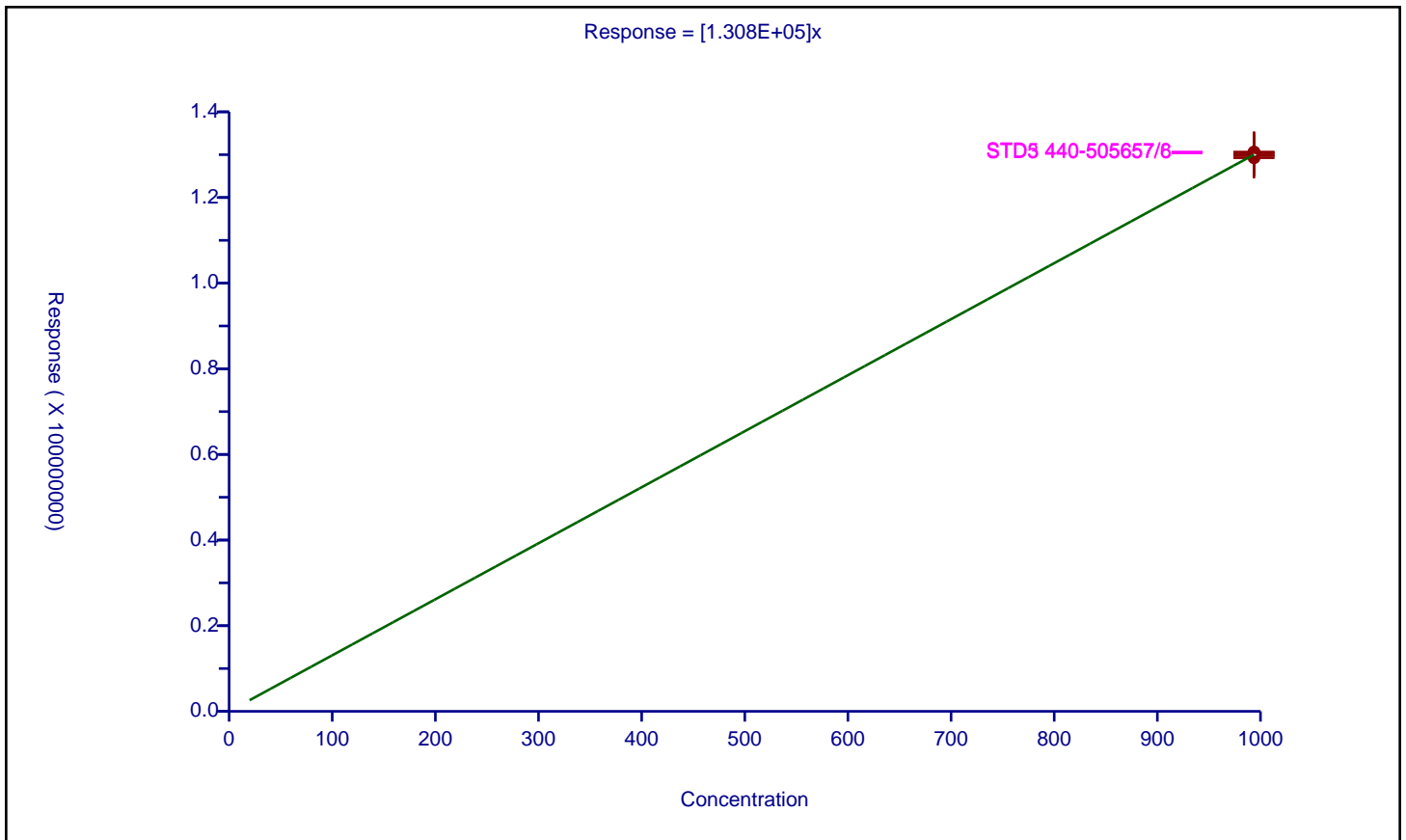
Curve Coefficients

Intercept: 0
Slope: 1.308E+05

Error Coefficients

Standard Error: 527000
Relative Standard Error: 0.4
Correlation Coefficient: NA
Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505657/4	993.7109	129914509.0			130736.725339	Y
2	STD2 440-505657/5	993.7109	129287090.0			130105.335465	Y
3	STD3 440-505657/6	993.7109	130418918.0			131244.326695	Y
4	STD4 440-505657/7	993.7109	129819611.0			130641.226739	Y
5	STD5 440-505657/8	993.7109	130624558.0			131451.268171	Y



Calibration

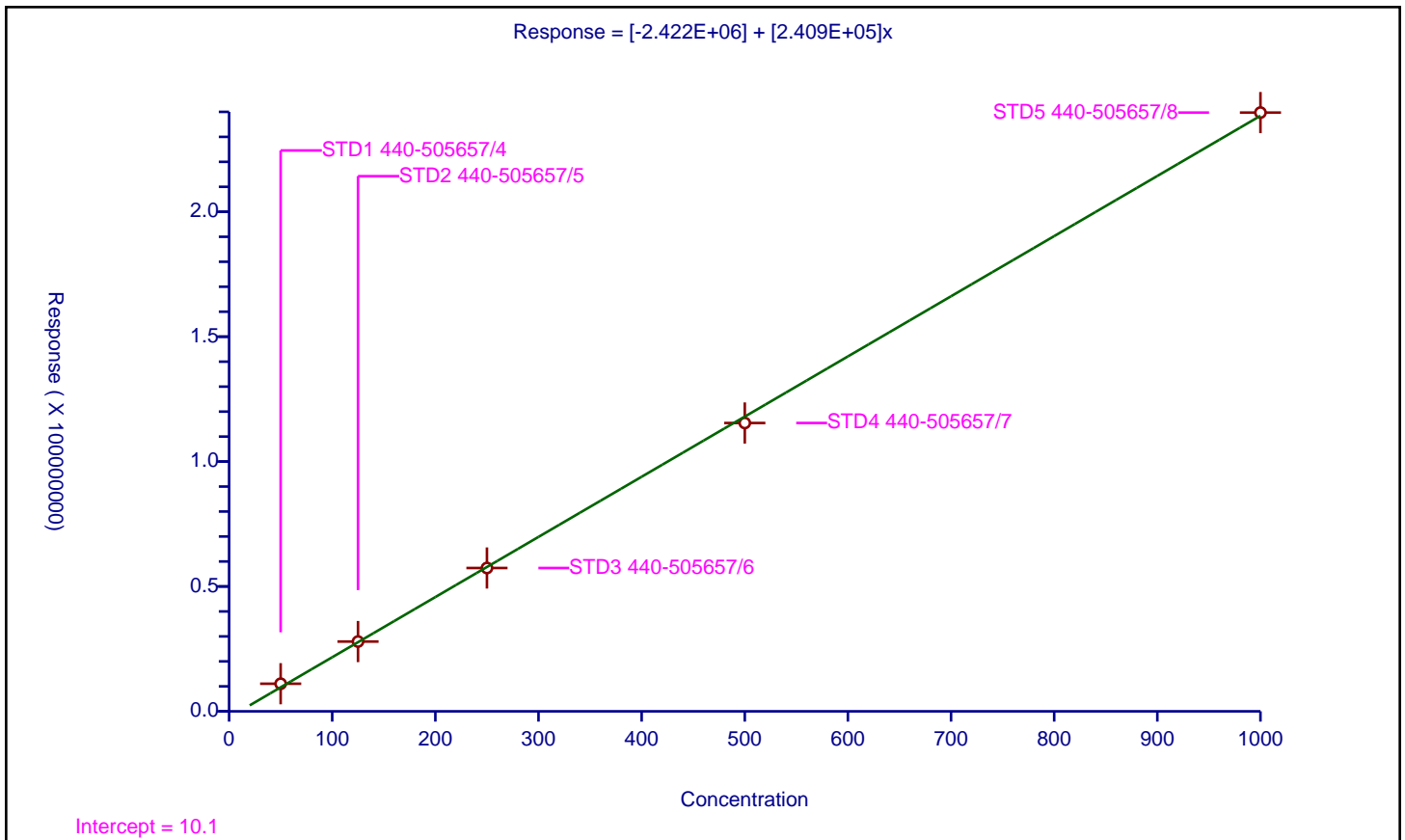
/ Bromide

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	-2.422E+06
Slope:	2.409E+05

Error Coefficients	
Standard Error:	1870000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505657/4	50.0	11051750.0			221035.0	Y
2	STD2 440-505657/5	125.0	27941696.0			223533.568	Y
3	STD3 440-505657/6	250.0	57387713.0			229550.852	Y
4	STD4 440-505657/7	500.0	115443708.0			230887.416	Y
5	STD5 440-505657/8	1000.0	239713443.0			239713.443	Y



Calibration

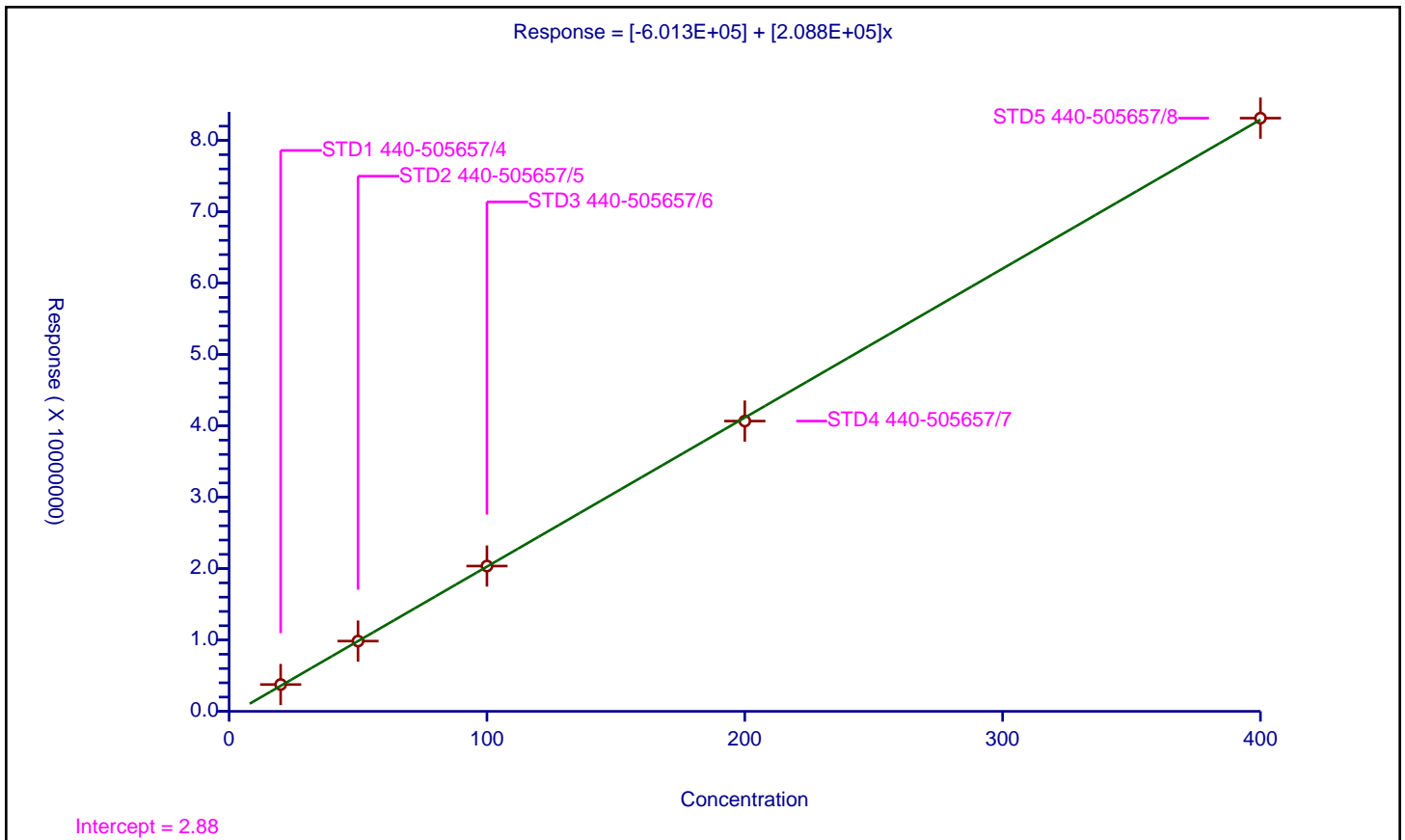
/ Chlorate

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	-6.013E+05
Slope:	2.088E+05

Error Coefficients	
Standard Error:	324000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505657/4	20.0	3755443.0			187772.15	Y
2	STD2 440-505657/5	50.0	9844253.0			196885.06	Y
3	STD3 440-505657/6	100.0	20361050.0			203610.5	Y
4	STD4 440-505657/7	200.0	40675167.0			203375.835	Y
5	STD5 440-505657/8	400.0	83122376.0			207805.94	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505658

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505658/3	440-0110603-003.d
Level 2	STD1 440-505658/4	440-0110603-004.d
Level 3	STD2 440-505658/5	440-0110603-005.d
Level 4	STD3 440-505658/6	440-0110603-006.d
Level 5	STD4 440-505658/7	440-0110603-007.d
Level 6	STD5 440-505658/8	440-0110603-008.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Chlorite		8.217	8.213	8.217	8.224	8.227					0.000 - 0.000	8.220
Dichloroacetic acid(Surr)	15.558	15.557	15.559	15.559	15.566	15.565					14.468 - 16.646	15.561

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505658

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505658/3	440-0110603-003.d
Level 2	STD1 440-505658/4	440-0110603-004.d
Level 3	STD2 440-505658/5	440-0110603-005.d
Level 4	STD3 440-505658/6	440-0110603-006.d
Level 5	STD4 440-505658/7	440-0110603-007.d
Level 6	STD5 440-505658/8	440-0110603-008.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Chlorite	239551	231807 252387	235521	239651	Lin	-807361.81	252060.113							0.9990		0.9950
Dichloroacetic acid(Surr)	131096 130641	130737 131451	130105	131244	Ave		130879.214			0.4		15.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 505658

SDG No.: _____

Instrument ID: IC-32 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/17/2018 09:24 Calibration End Date: 10/17/2018 11:56 Calibration ID: 20185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-505658/3	440-0110603-003.d
Level 2	STD1 440-505658/4	440-0110603-004.d
Level 3	STD2 440-505658/5	440-0110603-005.d
Level 4	STD3 440-505658/6	440-0110603-006.d
Level 5	STD4 440-505658/7	440-0110603-007.d
Level 6	STD5 440-505658/8	440-0110603-008.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorite	Lin	100954660	4636136	11776072	23965105	47910143	0.000000 400	20.0	50.0	100	200
Dichloroacetic acid(Surr)	Ave	130271924 130624558	129914509	129287090	130418918	129819611	994 994	994	994	994	994

Curve Type Legend:

Ave = Average
Lin = Linear

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-003.d
 Lims ID: STD0
 Client ID:
 Sample Type: IC Calib Level: 0
 Inject. Date: 17-Oct-2018 09:24:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-002
 Misc. Info.: EB
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:38:30 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:38:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 15.558 15.557 0.001 130271924 993.7 995.4

Reagents:

WC3001LCS_00077 Amount Added: 0.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-003.d

Injection Date: 17-Oct-2018 09:24:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD0

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

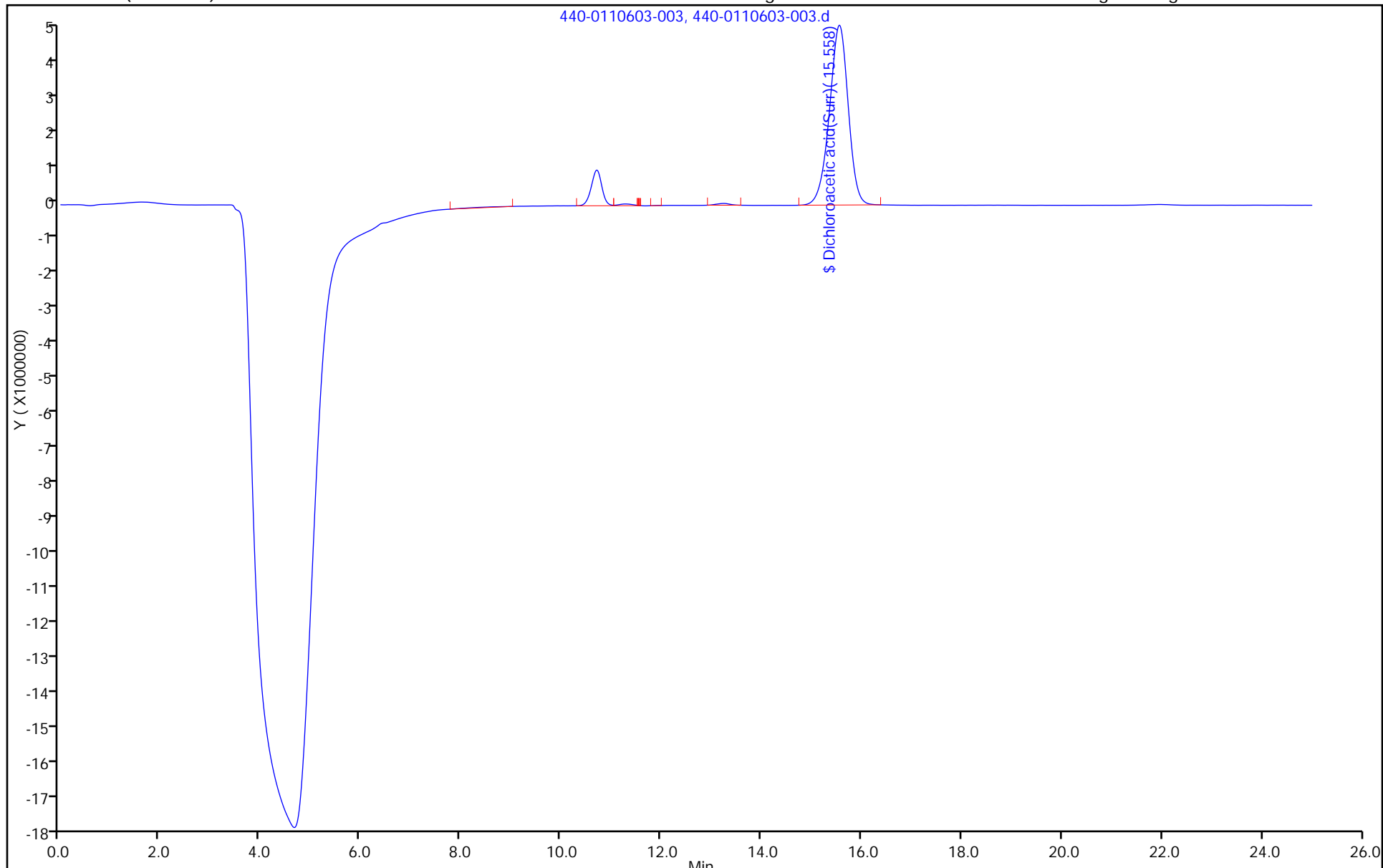
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-004.d
 Lims ID: STD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 17-Oct-2018 09:52:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-004
 Misc. Info.: STD1
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:10 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 10:25:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.217	8.227	-0.010	4636136	20.0	21.6	
3 Bromate	9.420	9.420	0.000	618335	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.557	15.557	0.000	129914509	993.7	992.6	
4 Bromide	18.235	18.235	0.000	11051750	NC	NC	
2 Chlorate	19.968	19.968	0.000	3755443	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 25.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-004.d

Injection Date: 17-Oct-2018 09:52:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD1

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

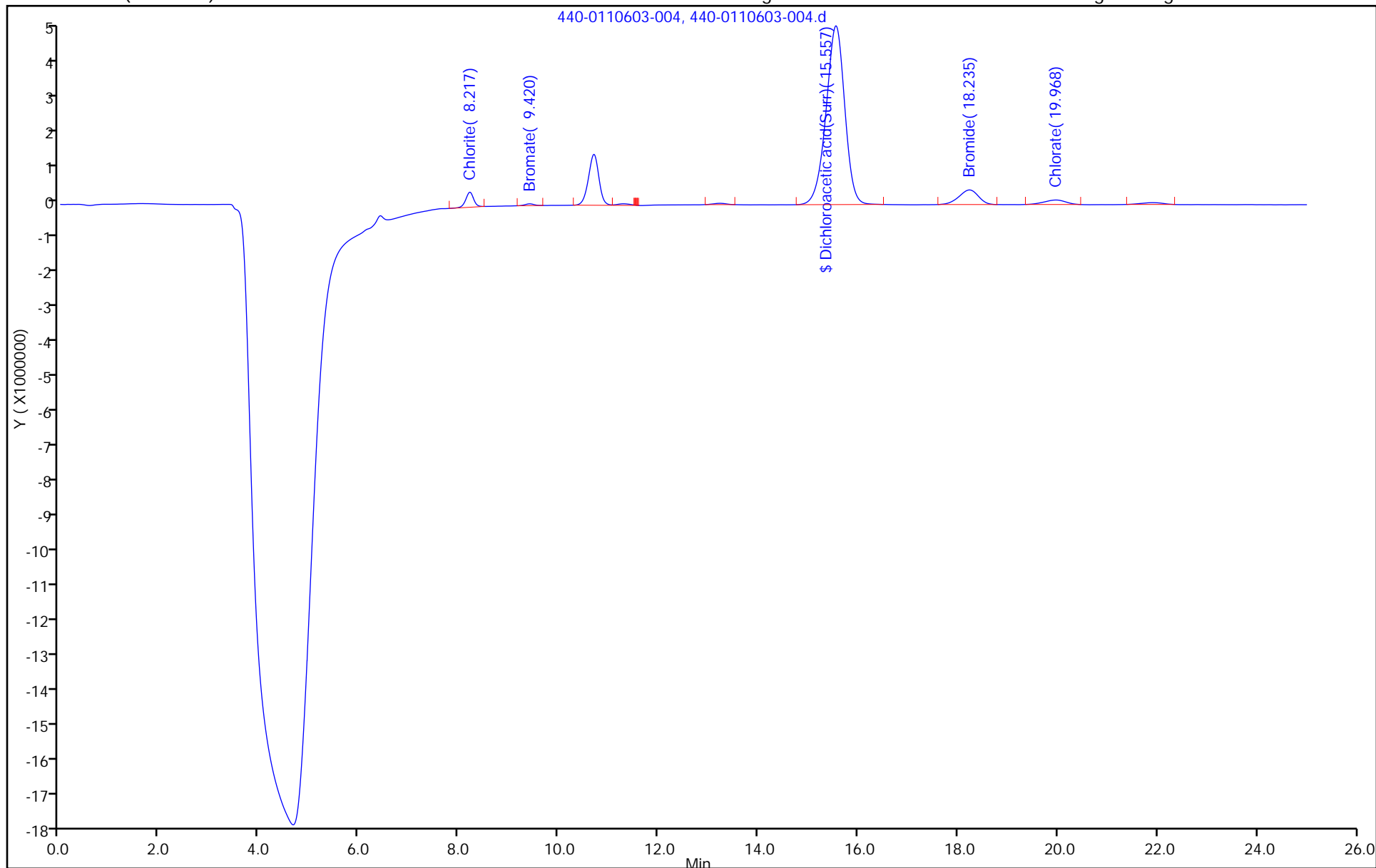
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-005.d
 Lims ID: STD2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 17-Oct-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-005
 Misc. Info.: STD2
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:08 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 10:59:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.213	8.227	-0.014	11776072	50.0	49.9	
3 Bromate	9.408	9.420	-0.012	1650031	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.559	15.557	0.002	129287090	993.7	987.8	
4 Bromide	18.163	18.235	-0.072	27941696	NC	NC	
2 Chlorate	19.897	19.968	-0.071	9844253	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 62.50 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-005.d

Injection Date: 17-Oct-2018 10:20:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD2

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

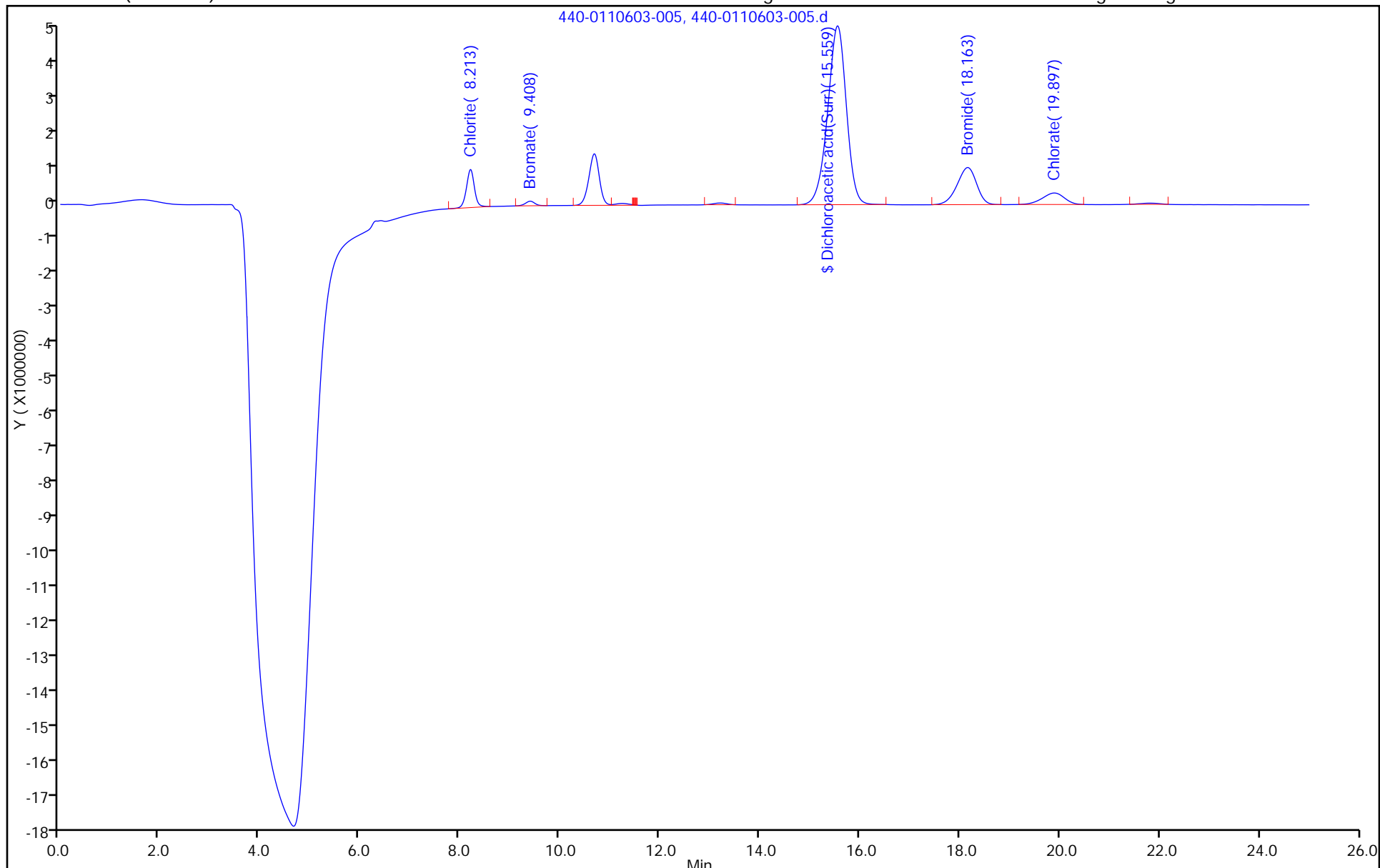
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-006.d
 Lims ID: STD3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 17-Oct-2018 10:57:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-006
 Misc. Info.: STD3
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:05 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 17-Oct-2018 11:59:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.217	8.227	-0.010	23965105	100.0	98.3	
3 Bromate	9.415	9.420	-0.005	3383157	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.559	15.557	0.002	130418918	993.7	996.5	
4 Bromide	18.229	18.235	-0.006	57387713	NC	NC	
2 Chlorate	19.957	19.968	-0.011	20361050	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-006.d

Injection Date: 17-Oct-2018 10:57:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD3

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

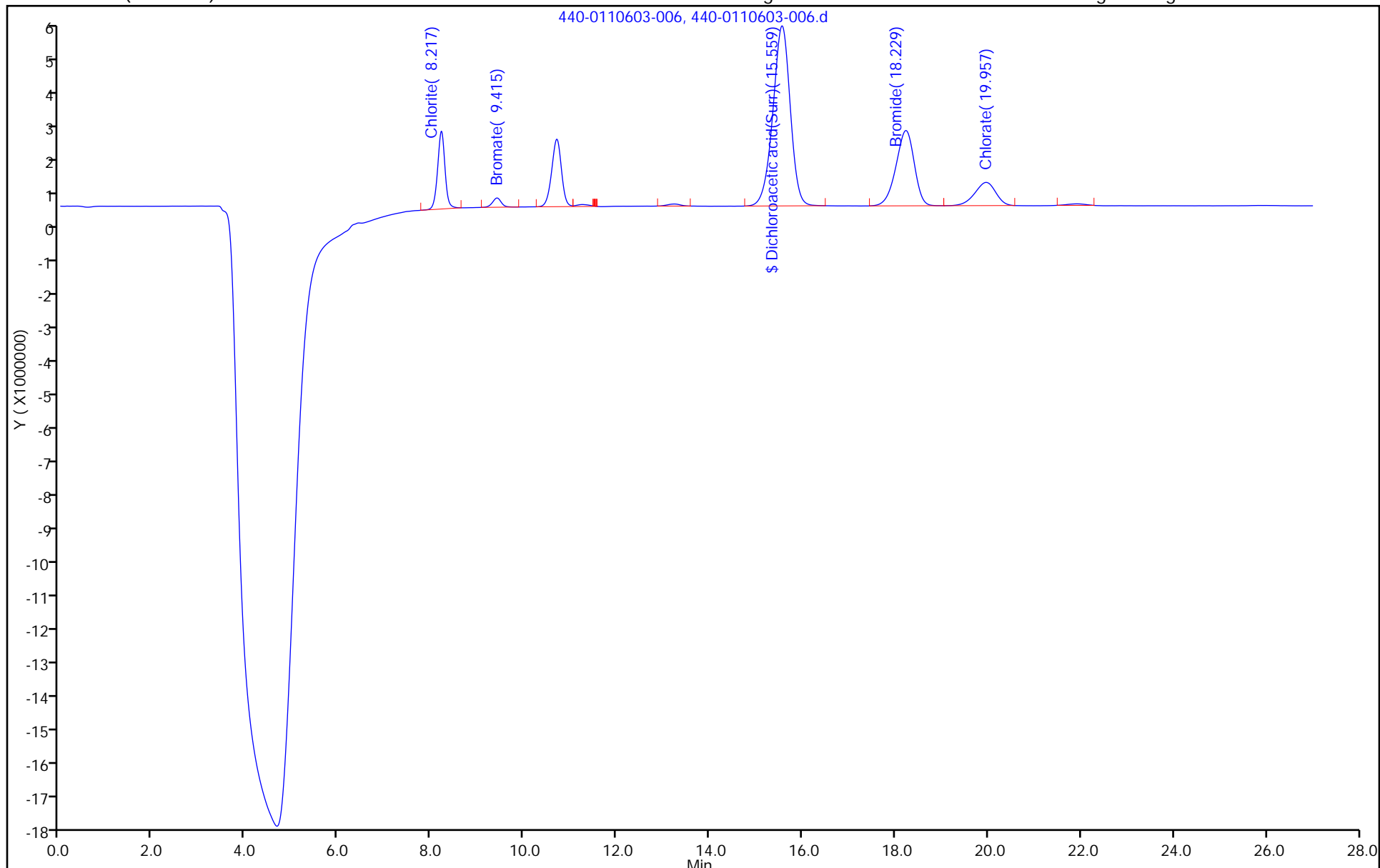
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-007.d
 Lims ID: STD4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 17-Oct-2018 11:27:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-007
 Misc. Info.: STD4
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:33:02 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 12:01:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.224	8.227	-0.003	47910143	200.0	193.3	
3 Bromate	9.423	9.420	0.003	6615567	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.566	15.557	0.009	129819611	993.7	991.9	
4 Bromide	18.243	18.235	0.008	115443708	NC	NC	
2 Chlorate	19.966	19.968	-0.002	40675167	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-007.d

Injection Date: 17-Oct-2018 11:27:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

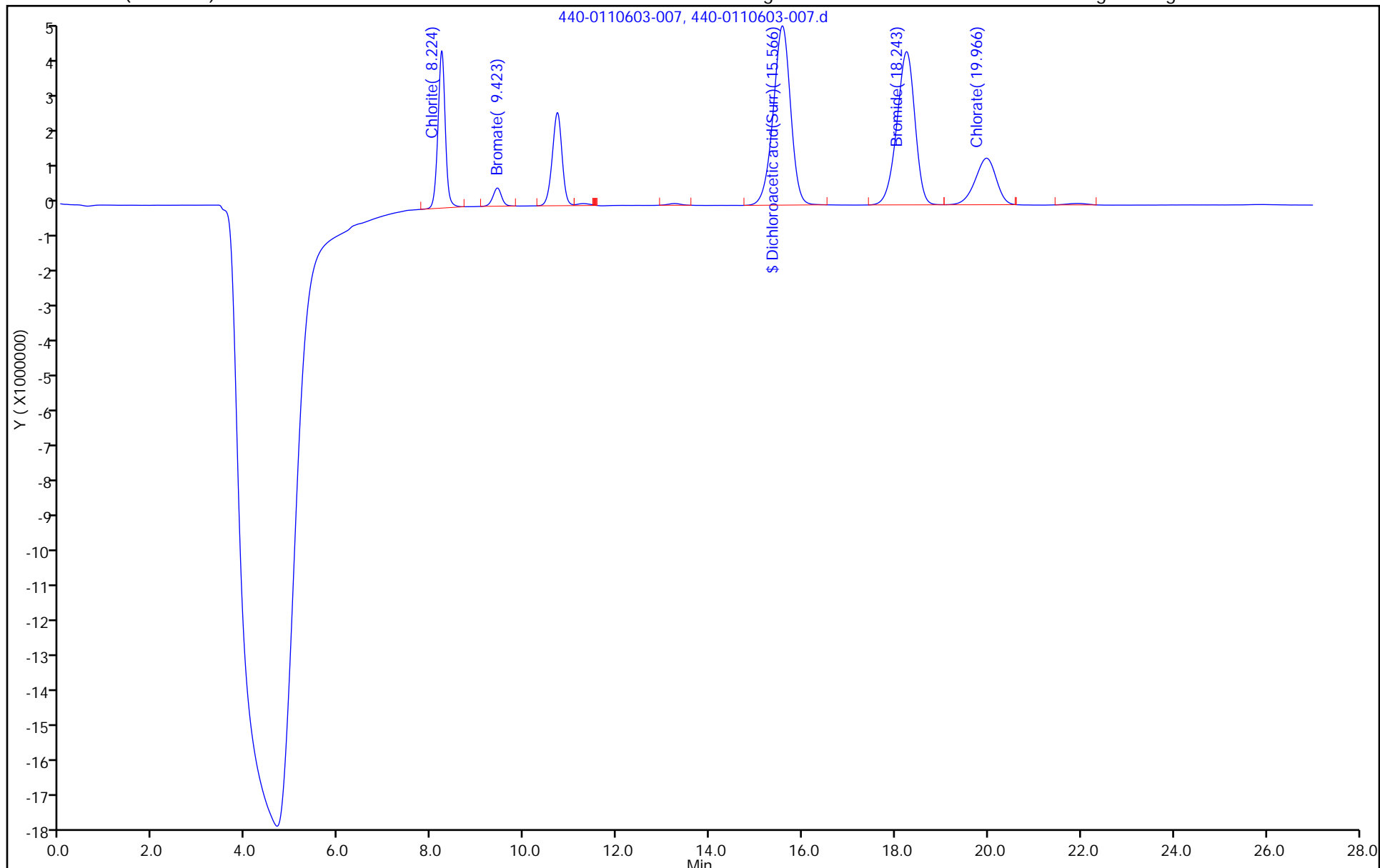
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Lims ID: STD5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 17-Oct-2018 11:56:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-008
 Misc. Info.: STD5
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 03:32:59 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 17-Oct-2018 12:33:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.227	8.227	0.000	100954660	400.0	403.7	
3 Bromate	9.429	9.420	0.009	13322694	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.565	15.557	0.008	130624558	993.7	998.1	
4 Bromide	18.266	18.235	0.031	239713443	NC	NC	
2 Chlorate	19.980	19.968	0.012	83122376	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 500.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d

Injection Date: 17-Oct-2018 11:56:00

Instrument ID: IC-32

Operator ID:

Lims ID: STD5

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

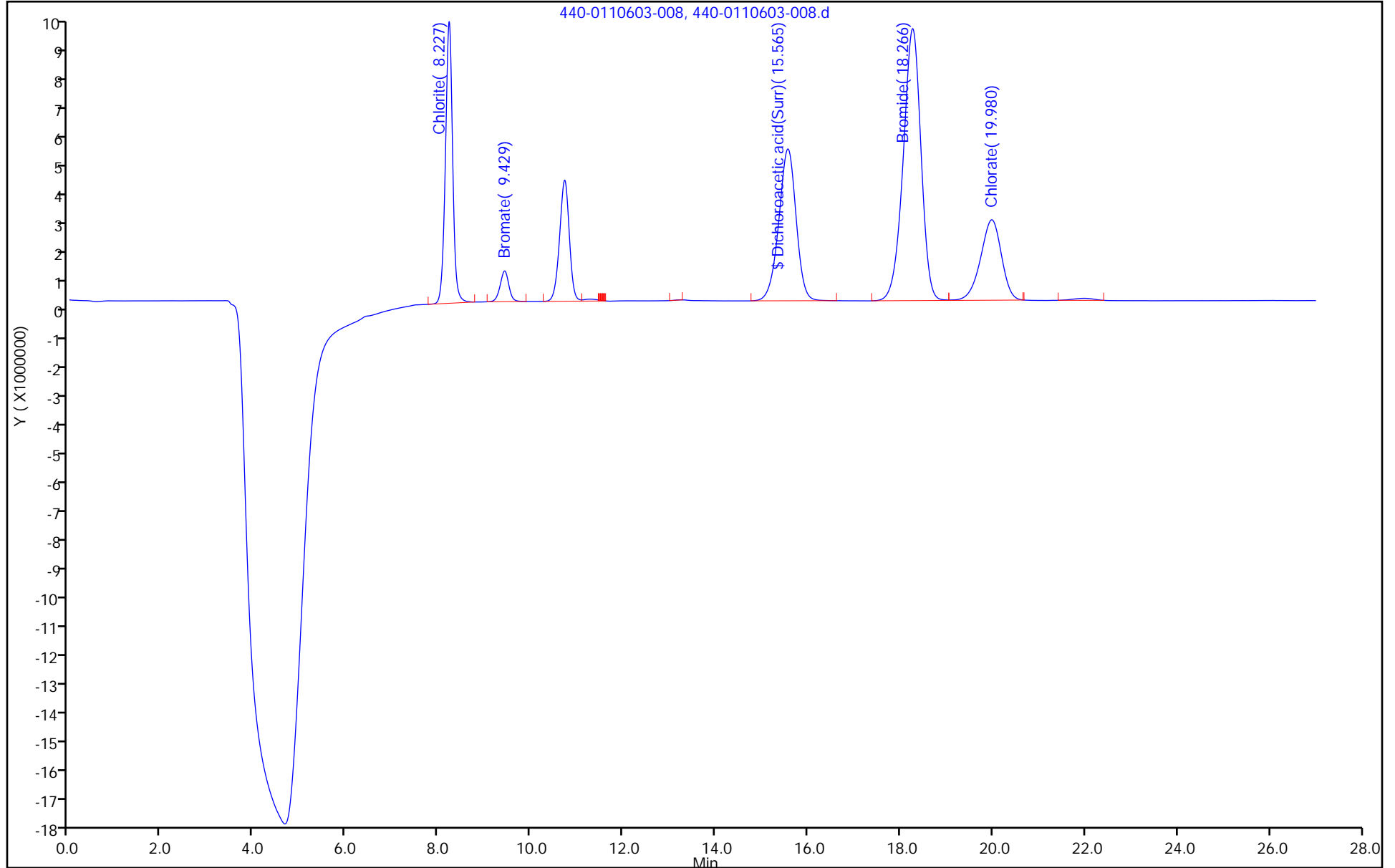
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

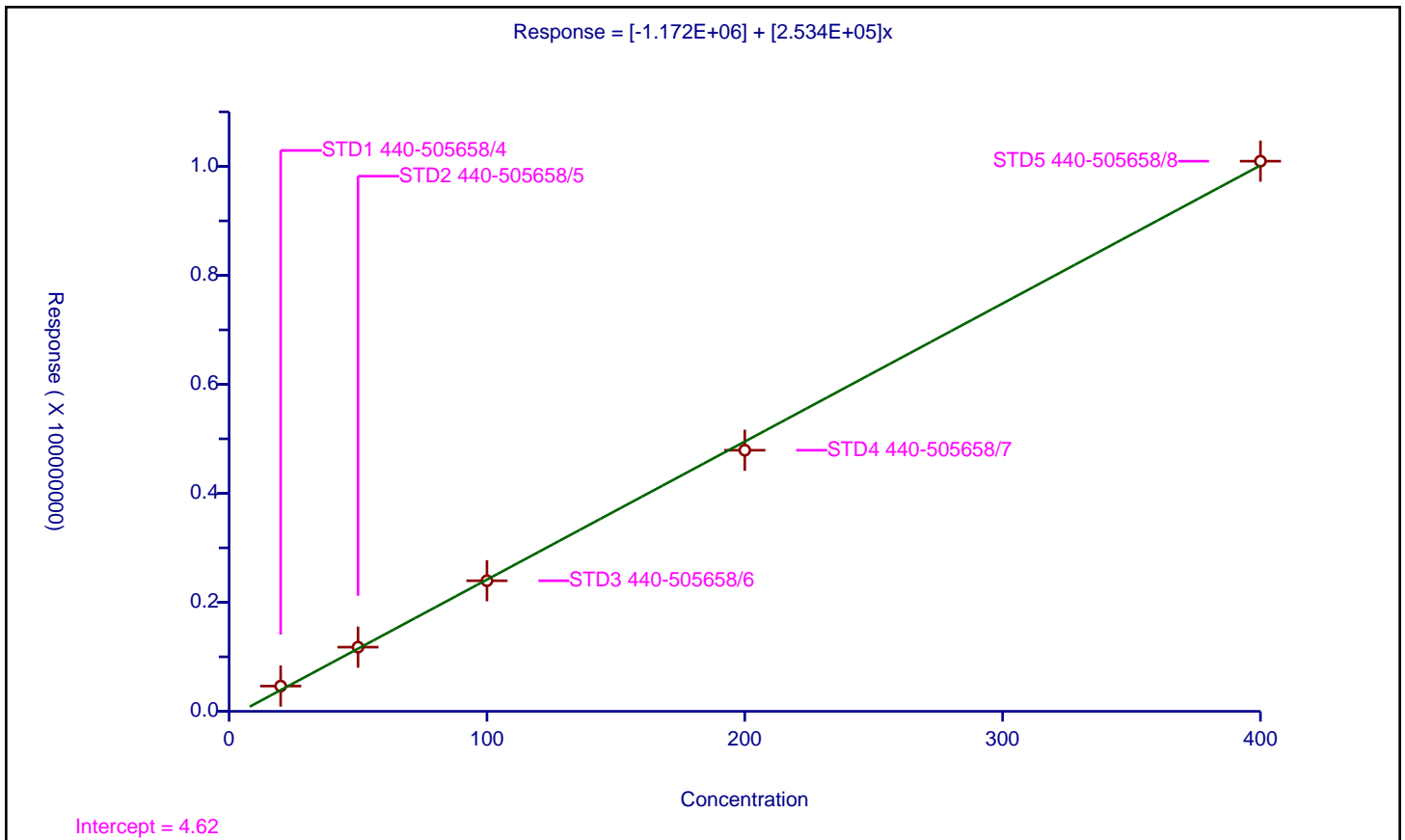
/ Chlorite

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	-1.172E+06
Slope:	2.534E+05

Error Coefficients	
Standard Error:	1130000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505658/4	20.0	4636136.0			231806.8	Y
2	STD2 440-505658/5	50.0	11776072.0			235521.44	Y
3	STD3 440-505658/6	100.0	23965105.0			239651.05	Y
4	STD4 440-505658/7	200.0	47910143.0			239550.715	Y
5	STD5 440-505658/8	400.0	100954660.0			252386.65	Y



Calibration

/ Dichloroacetic acid(Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ESTD
Response Base: AREA
RF Rounding: 0

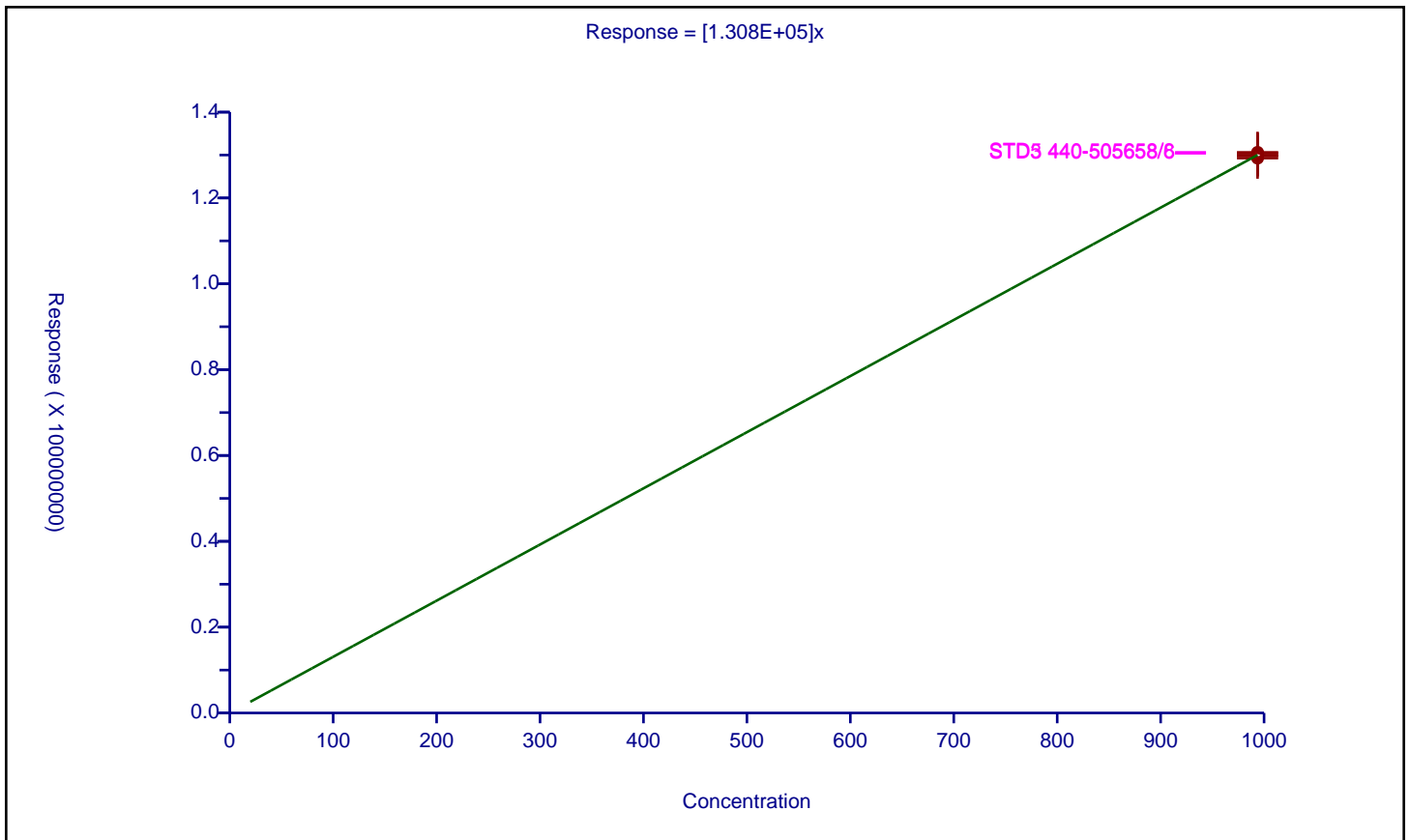
Curve Coefficients

Intercept: 0
Slope: 1.308E+05

Error Coefficients

Standard Error: 527000
Relative Standard Error: 0.4
Correlation Coefficient: NA
Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD1 440-505658/4	993.7109	129914509.0			130736.725339	Y
2	STD2 440-505658/5	993.7109	129287090.0			130105.335465	Y
3	STD3 440-505658/6	993.7109	130418918.0			131244.326695	Y
4	STD4 440-505658/7	993.7109	129819611.0			130641.226739	Y
5	STD5 440-505658/8	993.7109	130624558.0			131451.268171	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 494918

SDG No.: _____

Instrument ID: IC-8 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2018 05:59 Calibration End Date: 08/22/2018 09:00 Calibration ID: 19800

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-494918/2	440-0108143-002.d
Level 2	STD1 440-494918/3	440-0108143-003.d
Level 3	STD2 440-494918/4	440-0108143-004.d
Level 4	STD3 440-494918/5	440-0108143-005.d
Level 5	STD4 440-494918/6	440-0108143-006.d
Level 6	STD5 440-494918/7	440-0108143-007.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Chlorite		7.284	7.292	7.267	7.259	7.267					0.000 - 0.000	7.274
Dichloroacetic acid(Surr)	13.692	13.700	13.725	13.684	13.667	13.667					12.741 - 14.659	13.689

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 494918

SDG No.: _____

Instrument ID: IC-8 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2018 05:59 Calibration End Date: 08/22/2018 09:00 Calibration ID: 19800

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-494918/2	440-0108143-002.d
Level 2	STD1 440-494918/3	440-0108143-003.d
Level 3	STD2 440-494918/4	440-0108143-004.d
Level 4	STD3 440-494918/5	440-0108143-005.d
Level 5	STD4 440-494918/6	440-0108143-006.d
Level 6	STD5 440-494918/7	440-0108143-007.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Chlorite	155148	156990 161065	153688	154958	Lin	-340583.52	160804.095							1.0000		0.9950
Dichloroacetic acid(Surr)	83769 86549	83878 85494	83641	83825	Ave		84526.1120			1.4		15.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Irvine Job No.: 440-222284-1 Analy Batch No.: 494918

SDG No.: _____

Instrument ID: IC-8 GC Column: AS9-HC ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2018 05:59 Calibration End Date: 08/22/2018 09:00 Calibration ID: 19800

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0 440-494918/2	440-0108143-002.d
Level 2	STD1 440-494918/3	440-0108143-003.d
Level 3	STD2 440-494918/4	440-0108143-004.d
Level 4	STD3 440-494918/5	440-0108143-005.d
Level 5	STD4 440-494918/6	440-0108143-006.d
Level 6	STD5 440-494918/7	440-0108143-007.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorite	Lin	64426081	3139793	7684393	15495824	31029561	0.000000 400	20.0	50.0	100	200
Dichloroacetic acid(Surr)	Ave	83242483 84956157	83350197	83115424	83298013	86004839	994 994	994	994	994	994

Curve Type Legend:

Ave = Average
Lin = Linear

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-002.d
 Lims ID: STD0
 Client ID:
 Sample Type: IC Calib Level: 0
 Inject. Date: 22-Aug-2018 05:59:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-002
 Misc. Info.: 2 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:18 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Aug-2018 06:48:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----------	---------------	---------------	----------	--------------	----------------	-------

\$ 6 Dichloroacetic acid(Surr) 13.692 13.700 -0.008 83242483 993.7 984.8

Reagents:

WC3001LCS_00075 Amount Added: 0.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-002.d

Injection Date: 22-Aug-2018 05:59:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD0

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

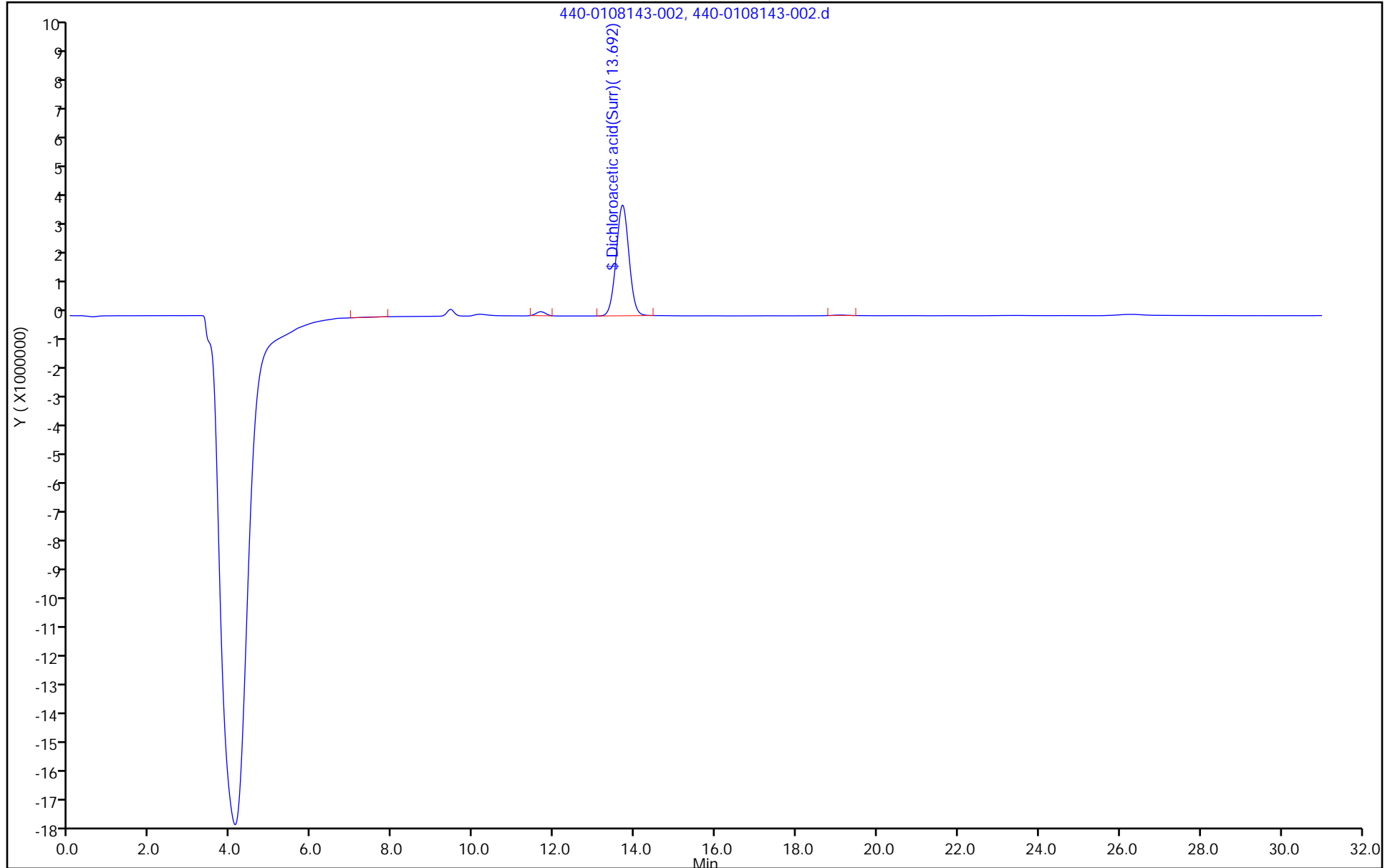
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-003.d
 Lims ID: STD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Aug-2018 06:35:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-003
 Misc. Info.: 3 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:17 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabovy Date: 22-Aug-2018 07:28:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.284	7.383	-0.099	3139793	20.0	21.6	
3 Bromate	8.325	8.325	0.000	412389	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.700	13.700	0.000	83350197	993.7	986.1	
4 Bromide	15.959	15.959	0.000	7297969	NC	NC	
2 Chlorate	17.350	17.350	0.000	2509702	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00075 Amount Added: 25.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-003.d

Injection Date: 22-Aug-2018 06:35:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD1

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

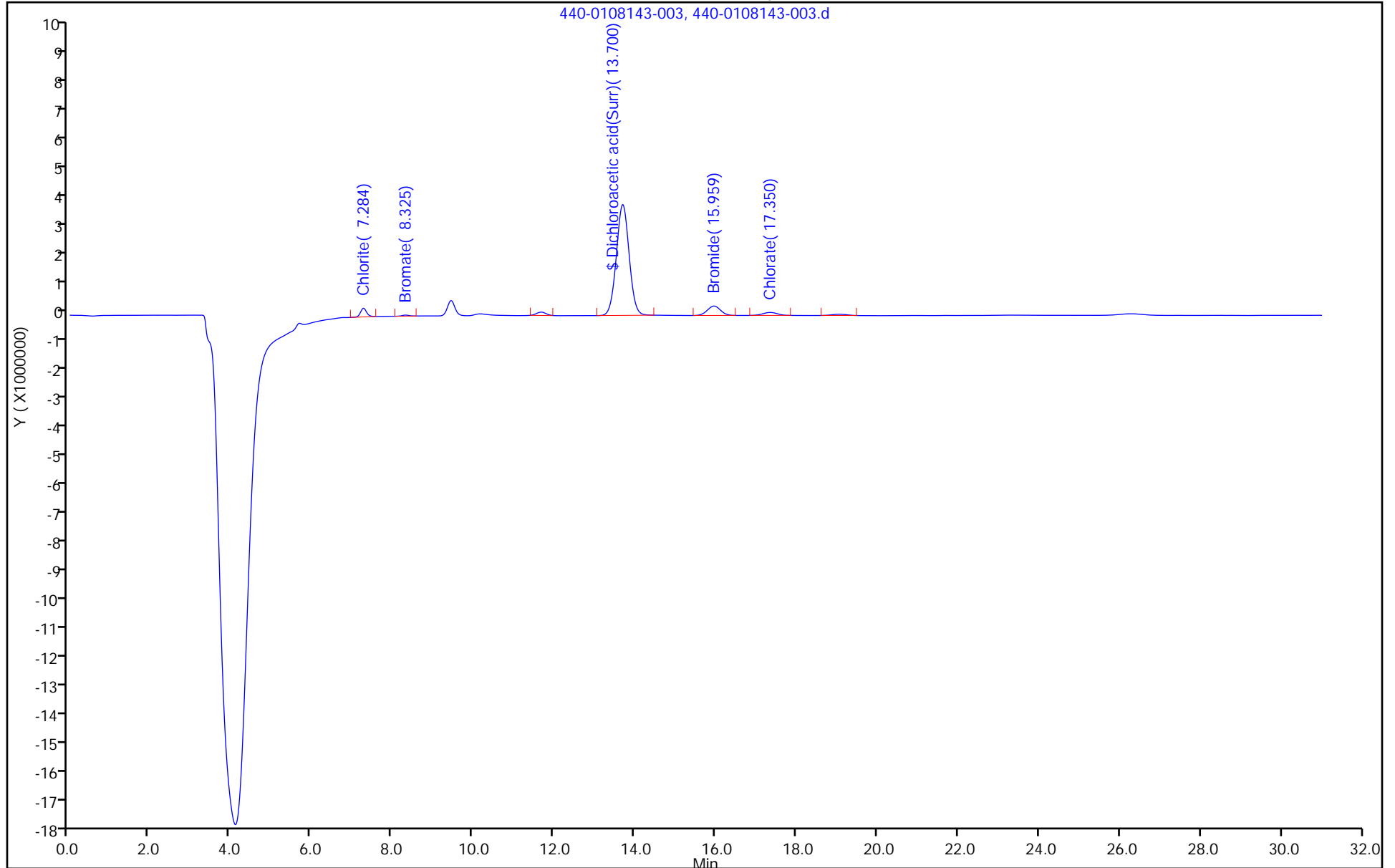
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-004.d
 Lims ID: STD2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Aug-2018 07:11:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-004
 Misc. Info.: 4 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:15 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabovy Date: 22-Aug-2018 07:58:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.292	7.383	-0.091	7684393	50.0	49.9	
3 Bromate	8.342	8.325	0.017	1017713	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.725	13.700	0.025	83115424	993.7	983.3	
4 Bromide	16.009	15.959	0.050	18572826	NC	NC	
2 Chlorate	17.400	17.350	0.050	6424738	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00075 Amount Added: 62.50 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-004.d

Injection Date: 22-Aug-2018 07:11:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD2

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

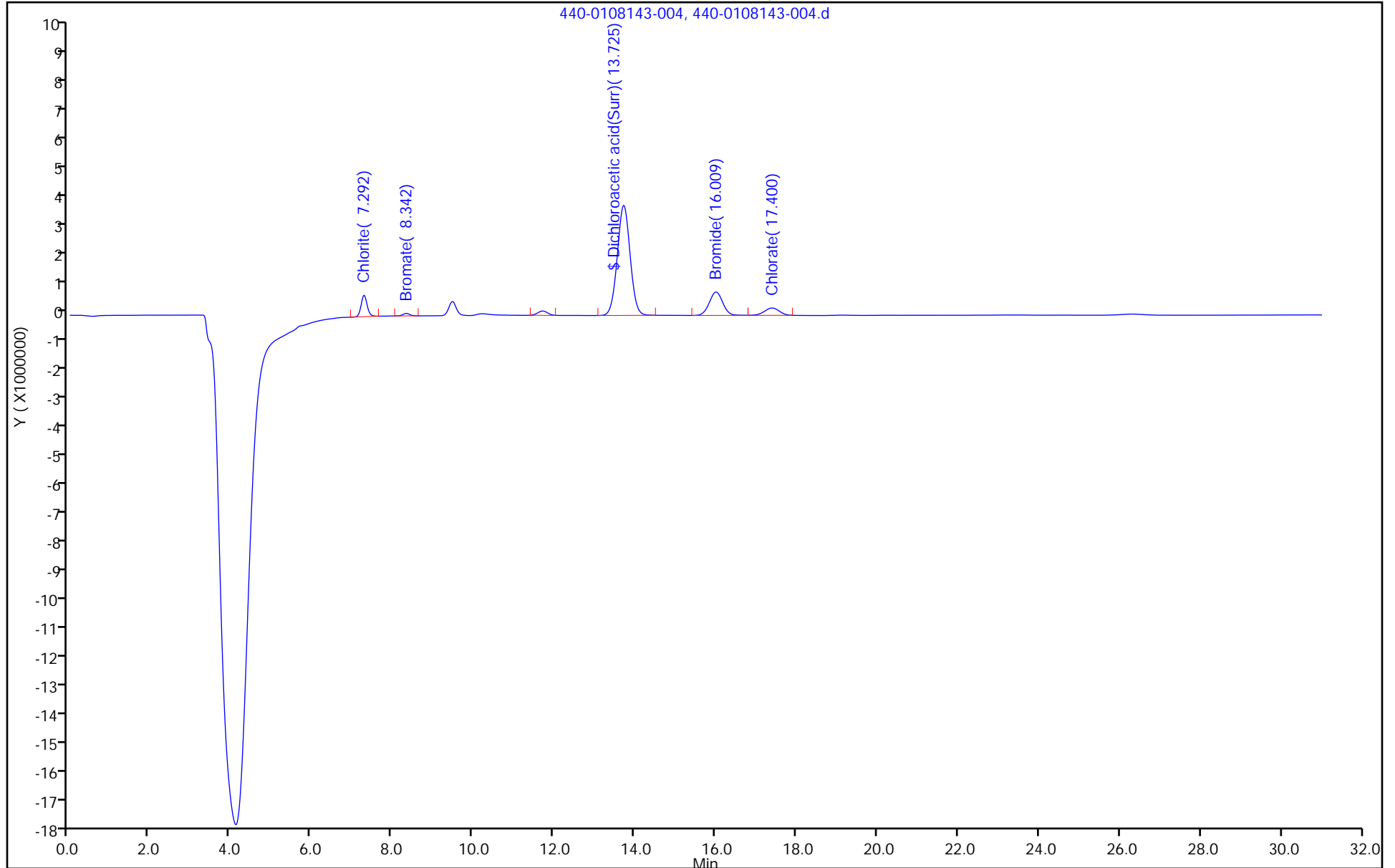
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-005.d
 Lims ID: STD3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Aug-2018 07:47:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-005
 Misc. Info.: 5 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:15 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.267	7.383	-0.116	15495824	100.0	98.5	
3 Bromate	8.309	8.325	-0.016	2071954	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.684	13.700	-0.016	83298013	993.7	985.5	
4 Bromide	15.925	15.959	-0.034	37154315	NC	NC	
2 Chlorate	17.317	17.350	-0.033	13029639	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00075 Amount Added: 125.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-005.d

Injection Date: 22-Aug-2018 07:47:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD3

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

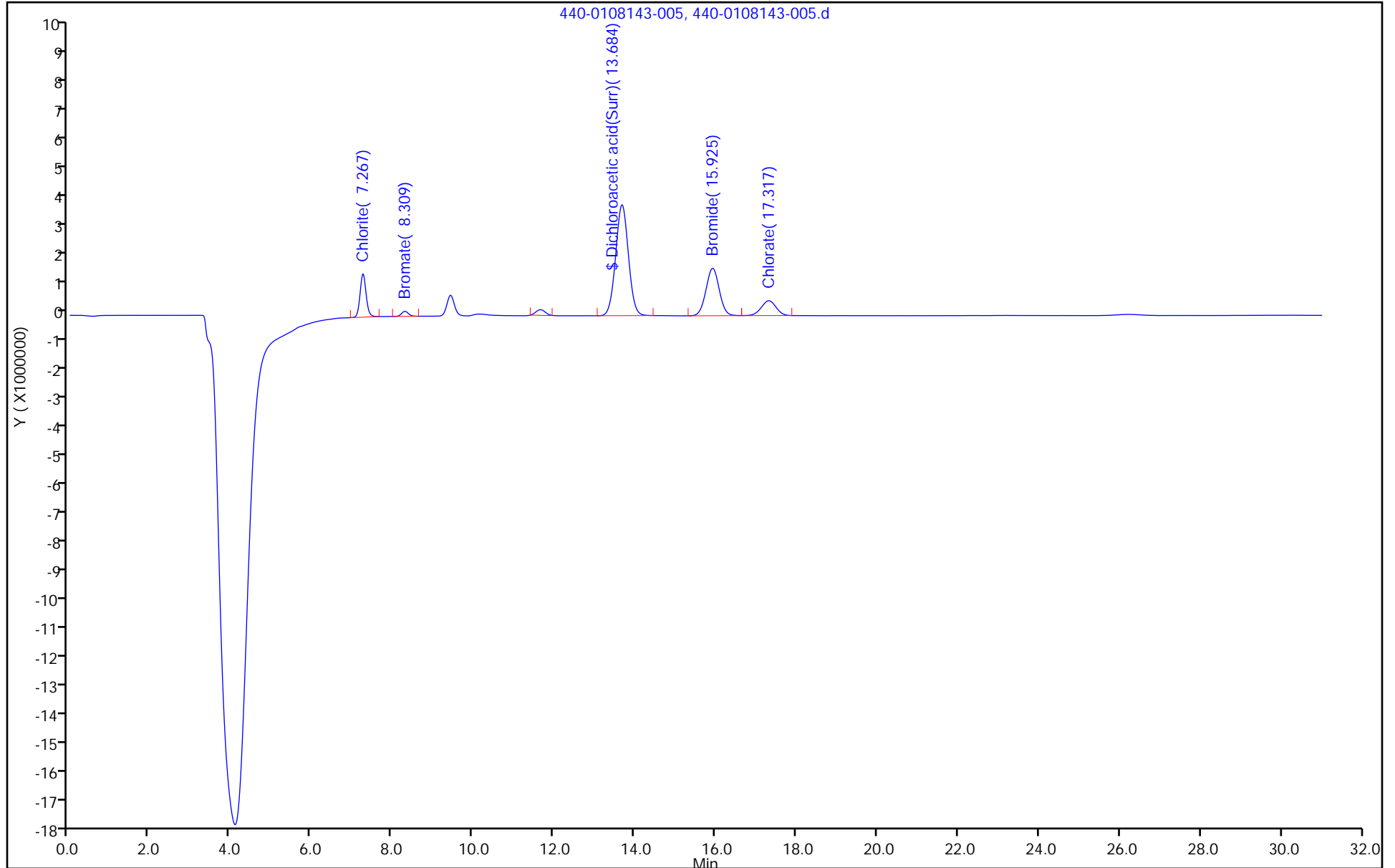
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-006.d
 Lims ID: STD4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Aug-2018 08:23:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-006
 Misc. Info.: 6 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:14 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.259	7.383	-0.124	31029561	200.0	195.1	
3 Bromate	8.292	8.325	-0.033	4053487	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.667	13.700	-0.033	86004839	993.7	1017.5	
4 Bromide	15.900	15.959	-0.059	74489996	NC	NC	
2 Chlorate	17.292	17.350	-0.058	26024250	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00075 Amount Added: 250.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-006.d

Injection Date: 22-Aug-2018 08:23:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD4

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

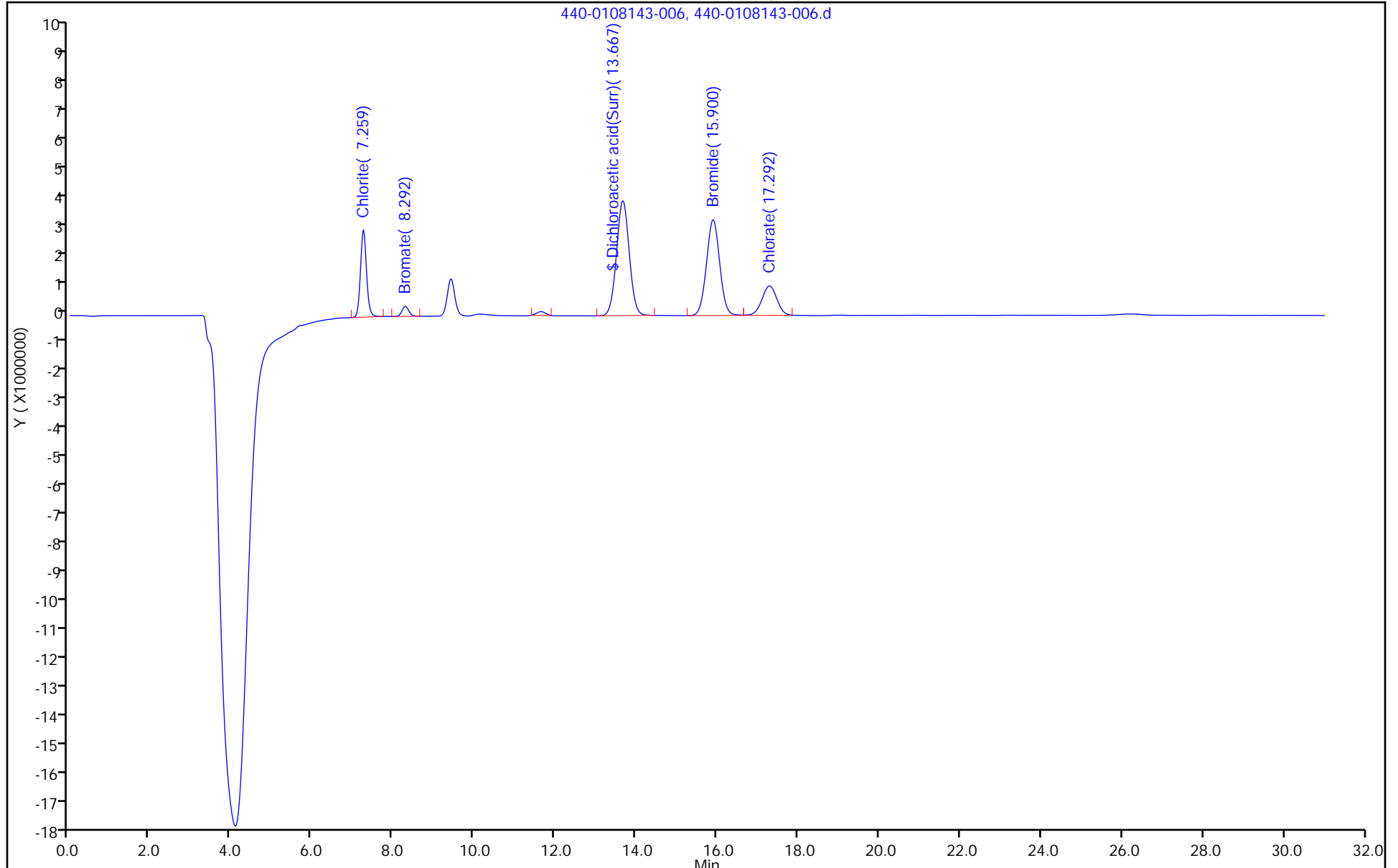
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Lims ID: STD5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-Aug-2018 09:00:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-007
 Misc. Info.: 7 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 09:40:13 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Aug-2018 09:40:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.267	7.383	-0.116	64426081	400.0	402.8	
3 Bromate	8.300	8.325	-0.025	8482481	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.667	13.700	-0.033	84956157	993.7	1005.1	
4 Bromide	15.933	15.959	-0.026	153094096	NC	NC	
2 Chlorate	17.325	17.350	-0.025	52749304	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00075 Amount Added: 500.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d

Injection Date: 22-Aug-2018 09:00:00

Instrument ID: IC-8

Operator ID:

Lims ID: STD5

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

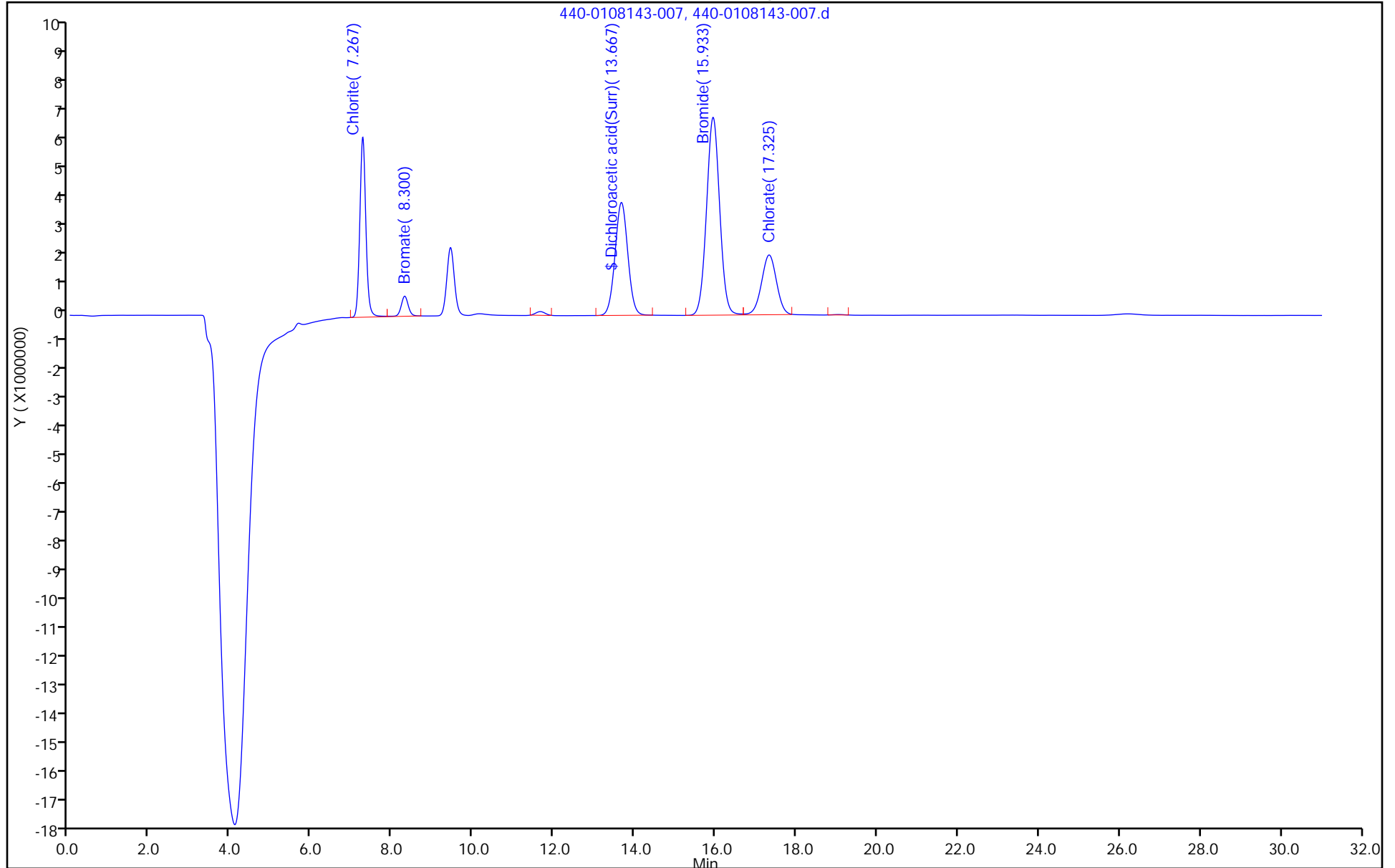
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



Calibration

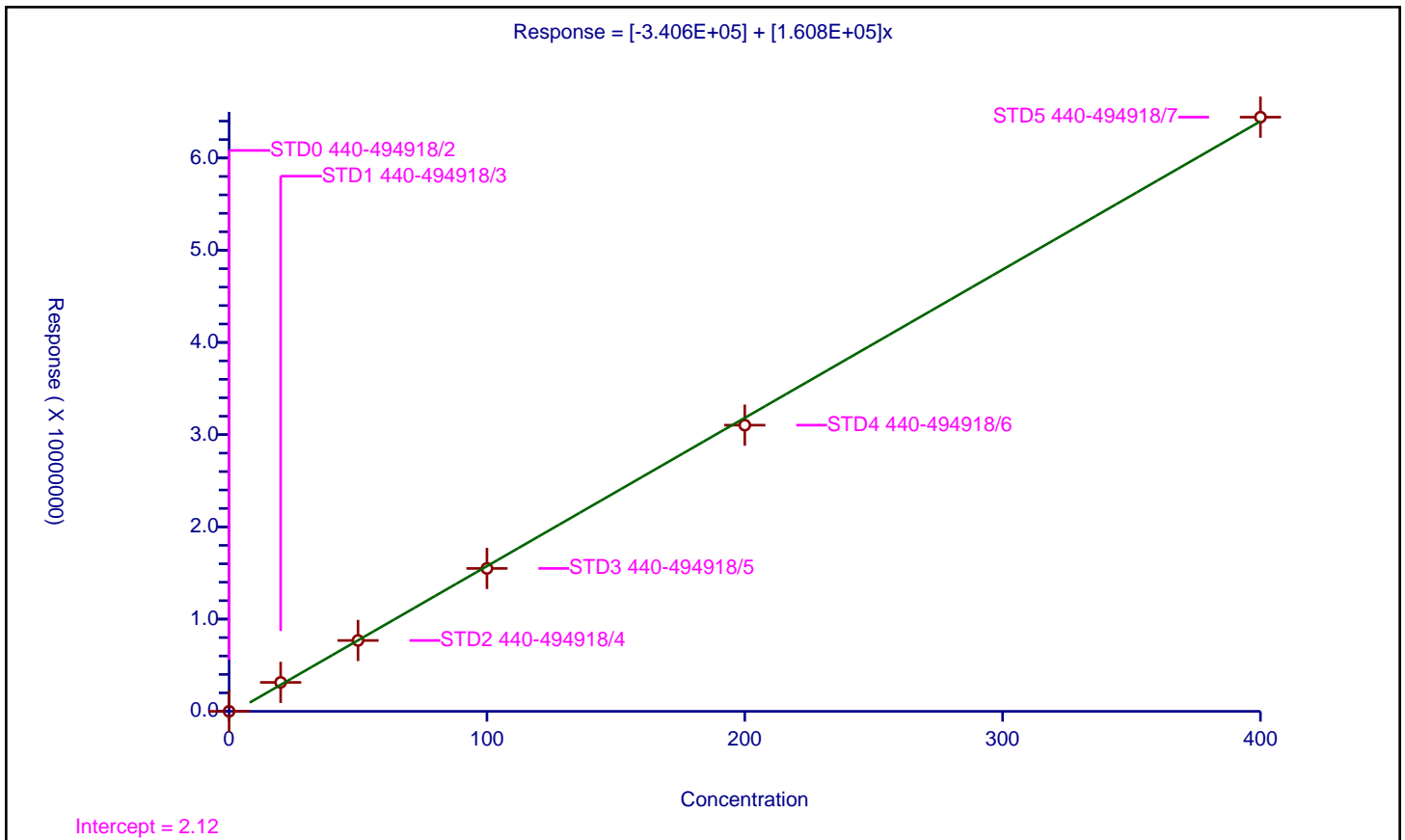
/ Chlorite

Curve Type: Linear
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	-3.406E+05
Slope:	1.608E+05

Error Coefficients	
Standard Error:	517000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-494918/2	0.0	0.0			NaN	Y
2	STD1 440-494918/3	20.0	3139793.0			156989.65	Y
3	STD2 440-494918/4	50.0	7684393.0			153687.86	Y
4	STD3 440-494918/5	100.0	15495824.0			154958.24	Y
5	STD4 440-494918/6	200.0	31029561.0			155147.805	Y
6	STD5 440-494918/7	400.0	64426081.0			161065.2025	Y



Calibration

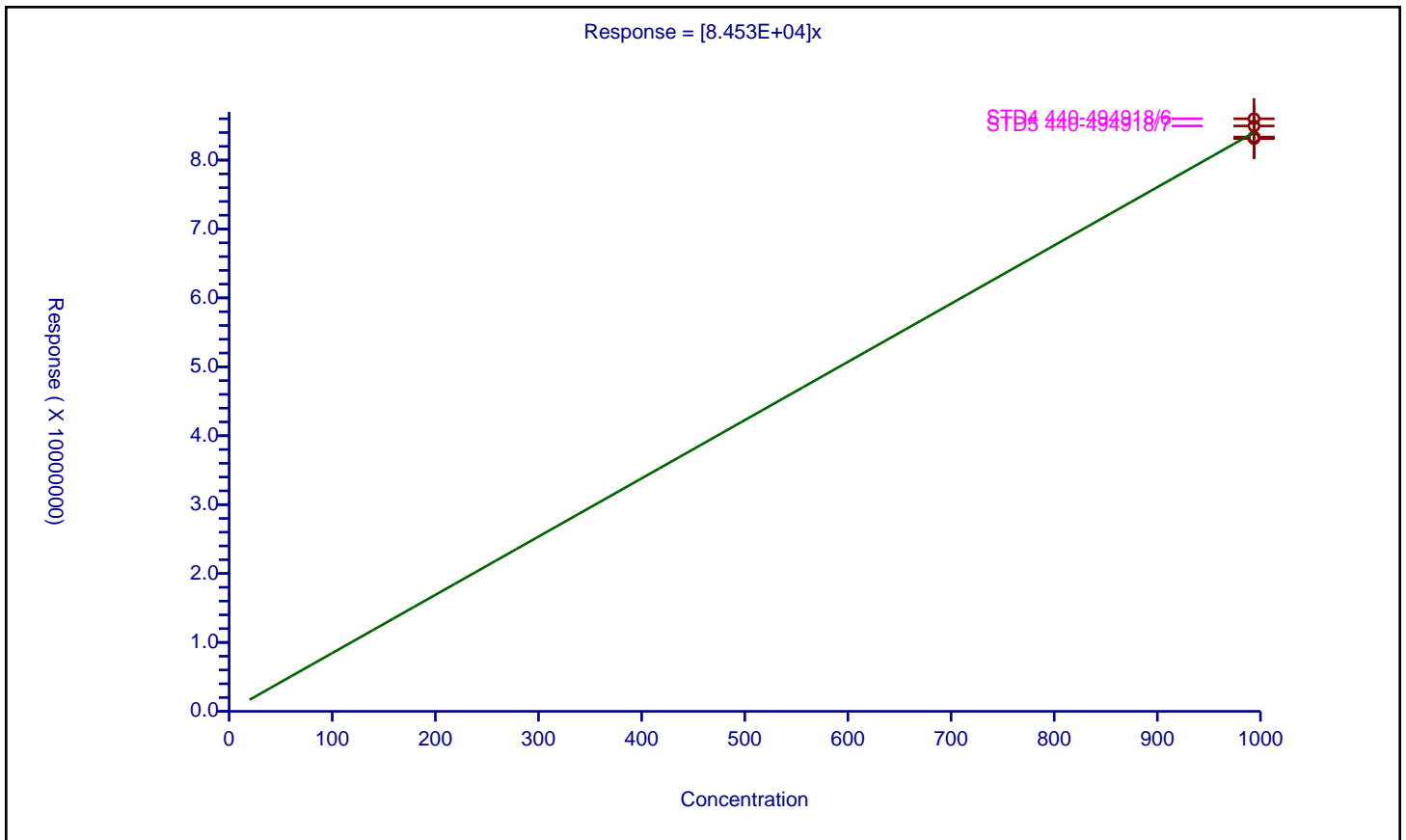
/ Dichloroacetic acid(Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.453E+04

Error Coefficients	
Standard Error:	1200000
Relative Standard Error:	1.4
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	STD0 440-494918/2	993.7109	83242483.0			83769.316609	Y
2	STD1 440-494918/3	993.7109	83350197.0			83877.712321	Y
3	STD2 440-494918/4	993.7109	83115424.0			83641.453465	Y
4	STD3 440-494918/5	993.7109	83298013.0			83825.198053	Y
5	STD4 440-494918/6	993.7109	86004839.0			86549.155293	Y
6	STD5 440-494918/7	993.7109	84956157.0			85493.836286	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505657/9 Calibration Date: 10/17/2018 12:45
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-009.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromate	Lin	131307	133491		30.1	30.0	0.4	15.0
Bromide	Lin	228944	228785		293	300	-2.3	15.0
Chlorate	Lin	199890	202527		119	120	-1.0	15.0
Dichloroacetic acid(Surr)	Ave	130879	132669		1010	994	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505657/9 Calibration Date: 10/17/2018 12:45
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-009.d

Analyte	RT	RT WINDOW	
		FROM	TO
Bromate	9.43	8.76	10.08
Bromide	18.23	16.96	19.51
Chlorate	19.97	18.89	20.88
Dichloroacetic acid(Surr)	15.58	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-009.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 17-Oct-2018 12:45:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-009
 Misc. Info.: ICV
 Operator ID: Instrument ID: IC-32
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:39:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.224	8.227	-0.003	28695612	NC	NC	
3 Bromate	9.425	9.420	0.005	4004731	30.0	30.1	
\$ 6 Dichloroacetic acid(Surr)	15.580	15.563	0.017	131834863	993.7	1007.3	
4 Bromide	18.232	18.235	-0.003	68635614	300.0	293.2	
2 Chlorate	19.965	19.885	0.080	24327597	120.1	118.9	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001ICV_00044 Amount Added: 150.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-009.d

Injection Date: 17-Oct-2018 12:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: ICV

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

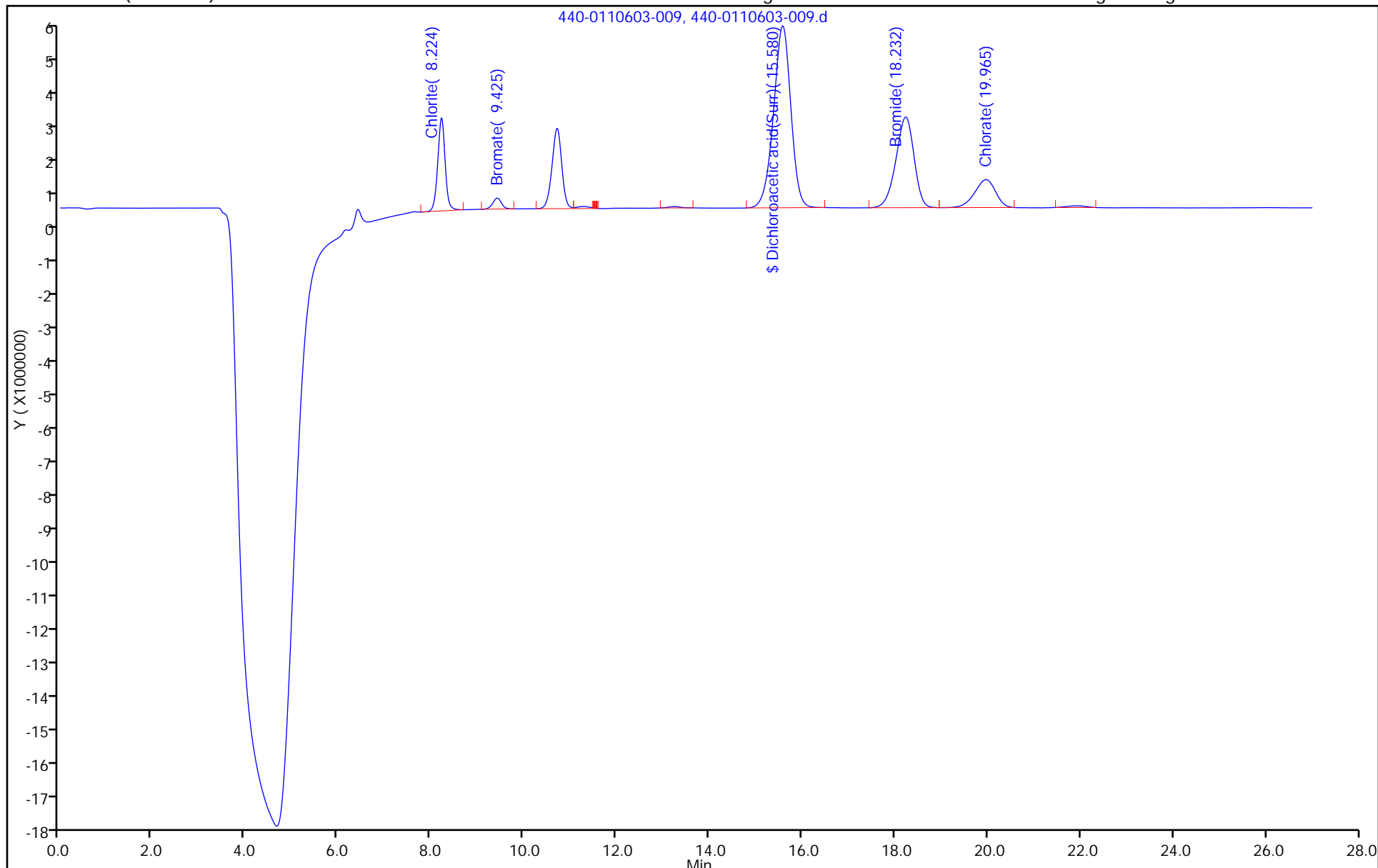
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505658/9 Calibration Date: 10/17/2018 12:45
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-009.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin	239783	239130		117	120	-2.5	15.0
Dichloroacetic acid(Surr)	Ave	130879	132669		1010	994	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-505658/9 Calibration Date: 10/17/2018 12:45
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-009.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	8.22	6.00	9.00
Dichloroacetic acid(Surr)	15.58	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-009.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 17-Oct-2018 12:45:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-009
 Misc. Info.: ICV
 Operator ID: Instrument ID: IC-32
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:39:14

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.224	8.227	-0.003	28695612	120.0	117.0	
3 Bromate	9.425	9.420	0.005	4004731	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.580	15.563	0.017	131834863	993.7	1007.3	
4 Bromide	18.232	18.235	-0.003	68635614	NC	NC	
2 Chlorate	19.965	19.885	0.080	24327597	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001ICV_00044 Amount Added: 150.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-009.d

Injection Date: 17-Oct-2018 12:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: ICV

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

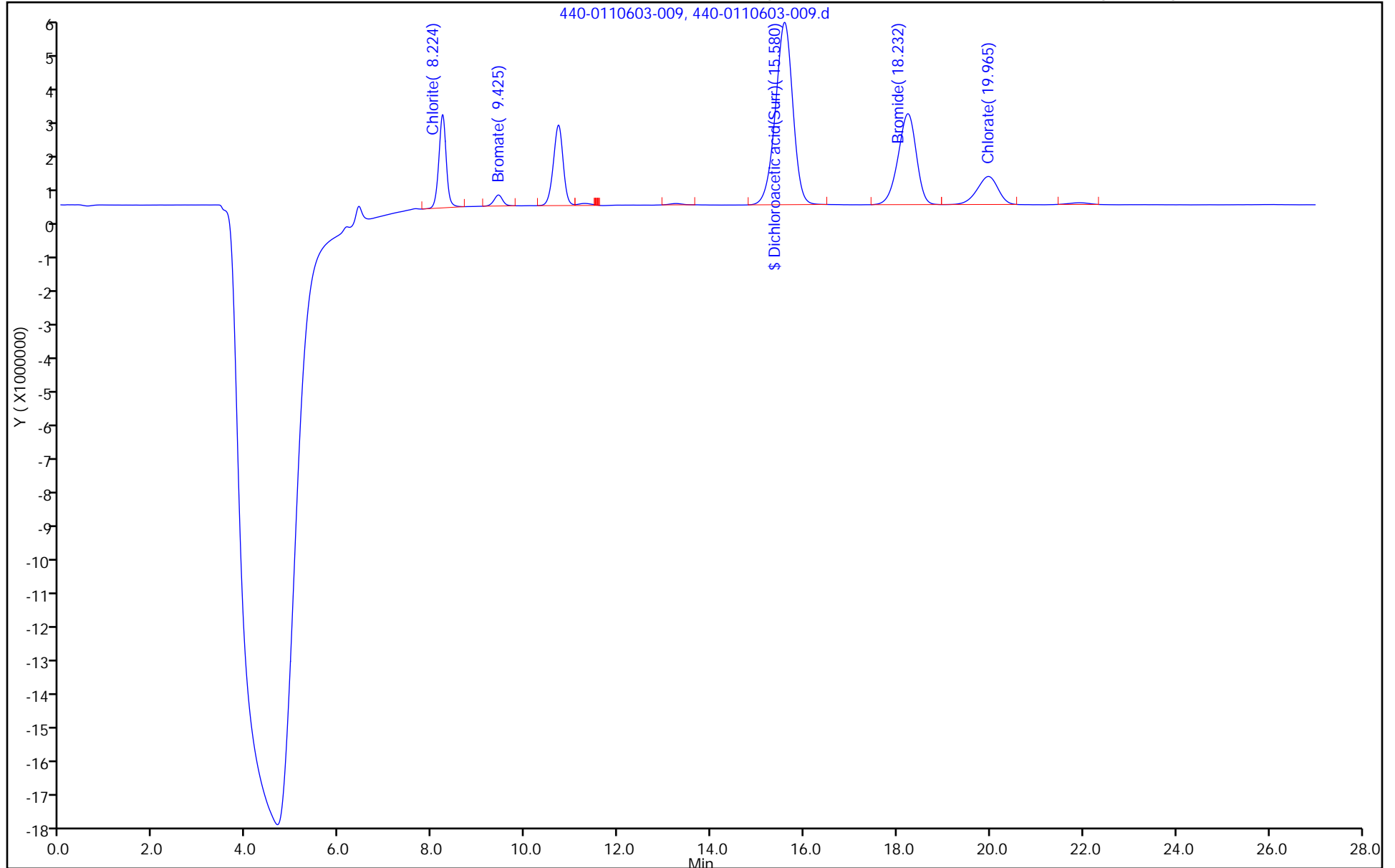
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505657/21 Calibration Date: 10/17/2018 18:44
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromate	Lin	131307	133261		50.1	50.0	0.2	15.0
Bromide	Lin	228944	230027		487	500	-2.7	15.0
Chlorate	Lin	199890	202635		197	200	-1.6	15.0
Dichloroacetic acid(Surr)	Ave	130879	131550		999	994	0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505657/21 Calibration Date: 10/17/2018 18:44
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-021.d

Analyte	RT	RT WINDOW	
		FROM	TO
Bromate	9.42	8.76	10.08
Bromide	18.16	16.96	19.51
Chlorate	19.89	18.89	20.88
Dichloroacetic acid(Surr)	15.59	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-021.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 17-Oct-2018 18:44:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-021
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:39:54

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.227	8.227	0.000	47965319	NC	NC	
3 Bromate	9.417	9.420	-0.003	6663045	50.0	50.1	
\$ 6 Dichloroacetic acid(Surr)	15.590	15.563	0.027	130723127	993.7	998.8	
4 Bromide	18.157	18.235	-0.078	115013502	500.0	486.6	
2 Chlorate	19.894	19.885	0.009	40527038	200.0	196.7	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-021.d

Injection Date: 17-Oct-2018 18:44:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 21

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

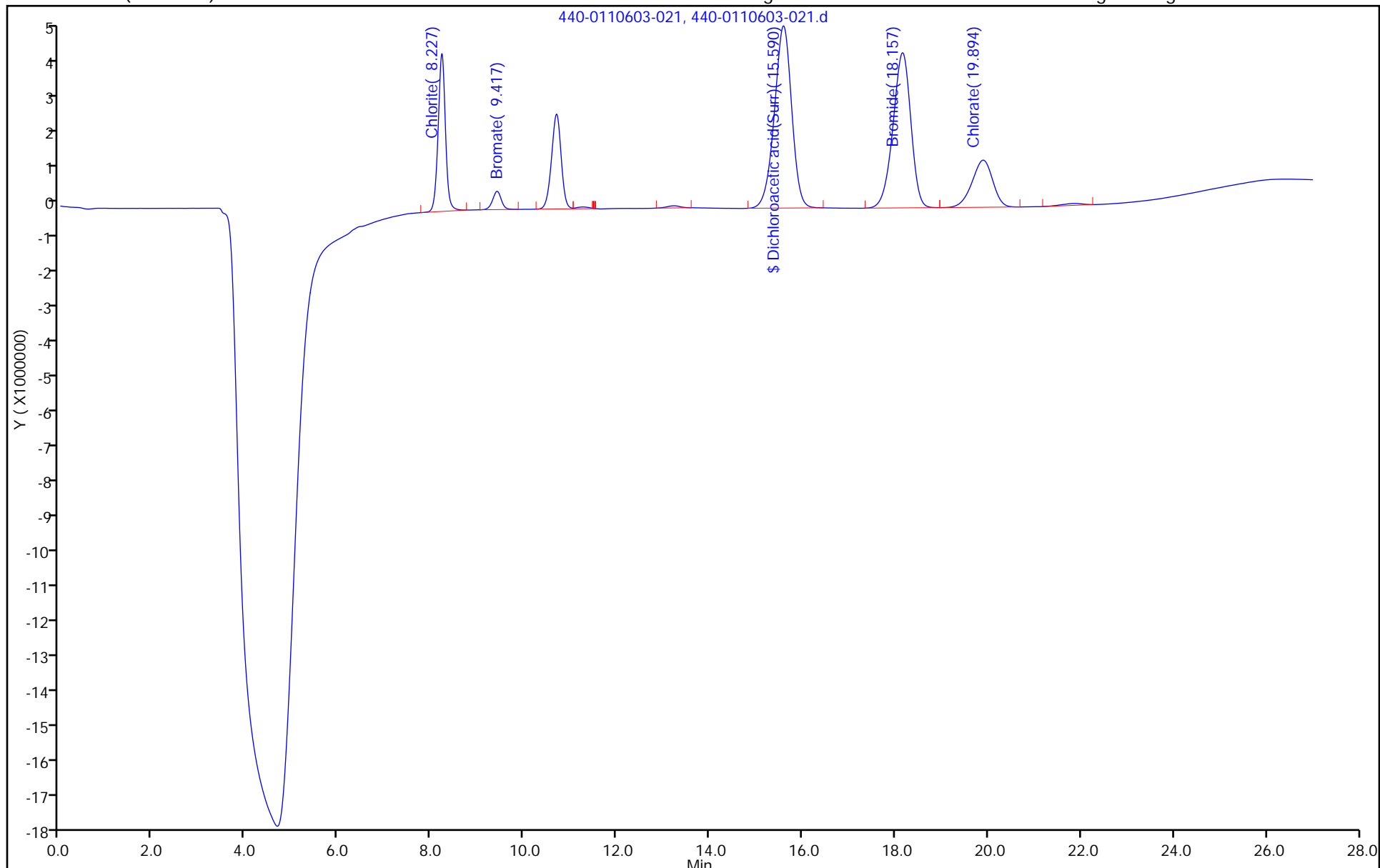
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505658/21 Calibration Date: 10/17/2018 18:44
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-021.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin	239783	239827		193	200	-3.3	15.0
Dichloroacetic acid(Surr)	Ave	130879	131550		999	994	0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505658/21 Calibration Date: 10/17/2018 18:44
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-021.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	8.23	6.00	9.00
Dichloroacetic acid(Surr)	15.59	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-021.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 17-Oct-2018 18:44:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-021
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:39:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.227	8.227	0.000	47965319	200.0	193.5	
3 Bromate	9.417	9.420	-0.003	6663045	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.590	15.563	0.027	130723127	993.7	998.8	
4 Bromide	18.157	18.235	-0.078	115013502	NC	NC	
2 Chlorate	19.894	19.885	0.009	40527038	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-021.d

Injection Date: 17-Oct-2018 18:44:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 21

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

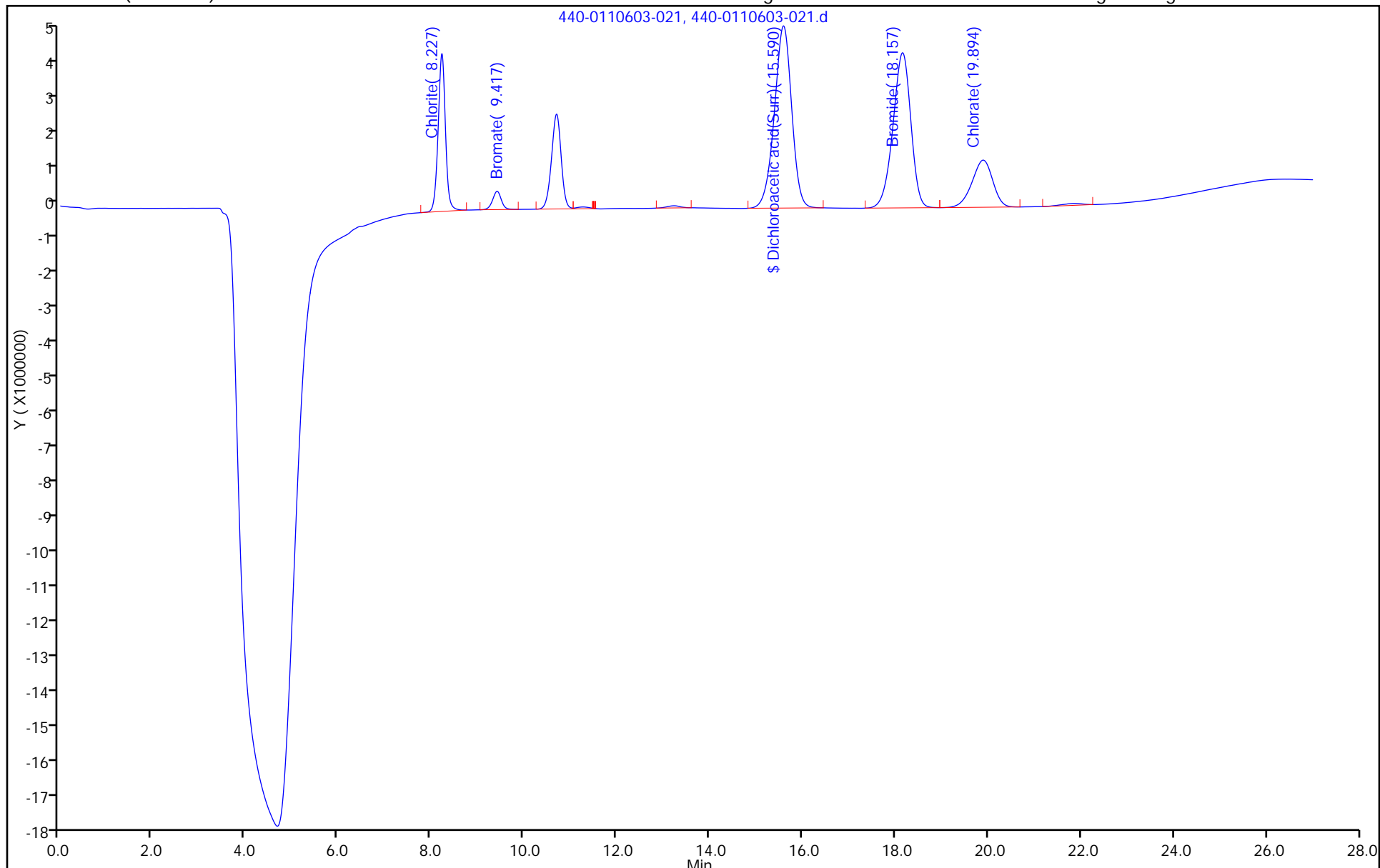
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505657/33 Calibration Date: 10/18/2018 00:43
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-033.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromate	Lin	131307	138816		26.1	25.0	4.5	15.0
Bromide	Lin	228944	230984		248	250	-0.9	15.0
Chlorate	Lin	199890	204650		100	100	0.3	15.0
Dichloroacetic acid(Surr)	Ave	130879	131453		998	994	0.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505657/33 Calibration Date: 10/18/2018 00:43
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-033.d

Analyte	RT	RT WINDOW	
		FROM	TO
Bromate	9.45	8.76	10.08
Bromide	18.37	16.96	19.51
Chlorate	20.09	18.89	20.88
Dichloroacetic acid(Surr)	15.58	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-033.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Oct-2018 00:43:00 ALS Bottle#: 0 Worklist Smp#: 33
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-033
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:44:31

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.237	8.227	0.010	24116057	NC	NC	
3 Bromate	9.451	9.420	0.031	3470404	25.0	26.1	
\$ 6 Dichloroacetic acid(Surr)	15.579	15.563	0.016	130626710	993.7	998.1	
4 Bromide	18.373	18.235	0.138	57745940	250.0	247.8	
2 Chlorate	20.085	19.885	0.200	20464962	100.0	100.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-033.d

Injection Date: 18-Oct-2018 00:43:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

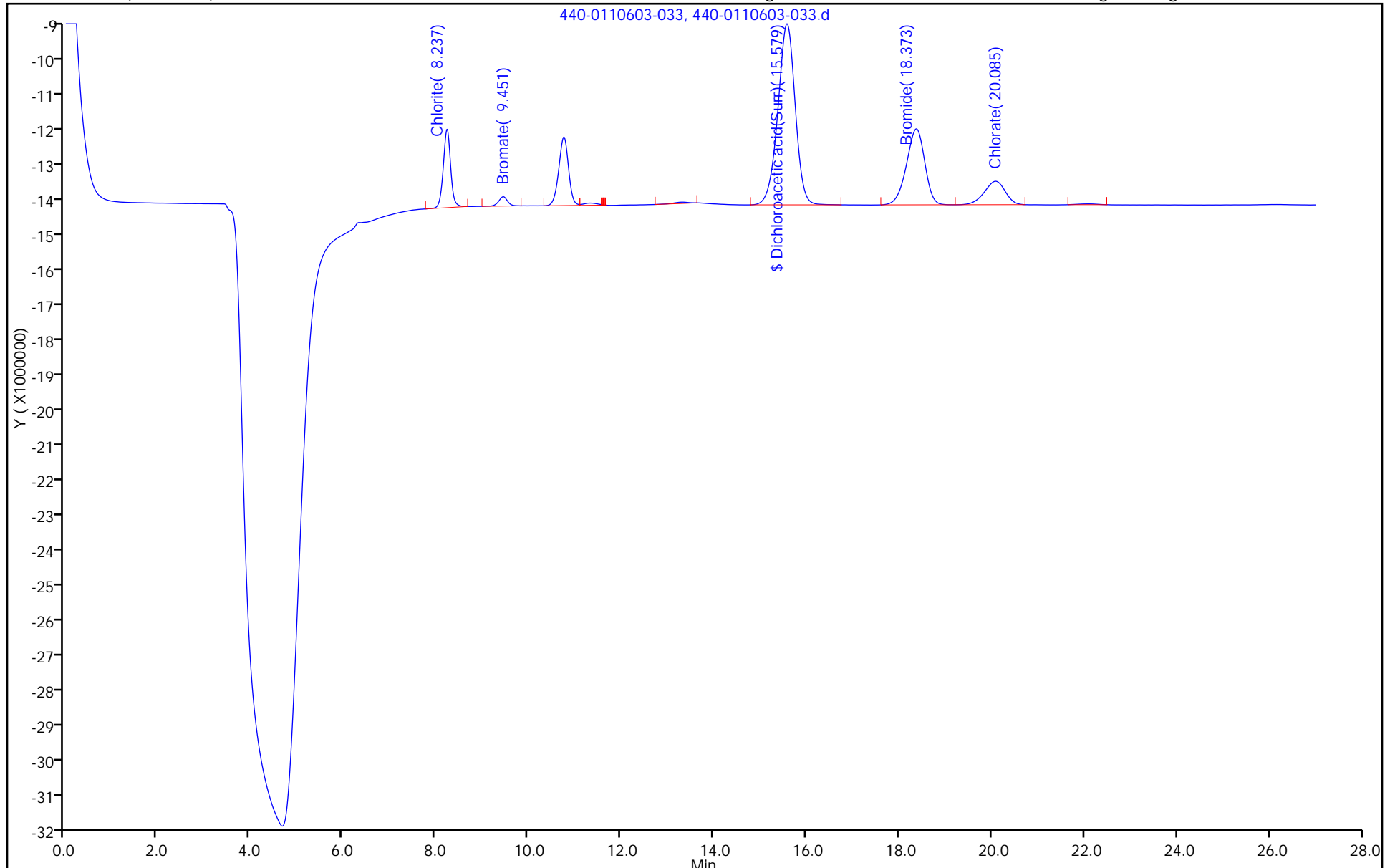
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505658/33 Calibration Date: 10/18/2018 00:43
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-033.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin	239783	241161		98.9	100	-1.1	15.0
Dichloroacetic acid(Surr)	Ave	130879	131453		998	994	0.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-505658/33 Calibration Date: 10/18/2018 00:43
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110603-033.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	8.24	6.00	9.00
Dichloroacetic acid(Surr)	15.58	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-033.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Oct-2018 00:43:00 ALS Bottle#: 0 Worklist Smp#: 33
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-033
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:44:31

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.237	8.227	0.010	24116057	100.0	98.9	
3 Bromate	9.451	9.420	0.031	3470404	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.579	15.563	0.016	130626710	993.7	998.1	
4 Bromide	18.373	18.235	0.138	57745940	NC	NC	
2 Chlorate	20.085	19.885	0.200	20464962	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-033.d

Injection Date: 18-Oct-2018 00:43:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

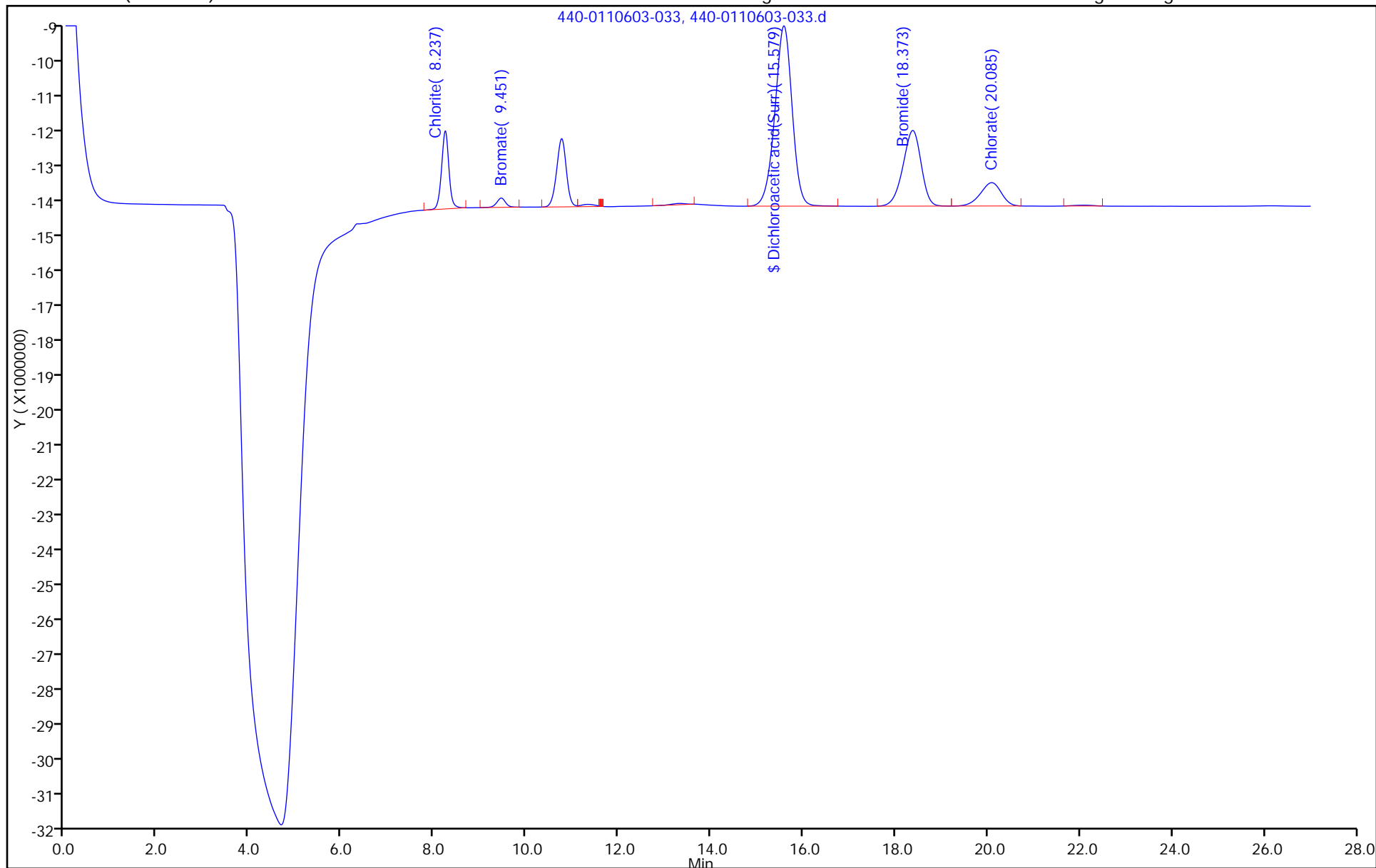
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506165/1 Calibration Date: 10/19/2018 04:52
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110708-001.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromate	Lin	131307	132067		24.9	25.0	-0.6	15.0
Bromide	Lin	228944	230794		248	250	-1.0	15.0
Chlorate	Lin	199890	202243		99.2	100	-0.8	15.0
Dichloroacetic acid(Surr)	Ave	130879	132720		1010	994	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506165/1 Calibration Date: 10/19/2018 04:52
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110708-001.d

Analyte	RT	RT WINDOW	
		FROM	TO
Bromate	9.47	8.76	10.08
Bromide	18.57	16.96	19.51
Chlorate	20.25	18.89	20.88
Dichloroacetic acid(Surr)	15.56	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-001.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 19-Oct-2018 04:52:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-001
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 06:09:16 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 06:09:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.237	8.227	0.010	24202187	NC	NC	
3 Bromate	9.472	9.420	0.052	3301677	25.0	24.9	
\$ 6 Dichloroacetic acid(Surr)	15.562	15.563	-0.001	131885558	993.7	1007.7	
4 Bromide	18.572	18.235	0.337	57698449	250.0	247.6	
2 Chlorate	20.249	19.885	0.364	20224302	100.0	99.2	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-001.d

Injection Date: 19-Oct-2018 04:52:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

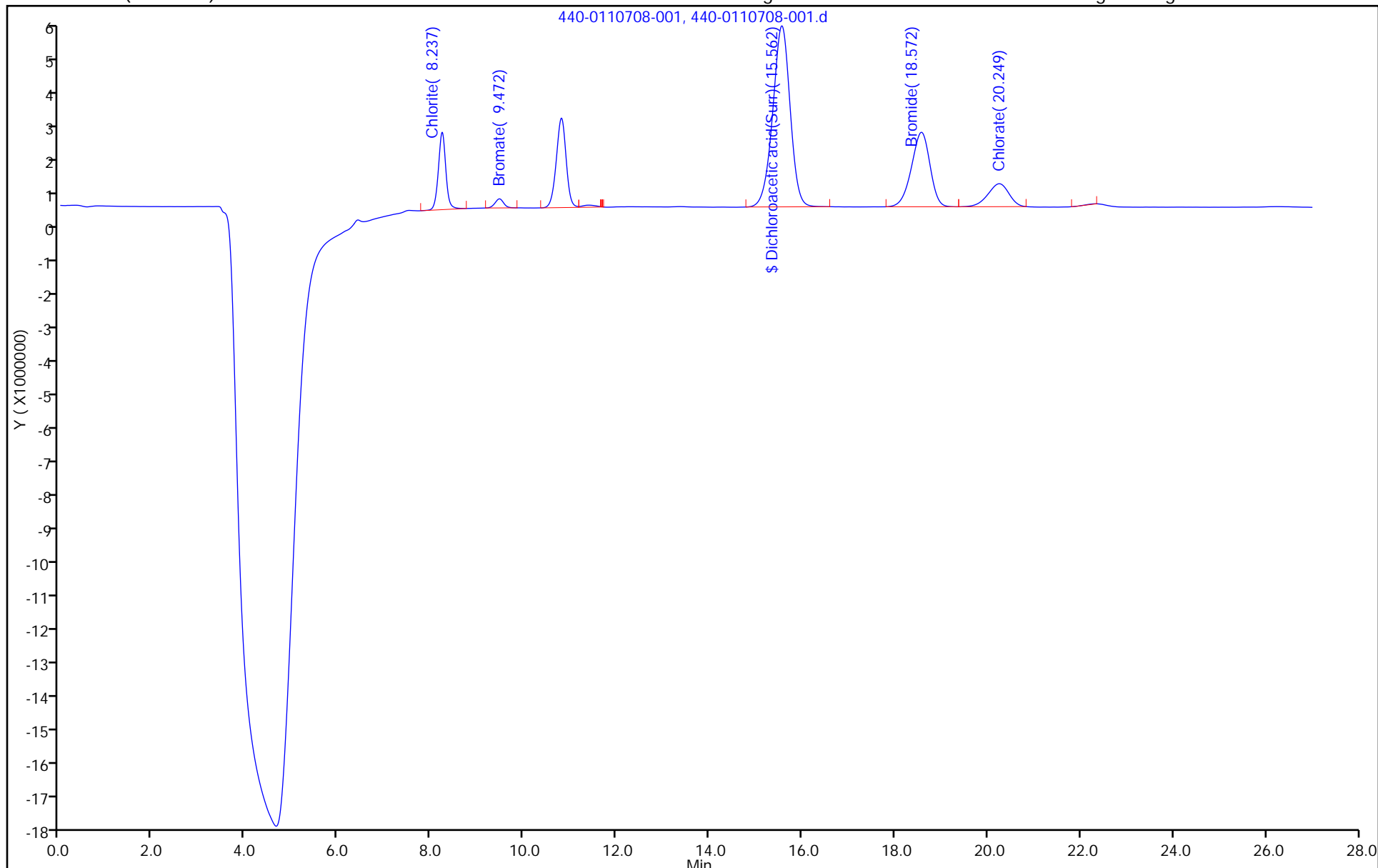
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506165/13 Calibration Date: 10/19/2018 10:50
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110708-013.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bromate	Lin	131307	132337		49.7	50.0	-0.5	15.0
Bromide	Lin	228944	229992		487	500	-2.7	15.0
Chlorate	Lin	199890	203051		197	200	-1.4	15.0
Dichloroacetic acid(Surr)	Ave	130879	134779		1020	994	3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506165/13 Calibration Date: 10/19/2018 10:50
 Instrument ID: IC-32 Calib Start Date: 10/17/2018 09:24
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 10/17/2018 11:56
 Lab File ID: 440-0110708-013.d

Analyte	RT	RT WINDOW	
		FROM	TO
Bromate	9.41	8.76	10.08
Bromide	18.11	16.96	19.51
Chlorate	19.82	18.89	20.88
Dichloroacetic acid(Surr)	15.55	14.47	16.65

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-013.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 19-Oct-2018 10:50:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-013
 Misc. Info.: CCV
 Operator ID: Instrument ID: IC-32
 Sublist: chrom-EPA 300.1*sub1
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:52 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.219	8.227	-0.008	47952081	NC	NC	
3 Bromate	9.407	9.420	-0.013	6616867	50.0	49.7	
\$ 6 Dichloroacetic acid(Surr)	15.549	15.563	-0.014	133931154	993.7	1023.3	
4 Bromide	18.113	18.235	-0.122	114996217	500.0	486.6	
2 Chlorate	19.816	19.885	-0.069	40610131	200.0	197.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-013.d

Injection Date: 19-Oct-2018 10:50:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCV

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

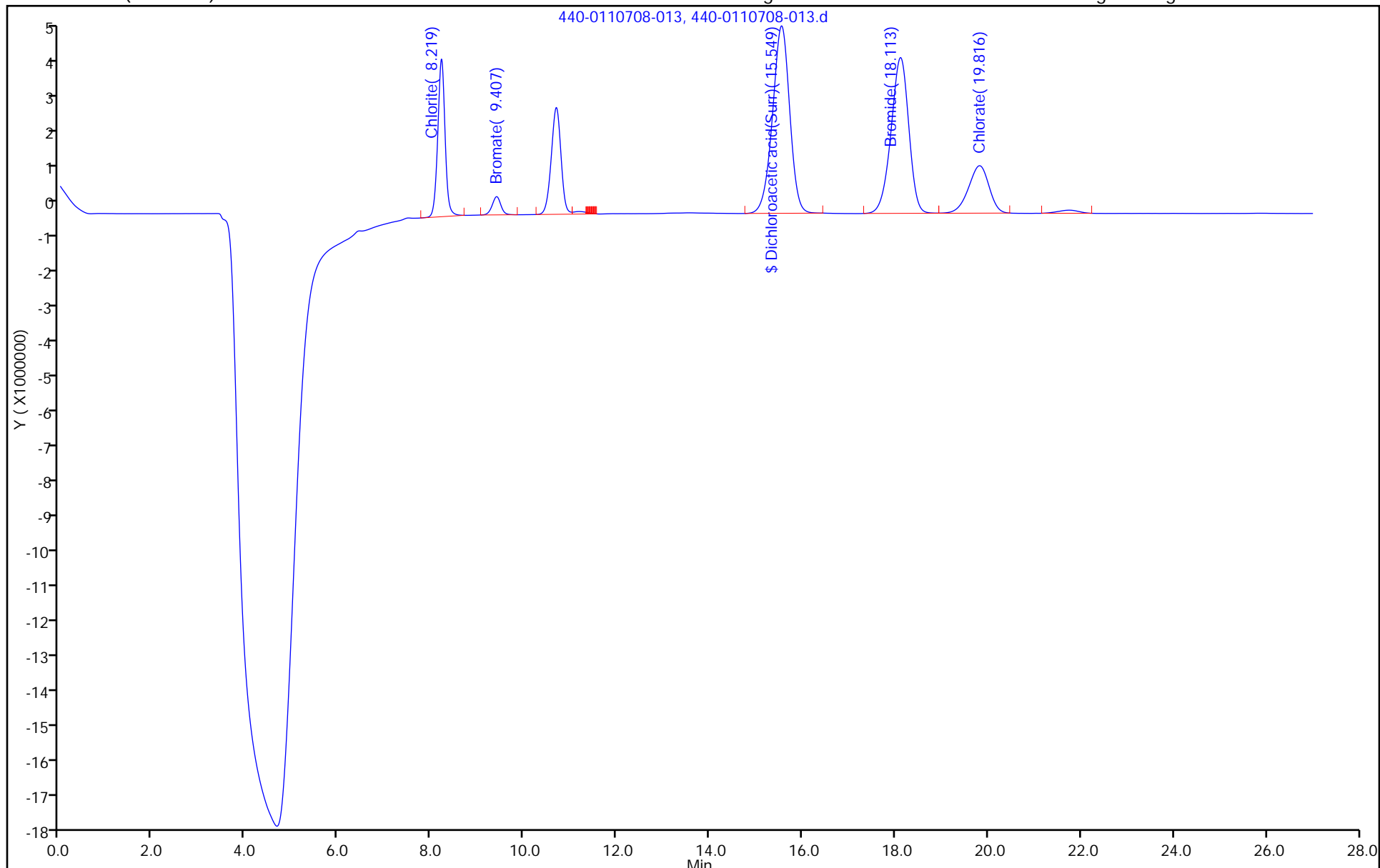
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-494918/8 Calibration Date: 08/22/2018 09:44
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0108143-008.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin		156456		119	120	-0.9	15.0
Dichloroacetic acid(Surr)	Ave	84526	85084		1000	994	0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: ICV 440-494918/8 Calibration Date: 08/22/2018 09:44
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0108143-008.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	7.27	7.00	8.00
Dichloroacetic acid(Surr)	13.68	12.74	14.66

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-008.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 22-Aug-2018 09:44:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-008
 Misc. Info.: 8 EB
 Operator ID: Instrument ID: IC-8
 Sublist:

Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 11:23:10 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Aug-2018 10:24:50

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.267	7.383	-0.116	18774701	120.0	118.9	
3 Bromate	8.309	8.325	-0.016	2479761	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.675	13.700	-0.025	84548651	993.7	1000.3	
4 Bromide	15.942	15.959	-0.017	45114701	NC	NC	
2 Chlorate	17.325	17.350	-0.025	15943276	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001ICV_00043 Amount Added: 150.00 Units: uL
 WCDCA_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-008.d

Injection Date: 22-Aug-2018 09:44:00

Instrument ID: IC-8

Operator ID:

Lims ID: ICV

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

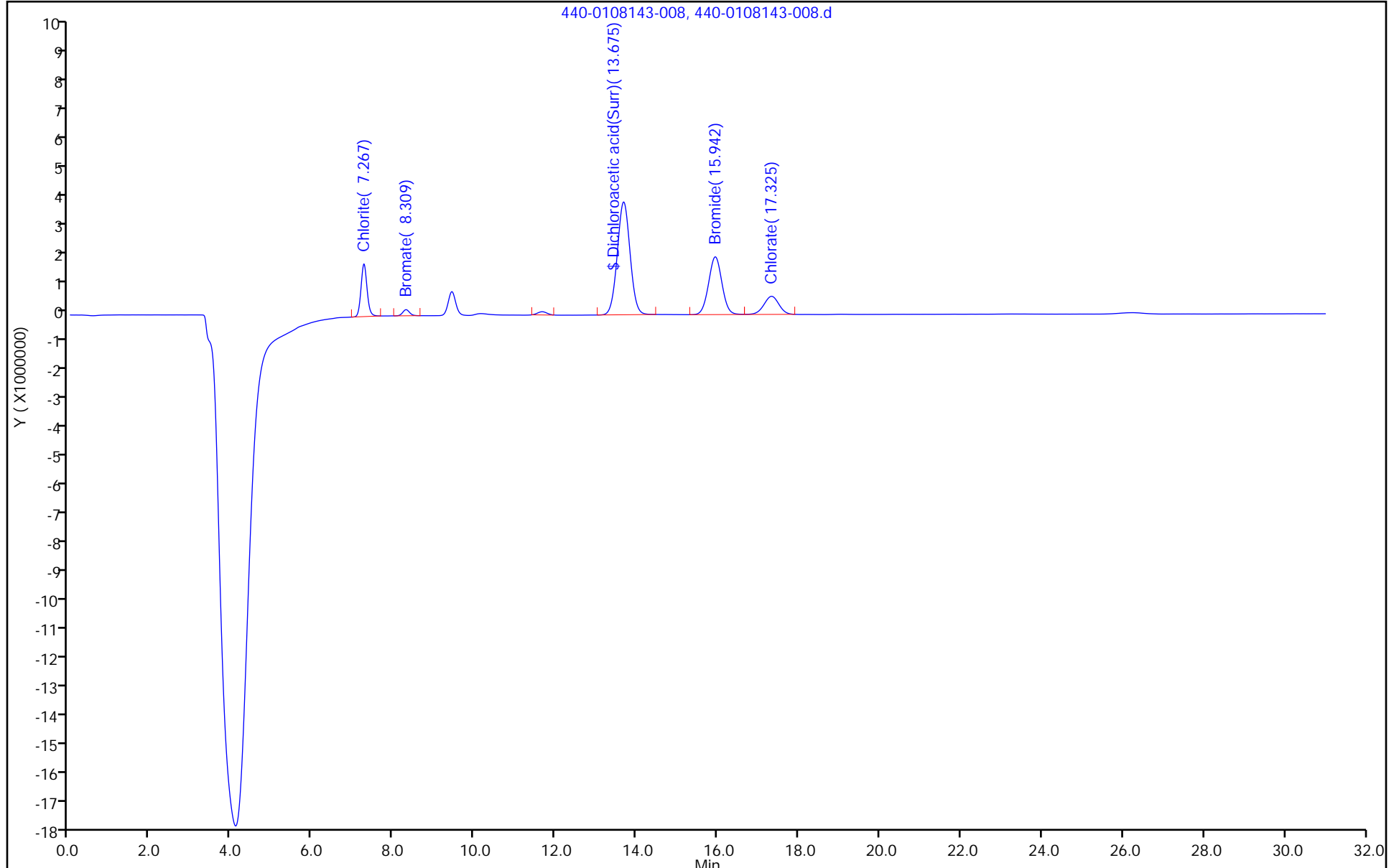
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/1 Calibration Date: 10/21/2018 05:22
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-001.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin		155972		99.1	100	-0.9	15.0
Dichloroacetic acid(Surr)	Ave	84526	85186		1000	994	0.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/1 Calibration Date: 10/21/2018 05:22
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-001.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	7.23	7.00	8.00
Dichloroacetic acid(Surr)	13.31	12.28	14.12

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-001.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Oct-2018 05:22:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-001
 Misc. Info.: 1 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 07:53:58 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 07:53:18

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.225	7.150	0.075	15597176	100.0	99.1	
3 Bromate	8.234	8.117	0.117	2177314	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.309	13.200	0.109	84650336	993.7	1001.5	
4 Bromide	15.659	15.209	0.450	37302205	NC	NC	
2 Chlorate	16.867	16.475	0.392	13798921	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-001.d

Injection Date: 21-Oct-2018 05:22:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCV

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

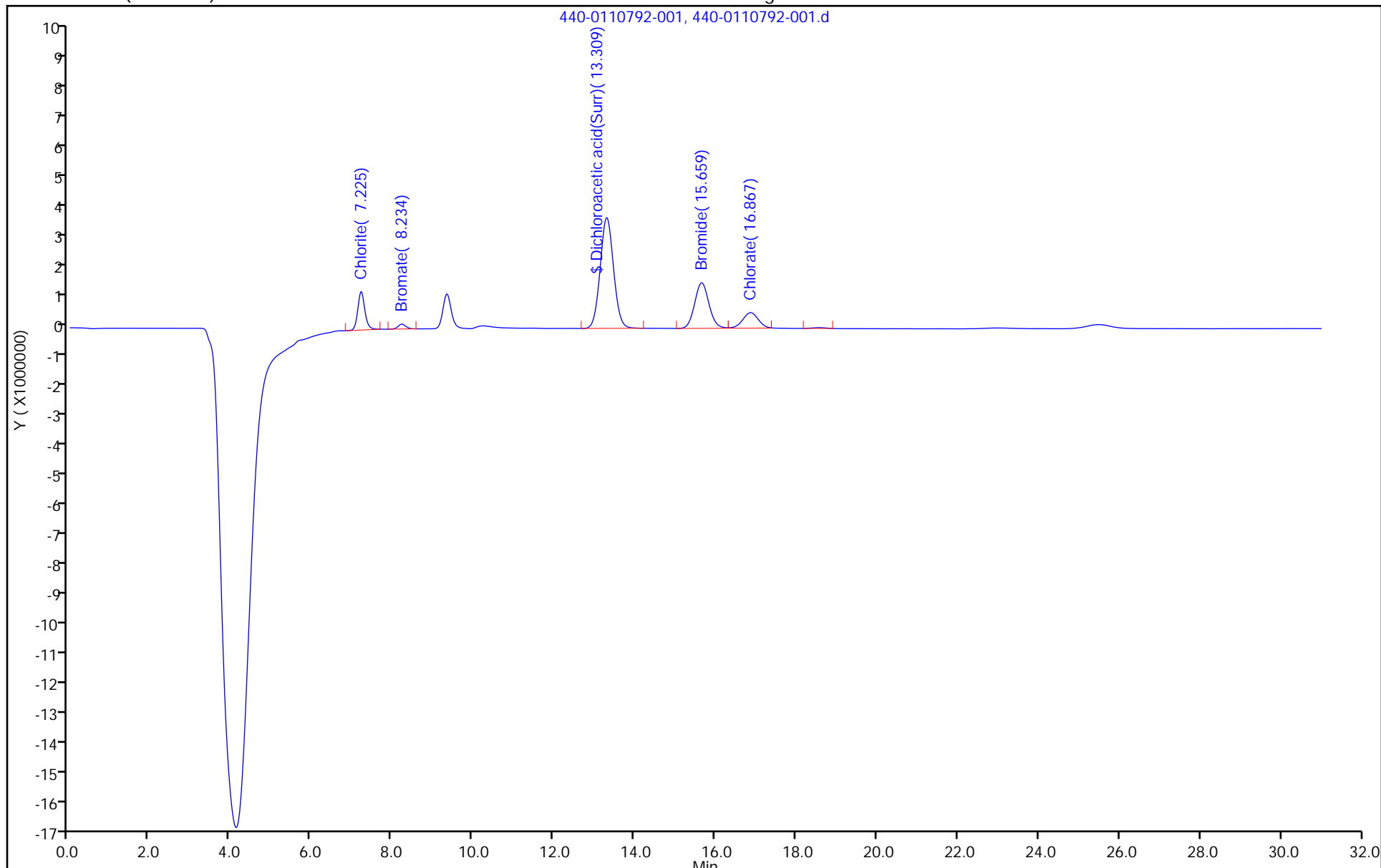
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/13 Calibration Date: 10/21/2018 12:37
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-013.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin		153425		193	200	-3.5	15.0
Dichloroacetic acid(Surr)	Ave	84526	85918		1010	994	1.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/13 Calibration Date: 10/21/2018 12:37
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-013.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	7.21	7.00	8.00
Dichloroacetic acid(Surr)	13.30	12.28	14.12

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-013.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Oct-2018 12:37:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-013
 Misc. Info.: 13 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:42:23

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.208	7.150	0.058	30685037	200.0	192.9	
3 Bromate	8.200	8.117	0.083	4364946	NC	NC	M
\$ 6 Dichloroacetic acid(Surr)	13.300	13.200	0.100	85377313	993.7	1010.1	
4 Bromide	15.517	15.209	0.308	74227318	NC	NC	
2 Chlorate	16.758	16.475	0.283	27233037	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-013.d

Injection Date: 21-Oct-2018 12:37:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCV

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

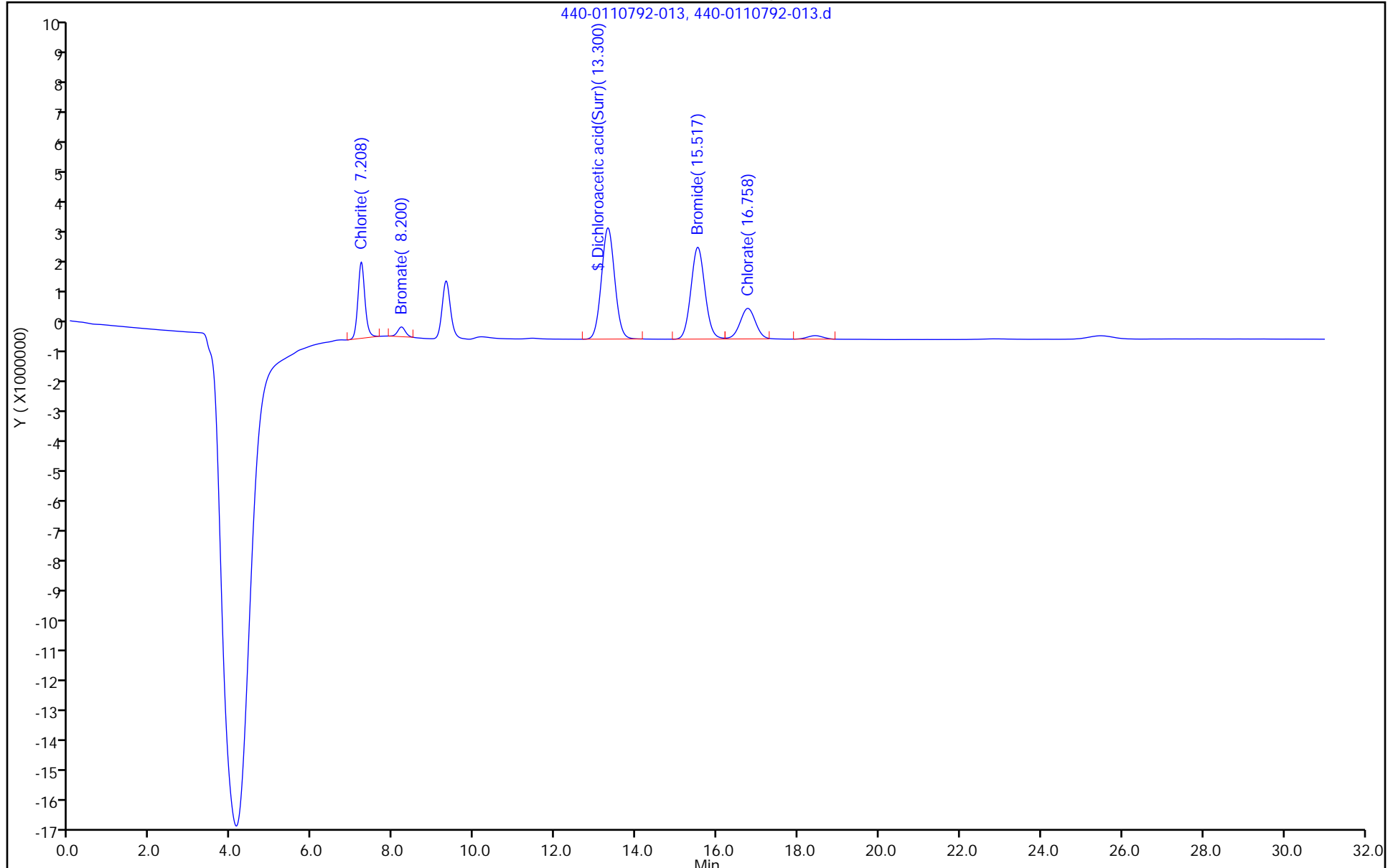
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/25 Calibration Date: 10/21/2018 19:52
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-025.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin		153459		97.5	100	-2.5	15.0
Dichloroacetic acid(Surr)	Ave	84526	85483		1000	994	1.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/25 Calibration Date: 10/21/2018 19:52
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-025.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	7.21	7.00	8.00
Dichloroacetic acid(Surr)	13.33	12.28	14.12

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-025.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Oct-2018 19:52:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-025
 Misc. Info.: 25 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:47:22

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.209	7.150	0.059	15345854	100.0	97.5	Ma
3 Bromate	8.184	8.117	0.067	1985347	NC	NC	Ma
\$ 6 Dichloroacetic acid(Surr)	13.325	13.200	0.125	84945064	993.7	1005.0	
4 Bromide	15.400	15.209	0.191	37541203	NC	NC	
2 Chlorate	16.659	16.475	0.184	13599241	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-025.d

Injection Date: 21-Oct-2018 19:52:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCV

Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

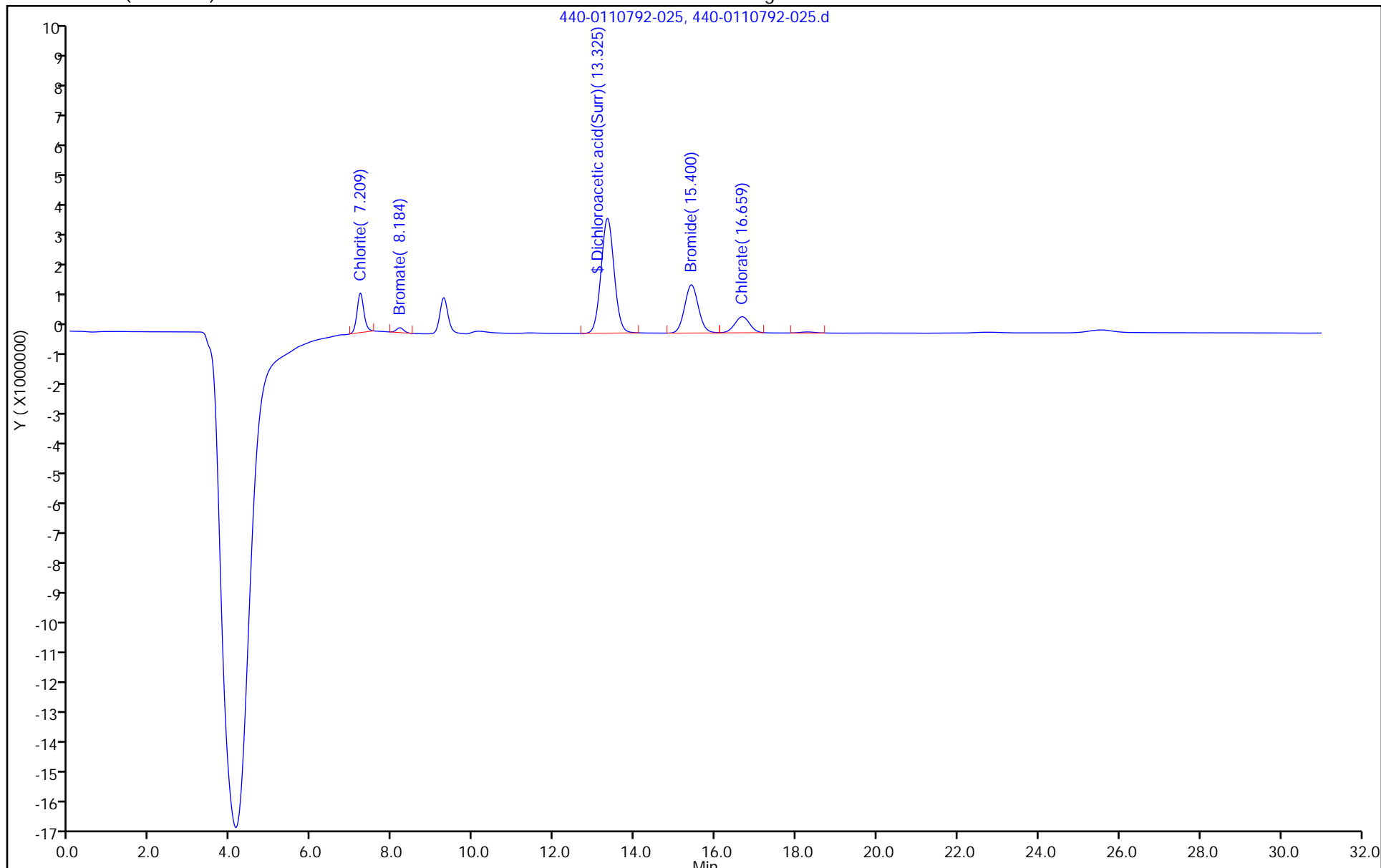
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine

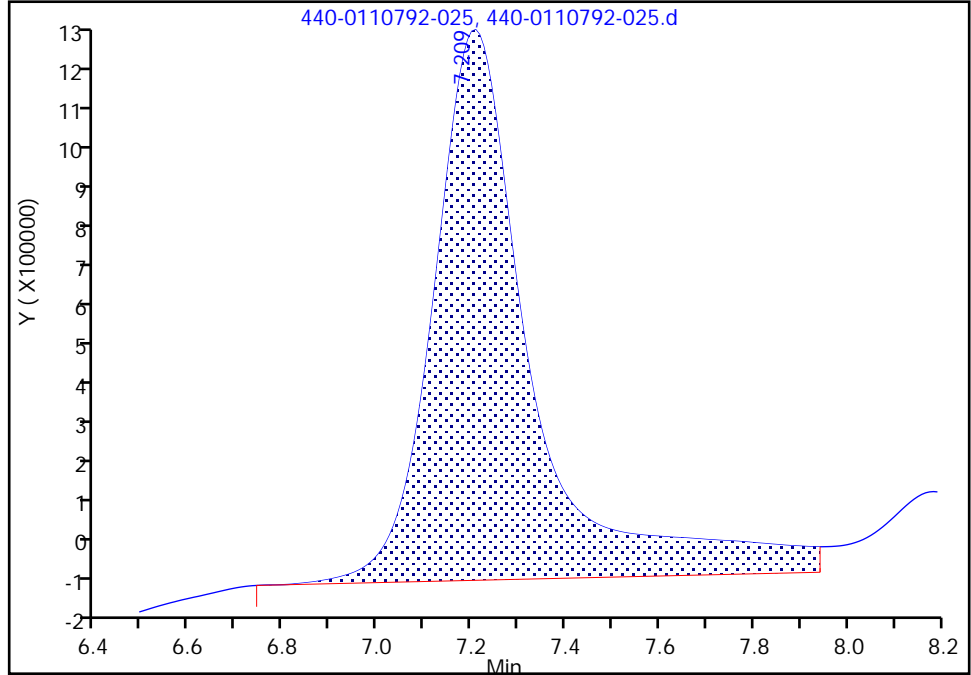
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-025.d
Injection Date: 21-Oct-2018 19:52:00 Instrument ID: IC-8
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

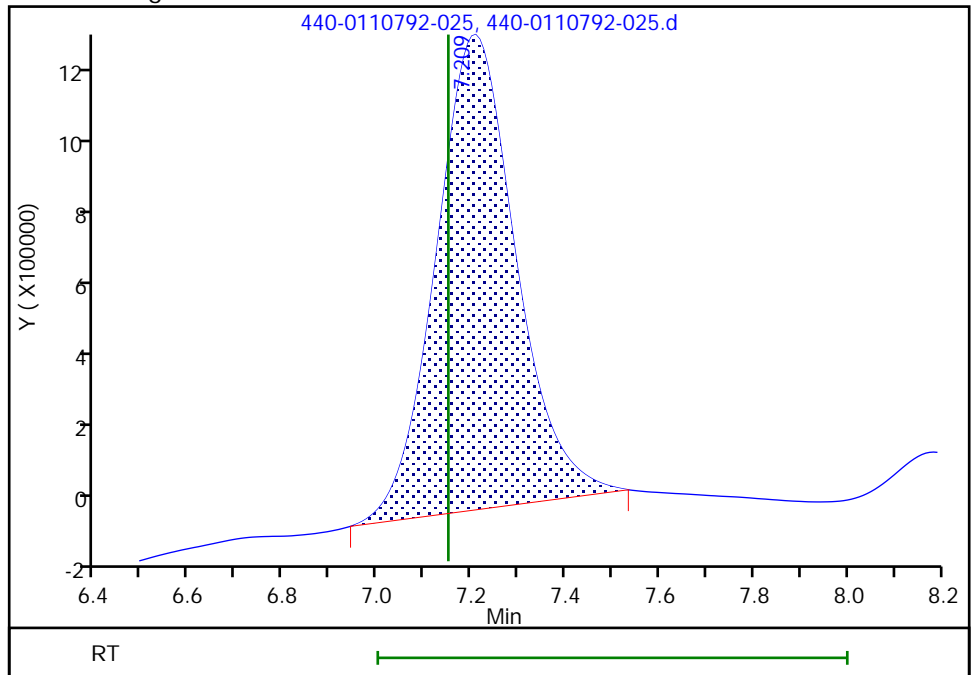
RT: 7.21
Area: 19767401
Amount: 0
Amount Units: ug/l

Processing Integration Results



RT: 7.21
Area: 15345854
Amount: 97.549988
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:47:15
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/37 Calibration Date: 10/22/2018 03:07
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-037.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorite	Lin		156824		197	200	-1.4	15.0
Dichloroacetic acid(Surr)	Ave	84526	84105		989	994	-0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Lab Sample ID: CCV 440-506501/37 Calibration Date: 10/22/2018 03:07
 Instrument ID: IC-8 Calib Start Date: 08/22/2018 05:59
 GC Column: AS9-HC ID: 4.00 (mm) Calib End Date: 08/22/2018 09:00
 Lab File ID: 440-0110792-037.d

Analyte	RT	RT WINDOW	
		FROM	TO
Chlorite	7.21	7.00	8.00
Dichloroacetic acid(Surr)	13.29	12.28	14.12

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-037.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-Oct-2018 03:07:00 ALS Bottle#: 0 Worklist Smp#: 37
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-037
 Misc. Info.: 37 EB
 Operator ID: Instrument ID: IC-8
 Sublist: chrom-300.1_C8*sub2
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:55:18 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:55:18

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.209	7.150	0.059	31364781	200.0	197.2	
3 Bromate	8.192	8.117	0.075	4255957	NC	NC	M
\$ 6 Dichloroacetic acid(Surr)	13.292	13.200	0.092	83575947	993.7	988.8	
4 Bromide	15.459	15.209	0.250	72613796	NC	NC	M
2 Chlorate	16.692	16.475	0.217	27214088	NC	NC	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-037.d

Injection Date: 22-Oct-2018 03:07:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCV

Worklist Smp#: 37

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

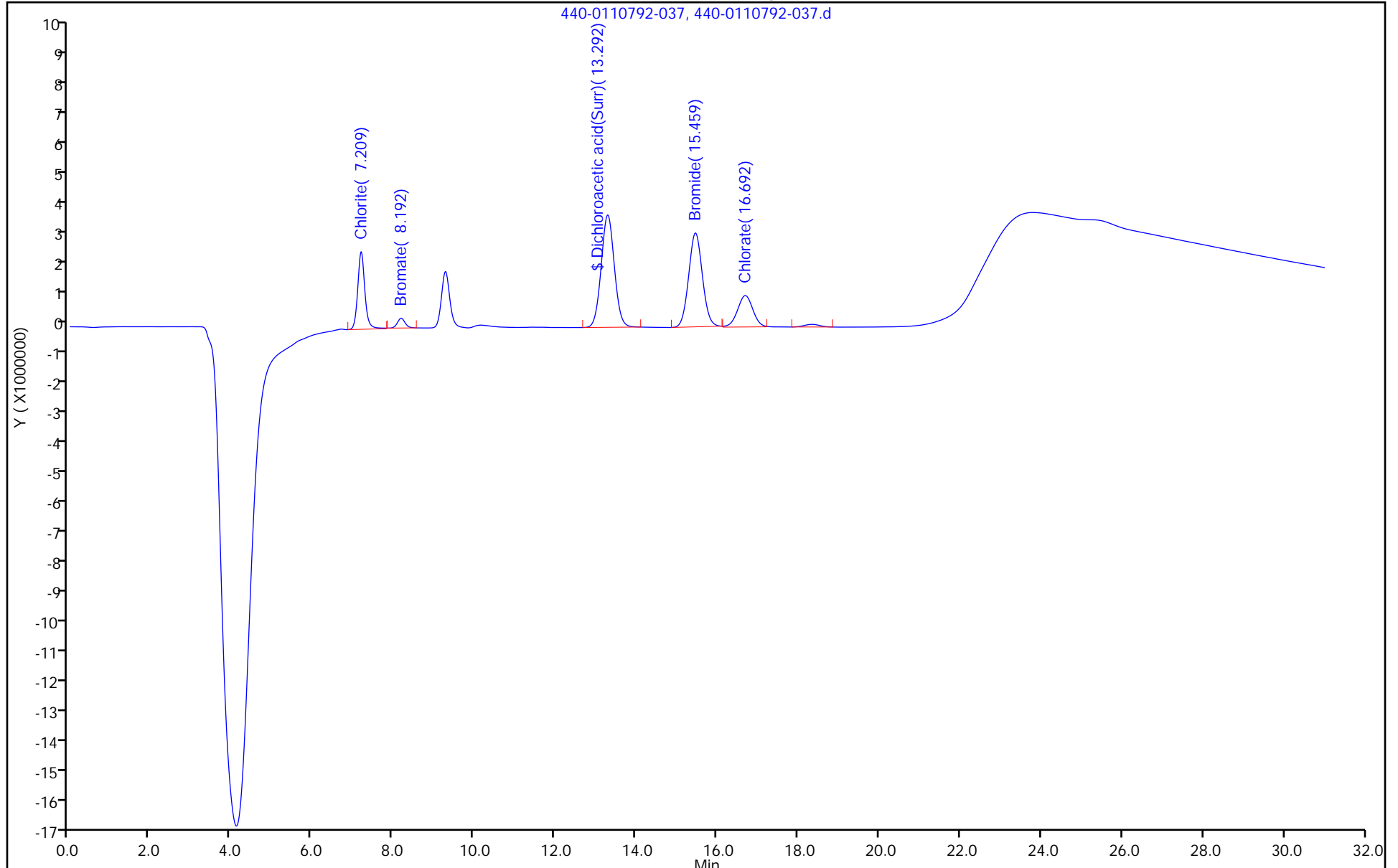
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-505657/13
 Matrix: Water Lab File ID: 440-0110603-013.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 14:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Oct-2018 14:45:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-013
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:50:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.572	15.563	0.009	130571988		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.572	15.563	0.009	130571988	993.7	997.7	a

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d

Injection Date: 17-Oct-2018 14:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: MB

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

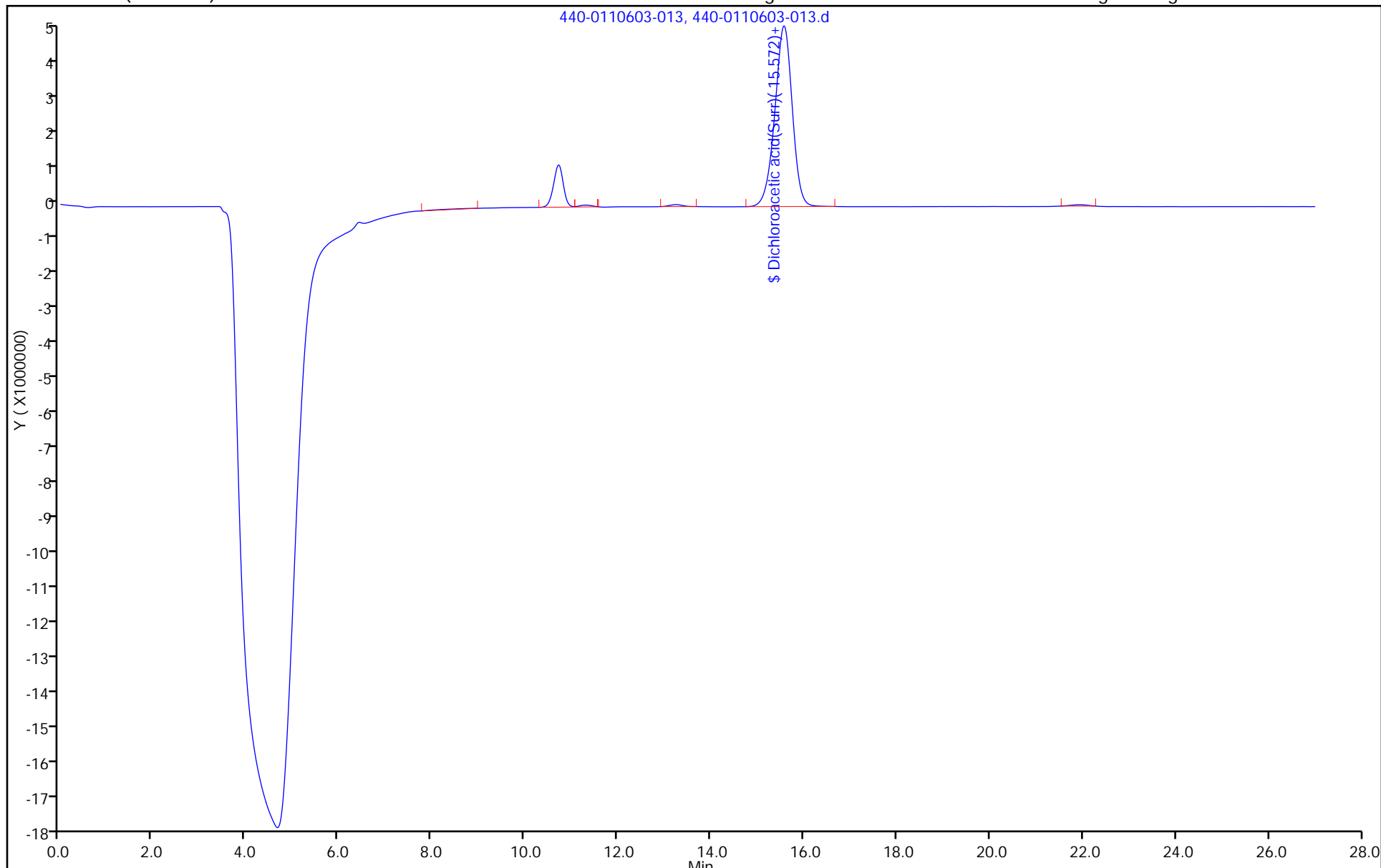
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Oct-2018 14:45:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-013
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:50:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	997.7	100.40

TestAmerica Irvine

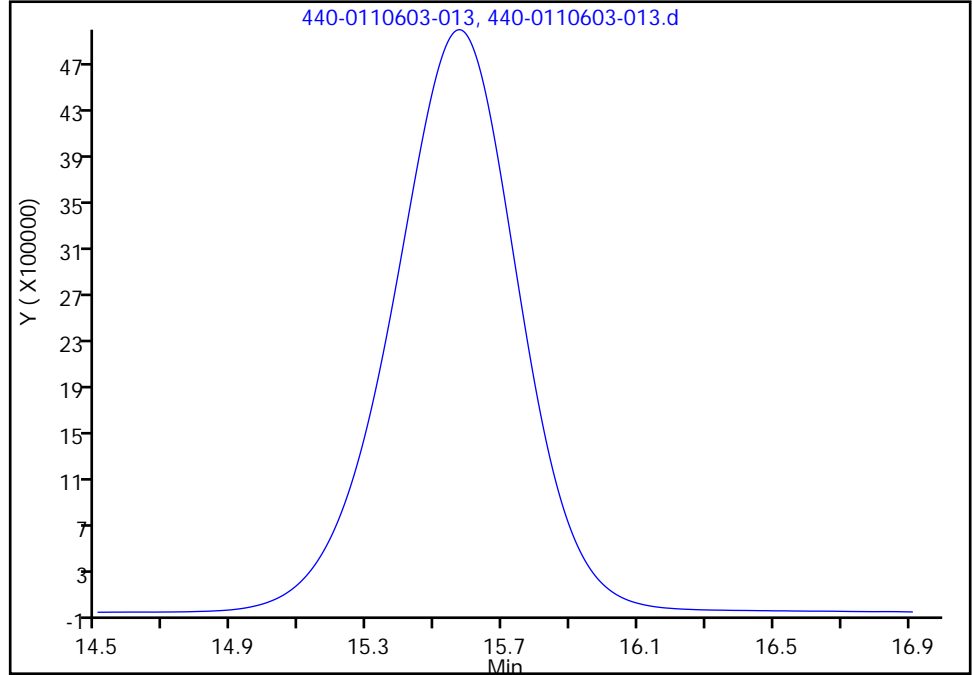
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
Injection Date: 17-Oct-2018 14:45:00 Instrument ID: IC-32
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_28D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

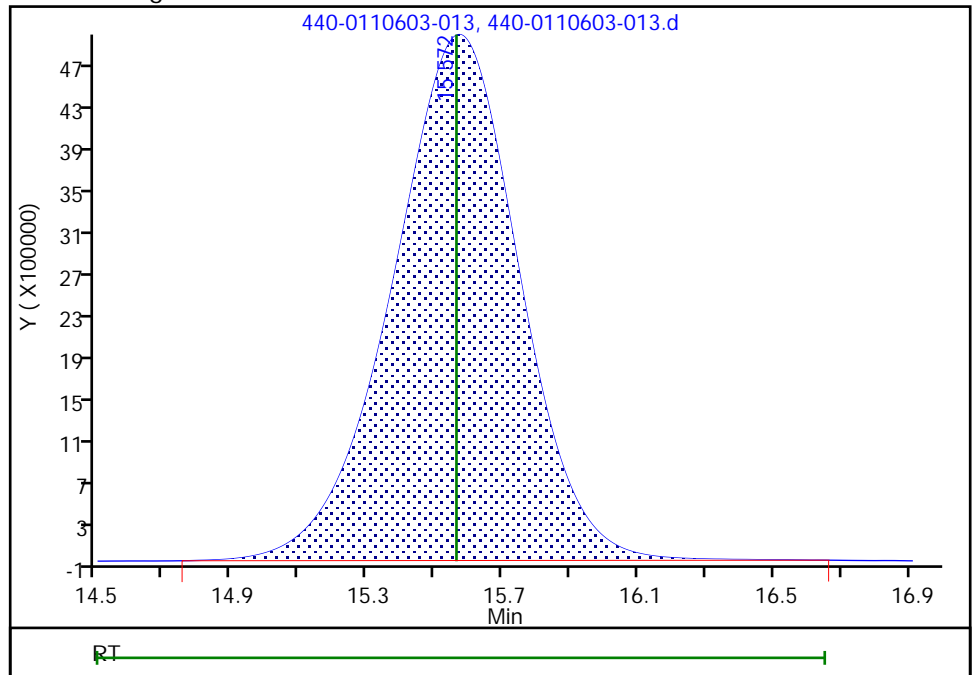
Not Detected
Expected RT: 15.56

Processing Integration Results



Manual Integration Results

RT: 15.57
Area: 130571988
Amount: 997.6526
Amount Units: ug/l



Reviewer: zakhrabov, 19-Oct-2018 03:50:16
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-505658/13
 Matrix: Water Lab File ID: 440-0110603-013.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 14:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Oct-2018 14:45:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-013
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:50:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.572	15.563	0.009	130571988		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.572	15.563	0.009	130571988	993.7	997.7	a

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d

Injection Date: 17-Oct-2018 14:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: MB

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

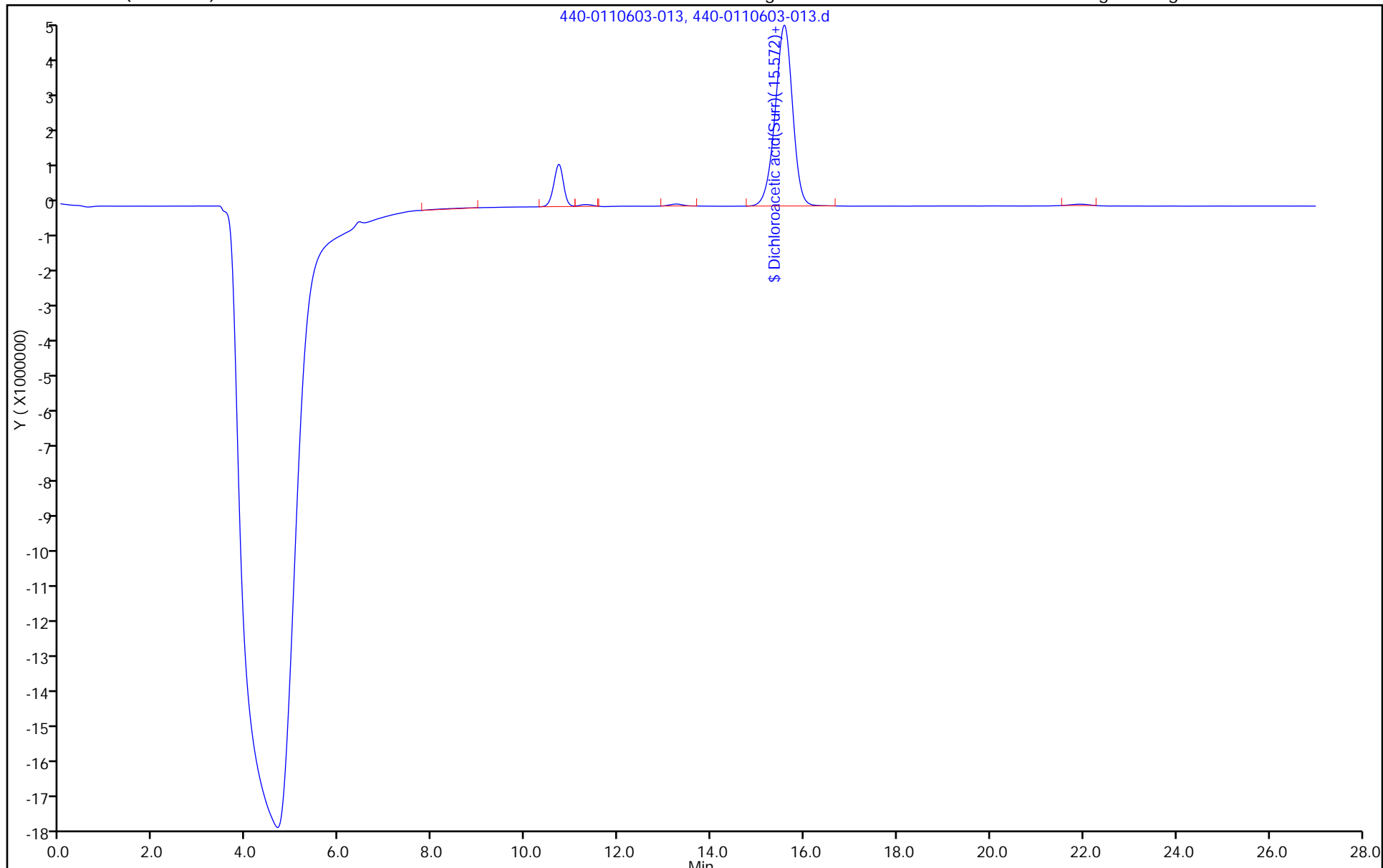
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Oct-2018 14:45:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-013
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:50:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	997.7	100.40

TestAmerica Irvine

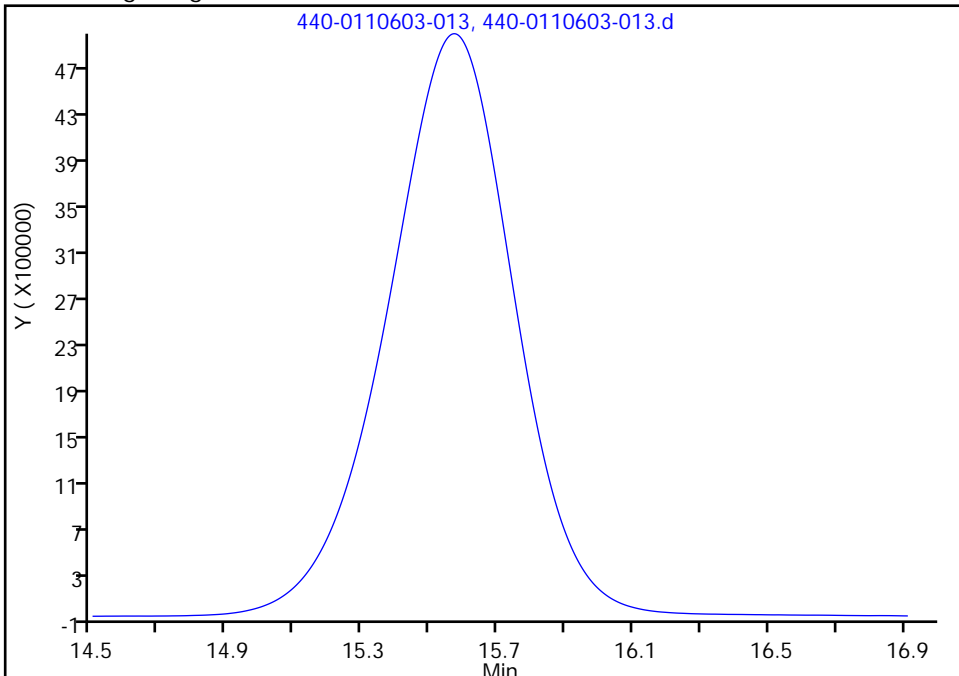
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-013.d
Injection Date: 17-Oct-2018 14:45:00 Instrument ID: IC-32
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

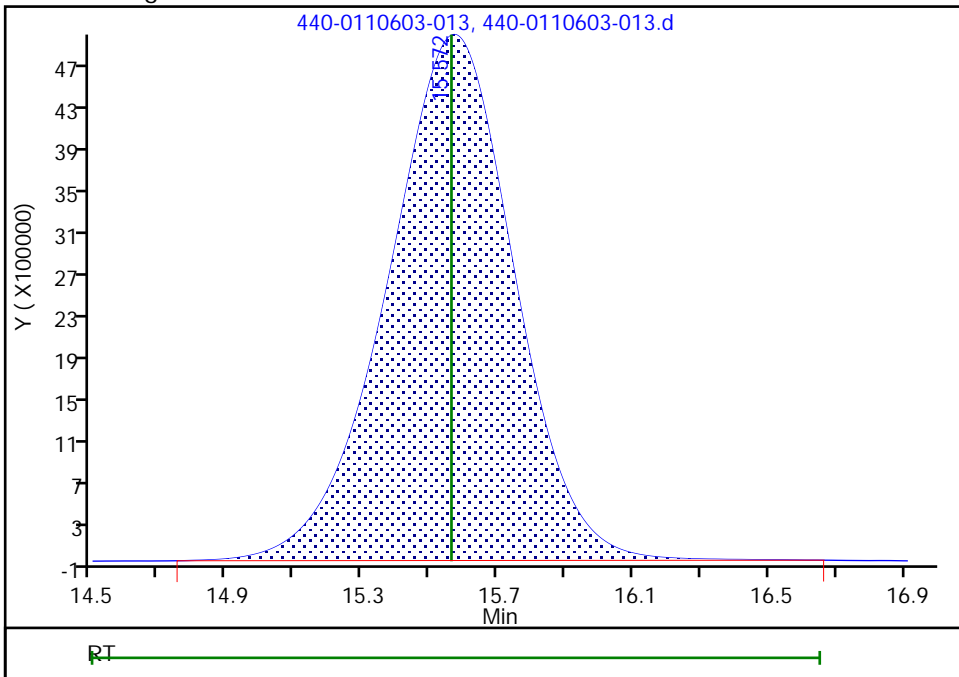
Not Detected
Expected RT: 15.56

Processing Integration Results



RT: 15.57
Area: 130571988
Amount: 997.6526
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 03:50:16
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506165/5
 Matrix: Water Lab File ID: 440-0110708-005.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 06:51
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	102		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-005.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 19-Oct-2018 06:51:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-005
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 07:58:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.535	15.563	-0.028	132389197			NC
\$ 6 Dichloroacetic acid(Surr)	15.535	15.563	-0.028	132389197	993.7	1011.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCa_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-005.d

Injection Date: 19-Oct-2018 06:51:00

Instrument ID: IC-32

Operator ID:

Lims ID: MB

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

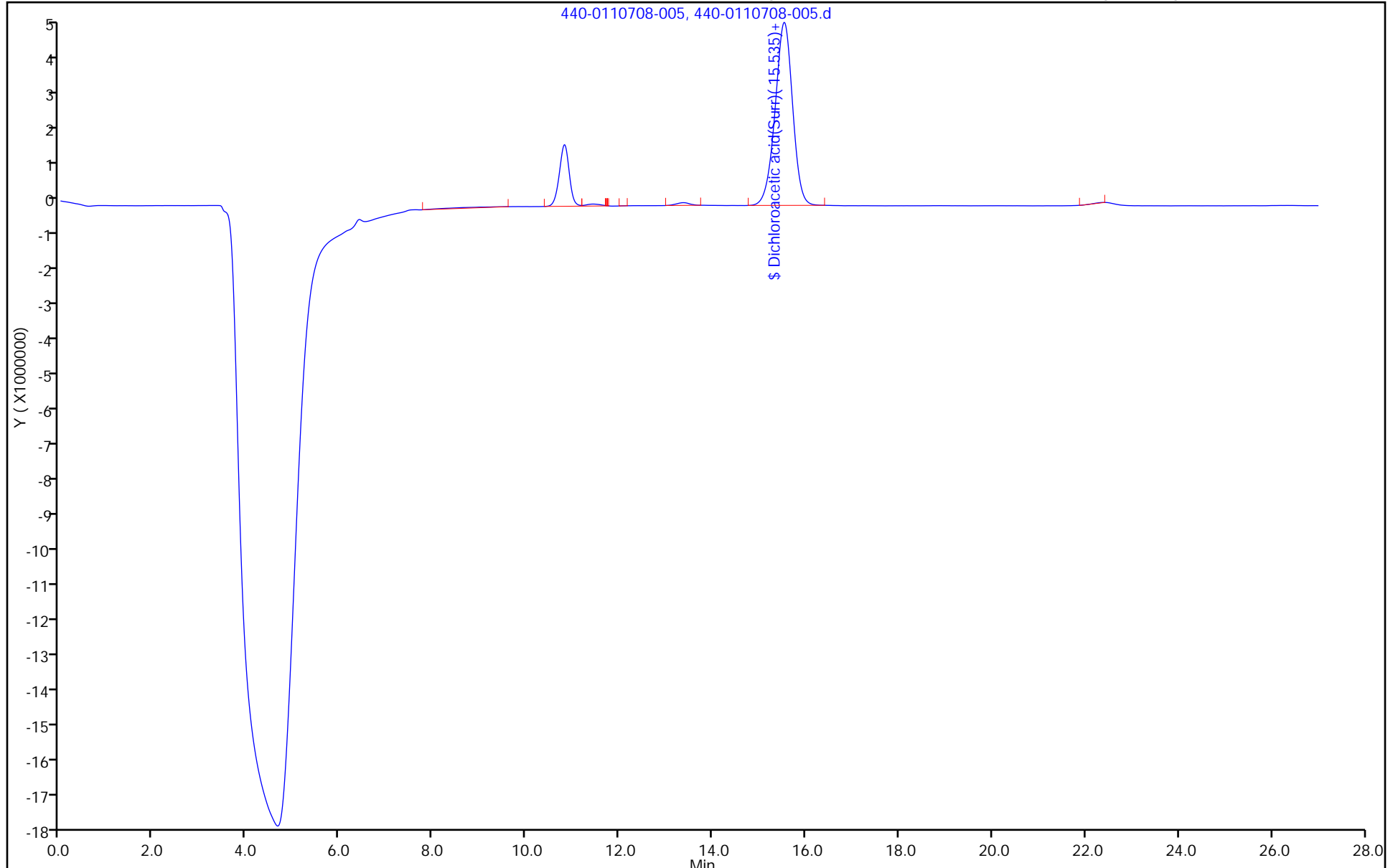
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-005.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 19-Oct-2018 06:51:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-005
 Misc. Info.: MB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 07:58:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1011.5	101.79

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 440-506501/5
 Matrix: Water Lab File ID: 440-0110792-005.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 07:47
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-005.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 21-Oct-2018 07:47:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-005
 Misc. Info.: 5 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 08:28:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 08:28:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.267	13.200	0.067	85120725	993.7	1007.0	
\$ 1 Dichloroacetic acid	13.267	13.909	-0.642	85120725		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCa_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-005.d

Injection Date: 21-Oct-2018 07:47:00

Instrument ID: IC-8

Operator ID:

Lims ID: MB

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

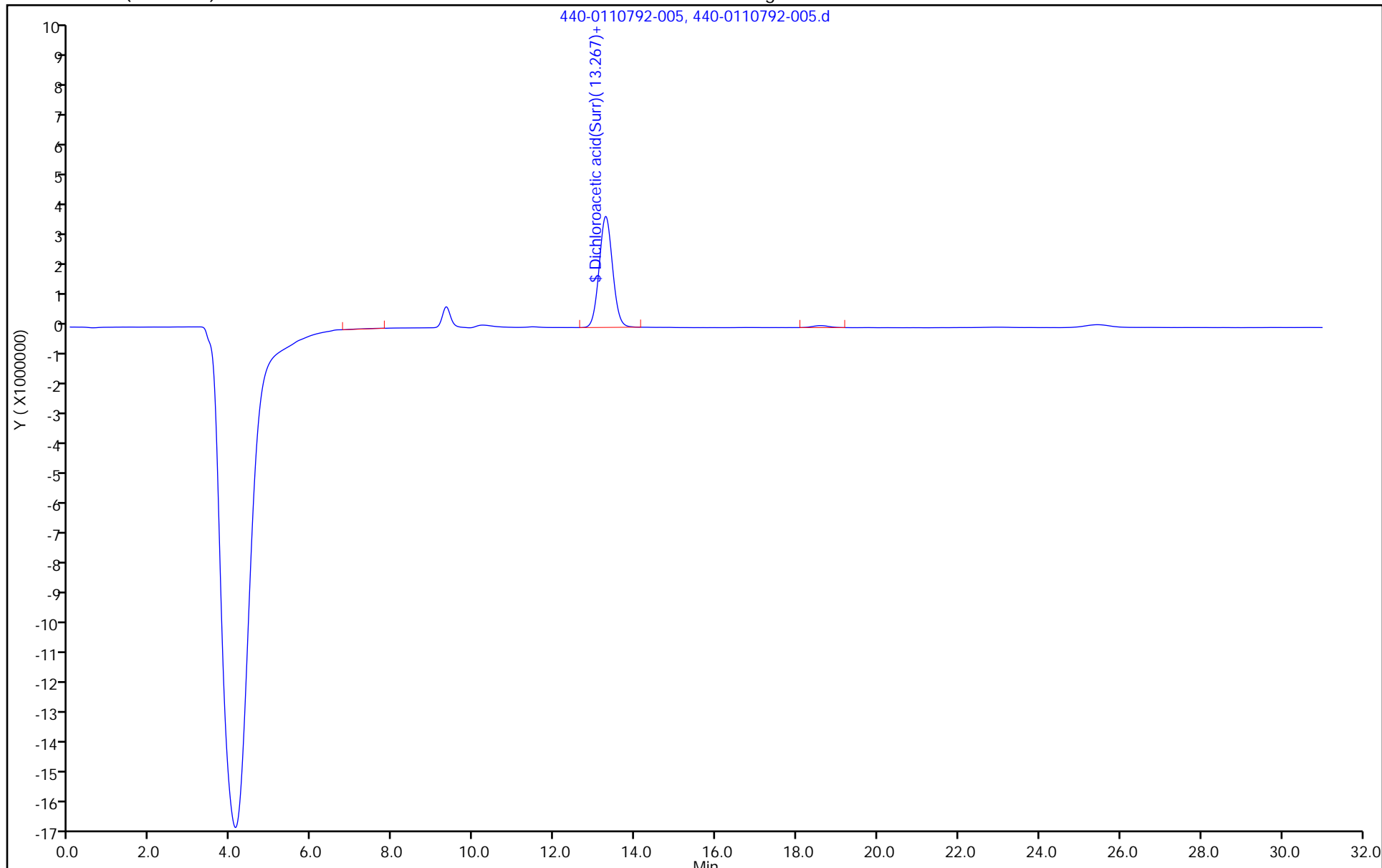
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-005.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 21-Oct-2018 07:47:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-005
 Misc. Info.: 5 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 08:28:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 08:28:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1007.0	101.34

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505657/22
 Matrix: Water Lab File ID: 440-0110603-022.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 19:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 17-Oct-2018 19:14:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-022
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:40:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.593	15.563	0.030	130642993			NC
\$ 6 Dichloroacetic acid(Surr)	15.593	15.563	0.030	130642993	993.7	998.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCa_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d

Injection Date: 17-Oct-2018 19:14:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCB

Worklist Smp#: 22

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

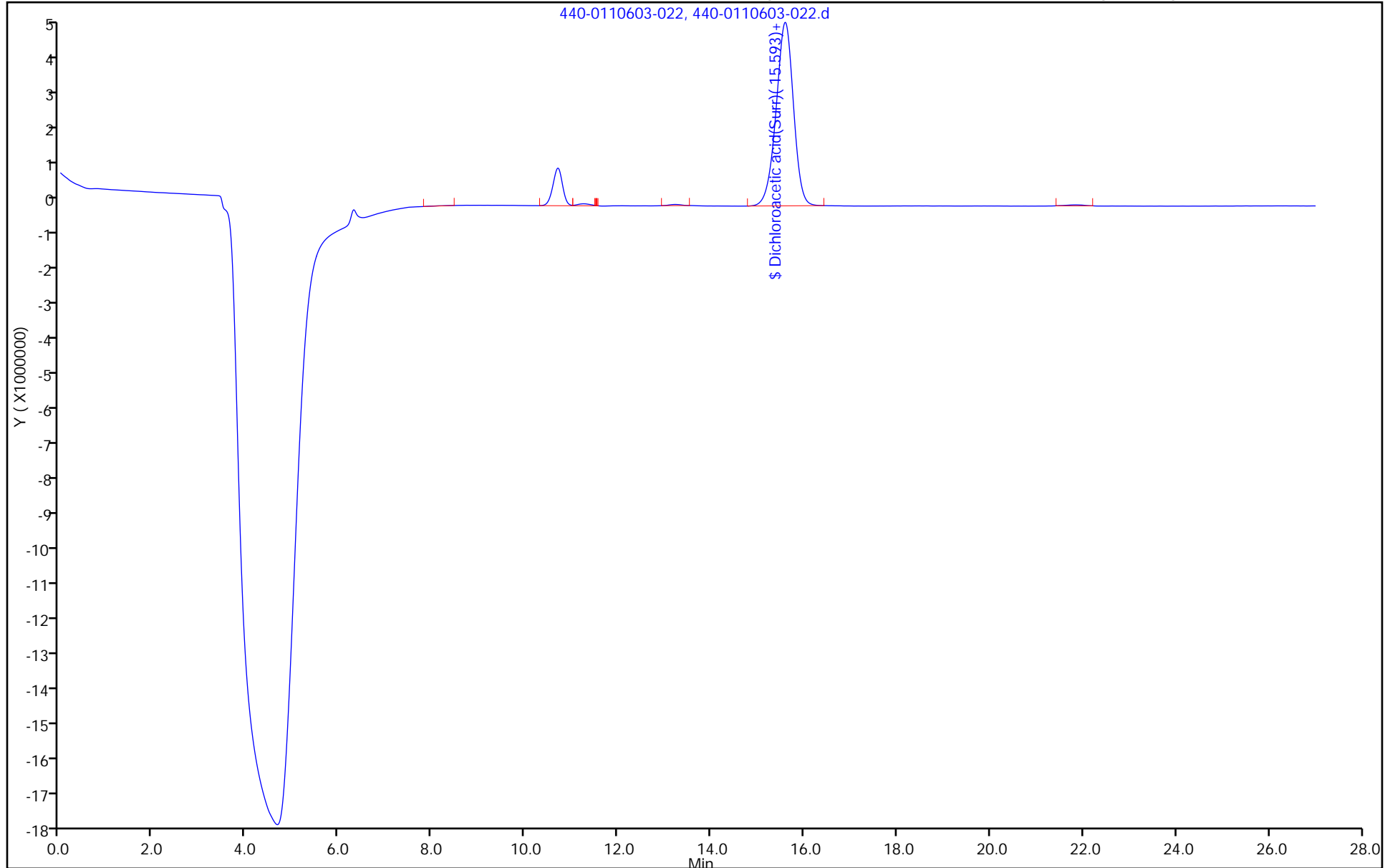
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 17-Oct-2018 19:14:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-022
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:40:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	998.2	100.45

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505657/34
 Matrix: Water Lab File ID: 440-0110603-034.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/18/2018 01:12
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 18-Oct-2018 01:12:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-034
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:44:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.568	15.563	0.005	129935564			NC
\$ 6 Dichloroacetic acid(Surr)	15.568	15.563	0.005	129935564	993.7	992.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d

Injection Date: 18-Oct-2018 01:12:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCB

Worklist Smp#: 34

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

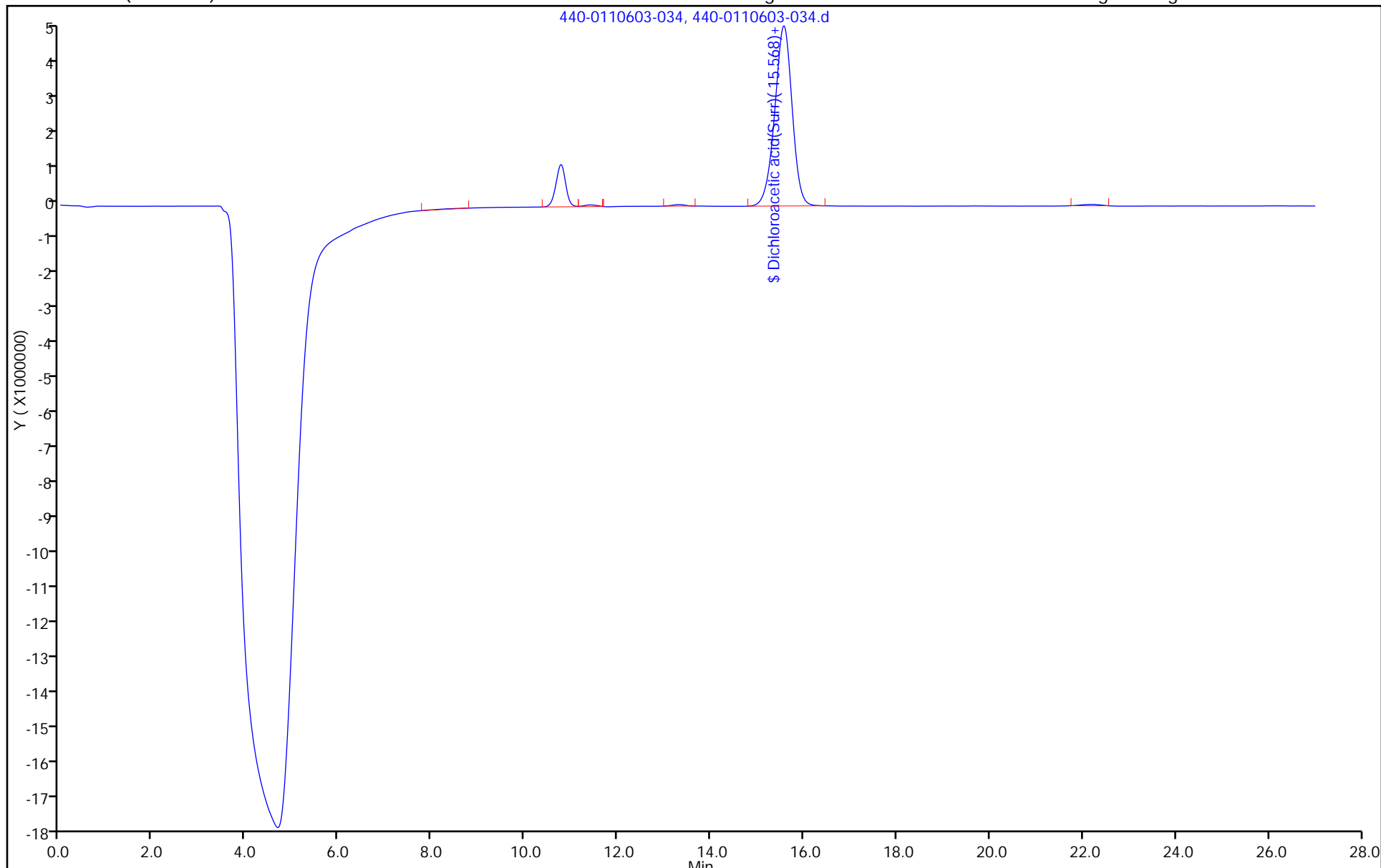
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 18-Oct-2018 01:12:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-034
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:44:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	992.8	99.91

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505658/22
 Matrix: Water Lab File ID: 440-0110603-022.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 19:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 17-Oct-2018 19:14:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-022
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:40:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.593	15.563	0.030	130642993			NC
\$ 6 Dichloroacetic acid(Surr)	15.593	15.563	0.030	130642993	993.7	998.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d

Injection Date: 17-Oct-2018 19:14:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCB

Worklist Smp#: 22

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

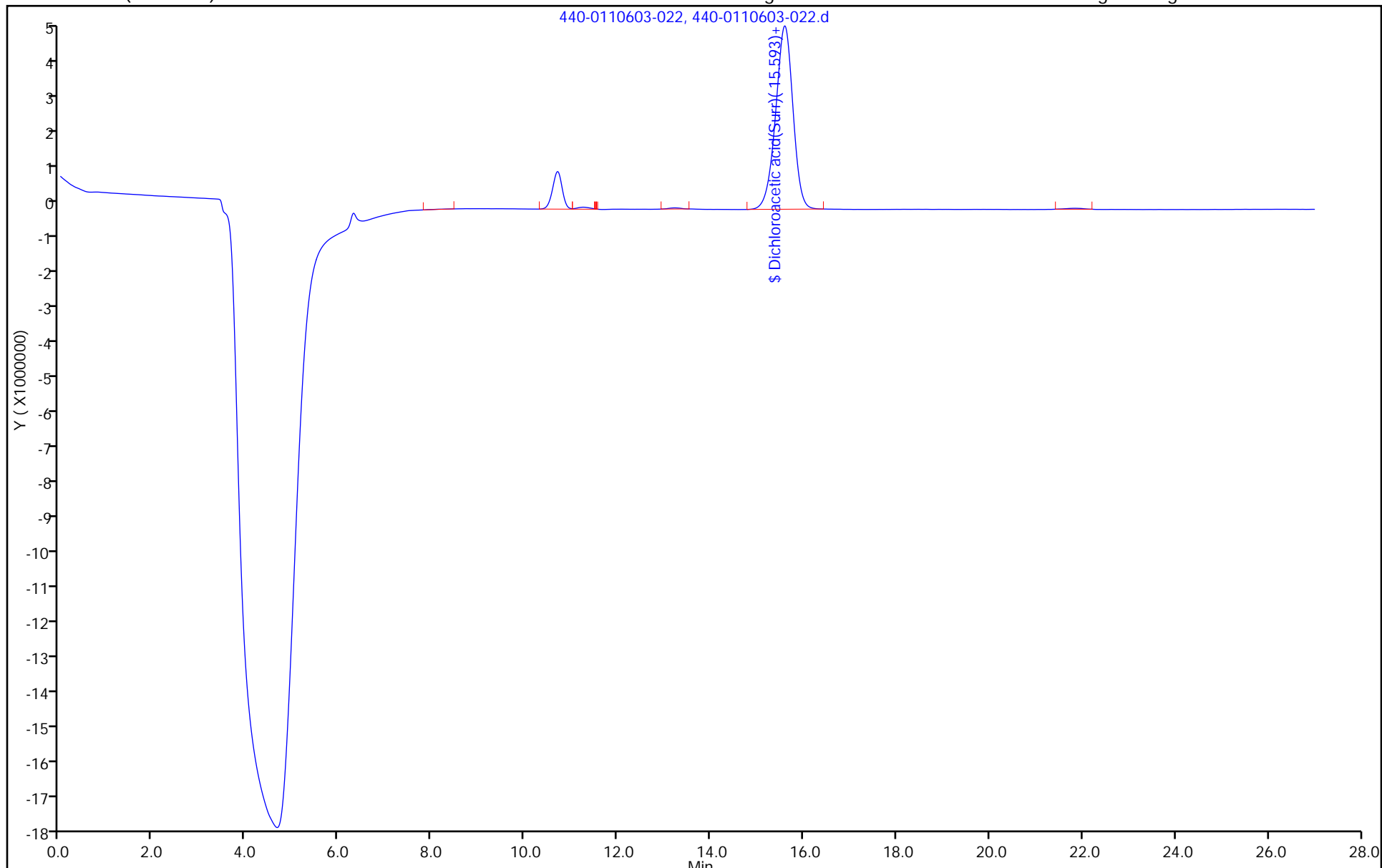
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 17-Oct-2018 19:14:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-022
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:00 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:40:09

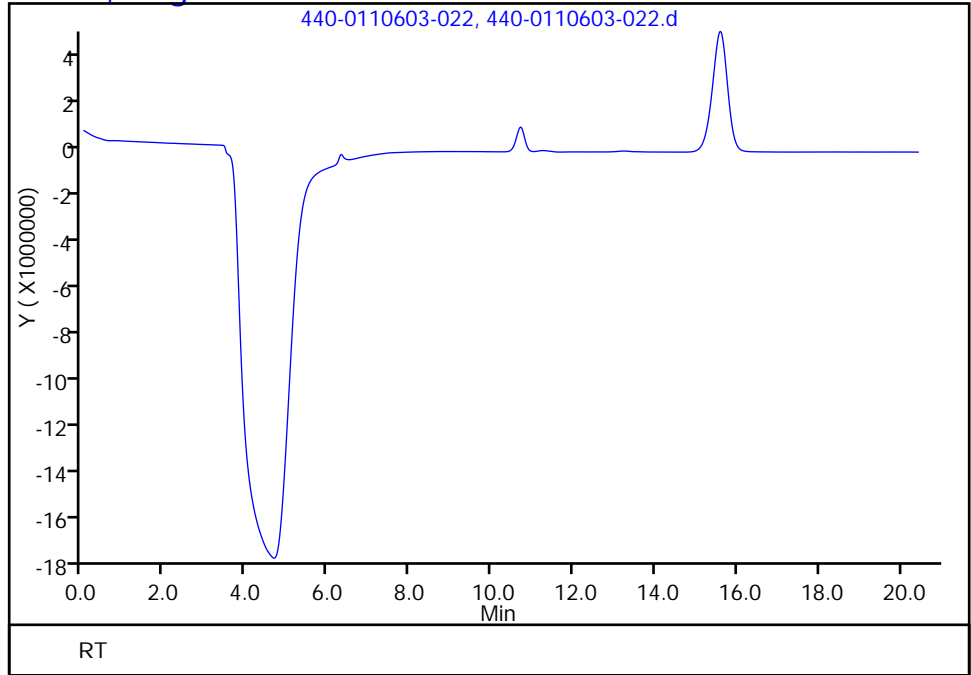
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	998.2	100.45

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-022.d
Injection Date: 17-Oct-2018 19:14:00 Instrument ID: IC-32
Lims ID: CCB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7, Signal: 1

RT: 8.45
Response: 123895
Amount: 0



Reviewer: zakhrabov, 19-Oct-2018 04:40:09
Audit Action: Manually Integrated

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-505658/34
 Matrix: Water Lab File ID: 440-0110603-034.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/18/2018 01:12
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 18-Oct-2018 01:12:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-034
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 04:44:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.568	15.563	0.005	129935564			NC
\$ 6 Dichloroacetic acid(Surr)	15.568	15.563	0.005	129935564	993.7	992.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d

Injection Date: 18-Oct-2018 01:12:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCB

Worklist Smp#: 34

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

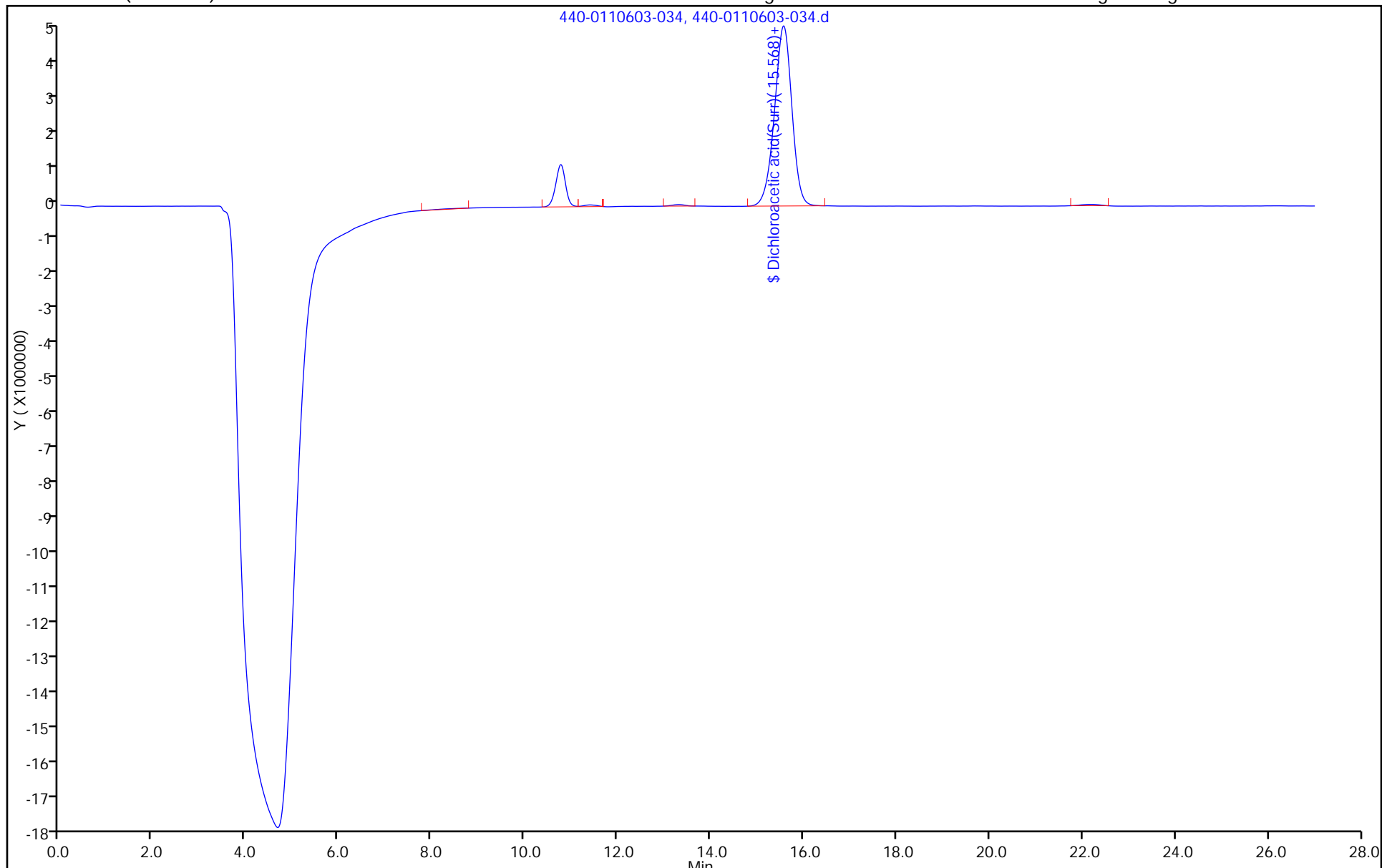
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 18-Oct-2018 01:12:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-034
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:51:19 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 04:44:39

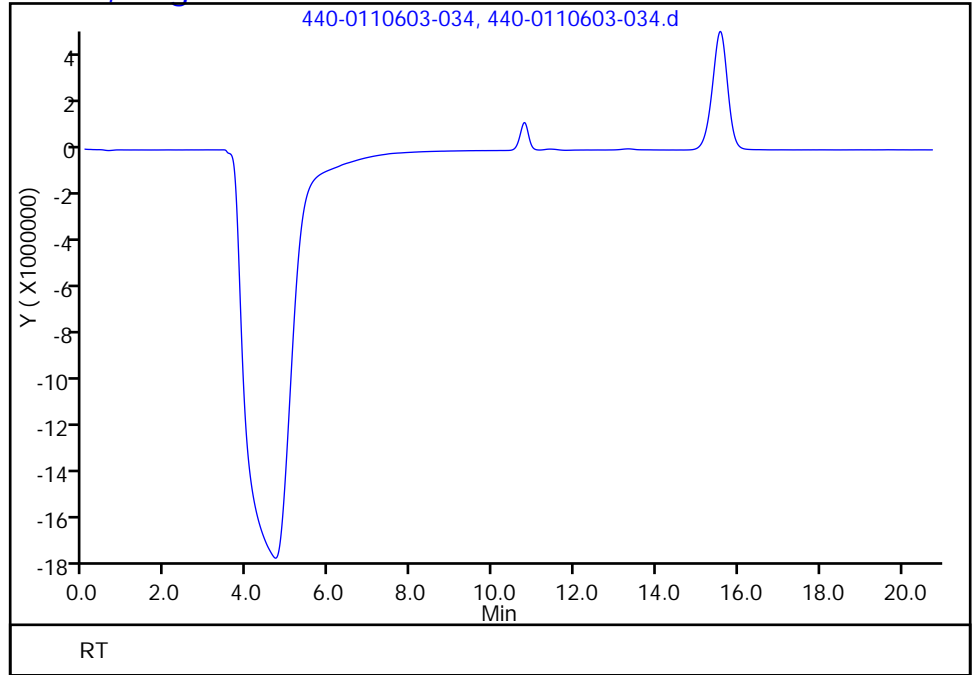
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	992.8	99.91

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-034.d
Injection Date: 18-Oct-2018 01:12:00 Instrument ID: IC-32
Lims ID: CCB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7, Signal: 1

RT: 8.77
Response: 459040
Amount: 0



Reviewer: zakhrabov, 19-Oct-2018 04:44:39
Audit Action: Manually Integrated

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506165/2
 Matrix: Water Lab File ID: 440-0110708-002.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 05:21
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	103		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-002.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 19-Oct-2018 05:21:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-002
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 06:09:16 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 06:09:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.554	15.563	-0.009	133877852			NC
\$ 6 Dichloroacetic acid(Surr)	15.554	15.563	-0.009	133877852	993.7	1022.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-002.d

Injection Date: 19-Oct-2018 05:21:00

Instrument ID: IC-32

Operator ID:

Lims ID: ICB

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

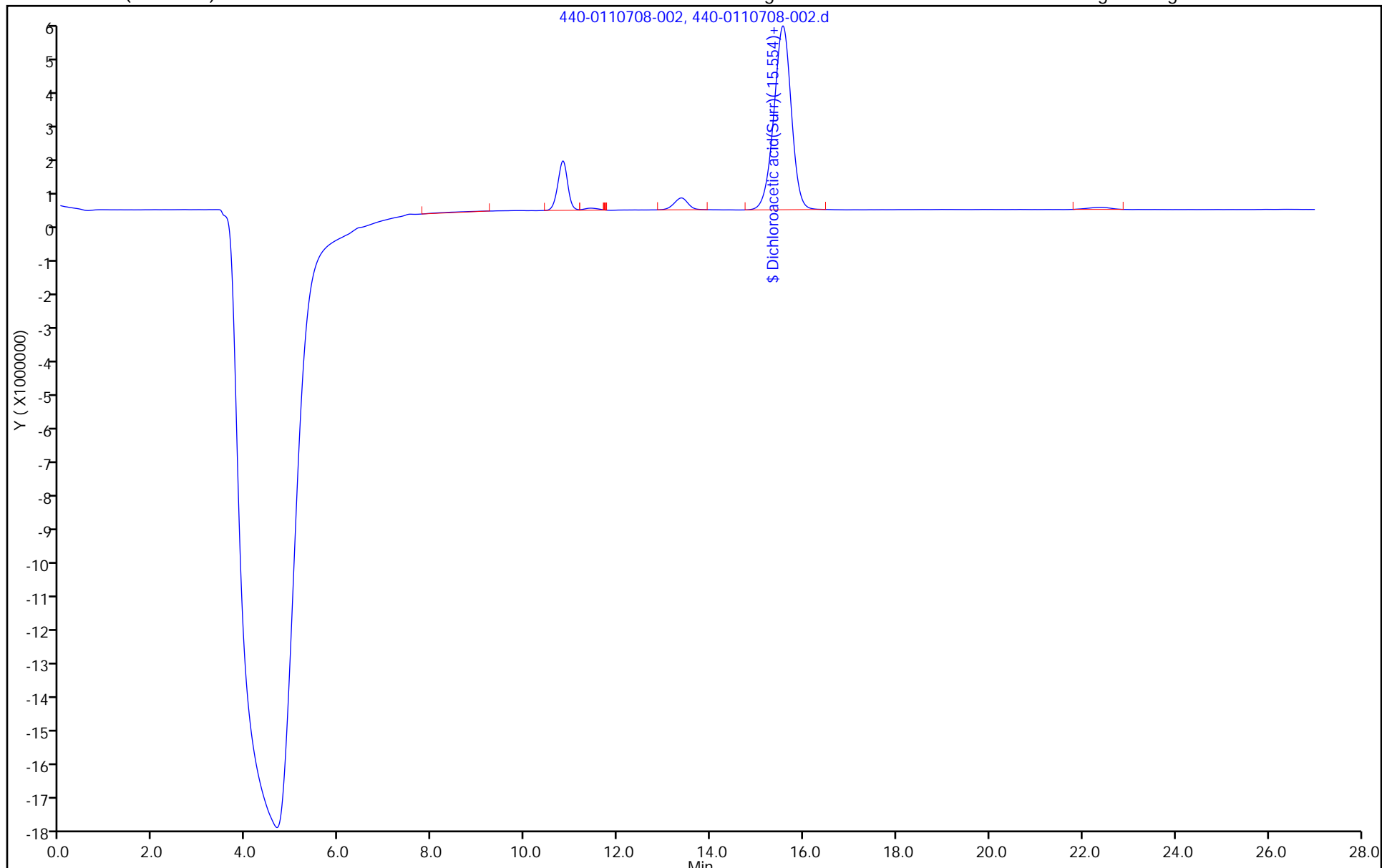
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-002.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 19-Oct-2018 05:21:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-002
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 06:09:16 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 06:09:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1022.9	102.94

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506165/14
 Matrix: Water Lab File ID: 440-0110708-014.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 13:05
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	103		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-014.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 19-Oct-2018 13:05:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-014
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 20-Oct-2018 07:19:54 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK048

First Level Reviewer: zakhrabovy Date: 20-Oct-2018 07:19:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.596	15.563	0.033	134323739			NC
\$ 6 Dichloroacetic acid(Surr)	15.596	15.563	0.033	134323739	993.7	1026.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-014.d

Injection Date: 19-Oct-2018 13:05:00

Instrument ID: IC-32

Operator ID:

Lims ID: CCB

Worklist Smp#: 14

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

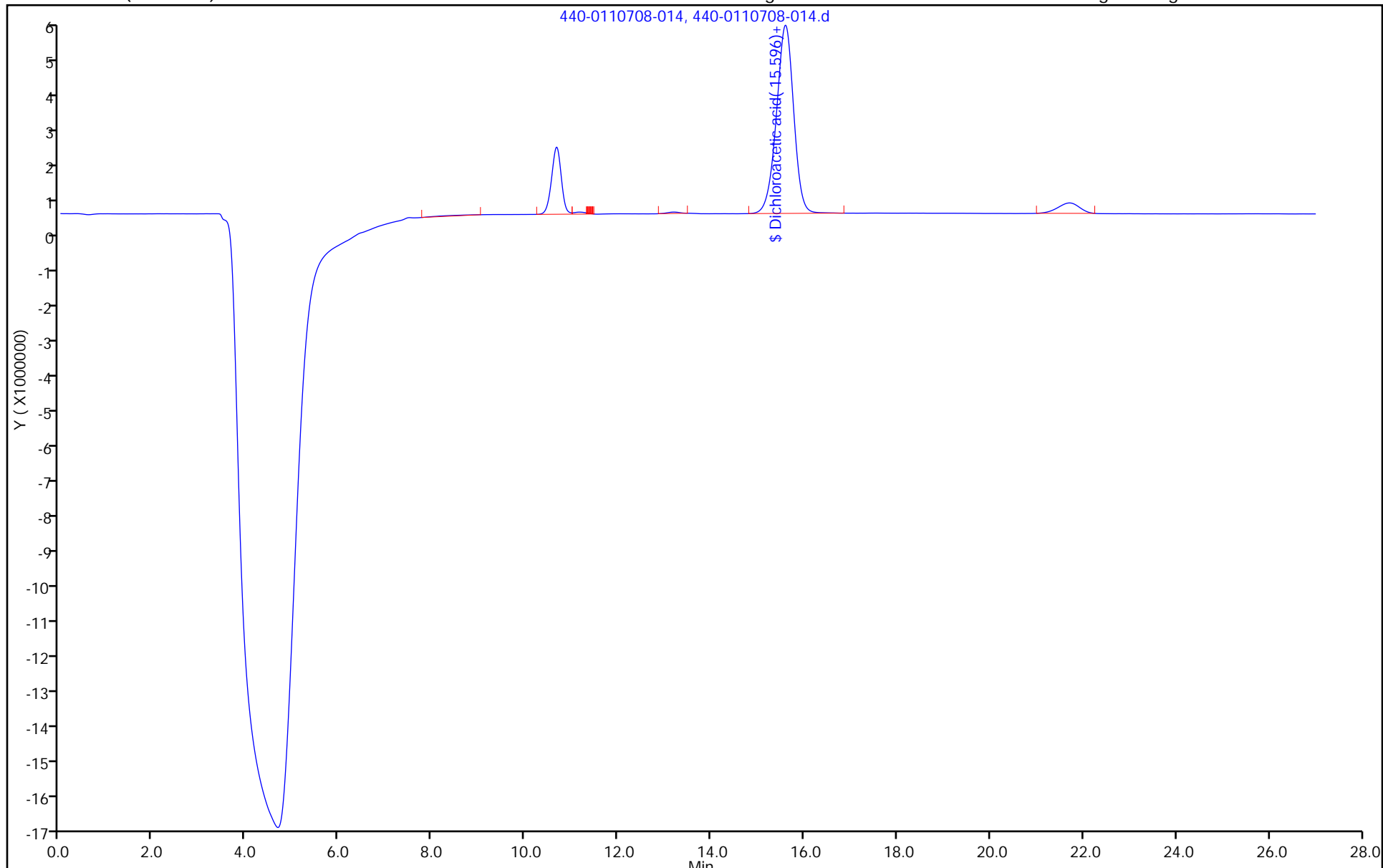
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-014.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 19-Oct-2018 13:05:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-014
 Misc. Info.: CCB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 20-Oct-2018 07:19:54 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK048

First Level Reviewer: zakhrabovy Date: 20-Oct-2018 07:19:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1026.3	103.28

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506501/2
 Matrix: Water Lab File ID: 440-0110792-002.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 05:58
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	102		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-002.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 05:58:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-002
 Misc. Info.: 2 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 07:53:58 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 07:53:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.259	13.200	0.059	85465429	993.7	1011.1	
\$ 1 Dichloroacetic acid	13.259	13.909	-0.650	85465429		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-002.d

Injection Date: 21-Oct-2018 05:58:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCB

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

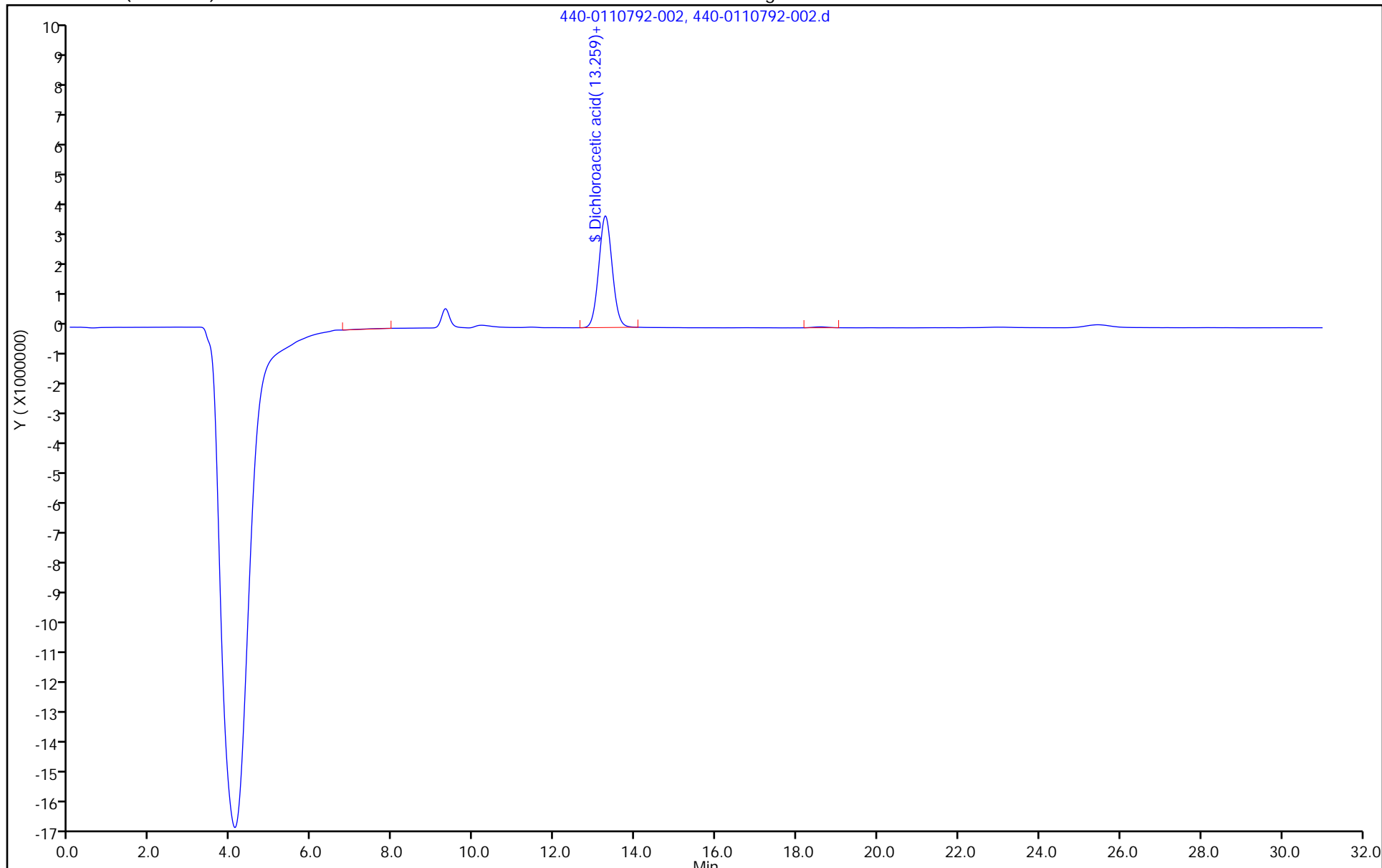
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-002.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 05:58:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-002
 Misc. Info.: 2 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 07:53:58 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 07:53:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1011.1	101.75

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506501/14
 Matrix: Water Lab File ID: 440-0110792-014.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 13:13
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-014.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 13:13:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-014
 Misc. Info.: 14 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:42:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.300	13.200	0.100	84640552	993.7	1001.4	
\$ 1 Dichloroacetic acid	13.300	13.909	-0.609	84640552		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDCa_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-014.d

Injection Date: 21-Oct-2018 13:13:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCB

Worklist Smp#: 14

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

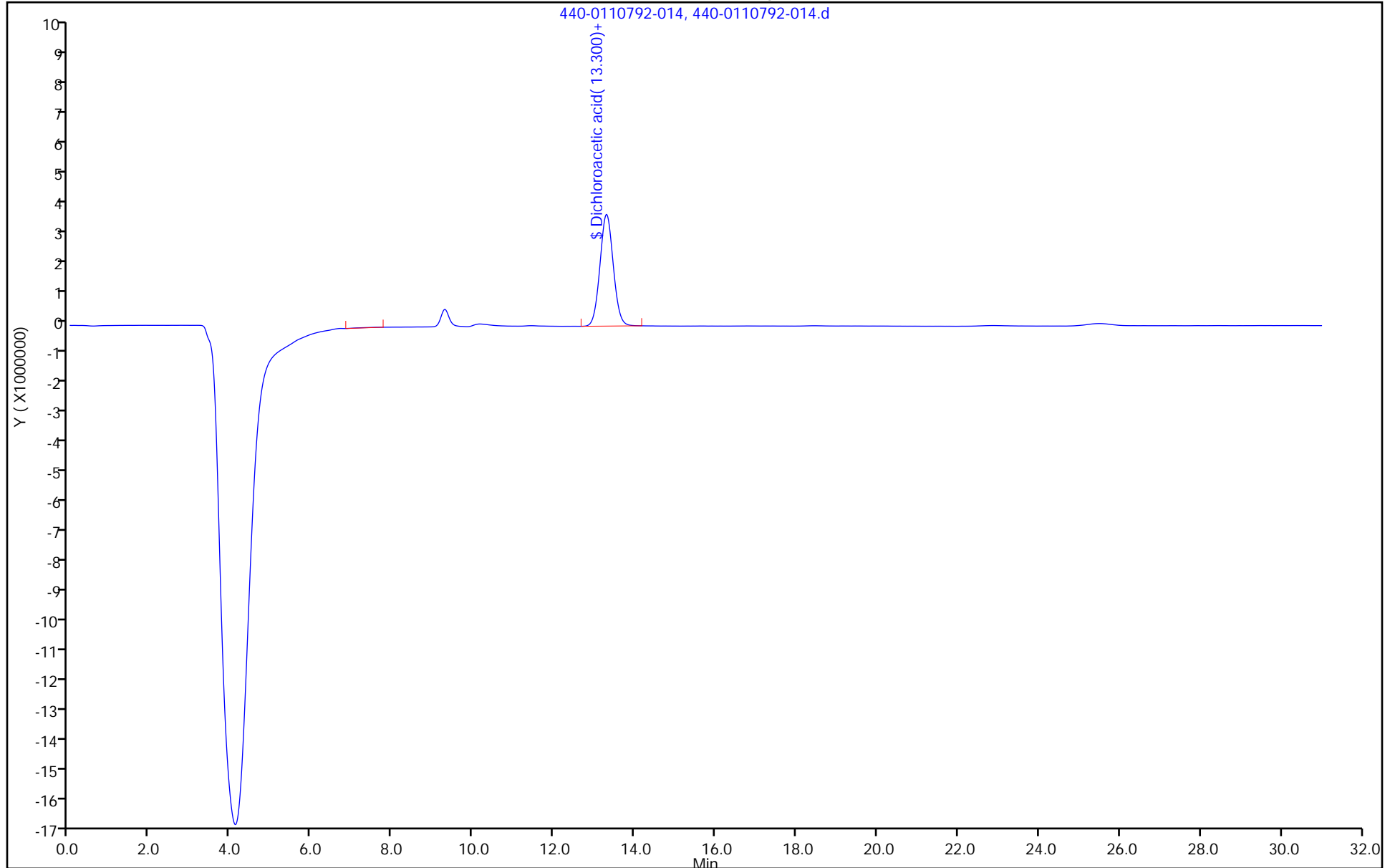
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-014.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 13:13:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-014
 Misc. Info.: 14 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabovy Date: 22-Oct-2018 03:42:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1001.4	100.77

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506501/26
 Matrix: Water Lab File ID: 440-0110792-026.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 20:28
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-026.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 20:28:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-026
 Misc. Info.: 26 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:47:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.317	13.200	0.117	85209134	993.7	1008.1	
\$ 1 Dichloroacetic acid	13.317	13.909	-0.592	85209134		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-026.d

Injection Date: 21-Oct-2018 20:28:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCB

Worklist Smp#: 26

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

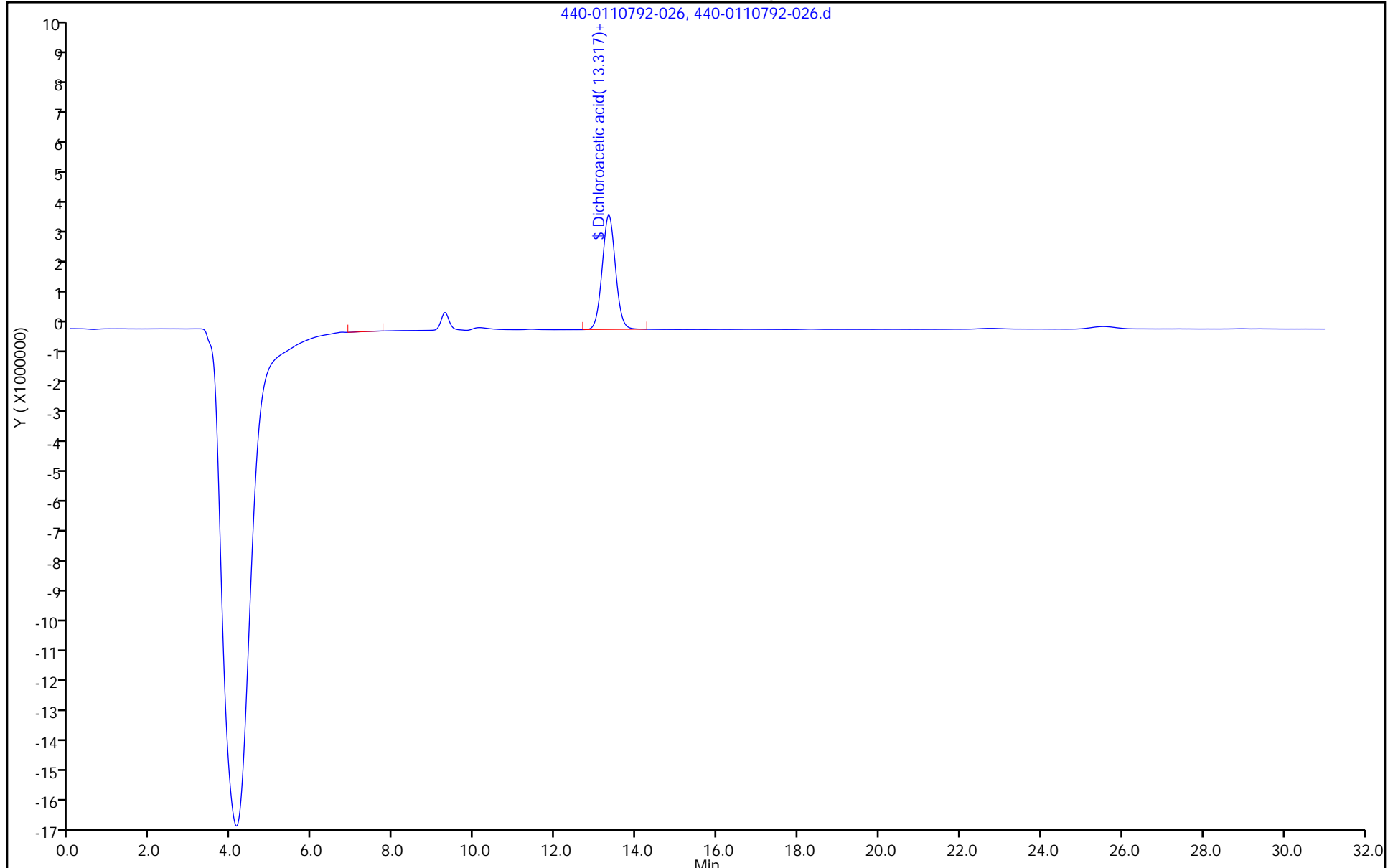
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-026.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Oct-2018 20:28:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-026
 Misc. Info.: 26 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:47:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1008.1	101.45

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 440-506501/38
 Matrix: Water Lab File ID: 440-0110792-038.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/22/2018 03:43
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-038.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 22-Oct-2018 03:43:00 ALS Bottle#: 0 Worklist Smp#: 38
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-038
 Misc. Info.: 38 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 05:21:02 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 04:24:20

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.325	13.200	0.125	85046342	993.7	1006.2	
\$ 1 Dichloroacetic acid	13.325	13.909	-0.584	85046342		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-038.d

Injection Date: 22-Oct-2018 03:43:00

Instrument ID: IC-8

Operator ID:

Lims ID: CCB

Worklist Smp#: 38

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

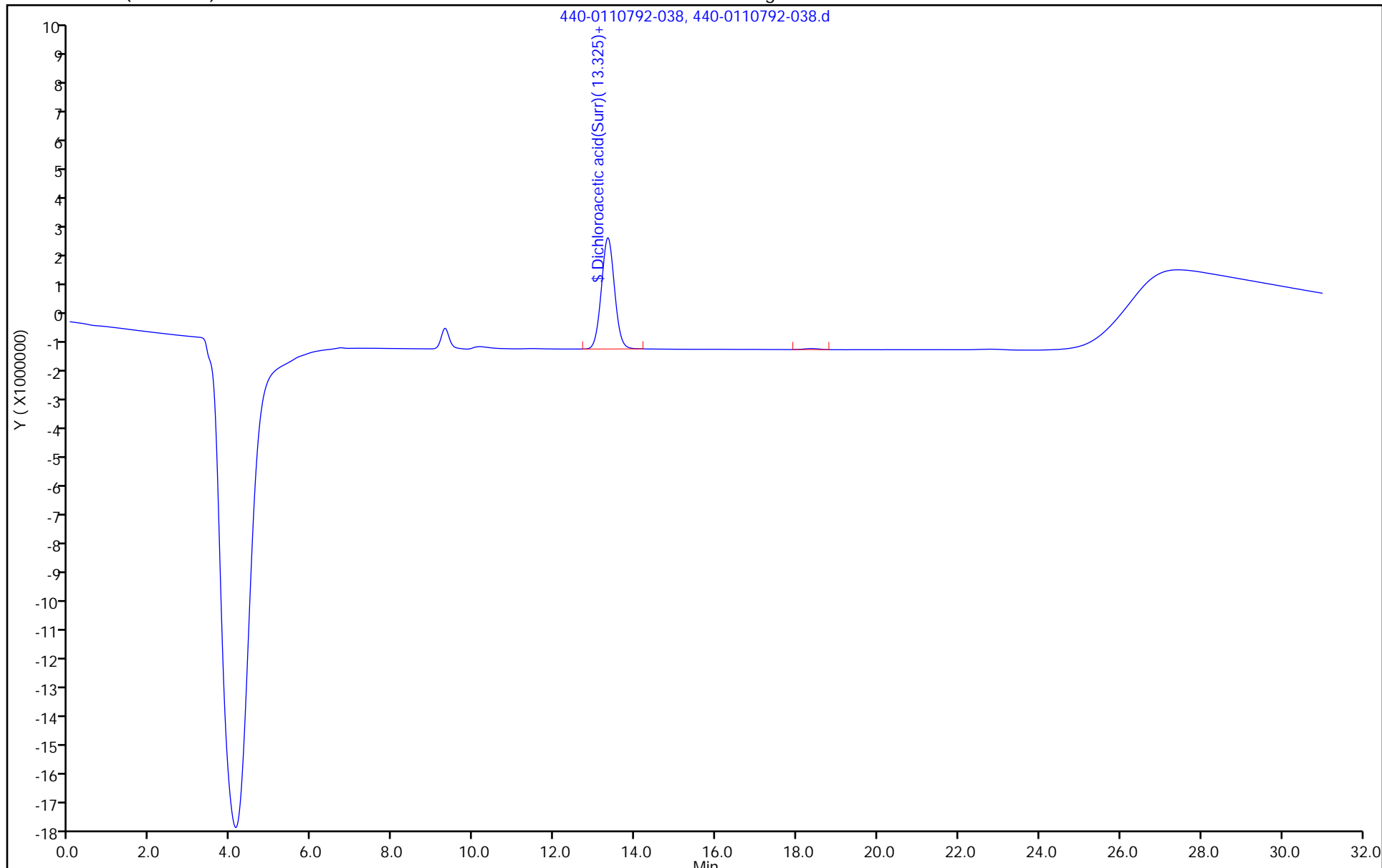
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-038.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 22-Oct-2018 03:43:00 ALS Bottle#: 0 Worklist Smp#: 38
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-038
 Misc. Info.: 38 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 05:21:02 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 04:24:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1006.2	101.25

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-494918/9
 Matrix: Water Lab File ID: 440-0108143-009.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 08/22/2018 10:20
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 494918 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-009.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 22-Aug-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-009
 Misc. Info.: 9 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 12:52:44 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Aug-2018 12:09:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 6 Dichloroacetic acid(Surr)	13.675	13.700	-0.025	85211297	993.7	1008.1	
\$ 1 Dichloroacetic acid	13.675	13.909	-0.234	85211297		NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WCDC_A_00068 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-009.d

Injection Date: 22-Aug-2018 10:20:00

Instrument ID: IC-8

Operator ID:

Lims ID: ICB

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

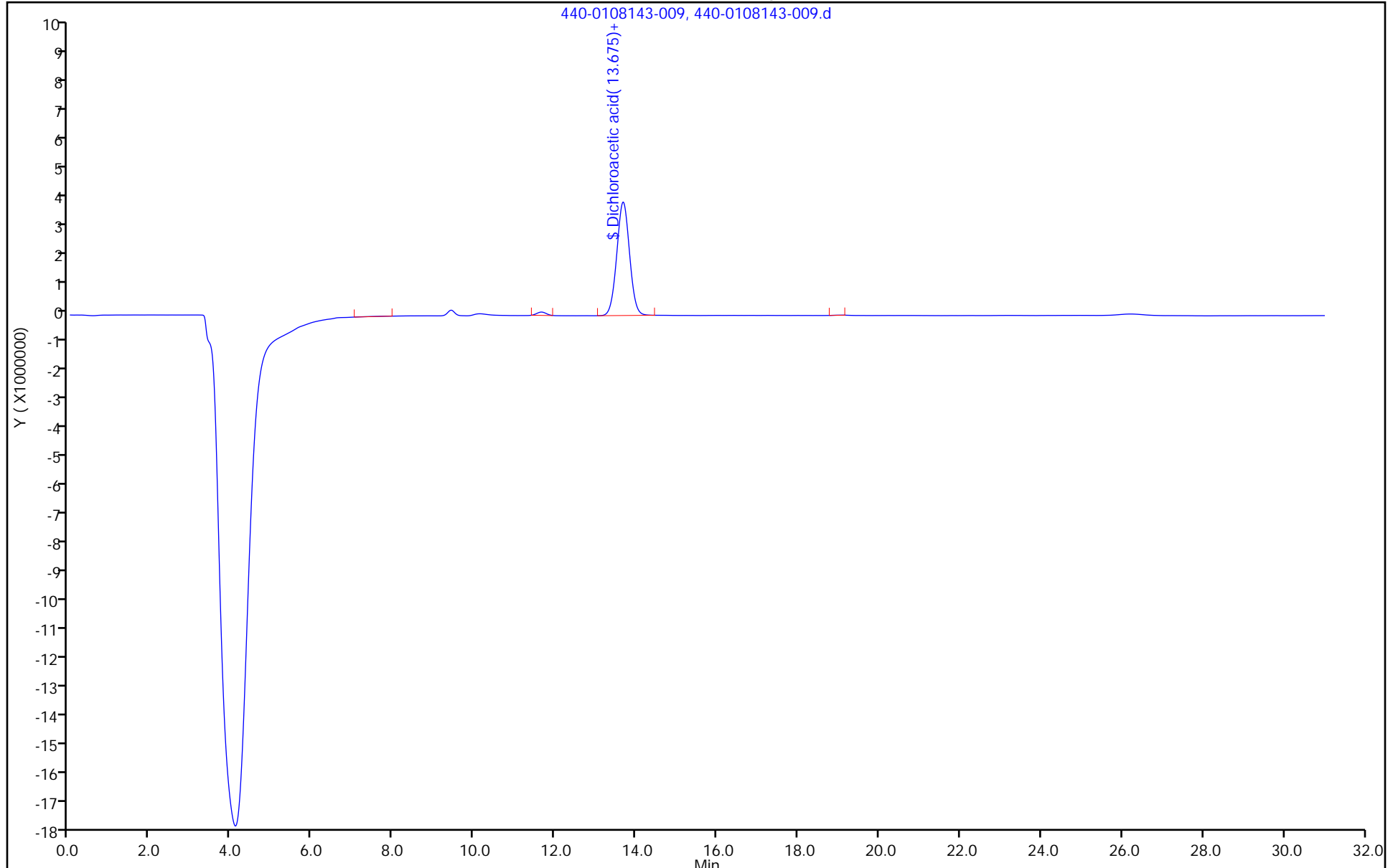
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-009.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 22-Aug-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0108143-009
 Misc. Info.: 9 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Aug-2018 12:52:44 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Aug-2018 12:09:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1008.1	101.45

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-505657/10
 Matrix: Water Lab File ID: 440-0110603-010.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 13:15
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	ND		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	99		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 17-Oct-2018 13:15:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-010
 Misc. Info.: ICB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:39:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.585	15.563	0.022	128432317		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.585	15.563	0.022	128432317	993.7	981.3	a

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d

Injection Date: 17-Oct-2018 13:15:00

Instrument ID: IC-32

Operator ID:

Lims ID: ICB

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

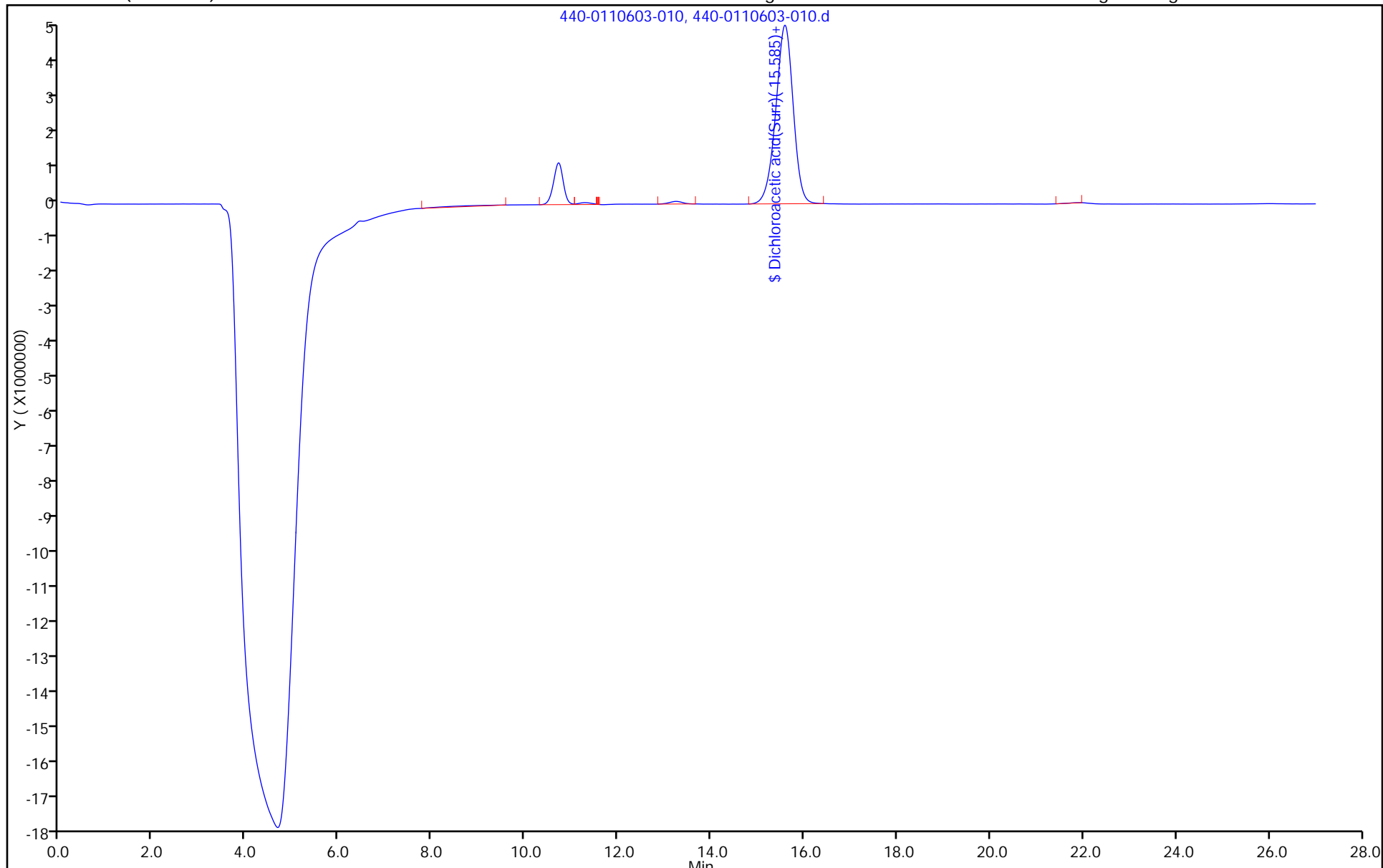
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 17-Oct-2018 13:15:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-010
 Misc. Info.: ICB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:39:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	981.3	98.75

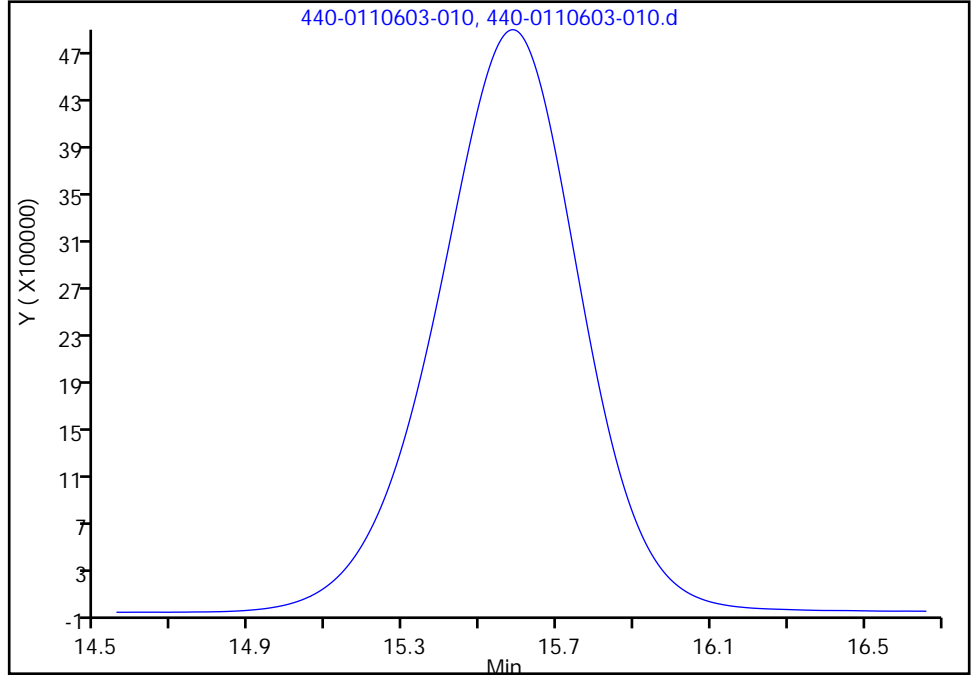
TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
Injection Date: 17-Oct-2018 13:15:00 Instrument ID: IC-32
Lims ID: ICB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_28D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6
Signal: 1

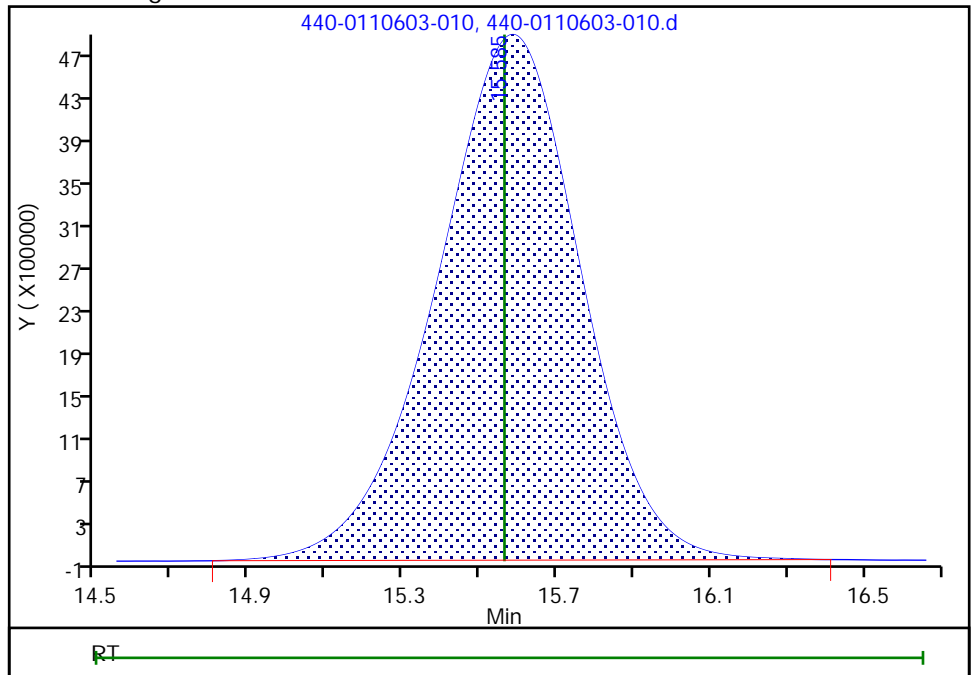
Not Detected
Expected RT: 15.56

Processing Integration Results



RT: 15.58
Area: 128432317
Amount: 981.3042
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 03:49:17
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 440-505658/10
 Matrix: Water Lab File ID: 440-0110603-010.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 13:15
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	ND		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	99		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 17-Oct-2018 13:15:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-010
 Misc. Info.: ICB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:39:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.585	15.563	0.022	128432317		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.585	15.563	0.022	128432317	993.7	981.3	a

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d

Injection Date: 17-Oct-2018 13:15:00

Instrument ID: IC-32

Operator ID:

Lims ID: ICB

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

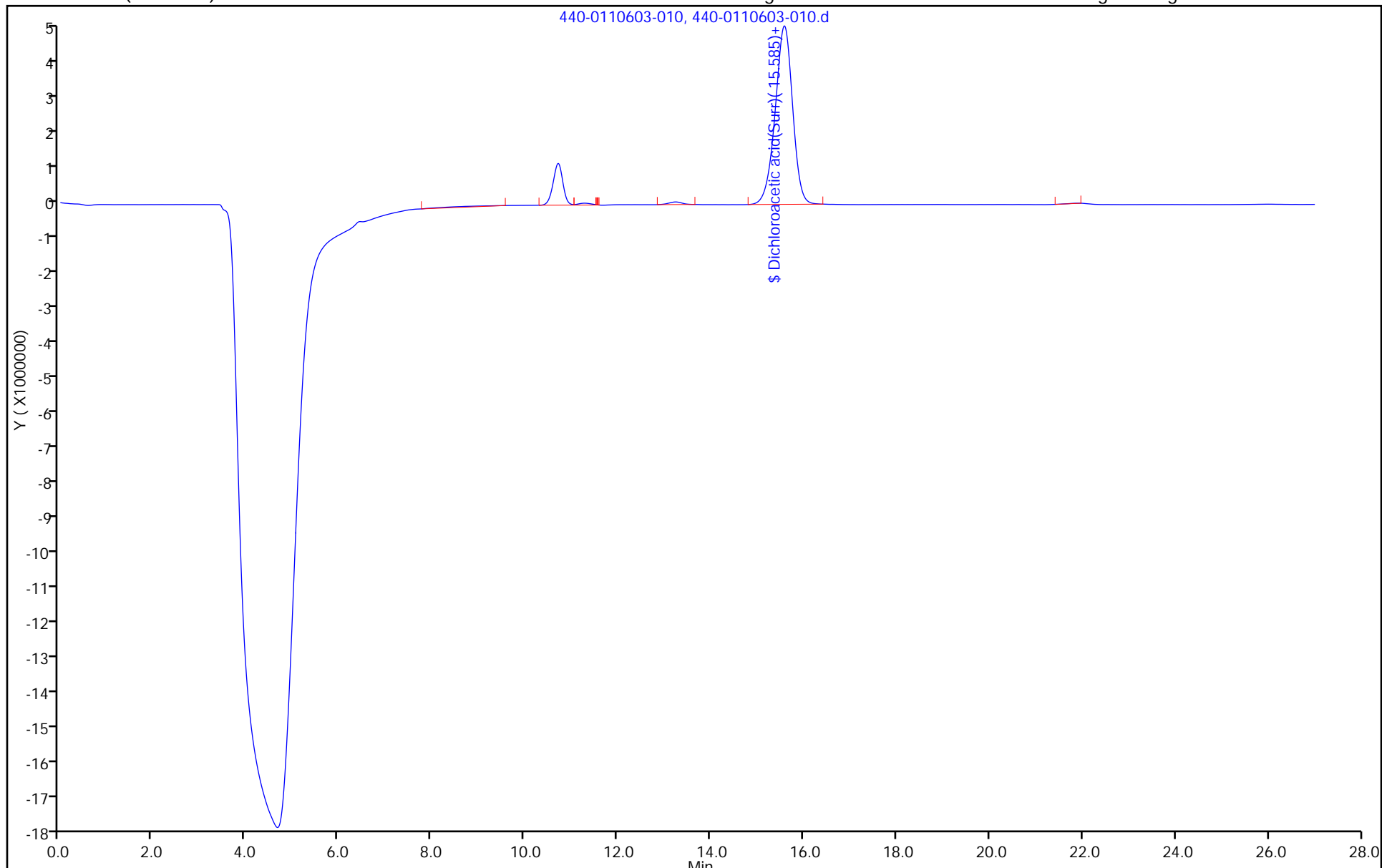
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 17-Oct-2018 13:15:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-010
 Misc. Info.: ICB
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:39:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	981.3	98.75

TestAmerica Irvine

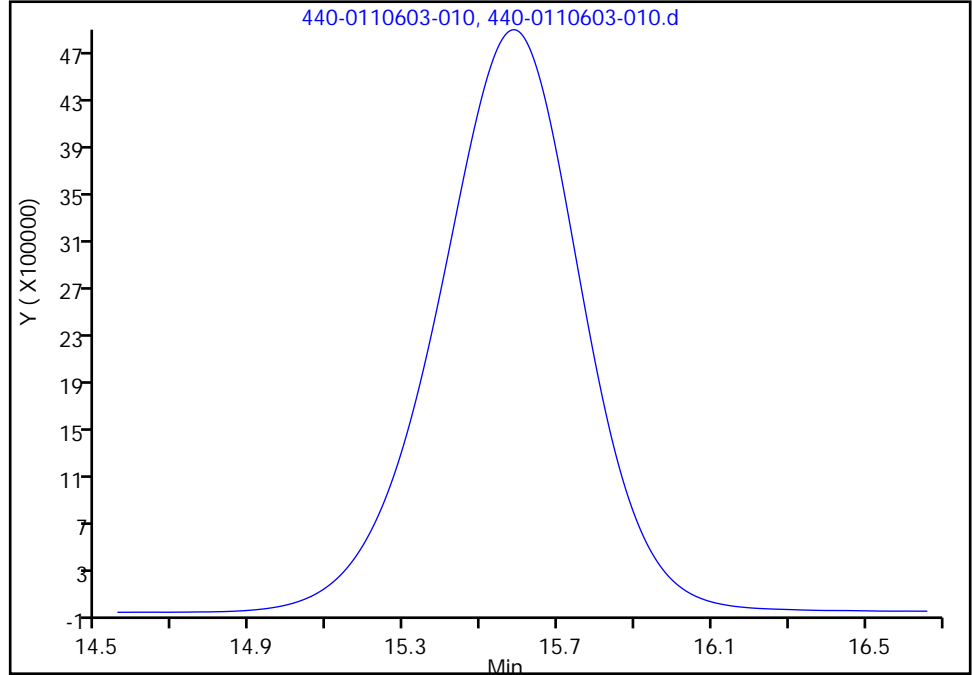
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-010.d
Injection Date: 17-Oct-2018 13:15:00 Instrument ID: IC-32
Lims ID: ICB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

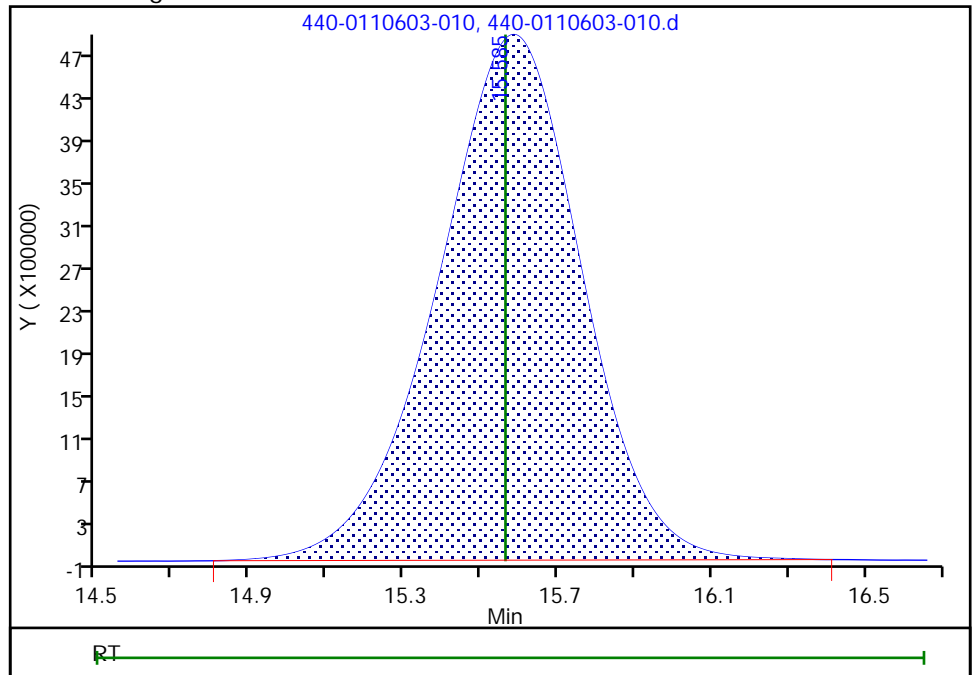
Not Detected
Expected RT: 15.56

Processing Integration Results



RT: 15.58
Area: 128432317
Amount: 981.3042
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 03:49:17
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-505657/12
 Matrix: Water Lab File ID: 440-0110603-012.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 14:16
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	99.9		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Oct-2018 14:16:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-012
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.222	8.227	-0.005	23994489	NC	NC	
3 Bromate	9.425	9.420	0.005	3304613	25.0	24.9	
\$ 6 Dichloroacetic acid(Surr)	15.571	15.563	0.008	131476179	993.7	1004.6	
4 Bromide	18.249	18.235	0.014	57426169	250.0	246.5	
2 Chlorate	19.977	19.885	0.092	20383206	100.0	99.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077

Amount Added: 125.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d

Injection Date: 17-Oct-2018 14:16:00

Instrument ID: IC-32

Operator ID:

Lims ID: LCS

Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

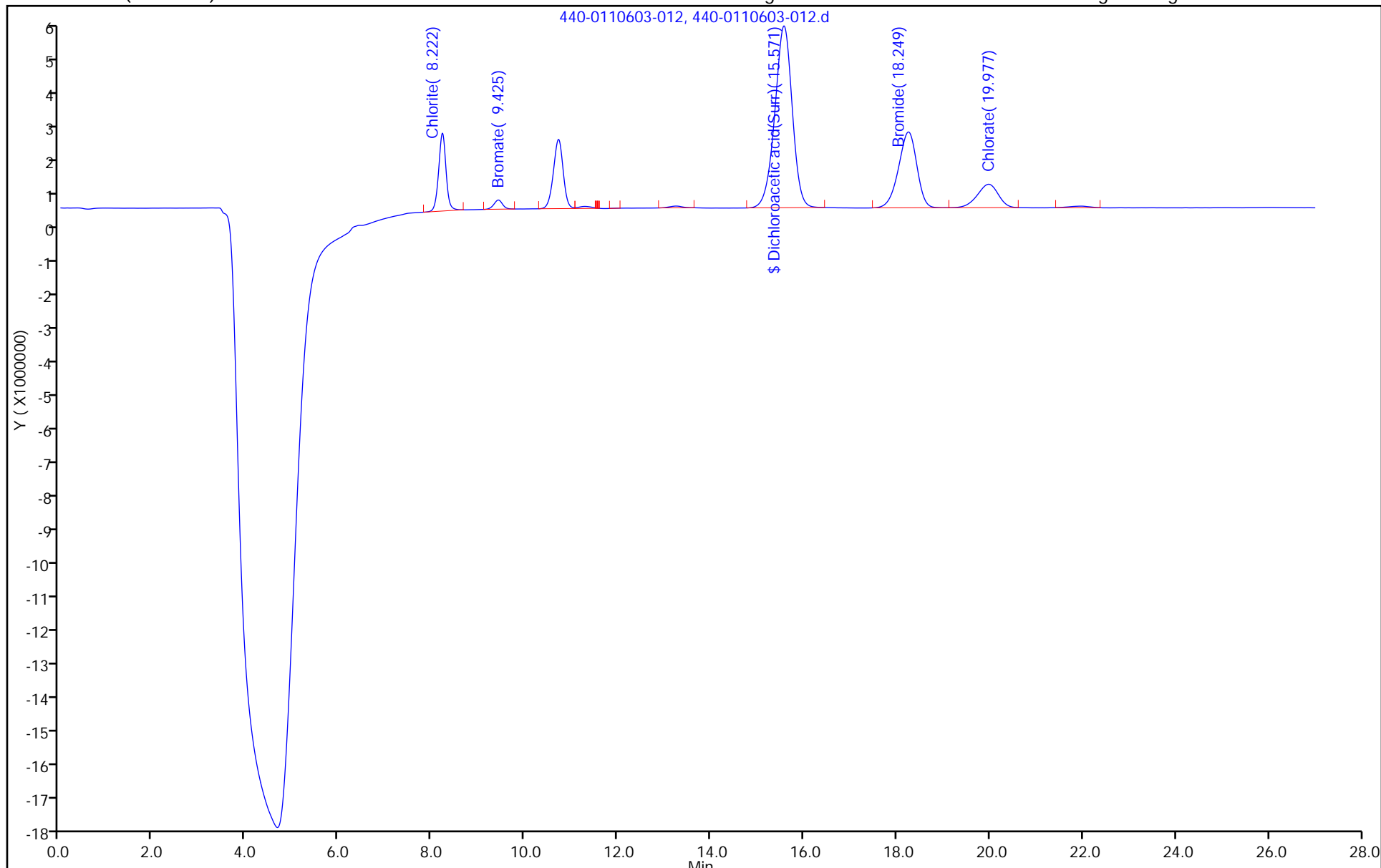
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Oct-2018 14:16:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-012
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1004.6	101.09

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-505658/12
 Matrix: Water Lab File ID: 440-0110603-012.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 14:16
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	98.4		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Oct-2018 14:16:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-012
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.222	8.227	-0.005	23994489	100.0	98.4	
3 Bromate	9.425	9.420	0.005	3304613	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	15.571	15.563	0.008	131476179	993.7	1004.6	
4 Bromide	18.249	18.235	0.014	57426169	NC	NC	
2 Chlorate	19.977	19.885	0.092	20383206	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077

Amount Added: 125.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d

Injection Date: 17-Oct-2018 14:16:00

Instrument ID: IC-32

Operator ID:

Lims ID: LCS

Worklist Smp#: 12

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

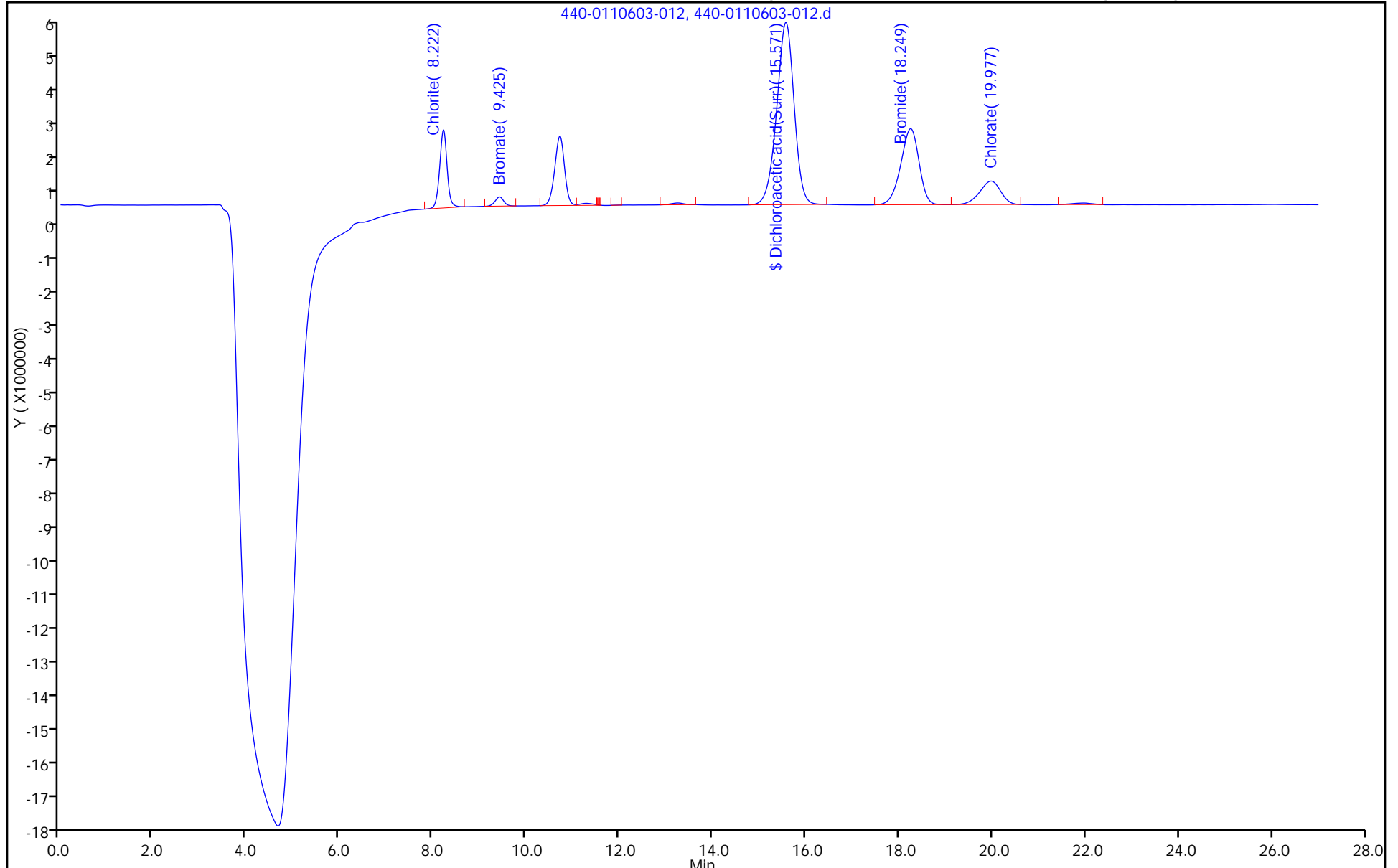
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-012.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Oct-2018 14:16:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-012
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1004.6	101.09

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506165/4
 Matrix: Water Lab File ID: 440-0110708-004.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 06:21
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	99.5		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	104		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-004.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 19-Oct-2018 06:21:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-004
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 07:58:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.242	8.227	0.015	24028069	NC	NC	
3 Bromate	9.481	9.420	0.061	3394081	25.0	25.5	
\$ 6 Dichloroacetic acid(Surr)	15.554	15.563	-0.009	134651865	993.7	1028.8	
4 Bromide	18.610	18.235	0.375	57548564	250.0	247.0	
2 Chlorate	20.282	19.885	0.397	20296786	100.0	99.5	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 125.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-004.d

Injection Date: 19-Oct-2018 06:21:00

Instrument ID: IC-32

Operator ID:

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

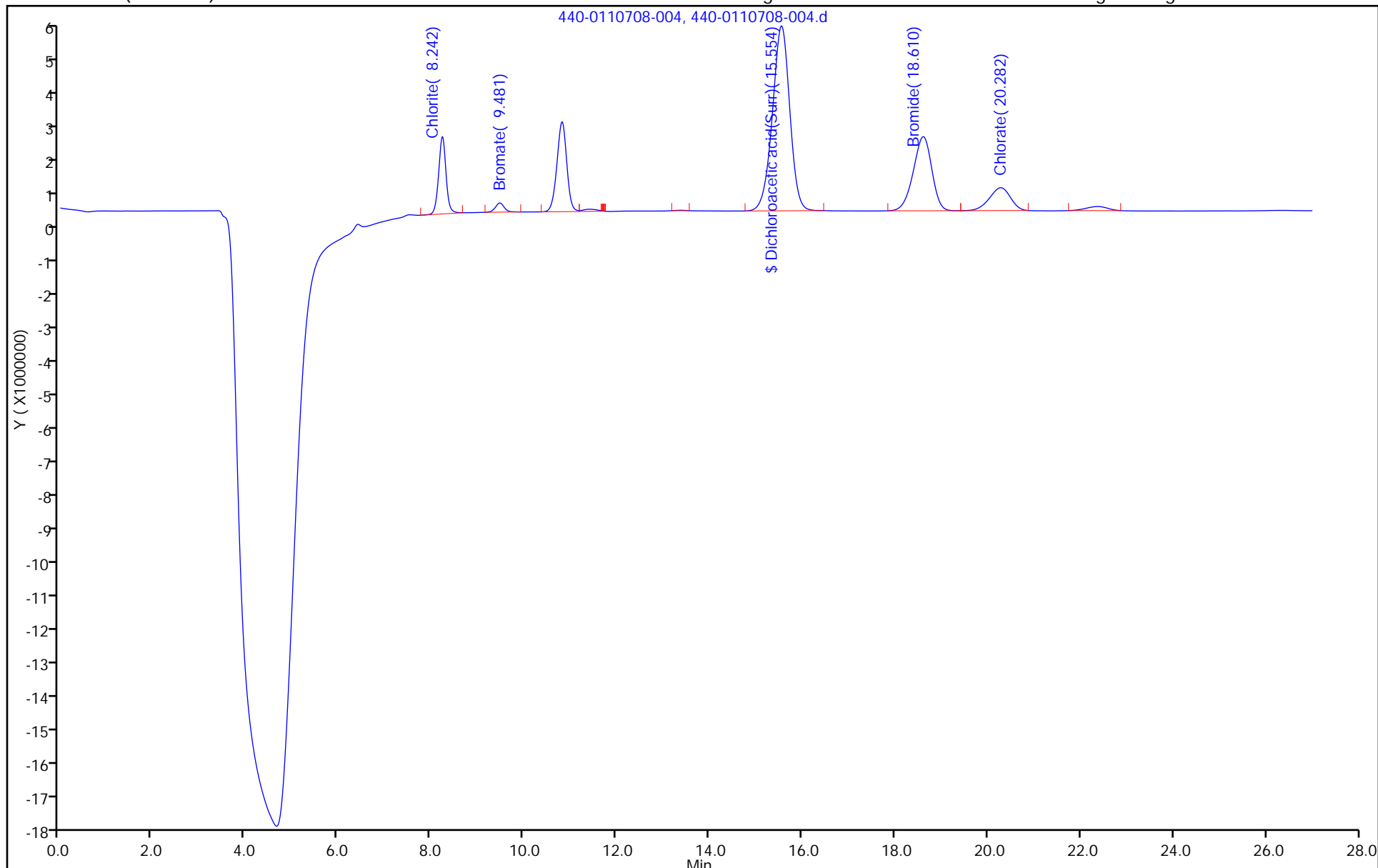
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-004.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 19-Oct-2018 06:21:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-004
 Misc. Info.: LCS
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 07:58:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1028.8	103.53

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 440-506501/4
 Matrix: Water Lab File ID: 440-0110792-004.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 07:11
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	99.8		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	102		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-004.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 21-Oct-2018 07:11:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-004
 Misc. Info.: 4 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 07:53:58 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.200	7.150	0.050	15709207	100.0	99.8	
3 Bromate	8.217	8.117	0.100	2199436	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.275	13.200	0.075	85552308	993.7	1012.1	
4 Bromide	15.675	15.209	0.466	37403825	NC	NC	
2 Chlorate	16.883	16.475	0.408	13701349	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077

Amount Added: 125.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-004.d

Injection Date: 21-Oct-2018 07:11:00

Instrument ID: IC-8

Operator ID:

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

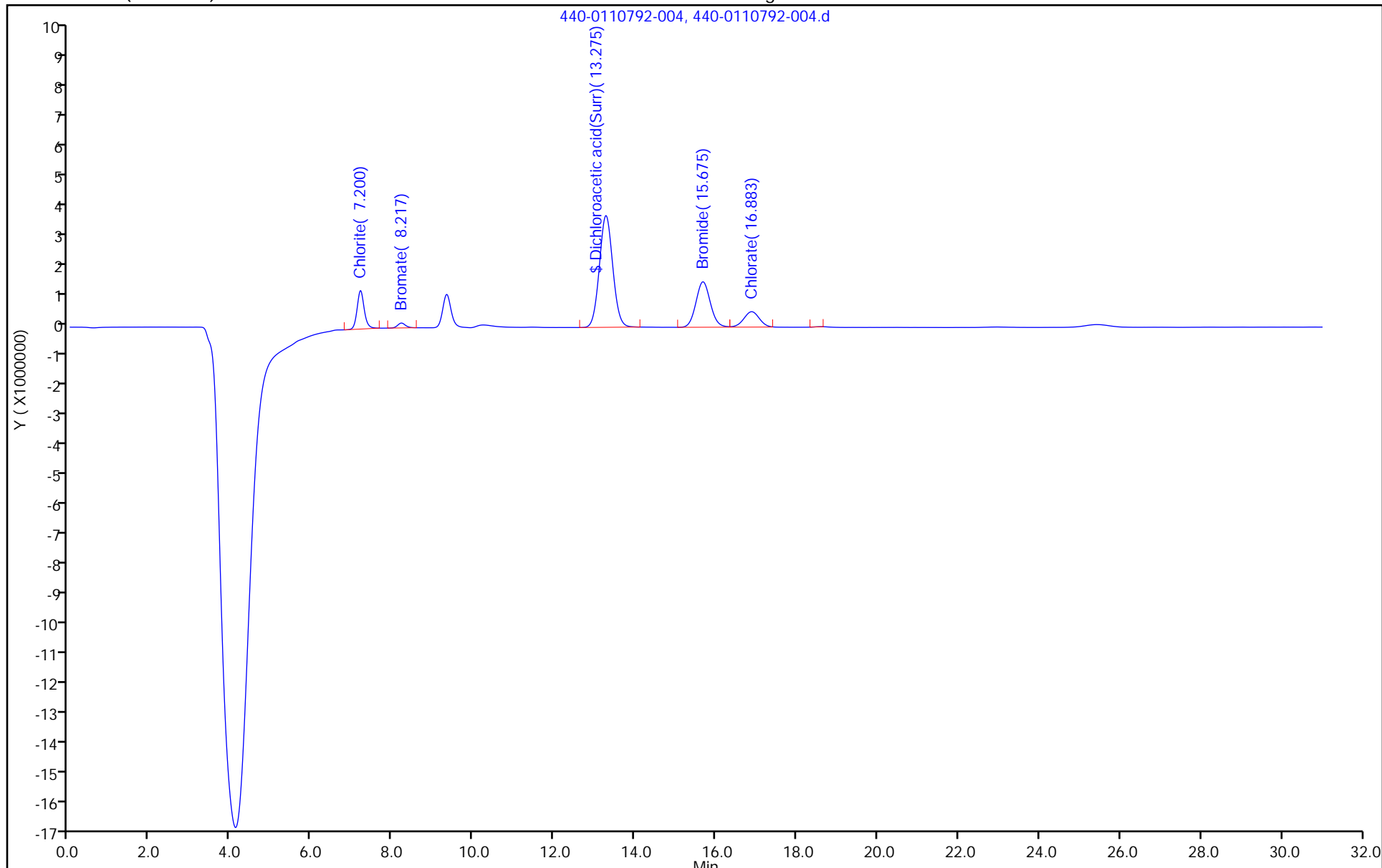
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-004.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 21-Oct-2018 07:11:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-004
 Misc. Info.: 4 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 07:53:58 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1012.1	101.85

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-505657/11
 Matrix: Water Lab File ID: 440-0110603-011.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 13:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	19.9	J	20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 17-Oct-2018 13:45:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-011
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:49:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.216	8.227	-0.011	4709059	NC	NC	
3 Bromate	9.416	9.420	-0.004	649168	5.00	4.95	
\$ 1 Dichloroacetic acid	15.571	15.563	0.008	130461326		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.571	15.563	0.008	130461326	993.7	996.8	a
4 Bromide	18.203	18.235	-0.032	11128003	50.0	53.4	
2 Chlorate	19.938	19.885	0.053	3733095	20.0	19.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WC3001LCS_00077

Amount Added: 25.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d

Injection Date: 17-Oct-2018 13:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: MRL

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

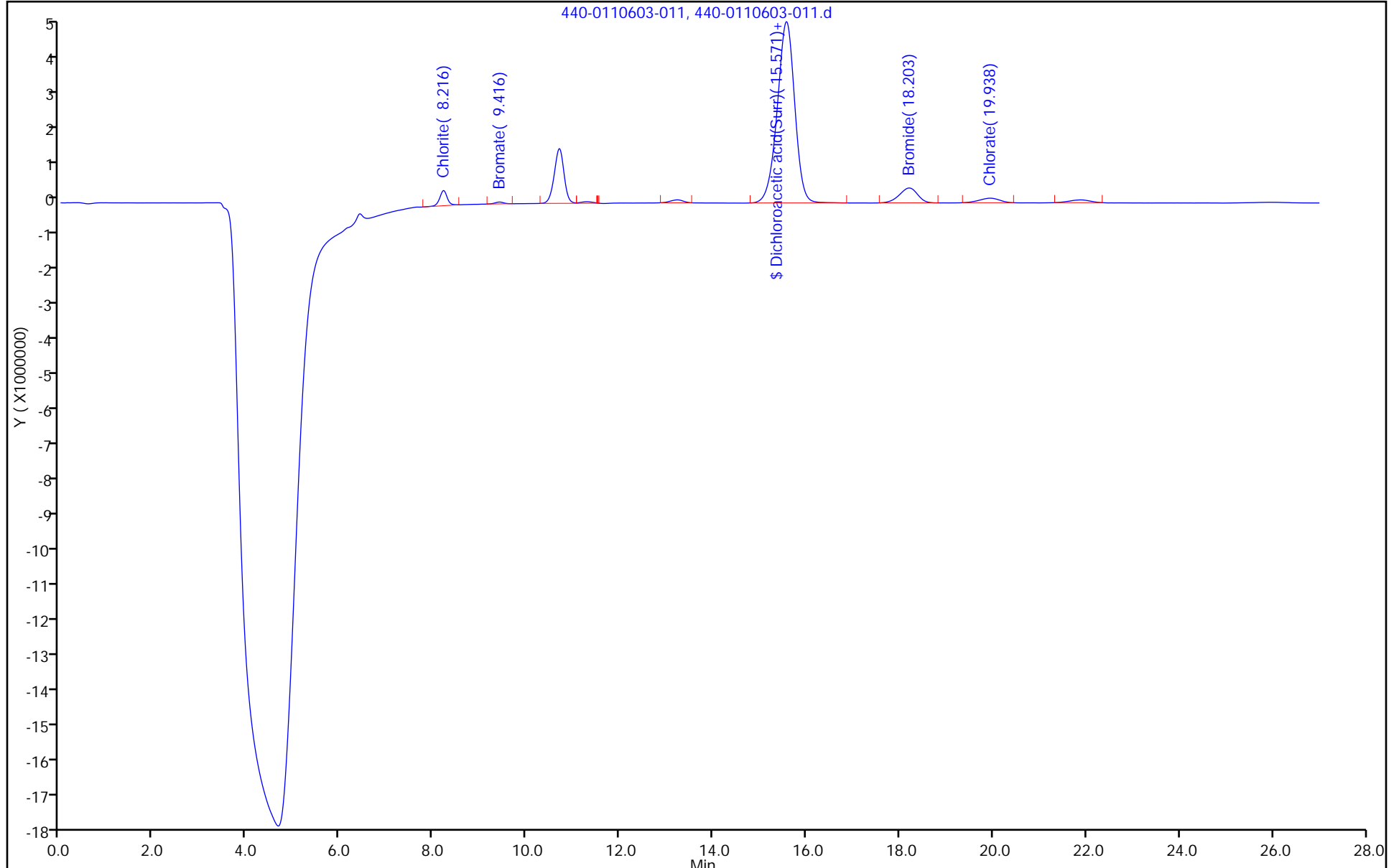
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 17-Oct-2018 13:45:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-011
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:49:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	996.8	100.31

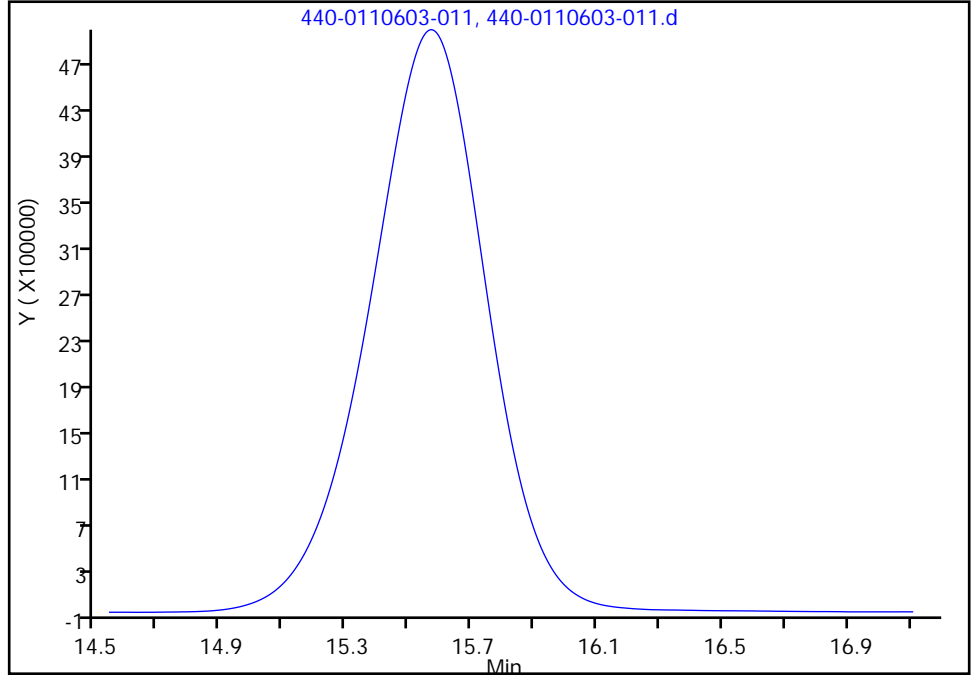
TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
Injection Date: 17-Oct-2018 13:45:00 Instrument ID: IC-32
Lims ID: MRL
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_28D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6
Signal: 1

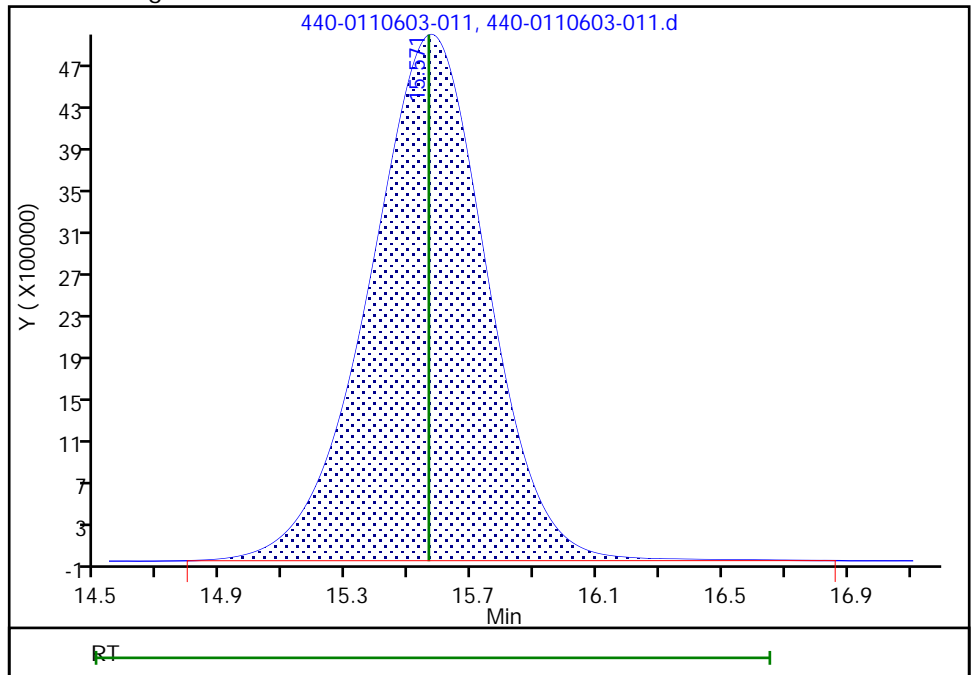
Not Detected
Expected RT: 15.56

Processing Integration Results



RT: 15.57
Area: 130461326
Amount: 996.8071
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 03:49:33
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-505658/11
 Matrix: Water Lab File ID: 440-0110603-011.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 13:45
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	21.9		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 17-Oct-2018 13:45:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-011
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 03:49:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.216	8.227	-0.011	4709059	20.0	21.9	
3 Bromate	9.416	9.420	-0.004	649168	NC	NC	
\$ 1 Dichloroacetic acid	15.571	15.563	0.008	130461326		NC	a
\$ 6 Dichloroacetic acid(Surr)	15.571	15.563	0.008	130461326	993.7	996.8	a
4 Bromide	18.203	18.235	-0.032	11128003	NC	NC	
2 Chlorate	19.938	19.885	0.053	3733095	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

WC3001LCS_00077

Amount Added: 25.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d

Injection Date: 17-Oct-2018 13:45:00

Instrument ID: IC-32

Operator ID:

Lims ID: MRL

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

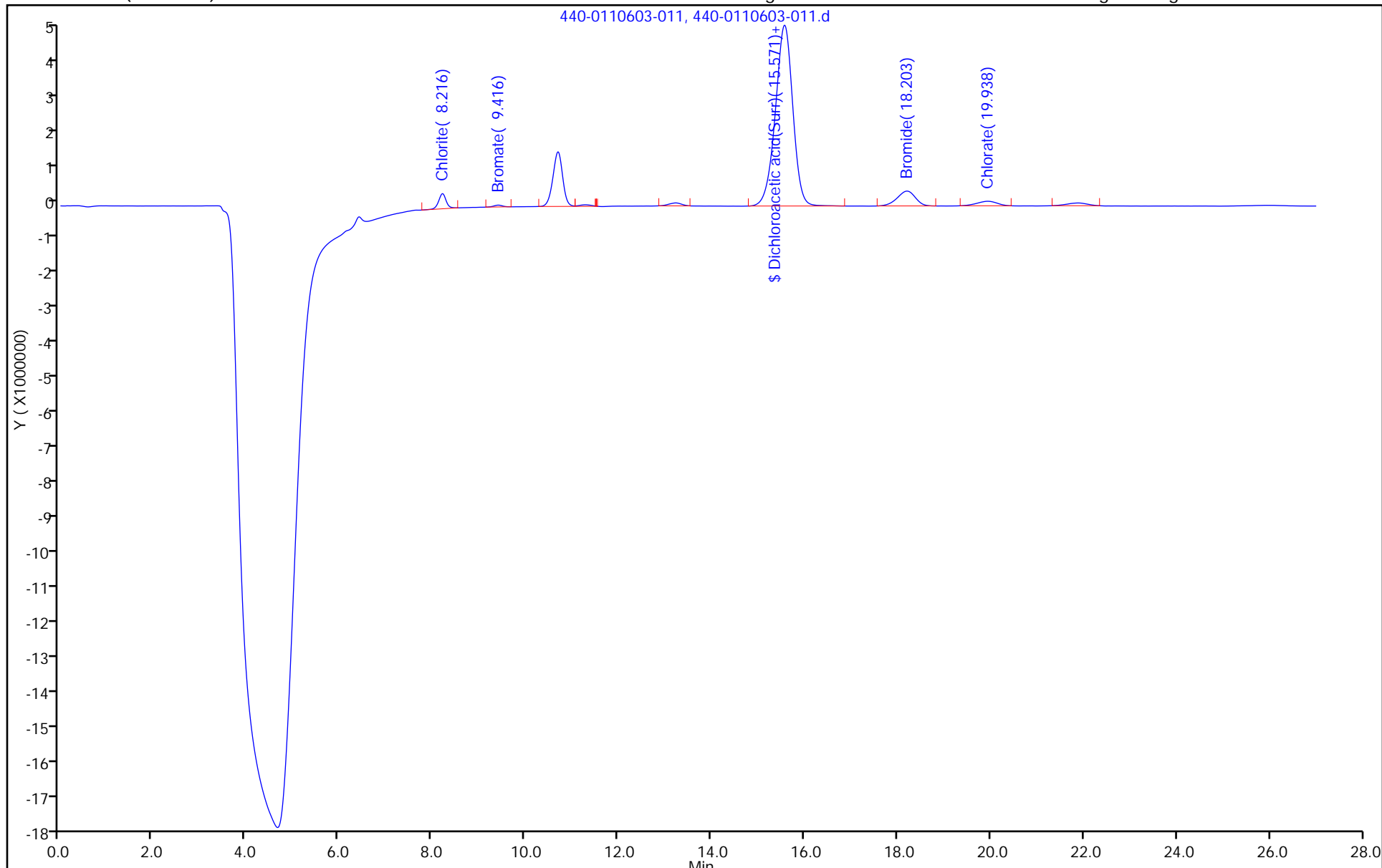
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 17-Oct-2018 13:45:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110603-011
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 04:50:23 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 03:49:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	996.8	100.31

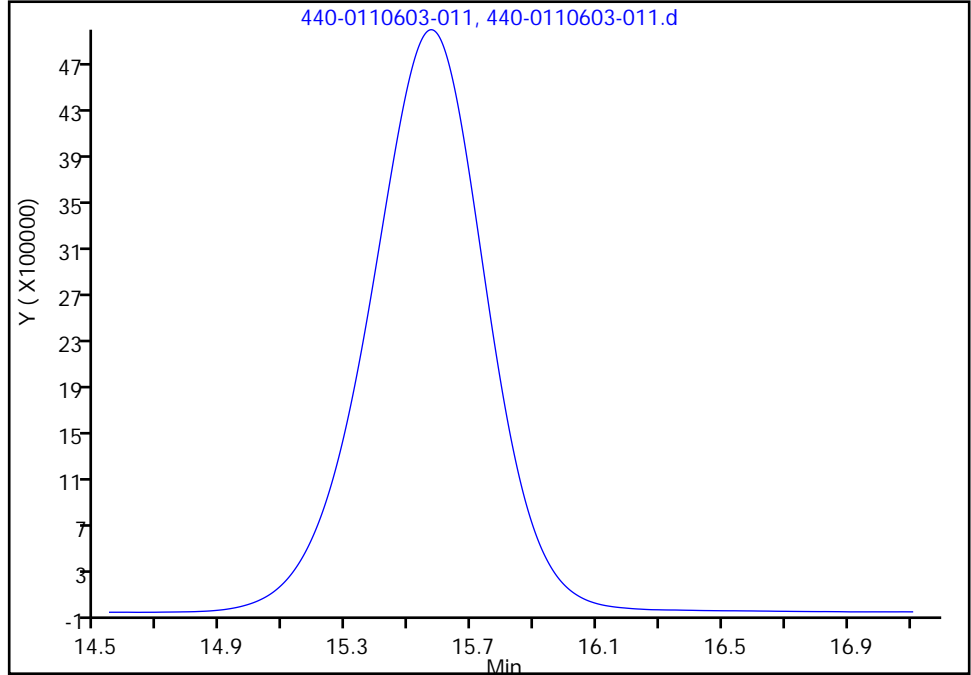
TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-011.d
Injection Date: 17-Oct-2018 13:45:00 Instrument ID: IC-32
Lims ID: MRL
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6
Signal: 1

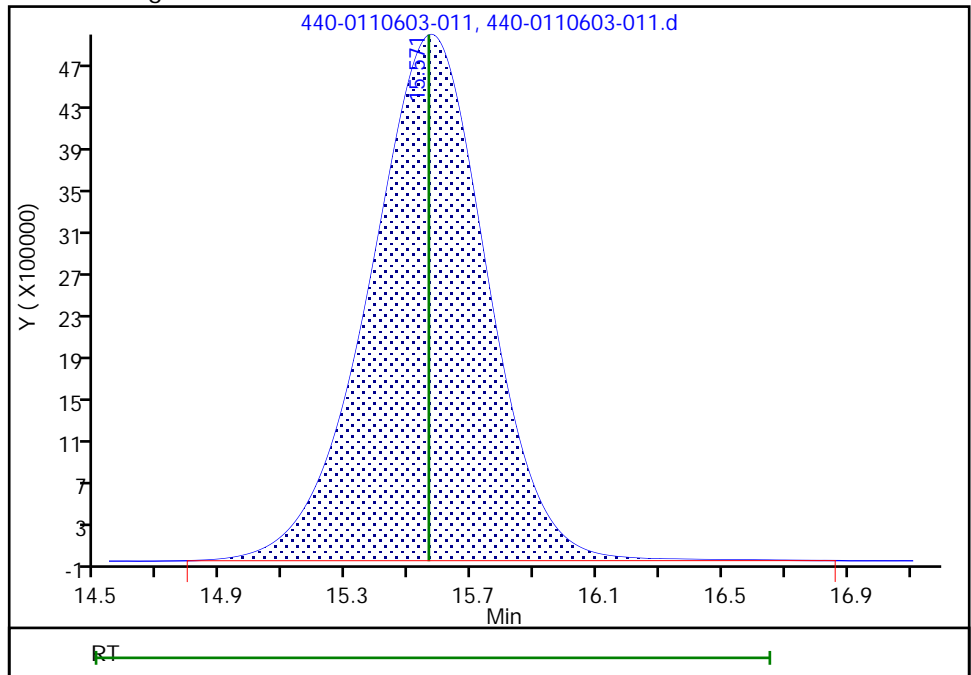
Not Detected
Expected RT: 15.56

Processing Integration Results



RT: 15.57
Area: 130461326
Amount: 996.8071
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 03:49:33
Audit Action: Assigned Compound ID

Audit Reason:

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-506165/3
 Matrix: Water Lab File ID: 440-0110708-003.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 05:51
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	20.8		20	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	103		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-003.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 19-Oct-2018 05:51:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-003
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 07:08:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.242	8.227	0.015	4817904	NC	NC	
3 Bromate	9.477	9.420	0.057	629253	5.00	4.81	
\$ 1 Dichloroacetic acid	15.566	15.563	0.003	134336810		NC	
\$ 6 Dichloroacetic acid(Surr)	15.566	15.563	0.003	134336810	993.7	1026.4	
4 Bromide	18.578	18.235	0.343	10993784	50.0	52.8	
2 Chlorate	20.261	19.885	0.376	3922467	20.0	20.8	M

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 25.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-003.d

Injection Date: 19-Oct-2018 05:51:00

Instrument ID: IC-32

Operator ID:

Lims ID: MRL

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

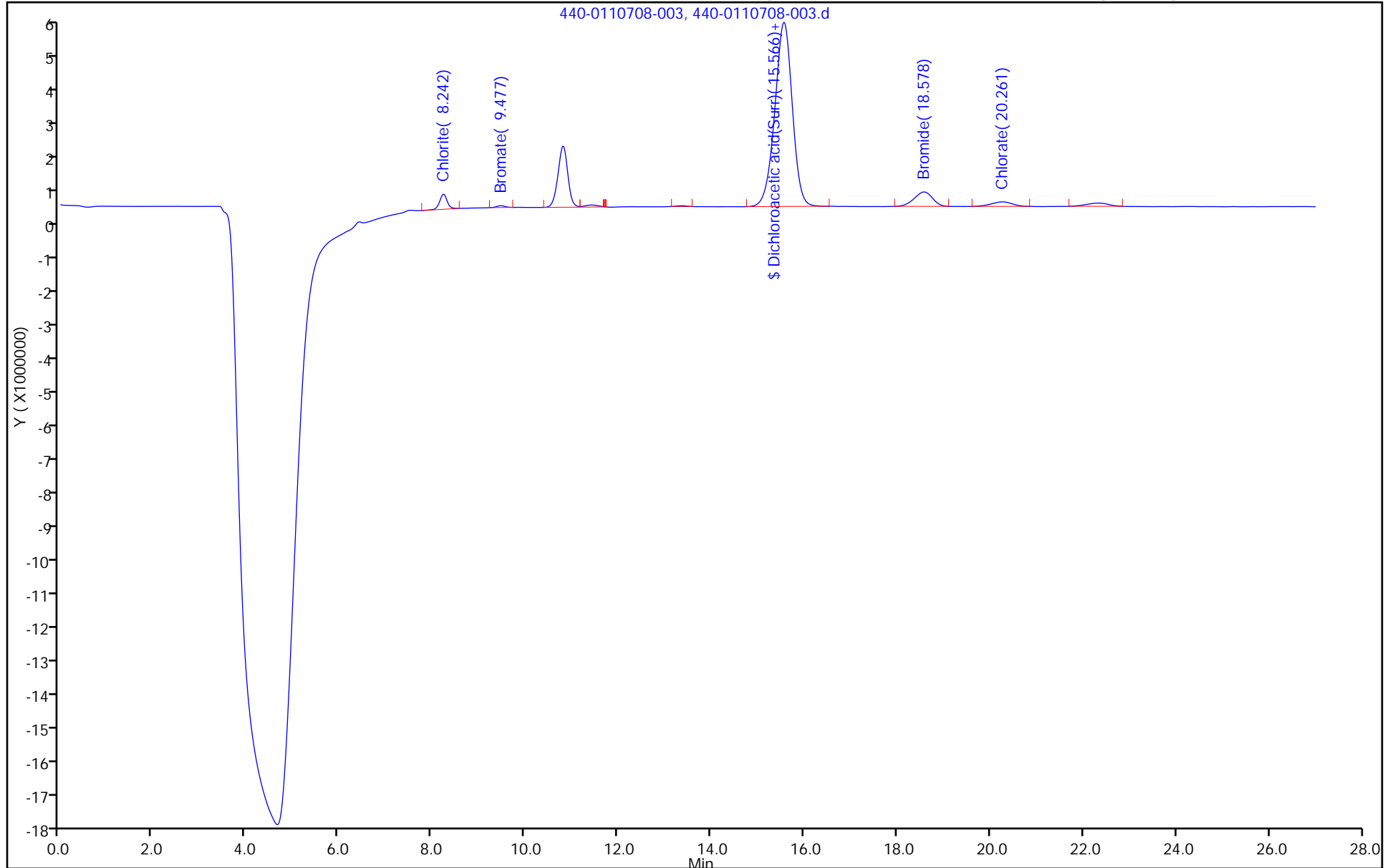
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-003.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 19-Oct-2018 05:51:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110708-003
 Misc. Info.: MRL
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 07:59:18 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 07:08:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1026.4	103.29

TestAmerica Irvine

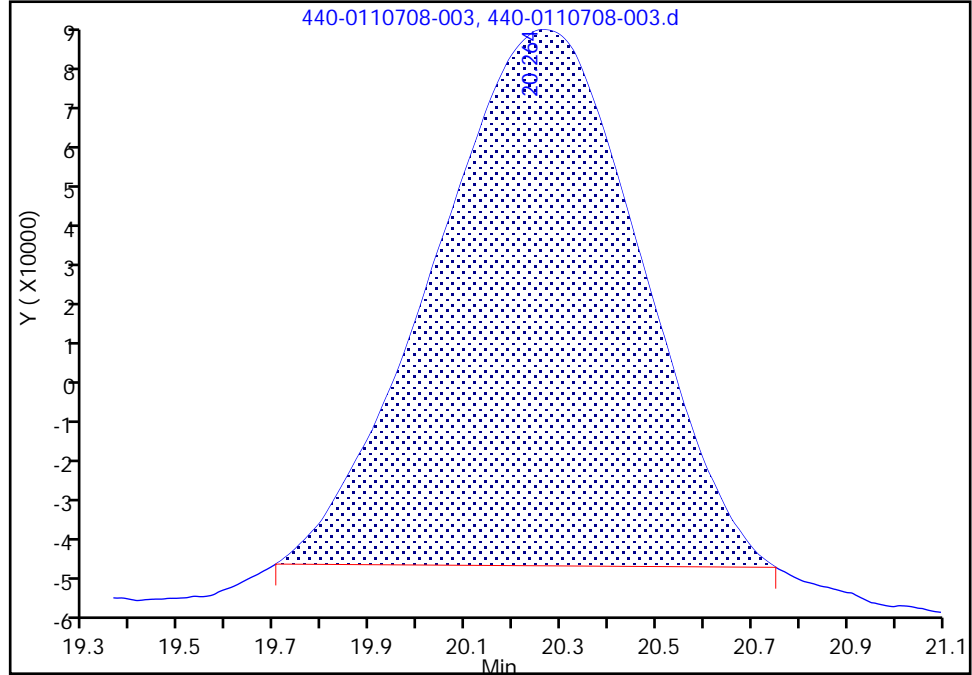
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-003.d
Injection Date: 19-Oct-2018 05:51:00 Instrument ID: IC-32
Lims ID: MRL
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: EPA 300.1 Limit Group: IC-300.1_28D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

2 Chlorate, CAS: 7790-93-4

Signal: 1

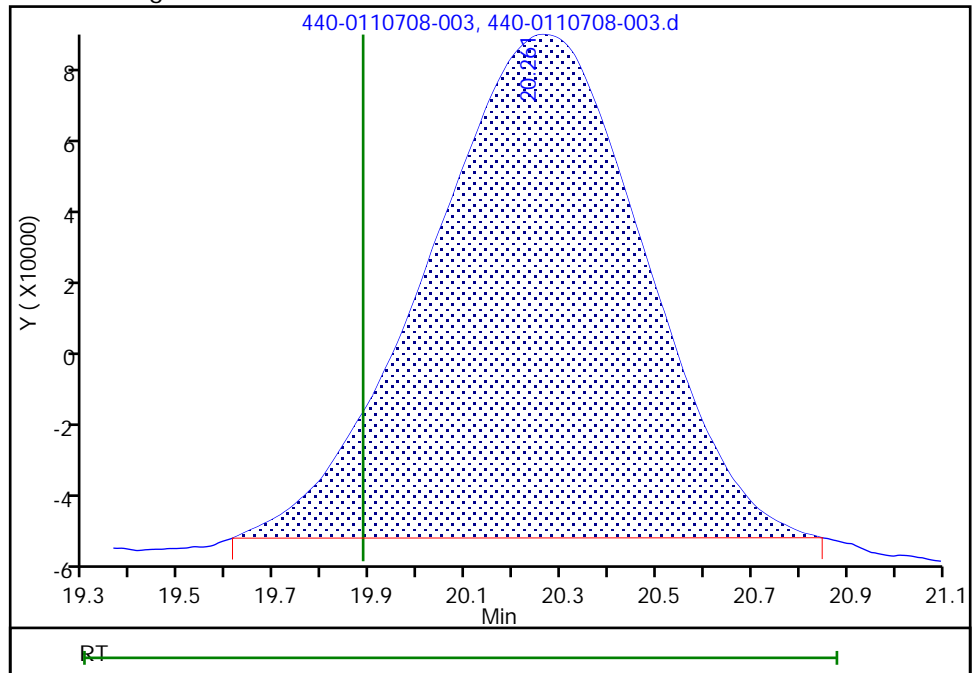
RT: 20.26
Area: 3602874
Amount: 19.303070
Amount Units: ug/l

Processing Integration Results



RT: 20.26
Area: 3922467
Amount: 20.838770
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 07:07:58
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MRL 440-506501/3
 Matrix: Water Lab File ID: 440-0110792-003.d
 Analysis Method: 300.1B Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 06:34
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	21.7		20	4.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-003.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 21-Oct-2018 06:34:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-003
 Misc. Info.: 3 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 08:28:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabovy Date: 21-Oct-2018 08:28:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.209	7.150	0.059	3146463	20.0	21.7	
3 Bromate	8.209	8.117	0.092	447344	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.284	13.200	0.084	84120945	993.7	995.2	
\$ 1 Dichloroacetic acid	13.284	13.909	-0.625	84120945		NC	
4 Bromide	15.684	15.209	0.475	7384252	NC	NC	
2 Chlorate	16.884	16.475	0.409	2526792	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 25.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-003.d

Injection Date: 21-Oct-2018 06:34:00

Instrument ID: IC-8

Operator ID:

Lims ID: MRL

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

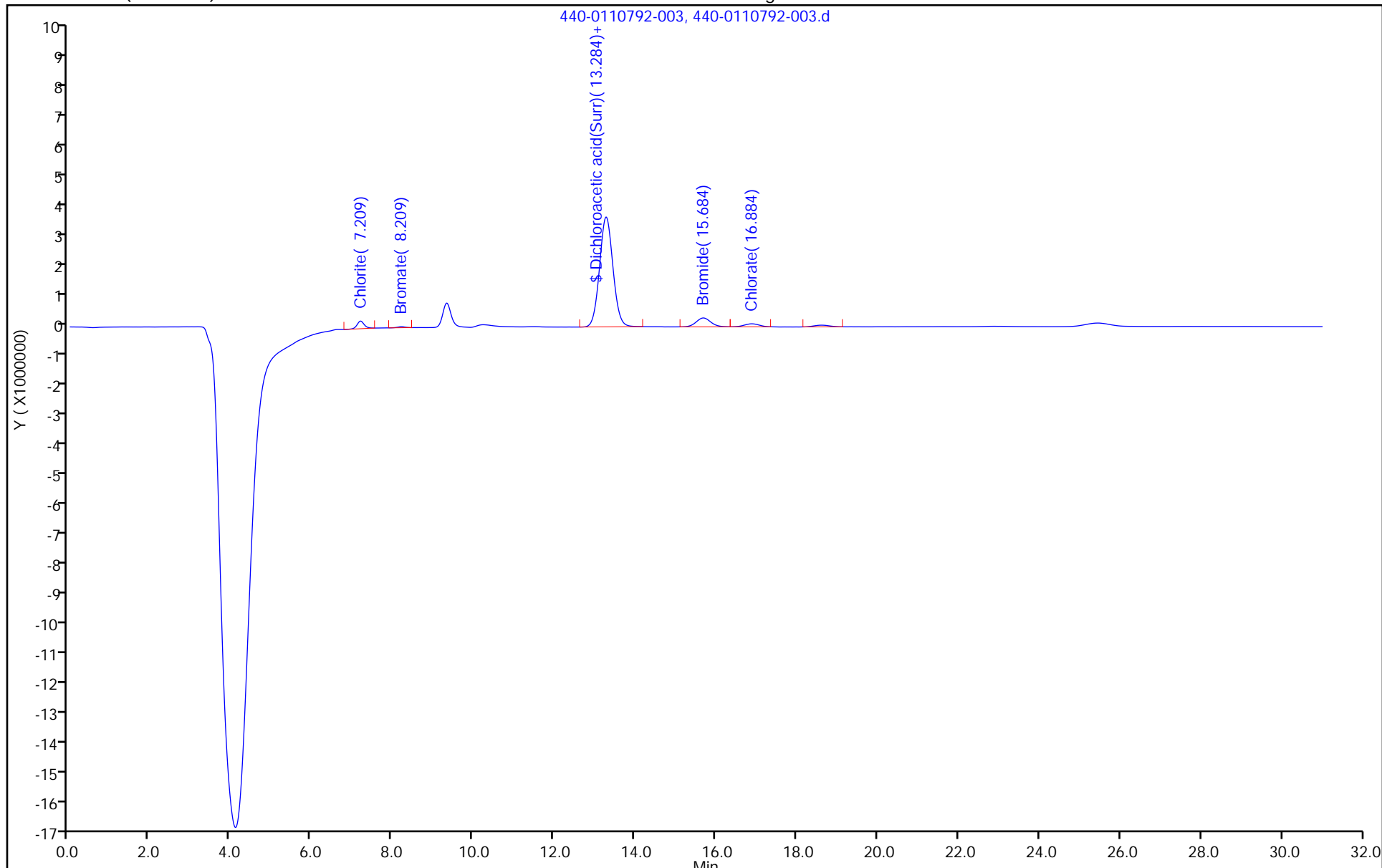
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-003.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 21-Oct-2018 06:34:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 440-0110792-003
 Misc. Info.: 3 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 21-Oct-2018 08:28:03 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK033

First Level Reviewer: zakhrabov Date: 21-Oct-2018 08:28:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	995.2	100.15

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: 440-0110792-028.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 21:41
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	407		100	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	98		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-028.d
 Lims ID: 440-222284-D-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 21-Oct-2018 21:41:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-028
 Misc. Info.: 28 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabovy Date: 22-Oct-2018 03:48:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.025	7.150	-0.125	12735873	40.0	81.3	M
3 Bromate	8.059	8.117	-0.058	329190	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.242	13.200	0.042	82682761	198.7	978.2	M
\$ 1 Dichloroacetic acid	13.242	13.909	-0.667	82682761		NC	M
4 Bromide	15.417	15.209	0.208	30076112551	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-028.d

Injection Date: 21-Oct-2018 21:41:00

Instrument ID: IC-8

Operator ID:

Lims ID: 440-222284-D-2 MS

Worklist Smp#: 28

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

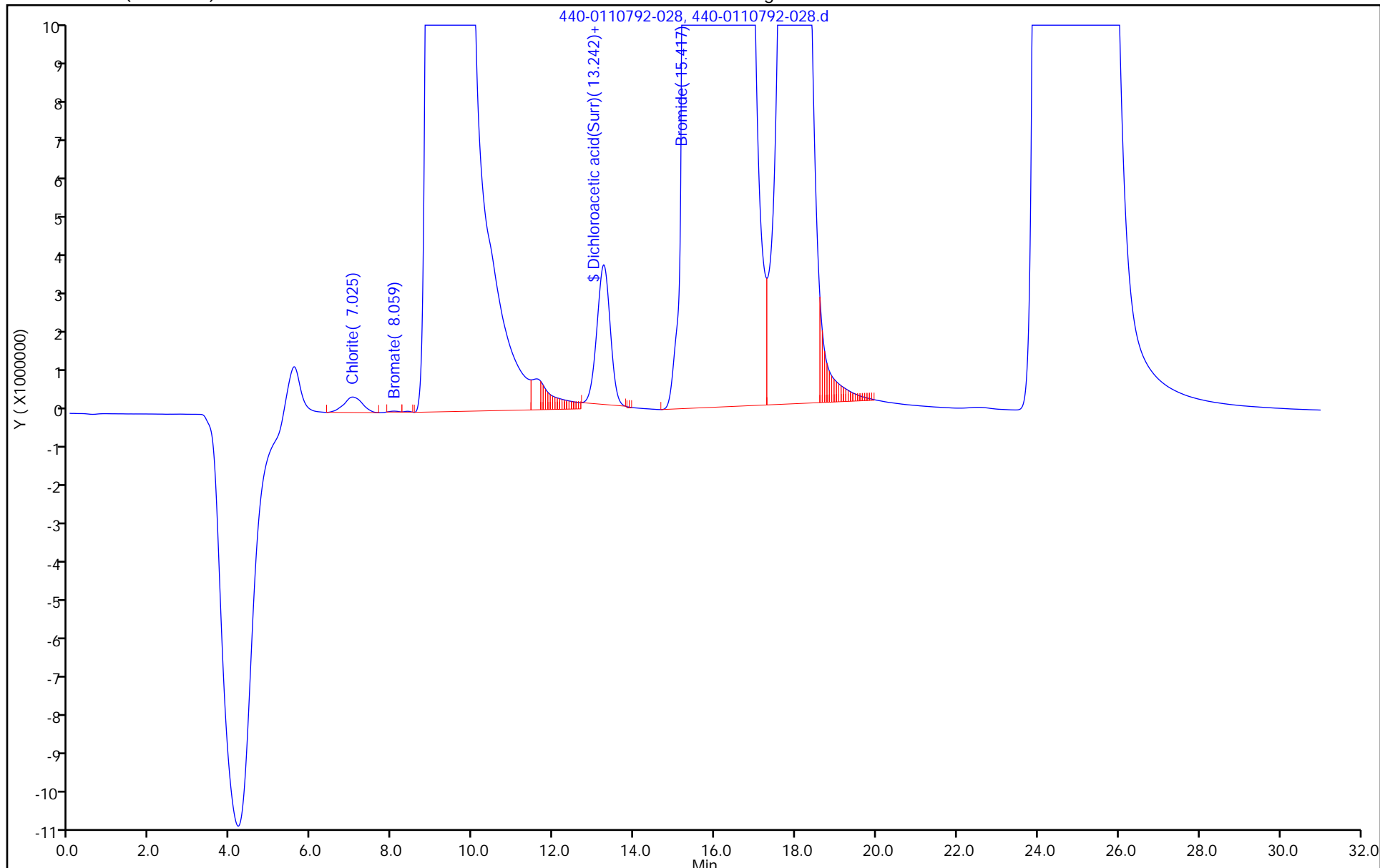
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-028.d
 Lims ID: 440-222284-D-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 21-Oct-2018 21:41:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-028
 Misc. Info.: 28 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:48:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	978.2	492.19

TestAmerica Irvine

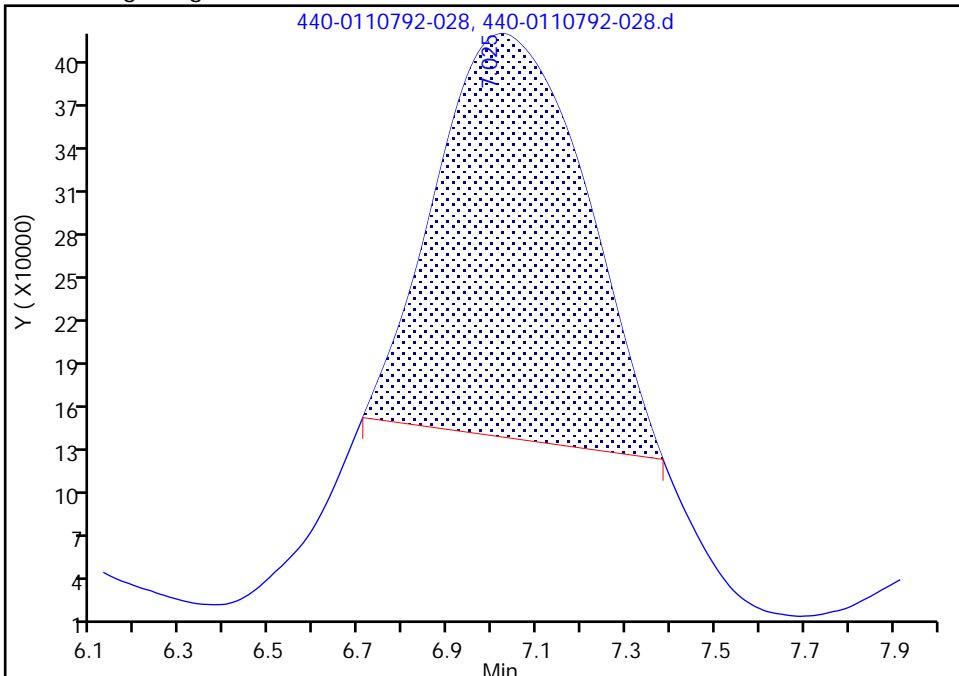
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-028.d
Injection Date: 21-Oct-2018 21:41:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 MS
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

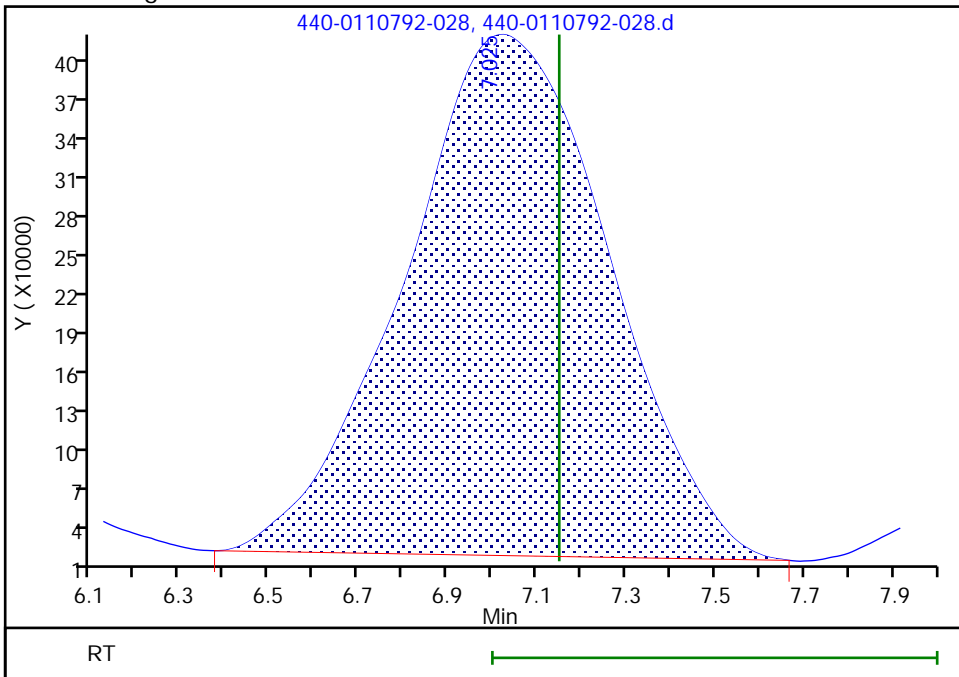
RT: 7.03
Area: 6506836
Amount: 42.582370
Amount Units: ug/l

Processing Integration Results



RT: 7.03
Area: 12735873
Amount: 81.319176
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:48:16
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

TestAmerica Irvine

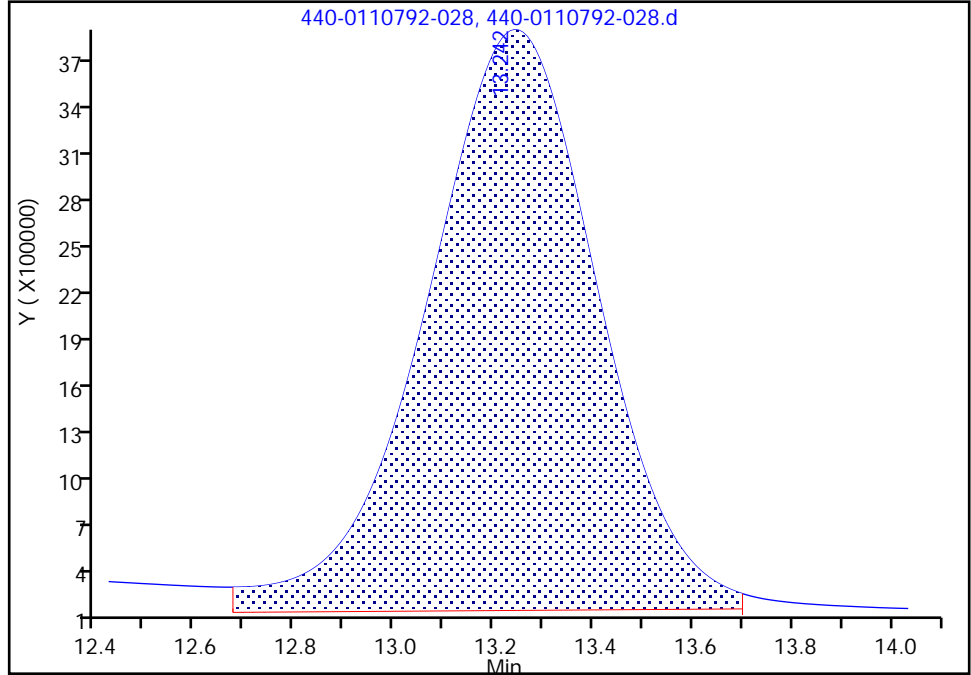
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-028.d
Injection Date: 21-Oct-2018 21:41:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 MS
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

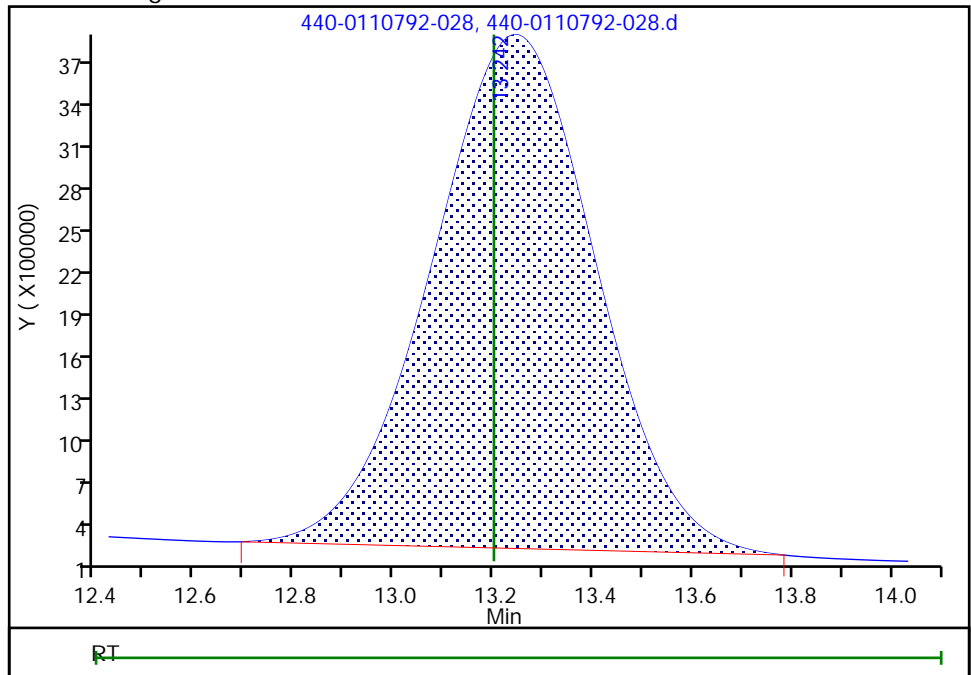
RT: 13.24
Area: 89230188
Amount: 1055.6523
Amount Units: ug/l

Processing Integration Results



RT: 13.24
Area: 82682761
Amount: 978.1919
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:48:22
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MS Lab Sample ID: 440-222284-2 MS
 Matrix: Water Lab File ID: 440-0110708-011.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 09:50
 Con. Extract Vol.: _____ Dilution Factor: 5000
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	759000		100000	10000

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	103		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-011.d
 Lims ID: 440-222284-D-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 19-Oct-2018 09:50:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-011
 Misc. Info.: 440-222284-d-2 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:12 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.550	15.563	-0.013	134440126			NC
\$ 6 Dichloroacetic acid(Surr)	15.550	15.563	-0.013	134440126	0.1987	1027.2	
2 Chlorate	19.854	19.885	-0.031	31193060	0.0400	151.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-011.d

Injection Date: 19-Oct-2018 09:50:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-2 MS

Worklist Smp#: 11

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5000.0000

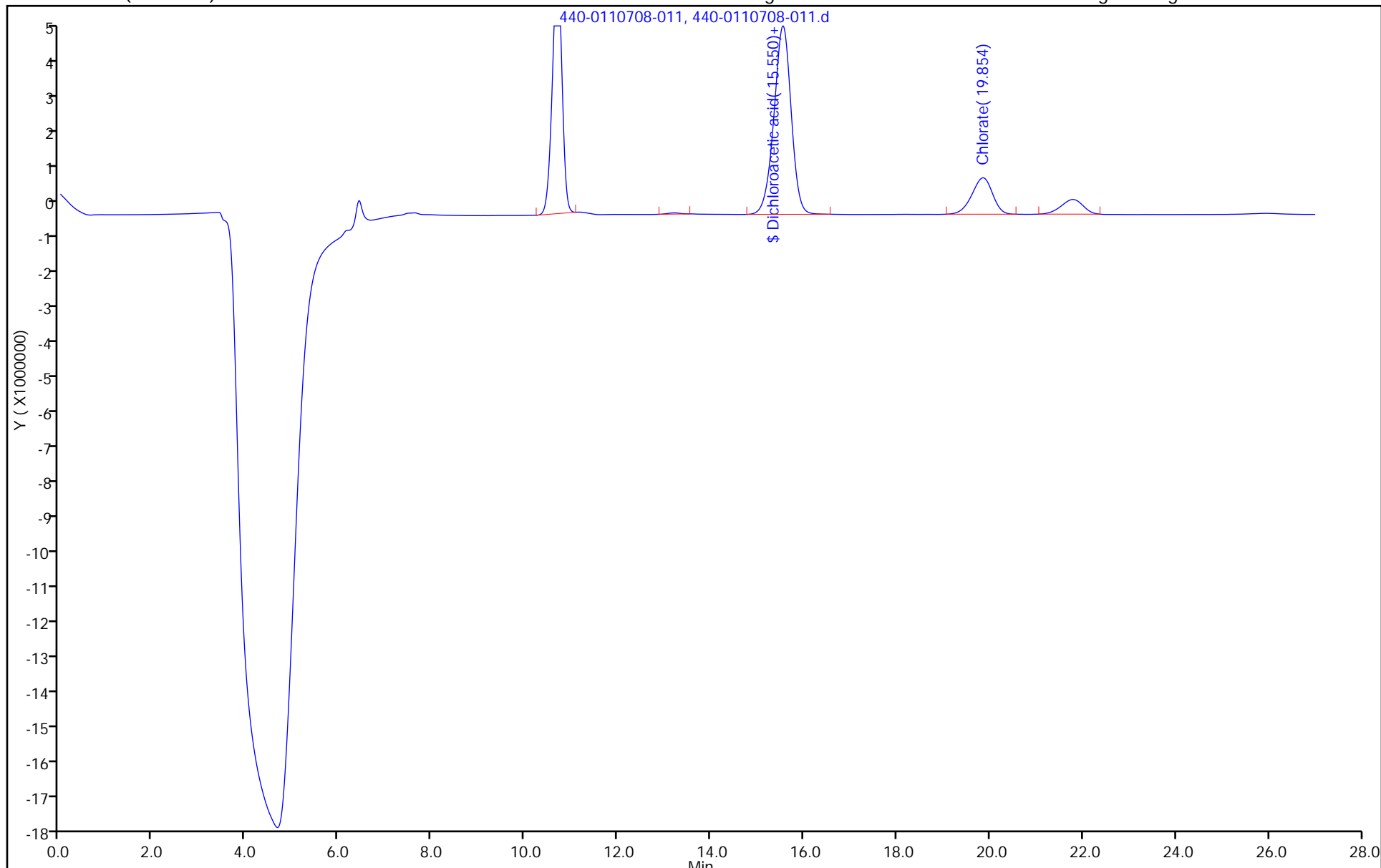
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-011.d
 Lims ID: 440-222284-D-2 MS
 Client ID: VER-01I-20181015
 Sample Type: MS
 Inject. Date: 19-Oct-2018 09:50:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-011
 Misc. Info.: 440-222284-d-2 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:12 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1027.2	516854.30

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 550-111664-B-1 MS
 Matrix: Water Lab File ID: 440-0110603-030.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 08:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 23:13
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	305		100	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d
 Lims ID: 550-111664-B-1 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 17-Oct-2018 23:13:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-030
 Misc. Info.: 550-111664-B-1 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:03:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.195	8.227	-0.032	27071600	NC	NC	M
3 Bromate	9.520	9.420	0.100	1452767	10.0	11.0	
\$ 1 Dichloroacetic acid	15.495	15.563	-0.068	129493469		NC	
\$ 6 Dichloroacetic acid(Surr)	15.495	15.563	-0.068	129493469	198.7	989.4	
4 Bromide	18.211	18.235	-0.024	26573523	100.0	117.8	
2 Chlorate	19.914	19.885	0.029	12271323	40.0	61.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d

Injection Date: 17-Oct-2018 23:13:00

Instrument ID: IC-32

Operator ID:

Lims ID: 550-111664-B-1 MS

Worklist Smp#: 30

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

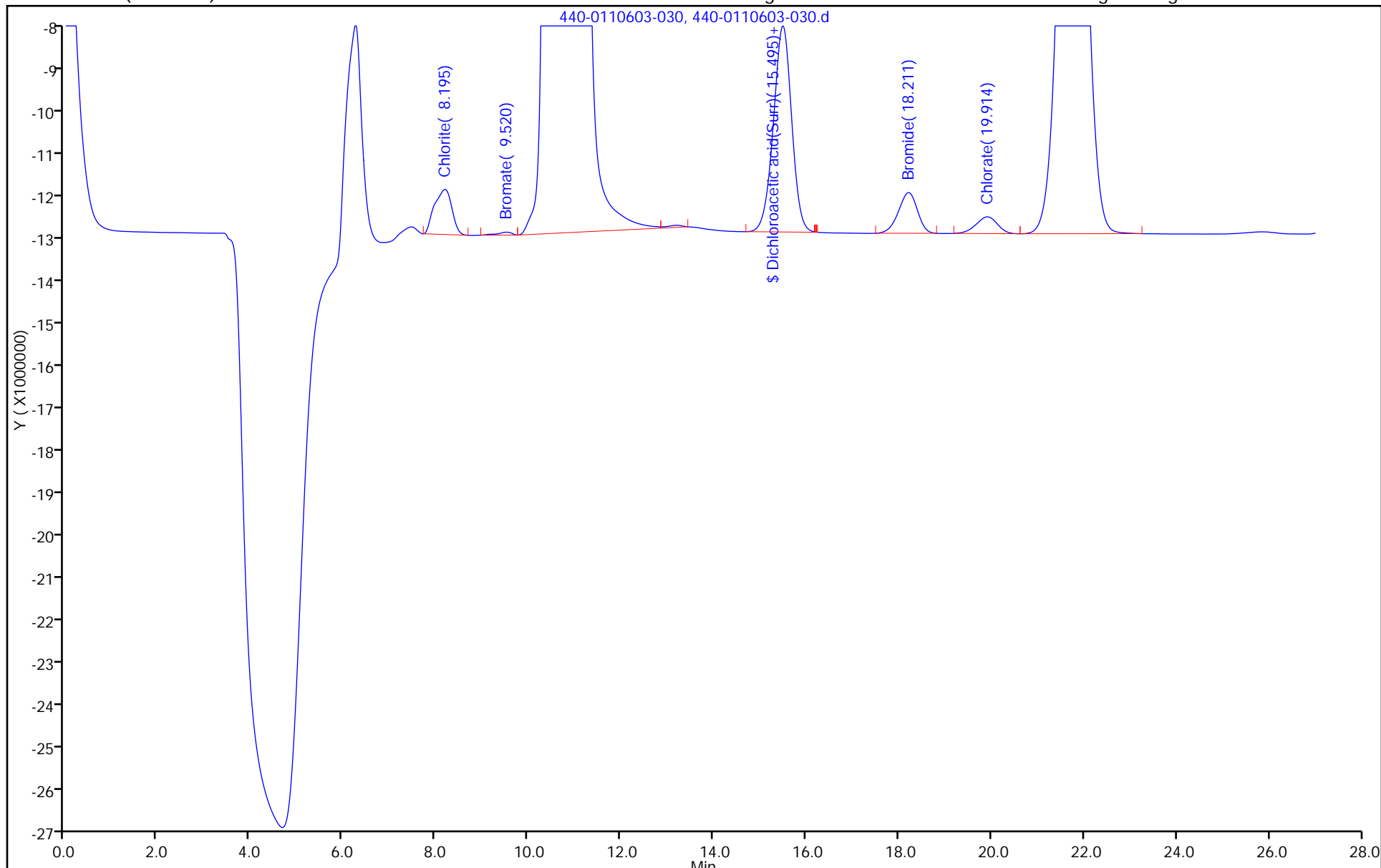
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d
 Lims ID: 550-111664-B-1 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 17-Oct-2018 23:13:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-030
 Misc. Info.: 550-111664-B-1 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:03:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	989.4	497.84

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 550-111664-B-1 MS
 Matrix: Water Lab File ID: 440-0110603-030.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 08:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 23:13
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	553		100	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	100		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d
 Lims ID: 550-111664-B-1 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 17-Oct-2018 23:13:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-030
 Misc. Info.: 550-111664-B-1 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:03:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.195	8.227	-0.032	27071600	40.0	110.6	M
3 Bromate	9.520	9.420	0.100	1452767	NC	NC	
\$ 1 Dichloroacetic acid	15.495	15.563	-0.068	129493469		NC	
\$ 6 Dichloroacetic acid(Surr)	15.495	15.563	-0.068	129493469	198.7	989.4	
4 Bromide	18.211	18.235	-0.024	26573523	NC	NC	
2 Chlorate	19.914	19.885	0.029	12271323	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d

Injection Date: 17-Oct-2018 23:13:00

Instrument ID: IC-32

Operator ID:

Lims ID: 550-111664-B-1 MS

Worklist Smp#: 30

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

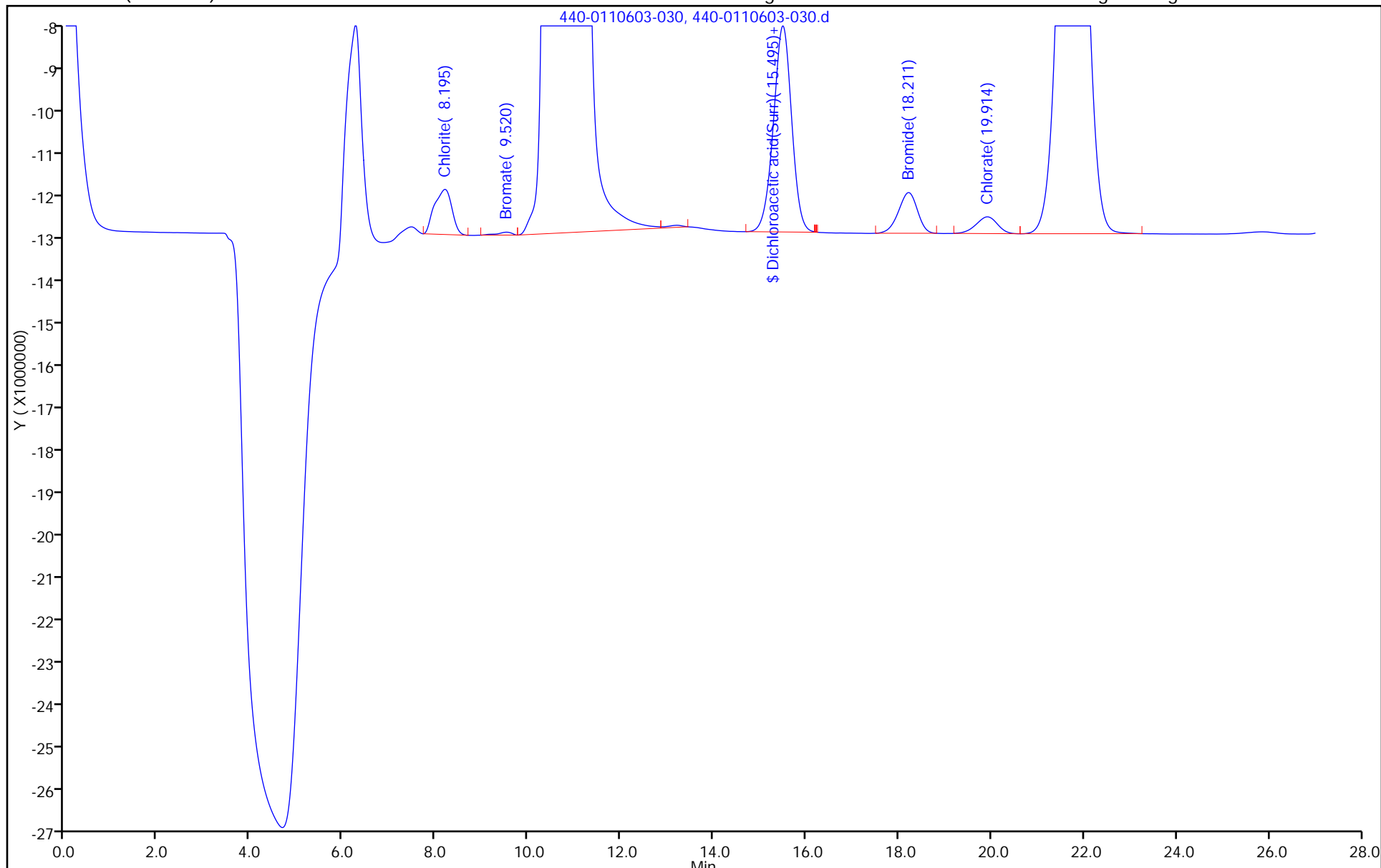
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d
 Lims ID: 550-111664-B-1 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 17-Oct-2018 23:13:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-030
 Misc. Info.: 550-111664-B-1 ms
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 05:03:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	989.4	497.84

TestAmerica Irvine

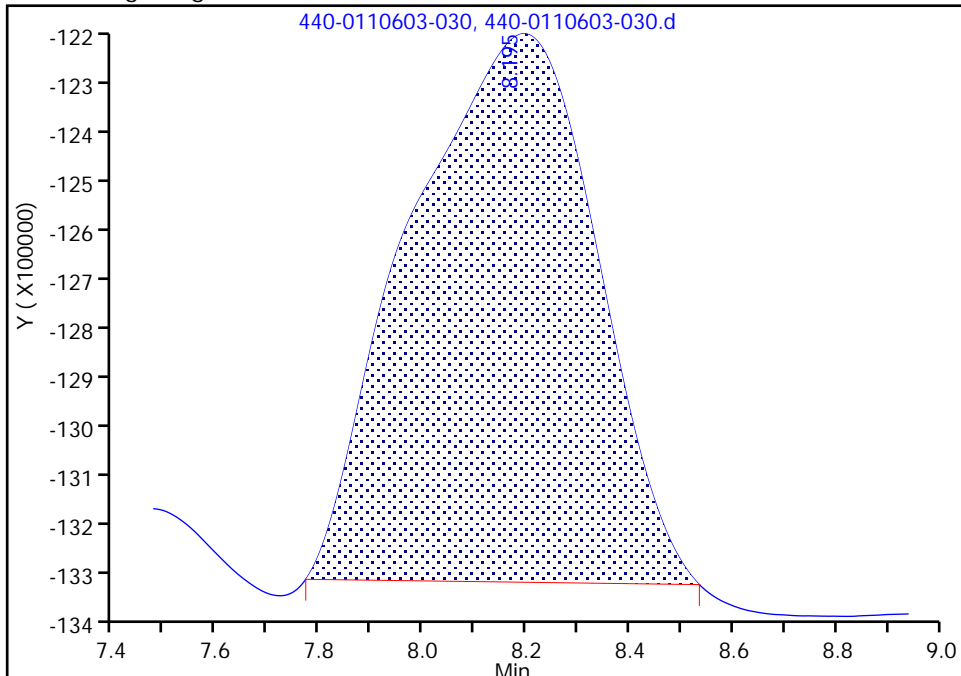
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-030.d
Injection Date: 17-Oct-2018 23:13:00 Instrument ID: IC-32
Lims ID: 550-111664-B-1 MS
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

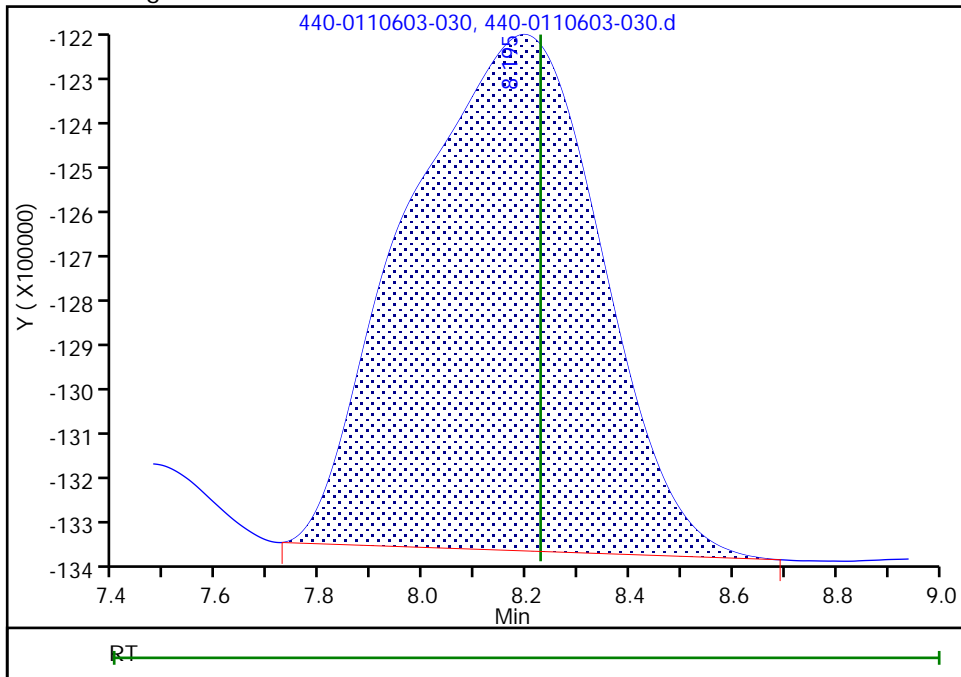
RT: 8.19
Area: 25074486
Amount: 102.6813
Amount Units: ug/l

Processing Integration Results



RT: 8.19
Area: 27071600
Amount: 110.6044
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 05:02:21
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: 440-0110792-029.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/21/2018 22:17
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506501 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	404		100	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-029.d
 Lims ID: 440-222284-D-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 21-Oct-2018 22:17:00 ALS Bottle#: 0 Worklist Smp#: 29
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-029
 Misc. Info.: 29 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabovy Date: 22-Oct-2018 03:48:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	7.017	7.150	-0.133	12660339	40.0	80.8	M
3 Bromate	8.050	8.117	-0.067	303511	NC	NC	
\$ 6 Dichloroacetic acid(Surr)	13.225	13.200	0.025	84514281	198.7	999.9	M
\$ 1 Dichloroacetic acid	13.225	13.909	-0.684	84514281		NC	M
4 Bromide	15.392	15.209	0.183	30608646953	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-029.d

Injection Date: 21-Oct-2018 22:17:00

Instrument ID: IC-8

Operator ID:

Lims ID: 440-222284-D-2 MSD

Worklist Smp#: 29

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

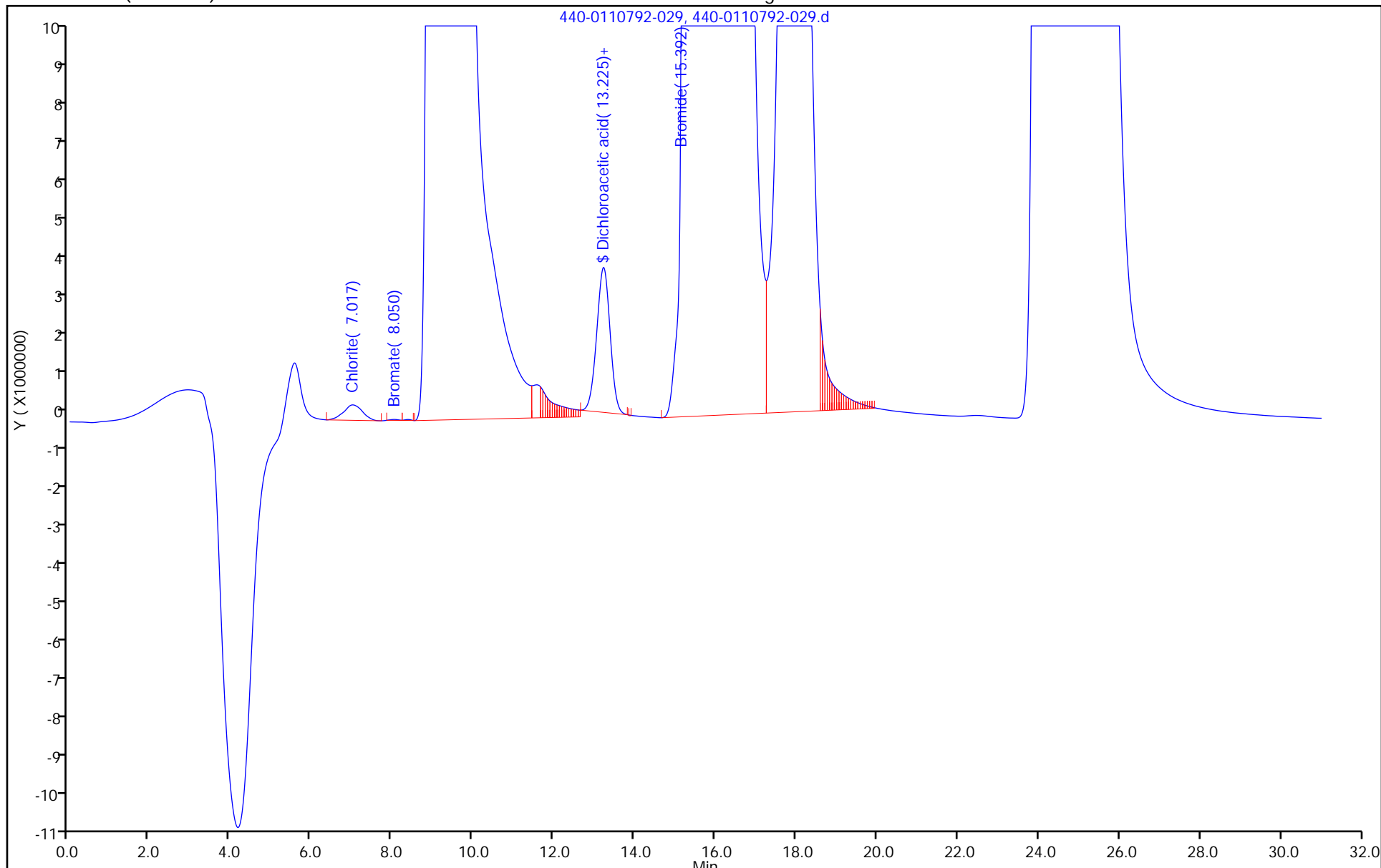
ALS Bottle#: 0

Method: 300.1_C8

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-029.d
 Lims ID: 440-222284-D-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 21-Oct-2018 22:17:00 ALS Bottle#: 0 Worklist Smp#: 29
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110792-029
 Misc. Info.: 29 EB
 Operator ID: Instrument ID: IC-8
 Method: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\300.1_C8.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 22-Oct-2018 03:53:35 Calib Date: 22-Aug-2018 09:00:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC8\20180822-108143.b\440-0108143-007.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK038

First Level Reviewer: zakhrabov Date: 22-Oct-2018 03:48:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	999.9	503.09

TestAmerica Irvine

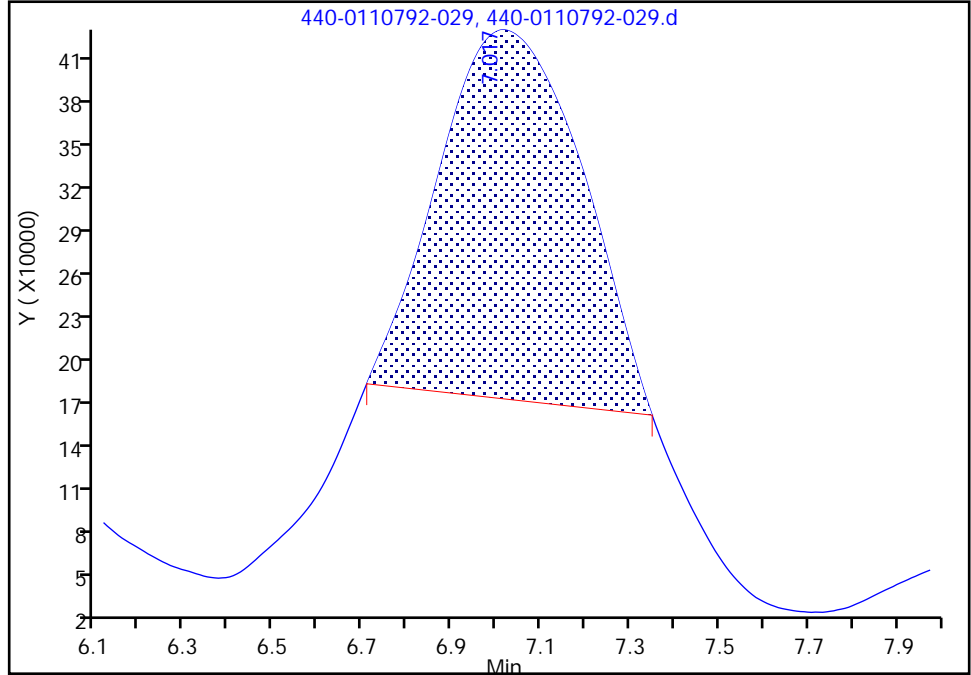
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-029.d
Injection Date: 21-Oct-2018 22:17:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 MSD
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

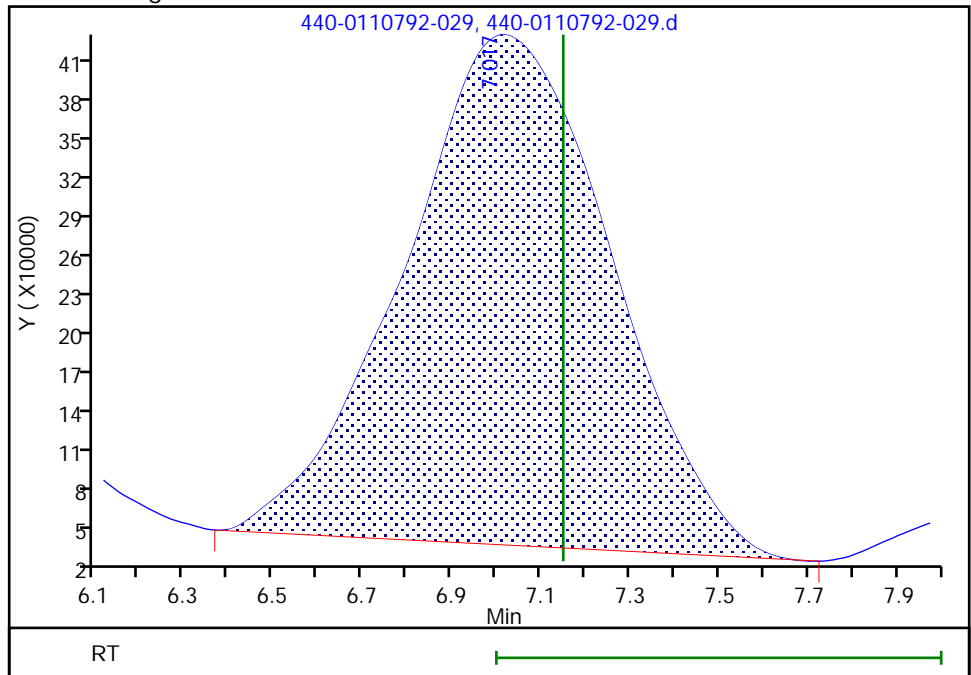
RT: 7.02
Area: 5698229
Amount: 37.553848
Amount Units: ug/l

Processing Integration Results



RT: 7.02
Area: 12660339
Amount: 80.849449
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:48:45
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

TestAmerica Irvine

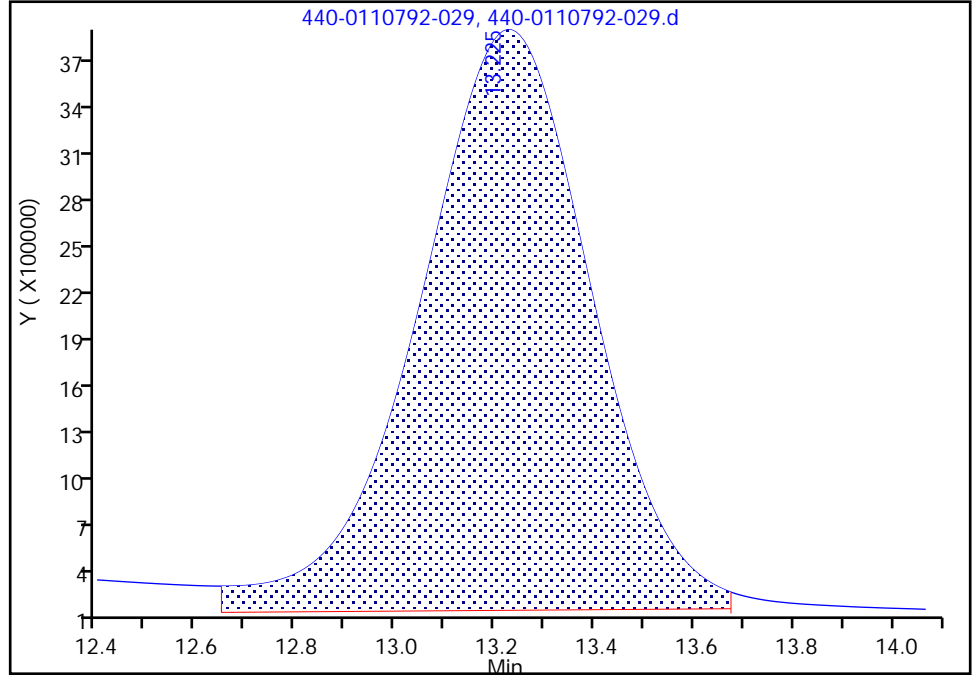
Data File: \\ChromNA\Irvine\ChromData\IC8\20181021-110792.b\440-0110792-029.d
Injection Date: 21-Oct-2018 22:17:00 Instrument ID: IC-8
Lims ID: 440-222284-D-2 MSD
Client ID: VER-01I-20181015
Operator ID: ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: 300.1_C8 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

\$ 6 Dichloroacetic acid(Surr), CAS: 79-43-6

Signal: 1

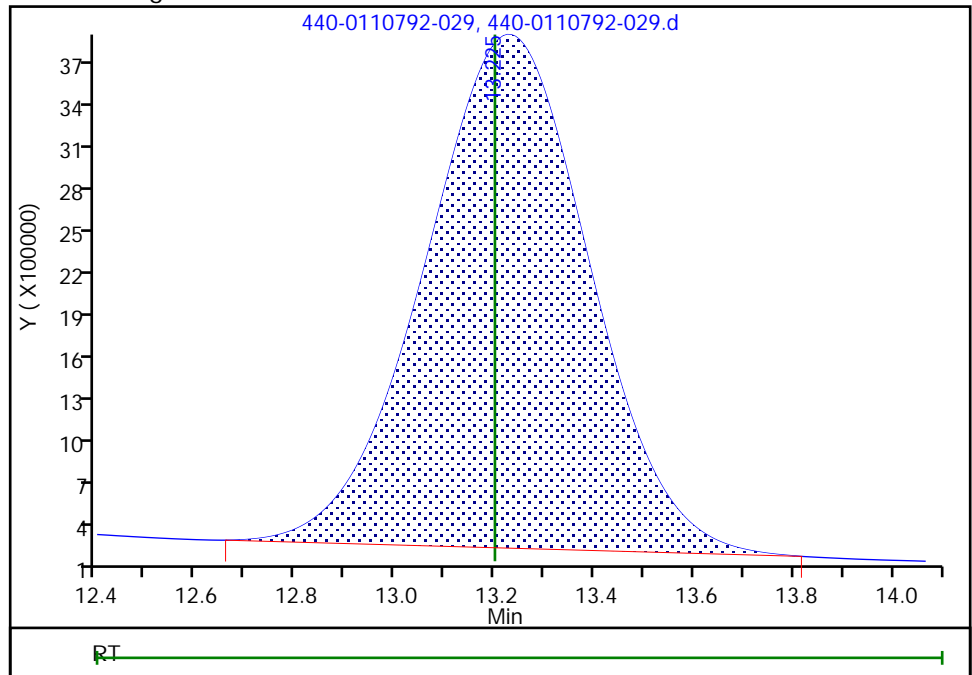
RT: 13.23
Area: 90965578
Amount: 1076.1832
Amount Units: ug/l

Processing Integration Results



RT: 13.23
Area: 84514281
Amount: 999.8600
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 22-Oct-2018 03:48:37

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: VER-01I-20181015 MSD Lab Sample ID: 440-222284-2 MSD
 Matrix: Water Lab File ID: 440-0110708-012.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/19/2018 10:20
 Con. Extract Vol.: _____ Dilution Factor: 5000
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 506165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	748000		100000	10000

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	104		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-012.d
 Lims ID: 440-222284-D-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 19-Oct-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-012
 Misc. Info.: 440-222284-d-2 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:52 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 11:46:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 1 Dichloroacetic acid	15.542	15.563	-0.021	135125973			NC
\$ 6 Dichloroacetic acid(Surr)	15.542	15.563	-0.021	135125973	0.1987	1032.4	
2 Chlorate	19.867	19.885	-0.018	30730033	0.0400	149.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC3001LCS_00077 Amount Added: 250.00 Units: uL
 WCDCA_00070 Amount Added: 10.00 Units: uL Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-012.d

Injection Date: 19-Oct-2018 10:20:00

Instrument ID: IC-32

Operator ID:

Lims ID: 440-222284-D-2 MSD

Worklist Smp#: 12

Client ID: VER-01I-20181015

Injection Vol: 1.0 uL

Dil. Factor: 5000.0000

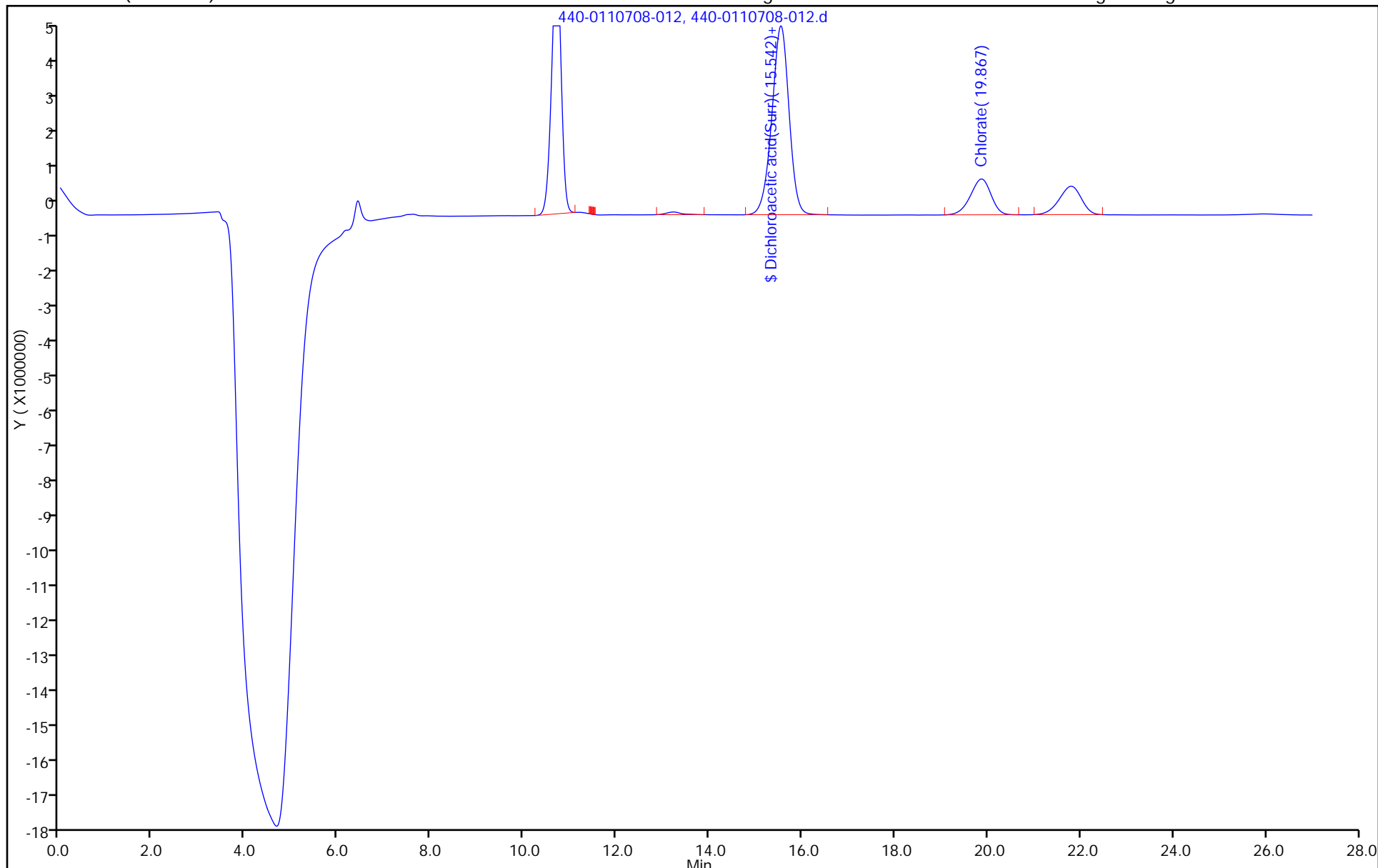
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\440-0110708-012.d
 Lims ID: 440-222284-D-2 MSD
 Client ID: VER-01I-20181015
 Sample Type: MSD
 Inject. Date: 19-Oct-2018 10:20:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 uL Dil. Factor: 5000.0000
 Sample Info: 440-0110708-012
 Misc. Info.: 440-222284-d-2 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181019-110708.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 11:43:52 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 11:46:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1032.4	519491.10

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 550-111664-B-1 MSD
 Matrix: Water Lab File ID: 440-0110603-031.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 08:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 23:43
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505657 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14866-68-3	Chlorate	298		100	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d
 Lims ID: 550-111664-B-1 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 17-Oct-2018 23:43:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-031
 Misc. Info.: 550-111664-B-1 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:02:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.196	8.227	-0.031	27674039	NC	NC	M
3 Bromate	9.518	9.420	0.098	1418780	10.0	10.7	
\$ 1 Dichloroacetic acid	15.491	15.563	-0.072	131185604		NC	
\$ 6 Dichloroacetic acid(Surr)	15.491	15.563	-0.072	131185604	198.7	1002.3	
4 Bromide	18.225	18.235	-0.010	26910584	100.0	119.2	
2 Chlorate	19.929	19.885	0.044	11970402	40.0	59.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d

Injection Date: 17-Oct-2018 23:43:00

Instrument ID: IC-32

Operator ID:

Lims ID: 550-111664-B-1 MSD

Worklist Smp#: 31

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

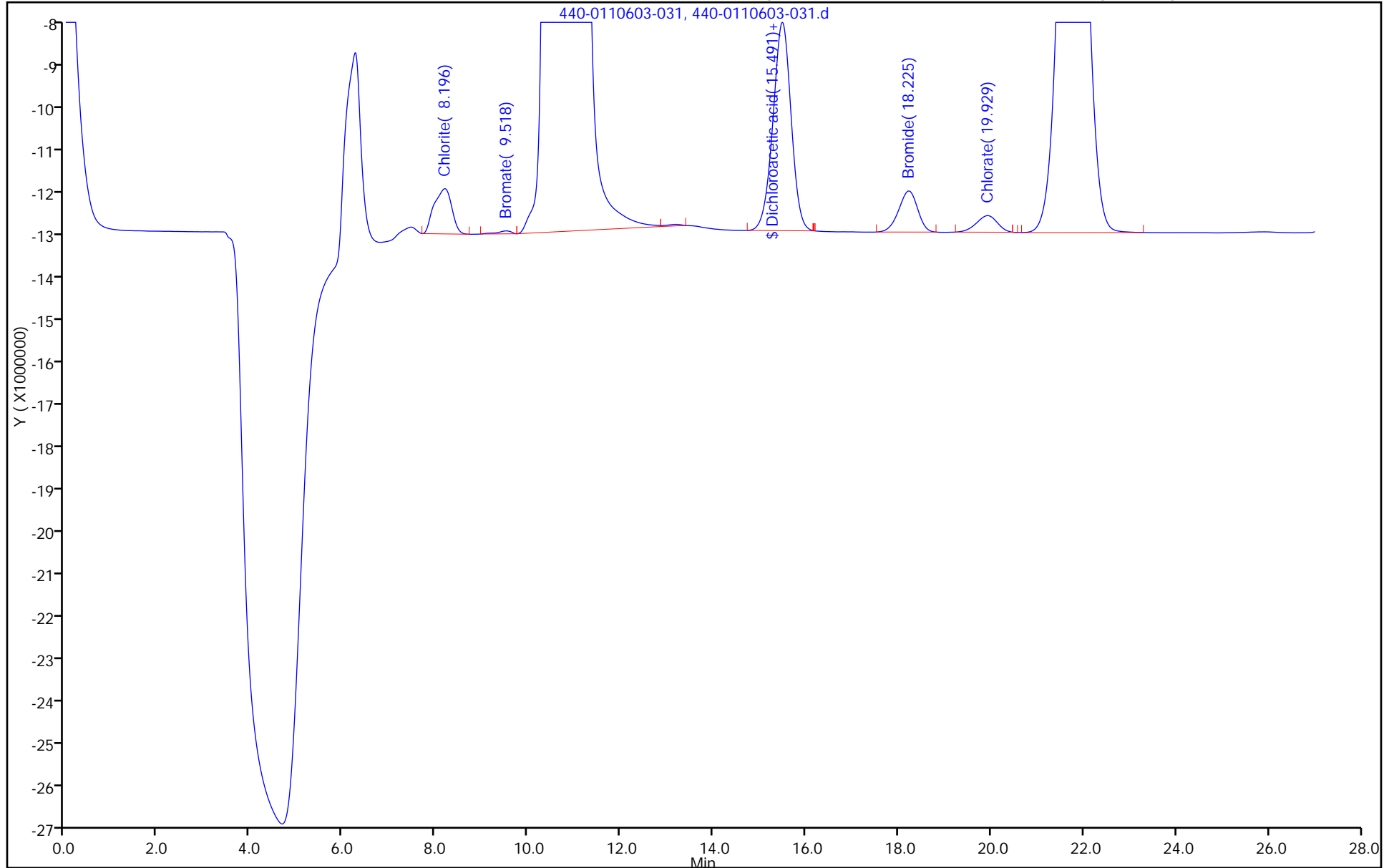
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_28D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d
 Lims ID: 550-111664-B-1 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 17-Oct-2018 23:43:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-031
 Misc. Info.: 550-111664-B-1 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_28D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:02:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1002.3	504.34

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: 550-111664-B-1 MSD
 Matrix: Water Lab File ID: 440-0110603-031.d
 Analysis Method: 300.1B Date Collected: 10/15/2018 08:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 10/17/2018 23:43
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: AS9-HC ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 505658 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14998-27-7	Chlorite	565		100	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
79-43-6	Dichloroacetic acid(Surr)	101		90-115

TestAmerica Irvine
Target Compound Quantitation Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d
 Lims ID: 550-111664-B-1 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 17-Oct-2018 23:43:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-031
 Misc. Info.: 550-111664-B-1 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabovy Date: 19-Oct-2018 05:02:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 Chlorite	8.196	8.227	-0.031	27674039	40.0	113.0	M
3 Bromate	9.518	9.420	0.098	1418780	NC	NC	
\$ 1 Dichloroacetic acid	15.491	15.563	-0.072	131185604		NC	
\$ 6 Dichloroacetic acid(Surr)	15.491	15.563	-0.072	131185604	198.7	1002.3	
4 Bromide	18.225	18.235	-0.010	26910584	NC	NC	
2 Chlorate	19.929	19.885	0.044	11970402	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC3001LCS_00077

Amount Added: 250.00

Units: uL

WCDCA_00070

Amount Added: 10.00

Units: uL

Run Reagent

TestAmerica Irvine

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d

Injection Date: 17-Oct-2018 23:43:00

Instrument ID: IC-32

Operator ID:

Lims ID: 550-111664-B-1 MSD

Worklist Smp#: 31

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 5.0000

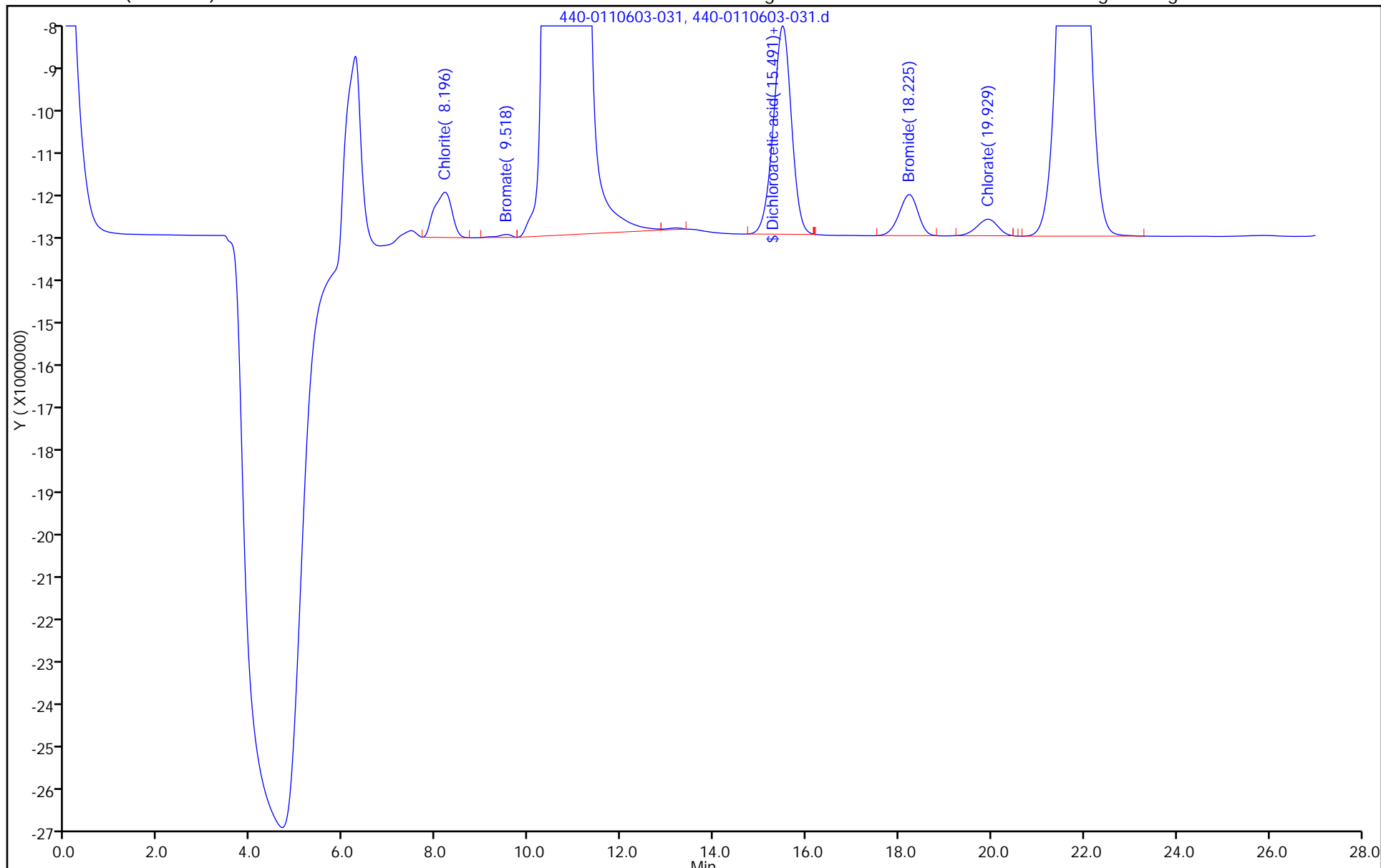
ALS Bottle#: 0

Method: EPA 300.1

Limit Group: IC-300.1_14D

Column: AS9 (4.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Irvine
Recovery Report

Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d
 Lims ID: 550-111664-B-1 MSD
 Client ID:
 Sample Type: MSD
 Inject. Date: 17-Oct-2018 23:43:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 uL Dil. Factor: 5.0000
 Sample Info: 440-0110603-031
 Misc. Info.: 550-111664-B-1 msd
 Operator ID: Instrument ID: IC-32
 Method: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\EPA 300.1.m
 Limit Group: IC-300.1_14D
 Method Label: 300.1
 Last Update: 19-Oct-2018 05:02:49 Calib Date: 17-Oct-2018 11:56:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-008.d
 Column 1 : AS9 (4.00 mm) Det: Ch-A-20110816009
 Process Host: XAWRK039

First Level Reviewer: zakhrabov Date: 19-Oct-2018 05:02:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 Dichloroacetic acid(Surr)	993.7	1002.3	504.34

TestAmerica Irvine

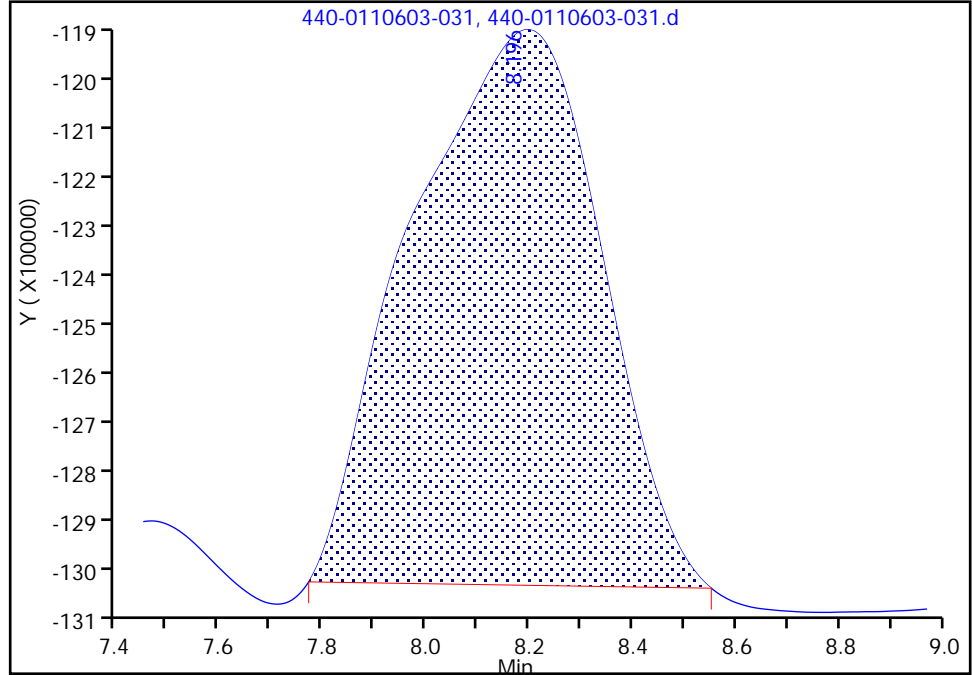
Data File: \\ChromNA\Irvine\ChromData\IC-32\20181017-110603.b\440-0110603-031.d
Injection Date: 17-Oct-2018 23:43:00 Instrument ID: IC-32
Lims ID: 550-111664-B-1 MSD
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 uL Dil. Factor: 5.0000
Method: EPA 300.1 Limit Group: IC-300.1_14D
Column: AS9 (4.00 mm) Detector: Ch-A-20110816009

5 Chlorite, CAS: 14998-27-7

Signal: 1

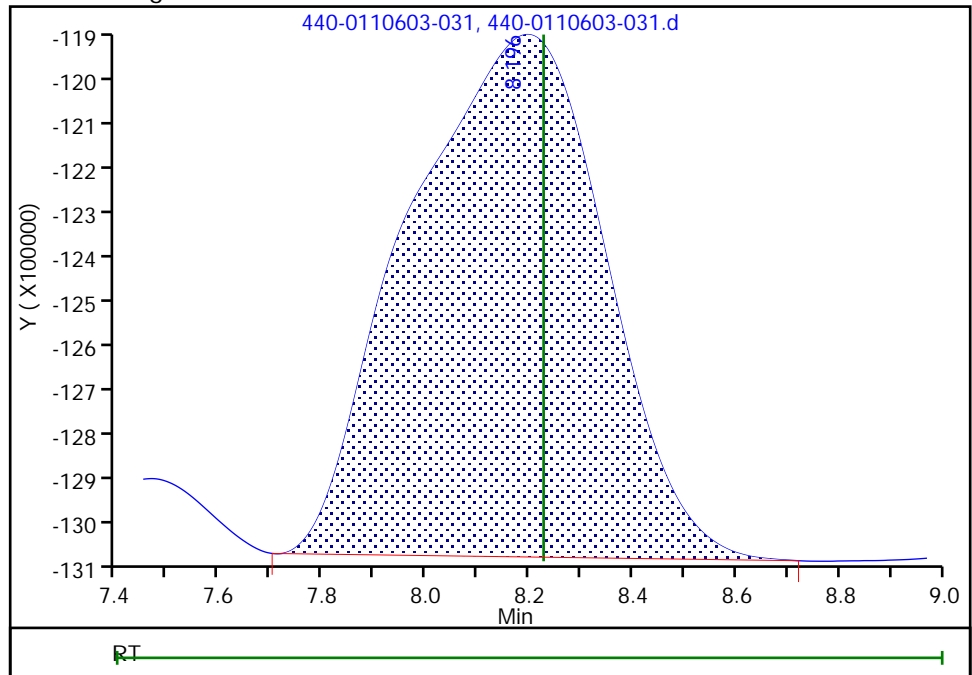
RT: 8.20
Area: 25632997
Amount: 0
Amount Units: ug/l

Processing Integration Results



RT: 8.20
Area: 27674039
Amount: 112.9945
Amount Units: ug/l

Manual Integration Results



Reviewer: zakhrabov, 19-Oct-2018 05:02:39
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-8 Start Date: 08/22/2018 05:59

Analysis Batch Number: 494918 End Date: 08/23/2018 21:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0 440-494918/2 IC		08/22/2018 05:59	1	440-0108143-002.d	AS9-HC 4 (mm)
STD1 440-494918/3 IC		08/22/2018 06:35	1	440-0108143-003.d	AS9-HC 4 (mm)
STD2 440-494918/4 IC		08/22/2018 07:11	1	440-0108143-004.d	AS9-HC 4 (mm)
STD3 440-494918/5 IC		08/22/2018 07:47	1	440-0108143-005.d	AS9-HC 4 (mm)
STD4 440-494918/6 IC		08/22/2018 08:23	1	440-0108143-006.d	AS9-HC 4 (mm)
STD5 440-494918/7 IC		08/22/2018 09:00	1	440-0108143-007.d	AS9-HC 4 (mm)
ICV 440-494918/8		08/22/2018 09:44	1	440-0108143-008.d	AS9-HC 4 (mm)
ICB 440-494918/9		08/22/2018 10:20	1	440-0108143-009.d	AS9-HC 4 (mm)
ZZZZZ		08/22/2018 10:56	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 11:32	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 12:09	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 12:45	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 13:21	2		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 14:34	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 15:10	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 15:46	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 16:22	1		AS9-HC 4 (mm)
CCV 440-494918/20		08/22/2018 16:59	1		AS9-HC 4 (mm)
CCB 440-494918/21		08/22/2018 17:35	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 18:11	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 18:47	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 19:24	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 20:00	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 23:01	1		AS9-HC 4 (mm)
ZZZZZ		08/22/2018 23:37	1		AS9-HC 4 (mm)
CCV 440-494918/32		08/23/2018 00:14	1		AS9-HC 4 (mm)
CCB 440-494918/33		08/23/2018 00:50	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 02:02	50		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 02:39	50		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 03:15	50		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 03:51	5000		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 04:27	1000		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 05:04	20000		AS9-HC 4 (mm)
CCV 440-494918/43		08/23/2018 06:53	1		AS9-HC 4 (mm)
CCB 440-494918/44		08/23/2018 07:29	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 08:05	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 08:41	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 09:18	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 10:30	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 11:06	1		AS9-HC 4 (mm)
ZZZZZ		08/23/2018 11:43	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-8 Start Date: 08/22/2018 05:59

Analysis Batch Number: 494918 End Date: 08/23/2018 21:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-494918/55		08/23/2018 14:08	1		AS9-HC 4 (mm)
CCB 440-494918/56		08/23/2018 14:44	1		AS9-HC 4 (mm)
CCV 440-494918/66		08/23/2018 20:46	1		AS9-HC 4 (mm)
CCB 440-494918/67		08/23/2018 21:22	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Start Date: 10/17/2018 08:29

Analysis Batch Number: 505657 End Date: 10/18/2018 08:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/17/2018 08:29	1		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 08:56	1		AS9-HC 4 (mm)
STD0 440-505657/3 IC		10/17/2018 09:24	1	440-0110603-003.d	AS9-HC 4 (mm)
STD1 440-505657/4 IC		10/17/2018 09:52	1	440-0110603-004.d	AS9-HC 4 (mm)
STD2 440-505657/5 IC		10/17/2018 10:20	1	440-0110603-005.d	AS9-HC 4 (mm)
STD3 440-505657/6 IC		10/17/2018 10:57	1	440-0110603-006.d	AS9-HC 4 (mm)
STD4 440-505657/7 IC		10/17/2018 11:27	1	440-0110603-007.d	AS9-HC 4 (mm)
STD5 440-505657/8 IC		10/17/2018 11:56	1	440-0110603-008.d	AS9-HC 4 (mm)
ICV 440-505657/9		10/17/2018 12:45	1	440-0110603-009.d	AS9-HC 4 (mm)
ICB 440-505657/10		10/17/2018 13:15	1	440-0110603-010.d	AS9-HC 4 (mm)
MRL 440-505657/11		10/17/2018 13:45	1	440-0110603-011.d	AS9-HC 4 (mm)
LCS 440-505657/12		10/17/2018 14:16	1	440-0110603-012.d	AS9-HC 4 (mm)
MB 440-505657/13		10/17/2018 14:45	1	440-0110603-013.d	AS9-HC 4 (mm)
ZZZZZ		10/17/2018 15:15	100		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 15:45	1000		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 16:15	1000		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 16:45	1000		AS9-HC 4 (mm)
440-222284-1		10/17/2018 17:15	50	440-0110603-018.d	AS9-HC 4 (mm)
440-222284-4		10/17/2018 17:45	1	440-0110603-019.d	AS9-HC 4 (mm)
440-222284-5		10/17/2018 18:14	1	440-0110603-020.d	AS9-HC 4 (mm)
CCV 440-505657/21		10/17/2018 18:44	1	440-0110603-021.d	AS9-HC 4 (mm)
CCB 440-505657/22		10/17/2018 19:14	1	440-0110603-022.d	AS9-HC 4 (mm)
ZZZZZ		10/17/2018 19:44	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 20:14	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 20:44	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 21:14	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 21:43	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 22:13	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 22:43	5		AS9-HC 4 (mm)
550-111664-B-1 MS		10/17/2018 23:13	5	440-0110603-030.d	AS9-HC 4 (mm)
550-111664-B-1 MSD		10/17/2018 23:43	5	440-0110603-031.d	AS9-HC 4 (mm)
CCV 440-505657/33		10/18/2018 00:43	1	440-0110603-033.d	AS9-HC 4 (mm)
CCB 440-505657/34		10/18/2018 01:12	1	440-0110603-034.d	AS9-HC 4 (mm)
CCV 440-505657/42		10/18/2018 05:11	1		AS9-HC 4 (mm)
CCB 440-505657/43		10/18/2018 05:41	1		AS9-HC 4 (mm)
CCV 440-505657/47		10/18/2018 07:41	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Start Date: 10/17/2018 08:29

Analysis Batch Number: 505657 End Date: 10/18/2018 08:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 440-505657/48		10/18/2018 08:11	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Start Date: 10/17/2018 08:29

Analysis Batch Number: 505658 End Date: 10/18/2018 08:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/17/2018 08:29	1		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 08:56	1		AS9-HC 4 (mm)
STD0 440-505658/3 IC		10/17/2018 09:24	1	440-0110603-003 .d	AS9-HC 4 (mm)
STD1 440-505658/4 IC		10/17/2018 09:52	1	440-0110603-004 .d	AS9-HC 4 (mm)
STD2 440-505658/5 IC		10/17/2018 10:20	1	440-0110603-005 .d	AS9-HC 4 (mm)
STD3 440-505658/6 IC		10/17/2018 10:57	1	440-0110603-006 .d	AS9-HC 4 (mm)
STD4 440-505658/7 IC		10/17/2018 11:27	1	440-0110603-007 .d	AS9-HC 4 (mm)
STD5 440-505658/8 IC		10/17/2018 11:56	1	440-0110603-008 .d	AS9-HC 4 (mm)
ICV 440-505658/9		10/17/2018 12:45	1	440-0110603-009 .d	AS9-HC 4 (mm)
ICB 440-505658/10		10/17/2018 13:15	1	440-0110603-010 .d	AS9-HC 4 (mm)
MRL 440-505658/11		10/17/2018 13:45	1	440-0110603-011 .d	AS9-HC 4 (mm)
LCS 440-505658/12		10/17/2018 14:16	1	440-0110603-012 .d	AS9-HC 4 (mm)
MB 440-505658/13		10/17/2018 14:45	1	440-0110603-013 .d	AS9-HC 4 (mm)
ZZZZZ		10/17/2018 15:15	100		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 15:45	1000		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 16:15	1000		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 16:45	1000		AS9-HC 4 (mm)
440-222284-1		10/17/2018 17:15	50	440-0110603-018 .d	AS9-HC 4 (mm)
440-222284-4		10/17/2018 17:45	1	440-0110603-019 .d	AS9-HC 4 (mm)
440-222284-5		10/17/2018 18:14	1	440-0110603-020 .d	AS9-HC 4 (mm)
CCV 440-505658/21		10/17/2018 18:44	1	440-0110603-021 .d	AS9-HC 4 (mm)
CCB 440-505658/22		10/17/2018 19:14	1	440-0110603-022 .d	AS9-HC 4 (mm)
ZZZZZ		10/17/2018 19:44	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 20:14	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 20:44	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 21:14	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 21:43	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 22:13	10		AS9-HC 4 (mm)
ZZZZZ		10/17/2018 22:43	5		AS9-HC 4 (mm)
550-111664-B-1 MS		10/17/2018 23:13	5	440-0110603-030 .d	AS9-HC 4 (mm)
550-111664-B-1 MSD		10/17/2018 23:43	5	440-0110603-031 .d	AS9-HC 4 (mm)
ZZZZZ		10/18/2018 00:13	5		AS9-HC 4 (mm)
CCV 440-505658/33		10/18/2018 00:43	1	440-0110603-033 .d	AS9-HC 4 (mm)
CCB 440-505658/34		10/18/2018 01:12	1	440-0110603-034 .d	AS9-HC 4 (mm)
ZZZZZ		10/18/2018 01:42	5		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 02:12	5		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Start Date: 10/17/2018 08:29

Analysis Batch Number: 505658 End Date: 10/18/2018 08:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/18/2018 02:42	5		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 03:12	5		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 03:42	1		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 04:12	1		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 04:41	1		AS9-HC 4 (mm)
CCV 440-505658/42		10/18/2018 05:11	1		AS9-HC 4 (mm)
CCB 440-505658/43		10/18/2018 05:41	1		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 06:11	1		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 06:41	1		AS9-HC 4 (mm)
ZZZZZ		10/18/2018 07:11	1		AS9-HC 4 (mm)
CCV 440-505658/47		10/18/2018 07:41	1		AS9-HC 4 (mm)
CCB 440-505658/48		10/18/2018 08:11	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-32 Start Date: 10/19/2018 04:52

Analysis Batch Number: 506165 End Date: 10/20/2018 01:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-506165/1		10/19/2018 04:52	1	440-0110708-001 .d	AS9-HC 4 (mm)
CCB 440-506165/2		10/19/2018 05:21	1	440-0110708-002 .d	AS9-HC 4 (mm)
MRL 440-506165/3		10/19/2018 05:51	1	440-0110708-003 .d	AS9-HC 4 (mm)
LCS 440-506165/4		10/19/2018 06:21	1	440-0110708-004 .d	AS9-HC 4 (mm)
MB 440-506165/5		10/19/2018 06:51	1	440-0110708-005 .d	AS9-HC 4 (mm)
ZZZZZ		10/19/2018 07:21	50		AS9-HC 4 (mm)
440-222284-2		10/19/2018 09:20	5000	440-0110708-010 .d	AS9-HC 4 (mm)
440-222284-2 MS		10/19/2018 09:50	5000	440-0110708-011 .d	AS9-HC 4 (mm)
440-222284-2 MSD		10/19/2018 10:20	5000	440-0110708-012 .d	AS9-HC 4 (mm)
CCV 440-506165/13		10/19/2018 10:50	1	440-0110708-013 .d	AS9-HC 4 (mm)
CCB 440-506165/14		10/19/2018 13:05	1	440-0110708-014 .d	AS9-HC 4 (mm)
ZZZZZ		10/19/2018 13:34	100		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 14:04	100		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 14:34	100		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 15:04	100		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 15:34	100		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 16:04	500		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 16:34	500		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 17:04	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 17:33	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 18:03	100		AS9-HC 4 (mm)
CCV 440-506165/25		10/19/2018 18:33	1		AS9-HC 4 (mm)
CCB 440-506165/26		10/19/2018 19:03	1		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 19:33	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 20:03	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 20:33	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 21:02	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 21:32	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 22:02	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 22:32	50		AS9-HC 4 (mm)
ZZZZZ		10/19/2018 23:02	50		AS9-HC 4 (mm)
CCV 440-506165/35		10/19/2018 23:32	1		AS9-HC 4 (mm)
CCB 440-506165/36		10/20/2018 00:02	1		AS9-HC 4 (mm)
CCV 440-506165/37		10/20/2018 00:32	1		AS9-HC 4 (mm)
CCB 440-506165/38		10/20/2018 01:01	1		AS9-HC 4 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: IC-8 Start Date: 10/21/2018 05:22

Analysis Batch Number: 506501 End Date: 10/22/2018 03:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 440-506501/1		10/21/2018 05:22	1	440-0110792-001 .d	AS9-HC 4 (mm)
CCB 440-506501/2		10/21/2018 05:58	1	440-0110792-002 .d	AS9-HC 4 (mm)
MRL 440-506501/3		10/21/2018 06:34	1	440-0110792-003 .d	AS9-HC 4 (mm)
LCS 440-506501/4		10/21/2018 07:11	1	440-0110792-004 .d	AS9-HC 4 (mm)
MB 440-506501/5		10/21/2018 07:47	1	440-0110792-005 .d	AS9-HC 4 (mm)
ZZZZZ		10/21/2018 08:23	10		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 08:59	10		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 09:36	10		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 10:48	1		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 11:24	1		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 12:01	1		AS9-HC 4 (mm)
CCV 440-506501/13		10/21/2018 12:37	1	440-0110792-013 .d	AS9-HC 4 (mm)
CCB 440-506501/14		10/21/2018 13:13	1	440-0110792-014 .d	AS9-HC 4 (mm)
ZZZZZ		10/21/2018 18:03	1		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 18:39	1		AS9-HC 4 (mm)
ZZZZZ		10/21/2018 19:16	1		AS9-HC 4 (mm)
CCV 440-506501/25		10/21/2018 19:52	1	440-0110792-025 .d	AS9-HC 4 (mm)
CCB 440-506501/26		10/21/2018 20:28	1	440-0110792-026 .d	AS9-HC 4 (mm)
440-222284-2		10/21/2018 21:04	5	440-0110792-027 .d	AS9-HC 4 (mm)
440-222284-2 MS		10/21/2018 21:41	5	440-0110792-028 .d	AS9-HC 4 (mm)
440-222284-2 MSD		10/21/2018 22:17	5	440-0110792-029 .d	AS9-HC 4 (mm)
CCV 440-506501/37		10/22/2018 03:07	1	440-0110792-037 .d	AS9-HC 4 (mm)
CCB 440-506501/38		10/22/2018 03:43	1	440-0110792-038 .d	AS9-HC 4 (mm)

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505657 Batch Start Date: 10/17/18 08:29 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC3001ICV 00044	WC3001LCS 00077	WCDCA 00070			
STD0 440-505657/3 IC		300.1B				10 uL			
STD1 440-505657/4 IC		300.1B			25 uL	10 uL			
STD2 440-505657/5 IC		300.1B			62.5 uL	10 uL			
STD3 440-505657/6 IC		300.1B			125 uL	10 uL			
STD4 440-505657/7 IC		300.1B			250 uL	10 uL			
STD5 440-505657/8 IC		300.1B			500 uL	10 uL			
ICV 440-505657/9		300.1B		150 uL		10 uL			
ICB 440-505657/10		300.1B				10 uL			
MRL 440-505657/11		300.1B			25 uL	10 uL			
LCS 440-505657/12		300.1B			125 uL	10 uL			
MB 440-505657/13		300.1B				10 uL			
440-222284-D-1	VER-01D-20181015	300.1B	T			10 uL			
440-222284-D-4	VER-20181015-FB	300.1B	T			10 uL			
440-222284-D-5	VER-20181015-EB	300.1B	T			10 uL			
CCV 440-505657/21		300.1B			250 uL	10 uL			
CCB 440-505657/22		300.1B				10 uL			
550-111664-B-1 MS		300.1B			250 uL	10 uL			
550-111664-B-1 MSD		300.1B			250 uL	10 uL			
CCV 440-505657/33		300.1B			125 uL	10 uL			
CCB 440-505657/34		300.1B				10 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505657 Batch Start Date: 10/17/18 08:29 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Batch Notes	
Ethylenediamine ID	5097050
Eluent 1 ID	5122613
Filter ID	70639103
Pipette/Syringe/Dispenser ID	128, 111, 97, 132, WC21, WC23, WC24
Sufficient Volume for Batch QC	YES

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505658 Batch Start Date: 10/17/18 08:29 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC3001ICV 00044	WC3001LCS 00077	WCDCA 00070			
STD0 440-505658/3 IC		300.1B				10 uL			
STD1 440-505658/4 IC		300.1B			25 uL	10 uL			
STD2 440-505658/5 IC		300.1B			62.5 uL	10 uL			
STD3 440-505658/6 IC		300.1B			125 uL	10 uL			
STD4 440-505658/7 IC		300.1B			250 uL	10 uL			
STD5 440-505658/8 IC		300.1B			500 uL	10 uL			
ICV 440-505658/9		300.1B		150 uL		10 uL			
ICB 440-505658/10		300.1B				10 uL			
MRL 440-505658/11		300.1B			25 uL	10 uL			
LCS 440-505658/12		300.1B			125 uL	10 uL			
MB 440-505658/13		300.1B				10 uL			
440-222284-D-1	VER-01D-20181015	300.1B	T			10 uL			
440-222284-D-4	VER-20181015-FB	300.1B	T			10 uL			
440-222284-D-5	VER-20181015-EB	300.1B	T			10 uL			
CCV 440-505658/21		300.1B			250 uL	10 uL			
CCB 440-505658/22		300.1B				10 uL			
550-111664-B-1 MS		300.1B	T		250 uL	10 uL			
550-111664-B-1 MSD		300.1B	T		250 uL	10 uL			
CCV 440-505658/33		300.1B			125 uL	10 uL			
CCB 440-505658/34		300.1B				10 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505658 Batch Start Date: 10/17/18 08:29 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Batch Notes	
Ethylenediamine ID	5097050
Eluent 1 ID	5122613
Filter ID	70639103
Pipette/Syringe/Dispenser ID	128, 132, 111, 97, WC21, WC23, WC24
Sufficient Volume for Batch QC	YES

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506165 Batch Start Date: 10/19/18 04:52 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC3001LCS 00077	WCDCA 00070				
CCV 440-506165/1		300.1B		125 uL	10 uL				
CCB 440-506165/2		300.1B			10 uL				
MRL 440-506165/3		300.1B		25 uL	10 uL				
LCS 440-506165/4		300.1B		125 uL	10 uL				
MB 440-506165/5		300.1B			10 uL				
440-222284-D-2	VER-01I-20181015	300.1B	T		10 uL				
440-222284-D-2 MS	VER-01I-20181015	300.1B	T	250 uL	10 uL				
440-222284-D-2 MSD	VER-01I-20181015	300.1B	T	250 uL	10 uL				
CCV 440-506165/13		300.1B		250 uL	10 uL				
CCB 440-506165/14		300.1B			10 uL				

Batch Notes	
Ethylenediamine ID	5097050
Eluent 1 ID	5129756
Filter ID	70639103
Pipette/Syringe/Dispenser ID	128, 111, 97, 132
Sufficient Volume for Batch QC	YES

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 506501 Batch Start Date: 10/21/18 05:22 Batch Analyst: Zakhrabov, Yuriy

Batch Method: 300.1B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC3001LCS 00077	WCDCA 00070			
CCV 440-506501/1		300.1B		125 uL	10 uL			
CCB 440-506501/2		300.1B			10 uL			
MRL 440-506501/3		300.1B		25 uL	10 uL			
LCS 440-506501/4		300.1B		125 uL	10 uL			
MB 440-506501/5		300.1B			10 uL			
CCV 440-506501/13		300.1B		250 uL	10 uL			
CCB 440-506501/14		300.1B			10 uL			
CCV 440-506501/25		300.1B		125 uL	10 uL			
CCB 440-506501/26		300.1B			10 uL			
440-222284-D-2	VER-01I-20181015	300.1B	T		10 uL			
440-222284-D-2	VER-01I-20181015	300.1B	T	250 uL	10 uL			
MS								
440-222284-D-2	VER-01I-20181015	300.1B	T	250 uL	10 uL			
MSD								
CCV 440-506501/37		300.1B		250 uL	10 uL			
CCB 440-506501/38		300.1B			10 uL			

Batch Notes	
Ethylenediamine ID	5097050
Eluent 1 ID	5132461
Filter ID	70639103
Pipette/Syringe/Dispenser ID	128, 111, 132, 97, WC21, WC23, WC24
Sufficient Volume for Batch QC	YES

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Irvine

Job Number: 440-222284-1

SDG No.: _____

Project: NERT M16

Client Sample ID
VER-01D-20181015
VER-01I-20181015
VER-20181015-FB
VER-20181015-EB

Lab Sample ID
440-222284-1
440-222284-2
440-222284-4
440-222284-5

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: VER-01D-20181015

Lab Sample ID: 440-222284-1

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/15/2018 13:15

Reporting Basis: WET

Date Received: 10/16/2018 07:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	0.028	0.0050	0.0025	mg/L			1	6010B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: VER-01I-20181015

Lab Sample ID: 440-222284-2

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG ID.:

Matrix: Water

Date Sampled: 10/15/2018 11:40

Reporting Basis: WET

Date Received: 10/16/2018 07:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	2.6	0.0050	0.0025	mg/L			1	6010B

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: VER-20181015-FB

Lab Sample ID: 440-222284-4

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/15/2018 14:15

Reporting Basis: WET

Date Received: 10/16/2018 07:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	ND	0.0050	0.0025	mg/L			1	6010B

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: VER-20181015-EB

Lab Sample ID: 440-222284-5

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG ID.:

Matrix: Water

Date Sampled: 10/15/2018 14:00

Reporting Basis: WET

Date Received: 10/16/2018 07:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-47-3	Chromium	ND	0.0050	0.0025	mg/L			1	6010B

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

ICV Source: ME ICP ICV2_01988 Concentration Units: mg/L

CCV Source: ME ICP STD3_02308

Analyte	ICV 440-506733/5 10/19/2018 08:48				CCV 440-506733/14 10/19/2018 12:01				CCV 440-506733/25 10/19/2018 12:29			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Chromium	1.00		1.00	100	1.02		1.00	102	1.02		1.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

ICV Source: ME ICP ICV2_01988 Concentration Units: mg/L

CCV Source: ME ICP STD3_02308

Analyte	CCV 440-506733/36 10/19/2018 12:56											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Chromium	1.02		1.00	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Method: 6010B Instrument ID: ICP8
 Lab Sample ID: CRI 440-506733/13 Concentration Units: mg/L
 CRQL Check Standard Source: ME ICP RL_00405

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Chromium	0.0100	0.0108		108	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICB 440-506733/7 10/19/2018 08:57		CCB 440-506733/15 10/19/2018 12:04		CCB 440-506733/26 10/19/2018 12:32		CCB 440-506733/37 10/19/2018 12:58	
		Found	C	Found	C	Found	C	Found	C
Chromium	0.0050	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Irvine Job No.: 440-222284-1
SDG No.: _____
Concentration Units: mg/L Lab Sample ID: MB 440-505985/1-A
Instrument Code: ICP8 Batch No.: 506733

CAS No.	Analyte	Concentration	C	Q	Method
7440-47-3	Chromium	ND			6010B

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Lab Sample ID: ICSA 440-506733/8

Instrument ID: ICP8

Lab File ID: 181019-1Z.csv

ICS Source: ME ICP IFA_02008

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Chromium		0.0047	
<i>Aluminum</i>	600	625	104
<i>Antimony</i>		-0.0149	
<i>Arsenic</i>		0.0093	
<i>Barium</i>		0.0054	
<i>Beryllium</i>		0.0000	
<i>Boron</i>		-0.0134	
<i>Cadmium</i>		0.0018	
<i>Calcium</i>	600	604	101
<i>Cobalt</i>		-0.0056	
<i>Copper</i>		-0.0049	
<i>Iron</i>	600	538	90
<i>Lead</i>		0.0095	
<i>Lithium</i>		-0.0806	
<i>Magnesium</i>	600	567	95
<i>Manganese</i>		0.0002	
<i>Molybdenum</i>		0.0014	
<i>Nickel</i>		0.0028	
<i>Phosphorus</i>		-0.0071	
<i>Potassium</i>		-0.305	
<i>Selenium</i>		0.0045	
<i>Silicon</i>		0.0183	
<i>Silver</i>		0.0029	
<i>Sodium</i>		0.102	
<i>Strontium</i>		-0.0134	
<i>Thallium</i>		0.0045	
<i>Tin</i>		-0.0172	
<i>Titanium</i>		0.0005	
<i>Tungsten</i>		0.0015	
<i>Vanadium</i>		-0.0103	
<i>Zinc</i>		0.0042	
<i>Zirconium</i>		0.0008	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Lab Sample ID: ICSAB 440-506733/9

Instrument ID: ICP8

Lab File ID: 181019-1Z.csv

ICS Source: ME ICP IFB_02026

Concentration Units: mg/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Chromium	0.500	0.493	99
<i>Aluminum</i>	<i>601</i>	<i>628</i>	<i>105</i>
<i>Antimony</i>	<i>0.500</i>	<i>0.467</i>	<i>93</i>
<i>Arsenic</i>	<i>0.500</i>	<i>0.509</i>	<i>102</i>
<i>Barium</i>	<i>0.500</i>	<i>0.473</i>	<i>95</i>
<i>Beryllium</i>	<i>0.500</i>	<i>0.528</i>	<i>106</i>
<i>Boron</i>	<i>0.500</i>	<i>0.508</i>	<i>102</i>
<i>Cadmium</i>	<i>0.500</i>	<i>0.453</i>	<i>91</i>
<i>Calcium</i>	<i>603</i>	<i>599</i>	<i>99</i>
<i>Cobalt</i>	<i>0.500</i>	<i>0.452</i>	<i>90</i>
<i>Copper</i>	<i>0.500</i>	<i>0.567</i>	<i>113</i>
<i>Iron</i>	<i>601</i>	<i>532</i>	<i>89</i>
<i>Lead</i>	<i>0.500</i>	<i>0.470</i>	<i>94</i>
<i>Lithium</i>	<i>0.500</i>	<i>0.460</i>	<i>92</i>
<i>Magnesium</i>	<i>603</i>	<i>565</i>	<i>94</i>
<i>Manganese</i>	<i>0.500</i>	<i>0.490</i>	<i>98</i>
<i>Molybdenum</i>	<i>0.500</i>	<i>0.498</i>	<i>100</i>
<i>Nickel</i>	<i>0.500</i>	<i>0.448</i>	<i>90</i>
<i>Phosphorus</i>	<i>0.500</i>	<i>0.508</i>	<i>102</i>
<i>Potassium</i>	<i>10.0</i>	<i>10.6</i>	<i>106</i>
<i>Selenium</i>	<i>0.500</i>	<i>0.472</i>	<i>94</i>
<i>Silicon</i>	<i>2.50</i>	<i>2.68</i>	<i>107</i>
<i>Silver</i>	<i>0.250</i>	<i>0.278</i>	<i>111</i>
<i>Sodium</i>	<i>10.0</i>	<i>10.6</i>	<i>106</i>
<i>Strontium</i>	<i>0.500</i>	<i>0.497</i>	<i>99</i>
<i>Thallium</i>	<i>0.500</i>	<i>0.472</i>	<i>94</i>
<i>Tin</i>	<i>0.500</i>	<i>0.447</i>	<i>89</i>
<i>Titanium</i>	<i>0.500</i>	<i>0.514</i>	<i>103</i>
<i>Tungsten</i>	<i>0.500</i>	<i>0.489</i>	<i>98</i>
<i>Vanadium</i>	<i>0.500</i>	<i>0.503</i>	<i>101</i>
<i>Zinc</i>	<i>0.500</i>	<i>0.439</i>	<i>88</i>
<i>Zirconium</i>	<i>0.500</i>	<i>0.496</i>	<i>99</i>

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
 MATRIX SPIKE SAMPLE RECOVERY
 METALS - TOTAL RECOVERABLE

Client ID: VER-01I-20181015 MS Lab ID: 440-222284-2 MS
 Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Concentration Units: mg/L
 % Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Chromium	3.64	2.6	1.00	106	75-125		6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 METALS - TOTAL RECOVERABLE

Client ID: VER-01I-20181015 MSD Lab ID: 440-222284-2 MSD
 Lab Name: TestAmerica Irvine Job No.: 440-222284-1
 SDG No.: _____
 Matrix: Water Concentration Units: mg/L
 % Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Chromium	3.49	1.00	91	75-125	4	20		6010B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
 POST DIGESTION SPIKE SAMPLE RECOVERY
 METALS - TOTAL RECOVERABLE

Client ID: VER-01I-20181015 PDS

Lab ID: 440-222284-2 PDS

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Matrix: Water

Concentration Units: mg/L

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Chromium	3.38	2.6	1.00	81	80-120		6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 METALS - TOTAL RECOVERABLE

Lab ID: LCS 440-505985/2-A

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

Sample Matrix: Water

LCS Source: ME ICP2 ICV1A_00057

Analyte	Water (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Chromium	1.00	1.07		107	80 120		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
 ICP-AES AND ICP-MS SERIAL DILUTIONS
 METALS - TOTAL RECOVERABLE

Lab ID: 440-222284-2

SDG No: _____

Lab Name: TestAmerica Irvine

Job No: 440-222284-1

Matrix: Water

Concentration Units: mg/L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Difference	Q	Method
Chromium	2.6	2.48	3.7		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Irvine

Job Number: 440-222284-1

SDG Number: _____

Matrix: Water

Instrument ID: ICP8

Method: 6010B

MDL Date: 06/15/2017 17:45

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Chromium	205.552	0.005	0.0025

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Irvine Job Number: 440-222284-1
SDG Number: _____
Matrix: Water Instrument ID: ICP8
Method: 6010B XMDL Date: 06/15/2017 17:46

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chromium	205.552	0.005	0.0025

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Irvine

Job Number: 440-222284-1

SDG No.: _____

ICP-AES Instrument ID: ICP8

Date: 10/19/2018

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Aluminum	396.152		0.000013	-0.000018	0.000025	0.000008	-0.000036	0.000046	0	0.02689	-0.000079	-0.000019	-0.000203	0.000009	0.001073
Antimony	206.834	0.000009	0.000003	0.000006	0.010395	0	-0.000062	-0.000074	-0.000075	-0.01878	-0.000037	0.000237	0.000208	0.00005	-0.000369
Arsenic	188.980	0.000011	-0.000005	-0.000018	-0.012816	0.00004	0.000084	0.000008	-0.000015	0.000025	0.000095	-0.000094	-0.000062	-0.000062	0.000903
Barium	233.527	0	0	-0.000006	-0.000002	0.000001	0.000001	0.000001	0	-0.000191	-0.000007	-0.000001	0.000003	-0.000164	0.000137
Beryllium	234.861	0	0	0.000004	0	0	0.000142	0	-0.000003	-0.000013	-0.000018	0.000001	0.000003	0.000001	0.000004
Boron	249.678	0	0.000001	0.00088	0.000452	-0.00002	-0.000089	0	-0.00007	-0.000017	-0.000005	-0.000014	-0.00003	-0.000018	-0.010398
Cadmium	214.439	-0.000001	0	0.000002	-0.000009	-0.000003	0.000011	0	0.000001	-0.000006	0.000004	0.000001	0.000005	0.000002	-0.000056
Calcium	422.673	-0.000006		0.000876	0.000377	-0.000272	-0.000064	0.000039	-0.000053	-0.000524	-0.000396	-0.000114	-0.000132	0.000387	-0.000193
Chromium	205.560	0.000001	0.000003	-0.000007		0.000042	0.00002	0	0.000025	-0.000681	-0.000317	0.000014	0.000028	-0.000018	0.000386
Cobalt	228.615	0	0.000001		0.000085	0.000016	0.000008	0.000002	-0.000003	0.000019	0.000157	0.000002	0.001777	-0.000007	0.000113
Copper	324.754	0.000001	-0.000019	0.000014	0.000019		-0.0000791	0.000002	0.000013	0.000217	0.000018	0.000014	0.000206	-0.000092	0.00002
Iron	238.204	-0.000007	0.000002	-0.000338	-0.000187	-0.00013		0.000024	0.000002	-0.000162	-0.000109	-0.000119	-0.000132	-0.000188	-0.000132
Lead	220.353	-0.000039	0.000003	-0.000498	0	-0.00009	-0.000018	-0.000046	0.00009	-0.000819	-0.000019	0.000021	-0.000428	-0.000038	-0.000096
Lithium	670.783	0.000054	0.000021	-0.000148	-0.00023	-0.001097	-0.000003	0.000057	-0.000518	-0.000367	-0.000358	-0.001101	0.000381	-0.001377	-0.000136
Magnesium	279.078	-0.00001	0.000007	-0.000382	-0.000435	-0.0001	-0.000217		0.000627	-0.000188	-0.000014	-0.000068	-0.000188	0.000112	-0.00038
Manganese	259.372	0	0.000001	0.00001	-0.000007	-0.000001	0.0013811	0.001474		0.004715	0.000013	0.000005	0.000019	0.00001	0.000005
Molybdenum	204.598	0.000025	0	0.000039	0.000067	0.000001	0.000004	0	0.000022		0.000085	-0.000008	0.00005	-0.000031	0.000033
Nickel	231.604	0.000001	-0.000003	-0.000756	0.000004	-0.000028	0.000004	-0.000002	-0.000049	-0.000042		0.00006	0.000011	-0.000001	-0.000013
Phosphorus	213.618	0.000001	-0.000013	0.000141	0.000127	-0.03762	-0.000018	0.000004	-0.000139	-0.020778	0.000094	-0.000098	0.000151	0.00024	-0.000573
Potassium	744.491	0.000095	0.000087	0.002408	0.001429	-0.000339	0.000196	0.000277	-0.000372	-0.001987	0.001312	0.001861	0.001852	0.001103	0.001579
Selenium	196.026	-0.000006	-0.000007	-0.00066	-0.000051	-0.000370	-0.00016	-0.00032	0.000565	-0.000003	-0.000241	0	-0.000066	-0.000483	0.009364
Silicon	251.611	0.000013	0.00002	0.000136	0.000095	0.000162	-0.000038	0.000048	0.000255	0.010982	0.000192	0.000679	0.004127	0.000213	0.053502
Silver	328.068	0	-0.000003	-0.000013	-0.000026	-0.000003	-0.000007	-0.000002	0.000075	0.000029	0.000003	-0.000009	-0.000107	0.000009	0.000009
Sodium	589.592	0.00003	0.000041	0.000558	0.000239	0.000428	0.000025	0.000018	0.000127	0.002128	0.000479	0.000076	0.000228	-0.00004	0.006467
Strontium	421.552	0	0.00003	0.000002	0.000003	-0.000001	0.00000	0	0	0.000001	0.000002	0.000002	0.000001	0	0.000017
Thallium	190.794	-0.000001	-0.000005	0.003078	0.000156	-0.000039	-0.0000975	0.000005	0.001388	0.000096	-0.000005	-0.000043	-0.010982	-0.02142	0.000265
Tin	189.925	0.000001	0	0.000083	0.000021	0.000021	0.000006	0.000003	0.000047	0.000038	0.000039		-0.000119	0.000028	0.000028
Titanium	336.122	0	-0.000008	-0.000017	-0.000029	0.000002	0.000001	0	0.000005	-0.00012	-0.000039	0.000005		-0.000364	0.000399
Tungsten	207.912	-0.000006	-0.000009	-0.000082	-0.000001	-0.000042	0	-0.000001	-0.000021	0.000144	-0.000024	-0.000005	-0.000009	-0.000019	
Vanadium	292.401	0.000004	0.000038	0.000001	0.000214	0.000012	0.000007	0.000002	0.000014	-0.008504	0.000003	0.000009	0.000907		0.000183

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Irvine Job Number: 440-222284-1

SDG No.: _____

ICP-AES Instrument ID: ICP8 Date: 10/19/2018

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Yttrium	371.029	0	0	0	0	0	-0.000005	0	0	0	0	0	0	0	0
Zinc	202.548	0.000003	0.000003	0.000013	-0.001604	0.0078	0.0000043	0.000028	0.000044	0.00007	-0.000062	0.000012	0.000048	0.000036	0.000339
Zirconium	343.823	0	0.000002	-0.000097	0.000005	0.000002	0.000012	0	-0.000025	-0.000012	-0.000009	0.000007	-0.000025	0.000005	0.000085

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Irvine

Job Number: 440-222284-1

SDG No.: _____

ICP-AES Instrument ID: ICP8

Date: 10/19/2018

Analyte	Wave Length	Zn	Zr												
Aluminum	396.152	-0.00005	0.008541												
Antimony	206.834	0.000096	-0.000086												
Arsenic	188.980	-0.000075	0.000125												
Barium	233.527	0.000001	-0.000001												
Beryllium	234.861	0.000001	0.000006												
Boron	249.678	0.00002	0.000445												
Cadmium	214.439	0.000005	0.000001												
Calcium	422.673	-0.000066	-0.000488												
Chromium	205.560	0.000037	0.000101												
Cobalt	228.615	-0.000013	-0.000003												
Copper	324.754	0.000016	0.00004												
Iron	238.204	0.00011	0.000622												
Lead	220.353	-0.000028	-0.000005												
Lithium	670.783	-0.00073	-0.000634												
Magnesium	279.078	-0.000119	-0.000067												
Manganese	259.372	0.000005	0.000048												
Molybdenum	204.598	0.000052	0.000002												
Nickel	231.604	0.000023	0.000028												
Phosphorus	213.618	-0.00009	0.000028												
Potassium	744.491	-0.001412	0.000491												
Selenium	196.026	-0.000101	-0.000166												
Silicon	251.611	0.001039	0.006759												
Silver	328.068	0.000001	0.003947												
Sodium	589.592	-0.000112	0.000318												
Strontium	421.552	0	-0.00002												
Thallium	190.794	-0.000027	0.000028												
Tin	189.925	0.000048	0.000557												
Titanium	336.122	0.000006	0.000122												
Tungsten	207.912	0.008281	0.000004												
Vanadium	292.401	0.000024	-0.000008												

10-IN
 ICP-AES INTERELEMENT CORRECTION FACTORS
 METALS

Lab Name: TestAmerica Irvine Job Number: 440-222284-1

SDG No.: _____

ICP-AES Instrument ID: ICP8 Date: 10/19/2018

Analyte	Wave Length	Zn	Zr												
Yttrium	371.029	0	0												
Zinc	202.548		0.000117												
Zirconium	343.823	0.000003													

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Irvine

Job No: 440-222284-1

SDG No.: _____

Instrument ID: ICP8

Date: 06/15/2017 18:16

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Chromium		30	6010B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Irvine

Job No.: 440-222284-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-505985/1-A	10/18/2018 09:37	505985		25	25
LCS 440-505985/2-A	10/18/2018 09:37	505985		25	25
440-222284-2	10/18/2018 09:37	505985		25	25
440-222284-2 MS	10/18/2018 09:37	505985		25	25
440-222284-2 MSD	10/18/2018 09:37	505985		25	25
440-222284-1	10/18/2018 09:37	505985		25	25
440-222284-4	10/18/2018 09:37	505985		25	25
440-222284-5	10/18/2018 09:37	505985		25	25

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 10/19/2018 08:32 End Date: 10/19/2018 12:58

Lab Sample Id	D/F	Type	Time	C r	Analytes																											
ICIS 440-506733/1	1		08:32	X																												
STD1 440-506733/2 IC			08:34	X																												
STD2 440-506733/3 IC			08:37	X																												
STD3 440-506733/4 IC			08:39	X																												
ICV 440-506733/5	1		08:48	X																												
ZZZZZZ			08:52																													
ICB 440-506733/7	1		08:57	X																												
ICSA 440-506733/8	1		09:02	X																												
ICSAB 440-506733/9	1		09:08	X																												
ZZZZZZ			09:12																													
RINSE 440-506733/11			09:14																													
CRI 440-506733/12			09:21																													
CRI 440-506733/13	1		09:24	X																												
CCV 440-506733/14	1		12:01	X																												
CCB 440-506733/15	1		12:04	X																												
MB 440-505985/1-A	1	R	12:07	X																												
440-222284-4	1	R	12:10	X																												
440-222284-5	1	R	12:12	X																												
ZZZZZZ			12:15																													
ZZZZZZ			12:17																													
ZZZZZZ			12:20																													
ZZZZZZ			12:22																													
ZZZZZZ			12:24																													
LCS 440-505985/2-A	1	R	12:27	X																												
CCV 440-506733/25	1		12:29	X																												
CCB 440-506733/26	1		12:32	X																												
440-222284-2	1	R	12:34	X																												
440-222284-2 MS	1	R	12:36	X																												
440-222284-2 MSD	1	R	12:39	X																												
440-222284-2 PDS	1	R	12:41	X																												
440-222284-2 SD	5	R	12:44	X																												
440-222284-1	1	R	12:46	X																												
ZZZZZZ			12:48																													
ZZZZZZ			12:51																													
ZZZZZZ			12:53																													
CCV 440-506733/36	1		12:56	X																												
CCB 440-506733/37	1		12:58	X																												

Prep Types: _____
R = Total Recoverable

15-IN
 ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
 METALS

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

ICP Instrument ID: ICP8 Start Date: 10/19/2018 End Date: 10/19/2018

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-506733/1	08:32										
ICV 440-506733/5	08:48	100									
ICB 440-506733/7	08:57	101									
ICSA 440-506733/8	09:02	87									
ICSAB 440-506733/9	09:08	87									
CRI 440-506733/13	09:24	101									
CCV 440-506733/14	12:01	101									
CCB 440-506733/15	12:04	100									
MB 440-505985/1-A	12:07	97									
440-222284-4	12:10	99									
440-222284-5	12:12	98									
LCS 440-505985/2-A	12:27	97									
CCV 440-506733/25	12:29	100									
CCB 440-506733/26	12:32	101									
440-222284-2	12:34	91									
440-222284-2 MS	12:36	91									
440-222284-2 MSD	12:39	92									
440-222284-2 PDS	12:41	93									
440-222284-2 SD	12:44	101									
440-222284-1	12:46	98									
CCV 440-506733/36	12:56	104									
CCB 440-506733/37	12:58	105									

METALS BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505985 Batch Start Date: 10/18/18 09:37 Batch Analyst: Em, Kimsann

Batch Method: 3005A Batch End Date: 10/18/18 14:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCL 00423	ME HNO3 00460	ME ICP2 ICV1A 00057
MB 440-505985/1		3005A, 6010B			25 mL	25 mL	0.125 mL	0.25 mL	
LCS 440-505985/2		3005A, 6010B			25 mL	25 mL	0.125 mL	0.25 mL	0.25 mL
440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.25 mL
MS 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.25 mL
MSD 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.25 mL
PDS 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.25 mL
440-222284-G-1	VER-01D-20181015	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-222284-G-4	VER-20181015-FB	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-222284-G-5	VER-20181015-EB	3005A, 6010B	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME ICP2 ICV1B 00049					
MB 440-505985/1		3005A, 6010B							
LCS 440-505985/2		3005A, 6010B		0.25 mL					
440-222284-G-2	VER-01I-20181015	3005A, 6010B	R						
440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	0.25 mL					
MS 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	0.25 mL					
MSD 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R	0.25 mL					
PDS 440-222284-G-2	VER-01I-20181015	3005A, 6010B	R						
440-222284-G-1	VER-01D-20181015	3005A, 6010B	R						
440-222284-G-4	VER-20181015-FB	3005A, 6010B	R						
440-222284-G-5	VER-20181015-EB	3005A, 6010B	R						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 440-222284-1

SDG No.: _____

Batch Number: 505985 Batch Start Date: 10/18/18 09:37 Batch Analyst: Em, Kimsann

Batch Method: 3005A Batch End Date: 10/18/18 14:34

Batch Notes	
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	93 Degrees C
Digestion End Time	10/18/2018 14:30
Digestion Start Time	10/18/2018 10:34
Digestion Unit ID	7
Hydrochloric Acid ID	0000198300
Nitric Acid ID	0000200458
Pipette/Syringe/Dispenser ID	MET201
Thermometer ID	P-115, LOc B8, CF=-1
Digestion Tube/Cup ID	1804377
Temperature - Uncorrected - End	94 Degrees C
Temperature - Uncorrected - Start	94 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Date created: 10/18/2018 8:05:20 AM

Sequence table:

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
S1:5	ICV 5129890	1.0	1.0	1.0
S1:5	IPC 5129890	1.0	1.0	1.0
S1:1	ICB 5129880	1.0	1.0	1.0
S1:6	ICSA 5129891	1.0	1.0	1.0
S1:7	ICSAB 5129892	1.0	1.0	1.0
S1:8	XICIS 5129897	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:9	XCRI 5129893	1.0	1.0	1.0
S1:10	CRI 5129894	1.0	1.0	1.0
2:43	440-222262-S-7-A@5	1.0	1.0	1.0
2:44	440-222262-S-8-A@5	1.0	1.0	1.0
2:45	440-222262-S-9-A@2	1.0	1.0	1.0
2:46	440-222262-S-10-A@2	1.0	1.0	1.0
2:47	440-222262-S-11-A@2	1.0	1.0	1.0
2:48	440-222262-S-13-A@2	1.0	1.0	1.0
2:49	440-222262-S-14-A@2	1.0	1.0	1.0
2:19	440-221968-A-1-A@100	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
2:55	MB 440-505979/1-A	1.0	1.0	1.0
2:56	440-222403-E-9-A	1.0	1.0	1.0
2:57	LCS 440-505979/2-A	1.0	1.0	1.0
2:58	440-222403-E-1-A	1.0	1.0	1.0
2:59	440-222403-E-1-B MS	1.0	1.0	1.0
2:60	440-222403-E-1-C MSD	1.0	1.0	1.0
3:1	440-222403-E-2-A	1.0	1.0	1.0
3:2	440-222403-E-3-A	1.0	1.0	1.0
3:3	440-222403-E-4-A	1.0	1.0	1.0
3:4	440-222403-E-5-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:5	440-222403-E-6-A	1.0	1.0	1.0
3:6	440-222403-E-7-A	1.0	1.0	1.0
3:7	440-222403-E-8-A	1.0	1.0	1.0
3:8	440-222403-E-10-A	1.0	1.0	1.0
3:9	440-222452-A-4-B	1.0	1.0	1.0
3:10	440-222452-A-4-C MS	1.0	1.0	1.0
3:11	440-222452-A-4-D MSD	1.0	1.0	1.0
3:12	440-222282-C-1-A	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
3:13	440-222282-C-2-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:11	440-221550-c-8-b@5	1.0	1.0	1.0
1:12	440-221550-c-9-b@5	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
S1:10	CRI 5129894	1.0	1.0	1.0
S1:6	ICSA 5129891	1.0	1.0	1.0
S1:7	ICSAB 5129892	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
3:14	440-222481-A-1-A	1.0	1.0	1.0
3:15	440-222499-K-1-B	1.0	1.0	1.0
3:16	440-222304-A-4-B	1.0	1.0	1.0
3:17	440-222304-A-5-B	1.0	1.0	1.0
3:18	440-222496-G-1-B	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:19	MB 440-505985/1-A	1.0	1.0	1.0
3:20	440-222284-G-4-A	1.0	1.0	1.0
3:21	440-222284-G-5-A	1.0	1.0	1.0
3:22	440-222331-L-14-A	1.0	1.0	1.0
3:23	440-222352-A-1-A	1.0	1.0	1.0
3:24	440-222352-A-2-A	1.0	1.0	1.0
3:25	440-222353-A-1-A	1.0	1.0	1.0
3:26	440-222353-A-2-A	1.0	1.0	1.0
3:27	LCS 440-505985/2-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:28	440-222284-G-2-A	1.0	1.0	1.0
3:29	440-222284-G-2-B MS	1.0	1.0	1.0
3:30	440-222284-G-2-C MSD	1.0	1.0	1.0
3:31	440-222284-G-2-D PDS	1.0	1.0	1.0
3:32	440-222284-G-2-A sd@5	1.0	1.0	1.0
3:33	440-222284-G-1-A	1.0	1.0	1.0
3:34	440-222377-E-1-A	1.0	1.0	1.0
3:35	440-222377-E-2-A	1.0	1.0	1.0
3:36	440-222399-E-1-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:37	MB 440-505794/1-A	1.0	1.0	1.0
3:38	LCS 440-505794/2-A	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
3:39	440-222369-N-1-A	1.0	1.0	1.0
3:40	440-222369-N-1-B MS	1.0	1.0	1.0
3:41	440-222369-N-1-C MSD	1.0	1.0	1.0
3:42	440-222369-N-1-D PDS	1.0	1.0	1.0
3:43	440-222369-N-1-A sd@5	1.0	1.0	1.0
3:44	440-222369-N-3-A	1.0	1.0	1.0
3:45	440-222369-N-4-A	1.0	1.0	1.0
3:46	440-222369-N-5-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:47	440-222369-N-6-A	1.0	1.0	1.0
3:48	440-222369-N-7-A	1.0	1.0	1.0
3:49	440-222369-N-8-A	1.0	1.0	1.0
3:50	440-222369-N-9-A	1.0	1.0	1.0
3:51	440-222369-N-10-A	1.0	1.0	1.0
3:52	440-222369-N-11-A	1.0	1.0	1.0
3:53	440-222369-N-12-A	1.0	1.0	1.0
3:54	440-222369-N-13-A	1.0	1.0	1.0
3:55	440-222369-N-14-A	1.0	1.0	1.0
3:56	440-222378-F-7-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:57	440-222378-F-8-A	1.0	1.0	1.0
3:58	440-222378-F-9-A	1.0	1.0	1.0
3:59	440-222378-F-10-A	1.0	1.0	1.0
3:60	440-222378-F-11-A	1.0	1.0	1.0
4:1	440-222378-F-12-A	1.0	1.0	1.0
1:1	MB 440-506050/1-A	1.0	1.0	1.0
1:2	LCS 440-506050/2-A	1.0	1.0	1.0
1:3	440-222303-A-1-B	1.0	1.0	1.0
1:4	440-222303-A-1-C MS	1.0	1.0	1.0
1:5	440-222303-A-1-D MSD	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:6	440-222560-A-1-A	1.0	1.0	1.0
1:7	440-222560-A-2-A	1.0	1.0	1.0
1:8	440-222560-A-3-A	1.0	1.0	1.0
1:9	440-222560-A-4-A	1.0	1.0	1.0
1:10	440-222560-A-5-A	1.0	1.0	1.0
1:13	440-222452-A-4-B	1.0	1.0	1.0
1:14	440-222452-A-4-C MS	1.0	1.0	1.0
1:15	440-222452-A-4-D MSD	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:16	MB 440-506051/1-A	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
1:17	LCS 440-506051/2-A	1.0	1.0	1.0
1:18	440-222474-T-4-D	1.0	1.0	1.0
1:19	440-222474-T-4-E MS	1.0	1.0	1.0
1:20	440-222474-T-4-F MSD	1.0	1.0	1.0
1:21	440-222474-T-4-G PDS	1.0	1.0	1.0
1:22	440-222474-T-4-DSD@5	1.0	1.0	1.0
1:23	440-222474-T-1-B	1.0	1.0	1.0
1:24	440-222474-T-2-B	1.0	1.0	1.0
1:25	440-222474-S-3-C	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:26	mb 440-506066/1-a	1.0	1.0	1.0
1:27	lcs 440-506066/2-a	1.0	1.0	1.0
1:28	440-222474-n-4-h	1.0	1.0	1.0
1:29	440-222474-n-4-i ms	1.0	1.0	1.0
1:30	440-222474-n-4-j msd	1.0	1.0	1.0
1:31	440-222474-n-4-hSD@5	1.0	1.0	1.0
1:32	440-222474-n-1-c	1.0	1.0	1.0
1:33	440-222474-n-2-c	1.0	1.0	1.0
1:34	440-222474-n-3-c	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:35	440-222369-N-5-A	1.0	1.0	1.0
1:36	440-222369-N-14-A	1.0	1.0	1.0
1:37	440-222369-N-1-A@10	1.0	1.0	1.0
1:38	440-222369-N-1-B MS@10	1.0	1.0	1.0
1:39	440-222369-N-1-C MSD@10	1.0	1.0	1.0
1:40	440-222369-N-1-D PDS@10	1.0	1.0	1.0
1:41	440-222369-N-1-A sd@50	1.0	1.0	1.0
1:42	440-222369-N-3-A@10	1.0	1.0	1.0
1:43	440-222369-N-4-A@10	1.0	1.0	1.0
1:44	440-222369-N-6-A@10	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:53	440-222369-N-14-A	1.0	1.0	1.0
1:54	440-222369-N-4-A	1.0	1.0	1.0
1:45	440-222369-N-7-A@10	1.0	1.0	1.0
1:46	440-222369-N-8-A@10	1.0	1.0	1.0
1:47	440-222369-N-9-A@10	1.0	1.0	1.0
1:48	440-222369-N-10-A@10	1.0	1.0	1.0
1:49	440-222369-N-11-A@10	1.0	1.0	1.0
1:50	440-222369-N-12-A@10	1.0	1.0	1.0
1:51	440-222369-N-13-A@10	1.0	1.0	1.0
1:52	440-222360-S-5-B@5	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
1:55	440-222369-N-5-A@10	1.0	1.0	1.0
1:56	440-222474-T-1-B@10	1.0	1.0	1.0
1:57	440-222474-n-1-c@10	1.0	1.0	1.0
4:2	MB 440-505595/1-A@20	1.0	1.0	1.0
4:3	LCS 440-505595/2-A@20	1.0	1.0	1.0
4:4	440-222037-A-3-B@20	1.0	1.0	1.0
4:5	440-222037-A-3-Bms@20	1.0	1.0	1.0
4:6	440-222037-A-3-Bmsd@20	1.0	1.0	1.0
4:7	440-222037-A-3-Bsd@100	1.0	1.0	1.0
4:8	440-222037-A-4-B@20	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
4:9	440-221144-A-1-L@20	1.0	1.0	1.0
4:10	MB 440-506229/1-A	1.0	1.0	1.0
4:11	LCS 440-506229/2-A	1.0	1.0	1.0
4:12	440-222488-L-2-A	1.0	1.0	1.0
4:13	440-222488-L-2-B MS	1.0	1.0	1.0
4:14	440-222488-L-2-C MSD	1.0	1.0	1.0
4:15	440-222488-L-7-A	1.0	1.0	1.0
4:16	440-222511-C-1-A	1.0	1.0	1.0
4:17	440-222511-C-2-A	1.0	1.0	1.0
4:18	440-222511-C-3-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
4:19	440-222222-O-1-D	1.0	1.0	1.0
4:20	440-222283-B-1-A	1.0	1.0	1.0
4:21	440-222203-I-2-A	1.0	1.0	1.0
4:22	440-222586-B-1-B	1.0	1.0	1.0
4:23	440-222318-H-1-B	1.0	1.0	1.0
4:24	440-222321-H-1-B	1.0	1.0	1.0
4:25	440-222321-H-1-C MS	1.0	1.0	1.0
4:26	440-222321-H-1-D MSD	1.0	1.0	1.0
4:27	440-222576-L-2-A	1.0	1.0	1.0
4:28	440-222576-L-6-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
4:29	MB 440-506240/1-A	1.0	1.0	1.0
4:30	LCS 440-506240/2-A	1.0	1.0	1.0
4:31	440-222514-E-1-A	1.0	1.0	1.0
4:32	440-222514-E-1-B MS	1.0	1.0	1.0
4:33	440-222514-E-1-C MSD	1.0	1.0	1.0
4:34	440-222514-E-2-A	1.0	1.0	1.0
4:35	440-222514-E-3-A	1.0	1.0	1.0

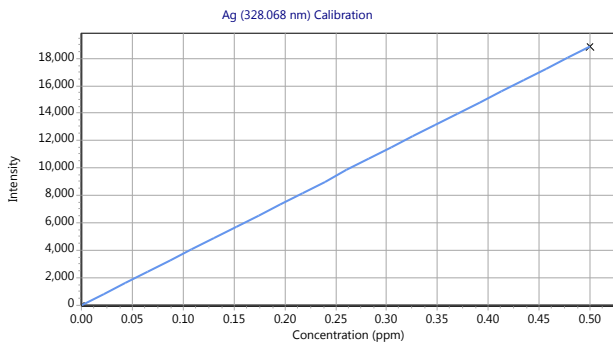
Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
4:36	440-222514-E-4-A	1.0	1.0	1.0
4:37	440-222514-E-5-A	1.0	1.0	1.0
4:38	440-222514-E-6-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
4:39	440-222514-E-7-A	1.0	1.0	1.0
4:40	440-222465-A-1-A	1.0	1.0	1.0
4:41	440-222465-A-2-A	1.0	1.0	1.0
4:42	440-222502-K-1-B	1.0	1.0	1.0
4:43	440-222502-K-2-A	1.0	1.0	1.0
4:44	440-222502-K-2-B MS	1.0	1.0	1.0
4:45	440-222502-K-2-C MSD	1.0	1.0	1.0
4:46	440-222502-K-3-B	1.0	1.0	1.0
4:47	440-222505-I-1-A	1.0	1.0	1.0
4:48	440-222505-I-2-B	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
4:49	440-222505-I-3-A	1.0	1.0	1.0
4:50	440-222577-D-1-A	1.0	1.0	1.0
4:51	440-222577-D-2-A	1.0	1.0	1.0
4:52	440-222577-D-3-A	1.0	1.0	1.0
4:53	440-222577-D-4-A	1.0	1.0	1.0
4:54	440-222577-D-5-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:1	MB 440-506097/1-A	1.0	1.0	1.0
3:2	LCS 440-506097/2-A	1.0	1.0	1.0
3:3	440-222004-D-1-B	1.0	1.0	1.0
3:4	440-222004-D-1-C MS	1.0	1.0	1.0
3:5	440-222004-D-1-D MSD	1.0	1.0	1.0
3:6	440-222004-D-1-Bsd@5	1.0	1.0	1.0
3:7	440-222004-D-3-G	1.0	1.0	1.0
3:8	440-222004-D-4-C	1.0	1.0	1.0
3:9	440-222004-D-5-C	1.0	1.0	1.0
3:10	440-222004-D-6-C	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:11	440-222004-E-7-C	1.0	1.0	1.0
3:12	440-222092-F-2-C	1.0	1.0	1.0
3:13	440-222092-F-8-C	1.0	1.0	1.0
3:14	440-221855-F-3-C	1.0	1.0	1.0
3:15	440-221855-M-6-C	1.0	1.0	1.0
3:16	MB 440-506290/1-A	1.0	1.0	1.0
3:17	LCS 440-506290/2-A	1.0	1.0	1.0
3:18	LCSD 440-506290/4-A	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
3:19	440-221975-N-3-C	1.0	1.0	1.0
3:20	440-221975-N-3-Csd@5	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:21	MB 440-506241/1-A	1.0	1.0	1.0
3:22	LCS 440-506241/2-A	1.0	1.0	1.0
3:23	440-222317-A-1-A	1.0	1.0	1.0
3:24	440-222317-A-1-B MS	1.0	1.0	1.0
3:25	440-222317-A-1-C MSD	1.0	1.0	1.0
3:26	440-222317-A-1-D PDS	1.0	1.0	1.0
3:27	440-222317-A-1-Asd@5	1.0	1.0	1.0
3:28	440-222317-A-2-A	1.0	1.0	1.0
3:29	440-222470-H-2-A	1.0	1.0	1.0
3:30	440-222470-H-3-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:31	440-222470-H-4-A	1.0	1.0	1.0
3:32	440-222470-H-5-A	1.0	1.0	1.0
3:33	440-222470-H-6-A	1.0	1.0	1.0
3:35	440-222418-L-22-A	1.0	1.0	1.0
3:36	440-222544-A-4-A	1.0	1.0	1.0
3:37	440-222535-A-4-A	1.0	1.0	1.0
3:38	440-222480-A-1-A	1.0	1.0	1.0
3:39	440-222480-A-2-A	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
3:34	440-222470-H-7-A@100	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:4	CCV 5129881	1.0	1.0	1.0
S1:1	CCB 5129880	1.0	1.0	1.0
S1:11	CRI 5129894	1.0	1.0	1.0
S1:12	ICSA 5129891	1.0	1.0	1.0
S1:13	ICSAB 5129892	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
S1:8	RINSE 5129898	1.0	1.0	1.0
3:41	Sample 226	1.0	1.0	1.0

Calibration Curves:

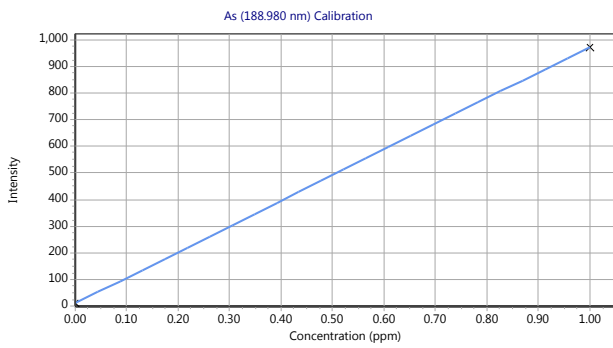
Ag (328.068 nm)
Intensity = 37801 * Concentration - 18

Standards	Intensity
IEC Blank	-17.5600
STD3	18880.0000



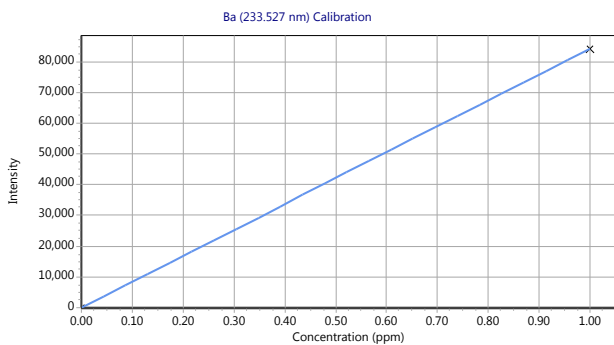
As (188.980 nm)
Intensity = 964 * Concentration + 10

Standards	Intensity
IEC Blank	9.8560
STD3	973.9000



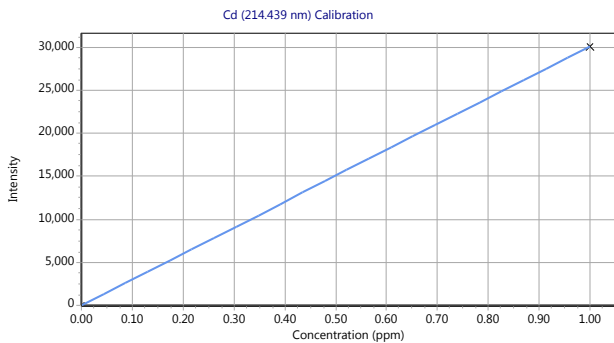
Ba (233.527 nm)
Intensity = 84304 * Concentration - 13

Standards	Intensity
IEC Blank	-12.8900
STD3	84290.0000



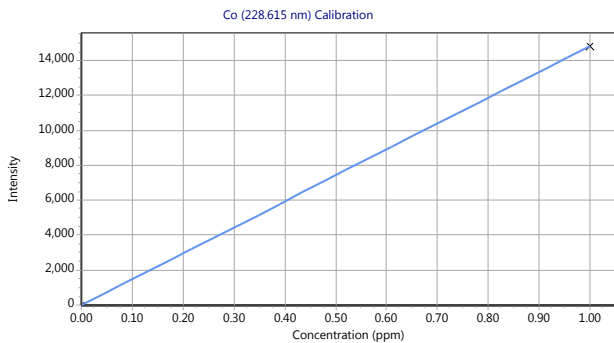
Cd (214.439 nm)
Intensity = 30108 * Concentration - 4

Standards	Intensity
IEC Blank	-4.4850
STD3	30100.0000



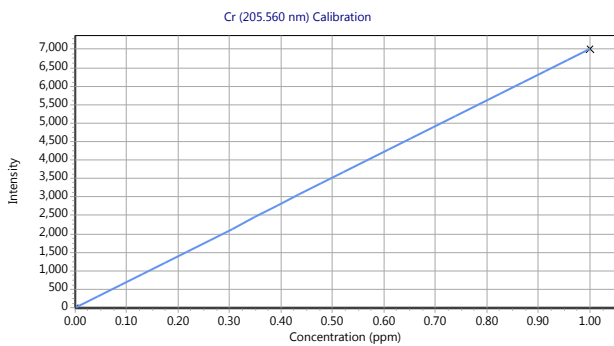
Co (228.615 nm)
Intensity = 14834 * Concentration - 3

Standards	Intensity
IEC Blank	-2.8900
STD3	14830.0000



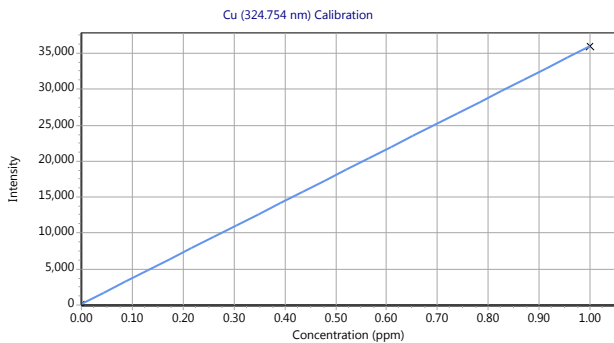
Cr (205.560 nm)
Intensity = 7017 * Concentration + 4

Standards	Intensity
IEC Blank	3.7230
STD3	7020.0000



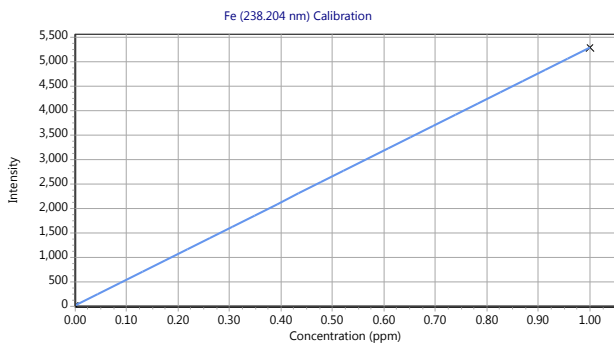
Cu (324.754 nm)
Intensity = 35890 * Concentration + 142

Standards	Intensity
IEC Blank	141.8000
STD3	36030.0000



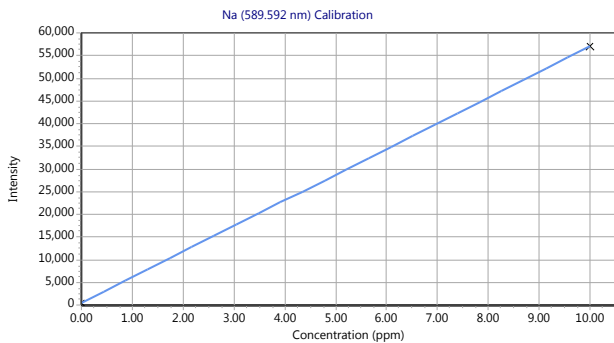
Fe (238.204 nm)
Intensity = 5267 * Concentration + 31

Standards	Intensity
IEC Blank	30.9700
STD3	5298.0000



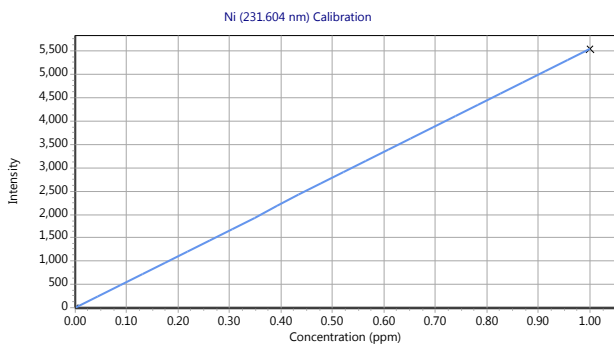
Na (589.592 nm)
Intensity = 5683 * Concentration + 369

Standards	Intensity
IEC Blank	368.6000
STD3	57200.0000



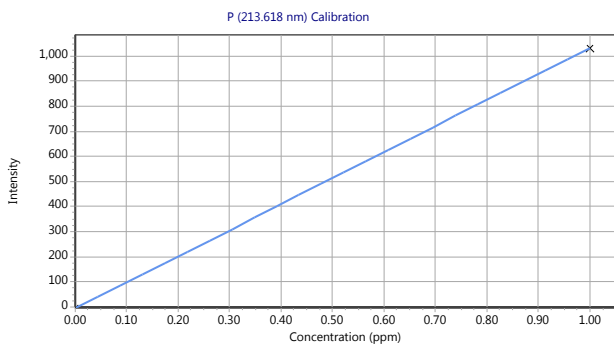
Ni (231.604 nm)
Intensity = 5561 * Concentration + 0

Standards	Intensity
IEC Blank	0.0688
STD3	5561.0000



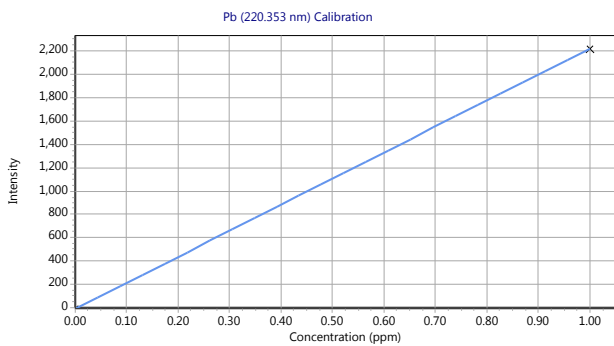
P (213.618 nm)
Intensity = 1038 * Concentration - 6

Standards	Intensity
IEC Blank	-5.5350
STD3	1032.0000



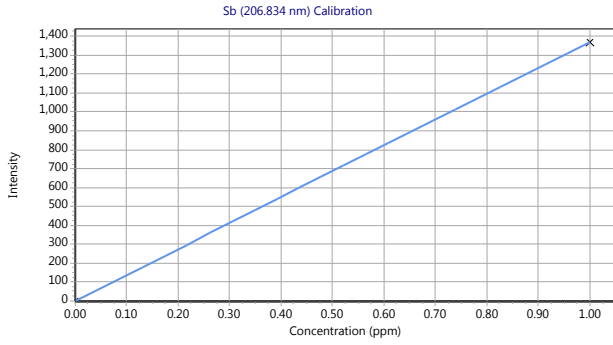
Pb (220.353 nm)
Intensity = 2232 * Concentration - 9

Standards	Intensity
IEC Blank	-9.1450
STD3	2222.0000



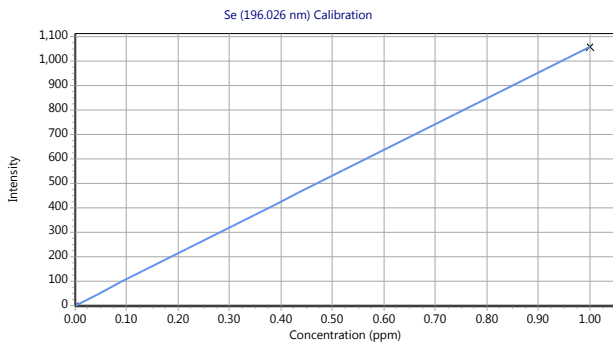
Sb (206.834 nm)
Intensity = 1369 * Concentration + 1

Standards	Intensity
IEC Blank	1.4010
STD3	1370.0000



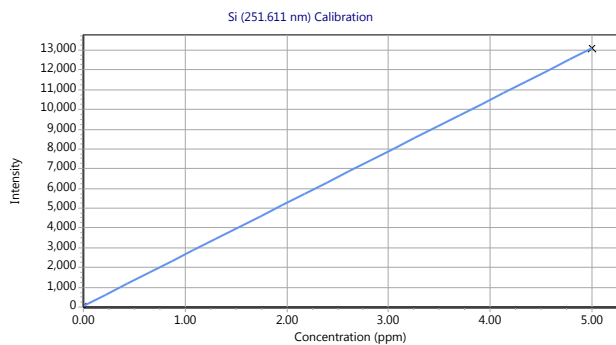
Se (196.026 nm)
Intensity = 1058 * Concentration + 2

Standards	Intensity
IEC Blank	1.9320
STD3	1060.0000



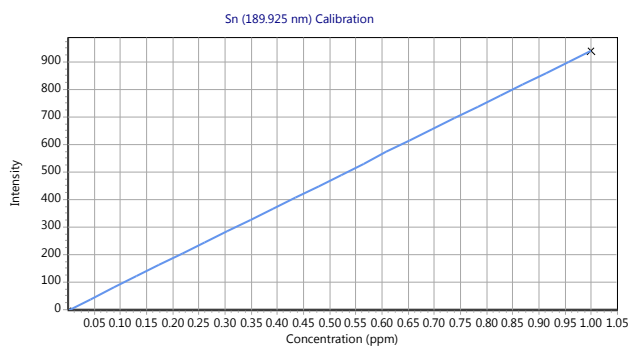
Si (251.611 nm)
Intensity = 2615 * Concentration + 45

Standards	Intensity
IEC Blank	44.9900
STD3	13120.0000



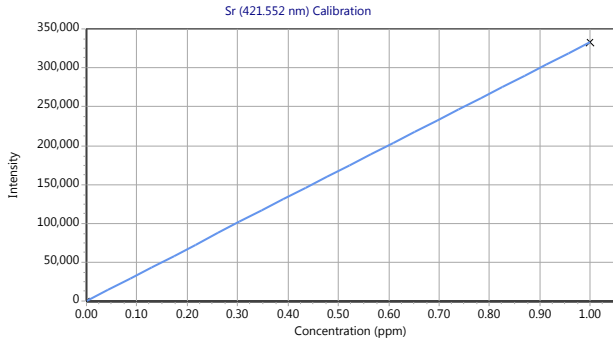
Sn (189.925 nm)
Intensity = 943 * Concentration - 2

Standards	Intensity
IEC Blank	-2.2560
STD3	940.4000



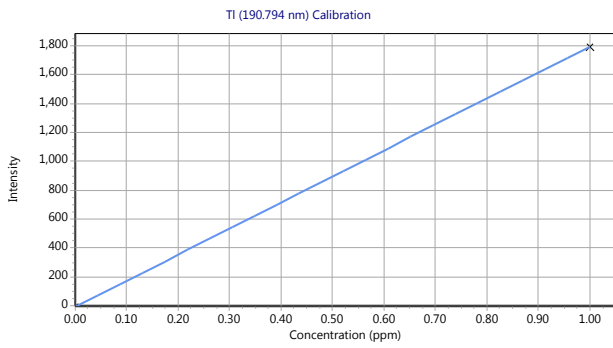
Sr (421.552 nm)
Intensity = 333367 * Concentration + 313

Standards	Intensity
IEC Blank	312.6000
STD3	333700.0000



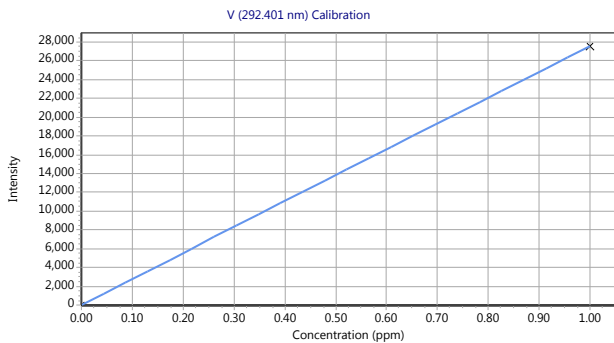
TI (190.794 nm)
Intensity = 1801 * Concentration - 7

Standards	Intensity
IEC Blank	-6.7290
STD3	1794.0000



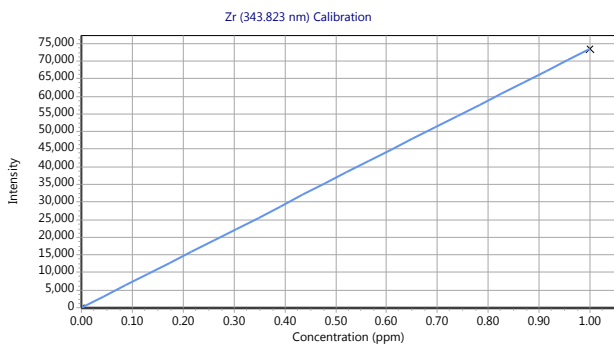
V (292.401 nm)
Intensity = 27558 * Concentration + 28

Standards	Intensity
IEC Blank	27.9500
STD3	27590.0000



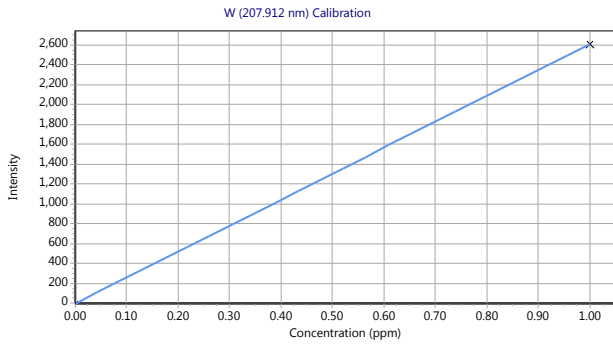
Zr (343.823 nm)
Intensity = 73556 * Concentration - 10

Standards	Intensity
IEC Blank	-9.5530
STD3	73550.0000



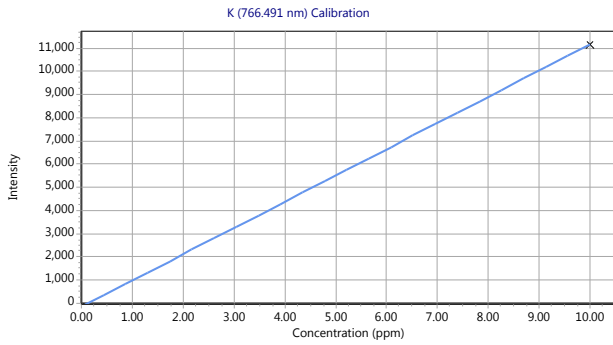
W (207.912 nm)
Intensity = 2614 * Concentration - 6

Standards	Intensity
IEC Blank	-5.8860
STD3	2608.0000



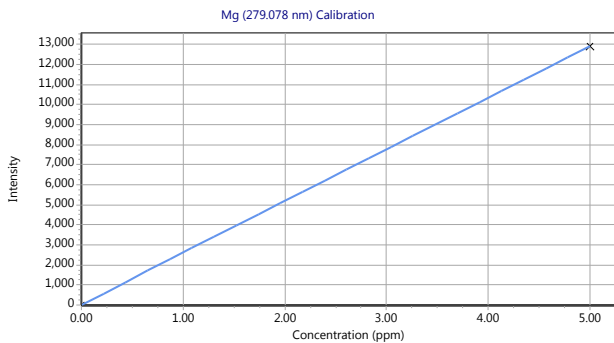
K (766.491 nm)
Intensity = 1132 * Concentration - 149

Standards	Intensity
IEC Blank	-148.5000
STD3	11170.0000



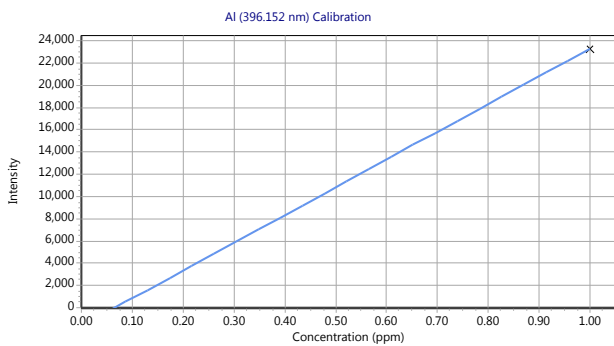
Mg (279.078 nm)
Intensity = 2581 * Concentration + 20

Standards	Intensity
IEC Blank	20.0500
STD3	12930.0000



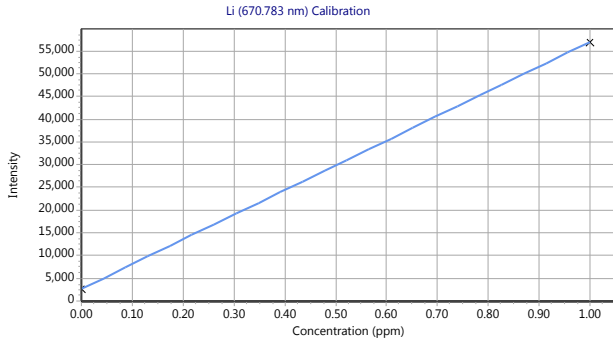
Al (396.152 nm)
Intensity = 24974 * Concentration - 1661

Standards	Intensity
IEC Blank	-1661.0000
STD3	23310.0000



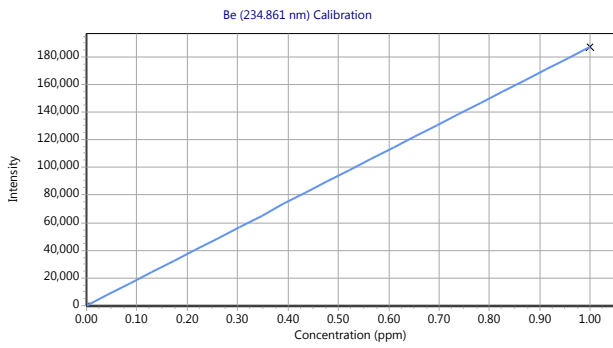
Li (670.783 nm)
Intensity = 54306 * Concentration + 2681

Standards	Intensity
IEC Blank	2681.0000
STD3	56990.0000



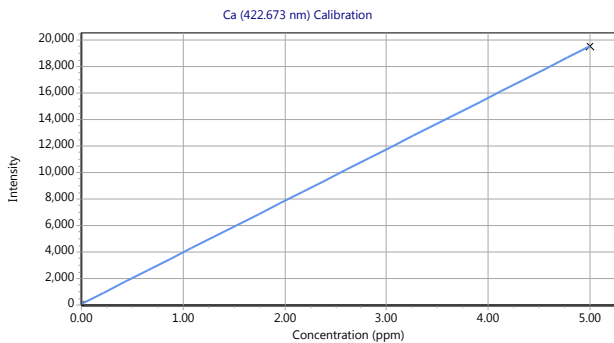
Be (234.861 nm)
Intensity = 187234 * Concentration + 1

Standards	Intensity
IEC Blank	0.5601
STD3	187200.0000



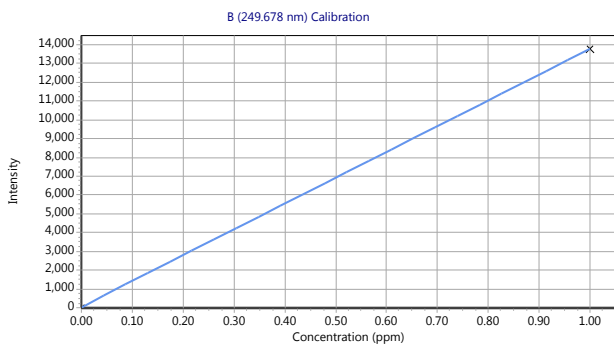
Ca (422.673 nm)
Intensity = 3899 * Concentration + 90

Standards	Intensity
IEC Blank	89.6400
STD3	19590.0000



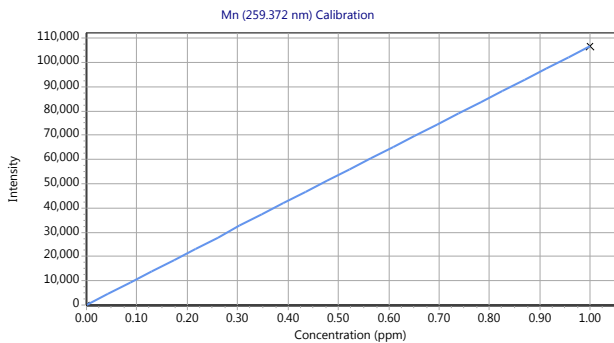
B (249.678 nm)
Intensity = 13775 * Concentration + 25

Standards	Intensity
IEC Blank	25.4900
STD3	13800.0000



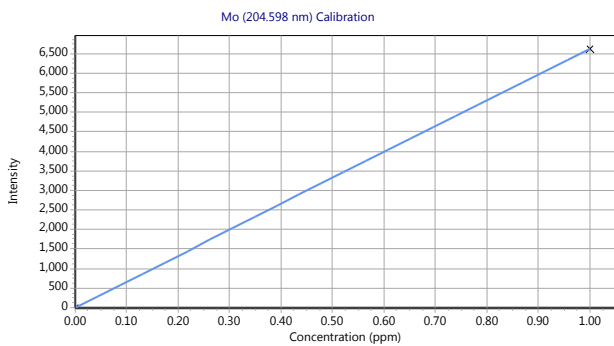
Mn (259.372 nm)
Intensity = 106786 * Concentration + 76

Standards	Intensity
IEC Blank	76.2600
STD3	106900.0000



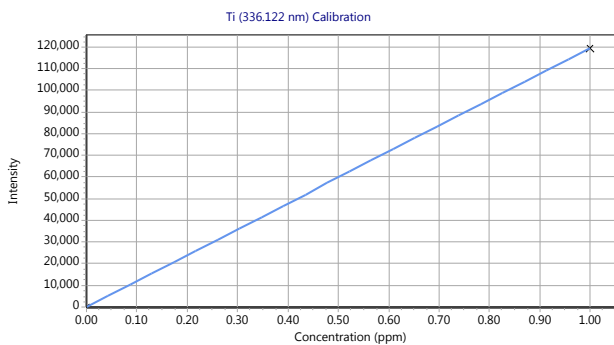
Mo (204.598 nm)
Intensity = 6623 * Concentration + 6

Standards	Intensity
IEC Blank	6.4530
STD3	6629.0000



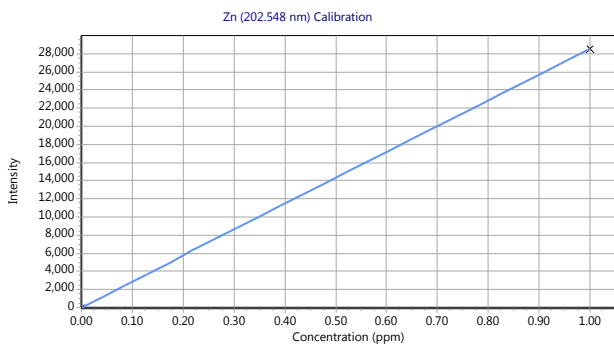
Ti (336.122 nm)
Intensity = 119615 * Concentration - 74

Standards	Intensity
IEC Blank	-73.7000
STD3	119500.0000



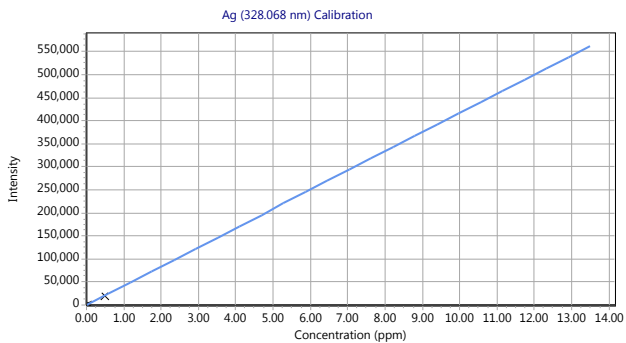
Zn (202.548 nm)
 Intensity = 28533 * Concentration + 37

Standards	Intensity
IEC Blank	37.4200
STD3	28570.0000



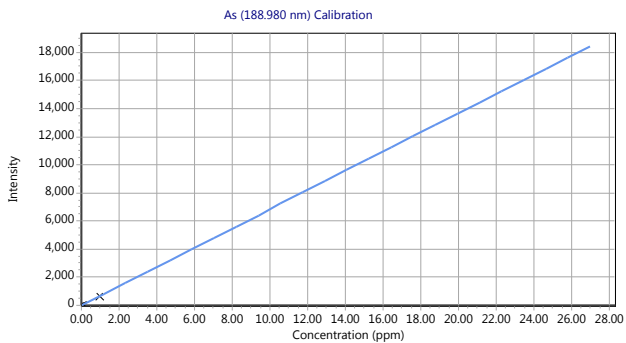
Ag (328.068 nm)
 Intensity = 41686.25344530 * Concentration + 1.79811432
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	1.7980
STD1 5129889	102.5000
STD2 5129888	2064.0000
STD3 5129881	20850.0000



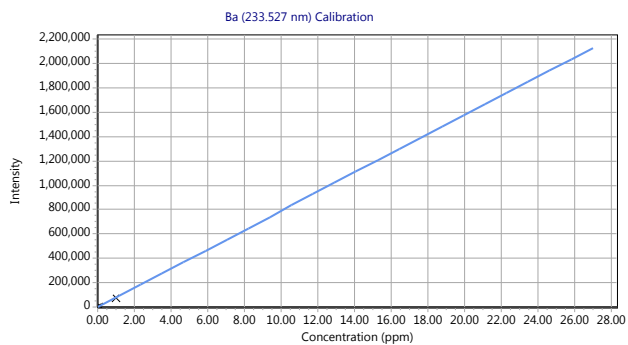
As (188.980 nm)
Intensity = 683.09965186 * Concentration + 5.71871893
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	5.7190
STD1 5129889	11.4400
STD2 5129888	74.6400
STD3 5129881	688.7000



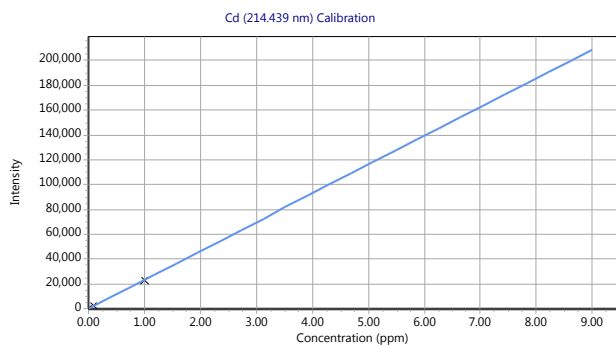
Ba (233.527 nm)
Intensity = 78854.93294496 * Concentration + 40.99384709
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	40.9900
STD1 5129889	431.2000
STD2 5129888	7955.0000
STD3 5129881	78890.0000



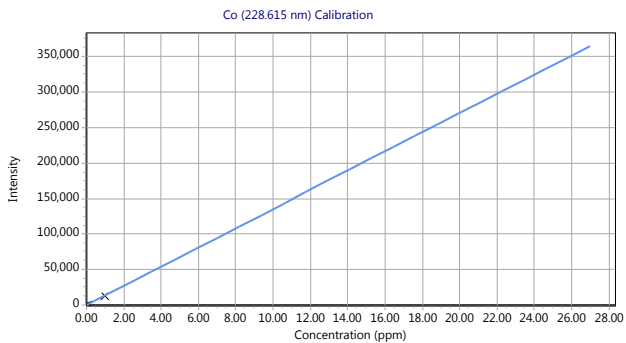
Cd (214.439 nm)
Intensity = 23203.72080197 * Concentration - 3.59110649
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-3.5910
STD1 5129889	109.8000
STD2 5129888	2334.0000
STD3 5129881	23200.0000



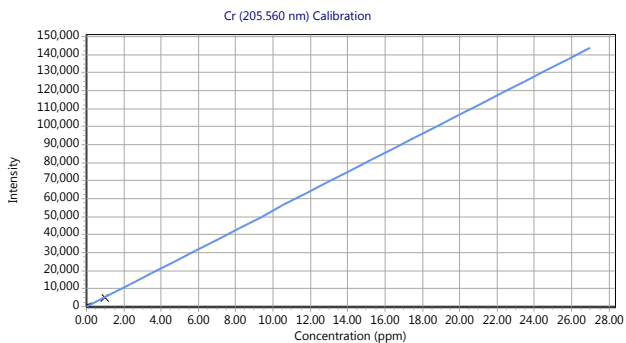
Co (228.615 nm)
Intensity = 13527.15588362 * Concentration - 22.68635400
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-22.6900
STD1 5129889	48.1400
STD2 5129888	1337.0000
STD3 5129881	13500.0000



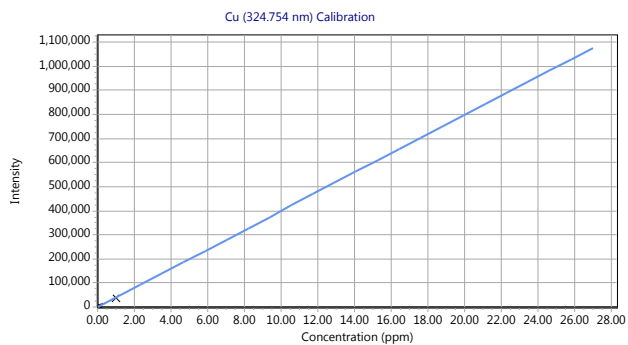
Cr (205.560 nm)
Intensity = 5329.96859008 * Concentration + 1.37511339
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	1.3750
STD1 5129889	30.5900
STD2 5129888	535.2000
STD3 5129881	5331.0000



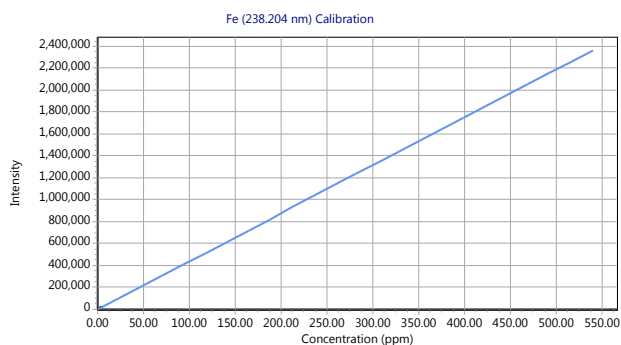
Cu (324.754 nm)
Intensity = 39861.42233876 * Concentration + 151.21187260
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	151.2000
STD1 5129889	346.9000
STD2 5129888	4038.0000
STD3 5129881	40020.0000



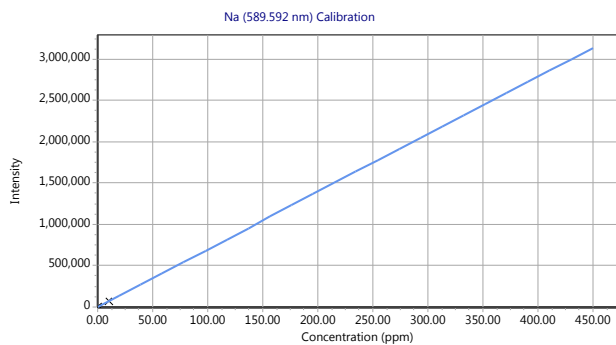
Fe (238.204 nm)
Intensity = 4374.34862849 * Concentration - 18.24630283
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-18.2500
STD2 5129888	417.0000
STD3 5129881	4356.0000



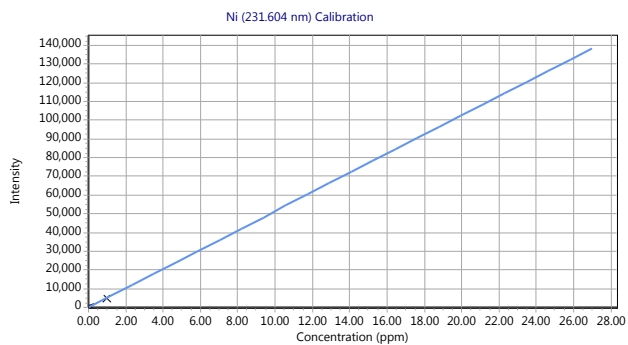
Na (589.592 nm)
Intensity = 6973.35451200 * Concentration + 1311.08638242
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	1311.0000
STD2 5129888	8349.0000
STD3 5129881	71040.0000



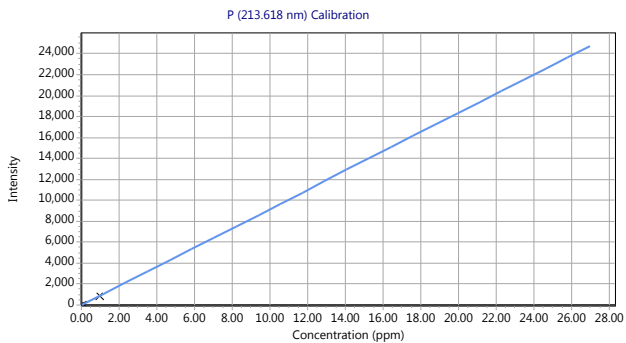
Ni (231.604 nm)
 Intensity = 5127.22706613 * Concentration + 1.87398557
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	1.8740
STD1 5129889	27.9700
STD2 5129888	514.1000
STD3 5129881	5129.0000



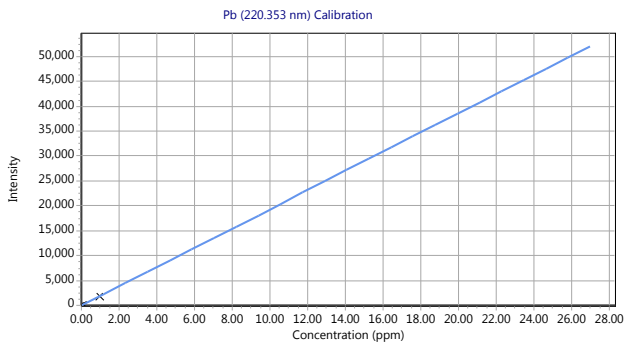
P (213.618 nm)
 Intensity = 917.11359986 * Concentration - 10.21553512
 Correlation coefficient: 0.99999

Standards	Intensity
STD0 5129880	-10.2200
STD2 5129888	78.4600
STD3 5129881	907.2000



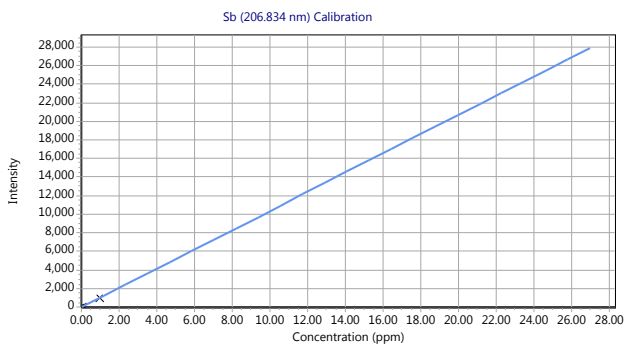
Pb (220.353 nm)
Intensity = 1927.39420844 * Concentration - 9.13809994
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-9.1380
STD1 5129889	1.8170
STD2 5129888	184.6000
STD3 5129881	1918.0000



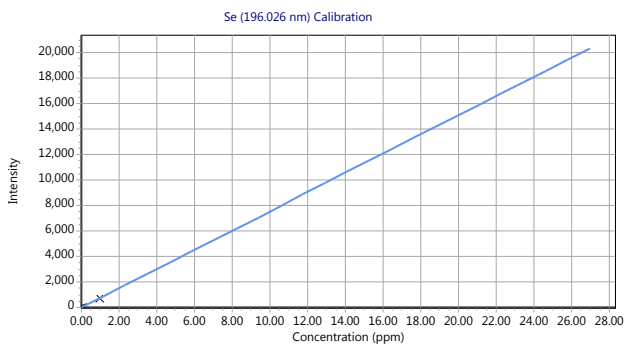
Sb (206.834 nm)
Intensity = 1033.95115727 * Concentration - 1.44253174
Correlation coefficient: 0.99991

Standards	Intensity
STD0 5129880	-1.4430
STD1 5129889	1.7780
STD2 5129888	87.2800
STD3 5129881	1034.0000



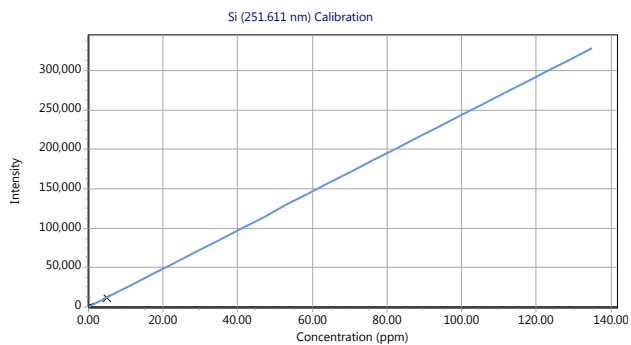
Se (196.026 nm)
 Intensity = 754.83068925 * Concentration - 1.04295194
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-1.0430
STD1 5129889	2.9210
STD2 5129888	76.4500
STD3 5129881	753.6000



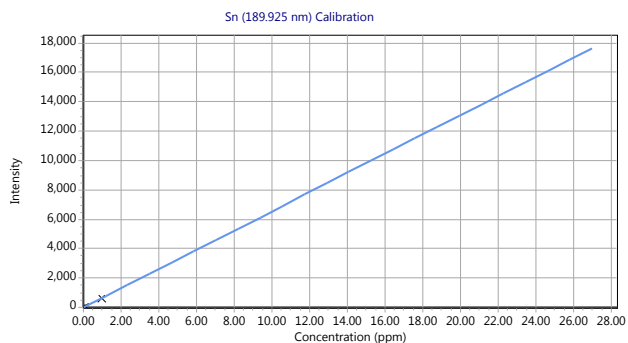
Si (251.611 nm)
 Intensity = 2436.70390358 * Concentration + 48.74188451
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	48.7400
STD1 5129889	110.5000
STD2 5129888	1264.0000
STD3 5129881	12230.0000



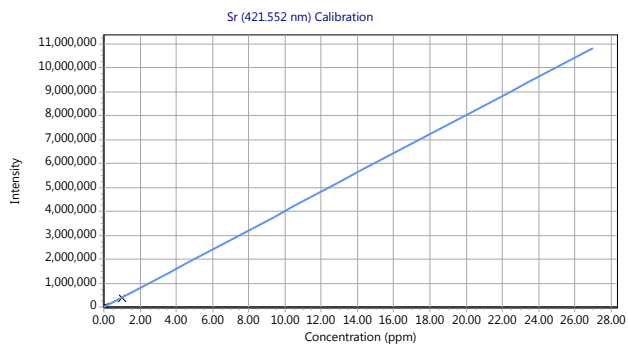
Sn (189.925 nm)
Intensity = 653.87247688 * Concentration - 3.58070644
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-3.5810
STD2 5129888	62.3400
STD3 5129881	650.2000



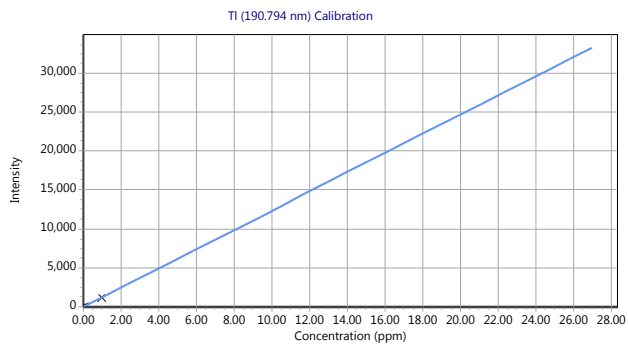
Sr (421.552 nm)
Intensity = 400938.94227685 * Concentration - 57.27000198
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-57.2700
STD1 5129889	1865.0000
STD2 5129888	40340.0000
STD3 5129881	400900.0000



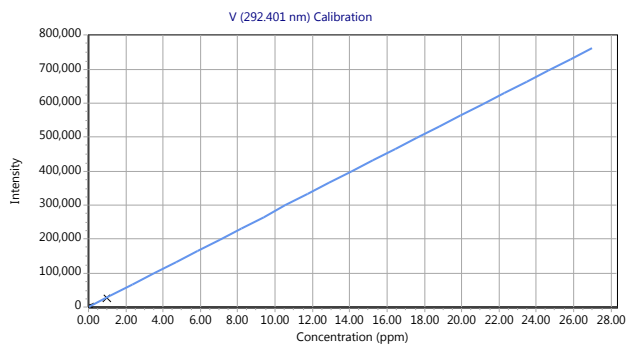
TI (190.794 nm)
 Intensity = 1232.93992645 * Concentration - 3.70384020
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-3.7040
STD1 5129889	3.9490
STD2 5129888	122.2000
STD3 5129881	1229.0000



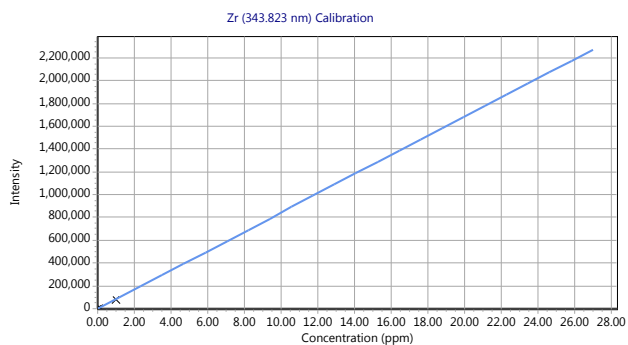
V (292.401 nm)
 Intensity = 28234.92458292 * Concentration + 56.70729052
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	56.7100
STD1 5129889	195.4000
STD2 5129888	2865.0000
STD3 5129881	28290.0000



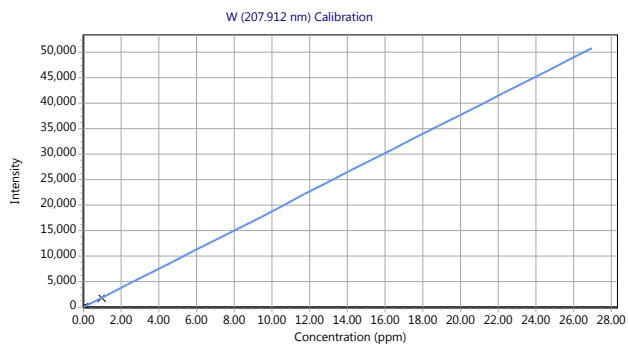
Zr (343.823 nm)
Intensity = 84151.50773010 * Concentration - 6.48134456
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5129880	-6.4810
STD1 5129889	153.0000
STD2 5129888	8110.0000
STD3 5129881	84180.0000



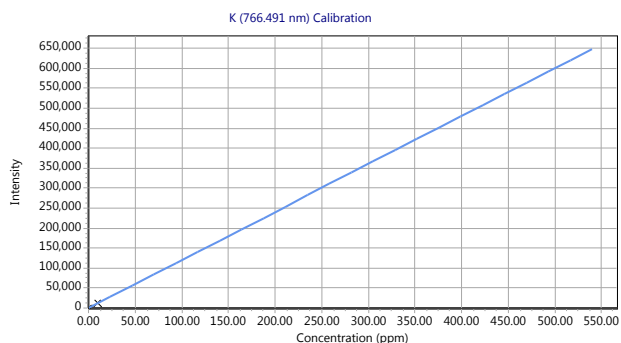
W (207.912 nm)
Intensity = 1880.96277222 * Concentration - 6.96788930
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5129880	-6.9680
STD1 5129889	5.2810
STD2 5129888	176.2000
STD3 5129881	1874.0000



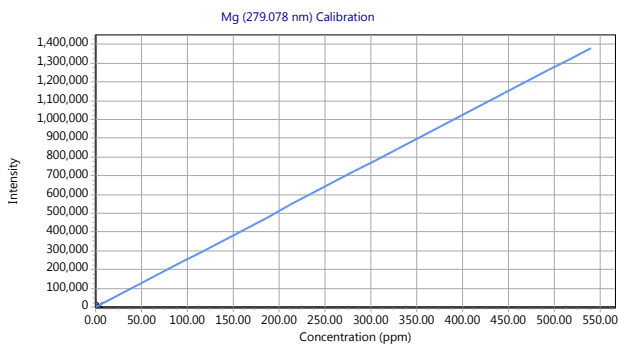
K (766.491 nm)
 Intensity = 1201.30796388 * Concentration - 114.74838279
 Correlation coefficient: 0.99999

Standards	Intensity
STD0 5129880	-114.7000
STD2 5129888	1025.0000
STD3 5129881	11900.0000



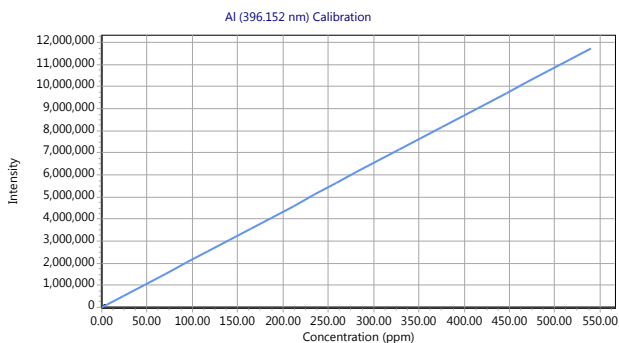
Mg (279.078 nm)
 Intensity = 2559.44778128 * Concentration + 5.91918395
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	5.9190
STD1 5129889	64.5600
STD2 5129888	1291.0000
STD3 5129881	12800.0000



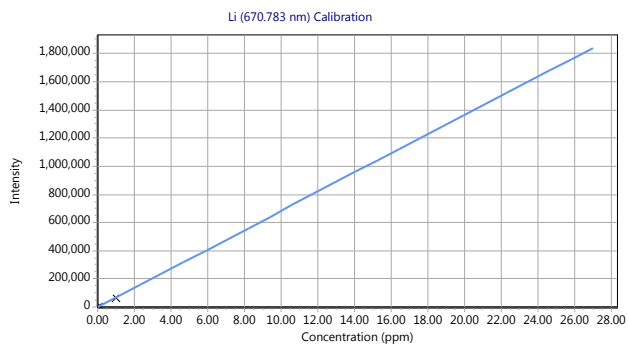
Al (396.152 nm)
Intensity = 21742.96317266 * Concentration - 1214.31614477
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5129880	-1214.0000
STD2 5129888	876.0000
STD3 5129881	20540.0000



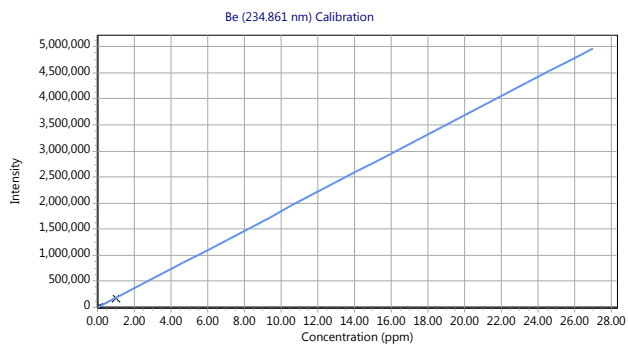
Li (670.783 nm)
Intensity = 68200.07175600 * Concentration + 48.74523423
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	48.7500
STD2 5129888	6792.0000
STD3 5129881	68260.0000



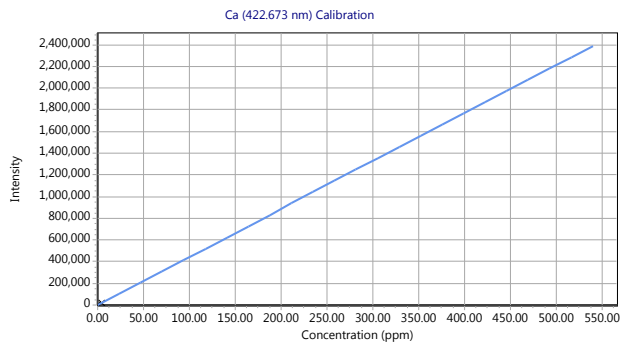
Be (234.861 nm)
 Intensity = 184151.23495062 * Concentration + 2.57147100
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	2.5710
STD1 5129889	892.2000
STD2 5129888	18300.0000
STD3 5129881	184200.0000



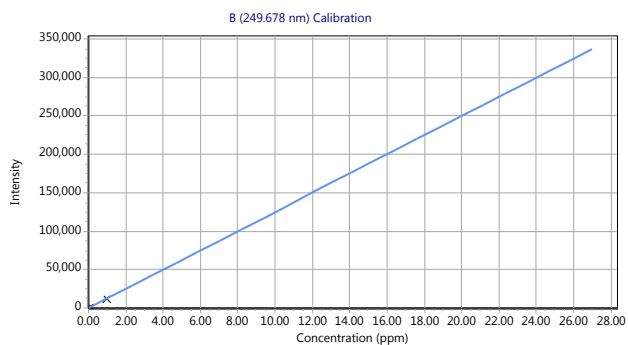
Ca (422.673 nm)
 Intensity = 4424.02066988 * Concentration + 91.97423570
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	91.9700
STD1 5129889	215.9000
STD2 5129888	2347.0000
STD3 5129881	22210.0000



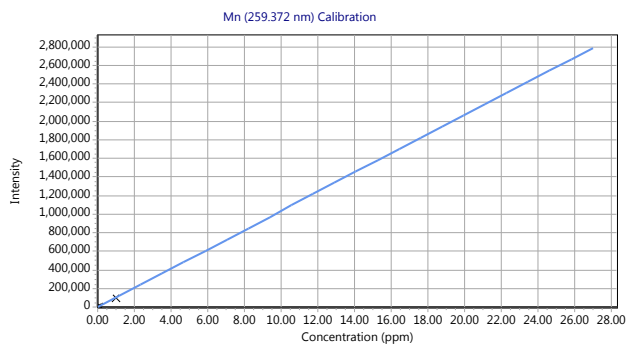
B (249.678 nm)
 Intensity = 12485.61425646 * Concentration - 23.88831830
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-23.8900
STD2 5129888	1209.0000
STD3 5129881	12460.0000



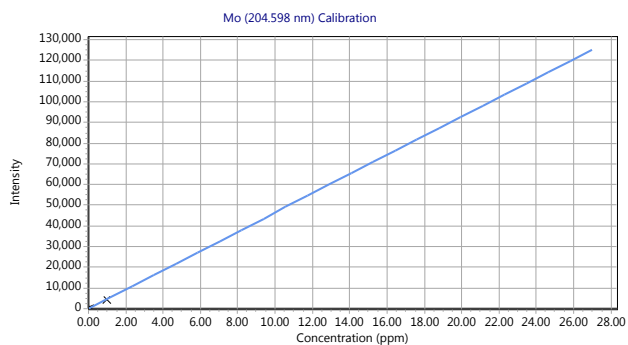
Mn (259.372 nm)
 Intensity = 103221.17464037 * Concentration + 65.69597391
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	65.7000
STD1 5129889	598.6000
STD2 5129888	10490.0000
STD3 5129881	103300.0000



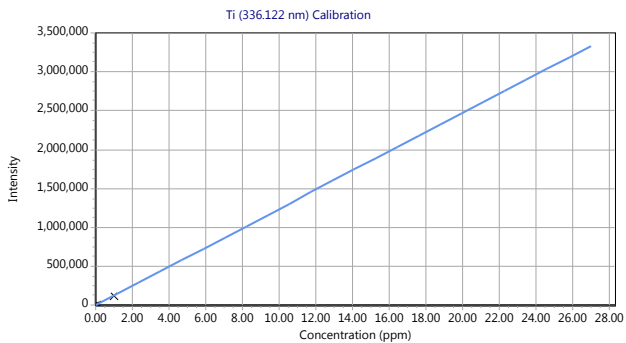
Mo (204.598 nm)
 Intensity = 4638.16336129 * Concentration + 0.51972249
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	0.5197
STD1 5129889	23.3000
STD2 5129888	458.0000
STD3 5129881	4639.0000



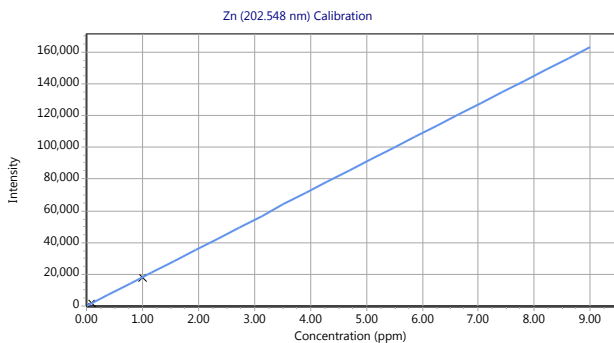
Ti (336.122 nm)
 Intensity = 123593.27216102 * Concentration - 174.32915693
 Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	-174.3000
STD1 5129889	437.3000
STD2 5129888	12110.0000
STD3 5129881	123400.0000



Zn (202.548 nm)
Intensity = 18134.16216819 * Concentration + 34.15468500
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5129880	34.1500
STD2 5129888	1842.0000
STD3 5129881	18170.0000



Sample Name: STD0 5129880

Date: 10/19/2018 8:32:30 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000	ppm	N/A	N/A	1.7980	0.0000 (ppm)	Y 371.029
Al (396.152 nm)	0.0000	ppm	N/A	N/A	-1214.0000	0.0000 (ppm)	Y 371.029
As (188.980 nm)	0.0000	ppm	N/A	N/A	5.7190	0.0000 (ppm)	Y 371.029
B (249.678 nm)	0.0000	ppm	N/A	N/A	-23.8900	0.0000 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000	ppm	N/A	N/A	40.9900	0.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	N/A	N/A	2.5710	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0000	ppm	N/A	N/A	91.9700	0.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	N/A	N/A	-3.5910	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0000	ppm	N/A	N/A	-22.6900	0.0000 (ppm)	Y 371.029
Cr (205.560 nm)	0.0000	ppm	N/A	N/A	1.3750	0.0000 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000	ppm	N/A	N/A	151.2000	0.0000 (ppm)	Y 371.029
Fe (238.204 nm)	0.0000	ppm	N/A	N/A	-18.2500	0.0000 (ppm)	Y_R 371.029
K (766.491 nm)	0.0000	ppm	N/A	N/A	-114.7000	0.0000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000	ppm	N/A	N/A	48.7500	0.0000 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0000	ppm	N/A	N/A	5.9190	0.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000	ppm	N/A	N/A	65.7000	0.0000 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000	ppm	N/A	N/A	0.5197	0.0000 (ppm)	Y 371.029
Na (589.592 nm)	0.0000	ppm	N/A	N/A	1311.0000	0.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000	ppm	N/A	N/A	1.8740	0.0000 (ppm)	Y 371.029
P (213.618 nm)	0.0000	ppm	N/A	N/A	-10.2200	0.0000 (ppm)	Y 371.029
Pb (220.353 nm)	0.0000	ppm	N/A	N/A	-9.1380	0.0000 (ppm)	Y 371.029
Sb (206.834 nm)	0.0000	ppm	N/A	N/A	-1.4430	0.0000 (ppm)	Y 371.029
Se (196.026 nm)	0.0000	ppm	N/A	N/A	-1.0430	0.0000 (ppm)	Y 371.029
Si (251.611 nm)	0.0000	ppm	N/A	N/A	48.7400	0.0000 (ppm)	Y 371.029
Sn (189.925 nm)	0.0000	ppm	N/A	N/A	-3.5810	0.0000 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000	ppm	N/A	N/A	-57.2700	0.0000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000	ppm	N/A	N/A	-174.3000	0.0000 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000	ppm	N/A	N/A	-3.7040	0.0000 (ppm)	Y 371.029
V (292.401 nm)	0.0000	ppm	N/A	N/A	56.7100	0.0000 (ppm)	Y 371.029
W (207.912 nm)	0.0000	ppm	N/A	N/A	-6.9680	0.0000 (ppm)	Y 371.029
Zn (202.548 nm)	0.0000	ppm	N/A	N/A	34.1500	0.0000 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000	ppm	N/A	N/A	-6.4810	0.0000 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	429700.0000	0.0000	0.00
Y_R 371.029	1.0000	63170.0000	0.0000	0.00

Sample Name: STD1 5129889

Date: 10/19/2018 8:34:54 AM

Rack:Tube: S1:2

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0025	ppm	N/A	N/A	102.5000	0.0025 (ppm)	Y 371.029
Al (396.152 nm)		ppm	N/A	N/A	-1100.0000		Y 371.029
As (188.980 nm)	0.0050	ppm	N/A	N/A	11.4400	0.0050 (ppm)	Y 371.029
B (249.678 nm)		ppm	N/A	N/A	39.5400		Y 371.029
Ba (233.527 nm)	0.0050	ppm	N/A	N/A	431.2000	0.0050 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0050	ppm	N/A	N/A	892.2000	0.0050 (ppm)	Y 371.029
Ca (422.673 nm)	0.0250	ppm	N/A	N/A	215.9000	0.0250 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0050	ppm	N/A	N/A	109.8000	0.0050 (ppm)	Y 371.029
Co (228.615 nm)	0.0050	ppm	N/A	N/A	48.1400	0.0050 (ppm)	Y 371.029
Cr (205.560 nm)	0.0050	ppm	N/A	N/A	30.5900	0.0050 (ppm)	Y 371.029
Cu (324.754 nm)	0.0050	ppm	N/A	N/A	346.9000	0.0050 (ppm)	Y 371.029
Fe (238.204 nm)		ppm	N/A	N/A	-6.4850		Y_R 371.029
K (766.491 nm)		ppm	N/A	N/A	-145.5000		Y_R 371.029
Li (670.783 nm)		ppm	N/A	N/A	291.3000		Y_R 371.029
Mg (279.078 nm)	0.0250	ppm	N/A	N/A	64.5600	0.0250 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0050	ppm	N/A	N/A	598.6000	0.0050 (ppm)	Y 371.029
Mo (204.598 nm)	0.0050	ppm	N/A	N/A	23.3000	0.0050 (ppm)	Y 371.029
Na (589.592 nm)		ppm	N/A	N/A	1697.0000		Y_R 371.029
Ni (231.604 nm)	0.0050	ppm	N/A	N/A	27.9700	0.0050 (ppm)	Y 371.029
P (213.618 nm)		ppm	N/A	N/A	-3.5060		Y 371.029
Pb (220.353 nm)	0.0050	ppm	N/A	N/A	1.8170	0.0050 (ppm)	Y 371.029
Sb (206.834 nm)	0.0050	ppm	N/A	N/A	1.7780	0.0050 (ppm)	Y 371.029
Se (196.026 nm)	0.0050	ppm	N/A	N/A	2.9210	0.0050 (ppm)	Y 371.029
Si (251.611 nm)	0.0250	ppm	N/A	N/A	110.5000	0.0250 (ppm)	Y 371.029
Sn (189.925 nm)		ppm	N/A	N/A	2.1390		Y 371.029
Sr (421.552 nm)	0.0050	ppm	N/A	N/A	1865.0000	0.0050 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0050	ppm	N/A	N/A	437.3000	0.0050 (ppm)	Y 371.029
Tl (190.794 nm)	0.0050	ppm	N/A	N/A	3.9490	0.0050 (ppm)	Y 371.029
V (292.401 nm)	0.0050	ppm	N/A	N/A	195.4000	0.0050 (ppm)	Y 371.029
W (207.912 nm)	0.0050	ppm	N/A	N/A	5.2810	0.0050 (ppm)	Y 371.029
Zn (202.548 nm)		ppm	N/A	N/A	122.8000		Y 371.029
Zr (343.823 nm)	0.0050	ppm	N/A	N/A	153.0000	0.0050 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0030	431100.0000	0.0065	0.64
Y_R 371.029	0.9999	63160.0000	0.0107	1.07

Sample Name: STD2 5129888

Date: 10/19/2018 8:37:18 AM

Rack:Tube: S1:3

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0500	ppm	N/A	N/A	2064.0000	0.0500 (ppm)	Y 371.029
Al (396.152 nm)	0.1000	ppm	N/A	N/A	876.0000	0.1000 (ppm)	Y 371.029
As (188.980 nm)	0.1000	ppm	N/A	N/A	74.6400	0.1000 (ppm)	Y 371.029
B (249.678 nm)	0.1000	ppm	N/A	N/A	1209.0000	0.1000 (ppm)	Y 371.029
Ba (233.527 nm)	0.1000	ppm	N/A	N/A	7955.0000	0.1000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.1000	ppm	N/A	N/A	18300.0000	0.1000 (ppm)	Y 371.029
Ca (422.673 nm)	0.5000	ppm	N/A	N/A	2347.0000	0.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.1000	ppm	N/A	N/A	2334.0000	0.1000 (ppm)	Y 371.029
Co (228.615 nm)	0.1000	ppm	N/A	N/A	1337.0000	0.1000 (ppm)	Y 371.029
Cr (205.560 nm)	0.1000	ppm	N/A	N/A	535.2000	0.1000 (ppm)	Y 371.029
Cu (324.754 nm)	0.1000	ppm	N/A	N/A	4038.0000	0.1000 (ppm)	Y 371.029
Fe (238.204 nm)	0.1000	ppm	N/A	N/A	417.0000	0.1000 (ppm)	Y_R 371.029
K (766.491 nm)	1.0000	ppm	N/A	N/A	1025.0000	1.0000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1000	ppm	N/A	N/A	6792.0000	0.1000 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.5000	ppm	N/A	N/A	1291.0000	0.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1000	ppm	N/A	N/A	10490.0000	0.1000 (ppm)	Y 371.029
Mo (204.598 nm)	0.1000	ppm	N/A	N/A	458.0000	0.1000 (ppm)	Y 371.029
Na (589.592 nm)	1.0000	ppm	N/A	N/A	8349.0000	1.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1000	ppm	N/A	N/A	514.1000	0.1000 (ppm)	Y 371.029
P (213.618 nm)	0.1000	ppm	N/A	N/A	78.4600	0.1000 (ppm)	Y 371.029
Pb (220.353 nm)	0.1000	ppm	N/A	N/A	184.6000	0.1000 (ppm)	Y 371.029
Sb (206.834 nm)	0.1000	ppm	N/A	N/A	87.2800	0.1000 (ppm)	Y 371.029
Se (196.026 nm)	0.1000	ppm	N/A	N/A	76.4500	0.1000 (ppm)	Y 371.029
Si (251.611 nm)	0.5000	ppm	N/A	N/A	1264.0000	0.5000 (ppm)	Y 371.029
Sn (189.925 nm)	0.1000	ppm	N/A	N/A	62.3400	0.1000 (ppm)	Y 371.029
Sr (421.552 nm)	0.1000	ppm	N/A	N/A	40340.0000	0.1000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.1000	ppm	N/A	N/A	12110.0000	0.1000 (ppm)	Y 371.029
Tl (190.794 nm)	0.1000	ppm	N/A	N/A	122.2000	0.1000 (ppm)	Y 371.029
V (292.401 nm)	0.1000	ppm	N/A	N/A	2865.0000	0.1000 (ppm)	Y 371.029
W (207.912 nm)	0.1000	ppm	N/A	N/A	176.2000	0.1000 (ppm)	Y 371.029
Zn (202.548 nm)	0.1000	ppm	N/A	N/A	1842.0000	0.1000 (ppm)	Y 371.029
Zr (343.823 nm)	0.1000	ppm	N/A	N/A	8110.0000	0.1000 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	430200.0000	0.0063	0.63
Y_R 371.029	1.0030	63380.0000	0.0031	0.31

Sample Name: STD3 5129881

Date: 10/19/2018 8:39:41 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5000	ppm	N/A	N/A	20850.0000	0.5000 (ppm)	Y 371.029
Al (396.152 nm)	1.0000	ppm	N/A	N/A	20540.0000	1.0000 (ppm)	Y 371.029
As (188.980 nm)	1.0000	ppm	N/A	N/A	688.7000	1.0000 (ppm)	Y 371.029
B (249.678 nm)	1.0000	ppm	N/A	N/A	12460.0000	1.0000 (ppm)	Y 371.029
Ba (233.527 nm)	1.0000	ppm	N/A	N/A	78890.0000	1.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0000	ppm	N/A	N/A	184200.0000	1.0000 (ppm)	Y 371.029
Ca (422.673 nm)	5.0000	ppm	N/A	N/A	22210.0000	5.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0000	ppm	N/A	N/A	23200.0000	1.0000 (ppm)	Y 371.029
Co (228.615 nm)	1.0000	ppm	N/A	N/A	13500.0000	1.0000 (ppm)	Y 371.029
Cr (205.560 nm)	1.0000	ppm	N/A	N/A	5331.0000	1.0000 (ppm)	Y 371.029
Cu (324.754 nm)	1.0000	ppm	N/A	N/A	40020.0000	1.0000 (ppm)	Y 371.029
Fe (238.204 nm)	1.0000	ppm	N/A	N/A	4356.0000	1.0000 (ppm)	Y_R 371.029
K (766.491 nm)	10.0000	ppm	N/A	N/A	11900.0000	10.0000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0000	ppm	N/A	N/A	68260.0000	1.0000 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0000	ppm	N/A	N/A	12800.0000	5.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0000	ppm	N/A	N/A	103300.0000	1.0000 (ppm)	Y 371.029
Mo (204.598 nm)	1.0000	ppm	N/A	N/A	4639.0000	1.0000 (ppm)	Y 371.029
Na (589.592 nm)	10.0000	ppm	N/A	N/A	71040.0000	10.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0000	ppm	N/A	N/A	5129.0000	1.0000 (ppm)	Y 371.029
P (213.618 nm)	1.0000	ppm	N/A	N/A	907.2000	1.0000 (ppm)	Y 371.029
Pb (220.353 nm)	1.0000	ppm	N/A	N/A	1918.0000	1.0000 (ppm)	Y 371.029
Sb (206.834 nm)	1.0000	ppm	N/A	N/A	1034.0000	1.0000 (ppm)	Y 371.029
Se (196.026 nm)	1.0000	ppm	N/A	N/A	753.6000	1.0000 (ppm)	Y 371.029
Si (251.611 nm)	5.0000	ppm	N/A	N/A	12230.0000	5.0000 (ppm)	Y 371.029
Sn (189.925 nm)	1.0000	ppm	N/A	N/A	650.2000	1.0000 (ppm)	Y 371.029
Sr (421.552 nm)	1.0000	ppm	N/A	N/A	400900.0000	1.0000 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0000	ppm	N/A	N/A	123400.0000	1.0000 (ppm)	Y 371.029
Tl (190.794 nm)	1.0000	ppm	N/A	N/A	1229.0000	1.0000 (ppm)	Y 371.029
V (292.401 nm)	1.0000	ppm	N/A	N/A	28290.0000	1.0000 (ppm)	Y 371.029
W (207.912 nm)	1.0000	ppm	N/A	N/A	1874.0000	1.0000 (ppm)	Y 371.029
Zn (202.548 nm)	1.0000	ppm	N/A	N/A	18170.0000	1.0000 (ppm)	Y 371.029
Zr (343.823 nm)	1.0000	ppm	N/A	N/A	84180.0000	1.0000 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9960	427900.0000	0.0046	0.47
Y_R 371.029	1.0010	63250.0000	0.0067	0.67

Sample Name: ICV 5129890

Date: 10/19/2018 8:48:09 AM

Rack:Tube: S1:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5008	ppm	0.0025	0.50	21090.0000	0.5008 (ppm)	Y 371.029
Al (396.152 nm)	1.0030	ppm	0.0047	0.47	21360.0000	1.0030 (ppm)	Y 371.029
As (188.980 nm)	1.0190	ppm	0.0032	0.32	695.2000	1.0190 (ppm)	Y 371.029
B (249.678 nm)	0.9854	ppm	0.0068	0.69	12190.0000	0.9854 (ppm)	Y 371.029
Ba (233.527 nm)	1.0030	ppm	0.0015	0.15	79090.0000	1.0030 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0090	ppm	0.0038	0.38	185800.0000	1.0090 (ppm)	Y 371.029
Ca (422.673 nm)	1.0230	ppm	0.0046	0.45	4614.0000	1.0230 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0210	ppm	0.0044	0.43	23680.0000	1.0210 (ppm)	Y 371.029
Co (228.615 nm)	1.0150	ppm	0.0012	0.12	13740.0000	1.0150 (ppm)	Y 371.029
Cr (205.560 nm)	1.0020	ppm	0.0049	0.49	5339.0000	1.0020 (ppm)	Y 371.029
Cu (324.754 nm)	1.0400	ppm	0.0027	0.26	41630.0000	1.0400 (ppm)	Y 371.029
Fe (238.204 nm)	1.0170	ppm	0.0029	0.29	4426.0000	1.0170 (ppm)	Y_R 371.029
K (766.491 nm)	9.8800	ppm	0.0361	0.37	11760.0000	9.8800 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0090	ppm	0.0017	0.17	68470.0000	1.0090 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.0060	ppm	0.0063	0.62	2577.0000	1.0060 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0340	ppm	0.0041	0.40	107400.0000	1.0340 (ppm)	Y 371.029
Mo (204.598 nm)	1.0080	ppm	0.0061	0.61	4677.0000	1.0080 (ppm)	Y 371.029
Na (589.592 nm)	9.9600	ppm	0.0424	0.43	70840.0000	9.9600 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0250	ppm	0.0086	0.84	5255.0000	1.0250 (ppm)	Y 371.029
P (213.618 nm)	0.9959	ppm	0.0007	0.07	845.5000	0.9959 (ppm)	Y 371.029
Pb (220.353 nm)	1.0150	ppm	0.0056	0.55	1943.0000	1.0150 (ppm)	Y 371.029
Sb (206.834 nm)	1.0010	ppm	0.0153	1.53	1025.0000	1.0010 (ppm)	Y 371.029
Se (196.026 nm)	1.0200	ppm	0.0105	1.03	774.0000	1.0200 (ppm)	Y 371.029
Si (251.611 nm)	4.8010	ppm	0.1279	2.66	11920.0000	4.8010 (ppm)	Y 371.029
Sn (189.925 nm)	1.0030	ppm	0.0000	0.00	652.9000	1.0030 (ppm)	Y 371.029
Sr (421.552 nm)	1.0030	ppm	0.0017	0.17	402300.0000	1.0030 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0010	ppm	0.0051	0.51	123500.0000	1.0010 (ppm)	Y 371.029
Tl (190.794 nm)	1.0130	ppm	0.0064	0.63	1208.0000	1.0130 (ppm)	Y 371.029
V (292.401 nm)	1.0060	ppm	0.0045	0.45	28290.0000	1.0060 (ppm)	Y 371.029
W (207.912 nm)	1.0040	ppm	0.0049	0.49	1893.0000	1.0040 (ppm)	Y 371.029
Zn (202.548 nm)	1.0290	ppm	0.0045	0.44	18840.0000	1.0290 (ppm)	Y 371.029
Zr (343.823 nm)	1.0040	ppm	0.0044	0.44	84510.0000	1.0040 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9971	428400.0000	0.0067	0.67
Y_R 371.029	0.9964	62940.0000	0.0007	0.07

Sample Name: IPC 5129890

Date: 10/19/2018 8:52:11 AM

Rack:Tube: S1:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5030	ppm	0.0035	0.69	21180.0000	0.5030 (ppm)	Y 371.029
Al (396.152 nm)	1.0090	ppm	0.0053	0.53	21490.0000	1.0090 (ppm)	Y 371.029
As (188.980 nm)	1.0240	ppm	0.0126	1.23	698.5000	1.0240 (ppm)	Y 371.029
B (249.678 nm)	0.9898	ppm	0.0084	0.85	12240.0000	0.9898 (ppm)	Y 371.029
Ba (233.527 nm)	1.0030	ppm	0.0008	0.08	79090.0000	1.0030 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0130	ppm	0.0064	0.63	186600.0000	1.0130 (ppm)	Y 371.029
Ca (422.673 nm)	1.0370	ppm	0.0005	0.05	4675.0000	1.0370 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0250	ppm	0.0051	0.49	23790.0000	1.0250 (ppm)	Y 371.029
Co (228.615 nm)	1.0160	ppm	0.0063	0.62	13760.0000	1.0160 (ppm)	Y 371.029
Cr (205.560 nm)	1.0050	ppm	0.0032	0.32	5355.0000	1.0050 (ppm)	Y 371.029
Cu (324.754 nm)	1.0410	ppm	0.0031	0.29	41680.0000	1.0410 (ppm)	Y 371.029
Fe (238.204 nm)	1.0380	ppm	0.0040	0.39	4518.0000	1.0380 (ppm)	Y_R 371.029
K (766.491 nm)	9.9700	ppm	0.1531	1.54	11870.0000	9.9700 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0260	ppm	0.0047	0.45	69630.0000	1.0260 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.0080	ppm	0.0033	0.33	2584.0000	1.0080 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0380	ppm	0.0055	0.53	107800.0000	1.0380 (ppm)	Y 371.029
Mo (204.598 nm)	1.0080	ppm	0.0070	0.69	4679.0000	1.0080 (ppm)	Y 371.029
Na (589.592 nm)	10.1100	ppm	0.0247	0.24	71870.0000	10.1100 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0280	ppm	0.0066	0.64	5270.0000	1.0280 (ppm)	Y 371.029
P (213.618 nm)	1.0020	ppm	0.0095	0.94	851.4000	1.0020 (ppm)	Y 371.029
Pb (220.353 nm)	1.0190	ppm	0.0034	0.34	1952.0000	1.0190 (ppm)	Y 371.029
Sb (206.834 nm)	1.0040	ppm	0.0144	1.44	1029.0000	1.0040 (ppm)	Y 371.029
Se (196.026 nm)	1.0250	ppm	0.0058	0.56	777.7000	1.0250 (ppm)	Y 371.029
Si (251.611 nm)	4.8750	ppm	0.1255	2.58	12100.0000	4.8750 (ppm)	Y 371.029
Sn (189.925 nm)	1.0120	ppm	0.0017	0.17	658.5000	1.0120 (ppm)	Y 371.029
Sr (421.552 nm)	1.0320	ppm	0.0060	0.58	413600.0000	1.0320 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0050	ppm	0.0060	0.59	124000.0000	1.0050 (ppm)	Y 371.029
Tl (190.794 nm)	1.0200	ppm	0.0021	0.20	1216.0000	1.0200 (ppm)	Y 371.029
V (292.401 nm)	1.0100	ppm	0.0042	0.42	28400.0000	1.0100 (ppm)	Y 371.029
W (207.912 nm)	1.0080	ppm	0.0021	0.20	1900.0000	1.0080 (ppm)	Y 371.029
Zn (202.548 nm)	1.0320	ppm	0.0055	0.54	18910.0000	1.0320 (ppm)	Y 371.029
Zr (343.823 nm)	1.0080	ppm	0.0058	0.58	84810.0000	1.0080 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	429700.0000	0.0044	0.44
Y_R 371.029	1.0040	63390.0000	0.0018	0.18

Sample Name: ICB 5129880

Date: 10/19/2018 8:57:06 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0002	64.62	12.3000	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0014	ppm	0.0005	40.41	-1185.0000	0.0014 (ppm)	Y 371.029
As (188.980 nm)	0.0085	ppm	0.0028	33.20	11.5100	0.0085 (ppm)	Y 371.029
B (249.678 nm)	0.0012	ppm	0.0004	33.41	-8.6390	0.0012 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0001	37.54	68.9500	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0001	37.46	67.0900	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0053 u	ppm	0.0087	> 100.00	115.4000	0.0053 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	38.25	1.6650	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0005	68.52	-12.8200	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0003	54.70	4.1140	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	0.0004	ppm	0.0000	9.28	167.4000	0.0004 (ppm)	Y 371.029
Fe (238.204 nm)	-0.0013 u	ppm	0.0012	92.80	-23.9700	-0.0013 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0999 u	ppm	0.0240	24.01	-234.8000	-0.0999 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0012	ppm	0.0009	77.04	128.0000	0.0012 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0015	ppm	0.0016	> 100.00	9.8150	0.0015 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0002	55.15	101.1000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0006	ppm	0.0006	98.07	3.2570	0.0006 (ppm)	Y 371.029
Na (589.592 nm)	-0.0751 u	ppm	0.0066	8.74	787.1000	-0.0751 u (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0006	> 100.00	2.3930	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0059	ppm	0.0076	> 100.00	-4.7480	0.0059 (ppm)	Y 371.029
Pb (220.353 nm)	0.0004 u	ppm	0.0014	> 100.00	-8.4350	0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0046	ppm	0.0023	51.22	3.2970	0.0046 (ppm)	Y 371.029
Se (196.026 nm)	-0.0015 u	ppm	0.0001	3.55	-2.1440	-0.0015 u (ppm)	Y 371.029
Si (251.611 nm)	0.0006	ppm	0.0008	> 100.00	50.1900	0.0006 (ppm)	Y 371.029
Sn (189.925 nm)	0.0016	ppm	0.0015	93.58	-2.5040	0.0016 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0002	> 100.00	2.7870	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0000	4.15	-115.6000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0010 u	ppm	0.0038	> 100.00	-2.4270	0.0010 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0000	1.34	68.3300	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0003	ppm	0.0000	7.58	-6.3520	0.0003 (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0000	1.36	47.2000	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	17.79	12.0200	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0090	433400.0000	0.0072	0.72
Y_R 371.029	1.0060	63530.0000	0.0005	0.05

Sample Name: ICSA 5129891

Date: 10/19/2018 9:02:37 AM

Rack:Tube: S1:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0029 b	ppm	0.0000	0.74	-188.4000	0.0029 b (ppm)	Y 371.029
Al (396.152 nm)	624.8000 bo	ppm	6.5630	1.05	13580000.0000	624.8000 bo (ppm)	Y 371.029
As (188.980 nm)	0.0093 b	ppm	0.0014	14.61	23.3900	0.0093 b (ppm)	Y 371.029
B (249.678 nm)	-0.0134 bu	ppm	0.0044	33.19	-754.8000	-0.0134 bu (ppm)	Y 371.029
Ba (233.527 nm)	0.0054 b	ppm	0.0001	2.14	573.9000	0.0054 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 bu	ppm	0.0026	> 100.00	13680.0000	0.0000 bu (ppm)	Y 371.029
Ca (422.673 nm)	604.2000 bo	ppm	0.9820	0.16	2673000.0000	604.2000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0018 b	ppm	0.0007	38.09	168.2000	0.0018 b (ppm)	Y 371.029
Co (228.615 nm)	-0.0056 bu	ppm	0.0009	16.47	-20.4200	-0.0056 bu (ppm)	Y 371.029
Cr (205.560 nm)	0.0047 b	ppm	0.0018	38.28	53.7900	0.0047 b (ppm)	Y 371.029
Cu (324.754 nm)	-0.0049 bu	ppm	0.0003	6.06	-72.8600	-0.0049 bu (ppm)	Y 371.029
Fe (238.204 nm)	537.7000 b	ppm	1.4190	0.26	2352000.0000	537.7000 b (ppm)	Y_R 371.029
K (766.491 nm)	-0.3051 bu	ppm	0.0289	9.46	-2.1620	-0.3051 bu (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0806 bu	ppm	0.0001	0.11	318.4000	-0.0806 bu (ppm)	Y_R 371.029
Mg (279.078 nm)	567.2000 bo	ppm	2.2160	0.39	1451000.0000	567.2000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002 bu	ppm	0.0086	> 100.00	76710.0000	0.0002 bu (ppm)	Y 371.029
Mo (204.598 nm)	0.0014 b	ppm	0.0010	74.48	94.8300	0.0014 b (ppm)	Y 371.029
Na (589.592 nm)	0.1016 b	ppm	0.0003	0.29	2547.0000	0.1016 b (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0028 b	ppm	0.0007	25.07	12.8200	0.0028 b (ppm)	Y 371.029
P (213.618 nm)	-0.0071 bu	ppm	0.0022	30.69	-28.5000	-0.0071 bu (ppm)	Y 371.029
Pb (220.353 nm)	0.0095 b	ppm	0.0006	6.68	-63.3200	0.0095 b (ppm)	Y 371.029
Sb (206.834 nm)	-0.0149 bu	ppm	0.0035	23.79	-6.5190	-0.0149 bu (ppm)	Y 371.029
Se (196.026 nm)	0.0045 b	ppm	0.0036	78.56	-81.2400	0.0045 b (ppm)	Y 371.029
Si (251.611 nm)	0.0183 b	ppm	0.0051	27.81	174.1000	0.0183 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0172 bu	ppm	0.0024	13.97	-13.4600	-0.0172 bu (ppm)	Y 371.029
Sr (421.552 nm)	-0.0134 bu	ppm	0.0001	0.75	4221.0000	-0.0134 bu (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005 b	ppm	0.0001	22.30	-801.9000	0.0005 b (ppm)	Y 371.029
Tl (190.794 nm)	0.0045 b	ppm	0.0013	27.88	7.1030	0.0045 b (ppm)	Y 371.029
V (292.401 nm)	-0.0103 bu	ppm	0.0003	3.25	711.3000	-0.0103 bu (ppm)	Y 371.029
W (207.912 nm)	0.0015 b	ppm	0.0006	39.36	-32.1400	0.0015 b (ppm)	Y 371.029
Zn (202.548 nm)	0.0042 b	ppm	0.0001	3.47	70.6200	0.0042 b (ppm)	Y 371.029
Zr (343.823 nm)	0.0008 b	ppm	0.0001	17.48	693.5000	0.0008 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8662	372200.0000	0.0057	0.65
Y_R 371.029	0.9151	57810.0000	0.0009	0.10

Sample Name: ICSAB 5129892

Date: 10/19/2018 9:08:14 AM

Rack:Tube: S1:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2781 b	ppm	0.0005	0.19	11390.0000	0.2781 b (ppm)	Y 371.029
Al (396.152 nm)	628.3000 bo	ppm	1.9140	0.30	13660000.0000	628.3000 bo (ppm)	Y 371.029
As (188.980 nm)	0.5089 b	ppm	0.0099	1.95	361.5000	0.5089 b (ppm)	Y 371.029
B (249.678 nm)	0.5079 b	ppm	0.0020	0.40	5714.0000	0.5079 b (ppm)	Y 371.029
Ba (233.527 nm)	0.4732 b	ppm	0.0004	0.07	37450.0000	0.4732 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.5278 b	ppm	0.0046	0.87	110700.0000	0.5278 b (ppm)	Y 371.029
Ca (422.673 nm)	598.7000 bo	ppm	3.5650	0.60	2649000.0000	598.7000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4532 b	ppm	0.0009	0.19	10640.0000	0.4532 b (ppm)	Y 371.029
Co (228.615 nm)	0.4516 b	ppm	0.0020	0.44	6180.0000	0.4516 b (ppm)	Y 371.029
Cr (205.560 nm)	0.4925 b	ppm	0.0020	0.40	2653.0000	0.4925 b (ppm)	Y 371.029
Cu (324.754 nm)	0.5673 b	ppm	0.0012	0.22	22740.0000	0.5673 b (ppm)	Y 371.029
Fe (238.204 nm)	531.9000 b	ppm	0.9841	0.19	2327000.0000	531.9000 b (ppm)	Y_R 371.029
K (766.491 nm)	10.5500 b	ppm	0.0764	0.72	13040.0000	10.5500 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.4604 b	ppm	0.0028	0.62	36990.0000	0.4604 b (ppm)	Y_R 371.029
Mg (279.078 nm)	565.4000 bo	ppm	0.4775	0.08	1447000.0000	565.4000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4902 b	ppm	0.0051	1.04	126700.0000	0.4902 b (ppm)	Y 371.029
Mo (204.598 nm)	0.4982 b	ppm	0.0031	0.61	2400.0000	0.4982 b (ppm)	Y 371.029
Na (589.592 nm)	10.5500 b	ppm	0.0537	0.51	75460.0000	10.5500 b (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4478 b	ppm	0.0009	0.20	2292.0000	0.4478 b (ppm)	Y 371.029
P (213.618 nm)	0.5082 b	ppm	0.0034	0.67	414.0000	0.5082 b (ppm)	Y 371.029
Pb (220.353 nm)	0.4704 b	ppm	0.0024	0.51	823.6000	0.4704 b (ppm)	Y 371.029
Sb (206.834 nm)	0.4674 b	ppm	0.0075	1.60	488.1000	0.4674 b (ppm)	Y 371.029
Se (196.026 nm)	0.4724 b	ppm	0.0007	0.15	275.2000	0.4724 b (ppm)	Y 371.029
Si (251.611 nm)	2.6770 b	ppm	0.0092	0.34	6737.0000	2.6770 b (ppm)	Y 371.029
Sn (189.925 nm)	0.4466 b	ppm	0.0029	0.64	290.1000	0.4466 b (ppm)	Y 371.029
Sr (421.552 nm)	0.4966 b	ppm	0.0006	0.12	208600.0000	0.4966 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5141 b	ppm	0.0017	0.33	62670.0000	0.5141 b (ppm)	Y 371.029
Tl (190.794 nm)	0.4723 b	ppm	0.0011	0.24	564.2000	0.4723 b (ppm)	Y 371.029
V (292.401 nm)	0.5032 b	ppm	0.0014	0.28	15120.0000	0.5032 b (ppm)	Y 371.029
W (207.912 nm)	0.4894 b	ppm	0.0027	0.56	890.8000	0.4894 b (ppm)	Y 371.029
Zn (202.548 nm)	0.4394 b	ppm	0.0018	0.41	8050.0000	0.4394 b (ppm)	Y 371.029
Zr (343.823 nm)	0.4960 b	ppm	0.0049	0.99	42350.0000	0.4960 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8676	372800.0000	0.0050	0.58
Y_R 371.029	0.9274	58580.0000	0.0005	0.06

Sample Name: XICIS 5129897

Date: 10/19/2018 9:12:11 AM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	96.47	-4.2610	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.2357 Z	ppm	0.0987	41.87	3911.0000 Z	0.2357 Z (ppm)	Y 371.029
As (188.980 nm)	0.0029	ppm	0.0032	> 100.00	7.6950	0.0029 (ppm)	Y 371.029
B (249.678 nm)	0.0005	ppm	0.0006	> 100.00	-18.1700	0.0005 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	3.74	58.1900	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0001	25.88	53.4100	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	0.1180 Z	ppm	0.0132	11.16	614.0000 Z	0.1180 Z (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0001	39.48	2.9220	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0001 u	ppm	0.0003	> 100.00	-20.7100	0.0001 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0002	26.86	4.4580	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0002	> 100.00	151.0000	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.1337 Z	ppm	0.0062	4.60	566.7000 Z	0.1337 Z (ppm)	Y_R 371.029
K (766.491 nm)	-0.1148 u	ppm	0.0047	4.11	-252.5000	-0.1148 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0010	ppm	0.0004	41.58	116.6000	0.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.2456 Z	ppm	0.1020	41.53	634.4000 Z	0.2456 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0003	64.66	124.8000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0005	ppm	0.0002	34.06	2.9580	0.0005 (ppm)	Y 371.029
Na (589.592 nm)	-0.1227 u	ppm	0.0037	3.02	455.6000	-0.1227 u (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0008	> 100.00	-0.0118	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	-0.0023 u	ppm	0.0053	> 100.00	-12.2500	-0.0023 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0008	ppm	0.0006	75.24	-7.7020	0.0008 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0009 u	ppm	0.0039	> 100.00	-2.3250	-0.0009 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0037 u	ppm	0.0012	32.57	-3.8700	-0.0037 u (ppm)	Y 371.029
Si (251.611 nm)	0.0041	ppm	0.0002	5.33	58.9400	0.0041 (ppm)	Y 371.029
Sn (189.925 nm)	0.0045	ppm	0.0007	14.85	-0.6296	0.0045 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-49.6000	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	4.69	-140.7000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0018 u	ppm	0.0005	28.94	-5.8520	-0.0018 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0001	82.66	61.4500	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0007 u	ppm	0.0018	> 100.00	-5.6310	0.0007 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0005 u	ppm	0.0001	15.80	24.6200	-0.0005 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	23.78	14.4100	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0070	432800.0000	0.0052	0.51
Y_R 371.029	1.0020	63310.0000	0.0045	0.45

Sample Name: RINSE 5129898

Date: 10/19/2018 9:14:34 AM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0000	> 100.00	2.1340	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0306	ppm	0.0090	29.35	-548.8000	0.0306 (ppm)	Y 371.029
As (188.980 nm)	0.0035	ppm	0.0016	44.45	8.1430	0.0035 (ppm)	Y 371.029
B (249.678 nm)	0.0008	ppm	0.0003	41.76	-14.0700	0.0008 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	41.1800	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	69.20	8.8370	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0255	ppm	0.0029	11.22	204.7000	0.0255 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	41.40	-1.8360	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0002 u	ppm	0.0006	> 100.00	-20.2100	0.0002 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0004	ppm	0.0001	22.19	3.2660	0.0004 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	59.81	140.9000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0220	ppm	0.0001	0.64	77.8300	0.0220 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1218 u	ppm	0.0572	46.97	-261.0000	-0.1218 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0006	> 100.00	40.0700	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0338 Z	ppm	0.0081	23.91	92.3400 Z	0.0338 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	36.69	77.5100	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0001	> 100.00	0.4540	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	-0.1258 u	ppm	0.0070	5.59	433.9000	-0.1258 u (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0005 u	ppm	0.0006	> 100.00	-0.9145	-0.0005 u (ppm)	Y 371.029
P (213.618 nm)	-0.0016 u	ppm	0.0018	> 100.00	-11.6600	-0.0016 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0003 u	ppm	0.0008	> 100.00	-8.5070	0.0003 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0011 u	ppm	0.0032	> 100.00	-0.3271	0.0011 u (ppm)	Y 371.029
Se (196.026 nm)	0.0009	ppm	0.0008	87.07	-0.3212	0.0009 (ppm)	Y 371.029
Si (251.611 nm)	0.0024	ppm	0.0003	13.39	54.6300	0.0024 (ppm)	Y 371.029
Sn (189.925 nm)	0.0021	ppm	0.0021	98.60	-2.2220	0.0021 (ppm)	Y 371.029
Sr (421.552 nm)	-0.0001 u	ppm	0.0000	34.11	-94.2700	-0.0001 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0001	> 100.00	-175.8000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0015 u	ppm	0.0012	77.87	-5.5260	-0.0015 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0002	> 100.00	59.4300	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0002 u	ppm	0.0011	> 100.00	-6.5620	0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0007 u	ppm	0.0000	3.94	22.1400	-0.0007 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	68.92	4.3280	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431300.0000	0.0045	0.45
Y_R 371.029	0.9982	63060.0000	0.0036	0.36

Sample Name: XCRI 5129893

Date: 10/19/2018 9:21:41 AM

Rack:Tube: S1:9

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0099	ppm	0.0002	1.80	433.5000	0.0099 (ppm)	Y 371.029
Al (396.152 nm)	0.0990	ppm	0.0006	0.59	971.1000	0.0990 (ppm)	Y 371.029
As (188.980 nm)	0.0108	ppm	0.0000	0.26	13.1200	0.0108 (ppm)	Y 371.029
B (249.678 nm)	0.0494	ppm	0.0002	0.32	582.2000	0.0494 (ppm)	Y 371.029
Ba (233.527 nm)	0.0100	ppm	0.0001	0.67	827.5000	0.0100 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0020	ppm	0.0000	1.98	374.4000	0.0020 (ppm)	Y 371.029
Ca (422.673 nm)	0.1106	ppm	0.0003	0.23	581.0000	0.1106 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0051	ppm	0.0001	2.17	113.6000	0.0051 (ppm)	Y 371.029
Co (228.615 nm)	0.0100	ppm	0.0002	1.60	112.7000	0.0100 (ppm)	Y 371.029
Cr (205.560 nm)	0.0052	ppm	0.0002	4.50	29.3700	0.0052 (ppm)	Y 371.029
Cu (324.754 nm)	0.0093	ppm	0.0002	1.74	523.8000	0.0093 (ppm)	Y 371.029
Fe (238.204 nm)	0.1048	ppm	0.0005	0.52	440.2000	0.1048 (ppm)	Y_R 371.029
K (766.491 nm)	0.4293	ppm	0.0247	5.74	401.4000	0.4293 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0467	ppm	0.0005	1.00	3222.0000	0.0467 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0268	ppm	0.0051	19.03	74.3300	0.0268 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0204	ppm	0.0001	0.54	2195.0000	0.0204 (ppm)	Y 371.029
Mo (204.598 nm)	0.0186	ppm	0.0002	1.08	86.7700	0.0186 (ppm)	Y 371.029
Na (589.592 nm)	0.3629	ppm	0.0086	2.38	3846.0000	0.3629 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0098	ppm	0.0008	8.16	52.2200	0.0098 (ppm)	Y 371.029
P (213.618 nm)	0.1996	ppm	0.0016	0.79	172.1000	0.1996 (ppm)	Y 371.029
Pb (220.353 nm)	0.0038	ppm	0.0013	33.91	-1.8910	0.0038 (ppm)	Y 371.029
Sb (206.834 nm)	0.0111	ppm	0.0008	7.24	9.7230	0.0111 (ppm)	Y 371.029
Se (196.026 nm)	0.0115	ppm	0.0021	18.04	8.1520	0.0115 (ppm)	Y 371.029
Si (251.611 nm)	0.2007	ppm	0.0008	0.40	551.3000	0.2007 (ppm)	Y 371.029
Sn (189.925 nm)	0.1017	ppm	0.0013	1.30	62.9900	0.1017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0202	ppm	0.0001	0.44	8040.0000	0.0202 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0051	ppm	0.0000	0.10	455.6000	0.0051 (ppm)	Y 371.029
Tl (190.794 nm)	0.0085	ppm	0.0000	0.37	6.5920	0.0085 (ppm)	Y 371.029
V (292.401 nm)	0.0099	ppm	0.0001	1.39	332.0000	0.0099 (ppm)	Y 371.029
W (207.912 nm)	0.0976	ppm	0.0003	0.30	176.9000	0.0976 (ppm)	Y 371.029
Zn (202.548 nm)	0.0213	ppm	0.0000	0.09	423.1000	0.0213 (ppm)	Y 371.029
Zr (343.823 nm)	0.0931	ppm	0.0018	1.90	7825.0000	0.0931 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0200	438300.0000	0.0061	0.60
Y_R 371.029	1.0220	64560.0000	0.0003	0.03

Sample Name: CRI 5129894

Date: 10/19/2018 9:24:04 AM

Rack:Tube: S1:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0196	ppm	0.0001	0.50	861.4000	0.0196 (ppm)	Y 371.029
Al (396.152 nm)	0.1909	ppm	0.0003	0.17	3006.0000	0.1909 (ppm)	Y 371.029
As (188.980 nm)	0.0259	ppm	0.0008	3.07	23.4700	0.0259 (ppm)	Y 371.029
B (249.678 nm)	0.0981	ppm	0.0008	0.79	1181.0000	0.0981 (ppm)	Y 371.029
Ba (233.527 nm)	0.0203	ppm	0.0004	1.90	1645.0000	0.0203 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0040	ppm	0.0000	1.13	745.2000	0.0040 (ppm)	Y 371.029
Ca (422.673 nm)	0.1982	ppm	0.0090	4.55	967.9000	0.1982 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0101	ppm	0.0002	1.80	231.2000	0.0101 (ppm)	Y 371.029
Co (228.615 nm)	0.0204	ppm	0.0000	0.22	253.3000	0.0204 (ppm)	Y 371.029
Cr (205.560 nm)	0.0108	ppm	0.0004	4.07	59.2500	0.0108 (ppm)	Y 371.029
Cu (324.754 nm)	0.0193	ppm	0.0003	1.31	920.8000	0.0193 (ppm)	Y 371.029
Fe (238.204 nm)	0.1995	ppm	0.0008	0.40	854.8000	0.1995 (ppm)	Y_R 371.029
K (766.491 nm)	0.9021	ppm	0.0549	6.09	969.8000	0.9021 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0968	ppm	0.0012	1.24	6621.0000	0.0968 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0430	ppm	0.0021	4.87	115.6000	0.0430 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0411	ppm	0.0001	0.25	4348.0000	0.0411 (ppm)	Y 371.029
Mo (204.598 nm)	0.0401	ppm	0.0009	2.14	186.4000	0.0401 (ppm)	Y 371.029
Na (589.592 nm)	0.8326	ppm	0.0019	0.22	7126.0000	0.8326 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0200	ppm	0.0004	2.15	104.6000	0.0200 (ppm)	Y 371.029
P (213.618 nm)	0.3953	ppm	0.0000	0.01	350.8000	0.3953 (ppm)	Y 371.029
Pb (220.353 nm)	0.0103	ppm	0.0024	23.12	10.5000	0.0103 (ppm)	Y 371.029
Sb (206.834 nm)	0.0192	ppm	0.0003	1.51	17.8300	0.0192 (ppm)	Y 371.029
Se (196.026 nm)	0.0230	ppm	0.0029	12.80	17.4000	0.0230 (ppm)	Y 371.029
Si (251.611 nm)	0.3996	ppm	0.0007	0.18	1050.0000	0.3996 (ppm)	Y 371.029
Sn (189.925 nm)	0.2030	ppm	0.0017	0.83	129.3000	0.2030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0399	ppm	0.0001	0.29	15940.0000	0.0399 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0100	ppm	0.0000	0.41	1075.0000	0.0100 (ppm)	Y 371.029
Tl (190.794 nm)	0.0186	ppm	0.0001	0.75	18.7100	0.0186 (ppm)	Y 371.029
V (292.401 nm)	0.0202	ppm	0.0001	0.31	620.9000	0.0202 (ppm)	Y 371.029
W (207.912 nm)	0.1961	ppm	0.0002	0.08	362.4000	0.1961 (ppm)	Y 371.029
Zn (202.548 nm)	0.0455	ppm	0.0002	0.45	863.3000	0.0455 (ppm)	Y 371.029
Zr (343.823 nm)	0.1982	ppm	0.0007	0.36	16670.0000	0.1982 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0140	435700.0000	0.0058	0.57
Y_R 371.029	1.0140	64050.0000	0.0100	0.99

Sample Name: 440-222262-S-7-A@5

Date: 10/19/2018 9:30:00 AM

Rack:Tube: 2:43

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	14.75	-46.3600	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0267	ppm	0.0003	1.25	-549.1000	0.0267 (ppm)	Y 371.029
As (188.980 nm)	0.0025 u	ppm	0.0112	> 100.00	7.6250	0.0025 u (ppm)	Y 371.029
B (249.678 nm)	1.4800	ppm	0.0125	0.85	18450.0000	1.4800 (ppm)	Y 371.029
Ba (233.527 nm)	0.0060	ppm	0.0000	0.31	524.7000	0.0060 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	77.42	30.9400	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	40.3900	ppm	0.1971	0.49	178800.0000	40.3900 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-5.1620	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0000	14.18	-16.1700	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0001	31.26	3.9860	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	0.0003	ppm	0.0003	> 100.00	128.7000	0.0003 (ppm)	Y 371.029
Fe (238.204 nm)	0.8576	ppm	0.0042	0.49	3741.0000	0.8576 (ppm)	Y_R 371.029
K (766.491 nm)	4.5860	ppm	0.0555	1.21	5424.0000	4.5860 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3632	ppm	0.0006	0.17	25170.0000	0.3632 (ppm)	Y_R 371.029
Mg (279.078 nm)	67.1300	ppm	0.3943	0.59	171800.0000	67.1300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0684	ppm	0.0004	0.52	7509.0000	0.0684 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0007	> 100.00	1.9460	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	380.8000	ppm	2.2390	0.59	2657000.0000	380.8000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0025	ppm	0.0013	49.36	13.3100	0.0025 (ppm)	Y 371.029
P (213.618 nm)	0.0808	ppm	0.0064	7.90	63.5400	0.0808 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0031 u	ppm	0.0011	35.19	-13.3200	-0.0031 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0012 u	ppm	0.0005	41.86	-2.6450	-0.0012 u (ppm)	Y 371.029
Se (196.026 nm)	0.0058	ppm	0.0007	11.67	2.8920	0.0058 (ppm)	Y 371.029
Si (251.611 nm)	3.8230	ppm	0.0261	0.68	9375.0000	3.8230 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0016 u	ppm	0.0022	> 100.00	-4.5270	-0.0016 u (ppm)	Y 371.029
Sr (421.552 nm)	1.3910	ppm	0.0082	0.59	558100.0000	1.3910 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	45.57	-200.7000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0015 u	ppm	0.0029	> 100.00	-1.5260	0.0015 u (ppm)	Y 371.029
V (292.401 nm)	-0.0010 u	ppm	0.0000	3.57	89.5500	-0.0010 u (ppm)	Y 371.029
W (207.912 nm)	-0.0028 u	ppm	0.0001	2.97	-13.1200	-0.0028 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0140	ppm	0.0001	0.95	325.4000	0.0140 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	35.14	32.5400	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9476	407100.0000	0.0050	0.53
Y_R 371.029	0.9790	61840.0000	0.0056	0.57

Sample Name: 440-222262-S-8-A@5

Date: 10/19/2018 9:32:24 AM

Rack:Tube: 2:44

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0008 u	ppm	0.0004	51.45	-37.4200	-0.0008 u (ppm)	Y 371.029
Al (396.152 nm)	0.0186	ppm	0.0002	1.29	-757.2000	0.0186 (ppm)	Y 371.029
As (188.980 nm)	0.0085	ppm	0.0007	8.16	11.6900	0.0085 (ppm)	Y 371.029
B (249.678 nm)	1.2420	ppm	0.0142	1.14	15490.0000	1.2420 (ppm)	Y 371.029
Ba (233.527 nm)	0.0105	ppm	0.0000	0.01	874.7000	0.0105 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	13.1800	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	15.3900	ppm	0.0706	0.46	68200.0000	15.3900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-0.3226	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0004 u	ppm	0.0008	> 100.00	-15.2800	0.0004 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0001	6.40	5.8720	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0002	> 100.00	134.3000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.3066	ppm	0.0019	0.60	1328.0000	0.3066 (ppm)	Y_R 371.029
K (766.491 nm)	4.1590	ppm	0.0274	0.66	4899.0000	4.1590 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3149	ppm	0.0006	0.19	21740.0000	0.3149 (ppm)	Y_R 371.029
Mg (279.078 nm)	45.2500	ppm	0.5080	1.12	115800.0000	45.2500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0176	ppm	0.0000	0.04	2107.0000	0.0176 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0012	> 100.00	1.9680	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	339.4000	ppm	0.0667	0.02	2368000.0000	339.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0007	> 100.00	0.9965	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.0567	ppm	0.0009	1.56	41.7200	0.0567 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0021 u	ppm	0.0016	75.10	-12.1100	-0.0021 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0025 u	ppm	0.0041	> 100.00	1.1140	0.0025 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0016 u	ppm	0.0011	69.07	-2.4130	-0.0016 u (ppm)	Y 371.029
Si (251.611 nm)	2.7500	ppm	0.0128	0.47	6757.0000	2.7500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0004 u	ppm	0.0041	> 100.00	-3.7680	-0.0004 u (ppm)	Y 371.029
Sr (421.552 nm)	0.5910	ppm	0.0029	0.48	237200.0000	0.5910 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	39.23	-174.0000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0012 u	ppm	0.0004	31.01	-4.9630	-0.0012 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0001	93.48	78.3400	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0005 u	ppm	0.0000	10.51	-8.2720	-0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0027	ppm	0.0003	9.87	107.6000	0.0027 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	30.00	13.6300	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9558	410700.0000	0.0037	0.39
Y_R 371.029	0.9763	61670.0000	0.0109	1.11

Sample Name: 440-222262-S-9-A@2

Date: 10/19/2018 9:34:47 AM

Rack:Tube: 2:45

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0012 u	ppm	0.0002	19.02	-65.9300	-0.0012 u (ppm)	Y 371.029
Al (396.152 nm)	0.0567	ppm	0.0004	0.65	96.4200	0.0567 (ppm)	Y 371.029
As (188.980 nm)	0.0028	ppm	0.0015	53.93	7.4640	0.0028 (ppm)	Y 371.029
B (249.678 nm)	0.5376	ppm	0.0040	0.74	6690.0000	0.5376 (ppm)	Y 371.029
Ba (233.527 nm)	0.0131	ppm	0.0000	0.38	1085.0000	0.0131 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	23.21	-1.7330	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	96.0700	ppm	0.5426	0.56	425100.0000	96.0700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	31.36	1.7420	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0014	ppm	0.0003	21.62	-0.5982	0.0014 (ppm)	Y 371.029
Cr (205.560 nm)	0.0014	ppm	0.0003	23.22	10.6900	0.0014 (ppm)	Y 371.029
Cu (324.754 nm)	0.0031	ppm	0.0005	15.92	187.1000	0.0031 (ppm)	Y 371.029
Fe (238.204 nm)	0.0659	ppm	0.0004	0.59	275.6000	0.0659 (ppm)	Y_R 371.029
K (766.491 nm)	6.6920	ppm	0.0651	0.97	7952.0000	6.6920 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1764	ppm	0.0017	0.94	12410.0000	0.1764 (ppm)	Y_R 371.029
Mg (279.078 nm)	40.2400	ppm	0.0505	0.13	103000.0000	40.2400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3032	ppm	0.0016	0.54	31540.0000	0.3032 (ppm)	Y 371.029
Mo (204.598 nm)	0.0040	ppm	0.0017	43.08	19.3000	0.0040 (ppm)	Y 371.029
Na (589.592 nm)	283.5000	ppm	0.6609	0.23	1978000.0000	283.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0483	ppm	0.0007	1.42	247.1000	0.0483 (ppm)	Y 371.029
P (213.618 nm)	0.0043 u	ppm	0.0069	> 100.00	-7.7190	0.0043 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0019 u	ppm	0.0010	52.82	-11.0100	-0.0019 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0029 u	ppm	0.0022	74.66	-4.1730	-0.0029 u (ppm)	Y 371.029
Se (196.026 nm)	0.0004 u	ppm	0.0025	> 100.00	-1.3140	0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	9.3700	ppm	0.0562	0.60	22890.0000	9.3700 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0011 u	ppm	0.0013	> 100.00	-4.2250	-0.0011 u (ppm)	Y 371.029
Sr (421.552 nm)	1.3540	ppm	0.0097	0.72	544300.0000	1.3540 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	15.49	-273.6000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0003 u	ppm	0.0006	> 100.00	-3.8970	-0.0003 u (ppm)	Y 371.029
V (292.401 nm)	-0.0034 u	ppm	0.0002	7.40	96.3900	-0.0034 u (ppm)	Y 371.029
W (207.912 nm)	-0.0015 u	ppm	0.0009	58.19	-11.8000	-0.0015 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0129	ppm	0.0000	0.27	295.7000	0.0129 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0002	23.33	71.5500	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9425	405000.0000	0.0080	0.85
Y_R 371.029	0.9730	61460.0000	0.0016	0.17

Sample Name: 440-222262-S-10-A@2

Date: 10/19/2018 9:37:10 AM

Rack:Tube: 2:46

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0012 u	ppm	0.0001	5.14	-63.0500	-0.0012 u (ppm)	Y 371.029
Al (396.152 nm)	0.0489	ppm	0.0012	2.56	-71.3500	0.0489 (ppm)	Y 371.029
As (188.980 nm)	0.0051	ppm	0.0013	24.52	9.1270	0.0051 (ppm)	Y 371.029
B (249.678 nm)	0.6683	ppm	0.0033	0.50	8321.0000	0.6683 (ppm)	Y 371.029
Ba (233.527 nm)	0.0133	ppm	0.0007	5.35	1098.0000	0.0133 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	3.5870	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	76.8500	ppm	29.1100	37.88	340100.0000	76.8500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	61.12	1.2150	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0022	ppm	0.0005	24.53	9.6020	0.0022 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0000	3.51	9.5020	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	44.99	61.0500	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0634	ppm	0.0212	33.47	264.4000	0.0634 (ppm)	Y_R 371.029
K (766.491 nm)	5.6180	ppm	1.8080	32.19	6660.0000	5.6180 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1732	ppm	0.0585	33.78	12170.0000	0.1732 (ppm)	Y_R 371.029
Mg (279.078 nm)	42.9600	ppm	2.4310	5.66	110000.0000	42.9600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3096	ppm	0.0002	0.07	32210.0000	0.3096 (ppm)	Y 371.029
Mo (204.598 nm)	0.0160	ppm	0.0002	1.34	74.7300	0.0160 (ppm)	Y 371.029
Na (589.592 nm)	241.5000	ppm	80.5700	33.36	1685000.0000	241.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1324	ppm	0.0015	1.13	678.4000	0.1324 (ppm)	Y 371.029
P (213.618 nm)	-0.0008 u	ppm	0.0078	> 100.00	-12.1500	-0.0008 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0017 u	ppm	0.0024	> 100.00	-10.6800	-0.0017 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0029 u	ppm	0.0006	21.37	-4.4080	-0.0029 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0011 u	ppm	0.0004	36.33	-2.3270	-0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	9.9350	ppm	0.0167	0.17	24270.0000	9.9350 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0020 u	ppm	0.0001	3.16	-4.8540	-0.0020 u (ppm)	Y 371.029
Sr (421.552 nm)	1.2480	ppm	0.3231	25.88	501700.0000	1.2480 (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	61.54	-277.1000	-0.0001 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0015 u	ppm	0.0044	> 100.00	-1.5430	0.0015 u (ppm)	Y 371.029
V (292.401 nm)	-0.0021 u	ppm	0.0000	2.04	102.6000	-0.0021 u (ppm)	Y 371.029
W (207.912 nm)	-0.0030 u	ppm	0.0016	54.07	-14.3300	-0.0030 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0015	ppm	0.0001	4.22	88.7500	0.0015 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	32.31	42.4200	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9391	403500.0000	0.0029	0.31
Y_R 371.029	1.0140	64050.0000	0.0543	5.35

Sample Name: 440-222262-S-11-A@2

Date: 10/19/2018 9:39:33 AM

Rack:Tube: 2:47

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0000	5.12	-56.7800	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0594	ppm	0.0006	1.03	185.6000	0.0594 (ppm)	Y 371.029
As (188.980 nm)	0.0062	ppm	0.0004	5.64	9.8110	0.0062 (ppm)	Y 371.029
B (249.678 nm)	0.5858	ppm	0.0080	1.37	7291.0000	0.5858 (ppm)	Y 371.029
Ba (233.527 nm)	0.0147	ppm	0.0005	3.37	1210.0000	0.0147 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	30.94	2.9530	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	100.0000	ppm	0.1320	0.13	442500.0000	100.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0001	26.75	3.0540	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0053	ppm	0.0004	6.97	52.4800	0.0053 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0007	91.12	6.5950	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0000	11.06	46.5900	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.2076	ppm	0.0013	0.62	895.6000	0.2076 (ppm)	Y_R 371.029
K (766.491 nm)	7.0470	ppm	0.1436	2.04	8379.0000	7.0470 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1906	ppm	0.0007	0.35	13380.0000	0.1906 (ppm)	Y_R 371.029
Mg (279.078 nm)	42.8300	ppm	0.7263	1.70	109600.0000	42.8300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4207	ppm	0.0045	1.06	43720.0000	0.4207 (ppm)	Y 371.029
Mo (204.598 nm)	0.0544	ppm	0.0004	0.81	252.9000	0.0544 (ppm)	Y 371.029
Na (589.592 nm)	278.0000	ppm	2.3640	0.85	1940000.0000	278.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.3478	ppm	0.0036	1.02	1782.0000	0.3478 (ppm)	Y 371.029
P (213.618 nm)	0.0023 u	ppm	0.0087	> 100.00	-10.3100	0.0023 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0019 u	ppm	0.0017	90.23	-10.8300	-0.0019 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0031 u	ppm	0.0002	6.54	-5.2600	-0.0031 u (ppm)	Y 371.029
Se (196.026 nm)	0.0035	ppm	0.0019	54.54	1.0290	0.0035 (ppm)	Y 371.029
Si (251.611 nm)	8.1070	ppm	0.0874	1.08	19820.0000	8.1070 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0036 u	ppm	0.0024	65.91	-5.8550	-0.0036 u (ppm)	Y 371.029
Sr (421.552 nm)	1.4690	ppm	0.0098	0.66	590400.0000	1.4690 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0001	25.04	-262.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0015	ppm	0.0007	47.64	-1.5150	0.0015 (ppm)	Y 371.029
V (292.401 nm)	-0.0040 u	ppm	0.0000	0.06	73.9300	-0.0040 u (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0020	99.93	-12.9400	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0041	ppm	0.0001	3.08	138.1000	0.0041 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0003	55.91	50.2900	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9500	408200.0000	0.0022	0.23
Y_R 371.029	0.9942	62800.0000	0.0043	0.43

Sample Name: 440-222262-S-13-A@2

Date: 10/19/2018 9:41:57 AM

Rack:Tube: 2:48

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0012 u	ppm	0.0001	8.74	-68.5900	-0.0012 u (ppm)	Y 371.029
Al (396.152 nm)	0.0632	ppm	0.0000	0.00	243.5000	0.0632 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0009	29.78	7.7020	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.6898	ppm	0.0058	0.85	8589.0000	0.6898 (ppm)	Y 371.029
Ba (233.527 nm)	0.0174	ppm	0.0001	0.30	1418.0000	0.0174 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	53.15	18.6200	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	100.8000	ppm	0.1613	0.16	445900.0000	100.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.4780	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0001	16.68	-14.4900	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0004	50.88	7.3590	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0002 u	ppm	0.0002	> 100.00	53.2400	-0.0002 u (ppm)	Y 371.029
Fe (238.204 nm)	0.6666	ppm	0.0006	0.09	2904.0000	0.6666 (ppm)	Y_R 371.029
K (766.491 nm)	7.3600	ppm	0.0026	0.04	8757.0000	7.3600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.2184	ppm	0.0013	0.60	15300.0000	0.2184 (ppm)	Y_R 371.029
Mg (279.078 nm)	44.1400	ppm	0.0510	0.12	113000.0000	44.1400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2462	ppm	0.0009	0.37	25760.0000	0.2462 (ppm)	Y 371.029
Mo (204.598 nm)	0.0045	ppm	0.0004	9.25	21.5000	0.0045 (ppm)	Y 371.029
Na (589.592 nm)	299.6000	ppm	0.9642	0.32	2091000.0000	299.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0003	> 100.00	-0.9084	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.0300	ppm	0.0055	18.26	15.9600	0.0300 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0025 u	ppm	0.0010	41.36	-12.0700	-0.0025 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0012 u	ppm	0.0016	> 100.00	-2.3520	-0.0012 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0038 u	ppm	0.0007	17.57	-4.5900	-0.0038 u (ppm)	Y 371.029
Si (251.611 nm)	10.7100	ppm	0.0599	0.56	26160.0000	10.7100 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0004 u	ppm	0.0002	50.91	-3.7750	-0.0004 u (ppm)	Y 371.029
Sr (421.552 nm)	1.4340	ppm	0.0007	0.05	576600.0000	1.4340 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	3.67	-268.0000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0007 u	ppm	0.0004	61.44	-4.5250	-0.0007 u (ppm)	Y 371.029
V (292.401 nm)	-0.0037 u	ppm	0.0005	12.36	92.6700	-0.0037 u (ppm)	Y 371.029
W (207.912 nm)	-0.0026 u	ppm	0.0006	21.41	-14.2000	-0.0026 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0023	ppm	0.0001	5.51	105.6000	0.0023 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	13.82	40.3500	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9502	408300.0000	0.0019	0.19
Y_R 371.029	1.0060	63560.0000	0.0047	0.47

Sample Name: 440-222262-S-14-A@2

Date: 10/19/2018 9:44:20 AM

Rack:Tube: 2:49

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0010 u	ppm	0.0001	6.06	-61.8000	-0.0010 u (ppm)	Y 371.029
Al (396.152 nm)	0.0512	ppm	0.0022	4.24	-2.4260	0.0512 (ppm)	Y 371.029
As (188.980 nm)	0.0047	ppm	0.0014	30.48	8.7480	0.0047 (ppm)	Y 371.029
B (249.678 nm)	0.7289	ppm	0.0073	1.00	9078.0000	0.7289 (ppm)	Y 371.029
Ba (233.527 nm)	0.0204	ppm	0.0001	0.58	1655.0000	0.0204 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	58.80	8.5440	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	116.0000	ppm	0.4635	0.40	513300.0000	116.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	5.04	-0.6760	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0002	34.46	-10.3000	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0002	68.17	5.2620	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0002 u	ppm	0.0001	34.66	37.9200	-0.0002 u (ppm)	Y 371.029
Fe (238.204 nm)	0.5791	ppm	0.0049	0.85	2522.0000	0.5791 (ppm)	Y_R 371.029
K (766.491 nm)	8.1410	ppm	0.1083	1.33	9699.0000	8.1410 (ppm)	Y_R 371.029
Li (670.783 nm)	0.2463	ppm	0.0007	0.30	17260.0000	0.2463 (ppm)	Y_R 371.029
Mg (279.078 nm)	52.7900	ppm	0.3090	0.59	135100.0000	52.7900 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3652	ppm	0.0022	0.61	38060.0000	0.3652 (ppm)	Y 371.029
Mo (204.598 nm)	0.0020	ppm	0.0027	> 100.00	9.9590	0.0020 (ppm)	Y 371.029
Na (589.592 nm)	329.4000	ppm	0.2470	0.07	2299000.0000	329.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0052	ppm	0.0005	8.92	25.6300	0.0052 (ppm)	Y 371.029
P (213.618 nm)	0.0292	ppm	0.0020	6.85	15.0500	0.0292 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0021 u	ppm	0.0011	49.44	-10.9400	-0.0021 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0065 u	ppm	0.0027	40.83	-7.8290	-0.0065 u (ppm)	Y 371.029
Se (196.026 nm)	0.0032	ppm	0.0016	51.71	0.6271	0.0032 (ppm)	Y 371.029
Si (251.611 nm)	10.0600	ppm	0.0672	0.67	24570.0000	10.0600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0027 u	ppm	0.0030	> 100.00	-5.2460	-0.0027 u (ppm)	Y 371.029
Sr (421.552 nm)	1.7520	ppm	0.0066	0.38	704000.0000	1.7520 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	51.64	-300.8000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0011 u	ppm	0.0049	> 100.00	-4.9060	-0.0011 u (ppm)	Y 371.029
V (292.401 nm)	-0.0049 u	ppm	0.0001	1.21	81.4000	-0.0049 u (ppm)	Y 371.029
W (207.912 nm)	-0.0013 u	ppm	0.0008	63.89	-12.1700	-0.0013 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0003	ppm	0.0001	31.21	75.0100	0.0003 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	17.65	43.3400	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9584	411800.0000	0.0019	0.20
Y_R 371.029	1.0100	63780.0000	0.0017	0.17

Sample Name: 440-221968-A-1-A@100

Date: 10/19/2018 9:46:44 AM

Rack:Tube: 2:19

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0000	24.04	-7.0000	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	2.3470	ppm	0.0219	0.93	49810.0000	2.3470 (ppm)	Y 371.029
As (188.980 nm)	0.0076	ppm	0.0019	25.29	10.6700	0.0076 (ppm)	Y 371.029
B (249.678 nm)	0.0560	ppm	0.0002	0.32	658.4000	0.0560 (ppm)	Y 371.029
Ba (233.527 nm)	0.0037	ppm	0.0000	1.17	338.0000	0.0037 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	41.36	130.9000	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	2.0980	ppm	0.0233	1.11	9371.0000	2.0980 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0001	> 100.00	-0.7016	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0004	59.22	-13.6400	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0017	ppm	0.0004	23.30	12.5100	0.0017 (ppm)	Y 371.029
Cu (324.754 nm)	0.0108	ppm	0.0002	2.25	587.8000	0.0108 (ppm)	Y 371.029
Fe (238.204 nm)	5.0580	ppm	0.0221	0.44	22110.0000	5.0580 (ppm)	Y_R 371.029
K (766.491 nm)	0.9339	ppm	0.0895	9.58	997.2000	0.9339 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0148	ppm	0.0013	8.47	710.2000	0.0148 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.2250	ppm	0.0149	1.22	3137.0000	1.2250 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0219	ppm	0.0002	0.84	3031.0000	0.0219 (ppm)	Y 371.029
Mo (204.598 nm)	0.0009	ppm	0.0012	> 100.00	7.0570	0.0009 (ppm)	Y 371.029
Na (589.592 nm)	7.0340	ppm	0.0911	1.29	50360.0000	7.0340 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0016	ppm	0.0012	77.21	10.9900	0.0016 (ppm)	Y 371.029
P (213.618 nm)	0.0058	ppm	0.0001	1.72	-5.9830	0.0058 (ppm)	Y 371.029
Pb (220.353 nm)	0.0014 u	ppm	0.0036	> 100.00	-7.3510	0.0014 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0044	ppm	0.0012	28.35	3.8700	0.0044 (ppm)	Y 371.029
Se (196.026 nm)	0.0011 u	ppm	0.0043	> 100.00	-0.7569	0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	0.2979	ppm	0.0000	0.02	806.7000	0.2979 (ppm)	Y 371.029
Sn (189.925 nm)	0.0009 u	ppm	0.0035	> 100.00	-2.7850	0.0009 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0198	ppm	0.0001	0.43	7925.0000	0.0198 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0000	6.26	-72.7700	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0021 u	ppm	0.0023	> 100.00	-6.4600	-0.0021 u (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0000	13.38	73.3100	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0148	ppm	0.0008	5.14	133.7000	0.0148 (ppm)	Y 371.029
Zn (202.548 nm)	9.9990 o	ppm	0.0831	0.83	181400.0000	9.9990 o (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0001	22.88	56.1500	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0100	433900.0000	0.0057	0.56
Y_R 371.029	1.0120	63930.0000	0.0021	0.21

Sample Name: CCV 5129881

Date: 10/19/2018 9:49:07 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5043	ppm	0.0015	0.29	21240.0000	0.5043 (ppm)	Y 371.029
Al (396.152 nm)	1.0120	ppm	0.0027	0.27	21560.0000	1.0120 (ppm)	Y 371.029
As (188.980 nm)	1.0080	ppm	0.0039	0.39	688.0000	1.0080 (ppm)	Y 371.029
B (249.678 nm)	1.0150	ppm	0.0057	0.56	12560.0000	1.0150 (ppm)	Y 371.029
Ba (233.527 nm)	1.0080	ppm	0.0063	0.62	79500.0000	1.0080 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0130	ppm	0.0008	0.07	186500.0000	1.0130 (ppm)	Y 371.029
Ca (422.673 nm)	5.0290	ppm	0.0087	0.17	22340.0000	5.0290 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0120	ppm	0.0018	0.17	23470.0000	1.0120 (ppm)	Y 371.029
Co (228.615 nm)	1.0170	ppm	0.0029	0.28	13770.0000	1.0170 (ppm)	Y 371.029
Cr (205.560 nm)	1.0140	ppm	0.0017	0.17	5407.0000	1.0140 (ppm)	Y 371.029
Cu (324.754 nm)	1.0210	ppm	0.0019	0.19	40880.0000	1.0210 (ppm)	Y 371.029
Fe (238.204 nm)	1.0070	ppm	0.0000	0.00	4384.0000	1.0070 (ppm)	Y_R 371.029
K (766.491 nm)	9.9260	ppm	0.0076	0.08	11820.0000	9.9260 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0010	ppm	0.0036	0.36	67920.0000	1.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0680	ppm	0.0312	0.62	12980.0000	5.0680 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0100	ppm	0.0007	0.07	104900.0000	1.0100 (ppm)	Y 371.029
Mo (204.598 nm)	1.0180	ppm	0.0013	0.12	4724.0000	1.0180 (ppm)	Y 371.029
Na (589.592 nm)	10.1000	ppm	0.0653	0.65	71850.0000	10.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0120	ppm	0.0022	0.22	5184.0000	1.0120 (ppm)	Y 371.029
P (213.618 nm)	1.0070	ppm	0.0036	0.36	856.3000	1.0070 (ppm)	Y 371.029
Pb (220.353 nm)	1.0180	ppm	0.0011	0.11	1950.0000	1.0180 (ppm)	Y 371.029
Sb (206.834 nm)	1.0130	ppm	0.0094	0.93	1037.0000	1.0130 (ppm)	Y 371.029
Se (196.026 nm)	1.0120	ppm	0.0048	0.47	767.5000	1.0120 (ppm)	Y 371.029
Si (251.611 nm)	4.9310	ppm	0.0782	1.59	12240.0000	4.9310 (ppm)	Y 371.029
Sn (189.925 nm)	1.0140	ppm	0.0030	0.30	659.9000	1.0140 (ppm)	Y 371.029
Sr (421.552 nm)	1.0030	ppm	0.0073	0.73	402000.0000	1.0030 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0130	ppm	0.0007	0.07	125000.0000	1.0130 (ppm)	Y 371.029
Tl (190.794 nm)	1.0130	ppm	0.0016	0.16	1206.0000	1.0130 (ppm)	Y 371.029
V (292.401 nm)	1.0200	ppm	0.0010	0.09	28690.0000	1.0200 (ppm)	Y 371.029
W (207.912 nm)	1.0130	ppm	0.0011	0.11	1910.0000	1.0130 (ppm)	Y 371.029
Zn (202.548 nm)	1.0200	ppm	0.0055	0.54	18680.0000	1.0200 (ppm)	Y 371.029
Zr (343.823 nm)	1.0140	ppm	0.0001	0.01	85280.0000	1.0140 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0050	431700.0000	0.0055	0.54
Y_R 371.029	1.0120	63940.0000	0.0020	0.20

Sample Name: CCB 5129880

Date: 10/19/2018 9:51:30 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0003	99.54	12.7700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0022	ppm	0.0008	34.31	-1166.0000	0.0022 (ppm)	Y 371.029
As (188.980 nm)	0.0044	ppm	0.0004	8.17	8.6980	0.0044 (ppm)	Y 371.029
B (249.678 nm)	0.0019	ppm	0.0004	19.20	0.1575	0.0019 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0003	57.88	77.1800	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	46.26	71.5400	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0067	ppm	0.0017	25.10	121.6000	0.0067 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	38.10	7.1350	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0003	48.25	-14.4000	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0000	0.67	4.6830	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	0.0004	ppm	0.0000	5.11	166.1000	0.0004 (ppm)	Y 371.029
Fe (238.204 nm)	0.0004 u	ppm	0.0009	> 100.00	-16.7100	0.0004 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0793 u	ppm	0.0270	34.10	-210.0000	-0.0793 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0008 u	ppm	0.0015	> 100.00	106.4000	0.0008 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0092	ppm	0.0024	25.80	29.5800	0.0092 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0003	67.93	108.6000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0001	7.96	6.3580	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	0.0378	ppm	0.0062	16.53	1575.0000	0.0378 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0011	ppm	0.0001	9.00	7.4340	0.0011 (ppm)	Y 371.029
P (213.618 nm)	0.0012	ppm	0.0011	93.50	-9.1330	0.0012 (ppm)	Y 371.029
Pb (220.353 nm)	0.0006	ppm	0.0007	> 100.00	-7.9160	0.0006 (ppm)	Y 371.029
Sb (206.834 nm)	0.0015 u	ppm	0.0027	> 100.00	0.0907	0.0015 u (ppm)	Y 371.029
Se (196.026 nm)	0.0011	ppm	0.0001	8.56	-0.2409	0.0011 (ppm)	Y 371.029
Si (251.611 nm)	0.0052	ppm	0.0022	41.97	61.6100	0.0052 (ppm)	Y 371.029
Sn (189.925 nm)	0.0027	ppm	0.0024	91.19	-1.8270	0.0027 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	1.71	54.6200	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0006	ppm	0.0002	27.46	-95.8600	0.0006 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0019	> 100.00	-3.2640	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0002	42.38	71.0300	0.0005 (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0008	> 100.00	-7.0880	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0004	21.70	67.6500	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0002	61.23	20.8000	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0150	436000.0000	0.0056	0.55
Y_R 371.029	1.0110	63870.0000	0.0021	0.20

Sample Name: MB 440-505979/1-A

Date: 10/19/2018 9:53:54 AM

Rack:Tube: 2:55

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	3.3130	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0133	ppm	0.0002	1.64	-925.5000	0.0133 (ppm)	Y 371.029
As (188.980 nm)	0.0055	ppm	0.0014	25.31	9.4540	0.0055 (ppm)	Y 371.029
B (249.678 nm)	0.0008	ppm	0.0002	24.16	-13.4300	0.0008 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	11.62	54.2100	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	30.64	24.6100	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0269	ppm	0.0035	13.03	211.1000	0.0269 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-2.0580	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0003 u	ppm	0.0005	> 100.00	-18.7900	0.0003 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0009	> 100.00	5.2340	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0001	> 100.00	151.8000	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0026	ppm	0.0007	27.75	-6.6950	0.0026 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0415 u	ppm	0.0152	36.65	-164.6000	-0.0415 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0020	ppm	0.0004	17.57	186.0000	0.0020 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0071	ppm	0.0035	48.90	24.1200	0.0071 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0000	10.35	88.4400	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	0.0010	ppm	0.0011	> 100.00	5.2890	0.0010 (ppm)	Y 371.029
Na (589.592 nm)	0.0109	ppm	0.0002	1.69	1387.0000	0.0109 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0007 u	ppm	0.0007	94.37	-1.8350	-0.0007 u (ppm)	Y 371.029
P (213.618 nm)	-0.0017 u	ppm	0.0001	4.22	-11.7700	-0.0017 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0013	61.42	-5.0720	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0029	ppm	0.0001	3.25	1.6050	0.0029 (ppm)	Y 371.029
Se (196.026 nm)	0.0018 u	ppm	0.0044	> 100.00	0.3149	0.0018 u (ppm)	Y 371.029
Si (251.611 nm)	0.0040	ppm	0.0002	4.33	58.5200	0.0040 (ppm)	Y 371.029
Sn (189.925 nm)	0.0021	ppm	0.0007	33.30	-2.1750	0.0021 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	35.82	24.1800	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	1.19	-133.8000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0018 u	ppm	0.0037	> 100.00	-5.9370	-0.0018 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0001	68.58	61.3900	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0009	ppm	0.0007	79.59	-5.0570	0.0009 (ppm)	Y 371.029
Zn (202.548 nm)	0.0154	ppm	0.0002	1.15	312.7000	0.0154 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	6.53	9.3960	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0260	440600.0000	0.0070	0.68
Y_R 371.029	1.0260	64780.0000	0.0032	0.31

Sample Name: 440-222403-E-9-A

Date: 10/19/2018 9:56:18 AM

Rack:Tube: 2:56

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-1.2960	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0199	ppm	0.0001	0.74	-780.9000	0.0199 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0009	29.42	7.8180	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.0011	ppm	0.0002	14.37	-10.2000	0.0011 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	30.16	46.7800	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	26.25	15.6700	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0431	ppm	0.0020	4.75	282.8000	0.0431 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	53.74	-1.1230	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0002	ppm	0.0003	> 100.00	-19.5800	0.0002 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0005	71.58	4.9920	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0001	ppm	0.0000	53.17	153.5000	0.0001 (ppm)	Y 371.029
Fe (238.204 nm)	0.0054	ppm	0.0018	32.64	5.5290	0.0054 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1270 u	ppm	0.0497	39.11	-267.3000	-0.1270 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0008	> 100.00	48.6400	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0060	ppm	0.0015	25.81	21.1900	0.0060 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	8.73	76.2300	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0008	ppm	0.0004	43.81	4.3970	0.0008 (ppm)	Y 371.029
Na (589.592 nm)	-0.0232 u	ppm	0.0098	42.02	1149.0000	-0.0232 u (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0005	> 100.00	2.2330	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0020	ppm	0.0008	41.07	-8.2890	0.0020 (ppm)	Y 371.029
Pb (220.353 nm)	0.0023	ppm	0.0002	8.62	-4.7130	0.0023 (ppm)	Y 371.029
Sb (206.834 nm)	0.0009	ppm	0.0000	3.58	-0.4912	0.0009 (ppm)	Y 371.029
Se (196.026 nm)	-0.0009 u	ppm	0.0019	> 100.00	-1.7010	-0.0009 u (ppm)	Y 371.029
Si (251.611 nm)	0.0049	ppm	0.0008	15.86	60.7400	0.0049 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006 u	ppm	0.0025	> 100.00	-3.1820	0.0006 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0000	ppm	0.0000	> 100.00	-47.7300	0.0000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	55.38	-155.9000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0010 u	ppm	0.0009	93.48	-4.9030	-0.0010 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	58.2100	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0003	24.53	-4.2190	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.0063	ppm	0.0001	1.55	148.6000	0.0063 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001 u	ppm	0.0001	> 100.00	-0.9866	0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440600.0000	0.0047	0.46
Y_R 371.029	1.0360	65440.0000	0.0000	0.00

Sample Name: LCS 440-505979/2-A

Date: 10/19/2018 9:58:41 AM

Rack:Tube: 2:57

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2472	ppm	0.0013	0.54	10410.0000	0.2472 (ppm)	Y 371.029
Al (396.152 nm)	0.4959	ppm	0.0023	0.47	9946.0000	0.4959 (ppm)	Y 371.029
As (188.980 nm)	0.5041	ppm	0.0079	1.56	346.9000	0.5041 (ppm)	Y 371.029
B (249.678 nm)	0.4924	ppm	0.0072	1.47	6080.0000	0.4924 (ppm)	Y 371.029
Ba (233.527 nm)	0.4890	ppm	0.0121	2.47	38590.0000	0.4890 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4977	ppm	0.0024	0.47	91670.0000	0.4977 (ppm)	Y 371.029
Ca (422.673 nm)	2.3060	ppm	0.2958	12.83	10290.0000	2.3060 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.5011	ppm	0.0042	0.83	11620.0000	0.5011 (ppm)	Y 371.029
Co (228.615 nm)	0.5032	ppm	0.0046	0.91	6798.0000	0.5032 (ppm)	Y 371.029
Cr (205.560 nm)	0.4999	ppm	0.0008	0.16	2665.0000	0.4999 (ppm)	Y 371.029
Cu (324.754 nm)	0.5000	ppm	0.0021	0.41	20090.0000	0.5000 (ppm)	Y 371.029
Fe (238.204 nm)	0.4644	ppm	0.0518	11.16	2012.0000	0.4644 (ppm)	Y_R 371.029
K (766.491 nm)	4.6010	ppm	0.4865	10.57	5419.0000	4.6010 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4626	ppm	0.0504	10.90	31400.0000	0.4626 (ppm)	Y_R 371.029
Mg (279.078 nm)	2.4460	ppm	0.0652	2.67	6264.0000	2.4460 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5035	ppm	0.0016	0.32	52320.0000	0.5035 (ppm)	Y 371.029
Mo (204.598 nm)	0.4896	ppm	0.0046	0.94	2272.0000	0.4896 (ppm)	Y 371.029
Na (589.592 nm)	4.5710	ppm	0.5123	11.21	33220.0000	4.5710 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.5010	ppm	0.0021	0.42	2569.0000	0.5010 (ppm)	Y 371.029
P (213.618 nm)	0.4971	ppm	0.0058	1.16	417.8000	0.4971 (ppm)	Y 371.029
Pb (220.353 nm)	0.5040	ppm	0.0030	0.59	960.8000	0.5040 (ppm)	Y 371.029
Sb (206.834 nm)	0.5183	ppm	0.0007	0.13	530.6000	0.5183 (ppm)	Y 371.029
Se (196.026 nm)	0.4994	ppm	0.0044	0.87	378.3000	0.4994 (ppm)	Y 371.029
Si (251.611 nm)	2.4490	ppm	0.0192	0.78	6102.0000	2.4490 (ppm)	Y 371.029
Sn (189.925 nm)	0.5011	ppm	0.0019	0.38	324.4000	0.5011 (ppm)	Y 371.029
Sr (421.552 nm)	0.4392	ppm	0.0777	17.69	176100.0000	0.4392 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4952	ppm	0.0020	0.40	61020.0000	0.4952 (ppm)	Y 371.029
Tl (190.794 nm)	0.4959	ppm	0.0080	1.62	588.8000	0.4959 (ppm)	Y 371.029
V (292.401 nm)	0.5016	ppm	0.0013	0.27	14140.0000	0.5016 (ppm)	Y 371.029
W (207.912 nm)	0.4844	ppm	0.0058	1.20	909.9000	0.4844 (ppm)	Y 371.029
Zn (202.548 nm)	0.5077	ppm	0.0012	0.24	9317.0000	0.5077 (ppm)	Y 371.029
Zr (343.823 nm)	0.4955	ppm	0.0035	0.71	41690.0000	0.4955 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440500.0000	0.0061	0.60
Y_R 371.029	1.0550	66670.0000	0.0243	2.30

Sample Name: 440-222403-E-1-A

Date: 10/19/2018 10:01:05 AM

Rack:Tube: 2:58

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0008 u	ppm	0.0001	7.62	-77.5600	-0.0008 u (ppm)	Y 371.029
Al (396.152 nm)	0.0110	ppm	0.0010	9.23	-757.3000	0.0110 (ppm)	Y 371.029
As (188.980 nm)	0.0969	ppm	0.0031	3.17	71.1500	0.0969 (ppm)	Y 371.029
B (249.678 nm)	2.7780	ppm	0.0312	1.12	34670.0000	2.7780 (ppm)	Y 371.029
Ba (233.527 nm)	0.0155	ppm	0.0001	0.47	1283.0000	0.0155 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0002	> 100.00	43.1900	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	218.5000	ppm	3.1310	1.43	966600.0000	218.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	93.50	1.8530	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0002	24.54	-6.3530	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0610	ppm	0.0001	0.19	330.8000	0.0610 (ppm)	Y 371.029
Cu (324.754 nm)	0.0070	ppm	0.0003	4.02	231.4000	0.0070 (ppm)	Y 371.029
Fe (238.204 nm)	0.0184	ppm	0.0001	0.61	78.1400	0.0184 (ppm)	Y_R 371.029
K (766.491 nm)	15.7900	ppm	0.3770	2.39	18930.0000	15.7900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.2353	ppm	0.0023	0.99	16930.0000	0.2353 (ppm)	Y_R 371.029
Mg (279.078 nm)	117.2000	ppm	1.4370	1.23	299900.0000	117.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0012 u	ppm	0.0001	11.95	438.1000	-0.0012 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0276	ppm	0.0001	0.32	128.8000	0.0276 (ppm)	Y 371.029
Na (589.592 nm)	587.2000 o	ppm	5.8160	0.99	4096000.0000	587.2000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0048	ppm	0.0011	22.92	20.7800	0.0048 (ppm)	Y 371.029
P (213.618 nm)	0.0101	ppm	0.0025	24.31	-4.4690	0.0101 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0036 u	ppm	0.0002	4.36	-11.5500	-0.0036 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0022 u	ppm	0.0010	44.96	-2.7710	-0.0022 u (ppm)	Y 371.029
Se (196.026 nm)	0.0055	ppm	0.0018	33.34	1.5480	0.0055 (ppm)	Y 371.029
Si (251.611 nm)	36.3300	ppm	0.0979	0.27	88600.0000	36.3300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0016 u	ppm	0.0047	> 100.00	-4.4250	-0.0016 u (ppm)	Y 371.029
Sr (421.552 nm)	5.8360	ppm	0.0824	1.41	2343000.0000	5.8360 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	29.56	-380.8000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0014 u	ppm	0.0008	60.90	-7.1040	-0.0014 u (ppm)	Y 371.029
V (292.401 nm)	0.0191	ppm	0.0005	2.69	902.1000	0.0191 (ppm)	Y 371.029
W (207.912 nm)	0.0010 u	ppm	0.0023	> 100.00	5.4010	0.0010 u (ppm)	Y 371.029
Zn (202.548 nm)	1.3770	ppm	0.0095	0.69	25080.0000	1.3770 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0002	44.18	61.1100	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9351	401800.0000	0.0002	0.02
Y_R 371.029	0.9898	62520.0000	0.0047	0.48

Sample Name: 440-222403-E-1-B MS

Date: 10/19/2018 10:03:28 AM

Rack:Tube: 2:59

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2724	ppm	0.0004	0.14	11420.0000	0.2724 (ppm)	Y 371.029
Al (396.152 nm)	0.7384	ppm	0.0026	0.35	15480.0000	0.7384 (ppm)	Y 371.029
As (188.980 nm)	0.6419	ppm	0.0047	0.74	440.1000	0.6419 (ppm)	Y 371.029
B (249.678 nm)	3.5080	ppm	0.0147	0.42	43730.0000	3.5080 (ppm)	Y 371.029
Ba (233.527 nm)	0.5026	ppm	0.0011	0.22	39690.0000	0.5026 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5387	ppm	0.0013	0.24	99230.0000	0.5387 (ppm)	Y 371.029
Ca (422.673 nm)	239.4000	ppm	0.3155	0.13	1059000.0000	239.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4910	ppm	0.0007	0.15	11390.0000	0.4910 (ppm)	Y 371.029
Co (228.615 nm)	0.5052	ppm	0.0012	0.23	6833.0000	0.5052 (ppm)	Y 371.029
Cr (205.560 nm)	0.5771	ppm	0.0018	0.31	3081.0000	0.5771 (ppm)	Y 371.029
Cu (324.754 nm)	0.5880	ppm	0.0006	0.10	23380.0000	0.5880 (ppm)	Y 371.029
Fe (238.204 nm)	0.5407	ppm	0.0058	1.07	2363.0000	0.5407 (ppm)	Y_R 371.029
K (766.491 nm)	22.4100	ppm	0.1016	0.45	26890.0000	22.4100 (ppm)	Y_R 371.029
Li (670.783 nm)	0.7989	ppm	0.0005	0.07	55210.0000	0.7989 (ppm)	Y_R 371.029
Mg (279.078 nm)	126.4000	ppm	0.2065	0.16	323400.0000	126.4000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5114	ppm	0.0005	0.09	53690.0000	0.5114 (ppm)	Y 371.029
Mo (204.598 nm)	0.5539	ppm	0.0034	0.62	2571.0000	0.5539 (ppm)	Y 371.029
Na (589.592 nm)	634.8000 o	ppm	1.9350	0.30	4428000.0000	634.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4957	ppm	0.0000	0.01	2535.0000	0.4957 (ppm)	Y 371.029
P (213.618 nm)	0.5774	ppm	0.0037	0.63	484.3000	0.5774 (ppm)	Y 371.029
Pb (220.353 nm)	0.4935	ppm	0.0000	0.01	945.2000	0.4935 (ppm)	Y 371.029
Sb (206.834 nm)	0.5539	ppm	0.0000	0.00	567.9000	0.5539 (ppm)	Y 371.029
Se (196.026 nm)	0.5307	ppm	0.0021	0.40	400.4000	0.5307 (ppm)	Y 371.029
Si (251.611 nm)	40.7500	ppm	0.1485	0.36	99480.0000	40.7500 (ppm)	Y 371.029
Sn (189.925 nm)	0.5142	ppm	0.0053	1.04	333.2000	0.5142 (ppm)	Y 371.029
Sr (421.552 nm)	6.8400	ppm	0.0118	0.17	2746000.0000	6.8400 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5334	ppm	0.0011	0.21	65450.0000	0.5334 (ppm)	Y 371.029
Tl (190.794 nm)	0.4852	ppm	0.0122	2.51	572.1000	0.4852 (ppm)	Y 371.029
V (292.401 nm)	0.5614	ppm	0.0007	0.13	16150.0000	0.5614 (ppm)	Y 371.029
W (207.912 nm)	0.5225	ppm	0.0022	0.43	992.9000	0.5225 (ppm)	Y 371.029
Zn (202.548 nm)	2.0080	ppm	0.0019	0.10	36620.0000	2.0080 (ppm)	Y 371.029
Zr (343.823 nm)	0.5272	ppm	0.0015	0.28	44400.0000	0.5272 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9390	403400.0000	0.0034	0.36
Y_R 371.029	0.9972	62990.0000	0.0002	0.02

Sample Name: 440-222403-E-1-C MSD

Date: 10/19/2018 10:05:52 AM

Rack:Tube: 2:60

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2676	ppm	0.0024	0.89	11220.0000	0.2676 (ppm)	Y 371.029
Al (396.152 nm)	0.6499	ppm	0.0046	0.71	13540.0000	0.6499 (ppm)	Y 371.029
As (188.980 nm)	0.6299	ppm	0.0047	0.74	432.0000	0.6299 (ppm)	Y 371.029
B (249.678 nm)	3.4060	ppm	0.0288	0.84	42460.0000	3.4060 (ppm)	Y 371.029
Ba (233.527 nm)	0.4922	ppm	0.0081	1.65	38860.0000	0.4922 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5319	ppm	0.0026	0.48	97960.0000	0.5319 (ppm)	Y 371.029
Ca (422.673 nm)	231.0000	ppm	0.1188	0.05	1022000.0000	231.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4857	ppm	0.0004	0.09	11270.0000	0.4857 (ppm)	Y 371.029
Co (228.615 nm)	0.4972	ppm	0.0032	0.64	6724.0000	0.4972 (ppm)	Y 371.029
Cr (205.560 nm)	0.5676	ppm	0.0017	0.31	3030.0000	0.5676 (ppm)	Y 371.029
Cu (324.754 nm)	0.5810	ppm	0.0015	0.25	23110.0000	0.5810 (ppm)	Y 371.029
Fe (238.204 nm)	0.5270	ppm	0.0020	0.39	2302.0000	0.5270 (ppm)	Y_R 371.029
K (766.491 nm)	21.8100	ppm	0.1377	0.63	26160.0000	21.8100 (ppm)	Y_R 371.029
Li (670.783 nm)	0.7805	ppm	0.0029	0.37	53930.0000	0.7805 (ppm)	Y_R 371.029
Mg (279.078 nm)	121.4000	ppm	2.0980	1.73	310800.0000	121.4000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5058	ppm	0.0018	0.36	53090.0000	0.5058 (ppm)	Y 371.029
Mo (204.598 nm)	0.5490	ppm	0.0051	0.93	2548.0000	0.5490 (ppm)	Y 371.029
Na (589.592 nm)	610.6000 o	ppm	2.5490	0.42	4260000.0000	610.6000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4909	ppm	0.0020	0.42	2511.0000	0.4909 (ppm)	Y 371.029
P (213.618 nm)	0.5646	ppm	0.0041	0.72	473.0000	0.5646 (ppm)	Y 371.029
Pb (220.353 nm)	0.4869	ppm	0.0028	0.58	932.4000	0.4869 (ppm)	Y 371.029
Sb (206.834 nm)	0.5500	ppm	0.0057	1.03	563.8000	0.5500 (ppm)	Y 371.029
Se (196.026 nm)	0.5207	ppm	0.0030	0.58	392.9000	0.5207 (ppm)	Y 371.029
Si (251.611 nm)	39.6100	ppm	0.1569	0.40	96690.0000	39.6100 (ppm)	Y 371.029
Sn (189.925 nm)	0.5078	ppm	0.0038	0.75	329.0000	0.5078 (ppm)	Y 371.029
Sr (421.552 nm)	6.6350	ppm	0.0030	0.05	2664000.0000	6.6350 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5292	ppm	0.0023	0.44	64940.0000	0.5292 (ppm)	Y 371.029
Tl (190.794 nm)	0.4704	ppm	0.0181	3.85	554.2000	0.4704 (ppm)	Y 371.029
V (292.401 nm)	0.5543	ppm	0.0018	0.33	15940.0000	0.5543 (ppm)	Y 371.029
W (207.912 nm)	0.5181	ppm	0.0031	0.61	983.6000	0.5181 (ppm)	Y 371.029
Zn (202.548 nm)	1.8860	ppm	0.0039	0.21	34400.0000	1.8860 (ppm)	Y 371.029
Zr (343.823 nm)	0.5229	ppm	0.0029	0.56	44030.0000	0.5229 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9532	409500.0000	0.0046	0.48
Y_R 371.029	1.0200	64410.0000	0.0082	0.81

Sample Name: 440-222403-E-2-A

Date: 10/19/2018 10:08:16 AM

Rack:Tube: 3:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0000	4.50	-68.3200	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0285	ppm	0.0002	0.87	-376.1000	0.0285 (ppm)	Y 371.029
As (188.980 nm)	0.1261	ppm	0.0028	2.21	91.2600	0.1261 (ppm)	Y 371.029
B (249.678 nm)	3.0390	ppm	0.0264	0.87	37920.0000	3.0390 (ppm)	Y 371.029
Ba (233.527 nm)	0.0187	ppm	0.0003	1.49	1535.0000	0.0187 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0002	> 100.00	163.4000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	262.4000	ppm	1.3330	0.51	1161000.0000	262.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	29.75	8.3480	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0020	ppm	0.0002	11.96	12.3800	0.0020 (ppm)	Y 371.029
Cr (205.560 nm)	0.0222	ppm	0.0006	2.79	124.5000	0.0222 (ppm)	Y 371.029
Cu (324.754 nm)	0.0032	ppm	0.0004	11.06	40.1500	0.0032 (ppm)	Y 371.029
Fe (238.204 nm)	4.6030	ppm	0.0046	0.10	20130.0000	4.6030 (ppm)	Y_R 371.029
K (766.491 nm)	18.2600	ppm	0.0526	0.29	21890.0000	18.2600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3405	ppm	0.0003	0.08	24160.0000	0.3405 (ppm)	Y_R 371.029
Mg (279.078 nm)	104.3000	ppm	0.2595	0.25	266900.0000	104.3000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0476	ppm	0.0001	0.12	6070.0000	0.0476 (ppm)	Y 371.029
Mo (204.598 nm)	0.0330	ppm	0.0012	3.68	154.0000	0.0330 (ppm)	Y 371.029
Na (589.592 nm)	548.2000 o	ppm	1.6530	0.30	3824000.0000	548.2000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0059	ppm	0.0010	17.05	25.9100	0.0059 (ppm)	Y 371.029
P (213.618 nm)	0.0058	ppm	0.0001	2.32	-9.0190	0.0058 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0014 u	ppm	0.0015	> 100.00	-7.6060	-0.0014 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0057 u	ppm	0.0075	> 100.00	-6.6720	-0.0057 u (ppm)	Y 371.029
Se (196.026 nm)	0.0103	ppm	0.0011	11.02	4.2800	0.0103 (ppm)	Y 371.029
Si (251.611 nm)	46.5400	ppm	0.3135	0.67	113500.0000	46.5400 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0042 u	ppm	0.0021	49.35	-6.1890	-0.0042 u (ppm)	Y 371.029
Sr (421.552 nm)	5.8980	ppm	0.0512	0.87	2369000.0000	5.8980 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0001	5.36	-372.0000	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0044	ppm	0.0023	52.16	-0.2490	0.0044 (ppm)	Y 371.029
V (292.401 nm)	0.0194	ppm	0.0001	0.63	967.8000	0.0194 (ppm)	Y 371.029
W (207.912 nm)	-0.0008 u	ppm	0.0001	17.31	-8.6640	-0.0008 u (ppm)	Y 371.029
Zn (202.548 nm)	0.5161	ppm	0.0018	0.34	9463.0000	0.5161 (ppm)	Y 371.029
Zr (343.823 nm)	0.0008	ppm	0.0000	2.22	111.7000	0.0008 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9819	421900.0000	0.0007	0.07
Y_R 371.029	1.0780	68070.0000	0.0068	0.63

Sample Name: 440-222403-E-3-A

Date: 10/19/2018 10:10:40 AM

Rack:Tube: 3:2

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0003	> 100.00	-62.5400	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0134	ppm	0.0002	1.65	-700.0000	0.0134 (ppm)	Y 371.029
As (188.980 nm)	0.1479	ppm	0.0011	0.73	105.1000	0.1479 (ppm)	Y 371.029
B (249.678 nm)	3.0110	ppm	0.0195	0.65	37580.0000	3.0110 (ppm)	Y 371.029
Ba (233.527 nm)	0.0174	ppm	0.0002	1.02	1429.0000	0.0174 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	15.0900	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	255.1000	ppm	0.5659	0.22	1129000.0000	255.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	40.66	0.1201	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0001	49.80	-11.8800	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.1713	ppm	0.0004	0.26	918.7000	0.1713 (ppm)	Y 371.029
Cu (324.754 nm)	0.0006	ppm	0.0001	11.78	-57.9400	0.0006 (ppm)	Y 371.029
Fe (238.204 nm)	0.0188	ppm	0.0012	6.25	78.5900	0.0188 (ppm)	Y_R 371.029
K (766.491 nm)	20.5000	ppm	0.1500	0.73	24580.0000	20.5000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3471	ppm	0.0018	0.51	24620.0000	0.3471 (ppm)	Y_R 371.029
Mg (279.078 nm)	107.6000	ppm	0.0632	0.06	275300.0000	107.6000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0103	ppm	0.0000	0.05	1591.0000	0.0103 (ppm)	Y 371.029
Mo (204.598 nm)	0.0321	ppm	0.0010	3.24	149.5000	0.0321 (ppm)	Y 371.029
Na (589.592 nm)	548.5000 o	ppm	6.2730	1.14	3826000.0000	548.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0043	ppm	0.0000	0.38	17.4900	0.0043 (ppm)	Y 371.029
P (213.618 nm)	0.0070	ppm	0.0028	40.38	-7.6300	0.0070 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0045 u	ppm	0.0019	43.33	-13.1600	-0.0045 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0047 u	ppm	0.0027	56.21	-4.4540	-0.0047 u (ppm)	Y 371.029
Se (196.026 nm)	0.0051	ppm	0.0002	4.28	0.9855	0.0051 (ppm)	Y 371.029
Si (251.611 nm)	45.9200	ppm	0.1986	0.43	112000.0000	45.9200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0045 u	ppm	0.0016	36.76	-6.3770	-0.0045 u (ppm)	Y 371.029
Sr (421.552 nm)	5.9680	ppm	0.0140	0.24	2397000.0000	5.9680 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	26.56	-429.4000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0020	ppm	0.0000	0.38	-3.2210	0.0020 (ppm)	Y 371.029
V (292.401 nm)	0.0200	ppm	0.0004	1.75	976.3000	0.0200 (ppm)	Y 371.029
W (207.912 nm)	-0.0005 u	ppm	0.0012	> 100.00	-12.8700	-0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0863	ppm	0.0003	0.29	1670.0000	0.0863 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0002	> 100.00	47.9700	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9783	420300.0000	0.0014	0.14
Y_R 371.029	1.0750	67930.0000	0.0023	0.21

Sample Name: 440-222403-E-4-A

Date: 10/19/2018 10:13:04 AM

Rack:Tube: 3:3

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0004	> 100.00	-64.4100	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.1032	ppm	0.0011	1.11	1327.0000	0.1032 (ppm)	Y 371.029
As (188.980 nm)	0.1270	ppm	0.0029	2.31	87.0700	0.1270 (ppm)	Y 371.029
B (249.678 nm)	3.5390	ppm	0.0244	0.69	44170.0000	3.5390 (ppm)	Y 371.029
Ba (233.527 nm)	0.0220	ppm	0.0003	1.48	1799.0000	0.0220 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	5.62	7.8240	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	330.1000	ppm	0.6162	0.19	1461000.0000	330.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	6.86	-2.3760	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0002	24.69	0.2964	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.7030	ppm	0.0035	0.50	3754.0000	0.7030 (ppm)	Y 371.029
Cu (324.754 nm)	0.0075	ppm	0.0003	4.45	148.2000	0.0075 (ppm)	Y 371.029
Fe (238.204 nm)	0.1201	ppm	0.0002	0.16	527.4000	0.1201 (ppm)	Y_R 371.029
K (766.491 nm)	27.5400	ppm	0.3733	1.36	33070.0000	27.5400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4334	ppm	0.0053	1.21	30830.0000	0.4334 (ppm)	Y_R 371.029
Mg (279.078 nm)	154.5000	ppm	2.5430	1.65	395400.0000	154.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0266	ppm	0.0001	0.35	3477.0000	0.0266 (ppm)	Y 371.029
Mo (204.598 nm)	0.0268	ppm	0.0013	4.94	125.3000	0.0268 (ppm)	Y 371.029
Na (589.592 nm)	683.4000 o	ppm	1.1820	0.17	4767000.0000	683.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0068	ppm	0.0015	21.45	28.4800	0.0068 (ppm)	Y 371.029
P (213.618 nm)	0.0445	ppm	0.0004	0.95	25.7100	0.0445 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0056 u	ppm	0.0001	1.99	-13.6500	-0.0056 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0073 u	ppm	0.0030	41.36	-2.1640	-0.0073 u (ppm)	Y 371.029
Se (196.026 nm)	0.0076	ppm	0.0032	42.07	2.3350	0.0076 (ppm)	Y 371.029
Si (251.611 nm)	47.2900	ppm	0.2321	0.49	115300.0000	47.2900 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0070 u	ppm	0.0030	42.35	-7.9730	-0.0070 u (ppm)	Y 371.029
Sr (421.552 nm)	8.6810	ppm	0.0345	0.40	3486000.0000	8.6810 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0023	ppm	0.0000	0.63	-296.4000	0.0023 (ppm)	Y 371.029
Tl (190.794 nm)	0.0036	ppm	0.0012	32.18	-1.4540	0.0036 (ppm)	Y 371.029
V (292.401 nm)	0.0176	ppm	0.0002	0.95	1018.0000	0.0176 (ppm)	Y 371.029
W (207.912 nm)	0.0005 u	ppm	0.0012	> 100.00	-12.4900	0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.1031	ppm	0.0002	0.20	1993.0000	0.1031 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	50.5800	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9748	418800.0000	0.0023	0.23
Y_R 371.029	1.0630	67130.0000	0.0173	1.63

Sample Name: 440-222403-E-5-A

Date: 10/19/2018 10:15:28 AM

Rack:Tube: 3:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0004	> 100.00	-74.7500	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0134	ppm	0.0001	0.47	-641.4000	0.0134 (ppm)	Y 371.029
As (188.980 nm)	0.1362	ppm	0.0053	3.86	90.4900	0.1362 (ppm)	Y 371.029
B (249.678 nm)	3.8000	ppm	0.0218	0.57	47430.0000	3.8000 (ppm)	Y 371.029
Ba (233.527 nm)	0.0226	ppm	0.0002	0.81	1849.0000	0.0226 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	28.00	-6.9870	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	310.1000	ppm	1.5720	0.51	1372000.0000	310.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	0.5120	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0003	57.39	-6.0360	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	1.1120	ppm	0.0032	0.29	5931.0000	1.1120 (ppm)	Y 371.029
Cu (324.754 nm)	0.0209	ppm	0.0003	1.21	702.0000	0.0209 (ppm)	Y 371.029
Fe (238.204 nm)	0.0170	ppm	0.0002	1.42	75.1000	0.0170 (ppm)	Y_R 371.029
K (766.491 nm)	23.8500	ppm	0.2411	1.01	28630.0000	23.8500 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3950	ppm	0.0023	0.58	28130.0000	0.3950 (ppm)	Y_R 371.029
Mg (279.078 nm)	145.5000	ppm	0.1988	0.14	372300.0000	145.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0320	ppm	0.0002	0.48	3983.0000	0.0320 (ppm)	Y 371.029
Mo (204.598 nm)	0.0263	ppm	0.0012	4.60	122.8000	0.0263 (ppm)	Y 371.029
Na (589.592 nm)	740.4000 o	ppm	2.8470	0.38	5164000.0000	740.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0100	ppm	0.0001	0.62	45.2800	0.0100 (ppm)	Y 371.029
P (213.618 nm)	0.0074	ppm	0.0030	41.35	-8.5440	0.0074 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0045 u	ppm	0.0012	25.96	-11.8800	-0.0045 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0013 u	ppm	0.0013	98.77	7.3950	-0.0013 u (ppm)	Y 371.029
Se (196.026 nm)	0.0087	ppm	0.0011	13.11	3.3250	0.0087 (ppm)	Y 371.029
Si (251.611 nm)	48.4500	ppm	0.1537	0.32	118200.0000	48.4500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0056 u	ppm	0.0018	31.76	-7.0920	-0.0056 u (ppm)	Y 371.029
Sr (421.552 nm)	8.0420	ppm	0.0521	0.65	3229000.0000	8.0420 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	42.12	-536.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0055	ppm	0.0017	30.86	1.0110	0.0055 (ppm)	Y 371.029
V (292.401 nm)	0.0216	ppm	0.0004	1.82	1104.0000	0.0216 (ppm)	Y 371.029
W (207.912 nm)	-0.0023 u	ppm	0.0013	55.21	-16.2400	-0.0023 u (ppm)	Y 371.029
Zn (202.548 nm)	0.2035	ppm	0.0007	0.34	3801.0000	0.2035 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	9.59	34.8900	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9755	419100.0000	0.0063	0.65
Y_R 371.029	1.0490	66290.0000	0.0045	0.43

Sample Name: CCV 5129881

Date: 10/19/2018 10:17:52 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5008	ppm	0.0007	0.14	21090.0000	0.5008 (ppm)	Y 371.029
Al (396.152 nm)	1.0360	ppm	0.0064	0.62	22090.0000	1.0360 (ppm)	Y 371.029
As (188.980 nm)	0.9973	ppm	0.0004	0.04	680.5000	0.9973 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0015	0.15	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	0.9880	ppm	0.0072	0.73	77930.0000	0.9880 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0020	ppm	0.0017	0.17	184600.0000	1.0020 (ppm)	Y 371.029
Ca (422.673 nm)	5.1220	ppm	0.0415	0.81	22750.0000	5.1220 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9989	ppm	0.0008	0.08	23170.0000	0.9989 (ppm)	Y 371.029
Co (228.615 nm)	1.0040	ppm	0.0028	0.28	13580.0000	1.0040 (ppm)	Y 371.029
Cr (205.560 nm)	1.0080	ppm	0.0012	0.12	5371.0000	1.0080 (ppm)	Y 371.029
Cu (324.754 nm)	1.0120	ppm	0.0024	0.24	40520.0000	1.0120 (ppm)	Y 371.029
Fe (238.204 nm)	1.0040	ppm	0.0006	0.06	4370.0000	1.0040 (ppm)	Y_R 371.029
K (766.491 nm)	10.0800	ppm	0.0695	0.69	12010.0000	10.0800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9953	ppm	0.0011	0.11	67530.0000	0.9953 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0660	ppm	0.0090	0.18	12970.0000	5.0660 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0040	ppm	0.0004	0.04	104300.0000	1.0040 (ppm)	Y 371.029
Mo (204.598 nm)	1.0080	ppm	0.0038	0.38	4679.0000	1.0080 (ppm)	Y 371.029
Na (589.592 nm)	10.7200	ppm	0.0545	0.51	76140.0000	10.7200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9992	ppm	0.0009	0.09	5121.0000	0.9992 (ppm)	Y 371.029
P (213.618 nm)	0.9910	ppm	0.0009	0.09	842.2000	0.9910 (ppm)	Y 371.029
Pb (220.353 nm)	1.0050	ppm	0.0043	0.43	1924.0000	1.0050 (ppm)	Y 371.029
Sb (206.834 nm)	0.9960	ppm	0.0137	1.37	1020.0000	0.9960 (ppm)	Y 371.029
Se (196.026 nm)	0.9956	ppm	0.0060	0.60	755.3000	0.9956 (ppm)	Y 371.029
Si (251.611 nm)	5.0970	ppm	0.0844	1.66	12640.0000	5.0970 (ppm)	Y 371.029
Sn (189.925 nm)	1.0070	ppm	0.0011	0.11	655.2000	1.0070 (ppm)	Y 371.029
Sr (421.552 nm)	1.0150	ppm	0.0043	0.42	407000.0000	1.0150 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0100	ppm	0.0011	0.10	124700.0000	1.0100 (ppm)	Y 371.029
Tl (190.794 nm)	1.0000	ppm	0.0008	0.08	1191.0000	1.0000 (ppm)	Y 371.029
V (292.401 nm)	1.0120	ppm	0.0007	0.07	28460.0000	1.0120 (ppm)	Y 371.029
W (207.912 nm)	1.0030	ppm	0.0011	0.11	1891.0000	1.0030 (ppm)	Y 371.029
Zn (202.548 nm)	0.9979	ppm	0.0007	0.07	18280.0000	0.9979 (ppm)	Y 371.029
Zr (343.823 nm)	1.0110	ppm	0.0010	0.10	85040.0000	1.0110 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0830	465200.0000	0.0042	0.39
Y_R 371.029	1.1090	70080.0000	0.0024	0.22

Sample Name: CCB 5129880

Date: 10/19/2018 10:20:15 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0000	16.83	11.4900	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0056	ppm	0.0006	10.33	-1092.0000	0.0056 (ppm)	Y 371.029
As (188.980 nm)	0.0041	ppm	0.0020	49.13	8.5310	0.0041 (ppm)	Y 371.029
B (249.678 nm)	0.0055	ppm	0.0006	10.90	45.1200	0.0055 (ppm)	Y 371.029
Ba (233.527 nm)	0.0003	ppm	0.0003	90.26	67.0200	0.0003 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	44.49	80.4100	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0423	ppm	0.0047	11.06	279.2000	0.0423 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0002	59.88	4.4840	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0003	31.67	-11.8500	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0003	54.81	4.4500	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0002 u	ppm	0.0001	48.69	142.5000	-0.0002 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0012 u	ppm	0.0022	> 100.00	-12.9000	0.0012 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0206 u	ppm	0.0342	> 100.00	-139.4000	-0.0206 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0004	> 100.00	47.9000	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0315 Z	ppm	0.0065	20.47	86.6500 Z	0.0315 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0002	70.86	100.9000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0009	ppm	0.0008	91.78	4.7870	0.0009 (ppm)	Y 371.029
Na (589.592 nm)	0.4784	ppm	0.0177	3.70	4647.0000	0.4784 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0000	0.13	6.2690	0.0009 (ppm)	Y 371.029
P (213.618 nm)	0.0053	ppm	0.0022	41.18	-5.3270	0.0053 (ppm)	Y 371.029
Pb (220.353 nm)	0.0015	ppm	0.0006	38.67	-6.3050	0.0015 (ppm)	Y 371.029
Sb (206.834 nm)	0.0046	ppm	0.0020	43.75	3.3190	0.0046 (ppm)	Y 371.029
Se (196.026 nm)	-0.0036 u	ppm	0.0048	> 100.00	-3.7350	-0.0036 u (ppm)	Y 371.029
Si (251.611 nm)	0.0110	ppm	0.0039	35.77	75.7600	0.0110 (ppm)	Y 371.029
Sn (189.925 nm)	0.0035	ppm	0.0002	5.34	-1.2730	0.0035 (ppm)	Y 371.029
Sr (421.552 nm)	0.0013	ppm	0.0001	5.43	454.2000	0.0013 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	24.69	-78.4400	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0005	> 100.00	-3.7560	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0002	52.10	66.3800	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0005	ppm	0.0003	48.28	-5.9490	0.0005 (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0002	29.33	46.4600	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0000	1.19	32.9300	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0890	467800.0000	0.0007	0.07
Y_R 371.029	1.1110	70170.0000	0.0002	0.02

Sample Name: CCB 5129880

Date: 10/19/2018 10:27:33 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	23.96	15.2700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0045	ppm	0.0001	1.76	-1118.0000	0.0045 (ppm)	Y 371.029
As (188.980 nm)	0.0020	ppm	0.0009	45.49	7.0790	0.0020 (ppm)	Y 371.029
B (249.678 nm)	0.0028	ppm	0.0006	20.25	10.6300	0.0028 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	40.3500	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	87.15	10.4900	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0099	ppm	0.0060	60.10	135.9000	0.0099 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.6760	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0000	0.86	-10.1200	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002	ppm	0.0000	14.31	2.2590	0.0002 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0002	37.15	127.0000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0015 u	ppm	0.0014	92.20	-24.9500	-0.0015 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0957 u	ppm	0.0817	85.37	-229.7000	-0.0957 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0002	> 100.00	40.6300	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0068	ppm	0.0031	46.12	23.3300	0.0068 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000 u	ppm	0.0001	> 100.00	60.5500	0.0000 u (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0003	> 100.00	0.2603	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.2280	ppm	0.0104	4.56	2901.0000	0.2280 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0006	> 100.00	2.5230	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0008 u	ppm	0.0054	> 100.00	-9.4350	0.0008 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0011	ppm	0.0006	58.03	-6.9870	0.0011 (ppm)	Y 371.029
Sb (206.834 nm)	0.0042	ppm	0.0004	9.74	2.9060	0.0042 (ppm)	Y 371.029
Se (196.026 nm)	-0.0006 u	ppm	0.0011	> 100.00	-1.5180	-0.0006 u (ppm)	Y 371.029
Si (251.611 nm)	0.0013	ppm	0.0016	> 100.00	52.0100	0.0013 (ppm)	Y 371.029
Sn (189.925 nm)	0.0003 u	ppm	0.0032	> 100.00	-3.3810	0.0003 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0000	7.50	21.1200	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	44.60	-152.3000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0005	> 100.00	-3.6600	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	57.5200	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0013	ppm	0.0012	98.73	-4.6160	0.0013 (ppm)	Y 371.029
Zn (202.548 nm)	0.0002	ppm	0.0001	38.56	38.2700	0.0002 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	79.44	4.5880	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0820	464800.0000	0.0059	0.55
Y_R 371.029	1.0970	69310.0000	0.0065	0.59

Sample Name: 440-222403-E-6-A

Date: 10/19/2018 10:31:11 AM

Rack:Tube: 3:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	63.37	-66.3700	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0184	ppm	0.0008	4.48	-572.8000	0.0184 (ppm)	Y 371.029
As (188.980 nm)	0.1472	ppm	0.0008	0.54	97.3100	0.1472 (ppm)	Y 371.029
B (249.678 nm)	3.8360	ppm	0.0301	0.78	47890.0000	3.8360 (ppm)	Y 371.029
Ba (233.527 nm)	0.0208	ppm	0.0002	0.92	1703.0000	0.0208 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	7.9330	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	271.9000	ppm	0.1434	0.05	1203000.0000	271.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	29.59	-0.8875	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0000	7.72	-6.0260	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	1.2170	ppm	0.0051	0.42	6490.0000	1.2170 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0001	45.16	-107.1000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0012	ppm	0.0009	76.15	2.6480	0.0012 (ppm)	Y_R 371.029
K (766.491 nm)	17.9000	ppm	0.0642	0.36	21470.0000	17.9000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3458	ppm	0.0010	0.28	24600.0000	0.3458 (ppm)	Y_R 371.029
Mg (279.078 nm)	121.8000	ppm	0.5294	0.43	311700.0000	121.8000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0381	ppm	0.0001	0.29	4515.0000	0.0381 (ppm)	Y 371.029
Mo (204.598 nm)	0.0270	ppm	0.0002	0.63	126.1000	0.0270 (ppm)	Y 371.029
Na (589.592 nm)	758.5000 o	ppm	3.8250	0.50	5290000.0000	758.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0028	ppm	0.0000	0.29	9.3630	0.0028 (ppm)	Y 371.029
P (213.618 nm)	0.0100	ppm	0.0032	31.64	-4.7850	0.0100 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0044 u	ppm	0.0010	21.47	-12.5900	-0.0044 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0010 u	ppm	0.0045	> 100.00	10.5200	0.0010 u (ppm)	Y 371.029
Se (196.026 nm)	0.0058	ppm	0.0015	26.38	1.3930	0.0058 (ppm)	Y 371.029
Si (251.611 nm)	49.2600	ppm	0.2239	0.45	120100.0000	49.2600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0057 u	ppm	0.0052	91.05	-7.1690	-0.0057 u (ppm)	Y 371.029
Sr (421.552 nm)	6.7460	ppm	0.0117	0.17	2709000.0000	6.7460 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	6.04	-485.5000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0029	ppm	0.0013	43.84	-2.5040	0.0029 (ppm)	Y 371.029
V (292.401 nm)	0.0399	ppm	0.0008	2.00	1566.0000	0.0399 (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0001	> 100.00	-13.0400	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0351	ppm	0.0003	0.95	725.7000	0.0351 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0000	49.98	36.3100	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9772	419800.0000	0.0010	0.10
Y_R 371.029	1.0710	67670.0000	0.0059	0.55

Sample Name: 440-222403-E-7-A

Date: 10/19/2018 10:33:35 AM

Rack:Tube: 3:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0091	ppm	0.0001	0.95	318.8000	0.0091 (ppm)	Y 371.029
Al (396.152 nm)	1.8090	ppm	0.0121	0.67	38360.0000	1.8090 (ppm)	Y 371.029
As (188.980 nm)	0.1484	ppm	0.0022	1.48	95.0800	0.1484 (ppm)	Y 371.029
B (249.678 nm)	4.0710	ppm	0.0292	0.72	50810.0000	4.0710 (ppm)	Y 371.029
Ba (233.527 nm)	0.0441	ppm	0.0000	0.10	3544.0000	0.0441 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	24.14	56.3900	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	278.9000	ppm	0.0528	0.02	1234000.0000	278.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	50.50	2.6560	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0005	66.93	-2.1920	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	1.6630	ppm	0.0168	1.01	8869.0000	1.6630 (ppm)	Y 371.029
Cu (324.754 nm)	0.0132	ppm	0.0002	1.76	427.0000	0.0132 (ppm)	Y 371.029
Fe (238.204 nm)	1.6400	ppm	0.0113	0.69	7172.0000	1.6400 (ppm)	Y_R 371.029
K (766.491 nm)	21.4900	ppm	0.0261	0.12	25790.0000	21.4900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3528	ppm	0.0017	0.47	25140.0000	0.3528 (ppm)	Y_R 371.029
Mg (279.078 nm)	132.9000	ppm	0.0666	0.05	340200.0000	132.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0579	ppm	0.0003	0.49	6828.0000	0.0579 (ppm)	Y 371.029
Mo (204.598 nm)	0.0242	ppm	0.0000	0.09	113.4000	0.0242 (ppm)	Y 371.029
Na (589.592 nm)	783.7000 o	ppm	1.2390	0.16	5466000.0000	783.7000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0091	ppm	0.0002	1.90	41.5500	0.0091 (ppm)	Y 371.029
P (213.618 nm)	0.3602	ppm	0.0007	0.21	315.9000	0.3602 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0025 u	ppm	0.0017	67.37	-8.8300	-0.0025 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0024 u	ppm	0.0047	> 100.00	15.9400	0.0024 u (ppm)	Y 371.029
Se (196.026 nm)	0.0062	ppm	0.0056	89.97	1.3700	0.0062 (ppm)	Y 371.029
Si (251.611 nm)	51.2200	ppm	0.2971	0.58	124900.0000	51.2200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0059 u	ppm	0.0045	76.97	-7.2510	-0.0059 u (ppm)	Y 371.029
Sr (421.552 nm)	7.2300	ppm	0.0046	0.06	2903000.0000	7.2300 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0415	ppm	0.0003	0.84	4606.0000	0.0415 (ppm)	Y 371.029
Tl (190.794 nm)	0.0027	ppm	0.0027	> 100.00	-3.2820	0.0027 (ppm)	Y 371.029
V (292.401 nm)	0.0427	ppm	0.0004	0.87	1661.0000	0.0427 (ppm)	Y 371.029
W (207.912 nm)	-0.0007 u	ppm	0.0004	58.40	-12.1700	-0.0007 u (ppm)	Y 371.029
Zn (202.548 nm)	0.2388	ppm	0.0007	0.29	4418.0000	0.2388 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0002	76.40	59.4400	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9839	422800.0000	0.0039	0.39
Y_R 371.029	1.0860	68590.0000	0.0000	0.00

Sample Name: 440-222403-E-8-A

Date: 10/19/2018 10:36:00 AM

Rack:Tube: 3:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	-75.3300	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0805	ppm	0.0004	0.47	864.1000	0.0805 (ppm)	Y 371.029
As (188.980 nm)	0.1401	ppm	0.0073	5.23	95.7100	0.1401 (ppm)	Y 371.029
B (249.678 nm)	3.8570	ppm	0.0118	0.31	48150.0000	3.8570 (ppm)	Y 371.029
Ba (233.527 nm)	0.0240	ppm	0.0001	0.40	1965.0000	0.0240 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0001	53.12	-3.9890	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	361.1000	ppm	4.3390	1.20	1598000.0000	361.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	37.99	-4.5280	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0004	92.01	-5.4470	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.7390	ppm	0.0020	0.27	3947.0000	0.7390 (ppm)	Y 371.029
Cu (324.754 nm)	0.0018	ppm	0.0001	4.91	-107.4000	0.0018 (ppm)	Y 371.029
Fe (238.204 nm)	0.0303	ppm	0.0001	0.44	136.8000	0.0303 (ppm)	Y_R 371.029
K (766.491 nm)	30.4400	ppm	0.3016	0.99	36560.0000	30.4400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4704	ppm	0.0020	0.42	33480.0000	0.4704 (ppm)	Y_R 371.029
Mg (279.078 nm)	172.3000	ppm	0.0628	0.04	441100.0000	172.3000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0159	ppm	0.0001	0.57	2431.0000	0.0159 (ppm)	Y 371.029
Mo (204.598 nm)	0.0291	ppm	0.0000	0.16	135.8000	0.0291 (ppm)	Y 371.029
Na (589.592 nm)	741.8000 o	ppm	7.3500	0.99	5174000.0000	741.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0056	ppm	0.0004	6.94	21.3100	0.0056 (ppm)	Y 371.029
P (213.618 nm)	0.0140	ppm	0.0007	4.84	-2.3870	0.0140 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0065 u	ppm	0.0032	49.54	-14.5600	-0.0065 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0019 u	ppm	0.0007	36.44	3.6770	-0.0019 u (ppm)	Y 371.029
Se (196.026 nm)	0.0097	ppm	0.0076	77.71	3.7150	0.0097 (ppm)	Y 371.029
Si (251.611 nm)	51.0000	ppm	0.0849	0.17	124400.0000	51.0000 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0091 u	ppm	0.0001	1.31	-9.3150	-0.0091 u (ppm)	Y 371.029
Sr (421.552 nm)	9.6440	ppm	0.1293	1.34	3872000.0000	9.6440 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0013	ppm	0.0001	7.17	-453.8000	0.0013 (ppm)	Y 371.029
Tl (190.794 nm)	0.0023	ppm	0.0013	55.69	-3.1650	0.0023 (ppm)	Y 371.029
V (292.401 nm)	0.0168	ppm	0.0001	0.79	1039.0000	0.0168 (ppm)	Y 371.029
W (207.912 nm)	-0.0019 u	ppm	0.0019	99.73	-18.2700	-0.0019 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0624	ppm	0.0001	0.15	1265.0000	0.0624 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0004 u	ppm	0.0001	25.01	20.5300	-0.0004 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9801	421100.0000	0.0022	0.22
Y_R 371.029	1.0650	67300.0000	0.0018	0.17

Sample Name: 440-222403-E-10-A

Date: 10/19/2018 10:38:24 AM

Rack:Tube: 3:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	37.10	-80.6900	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0243	ppm	0.0008	3.49	-447.2000	0.0243 (ppm)	Y 371.029
As (188.980 nm)	1.1370	ppm	0.0175	1.54	742.1000	1.1370 (ppm)	Y 371.029
B (249.678 nm)	3.4050	ppm	0.0296	0.87	42490.0000	3.4050 (ppm)	Y 371.029
Ba (233.527 nm)	0.0280	ppm	0.0002	0.54	2273.0000	0.0280 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0002 u	ppm	0.0001	49.29	488.6000	-0.0002 u (ppm)	Y 371.029
Ca (422.673 nm)	279.5000	ppm	0.1186	0.04	1237000.0000	279.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	3.0100	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0000	4.14	2.8800	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	5.7270	ppm	0.0826	1.44	30530.0000	5.7270 (ppm)	Y 371.029
Cu (324.754 nm)	0.0067	ppm	0.0003	5.15	182.9000	0.0067 (ppm)	Y 371.029
Fe (238.204 nm)	20.3200	ppm	0.0282	0.14	88880.0000	20.3200 (ppm)	Y_R 371.029
K (766.491 nm)	26.8800	ppm	0.0802	0.30	32270.0000	26.8800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4080	ppm	0.0001	0.03	28800.0000	0.4080 (ppm)	Y_R 371.029
Mg (279.078 nm)	127.7000	ppm	1.2720	1.00	326700.0000	127.7000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0315	ppm	0.0004	1.16	6666.0000	0.0315 (ppm)	Y 371.029
Mo (204.598 nm)	0.0294	ppm	0.0002	0.77	138.7000	0.0294 (ppm)	Y 371.029
Na (589.592 nm)	657.4000 o	ppm	2.7830	0.42	4586000.0000	657.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0034	ppm	0.0003	7.45	13.0400	0.0034 (ppm)	Y 371.029
P (213.618 nm)	0.1084	ppm	0.0005	0.45	85.2500	0.1084 (ppm)	Y 371.029
Pb (220.353 nm)	0.0138	ppm	0.0010	7.24	21.2300	0.0138 (ppm)	Y 371.029
Sb (206.834 nm)	0.0264	ppm	0.0017	6.42	75.6500	0.0264 (ppm)	Y 371.029
Se (196.026 nm)	0.0056	ppm	0.0057	> 100.00	-1.8760	0.0056 (ppm)	Y 371.029
Si (251.611 nm)	52.9600	ppm	0.3309	0.62	129100.0000	52.9600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0054 u	ppm	0.0008	14.17	-6.8960	-0.0054 u (ppm)	Y 371.029
Sr (421.552 nm)	7.2400	ppm	0.0155	0.21	2907000.0000	7.2400 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0001	29.59	-507.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0036	ppm	0.0002	6.56	-4.2830	0.0036 (ppm)	Y 371.029
V (292.401 nm)	0.1653	ppm	0.0020	1.22	5139.0000	0.1653 (ppm)	Y 371.029
W (207.912 nm)	-0.0010 u	ppm	0.0008	82.97	-10.4500	-0.0010 u (ppm)	Y 371.029
Zn (202.548 nm)	0.4508	ppm	0.0026	0.58	8150.0000	0.4508 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	58.16	68.9800	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431600.0000	0.0083	0.83
Y_R 371.029	1.0810	68290.0000	0.0077	0.72

Sample Name: 440-222452-A-4-B

Date: 10/19/2018 10:40:48 AM

Rack:Tube: 3:9

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0001	7.52	-57.1300	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	33.6500	ppm	0.2154	0.64	730700.0000	33.6500 (ppm)	Y 371.029
As (188.980 nm)	0.0125	ppm	0.0047	37.85	12.3500	0.0125 (ppm)	Y 371.029
B (249.678 nm)	1.4840	ppm	0.0032	0.21	18520.0000	1.4840 (ppm)	Y 371.029
Ba (233.527 nm)	0.0532	ppm	0.0005	0.97	4257.0000	0.0532 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	15.38	13.4500	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	509.5000	ppm	0.5772	0.11	2254000.0000	509.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-0.5061	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0000 u	ppm	0.0001	> 100.00	-13.3200	0.0000 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0141	ppm	0.0027	19.20	85.4300	0.0141 (ppm)	Y 371.029
Cu (324.754 nm)	0.0176	ppm	0.0001	0.52	373.0000	0.0176 (ppm)	Y 371.029
Fe (238.204 nm)	0.5513	ppm	0.0040	0.72	2399.0000	0.5513 (ppm)	Y_R 371.029
K (766.491 nm)	2.5660	ppm	0.0548	2.14	3041.0000	2.5660 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0109 u	ppm	0.0005	4.17	371.1000	-0.0109 u (ppm)	Y_R 371.029
Mg (279.078 nm)	5.2270	ppm	0.1178	2.25	13390.0000	5.2270 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0530	ppm	0.0003	0.56	5746.0000	0.0530 (ppm)	Y 371.029
Mo (204.598 nm)	0.1575	ppm	0.0012	0.73	735.0000	0.1575 (ppm)	Y 371.029
Na (589.592 nm)	94.4700	ppm	0.2114	0.22	660300.0000	94.4700 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0068	ppm	0.0004	5.57	26.5000	0.0068 (ppm)	Y 371.029
P (213.618 nm)	0.1578	ppm	0.0055	3.52	123.8000	0.1578 (ppm)	Y 371.029
Pb (220.353 nm)	0.0037	ppm	0.0001	2.89	-0.4592	0.0037 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0026 u	ppm	0.0053	> 100.00	-4.0170	-0.0026 u (ppm)	Y 371.029
Se (196.026 nm)	0.0021 u	ppm	0.0048	> 100.00	-3.0070	0.0021 u (ppm)	Y 371.029
Si (251.611 nm)	1.3110	ppm	0.0254	1.94	3281.0000	1.3110 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0024 u	ppm	0.0026	> 100.00	-5.3120	-0.0024 u (ppm)	Y 371.029
Sr (421.552 nm)	0.5194	ppm	0.0021	0.41	216200.0000	0.5194 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0059	ppm	0.0000	0.38	-78.2100	0.0059 (ppm)	Y 371.029
Tl (190.794 nm)	0.0024	ppm	0.0005	19.09	-4.7380	0.0024 (ppm)	Y 371.029
V (292.401 nm)	-0.0145 u	ppm	0.0003	2.34	323.7000	-0.0145 u (ppm)	Y 371.029
W (207.912 nm)	0.0035	ppm	0.0024	67.06	-11.6500	0.0035 (ppm)	Y 371.029
Zn (202.548 nm)	0.0262	ppm	0.0003	0.96	549.8000	0.0262 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 u	ppm	0.0001	23.32	39.1400	-0.0005 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0210	438700.0000	0.0013	0.13
Y_R 371.029	1.1060	69860.0000	0.0139	1.25

Sample Name: 440-222452-A-4-C MS

Date: 10/19/2018 10:43:12 AM

Rack:Tube: 3:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2615	ppm	0.0063	2.39	10920.0000	0.2615 (ppm)	Y 371.029
Al (396.152 nm)	33.9500	ppm	0.0796	0.23	737600.0000	33.9500 (ppm)	Y 371.029
As (188.980 nm)	0.5398	ppm	0.0050	0.92	369.5000	0.5398 (ppm)	Y 371.029
B (249.678 nm)	1.9820	ppm	0.0131	0.66	24680.0000	1.9820 (ppm)	Y 371.029
Ba (233.527 nm)	0.5369	ppm	0.0034	0.64	42390.0000	0.5369 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5211	ppm	0.0030	0.58	95990.0000	0.5211 (ppm)	Y 371.029
Ca (422.673 nm)	501.4000	ppm	3.8050	0.76	2218000.0000	501.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4669	ppm	0.0041	0.88	10830.0000	0.4669 (ppm)	Y 371.029
Co (228.615 nm)	0.4918	ppm	0.0028	0.56	6654.0000	0.4918 (ppm)	Y 371.029
Cr (205.560 nm)	0.5107	ppm	0.0053	1.04	2731.0000	0.5107 (ppm)	Y 371.029
Cu (324.754 nm)	0.5874	ppm	0.0005	0.08	23100.0000	0.5874 (ppm)	Y 371.029
Fe (238.204 nm)	1.0270	ppm	0.0017	0.16	4478.0000	1.0270 (ppm)	Y_R 371.029
K (766.491 nm)	7.6270	ppm	0.0252	0.33	9127.0000	7.6270 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5042	ppm	0.0009	0.18	35280.0000	0.5042 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.5660	ppm	0.0205	0.27	19380.0000	7.5660 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5530	ppm	0.0039	0.70	57650.0000	0.5530 (ppm)	Y 371.029
Mo (204.598 nm)	0.6619	ppm	0.0005	0.08	3075.0000	0.6619 (ppm)	Y 371.029
Na (589.592 nm)	97.0900	ppm	0.0172	0.02	678600.0000	97.0900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4887	ppm	0.0025	0.52	2496.0000	0.4887 (ppm)	Y 371.029
P (213.618 nm)	0.6864	ppm	0.0050	0.73	578.3000	0.6864 (ppm)	Y 371.029
Pb (220.353 nm)	0.4932	ppm	0.0034	0.70	941.4000	0.4932 (ppm)	Y 371.029
Sb (206.834 nm)	0.5362	ppm	0.0024	0.44	548.9000	0.5362 (ppm)	Y 371.029
Se (196.026 nm)	0.5056	ppm	0.0040	0.78	379.6000	0.5056 (ppm)	Y 371.029
Si (251.611 nm)	3.8900	ppm	0.0101	0.26	9654.0000	3.8900 (ppm)	Y 371.029
Sn (189.925 nm)	0.4855	ppm	0.0087	1.78	314.1000	0.4855 (ppm)	Y 371.029
Sr (421.552 nm)	1.0180	ppm	0.0007	0.07	415900.0000	1.0180 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5204	ppm	0.0047	0.90	63520.0000	0.5204 (ppm)	Y 371.029
Tl (190.794 nm)	0.4780	ppm	0.0016	0.33	562.1000	0.4780 (ppm)	Y 371.029
V (292.401 nm)	0.5055	ppm	0.0036	0.71	14910.0000	0.5055 (ppm)	Y 371.029
W (207.912 nm)	0.5115	ppm	0.0025	0.49	949.5000	0.5115 (ppm)	Y 371.029
Zn (202.548 nm)	0.5136	ppm	0.0045	0.87	9472.0000	0.5136 (ppm)	Y 371.029
Zr (343.823 nm)	0.5085	ppm	0.0001	0.03	42870.0000	0.5085 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0370	445400.0000	0.0132	1.28
Y_R 371.029	1.0830	68380.0000	0.0024	0.23

Sample Name: 440-222452-A-4-D MSD

Date: 10/19/2018 10:45:36 AM

Rack:Tube: 3:11

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2225	ppm	0.0038	1.69	9300.0000	0.2225 (ppm)	Y 371.029
Al (396.152 nm)	34.1400	ppm	0.1954	0.57	741700.0000	34.1400 (ppm)	Y 371.029
As (188.980 nm)	0.5450	ppm	0.0083	1.53	373.0000	0.5450 (ppm)	Y 371.029
B (249.678 nm)	1.9970	ppm	0.0012	0.06	24870.0000	1.9970 (ppm)	Y 371.029
Ba (233.527 nm)	0.5489	ppm	0.0054	0.99	43340.0000	0.5489 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5285	ppm	0.0014	0.26	97370.0000	0.5285 (ppm)	Y 371.029
Ca (422.673 nm)	497.2000	ppm	3.1870	0.64	2200000.0000	497.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4774	ppm	0.0023	0.48	11080.0000	0.4774 (ppm)	Y 371.029
Co (228.615 nm)	0.5014	ppm	0.0023	0.45	6784.0000	0.5014 (ppm)	Y 371.029
Cr (205.560 nm)	0.5182	ppm	0.0016	0.31	2771.0000	0.5182 (ppm)	Y 371.029
Cu (324.754 nm)	0.6023	ppm	0.0017	0.28	23700.0000	0.6023 (ppm)	Y 371.029
Fe (238.204 nm)	1.0480	ppm	0.0032	0.30	4571.0000	1.0480 (ppm)	Y_R 371.029
K (766.491 nm)	7.7030	ppm	0.0463	0.60	9217.0000	7.7030 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5104	ppm	0.0013	0.26	35690.0000	0.5104 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.5880	ppm	0.0587	0.77	19440.0000	7.5880 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5604	ppm	0.0013	0.23	58410.0000	0.5604 (ppm)	Y 371.029
Mo (204.598 nm)	0.6715	ppm	0.0064	0.95	3120.0000	0.6715 (ppm)	Y 371.029
Na (589.592 nm)	97.0600	ppm	0.1731	0.18	678400.0000	97.0600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4958	ppm	0.0017	0.33	2532.0000	0.4958 (ppm)	Y 371.029
P (213.618 nm)	0.6934	ppm	0.0021	0.30	584.1000	0.6934 (ppm)	Y 371.029
Pb (220.353 nm)	0.5030	ppm	0.0011	0.23	960.2000	0.5030 (ppm)	Y 371.029
Sb (206.834 nm)	0.5567	ppm	0.0045	0.81	570.0000	0.5567 (ppm)	Y 371.029
Se (196.026 nm)	0.5182	ppm	0.0035	0.68	389.2000	0.5182 (ppm)	Y 371.029
Si (251.611 nm)	3.9630	ppm	0.0102	0.26	9831.0000	3.9630 (ppm)	Y 371.029
Sn (189.925 nm)	0.4937	ppm	0.0010	0.19	319.4000	0.4937 (ppm)	Y 371.029
Sr (421.552 nm)	1.0210	ppm	0.0057	0.56	417200.0000	1.0210 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5306	ppm	0.0018	0.33	64780.0000	0.5306 (ppm)	Y 371.029
Tl (190.794 nm)	0.4910	ppm	0.0010	0.21	577.8000	0.4910 (ppm)	Y 371.029
V (292.401 nm)	0.5132	ppm	0.0006	0.11	15120.0000	0.5132 (ppm)	Y 371.029
W (207.912 nm)	0.5186	ppm	0.0053	1.02	962.8000	0.5186 (ppm)	Y 371.029
Zn (202.548 nm)	0.5055	ppm	0.0028	0.56	9328.0000	0.5055 (ppm)	Y 371.029
Zr (343.823 nm)	0.5227	ppm	0.0021	0.41	44070.0000	0.5227 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0670	458500.0000	0.0198	1.85
Y_R 371.029	1.1050	69820.0000	0.0082	0.74

Sample Name: 440-222282-C-1-A

Date: 10/19/2018 10:48:00 AM

Rack:Tube: 3:12

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	54.42	-63.5300	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0490	ppm	0.0091	18.58	200.3000	0.0490 (ppm)	Y 371.029
As (188.980 nm)	0.0575	ppm	0.0041	7.16	44.4900	0.0575 (ppm)	Y 371.029
B (249.678 nm)	2.4390	ppm	0.0217	0.89	30430.0000	2.4390 (ppm)	Y 371.029
Ba (233.527 nm)	0.0201	ppm	0.0000	0.18	1645.0000	0.0201 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	57.56	78.4000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	272.5000	ppm	0.4414	0.16	1206000.0000	272.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0005	> 100.00	10.2100	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0135	ppm	0.0001	0.70	166.8000	0.0135 (ppm)	Y 371.029
Cr (205.560 nm)	0.0051	ppm	0.0003	5.07	32.7400	0.0051 (ppm)	Y 371.029
Cu (324.754 nm)	0.0008	ppm	0.0001	11.11	-64.4100	0.0008 (ppm)	Y 371.029
Fe (238.204 nm)	0.9136	ppm	0.0054	0.59	3995.0000	0.9136 (ppm)	Y_R 371.029
K (766.491 nm)	23.0700	ppm	0.1445	0.63	27680.0000	23.0700 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3105	ppm	0.0008	0.26	22190.0000	0.3105 (ppm)	Y_R 371.029
Mg (279.078 nm)	120.5000	ppm	0.4158	0.35	308500.0000	120.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2564	ppm	0.0008	0.30	27260.0000	0.2564 (ppm)	Y 371.029
Mo (204.598 nm)	0.2471	ppm	0.0042	1.69	1147.0000	0.2471 (ppm)	Y 371.029
Na (589.592 nm)	976.6000 o	ppm	2.3250	0.24	6812000.0000	976.6000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0203	ppm	0.0004	2.06	98.9900	0.0203 (ppm)	Y 371.029
P (213.618 nm)	0.3435	ppm	0.0020	0.60	297.3000	0.3435 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0046 u	ppm	0.0020	44.77	-13.1300	-0.0046 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0075 u	ppm	0.0005	6.61	-12.2700	-0.0075 u (ppm)	Y 371.029
Se (196.026 nm)	0.0053	ppm	0.0038	72.29	1.0090	0.0053 (ppm)	Y 371.029
Si (251.611 nm)	37.7300	ppm	0.2588	0.69	92020.0000	37.7300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0051 u	ppm	0.0017	33.49	-6.7580	-0.0051 u (ppm)	Y 371.029
Sr (421.552 nm)	7.6220	ppm	0.0018	0.02	3060000.0000	7.6220 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0007	ppm	0.0000	6.11	-431.8000	0.0007 (ppm)	Y 371.029
Tl (190.794 nm)	0.0016 u	ppm	0.0037	> 100.00	-3.3580	0.0016 u (ppm)	Y 371.029
V (292.401 nm)	0.0238	ppm	0.0000	0.14	1063.0000	0.0238 (ppm)	Y 371.029
W (207.912 nm)	-0.0011 u	ppm	0.0007	65.99	-15.1200	-0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0144	ppm	0.0001	0.99	376.8000	0.0144 (ppm)	Y 371.029
Zr (343.823 nm)	0.0011	ppm	0.0001	8.67	129.9000	0.0011 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9444	405800.0000	0.0063	0.66
Y_R 371.029	1.0450	66020.0000	0.0037	0.36

Sample Name: 440-222282-C-2-A

Date: 10/19/2018 10:50:25 AM

Rack:Tube: 3:13

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0003	> 100.00	-62.9000	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0220	ppm	0.0013	6.11	-412.1000	0.0220 (ppm)	Y 371.029
As (188.980 nm)	0.1217	ppm	0.0054	4.42	87.9600	0.1217 (ppm)	Y 371.029
B (249.678 nm)	2.4620	ppm	0.0223	0.91	30720.0000	2.4620 (ppm)	Y 371.029
Ba (233.527 nm)	0.0198	ppm	0.0006	2.84	1623.0000	0.0198 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	27.77	21.9500	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	276.4000	ppm	0.4223	0.15	1223000.0000	276.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	0.4412	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0093	ppm	0.0002	1.75	110.1000	0.0093 (ppm)	Y 371.029
Cr (205.560 nm)	0.0596	ppm	0.0001	0.09	323.6000	0.0596 (ppm)	Y 371.029
Cu (324.754 nm)	0.0094	ppm	0.0001	1.33	274.8000	0.0094 (ppm)	Y 371.029
Fe (238.204 nm)	0.0962	ppm	0.0018	1.90	418.8000	0.0962 (ppm)	Y_R 371.029
K (766.491 nm)	23.7300	ppm	0.0106	0.04	28470.0000	23.7300 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3192	ppm	0.0026	0.82	22800.0000	0.3192 (ppm)	Y_R 371.029
Mg (279.078 nm)	120.2000	ppm	3.3580	2.79	307800.0000	120.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2018	ppm	0.0009	0.42	21490.0000	0.2018 (ppm)	Y 371.029
Mo (204.598 nm)	0.1917	ppm	0.0016	0.83	890.0000	0.1917 (ppm)	Y 371.029
Na (589.592 nm)	976.5000 o	ppm	1.1430	0.12	6811000.0000	976.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0150	ppm	0.0008	5.40	71.8400	0.0150 (ppm)	Y 371.029
P (213.618 nm)	0.0378	ppm	0.0022	5.85	17.3600	0.0378 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0024 u	ppm	0.0016	66.39	-8.8840	-0.0024 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0056 u	ppm	0.0022	40.48	-8.8820	-0.0056 u (ppm)	Y 371.029
Se (196.026 nm)	0.0143	ppm	0.0082	57.31	7.8980	0.0143 (ppm)	Y 371.029
Si (251.611 nm)	38.0500	ppm	0.1818	0.48	92810.0000	38.0500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0078 u	ppm	0.0017	21.68	-8.5330	-0.0078 u (ppm)	Y 371.029
Sr (421.552 nm)	7.7300	ppm	0.0486	0.63	3104000.0000	7.7300 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	2.06	-479.0000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0027	ppm	0.0012	44.59	-3.2130	0.0027 (ppm)	Y 371.029
V (292.401 nm)	0.0580	ppm	0.0006	0.96	2044.0000	0.0580 (ppm)	Y 371.029
W (207.912 nm)	-0.0014 u	ppm	0.0006	40.90	-15.8100	-0.0014 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0196	ppm	0.0003	1.65	471.9000	0.0196 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0001	27.72	64.2100	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9362	402200.0000	0.0071	0.76
Y_R 371.029	1.0430	65870.0000	0.0184	1.76

Sample Name: CCV 5129881

Date: 10/19/2018 10:52:49 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5018	ppm	0.0011	0.22	21140.0000	0.5018 (ppm)	Y 371.029
Al (396.152 nm)	1.0360	ppm	0.0008	0.07	22090.0000	1.0360 (ppm)	Y 371.029
As (188.980 nm)	1.0020	ppm	0.0056	0.56	684.0000	1.0020 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0032	0.31	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	1.0140	ppm	0.0072	0.71	79980.0000	1.0140 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0100	ppm	0.0019	0.19	186000.0000	1.0100 (ppm)	Y 371.029
Ca (422.673 nm)	5.1650	ppm	0.0218	0.42	22940.0000	5.1650 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0110	ppm	0.0007	0.07	23460.0000	1.0110 (ppm)	Y 371.029
Co (228.615 nm)	1.0180	ppm	0.0015	0.15	13780.0000	1.0180 (ppm)	Y 371.029
Cr (205.560 nm)	1.0180	ppm	0.0011	0.10	5423.0000	1.0180 (ppm)	Y 371.029
Cu (324.754 nm)	1.0130	ppm	0.0010	0.10	40560.0000	1.0130 (ppm)	Y 371.029
Fe (238.204 nm)	1.0080	ppm	0.0014	0.14	4391.0000	1.0080 (ppm)	Y_R 371.029
K (766.491 nm)	10.1300	ppm	0.0899	0.89	12060.0000	10.1300 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9968	ppm	0.0058	0.58	67630.0000	0.9968 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1900	ppm	0.0725	1.40	13290.0000	5.1900 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0110	ppm	0.0010	0.10	105000.0000	1.0110 (ppm)	Y 371.029
Mo (204.598 nm)	1.0180	ppm	0.0043	0.42	4723.0000	1.0180 (ppm)	Y 371.029
Na (589.592 nm)	11.1600 Q	ppm	0.0543	0.49	79240.0000 Q	11.1600 Q (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0120	ppm	0.0024	0.23	5188.0000	1.0120 (ppm)	Y 371.029
P (213.618 nm)	0.9973	ppm	0.0027	0.27	847.8000	0.9973 (ppm)	Y 371.029
Pb (220.353 nm)	1.0160	ppm	0.0017	0.17	1946.0000	1.0160 (ppm)	Y 371.029
Sb (206.834 nm)	1.0040	ppm	0.0179	1.79	1029.0000	1.0040 (ppm)	Y 371.029
Se (196.026 nm)	0.9981	ppm	0.0019	0.19	757.3000	0.9981 (ppm)	Y 371.029
Si (251.611 nm)	5.0480	ppm	0.0793	1.57	12530.0000	5.0480 (ppm)	Y 371.029
Sn (189.925 nm)	1.0170	ppm	0.0042	0.41	661.8000	1.0170 (ppm)	Y 371.029
Sr (421.552 nm)	1.0130	ppm	0.0040	0.39	406000.0000	1.0130 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0140	ppm	0.0008	0.08	125100.0000	1.0140 (ppm)	Y 371.029
Tl (190.794 nm)	1.0160	ppm	0.0004	0.04	1211.0000	1.0160 (ppm)	Y 371.029
V (292.401 nm)	1.0200	ppm	0.0009	0.09	28680.0000	1.0200 (ppm)	Y 371.029
W (207.912 nm)	1.0140	ppm	0.0064	0.63	1912.0000	1.0140 (ppm)	Y 371.029
Zn (202.548 nm)	1.0130	ppm	0.0000	0.00	18560.0000	1.0130 (ppm)	Y 371.029
Zr (343.823 nm)	1.0130	ppm	0.0015	0.14	85250.0000	1.0130 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440400.0000	0.0066	0.65
Y_R 371.029	1.0310	65150.0000	0.0020	0.19

Sample Name: CCB 5129880

Date: 10/19/2018 10:55:12 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0002	19.30	34.6000	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	0.0030	ppm	0.0012	40.84	-1148.0000	0.0030 (ppm)	Y 371.029
As (188.980 nm)	0.0050	ppm	0.0056	> 100.00	9.1000	0.0050 (ppm)	Y 371.029
B (249.678 nm)	0.0053	ppm	0.0014	27.15	42.4900	0.0053 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0003	59.74	79.0300	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	54.25	92.0000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0663	ppm	0.0041	6.13	385.2000	0.0663 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0003	55.67	9.0360	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0001	12.60	-9.3930	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0004	46.59	5.7490	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0004	> 100.00	147.3000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0021 u	ppm	0.0013	60.97	-27.5400	-0.0021 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.1073 u	ppm	0.0299	27.89	-243.6000	-0.1073 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0009	ppm	0.0011	> 100.00	109.1000	0.0009 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0283 Z	ppm	0.0098	34.62	78.3900 Z	0.0283 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0002	43.46	116.7000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0005	33.22	7.0810	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.8084 Z	ppm	0.0128	1.58	6949.0000 Z	0.8084 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0008	ppm	0.0002	28.64	6.1520	0.0008 (ppm)	Y 371.029
P (213.618 nm)	0.0007 u	ppm	0.0025	> 100.00	-9.5340	0.0007 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0018	ppm	0.0000	0.18	-5.6550	0.0018 (ppm)	Y 371.029
Sb (206.834 nm)	0.0052	ppm	0.0049	95.65	3.9000	0.0052 (ppm)	Y 371.029
Se (196.026 nm)	0.0015	ppm	0.0021	> 100.00	0.1320	0.0015 (ppm)	Y 371.029
Si (251.611 nm)	0.0120	ppm	0.0041	34.37	78.0900	0.0120 (ppm)	Y 371.029
Sn (189.925 nm)	0.0025	ppm	0.0032	> 100.00	-1.9290	0.0025 (ppm)	Y 371.029
Sr (421.552 nm)	0.0011	ppm	0.0000	1.96	402.9000	0.0011 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	22.55	-77.0900	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0016 u	ppm	0.0001	7.14	-5.6790	-0.0016 u (ppm)	Y 371.029
V (292.401 nm)	0.0008	ppm	0.0004	45.22	79.8100	0.0008 (ppm)	Y 371.029
W (207.912 nm)	0.0015	ppm	0.0014	93.16	-4.2100	0.0015 (ppm)	Y 371.029
Zn (202.548 nm)	0.0006	ppm	0.0003	40.62	45.6100	0.0006 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0003	83.52	19.7300	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0330	443700.0000	0.0059	0.57
Y_R 371.029	1.0310	65100.0000	0.0142	1.38

Sample Name: CCV 5129881

Date: 10/19/2018 11:21:57 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5008	ppm	0.0070	1.41	21090.0000	0.5008 (ppm)	Y 371.029
Al (396.152 nm)	1.0260	ppm	0.0163	1.59	21860.0000	1.0260 (ppm)	Y 371.029
As (188.980 nm)	0.9954	ppm	0.0156	1.56	679.3000	0.9954 (ppm)	Y 371.029
B (249.678 nm)	1.0070	ppm	0.0163	1.62	12460.0000	1.0070 (ppm)	Y 371.029
Ba (233.527 nm)	1.0170	ppm	0.0007	0.07	80180.0000	1.0170 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0040	ppm	0.0126	1.26	185000.0000	1.0040 (ppm)	Y 371.029
Ca (422.673 nm)	5.0820	ppm	0.0155	0.31	22570.0000	5.0820 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0030	ppm	0.0192	1.92	23280.0000	1.0030 (ppm)	Y 371.029
Co (228.615 nm)	1.0090	ppm	0.0199	1.97	13660.0000	1.0090 (ppm)	Y 371.029
Cr (205.560 nm)	1.0110	ppm	0.0106	1.05	5387.0000	1.0110 (ppm)	Y 371.029
Cu (324.754 nm)	1.0040	ppm	0.0171	1.70	40190.0000	1.0040 (ppm)	Y 371.029
Fe (238.204 nm)	1.0160	ppm	0.0011	0.11	4424.0000	1.0160 (ppm)	Y_R 371.029
K (766.491 nm)	10.1500	ppm	0.0017	0.02	12100.0000	10.1500 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0040	ppm	0.0002	0.02	68100.0000	1.0040 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1300	ppm	0.0108	0.21	13130.0000	5.1300 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0060	ppm	0.0110	1.09	104500.0000	1.0060 (ppm)	Y 371.029
Mo (204.598 nm)	1.0100	ppm	0.0152	1.51	4685.0000	1.0100 (ppm)	Y 371.029
Na (589.592 nm)	10.2700	ppm	0.0030	0.03	72990.0000	10.2700 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0070	ppm	0.0125	1.24	5160.0000	1.0070 (ppm)	Y 371.029
P (213.618 nm)	0.9942	ppm	0.0114	1.15	845.5000	0.9942 (ppm)	Y 371.029
Pb (220.353 nm)	1.0150	ppm	0.0114	1.12	1943.0000	1.0150 (ppm)	Y 371.029
Sb (206.834 nm)	0.9861	ppm	0.0233	2.37	1010.0000	0.9861 (ppm)	Y 371.029
Se (196.026 nm)	0.9976	ppm	0.0115	1.16	756.8000	0.9976 (ppm)	Y 371.029
Si (251.611 nm)	4.9470	ppm	0.1457	2.95	12280.0000	4.9470 (ppm)	Y 371.029
Sn (189.925 nm)	1.0120	ppm	0.0065	0.64	658.5000	1.0120 (ppm)	Y 371.029
Sr (421.552 nm)	1.0240	ppm	0.0050	0.49	410400.0000	1.0240 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0070	ppm	0.0121	1.20	124300.0000	1.0070 (ppm)	Y 371.029
Tl (190.794 nm)	1.0130	ppm	0.0079	0.78	1207.0000	1.0130 (ppm)	Y 371.029
V (292.401 nm)	1.0150	ppm	0.0105	1.03	28560.0000	1.0150 (ppm)	Y 371.029
W (207.912 nm)	1.0110	ppm	0.0176	1.74	1906.0000	1.0110 (ppm)	Y 371.029
Zn (202.548 nm)	1.0130	ppm	0.0105	1.04	18550.0000	1.0130 (ppm)	Y 371.029
Zr (343.823 nm)	1.0060	ppm	0.0123	1.22	84680.0000	1.0060 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0210	438900.0000	0.0062	0.61
Y_R 371.029	1.0220	64580.0000	0.0060	0.59

Sample Name: CCB 5129880

Date: 10/19/2018 11:24:21 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0002	91.95	10.2300	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0017	ppm	0.0006	34.94	-1177.0000	0.0017 (ppm)	Y 371.029
As (188.980 nm)	0.0041	ppm	0.0002	5.33	8.5000	0.0041 (ppm)	Y 371.029
B (249.678 nm)	0.0022	ppm	0.0001	4.40	3.5690	0.0022 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	38.31	81.2000	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	47.96	97.3500	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0085	ppm	0.0010	12.32	129.6000	0.0085 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0001	27.68	8.4950	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0002	36.38	-13.6000	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0014	ppm	0.0004	28.85	8.8240	0.0014 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0001	37.55	137.2000	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0011	ppm	0.0010	89.71	-13.2700	0.0011 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0924 u	ppm	0.0465	50.32	-225.7000	-0.0924 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0007 u	ppm	0.0014	> 100.00	98.3100	0.0007 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0055	ppm	0.0038	69.32	20.0800	0.0055 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0002	44.37	119.7000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0006	39.30	7.0740	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.1304	ppm	0.0075	5.74	2221.0000	0.1304 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004 u	ppm	0.0008	> 100.00	3.7220	0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0000 u	ppm	0.0008	> 100.00	-10.1800	0.0000 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0004	42.09	-7.4470	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0033	ppm	0.0037	> 100.00	1.9730	0.0033 (ppm)	Y 371.029
Se (196.026 nm)	-0.0024 u	ppm	0.0014	58.02	-2.8020	-0.0024 u (ppm)	Y 371.029
Si (251.611 nm)	0.0042	ppm	0.0007	17.19	59.3000	0.0042 (ppm)	Y 371.029
Sn (189.925 nm)	0.0012 u	ppm	0.0018	> 100.00	-2.7720	0.0012 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0000	9.13	23.5200	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0002	26.62	-65.9300	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0020	ppm	0.0004	18.75	-1.2720	0.0020 (ppm)	Y 371.029
V (292.401 nm)	0.0007	ppm	0.0001	16.66	75.8100	0.0007 (ppm)	Y 371.029
W (207.912 nm)	0.0015	ppm	0.0005	30.78	-4.0510	0.0015 (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0003	38.64	46.7800	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	38.81	33.1700	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440300.0000	0.0064	0.62
Y_R 371.029	1.0220	64540.0000	0.0040	0.39

Sample Name: 440-221550-c-8-b@5

Date: 10/19/2018 11:27:09 AM

Rack:Tube: 1:11

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	14.70	-27.4700	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0154	ppm	0.0006	4.07	-845.8000	0.0154 (ppm)	Y 371.029
As (188.980 nm)	0.0062	ppm	0.0015	23.89	9.6910	0.0062 (ppm)	Y 371.029
B (249.678 nm)	0.5363	ppm	0.0043	0.80	6674.0000	0.5363 (ppm)	Y 371.029
Ba (233.527 nm)	0.0044	ppm	0.0001	1.23	394.9000	0.0044 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0000	17.10	53.3500	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	71.5100	ppm	0.1652	0.23	316500.0000	71.5100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	6.36	0.5482	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0000	13.38	-16.3200	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0004	36.82	8.3070	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0003	29.40	40.1200	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0007 u	ppm	0.0008	> 100.00	-19.3600	-0.0007 u (ppm)	Y_R 371.029
K (766.491 nm)	0.9590	ppm	0.0349	3.64	1050.0000	0.9590 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0254	ppm	0.0010	4.11	1945.0000	0.0254 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.4920	ppm	0.0367	0.43	21740.0000	8.4920 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0001	52.54	117.3000	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0007 u	ppm	0.0001	8.12	-2.9040	-0.0007 u (ppm)	Y 371.029
Na (589.592 nm)	135.0000	ppm	0.4207	0.31	942900.0000	135.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0003 u	ppm	0.0001	37.18	-1.0200	-0.0003 u (ppm)	Y 371.029
P (213.618 nm)	0.0014 u	ppm	0.0044	> 100.00	-9.8320	0.0014 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0004 u	ppm	0.0000	5.27	-9.0870	-0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0002 u	ppm	0.0081	> 100.00	-0.9013	0.0002 u (ppm)	Y 371.029
Se (196.026 nm)	0.0069	ppm	0.0055	79.25	3.6990	0.0069 (ppm)	Y 371.029
Si (251.611 nm)	6.9720	ppm	0.0302	0.43	17040.0000	6.9720 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0012 u	ppm	0.0021	> 100.00	-4.3970	-0.0012 u (ppm)	Y 371.029
Sr (421.552 nm)	0.6801	ppm	0.0017	0.25	273700.0000	0.6801 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	14.80	-195.7000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0011	> 100.00	-3.7710	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0004	71.61	170.4000	0.0005 (ppm)	Y 371.029
W (207.912 nm)	-0.0003 u	ppm	0.0003	> 100.00	-9.1590	-0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0007 u	ppm	0.0003	41.00	30.6500	-0.0007 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	12.39	21.2000	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9956	427800.0000	0.0020	0.20
Y_R 371.029	1.0530	66520.0000	0.0053	0.51

Sample Name: 440-221550-c-9-b@5

Date: 10/19/2018 11:29:33 AM

Rack:Tube: 1:12

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	30.09	-28.4100	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0098	ppm	0.0002	1.80	-966.8000	0.0098 (ppm)	Y 371.029
As (188.980 nm)	0.0077	ppm	0.0037	47.82	10.7400	0.0077 (ppm)	Y 371.029
B (249.678 nm)	0.5320	ppm	0.0039	0.73	6620.0000	0.5320 (ppm)	Y 371.029
Ba (233.527 nm)	0.0043	ppm	0.0000	1.11	385.6000	0.0043 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	18.33	18.8500	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	70.4700	ppm	0.0954	0.14	311900.0000	70.4700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-0.9996	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0000	2.26	-10.2500	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0015	ppm	0.0002	11.91	10.7000	0.0015 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0003	25.35	41.9000	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0011 u	ppm	0.0012	> 100.00	-21.3600	-0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	0.9545	ppm	0.0180	1.89	1044.0000	0.9545 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0234	ppm	0.0002	0.65	1804.0000	0.0234 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.5750	ppm	0.0269	0.31	21950.0000	8.5750 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0045	ppm	0.0000	0.55	567.6000	0.0045 (ppm)	Y 371.029
Mo (204.598 nm)	0.0010	ppm	0.0002	20.40	4.9670	0.0010 (ppm)	Y 371.029
Na (589.592 nm)	133.2000	ppm	0.0780	0.06	930200.0000	133.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0008	> 100.00	1.1530	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0084	ppm	0.0053	62.65	-3.4630	0.0084 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0011 u	ppm	0.0001	10.33	-10.4800	-0.0011 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0046 u	ppm	0.0065	> 100.00	-5.8880	-0.0046 u (ppm)	Y 371.029
Se (196.026 nm)	0.0052	ppm	0.0023	43.69	2.3800	0.0052 (ppm)	Y 371.029
Si (251.611 nm)	6.9140	ppm	0.0270	0.39	16900.0000	6.9140 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0005 u	ppm	0.0021	> 100.00	-3.9340	-0.0005 u (ppm)	Y 371.029
Sr (421.552 nm)	0.6711	ppm	0.0005	0.08	270100.0000	0.6711 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0000	4.47	-209.8000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0006	ppm	0.0001	13.38	-3.4540	0.0006 (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0003	> 100.00	156.0000	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0006 u	ppm	0.0013	> 100.00	-9.7020	-0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0005	ppm	0.0002	45.25	52.9300	0.0005 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	27.32	12.7600	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0160	436400.0000	0.0042	0.41
Y_R 371.029	1.0490	66240.0000	0.0045	0.43

Sample Name: CCV 5129881

Date: 10/19/2018 11:31:57 AM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5013	ppm	0.0026	0.51	21110.0000	0.5013 (ppm)	Y 371.029
Al (396.152 nm)	1.0380	ppm	0.0070	0.67	22120.0000	1.0380 (ppm)	Y 371.029
As (188.980 nm)	1.0040	ppm	0.0066	0.66	685.2000	1.0040 (ppm)	Y 371.029
B (249.678 nm)	1.0130	ppm	0.0068	0.67	12530.0000	1.0130 (ppm)	Y 371.029
Ba (233.527 nm)	1.0160	ppm	0.0338	3.32	80150.0000	1.0160 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0070	ppm	0.0039	0.39	185400.0000	1.0070 (ppm)	Y 371.029
Ca (422.673 nm)	5.0500	ppm	0.0017	0.03	22430.0000	5.0500 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0080	ppm	0.0011	0.10	23390.0000	1.0080 (ppm)	Y 371.029
Co (228.615 nm)	1.0130	ppm	0.0001	0.01	13710.0000	1.0130 (ppm)	Y 371.029
Cr (205.560 nm)	1.0130	ppm	0.0019	0.19	5397.0000	1.0130 (ppm)	Y 371.029
Cu (324.754 nm)	1.0110	ppm	0.0037	0.37	40450.0000	1.0110 (ppm)	Y 371.029
Fe (238.204 nm)	1.0030	ppm	0.0020	0.20	4366.0000	1.0030 (ppm)	Y_R 371.029
K (766.491 nm)	10.0800	ppm	0.0265	0.26	12000.0000	10.0800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9915	ppm	0.0040	0.40	67270.0000	0.9915 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1340	ppm	0.1591	3.10	13140.0000	5.1340 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0080	ppm	0.0024	0.24	104700.0000	1.0080 (ppm)	Y 371.029
Mo (204.598 nm)	1.0120	ppm	0.0076	0.75	4697.0000	1.0120 (ppm)	Y 371.029
Na (589.592 nm)	10.1900	ppm	0.0407	0.40	72420.0000	10.1900 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0110	ppm	0.0014	0.14	5181.0000	1.0110 (ppm)	Y 371.029
P (213.618 nm)	1.0000	ppm	0.0109	1.09	851.0000	1.0000 (ppm)	Y 371.029
Pb (220.353 nm)	1.0140	ppm	0.0021	0.21	1943.0000	1.0140 (ppm)	Y 371.029
Sb (206.834 nm)	1.0000	ppm	0.0201	2.01	1025.0000	1.0000 (ppm)	Y 371.029
Se (196.026 nm)	0.9960	ppm	0.0063	0.63	755.7000	0.9960 (ppm)	Y 371.029
Si (251.611 nm)	5.0230	ppm	0.1112	2.21	12460.0000	5.0230 (ppm)	Y 371.029
Sn (189.925 nm)	1.0120	ppm	0.0031	0.31	658.7000	1.0120 (ppm)	Y 371.029
Sr (421.552 nm)	1.0130	ppm	0.0002	0.02	406300.0000	1.0130 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0110	ppm	0.0034	0.34	124800.0000	1.0110 (ppm)	Y 371.029
Tl (190.794 nm)	1.0130	ppm	0.0005	0.05	1207.0000	1.0130 (ppm)	Y 371.029
V (292.401 nm)	1.0150	ppm	0.0022	0.22	28560.0000	1.0150 (ppm)	Y 371.029
W (207.912 nm)	1.0080	ppm	0.0060	0.59	1901.0000	1.0080 (ppm)	Y 371.029
Zn (202.548 nm)	1.0100	ppm	0.0004	0.03	18500.0000	1.0100 (ppm)	Y 371.029
Zr (343.823 nm)	1.0110	ppm	0.0022	0.22	85030.0000	1.0110 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0440	448400.0000	0.0040	0.38
Y_R 371.029	1.0470	66110.0000	0.0273	2.61

Sample Name: CCB 5129880

Date: 10/19/2018 11:34:20 AM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	15.78	16.1100	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0004 u	ppm	0.0010	> 100.00	-1205.0000	0.0004 u (ppm)	Y 371.029
As (188.980 nm)	0.0054	ppm	0.0045	83.49	9.4330	0.0054 (ppm)	Y 371.029
B (249.678 nm)	0.0032	ppm	0.0014	43.01	16.2000	0.0032 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	49.24	79.6400	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	49.65	98.3300	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0124	ppm	0.0089	71.90	146.8000	0.0124 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0002	28.20	9.8380	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0010	88.65	-8.0560	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0000	1.04	7.0200	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0003	85.25	137.7000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0001 u	ppm	0.0009	> 100.00	-18.7300	-0.0001 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0977 u	ppm	0.0394	40.36	-232.1000	-0.0977 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0010	ppm	0.0000	3.02	117.0000	0.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0046	ppm	0.0012	25.49	17.5800	0.0046 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0003	45.00	125.9000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0016	ppm	0.0003	18.66	8.1150	0.0016 (ppm)	Y 371.029
Na (589.592 nm)	0.1368	ppm	0.0060	4.39	2265.0000	0.1368 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0008	ppm	0.0004	52.02	6.1720	0.0008 (ppm)	Y 371.029
P (213.618 nm)	-0.0046 u	ppm	0.0050	> 100.00	-14.4000	-0.0046 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0012 u	ppm	0.0021	> 100.00	-6.7930	0.0012 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0048	ppm	0.0037	75.68	3.5570	0.0048 (ppm)	Y 371.029
Se (196.026 nm)	0.0004 u	ppm	0.0007	> 100.00	-0.7045	0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	0.0068	ppm	0.0012	17.66	65.4000	0.0068 (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0005	18.01	-1.8630	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	47.48	25.1100	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0003	32.54	-73.4100	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	0.0001 u	ppm	0.0016	> 100.00	-3.5690	0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0008	ppm	0.0001	8.64	80.2800	0.0008 (ppm)	Y 371.029
W (207.912 nm)	0.0005 u	ppm	0.0017	> 100.00	-5.9820	0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0008	ppm	0.0002	21.14	49.1300	0.0008 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	39.68	23.0500	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0240	439800.0000	0.0067	0.66
Y_R 371.029	1.0300	65050.0000	0.0018	0.17

Sample Name: CRI 5129894

Date: 10/19/2018 11:36:43 AM

Rack:Tube: S1:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0197	ppm	0.0001	0.46	864.7000	0.0197 (ppm)	Y 371.029
Al (396.152 nm)	0.1944	ppm	0.0008	0.40	3082.0000	0.1944 (ppm)	Y 371.029
As (188.980 nm)	0.0225	ppm	0.0006	2.48	21.1300	0.0225 (ppm)	Y 371.029
B (249.678 nm)	0.1002	ppm	0.0014	1.37	1207.0000	0.1002 (ppm)	Y 371.029
Ba (233.527 nm)	0.0208	ppm	0.0001	0.56	1681.0000	0.0208 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0041	ppm	0.0000	0.61	771.3000	0.0041 (ppm)	Y 371.029
Ca (422.673 nm)	0.2017	ppm	0.0146	7.23	983.4000	0.2017 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0102	ppm	0.0000	0.09	233.2000	0.0102 (ppm)	Y 371.029
Co (228.615 nm)	0.0211	ppm	0.0001	0.35	263.1000	0.0211 (ppm)	Y 371.029
Cr (205.560 nm)	0.0109	ppm	0.0002	1.90	60.0300	0.0109 (ppm)	Y 371.029
Cu (324.754 nm)	0.0184	ppm	0.0003	1.58	885.5000	0.0184 (ppm)	Y 371.029
Fe (238.204 nm)	0.1999	ppm	0.0009	0.43	856.4000	0.1999 (ppm)	Y_R 371.029
K (766.491 nm)	0.9654	ppm	0.0580	6.01	1046.0000	0.9654 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0964	ppm	0.0018	1.89	6594.0000	0.0964 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0446	ppm	0.0058	12.94	119.7000	0.0446 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0414	ppm	0.0000	0.06	4385.0000	0.0414 (ppm)	Y 371.029
Mo (204.598 nm)	0.0408	ppm	0.0011	2.72	189.7000	0.0408 (ppm)	Y 371.029
Na (589.592 nm)	1.0920	ppm	0.0191	1.75	8937.0000	1.0920 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0201	ppm	0.0010	4.76	104.9000	0.0201 (ppm)	Y 371.029
P (213.618 nm)	0.3899	ppm	0.0069	1.78	345.9000	0.3899 (ppm)	Y 371.029
Pb (220.353 nm)	0.0106	ppm	0.0005	4.87	11.0800	0.0106 (ppm)	Y 371.029
Sb (206.834 nm)	0.0208	ppm	0.0017	7.93	19.4900	0.0208 (ppm)	Y 371.029
Se (196.026 nm)	0.0228	ppm	0.0028	12.07	17.3000	0.0228 (ppm)	Y 371.029
Si (251.611 nm)	0.3981	ppm	0.0035	0.89	1046.0000	0.3981 (ppm)	Y 371.029
Sn (189.925 nm)	0.2042	ppm	0.0014	0.68	130.1000	0.2042 (ppm)	Y 371.029
Sr (421.552 nm)	0.0407	ppm	0.0006	1.40	16250.0000	0.0407 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0104	ppm	0.0001	0.59	1118.0000	0.0104 (ppm)	Y 371.029
Tl (190.794 nm)	0.0207	ppm	0.0022	10.74	21.3300	0.0207 (ppm)	Y 371.029
V (292.401 nm)	0.0201	ppm	0.0000	0.07	618.5000	0.0201 (ppm)	Y 371.029
W (207.912 nm)	0.1988	ppm	0.0013	0.64	367.4000	0.1988 (ppm)	Y 371.029
Zn (202.548 nm)	0.0461	ppm	0.0002	0.40	874.0000	0.0461 (ppm)	Y 371.029
Zr (343.823 nm)	0.1913	ppm	0.0037	1.93	16100.0000	0.1913 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0240	440000.0000	0.0097	0.95
Y_R 371.029	1.0230	64630.0000	0.0019	0.19

Sample Name: ICSA 5129891

Date: 10/19/2018 11:40:19 AM

Rack:Tube: S1:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0030 b	ppm	0.0001	2.06	-190.3000	0.0030 b (ppm)	Y 371.029
Al (396.152 nm)	642.1000 bo	ppm	4.1200	0.64	13960000.0000	642.1000 bo (ppm)	Y 371.029
As (188.980 nm)	0.0023 bu	ppm	0.0048	> 100.00	18.7600	0.0023 bu (ppm)	Y 371.029
B (249.678 nm)	-0.0155 bu	ppm	0.0035	22.89	-785.8000	-0.0155 bu (ppm)	Y 371.029
Ba (233.527 nm)	0.0053 b	ppm	0.0001	1.55	570.8000	0.0053 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004 bu	ppm	0.0018	> 100.00	13860.0000	0.0004 bu (ppm)	Y 371.029
Ca (422.673 nm)	611.5000 bo	ppm	7.9160	1.29	2705000.0000	611.5000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0022 b	ppm	0.0000	0.84	177.0000	0.0022 b (ppm)	Y 371.029
Co (228.615 nm)	-0.0062 bu	ppm	0.0009	14.32	-26.8500	-0.0062 bu (ppm)	Y 371.029
Cr (205.560 nm)	0.0040 b	ppm	0.0010	24.35	50.2300	0.0040 b (ppm)	Y 371.029
Cu (324.754 nm)	-0.0060 bu	ppm	0.0003	5.28	-117.1000	-0.0060 bu (ppm)	Y 371.029
Fe (238.204 nm)	544.7000 bo	ppm	0.3158	0.06	2383000.0000	544.7000 bo (ppm)	Y_R 371.029
K (766.491 nm)	-0.1882 bu	ppm	0.0104	5.50	145.6000	-0.1882 bu (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0806 bu	ppm	0.0002	0.22	424.9000	-0.0806 bu (ppm)	Y_R 371.029
Mg (279.078 nm)	581.7000 bo	ppm	2.6470	0.46	1489000.0000	581.7000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0065 b	ppm	0.0050	76.93	78090.0000	0.0065 b (ppm)	Y 371.029
Mo (204.598 nm)	-0.0008 bu	ppm	0.0004	52.68	86.1800	-0.0008 bu (ppm)	Y 371.029
Na (589.592 nm)	0.3425 b	ppm	0.0034	1.00	4234.0000	0.3425 b (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0040 b	ppm	0.0007	16.60	18.9500	0.0040 b (ppm)	Y 371.029
P (213.618 nm)	0.0020 bu	ppm	0.0129	> 100.00	-20.1600	0.0020 bu (ppm)	Y 371.029
Pb (220.353 nm)	0.0134 Kb	ppm	0.0016	11.85	-56.8800 K	0.0134 Kb (ppm)	Y 371.029
Sb (206.834 nm)	-0.0172 bu	ppm	0.0147	85.11	-8.7630	-0.0172 bu (ppm)	Y 371.029
Se (196.026 nm)	0.0037 bu	ppm	0.0089	> 100.00	-82.6900	0.0037 bu (ppm)	Y 371.029
Si (251.611 nm)	0.0196 b	ppm	0.0052	26.72	178.5000	0.0196 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0155 bu	ppm	0.0002	1.44	-12.3500	-0.0155 bu (ppm)	Y 371.029
Sr (421.552 nm)	-0.0135 bu	ppm	0.0000	0.11	4275.0000	-0.0135 bu (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008 b	ppm	0.0001	8.01	-781.4000	0.0008 b (ppm)	Y 371.029
Tl (190.794 nm)	0.0026 bu	ppm	0.0052	> 100.00	4.7950	0.0026 bu (ppm)	Y 371.029
V (292.401 nm)	-0.0092 bu	ppm	0.0001	1.41	753.4000	-0.0092 bu (ppm)	Y 371.029
W (207.912 nm)	-0.0021 bu	ppm	0.0017	80.10	-39.2000	-0.0021 bu (ppm)	Y 371.029
Zn (202.548 nm)	0.0042 b	ppm	0.0004	9.07	72.9600	0.0042 b (ppm)	Y 371.029
Zr (343.823 nm)	0.0011 b	ppm	0.0002	13.44	729.3000	0.0011 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8687	373200.0000	0.0054	0.62
Y_R 371.029	0.9186	58030.0000	0.0062	0.67

Sample Name: ICSAB 5129892

Date: 10/19/2018 11:42:42 AM

Rack:Tube: S1:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2787 b	ppm	0.0015	0.52	11410.0000	0.2787 b (ppm)	Y 371.029
Al (396.152 nm)	640.2000 bo	ppm	2.1760	0.34	13920000.0000	640.2000 bo (ppm)	Y 371.029
As (188.980 nm)	0.5011 b	ppm	0.0087	1.75	356.3000	0.5011 b (ppm)	Y 371.029
B (249.678 nm)	0.5144 b	ppm	0.0031	0.61	5789.0000	0.5144 b (ppm)	Y 371.029
Ba (233.527 nm)	0.4826 b	ppm	0.0002	0.04	38200.0000	0.4826 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.5295 b	ppm	0.0001	0.01	111200.0000	0.5295 b (ppm)	Y 371.029
Ca (422.673 nm)	600.4000 bo	ppm	0.7225	0.12	2656000.0000	600.4000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4576 b	ppm	0.0020	0.44	10740.0000	0.4576 b (ppm)	Y 371.029
Co (228.615 nm)	0.4530 b	ppm	0.0011	0.24	6199.0000	0.4530 b (ppm)	Y 371.029
Cr (205.560 nm)	0.4965 b	ppm	0.0021	0.43	2674.0000	0.4965 b (ppm)	Y 371.029
Cu (324.754 nm)	0.5632 b	ppm	0.0003	0.05	22590.0000	0.5632 b (ppm)	Y 371.029
Fe (238.204 nm)	540.4000 bo	ppm	1.2860	0.24	2364000.0000	540.4000 bo (ppm)	Y_R 371.029
K (766.491 nm)	10.8600 b	ppm	0.0750	0.69	13420.0000	10.8600 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.4649 b	ppm	0.0005	0.11	37390.0000	0.4649 b (ppm)	Y_R 371.029
Mg (279.078 nm)	579.1000 bo	ppm	0.6567	0.11	1482000.0000	579.1000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4895 b	ppm	0.0039	0.79	127700.0000	0.4895 b (ppm)	Y 371.029
Mo (204.598 nm)	0.5055 b	ppm	0.0029	0.56	2435.0000	0.5055 b (ppm)	Y 371.029
Na (589.592 nm)	10.9700 b	ppm	0.0439	0.40	78390.0000	10.9700 b (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4542 b	ppm	0.0029	0.64	2326.0000	0.4542 b (ppm)	Y 371.029
P (213.618 nm)	0.5069 b	ppm	0.0066	1.30	412.8000	0.5069 b (ppm)	Y 371.029
Pb (220.353 nm)	0.4772 b	ppm	0.0050	1.04	835.8000	0.4772 b (ppm)	Y 371.029
Sb (206.834 nm)	0.4839 b	ppm	0.0288	5.95	505.2000	0.4839 b (ppm)	Y 371.029
Se (196.026 nm)	0.4715 b	ppm	0.0005	0.11	273.4000	0.4715 b (ppm)	Y 371.029
Si (251.611 nm)	2.6800 b	ppm	0.0130	0.48	6745.0000	2.6800 b (ppm)	Y 371.029
Sn (189.925 nm)	0.4573 b	ppm	0.0002	0.04	297.1000	0.4573 b (ppm)	Y 371.029
Sr (421.552 nm)	0.5053 b	ppm	0.0020	0.39	212100.0000	0.5053 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5188 b	ppm	0.0015	0.30	63260.0000	0.5188 b (ppm)	Y 371.029
Tl (190.794 nm)	0.4716 b	ppm	0.0019	0.40	563.2000	0.4716 b (ppm)	Y 371.029
V (292.401 nm)	0.5089 b	ppm	0.0008	0.16	15280.0000	0.5089 b (ppm)	Y 371.029
W (207.912 nm)	0.4933 b	ppm	0.0018	0.36	897.8000	0.4933 b (ppm)	Y 371.029
Zn (202.548 nm)	0.4426 b	ppm	0.0007	0.15	8110.0000	0.4426 b (ppm)	Y 371.029
Zr (343.823 nm)	0.4955 b	ppm	0.0066	1.33	42320.0000	0.4955 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8639	371200.0000	0.0043	0.50
Y_R 371.029	0.9156	57830.0000	0.0008	0.09

Sample Name: RINSE 5129898

Date: 10/19/2018 11:45:06 AM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	80.36	8.8290	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.2321 Z	ppm	0.1531	65.99	3832.0000 Z	0.2321 Z (ppm)	Y 371.029
As (188.980 nm)	0.0052	ppm	0.0036	68.65	9.3000	0.0052 (ppm)	Y 371.029
B (249.678 nm)	0.0015	ppm	0.0001	3.65	-5.1340	0.0015 (ppm)	Y 371.029
Ba (233.527 nm)	0.0003	ppm	0.0002	82.22	61.6400	0.0003 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0002	80.53	49.0700	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.1046 Z	ppm	0.0018	1.70	554.7000 Z	0.1046 Z (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0003	84.38	4.3000	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0002	26.14	-14.0200	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0003	51.58	4.6020	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0001	9.41	129.9000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0909	ppm	0.0038	4.23	379.4000	0.0909 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0987 u	ppm	0.0059	5.95	-233.2000	-0.0987 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0010	> 100.00	51.6300	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.2550 Z	ppm	0.1633	64.02	658.6000 Z	0.2550 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0003	59.79	124.4000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0004	ppm	0.0004	82.18	2.6320	0.0004 (ppm)	Y 371.029
Na (589.592 nm)	0.0534	ppm	0.0010	1.91	1684.0000	0.0534 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0005	> 100.00	2.8160	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	-0.0014 u	ppm	0.0021	> 100.00	-11.4400	-0.0014 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0002	10.23	-5.0590	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0021	ppm	0.0020	98.90	0.6832	0.0021 (ppm)	Y 371.029
Se (196.026 nm)	0.0012 u	ppm	0.0031	> 100.00	-0.1565	0.0012 u (ppm)	Y 371.029
Si (251.611 nm)	0.0048	ppm	0.0012	24.86	60.8100	0.0048 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0003 u	ppm	0.0008	> 100.00	-3.7640	-0.0003 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0000	ppm	0.0000	75.32	-51.4000	0.0000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0001	35.78	-143.1000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0005	68.83	-4.6250	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0003	> 100.00	60.8400	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0009	ppm	0.0008	83.85	-5.2220	0.0009 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0002	37.28	26.4100	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0002	49.03	19.7200	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0090	433700.0000	0.0108	1.07
Y_R 371.029	0.9996	63140.0000	0.0018	0.18

Sample Name: RINSE 5129898

Date: 10/19/2018 11:47:29 AM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	1.7320	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0240	ppm	0.0066	27.37	-693.3000	0.0240 (ppm)	Y 371.029
As (188.980 nm)	0.0054	ppm	0.0021	38.85	9.4060	0.0054 (ppm)	Y 371.029
B (249.678 nm)	0.0013	ppm	0.0005	37.90	-8.1290	0.0013 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0001	> 100.00	48.6900	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	65.20	11.8800	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0179	ppm	0.0004	2.25	170.9000	0.0179 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-4.1530	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0001	17.11	-14.9400	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002 u	ppm	0.0005	> 100.00	2.6630	0.0002 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0007 u	ppm	0.0005	68.53	124.6000	-0.0007 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0182	ppm	0.0026	14.29	61.1300	0.0182 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1540 u	ppm	0.0508	33.00	-299.7000	-0.1540 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0001	ppm	0.0001	73.28	58.5800	0.0001 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0279 Z	ppm	0.0071	25.43	77.1900 Z	0.0279 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	36.76	75.8900	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002	ppm	0.0001	57.04	1.6220	0.0002 (ppm)	Y 371.029
Na (589.592 nm)	0.0510	ppm	0.0044	8.58	1667.0000	0.0510 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0009 u	ppm	0.0012	> 100.00	-2.4840	-0.0009 u (ppm)	Y 371.029
P (213.618 nm)	0.0017 u	ppm	0.0030	> 100.00	-8.5930	0.0017 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0006	ppm	0.0005	77.45	-7.9560	0.0006 (ppm)	Y 371.029
Sb (206.834 nm)	0.0032	ppm	0.0040	> 100.00	1.9210	0.0032 (ppm)	Y 371.029
Se (196.026 nm)	-0.0012 u	ppm	0.0009	70.50	-1.9700	-0.0012 u (ppm)	Y 371.029
Si (251.611 nm)	0.0020	ppm	0.0006	32.27	53.5600	0.0020 (ppm)	Y 371.029
Sn (189.925 nm)	0.0054	ppm	0.0009	15.95	-0.0656	0.0054 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	70.10	-69.3100	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	54.52	-166.4000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002	ppm	0.0000	4.44	-3.4470	0.0002 (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0003	> 100.00	59.8700	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0002 u	ppm	0.0014	> 100.00	-6.5910	0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0007 u	ppm	0.0001	7.39	20.3200	-0.0007 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	88.12	7.0660	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0090	433500.0000	0.0040	0.40
Y_R 371.029	1.0090	63720.0000	0.0013	0.13

Sample Name: 440-222481-A-1-A

Date: 10/19/2018 11:49:53 AM

Rack:Tube: 3:14

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	38.38	-38.2300	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0280	ppm	0.0012	4.27	-548.7000	0.0280 (ppm)	Y 371.029
As (188.980 nm)	0.0080	ppm	0.0016	20.28	10.8800	0.0080 (ppm)	Y 371.029
B (249.678 nm)	0.2214	ppm	0.0019	0.87	2743.0000	0.2214 (ppm)	Y 371.029
Ba (233.527 nm)	0.0871	ppm	0.0005	0.53	6918.0000	0.0871 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	6.6200	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	100.3000	ppm	0.8647	0.86	444000.0000	100.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	43.99	-0.3902	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0001	34.88	-15.0000	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0001	13.19	9.1240	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	0.0491	ppm	0.0003	0.57	2017.0000	0.0491 (ppm)	Y 371.029
Fe (238.204 nm)	0.0358	ppm	0.0020	5.63	141.5000	0.0358 (ppm)	Y_R 371.029
K (766.491 nm)	4.5170	ppm	0.0513	1.13	5332.0000	4.5170 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0016	ppm	0.0000	0.51	409.2000	0.0016 (ppm)	Y_R 371.029
Mg (279.078 nm)	18.3400	ppm	0.1564	0.85	46960.0000	18.3400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0007	ppm	0.0000	6.27	219.7000	0.0007 (ppm)	Y 371.029
Mo (204.598 nm)	0.0030	ppm	0.0005	16.30	14.4400	0.0030 (ppm)	Y 371.029
Na (589.592 nm)	84.6000	ppm	0.1123	0.13	591300.0000	84.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0011	> 100.00	4.3470	0.0009 (ppm)	Y 371.029
P (213.618 nm)	0.0179	ppm	0.0026	14.56	2.8600	0.0179 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0001 u	ppm	0.0008	> 100.00	-7.9840	-0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0013 u	ppm	0.0003	25.31	-2.3870	-0.0013 u (ppm)	Y 371.029
Se (196.026 nm)	0.0024 u	ppm	0.0035	> 100.00	0.1204	0.0024 u (ppm)	Y 371.029
Si (251.611 nm)	11.4900	ppm	0.0792	0.69	28060.0000	11.4900 (ppm)	Y 371.029
Sn (189.925 nm)	0.0007 u	ppm	0.0022	> 100.00	-3.1250	0.0007 u (ppm)	Y 371.029
Sr (421.552 nm)	0.7060	ppm	0.0010	0.14	284600.0000	0.7060 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	6.27	-258.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0009	ppm	0.0011	> 100.00	-3.3030	0.0009 (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0001	31.59	202.7000	0.0002 (ppm)	Y 371.029
W (207.912 nm)	-0.0017 u	ppm	0.0010	56.15	-12.2800	-0.0017 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0140	ppm	0.0002	1.60	311.7000	0.0140 (ppm)	Y 371.029
Zr (343.823 nm)	0.0010	ppm	0.0000	2.95	95.9000	0.0010 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9989	429200.0000	0.0010	0.10
Y_R 371.029	1.0270	64890.0000	0.0122	1.18

Sample Name: 440-222499-K-1-B

Date: 10/19/2018 11:52:18 AM

Rack:Tube: 3:15

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0000	9.95	-26.5500	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0189	ppm	0.0003	1.72	-778.5000	0.0189 (ppm)	Y 371.029
As (188.980 nm)	0.0039	ppm	0.0034	87.46	8.2050	0.0039 (ppm)	Y 371.029
B (249.678 nm)	0.0532	ppm	0.0001	0.28	641.0000	0.0532 (ppm)	Y 371.029
Ba (233.527 nm)	0.0868	ppm	0.0011	1.31	6889.0000	0.0868 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	93.56	0.5912	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	44.9900	ppm	0.0471	0.10	199100.0000	44.9900 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-4.9870	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0003	44.77	-14.0200	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0025	ppm	0.0004	14.28	15.3000	0.0025 (ppm)	Y 371.029
Cu (324.754 nm)	0.0086	ppm	0.0003	3.12	453.3000	0.0086 (ppm)	Y 371.029
Fe (238.204 nm)	0.0199	ppm	0.0009	4.45	70.2300	0.0199 (ppm)	Y_R 371.029
K (766.491 nm)	3.1770	ppm	0.1145	3.60	3711.0000	3.1770 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0005 u	ppm	0.0001	20.68	125.1000	-0.0005 u (ppm)	Y_R 371.029
Mg (279.078 nm)	8.4560	ppm	0.0165	0.19	21650.0000	8.4560 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0000	5.59	152.1000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0011	ppm	0.0008	73.33	5.7200	0.0011 (ppm)	Y 371.029
Na (589.592 nm)	13.3000	ppm	0.0182	0.14	94100.0000	13.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0007 u	ppm	0.0003	47.29	-2.5960	-0.0007 u (ppm)	Y 371.029
P (213.618 nm)	0.0092	ppm	0.0002	2.30	-2.7520	0.0092 (ppm)	Y 371.029
Pb (220.353 nm)	0.0015 u	ppm	0.0024	> 100.00	-5.7160	0.0015 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0001	2.84	-3.3470	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0042	ppm	0.0010	24.73	1.8490	0.0042 (ppm)	Y 371.029
Si (251.611 nm)	8.1110	ppm	0.0963	1.19	19820.0000	8.1110 (ppm)	Y 371.029
Sn (189.925 nm)	0.0020 u	ppm	0.0028	> 100.00	-2.2910	0.0020 u (ppm)	Y 371.029
Sr (421.552 nm)	0.4042	ppm	0.0003	0.07	162700.0000	0.4042 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	4.81	-202.4000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0003	ppm	0.0000	9.97	-3.7000	0.0003 (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0001	38.13	129.0000	0.0004 (ppm)	Y 371.029
W (207.912 nm)	-0.0014 u	ppm	0.0001	8.68	-9.6500	-0.0014 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0790	ppm	0.0004	0.52	1475.0000	0.0790 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	6.67	35.7200	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437400.0000	0.0063	0.62
Y_R 371.029	1.0320	65200.0000	0.0026	0.25

Sample Name: 440-222304-A-4-B

Date: 10/19/2018 11:54:42 AM

Rack:Tube: 3:16

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	7.30	-45.4000	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.5236	ppm	0.0018	0.35	10200.0000	0.5236 (ppm)	Y 371.029
As (188.980 nm)	0.0421	ppm	0.0013	3.09	34.3500	0.0421 (ppm)	Y 371.029
B (249.678 nm)	0.6316	ppm	0.0062	0.98	7861.0000	0.6316 (ppm)	Y 371.029
Ba (233.527 nm)	0.3510	ppm	0.0005	0.13	27720.0000	0.3510 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	39.1900	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	40.6800	ppm	0.0140	0.03	180100.0000	40.6800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.6690	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0004	42.45	-7.5220	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0044	ppm	0.0002	3.66	25.3700	0.0044 (ppm)	Y 371.029
Cu (324.754 nm)	0.0177	ppm	0.0001	0.39	820.6000	0.0177 (ppm)	Y 371.029
Fe (238.204 nm)	1.0900	ppm	0.0011	0.10	4754.0000	1.0900 (ppm)	Y_R 371.029
K (766.491 nm)	8.3740	ppm	0.0060	0.07	9956.0000	8.3740 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0568	ppm	0.0001	0.13	4048.0000	0.0568 (ppm)	Y_R 371.029
Mg (279.078 nm)	15.3400	ppm	0.0346	0.23	39280.0000	15.3400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1047	ppm	0.0007	0.64	11080.0000	0.1047 (ppm)	Y 371.029
Mo (204.598 nm)	0.0039	ppm	0.0004	9.37	18.6200	0.0039 (ppm)	Y 371.029
Na (589.592 nm)	277.1000	ppm	0.1798	0.06	1934000.0000	277.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0047	ppm	0.0009	19.16	24.7600	0.0047 (ppm)	Y 371.029
P (213.618 nm)	0.8573	ppm	0.0165	1.93	774.7000	0.8573 (ppm)	Y 371.029
Pb (220.353 nm)	0.0003 u	ppm	0.0017	> 100.00	-7.9200	0.0003 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0033	ppm	0.0026	80.03	2.1140	0.0033 (ppm)	Y 371.029
Se (196.026 nm)	0.2527	ppm	0.0033	1.32	189.3000	0.2527 (ppm)	Y 371.029
Si (251.611 nm)	5.4080	ppm	0.0644	1.19	13230.0000	5.4080 (ppm)	Y 371.029
Sn (189.925 nm)	0.0033	ppm	0.0038	> 100.00	-1.4000	0.0033 (ppm)	Y 371.029
Sr (421.552 nm)	1.0210	ppm	0.0006	0.06	409800.0000	1.0210 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0012	ppm	0.0000	2.74	-73.0800	0.0012 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0013	> 100.00	-3.8500	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	0.0024	ppm	0.0001	2.51	181.7000	0.0024 (ppm)	Y 371.029
W (207.912 nm)	0.0013	ppm	0.0001	8.10	-4.1760	0.0013 (ppm)	Y 371.029
Zn (202.548 nm)	0.1214	ppm	0.0007	0.55	2249.0000	0.1214 (ppm)	Y 371.029
Zr (343.823 nm)	0.0012	ppm	0.0001	5.83	106.1000	0.0012 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9822	422000.0000	0.0066	0.68
Y_R 371.029	1.0160	64160.0000	0.0003	0.03

Sample Name: 440-222304-A-5-B

Date: 10/19/2018 11:57:06 AM

Rack:Tube: 3:17

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0006 u	ppm	0.0000	0.31	-33.3700	-0.0006 u (ppm)	Y 371.029
Al (396.152 nm)	0.5271	ppm	0.0023	0.43	10270.0000	0.5271 (ppm)	Y 371.029
As (188.980 nm)	0.0323	ppm	0.0005	1.69	27.8300	0.0323 (ppm)	Y 371.029
B (249.678 nm)	0.6469	ppm	0.0067	1.04	8040.0000	0.6469 (ppm)	Y 371.029
Ba (233.527 nm)	0.3598	ppm	0.0004	0.11	28420.0000	0.3598 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	48.98	343.3000	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	40.9900	ppm	0.0242	0.06	181400.0000	40.9900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	3.1980	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0036	ppm	0.0002	6.46	28.1100	0.0036 (ppm)	Y 371.029
Cr (205.560 nm)	0.0045	ppm	0.0001	2.74	26.5400	0.0045 (ppm)	Y 371.029
Cu (324.754 nm)	0.0023	ppm	0.0007	31.34	217.6000	0.0023 (ppm)	Y 371.029
Fe (238.204 nm)	13.1600	ppm	0.0200	0.15	57550.0000	13.1600 (ppm)	Y_R 371.029
K (766.491 nm)	8.5660	ppm	0.0530	0.62	10190.0000	8.5660 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0553	ppm	0.0027	4.88	3943.0000	0.0553 (ppm)	Y_R 371.029
Mg (279.078 nm)	15.6500	ppm	0.0242	0.15	40060.0000	15.6500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1320	ppm	0.0009	0.66	15560.0000	0.1320 (ppm)	Y 371.029
Mo (204.598 nm)	0.0052	ppm	0.0016	30.59	25.0000	0.0052 (ppm)	Y 371.029
Na (589.592 nm)	281.1000	ppm	0.5414	0.19	1961000.0000	281.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0094	ppm	0.0002	1.95	49.0700	0.0094 (ppm)	Y 371.029
P (213.618 nm)	0.6264	ppm	0.0167	2.66	563.4000	0.6264 (ppm)	Y 371.029
Pb (220.353 nm)	0.0002 u	ppm	0.0015	> 100.00	-9.1580	0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0034 u	ppm	0.0059	> 100.00	2.2460	0.0034 u (ppm)	Y 371.029
Se (196.026 nm)	0.2790	ppm	0.0006	0.23	207.5000	0.2790 (ppm)	Y 371.029
Si (251.611 nm)	5.5330	ppm	0.0538	0.97	13540.0000	5.5330 (ppm)	Y 371.029
Sn (189.925 nm)	0.0029	ppm	0.0033	> 100.00	-1.6690	0.0029 (ppm)	Y 371.029
Sr (421.552 nm)	1.0290	ppm	0.0017	0.16	413200.0000	1.0290 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0096	ppm	0.0001	0.84	965.0000	0.0096 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0014 u	ppm	0.0002	17.58	-6.1610	-0.0014 u (ppm)	Y 371.029
V (292.401 nm)	0.0262	ppm	0.0004	1.34	852.8000	0.0262 (ppm)	Y 371.029
W (207.912 nm)	-0.0010 u	ppm	0.0018	> 100.00	-8.3010	-0.0010 u (ppm)	Y 371.029
Zn (202.548 nm)	0.1496	ppm	0.0010	0.66	2748.0000	0.1496 (ppm)	Y 371.029
Zr (343.823 nm)	0.0012	ppm	0.0002	12.58	114.4000	0.0012 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9856	423500.0000	0.0073	0.74
Y_R 371.029	1.0090	63710.0000	0.0007	0.07

Sample Name: 440-222496-G-1-B

Date: 10/19/2018 11:59:30 AM

Rack:Tube: 3:18

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0001	15.28	-32.6000	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0595	ppm	0.0004	0.73	118.6000	0.0595 (ppm)	Y 371.029
As (188.980 nm)	0.0047	ppm	0.0026	55.53	8.9250	0.0047 (ppm)	Y 371.029
B (249.678 nm)	0.1896	ppm	0.0005	0.26	2343.0000	0.1896 (ppm)	Y 371.029
Ba (233.527 nm)	0.0590	ppm	0.0003	0.46	4693.0000	0.0590 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	20.7700	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	32.7100	ppm	0.1218	0.37	144800.0000	32.7100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	24.10	-2.4710	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0002	80.01	-17.9000	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0000	1.53	6.6960	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0003	25.82	83.8400	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.7015	ppm	0.0071	1.02	3053.0000	0.7015 (ppm)	Y_R 371.029
K (766.491 nm)	2.9030	ppm	0.0493	1.70	3384.0000	2.9030 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0014 u	ppm	0.0001	6.41	95.1300	-0.0014 u (ppm)	Y_R 371.029
Mg (279.078 nm)	20.6900	ppm	0.0965	0.47	52970.0000	20.6900 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1185	ppm	0.0001	0.12	12490.0000	0.1185 (ppm)	Y 371.029
Mo (204.598 nm)	0.0118	ppm	0.0003	2.33	55.0500	0.0118 (ppm)	Y 371.029
Na (589.592 nm)	115.6000	ppm	0.6871	0.59	807100.0000	115.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0004	> 100.00	1.1280	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.1458	ppm	0.0043	2.93	122.9000	0.1458 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0005 u	ppm	0.0001	22.04	-9.3660	-0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0033	ppm	0.0017	53.45	1.8550	0.0033 (ppm)	Y 371.029
Se (196.026 nm)	0.0031	ppm	0.0011	35.39	0.9864	0.0031 (ppm)	Y 371.029
Si (251.611 nm)	1.6870	ppm	0.0011	0.07	4165.0000	1.6870 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0004	13.42	-1.5970	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.3235	ppm	0.0010	0.30	130100.0000	0.3235 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0016	ppm	0.0001	4.57	-18.2300	0.0016 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0002 u	ppm	0.0034	> 100.00	-3.8340	-0.0002 u (ppm)	Y 371.029
V (292.401 nm)	-0.0009 u	ppm	0.0001	14.27	75.7500	-0.0009 u (ppm)	Y 371.029
W (207.912 nm)	-0.0018 u	ppm	0.0012	66.22	-11.1500	-0.0018 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0056	ppm	0.0000	0.01	149.1000	0.0056 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	83.54	11.0900	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9911	425900.0000	0.0003	0.03
Y_R 371.029	1.0080	63650.0000	0.0038	0.37

Sample Name: CCV 5129881

Date: 10/19/2018 12:01:54 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5038	ppm	0.0018	0.35	21220.0000	0.5038 (ppm)	Y 371.029
Al (396.152 nm)	1.0320	ppm	0.0027	0.26	22000.0000	1.0320 (ppm)	Y 371.029
As (188.980 nm)	1.0060	ppm	0.0006	0.06	686.7000	1.0060 (ppm)	Y 371.029
B (249.678 nm)	1.0120	ppm	0.0073	0.72	12520.0000	1.0120 (ppm)	Y 371.029
Ba (233.527 nm)	1.0230	ppm	0.0064	0.62	80690.0000	1.0230 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0100	ppm	0.0026	0.26	186100.0000	1.0100 (ppm)	Y 371.029
Ca (422.673 nm)	5.0810	ppm	0.0384	0.75	22570.0000	5.0810 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0170	ppm	0.0027	0.27	23600.0000	1.0170 (ppm)	Y 371.029
Co (228.615 nm)	1.0150	ppm	0.0029	0.29	13740.0000	1.0150 (ppm)	Y 371.029
Cr (205.560 nm)	1.0190	ppm	0.0046	0.46	5429.0000	1.0190 (ppm)	Y 371.029
Cu (324.754 nm)	1.0090	ppm	0.0013	0.13	40390.0000	1.0090 (ppm)	Y 371.029
Fe (238.204 nm)	1.0170	ppm	0.0047	0.46	4427.0000	1.0170 (ppm)	Y_R 371.029
K (766.491 nm)	10.0600	ppm	0.0055	0.05	11980.0000	10.0600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9995	ppm	0.0079	0.79	67810.0000	0.9995 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1850	ppm	0.0397	0.77	13270.0000	5.1850 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0150	ppm	0.0025	0.24	105500.0000	1.0150 (ppm)	Y 371.029
Mo (204.598 nm)	1.0200	ppm	0.0045	0.44	4735.0000	1.0200 (ppm)	Y 371.029
Na (589.592 nm)	10.2800	ppm	0.0627	0.61	73050.0000	10.2800 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0160	ppm	0.0025	0.25	5207.0000	1.0160 (ppm)	Y 371.029
P (213.618 nm)	0.9980	ppm	0.0005	0.05	848.6000	0.9980 (ppm)	Y 371.029
Pb (220.353 nm)	1.0220	ppm	0.0021	0.21	1957.0000	1.0220 (ppm)	Y 371.029
Sb (206.834 nm)	1.0170	ppm	0.0163	1.60	1042.0000	1.0170 (ppm)	Y 371.029
Se (196.026 nm)	1.0020	ppm	0.0016	0.16	760.4000	1.0020 (ppm)	Y 371.029
Si (251.611 nm)	5.0830	ppm	0.0659	1.30	12610.0000	5.0830 (ppm)	Y 371.029
Sn (189.925 nm)	1.0190	ppm	0.0011	0.11	663.7000	1.0190 (ppm)	Y 371.029
Sr (421.552 nm)	1.0100	ppm	0.0088	0.87	405000.0000	1.0100 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0160	ppm	0.0029	0.28	125400.0000	1.0160 (ppm)	Y 371.029
Tl (190.794 nm)	1.0160	ppm	0.0060	0.59	1210.0000	1.0160 (ppm)	Y 371.029
V (292.401 nm)	1.0220	ppm	0.0028	0.27	28740.0000	1.0220 (ppm)	Y 371.029
W (207.912 nm)	1.0200	ppm	0.0026	0.26	1922.0000	1.0200 (ppm)	Y 371.029
Zn (202.548 nm)	1.0220	ppm	0.0031	0.30	18720.0000	1.0220 (ppm)	Y 371.029
Zr (343.823 nm)	1.0170	ppm	0.0008	0.08	85590.0000	1.0170 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0060	432200.0000	0.0139	1.38
Y_R 371.029	1.0080	63650.0000	0.0050	0.50

Sample Name: CCB 5129880

Date: 10/19/2018 12:04:17 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0002	64.59	12.2700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0029	ppm	0.0004	14.10	-1152.0000	0.0029 (ppm)	Y 371.029
As (188.980 nm)	0.0059	ppm	0.0007	11.39	9.7380	0.0059 (ppm)	Y 371.029
B (249.678 nm)	0.0029	ppm	0.0009	29.80	12.6400	0.0029 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	38.09	80.7200	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	43.60	84.9700	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0202	ppm	0.0022	11.03	181.3000	0.0202 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	13.06	6.2700	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0002	44.38	-16.6700	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0004	36.55	6.5950	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0000	2.53	132.2000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0006 u	ppm	0.0011	> 100.00	-15.7400	0.0006 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0163 u	ppm	0.0335	> 100.00	-134.3000	-0.0163 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0014	ppm	0.0010	69.52	144.0000	0.0014 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0093	ppm	0.0024	25.39	29.6400	0.0093 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	32.97	123.2000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0012	ppm	0.0009	77.51	6.0180	0.0012 (ppm)	Y 371.029
Na (589.592 nm)	0.1461	ppm	0.0105	7.20	2330.0000	0.1461 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005 u	ppm	0.0008	> 100.00	4.2750	0.0005 u (ppm)	Y 371.029
P (213.618 nm)	0.0025	ppm	0.0007	29.43	-7.8860	0.0025 (ppm)	Y 371.029
Pb (220.353 nm)	0.0002 u	ppm	0.0013	> 100.00	-8.7930	0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0040	ppm	0.0014	35.42	2.7050	0.0040 (ppm)	Y 371.029
Se (196.026 nm)	-0.0004 u	ppm	0.0019	> 100.00	-1.2920	-0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	0.0104	ppm	0.0037	36.02	74.3300	0.0104 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0006	26.82	-2.0700	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0001	23.05	60.2800	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0007	ppm	0.0002	35.48	-88.6700	0.0007 (ppm)	Y 371.029
Tl (190.794 nm)	0.0011	ppm	0.0011	95.62	-2.3020	0.0011 (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0003	57.64	71.9000	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0012	ppm	0.0011	93.02	-4.6490	0.0012 (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0002	9.79	69.2400	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0002	53.69	20.0100	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	429800.0000	0.0072	0.72
Y_R 371.029	0.9813	61990.0000	0.0058	0.59

Sample Name: MB 440-505985/1-A

Date: 10/19/2018 12:07:59 PM

Rack:Tube: 3:19

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	-0.0177	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0085	ppm	0.0003	3.66	-1031.0000	0.0085 (ppm)	Y 371.029
As (188.980 nm)	0.0012	ppm	0.0014	> 100.00	6.5040	0.0012 (ppm)	Y 371.029
B (249.678 nm)	0.0029	ppm	0.0006	20.23	12.6400	0.0029 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0000	1.14	71.5800	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	8.43	10.4700	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0225	ppm	0.0001	0.33	191.7000	0.0225 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-4.4480	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0001	ppm	0.0000	31.94	-20.9700	0.0001 (ppm)	Y 371.029
Cr (205.560 nm)	0.0001 u	ppm	0.0004	> 100.00	1.9990	0.0001 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0003	59.76	132.4000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0048	ppm	0.0003	6.44	2.7430	0.0048 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1048 u	ppm	0.0261	24.92	-240.7000	-0.1048 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0013	ppm	0.0005	42.35	134.3000	0.0013 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0040	ppm	0.0002	5.51	16.2300	0.0040 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0001	32.46	92.2000	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0001	ppm	0.0001	74.85	1.0970	0.0001 (ppm)	Y 371.029
Na (589.592 nm)	0.1286	ppm	0.0039	3.06	2208.0000	0.1286 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0010 u	ppm	0.0004	43.39	-3.0740	-0.0010 u (ppm)	Y 371.029
P (213.618 nm)	0.0012	ppm	0.0008	64.67	-9.0550	0.0012 (ppm)	Y 371.029
Pb (220.353 nm)	0.0010	ppm	0.0001	12.44	-7.1630	0.0010 (ppm)	Y 371.029
Sb (206.834 nm)	0.0036	ppm	0.0011	31.19	2.2920	0.0036 (ppm)	Y 371.029
Se (196.026 nm)	0.0019	ppm	0.0001	3.29	0.4106	0.0019 (ppm)	Y 371.029
Si (251.611 nm)	0.0085	ppm	0.0010	11.41	69.5100	0.0085 (ppm)	Y 371.029
Sn (189.925 nm)	0.0045	ppm	0.0012	25.95	-0.6264	0.0045 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0001	87.11	-14.5000	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0000	1.00	-175.2000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0002 u	ppm	0.0021	> 100.00	-3.4620	0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0000	8.25	61.7400	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0007 u	ppm	0.0014	> 100.00	-5.4870	0.0007 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0097	ppm	0.0002	1.73	209.5000	0.0097 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001 u	ppm	0.0001	> 100.00	-1.0120	0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9697	416700.0000	0.0019	0.20
Y_R 371.029	0.9692	61230.0000	0.0052	0.53

Sample Name: 440-222284-G-4-A

Date: 10/19/2018 12:10:23 PM

Rack:Tube: 3:20

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	1.7420	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0160	ppm	0.0006	3.79	-867.1000	0.0160 (ppm)	Y 371.029
As (188.980 nm)	0.0009 u	ppm	0.0021	> 100.00	6.3270	0.0009 u (ppm)	Y 371.029
B (249.678 nm)	0.0115	ppm	0.0001	1.28	119.3000	0.0115 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	3.95	54.7300	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	3.8250	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.0227	ppm	0.0064	27.94	192.5000	0.0227 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	1.48	0.7727	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0003	74.28	-17.7500	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0003	37.24	6.3470	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	0.0002	ppm	0.0003	> 100.00	160.4000	0.0002 (ppm)	Y 371.029
Fe (238.204 nm)	0.0086	ppm	0.0004	4.86	19.2000	0.0086 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1093 u	ppm	0.0046	4.23	-246.1000	-0.1093 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0017	ppm	0.0005	30.48	162.3000	0.0017 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0055	ppm	0.0005	9.02	19.9000	0.0055 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	9.71	92.3100	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0003	> 100.00	0.3651	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	0.0843	ppm	0.0103	12.24	1899.0000	0.0843 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0005	> 100.00	1.8570	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.0005 u	ppm	0.0031	> 100.00	-9.6990	0.0005 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0015	ppm	0.0004	24.13	-6.2750	0.0015 (ppm)	Y 371.029
Sb (206.834 nm)	0.0025	ppm	0.0026	> 100.00	1.2050	0.0025 (ppm)	Y 371.029
Se (196.026 nm)	0.0001 u	ppm	0.0006	> 100.00	-0.9237	0.0001 u (ppm)	Y 371.029
Si (251.611 nm)	0.0110	ppm	0.0006	5.35	75.6700	0.0110 (ppm)	Y 371.029
Sn (189.925 nm)	0.0015	ppm	0.0002	11.83	-2.6210	0.0015 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	35.79	15.6000	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0002	> 100.00	-177.9000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0002	ppm	0.0003	> 100.00	-3.3790	0.0002 (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0002	> 100.00	56.3700	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0018	> 100.00	-3.7170	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	0.0061	ppm	0.0001	1.93	145.0000	0.0061 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0002	> 100.00	-4.6190	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9885	424700.0000	0.0011	0.11
Y_R 371.029	1.0000	63180.0000	0.0052	0.52

Sample Name: 440-222284-G-5-A

Date: 10/19/2018 12:12:48 PM

Rack:Tube: 3:21

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0001	77.58	4.8030	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0099	ppm	0.0000	0.32	-999.3000	0.0099 (ppm)	Y 371.029
As (188.980 nm)	0.0079	ppm	0.0002	2.57	11.1000	0.0079 (ppm)	Y 371.029
B (249.678 nm)	0.0115	ppm	0.0000	0.41	120.2000	0.0115 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	17.78	57.6100	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	74.10	-1.3870	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.0375	ppm	0.0048	12.89	257.7000	0.0375 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	43.31	-2.6520	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0003 u	ppm	0.0006	> 100.00	-18.1000	0.0003 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0002	26.87	6.0470	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	0.0001 u	ppm	0.0002	> 100.00	154.5000	0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0089	ppm	0.0025	28.56	20.5300	0.0089 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1515 u	ppm	0.0307	20.27	-296.8000	-0.1515 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0035	ppm	0.0001	3.73	288.4000	0.0035 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0075	ppm	0.0021	28.01	25.1500	0.0075 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0000	2.27	111.4000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0005	ppm	0.0002	40.01	2.6280	0.0005 (ppm)	Y 371.029
Na (589.592 nm)	0.0854	ppm	0.0086	10.12	1907.0000	0.0854 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0005 u	ppm	0.0001	11.22	-0.8787	-0.0005 u (ppm)	Y 371.029
P (213.618 nm)	0.0015 u	ppm	0.0053	> 100.00	-8.8060	0.0015 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0007	ppm	0.0005	62.96	-7.7410	0.0007 (ppm)	Y 371.029
Sb (206.834 nm)	0.0023	ppm	0.0021	89.82	0.9557	0.0023 (ppm)	Y 371.029
Se (196.026 nm)	-0.0007 u	ppm	0.0068	> 100.00	-1.5970	-0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	0.0161	ppm	0.0022	13.54	87.7000	0.0161 (ppm)	Y 371.029
Sn (189.925 nm)	0.0003 u	ppm	0.0006	> 100.00	-3.3660	0.0003 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	11.06	-15.2700	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	48.14	-153.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0008	97.13	-4.6350	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0001	> 100.00	58.3700	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0008 u	ppm	0.0005	57.52	-8.4090	-0.0008 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0050	ppm	0.0000	1.00	124.5000	0.0050 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.7970	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9752	419000.0000	0.0038	0.39
Y_R 371.029	0.9788	61830.0000	0.0013	0.13

Sample Name: 440-222331-L-14-A

Date: 10/19/2018 12:15:11 PM

Rack:Tube: 3:22

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	6.0480	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0087	ppm	0.0003	3.76	-1025.0000	0.0087 (ppm)	Y 371.029
As (188.980 nm)	0.0052	ppm	0.0015	29.08	9.2810	0.0052 (ppm)	Y 371.029
B (249.678 nm)	0.0028	ppm	0.0004	14.28	10.6500	0.0028 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	15.91	58.4800	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	64.70	5.5360	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0272	ppm	0.0010	3.65	212.5000	0.0272 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	54.34	-5.7680	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0004	> 100.00	-18.5900	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0003	34.94	5.3920	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0001	5.13	110.5000	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0052	ppm	0.0002	4.65	4.5920	0.0052 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0822 u	ppm	0.0407	49.50	-213.5000	-0.0822 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0035	ppm	0.0011	31.83	285.0000	0.0035 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0023	ppm	0.0016	70.17	11.6900	0.0023 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	22.27	74.0200	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0005 u	ppm	0.0004	83.56	-1.7730	-0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	0.0547	ppm	0.0108	19.69	1692.0000	0.0547 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0002 u	ppm	0.0005	> 100.00	0.8082	-0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0026 u	ppm	0.0049	> 100.00	-7.7990	0.0026 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0012	> 100.00	-8.1930	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0041	ppm	0.0007	17.09	2.8070	0.0041 (ppm)	Y 371.029
Se (196.026 nm)	0.0031 u	ppm	0.0056	> 100.00	1.2690	0.0031 u (ppm)	Y 371.029
Si (251.611 nm)	0.0086	ppm	0.0005	5.85	69.8100	0.0086 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0002 u	ppm	0.0026	> 100.00	-3.6880	-0.0002 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	32.98	-3.5810	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0000	33.44	-180.1000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0015 u	ppm	0.0036	> 100.00	-5.4820	-0.0015 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0000	24.30	62.6900	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0000 u	ppm	0.0024	> 100.00	-6.9420	0.0000 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0048	ppm	0.0002	3.39	120.8000	0.0048 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	57.63	0.7932	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9840	422800.0000	0.0028	0.28
Y_R 371.029	0.9850	62220.0000	0.0018	0.18

Sample Name: 440-222352-A-1-A

Date: 10/19/2018 12:17:36 PM

Rack:Tube: 3:23

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0003	> 100.00	0.8244	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0609	ppm	0.0006	0.98	109.5000	0.0609 (ppm)	Y 371.029
As (188.980 nm)	0.0049	ppm	0.0001	1.25	9.0680	0.0049 (ppm)	Y 371.029
B (249.678 nm)	0.0082	ppm	0.0001	0.79	78.0600	0.0082 (ppm)	Y 371.029
Ba (233.527 nm)	0.0013	ppm	0.0000	2.03	139.9000	0.0013 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	4.7590	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.2959	ppm	0.0049	1.67	1401.0000	0.2959 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.9300	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0001	17.82	-16.7600	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0002	26.32	6.2780	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0002	24.62	116.6000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0937	ppm	0.0000	0.02	391.5000	0.0937 (ppm)	Y_R 371.029
K (766.491 nm)	0.0455	ppm	0.0081	17.80	-60.0100	0.0455 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0022	ppm	0.0000	1.52	198.3000	0.0022 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0657	ppm	0.0012	1.79	174.1000	0.0657 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0018	ppm	0.0000	0.23	266.9000	0.0018 (ppm)	Y 371.029
Mo (204.598 nm)	0.0004	ppm	0.0005	> 100.00	2.6160	0.0004 (ppm)	Y 371.029
Na (589.592 nm)	2.0580	ppm	0.0072	0.35	15660.0000	2.0580 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0005 u	ppm	0.0003	60.31	-0.9263	-0.0005 u (ppm)	Y 371.029
P (213.618 nm)	0.0578	ppm	0.0039	6.67	42.8800	0.0578 (ppm)	Y 371.029
Pb (220.353 nm)	0.0002	ppm	0.0001	40.02	-8.7500	0.0002 (ppm)	Y 371.029
Sb (206.834 nm)	0.0035	ppm	0.0013	38.47	2.1790	0.0035 (ppm)	Y 371.029
Se (196.026 nm)	-0.0002 u	ppm	0.0032	> 100.00	-1.2170	-0.0002 u (ppm)	Y 371.029
Si (251.611 nm)	0.7813	ppm	0.0019	0.25	1953.0000	0.7813 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006 u	ppm	0.0011	> 100.00	-3.2160	0.0006 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0024	ppm	0.0000	1.18	896.2000	0.0024 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0049	ppm	0.0001	2.71	435.4000	0.0049 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0033 u	ppm	0.0002	5.86	-7.7770	-0.0033 u (ppm)	Y 371.029
V (292.401 nm)	0.0006	ppm	0.0002	30.92	74.4100	0.0006 (ppm)	Y 371.029
W (207.912 nm)	0.0007	ppm	0.0003	38.25	-5.5130	0.0007 (ppm)	Y 371.029
Zn (202.548 nm)	0.0114	ppm	0.0001	0.74	241.1000	0.0114 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001 u	ppm	0.0001	> 100.00	-1.0150	0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9778	420100.0000	0.0053	0.54
Y_R 371.029	0.9641	60900.0000	0.0011	0.12

Sample Name: 440-222352-A-2-A

Date: 10/19/2018 12:20:00 PM

Rack:Tube: 3:24

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0003	> 100.00	-2.7060	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0279	ppm	0.0001	0.22	-607.6000	0.0279 (ppm)	Y 371.029
As (188.980 nm)	0.0054	ppm	0.0035	65.43	9.4110	0.0054 (ppm)	Y 371.029
B (249.678 nm)	0.0077	ppm	0.0004	5.22	71.5500	0.0077 (ppm)	Y 371.029
Ba (233.527 nm)	0.0009	ppm	0.0000	1.85	108.3000	0.0009 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	79.92	5.6280	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.2980	ppm	0.0111	3.73	1410.0000	0.2980 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.8630	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0001	29.72	-17.5300	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0008	67.14	8.1050	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0002	37.92	125.6000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0278	ppm	0.0004	1.48	103.2000	0.0278 (ppm)	Y_R 371.029
K (766.491 nm)	0.0059	ppm	0.0062	> 100.00	-107.5000	0.0059 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0029	ppm	0.0003	9.13	246.3000	0.0029 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0512	ppm	0.0042	8.14	136.9000	0.0512 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0001	8.60	132.1000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003	ppm	0.0000	3.98	2.0850	0.0003 (ppm)	Y 371.029
Na (589.592 nm)	1.7210	ppm	0.0077	0.45	13320.0000	1.7210 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0003	ppm	0.0000	13.76	3.4140	0.0003 (ppm)	Y 371.029
P (213.618 nm)	0.0067	ppm	0.0018	26.18	-4.0090	0.0067 (ppm)	Y 371.029
Pb (220.353 nm)	0.0008	ppm	0.0011	> 100.00	-7.5880	0.0008 (ppm)	Y 371.029
Sb (206.834 nm)	0.0044	ppm	0.0024	54.55	3.1420	0.0044 (ppm)	Y 371.029
Se (196.026 nm)	0.0012 u	ppm	0.0022	> 100.00	-0.1226	0.0012 u (ppm)	Y 371.029
Si (251.611 nm)	0.6887	ppm	0.0048	0.70	1727.0000	0.6887 (ppm)	Y 371.029
Sn (189.925 nm)	0.0016	ppm	0.0022	> 100.00	-2.5060	0.0016 (ppm)	Y 371.029
Sr (421.552 nm)	0.0025	ppm	0.0001	5.11	929.8000	0.0025 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0007	ppm	0.0001	15.35	-93.9800	0.0007 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0022 u	ppm	0.0001	4.06	-6.4170	-0.0022 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0004	81.23	70.7200	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0030	ppm	0.0003	11.01	-1.1870	0.0030 (ppm)	Y 371.029
Zn (202.548 nm)	0.0061	ppm	0.0002	2.84	144.0000	0.0061 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	-4.1900	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9784	420400.0000	0.0023	0.24
Y_R 371.029	0.9699	61270.0000	0.0036	0.38

Sample Name: 440-222353-A-1-A

Date: 10/19/2018 12:22:24 PM

Rack:Tube: 3:25

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	2.2540	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0437	ppm	0.0001	0.19	-264.1000	0.0437 (ppm)	Y 371.029
As (188.980 nm)	0.0022	ppm	0.0022	> 100.00	7.1920	0.0022 (ppm)	Y 371.029
B (249.678 nm)	0.0074	ppm	0.0003	3.73	68.7300	0.0074 (ppm)	Y 371.029
Ba (233.527 nm)	0.0024	ppm	0.0000	0.96	232.7000	0.0024 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	6.06	-2.8210	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.2432	ppm	0.0073	3.02	1168.0000	0.2432 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-4.5500	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0001	21.10	-15.1400	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0012	ppm	0.0003	25.81	7.5320	0.0012 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0007 u	ppm	0.0002	20.17	121.4000	-0.0007 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0569	ppm	0.0008	1.44	230.4000	0.0569 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0249 u	ppm	0.0657	> 100.00	-144.6000	-0.0249 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0020	ppm	0.0012	60.89	182.8000	0.0020 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0506	ppm	0.0000	0.06	135.5000	0.0506 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0010	ppm	0.0000	0.95	176.9000	0.0010 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003	ppm	0.0004	> 100.00	2.0080	0.0003 (ppm)	Y 371.029
Na (589.592 nm)	1.6490	ppm	0.0130	0.79	12810.0000	1.6490 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0007	ppm	0.0002	32.90	5.5170	0.0007 (ppm)	Y 371.029
P (213.618 nm)	0.0033	ppm	0.0029	87.53	-7.1160	0.0033 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0004 u	ppm	0.0012	> 100.00	-9.8570	-0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0021	ppm	0.0016	76.73	0.7023	0.0021 (ppm)	Y 371.029
Se (196.026 nm)	0.0007	ppm	0.0005	63.29	-0.4751	0.0007 (ppm)	Y 371.029
Si (251.611 nm)	0.6888	ppm	0.0024	0.35	1727.0000	0.6888 (ppm)	Y 371.029
Sn (189.925 nm)	0.0007 u	ppm	0.0018	> 100.00	-3.1510	0.0007 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0021	ppm	0.0001	4.97	804.2000	0.0021 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0024	ppm	0.0000	0.52	117.2000	0.0024 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0003	23.31	-5.2710	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0001	30.72	69.3400	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0016	ppm	0.0009	55.30	-3.9640	0.0016 (ppm)	Y 371.029
Zn (202.548 nm)	0.0084	ppm	0.0002	1.83	185.4000	0.0084 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	66.07	-15.5200	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9791	420700.0000	0.0009	0.09
Y_R 371.029	0.9692	61220.0000	0.0066	0.68

Sample Name: 440-222353-A-2-A

Date: 10/19/2018 12:24:49 PM

Rack:Tube: 3:26

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0000	8.71	-4.3390	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0124	ppm	0.0004	3.07	-944.4000	0.0124 (ppm)	Y 371.029
As (188.980 nm)	0.0075	ppm	0.0009	11.97	10.8100	0.0075 (ppm)	Y 371.029
B (249.678 nm)	0.0068	ppm	0.0002	2.49	60.4500	0.0068 (ppm)	Y 371.029
Ba (233.527 nm)	0.0008	ppm	0.0001	9.44	100.3000	0.0008 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	2.3880	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.2931	ppm	0.0126	4.30	1389.0000	0.2931 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-4.0610	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0001	25.52	-18.3500	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.0012	ppm	0.0004	35.67	7.7570	0.0012 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	31.12	129.9000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0147	ppm	0.0011	7.61	46.0800	0.0147 (ppm)	Y_R 371.029
K (766.491 nm)	0.0456 u	ppm	0.1369	> 100.00	-59.9500	0.0456 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0013	ppm	0.0006	44.17	137.7000	0.0013 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0519	ppm	0.0006	1.23	138.8000	0.0519 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	2.88	99.4400	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0006	> 100.00	0.0270	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	1.8200	ppm	0.0121	0.66	14010.0000	1.8200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0003	ppm	0.0003	88.70	3.3470	0.0003 (ppm)	Y 371.029
P (213.618 nm)	0.0182	ppm	0.0031	16.81	6.4980	0.0182 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0001 u	ppm	0.0005	> 100.00	-9.4170	-0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0028	ppm	0.0015	54.27	1.4480	0.0028 (ppm)	Y 371.029
Se (196.026 nm)	-0.0007 u	ppm	0.0007	> 100.00	-1.5760	-0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	0.6547	ppm	0.0022	0.33	1644.0000	0.6547 (ppm)	Y 371.029
Sn (189.925 nm)	0.0031	ppm	0.0016	51.82	-1.5330	0.0031 (ppm)	Y 371.029
Sr (421.552 nm)	0.0023	ppm	0.0000	0.82	874.5000	0.0023 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	17.32	-152.8000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0012 u	ppm	0.0003	22.92	-5.1530	-0.0012 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0001	13.78	71.2900	0.0005 (ppm)	Y 371.029
W (207.912 nm)	-0.0004 u	ppm	0.0007	> 100.00	-7.5940	-0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0046	ppm	0.0000	0.60	117.1000	0.0046 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.2190	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9710	417200.0000	0.0023	0.24
Y_R 371.029	0.9627	60810.0000	0.0002	0.02

Sample Name: LCS 440-505985/2-A

Date: 10/19/2018 12:27:13 PM

Rack:Tube: 3:27

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5278	ppm	0.0010	0.19	22230.0000	0.5278 (ppm)	Y 371.029
Al (396.152 nm)	1.0910	ppm	0.0034	0.31	23310.0000	1.0910 (ppm)	Y 371.029
As (188.980 nm)	1.0390	ppm	0.0073	0.70	708.8000	1.0390 (ppm)	Y 371.029
B (249.678 nm)	1.0550	ppm	0.0080	0.76	13060.0000	1.0550 (ppm)	Y 371.029
Ba (233.527 nm)	1.0840	ppm	0.0006	0.05	85480.0000	1.0840 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0500	ppm	0.0052	0.49	193400.0000	1.0500 (ppm)	Y 371.029
Ca (422.673 nm)	5.4190	ppm	0.0055	0.10	24060.0000	5.4190 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0580	ppm	0.0033	0.31	24560.0000	1.0580 (ppm)	Y 371.029
Co (228.615 nm)	1.0680	ppm	0.0033	0.31	14450.0000	1.0680 (ppm)	Y 371.029
Cr (205.560 nm)	1.0670	ppm	0.0060	0.56	5686.0000	1.0670 (ppm)	Y 371.029
Cu (324.754 nm)	1.0810	ppm	0.0035	0.32	43250.0000	1.0810 (ppm)	Y 371.029
Fe (238.204 nm)	1.0890	ppm	0.0061	0.56	4744.0000	1.0890 (ppm)	Y_R 371.029
K (766.491 nm)	10.7300	ppm	0.0075	0.07	12790.0000	10.7300 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0690	ppm	0.0012	0.11	72530.0000	1.0690 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.4400	ppm	0.0079	0.15	13930.0000	5.4400 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0650	ppm	0.0041	0.39	110600.0000	1.0650 (ppm)	Y 371.029
Mo (204.598 nm)	1.0680	ppm	0.0052	0.48	4954.0000	1.0680 (ppm)	Y 371.029
Na (589.592 nm)	10.7600	ppm	0.0219	0.20	76440.0000	10.7600 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0610	ppm	0.0028	0.26	5440.0000	1.0610 (ppm)	Y 371.029
P (213.618 nm)	1.0300	ppm	0.0054	0.52	874.4000	1.0300 (ppm)	Y 371.029
Pb (220.353 nm)	1.0630	ppm	0.0050	0.47	2037.0000	1.0630 (ppm)	Y 371.029
Sb (206.834 nm)	1.0770	ppm	0.0016	0.15	1103.0000	1.0770 (ppm)	Y 371.029
Se (196.026 nm)	0.9976	ppm	0.0065	0.65	757.1000	0.9976 (ppm)	Y 371.029
Si (251.611 nm)	5.1290	ppm	0.0760	1.48	12730.0000	5.1290 (ppm)	Y 371.029
Sn (189.925 nm)	1.0290	ppm	0.0027	0.26	669.8000	1.0290 (ppm)	Y 371.029
Sr (421.552 nm)	1.0780	ppm	0.0001	0.01	432300.0000	1.0780 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0590	ppm	0.0053	0.50	130700.0000	1.0590 (ppm)	Y 371.029
Tl (190.794 nm)	1.0380	ppm	0.0254	2.45	1235.0000	1.0380 (ppm)	Y 371.029
V (292.401 nm)	1.0730	ppm	0.0039	0.37	30180.0000	1.0730 (ppm)	Y 371.029
W (207.912 nm)	1.0590	ppm	0.0018	0.17	1997.0000	1.0590 (ppm)	Y 371.029
Zn (202.548 nm)	1.0660	ppm	0.0029	0.27	19530.0000	1.0660 (ppm)	Y 371.029
Zr (343.823 nm)	1.0560	ppm	0.0051	0.49	88830.0000	1.0560 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9711	417200.0000	0.0005	0.05
Y_R 371.029	0.9642	60910.0000	0.0030	0.31

Sample Name: CCV 5129881

Date: 10/19/2018 12:29:37 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5037	ppm	0.0004	0.08	21210.0000	0.5037 (ppm)	Y 371.029
Al (396.152 nm)	1.0270	ppm	0.0041	0.40	21890.0000	1.0270 (ppm)	Y 371.029
As (188.980 nm)	1.0030	ppm	0.0009	0.09	684.1000	1.0030 (ppm)	Y 371.029
B (249.678 nm)	1.0120	ppm	0.0063	0.62	12520.0000	1.0120 (ppm)	Y 371.029
Ba (233.527 nm)	1.0190	ppm	0.0055	0.54	80360.0000	1.0190 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0100	ppm	0.0020	0.20	185900.0000	1.0100 (ppm)	Y 371.029
Ca (422.673 nm)	5.0490	ppm	0.0331	0.65	22430.0000	5.0490 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0160	ppm	0.0006	0.06	23580.0000	1.0160 (ppm)	Y 371.029
Co (228.615 nm)	1.0170	ppm	0.0005	0.05	13760.0000	1.0170 (ppm)	Y 371.029
Cr (205.560 nm)	1.0170	ppm	0.0026	0.26	5419.0000	1.0170 (ppm)	Y 371.029
Cu (324.754 nm)	1.0120	ppm	0.0038	0.38	40510.0000	1.0120 (ppm)	Y 371.029
Fe (238.204 nm)	1.0110	ppm	0.0003	0.03	4402.0000	1.0110 (ppm)	Y_R 371.029
K (766.491 nm)	10.0500	ppm	0.0846	0.84	11980.0000	10.0500 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9977	ppm	0.0069	0.69	67690.0000	0.9977 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1340	ppm	0.0328	0.64	13140.0000	5.1340 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0140	ppm	0.0010	0.10	105300.0000	1.0140 (ppm)	Y 371.029
Mo (204.598 nm)	1.0220	ppm	0.0041	0.40	4742.0000	1.0220 (ppm)	Y 371.029
Na (589.592 nm)	10.0900	ppm	0.0702	0.70	71760.0000	10.0900 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0170	ppm	0.0001	0.00	5210.0000	1.0170 (ppm)	Y 371.029
P (213.618 nm)	0.9937	ppm	0.0097	0.97	844.5000	0.9937 (ppm)	Y 371.029
Pb (220.353 nm)	1.0200	ppm	0.0001	0.01	1954.0000	1.0200 (ppm)	Y 371.029
Sb (206.834 nm)	0.9963	ppm	0.0116	1.16	1020.0000	0.9963 (ppm)	Y 371.029
Se (196.026 nm)	0.9958	ppm	0.0016	0.16	755.6000	0.9958 (ppm)	Y 371.029
Si (251.611 nm)	5.0300	ppm	0.0868	1.73	12480.0000	5.0300 (ppm)	Y 371.029
Sn (189.925 nm)	1.0140	ppm	0.0008	0.07	660.0000	1.0140 (ppm)	Y 371.029
Sr (421.552 nm)	1.0180	ppm	0.0091	0.89	408000.0000	1.0180 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0170	ppm	0.0013	0.13	125400.0000	1.0170 (ppm)	Y 371.029
Tl (190.794 nm)	1.0170	ppm	0.0047	0.47	1212.0000	1.0170 (ppm)	Y 371.029
V (292.401 nm)	1.0220	ppm	0.0018	0.18	28740.0000	1.0220 (ppm)	Y 371.029
W (207.912 nm)	1.0180	ppm	0.0011	0.10	1919.0000	1.0180 (ppm)	Y 371.029
Zn (202.548 nm)	1.0200	ppm	0.0003	0.03	18680.0000	1.0200 (ppm)	Y 371.029
Zr (343.823 nm)	1.0140	ppm	0.0011	0.11	85360.0000	1.0140 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9960	427900.0000	0.0057	0.57
Y_R 371.029	0.9999	63160.0000	0.0018	0.18

Sample Name: CCB 5129880

Date: 10/19/2018 12:32:00 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	43.90	10.3400	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0041	ppm	0.0006	14.94	-1124.0000	0.0041 (ppm)	Y 371.029
As (188.980 nm)	0.0074	ppm	0.0043	58.30	10.7900	0.0074 (ppm)	Y 371.029
B (249.678 nm)	0.0027	ppm	0.0004	14.71	10.2700	0.0027 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0003	50.41	81.5500	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	36.22	99.7700	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0043	ppm	0.0019	44.12	110.8000	0.0043 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0001	13.62	10.9400	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0002	20.40	-7.8060	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0000	3.18	6.3140	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0001	21.60	129.5000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0007 u	ppm	0.0006	87.92	-21.3000	-0.0007 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.1031 u	ppm	0.0596	57.79	-238.7000	-0.1031 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0022	ppm	0.0003	15.59	195.9000	0.0022 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0045	ppm	0.0019	42.07	17.4000	0.0045 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0003	48.36	126.1000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0024	ppm	0.0005	22.21	11.8400	0.0024 (ppm)	Y 371.029
Na (589.592 nm)	0.0008	ppm	0.0010	> 100.00	1317.0000	0.0008 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0006	ppm	0.0005	89.43	4.9110	0.0006 (ppm)	Y 371.029
P (213.618 nm)	0.0024 u	ppm	0.0044	> 100.00	-7.9650	0.0024 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0019	ppm	0.0010	54.36	-5.4490	0.0019 (ppm)	Y 371.029
Sb (206.834 nm)	0.0035	ppm	0.0030	87.21	2.1360	0.0035 (ppm)	Y 371.029
Se (196.026 nm)	0.0029 u	ppm	0.0045	> 100.00	1.1830	0.0029 u (ppm)	Y 371.029
Si (251.611 nm)	0.0054	ppm	0.0007	12.97	62.0600	0.0054 (ppm)	Y 371.029
Sn (189.925 nm)	0.0035	ppm	0.0002	5.57	-1.2700	0.0035 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0001	17.77	59.9200	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	22.56	-74.0600	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	0.0008 u	ppm	0.0027	> 100.00	-2.7610	0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0008	ppm	0.0004	48.73	80.0900	0.0008 (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0014	> 100.00	-4.3190	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.0020	ppm	0.0001	2.78	70.7700	0.0020 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	21.39	30.2000	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0080	433200.0000	0.0040	0.40
Y_R 371.029	1.0110	63870.0000	0.0009	0.09

Sample Name: 440-222284-G-2-A

Date: 10/19/2018 12:34:24 PM

Rack:Tube: 3:28

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0010 u	ppm	0.0001	13.33	-77.8500	-0.0010 u (ppm)	Y 371.029
Al (396.152 nm)	0.0540	ppm	0.0010	1.78	121.4000	0.0540 (ppm)	Y 371.029
As (188.980 nm)	0.0460	ppm	0.0035	7.51	19.1900	0.0460 (ppm)	Y 371.029
B (249.678 nm)	1.2820	ppm	0.0142	1.11	16000.0000	1.2820 (ppm)	Y 371.029
Ba (233.527 nm)	0.0350	ppm	0.0002	0.63	2815.0000	0.0350 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	20.2000	0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	172.2000	ppm	0.7250	0.42	762000.0000	172.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	0.1700	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0002	21.62	-4.3460	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	2.5740	ppm	0.0428	1.66	13720.0000	2.5740 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0002	16.88	-58.7800	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0215	ppm	0.0005	2.51	85.6600	0.0215 (ppm)	Y_R 371.029
K (766.491 nm)	11.9200	ppm	0.0106	0.09	14270.0000	11.9200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1025	ppm	0.0010	1.02	7677.0000	0.1025 (ppm)	Y_R 371.029
Mg (279.078 nm)	88.2300	ppm	0.5994	0.68	225800.0000	88.2300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0018	ppm	0.0001	3.74	615.7000	0.0018 (ppm)	Y 371.029
Mo (204.598 nm)	0.0111	ppm	0.0002	1.50	52.7000	0.0111 (ppm)	Y 371.029
Na (589.592 nm)	314.5000	ppm	0.9674	0.31	2194000.0000	314.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002	ppm	0.0001	60.29	-1.3550	0.0002 (ppm)	Y 371.029
P (213.618 nm)	0.0160	ppm	0.0062	38.98	2.3830	0.0160 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0045 u	ppm	0.0012	25.81	-14.4200	-0.0045 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0116	ppm	0.0008	6.67	32.7100	0.0116 (ppm)	Y 371.029
Se (196.026 nm)	0.0059	ppm	0.0021	36.61	2.1010	0.0059 (ppm)	Y 371.029
Si (251.611 nm)	24.3200	ppm	0.1387	0.57	59340.0000	24.3200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0048 u	ppm	0.0006	12.63	-6.6010	-0.0048 u (ppm)	Y 371.029
Sr (421.552 nm)	4.6650	ppm	0.0292	0.63	1873000.0000	4.6650 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0015	ppm	0.0000	1.76	-207.0000	0.0015 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0026 u	ppm	0.0007	25.42	-7.7590	-0.0026 u (ppm)	Y 371.029
V (292.401 nm)	0.0164	ppm	0.0000	0.18	772.1000	0.0164 (ppm)	Y 371.029
W (207.912 nm)	-0.0027 u	ppm	0.0011	39.89	-15.9300	-0.0027 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0142	ppm	0.0002	1.24	291.0000	0.0142 (ppm)	Y 371.029
Zr (343.823 nm)	0.0006	ppm	0.0000	2.16	70.8700	0.0006 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9125	392000.0000	0.0011	0.12
Y_R 371.029	0.9650	60960.0000	0.0008	0.08

Sample Name: 440-222284-G-2-B MS

Date: 10/19/2018 12:36:49 PM

Rack:Tube: 3:29

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5578	ppm	0.0033	0.59	23440.0000	0.5578 (ppm)	Y 371.029
Al (396.152 nm)	1.3810	ppm	0.0087	0.63	29810.0000	1.3810 (ppm)	Y 371.029
As (188.980 nm)	1.1600	ppm	0.0130	1.12	773.8000	1.1600 (ppm)	Y 371.029
B (249.678 nm)	2.4240	ppm	0.0181	0.75	30160.0000	2.4240 (ppm)	Y 371.029
Ba (233.527 nm)	1.0650	ppm	0.0090	0.85	84040.0000	1.0650 (ppm)	Y_R 371.029
Be (234.861 nm)	1.1060	ppm	0.0061	0.55	203700.0000	1.1060 (ppm)	Y 371.029
Ca (422.673 nm)	177.1000	ppm	0.0198	0.01	783700.0000	177.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0330	ppm	0.0070	0.67	23960.0000	1.0330 (ppm)	Y 371.029
Co (228.615 nm)	1.0400	ppm	0.0069	0.66	14080.0000	1.0400 (ppm)	Y 371.029
Cr (205.560 nm)	3.6350	ppm	0.0363	1.00	19380.0000	3.6350 (ppm)	Y 371.029
Cu (324.754 nm)	1.1550	ppm	0.0089	0.77	46050.0000	1.1550 (ppm)	Y 371.029
Fe (238.204 nm)	1.1080	ppm	0.0042	0.38	4835.0000	1.1080 (ppm)	Y_R 371.029
K (766.491 nm)	22.8600	ppm	0.0440	0.19	27420.0000	22.8600 (ppm)	Y_R 371.029
Li (670.783 nm)	1.2010	ppm	0.0015	0.12	82140.0000	1.2010 (ppm)	Y_R 371.029
Mg (279.078 nm)	94.2000	ppm	0.7916	0.84	241100.0000	94.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0640	ppm	0.0057	0.53	110900.0000	1.0640 (ppm)	Y 371.029
Mo (204.598 nm)	1.1260	ppm	0.0087	0.77	5224.0000	1.1260 (ppm)	Y 371.029
Na (589.592 nm)	323.3000	ppm	0.0947	0.03	2256000.0000	323.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0130	ppm	0.0048	0.47	5187.0000	1.0130 (ppm)	Y 371.029
P (213.618 nm)	1.1430	ppm	0.0004	0.03	973.2000	1.1430 (ppm)	Y 371.029
Pb (220.353 nm)	1.0400	ppm	0.0019	0.18	1995.0000	1.0400 (ppm)	Y 371.029
Sb (206.834 nm)	1.1640	ppm	0.0020	0.17	1215.0000	1.1640 (ppm)	Y 371.029
Se (196.026 nm)	1.0520	ppm	0.0035	0.34	797.1000	1.0520 (ppm)	Y 371.029
Si (251.611 nm)	29.1000	ppm	0.2346	0.81	71160.0000	29.1000 (ppm)	Y 371.029
Sn (189.925 nm)	1.0610	ppm	0.0061	0.57	690.9000	1.0610 (ppm)	Y 371.029
Sr (421.552 nm)	5.7190	ppm	0.0013	0.02	2296000.0000	5.7190 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.1050	ppm	0.0062	0.56	136200.0000	1.1050 (ppm)	Y 371.029
Tl (190.794 nm)	1.0230	ppm	0.0207	2.03	1215.0000	1.0230 (ppm)	Y 371.029
V (292.401 nm)	1.1390	ppm	0.0069	0.60	32290.0000	1.1390 (ppm)	Y 371.029
W (207.912 nm)	1.1100	ppm	0.0083	0.75	2088.0000	1.1100 (ppm)	Y 371.029
Zn (202.548 nm)	1.0400	ppm	0.0027	0.26	19070.0000	1.0400 (ppm)	Y 371.029
Zr (343.823 nm)	1.0910	ppm	0.0061	0.56	91810.0000	1.0910 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9092	390600.0000	0.0004	0.05
Y_R 371.029	0.9529	60200.0000	0.0033	0.35

Sample Name: 440-222284-G-2-C MSD

Date: 10/19/2018 12:39:13 PM

Rack:Tube: 3:30

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5333	ppm	0.0017	0.33	22420.0000	0.5333 (ppm)	Y 371.029
Al (396.152 nm)	1.3180	ppm	0.0022	0.17	28400.0000	1.3180 (ppm)	Y 371.029
As (188.980 nm)	1.1160	ppm	0.0013	0.12	744.1000	1.1160 (ppm)	Y 371.029
B (249.678 nm)	2.3310	ppm	0.0004	0.02	29000.0000	2.3310 (ppm)	Y 371.029
Ba (233.527 nm)	0.9918	ppm	0.0092	0.92	78240.0000	0.9918 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0580	ppm	0.0059	0.55	194800.0000	1.0580 (ppm)	Y 371.029
Ca (422.673 nm)	168.3000	ppm	0.1233	0.07	744500.0000	168.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9813	ppm	0.0026	0.26	22770.0000	0.9813 (ppm)	Y 371.029
Co (228.615 nm)	0.9883	ppm	0.0077	0.78	13380.0000	0.9883 (ppm)	Y 371.029
Cr (205.560 nm)	3.4870	ppm	0.0064	0.18	18590.0000	3.4870 (ppm)	Y 371.029
Cu (324.754 nm)	1.1050	ppm	0.0032	0.29	44050.0000	1.1050 (ppm)	Y 371.029
Fe (238.204 nm)	1.0370	ppm	0.0058	0.55	4526.0000	1.0370 (ppm)	Y_R 371.029
K (766.491 nm)	21.7300	ppm	0.0096	0.04	26050.0000	21.7300 (ppm)	Y_R 371.029
Li (670.783 nm)	1.1290	ppm	0.0013	0.12	77260.0000	1.1290 (ppm)	Y_R 371.029
Mg (279.078 nm)	88.5100	ppm	0.8718	0.98	226500.0000	88.5100 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0180	ppm	0.0047	0.46	106100.0000	1.0180 (ppm)	Y 371.029
Mo (204.598 nm)	1.0810	ppm	0.0026	0.24	5019.0000	1.0810 (ppm)	Y 371.029
Na (589.592 nm)	307.2000	ppm	1.2050	0.39	2144000.0000	307.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9683	ppm	0.0051	0.52	4958.0000	0.9683 (ppm)	Y 371.029
P (213.618 nm)	1.1020	ppm	0.0047	0.43	938.2000	1.1020 (ppm)	Y 371.029
Pb (220.353 nm)	0.9905	ppm	0.0030	0.31	1900.0000	0.9905 (ppm)	Y 371.029
Sb (206.834 nm)	1.1070	ppm	0.0099	0.90	1155.0000	1.1070 (ppm)	Y 371.029
Se (196.026 nm)	1.0100	ppm	0.0105	1.04	764.9000	1.0100 (ppm)	Y 371.029
Si (251.611 nm)	28.1200	ppm	0.0540	0.19	68760.0000	28.1200 (ppm)	Y 371.029
Sn (189.925 nm)	1.0130	ppm	0.0073	0.72	659.8000	1.0130 (ppm)	Y 371.029
Sr (421.552 nm)	5.4400	ppm	0.0024	0.04	2184000.0000	5.4400 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0600	ppm	0.0040	0.38	130600.0000	1.0600 (ppm)	Y 371.029
Tl (190.794 nm)	0.9810	ppm	0.0137	1.39	1164.0000	0.9810 (ppm)	Y 371.029
V (292.401 nm)	1.0900	ppm	0.0049	0.45	30910.0000	1.0900 (ppm)	Y 371.029
W (207.912 nm)	1.0630	ppm	0.0005	0.05	1999.0000	1.0630 (ppm)	Y 371.029
Zn (202.548 nm)	0.9936	ppm	0.0048	0.48	18220.0000	0.9936 (ppm)	Y 371.029
Zr (343.823 nm)	1.0470	ppm	0.0043	0.41	88140.0000	1.0470 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9225	396300.0000	0.0106	1.15
Y_R 371.029	0.9941	62800.0000	0.0027	0.27

Sample Name: 440-222284-G-2-D PDS

Date: 10/19/2018 12:41:37 PM

Rack:Tube: 3:31

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5116	ppm	0.0004	0.08	21500.0000	0.5116 (ppm)	Y 371.029
Al (396.152 nm)	1.2440	ppm	0.0018	0.14	26750.0000	1.2440 (ppm)	Y 371.029
As (188.980 nm)	1.0650	ppm	0.0055	0.51	710.0000	1.0650 (ppm)	Y 371.029
B (249.678 nm)	2.2530	ppm	0.0041	0.18	28030.0000	2.2530 (ppm)	Y 371.029
Ba (233.527 nm)	0.9681	ppm	0.0060	0.62	76380.0000	0.9681 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0140	ppm	0.0009	0.09	186800.0000	1.0140 (ppm)	Y 371.029
Ca (422.673 nm)	164.6000	ppm	0.5266	0.32	728500.0000	164.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9442	ppm	0.0014	0.15	21910.0000	0.9442 (ppm)	Y 371.029
Co (228.615 nm)	0.9538	ppm	0.0003	0.03	12920.0000	0.9538 (ppm)	Y 371.029
Cr (205.560 nm)	3.3830	ppm	0.0134	0.40	18040.0000	3.3830 (ppm)	Y 371.029
Cu (324.754 nm)	1.0630	ppm	0.0003	0.03	42390.0000	1.0630 (ppm)	Y 371.029
Fe (238.204 nm)	1.0010	ppm	0.0024	0.24	4369.0000	1.0010 (ppm)	Y_R 371.029
K (766.491 nm)	21.0800	ppm	0.0187	0.09	25280.0000	21.0800 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0930	ppm	0.0031	0.28	74810.0000	1.0930 (ppm)	Y_R 371.029
Mg (279.078 nm)	87.3600	ppm	0.5457	0.62	223600.0000	87.3600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9779	ppm	0.0010	0.11	101900.0000	0.9779 (ppm)	Y 371.029
Mo (204.598 nm)	1.0400	ppm	0.0009	0.09	4827.0000	1.0400 (ppm)	Y 371.029
Na (589.592 nm)	302.0000	ppm	2.2740	0.75	2107000.0000	302.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9318	ppm	0.0002	0.02	4771.0000	0.9318 (ppm)	Y 371.029
P (213.618 nm)	1.0570	ppm	0.0052	0.49	899.3000	1.0570 (ppm)	Y 371.029
Pb (220.353 nm)	0.9472	ppm	0.0021	0.23	1817.0000	0.9472 (ppm)	Y 371.029
Sb (206.834 nm)	1.0620	ppm	0.0074	0.70	1109.0000	1.0620 (ppm)	Y 371.029
Se (196.026 nm)	0.9593	ppm	0.0007	0.08	726.8000	0.9593 (ppm)	Y 371.029
Si (251.611 nm)	27.3800	ppm	0.0195	0.07	66960.0000	27.3800 (ppm)	Y 371.029
Sn (189.925 nm)	0.9740	ppm	0.0022	0.22	634.1000	0.9740 (ppm)	Y 371.029
Sr (421.552 nm)	5.2960	ppm	0.0136	0.26	2126000.0000	5.2960 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0200	ppm	0.0011	0.11	125600.0000	1.0200 (ppm)	Y 371.029
Tl (190.794 nm)	0.9377	ppm	0.0147	1.57	1112.0000	0.9377 (ppm)	Y 371.029
V (292.401 nm)	1.0470	ppm	0.0020	0.19	29680.0000	1.0470 (ppm)	Y 371.029
W (207.912 nm)	1.0250	ppm	0.0005	0.05	1927.0000	1.0250 (ppm)	Y 371.029
Zn (202.548 nm)	0.9358	ppm	0.0005	0.06	17160.0000	0.9358 (ppm)	Y 371.029
Zr (343.823 nm)	1.0080	ppm	0.0015	0.15	84850.0000	1.0080 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9303	399700.0000	0.0018	0.19
Y_R 371.029	0.9845	62190.0000	0.0033	0.33

Sample Name: 440-222284-G-2-A sd@5

Date: 10/19/2018 12:44:01 PM

Rack:Tube: 3:32

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0002	56.10	-22.0800	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0179	ppm	0.0008	4.53	-793.4000	0.0179 (ppm)	Y 371.029
As (188.980 nm)	0.0120	ppm	0.0003	2.63	10.4600	0.0120 (ppm)	Y 371.029
B (249.678 nm)	0.2398	ppm	0.0008	0.34	2973.0000	0.2398 (ppm)	Y 371.029
Ba (233.527 nm)	0.0075	ppm	0.0003	3.72	637.0000	0.0075 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0003	55.66	116.3000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	33.0200	ppm	0.0891	0.27	146200.0000	33.0200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0007	ppm	0.0003	38.11	12.2700	0.0007 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0008	60.31	-4.3360	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.4957	ppm	0.0042	0.84	2644.0000	0.4957 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0007 u	ppm	0.0003	48.03	93.5200	-0.0007 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0043	ppm	0.0003	6.08	2.6350	0.0043 (ppm)	Y_R 371.029
K (766.491 nm)	2.2210	ppm	0.0134	0.60	2564.0000	2.2210 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0180	ppm	0.0004	2.35	1401.0000	0.0180 (ppm)	Y_R 371.029
Mg (279.078 nm)	17.3200	ppm	0.0263	0.15	44340.0000	17.3200 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0011	ppm	0.0002	16.20	251.5000	0.0011 (ppm)	Y 371.029
Mo (204.598 nm)	0.0031	ppm	0.0000	0.42	15.2000	0.0031 (ppm)	Y 371.029
Na (589.592 nm)	61.5000	ppm	0.1628	0.26	430200.0000	61.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0004	> 100.00	2.0400	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0024 u	ppm	0.0049	> 100.00	-8.3460	0.0024 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0016	ppm	0.0014	83.42	-5.3320	0.0016 (ppm)	Y 371.029
Sb (206.834 nm)	0.0057	ppm	0.0053	92.00	8.7390	0.0057 (ppm)	Y 371.029
Se (196.026 nm)	0.0026	ppm	0.0013	49.06	0.6781	0.0026 (ppm)	Y 371.029
Si (251.611 nm)	4.5310	ppm	0.0497	1.10	11100.0000	4.5310 (ppm)	Y 371.029
Sn (189.925 nm)	0.0018 u	ppm	0.0047	> 100.00	-2.3690	0.0018 u (ppm)	Y 371.029
Sr (421.552 nm)	0.8931	ppm	0.0025	0.28	358600.0000	0.8931 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0012	ppm	0.0002	19.01	-71.7800	0.0012 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0007	88.70	-4.8660	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0040	ppm	0.0004	10.09	217.7000	0.0040 (ppm)	Y 371.029
W (207.912 nm)	0.0002	ppm	0.0001	43.27	-7.3850	0.0002 (ppm)	Y 371.029
Zn (202.548 nm)	0.0043	ppm	0.0002	5.87	111.1000	0.0043 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0002	28.15	60.3500	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0140	435600.0000	0.0020	0.20
Y_R 371.029	1.0280	64970.0000	0.0041	0.39

Sample Name: 440-222284-G-1-A

Date: 10/19/2018 12:46:26 PM

Rack:Tube: 3:33

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	30.46	-17.8200	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.2406	ppm	0.0010	0.41	4051.0000	0.2406 (ppm)	Y 371.029
As (188.980 nm)	0.0361	ppm	0.0034	9.32	30.1300	0.0361 (ppm)	Y 371.029
B (249.678 nm)	0.8992	ppm	0.0062	0.69	11200.0000	0.8992 (ppm)	Y 371.029
Ba (233.527 nm)	0.0163	ppm	0.0001	0.47	1332.0000	0.0163 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	27.34	23.6400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	30.1100	ppm	0.1280	0.42	133300.0000	30.1100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	22.21	0.4330	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0004	44.43	-10.2000	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0275	ppm	0.0006	2.10	148.6000	0.0275 (ppm)	Y 371.029
Cu (324.754 nm)	0.0007	ppm	0.0000	2.26	153.2000	0.0007 (ppm)	Y 371.029
Fe (238.204 nm)	0.2831	ppm	0.0032	1.14	1222.0000	0.2831 (ppm)	Y_R 371.029
K (766.491 nm)	6.2230	ppm	0.0223	0.36	7371.0000	6.2230 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0447	ppm	0.0016	3.48	3219.0000	0.0447 (ppm)	Y_R 371.029
Mg (279.078 nm)	17.4600	ppm	0.0392	0.22	44690.0000	17.4600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0111	ppm	0.0001	1.12	1321.0000	0.0111 (ppm)	Y 371.029
Mo (204.598 nm)	0.0118	ppm	0.0000	0.32	55.4200	0.0118 (ppm)	Y 371.029
Na (589.592 nm)	135.1000	ppm	0.4938	0.37	943600.0000	135.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0059	ppm	0.0007	11.53	31.3400	0.0059 (ppm)	Y 371.029
P (213.618 nm)	0.1776	ppm	0.0040	2.26	152.1000	0.1776 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0021 u	ppm	0.0008	36.99	-12.6100	-0.0021 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0005 u	ppm	0.0055	> 100.00	-1.8310	-0.0005 u (ppm)	Y 371.029
Se (196.026 nm)	0.0059	ppm	0.0043	72.87	3.2050	0.0059 (ppm)	Y 371.029
Si (251.611 nm)	16.6300	ppm	0.0555	0.33	40590.0000	16.6300 (ppm)	Y 371.029
Sn (189.925 nm)	0.0016	ppm	0.0017	> 100.00	-2.5380	0.0016 (ppm)	Y 371.029
Sr (421.552 nm)	1.0690	ppm	0.0035	0.32	429100.0000	1.0690 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0071	ppm	0.0001	0.80	669.2000	0.0071 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0005 u	ppm	0.0021	> 100.00	-5.0870	-0.0005 u (ppm)	Y 371.029
V (292.401 nm)	0.0188	ppm	0.0001	0.79	627.4000	0.0188 (ppm)	Y 371.029
W (207.912 nm)	0.0022	ppm	0.0010	43.70	-3.3630	0.0022 (ppm)	Y 371.029
Zn (202.548 nm)	0.0150	ppm	0.0001	0.90	316.7000	0.0150 (ppm)	Y 371.029
Zr (343.823 nm)	0.0011	ppm	0.0000	3.41	88.7300	0.0011 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9849	423200.0000	0.0095	0.96
Y_R 371.029	1.0050	63500.0000	0.0028	0.28

Sample Name: 440-222377-E-1-A

Date: 10/19/2018 12:48:49 PM

Rack:Tube: 3:34

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0000	14.05	-55.2200	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.7439	ppm	0.0050	0.67	15120.0000	0.7439 (ppm)	Y 371.029
As (188.980 nm)	0.1917	ppm	0.0013	0.69	136.2000	0.1917 (ppm)	Y 371.029
B (249.678 nm)	0.5186	ppm	0.0042	0.81	6431.0000	0.5186 (ppm)	Y 371.029
Ba (233.527 nm)	0.3084	ppm	0.0002	0.07	24380.0000	0.3084 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	29.21	569.6000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	270.2000	ppm	0.9679	0.36	1196000.0000	270.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0002	> 100.00	6.8710	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0017	ppm	0.0003	16.97	10.3000	0.0017 (ppm)	Y 371.029
Cr (205.560 nm)	0.0029	ppm	0.0003	9.01	22.2300	0.0029 (ppm)	Y 371.029
Cu (324.754 nm)	0.0208	ppm	0.0005	2.30	750.4000	0.0208 (ppm)	Y 371.029
Fe (238.204 nm)	21.8400	ppm	0.0465	0.21	95520.0000	21.8400 (ppm)	Y_R 371.029
K (766.491 nm)	7.3920	ppm	0.0103	0.14	8833.0000	7.3920 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0046	ppm	0.0010	21.79	1106.0000	0.0046 (ppm)	Y_R 371.029
Mg (279.078 nm)	78.2500	ppm	0.0867	0.11	200300.0000	78.2500 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.6100	ppm	0.0087	0.54	169500.0000	1.6100 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0001	5.17	7.7680	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	188.6000	ppm	0.1411	0.07	1317000.0000	188.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0036	ppm	0.0015	42.09	13.8700	0.0036 (ppm)	Y 371.029
P (213.618 nm)	0.5148	ppm	0.0027	0.53	457.0000	0.5148 (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0010	> 100.00	-6.1560	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0014 u	ppm	0.0035	> 100.00	1.1260	0.0014 u (ppm)	Y 371.029
Se (196.026 nm)	0.0006 u	ppm	0.0027	> 100.00	-4.7840	0.0006 u (ppm)	Y 371.029
Si (251.611 nm)	29.1300	ppm	0.1633	0.56	71060.0000	29.1300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0034 u	ppm	0.0041	> 100.00	-5.7150	-0.0034 u (ppm)	Y 371.029
Sr (421.552 nm)	2.4840	ppm	0.0109	0.44	1000000.0000	2.4840 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0416	ppm	0.0003	0.81	4632.0000	0.0416 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0012 u	ppm	0.0013	> 100.00	-4.0090	-0.0012 u (ppm)	Y 371.029
V (292.401 nm)	-0.0089 u	ppm	0.0002	2.21	183.6000	-0.0089 u (ppm)	Y 371.029
W (207.912 nm)	-0.0011 u	ppm	0.0005	48.48	-15.0500	-0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0374	ppm	0.0004	1.05	759.6000	0.0374 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0002	> 100.00	67.1500	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9593	412200.0000	0.0012	0.12
Y_R 371.029	1.0060	63530.0000	0.0021	0.20

Sample Name: 440-222377-E-2-A

Date: 10/19/2018 12:51:14 PM

Rack:Tube: 3:35

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0000	3.51	-42.0700	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	1.2020	ppm	0.0063	0.53	24990.0000	1.2020 (ppm)	Y 371.029
As (188.980 nm)	0.0712	ppm	0.0023	3.28	54.1600	0.0712 (ppm)	Y 371.029
B (249.678 nm)	0.3358	ppm	0.0009	0.26	4152.0000	0.3358 (ppm)	Y 371.029
Ba (233.527 nm)	0.1942	ppm	0.0005	0.25	15360.0000	0.1942 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0001	44.75	472.1000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	123.5000	ppm	0.2852	0.23	546400.0000	123.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0000	10.74	10.5900	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0031	ppm	0.0005	15.46	25.2300	0.0031 (ppm)	Y 371.029
Cr (205.560 nm)	0.0064	ppm	0.0001	1.04	38.2100	0.0064 (ppm)	Y 371.029
Cu (324.754 nm)	0.1156	ppm	0.0004	0.35	4662.0000	0.1156 (ppm)	Y 371.029
Fe (238.204 nm)	17.4800	ppm	0.0299	0.17	76450.0000	17.4800 (ppm)	Y_R 371.029
K (766.491 nm)	11.5200	ppm	0.0281	0.24	13760.0000	11.5200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0114	ppm	0.0003	2.30	1155.0000	0.0114 (ppm)	Y_R 371.029
Mg (279.078 nm)	33.0700	ppm	0.0063	0.02	84630.0000	33.0700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2619	ppm	0.0013	0.51	29650.0000	0.2619 (ppm)	Y 371.029
Mo (204.598 nm)	0.0108	ppm	0.0002	1.46	51.3400	0.0108 (ppm)	Y 371.029
Na (589.592 nm)	134.9000	ppm	0.7382	0.55	942300.0000	134.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0246	ppm	0.0013	5.25	125.2000	0.0246 (ppm)	Y 371.029
P (213.618 nm)	0.2498	ppm	0.0038	1.54	212.3000	0.2498 (ppm)	Y 371.029
Pb (220.353 nm)	0.0062	ppm	0.0011	17.47	3.2100	0.0062 (ppm)	Y 371.029
Sb (206.834 nm)	0.0012 u	ppm	0.0028	> 100.00	0.3243	0.0012 u (ppm)	Y 371.029
Se (196.026 nm)	0.0070	ppm	0.0011	15.15	1.0970	0.0070 (ppm)	Y 371.029
Si (251.611 nm)	12.9600	ppm	0.0489	0.38	31630.0000	12.9600 (ppm)	Y 371.029
Sn (189.925 nm)	0.0108	ppm	0.0018	16.61	3.5030	0.0108 (ppm)	Y 371.029
Sr (421.552 nm)	1.2880	ppm	0.0050	0.39	518200.0000	1.2880 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0637	ppm	0.0005	0.76	7549.0000	0.0637 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0001 u	ppm	0.0016	> 100.00	-4.8560	-0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0007	ppm	0.0000	7.30	247.6000	0.0007 (ppm)	Y 371.029
W (207.912 nm)	0.0020	ppm	0.0009	44.55	-2.8480	0.0020 (ppm)	Y 371.029
Zn (202.548 nm)	0.3020	ppm	0.0007	0.24	5542.0000	0.3020 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	28.42	74.5200	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9838	422700.0000	0.0022	0.23
Y_R 371.029	1.0210	64520.0000	0.0031	0.30

Sample Name: 440-222399-E-1-A

Date: 10/19/2018 12:53:38 PM

Rack:Tube: 3:36

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0006 u	ppm	0.0000	0.81	-75.1800	-0.0006 u (ppm)	Y 371.029
Al (396.152 nm)	0.4307	ppm	0.0009	0.20	8267.0000	0.4307 (ppm)	Y 371.029
As (188.980 nm)	1.2660	ppm	0.0079	0.62	870.4000	1.2660 (ppm)	Y 371.029
B (249.678 nm)	0.5347	ppm	0.0008	0.15	6615.0000	0.5347 (ppm)	Y 371.029
Ba (233.527 nm)	0.2168	ppm	0.0003	0.15	17160.0000	0.2168 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	12.85	1022.0000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	222.6000	ppm	0.4401	0.20	985100.0000	222.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	10.62	11.4600	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0004 u	ppm	0.0007	> 100.00	-8.1660	0.0004 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0024	ppm	0.0002	9.00	18.9000	0.0024 (ppm)	Y 371.029
Cu (324.754 nm)	0.0102	ppm	0.0001	1.04	387.8000	0.0102 (ppm)	Y 371.029
Fe (238.204 nm)	38.9500	ppm	0.0388	0.10	170400.0000	38.9500 (ppm)	Y_R 371.029
K (766.491 nm)	9.4730	ppm	0.0171	0.18	11330.0000	9.4730 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0158	ppm	0.0002	1.45	1746.0000	0.0158 (ppm)	Y_R 371.029
Mg (279.078 nm)	62.1600	ppm	0.1906	0.31	159100.0000	62.1600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8436	ppm	0.0016	0.19	92750.0000	0.8436 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0005	> 100.00	1.5790	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	347.9000	ppm	0.6182	0.18	2427000.0000	347.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0045	ppm	0.0004	8.20	20.1900	0.0045 (ppm)	Y 371.029
P (213.618 nm)	0.8213	ppm	0.0011	0.14	739.1000	0.8213 (ppm)	Y 371.029
Pb (220.353 nm)	0.0038	ppm	0.0012	32.11	-1.2950	0.0038 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0043 u	ppm	0.0093	> 100.00	-4.7960	-0.0043 u (ppm)	Y 371.029
Se (196.026 nm)	0.0020	ppm	0.0023	> 100.00	-6.1180	0.0020 (ppm)	Y 371.029
Si (251.611 nm)	27.5300	ppm	0.0542	0.20	67140.0000	27.5300 (ppm)	Y 371.029
Sn (189.925 nm)	0.0004 u	ppm	0.0011	> 100.00	-3.2740	0.0004 u (ppm)	Y 371.029
Sr (421.552 nm)	2.5520	ppm	0.0090	0.35	1026000.0000	2.5520 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0194	ppm	0.0007	3.55	1957.0000	0.0194 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0018 u	ppm	0.0008	41.93	-5.4640	-0.0018 u (ppm)	Y 371.029
V (292.401 nm)	-0.0070 u	ppm	0.0000	0.03	169.6000	-0.0070 u (ppm)	Y 371.029
W (207.912 nm)	-0.0008 u	ppm	0.0013	> 100.00	-13.8000	-0.0008 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0146	ppm	0.0000	0.32	319.2000	0.0146 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	4.55	78.5300	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9534	409600.0000	0.0046	0.48
Y_R 371.029	1.0230	64640.0000	0.0015	0.15

Sample Name: CCV 5129881

Date: 10/19/2018 12:56:01 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5067	ppm	0.0012	0.24	21340.0000	0.5067 (ppm)	Y 371.029
Al (396.152 nm)	1.0460	ppm	0.0027	0.26	22290.0000	1.0460 (ppm)	Y 371.029
As (188.980 nm)	1.0140	ppm	0.0042	0.41	691.9000	1.0140 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0063	0.62	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	1.0100	ppm	0.0056	0.55	79660.0000	1.0100 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0130	ppm	0.0026	0.26	186700.0000	1.0130 (ppm)	Y 371.029
Ca (422.673 nm)	5.1360	ppm	0.0223	0.43	22810.0000	5.1360 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0160	ppm	0.0003	0.03	23570.0000	1.0160 (ppm)	Y 371.029
Co (228.615 nm)	1.0220	ppm	0.0022	0.21	13830.0000	1.0220 (ppm)	Y 371.029
Cr (205.560 nm)	1.0180	ppm	0.0016	0.16	5427.0000	1.0180 (ppm)	Y 371.029
Cu (324.754 nm)	1.0160	ppm	0.0047	0.47	40660.0000	1.0160 (ppm)	Y 371.029
Fe (238.204 nm)	1.0310	ppm	0.0084	0.82	4492.0000	1.0310 (ppm)	Y_R 371.029
K (766.491 nm)	10.1700	ppm	0.1343	1.32	12110.0000	10.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9947	ppm	0.0057	0.58	67490.0000	0.9947 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1290	ppm	0.0510	0.99	13130.0000	5.1290 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0180	ppm	0.0019	0.19	105800.0000	1.0180 (ppm)	Y 371.029
Mo (204.598 nm)	1.0220	ppm	0.0027	0.26	4740.0000	1.0220 (ppm)	Y 371.029
Na (589.592 nm)	10.3400	ppm	0.0708	0.68	73510.0000	10.3400 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0170	ppm	0.0038	0.38	5211.0000	1.0170 (ppm)	Y 371.029
P (213.618 nm)	0.9959	ppm	0.0006	0.06	846.6000	0.9959 (ppm)	Y 371.029
Pb (220.353 nm)	1.0230	ppm	0.0018	0.18	1960.0000	1.0230 (ppm)	Y 371.029
Sb (206.834 nm)	1.0220	ppm	0.0198	1.94	1047.0000	1.0220 (ppm)	Y 371.029
Se (196.026 nm)	1.0020	ppm	0.0034	0.34	759.9000	1.0020 (ppm)	Y 371.029
Si (251.611 nm)	5.1910	ppm	0.0884	1.70	12870.0000	5.1910 (ppm)	Y 371.029
Sn (189.925 nm)	1.0140	ppm	0.0042	0.41	660.2000	1.0140 (ppm)	Y 371.029
Sr (421.552 nm)	1.0150	ppm	0.0087	0.85	406800.0000	1.0150 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0210	ppm	0.0014	0.14	125900.0000	1.0210 (ppm)	Y 371.029
Tl (190.794 nm)	1.0180	ppm	0.0011	0.10	1212.0000	1.0180 (ppm)	Y 371.029
V (292.401 nm)	1.0230	ppm	0.0021	0.20	28780.0000	1.0230 (ppm)	Y 371.029
W (207.912 nm)	1.0200	ppm	0.0026	0.25	1923.0000	1.0200 (ppm)	Y 371.029
Zn (202.548 nm)	1.0180	ppm	0.0030	0.29	18650.0000	1.0180 (ppm)	Y 371.029
Zr (343.823 nm)	1.0200	ppm	0.0022	0.21	85800.0000	1.0200 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0390	446500.0000	0.0060	0.57
Y_R 371.029	1.0590	66860.0000	0.0020	0.19

Sample Name: CCB 5129880

Date: 10/19/2018 12:58:25 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	6.5460	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0077	ppm	0.0010	13.34	-1047.0000	0.0077 (ppm)	Y 371.029
As (188.980 nm)	0.0016 u	ppm	0.0024	> 100.00	6.7840	0.0016 u (ppm)	Y 371.029
B (249.678 nm)	0.0037	ppm	0.0010	27.58	22.4100	0.0037 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	46.61	81.9100	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	35.11	91.6700	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0179	ppm	0.0055	30.70	171.1000	0.0179 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	40.69	7.9590	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0001	10.64	-12.8700	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0007	88.40	5.7920	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0007	82.24	115.9000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0020	ppm	0.0020	> 100.00	-9.6150	0.0020 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0832 u	ppm	0.0555	66.79	-214.6000	-0.0832 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0022	ppm	0.0003	12.36	199.4000	0.0022 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0087	ppm	0.0031	35.47	28.2100	0.0087 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	37.23	125.8000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0011	ppm	0.0003	30.26	5.6530	0.0011 (ppm)	Y 371.029
Na (589.592 nm)	0.1648	ppm	0.0107	6.47	2460.0000	0.1648 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0006	ppm	0.0001	14.55	4.9020	0.0006 (ppm)	Y 371.029
P (213.618 nm)	0.0024	ppm	0.0014	58.52	-7.9440	0.0024 (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0006	62.94	-7.3730	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0026	ppm	0.0009	33.76	1.2720	0.0026 (ppm)	Y 371.029
Se (196.026 nm)	0.0028	ppm	0.0005	18.39	1.0590	0.0028 (ppm)	Y 371.029
Si (251.611 nm)	0.0066	ppm	0.0026	39.24	64.8900	0.0066 (ppm)	Y 371.029
Sn (189.925 nm)	0.0013	ppm	0.0014	> 100.00	-2.7250	0.0013 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0000	1.22	116.7000	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0001	9.42	-63.6000	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0001 u	ppm	0.0029	> 100.00	-3.5590	0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	49.84	68.1900	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0007	ppm	0.0002	31.09	-5.7050	0.0007 (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0003	13.43	69.1100	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	12.86	18.5500	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0470	449800.0000	0.0019	0.18
Y_R 371.029	1.0690	67560.0000	0.0017	0.16

Sample Name: MB 440-505794/1-A

Date: 10/19/2018 1:00:49 PM

Rack:Tube: 3:37

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003 u	ppm	0.0005	> 100.00	14.5400	0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0131	ppm	0.0003	1.99	-929.6000	0.0131 (ppm)	Y 371.029
As (188.980 nm)	0.0033	ppm	0.0001	2.59	7.9830	0.0033 (ppm)	Y 371.029
B (249.678 nm)	0.0036	ppm	0.0003	9.42	21.4000	0.0036 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	24.64	53.3300	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	21.76	15.4900	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0099	ppm	0.0062	62.33	135.6000	0.0099 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	57.97	-1.0600	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0001	26.81	-17.2900	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0003	32.93	6.4200	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0016 u	ppm	0.0000	0.54	89.3400	-0.0016 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0020	ppm	0.0017	84.90	-9.3430	0.0020 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0805 u	ppm	0.0296	36.73	-211.5000	-0.0805 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0017	ppm	0.0000	0.76	167.9000	0.0017 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0034	ppm	0.0013	37.14	14.6700	0.0034 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0000	2.71	87.7100	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0003 u	ppm	0.0008	> 100.00	-1.0920	-0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	0.1420	ppm	0.0148	10.40	2301.0000	0.1420 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0005 u	ppm	0.0002	41.14	-0.6030	-0.0005 u (ppm)	Y 371.029
P (213.618 nm)	-0.0026 u	ppm	0.0052	> 100.00	-12.5400	-0.0026 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0020	> 100.00	-8.1510	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0040	ppm	0.0001	2.96	2.6920	0.0040 (ppm)	Y 371.029
Se (196.026 nm)	-0.0005 u	ppm	0.0013	> 100.00	-1.4070	-0.0005 u (ppm)	Y 371.029
Si (251.611 nm)	0.0049	ppm	0.0006	12.33	60.7000	0.0049 (ppm)	Y 371.029
Sn (189.925 nm)	0.0017	ppm	0.0002	11.03	-2.4410	0.0017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0001	69.48	-5.8740	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	29.20	-149.3000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0013	> 100.00	-5.3210	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0002	93.85	62.4700	0.0002 (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0009	> 100.00	-7.0650	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0018	ppm	0.0000	1.83	66.7800	0.0018 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	43.07	10.1100	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0430	448300.0000	0.0052	0.50
Y_R 371.029	1.0560	66710.0000	0.0030	0.29

Sample Name: LCS 440-505794/2-A

Date: 10/19/2018 1:03:14 PM

Rack:Tube: 3:38

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5048	ppm	0.0028	0.56	21260.0000	0.5048 (ppm)	Y 371.029
Al (396.152 nm)	1.0440	ppm	0.0124	1.19	22260.0000	1.0440 (ppm)	Y 371.029
As (188.980 nm)	0.9993	ppm	0.0059	0.59	682.0000	0.9993 (ppm)	Y 371.029
B (249.678 nm)	1.0120	ppm	0.0128	1.26	12520.0000	1.0120 (ppm)	Y 371.029
Ba (233.527 nm)	1.0060	ppm	0.0077	0.77	79360.0000	1.0060 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0000	ppm	0.0098	0.98	184200.0000	1.0000 (ppm)	Y 371.029
Ca (422.673 nm)	5.1040	ppm	0.0009	0.02	22670.0000	5.1040 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0010	ppm	0.0182	1.81	23210.0000	1.0010 (ppm)	Y 371.029
Co (228.615 nm)	1.0060	ppm	0.0168	1.66	13620.0000	1.0060 (ppm)	Y 371.029
Cr (205.560 nm)	1.0110	ppm	0.0094	0.93	5388.0000	1.0110 (ppm)	Y 371.029
Cu (324.754 nm)	1.0200	ppm	0.0148	1.45	40830.0000	1.0200 (ppm)	Y 371.029
Fe (238.204 nm)	1.0260	ppm	0.0002	0.02	4466.0000	1.0260 (ppm)	Y_R 371.029
K (766.491 nm)	10.1000	ppm	0.0538	0.53	12030.0000	10.1000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0100	ppm	0.0002	0.02	68520.0000	1.0100 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0500	ppm	0.0349	0.69	12930.0000	5.0500 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0110	ppm	0.0085	0.84	105000.0000	1.0110 (ppm)	Y 371.029
Mo (204.598 nm)	1.0230	ppm	0.0121	1.18	4749.0000	1.0230 (ppm)	Y 371.029
Na (589.592 nm)	10.2300	ppm	0.0253	0.25	72710.0000	10.2300 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0090	ppm	0.0112	1.11	5171.0000	1.0090 (ppm)	Y 371.029
P (213.618 nm)	0.9829	ppm	0.0117	1.19	834.6000	0.9829 (ppm)	Y 371.029
Pb (220.353 nm)	1.0120	ppm	0.0081	0.80	1939.0000	1.0120 (ppm)	Y 371.029
Sb (206.834 nm)	1.0390	ppm	0.0073	0.70	1065.0000	1.0390 (ppm)	Y 371.029
Se (196.026 nm)	0.9605	ppm	0.0170	1.76	728.8000	0.9605 (ppm)	Y 371.029
Si (251.611 nm)	4.9930	ppm	0.0942	1.89	12390.0000	4.9930 (ppm)	Y 371.029
Sn (189.925 nm)	0.9867	ppm	0.0022	0.22	642.2000	0.9867 (ppm)	Y 371.029
Sr (421.552 nm)	1.0250	ppm	0.0099	0.97	411100.0000	1.0250 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0150	ppm	0.0098	0.97	125200.0000	1.0150 (ppm)	Y 371.029
Tl (190.794 nm)	0.9834	ppm	0.0387	3.93	1170.0000	0.9834 (ppm)	Y 371.029
V (292.401 nm)	1.0160	ppm	0.0078	0.77	28580.0000	1.0160 (ppm)	Y 371.029
W (207.912 nm)	1.0180	ppm	0.0106	1.04	1919.0000	1.0180 (ppm)	Y 371.029
Zn (202.548 nm)	0.9995	ppm	0.0085	0.85	18310.0000	0.9995 (ppm)	Y 371.029
Zr (343.823 nm)	1.0120	ppm	0.0106	1.04	85170.0000	1.0120 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0340	444200.0000	0.0009	0.09
Y_R 371.029	1.0510	66410.0000	0.0019	0.18

Sample Name: 440-222369-N-1-A

Date: 10/19/2018 1:05:39 PM

Rack:Tube: 3:39

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0003	52.92	-55.2300	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0103	ppm	0.0002	2.02	-837.3000	0.0103 (ppm)	Y 371.029
As (188.980 nm)	0.0030 u	ppm	0.0056	> 100.00	7.3890	0.0030 u (ppm)	Y 371.029
B (249.678 nm)	1.4810	ppm	0.0135	0.91	18470.0000	1.4810 (ppm)	Y 371.029
Ba (233.527 nm)	0.0264	ppm	0.0002	0.82	2137.0000	0.0264 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	56.83	90.3800	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	191.4000	ppm	0.3243	0.17	847100.0000	191.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0003	58.92	8.1740	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0064	ppm	0.0002	3.41	68.8300	0.0064 (ppm)	Y 371.029
Cr (205.560 nm)	0.0024	ppm	0.0003	12.02	17.2500	0.0024 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0003	89.11	-37.9200	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	0.1734	ppm	0.0010	0.59	750.5000	0.1734 (ppm)	Y_R 371.029
K (766.491 nm)	12.9200	ppm	0.0219	0.17	15460.0000	12.9200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4343	ppm	0.0018	0.42	30280.0000	0.4343 (ppm)	Y_R 371.029
Mg (279.078 nm)	74.9300	ppm	1.1160	1.49	191800.0000	74.9300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8678	ppm	0.0035	0.41	89970.0000	0.8678 (ppm)	Y 371.029
Mo (204.598 nm)	0.0139	ppm	0.0004	2.84	65.2800	0.0139 (ppm)	Y 371.029
Na (589.592 nm)	552.8000 o	ppm	3.2280	0.58	3856000.0000	552.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.2498	ppm	0.0006	0.24	1278.0000	0.2498 (ppm)	Y 371.029
P (213.618 nm)	0.0015 u	ppm	0.0037	> 100.00	-11.6200	0.0015 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0049 u	ppm	0.0017	34.05	-14.9200	-0.0049 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0065 u	ppm	0.0033	51.44	-7.7010	-0.0065 u (ppm)	Y 371.029
Se (196.026 nm)	0.0092	ppm	0.0019	20.69	4.9240	0.0092 (ppm)	Y 371.029
Si (251.611 nm)	16.0100	ppm	0.0424	0.27	39070.0000	16.0100 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0058 u	ppm	0.0024	41.13	-7.2770	-0.0058 u (ppm)	Y 371.029
Sr (421.552 nm)	2.5920	ppm	0.0011	0.04	1042000.0000	2.5920 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0007	ppm	0.0003	38.91	-327.0000	0.0007 (ppm)	Y 371.029
Tl (190.794 nm)	0.0023	ppm	0.0018	78.51	-0.1302	0.0023 (ppm)	Y 371.029
V (292.401 nm)	-0.0071 u	ppm	0.0002	2.89	120.4000	-0.0071 u (ppm)	Y 371.029
W (207.912 nm)	-0.0036 u	ppm	0.0004	11.80	-18.1000	-0.0036 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0018	ppm	0.0001	2.79	119.9000	0.0018 (ppm)	Y 371.029
Zr (343.823 nm)	0.0013	ppm	0.0002	16.03	133.6000	0.0013 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9229	396600.0000	0.0036	0.39
Y_R 371.029	0.9800	61910.0000	0.0067	0.69

Sample Name: 440-222369-N-1-B MS

Date: 10/19/2018 1:08:03 PM

Rack:Tube: 3:40

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5521	ppm	0.0014	0.25	23200.0000	0.5521 (ppm)	Y 371.029
Al (396.152 nm)	1.3290	ppm	0.0054	0.41	28670.0000	1.3290 (ppm)	Y 371.029
As (188.980 nm)	1.1060	ppm	0.0066	0.59	754.2000	1.1060 (ppm)	Y 371.029
B (249.678 nm)	2.6900	ppm	0.0193	0.72	33470.0000	2.6900 (ppm)	Y 371.029
Ba (233.527 nm)	1.0320	ppm	0.0004	0.04	81420.0000	1.0320 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0910	ppm	0.0068	0.63	200900.0000	1.0910 (ppm)	Y 371.029
Ca (422.673 nm)	208.3000	ppm	0.7965	0.38	921700.0000	208.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0040	ppm	0.0103	1.03	23290.0000	1.0040 (ppm)	Y 371.029
Co (228.615 nm)	1.0320	ppm	0.0095	0.92	13980.0000	1.0320 (ppm)	Y 371.029
Cr (205.560 nm)	1.0530	ppm	0.0070	0.67	5618.0000	1.0530 (ppm)	Y 371.029
Cu (324.754 nm)	1.1680	ppm	0.0079	0.68	46530.0000	1.1680 (ppm)	Y 371.029
Fe (238.204 nm)	1.2510	ppm	0.0084	0.67	5461.0000	1.2510 (ppm)	Y_R 371.029
K (766.491 nm)	24.5700	ppm	0.1993	0.81	29470.0000	24.5700 (ppm)	Y_R 371.029
Li (670.783 nm)	1.5580	ppm	0.0121	0.78	106500.0000	1.5580 (ppm)	Y_R 371.029
Mg (279.078 nm)	85.3000	ppm	0.0355	0.04	218300.0000	85.3000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.9610	ppm	0.0130	0.66	203500.0000	1.9610 (ppm)	Y 371.029
Mo (204.598 nm)	1.1120	ppm	0.0095	0.85	5161.0000	1.1120 (ppm)	Y 371.029
Na (589.592 nm)	590.9000 o	ppm	0.5922	0.10	4122000.0000	590.9000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	1.2750	ppm	0.0091	0.71	6530.0000	1.2750 (ppm)	Y 371.029
P (213.618 nm)	1.1430	ppm	0.0079	0.70	971.7000	1.1430 (ppm)	Y 371.029
Pb (220.353 nm)	1.0100	ppm	0.0109	1.07	1939.0000	1.0100 (ppm)	Y 371.029
Sb (206.834 nm)	1.1340	ppm	0.0040	0.36	1162.0000	1.1340 (ppm)	Y 371.029
Se (196.026 nm)	1.0350	ppm	0.0057	0.55	784.4000	1.0350 (ppm)	Y 371.029
Si (251.611 nm)	22.0200	ppm	0.1832	0.83	53910.0000	22.0200 (ppm)	Y 371.029
Sn (189.925 nm)	1.0530	ppm	0.0054	0.52	685.6000	1.0530 (ppm)	Y 371.029
Sr (421.552 nm)	3.8130	ppm	0.0139	0.36	1532000.0000	3.8130 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0870	ppm	0.0063	0.58	133900.0000	1.0870 (ppm)	Y 371.029
Tl (190.794 nm)	0.9837	ppm	0.0308	3.13	1168.0000	0.9837 (ppm)	Y 371.029
V (292.401 nm)	1.0950	ppm	0.0065	0.59	31070.0000	1.0950 (ppm)	Y 371.029
W (207.912 nm)	1.0900	ppm	0.0080	0.73	2049.0000	1.0900 (ppm)	Y 371.029
Zn (202.548 nm)	0.9889	ppm	0.0060	0.61	18200.0000	0.9889 (ppm)	Y 371.029
Zr (343.823 nm)	1.0730	ppm	0.0064	0.60	90290.0000	1.0730 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9129	392300.0000	0.0114	1.25
Y_R 371.029	0.9602	60660.0000	0.0061	0.64

Sample Name: 440-222369-N-1-C MSD

Date: 10/19/2018 1:10:28 PM

Rack:Tube: 3:41

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5142	ppm	0.0003	0.06	21610.0000	0.5142 (ppm)	Y 371.029
Al (396.152 nm)	1.2330	ppm	0.0011	0.09	26520.0000	1.2330 (ppm)	Y 371.029
As (188.980 nm)	1.0360	ppm	0.0010	0.10	706.7000	1.0360 (ppm)	Y 371.029
B (249.678 nm)	2.5230	ppm	0.0046	0.18	31390.0000	2.5230 (ppm)	Y 371.029
Ba (233.527 nm)	0.9563	ppm	0.0045	0.47	75450.0000	0.9563 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0150	ppm	0.0013	0.13	186900.0000	1.0150 (ppm)	Y 371.029
Ca (422.673 nm)	196.6000	ppm	0.0443	0.02	870000.0000	196.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9379	ppm	0.0012	0.13	21760.0000	0.9379 (ppm)	Y 371.029
Co (228.615 nm)	0.9618	ppm	0.0045	0.47	13020.0000	0.9618 (ppm)	Y 371.029
Cr (205.560 nm)	0.9778	ppm	0.0016	0.16	5215.0000	0.9778 (ppm)	Y 371.029
Cu (324.754 nm)	1.0850	ppm	0.0006	0.05	43240.0000	1.0850 (ppm)	Y 371.029
Fe (238.204 nm)	1.1580	ppm	0.0055	0.47	5055.0000	1.1580 (ppm)	Y_R 371.029
K (766.491 nm)	23.2300	ppm	0.0095	0.04	27860.0000	23.2300 (ppm)	Y_R 371.029
Li (670.783 nm)	1.4540	ppm	0.0013	0.09	99450.0000	1.4540 (ppm)	Y_R 371.029
Mg (279.078 nm)	80.3100	ppm	0.3898	0.49	205600.0000	80.3100 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.8400	ppm	0.0007	0.04	190900.0000	1.8400 (ppm)	Y 371.029
Mo (204.598 nm)	1.0390	ppm	0.0006	0.06	4820.0000	1.0390 (ppm)	Y 371.029
Na (589.592 nm)	558.4000 o	ppm	1.9160	0.34	3895000.0000	558.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	1.1900	ppm	0.0038	0.32	6096.0000	1.1900 (ppm)	Y 371.029
P (213.618 nm)	1.0660	ppm	0.0009	0.08	906.0000	1.0660 (ppm)	Y 371.029
Pb (220.353 nm)	0.9425	ppm	0.0009	0.09	1808.0000	0.9425 (ppm)	Y 371.029
Sb (206.834 nm)	1.0580	ppm	0.0008	0.08	1085.0000	1.0580 (ppm)	Y 371.029
Se (196.026 nm)	0.9655	ppm	0.0009	0.09	731.7000	0.9655 (ppm)	Y 371.029
Si (251.611 nm)	20.8100	ppm	0.0310	0.15	50960.0000	20.8100 (ppm)	Y 371.029
Sn (189.925 nm)	0.9859	ppm	0.0040	0.40	641.8000	0.9859 (ppm)	Y 371.029
Sr (421.552 nm)	3.5860	ppm	0.0072	0.20	1441000.0000	3.5860 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0130	ppm	0.0018	0.18	124800.0000	1.0130 (ppm)	Y 371.029
Tl (190.794 nm)	0.9075	ppm	0.0235	2.59	1077.0000	0.9075 (ppm)	Y 371.029
V (292.401 nm)	1.0210	ppm	0.0045	0.44	28980.0000	1.0210 (ppm)	Y 371.029
W (207.912 nm)	1.0180	ppm	0.0017	0.17	1913.0000	1.0180 (ppm)	Y 371.029
Zn (202.548 nm)	0.9236	ppm	0.0011	0.12	17000.0000	0.9236 (ppm)	Y 371.029
Zr (343.823 nm)	1.0010	ppm	0.0017	0.17	84260.0000	1.0010 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9164	393800.0000	0.0035	0.38
Y_R 371.029	0.9691	61220.0000	0.0024	0.25

Sample Name: 440-222369-N-1-D PDS

Date: 10/19/2018 1:12:52 PM

Rack:Tube: 3:42

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5339	ppm	0.0006	0.11	22440.0000	0.5339 (ppm)	Y 371.029
Al (396.152 nm)	1.2880	ppm	0.0031	0.24	27740.0000	1.2880 (ppm)	Y 371.029
As (188.980 nm)	1.0680	ppm	0.0032	0.30	728.6000	1.0680 (ppm)	Y 371.029
B (249.678 nm)	2.5250	ppm	0.0085	0.34	31410.0000	2.5250 (ppm)	Y 371.029
Ba (233.527 nm)	0.9600	ppm	0.0095	0.99	75730.0000	0.9600 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0500	ppm	0.0003	0.03	193400.0000	1.0500 (ppm)	Y 371.029
Ca (422.673 nm)	187.8000	ppm	0.4647	0.25	831000.0000	187.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9672	ppm	0.0042	0.44	22440.0000	0.9672 (ppm)	Y 371.029
Co (228.615 nm)	0.9966	ppm	0.0016	0.16	13490.0000	0.9966 (ppm)	Y 371.029
Cr (205.560 nm)	1.0140	ppm	0.0011	0.11	5406.0000	1.0140 (ppm)	Y 371.029
Cu (324.754 nm)	1.1250	ppm	0.0010	0.09	44840.0000	1.1250 (ppm)	Y 371.029
Fe (238.204 nm)	1.1750	ppm	0.0021	0.18	5128.0000	1.1750 (ppm)	Y_R 371.029
K (766.491 nm)	22.8400	ppm	0.0509	0.22	27390.0000	22.8400 (ppm)	Y_R 371.029
Li (670.783 nm)	1.4650	ppm	0.0002	0.01	100200.0000	1.4650 (ppm)	Y_R 371.029
Mg (279.078 nm)	75.5900	ppm	0.6250	0.83	193500.0000	75.5900 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.8470	ppm	0.0022	0.12	191700.0000	1.8470 (ppm)	Y 371.029
Mo (204.598 nm)	1.0800	ppm	0.0001	0.01	5010.0000	1.0800 (ppm)	Y 371.029
Na (589.592 nm)	537.4000 o	ppm	1.7230	0.32	3749000.0000	537.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	1.2160	ppm	0.0002	0.01	6226.0000	1.2160 (ppm)	Y 371.029
P (213.618 nm)	1.1010	ppm	0.0017	0.15	936.3000	1.1010 (ppm)	Y 371.029
Pb (220.353 nm)	0.9719	ppm	0.0023	0.24	1864.0000	0.9719 (ppm)	Y 371.029
Sb (206.834 nm)	1.0970	ppm	0.0041	0.37	1125.0000	1.0970 (ppm)	Y 371.029
Se (196.026 nm)	0.9962	ppm	0.0036	0.36	755.1000	0.9962 (ppm)	Y 371.029
Si (251.611 nm)	20.7200	ppm	0.0935	0.45	50750.0000	20.7200 (ppm)	Y 371.029
Sn (189.925 nm)	1.0170	ppm	0.0014	0.14	662.4000	1.0170 (ppm)	Y 371.029
Sr (421.552 nm)	3.4920	ppm	0.0061	0.18	1403000.0000	3.4920 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0550	ppm	0.0017	0.16	130000.0000	1.0550 (ppm)	Y 371.029
Tl (190.794 nm)	0.9625	ppm	0.0064	0.66	1143.0000	0.9625 (ppm)	Y 371.029
V (292.401 nm)	1.0580	ppm	0.0013	0.12	30000.0000	1.0580 (ppm)	Y 371.029
W (207.912 nm)	1.0580	ppm	0.0010	0.09	1990.0000	1.0580 (ppm)	Y 371.029
Zn (202.548 nm)	0.9559	ppm	0.0013	0.14	17590.0000	0.9559 (ppm)	Y 371.029
Zr (343.823 nm)	1.0450	ppm	0.0014	0.14	87960.0000	1.0450 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9343	401400.0000	0.0004	0.04
Y_R 371.029	1.0170	64230.0000	0.0105	1.03

Sample Name: 440-222369-N-1-A sd@5

Date: 10/19/2018 1:15:16 PM

Rack:Tube: 3:43

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0000	6.99	-10.7700	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0118	ppm	0.0003	2.64	-926.9000	0.0118 (ppm)	Y 371.029
As (188.980 nm)	0.0067	ppm	0.0028	42.09	10.2500	0.0067 (ppm)	Y 371.029
B (249.678 nm)	0.2828	ppm	0.0003	0.12	3508.0000	0.2828 (ppm)	Y 371.029
Ba (233.527 nm)	0.0061	ppm	0.0002	4.11	521.3000	0.0061 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	38.03	122.8000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	37.1100	ppm	0.2128	0.57	164300.0000	37.1100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0008	ppm	0.0004	44.53	16.3200	0.0008 (ppm)	Y 371.029
Co (228.615 nm)	0.0019	ppm	0.0005	28.47	4.3750	0.0019 (ppm)	Y 371.029
Cr (205.560 nm)	0.0016	ppm	0.0001	6.39	10.4700	0.0016 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0001	> 100.00	112.5000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0392	ppm	0.0007	1.86	155.1000	0.0392 (ppm)	Y_R 371.029
K (766.491 nm)	2.3630	ppm	0.0778	3.29	2734.0000	2.3630 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0795	ppm	0.0010	1.30	5592.0000	0.0795 (ppm)	Y_R 371.029
Mg (279.078 nm)	15.1700	ppm	0.1807	1.19	38850.0000	15.1700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1727	ppm	0.0001	0.03	17960.0000	0.1727 (ppm)	Y 371.029
Mo (204.598 nm)	0.0042	ppm	0.0005	12.33	20.2300	0.0042 (ppm)	Y 371.029
Na (589.592 nm)	112.9000	ppm	0.5571	0.49	788300.0000	112.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0503	ppm	0.0010	2.02	258.7000	0.0503 (ppm)	Y 371.029
P (213.618 nm)	-0.0010 u	ppm	0.0028	> 100.00	-11.6600	-0.0010 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0010 u	ppm	0.0005	49.88	-10.2500	-0.0010 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0002 u	ppm	0.0066	> 100.00	-1.5940	-0.0002 u (ppm)	Y 371.029
Se (196.026 nm)	0.0018 u	ppm	0.0027	> 100.00	0.1112	0.0018 u (ppm)	Y 371.029
Si (251.611 nm)	3.0490	ppm	0.0082	0.27	7482.0000	3.0490 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006 u	ppm	0.0018	> 100.00	-3.1640	0.0006 u (ppm)	Y 371.029
Sr (421.552 nm)	0.4996	ppm	0.0025	0.50	200800.0000	0.4996 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0003	28.06	-105.9000	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0031	ppm	0.0007	22.01	0.1937	0.0031 (ppm)	Y 371.029
V (292.401 nm)	-0.0003 u	ppm	0.0001	26.32	98.5100	-0.0003 u (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0013	65.14	-11.3400	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0142	ppm	0.0004	2.48	301.5000	0.0142 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0002	20.80	61.3000	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9826	422200.0000	0.0052	0.53
Y_R 371.029	0.9997	63150.0000	0.0062	0.62

Sample Name: 440-222369-N-3-A

Date: 10/19/2018 1:17:40 PM

Rack:Tube: 3:44

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0010 u	ppm	0.0001	6.67	-81.5600	-0.0010 u (ppm)	Y 371.029
Al (396.152 nm)	0.0001 u	ppm	0.0010	> 100.00	-913.8000	0.0001 u (ppm)	Y 371.029
As (188.980 nm)	0.0030	ppm	0.0036	> 100.00	8.6830	0.0030 (ppm)	Y 371.029
B (249.678 nm)	6.6550	ppm	0.0683	1.03	83060.0000	6.6550 (ppm)	Y 371.029
Ba (233.527 nm)	0.0408	ppm	0.0003	0.77	3282.0000	0.0408 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	35.86	284.8000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	126.5000	ppm	0.4785	0.38	559900.0000	126.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0002	94.34	4.6560	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0002	ppm	0.0001	39.59	-11.5400	0.0002 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	15.78	7.5330	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0000	1.43	1.0800	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	9.7870	ppm	0.0004	0.00	42820.0000	9.7870 (ppm)	Y_R 371.029
K (766.491 nm)	21.3100	ppm	0.1199	0.56	25590.0000	21.3100 (ppm)	Y_R 371.029
Li (670.783 nm)	1.7580	ppm	0.0129	0.73	121100.0000	1.7580 (ppm)	Y_R 371.029
Mg (279.078 nm)	245.4000	ppm	1.9900	0.81	628000.0000	245.4000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2884	ppm	0.0025	0.86	32160.0000	0.2884 (ppm)	Y 371.029
Mo (204.598 nm)	0.0006	ppm	0.0002	39.35	3.9530	0.0006 (ppm)	Y 371.029
Na (589.592 nm)	1413.0000 o	ppm	8.5310	0.60	9851000.0000	1413.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0020	ppm	0.0012	60.48	7.1240	0.0020 (ppm)	Y 371.029
P (213.618 nm)	0.3077	ppm	0.0043	1.41	271.0000	0.3077 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0055 u	ppm	0.0004	7.73	-13.6600	-0.0055 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0036 u	ppm	0.0017	46.56	-5.1160	-0.0036 u (ppm)	Y 371.029
Se (196.026 nm)	0.0026	ppm	0.0032	> 100.00	-1.4230	0.0026 (ppm)	Y 371.029
Si (251.611 nm)	19.2800	ppm	0.1296	0.67	47070.0000	19.2800 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0057 u	ppm	0.0033	57.60	-6.8780	-0.0057 u (ppm)	Y 371.029
Sr (421.552 nm)	5.4980	ppm	0.0098	0.18	2206000.0000	5.4980 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	15.54	-288.4000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0013 u	ppm	0.0025	> 100.00	-0.7044	0.0013 u (ppm)	Y 371.029
V (292.401 nm)	-0.0035 u	ppm	0.0000	1.00	145.9000	-0.0035 u (ppm)	Y 371.029
W (207.912 nm)	-0.0058 u	ppm	0.0006	9.97	-21.3300	-0.0058 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0001 u	ppm	0.0000	23.50	165.4000	-0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	13.86	65.8300	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8628	370700.0000	0.0096	1.12
Y_R 371.029	0.9354	59090.0000	0.0057	0.61

Sample Name: 440-222369-N-4-A

Date: 10/19/2018 1:20:04 PM

Rack:Tube: 3:45

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0003	> 100.00	1.6580	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0095	ppm	0.0001	1.26	-1009.0000	0.0095 (ppm)	Y 371.029
As (188.980 nm)	-0.0002 u	ppm	0.0026	> 100.00	5.5440	-0.0002 u (ppm)	Y 371.029
B (249.678 nm)	0.0097	ppm	0.0024	24.59	96.6800	0.0097 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0001	96.35	47.8800	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	97.73	9.0890	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0291	ppm	0.0055	19.05	220.8000	0.0291 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.8760	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0003	58.57	-16.8800	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0000	3.30	5.1580	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0004	51.32	119.9000	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0067	ppm	0.0020	29.32	11.1800	0.0067 (ppm)	Y_R 371.029
K (766.491 nm)	0.0202 u	ppm	0.0307	> 100.00	-90.4400	0.0202 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0004 u	ppm	0.0001	18.06	22.4300	-0.0004 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0511	ppm	0.0326	63.79	136.6000	0.0511 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0001	22.88	90.1200	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	0.0008	ppm	0.0005	65.58	4.0770	0.0008 (ppm)	Y 371.029
Na (589.592 nm)	0.9179	ppm	0.0161	1.75	7712.0000	0.9179 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0001 u	ppm	0.0003	> 100.00	1.3580	-0.0001 u (ppm)	Y 371.029
P (213.618 nm)	-0.0035 u	ppm	0.0012	33.59	-13.3700	-0.0035 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0004 u	ppm	0.0017	> 100.00	-8.4030	0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0004 u	ppm	0.0011	> 100.00	-1.0350	0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.0020	ppm	0.0008	41.20	0.5043	0.0020 (ppm)	Y 371.029
Si (251.611 nm)	0.0098	ppm	0.0052	52.71	72.7800	0.0098 (ppm)	Y 371.029
Sn (189.925 nm)	0.0043	ppm	0.0023	54.11	-0.7936	0.0043 (ppm)	Y 371.029
Sr (421.552 nm)	0.0005	ppm	0.0001	13.03	145.4000	0.0005 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	9.98	-140.2000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0009 u	ppm	0.0019	> 100.00	-4.8040	-0.0009 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	58.2300	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0000 u	ppm	0.0004	> 100.00	-6.7060	0.0000 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0266	ppm	0.0001	0.42	516.7000	0.0266 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	27.14	13.7000	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0520	452200.0000	0.0001	0.01
Y_R 371.029	1.0510	66420.0000	0.0114	1.09

Sample Name: 440-222369-N-5-A

Date: 10/19/2018 1:22:28 PM

Rack:Tube: 3:46

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0010 u	ppm	0.0003	35.48	-55.2100	-0.0010 u (ppm)	Y 371.029
Al (396.152 nm)	0.0072	ppm	0.0002	2.95	-918.1000	0.0072 (ppm)	Y 371.029
As (188.980 nm)	0.0014 u	ppm	0.0026	> 100.00	7.1710	0.0014 u (ppm)	Y 371.029
B (249.678 nm)	7.7380	ppm	0.0626	0.81	96580.0000	7.7380 (ppm)	Y 371.029
Ba (233.527 nm)	0.0314	ppm	0.0005	1.72	2529.0000	0.0314 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	98.9900	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	39.3200	ppm	0.0292	0.07	174100.0000	39.3200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	7.06	-0.8958	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0000	1.29	-13.8300	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0004	48.60	6.9230	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0007	49.26	68.6600	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	3.5980	ppm	0.0033	0.09	15730.0000	3.5980 (ppm)	Y_R 371.029
K (766.491 nm)	18.6500	ppm	0.0667	0.36	22340.0000	18.6500 (ppm)	Y_R 371.029
Li (670.783 nm)	1.6340	ppm	0.0069	0.42	112000.0000	1.6340 (ppm)	Y_R 371.029
Mg (279.078 nm)	120.9000	ppm	2.3930	1.98	309500.0000	120.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0449	ppm	0.0000	0.07	5667.0000	0.0449 (ppm)	Y 371.029
Mo (204.598 nm)	0.0042	ppm	0.0010	24.48	20.0700	0.0042 (ppm)	Y 371.029
Na (589.592 nm)	1316.0000 o	ppm	6.5500	0.50	9182000.0000	1316.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0015	ppm	0.0006	40.70	7.6680	0.0015 (ppm)	Y 371.029
P (213.618 nm)	0.2843	ppm	0.0037	1.32	250.4000	0.2843 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0059 u	ppm	0.0007	11.26	-17.5700	-0.0059 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0019 u	ppm	0.0007	37.21	-3.4900	-0.0019 u (ppm)	Y 371.029
Se (196.026 nm)	0.0042	ppm	0.0043	> 100.00	1.2730	0.0042 (ppm)	Y 371.029
Si (251.611 nm)	15.0000	ppm	0.0158	0.11	36610.0000	15.0000 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0035 u	ppm	0.0018	50.66	-5.6500	-0.0035 u (ppm)	Y 371.029
Sr (421.552 nm)	2.4130	ppm	0.0111	0.46	968000.0000	2.4130 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	5.43	-175.5000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017	ppm	0.0007	39.51	-0.9465	0.0017 (ppm)	Y 371.029
V (292.401 nm)	-0.0004 u	ppm	0.0000	3.46	105.4000	-0.0004 u (ppm)	Y 371.029
W (207.912 nm)	-0.0034 u	ppm	0.0008	22.06	-14.4800	-0.0034 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0155	ppm	0.0006	3.73	378.6000	0.0155 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	21.87	37.2800	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8879	381500.0000	0.0077	0.87
Y_R 371.029	0.9799	61900.0000	0.0098	1.00

Sample Name: CCV 5129881

Date: 10/19/2018 1:26:23 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5044	ppm	0.0042	0.84	21240.0000	0.5044 (ppm)	Y 371.029
Al (396.152 nm)	1.0390	ppm	0.0055	0.53	22140.0000	1.0390 (ppm)	Y 371.029
As (188.980 nm)	1.0090	ppm	0.0013	0.13	688.2000	1.0090 (ppm)	Y 371.029
B (249.678 nm)	1.0220	ppm	0.0087	0.85	12640.0000	1.0220 (ppm)	Y 371.029
Ba (233.527 nm)	1.0390	ppm	0.0085	0.82	81930.0000	1.0390 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0100	ppm	0.0071	0.70	186100.0000	1.0100 (ppm)	Y 371.029
Ca (422.673 nm)	5.1590	ppm	0.0095	0.18	22910.0000	5.1590 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0170	ppm	0.0064	0.63	23600.0000	1.0170 (ppm)	Y 371.029
Co (228.615 nm)	1.0180	ppm	0.0080	0.79	13780.0000	1.0180 (ppm)	Y 371.029
Cr (205.560 nm)	1.0190	ppm	0.0049	0.48	5432.0000	1.0190 (ppm)	Y 371.029
Cu (324.754 nm)	1.0140	ppm	0.0055	0.55	40580.0000	1.0140 (ppm)	Y 371.029
Fe (238.204 nm)	1.0300	ppm	0.0063	0.61	4485.0000	1.0300 (ppm)	Y_R 371.029
K (766.491 nm)	10.2600	ppm	0.1089	1.06	12230.0000	10.2600 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0060	ppm	0.0022	0.22	68230.0000	1.0060 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.2570	ppm	0.0343	0.65	13460.0000	5.2570 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0180	ppm	0.0063	0.62	105700.0000	1.0180 (ppm)	Y 371.029
Mo (204.598 nm)	1.0230	ppm	0.0114	1.11	4748.0000	1.0230 (ppm)	Y 371.029
Na (589.592 nm)	10.9100	ppm	0.0088	0.08	77460.0000	10.9100 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0200	ppm	0.0052	0.51	5226.0000	1.0200 (ppm)	Y 371.029
P (213.618 nm)	0.9919	ppm	0.0032	0.32	843.1000	0.9919 (ppm)	Y 371.029
Pb (220.353 nm)	1.0220	ppm	0.0093	0.91	1958.0000	1.0220 (ppm)	Y 371.029
Sb (206.834 nm)	1.0060	ppm	0.0179	1.78	1030.0000	1.0060 (ppm)	Y 371.029
Se (196.026 nm)	1.0020	ppm	0.0027	0.27	760.2000	1.0020 (ppm)	Y 371.029
Si (251.611 nm)	5.0990	ppm	0.1148	2.25	12650.0000	5.0990 (ppm)	Y 371.029
Sn (189.925 nm)	1.0190	ppm	0.0057	0.56	663.5000	1.0190 (ppm)	Y 371.029
Sr (421.552 nm)	1.0280	ppm	0.0102	0.99	412200.0000	1.0280 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0180	ppm	0.0069	0.68	125700.0000	1.0180 (ppm)	Y 371.029
Tl (190.794 nm)	1.0180	ppm	0.0033	0.32	1213.0000	1.0180 (ppm)	Y 371.029
V (292.401 nm)	1.0220	ppm	0.0065	0.63	28760.0000	1.0220 (ppm)	Y 371.029
W (207.912 nm)	1.0210	ppm	0.0060	0.59	1925.0000	1.0210 (ppm)	Y 371.029
Zn (202.548 nm)	1.0190	ppm	0.0063	0.62	18670.0000	1.0190 (ppm)	Y 371.029
Zr (343.823 nm)	1.0170	ppm	0.0070	0.69	85540.0000	1.0170 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0140	435500.0000	0.0084	0.83
Y_R 371.029	1.0030	63350.0000	0.0101	1.01

Sample Name: CCB 5129880

Date: 10/19/2018 1:28:46 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0000	> 100.00	2.3790	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0048	ppm	0.0008	15.90	-1109.0000	0.0048 (ppm)	Y 371.029
As (188.980 nm)	0.0047	ppm	0.0016	33.40	8.9030	0.0047 (ppm)	Y 371.029
B (249.678 nm)	0.0061	ppm	0.0013	20.97	52.0900	0.0061 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0003	50.11	90.2900	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	47.72	102.9000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0214	ppm	0.0071	33.15	186.8000	0.0214 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0004	85.68	6.9270	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0004	72.43	-15.1300	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0002	20.18	6.8780	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0003	43.11	119.1000	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0011 u	ppm	0.0021	> 100.00	-23.2500	-0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0291 u	ppm	0.0586	> 100.00	-149.7000	-0.0291 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0026	ppm	0.0010	37.53	226.1000	0.0026 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0087	ppm	0.0022	25.04	28.1500	0.0087 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0007	ppm	0.0003	49.46	132.8000	0.0007 (ppm)	Y 371.029
Mo (204.598 nm)	0.0017	ppm	0.0002	10.53	8.4210	0.0017 (ppm)	Y 371.029
Na (589.592 nm)	0.5681 Z	ppm	0.0055	0.97	5272.0000 Z	0.5681 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0006	68.44	6.7400	0.0009 (ppm)	Y 371.029
P (213.618 nm)	-0.0016 u	ppm	0.0023	> 100.00	-11.7000	-0.0016 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0018	> 100.00	-8.1100	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0026	ppm	0.0033	> 100.00	1.1990	0.0026 (ppm)	Y 371.029
Se (196.026 nm)	0.0006 u	ppm	0.0030	> 100.00	-0.5697	0.0006 u (ppm)	Y 371.029
Si (251.611 nm)	0.0059	ppm	0.0037	62.53	63.3100	0.0059 (ppm)	Y 371.029
Sn (189.925 nm)	0.0024	ppm	0.0008	35.37	-2.0110	0.0024 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0001	25.57	97.0400	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0001	11.74	-62.8100	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0005 u	ppm	0.0037	> 100.00	-4.3180	-0.0005 u (ppm)	Y 371.029
V (292.401 nm)	0.0006	ppm	0.0004	56.65	74.7200	0.0006 (ppm)	Y 371.029
W (207.912 nm)	0.0016	ppm	0.0020	> 100.00	-3.9980	0.0016 (ppm)	Y 371.029
Zn (202.548 nm)	0.0022	ppm	0.0002	10.91	73.4300	0.0022 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0002	35.71	30.8500	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431500.0000	0.0072	0.72
Y_R 371.029	1.0020	63300.0000	0.0015	0.15

Sample Name: 440-222369-N-6-A

Date: 10/19/2018 1:31:10 PM

Rack:Tube: 3:47

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	12.95	-52.6700	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0029	ppm	0.0008	26.64	-1008.0000	0.0029 (ppm)	Y 371.029
As (188.980 nm)	0.0047	ppm	0.0065	> 100.00	9.4570	0.0047 (ppm)	Y 371.029
B (249.678 nm)	7.8200	ppm	0.0592	0.76	97610.0000	7.8200 (ppm)	Y 371.029
Ba (233.527 nm)	0.0320	ppm	0.0003	1.00	2576.0000	0.0320 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	24.55	121.4000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	39.7100	ppm	0.0509	0.13	175800.0000	39.7100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.2930	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	-0.0004 u	ppm	0.0001	29.97	-23.9400	-0.0004 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0002	39.34	5.4860	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0001	9.00	93.0600	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	3.6190	ppm	0.0045	0.12	15830.0000	3.6190 (ppm)	Y_R 371.029
K (766.491 nm)	18.9100	ppm	0.1026	0.54	22650.0000	18.9100 (ppm)	Y_R 371.029
Li (670.783 nm)	1.6690	ppm	0.0000	0.00	114400.0000	1.6690 (ppm)	Y_R 371.029
Mg (279.078 nm)	123.0000	ppm	1.3940	1.13	314900.0000	123.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0446	ppm	0.0002	0.51	5647.0000	0.0446 (ppm)	Y 371.029
Mo (204.598 nm)	0.0045	ppm	0.0002	4.24	21.4800	0.0045 (ppm)	Y 371.029
Na (589.592 nm)	1381.0000 o	ppm	15.1000	1.09	9629000.0000	1381.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0003	ppm	0.0003	> 100.00	1.3430	0.0003 (ppm)	Y 371.029
P (213.618 nm)	0.2869	ppm	0.0023	0.82	252.8000	0.2869 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0046 u	ppm	0.0005	11.68	-15.1900	-0.0046 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0041 u	ppm	0.0037	90.64	-5.7580	-0.0041 u (ppm)	Y 371.029
Se (196.026 nm)	0.0057	ppm	0.0030	52.49	2.3240	0.0057 (ppm)	Y 371.029
Si (251.611 nm)	15.0600	ppm	0.0541	0.36	36770.0000	15.0600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0057 u	ppm	0.0055	96.87	-7.1120	-0.0057 u (ppm)	Y 371.029
Sr (421.552 nm)	2.4170	ppm	0.0109	0.45	969800.0000	2.4170 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	16.42	-168.9000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0040	ppm	0.0004	10.02	1.8780	0.0040 (ppm)	Y 371.029
V (292.401 nm)	-0.0003 u	ppm	0.0003	83.42	108.6000	-0.0003 u (ppm)	Y 371.029
W (207.912 nm)	-0.0048 u	ppm	0.0001	2.11	-17.3000	-0.0048 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0044 u	ppm	0.0002	5.28	20.4900	-0.0044 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0000	9.09	46.2000	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8562	367900.0000	0.0032	0.37
Y_R 371.029	0.9450	59700.0000	0.0189	2.00

Sample Name: 440-222369-N-7-A

Date: 10/19/2018 1:33:34 PM

Rack:Tube: 3:48

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0002	29.86	-65.2900	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0109	ppm	0.0003	2.49	-834.1000	0.0109 (ppm)	Y 371.029
As (188.980 nm)	0.0049	ppm	0.0011	21.90	8.6550	0.0049 (ppm)	Y 371.029
B (249.678 nm)	1.5340	ppm	0.0165	1.08	19130.0000	1.5340 (ppm)	Y 371.029
Ba (233.527 nm)	0.0272	ppm	0.0001	0.50	2200.0000	0.0272 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	15.89	26.7600	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	194.8000	ppm	1.2700	0.65	861800.0000	194.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	7.06	2.6540	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0024	ppm	0.0008	34.81	14.8900	0.0024 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0006	52.02	10.5800	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	0.0006	ppm	0.0003	57.50	-3.4340	0.0006 (ppm)	Y 371.029
Fe (238.204 nm)	0.0522	ppm	0.0016	3.15	219.7000	0.0522 (ppm)	Y_R 371.029
K (766.491 nm)	12.2200	ppm	0.0076	0.06	14610.0000	12.2200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4404	ppm	0.0020	0.45	30690.0000	0.4404 (ppm)	Y_R 371.029
Mg (279.078 nm)	66.9500	ppm	0.1494	0.22	171400.0000	66.9500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5775	ppm	0.0049	0.85	59970.0000	0.5775 (ppm)	Y 371.029
Mo (204.598 nm)	0.0101	ppm	0.0011	10.73	47.5800	0.0101 (ppm)	Y 371.029
Na (589.592 nm)	536.3000 o	ppm	0.7900	0.15	3741000.0000	536.3000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1128	ppm	0.0021	1.84	575.3000	0.1128 (ppm)	Y 371.029
P (213.618 nm)	-0.0007 u	ppm	0.0009	> 100.00	-13.6300	-0.0007 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0041 u	ppm	0.0018	43.12	-13.5600	-0.0041 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0066	> 100.00	-2.9290	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0024 u	ppm	0.0060	> 100.00	-0.3629	0.0024 u (ppm)	Y 371.029
Si (251.611 nm)	14.8000	ppm	0.1114	0.75	36120.0000	14.8000 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0023 u	ppm	0.0002	6.91	-4.9800	-0.0023 u (ppm)	Y 371.029
Sr (421.552 nm)	2.3540	ppm	0.0194	0.82	946700.0000	2.3540 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0001	29.68	-369.5000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0017 u	ppm	0.0005	27.86	-5.6570	-0.0017 u (ppm)	Y 371.029
V (292.401 nm)	-0.0077 u	ppm	0.0004	4.67	109.6000	-0.0077 u (ppm)	Y 371.029
W (207.912 nm)	-0.0014 u	ppm	0.0018	> 100.00	-14.1100	-0.0014 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0002	14.31	113.6000	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	4.26	47.9300	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9095	390800.0000	0.0004	0.05
Y_R 371.029	0.9549	60320.0000	0.0097	1.02

Sample Name: 440-222369-N-8-A

Date: 10/19/2018 1:35:59 PM

Rack:Tube: 3:49

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0008 u	ppm	0.0000	4.72	-69.9700	-0.0008 u (ppm)	Y 371.029
Al (396.152 nm)	0.0098	ppm	0.0003	3.50	-839.5000	0.0098 (ppm)	Y 371.029
As (188.980 nm)	0.0079	ppm	0.0008	9.66	10.7300	0.0079 (ppm)	Y 371.029
B (249.678 nm)	1.2580	ppm	0.0098	0.78	15690.0000	1.2580 (ppm)	Y 371.029
Ba (233.527 nm)	0.0261	ppm	0.0002	0.66	2113.0000	0.0261 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	21.53	15.7900	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	193.1000	ppm	0.5556	0.29	854200.0000	193.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	0.6063	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0002	22.56	-5.1040	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0033	ppm	0.0005	16.30	22.5800	0.0033 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0001	22.15	-42.0800	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0135	ppm	0.0009	6.67	52.1300	0.0135 (ppm)	Y_R 371.029
K (766.491 nm)	14.3500	ppm	0.1870	1.30	17180.0000	14.3500 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3937	ppm	0.0009	0.23	27570.0000	0.3937 (ppm)	Y_R 371.029
Mg (279.078 nm)	83.8600	ppm	0.0685	0.08	214600.0000	83.8600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3502	ppm	0.0013	0.36	36570.0000	0.3502 (ppm)	Y 371.029
Mo (204.598 nm)	0.0085	ppm	0.0020	23.57	40.0000	0.0085 (ppm)	Y 371.029
Na (589.592 nm)	577.5000 o	ppm	6.6460	1.15	4029000.0000	577.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0670	ppm	0.0008	1.12	340.5000	0.0670 (ppm)	Y 371.029
P (213.618 nm)	0.0157	ppm	0.0028	17.79	1.5450	0.0157 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0023 u	ppm	0.0003	14.39	-9.8810	-0.0023 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0027 u	ppm	0.0041	> 100.00	-3.6630	-0.0027 u (ppm)	Y 371.029
Se (196.026 nm)	0.0004 u	ppm	0.0030	> 100.00	-1.9470	0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	18.6300	ppm	0.0618	0.33	45470.0000	18.6300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0050 u	ppm	0.0007	13.88	-6.7610	-0.0050 u (ppm)	Y 371.029
Sr (421.552 nm)	2.8730	ppm	0.0060	0.21	1155000.0000	2.8730 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0000	2.87	-366.3000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017	ppm	0.0013	72.42	-1.7800	0.0017 (ppm)	Y 371.029
V (292.401 nm)	-0.0074 u	ppm	0.0002	3.27	117.9000	-0.0074 u (ppm)	Y 371.029
W (207.912 nm)	-0.0019 u	ppm	0.0012	60.83	-15.0000	-0.0019 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0009 u	ppm	0.0000	0.20	74.9600	-0.0009 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	4.84	41.6500	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9086	390400.0000	0.0026	0.29
Y_R 371.029	0.9522	60150.0000	0.0075	0.78

Sample Name: 440-222369-N-9-A

Date: 10/19/2018 1:38:23 PM

Rack:Tube: 3:50

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0002	20.03	-69.8300	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0082	ppm	0.0000	0.16	-891.7000	0.0082 (ppm)	Y 371.029
As (188.980 nm)	0.0084	ppm	0.0058	69.66	11.1200	0.0084 (ppm)	Y 371.029
B (249.678 nm)	1.1390	ppm	0.0006	0.05	14200.0000	1.1390 (ppm)	Y 371.029
Ba (233.527 nm)	0.0237	ppm	0.0003	1.20	1924.0000	0.0237 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	4.8930	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	176.8000	ppm	0.6385	0.36	782200.0000	176.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-0.5169	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0001	9.00	-2.5200	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0032	ppm	0.0002	5.38	21.7900	0.0032 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0001	9.89	-54.9700	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0209	ppm	0.0016	7.67	83.5800	0.0209 (ppm)	Y_R 371.029
K (766.491 nm)	13.2000	ppm	0.1339	1.01	15790.0000	13.2000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3617	ppm	0.0025	0.69	25330.0000	0.3617 (ppm)	Y_R 371.029
Mg (279.078 nm)	75.6300	ppm	0.2594	0.34	193600.0000	75.6300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3227	ppm	0.0003	0.08	33690.0000	0.3227 (ppm)	Y 371.029
Mo (204.598 nm)	0.0052	ppm	0.0004	8.18	24.8200	0.0052 (ppm)	Y 371.029
Na (589.592 nm)	532.5000 o	ppm	0.8526	0.16	3715000.0000	532.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0568	ppm	0.0012	2.03	288.7000	0.0568 (ppm)	Y 371.029
P (213.618 nm)	0.0144	ppm	0.0076	52.69	0.6373	0.0144 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0028 u	ppm	0.0006	22.77	-11.0800	-0.0028 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0035 u	ppm	0.0023	63.96	-4.5220	-0.0035 u (ppm)	Y 371.029
Se (196.026 nm)	0.0022	ppm	0.0019	85.36	-0.4911	0.0022 (ppm)	Y 371.029
Si (251.611 nm)	16.8600	ppm	0.0112	0.07	41160.0000	16.8600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0010 u	ppm	0.0020	> 100.00	-4.1510	-0.0010 u (ppm)	Y 371.029
Sr (421.552 nm)	2.6270	ppm	0.0067	0.25	1056000.0000	2.6270 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	37.20	-366.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0015	ppm	0.0008	49.38	-1.9910	0.0015 (ppm)	Y 371.029
V (292.401 nm)	-0.0068 u	ppm	0.0005	6.73	110.3000	-0.0068 u (ppm)	Y 371.029
W (207.912 nm)	-0.0032 u	ppm	0.0001	2.60	-16.8800	-0.0032 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0208	ppm	0.0002	0.91	463.8000	0.0208 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	> 100.00	29.3500	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9041	388500.0000	0.0074	0.82
Y_R 371.029	0.9510	60080.0000	0.0107	1.12

Sample Name: 440-222369-N-10-A

Date: 10/19/2018 1:40:47 PM

Rack:Tube: 3:51

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	7.16	-71.8400	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0078	ppm	0.0004	5.29	-897.1000	0.0078 (ppm)	Y 371.029
As (188.980 nm)	0.0071	ppm	0.0010	14.66	10.2200	0.0071 (ppm)	Y 371.029
B (249.678 nm)	1.2170	ppm	0.0169	1.39	15180.0000	1.2170 (ppm)	Y 371.029
Ba (233.527 nm)	0.0276	ppm	0.0004	1.33	2233.0000	0.0276 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	0.7841	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	178.5000	ppm	0.2681	0.15	789800.0000	178.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	30.98	2.4490	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0014	ppm	0.0003	21.15	0.5695	0.0014 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0001	10.69	10.4000	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0001	10.45	-33.8300	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0157	ppm	0.0017	10.85	60.6100	0.0157 (ppm)	Y_R 371.029
K (766.491 nm)	13.1500	ppm	0.0050	0.04	15730.0000	13.1500 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3922	ppm	0.0011	0.28	27400.0000	0.3922 (ppm)	Y_R 371.029
Mg (279.078 nm)	73.9000	ppm	0.0269	0.04	189200.0000	73.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3330	ppm	0.0041	1.23	34750.0000	0.3330 (ppm)	Y 371.029
Mo (204.598 nm)	0.0142	ppm	0.0020	14.01	66.5600	0.0142 (ppm)	Y 371.029
Na (589.592 nm)	539.8000 o	ppm	1.4550	0.27	3766000.0000	539.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0662	ppm	0.0010	1.50	336.6000	0.0662 (ppm)	Y 371.029
P (213.618 nm)	0.0022	ppm	0.0010	44.46	-10.7900	0.0022 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0048 u	ppm	0.0007	14.04	-15.0800	-0.0048 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0026 u	ppm	0.0012	47.14	-3.7110	-0.0026 u (ppm)	Y 371.029
Se (196.026 nm)	0.0021	ppm	0.0002	8.99	-0.5252	0.0021 (ppm)	Y 371.029
Si (251.611 nm)	16.8600	ppm	0.2825	1.68	41160.0000	16.8600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0039 u	ppm	0.0033	84.34	-6.0650	-0.0039 u (ppm)	Y 371.029
Sr (421.552 nm)	2.5840	ppm	0.0041	0.16	1039000.0000	2.5840 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	28.19	-372.6000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0001 u	ppm	0.0003	> 100.00	-4.0620	-0.0001 u (ppm)	Y 371.029
V (292.401 nm)	-0.0070 u	ppm	0.0001	1.68	105.7000	-0.0070 u (ppm)	Y 371.029
W (207.912 nm)	-0.0015 u	ppm	0.0006	38.84	-13.9000	-0.0015 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0006	ppm	0.0002	33.99	97.0400	0.0006 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	41.08	16.9900	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9064	389400.0000	0.0132	1.46
Y_R 371.029	0.9579	60510.0000	0.0018	0.19

Sample Name: 440-222369-N-11-A

Date: 10/19/2018 1:43:11 PM

Rack:Tube: 3:52

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	7.53	-72.9800	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.0121	ppm	0.0007	5.49	-786.6000	0.0121 (ppm)	Y 371.029
As (188.980 nm)	0.0028	ppm	0.0009	31.22	7.3790	0.0028 (ppm)	Y 371.029
B (249.678 nm)	1.1630	ppm	0.0060	0.52	14510.0000	1.1630 (ppm)	Y 371.029
Ba (233.527 nm)	0.0229	ppm	0.0003	1.10	1857.0000	0.0229 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	11.1800	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	182.0000	ppm	0.6285	0.35	805400.0000	182.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0001	20.83	9.7410	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0055	ppm	0.0007	13.49	57.7100	0.0055 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	19.15	8.0780	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0005	ppm	0.0001	26.95	5.7030	0.0005 (ppm)	Y 371.029
Fe (238.204 nm)	0.0103	ppm	0.0012	11.94	38.0500	0.0103 (ppm)	Y_R 371.029
K (766.491 nm)	13.6800	ppm	0.0666	0.49	16370.0000	13.6800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3787	ppm	0.0032	0.86	26530.0000	0.3787 (ppm)	Y_R 371.029
Mg (279.078 nm)	84.7500	ppm	0.6747	0.80	216900.0000	84.7500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3256	ppm	0.0000	0.00	34030.0000	0.3256 (ppm)	Y 371.029
Mo (204.598 nm)	0.0240	ppm	0.0017	6.90	112.2000	0.0240 (ppm)	Y 371.029
Na (589.592 nm)	544.1000 o	ppm	5.2230	0.96	3796000.0000	544.1000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.2633	ppm	0.0000	0.02	1347.0000	0.2633 (ppm)	Y 371.029
P (213.618 nm)	0.0137	ppm	0.0019	13.87	-0.4084	0.0137 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0029 u	ppm	0.0011	38.11	-11.1600	-0.0029 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0046 u	ppm	0.0014	30.63	-5.9420	-0.0046 u (ppm)	Y 371.029
Se (196.026 nm)	0.0046	ppm	0.0015	31.69	1.2840	0.0046 (ppm)	Y 371.029
Si (251.611 nm)	19.6900	ppm	0.0304	0.15	48060.0000	19.6900 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0021 u	ppm	0.0036	> 100.00	-4.8600	-0.0021 u (ppm)	Y 371.029
Sr (421.552 nm)	2.9080	ppm	0.0111	0.38	1169000.0000	2.9080 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0001	> 100.00	-398.8000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0009 u	ppm	0.0021	> 100.00	-2.8060	0.0009 u (ppm)	Y 371.029
V (292.401 nm)	-0.0063 u	ppm	0.0001	0.89	126.6000	-0.0063 u (ppm)	Y 371.029
W (207.912 nm)	-0.0022 u	ppm	0.0019	86.06	-15.3100	-0.0022 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0014 u	ppm	0.0000	1.93	65.7800	-0.0014 u (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	67.55	12.3500	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9101	391000.0000	0.0085	0.93
Y_R 371.029	0.9912	62610.0000	0.0001	0.01

Sample Name: 440-222369-N-12-A

Date: 10/19/2018 1:45:36 PM

Rack:Tube: 3:53

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0004	> 100.00	-68.9100	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	-0.0045 u	ppm	0.0008	17.96	-1042.0000	-0.0045 u (ppm)	Y 371.029
As (188.980 nm)	0.0082	ppm	0.0071	86.15	10.3700	0.0082 (ppm)	Y 371.029
B (249.678 nm)	3.0610	ppm	0.0048	0.16	38200.0000	3.0610 (ppm)	Y 371.029
Ba (233.527 nm)	0.0385	ppm	0.0000	0.03	3104.0000	0.0385 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	62.40	6.9770	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	394.1000	ppm	2.1700	0.55	1744000.0000	394.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	4.70	0.5207	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0058	ppm	0.0000	0.38	65.5800	0.0058 (ppm)	Y 371.029
Cr (205.560 nm)	0.0031	ppm	0.0007	21.99	24.9900	0.0031 (ppm)	Y 371.029
Cu (324.754 nm)	0.0011	ppm	0.0001	5.55	-164.5000	0.0011 (ppm)	Y 371.029
Fe (238.204 nm)	0.1691	ppm	0.0041	2.41	738.9000	0.1691 (ppm)	Y_R 371.029
K (766.491 nm)	38.1700	ppm	0.1368	0.36	45830.0000	38.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	1.9400	ppm	0.0126	0.65	133500.0000	1.9400 (ppm)	Y_R 371.029
Mg (279.078 nm)	119.0000	ppm	0.0071	0.01	304600.0000	119.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8538	ppm	0.0049	0.57	88720.0000	0.8538 (ppm)	Y 371.029
Mo (204.598 nm)	0.0110	ppm	0.0000	0.14	51.7300	0.0110 (ppm)	Y 371.029
Na (589.592 nm)	601.1000 o	ppm	3.1020	0.52	4193000.0000	601.1000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.2097	ppm	0.0012	0.59	1068.0000	0.2097 (ppm)	Y 371.029
P (213.618 nm)	0.0070	ppm	0.0017	24.81	-9.3230	0.0070 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0042 u	ppm	0.0017	40.51	-10.8500	-0.0042 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0035 u	ppm	0.0015	41.29	-3.7730	-0.0035 u (ppm)	Y 371.029
Se (196.026 nm)	0.0018	ppm	0.0010	57.81	-2.0720	0.0018 (ppm)	Y 371.029
Si (251.611 nm)	18.2300	ppm	0.0967	0.53	44500.0000	18.2300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0054 u	ppm	0.0021	38.35	-7.0290	-0.0054 u (ppm)	Y 371.029
Sr (421.552 nm)	6.9340	ppm	0.0384	0.55	2786000.0000	6.9340 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0002	> 100.00	-650.3000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0038	ppm	0.0017	44.41	0.4697	0.0038 (ppm)	Y 371.029
V (292.401 nm)	-0.0169 u	ppm	0.0002	1.19	124.7000	-0.0169 u (ppm)	Y 371.029
W (207.912 nm)	-0.0029 u	ppm	0.0010	35.65	-21.3700	-0.0029 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0014 u	ppm	0.0001	6.75	98.0100	-0.0014 u (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 u	ppm	0.0000	2.20	14.5000	-0.0005 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8952	384600.0000	0.0089	1.00
Y_R 371.029	0.9708	61330.0000	0.0028	0.28

Sample Name: 440-222369-N-13-A

Date: 10/19/2018 1:48:01 PM

Rack:Tube: 3:54

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0001	13.12	-59.6800	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0089	ppm	0.0004	4.83	-860.3000	0.0089 (ppm)	Y 371.029
As (188.980 nm)	0.0046	ppm	0.0019	42.48	8.6260	0.0046 (ppm)	Y 371.029
B (249.678 nm)	1.3790	ppm	0.0148	1.07	17200.0000	1.3790 (ppm)	Y 371.029
Ba (233.527 nm)	0.0269	ppm	0.0002	0.60	2173.0000	0.0269 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	3.6420	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	153.4000	ppm	1.4500	0.95	678600.0000	153.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.0820	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0081	ppm	0.0012	14.69	91.7000	0.0081 (ppm)	Y 371.029
Cr (205.560 nm)	0.0021	ppm	0.0001	5.72	14.2900	0.0021 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0004	38.53	-24.3500	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0765	ppm	0.0015	1.98	325.8000	0.0765 (ppm)	Y_R 371.029
K (766.491 nm)	13.2000	ppm	0.0746	0.56	15790.0000	13.2000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4328	ppm	0.0025	0.59	30110.0000	0.4328 (ppm)	Y_R 371.029
Mg (279.078 nm)	74.1200	ppm	0.4178	0.56	189700.0000	74.1200 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4906	ppm	0.0031	0.62	51050.0000	0.4906 (ppm)	Y 371.029
Mo (204.598 nm)	0.0611	ppm	0.0009	1.45	284.3000	0.0611 (ppm)	Y 371.029
Na (589.592 nm)	541.9000 o	ppm	2.1710	0.40	3780000.0000	541.9000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.5785	ppm	0.0048	0.83	2964.0000	0.5785 (ppm)	Y 371.029
P (213.618 nm)	0.0012 u	ppm	0.0041	> 100.00	-12.0500	0.0012 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0023 u	ppm	0.0016	68.56	-10.5500	-0.0023 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0062	> 100.00	-4.0380	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0044	ppm	0.0023	52.30	1.3190	0.0044 (ppm)	Y 371.029
Si (251.611 nm)	14.4600	ppm	0.0953	0.66	35310.0000	14.4600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0025 u	ppm	0.0035	> 100.00	-5.0980	-0.0025 u (ppm)	Y 371.029
Sr (421.552 nm)	2.3200	ppm	0.0165	0.71	932400.0000	2.3200 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	44.72	-349.0000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0011 u	ppm	0.0025	> 100.00	-2.0320	0.0011 u (ppm)	Y 371.029
V (292.401 nm)	-0.0063 u	ppm	0.0000	0.12	81.7500	-0.0063 u (ppm)	Y 371.029
W (207.912 nm)	-0.0039 u	ppm	0.0009	23.59	-17.9400	-0.0039 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0009 u	ppm	0.0000	0.25	67.6500	-0.0009 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0000	> 100.00	18.2700	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9232	396700.0000	0.0053	0.57
Y_R 371.029	1.0060	63520.0000	0.0177	1.76

Sample Name: 440-222369-N-14-A

Date: 10/19/2018 1:50:25 PM

Rack:Tube: 3:55

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0000	> 100.00	2.5840	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0101	ppm	0.0001	1.27	-995.0000	0.0101 (ppm)	Y 371.029
As (188.980 nm)	0.0023	ppm	0.0029	> 100.00	7.2820	0.0023 (ppm)	Y 371.029
B (249.678 nm)	0.0063	ppm	0.0012	18.43	54.8800	0.0063 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000	ppm	0.0000	62.79	44.7800	0.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	8.93	5.4940	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0513	ppm	0.0045	8.78	318.8000	0.0513 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.7920	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0001	19.69	-16.2800	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0045	ppm	0.0007	15.48	25.5800	0.0045 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0003	18.63	92.0200	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0192	ppm	0.0046	23.95	65.7000	0.0192 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0218 u	ppm	0.0246	> 100.00	-140.8000	-0.0218 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0002 u	ppm	0.0009	> 100.00	65.2500	0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0362	ppm	0.0130	35.79	98.6500	0.0362 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0007	ppm	0.0001	11.78	133.9000	0.0007 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0003 u	ppm	0.0001	30.45	-0.9201	-0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	0.9208	ppm	0.0166	1.81	7732.0000	0.9208 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0015	ppm	0.0004	29.76	9.4090	0.0015 (ppm)	Y 371.029
P (213.618 nm)	0.0007 u	ppm	0.0041	> 100.00	-9.5110	0.0007 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0020	ppm	0.0013	63.63	-5.2650	0.0020 (ppm)	Y 371.029
Sb (206.834 nm)	0.0021	ppm	0.0003	12.61	0.7614	0.0021 (ppm)	Y 371.029
Se (196.026 nm)	0.0001 u	ppm	0.0012	> 100.00	-0.9869	0.0001 u (ppm)	Y 371.029
Si (251.611 nm)	0.0117	ppm	0.0014	11.69	77.3600	0.0117 (ppm)	Y 371.029
Sn (189.925 nm)	0.0050	ppm	0.0023	46.69	-0.3182	0.0050 (ppm)	Y 371.029
Sr (421.552 nm)	0.0007	ppm	0.0000	3.61	220.8000	0.0007 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	58.73	-159.2000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0004	29.08	-5.2880	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0001	96.28	53.3200	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0000 u	ppm	0.0001	> 100.00	-7.0130	0.0000 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0018	ppm	0.0000	0.97	65.5700	0.0018 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	17.58	4.6850	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0640	457300.0000	0.0091	0.85
Y_R 371.029	1.0930	69040.0000	0.0101	0.92

Sample Name: 440-222378-F-7-A

Date: 10/19/2018 1:52:49 PM

Rack:Tube: 3:56

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	14.01	-32.9000	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0178	ppm	0.0005	2.66	-745.6000	0.0178 (ppm)	Y 371.029
As (188.980 nm)	0.0072	ppm	0.0035	48.46	10.3800	0.0072 (ppm)	Y 371.029
B (249.678 nm)	0.2202	ppm	0.0003	0.14	2727.0000	0.2202 (ppm)	Y 371.029
Ba (233.527 nm)	0.1419	ppm	0.0003	0.24	11240.0000	0.1419 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	4.3990	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	86.7500	ppm	0.3039	0.35	383900.0000	86.7500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-3.0100	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0008	87.90	-8.3640	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0193	ppm	0.0008	4.31	105.9000	0.0193 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0000	74.18	71.1100	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0395	ppm	0.0007	1.88	159.7000	0.0395 (ppm)	Y_R 371.029
K (766.491 nm)	3.8080	ppm	0.0455	1.19	4485.0000	3.8080 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1218	ppm	0.0012	0.97	8666.0000	0.1218 (ppm)	Y_R 371.029
Mg (279.078 nm)	38.0500	ppm	0.1071	0.28	97400.0000	38.0500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0001	81.28	245.4000	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0229	ppm	0.0006	2.62	106.6000	0.0229 (ppm)	Y 371.029
Na (589.592 nm)	123.0000	ppm	1.0460	0.85	859300.0000	123.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0061	ppm	0.0013	21.13	31.0400	0.0061 (ppm)	Y 371.029
P (213.618 nm)	0.1095	ppm	0.0036	3.27	88.7900	0.1095 (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0002	> 100.00	-7.5860	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0019 u	ppm	0.0106	> 100.00	-3.2590	-0.0019 u (ppm)	Y 371.029
Se (196.026 nm)	0.0029	ppm	0.0015	52.71	0.5535	0.0029 (ppm)	Y 371.029
Si (251.611 nm)	21.7300	ppm	0.0229	0.11	53010.0000	21.7300 (ppm)	Y 371.029
Sn (189.925 nm)	0.0008	ppm	0.0004	46.04	-3.0000	0.0008 (ppm)	Y 371.029
Sr (421.552 nm)	0.5108	ppm	0.0014	0.27	206100.0000	0.5108 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	38.45	-260.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0016 u	ppm	0.0022	> 100.00	-6.3700	-0.0016 u (ppm)	Y 371.029
V (292.401 nm)	0.0065	ppm	0.0001	1.02	356.3000	0.0065 (ppm)	Y 371.029
W (207.912 nm)	-0.0006 u	ppm	0.0004	65.49	-10.0000	-0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0135	ppm	0.0001	0.44	304.9000	0.0135 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	42.29	-0.4754	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0190	437900.0000	0.0049	0.48
Y_R 371.029	1.0500	66340.0000	0.0017	0.16

Sample Name: CCV 5129881

Date: 10/19/2018 2:06:50 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5045	ppm	0.0009	0.17	21250.0000	0.5045 (ppm)	Y 371.029
Al (396.152 nm)	1.0470	ppm	0.0032	0.31	22320.0000	1.0470 (ppm)	Y 371.029
As (188.980 nm)	1.0040	ppm	0.0041	0.41	685.0000	1.0040 (ppm)	Y 371.029
B (249.678 nm)	1.0180	ppm	0.0068	0.67	12590.0000	1.0180 (ppm)	Y 371.029
Ba (233.527 nm)	1.0260	ppm	0.0036	0.35	80900.0000	1.0260 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0080	ppm	0.0044	0.44	185700.0000	1.0080 (ppm)	Y 371.029
Ca (422.673 nm)	5.1220	ppm	0.0004	0.01	22750.0000	5.1220 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0130	ppm	0.0041	0.40	23500.0000	1.0130 (ppm)	Y 371.029
Co (228.615 nm)	1.0210	ppm	0.0019	0.19	13810.0000	1.0210 (ppm)	Y 371.029
Cr (205.560 nm)	1.0170	ppm	0.0026	0.25	5418.0000	1.0170 (ppm)	Y 371.029
Cu (324.754 nm)	1.0120	ppm	0.0017	0.17	40490.0000	1.0120 (ppm)	Y 371.029
Fe (238.204 nm)	1.0320	ppm	0.0026	0.25	4492.0000	1.0320 (ppm)	Y_R 371.029
K (766.491 nm)	10.2300	ppm	0.0052	0.05	12190.0000	10.2300 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0010	ppm	0.0035	0.35	67890.0000	1.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1640	ppm	0.0188	0.36	13220.0000	5.1640 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0160	ppm	0.0037	0.37	105500.0000	1.0160 (ppm)	Y 371.029
Mo (204.598 nm)	1.0230	ppm	0.0064	0.63	4748.0000	1.0230 (ppm)	Y 371.029
Na (589.592 nm)	10.4300	ppm	0.0123	0.12	74130.0000	10.4300 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0150	ppm	0.0038	0.38	5203.0000	1.0150 (ppm)	Y 371.029
P (213.618 nm)	0.9995	ppm	0.0037	0.37	850.3000	0.9995 (ppm)	Y 371.029
Pb (220.353 nm)	1.0180	ppm	0.0024	0.23	1951.0000	1.0180 (ppm)	Y 371.029
Sb (206.834 nm)	1.0030	ppm	0.0112	1.11	1027.0000	1.0030 (ppm)	Y 371.029
Se (196.026 nm)	0.9935	ppm	0.0050	0.50	753.7000	0.9935 (ppm)	Y 371.029
Si (251.611 nm)	5.0450	ppm	0.1047	2.07	12520.0000	5.0450 (ppm)	Y 371.029
Sn (189.925 nm)	1.0140	ppm	0.0038	0.37	660.2000	1.0140 (ppm)	Y 371.029
Sr (421.552 nm)	1.0290	ppm	0.0024	0.23	412600.0000	1.0290 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0190	ppm	0.0040	0.40	125700.0000	1.0190 (ppm)	Y 371.029
Tl (190.794 nm)	1.0140	ppm	0.0033	0.33	1207.0000	1.0140 (ppm)	Y 371.029
V (292.401 nm)	1.0220	ppm	0.0030	0.29	28750.0000	1.0220 (ppm)	Y 371.029
W (207.912 nm)	1.0220	ppm	0.0013	0.13	1927.0000	1.0220 (ppm)	Y 371.029
Zn (202.548 nm)	1.0140	ppm	0.0029	0.29	18570.0000	1.0140 (ppm)	Y 371.029
Zr (343.823 nm)	1.0180	ppm	0.0033	0.33	85630.0000	1.0180 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0560	453500.0000	0.0114	1.08
Y_R 371.029	1.0570	66790.0000	0.0045	0.43

Sample Name: CCB 5129880

Date: 10/19/2018 2:09:13 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003 u	ppm	0.0006	> 100.00	13.1700	0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0070	ppm	0.0006	8.72	-1062.0000	0.0070 (ppm)	Y 371.029
As (188.980 nm)	0.0017	ppm	0.0001	5.50	6.9090	0.0017 (ppm)	Y 371.029
B (249.678 nm)	0.0033	ppm	0.0007	21.90	16.9000	0.0033 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0003	55.27	87.1600	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	30.67	101.5000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0152	ppm	0.0009	5.67	159.3000	0.0152 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0007	ppm	0.0000	5.76	11.9900	0.0007 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0003	27.46	-7.8570	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0005	73.86	4.9710	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0003	36.90	115.2000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0003 u	ppm	0.0021	> 100.00	-19.5500	-0.0003 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0460 u	ppm	0.0766	> 100.00	-170.0000	-0.0460 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0019	ppm	0.0014	72.73	179.3000	0.0019 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0052	ppm	0.0001	1.53	19.3600	0.0052 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	35.80	125.9000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0019	ppm	0.0002	12.73	9.2810	0.0019 (ppm)	Y 371.029
Na (589.592 nm)	0.2863	ppm	0.0136	4.74	3308.0000	0.2863 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0007	ppm	0.0007	> 100.00	5.2410	0.0007 (ppm)	Y 371.029
P (213.618 nm)	-0.0003 u	ppm	0.0039	> 100.00	-10.4500	-0.0003 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0028	ppm	0.0010	37.44	-3.7910	0.0028 (ppm)	Y 371.029
Sb (206.834 nm)	0.0017	ppm	0.0007	42.70	0.2967	0.0017 (ppm)	Y 371.029
Se (196.026 nm)	-0.0016 u	ppm	0.0016	> 100.00	-2.2300	-0.0016 u (ppm)	Y 371.029
Si (251.611 nm)	0.0036	ppm	0.0024	66.68	57.6300	0.0036 (ppm)	Y 371.029
Sn (189.925 nm)	0.0036	ppm	0.0012	32.84	-1.2350	0.0036 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	4.91	69.8300	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0001	14.98	-62.1800	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0016 u	ppm	0.0027	> 100.00	-1.7740	0.0016 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0004	82.93	71.2500	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0013	ppm	0.0009	65.39	-4.4270	0.0013 (ppm)	Y 371.029
Zn (202.548 nm)	0.0014	ppm	0.0003	17.47	60.0400	0.0014 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	36.11	28.1200	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0600	455600.0000	0.0028	0.27
Y_R 371.029	1.0680	67450.0000	0.0008	0.07

Sample Name: 440-222378-F-8-A

Date: 10/19/2018 2:13:02 PM

Rack:Tube: 3:57

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0006 u	ppm	0.0001	18.34	-42.0300	-0.0006 u (ppm)	Y 371.029
Al (396.152 nm)	0.0183	ppm	0.0008	4.11	-738.9000	0.0183 (ppm)	Y 371.029
As (188.980 nm)	0.0026 u	ppm	0.0051	> 100.00	7.3320	0.0026 u (ppm)	Y 371.029
B (249.678 nm)	0.3715	ppm	0.0037	0.98	4616.0000	0.3715 (ppm)	Y 371.029
Ba (233.527 nm)	0.2303	ppm	0.0056	2.41	18210.0000	0.2303 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	6.38	27.0400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	91.1600	ppm	0.2620	0.29	403400.0000	91.1600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0003	> 100.00	4.1000	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0001 u	ppm	0.0002	> 100.00	-18.6500	0.0001 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0063	ppm	0.0000	0.19	36.5800	0.0063 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0013 u	ppm	0.0001	6.09	18.2400	-0.0013 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0160	ppm	0.0002	1.06	57.2800	0.0160 (ppm)	Y_R 371.029
K (766.491 nm)	4.8750	ppm	0.0478	0.98	5769.0000	4.8750 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0565	ppm	0.0004	0.70	4235.0000	0.0565 (ppm)	Y_R 371.029
Mg (279.078 nm)	41.7600	ppm	0.5111	1.22	106900.0000	41.7600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0000	8.79	295.3000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0020	ppm	0.0011	57.23	9.8100	0.0020 (ppm)	Y 371.029
Na (589.592 nm)	167.2000	ppm	0.9601	0.57	1167000.0000	167.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0017	ppm	0.0002	12.90	8.2520	0.0017 (ppm)	Y 371.029
P (213.618 nm)	0.0701	ppm	0.0060	8.51	52.9100	0.0701 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0019 u	ppm	0.0005	24.90	-11.0100	-0.0019 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0001 u	ppm	0.0028	> 100.00	-1.1450	-0.0001 u (ppm)	Y 371.029
Se (196.026 nm)	0.0049	ppm	0.0024	47.88	2.0470	0.0049 (ppm)	Y 371.029
Si (251.611 nm)	32.3800	ppm	0.1466	0.45	78960.0000	32.3800 (ppm)	Y 371.029
Sn (189.925 nm)	0.0005 u	ppm	0.0030	> 100.00	-3.2350	0.0005 u (ppm)	Y 371.029
Sr (421.552 nm)	0.6326	ppm	0.0023	0.36	255000.0000	0.6326 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	12.68	-234.6000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002 u	ppm	0.0023	> 100.00	-4.2430	0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0100	ppm	0.0002	2.31	466.5000	0.0100 (ppm)	Y 371.029
W (207.912 nm)	0.0009 u	ppm	0.0022	> 100.00	-7.4510	0.0009 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0002	27.22	75.0400	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	21.66	52.7600	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9980	428800.0000	0.0021	0.21
Y_R 371.029	1.0300	65060.0000	0.0091	0.89

Sample Name: 440-222378-F-9-A

Date: 10/19/2018 2:15:26 PM

Rack:Tube: 3:58

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	37.66	-33.1100	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0866	ppm	0.0006	0.71	739.8000	0.0866 (ppm)	Y 371.029
As (188.980 nm)	0.0065	ppm	0.0029	45.07	9.9500	0.0065 (ppm)	Y 371.029
B (249.678 nm)	0.3562	ppm	0.0037	1.04	4425.0000	0.3562 (ppm)	Y 371.029
Ba (233.527 nm)	0.0978	ppm	0.0020	2.06	7759.0000	0.0978 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	32.49	16.4300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	70.6700	ppm	0.1133	0.16	312700.0000	70.6700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-0.4688	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0001	9.35	-11.8600	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0177	ppm	0.0005	2.67	96.7000	0.0177 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0003	24.46	42.5900	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0035	ppm	0.0004	10.69	1.5460	0.0035 (ppm)	Y_R 371.029
K (766.491 nm)	1.1360	ppm	0.0226	1.99	1271.0000	1.1360 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0717	ppm	0.0021	2.90	5198.0000	0.0717 (ppm)	Y_R 371.029
Mg (279.078 nm)	33.8400	ppm	0.5499	1.63	86610.0000	33.8400 (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0008 u	ppm	0.0000	3.04	129.1000	-0.0008 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0213	ppm	0.0012	5.69	99.5400	0.0213 (ppm)	Y 371.029
Na (589.592 nm)	169.4000	ppm	0.3178	0.19	1183000.0000	169.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0001 u	ppm	0.0002	> 100.00	-0.2430	-0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0879	ppm	0.0086	9.75	69.2200	0.0879 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0028 u	ppm	0.0001	5.20	-13.2700	-0.0028 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0006 u	ppm	0.0029	> 100.00	-0.7763	0.0006 u (ppm)	Y 371.029
Se (196.026 nm)	0.0014 u	ppm	0.0051	> 100.00	-0.4575	0.0014 u (ppm)	Y 371.029
Si (251.611 nm)	26.4400	ppm	0.1104	0.42	64490.0000	26.4400 (ppm)	Y 371.029
Sn (189.925 nm)	0.0002 u	ppm	0.0010	> 100.00	-3.4100	0.0002 u (ppm)	Y 371.029
Sr (421.552 nm)	0.4851	ppm	0.0016	0.33	195500.0000	0.4851 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	17.67	-227.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0021 u	ppm	0.0012	54.20	-7.1640	-0.0021 u (ppm)	Y 371.029
V (292.401 nm)	0.0156	ppm	0.0003	1.96	591.8000	0.0156 (ppm)	Y 371.029
W (207.912 nm)	-0.0013 u	ppm	0.0001	10.01	-11.0600	-0.0013 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0000	0.41	87.0500	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0001	49.09	26.6900	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9922	426300.0000	0.0041	0.42
Y_R 371.029	1.0350	65350.0000	0.0077	0.74

Sample Name: 440-222378-F-10-A

Date: 10/19/2018 2:17:49 PM

Rack:Tube: 3:59

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0004	98.27	-31.7200	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0158	ppm	0.0004	2.26	-800.6000	0.0158 (ppm)	Y 371.029
As (188.980 nm)	0.0087	ppm	0.0038	43.80	11.5100	0.0087 (ppm)	Y 371.029
B (249.678 nm)	0.3362	ppm	0.0026	0.76	4175.0000	0.3362 (ppm)	Y 371.029
Ba (233.527 nm)	0.2055	ppm	0.0002	0.09	16250.0000	0.2055 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	4.3450	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	80.9500	ppm	0.2668	0.33	358200.0000	80.9500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0002	56.96	3.1940	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0001	ppm	0.0000	66.33	-19.5100	0.0001 (ppm)	Y 371.029
Cr (205.560 nm)	0.0059	ppm	0.0006	9.84	34.1100	0.0059 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0001	8.65	35.5300	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0033	ppm	0.0008	25.10	1.1730	0.0033 (ppm)	Y_R 371.029
K (766.491 nm)	5.6490	ppm	0.0143	0.25	6696.0000	5.6490 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0522	ppm	0.0010	1.99	3903.0000	0.0522 (ppm)	Y_R 371.029
Mg (279.078 nm)	37.4700	ppm	0.1918	0.51	95920.0000	37.4700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0647	ppm	0.0001	0.12	6894.0000	0.0647 (ppm)	Y 371.029
Mo (204.598 nm)	0.0048	ppm	0.0005	10.77	22.9700	0.0048 (ppm)	Y 371.029
Na (589.592 nm)	149.3000	ppm	0.1605	0.11	1042000.0000	149.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0005	> 100.00	0.5954	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0953	ppm	0.0026	2.76	76.0800	0.0953 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0010 u	ppm	0.0004	41.78	-9.4900	-0.0010 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0024 u	ppm	0.0073	> 100.00	-3.7190	-0.0024 u (ppm)	Y 371.029
Se (196.026 nm)	0.0043	ppm	0.0024	55.40	1.6890	0.0043 (ppm)	Y 371.029
Si (251.611 nm)	26.6800	ppm	0.1027	0.38	65070.0000	26.6800 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0019 u	ppm	0.0016	84.32	-4.7800	-0.0019 u (ppm)	Y 371.029
Sr (421.552 nm)	0.5627	ppm	0.0013	0.22	226800.0000	0.5627 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	4.06	-235.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0015	ppm	0.0019	> 100.00	-2.3770	0.0015 (ppm)	Y 371.029
V (292.401 nm)	0.0062	ppm	0.0001	2.03	342.7000	0.0062 (ppm)	Y 371.029
W (207.912 nm)	-0.0028 u	ppm	0.0024	85.79	-14.1700	-0.0028 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0001	14.27	71.5600	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	63.12	21.8400	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9845	423000.0000	0.0033	0.34
Y_R 371.029	1.0110	63850.0000	0.0034	0.33

Sample Name: 440-222378-F-11-A

Date: 10/19/2018 2:20:13 PM

Rack:Tube: 3:60

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	24.58	-32.7600	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0160	ppm	0.0001	0.86	-813.5000	0.0160 (ppm)	Y 371.029
As (188.980 nm)	0.0069	ppm	0.0026	38.51	9.2980	0.0069 (ppm)	Y 371.029
B (249.678 nm)	0.3393	ppm	0.0012	0.34	4214.0000	0.3393 (ppm)	Y 371.029
Ba (233.527 nm)	0.0960	ppm	0.0017	1.80	7613.0000	0.0960 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	67.41	2.1780	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	60.4200	ppm	0.2124	0.35	267400.0000	60.4200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	0.4446	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0004	87.92	-14.7400	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.1508	ppm	0.0008	0.54	806.1000	0.1508 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0002	15.61	42.4500	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0053	ppm	0.0005	8.75	8.6500	0.0053 (ppm)	Y_R 371.029
K (766.491 nm)	4.2890	ppm	0.0116	0.27	5056.0000	4.2890 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0359	ppm	0.0016	4.48	2711.0000	0.0359 (ppm)	Y_R 371.029
Mg (279.078 nm)	28.2800	ppm	0.0340	0.12	72390.0000	28.2800 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0041	ppm	0.0000	0.78	603.5000	0.0041 (ppm)	Y 371.029
Mo (204.598 nm)	0.0038	ppm	0.0003	9.13	18.3400	0.0038 (ppm)	Y 371.029
Na (589.592 nm)	194.2000	ppm	0.7715	0.40	1356000.0000	194.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004	ppm	0.0001	14.17	2.2780	0.0004 (ppm)	Y 371.029
P (213.618 nm)	0.1588	ppm	0.0012	0.74	134.7000	0.1588 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0007 u	ppm	0.0015	> 100.00	-9.3010	-0.0007 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0016 u	ppm	0.0079	> 100.00	-1.6330	-0.0016 u (ppm)	Y 371.029
Se (196.026 nm)	0.0087	ppm	0.0014	16.44	5.0800	0.0087 (ppm)	Y 371.029
Si (251.611 nm)	22.4400	ppm	0.1623	0.72	54720.0000	22.4400 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032	ppm	0.0025	78.47	-1.4750	0.0032 (ppm)	Y 371.029
Sr (421.552 nm)	0.3977	ppm	0.0014	0.36	160300.0000	0.3977 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	7.63	-230.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0017 u	ppm	0.0020	> 100.00	-6.7100	-0.0017 u (ppm)	Y 371.029
V (292.401 nm)	0.0223	ppm	0.0001	0.60	770.3000	0.0223 (ppm)	Y 371.029
W (207.912 nm)	-0.0012 u	ppm	0.0013	> 100.00	-10.3200	-0.0012 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0287	ppm	0.0002	0.82	569.3000	0.0287 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0000	5.96	44.2300	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9734	418200.0000	0.0054	0.55
Y_R 371.029	1.0270	64890.0000	0.0013	0.12

Sample Name: 440-222378-F-12-A

Date: 10/19/2018 2:22:38 PM

Rack:Tube: 4:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0006 u	ppm	0.0000	4.25	-27.8000	-0.0006 u (ppm)	Y 371.029
Al (396.152 nm)	0.0187	ppm	0.0001	0.75	-783.4000	0.0187 (ppm)	Y 371.029
As (188.980 nm)	0.0069	ppm	0.0022	32.77	9.5970	0.0069 (ppm)	Y 371.029
B (249.678 nm)	0.4170	ppm	0.0014	0.32	5184.0000	0.4170 (ppm)	Y 371.029
Ba (233.527 nm)	0.0258	ppm	0.0001	0.26	2077.0000	0.0258 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	6.52	-4.9120	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	28.9800	ppm	0.0876	0.30	128300.0000	28.9800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.0230	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	-0.0001 u	ppm	0.0005	> 100.00	-22.6400	-0.0001 u (ppm)	Y 371.029
Cr (205.560 nm)	0.1116	ppm	0.0002	0.21	596.6000	0.1116 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0001	5.97	65.5200	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0024	ppm	0.0005	21.35	-5.9790	0.0024 (ppm)	Y_R 371.029
K (766.491 nm)	7.4390	ppm	0.1512	2.03	8831.0000	7.4390 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0429	ppm	0.0015	3.56	3078.0000	0.0429 (ppm)	Y_R 371.029
Mg (279.078 nm)	13.7600	ppm	0.0777	0.56	35230.0000	13.7600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0000	7.82	172.4000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0016	ppm	0.0002	9.70	8.0940	0.0016 (ppm)	Y 371.029
Na (589.592 nm)	190.1000	ppm	0.0449	0.02	1327000.0000	190.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0004	> 100.00	-0.7261	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.1264	ppm	0.0061	4.86	105.4000	0.1264 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0002 u	ppm	0.0016	> 100.00	-9.0120	-0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0010 u	ppm	0.0006	58.98	-1.4240	-0.0010 u (ppm)	Y 371.029
Se (196.026 nm)	0.0056	ppm	0.0021	37.85	3.0120	0.0056 (ppm)	Y 371.029
Si (251.611 nm)	21.5700	ppm	0.0300	0.14	52620.0000	21.5700 (ppm)	Y 371.029
Sn (189.925 nm)	0.0014	ppm	0.0016	> 100.00	-2.6310	0.0014 (ppm)	Y 371.029
Sr (421.552 nm)	0.1871	ppm	0.0002	0.10	75420.0000	0.1871 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	65.28	-202.7000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0005	59.37	-5.0380	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0071	ppm	0.0003	4.33	298.6000	0.0071 (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0004	20.34	-11.3900	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0006	ppm	0.0001	13.97	50.9800	0.0006 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	10.23	18.9600	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9990	429200.0000	0.0017	0.17
Y_R 371.029	1.0170	64270.0000	0.0050	0.49

Sample Name: MB 440-506050/1-A

Date: 10/19/2018 2:25:02 PM

Rack:Tube: 1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	33.10	14.2000	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0061	ppm	0.0012	19.22	-1082.0000	0.0061 (ppm)	Y 371.029
As (188.980 nm)	0.0066	ppm	0.0004	6.78	10.2400	0.0066 (ppm)	Y 371.029
B (249.678 nm)	0.0016	ppm	0.0005	30.99	-3.4660	0.0016 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0001	64.04	49.9500	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	95.68	10.4700	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0409	ppm	0.0040	9.87	272.9000	0.0409 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	92.19	-2.1630	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0002	26.13	-14.8100	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0003	44.81	5.0910	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0002	16.73	93.8200	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0013	ppm	0.0003	21.69	-12.7100	0.0013 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1233 u	ppm	0.1111	90.15	-262.8000	-0.1233 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0039	ppm	0.0003	7.47	314.8000	0.0039 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0183	ppm	0.0051	27.71	52.6700	0.0183 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	4.05	71.3300	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002	ppm	0.0001	22.85	1.5660	0.0002 (ppm)	Y 371.029
Na (589.592 nm)	0.4536	ppm	0.0061	1.35	4474.0000	0.4536 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0003 u	ppm	0.0003	> 100.00	0.5535	-0.0003 u (ppm)	Y 371.029
P (213.618 nm)	-0.0024 u	ppm	0.0063	> 100.00	-12.3000	-0.0024 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0008	39.00	-5.0970	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0034	ppm	0.0017	49.19	2.0880	0.0034 (ppm)	Y 371.029
Se (196.026 nm)	0.0002 u	ppm	0.0028	> 100.00	-0.8859	0.0002 u (ppm)	Y 371.029
Si (251.611 nm)	0.0198	ppm	0.0063	31.65	96.7700	0.0198 (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0009	33.72	-1.8660	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	44.60	6.5620	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	32.30	-145.5000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0016 u	ppm	0.0038	> 100.00	-1.7140	0.0016 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0000	11.54	63.7800	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0001 u	ppm	0.0003	> 100.00	-6.7380	0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0002	11.82	68.3400	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	73.43	0.7321	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0600	455600.0000	0.0128	1.20
Y_R 371.029	1.0330	65260.0000	0.0068	0.66

Sample Name: LCS 440-506050/2-A

Date: 10/19/2018 2:27:25 PM

Rack:Tube: 1:2

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2296	ppm	0.0000	0.02	9675.0000	0.2296 (ppm)	Y 371.029
Al (396.152 nm)	0.4911	ppm	0.0007	0.14	9827.0000	0.4911 (ppm)	Y 371.029
As (188.980 nm)	0.4854	ppm	0.0019	0.39	334.2000	0.4854 (ppm)	Y 371.029
B (249.678 nm)	0.4808	ppm	0.0005	0.11	5937.0000	0.4808 (ppm)	Y 371.029
Ba (233.527 nm)	0.4974	ppm	0.0028	0.56	39260.0000	0.4974 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4847	ppm	0.0015	0.30	89270.0000	0.4847 (ppm)	Y 371.029
Ca (422.673 nm)	2.4740	ppm	0.0171	0.69	11040.0000	2.4740 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4945	ppm	0.0021	0.42	11470.0000	0.4945 (ppm)	Y 371.029
Co (228.615 nm)	0.4967	ppm	0.0019	0.39	6710.0000	0.4967 (ppm)	Y 371.029
Cr (205.560 nm)	0.4913	ppm	0.0000	0.01	2619.0000	0.4913 (ppm)	Y 371.029
Cu (324.754 nm)	0.4790	ppm	0.0001	0.03	19250.0000	0.4790 (ppm)	Y 371.029
Fe (238.204 nm)	0.4942	ppm	0.0059	1.20	2143.0000	0.4942 (ppm)	Y_R 371.029
K (766.491 nm)	4.8610	ppm	0.0652	1.34	5731.0000	4.8610 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4763	ppm	0.0016	0.33	32340.0000	0.4763 (ppm)	Y_R 371.029
Mg (279.078 nm)	2.5030	ppm	0.0106	0.42	6410.0000	2.5030 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4942	ppm	0.0001	0.01	51360.0000	0.4942 (ppm)	Y 371.029
Mo (204.598 nm)	0.4842	ppm	0.0042	0.86	2247.0000	0.4842 (ppm)	Y 371.029
Na (589.592 nm)	5.1720	ppm	0.0206	0.40	37410.0000	5.1720 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4927	ppm	0.0003	0.07	2526.0000	0.4927 (ppm)	Y 371.029
P (213.618 nm)	0.4722	ppm	0.0030	0.64	396.2000	0.4722 (ppm)	Y 371.029
Pb (220.353 nm)	0.4957	ppm	0.0004	0.08	944.9000	0.4957 (ppm)	Y 371.029
Sb (206.834 nm)	0.5082	ppm	0.0007	0.13	520.3000	0.5082 (ppm)	Y 371.029
Se (196.026 nm)	0.4770	ppm	0.0013	0.28	361.3000	0.4770 (ppm)	Y 371.029
Si (251.611 nm)	2.4190	ppm	0.0124	0.51	6024.0000	2.4190 (ppm)	Y 371.029
Sn (189.925 nm)	0.4922	ppm	0.0033	0.66	318.6000	0.4922 (ppm)	Y 371.029
Sr (421.552 nm)	0.4891	ppm	0.0102	2.09	196100.0000	0.4891 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4887	ppm	0.0008	0.16	60220.0000	0.4887 (ppm)	Y 371.029
Tl (190.794 nm)	0.4809	ppm	0.0101	2.10	570.7000	0.4809 (ppm)	Y 371.029
V (292.401 nm)	0.4907	ppm	0.0003	0.06	13840.0000	0.4907 (ppm)	Y 371.029
W (207.912 nm)	0.4798	ppm	0.0017	0.36	901.0000	0.4798 (ppm)	Y 371.029
Zn (202.548 nm)	0.4979	ppm	0.0004	0.08	9135.0000	0.4979 (ppm)	Y 371.029
Zr (343.823 nm)	0.4874	ppm	0.0023	0.47	41010.0000	0.4874 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0170	437100.0000	0.0047	0.46
Y_R 371.029	1.0150	64140.0000	0.0099	0.98

Sample Name: 440-222303-A-1-B

Date: 10/19/2018 2:29:49 PM

Rack:Tube: 1:3

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0001	7.47	-37.8300	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.3529	ppm	0.0019	0.55	6502.0000	0.3529 (ppm)	Y 371.029
As (188.980 nm)	0.0277	ppm	0.0039	14.13	24.5300	0.0277 (ppm)	Y 371.029
B (249.678 nm)	0.6664	ppm	0.0047	0.70	8298.0000	0.6664 (ppm)	Y 371.029
Ba (233.527 nm)	0.2691	ppm	0.0011	0.41	21260.0000	0.2691 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	22.73	38.4900	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	49.1100	ppm	0.2688	0.55	217300.0000	49.1100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	45.41	0.1746	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0006	55.45	-6.0930	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0043	ppm	0.0002	4.94	25.2200	0.0043 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0003	54.10	81.5800	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0989	ppm	0.0027	2.76	417.2000	0.0989 (ppm)	Y_R 371.029
K (766.491 nm)	12.8000	ppm	0.2469	1.93	15270.0000	12.8000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0729	ppm	0.0019	2.58	5190.0000	0.0729 (ppm)	Y_R 371.029
Mg (279.078 nm)	22.3400	ppm	0.0580	0.26	57180.0000	22.3400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1946	ppm	0.0000	0.01	20260.0000	0.1946 (ppm)	Y 371.029
Mo (204.598 nm)	0.0036	ppm	0.0004	11.48	17.2100	0.0036 (ppm)	Y 371.029
Na (589.592 nm)	405.5000	ppm	2.1160	0.52	2829000.0000	405.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0059	ppm	0.0007	12.38	30.8500	0.0059 (ppm)	Y 371.029
P (213.618 nm)	0.4417	ppm	0.0028	0.64	394.2000	0.4417 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0009 u	ppm	0.0008	95.23	-9.8790	-0.0009 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0006 u	ppm	0.0045	> 100.00	-0.6803	0.0006 u (ppm)	Y 371.029
Se (196.026 nm)	0.2367	ppm	0.0042	1.78	177.3000	0.2367 (ppm)	Y 371.029
Si (251.611 nm)	3.4340	ppm	0.0101	0.29	8422.0000	3.4340 (ppm)	Y 371.029
Sn (189.925 nm)	0.0013 u	ppm	0.0027	> 100.00	-2.6880	0.0013 u (ppm)	Y 371.029
Sr (421.552 nm)	1.2100	ppm	0.0012	0.10	485800.0000	1.2100 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0000	2.94	-108.6000	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0006 u	ppm	0.0033	> 100.00	-3.0380	0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0052	ppm	0.0004	6.73	273.0000	0.0052 (ppm)	Y 371.029
W (207.912 nm)	-0.0014 u	ppm	0.0019	> 100.00	-10.6200	-0.0014 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0050	ppm	0.0001	1.22	140.0000	0.0050 (ppm)	Y 371.029
Zr (343.823 nm)	0.0008	ppm	0.0001	19.03	64.6400	0.0008 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9382	403100.0000	0.0011	0.12
Y_R 371.029	0.9707	61320.0000	0.0003	0.03

Sample Name: 440-222303-A-1-C MS

Date: 10/19/2018 2:32:12 PM

Rack:Tube: 1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2526	ppm	0.0008	0.32	10630.0000	0.2526 (ppm)	Y 371.029
Al (396.152 nm)	0.9718	ppm	0.0025	0.25	20320.0000	0.9718 (ppm)	Y 371.029
As (188.980 nm)	0.4996	ppm	0.0063	1.27	343.8000	0.4996 (ppm)	Y 371.029
B (249.678 nm)	1.1870	ppm	0.0079	0.67	14750.0000	1.1870 (ppm)	Y 371.029
Ba (233.527 nm)	0.7539	ppm	0.0034	0.45	59490.0000	0.7539 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5097	ppm	0.0009	0.18	93870.0000	0.5097 (ppm)	Y 371.029
Ca (422.673 nm)	52.2700	ppm	0.0220	0.04	231300.0000	52.2700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4839	ppm	0.0019	0.40	11220.0000	0.4839 (ppm)	Y 371.029
Co (228.615 nm)	0.4962	ppm	0.0001	0.03	6706.0000	0.4962 (ppm)	Y 371.029
Cr (205.560 nm)	0.5035	ppm	0.0003	0.05	2685.0000	0.5035 (ppm)	Y 371.029
Cu (324.754 nm)	0.5440	ppm	0.0019	0.35	21800.0000	0.5440 (ppm)	Y 371.029
Fe (238.204 nm)	0.5905	ppm	0.0015	0.25	2567.0000	0.5905 (ppm)	Y_R 371.029
K (766.491 nm)	18.0800	ppm	0.0713	0.39	21620.0000	18.0800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5709	ppm	0.0006	0.10	38960.0000	0.5709 (ppm)	Y_R 371.029
Mg (279.078 nm)	24.9500	ppm	0.0795	0.32	63850.0000	24.9500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.6947	ppm	0.0017	0.24	72160.0000	0.6947 (ppm)	Y 371.029
Mo (204.598 nm)	0.4822	ppm	0.0040	0.83	2238.0000	0.4822 (ppm)	Y 371.029
Na (589.592 nm)	414.2000	ppm	1.7420	0.42	2889000.0000	414.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4911	ppm	0.0023	0.46	2516.0000	0.4911 (ppm)	Y 371.029
P (213.618 nm)	0.9757	ppm	0.0018	0.18	855.0000	0.9757 (ppm)	Y 371.029
Pb (220.353 nm)	0.4953	ppm	0.0021	0.42	945.0000	0.4953 (ppm)	Y 371.029
Sb (206.834 nm)	0.5023	ppm	0.0041	0.82	514.5000	0.5023 (ppm)	Y 371.029
Se (196.026 nm)	0.2144	ppm	0.0015	0.68	162.9000	0.2144 (ppm)	Y 371.029
Si (251.611 nm)	5.7980	ppm	0.0247	0.43	14270.0000	5.7980 (ppm)	Y 371.029
Sn (189.925 nm)	0.4944	ppm	0.0033	0.67	320.1000	0.4944 (ppm)	Y 371.029
Sr (421.552 nm)	1.7310	ppm	0.0213	1.23	694600.0000	1.7310 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5090	ppm	0.0013	0.26	62670.0000	0.5090 (ppm)	Y 371.029
Tl (190.794 nm)	0.4796	ppm	0.0002	0.04	568.1000	0.4796 (ppm)	Y 371.029
V (292.401 nm)	0.5203	ppm	0.0004	0.08	14740.0000	0.5203 (ppm)	Y 371.029
W (207.912 nm)	0.5046	ppm	0.0013	0.25	946.5000	0.5046 (ppm)	Y 371.029
Zn (202.548 nm)	0.5086	ppm	0.0019	0.37	9354.0000	0.5086 (ppm)	Y 371.029
Zr (343.823 nm)	0.5042	ppm	0.0018	0.35	42430.0000	0.5042 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9445	405800.0000	0.0032	0.34
Y_R 371.029	0.9842	62170.0000	0.0044	0.45

Sample Name: 440-222303-A-1-D MSD

Date: 10/19/2018 2:34:36 PM

Rack:Tube: 1:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2497	ppm	0.0009	0.35	10500.0000	0.2497 (ppm)	Y 371.029
Al (396.152 nm)	0.9792	ppm	0.0040	0.41	20480.0000	0.9792 (ppm)	Y 371.029
As (188.980 nm)	0.5064	ppm	0.0078	1.54	348.4000	0.5064 (ppm)	Y 371.029
B (249.678 nm)	1.1880	ppm	0.0079	0.66	14770.0000	1.1880 (ppm)	Y 371.029
Ba (233.527 nm)	0.7492	ppm	0.0057	0.76	59120.0000	0.7492 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5105	ppm	0.0006	0.11	94030.0000	0.5105 (ppm)	Y 371.029
Ca (422.673 nm)	52.7200	ppm	0.4488	0.85	233300.0000	52.7200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4871	ppm	0.0022	0.45	11300.0000	0.4871 (ppm)	Y 371.029
Co (228.615 nm)	0.4984	ppm	0.0014	0.29	6735.0000	0.4984 (ppm)	Y 371.029
Cr (205.560 nm)	0.5031	ppm	0.0022	0.44	2683.0000	0.5031 (ppm)	Y 371.029
Cu (324.754 nm)	0.5449	ppm	0.0016	0.29	21830.0000	0.5449 (ppm)	Y 371.029
Fe (238.204 nm)	0.6004	ppm	0.0027	0.45	2610.0000	0.6004 (ppm)	Y_R 371.029
K (766.491 nm)	18.0200	ppm	0.0494	0.27	21550.0000	18.0200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5743	ppm	0.0040	0.70	39190.0000	0.5743 (ppm)	Y_R 371.029
Mg (279.078 nm)	24.7600	ppm	0.1788	0.72	63370.0000	24.7600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.6952	ppm	0.0022	0.32	72200.0000	0.6952 (ppm)	Y 371.029
Mo (204.598 nm)	0.4823	ppm	0.0039	0.81	2238.0000	0.4823 (ppm)	Y 371.029
Na (589.592 nm)	412.8000	ppm	1.8610	0.45	2880000.0000	412.8000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4911	ppm	0.0010	0.20	2517.0000	0.4911 (ppm)	Y 371.029
P (213.618 nm)	0.9784	ppm	0.0058	0.60	857.5000	0.9784 (ppm)	Y 371.029
Pb (220.353 nm)	0.4949	ppm	0.0033	0.66	944.2000	0.4949 (ppm)	Y 371.029
Sb (206.834 nm)	0.5001	ppm	0.0038	0.77	512.2000	0.5001 (ppm)	Y 371.029
Se (196.026 nm)	0.2245	ppm	0.0035	1.55	170.5000	0.2245 (ppm)	Y 371.029
Si (251.611 nm)	5.7610	ppm	0.0367	0.64	14180.0000	5.7610 (ppm)	Y 371.029
Sn (189.925 nm)	0.4939	ppm	0.0022	0.44	319.7000	0.4939 (ppm)	Y 371.029
Sr (421.552 nm)	1.7340	ppm	0.0065	0.38	695800.0000	1.7340 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5065	ppm	0.0018	0.35	62360.0000	0.5065 (ppm)	Y 371.029
Tl (190.794 nm)	0.4780	ppm	0.0033	0.68	566.2000	0.4780 (ppm)	Y 371.029
V (292.401 nm)	0.5208	ppm	0.0020	0.38	14760.0000	0.5208 (ppm)	Y 371.029
W (207.912 nm)	0.5016	ppm	0.0044	0.88	940.9000	0.5016 (ppm)	Y 371.029
Zn (202.548 nm)	0.5071	ppm	0.0019	0.37	9328.0000	0.5071 (ppm)	Y 371.029
Zr (343.823 nm)	0.5014	ppm	0.0023	0.45	42190.0000	0.5014 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9515	408800.0000	0.0046	0.49
Y_R 371.029	0.9981	63050.0000	0.0053	0.53

Sample Name: CCV 5129881

Date: 10/19/2018 2:36:59 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5068	ppm	0.0024	0.48	21340.0000	0.5068 (ppm)	Y 371.029
Al (396.152 nm)	1.0500	ppm	0.0029	0.27	22380.0000	1.0500 (ppm)	Y 371.029
As (188.980 nm)	1.0080	ppm	0.0017	0.17	687.7000	1.0080 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0063	0.61	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	1.0210	ppm	0.0009	0.09	80500.0000	1.0210 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0140	ppm	0.0032	0.31	186700.0000	1.0140 (ppm)	Y 371.029
Ca (422.673 nm)	5.1120	ppm	0.0124	0.24	22710.0000	5.1120 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0230	ppm	0.0029	0.28	23720.0000	1.0230 (ppm)	Y 371.029
Co (228.615 nm)	1.0230	ppm	0.0008	0.08	13850.0000	1.0230 (ppm)	Y 371.029
Cr (205.560 nm)	1.0230	ppm	0.0038	0.38	5450.0000	1.0230 (ppm)	Y 371.029
Cu (324.754 nm)	1.0130	ppm	0.0008	0.08	40540.0000	1.0130 (ppm)	Y 371.029
Fe (238.204 nm)	1.0240	ppm	0.0091	0.89	4458.0000	1.0240 (ppm)	Y_R 371.029
K (766.491 nm)	10.2200	ppm	0.0586	0.57	12180.0000	10.2200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9948	ppm	0.0029	0.29	67490.0000	0.9948 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1540	ppm	0.0069	0.13	13200.0000	5.1540 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0220	ppm	0.0029	0.29	106100.0000	1.0220 (ppm)	Y 371.029
Mo (204.598 nm)	1.0280	ppm	0.0058	0.56	4768.0000	1.0280 (ppm)	Y 371.029
Na (589.592 nm)	10.6200	ppm	0.0705	0.66	75470.0000	10.6200 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0210	ppm	0.0043	0.42	5235.0000	1.0210 (ppm)	Y 371.029
P (213.618 nm)	0.9997	ppm	0.0049	0.49	850.4000	0.9997 (ppm)	Y 371.029
Pb (220.353 nm)	1.0270	ppm	0.0015	0.15	1967.0000	1.0270 (ppm)	Y 371.029
Sb (206.834 nm)	1.0180	ppm	0.0153	1.50	1043.0000	1.0180 (ppm)	Y 371.029
Se (196.026 nm)	0.9974	ppm	0.0016	0.16	756.7000	0.9974 (ppm)	Y 371.029
Si (251.611 nm)	5.1090	ppm	0.0888	1.74	12670.0000	5.1090 (ppm)	Y 371.029
Sn (189.925 nm)	1.0160	ppm	0.0065	0.64	661.5000	1.0160 (ppm)	Y 371.029
Sr (421.552 nm)	1.0230	ppm	0.0065	0.64	410200.0000	1.0230 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0220	ppm	0.0034	0.33	126200.0000	1.0220 (ppm)	Y 371.029
Tl (190.794 nm)	1.0230	ppm	0.0012	0.11	1219.0000	1.0230 (ppm)	Y 371.029
V (292.401 nm)	1.0250	ppm	0.0023	0.23	28850.0000	1.0250 (ppm)	Y 371.029
W (207.912 nm)	1.0270	ppm	0.0018	0.17	1936.0000	1.0270 (ppm)	Y 371.029
Zn (202.548 nm)	1.0240	ppm	0.0032	0.31	18760.0000	1.0240 (ppm)	Y 371.029
Zr (343.823 nm)	1.0210	ppm	0.0016	0.16	85890.0000	1.0210 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437200.0000	0.0054	0.53
Y_R 371.029	1.0310	65110.0000	0.0023	0.23

Sample Name: CCB 5129880

Date: 10/19/2018 2:39:23 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0004	ppm	0.0003	80.83	18.6800	0.0004 (ppm)	Y 371.029
Al (396.152 nm)	0.0057	ppm	0.0004	7.56	-1090.0000	0.0057 (ppm)	Y 371.029
As (188.980 nm)	0.0070	ppm	0.0022	31.70	10.5200	0.0070 (ppm)	Y 371.029
B (249.678 nm)	0.0042	ppm	0.0008	19.91	28.0500	0.0042 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0002	25.60	91.7900	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	37.61	100.2000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0118	ppm	0.0007	5.76	144.2000	0.0118 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0001	17.84	10.3800	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0015	ppm	0.0001	6.79	-2.9540	0.0015 (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0000	9.76	3.2130	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0006	52.71	109.4000	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0001 u	ppm	0.0022	> 100.00	-17.6900	0.0001 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0528 u	ppm	0.0757	> 100.00	-178.2000	-0.0528 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0048	ppm	0.0004	8.33	372.5000	0.0048 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0088	ppm	0.0017	19.28	28.4600	0.0088 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0007	ppm	0.0002	32.07	133.4000	0.0007 (ppm)	Y 371.029
Mo (204.598 nm)	0.0015	ppm	0.0002	15.76	7.2820	0.0015 (ppm)	Y 371.029
Na (589.592 nm)	0.3985	ppm	0.0103	2.58	4090.0000	0.3985 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0003	> 100.00	1.9000	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.0046	ppm	0.0005	11.21	-5.9750	0.0046 (ppm)	Y 371.029
Pb (220.353 nm)	0.0026	ppm	0.0005	17.75	-4.1180	0.0026 (ppm)	Y 371.029
Sb (206.834 nm)	0.0025	ppm	0.0025	> 100.00	1.1360	0.0025 (ppm)	Y 371.029
Se (196.026 nm)	0.0020	ppm	0.0015	77.30	0.4527	0.0020 (ppm)	Y 371.029
Si (251.611 nm)	0.0076	ppm	0.0009	12.03	67.5700	0.0076 (ppm)	Y 371.029
Sn (189.925 nm)	0.0038	ppm	0.0026	68.23	-1.0990	0.0038 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0000	4.28	107.9000	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0001	7.96	-61.7500	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0036	ppm	0.0009	25.48	0.7920	0.0036 (ppm)	Y 371.029
V (292.401 nm)	0.0007	ppm	0.0001	22.81	74.9400	0.0007 (ppm)	Y 371.029
W (207.912 nm)	0.0016	ppm	0.0006	33.94	-3.8810	0.0016 (ppm)	Y 371.029
Zn (202.548 nm)	0.0016	ppm	0.0000	0.70	62.8800	0.0016 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	25.57	29.1100	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0270	441400.0000	0.0032	0.31
Y_R 371.029	1.0330	65280.0000	0.0067	0.65

Sample Name: 440-222560-A-1-A

Date: 10/19/2018 2:43:39 PM

Rack:Tube: 1:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	24.14	-27.6900	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.5551	ppm	0.0022	0.39	10890.0000	0.5551 (ppm)	Y 371.029
As (188.980 nm)	0.0435	ppm	0.0008	1.79	35.3000	0.0435 (ppm)	Y 371.029
B (249.678 nm)	0.5724	ppm	0.0030	0.52	7123.0000	0.5724 (ppm)	Y 371.029
Ba (233.527 nm)	0.3439	ppm	0.0041	1.19	27160.0000	0.3439 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	11.95	56.3900	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	41.4000	ppm	0.2361	0.57	183300.0000	41.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	54.83	1.1720	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0015	ppm	0.0004	29.24	-1.8460	0.0015 (ppm)	Y 371.029
Cr (205.560 nm)	0.0033	ppm	0.0002	5.14	19.7200	0.0033 (ppm)	Y 371.029
Cu (324.754 nm)	0.0037	ppm	0.0001	3.24	262.6000	0.0037 (ppm)	Y 371.029
Fe (238.204 nm)	0.9940	ppm	0.0019	0.19	4332.0000	0.9940 (ppm)	Y_R 371.029
K (766.491 nm)	7.8300	ppm	0.0391	0.50	9302.0000	7.8300 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0497	ppm	0.0009	1.81	3563.0000	0.0497 (ppm)	Y_R 371.029
Mg (279.078 nm)	14.8600	ppm	0.1365	0.92	38030.0000	14.8600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1214	ppm	0.0002	0.20	12800.0000	0.1214 (ppm)	Y 371.029
Mo (204.598 nm)	0.0031	ppm	0.0001	2.41	15.1300	0.0031 (ppm)	Y 371.029
Na (589.592 nm)	270.4000	ppm	0.9570	0.35	1887000.0000	270.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0046	ppm	0.0002	3.77	24.2100	0.0046 (ppm)	Y 371.029
P (213.618 nm)	0.7566	ppm	0.0058	0.77	682.9000	0.7566 (ppm)	Y 371.029
Pb (220.353 nm)	0.0004	ppm	0.0004	> 100.00	-7.7340	0.0004 (ppm)	Y 371.029
Sb (206.834 nm)	0.0028 u	ppm	0.0058	> 100.00	1.5550	0.0028 u (ppm)	Y 371.029
Se (196.026 nm)	0.3126	ppm	0.0006	0.20	234.5000	0.3126 (ppm)	Y 371.029
Si (251.611 nm)	5.5530	ppm	0.0557	1.00	13590.0000	5.5530 (ppm)	Y 371.029
Sn (189.925 nm)	0.0027	ppm	0.0005	19.39	-1.7640	0.0027 (ppm)	Y 371.029
Sr (421.552 nm)	0.9893	ppm	0.0052	0.53	397200.0000	0.9893 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0013	ppm	0.0000	2.99	-59.4900	0.0013 (ppm)	Y 371.029
Tl (190.794 nm)	0.0003 u	ppm	0.0025	> 100.00	-3.4300	0.0003 u (ppm)	Y 371.029
V (292.401 nm)	0.0040	ppm	0.0002	5.27	227.3000	0.0040 (ppm)	Y 371.029
W (207.912 nm)	0.0011	ppm	0.0001	11.28	-4.4710	0.0011 (ppm)	Y 371.029
Zn (202.548 nm)	0.1322	ppm	0.0003	0.20	2442.0000	0.1322 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	13.38	41.0400	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9997	429500.0000	0.0054	0.54
Y_R 371.029	1.0290	65000.0000	0.0068	0.66

Sample Name: 440-222560-A-2-A

Date: 10/19/2018 2:46:03 PM

Rack:Tube: 1:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	43.89	-25.1400	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.1461	ppm	0.0003	0.17	1988.0000	0.1461 (ppm)	Y 371.029
As (188.980 nm)	0.0176	ppm	0.0033	18.75	17.6600	0.0176 (ppm)	Y 371.029
B (249.678 nm)	0.5372	ppm	0.0059	1.10	6681.0000	0.5372 (ppm)	Y 371.029
Ba (233.527 nm)	0.2842	ppm	0.0028	0.97	22450.0000	0.2842 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	43.84	71.0000	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	37.0800	ppm	0.0343	0.09	164100.0000	37.0800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.9880	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0023	ppm	0.0001	3.15	9.5340	0.0023 (ppm)	Y 371.029
Cr (205.560 nm)	0.0026	ppm	0.0002	7.56	15.9300	0.0026 (ppm)	Y 371.029
Cu (324.754 nm)	0.0006	ppm	0.0001	20.17	144.9000	0.0006 (ppm)	Y 371.029
Fe (238.204 nm)	2.4010	ppm	0.0020	0.08	10490.0000	2.4010 (ppm)	Y_R 371.029
K (766.491 nm)	7.1990	ppm	0.0496	0.69	8543.0000	7.1990 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0462	ppm	0.0011	2.36	3308.0000	0.0462 (ppm)	Y_R 371.029
Mg (279.078 nm)	13.2400	ppm	0.1319	1.00	33880.0000	13.2400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1284	ppm	0.0008	0.61	13710.0000	0.1284 (ppm)	Y 371.029
Mo (204.598 nm)	0.0016	ppm	0.0014	87.21	7.9210	0.0016 (ppm)	Y 371.029
Na (589.592 nm)	247.7000	ppm	0.5624	0.23	1729000.0000	247.7000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0051	ppm	0.0003	5.05	27.1700	0.0051 (ppm)	Y 371.029
P (213.618 nm)	0.2798	ppm	0.0058	2.08	245.8000	0.2798 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0003 u	ppm	0.0000	13.30	-9.2760	-0.0003 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0038 u	ppm	0.0051	> 100.00	-5.2110	-0.0038 u (ppm)	Y 371.029
Se (196.026 nm)	0.1974	ppm	0.0004	0.22	147.4000	0.1974 (ppm)	Y 371.029
Si (251.611 nm)	5.0500	ppm	0.0530	1.05	12360.0000	5.0500 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006 u	ppm	0.0035	> 100.00	-3.1770	0.0006 u (ppm)	Y 371.029
Sr (421.552 nm)	0.8959	ppm	0.0014	0.15	359700.0000	0.8959 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0012	ppm	0.0000	2.77	-66.5600	0.0012 (ppm)	Y 371.029
Tl (190.794 nm)	0.0011	ppm	0.0002	20.12	-2.4670	0.0011 (ppm)	Y 371.029
V (292.401 nm)	0.0069	ppm	0.0001	2.04	303.1000	0.0069 (ppm)	Y 371.029
W (207.912 nm)	-0.0011 u	ppm	0.0011	> 100.00	-8.8620	-0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0903	ppm	0.0006	0.70	1680.0000	0.0903 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0002	53.60	29.1100	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0060	432200.0000	0.0016	0.16
Y_R 371.029	1.0370	65480.0000	0.0037	0.35

Sample Name: 440-222560-A-3-A

Date: 10/19/2018 2:48:26 PM

Rack:Tube: 1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0009 u	ppm	0.0003	29.91	-60.1500	-0.0009 u (ppm)	Y 371.029
Al (396.152 nm)	0.2239	ppm	0.0009	0.40	3737.0000	0.2239 (ppm)	Y 371.029
As (188.980 nm)	0.0128	ppm	0.0013	10.24	14.1300	0.0128 (ppm)	Y 371.029
B (249.678 nm)	0.6014	ppm	0.0012	0.19	7483.0000	0.6014 (ppm)	Y 371.029
Ba (233.527 nm)	0.1844	ppm	0.0006	0.35	14590.0000	0.1844 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	19.91	89.3300	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	126.0000	ppm	0.7810	0.62	557500.0000	126.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	0.0443	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0023	ppm	0.0000	0.09	11.2700	0.0023 (ppm)	Y 371.029
Cr (205.560 nm)	0.0036	ppm	0.0002	5.02	23.2400	0.0036 (ppm)	Y 371.029
Cu (324.754 nm)	0.0295	ppm	0.0003	0.97	1216.0000	0.0295 (ppm)	Y 371.029
Fe (238.204 nm)	3.2570	ppm	0.0188	0.58	14230.0000	3.2570 (ppm)	Y_R 371.029
K (766.491 nm)	13.5200	ppm	0.1273	0.94	16160.0000	13.5200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0512	ppm	0.0009	1.67	3866.0000	0.0512 (ppm)	Y_R 371.029
Mg (279.078 nm)	34.4900	ppm	0.1491	0.43	88290.0000	34.4900 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0681	ppm	0.0000	0.06	7684.0000	0.0681 (ppm)	Y 371.029
Mo (204.598 nm)	0.0085	ppm	0.0003	3.15	40.0100	0.0085 (ppm)	Y 371.029
Na (589.592 nm)	695.3000 o	ppm	3.7510	0.54	4850000.0000	695.3000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0060	ppm	0.0006	10.72	29.9600	0.0060 (ppm)	Y 371.029
P (213.618 nm)	0.9331	ppm	0.0002	0.02	842.5000	0.9331 (ppm)	Y 371.029
Pb (220.353 nm)	0.0022	ppm	0.0012	57.54	-3.4020	0.0022 (ppm)	Y 371.029
Sb (206.834 nm)	0.0004 u	ppm	0.0038	> 100.00	-0.5252	0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.1177	ppm	0.0000	0.01	86.5700	0.1177 (ppm)	Y 371.029
Si (251.611 nm)	13.8500	ppm	0.0310	0.22	33820.0000	13.8500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0027 u	ppm	0.0008	30.78	-5.2950	-0.0027 u (ppm)	Y 371.029
Sr (421.552 nm)	1.6500	ppm	0.0131	0.80	663500.0000	1.6500 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0053	ppm	0.0000	0.37	328.1000	0.0053 (ppm)	Y 371.029
Tl (190.794 nm)	0.0044	ppm	0.0005	11.34	0.6480	0.0044 (ppm)	Y 371.029
V (292.401 nm)	0.0095	ppm	0.0003	2.78	499.0000	0.0095 (ppm)	Y 371.029
W (207.912 nm)	0.0015	ppm	0.0009	62.94	3.2430	0.0015 (ppm)	Y 371.029
Zn (202.548 nm)	0.9253	ppm	0.0023	0.25	16840.0000	0.9253 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0001	38.77	47.3400	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9533	409600.0000	0.0061	0.64
Y_R 371.029	1.0120	63950.0000	0.0081	0.80

Sample Name: 440-222560-A-4-A

Date: 10/19/2018 2:50:50 PM

Rack:Tube: 1:9

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0002	32.93	-35.3800	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.5069	ppm	0.0007	0.13	9831.0000	0.5069 (ppm)	Y 371.029
As (188.980 nm)	0.0450	ppm	0.0033	7.28	36.3700	0.0450 (ppm)	Y 371.029
B (249.678 nm)	0.5397	ppm	0.0034	0.63	6715.0000	0.5397 (ppm)	Y 371.029
Ba (233.527 nm)	0.3194	ppm	0.0013	0.40	25230.0000	0.3194 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	19.3100	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	35.1000	ppm	0.0287	0.08	155400.0000	35.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	86.69	-0.7915	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0003	27.50	-6.4410	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0030	ppm	0.0003	9.74	18.2200	0.0030 (ppm)	Y 371.029
Cu (324.754 nm)	0.0034	ppm	0.0005	16.26	253.8000	0.0034 (ppm)	Y 371.029
Fe (238.204 nm)	0.6424	ppm	0.0008	0.12	2794.0000	0.6424 (ppm)	Y_R 371.029
K (766.491 nm)	7.1250	ppm	0.0297	0.42	8453.0000	7.1250 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0442	ppm	0.0003	0.73	3169.0000	0.0442 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.9500	ppm	0.0270	0.23	30590.0000	11.9500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1123	ppm	0.0004	0.38	11790.0000	0.1123 (ppm)	Y 371.029
Mo (204.598 nm)	0.0035	ppm	0.0005	15.25	16.6300	0.0035 (ppm)	Y 371.029
Na (589.592 nm)	234.1000	ppm	1.0550	0.45	1634000.0000	234.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0038	ppm	0.0002	6.35	20.5500	0.0038 (ppm)	Y 371.029
P (213.618 nm)	0.6556	ppm	0.0003	0.04	590.4000	0.6556 (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0013	> 100.00	-8.5310	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0050 u	ppm	0.0048	94.39	-6.5110	-0.0050 u (ppm)	Y 371.029
Se (196.026 nm)	0.3179	ppm	0.0057	1.80	238.6000	0.3179 (ppm)	Y 371.029
Si (251.611 nm)	5.3600	ppm	0.0396	0.74	13110.0000	5.3600 (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0010	40.40	-1.8720	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.8914	ppm	0.0012	0.13	357900.0000	0.8914 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0012	ppm	0.0001	8.73	-67.4400	0.0012 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0011	> 100.00	-4.7300	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0026	ppm	0.0000	0.13	179.7000	0.0026 (ppm)	Y 371.029
W (207.912 nm)	-0.0003 u	ppm	0.0001	43.84	-7.2710	-0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0996	ppm	0.0001	0.12	1848.0000	0.0996 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	13.32	29.8700	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9887	424800.0000	0.0093	0.95
Y_R 371.029	1.0280	64940.0000	0.0041	0.40

Sample Name: 440-222560-A-5-A

Date: 10/19/2018 2:53:14 PM

Rack:Tube: 1:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0004	95.85	-25.6600	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0948	ppm	0.0008	0.85	874.1000	0.0948 (ppm)	Y 371.029
As (188.980 nm)	0.0106	ppm	0.0031	29.73	12.8800	0.0106 (ppm)	Y 371.029
B (249.678 nm)	0.5887	ppm	0.0030	0.51	7323.0000	0.5887 (ppm)	Y 371.029
Ba (233.527 nm)	0.2993	ppm	0.0001	0.03	23650.0000	0.2993 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	87.4400	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	38.5900	ppm	0.2991	0.78	170800.0000	38.5900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.0860	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0029	ppm	0.0001	3.55	17.8700	0.0029 (ppm)	Y 371.029
Cr (205.560 nm)	0.0021	ppm	0.0006	26.70	13.5200	0.0021 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0001	12.62	80.9700	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	3.2470	ppm	0.0167	0.51	14190.0000	3.2470 (ppm)	Y_R 371.029
K (766.491 nm)	7.8170	ppm	0.1423	1.82	9286.0000	7.8170 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0494	ppm	0.0004	0.77	3530.0000	0.0494 (ppm)	Y_R 371.029
Mg (279.078 nm)	13.4700	ppm	0.0079	0.06	34490.0000	13.4700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1395	ppm	0.0000	0.01	14960.0000	0.1395 (ppm)	Y 371.029
Mo (204.598 nm)	0.0027	ppm	0.0008	31.48	13.1100	0.0027 (ppm)	Y 371.029
Na (589.592 nm)	257.0000	ppm	1.9540	0.76	1793000.0000	257.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0062	ppm	0.0007	11.12	32.9700	0.0062 (ppm)	Y 371.029
P (213.618 nm)	0.2269	ppm	0.0061	2.69	197.3000	0.2269 (ppm)	Y 371.029
Pb (220.353 nm)	0.0002 u	ppm	0.0023	> 100.00	-8.2660	0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0076 u	ppm	0.0105	> 100.00	-9.1380	-0.0076 u (ppm)	Y 371.029
Se (196.026 nm)	0.1831	ppm	0.0044	2.39	136.5000	0.1831 (ppm)	Y 371.029
Si (251.611 nm)	5.7900	ppm	0.0451	0.78	14160.0000	5.7900 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0010 u	ppm	0.0002	21.10	-4.2270	-0.0010 u (ppm)	Y 371.029
Sr (421.552 nm)	0.9556	ppm	0.0066	0.69	383700.0000	0.9556 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0017	ppm	0.0001	5.34	-11.9600	0.0017 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0005 u	ppm	0.0013	> 100.00	-4.5240	-0.0005 u (ppm)	Y 371.029
V (292.401 nm)	0.0107	ppm	0.0001	0.58	410.6000	0.0107 (ppm)	Y 371.029
W (207.912 nm)	-0.0021 u	ppm	0.0006	30.22	-10.8700	-0.0021 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0932	ppm	0.0001	0.06	1731.0000	0.0932 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	2.39	27.1900	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9985	429000.0000	0.0012	0.12
Y_R 371.029	1.0420	65790.0000	0.0028	0.27

Sample Name: 440-222452-A-4-B

Date: 10/19/2018 2:55:37 PM

Rack:Tube: 1:13

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0004	72.58	-63.6800	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	33.1900	ppm	0.2429	0.73	720600.0000	33.1900 (ppm)	Y 371.029
As (188.980 nm)	0.0118	ppm	0.0016	13.28	11.9700	0.0118 (ppm)	Y 371.029
B (249.678 nm)	1.4620	ppm	0.0254	1.74	18240.0000	1.4620 (ppm)	Y 371.029
Ba (233.527 nm)	0.0563	ppm	0.0002	0.41	4500.0000	0.0563 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	4.12	14.9100	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	511.1000	ppm	2.4670	0.48	2261000.0000	511.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-1.4400	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	-0.0001 u	ppm	0.0001	> 100.00	-15.2200	-0.0001 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0084	ppm	0.0006	6.71	55.2200	0.0084 (ppm)	Y 371.029
Cu (324.754 nm)	0.0168	ppm	0.0001	0.54	344.0000	0.0168 (ppm)	Y 371.029
Fe (238.204 nm)	0.5492	ppm	0.0035	0.65	2389.0000	0.5492 (ppm)	Y_R 371.029
K (766.491 nm)	2.4880	ppm	0.0076	0.30	2947.0000	2.4880 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0149 u	ppm	0.0004	2.79	85.3800	-0.0149 u (ppm)	Y_R 371.029
Mg (279.078 nm)	5.2940	ppm	0.0367	0.69	13570.0000	5.2940 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0532	ppm	0.0001	0.26	5760.0000	0.0532 (ppm)	Y 371.029
Mo (204.598 nm)	0.1582	ppm	0.0031	1.97	738.3000	0.1582 (ppm)	Y 371.029
Na (589.592 nm)	94.0400	ppm	0.0928	0.10	657300.0000	94.0400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0068	ppm	0.0009	13.01	26.5000	0.0068 (ppm)	Y 371.029
P (213.618 nm)	0.1554	ppm	0.0027	1.77	121.8000	0.1554 (ppm)	Y 371.029
Pb (220.353 nm)	0.0056	ppm	0.0006	11.27	3.2880	0.0056 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0018	90.19	-3.3940	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0042	ppm	0.0033	78.59	-1.3860	0.0042 (ppm)	Y 371.029
Si (251.611 nm)	1.2720	ppm	0.0079	0.62	3184.0000	1.2720 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0054 u	ppm	0.0003	6.38	-7.2290	-0.0054 u (ppm)	Y 371.029
Sr (421.552 nm)	0.5148	ppm	0.0007	0.14	214200.0000	0.5148 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0067	ppm	0.0004	5.76	24.6100	0.0067 (ppm)	Y 371.029
Tl (190.794 nm)	0.0025	ppm	0.0029	> 100.00	-4.5830	0.0025 (ppm)	Y 371.029
V (292.401 nm)	-0.0145 u	ppm	0.0006	4.29	319.7000	-0.0145 u (ppm)	Y 371.029
W (207.912 nm)	0.0033	ppm	0.0007	22.11	-12.0100	0.0033 (ppm)	Y 371.029
Zn (202.548 nm)	0.0237	ppm	0.0001	0.24	504.0000	0.0237 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 u	ppm	0.0002	34.12	44.4400	-0.0005 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9812	421600.0000	0.0064	0.66
Y_R 371.029	1.0150	64100.0000	0.0082	0.81

Sample Name: 440-222452-A-4-C MS

Date: 10/19/2018 2:58:01 PM

Rack:Tube: 1:14

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2463	ppm	0.0009	0.37	10280.0000	0.2463 (ppm)	Y 371.029
Al (396.152 nm)	33.0500	ppm	0.1209	0.37	718100.0000	33.0500 (ppm)	Y 371.029
As (188.980 nm)	0.5323	ppm	0.0112	2.11	364.4000	0.5323 (ppm)	Y 371.029
B (249.678 nm)	1.9540	ppm	0.0102	0.52	24340.0000	1.9540 (ppm)	Y 371.029
Ba (233.527 nm)	0.5612	ppm	0.0181	3.23	44300.0000	0.5612 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5139	ppm	0.0012	0.22	94670.0000	0.5139 (ppm)	Y 371.029
Ca (422.673 nm)	506.5000	ppm	5.3390	1.05	2241000.0000	506.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4747	ppm	0.0027	0.56	11010.0000	0.4747 (ppm)	Y 371.029
Co (228.615 nm)	0.4936	ppm	0.0030	0.61	6678.0000	0.4936 (ppm)	Y 371.029
Cr (205.560 nm)	0.5074	ppm	0.0029	0.58	2714.0000	0.5074 (ppm)	Y 371.029
Cu (324.754 nm)	0.5730	ppm	0.0026	0.45	22530.0000	0.5730 (ppm)	Y 371.029
Fe (238.204 nm)	1.0390	ppm	0.0013	0.12	4530.0000	1.0390 (ppm)	Y_R 371.029
K (766.491 nm)	7.7060	ppm	0.0184	0.24	9221.0000	7.7060 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4953	ppm	0.0001	0.01	34670.0000	0.4953 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.9120	ppm	0.2474	3.13	20260.0000	7.9120 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5515	ppm	0.0019	0.35	57480.0000	0.5515 (ppm)	Y 371.029
Mo (204.598 nm)	0.6616	ppm	0.0074	1.13	3074.0000	0.6616 (ppm)	Y 371.029
Na (589.592 nm)	97.5600	ppm	0.1727	0.18	681900.0000	97.5600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4887	ppm	0.0029	0.60	2496.0000	0.4887 (ppm)	Y 371.029
P (213.618 nm)	0.6774	ppm	0.0002	0.03	570.9000	0.6774 (ppm)	Y 371.029
Pb (220.353 nm)	0.4932	ppm	0.0003	0.06	941.5000	0.4932 (ppm)	Y 371.029
Sb (206.834 nm)	0.5290	ppm	0.0036	0.69	541.6000	0.5290 (ppm)	Y 371.029
Se (196.026 nm)	0.4972	ppm	0.0044	0.89	373.2000	0.4972 (ppm)	Y 371.029
Si (251.611 nm)	3.8280	ppm	0.0119	0.31	9498.0000	3.8280 (ppm)	Y 371.029
Sn (189.925 nm)	0.4835	ppm	0.0025	0.52	312.7000	0.4835 (ppm)	Y 371.029
Sr (421.552 nm)	1.0150	ppm	0.0034	0.33	414500.0000	1.0150 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5161	ppm	0.0018	0.34	62990.0000	0.5161 (ppm)	Y 371.029
Tl (190.794 nm)	0.4754	ppm	0.0061	1.28	559.1000	0.4754 (ppm)	Y 371.029
V (292.401 nm)	0.5020	ppm	0.0014	0.29	14810.0000	0.5020 (ppm)	Y 371.029
W (207.912 nm)	0.5066	ppm	0.0041	0.81	940.2000	0.5066 (ppm)	Y 371.029
Zn (202.548 nm)	0.5180	ppm	0.0052	1.01	9550.0000	0.5180 (ppm)	Y 371.029
Zr (343.823 nm)	0.5023	ppm	0.0032	0.63	42350.0000	0.5023 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9550	410300.0000	0.0355	3.72
Y_R 371.029	0.9532	60210.0000	0.0003	0.03

Sample Name: 440-222452-A-4-D MSD

Date: 10/19/2018 3:00:25 PM

Rack:Tube: 1:15

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2077	ppm	0.0068	3.27	8678.0000	0.2077 (ppm)	Y 371.029
Al (396.152 nm)	32.8300	ppm	0.2250	0.69	713300.0000	32.8300 (ppm)	Y 371.029
As (188.980 nm)	0.5429	ppm	0.0119	2.18	371.5000	0.5429 (ppm)	Y 371.029
B (249.678 nm)	1.9570	ppm	0.0230	1.17	24380.0000	1.9570 (ppm)	Y 371.029
Ba (233.527 nm)	0.5514	ppm	0.0027	0.49	43530.0000	0.5514 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5237	ppm	0.0042	0.81	96480.0000	0.5237 (ppm)	Y 371.029
Ca (422.673 nm)	508.7000	ppm	5.0280	0.99	2251000.0000	508.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4839	ppm	0.0020	0.41	11230.0000	0.4839 (ppm)	Y 371.029
Co (228.615 nm)	0.5049	ppm	0.0025	0.49	6831.0000	0.5049 (ppm)	Y 371.029
Cr (205.560 nm)	0.5183	ppm	0.0039	0.76	2772.0000	0.5183 (ppm)	Y 371.029
Cu (324.754 nm)	0.5816	ppm	0.0042	0.73	22870.0000	0.5816 (ppm)	Y 371.029
Fe (238.204 nm)	1.0580	ppm	0.0033	0.31	4616.0000	1.0580 (ppm)	Y_R 371.029
K (766.491 nm)	7.7690	ppm	0.0379	0.49	9297.0000	7.7690 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5075	ppm	0.0023	0.44	35500.0000	0.5075 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6820	ppm	0.0296	0.39	19680.0000	7.6820 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5611	ppm	0.0024	0.43	58480.0000	0.5611 (ppm)	Y 371.029
Mo (204.598 nm)	0.6717	ppm	0.0093	1.39	3121.0000	0.6717 (ppm)	Y 371.029
Na (589.592 nm)	97.7100	ppm	0.4461	0.46	682900.0000	97.7100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4983	ppm	0.0027	0.54	2545.0000	0.4983 (ppm)	Y 371.029
P (213.618 nm)	0.6817	ppm	0.0020	0.29	574.2000	0.6817 (ppm)	Y 371.029
Pb (220.353 nm)	0.5049	ppm	0.0006	0.12	964.2000	0.5049 (ppm)	Y 371.029
Sb (206.834 nm)	0.5455	ppm	0.0034	0.62	558.6000	0.5455 (ppm)	Y 371.029
Se (196.026 nm)	0.5020	ppm	0.0019	0.38	376.9000	0.5020 (ppm)	Y 371.029
Si (251.611 nm)	3.8770	ppm	0.0325	0.84	9622.0000	3.8770 (ppm)	Y 371.029
Sn (189.925 nm)	0.4999	ppm	0.0009	0.17	323.5000	0.4999 (ppm)	Y 371.029
Sr (421.552 nm)	1.0230	ppm	0.0022	0.22	417900.0000	1.0230 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5289	ppm	0.0039	0.73	64570.0000	0.5289 (ppm)	Y 371.029
Tl (190.794 nm)	0.4986	ppm	0.0038	0.76	587.2000	0.4986 (ppm)	Y 371.029
V (292.401 nm)	0.5115	ppm	0.0029	0.58	15080.0000	0.5115 (ppm)	Y 371.029
W (207.912 nm)	0.5204	ppm	0.0050	0.96	966.1000	0.5204 (ppm)	Y 371.029
Zn (202.548 nm)	0.5185	ppm	0.0018	0.35	9561.0000	0.5185 (ppm)	Y 371.029
Zr (343.823 nm)	0.5165	ppm	0.0053	1.03	43550.0000	0.5165 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9302	399700.0000	0.0003	0.04
Y_R 371.029	0.9610	60710.0000	0.0010	0.11

Sample Name: CCV 5129881

Date: 10/19/2018 3:08:22 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5076	ppm	0.0021	0.41	21370.0000	0.5076 (ppm)	Y 371.029
Al (396.152 nm)	1.0440	ppm	0.0026	0.25	22260.0000	1.0440 (ppm)	Y 371.029
As (188.980 nm)	1.0160	ppm	0.0074	0.73	693.2000	1.0160 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0085	0.83	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	1.0380	ppm	0.0001	0.01	81840.0000	1.0380 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0170	ppm	0.0043	0.42	187300.0000	1.0170 (ppm)	Y 371.029
Ca (422.673 nm)	5.1740	ppm	0.0001	0.00	22980.0000	5.1740 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0280	ppm	0.0105	1.02	23860.0000	1.0280 (ppm)	Y 371.029
Co (228.615 nm)	1.0270	ppm	0.0084	0.82	13900.0000	1.0270 (ppm)	Y 371.029
Cr (205.560 nm)	1.0270	ppm	0.0022	0.22	5472.0000	1.0270 (ppm)	Y 371.029
Cu (324.754 nm)	1.0190	ppm	0.0068	0.67	40790.0000	1.0190 (ppm)	Y 371.029
Fe (238.204 nm)	1.0430	ppm	0.0078	0.75	4542.0000	1.0430 (ppm)	Y_R 371.029
K (766.491 nm)	10.2400	ppm	0.0334	0.33	12200.0000	10.2400 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0080	ppm	0.0001	0.01	68380.0000	1.0080 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.2500	ppm	0.0023	0.04	13440.0000	5.2500 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0250	ppm	0.0033	0.32	106400.0000	1.0250 (ppm)	Y 371.029
Mo (204.598 nm)	1.0310	ppm	0.0063	0.62	4784.0000	1.0310 (ppm)	Y 371.029
Na (589.592 nm)	10.5400	ppm	0.0095	0.09	74880.0000	10.5400 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0280	ppm	0.0032	0.32	5268.0000	1.0280 (ppm)	Y 371.029
P (213.618 nm)	1.0050	ppm	0.0042	0.42	854.8000	1.0050 (ppm)	Y 371.029
Pb (220.353 nm)	1.0330	ppm	0.0008	0.08	1978.0000	1.0330 (ppm)	Y 371.029
Sb (206.834 nm)	1.0140	ppm	0.0232	2.29	1039.0000	1.0140 (ppm)	Y 371.029
Se (196.026 nm)	1.0060	ppm	0.0050	0.50	763.1000	1.0060 (ppm)	Y 371.029
Si (251.611 nm)	5.0640	ppm	0.1034	2.04	12560.0000	5.0640 (ppm)	Y 371.029
Sn (189.925 nm)	1.0220	ppm	0.0074	0.72	665.4000	1.0220 (ppm)	Y 371.029
Sr (421.552 nm)	1.0350	ppm	0.0027	0.26	415100.0000	1.0350 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0230	ppm	0.0041	0.40	126200.0000	1.0230 (ppm)	Y 371.029
Tl (190.794 nm)	1.0280	ppm	0.0048	0.46	1225.0000	1.0280 (ppm)	Y 371.029
V (292.401 nm)	1.0280	ppm	0.0048	0.47	28930.0000	1.0280 (ppm)	Y 371.029
W (207.912 nm)	1.0310	ppm	0.0027	0.26	1943.0000	1.0310 (ppm)	Y 371.029
Zn (202.548 nm)	1.0360	ppm	0.0037	0.35	18980.0000	1.0360 (ppm)	Y 371.029
Zr (343.823 nm)	1.0210	ppm	0.0037	0.36	85920.0000	1.0210 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9575	411400.0000	0.0076	0.79
Y_R 371.029	0.9555	60360.0000	0.0048	0.51

Sample Name: CCB 5129880

Date: 10/19/2018 3:10:45 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	44.91	13.1200	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0036	ppm	0.0012	33.83	-1137.0000	0.0036 (ppm)	Y 371.029
As (188.980 nm)	0.0072	ppm	0.0001	1.75	10.6400	0.0072 (ppm)	Y 371.029
B (249.678 nm)	0.0041	ppm	0.0004	10.28	26.9300	0.0041 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0002	35.15	85.6900	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	41.77	94.3500	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0211	ppm	0.0065	30.79	185.5000	0.0211 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	42.07	8.4100	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0000	0.47	-9.2840	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0001	13.09	7.0750	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0001	12.63	111.1000	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0003 u	ppm	0.0019	> 100.00	-19.7000	-0.0003 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0624 u	ppm	0.0246	39.45	-189.7000	-0.0624 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0029	ppm	0.0013	43.49	247.1000	0.0029 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0048	ppm	0.0013	26.23	18.2500	0.0048 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	30.63	122.3000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0009	ppm	0.0010	> 100.00	4.7780	0.0009 (ppm)	Y 371.029
Na (589.592 nm)	0.2322	ppm	0.0134	5.77	2931.0000	0.2322 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0012	ppm	0.0004	30.56	7.9230	0.0012 (ppm)	Y 371.029
P (213.618 nm)	0.0009 u	ppm	0.0051	> 100.00	-9.3290	0.0009 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0016	> 100.00	-6.7870	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0002 u	ppm	0.0011	> 100.00	-1.6570	-0.0002 u (ppm)	Y 371.029
Se (196.026 nm)	0.0025	ppm	0.0010	38.53	0.8943	0.0025 (ppm)	Y 371.029
Si (251.611 nm)	0.0069	ppm	0.0037	53.06	65.8300	0.0069 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0027	> 100.00	-2.0900	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	5.10	51.4900	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	24.00	-80.9500	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0009 u	ppm	0.0016	> 100.00	-4.8360	-0.0009 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0004	86.48	70.6300	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0008	55.41	-4.4040	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.0016	ppm	0.0000	1.92	63.1700	0.0016 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0002	55.10	23.5900	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9920	426200.0000	0.0100	1.01
Y_R 371.029	1.0130	64010.0000	0.0031	0.30

Sample Name: MB 440-506051/1-A

Date: 10/19/2018 3:14:58 PM

Rack:Tube: 1:16

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0001	83.30	7.7810	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0037	ppm	0.0003	8.17	-1134.0000	0.0037 (ppm)	Y 371.029
As (188.980 nm)	0.0041	ppm	0.0029	70.64	8.4850	0.0041 (ppm)	Y 371.029
B (249.678 nm)	0.0032	ppm	0.0002	7.25	16.1600	0.0032 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	1.78	54.6700	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0001	43.44	27.0300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0116	ppm	0.0011	9.60	143.2000	0.0116 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002 u	ppm	0.0002	> 100.00	-0.0551	0.0002 u (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0002	20.86	-12.3400	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0014	ppm	0.0001	9.02	8.7900	0.0014 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0003	25.24	106.0000	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0024	ppm	0.0005	19.05	-7.5630	0.0024 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0453 u	ppm	0.0022	4.88	-169.2000	-0.0453 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0024	ppm	0.0013	53.94	212.9000	0.0024 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0033	ppm	0.0001	3.69	14.4300	0.0033 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0001	53.92	87.5900	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	0.0001 u	ppm	0.0003	> 100.00	1.1740	0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.2495	ppm	0.0079	3.15	3051.0000	0.2495 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004	ppm	0.0003	59.60	4.0460	0.0004 (ppm)	Y 371.029
P (213.618 nm)	-0.0040 u	ppm	0.0042	> 100.00	-13.8500	-0.0040 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0004 u	ppm	0.0011	> 100.00	-9.8170	-0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0038	ppm	0.0015	39.09	2.5270	0.0038 (ppm)	Y 371.029
Se (196.026 nm)	-0.0025 u	ppm	0.0007	28.28	-2.8920	-0.0025 u (ppm)	Y 371.029
Si (251.611 nm)	0.0035	ppm	0.0002	5.72	57.4600	0.0035 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032	ppm	0.0011	34.55	-1.5010	0.0032 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0001	52.10	-15.2700	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000	ppm	0.0000	24.48	-169.9000	0.0000 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0009 u	ppm	0.0042	> 100.00	-4.7920	-0.0009 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0000	9.18	68.3800	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0004 u	ppm	0.0015	> 100.00	-6.1560	0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0020	ppm	0.0001	7.37	70.3200	0.0020 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	13.74	15.6700	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0070	432500.0000	0.0015	0.15
Y_R 371.029	1.0080	63670.0000	0.0034	0.34

Sample Name: LCS 440-506051/2-A

Date: 10/19/2018 3:17:21 PM

Rack:Tube: 1:17

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4867	ppm	0.0029	0.60	20500.0000	0.4867 (ppm)	Y 371.029
Al (396.152 nm)	1.0040	ppm	0.0077	0.76	21350.0000	1.0040 (ppm)	Y 371.029
As (188.980 nm)	0.9560	ppm	0.0029	0.30	652.6000	0.9560 (ppm)	Y 371.029
B (249.678 nm)	0.9687	ppm	0.0104	1.07	11980.0000	0.9687 (ppm)	Y 371.029
Ba (233.527 nm)	0.9731	ppm	0.0003	0.03	76750.0000	0.9731 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9620	ppm	0.0061	0.63	177200.0000	0.9620 (ppm)	Y 371.029
Ca (422.673 nm)	4.9480	ppm	0.0038	0.08	21980.0000	4.9480 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9694	ppm	0.0119	1.22	22490.0000	0.9694 (ppm)	Y 371.029
Co (228.615 nm)	0.9816	ppm	0.0132	1.34	13280.0000	0.9816 (ppm)	Y 371.029
Cr (205.560 nm)	0.9782	ppm	0.0054	0.56	5214.0000	0.9782 (ppm)	Y 371.029
Cu (324.754 nm)	0.9875	ppm	0.0066	0.66	39530.0000	0.9875 (ppm)	Y 371.029
Fe (238.204 nm)	0.9957	ppm	0.0030	0.30	4335.0000	0.9957 (ppm)	Y_R 371.029
K (766.491 nm)	9.8180	ppm	0.0276	0.28	11690.0000	9.8180 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9826	ppm	0.0032	0.33	66680.0000	0.9826 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.8840	ppm	0.0001	0.00	12500.0000	4.8840 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9774	ppm	0.0058	0.59	101500.0000	0.9774 (ppm)	Y 371.029
Mo (204.598 nm)	0.9842	ppm	0.0053	0.54	4567.0000	0.9842 (ppm)	Y 371.029
Na (589.592 nm)	10.0500	ppm	0.0087	0.09	71440.0000	10.0500 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9743	ppm	0.0066	0.68	4993.0000	0.9743 (ppm)	Y 371.029
P (213.618 nm)	0.9444	ppm	0.0118	1.25	801.1000	0.9444 (ppm)	Y 371.029
Pb (220.353 nm)	0.9756	ppm	0.0051	0.53	1868.0000	0.9756 (ppm)	Y 371.029
Sb (206.834 nm)	1.0020	ppm	0.0066	0.66	1026.0000	1.0020 (ppm)	Y 371.029
Se (196.026 nm)	0.9095	ppm	0.0117	1.28	690.1000	0.9095 (ppm)	Y 371.029
Si (251.611 nm)	4.7170	ppm	0.0725	1.54	11710.0000	4.7170 (ppm)	Y 371.029
Sn (189.925 nm)	0.9514	ppm	0.0046	0.48	619.1000	0.9514 (ppm)	Y 371.029
Sr (421.552 nm)	0.9844	ppm	0.0002	0.02	394700.0000	0.9844 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9760	ppm	0.0061	0.62	120400.0000	0.9760 (ppm)	Y 371.029
Tl (190.794 nm)	0.9532	ppm	0.0256	2.69	1134.0000	0.9532 (ppm)	Y 371.029
V (292.401 nm)	0.9856	ppm	0.0040	0.41	27730.0000	0.9856 (ppm)	Y 371.029
W (207.912 nm)	0.9779	ppm	0.0058	0.59	1843.0000	0.9779 (ppm)	Y 371.029
Zn (202.548 nm)	0.9673	ppm	0.0045	0.47	17720.0000	0.9673 (ppm)	Y 371.029
Zr (343.823 nm)	0.9733	ppm	0.0058	0.59	81890.0000	0.9733 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9973	428500.0000	0.0014	0.14
Y_R 371.029	1.0130	63990.0000	0.0043	0.43

Sample Name: 440-222474-T-4-D

Date: 10/19/2018 3:19:44 PM

Rack:Tube: 1:18

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	38.53	-24.2700	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0627	ppm	0.0011	1.79	195.9000	0.0627 (ppm)	Y 371.029
As (188.980 nm)	0.0105	ppm	0.0034	32.04	12.8300	0.0105 (ppm)	Y 371.029
B (249.678 nm)	0.1870	ppm	0.0012	0.63	2286.0000	0.1870 (ppm)	Y 371.029
Ba (233.527 nm)	0.0046	ppm	0.0001	3.16	412.5000	0.0046 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0002	84.61	50.7000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	58.0900	ppm	0.0240	0.04	257100.0000	58.0900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0002	73.59	4.2490	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0012	ppm	0.0004	31.87	-5.3390	0.0012 (ppm)	Y 371.029
Cr (205.560 nm)	0.0019	ppm	0.0002	11.77	12.6500	0.0019 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0007 u	ppm	0.0004	62.48	69.6900	-0.0007 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0509	ppm	0.0026	5.07	205.9000	0.0509 (ppm)	Y_R 371.029
K (766.491 nm)	5.4910	ppm	0.0025	0.05	6492.0000	5.4910 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0330	ppm	0.0009	2.70	2431.0000	0.0330 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6770	ppm	0.0833	1.09	19660.0000	7.6770 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0391	ppm	0.0000	0.04	4158.0000	0.0391 (ppm)	Y 371.029
Mo (204.598 nm)	0.0290	ppm	0.0013	4.40	135.0000	0.0290 (ppm)	Y 371.029
Na (589.592 nm)	94.9000	ppm	0.0911	0.10	663100.0000	94.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0016	ppm	0.0003	18.27	8.8090	0.0016 (ppm)	Y 371.029
P (213.618 nm)	0.1041	ppm	0.0027	2.62	83.8900	0.1041 (ppm)	Y 371.029
Pb (220.353 nm)	0.0009 u	ppm	0.0014	> 100.00	-6.8440	0.0009 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0018	ppm	0.0012	64.79	0.1390	0.0018 (ppm)	Y 371.029
Se (196.026 nm)	0.0057	ppm	0.0021	36.56	4.3890	0.0057 (ppm)	Y 371.029
Si (251.611 nm)	11.2200	ppm	0.0457	0.41	27420.0000	11.2200 (ppm)	Y 371.029
Sn (189.925 nm)	0.0010 u	ppm	0.0048	> 100.00	-2.9370	0.0010 u (ppm)	Y 371.029
Sr (421.552 nm)	0.1439	ppm	0.0004	0.28	58530.0000	0.1439 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0024	ppm	0.0001	2.48	63.0200	0.0024 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0018 u	ppm	0.0009	50.96	-6.2600	-0.0018 u (ppm)	Y 371.029
V (292.401 nm)	0.0019	ppm	0.0000	0.40	185.8000	0.0019 (ppm)	Y 371.029
W (207.912 nm)	0.2463	ppm	0.0023	0.94	455.1000	0.2463 (ppm)	Y 371.029
Zn (202.548 nm)	0.0065	ppm	0.0000	0.53	160.8000	0.0065 (ppm)	Y 371.029
Zr (343.823 nm)	0.0015	ppm	0.0002	13.45	134.5000	0.0015 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9786	420400.0000	0.0005	0.06
Y_R 371.029	0.9963	62930.0000	0.0084	0.84

Sample Name: 440-222474-T-4-E MS

Date: 10/19/2018 3:22:08 PM

Rack:Tube: 1:19

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4956	ppm	0.0007	0.14	20860.0000	0.4956 (ppm)	Y 371.029
Al (396.152 nm)	1.2330	ppm	0.0050	0.40	26390.0000	1.2330 (ppm)	Y 371.029
As (188.980 nm)	0.9702	ppm	0.0037	0.39	662.3000	0.9702 (ppm)	Y 371.029
B (249.678 nm)	1.1930	ppm	0.0071	0.60	14750.0000	1.1930 (ppm)	Y 371.029
Ba (233.527 nm)	0.9378	ppm	0.0298	3.18	73980.0000	0.9378 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9926	ppm	0.0007	0.07	182800.0000	0.9926 (ppm)	Y 371.029
Ca (422.673 nm)	60.8900	ppm	0.0598	0.10	269500.0000	60.8900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9798	ppm	0.0059	0.60	22730.0000	0.9798 (ppm)	Y 371.029
Co (228.615 nm)	0.9895	ppm	0.0018	0.18	13390.0000	0.9895 (ppm)	Y 371.029
Cr (205.560 nm)	0.9787	ppm	0.0029	0.30	5218.0000	0.9787 (ppm)	Y 371.029
Cu (324.754 nm)	1.0560	ppm	0.0014	0.13	42200.0000	1.0560 (ppm)	Y 371.029
Fe (238.204 nm)	1.0530	ppm	0.0012	0.12	4586.0000	1.0530 (ppm)	Y_R 371.029
K (766.491 nm)	15.3000	ppm	0.0584	0.38	18290.0000	15.3000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0360	ppm	0.0014	0.14	70430.0000	1.0360 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.8200	ppm	0.3752	3.17	30270.0000	11.8200 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0230	ppm	0.0015	0.15	106300.0000	1.0230 (ppm)	Y 371.029
Mo (204.598 nm)	1.0330	ppm	0.0002	0.02	4791.0000	1.0330 (ppm)	Y 371.029
Na (589.592 nm)	100.6000	ppm	0.3893	0.39	703100.0000	100.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9845	ppm	0.0044	0.45	5044.0000	0.9845 (ppm)	Y 371.029
P (213.618 nm)	1.1070	ppm	0.0033	0.30	946.1000	1.1070 (ppm)	Y 371.029
Pb (220.353 nm)	0.9931	ppm	0.0002	0.02	1903.0000	0.9931 (ppm)	Y 371.029
Sb (206.834 nm)	1.0220	ppm	0.0018	0.18	1047.0000	1.0220 (ppm)	Y 371.029
Se (196.026 nm)	0.9217	ppm	0.0094	1.02	700.5000	0.9217 (ppm)	Y 371.029
Si (251.611 nm)	15.3600	ppm	0.0448	0.29	37680.0000	15.3600 (ppm)	Y 371.029
Sn (189.925 nm)	0.9845	ppm	0.0007	0.07	640.8000	0.9845 (ppm)	Y 371.029
Sr (421.552 nm)	1.1200	ppm	0.0027	0.24	449800.0000	1.1200 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0060	ppm	0.0012	0.12	124100.0000	1.0060 (ppm)	Y 371.029
Tl (190.794 nm)	0.9675	ppm	0.0206	2.13	1150.0000	0.9675 (ppm)	Y 371.029
V (292.401 nm)	1.0190	ppm	0.0053	0.52	28750.0000	1.0190 (ppm)	Y 371.029
W (207.912 nm)	1.2500	ppm	0.0007	0.06	2355.0000	1.2500 (ppm)	Y 371.029
Zn (202.548 nm)	0.9998	ppm	0.0051	0.51	18330.0000	0.9998 (ppm)	Y 371.029
Zr (343.823 nm)	0.9960	ppm	0.0005	0.05	83810.0000	0.9960 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9835	422600.0000	0.0179	1.82
Y_R 371.029	1.0480	66180.0000	0.0180	1.71

Sample Name: 440-222474-T-4-F MSD

Date: 10/19/2018 3:24:32 PM

Rack:Tube: 1:20

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5188	ppm	0.0034	0.65	21830.0000	0.5188 (ppm)	Y 371.029
Al (396.152 nm)	1.3020	ppm	0.0082	0.63	27920.0000	1.3020 (ppm)	Y 371.029
As (188.980 nm)	1.0210	ppm	0.0043	0.42	696.6000	1.0210 (ppm)	Y 371.029
B (249.678 nm)	1.2520	ppm	0.0002	0.01	15490.0000	1.2520 (ppm)	Y 371.029
Ba (233.527 nm)	0.9990	ppm	0.0025	0.25	78800.0000	0.9990 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0410	ppm	0.0046	0.44	191600.0000	1.0410 (ppm)	Y 371.029
Ca (422.673 nm)	62.8100	ppm	0.2177	0.35	278000.0000	62.8100 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0250	ppm	0.0024	0.23	23780.0000	1.0250 (ppm)	Y 371.029
Co (228.615 nm)	1.0360	ppm	0.0052	0.50	14020.0000	1.0360 (ppm)	Y 371.029
Cr (205.560 nm)	1.0230	ppm	0.0031	0.31	5456.0000	1.0230 (ppm)	Y 371.029
Cu (324.754 nm)	1.1130	ppm	0.0096	0.86	44470.0000	1.1130 (ppm)	Y 371.029
Fe (238.204 nm)	1.1120	ppm	0.0063	0.57	4845.0000	1.1120 (ppm)	Y_R 371.029
K (766.491 nm)	15.8900	ppm	0.0848	0.53	18990.0000	15.8900 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0700	ppm	0.0045	0.42	72710.0000	1.0700 (ppm)	Y_R 371.029
Mg (279.078 nm)	12.5300	ppm	0.0563	0.45	32080.0000	12.5300 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0720	ppm	0.0040	0.37	111300.0000	1.0720 (ppm)	Y 371.029
Mo (204.598 nm)	1.0730	ppm	0.0015	0.14	4979.0000	1.0730 (ppm)	Y 371.029
Na (589.592 nm)	103.9000	ppm	0.6849	0.66	725700.0000	103.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0300	ppm	0.0004	0.04	5276.0000	1.0300 (ppm)	Y 371.029
P (213.618 nm)	1.1550	ppm	0.0021	0.18	987.3000	1.1550 (ppm)	Y 371.029
Pb (220.353 nm)	1.0400	ppm	0.0027	0.26	1992.0000	1.0400 (ppm)	Y 371.029
Sb (206.834 nm)	1.0580	ppm	0.0084	0.79	1083.0000	1.0580 (ppm)	Y 371.029
Se (196.026 nm)	0.9568	ppm	0.0007	0.07	727.2000	0.9568 (ppm)	Y 371.029
Si (251.611 nm)	16.2600	ppm	0.0164	0.10	39880.0000	16.2600 (ppm)	Y 371.029
Sn (189.925 nm)	1.0220	ppm	0.0033	0.32	665.6000	1.0220 (ppm)	Y 371.029
Sr (421.552 nm)	1.1640	ppm	0.0111	0.95	467400.0000	1.1640 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0480	ppm	0.0039	0.37	129300.0000	1.0480 (ppm)	Y 371.029
Tl (190.794 nm)	1.0140	ppm	0.0111	1.09	1206.0000	1.0140 (ppm)	Y 371.029
V (292.401 nm)	1.0660	ppm	0.0041	0.39	30070.0000	1.0660 (ppm)	Y 371.029
W (207.912 nm)	1.2950	ppm	0.0061	0.47	2439.0000	1.2950 (ppm)	Y 371.029
Zn (202.548 nm)	1.0450	ppm	0.0011	0.10	19170.0000	1.0450 (ppm)	Y 371.029
Zr (343.823 nm)	1.0360	ppm	0.0054	0.52	87190.0000	1.0360 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431400.0000	0.0037	0.37
Y_R 371.029	1.0510	66410.0000	0.0022	0.21

Sample Name: 440-222474-T-4-G PDS

Date: 10/19/2018 3:26:55 PM

Rack:Tube: 1:21

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4976	ppm	0.0044	0.88	20940.0000	0.4976 (ppm)	Y 371.029
Al (396.152 nm)	1.1740	ppm	0.0065	0.56	25120.0000	1.1740 (ppm)	Y 371.029
As (188.980 nm)	0.9711	ppm	0.0058	0.60	662.9000	0.9711 (ppm)	Y 371.029
B (249.678 nm)	1.1990	ppm	0.0116	0.97	14830.0000	1.1990 (ppm)	Y 371.029
Ba (233.527 nm)	0.9457	ppm	0.0109	1.16	74600.0000	0.9457 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9957	ppm	0.0043	0.43	183400.0000	0.9957 (ppm)	Y 371.029
Ca (422.673 nm)	57.9800	ppm	0.3374	0.58	256600.0000	57.9800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9856	ppm	0.0046	0.47	22870.0000	0.9856 (ppm)	Y 371.029
Co (228.615 nm)	0.9893	ppm	0.0061	0.62	13390.0000	0.9893 (ppm)	Y 371.029
Cr (205.560 nm)	0.9815	ppm	0.0024	0.25	5233.0000	0.9815 (ppm)	Y 371.029
Cu (324.754 nm)	1.0590	ppm	0.0031	0.29	42320.0000	1.0590 (ppm)	Y 371.029
Fe (238.204 nm)	1.0420	ppm	0.0052	0.50	4541.0000	1.0420 (ppm)	Y_R 371.029
K (766.491 nm)	15.1700	ppm	0.1170	0.77	18140.0000	15.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0300	ppm	0.0076	0.73	70030.0000	1.0300 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.6000	ppm	0.1534	1.32	29690.0000	11.6000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0240	ppm	0.0038	0.37	106400.0000	1.0240 (ppm)	Y 371.029
Mo (204.598 nm)	1.0360	ppm	0.0069	0.67	4806.0000	1.0360 (ppm)	Y 371.029
Na (589.592 nm)	96.8100	ppm	0.8269	0.85	676500.0000	96.8100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9877	ppm	0.0038	0.38	5061.0000	0.9877 (ppm)	Y 371.029
P (213.618 nm)	1.1050	ppm	0.0015	0.14	944.0000	1.1050 (ppm)	Y 371.029
Pb (220.353 nm)	0.9987	ppm	0.0020	0.21	1913.0000	0.9987 (ppm)	Y 371.029
Sb (206.834 nm)	1.0200	ppm	0.0096	0.94	1045.0000	1.0200 (ppm)	Y 371.029
Se (196.026 nm)	0.9187	ppm	0.0062	0.68	698.2000	0.9187 (ppm)	Y 371.029
Si (251.611 nm)	15.2700	ppm	0.0657	0.43	37470.0000	15.2700 (ppm)	Y 371.029
Sn (189.925 nm)	0.9885	ppm	0.0004	0.04	643.4000	0.9885 (ppm)	Y 371.029
Sr (421.552 nm)	1.1160	ppm	0.0064	0.57	448400.0000	1.1160 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0120	ppm	0.0044	0.43	124800.0000	1.0120 (ppm)	Y 371.029
Tl (190.794 nm)	0.9621	ppm	0.0323	3.36	1144.0000	0.9621 (ppm)	Y 371.029
V (292.401 nm)	1.0200	ppm	0.0051	0.50	28760.0000	1.0200 (ppm)	Y 371.029
W (207.912 nm)	1.2440	ppm	0.0026	0.21	2344.0000	1.2440 (ppm)	Y 371.029
Zn (202.548 nm)	1.0040	ppm	0.0032	0.32	18410.0000	1.0040 (ppm)	Y 371.029
Zr (343.823 nm)	1.0020	ppm	0.0037	0.37	84330.0000	1.0020 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0200	438500.0000	0.0008	0.08
Y_R 371.029	1.0810	68300.0000	0.0163	1.50

Sample Name: 440-222474-T-4-DSD@5

Date: 10/19/2018 3:29:19 PM

Rack:Tube: 1:22

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0001	89.29	2.7260	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0179	ppm	0.0010	5.78	-815.3000	0.0179 (ppm)	Y 371.029
As (188.980 nm)	0.0038	ppm	0.0016	40.67	8.3140	0.0038 (ppm)	Y 371.029
B (249.678 nm)	0.0420	ppm	0.0010	2.43	495.6000	0.0420 (ppm)	Y 371.029
Ba (233.527 nm)	0.0016	ppm	0.0003	18.10	168.5000	0.0016 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0003	46.74	116.1000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	11.7000	ppm	0.0834	0.71	51850.0000	11.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0007	ppm	0.0003	41.18	12.3200	0.0007 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0002	22.14	-8.1590	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0012	ppm	0.0006	53.17	7.9970	0.0012 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0002	22.57	106.5000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0103	ppm	0.0013	12.50	26.9500	0.0103 (ppm)	Y_R 371.029
K (766.491 nm)	1.0600	ppm	0.0048	0.45	1161.0000	1.0600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0038	ppm	0.0008	20.08	334.0000	0.0038 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.6060	ppm	0.0341	2.13	4117.0000	1.6060 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0088	ppm	0.0003	3.01	980.1000	0.0088 (ppm)	Y 371.029
Mo (204.598 nm)	0.0067	ppm	0.0004	5.78	31.5600	0.0067 (ppm)	Y 371.029
Na (589.592 nm)	19.4600	ppm	0.0145	0.07	137000.0000	19.4600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0001	17.00	6.0560	0.0009 (ppm)	Y 371.029
P (213.618 nm)	0.0248	ppm	0.0028	11.34	12.3000	0.0248 (ppm)	Y 371.029
Pb (220.353 nm)	0.0013	ppm	0.0014	> 100.00	-6.4540	0.0013 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0007 u	ppm	0.0047	> 100.00	-2.2690	-0.0007 u (ppm)	Y 371.029
Se (196.026 nm)	0.0024	ppm	0.0011	45.24	0.9823	0.0024 (ppm)	Y 371.029
Si (251.611 nm)	2.2990	ppm	0.0066	0.29	5657.0000	2.2990 (ppm)	Y 371.029
Sn (189.925 nm)	0.0009	ppm	0.0010	> 100.00	-2.9690	0.0009 (ppm)	Y 371.029
Sr (421.552 nm)	0.0295	ppm	0.0001	0.42	11970.0000	0.0295 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0013	ppm	0.0003	25.42	-26.5200	0.0013 (ppm)	Y 371.029
Tl (190.794 nm)	0.0012 u	ppm	0.0027	> 100.00	-2.2620	0.0012 u (ppm)	Y 371.029
V (292.401 nm)	0.0011	ppm	0.0001	11.30	103.3000	0.0011 (ppm)	Y 371.029
W (207.912 nm)	0.0510	ppm	0.0006	1.11	88.7700	0.0510 (ppm)	Y 371.029
Zn (202.548 nm)	0.0014	ppm	0.0003	22.06	60.3700	0.0014 (ppm)	Y 371.029
Zr (343.823 nm)	0.0008	ppm	0.0002	24.47	67.0600	0.0008 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0380	445900.0000	0.0126	1.22
Y_R 371.029	1.0460	66050.0000	0.0027	0.25

Sample Name: 440-222474-T-1-B

Date: 10/19/2018 3:31:43 PM

Rack:Tube: 1:23

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0054 bu	ppm	0.0002	3.36	66.0100	-0.0054 bu (ppm)	Y 371.029
Al (396.152 nm)	125.3000 b	ppm	1.1860	0.95	2724000.0000	125.3000 b (ppm)	Y 371.029
As (188.980 nm)	0.0626 b	ppm	0.0040	6.37	46.9700	0.0626 b (ppm)	Y 371.029
B (249.678 nm)	1.6200 b	ppm	0.0110	0.68	20090.0000	1.6200 b (ppm)	Y 371.029
Ba (233.527 nm)	0.0254 b	ppm	0.0001	0.48	2082.0000	0.0254 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0163 b	ppm	0.0003	1.82	3022.0000	0.0163 b (ppm)	Y 371.029
Ca (422.673 nm)	337.3000 b	ppm	0.9266	0.27	1492000.0000	337.3000 b (ppm)	Y_R 371.029
Cd (214.439 nm)	0.5734 b	ppm	0.0109	1.90	13310.0000	0.5734 b (ppm)	Y 371.029
Co (228.615 nm)	1.0330 b	ppm	0.0093	0.90	13970.0000	1.0330 b (ppm)	Y 371.029
Cr (205.560 nm)	0.3419 b	ppm	0.0058	1.70	1840.0000	0.3419 b (ppm)	Y 371.029
Cu (324.754 nm)	0.3100 b	ppm	0.0021	0.68	12310.0000	0.3100 b (ppm)	Y 371.029
Fe (238.204 nm)	3.4820 b	ppm	0.0051	0.15	15260.0000	3.4820 b (ppm)	Y_R 371.029
K (766.491 nm)	26.2200 b	ppm	0.1262	0.48	31540.0000	26.2200 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.6662 b	ppm	0.0011	0.17	43470.0000	0.6662 b (ppm)	Y_R 371.029
Mg (279.078 nm)	440.0000 b	ppm	4.8010	1.09	1126000.0000	440.0000 b (ppm)	Y_R 371.029
Mn (259.372 nm)	114.9000 bo	ppm	1.2320	1.07	11860000.0000	114.9000 bo (ppm)	Y 371.029
Mo (204.598 nm)	-0.0019 bu	ppm	0.0005	25.93	24.1600	-0.0019 bu (ppm)	Y 371.029
Na (589.592 nm)	473.3000 bo	ppm	1.1340	0.24	3302000.0000	473.3000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	5.8830 b	ppm	0.0804	1.37	30120.0000	5.8830 b (ppm)	Y 371.029
P (213.618 nm)	0.0036 bu	ppm	0.0057	> 100.00	-37.5800	0.0036 bu (ppm)	Y 371.029
Pb (220.353 nm)	0.0017 b	ppm	0.0002	8.82	45.1400	0.0017 b (ppm)	Y 371.029
Sb (206.834 nm)	0.0053 b	ppm	0.0034	64.35	-0.5495	0.0053 b (ppm)	Y 371.029
Se (196.026 nm)	0.0479 b	ppm	0.0015	3.16	82.6000	0.0479 b (ppm)	Y 371.029
Si (251.611 nm)	16.3500 b	ppm	0.1952	1.19	40090.0000	16.3500 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0122 bu	ppm	0.0020	16.64	-6.5570	-0.0122 bu (ppm)	Y 371.029
Sr (421.552 nm)	1.8670 b	ppm	0.0082	0.44	753800.0000	1.8670 b (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0015 bu	ppm	0.0000	1.08	-702.7000	-0.0015 bu (ppm)	Y 371.029
Tl (190.794 nm)	0.0224 b	ppm	0.0041	18.49	239.4000	0.0224 b (ppm)	Y 371.029
V (292.401 nm)	-0.0196 bu	ppm	0.0001	0.62	62.5100	-0.0196 bu (ppm)	Y 371.029
W (207.912 nm)	0.0295 b	ppm	0.0026	8.97	150.8000	0.0295 b (ppm)	Y 371.029
Zn (202.548 nm)	10.5200 bo	ppm	0.1298	1.23	191300.0000	10.5200 bo (ppm)	Y 371.029
Zr (343.823 nm)	-0.0015 bu	ppm	0.0005	33.34	-344.7000	-0.0015 bu (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.4140	607700.0000	0.0085	0.60
Y_R 371.029	1.5430	97440.0000	0.0070	0.46

Sample Name: 440-222474-T-2-B

Date: 10/19/2018 3:34:07 PM

Rack:Tube: 1:24

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0014	ppm	0.0001	8.82	-6.9810	0.0014 (ppm)	Y 371.029
Al (396.152 nm)	8.5230	ppm	0.0409	0.48	184700.0000	8.5230 (ppm)	Y 371.029
As (188.980 nm)	0.0192	ppm	0.0025	12.81	18.6000	0.0192 (ppm)	Y 371.029
B (249.678 nm)	1.1130	ppm	0.0054	0.48	13870.0000	1.1130 (ppm)	Y 371.029
Ba (233.527 nm)	0.0304	ppm	0.0003	1.15	2491.0000	0.0304 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0024	ppm	0.0000	1.52	468.6000	0.0024 (ppm)	Y 371.029
Ca (422.673 nm)	537.9000	ppm	0.9524	0.18	2380000.0000	537.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0458	ppm	0.0001	0.21	1063.0000	0.0458 (ppm)	Y 371.029
Co (228.615 nm)	0.0150	ppm	0.0002	1.58	198.6000	0.0150 (ppm)	Y 371.029
Cr (205.560 nm)	0.0046	ppm	0.0002	4.26	37.2000	0.0046 (ppm)	Y 371.029
Cu (324.754 nm)	0.0009	ppm	0.0007	73.98	-281.6000	0.0009 (ppm)	Y 371.029
Fe (238.204 nm)	0.7806	ppm	0.0002	0.03	3444.0000	0.7806 (ppm)	Y_R 371.029
K (766.491 nm)	8.6960	ppm	0.0414	0.48	10530.0000	8.6960 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0589	ppm	0.0004	0.63	5991.0000	0.0589 (ppm)	Y_R 371.029
Mg (279.078 nm)	382.6000	ppm	4.1120	1.07	979200.0000	382.6000 (ppm)	Y_R 371.029
Mn (259.372 nm)	16.6800	ppm	0.0569	0.34	1724000.0000	16.6800 (ppm)	Y 371.029
Mo (204.598 nm)	0.0042	ppm	0.0007	16.50	23.6600	0.0042 (ppm)	Y 371.029
Na (589.592 nm)	346.5000	ppm	1.2570	0.36	2418000.0000	346.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4847	ppm	0.0033	0.68	2467.0000	0.4847 (ppm)	Y 371.029
P (213.618 nm)	0.3390	ppm	0.0027	0.79	292.1000	0.3390 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0069 u	ppm	0.0019	27.57	-2.8000	-0.0069 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0039 u	ppm	0.0027	69.01	-5.2080	-0.0039 u (ppm)	Y 371.029
Se (196.026 nm)	0.0077	ppm	0.0005	6.27	8.2720	0.0077 (ppm)	Y 371.029
Si (251.611 nm)	39.8600	ppm	0.1989	0.50	97260.0000	39.8600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0080 u	ppm	0.0008	9.79	-7.7640	-0.0080 u (ppm)	Y 371.029
Sr (421.552 nm)	1.9320	ppm	0.0060	0.31	782900.0000	1.9320 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0385	ppm	0.0002	0.56	3943.0000	0.0385 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0067 u	ppm	0.0011	16.41	16.4700	-0.0067 u (ppm)	Y 371.029
V (292.401 nm)	-0.0140 u	ppm	0.0001	0.93	429.3000	-0.0140 u (ppm)	Y 371.029
W (207.912 nm)	0.0024	ppm	0.0005	20.39	-15.9800	0.0024 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0024	> 100.00	279.1000	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	12.36	72.4700	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9279	398700.0000	0.0176	1.90
Y_R 371.029	1.0210	64510.0000	0.0063	0.62

Sample Name: 440-222474-S-3-C

Date: 10/19/2018 3:36:30 PM

Rack:Tube: 1:25

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0004	ppm	0.0003	75.08	-67.3200	0.0004 (ppm)	Y 371.029
Al (396.152 nm)	0.0759	ppm	0.0032	4.28	738.2000	0.0759 (ppm)	Y 371.029
As (188.980 nm)	0.0078	ppm	0.0004	4.94	10.0400	0.0078 (ppm)	Y 371.029
B (249.678 nm)	0.2381	ppm	0.0007	0.27	2957.0000	0.2381 (ppm)	Y 371.029
Ba (233.527 nm)	0.0365	ppm	0.0001	0.22	2951.0000	0.0365 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	43.74	5.1430	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	417.2000	ppm	1.9950	0.48	1846000.0000	417.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-0.7273	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0016	ppm	0.0004	25.16	9.6050	0.0016 (ppm)	Y 371.029
Cr (205.560 nm)	0.0105	ppm	0.0007	6.82	64.9000	0.0105 (ppm)	Y 371.029
Cu (324.754 nm)	0.0014	ppm	0.0006	43.72	-174.4000	0.0014 (ppm)	Y 371.029
Fe (238.204 nm)	0.0900	ppm	0.0004	0.50	395.7000	0.0900 (ppm)	Y_R 371.029
K (766.491 nm)	7.3580	ppm	0.0481	0.65	8829.0000	7.3580 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0235	ppm	0.0000	0.05	2971.0000	0.0235 (ppm)	Y_R 371.029
Mg (279.078 nm)	140.6000	ppm	0.1019	0.07	359800.0000	140.6000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0699	ppm	0.0081	11.63	7884.0000	0.0699 (ppm)	Y 371.029
Mo (204.598 nm)	0.0107	ppm	0.0002	2.30	50.1200	0.0107 (ppm)	Y 371.029
Na (589.592 nm)	140.4000	ppm	0.1809	0.13	980600.0000	140.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0039	ppm	0.0003	7.81	12.0500	0.0039 (ppm)	Y 371.029
P (213.618 nm)	0.0344	ppm	0.0009	2.61	15.6000	0.0344 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0055 u	ppm	0.0004	7.48	-12.9500	-0.0055 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0069 u	ppm	0.0014	20.62	-7.0580	-0.0069 u (ppm)	Y 371.029
Se (196.026 nm)	0.0038	ppm	0.0018	46.53	-0.9870	0.0038 (ppm)	Y 371.029
Si (251.611 nm)	26.3400	ppm	0.1739	0.66	64280.0000	26.3400 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0018 u	ppm	0.0007	41.19	-4.6540	-0.0018 u (ppm)	Y 371.029
Sr (421.552 nm)	1.1190	ppm	0.0046	0.41	454900.0000	1.1190 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0045	ppm	0.0007	15.93	-127.0000	0.0045 (ppm)	Y 371.029
Tl (190.794 nm)	0.0015	ppm	0.0004	27.98	-4.2330	0.0015 (ppm)	Y 371.029
V (292.401 nm)	-0.0072 u	ppm	0.0000	0.01	432.4000	-0.0072 u (ppm)	Y 371.029
W (207.912 nm)	0.0045	ppm	0.0009	19.00	-7.9490	0.0045 (ppm)	Y 371.029
Zn (202.548 nm)	0.0021	ppm	0.0001	6.85	173.3000	0.0021 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0006 u	ppm	0.0001	19.33	14.5400	-0.0006 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9791	420700.0000	0.0093	0.95
Y_R 371.029	1.0560	66690.0000	0.0096	0.91

Sample Name: CCV 5129881

Date: 10/19/2018 3:43:13 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5060	ppm	0.0010	0.19	21310.0000	0.5060 (ppm)	Y 371.029
Al (396.152 nm)	1.0690	ppm	0.0018	0.17	22800.0000	1.0690 (ppm)	Y 371.029
As (188.980 nm)	1.0100	ppm	0.0005	0.05	689.0000	1.0100 (ppm)	Y 371.029
B (249.678 nm)	1.0220	ppm	0.0053	0.52	12650.0000	1.0220 (ppm)	Y 371.029
Ba (233.527 nm)	1.0060	ppm	0.0050	0.50	79310.0000	1.0060 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0130	ppm	0.0021	0.21	186500.0000	1.0130 (ppm)	Y 371.029
Ca (422.673 nm)	5.1020	ppm	0.0307	0.60	22660.0000	5.1020 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0160	ppm	0.0003	0.03	23570.0000	1.0160 (ppm)	Y 371.029
Co (228.615 nm)	1.0170	ppm	0.0027	0.27	13770.0000	1.0170 (ppm)	Y 371.029
Cr (205.560 nm)	1.0180	ppm	0.0012	0.12	5428.0000	1.0180 (ppm)	Y 371.029
Cu (324.754 nm)	1.0170	ppm	0.0019	0.19	40710.0000	1.0170 (ppm)	Y 371.029
Fe (238.204 nm)	1.0200	ppm	0.0069	0.68	4440.0000	1.0200 (ppm)	Y_R 371.029
K (766.491 nm)	10.2000	ppm	0.0777	0.76	12150.0000	10.2000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9921	ppm	0.0076	0.76	67320.0000	0.9921 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1150	ppm	0.0076	0.15	13100.0000	5.1150 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0400	ppm	0.0033	0.32	108000.0000	1.0400 (ppm)	Y 371.029
Mo (204.598 nm)	1.0250	ppm	0.0043	0.42	4754.0000	1.0250 (ppm)	Y 371.029
Na (589.592 nm)	10.2600	ppm	0.0916	0.89	72950.0000	10.2600 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0160	ppm	0.0013	0.13	5207.0000	1.0160 (ppm)	Y 371.029
P (213.618 nm)	1.0030	ppm	0.0052	0.51	853.6000	1.0030 (ppm)	Y 371.029
Pb (220.353 nm)	1.0220	ppm	0.0021	0.20	1959.0000	1.0220 (ppm)	Y 371.029
Sb (206.834 nm)	1.0170	ppm	0.0136	1.34	1042.0000	1.0170 (ppm)	Y 371.029
Se (196.026 nm)	0.9965	ppm	0.0044	0.44	755.9000	0.9965 (ppm)	Y 371.029
Si (251.611 nm)	5.1320	ppm	0.0880	1.71	12730.0000	5.1320 (ppm)	Y 371.029
Sn (189.925 nm)	1.0150	ppm	0.0023	0.23	660.8000	1.0150 (ppm)	Y 371.029
Sr (421.552 nm)	1.0150	ppm	0.0121	1.19	407200.0000	1.0150 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0200	ppm	0.0018	0.18	125800.0000	1.0200 (ppm)	Y 371.029
Tl (190.794 nm)	1.0200	ppm	0.0037	0.37	1216.0000	1.0200 (ppm)	Y 371.029
V (292.401 nm)	1.0230	ppm	0.0021	0.21	28770.0000	1.0230 (ppm)	Y 371.029
W (207.912 nm)	1.0180	ppm	0.0012	0.12	1919.0000	1.0180 (ppm)	Y 371.029
Zn (202.548 nm)	1.0180	ppm	0.0000	0.00	18650.0000	1.0180 (ppm)	Y 371.029
Zr (343.823 nm)	1.0170	ppm	0.0022	0.21	85600.0000	1.0170 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0540	453000.0000	0.0042	0.40
Y_R 371.029	1.0810	68290.0000	0.0076	0.70

Sample Name: CCB 5129880

Date: 10/19/2018 3:45:36 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0000	1.59	10.3000	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0117	ppm	0.0014	11.79	-959.0000	0.0117 (ppm)	Y 371.029
As (188.980 nm)	-0.0003 u	ppm	0.0008	> 100.00	5.5300	-0.0003 u (ppm)	Y 371.029
B (249.678 nm)	0.0039	ppm	0.0010	25.72	24.9200	0.0039 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0003	45.47	85.3200	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	41.70	91.8200	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0279	ppm	0.0062	22.33	215.3000	0.0279 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0004	72.16	8.1260	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0003	26.55	-8.3390	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0002	22.35	5.7990	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0001	6.14	108.1000	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0004	ppm	0.0004	> 100.00	-16.6100	0.0004 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0340 u	ppm	0.0509	> 100.00	-155.6000	-0.0340 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0034	ppm	0.0001	3.89	283.4000	0.0034 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0204 Z	ppm	0.0033	16.42	58.0300 Z	0.0204 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0065	ppm	0.0010	14.92	733.7000	0.0065 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0001	8.80	7.2350	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.1829	ppm	0.0096	5.23	2587.0000	0.1829 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0011	ppm	0.0004	38.06	7.2700	0.0011 (ppm)	Y 371.029
P (213.618 nm)	0.0025	ppm	0.0027	> 100.00	-7.9020	0.0025 (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0014	64.37	-5.0910	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0042	ppm	0.0006	14.82	2.9020	0.0042 (ppm)	Y 371.029
Se (196.026 nm)	0.0009	ppm	0.0011	> 100.00	-0.3180	0.0009 (ppm)	Y 371.029
Si (251.611 nm)	0.0058	ppm	0.0012	20.06	63.1300	0.0058 (ppm)	Y 371.029
Sn (189.925 nm)	0.0010	ppm	0.0006	55.69	-2.9020	0.0010 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0001	30.80	89.2300	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0002	24.00	-65.8000	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0022	ppm	0.0004	15.93	-0.9298	0.0022 (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0000	1.63	70.1800	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0016	ppm	0.0000	1.33	-4.0260	0.0016 (ppm)	Y 371.029
Zn (202.548 nm)	0.0024	ppm	0.0003	11.19	77.6200	0.0024 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0003	56.54	34.2400	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0620	456300.0000	0.0082	0.77
Y_R 371.029	1.0670	67370.0000	0.0048	0.45

Sample Name: CCB 5129880

Date: 10/19/2018 3:49:50 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0000	21.56	7.3710	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0095	ppm	0.0002	2.35	-1009.0000	0.0095 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0030	95.06	7.8620	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.0024	ppm	0.0001	2.83	6.1730	0.0024 (ppm)	Y 371.029
Ba (233.527 nm)	0.0003	ppm	0.0000	7.70	65.8600	0.0003 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	23.73	45.5500	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.0113	ppm	0.0117	> 100.00	142.1000	0.0113 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	2.51	0.3380	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0002	25.57	-9.7490	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0002	32.43	4.8100	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0013 u	ppm	0.0001	4.49	98.7100	-0.0013 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0004 u	ppm	0.0015	> 100.00	-19.8000	-0.0004 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0801 u	ppm	0.0302	37.66	-210.9000	-0.0801 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0022	ppm	0.0012	53.25	200.9000	0.0022 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0094	ppm	0.0047	49.59	29.9800	0.0094 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0028	ppm	0.0008	29.40	355.1000	0.0028 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002 u	ppm	0.0004	> 100.00	1.6690	0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	0.1506	ppm	0.0032	2.12	2361.0000	0.1506 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0013	> 100.00	2.1810	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0047	ppm	0.0020	43.00	-5.8320	0.0047 (ppm)	Y 371.029
Pb (220.353 nm)	0.0005	ppm	0.0003	58.93	-8.1600	0.0005 (ppm)	Y 371.029
Sb (206.834 nm)	0.0005 u	ppm	0.0035	> 100.00	-0.9077	0.0005 u (ppm)	Y 371.029
Se (196.026 nm)	0.0000 u	ppm	0.0033	> 100.00	-1.0520	0.0000 u (ppm)	Y 371.029
Si (251.611 nm)	0.0036	ppm	0.0003	7.30	57.5400	0.0036 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032	ppm	0.0009	27.26	-1.4720	0.0032 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	50.62	-25.6200	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	12.60	-121.9000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0008 u	ppm	0.0011	> 100.00	-2.7200	0.0008 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	51.21	67.9900	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0014 u	ppm	0.0022	> 100.00	-4.2900	0.0014 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0033	ppm	0.0002	4.72	93.7300	0.0033 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0001	26.17	16.5300	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0570	454300.0000	0.0054	0.51
Y_R 371.029	1.0670	67420.0000	0.0046	0.43

Sample Name: mb 440-506066/1-a

Date: 10/19/2018 3:52:13 PM

Rack:Tube: 1:26

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	36.85	14.6300	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0071	ppm	0.0006	8.37	-1060.0000	0.0071 (ppm)	Y 371.029
As (188.980 nm)	0.0005	ppm	0.0006	> 100.00	6.0770	0.0005 (ppm)	Y 371.029
B (249.678 nm)	0.0021	ppm	0.0006	30.79	1.5160	0.0021 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	4.43	48.9000	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	1.7900	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	0.0200	ppm	0.0096	47.89	180.6000	0.0200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	99.55	-1.7010	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0005	51.90	-10.4700	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0000	1.88	5.2650	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0013 u	ppm	0.0002	12.82	99.6200	-0.0013 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0011 u	ppm	0.0029	> 100.00	-13.3200	0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0895 u	ppm	0.0680	75.96	-222.3000	-0.0895 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0004	> 100.00	50.8300	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0030	ppm	0.0024	81.75	13.4900	0.0030 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0008	ppm	0.0002	26.10	144.0000	0.0008 (ppm)	Y 371.029
Mo (204.598 nm)	0.0001	ppm	0.0000	31.18	0.8157	0.0001 (ppm)	Y 371.029
Na (589.592 nm)	0.1617	ppm	0.0176	10.90	2439.0000	0.1617 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0002	> 100.00	2.1120	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	0.0075	ppm	0.0047	62.72	-3.2330	0.0075 (ppm)	Y 371.029
Pb (220.353 nm)	0.0006	ppm	0.0007	> 100.00	-8.0140	0.0006 (ppm)	Y 371.029
Sb (206.834 nm)	0.0035	ppm	0.0013	37.05	2.2360	0.0035 (ppm)	Y 371.029
Se (196.026 nm)	0.0052	ppm	0.0020	38.06	2.9010	0.0052 (ppm)	Y 371.029
Si (251.611 nm)	0.0038	ppm	0.0010	26.19	58.1800	0.0038 (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0008	32.11	-1.8640	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	27.34	-12.3600	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	32.50	-159.2000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0010 u	ppm	0.0005	54.50	-4.8520	-0.0010 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0002	> 100.00	61.3000	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0021	ppm	0.0007	34.33	-3.0490	0.0021 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0002 u	ppm	0.0000	3.55	30.2200	-0.0002 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	24.45	3.8750	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0450	449100.0000	0.0020	0.19
Y_R 371.029	1.0520	66450.0000	0.0042	0.40

Sample Name: lcs 440-506066/2-a

Date: 10/19/2018 3:54:36 PM

Rack:Tube: 1:27

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4484	ppm	0.0001	0.01	18880.0000	0.4484 (ppm)	Y 371.029
Al (396.152 nm)	0.9330	ppm	0.0005	0.06	19750.0000	0.9330 (ppm)	Y 371.029
As (188.980 nm)	0.8809	ppm	0.0022	0.25	601.8000	0.8809 (ppm)	Y 371.029
B (249.678 nm)	0.8964	ppm	0.0037	0.42	11090.0000	0.8964 (ppm)	Y 371.029
Ba (233.527 nm)	0.8995	ppm	0.0072	0.80	70960.0000	0.8995 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8836	ppm	0.0033	0.37	162700.0000	0.8836 (ppm)	Y 371.029
Ca (422.673 nm)	4.5540	ppm	0.0229	0.50	20240.0000	4.5540 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8890	ppm	0.0051	0.57	20620.0000	0.8890 (ppm)	Y 371.029
Co (228.615 nm)	0.8982	ppm	0.0051	0.56	12150.0000	0.8982 (ppm)	Y 371.029
Cr (205.560 nm)	0.9012	ppm	0.0010	0.11	4803.0000	0.9012 (ppm)	Y 371.029
Cu (324.754 nm)	0.9058	ppm	0.0035	0.38	36270.0000	0.9058 (ppm)	Y 371.029
Fe (238.204 nm)	0.9066	ppm	0.0067	0.73	3946.0000	0.9066 (ppm)	Y_R 371.029
K (766.491 nm)	9.0110	ppm	0.0976	1.08	10720.0000	9.0110 (ppm)	Y_R 371.029
Li (670.783 nm)	0.8983	ppm	0.0054	0.61	60960.0000	0.8983 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.5010	ppm	0.0196	0.44	11520.0000	4.5010 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9019	ppm	0.0002	0.03	93680.0000	0.9019 (ppm)	Y 371.029
Mo (204.598 nm)	0.9089	ppm	0.0006	0.07	4217.0000	0.9089 (ppm)	Y 371.029
Na (589.592 nm)	9.1900	ppm	0.0449	0.49	65460.0000	9.1900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8985	ppm	0.0014	0.16	4605.0000	0.8985 (ppm)	Y 371.029
P (213.618 nm)	0.8694	ppm	0.0020	0.23	736.8000	0.8694 (ppm)	Y 371.029
Pb (220.353 nm)	0.9012	ppm	0.0008	0.08	1725.0000	0.9012 (ppm)	Y 371.029
Sb (206.834 nm)	0.9023	ppm	0.0020	0.22	924.2000	0.9023 (ppm)	Y 371.029
Se (196.026 nm)	0.8422	ppm	0.0012	0.14	639.0000	0.8422 (ppm)	Y 371.029
Si (251.611 nm)	4.4920	ppm	0.0767	1.71	11150.0000	4.4920 (ppm)	Y 371.029
Sn (189.925 nm)	0.8857	ppm	0.0021	0.23	576.1000	0.8857 (ppm)	Y 371.029
Sr (421.552 nm)	0.9139	ppm	0.0005	0.06	366400.0000	0.9139 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9016	ppm	0.0005	0.06	111200.0000	0.9016 (ppm)	Y 371.029
Tl (190.794 nm)	0.8974	ppm	0.0070	0.78	1068.0000	0.8974 (ppm)	Y 371.029
V (292.401 nm)	0.9087	ppm	0.0004	0.04	25570.0000	0.9087 (ppm)	Y 371.029
W (207.912 nm)	0.9024	ppm	0.0019	0.21	1700.0000	0.9024 (ppm)	Y 371.029
Zn (202.548 nm)	0.8873	ppm	0.0000	0.00	16260.0000	0.8873 (ppm)	Y 371.029
Zr (343.823 nm)	0.9007	ppm	0.0004	0.04	75790.0000	0.9007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0400	446900.0000	0.0046	0.44
Y_R 371.029	1.0550	66670.0000	0.0082	0.78

Sample Name: 440-222474-n-4-h

Date: 10/19/2018 3:57:01 PM

Rack:Tube: 1:28

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0004	> 100.00	-18.8000	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0239	ppm	0.0010	4.04	-651.8000	0.0239 (ppm)	Y 371.029
As (188.980 nm)	0.0066	ppm	0.0015	23.30	10.1400	0.0066 (ppm)	Y 371.029
B (249.678 nm)	0.1741	ppm	0.0026	1.52	2126.0000	0.1741 (ppm)	Y 371.029
Ba (233.527 nm)	0.0039	ppm	0.0000	1.07	356.9000	0.0039 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0002	53.53	61.7600	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	51.7900	ppm	0.3111	0.60	229200.0000	51.7900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	35.32	6.1980	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0015	ppm	0.0001	3.58	-1.2860	0.0015 (ppm)	Y 371.029
Cr (205.560 nm)	0.0018	ppm	0.0001	8.28	11.9500	0.0018 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0012 u	ppm	0.0005	46.96	56.7100	-0.0012 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0105	ppm	0.0012	11.24	29.1000	0.0105 (ppm)	Y_R 371.029
K (766.491 nm)	4.8210	ppm	0.1781	3.69	5686.0000	4.8210 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0289	ppm	0.0014	4.73	2133.0000	0.0289 (ppm)	Y_R 371.029
Mg (279.078 nm)	6.9210	ppm	0.1102	1.59	17720.0000	6.9210 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0361	ppm	0.0001	0.35	3833.0000	0.0361 (ppm)	Y 371.029
Mo (204.598 nm)	0.0255	ppm	0.0011	4.45	118.9000	0.0255 (ppm)	Y 371.029
Na (589.592 nm)	83.2900	ppm	0.9405	1.13	582100.0000	83.2900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0013	ppm	0.0002	16.62	7.4900	0.0013 (ppm)	Y 371.029
P (213.618 nm)	0.0889	ppm	0.0017	1.89	70.1700	0.0889 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0012 u	ppm	0.0001	5.19	-10.9300	-0.0012 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0032	ppm	0.0007	22.79	1.6300	0.0032 (ppm)	Y 371.029
Se (196.026 nm)	0.0005 u	ppm	0.0045	> 100.00	0.3503	0.0005 u (ppm)	Y 371.029
Si (251.611 nm)	9.8970	ppm	0.1752	1.77	24190.0000	9.8970 (ppm)	Y 371.029
Sn (189.925 nm)	0.0029	ppm	0.0009	30.65	-1.6600	0.0029 (ppm)	Y 371.029
Sr (421.552 nm)	0.1284	ppm	0.0019	1.48	52200.0000	0.1284 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	21.37	-177.0000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0004	30.06	-5.6130	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	0.0014	ppm	0.0001	10.63	162.6000	0.0014 (ppm)	Y 371.029
W (207.912 nm)	0.2257	ppm	0.0018	0.81	416.4000	0.2257 (ppm)	Y 371.029
Zn (202.548 nm)	0.0024	ppm	0.0001	4.51	85.2200	0.0024 (ppm)	Y 371.029
Zr (343.823 nm)	0.0014	ppm	0.0001	9.14	118.7000	0.0014 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440400.0000	0.0050	0.49
Y_R 371.029	1.0550	66650.0000	0.0035	0.33

Sample Name: 440-222474-n-4-i.ms

Date: 10/19/2018 3:59:24 PM

Rack:Tube: 1:29

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4670	ppm	0.0021	0.45	19660.0000	0.4670 (ppm)	Y 371.029
Al (396.152 nm)	1.0670	ppm	0.0072	0.67	22740.0000	1.0670 (ppm)	Y 371.029
As (188.980 nm)	0.9459	ppm	0.0022	0.24	646.0000	0.9459 (ppm)	Y 371.029
B (249.678 nm)	1.1340	ppm	0.0111	0.97	14020.0000	1.1340 (ppm)	Y 371.029
Ba (233.527 nm)	0.9004	ppm	0.0056	0.63	71030.0000	0.9004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9376	ppm	0.0047	0.51	172700.0000	0.9376 (ppm)	Y 371.029
Ca (422.673 nm)	56.9700	ppm	0.0619	0.11	252100.0000	56.9700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8999	ppm	0.0122	1.36	20880.0000	0.8999 (ppm)	Y 371.029
Co (228.615 nm)	0.9222	ppm	0.0137	1.48	12480.0000	0.9222 (ppm)	Y 371.029
Cr (205.560 nm)	0.9276	ppm	0.0032	0.35	4946.0000	0.9276 (ppm)	Y 371.029
Cu (324.754 nm)	0.9802	ppm	0.0082	0.84	39190.0000	0.9802 (ppm)	Y 371.029
Fe (238.204 nm)	0.9576	ppm	0.0037	0.38	4170.0000	0.9576 (ppm)	Y_R 371.029
K (766.491 nm)	14.1700	ppm	0.0222	0.16	16920.0000	14.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9621	ppm	0.0013	0.13	65410.0000	0.9621 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.1800	ppm	0.0757	0.68	28620.0000	11.1800 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9625	ppm	0.0042	0.44	100000.0000	0.9625 (ppm)	Y 371.029
Mo (204.598 nm)	0.9827	ppm	0.0060	0.61	4560.0000	0.9827 (ppm)	Y 371.029
Na (589.592 nm)	92.6500	ppm	0.0994	0.11	647500.0000	92.6500 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9179	ppm	0.0033	0.35	4703.0000	0.9179 (ppm)	Y 371.029
P (213.618 nm)	1.0290	ppm	0.0057	0.56	878.3000	1.0290 (ppm)	Y 371.029
Pb (220.353 nm)	0.9099	ppm	0.0036	0.39	1742.0000	0.9099 (ppm)	Y 371.029
Sb (206.834 nm)	0.9876	ppm	0.0093	0.94	1012.0000	0.9876 (ppm)	Y 371.029
Se (196.026 nm)	0.8941	ppm	0.0149	1.66	679.4000	0.8941 (ppm)	Y 371.029
Si (251.611 nm)	14.5600	ppm	0.1289	0.89	35710.0000	14.5600 (ppm)	Y 371.029
Sn (189.925 nm)	0.9366	ppm	0.0015	0.16	609.4000	0.9366 (ppm)	Y 371.029
Sr (421.552 nm)	1.0800	ppm	0.0012	0.11	433700.0000	1.0800 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9490	ppm	0.0044	0.47	117000.0000	0.9490 (ppm)	Y 371.029
Tl (190.794 nm)	0.8913	ppm	0.0243	2.73	1059.0000	0.8913 (ppm)	Y 371.029
V (292.401 nm)	0.9599	ppm	0.0023	0.24	27070.0000	0.9599 (ppm)	Y 371.029
W (207.912 nm)	1.1810	ppm	0.0041	0.35	2223.0000	1.1810 (ppm)	Y 371.029
Zn (202.548 nm)	0.9056	ppm	0.0045	0.49	16610.0000	0.9056 (ppm)	Y 371.029
Zr (343.823 nm)	0.9416	ppm	0.0044	0.47	79240.0000	0.9416 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0320	443400.0000	0.0045	0.43
Y_R 371.029	1.0800	68190.0000	0.0011	0.10

Sample Name: 440-222474-n-4-j msd

Date: 10/19/2018 4:01:48 PM

Rack:Tube: 1:30

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4539	ppm	0.0051	1.12	19100.0000	0.4539 (ppm)	Y 371.029
Al (396.152 nm)	1.0370	ppm	0.0130	1.25	22070.0000	1.0370 (ppm)	Y 371.029
As (188.980 nm)	0.9198	ppm	0.0097	1.05	628.3000	0.9198 (ppm)	Y 371.029
B (249.678 nm)	1.1110	ppm	0.0146	1.31	13740.0000	1.1110 (ppm)	Y 371.029
Ba (233.527 nm)	0.8863	ppm	0.0071	0.81	69920.0000	0.8863 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9122	ppm	0.0113	1.24	168000.0000	0.9122 (ppm)	Y 371.029
Ca (422.673 nm)	55.9000	ppm	0.4340	0.78	247400.0000	55.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8742	ppm	0.0150	1.71	20280.0000	0.8742 (ppm)	Y 371.029
Co (228.615 nm)	0.8984	ppm	0.0135	1.50	12160.0000	0.8984 (ppm)	Y 371.029
Cr (205.560 nm)	0.9008	ppm	0.0085	0.94	4803.0000	0.9008 (ppm)	Y 371.029
Cu (324.754 nm)	0.9483	ppm	0.0146	1.54	37920.0000	0.9483 (ppm)	Y 371.029
Fe (238.204 nm)	0.9100	ppm	0.0018	0.19	3962.0000	0.9100 (ppm)	Y_R 371.029
K (766.491 nm)	13.7600	ppm	0.2469	1.79	16430.0000	13.7600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9141	ppm	0.0122	1.33	62150.0000	0.9141 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.2600	ppm	0.1138	1.01	28820.0000	11.2600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9362	ppm	0.0105	1.12	97270.0000	0.9362 (ppm)	Y 371.029
Mo (204.598 nm)	0.9526	ppm	0.0105	1.10	4420.0000	0.9526 (ppm)	Y 371.029
Na (589.592 nm)	90.9900	ppm	1.2720	1.40	635900.0000	90.9900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8912	ppm	0.0117	1.31	4567.0000	0.8912 (ppm)	Y 371.029
P (213.618 nm)	1.0090	ppm	0.0136	1.35	861.7000	1.0090 (ppm)	Y 371.029
Pb (220.353 nm)	0.8844	ppm	0.0083	0.94	1693.0000	0.8844 (ppm)	Y 371.029
Sb (206.834 nm)	0.9554	ppm	0.0122	1.27	978.7000	0.9554 (ppm)	Y 371.029
Se (196.026 nm)	0.8704	ppm	0.0122	1.40	661.3000	0.8704 (ppm)	Y 371.029
Si (251.611 nm)	14.5600	ppm	0.1820	1.25	35700.0000	14.5600 (ppm)	Y 371.029
Sn (189.925 nm)	0.9082	ppm	0.0075	0.83	590.8000	0.9082 (ppm)	Y 371.029
Sr (421.552 nm)	1.0260	ppm	0.0082	0.79	412300.0000	1.0260 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9188	ppm	0.0103	1.12	113300.0000	0.9188 (ppm)	Y 371.029
Tl (190.794 nm)	0.8660	ppm	0.0305	3.52	1029.0000	0.8660 (ppm)	Y 371.029
V (292.401 nm)	0.9311	ppm	0.0087	0.94	26270.0000	0.9311 (ppm)	Y 371.029
W (207.912 nm)	1.1490	ppm	0.0090	0.79	2162.0000	1.1490 (ppm)	Y 371.029
Zn (202.548 nm)	0.8851	ppm	0.0106	1.20	16240.0000	0.8851 (ppm)	Y 371.029
Zr (343.823 nm)	0.9149	ppm	0.0063	0.68	76990.0000	0.9149 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0270	441200.0000	0.0053	0.52
Y_R 371.029	1.0610	67020.0000	0.0057	0.53

Sample Name: 440-222474-n-4-hSD@5

Date: 10/19/2018 4:04:11 PM

Rack:Tube: 1:31

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	25.86	8.8400	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0108	ppm	0.0006	5.15	-970.6000	0.0108 (ppm)	Y 371.029
As (188.980 nm)	0.0035	ppm	0.0035	98.88	8.0930	0.0035 (ppm)	Y 371.029
B (249.678 nm)	0.0384	ppm	0.0012	3.15	451.1000	0.0384 (ppm)	Y 371.029
Ba (233.527 nm)	0.0013	ppm	0.0002	17.87	142.3000	0.0013 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	40.00	101.7000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	10.7300	ppm	0.0147	0.14	47570.0000	10.7300 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0003	65.92	5.9060	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0012	ppm	0.0002	16.85	-5.6570	0.0012 (ppm)	Y 371.029
Cr (205.560 nm)	0.0014	ppm	0.0008	54.64	8.9620	0.0014 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0000	0.25	86.4400	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0012	ppm	0.0013	> 100.00	-12.6600	0.0012 (ppm)	Y_R 371.029
K (766.491 nm)	0.9710	ppm	0.0583	6.00	1054.0000	0.9710 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0039	ppm	0.0009	24.05	340.0000	0.0039 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.4500	ppm	0.0149	1.03	3716.0000	1.4500 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0081	ppm	0.0003	3.34	911.6000	0.0081 (ppm)	Y 371.029
Mo (204.598 nm)	0.0064	ppm	0.0002	2.51	30.3400	0.0064 (ppm)	Y 371.029
Na (589.592 nm)	17.5400	ppm	0.0130	0.07	123600.0000	17.5400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0008	ppm	0.0002	24.26	5.7980	0.0008 (ppm)	Y 371.029
P (213.618 nm)	0.0187	ppm	0.0054	28.73	6.6890	0.0187 (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0002	13.46	-6.6750	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0039	ppm	0.0001	2.24	2.5060	0.0039 (ppm)	Y 371.029
Se (196.026 nm)	0.0025	ppm	0.0002	9.10	1.0770	0.0025 (ppm)	Y 371.029
Si (251.611 nm)	2.0430	ppm	0.0051	0.25	5032.0000	2.0430 (ppm)	Y 371.029
Sn (189.925 nm)	0.0017 u	ppm	0.0025	> 100.00	-2.4590	0.0017 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0270	ppm	0.0001	0.41	10950.0000	0.0270 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	19.36	-83.2800	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0001 u	ppm	0.0006	> 100.00	-3.8960	-0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0008	ppm	0.0000	1.34	93.2600	0.0008 (ppm)	Y 371.029
W (207.912 nm)	0.0461	ppm	0.0005	1.02	79.5900	0.0461 (ppm)	Y 371.029
Zn (202.548 nm)	0.0006	ppm	0.0002	43.40	45.8000	0.0006 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0002	29.33	56.1600	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0680	458900.0000	0.0023	0.22
Y_R 371.029	1.0990	69410.0000	0.0009	0.08

Sample Name: 440-222474-n-1-c

Date: 10/19/2018 4:06:35 PM

Rack:Tube: 1:32

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0060 bu	ppm	0.0000	0.76	36.3500	-0.0060 bu (ppm)	Y 371.029
Al (396.152 nm)	118.0000 b	ppm	0.0714	0.06	2565000.0000	118.0000 b (ppm)	Y 371.029
As (188.980 nm)	0.0575 b	ppm	0.0036	6.27	43.6700	0.0575 b (ppm)	Y 371.029
B (249.678 nm)	1.5400 b	ppm	0.0052	0.33	19110.0000	1.5400 b (ppm)	Y 371.029
Ba (233.527 nm)	0.0244 b	ppm	0.0000	0.07	2002.0000	0.0244 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0154 b	ppm	0.0000	0.03	2850.0000	0.0154 b (ppm)	Y 371.029
Ca (422.673 nm)	310.6000 b	ppm	1.4820	0.48	1374000.0000	310.6000 b (ppm)	Y_R 371.029
Cd (214.439 nm)	0.5423 b	ppm	0.0033	0.61	12590.0000	0.5423 b (ppm)	Y 371.029
Co (228.615 nm)	0.9683 b	ppm	0.0009	0.09	13090.0000	0.9683 b (ppm)	Y 371.029
Cr (205.560 nm)	0.3096 b	ppm	0.0004	0.14	1667.0000	0.3096 b (ppm)	Y 371.029
Cu (324.754 nm)	0.2883 b	ppm	0.0002	0.06	11460.0000	0.2883 b (ppm)	Y 371.029
Fe (238.204 nm)	2.9630 b	ppm	0.0078	0.26	12990.0000	2.9630 b (ppm)	Y_R 371.029
K (766.491 nm)	24.4800 b	ppm	0.2110	0.86	29440.0000	24.4800 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.6175 b	ppm	0.0032	0.52	40150.0000	0.6175 b (ppm)	Y_R 371.029
Mg (279.078 nm)	416.8000 b	ppm	1.3360	0.32	1067000.0000	416.8000 b (ppm)	Y_R 371.029
Mn (259.372 nm)	111.5000 bo	ppm	1.2740	1.14	11510000.0000	111.5000 bo (ppm)	Y 371.029
Mo (204.598 nm)	-0.0021 bu	ppm	0.0003	15.72	21.5100	-0.0021 bu (ppm)	Y 371.029
Na (589.592 nm)	440.6000 b	ppm	3.3260	0.75	3074000.0000	440.6000 b (ppm)	Y_R 371.029
Ni (231.604 nm)	5.4530 b	ppm	0.0067	0.12	27920.0000	5.4530 b (ppm)	Y 371.029
P (213.618 nm)	0.0013 bu	ppm	0.0066	> 100.00	-38.0600	0.0013 bu (ppm)	Y 371.029
Pb (220.353 nm)	0.0002 bu	ppm	0.0007	> 100.00	40.4500	0.0002 bu (ppm)	Y 371.029
Sb (206.834 nm)	0.0050 b	ppm	0.0013	25.26	-0.9959	0.0050 b (ppm)	Y 371.029
Se (196.026 nm)	0.0423 b	ppm	0.0021	5.04	77.0700	0.0423 b (ppm)	Y 371.029
Si (251.611 nm)	15.3600 b	ppm	0.0156	0.10	37670.0000	15.3600 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0114 bu	ppm	0.0035	30.79	-6.2170	-0.0114 bu (ppm)	Y 371.029
Sr (421.552 nm)	1.7280 b	ppm	0.0079	0.46	697500.0000	1.7280 b (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0017 bu	ppm	0.0001	6.13	-687.1000	-0.0017 bu (ppm)	Y 371.029
Tl (190.794 nm)	0.0209 b	ppm	0.0018	8.41	230.4000	0.0209 b (ppm)	Y 371.029
V (292.401 nm)	-0.0180 bu	ppm	0.0002	0.97	63.3800	-0.0180 bu (ppm)	Y 371.029
W (207.912 nm)	0.0298 b	ppm	0.0012	4.18	145.3000	0.0298 b (ppm)	Y 371.029
Zn (202.548 nm)	9.9260 bo	ppm	0.0506	0.51	180400.0000	9.9260 bo (ppm)	Y 371.029
Zr (343.823 nm)	-0.0010 bu	ppm	0.0006	56.39	-298.1000	-0.0010 bu (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.4190	609800.0000	0.0112	0.79
Y_R 371.029	1.5410	97360.0000	0.0098	0.64

Sample Name: 440-222474-n-2-c

Date: 10/19/2018 4:08:59 PM

Rack:Tube: 1:33

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0011	ppm	0.0001	10.75	-12.4500	0.0011 (ppm)	Y 371.029
Al (396.152 nm)	0.8323	ppm	0.0112	1.34	17430.0000	0.8323 (ppm)	Y 371.029
As (188.980 nm)	0.0057	ppm	0.0030	51.60	9.3670	0.0057 (ppm)	Y 371.029
B (249.678 nm)	1.0190	ppm	0.0019	0.19	12690.0000	1.0190 (ppm)	Y 371.029
Ba (233.527 nm)	0.0233	ppm	0.0001	0.59	1926.0000	0.0233 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0014	ppm	0.0001	4.47	269.7000	0.0014 (ppm)	Y 371.029
Ca (422.673 nm)	495.1000	ppm	3.0220	0.61	2191000.0000	495.1000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0408	ppm	0.0002	0.40	948.3000	0.0408 (ppm)	Y 371.029
Co (228.615 nm)	0.0126	ppm	0.0007	5.79	164.7000	0.0126 (ppm)	Y 371.029
Cr (205.560 nm)	0.0022	ppm	0.0004	18.87	23.3300	0.0022 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	40.68	-300.0000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0015 u	ppm	0.0018	> 100.00	18.7600	-0.0015 u (ppm)	Y_R 371.029
K (766.491 nm)	7.8050	ppm	0.0490	0.63	9443.0000	7.8050 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0531	ppm	0.0015	2.80	5403.0000	0.0531 (ppm)	Y_R 371.029
Mg (279.078 nm)	352.7000	ppm	1.4700	0.42	902900.0000	352.7000 (ppm)	Y_R 371.029
Mn (259.372 nm)	15.4700	ppm	0.0285	0.18	1598000.0000	15.4700 (ppm)	Y 371.029
Mo (204.598 nm)	0.0049	ppm	0.0002	4.61	25.5300	0.0049 (ppm)	Y 371.029
Na (589.592 nm)	317.1000	ppm	0.0309	0.01	2213000.0000	317.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4391	ppm	0.0012	0.28	2236.0000	0.4391 (ppm)	Y 371.029
P (213.618 nm)	0.0113	ppm	0.0047	41.41	-7.7820	0.0113 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0094 u	ppm	0.0018	19.08	-8.5740	-0.0094 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0065 u	ppm	0.0008	12.85	-8.0400	-0.0065 u (ppm)	Y 371.029
Se (196.026 nm)	0.0055	ppm	0.0019	33.90	6.4870	0.0055 (ppm)	Y 371.029
Si (251.611 nm)	31.8600	ppm	0.1867	0.59	77760.0000	31.8600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0113 u	ppm	0.0032	27.99	-9.9800	-0.0113 u (ppm)	Y 371.029
Sr (421.552 nm)	1.7730	ppm	0.0106	0.60	718400.0000	1.7730 (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0002 u	ppm	0.0001	37.37	-791.7000	-0.0002 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0050 u	ppm	0.0017	34.40	17.0700	-0.0050 u (ppm)	Y 371.029
V (292.401 nm)	-0.0160 u	ppm	0.0001	0.63	308.3000	-0.0160 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0017	> 100.00	-16.6400	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.0025	ppm	0.0015	58.44	311.4000	0.0025 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0007 u	ppm	0.0001	12.36	-19.9300	-0.0007 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9463	406600.0000	0.0090	0.96
Y_R 371.029	1.0320	65210.0000	0.0038	0.37

Sample Name: 440-222474-n-3-c

Date: 10/19/2018 4:11:23 PM

Rack:Tube: 1:34

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0003	> 100.00	-67.4600	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0083	ppm	0.0006	6.94	-749.3000	0.0083 (ppm)	Y 371.029
As (188.980 nm)	0.0150	ppm	0.0023	15.02	15.0400	0.0150 (ppm)	Y 371.029
B (249.678 nm)	0.2264	ppm	0.0050	2.20	2810.0000	0.2264 (ppm)	Y 371.029
Ba (233.527 nm)	0.0338	ppm	0.0005	1.45	2736.0000	0.0338 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	7.34	-3.6040	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	395.9000	ppm	1.5180	0.38	1752000.0000	395.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	23.85	2.2710	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0003	24.32	4.2420	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.0072	ppm	0.0002	2.59	46.8200	0.0072 (ppm)	Y 371.029
Cu (324.754 nm)	0.0003	ppm	0.0001	20.46	-197.5000	0.0003 (ppm)	Y 371.029
Fe (238.204 nm)	-0.0002 u	ppm	0.0029	> 100.00	-0.4091	-0.0002 u (ppm)	Y_R 371.029
K (766.491 nm)	6.8620	ppm	0.0350	0.51	8227.0000	6.8620 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0234	ppm	0.0004	1.50	2891.0000	0.0234 (ppm)	Y_R 371.029
Mg (279.078 nm)	132.2000	ppm	0.8552	0.65	338500.0000	132.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0582	ppm	0.0045	7.69	6629.0000	0.0582 (ppm)	Y 371.029
Mo (204.598 nm)	0.0087	ppm	0.0013	15.12	40.9000	0.0087 (ppm)	Y 371.029
Na (589.592 nm)	131.6000	ppm	0.1850	0.14	919400.0000	131.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0038	ppm	0.0001	1.75	11.7600	0.0038 (ppm)	Y 371.029
P (213.618 nm)	0.0274	ppm	0.0010	3.80	9.5890	0.0274 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0034 u	ppm	0.0018	54.24	-9.2960	-0.0034 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0050 u	ppm	0.0011	22.82	-5.1870	-0.0050 u (ppm)	Y 371.029
Se (196.026 nm)	0.0023	ppm	0.0019	85.81	-1.9660	0.0023 (ppm)	Y 371.029
Si (251.611 nm)	24.6500	ppm	0.8129	3.30	60140.0000	24.6500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0055 u	ppm	0.0014	24.67	-7.0820	-0.0055 u (ppm)	Y 371.029
Sr (421.552 nm)	1.0660	ppm	0.0003	0.03	433400.0000	1.0660 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0001	> 100.00	-660.0000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0009 u	ppm	0.0045	> 100.00	-4.7610	0.0009 u (ppm)	Y 371.029
V (292.401 nm)	-0.0074 u	ppm	0.0001	0.94	394.6000	-0.0074 u (ppm)	Y 371.029
W (207.912 nm)	0.0064	ppm	0.0015	23.25	-3.8500	0.0064 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0007 u	ppm	0.0000	3.31	116.9000	-0.0007 u (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 u	ppm	0.0001	25.48	17.6600	-0.0005 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0150	436000.0000	0.0094	0.93
Y_R 371.029	1.0780	68120.0000	0.0063	0.59

Sample Name: CCV 5129881

Date: 10/19/2018 4:17:03 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5064	ppm	0.0036	0.71	21320.0000	0.5064 (ppm)	Y 371.029
Al (396.152 nm)	1.0680	ppm	0.0074	0.69	22770.0000	1.0680 (ppm)	Y 371.029
As (188.980 nm)	1.0080	ppm	0.0016	0.15	688.2000	1.0080 (ppm)	Y 371.029
B (249.678 nm)	1.0220	ppm	0.0091	0.89	12640.0000	1.0220 (ppm)	Y 371.029
Ba (233.527 nm)	1.0050	ppm	0.0011	0.11	79300.0000	1.0050 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0120	ppm	0.0064	0.63	186300.0000	1.0120 (ppm)	Y 371.029
Ca (422.673 nm)	5.1710	ppm	0.0053	0.10	22970.0000	5.1710 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0140	ppm	0.0061	0.60	23520.0000	1.0140 (ppm)	Y 371.029
Co (228.615 nm)	1.0190	ppm	0.0086	0.85	13790.0000	1.0190 (ppm)	Y 371.029
Cr (205.560 nm)	1.0170	ppm	0.0044	0.43	5423.0000	1.0170 (ppm)	Y 371.029
Cu (324.754 nm)	1.0190	ppm	0.0060	0.59	40780.0000	1.0190 (ppm)	Y 371.029
Fe (238.204 nm)	1.0300	ppm	0.0003	0.03	4485.0000	1.0300 (ppm)	Y_R 371.029
K (766.491 nm)	10.2000	ppm	0.0179	0.18	12150.0000	10.2000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0040	ppm	0.0032	0.32	68140.0000	1.0040 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0960	ppm	0.0179	0.35	13050.0000	5.0960 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0280	ppm	0.0030	0.29	106800.0000	1.0280 (ppm)	Y 371.029
Mo (204.598 nm)	1.0220	ppm	0.0093	0.92	4740.0000	1.0220 (ppm)	Y 371.029
Na (589.592 nm)	10.3400	ppm	0.0441	0.43	73480.0000	10.3400 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0150	ppm	0.0051	0.50	5199.0000	1.0150 (ppm)	Y 371.029
P (213.618 nm)	1.0010	ppm	0.0051	0.51	851.2000	1.0010 (ppm)	Y 371.029
Pb (220.353 nm)	1.0180	ppm	0.0060	0.59	1950.0000	1.0180 (ppm)	Y 371.029
Sb (206.834 nm)	1.0170	ppm	0.0172	1.69	1042.0000	1.0170 (ppm)	Y 371.029
Se (196.026 nm)	0.9983	ppm	0.0105	1.06	757.3000	0.9983 (ppm)	Y 371.029
Si (251.611 nm)	5.1510	ppm	0.1143	2.22	12770.0000	5.1510 (ppm)	Y 371.029
Sn (189.925 nm)	1.0100	ppm	0.0058	0.58	657.6000	1.0100 (ppm)	Y 371.029
Sr (421.552 nm)	1.0330	ppm	0.0137	1.33	414100.0000	1.0330 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0200	ppm	0.0059	0.58	125800.0000	1.0200 (ppm)	Y 371.029
Tl (190.794 nm)	1.0170	ppm	0.0084	0.82	1212.0000	1.0170 (ppm)	Y 371.029
V (292.401 nm)	1.0220	ppm	0.0048	0.47	28750.0000	1.0220 (ppm)	Y 371.029
W (207.912 nm)	1.0210	ppm	0.0040	0.39	1925.0000	1.0210 (ppm)	Y 371.029
Zn (202.548 nm)	1.0140	ppm	0.0048	0.47	18570.0000	1.0140 (ppm)	Y 371.029
Zr (343.823 nm)	1.0180	ppm	0.0061	0.60	85650.0000	1.0180 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0710	460100.0000	0.0063	0.58
Y_R 371.029	1.0960	69260.0000	0.0008	0.07

Sample Name: CCB 5129880

Date: 10/19/2018 4:19:26 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0003	> 100.00	12.1300	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0117	ppm	0.0001	0.54	-958.5000	0.0117 (ppm)	Y 371.029
As (188.980 nm)	0.0021 u	ppm	0.0033	> 100.00	7.1300	0.0021 u (ppm)	Y 371.029
B (249.678 nm)	0.0034	ppm	0.0007	19.56	18.5400	0.0034 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0002	46.86	75.5100	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	32.72	91.4100	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0247	ppm	0.0108	43.56	201.4000	0.0247 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0003	57.15	8.3360	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0002	18.71	-8.0470	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0000	0.34	6.1480	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0001	9.41	95.7900	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0001 u	ppm	0.0004	> 100.00	-17.9400	0.0001 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0770 u	ppm	0.0321	41.65	-207.2000	-0.0770 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0029	ppm	0.0003	8.57	247.9000	0.0029 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0128	ppm	0.0017	13.11	38.7600	0.0128 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0032	ppm	0.0008	23.89	397.5000	0.0032 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0004	31.61	6.5330	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	0.1263	ppm	0.0057	4.50	2192.0000	0.1263 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0013	ppm	0.0008	60.15	8.5620	0.0013 (ppm)	Y 371.029
P (213.618 nm)	0.0050	ppm	0.0038	76.17	-5.5660	0.0050 (ppm)	Y 371.029
Pb (220.353 nm)	0.0008 u	ppm	0.0013	> 100.00	-7.5510	0.0008 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0051	ppm	0.0036	70.02	3.8610	0.0051 (ppm)	Y 371.029
Se (196.026 nm)	0.0039	ppm	0.0016	40.37	1.8770	0.0039 (ppm)	Y 371.029
Si (251.611 nm)	0.0051	ppm	0.0011	22.11	61.4700	0.0051 (ppm)	Y 371.029
Sn (189.925 nm)	0.0047	ppm	0.0001	2.99	-0.5160	0.0047 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	11.06	71.7200	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0002	22.48	-55.1200	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0007	ppm	0.0010	> 100.00	-2.8080	0.0007 (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	55.77	69.0400	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0001	3.13	-3.7580	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	0.0029	ppm	0.0002	7.08	87.1000	0.0029 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	37.83	24.0500	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0810	464600.0000	0.0060	0.55
Y_R 371.029	1.1030	69660.0000	0.0073	0.66

Sample Name: 440-222369-N-5-A

Date: 10/19/2018 4:24:07 PM

Rack:Tube: 1:35

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0002	30.83	-43.5600	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0084	ppm	0.0006	7.63	-893.1000	0.0084 (ppm)	Y 371.029
As (188.980 nm)	0.0019	ppm	0.0001	5.98	7.5310	0.0019 (ppm)	Y 371.029
B (249.678 nm)	7.5580	ppm	0.0661	0.87	94340.0000	7.5580 (ppm)	Y 371.029
Ba (233.527 nm)	0.0316	ppm	0.0002	0.78	2547.0000	0.0316 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	14.54	125.0000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	38.1800	ppm	0.0107	0.03	169000.0000	38.1800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	23.36	1.5370	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0003	ppm	0.0003	> 100.00	-15.3200	0.0003 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0007	66.97	8.1290	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0000	2.05	87.8800	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	3.4870	ppm	0.0009	0.03	15250.0000	3.4870 (ppm)	Y_R 371.029
K (766.491 nm)	17.9400	ppm	0.0765	0.43	21490.0000	17.9400 (ppm)	Y_R 371.029
Li (670.783 nm)	1.5840	ppm	0.0024	0.15	108600.0000	1.5840 (ppm)	Y_R 371.029
Mg (279.078 nm)	121.8000	ppm	0.8264	0.68	311700.0000	121.8000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0444	ppm	0.0001	0.23	5594.0000	0.0444 (ppm)	Y 371.029
Mo (204.598 nm)	0.0025	ppm	0.0007	27.76	12.2600	0.0025 (ppm)	Y 371.029
Na (589.592 nm)	1309.0000 o	ppm	1.3540	0.10	9131000.0000	1309.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0014	ppm	0.0004	29.23	7.0530	0.0014 (ppm)	Y 371.029
P (213.618 nm)	0.2756	ppm	0.0103	3.72	242.5000	0.2756 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0031 u	ppm	0.0025	83.19	-12.1800	-0.0031 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0036 u	ppm	0.0062	> 100.00	-5.3040	-0.0036 u (ppm)	Y 371.029
Se (196.026 nm)	0.0041	ppm	0.0042	> 100.00	1.1500	0.0041 (ppm)	Y 371.029
Si (251.611 nm)	14.5800	ppm	0.0231	0.16	35600.0000	14.5800 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0041 u	ppm	0.0037	89.15	-6.0700	-0.0041 u (ppm)	Y 371.029
Sr (421.552 nm)	2.3140	ppm	0.0172	0.74	928300.0000	2.3140 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0000	4.61	-164.6000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017 u	ppm	0.0026	> 100.00	-1.0090	0.0017 u (ppm)	Y 371.029
V (292.401 nm)	-0.0002 u	ppm	0.0001	33.15	108.6000	-0.0002 u (ppm)	Y 371.029
W (207.912 nm)	-0.0050 u	ppm	0.0007	14.94	-17.5500	-0.0050 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0041 u	ppm	0.0001	1.54	24.4400	-0.0041 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0006	ppm	0.0001	8.83	49.3200	0.0006 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9095	390800.0000	0.0042	0.47
Y_R 371.029	0.9703	61290.0000	0.0051	0.52

Sample Name: 440-222369-N-14-A

Date: 10/19/2018 4:26:32 PM

Rack:Tube: 1:36

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	3.0360	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0088	ppm	0.0002	1.91	-1023.0000	0.0088 (ppm)	Y 371.029
As (188.980 nm)	0.0030	ppm	0.0008	27.59	7.7390	0.0030 (ppm)	Y 371.029
B (249.678 nm)	0.0106	ppm	0.0034	32.22	108.1000	0.0106 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	9.35	50.4600	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	79.95	11.2200	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0119	ppm	0.0073	61.07	144.5000	0.0119 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.7280	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0004	ppm	0.0004	> 100.00	-17.5200	0.0004 (ppm)	Y 371.029
Cr (205.560 nm)	0.0046	ppm	0.0006	12.25	26.0800	0.0046 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0013 u	ppm	0.0001	8.97	100.1000	-0.0013 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0237	ppm	0.0011	4.48	85.3600	0.0237 (ppm)	Y_R 371.029
K (766.491 nm)	0.0092 u	ppm	0.0387	> 100.00	-103.7000	0.0092 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0010	ppm	0.0007	64.41	119.3000	0.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0554	ppm	0.0312	56.24	147.7000	0.0554 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0011	ppm	0.0001	6.66	177.8000	0.0011 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002	ppm	0.0002	> 100.00	1.4200	0.0002 (ppm)	Y 371.029
Na (589.592 nm)	0.9070	ppm	0.0094	1.04	7636.0000	0.9070 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0016	ppm	0.0002	12.31	9.9810	0.0016 (ppm)	Y 371.029
P (213.618 nm)	0.0032	ppm	0.0013	40.09	-7.1770	0.0032 (ppm)	Y 371.029
Pb (220.353 nm)	0.0007	ppm	0.0002	32.63	-7.7650	0.0007 (ppm)	Y 371.029
Sb (206.834 nm)	0.0010 u	ppm	0.0041	> 100.00	-0.3748	0.0010 u (ppm)	Y 371.029
Se (196.026 nm)	0.0017	ppm	0.0021	> 100.00	0.2488	0.0017 (ppm)	Y 371.029
Si (251.611 nm)	0.0097	ppm	0.0036	37.00	72.5500	0.0097 (ppm)	Y 371.029
Sn (189.925 nm)	0.0017	ppm	0.0002	14.51	-2.4790	0.0017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0006	ppm	0.0000	1.56	171.8000	0.0006 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	5.79	-155.1000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0018	> 100.00	-3.1930	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0000	7.07	65.9400	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0003 u	ppm	0.0009	> 100.00	-6.4630	0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0005	ppm	0.0001	22.64	43.3900	0.0005 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	55.75	3.5490	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0480	450200.0000	0.0048	0.46
Y_R 371.029	1.0530	66500.0000	0.0071	0.68

Sample Name: 440-222369-N-1-A@10

Date: 10/19/2018 4:28:56 PM

Rack:Tube: 1:37

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	13.48	-18.9700	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0087	ppm	0.0002	2.06	-1010.0000	0.0087 (ppm)	Y 371.029
As (188.980 nm)	0.0032	ppm	0.0018	57.47	7.8500	0.0032 (ppm)	Y 371.029
B (249.678 nm)	0.1418	ppm	0.0004	0.29	1746.0000	0.1418 (ppm)	Y 371.029
Ba (233.527 nm)	0.0028	ppm	0.0000	0.74	267.1000	0.0028 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	12.71	9.0130	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	18.8800	ppm	0.0683	0.36	83620.0000	18.8800 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.8140	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0004	35.36	-7.3140	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0002	16.25	7.2960	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0000	4.77	110.6000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0158	ppm	0.0018	11.63	51.8100	0.0158 (ppm)	Y_R 371.029
K (766.491 nm)	1.2110	ppm	0.1033	8.53	1345.0000	1.2110 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0380	ppm	0.0004	0.93	2702.0000	0.0380 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6780	ppm	0.0577	0.75	19660.0000	7.6780 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0882	ppm	0.0003	0.39	9204.0000	0.0882 (ppm)	Y 371.029
Mo (204.598 nm)	0.0019	ppm	0.0002	9.38	9.1390	0.0019 (ppm)	Y 371.029
Na (589.592 nm)	57.7700	ppm	0.4165	0.72	404200.0000	57.7700 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0246	ppm	0.0004	1.63	127.5000	0.0246 (ppm)	Y 371.029
P (213.618 nm)	-0.0029 u	ppm	0.0006	21.13	-13.1000	-0.0029 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0013 u	ppm	0.0008	63.36	-11.3500	-0.0013 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0002 u	ppm	0.0003	> 100.00	-1.6050	-0.0002 u (ppm)	Y 371.029
Se (196.026 nm)	0.0029	ppm	0.0010	33.30	1.0800	0.0029 (ppm)	Y 371.029
Si (251.611 nm)	1.5390	ppm	0.0049	0.32	3800.0000	1.5390 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006	ppm	0.0006	> 100.00	-3.2090	0.0006 (ppm)	Y 371.029
Sr (421.552 nm)	0.2561	ppm	0.0007	0.29	102900.0000	0.2561 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	6.33	-178.6000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0009	ppm	0.0003	32.19	-2.4800	0.0009 (ppm)	Y 371.029
V (292.401 nm)	-0.0004 u	ppm	0.0000	5.22	71.1100	-0.0004 u (ppm)	Y 371.029
W (207.912 nm)	0.0000 u	ppm	0.0018	> 100.00	-7.2920	0.0000 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0058	ppm	0.0001	1.08	144.9000	0.0058 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	24.89	8.5630	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0330	443600.0000	0.0002	0.02
Y_R 371.029	1.0560	66720.0000	0.0048	0.45

Sample Name: 440-222369-N-1-B MS@10

Date: 10/19/2018 4:31:19 PM

Rack:Tube: 1:38

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0521	ppm	0.0004	0.79	2189.0000	0.0521 (ppm)	Y 371.029
Al (396.152 nm)	0.1219	ppm	0.0004	0.32	1531.0000	0.1219 (ppm)	Y 371.029
As (188.980 nm)	0.1089	ppm	0.0013	1.22	79.4400	0.1089 (ppm)	Y 371.029
B (249.678 nm)	0.2557	ppm	0.0015	0.60	3159.0000	0.2557 (ppm)	Y 371.029
Ba (233.527 nm)	0.1065	ppm	0.0003	0.24	8439.0000	0.1065 (ppm)	Y_R 371.029
Be (234.861 nm)	0.1063	ppm	0.0008	0.74	19580.0000	0.1063 (ppm)	Y 371.029
Ca (422.673 nm)	20.7000	ppm	0.0163	0.08	91680.0000	20.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.1045	ppm	0.0007	0.71	2421.0000	0.1045 (ppm)	Y 371.029
Co (228.615 nm)	0.1064	ppm	0.0002	0.23	1421.0000	0.1064 (ppm)	Y 371.029
Cr (205.560 nm)	0.1051	ppm	0.0004	0.40	561.7000	0.1051 (ppm)	Y 371.029
Cu (324.754 nm)	0.1073	ppm	0.0009	0.82	4410.0000	0.1073 (ppm)	Y 371.029
Fe (238.204 nm)	0.1255	ppm	0.0010	0.79	531.6000	0.1255 (ppm)	Y_R 371.029
K (766.491 nm)	2.3550	ppm	0.0034	0.14	2721.0000	2.3550 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1429	ppm	0.0004	0.31	9821.0000	0.1429 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.6410	ppm	0.0284	0.33	22120.0000	8.6410 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1987	ppm	0.0010	0.51	20670.0000	0.1987 (ppm)	Y 371.029
Mo (204.598 nm)	0.1091	ppm	0.0019	1.72	506.7000	0.1091 (ppm)	Y 371.029
Na (589.592 nm)	62.2200	ppm	0.1237	0.20	435200.0000	62.2200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1302	ppm	0.0011	0.81	668.4000	0.1302 (ppm)	Y 371.029
P (213.618 nm)	0.1071	ppm	0.0012	1.16	81.7900	0.1071 (ppm)	Y 371.029
Pb (220.353 nm)	0.1042	ppm	0.0018	1.76	191.7000	0.1042 (ppm)	Y 371.029
Sb (206.834 nm)	0.1123	ppm	0.0008	0.76	113.8000	0.1123 (ppm)	Y 371.029
Se (196.026 nm)	0.1082	ppm	0.0045	4.13	81.0100	0.1082 (ppm)	Y 371.029
Si (251.611 nm)	2.1550	ppm	0.0137	0.63	5320.0000	2.1550 (ppm)	Y 371.029
Sn (189.925 nm)	0.1071	ppm	0.0001	0.07	66.5000	0.1071 (ppm)	Y 371.029
Sr (421.552 nm)	0.3795	ppm	0.0003	0.08	152400.0000	0.3795 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.1064	ppm	0.0006	0.58	12950.0000	0.1064 (ppm)	Y 371.029
Tl (190.794 nm)	0.0996	ppm	0.0010	0.96	115.1000	0.0996 (ppm)	Y 371.029
V (292.401 nm)	0.1069	ppm	0.0002	0.19	3085.0000	0.1069 (ppm)	Y 371.029
W (207.912 nm)	0.1048	ppm	0.0025	2.36	190.8000	0.1048 (ppm)	Y 371.029
Zn (202.548 nm)	0.1047	ppm	0.0007	0.71	1955.0000	0.1047 (ppm)	Y 371.029
Zr (343.823 nm)	0.1009	ppm	0.0022	2.16	8489.0000	0.1009 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0310	443200.0000	0.0044	0.43
Y_R 371.029	1.0540	66600.0000	0.0050	0.48

Sample Name: 440-222369-N-1-C MSD@10

Date: 10/19/2018 4:33:43 PM

Rack:Tube: 1:39

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0485	ppm	0.0002	0.50	2041.0000	0.0485 (ppm)	Y 371.029
Al (396.152 nm)	0.1143	ppm	0.0001	0.05	1359.0000	0.1143 (ppm)	Y 371.029
As (188.980 nm)	0.0983	ppm	0.0017	1.74	72.2400	0.0983 (ppm)	Y 371.029
B (249.678 nm)	0.2411	ppm	0.0016	0.66	2978.0000	0.2411 (ppm)	Y 371.029
Ba (233.527 nm)	0.0986	ppm	0.0003	0.35	7816.0000	0.0986 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0993	ppm	0.0003	0.33	18300.0000	0.0993 (ppm)	Y 371.029
Ca (422.673 nm)	19.6500	ppm	0.0370	0.19	87020.0000	19.6500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0978	ppm	0.0002	0.23	2266.0000	0.0978 (ppm)	Y 371.029
Co (228.615 nm)	0.0992	ppm	0.0003	0.25	1323.0000	0.0992 (ppm)	Y 371.029
Cr (205.560 nm)	0.0983	ppm	0.0010	1.03	525.6000	0.0983 (ppm)	Y 371.029
Cu (324.754 nm)	0.0999	ppm	0.0004	0.42	4115.0000	0.0999 (ppm)	Y 371.029
Fe (238.204 nm)	0.1172	ppm	0.0020	1.69	495.5000	0.1172 (ppm)	Y_R 371.029
K (766.491 nm)	2.2240	ppm	0.0027	0.12	2563.0000	2.2240 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1343	ppm	0.0007	0.52	9229.0000	0.1343 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.1320	ppm	0.0362	0.45	20820.0000	8.1320 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1870	ppm	0.0007	0.37	19460.0000	0.1870 (ppm)	Y 371.029
Mo (204.598 nm)	0.1025	ppm	0.0007	0.70	475.9000	0.1025 (ppm)	Y 371.029
Na (589.592 nm)	58.8900	ppm	0.0357	0.06	412000.0000	58.8900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1232	ppm	0.0012	0.93	632.6000	0.1232 (ppm)	Y 371.029
P (213.618 nm)	0.1007	ppm	0.0002	0.19	76.3600	0.1007 (ppm)	Y 371.029
Pb (220.353 nm)	0.0956	ppm	0.0000	0.01	175.1000	0.0956 (ppm)	Y 371.029
Sb (206.834 nm)	0.1063	ppm	0.0018	1.71	107.8000	0.1063 (ppm)	Y 371.029
Se (196.026 nm)	0.0974	ppm	0.0048	4.95	72.8100	0.0974 (ppm)	Y 371.029
Si (251.611 nm)	2.0360	ppm	0.0082	0.40	5029.0000	2.0360 (ppm)	Y 371.029
Sn (189.925 nm)	0.1012	ppm	0.0019	1.84	62.6400	0.1012 (ppm)	Y 371.029
Sr (421.552 nm)	0.3591	ppm	0.0004	0.10	144200.0000	0.3591 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0997	ppm	0.0004	0.38	12120.0000	0.0997 (ppm)	Y 371.029
Tl (190.794 nm)	0.0926	ppm	0.0050	5.41	106.8000	0.0926 (ppm)	Y 371.029
V (292.401 nm)	0.1000	ppm	0.0004	0.41	2892.0000	0.1000 (ppm)	Y 371.029
W (207.912 nm)	0.0983	ppm	0.0005	0.50	178.6000	0.0983 (ppm)	Y 371.029
Zn (202.548 nm)	0.0972	ppm	0.0001	0.12	1818.0000	0.0972 (ppm)	Y 371.029
Zr (343.823 nm)	0.0975	ppm	0.0005	0.47	8198.0000	0.0975 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0310	442900.0000	0.0034	0.33
Y_R 371.029	1.0630	67130.0000	0.0043	0.41

Sample Name: 440-222369-N-1-D PDS@10

Date: 10/19/2018 4:36:07 PM

Rack:Tube: 1:40

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0496	ppm	0.0004	0.76	2088.0000	0.0496 (ppm)	Y 371.029
Al (396.152 nm)	0.1184	ppm	0.0000	0.02	1452.0000	0.1184 (ppm)	Y 371.029
As (188.980 nm)	0.1052	ppm	0.0005	0.51	76.9100	0.1052 (ppm)	Y 371.029
B (249.678 nm)	0.2385	ppm	0.0012	0.52	2946.0000	0.2385 (ppm)	Y 371.029
Ba (233.527 nm)	0.1030	ppm	0.0005	0.53	8160.0000	0.1030 (ppm)	Y_R 371.029
Be (234.861 nm)	0.1022	ppm	0.0005	0.48	18830.0000	0.1022 (ppm)	Y 371.029
Ca (422.673 nm)	18.7600	ppm	0.0727	0.39	83090.0000	18.7600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.1004	ppm	0.0005	0.51	2327.0000	0.1004 (ppm)	Y 371.029
Co (228.615 nm)	0.1020	ppm	0.0016	1.55	1361.0000	0.1020 (ppm)	Y 371.029
Cr (205.560 nm)	0.1018	ppm	0.0003	0.26	543.9000	0.1018 (ppm)	Y 371.029
Cu (324.754 nm)	0.1024	ppm	0.0001	0.08	4217.0000	0.1024 (ppm)	Y 371.029
Fe (238.204 nm)	0.1204	ppm	0.0044	3.62	509.4000	0.1204 (ppm)	Y_R 371.029
K (766.491 nm)	2.1570	ppm	0.0292	1.36	2483.0000	2.1570 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1333	ppm	0.0001	0.11	9160.0000	0.1333 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.9580	ppm	0.0359	0.45	20380.0000	7.9580 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1865	ppm	0.0008	0.40	19400.0000	0.1865 (ppm)	Y 371.029
Mo (204.598 nm)	0.1055	ppm	0.0013	1.25	490.2000	0.1055 (ppm)	Y 371.029
Na (589.592 nm)	56.5300	ppm	0.1990	0.35	395500.0000	56.5300 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.1243	ppm	0.0003	0.26	638.4000	0.1243 (ppm)	Y 371.029
P (213.618 nm)	0.1062	ppm	0.0020	1.91	81.2400	0.1062 (ppm)	Y 371.029
Pb (220.353 nm)	0.1004	ppm	0.0003	0.26	184.4000	0.1004 (ppm)	Y 371.029
Sb (206.834 nm)	0.1071	ppm	0.0001	0.07	108.5000	0.1071 (ppm)	Y 371.029
Se (196.026 nm)	0.1006	ppm	0.0011	1.07	75.2800	0.1006 (ppm)	Y 371.029
Si (251.611 nm)	2.0090	ppm	0.0041	0.21	4963.0000	2.0090 (ppm)	Y 371.029
Sn (189.925 nm)	0.1040	ppm	0.0027	2.61	64.5100	0.1040 (ppm)	Y 371.029
Sr (421.552 nm)	0.3485	ppm	0.0008	0.23	140000.0000	0.3485 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.1031	ppm	0.0004	0.39	12550.0000	0.1031 (ppm)	Y 371.029
Tl (190.794 nm)	0.1006	ppm	0.0016	1.60	116.5000	0.1006 (ppm)	Y 371.029
V (292.401 nm)	0.1032	ppm	0.0003	0.28	2980.0000	0.1032 (ppm)	Y 371.029
W (207.912 nm)	0.1019	ppm	0.0009	0.87	185.5000	0.1019 (ppm)	Y 371.029
Zn (202.548 nm)	0.1007	ppm	0.0004	0.38	1881.0000	0.1007 (ppm)	Y 371.029
Zr (343.823 nm)	0.1029	ppm	0.0001	0.14	8655.0000	0.1029 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0380	445800.0000	0.0139	1.34
Y_R 371.029	1.0540	66590.0000	0.0054	0.52

Sample Name: 440-222369-N-1-A sd@50

Date: 10/19/2018 4:38:31 PM

Rack:Tube: 1:41

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0002	> 100.00	3.2620	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0113	ppm	0.0001	0.52	-966.0000	0.0113 (ppm)	Y 371.029
As (188.980 nm)	0.0011	ppm	0.0001	6.98	6.4380	0.0011 (ppm)	Y 371.029
B (249.678 nm)	0.0291	ppm	0.0001	0.30	339.6000	0.0291 (ppm)	Y 371.029
Ba (233.527 nm)	0.0007	ppm	0.0000	4.27	93.4900	0.0007 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	8.18	17.2300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	3.7490	ppm	0.0016	0.04	16680.0000	3.7490 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	4.65	-1.1130	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0003	44.00	-12.7800	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	18.13	5.2730	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0016 u	ppm	0.0003	16.69	83.1600	-0.0016 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0046	ppm	0.0008	18.13	1.9910	0.0046 (ppm)	Y_R 371.029
K (766.491 nm)	0.1712	ppm	0.0071	4.14	91.8800	0.1712 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0043	ppm	0.0002	5.08	356.3000	0.0043 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.5190	ppm	0.0055	0.36	3894.0000	1.5190 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0178	ppm	0.0000	0.03	1905.0000	0.0178 (ppm)	Y 371.029
Mo (204.598 nm)	0.0009	ppm	0.0005	58.27	4.8530	0.0009 (ppm)	Y 371.029
Na (589.592 nm)	11.7600	ppm	0.0040	0.03	83340.0000	11.7600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0041	ppm	0.0001	3.33	22.7200	0.0041 (ppm)	Y 371.029
P (213.618 nm)	-0.0029 u	ppm	0.0005	16.46	-12.8600	-0.0029 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0009	97.72	-7.3510	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0008 u	ppm	0.0044	> 100.00	-0.5869	0.0008 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0011 u	ppm	0.0031	> 100.00	-1.8750	-0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	0.2989	ppm	0.0028	0.92	777.6000	0.2989 (ppm)	Y 371.029
Sn (189.925 nm)	0.0019	ppm	0.0013	67.89	-2.3330	0.0019 (ppm)	Y 371.029
Sr (421.552 nm)	0.0511	ppm	0.0001	0.13	20470.0000	0.0511 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	16.03	-147.2000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0010	ppm	0.0013	> 100.00	-2.4610	0.0010 (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	60.8300	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0014	> 100.00	-7.2440	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0011	ppm	0.0000	4.53	54.6600	0.0011 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	52.15	9.1370	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0510	451600.0000	0.0031	0.29
Y_R 371.029	1.0750	67900.0000	0.0030	0.28

Sample Name: 440-222369-N-3-A@10

Date: 10/19/2018 4:40:54 PM

Rack:Tube: 1:42

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	41.20	-16.1900	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0054	ppm	0.0003	5.69	-1068.0000	0.0054 (ppm)	Y 371.029
As (188.980 nm)	0.0019	ppm	0.0011	55.46	7.1020	0.0019 (ppm)	Y 371.029
B (249.678 nm)	0.6170	ppm	0.0101	1.64	7679.0000	0.6170 (ppm)	Y 371.029
Ba (233.527 nm)	0.0043	ppm	0.0000	0.17	379.3000	0.0043 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	7.73	37.8200	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	12.5300	ppm	0.0175	0.14	55530.0000	12.5300 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	16.16	-1.8760	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0004 u	ppm	0.0010	> 100.00	-16.0100	0.0004 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0001	38.16	3.2960	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0000	2.10	80.3000	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.9982	ppm	0.0020	0.20	4351.0000	0.9982 (ppm)	Y_R 371.029
K (766.491 nm)	1.8700	ppm	0.0107	0.57	2142.0000	1.8700 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1576	ppm	0.0009	0.59	10920.0000	0.1576 (ppm)	Y_R 371.029
Mg (279.078 nm)	24.5900	ppm	0.2961	1.20	62950.0000	24.5900 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0290	ppm	0.0003	1.07	3288.0000	0.0290 (ppm)	Y 371.029
Mo (204.598 nm)	0.0010	ppm	0.0010	99.21	5.0840	0.0010 (ppm)	Y 371.029
Na (589.592 nm)	172.0000	ppm	0.5250	0.31	1201000.0000	172.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004	ppm	0.0004	> 100.00	3.1940	0.0004 (ppm)	Y 371.029
P (213.618 nm)	0.0248	ppm	0.0009	3.74	12.4600	0.0248 (ppm)	Y 371.029
Pb (220.353 nm)	0.0004 u	ppm	0.0006	> 100.00	-7.8000	0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0010 u	ppm	0.0043	> 100.00	-0.4470	0.0010 u (ppm)	Y 371.029
Se (196.026 nm)	0.0046	ppm	0.0024	53.05	2.2110	0.0046 (ppm)	Y 371.029
Si (251.611 nm)	1.8170	ppm	0.0178	0.98	4481.0000	1.8170 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0004 u	ppm	0.0014	> 100.00	-3.7880	-0.0004 u (ppm)	Y 371.029
Sr (421.552 nm)	0.5512	ppm	0.0003	0.06	221200.0000	0.5512 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	6.37	-160.0000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0006 u	ppm	0.0016	> 100.00	-2.8050	0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0002	> 100.00	78.3700	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0004 u	ppm	0.0011	> 100.00	-8.0090	-0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0001 u	ppm	0.0003	> 100.00	45.0800	-0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	55.18	14.3300	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437500.0000	0.0016	0.15
Y_R 371.029	1.0640	67230.0000	0.0023	0.21

Sample Name: 440-222369-N-4-A@10

Date: 10/19/2018 4:43:18 PM

Rack:Tube: 1:43

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0002	59.06	13.3200	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0062	ppm	0.0005	8.54	-1080.0000	0.0062 (ppm)	Y 371.029
As (188.980 nm)	0.0028	ppm	0.0020	72.97	7.6260	0.0028 (ppm)	Y 371.029
B (249.678 nm)	0.0024	ppm	0.0011	47.03	5.4020	0.0024 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	41.20	47.7700	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	14.55	10.4700	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0061	ppm	0.0011	18.36	119.0000	0.0061 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.9210	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0003	35.48	-11.0200	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0003	61.73	4.0950	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0001	6.20	92.6800	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0028	ppm	0.0008	27.21	-6.1700	0.0028 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0795 u	ppm	0.0545	68.51	-210.2000	-0.0795 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0018	ppm	0.0003	17.14	170.0000	0.0018 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0134	ppm	0.0062	46.51	40.3000	0.0134 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0000	1.08	84.9600	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	0.0010	ppm	0.0005	54.00	5.0240	0.0010 (ppm)	Y 371.029
Na (589.592 nm)	0.2654	ppm	0.0081	3.07	3162.0000	0.2654 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002	ppm	0.0001	28.17	3.1160	0.0002 (ppm)	Y 371.029
P (213.618 nm)	-0.0010 u	ppm	0.0014	> 100.00	-11.0900	-0.0010 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0022	ppm	0.0001	5.95	-4.9290	0.0022 (ppm)	Y 371.029
Sb (206.834 nm)	0.0027	ppm	0.0037	> 100.00	1.3530	0.0027 (ppm)	Y 371.029
Se (196.026 nm)	0.0002 u	ppm	0.0020	> 100.00	-0.9087	0.0002 u (ppm)	Y 371.029
Si (251.611 nm)	0.0011	ppm	0.0006	49.88	51.7200	0.0011 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0015	49.66	-1.6260	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-47.3000	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	15.92	-156.0000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0021	ppm	0.0000	2.03	-1.0600	0.0021 (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0002	> 100.00	55.6900	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0005	ppm	0.0005	> 100.00	-5.9160	0.0005 (ppm)	Y 371.029
Zn (202.548 nm)	0.0027	ppm	0.0001	2.23	83.6500	0.0027 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	26.23	7.0310	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0670	458500.0000	0.0042	0.39
Y_R 371.029	1.0680	67480.0000	0.0029	0.28

Sample Name: 440-222369-N-6-A@10

Date: 10/19/2018 4:45:42 PM

Rack:Tube: 1:44

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	1.0380	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0099	ppm	0.0007	6.62	-984.9000	0.0099 (ppm)	Y 371.029
As (188.980 nm)	0.0057	ppm	0.0003	5.72	9.6940	0.0057 (ppm)	Y 371.029
B (249.678 nm)	0.7393	ppm	0.0142	1.92	9206.0000	0.7393 (ppm)	Y 371.029
Ba (233.527 nm)	0.0035	ppm	0.0001	1.94	317.3000	0.0035 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	12.8800	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	3.8610	ppm	0.0049	0.13	17180.0000	3.8610 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	92.00	-4.4930	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0000 u	ppm	0.0002	> 100.00	-22.9500	0.0000 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0001	22.59	4.6870	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0012 u	ppm	0.0001	7.36	99.7500	-0.0012 u (ppm)	Y 371.029
Fe (238.204 nm)	0.3609	ppm	0.0014	0.38	1562.0000	0.3609 (ppm)	Y_R 371.029
K (766.491 nm)	1.7030	ppm	0.0217	1.27	1936.0000	1.7030 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1500	ppm	0.0004	0.30	10340.0000	0.1500 (ppm)	Y_R 371.029
Mg (279.078 nm)	12.8400	ppm	0.1284	1.00	32880.0000	12.8400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0046	ppm	0.0000	0.68	639.8000	0.0046 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002 u	ppm	0.0005	> 100.00	1.5490	0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	165.3000	ppm	0.6298	0.38	1154000.0000	165.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0003	> 100.00	2.2580	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0287	ppm	0.0040	13.85	16.1700	0.0287 (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0018	> 100.00	-7.8340	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0004 u	ppm	0.0005	> 100.00	-1.8760	-0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.0018	ppm	0.0008	45.06	0.2037	0.0018 (ppm)	Y 371.029
Si (251.611 nm)	1.4360	ppm	0.0148	1.03	3550.0000	1.4360 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0005 u	ppm	0.0021	> 100.00	-3.9130	-0.0005 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2415	ppm	0.0026	1.09	96840.0000	0.2415 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	16.46	-157.9000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0012	ppm	0.0001	8.68	-2.0830	0.0012 (ppm)	Y 371.029
V (292.401 nm)	0.0000	ppm	0.0000	31.65	63.4600	0.0000 (ppm)	Y 371.029
W (207.912 nm)	-0.0003 u	ppm	0.0017	> 100.00	-7.3950	-0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0153	ppm	0.0002	1.60	318.5000	0.0153 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	30.09	6.1070	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440600.0000	0.0030	0.29
Y_R 371.029	1.0460	66070.0000	0.0078	0.75

Sample Name: CCV 5129881

Date: 10/19/2018 4:48:05 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5071	ppm	0.0015	0.30	21350.0000	0.5071 (ppm)	Y 371.029
Al (396.152 nm)	1.0520	ppm	0.0049	0.47	22420.0000	1.0520 (ppm)	Y 371.029
As (188.980 nm)	1.0130	ppm	0.0110	1.08	691.4000	1.0130 (ppm)	Y 371.029
B (249.678 nm)	1.0210	ppm	0.0093	0.91	12630.0000	1.0210 (ppm)	Y 371.029
Ba (233.527 nm)	1.0290	ppm	0.0191	1.86	81160.0000	1.0290 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0140	ppm	0.0053	0.52	186800.0000	1.0140 (ppm)	Y 371.029
Ca (422.673 nm)	5.1580	ppm	0.0117	0.23	22910.0000	5.1580 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0210	ppm	0.0051	0.50	23690.0000	1.0210 (ppm)	Y 371.029
Co (228.615 nm)	1.0220	ppm	0.0073	0.71	13830.0000	1.0220 (ppm)	Y 371.029
Cr (205.560 nm)	1.0220	ppm	0.0034	0.34	5447.0000	1.0220 (ppm)	Y 371.029
Cu (324.754 nm)	1.0150	ppm	0.0027	0.27	40630.0000	1.0150 (ppm)	Y 371.029
Fe (238.204 nm)	1.0410	ppm	0.0006	0.06	4534.0000	1.0410 (ppm)	Y_R 371.029
K (766.491 nm)	10.3000	ppm	0.0008	0.01	12270.0000	10.3000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0070	ppm	0.0002	0.02	68350.0000	1.0070 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.1980	ppm	0.1012	1.95	13310.0000	5.1980 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0220	ppm	0.0046	0.45	106200.0000	1.0220 (ppm)	Y 371.029
Mo (204.598 nm)	1.0260	ppm	0.0082	0.79	4761.0000	1.0260 (ppm)	Y 371.029
Na (589.592 nm)	10.4900	ppm	0.0060	0.06	74500.0000	10.4900 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0200	ppm	0.0031	0.31	5229.0000	1.0200 (ppm)	Y 371.029
P (213.618 nm)	0.9987	ppm	0.0078	0.79	849.3000	0.9987 (ppm)	Y 371.029
Pb (220.353 nm)	1.0240	ppm	0.0043	0.42	1961.0000	1.0240 (ppm)	Y 371.029
Sb (206.834 nm)	1.0070	ppm	0.0238	2.37	1032.0000	1.0070 (ppm)	Y 371.029
Se (196.026 nm)	1.0030	ppm	0.0071	0.71	760.6000	1.0030 (ppm)	Y 371.029
Si (251.611 nm)	5.0720	ppm	0.1136	2.24	12580.0000	5.0720 (ppm)	Y 371.029
Sn (189.925 nm)	1.0220	ppm	0.0071	0.70	665.6000	1.0220 (ppm)	Y 371.029
Sr (421.552 nm)	1.0460	ppm	0.0024	0.23	419500.0000	1.0460 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0210	ppm	0.0041	0.40	126000.0000	1.0210 (ppm)	Y 371.029
Tl (190.794 nm)	1.0180	ppm	0.0029	0.28	1212.0000	1.0180 (ppm)	Y 371.029
V (292.401 nm)	1.0250	ppm	0.0046	0.44	28830.0000	1.0250 (ppm)	Y 371.029
W (207.912 nm)	1.0220	ppm	0.0020	0.20	1927.0000	1.0220 (ppm)	Y 371.029
Zn (202.548 nm)	1.0230	ppm	0.0052	0.51	18750.0000	1.0230 (ppm)	Y 371.029
Zr (343.823 nm)	1.0220	ppm	0.0042	0.41	85960.0000	1.0220 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0250	440600.0000	0.0119	1.16
Y_R 371.029	1.0290	64990.0000	0.0127	1.23

Sample Name: CCB 5129880

Date: 10/19/2018 4:50:29 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0000	38.23	5.0070	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0037	ppm	0.0010	26.12	-1133.0000	0.0037 (ppm)	Y 371.029
As (188.980 nm)	0.0052	ppm	0.0008	15.87	9.2790	0.0052 (ppm)	Y 371.029
B (249.678 nm)	0.0034	ppm	0.0006	18.70	17.8700	0.0034 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0003	59.61	75.6800	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	47.96	94.4900	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0167	ppm	0.0082	49.50	165.7000	0.0167 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	39.05	7.6620	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0004	39.95	-9.7990	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0002	20.97	6.9580	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0006	56.67	110.7000	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0006	ppm	0.0002	39.07	-15.7800	0.0006 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0361 u	ppm	0.1321	> 100.00	-158.1000	-0.0361 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0032	ppm	0.0010	30.15	266.6000	0.0032 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0063	ppm	0.0024	37.73	21.9600	0.0063 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	36.58	131.0000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0007	48.86	6.9320	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.1876	ppm	0.0015	0.82	2619.0000	0.1876 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0001	10.90	4.4490	0.0005 (ppm)	Y 371.029
P (213.618 nm)	-0.0010 u	ppm	0.0005	45.92	-11.1200	-0.0010 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0001 u	ppm	0.0011	> 100.00	-8.9310	0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0020	ppm	0.0014	71.01	0.6284	0.0020 (ppm)	Y 371.029
Se (196.026 nm)	0.0024	ppm	0.0033	> 100.00	0.8038	0.0024 (ppm)	Y 371.029
Si (251.611 nm)	0.0052	ppm	0.0028	54.41	61.6000	0.0052 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032	ppm	0.0018	54.68	-1.4700	0.0032 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0001	27.47	65.8000	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0001	18.79	-80.2500	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0006 u	ppm	0.0029	> 100.00	-4.4210	-0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0006	ppm	0.0003	46.40	72.2400	0.0006 (ppm)	Y 371.029
W (207.912 nm)	0.0006 u	ppm	0.0010	> 100.00	-5.7910	0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0018	ppm	0.0003	16.36	67.3200	0.0018 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	19.03	32.9700	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0150	436000.0000	0.0033	0.33
Y_R 371.029	1.0230	64610.0000	0.0002	0.02

Sample Name: 440-222369-N-14-A

Date: 10/19/2018 4:52:52 PM

Rack:Tube: 1:53

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	1.0060	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0062	ppm	0.0001	1.96	-1080.0000	0.0062 (ppm)	Y 371.029
As (188.980 nm)	0.0068	ppm	0.0005	7.38	10.3600	0.0068 (ppm)	Y 371.029
B (249.678 nm)	0.0032	ppm	0.0002	6.46	15.3900	0.0032 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000	ppm	0.0000	43.50	44.8600	0.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	9.69	8.8000	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0115	ppm	0.0035	30.71	142.9000	0.0115 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	55.56	-1.3840	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0001	16.64	-12.6800	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0046	ppm	0.0001	1.83	25.9500	0.0046 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0001	5.60	92.4500	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0192	ppm	0.0006	3.08	65.8300	0.0192 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0646 u	ppm	0.0451	69.84	-192.3000	-0.0646 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0050	ppm	0.0002	3.24	390.0000	0.0050 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0036	ppm	0.0010	27.40	15.1100	0.0036 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0000	0.63	128.8000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0005	> 100.00	1.7320	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	0.1786	ppm	0.0007	0.42	2556.0000	0.1786 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0014	ppm	0.0002	17.07	9.0020	0.0014 (ppm)	Y 371.029
P (213.618 nm)	-0.0036 u	ppm	0.0022	61.77	-13.4600	-0.0036 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0020	ppm	0.0006	31.15	-5.2390	0.0020 (ppm)	Y 371.029
Sb (206.834 nm)	0.0024	ppm	0.0006	24.29	1.0740	0.0024 (ppm)	Y 371.029
Se (196.026 nm)	-0.0032 u	ppm	0.0011	34.30	-3.4390	-0.0032 u (ppm)	Y 371.029
Si (251.611 nm)	0.0055	ppm	0.0000	0.17	62.3200	0.0055 (ppm)	Y 371.029
Sn (189.925 nm)	0.0012	ppm	0.0017	> 100.00	-2.7680	0.0012 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	32.77	-24.7100	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	14.60	-151.2000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0001 u	ppm	0.0014	> 100.00	-3.8170	-0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0000	7.46	64.6900	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0013	ppm	0.0016	> 100.00	-4.5040	0.0013 (ppm)	Y 371.029
Zn (202.548 nm)	0.0006	ppm	0.0000	2.23	44.7600	0.0006 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	29.85	11.4800	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0130	435200.0000	0.0002	0.02
Y_R 371.029	1.0060	63560.0000	0.0023	0.23

Sample Name: 440-222369-N-4-A

Date: 10/19/2018 4:55:15 PM

Rack:Tube: 1:54

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-1.5410	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0054	ppm	0.0013	24.39	-1097.0000	0.0054 (ppm)	Y 371.029
As (188.980 nm)	0.0005 u	ppm	0.0038	> 100.00	6.0690	0.0005 u (ppm)	Y 371.029
B (249.678 nm)	0.0025	ppm	0.0002	6.54	7.3190	0.0025 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0001	87.29	47.1600	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	11.81	17.1900	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0120	ppm	0.0052	43.24	145.3000	0.0120 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.9040	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0006	93.06	-13.5600	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0000	2.45	4.5760	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0016 u	ppm	0.0002	10.25	86.8200	-0.0016 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0030	ppm	0.0004	12.98	-5.2870	0.0030 (ppm)	Y_R 371.029
K (766.491 nm)	-0.1011 u	ppm	0.0145	14.29	-236.2000	-0.1011 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0056	ppm	0.0004	6.75	433.2000	0.0056 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0030	ppm	0.0010	32.28	13.5200	0.0030 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	8.34	94.2600	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0004	ppm	0.0002	52.34	2.2560	0.0004 (ppm)	Y 371.029
Na (589.592 nm)	0.1663	ppm	0.0051	3.07	2471.0000	0.1663 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0001 u	ppm	0.0002	> 100.00	1.2250	-0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0026 u	ppm	0.0040	> 100.00	-7.7690	0.0026 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0006 u	ppm	0.0003	57.66	-10.2200	-0.0006 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0027 u	ppm	0.0046	> 100.00	1.3880	0.0027 u (ppm)	Y 371.029
Se (196.026 nm)	0.0002 u	ppm	0.0023	> 100.00	-0.8804	0.0002 u (ppm)	Y 371.029
Si (251.611 nm)	0.0065	ppm	0.0003	3.98	64.8700	0.0065 (ppm)	Y 371.029
Sn (189.925 nm)	0.0010	ppm	0.0008	78.65	-2.9130	0.0010 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0002	> 100.00	-63.8600	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	11.37	-156.7000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0020	> 100.00	-5.2370	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0004	> 100.00	53.9500	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0005	ppm	0.0003	51.89	-5.7190	0.0005 (ppm)	Y 371.029
Zn (202.548 nm)	0.0251	ppm	0.0000	0.06	488.2000	0.0251 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	43.98	7.3730	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437500.0000	0.0086	0.84
Y_R 371.029	1.0190	64380.0000	0.0025	0.24

Sample Name: 440-222369-N-7-A@10

Date: 10/19/2018 4:57:39 PM

Rack:Tube: 1:45

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	27.37	-13.3800	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0073	ppm	0.0002	2.18	-1040.0000	0.0073 (ppm)	Y 371.029
As (188.980 nm)	0.0017 u	ppm	0.0046	> 100.00	6.8660	0.0017 u (ppm)	Y 371.029
B (249.678 nm)	0.1475	ppm	0.0010	0.66	1818.0000	0.1475 (ppm)	Y 371.029
Ba (233.527 nm)	0.0030	ppm	0.0001	2.96	282.2000	0.0030 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	4.99	19.5200	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	19.6200	ppm	0.0921	0.47	86890.0000	19.6200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	25.24	-1.8130	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0005	48.59	-7.6900	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0002	29.10	4.6380	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0013 u	ppm	0.0000	1.93	81.1800	-0.0013 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0064	ppm	0.0017	26.56	10.5800	0.0064 (ppm)	Y_R 371.029
K (766.491 nm)	1.1140	ppm	0.1114	10.00	1228.0000	1.1140 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0361	ppm	0.0000	0.13	2570.0000	0.0361 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.1010	ppm	0.1055	1.49	18180.0000	7.1010 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0593	ppm	0.0004	0.60	6215.0000	0.0593 (ppm)	Y 371.029
Mo (204.598 nm)	0.0009	ppm	0.0003	29.42	4.7230	0.0009 (ppm)	Y 371.029
Na (589.592 nm)	57.1200	ppm	0.2003	0.35	399600.0000	57.1200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0121	ppm	0.0001	0.95	63.2500	0.0121 (ppm)	Y 371.029
P (213.618 nm)	-0.0002 u	ppm	0.0013	> 100.00	-10.6700	-0.0002 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0017 u	ppm	0.0001	6.90	-12.0700	-0.0017 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0044	ppm	0.0054	> 100.00	3.1880	0.0044 (ppm)	Y 371.029
Se (196.026 nm)	-0.0004 u	ppm	0.0033	> 100.00	-1.4830	-0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	1.4500	ppm	0.0097	0.67	3584.0000	1.4500 (ppm)	Y 371.029
Sn (189.925 nm)	0.0036	ppm	0.0017	47.54	-1.2270	0.0036 (ppm)	Y 371.029
Sr (421.552 nm)	0.2368	ppm	0.0003	0.15	95200.0000	0.2368 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	9.21	-163.8000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0012	> 100.00	-4.6450	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	-0.0005 u	ppm	0.0004	83.96	69.5700	-0.0005 u (ppm)	Y 371.029
W (207.912 nm)	-0.0011 u	ppm	0.0002	14.91	-9.4680	-0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0009	ppm	0.0000	1.79	55.4300	0.0009 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	45.34	9.5720	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431200.0000	0.0099	0.99
Y_R 371.029	1.0010	63210.0000	0.0100	1.00

Sample Name: 440-222369-N-8-A@10

Date: 10/19/2018 5:00:03 PM

Rack:Tube: 1:46

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	26.90	-10.9900	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0068	ppm	0.0007	10.33	-1050.0000	0.0068 (ppm)	Y 371.029
As (188.980 nm)	0.0006 u	ppm	0.0016	> 100.00	6.1250	0.0006 u (ppm)	Y 371.029
B (249.678 nm)	0.1202	ppm	0.0010	0.84	1478.0000	0.1202 (ppm)	Y 371.029
Ba (233.527 nm)	0.0028	ppm	0.0000	1.37	261.4000	0.0028 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	18.57	14.3100	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	19.5300	ppm	0.0882	0.45	86480.0000	19.5300 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.1770	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0003	47.31	-14.1800	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0002	28.98	5.8390	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0016 u	ppm	0.0003	16.99	70.4800	-0.0016 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0013	ppm	0.0015	> 100.00	-11.3500	0.0013 (ppm)	Y_R 371.029
K (766.491 nm)	1.3010	ppm	0.0015	0.11	1453.0000	1.3010 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0322	ppm	0.0003	1.08	2310.0000	0.0322 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.7170	ppm	0.0972	1.12	22320.0000	8.7170 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0360	ppm	0.0000	0.03	3816.0000	0.0360 (ppm)	Y 371.029
Mo (204.598 nm)	0.0016	ppm	0.0009	59.97	7.7880	0.0016 (ppm)	Y 371.029
Na (589.592 nm)	61.8800	ppm	0.1427	0.23	432800.0000	61.8800 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0066	ppm	0.0004	6.41	35.2700	0.0066 (ppm)	Y 371.029
P (213.618 nm)	0.0027 u	ppm	0.0057	> 100.00	-7.9640	0.0027 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0001 u	ppm	0.0015	> 100.00	-9.0060	-0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0023 u	ppm	0.0084	> 100.00	0.9444	0.0023 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0003 u	ppm	0.0043	> 100.00	-1.3830	-0.0003 u (ppm)	Y 371.029
Si (251.611 nm)	1.8210	ppm	0.0072	0.40	4487.0000	1.8210 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0002 u	ppm	0.0029	> 100.00	-3.6740	-0.0002 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2907	ppm	0.0015	0.53	116800.0000	0.2907 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	12.60	-176.5000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0006 u	ppm	0.0003	51.83	-4.4270	-0.0006 u (ppm)	Y 371.029
V (292.401 nm)	-0.0006 u	ppm	0.0001	10.01	66.2300	-0.0006 u (ppm)	Y 371.029
W (207.912 nm)	-0.0002 u	ppm	0.0012	> 100.00	-7.7930	-0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0001 u	ppm	0.0001	> 100.00	41.5800	0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	14.38	3.7970	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437300.0000	0.0065	0.64
Y_R 371.029	1.0220	64580.0000	0.0083	0.81

Sample Name: 440-222369-N-9-A@10

Date: 10/19/2018 5:02:27 PM

Rack:Tube: 1:47

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0000	14.62	-8.6030	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0057	ppm	0.0004	6.19	-1076.0000	0.0057 (ppm)	Y 371.029
As (188.980 nm)	0.0002 u	ppm	0.0020	> 100.00	5.8500	0.0002 u (ppm)	Y 371.029
B (249.678 nm)	0.1093	ppm	0.0010	0.95	1341.0000	0.1093 (ppm)	Y 371.029
Ba (233.527 nm)	0.0026	ppm	0.0001	1.97	247.5000	0.0026 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	3.5000	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	17.6700	ppm	0.0324	0.18	78280.0000	17.6700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	24.80	-2.2630	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0002	27.13	-10.1100	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0002	25.74	5.7770	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0000	1.90	78.7800	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0024	ppm	0.0014	60.34	-6.8940	0.0024 (ppm)	Y_R 371.029
K (766.491 nm)	1.1330	ppm	0.0408	3.60	1251.0000	1.1330 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0304	ppm	0.0011	3.70	2185.0000	0.0304 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.8970	ppm	0.0275	0.35	20220.0000	7.8970 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0330	ppm	0.0002	0.55	3504.0000	0.0330 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0006 u	ppm	0.0004	60.27	-2.2760	-0.0006 u (ppm)	Y 371.029
Na (589.592 nm)	55.7400	ppm	0.1131	0.20	390000.0000	55.7400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0051	ppm	0.0001	2.37	27.7900	0.0051 (ppm)	Y 371.029
P (213.618 nm)	-0.0013 u	ppm	0.0055	> 100.00	-11.5900	-0.0013 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0019	> 100.00	-8.8650	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0031	ppm	0.0036	> 100.00	1.8010	0.0031 (ppm)	Y 371.029
Se (196.026 nm)	0.0028	ppm	0.0005	18.00	0.9880	0.0028 (ppm)	Y 371.029
Si (251.611 nm)	1.6410	ppm	0.0120	0.73	4048.0000	1.6410 (ppm)	Y 371.029
Sn (189.925 nm)	0.0020	ppm	0.0016	79.77	-2.2700	0.0020 (ppm)	Y 371.029
Sr (421.552 nm)	0.2633	ppm	0.0006	0.23	105800.0000	0.2633 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	53.85	-178.9000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0001 u	ppm	0.0004	> 100.00	-3.6290	0.0001 u (ppm)	Y 371.029
V (292.401 nm)	-0.0006 u	ppm	0.0005	83.59	65.1500	-0.0006 u (ppm)	Y 371.029
W (207.912 nm)	-0.0015 u	ppm	0.0007	44.16	-10.1400	-0.0015 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0047	ppm	0.0001	2.80	123.8000	0.0047 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	31.30	13.8800	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437300.0000	0.0056	0.55
Y_R 371.029	1.0170	64240.0000	0.0030	0.29

Sample Name: 440-222369-N-10-A@10

Date: 10/19/2018 5:04:51 PM

Rack:Tube: 1:48

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	87.40	-8.9630	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0048	ppm	0.0005	9.42	-1096.0000	0.0048 (ppm)	Y 371.029
As (188.980 nm)	0.0050	ppm	0.0034	67.08	9.1260	0.0050 (ppm)	Y 371.029
B (249.678 nm)	0.1135	ppm	0.0015	1.32	1393.0000	0.1135 (ppm)	Y 371.029
Ba (233.527 nm)	0.0030	ppm	0.0000	0.36	279.2000	0.0030 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	5.0030	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	17.3500	ppm	0.0297	0.17	76840.0000	17.3500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-4.2300	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0007	> 100.00	-13.0300	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0002	22.82	6.4390	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0012 u	ppm	0.0000	1.76	89.3700	-0.0012 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0011 u	ppm	0.0001	6.67	-21.9900	-0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	1.0910	ppm	0.0270	2.48	1201.0000	1.0910 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0315	ppm	0.0016	5.11	2256.0000	0.0315 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6980	ppm	0.0402	0.52	19710.0000	7.6980 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0332	ppm	0.0003	0.77	3523.0000	0.0332 (ppm)	Y 371.029
Mo (204.598 nm)	0.0017	ppm	0.0000	2.19	8.5640	0.0017 (ppm)	Y 371.029
Na (589.592 nm)	55.6700	ppm	0.1075	0.19	389500.0000	55.6700 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0065	ppm	0.0000	0.33	34.6400	0.0065 (ppm)	Y 371.029
P (213.618 nm)	-0.0016 u	ppm	0.0101	> 100.00	-11.8500	-0.0016 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0007 u	ppm	0.0008	> 100.00	-10.2300	-0.0007 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0014 u	ppm	0.0104	> 100.00	0.0097	0.0014 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0011 u	ppm	0.0016	> 100.00	-1.9640	-0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	1.6070	ppm	0.0174	1.08	3967.0000	1.6070 (ppm)	Y 371.029
Sn (189.925 nm)	0.0024	ppm	0.0026	> 100.00	-1.9870	0.0024 (ppm)	Y 371.029
Sr (421.552 nm)	0.2499	ppm	0.0010	0.42	100400.0000	0.2499 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	60.66	-182.4000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0021 u	ppm	0.0031	> 100.00	-1.0810	0.0021 u (ppm)	Y 371.029
V (292.401 nm)	-0.0004 u	ppm	0.0001	15.59	68.9300	-0.0004 u (ppm)	Y 371.029
W (207.912 nm)	-0.0002 u	ppm	0.0027	> 100.00	-7.6690	-0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0003 u	ppm	0.0001	33.63	33.7800	-0.0003 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	79.58	10.3600	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0140	435700.0000	0.0091	0.90
Y_R 371.029	1.0010	63220.0000	0.0043	0.43

Sample Name: 440-222369-N-11-A@10

Date: 10/19/2018 5:07:14 PM

Rack:Tube: 1:49

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	14.16	-17.3700	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0054	ppm	0.0009	16.27	-1081.0000	0.0054 (ppm)	Y 371.029
As (188.980 nm)	0.0050	ppm	0.0003	6.23	9.1320	0.0050 (ppm)	Y 371.029
B (249.678 nm)	0.1093	ppm	0.0011	0.98	1342.0000	0.1093 (ppm)	Y 371.029
Ba (233.527 nm)	0.0024	ppm	0.0000	0.54	232.8000	0.0024 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	5.5060	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	18.5200	ppm	0.0370	0.20	82020.0000	18.5200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	39.56	-0.4542	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0002	19.95	-8.7290	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	10.59	5.3670	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0004	29.59	79.2000	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0014	ppm	0.0007	46.88	-10.9400	0.0014 (ppm)	Y_R 371.029
K (766.491 nm)	1.2640	ppm	0.0416	3.29	1409.0000	1.2640 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0347	ppm	0.0003	0.81	2479.0000	0.0347 (ppm)	Y_R 371.029
Mg (279.078 nm)	8.7050	ppm	0.0837	0.96	22290.0000	8.7050 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0330	ppm	0.0002	0.57	3504.0000	0.0330 (ppm)	Y 371.029
Mo (204.598 nm)	0.0019	ppm	0.0013	67.33	9.4260	0.0019 (ppm)	Y 371.029
Na (589.592 nm)	58.7200	ppm	0.0974	0.17	410800.0000	58.7200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0261	ppm	0.0006	2.19	135.3000	0.0261 (ppm)	Y 371.029
P (213.618 nm)	0.0064	ppm	0.0056	87.56	-4.5980	0.0064 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0019 u	ppm	0.0000	1.88	-12.4400	-0.0019 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0028 u	ppm	0.0067	> 100.00	-4.3260	-0.0028 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0011 u	ppm	0.0020	> 100.00	-1.9850	-0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	1.8930	ppm	0.0125	0.66	4664.0000	1.8930 (ppm)	Y 371.029
Sn (189.925 nm)	0.0005 u	ppm	0.0008	> 100.00	-3.2190	0.0005 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2947	ppm	0.0002	0.06	118400.0000	0.2947 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	25.62	-184.7000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004	ppm	0.0001	31.97	-3.2390	0.0004 (ppm)	Y 371.029
V (292.401 nm)	-0.0003 u	ppm	0.0000	11.78	73.5100	-0.0003 u (ppm)	Y 371.029
W (207.912 nm)	-0.0004 u	ppm	0.0006	> 100.00	-8.1240	-0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0005 u	ppm	0.0000	9.11	31.2000	-0.0005 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	49.67	5.0910	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0100	434000.0000	0.0106	1.05
Y_R 371.029	1.0490	66250.0000	0.0058	0.55

Sample Name: 440-222369-N-12-A@10

Date: 10/19/2018 5:09:39 PM

Rack:Tube: 1:50

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	22.67	-16.8900	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.0120	ppm	0.0009	7.66	-927.9000	0.0120 (ppm)	Y 371.029
As (188.980 nm)	0.0012 u	ppm	0.0045	> 100.00	6.4040	0.0012 u (ppm)	Y 371.029
B (249.678 nm)	0.2819	ppm	0.0038	1.33	3496.0000	0.2819 (ppm)	Y 371.029
Ba (233.527 nm)	0.0040	ppm	0.0001	2.87	357.3000	0.0040 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	7.6070	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	39.8000	ppm	0.2684	0.67	176200.0000	39.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.6140	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0004	32.04	-3.8630	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.0015	ppm	0.0002	10.77	10.0100	0.0015 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0002	18.83	81.7400	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0348	ppm	0.0010	2.74	135.6000	0.0348 (ppm)	Y_R 371.029
K (766.491 nm)	3.6000	ppm	0.0139	0.39	4220.0000	3.6000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1834	ppm	0.0018	0.99	12670.0000	0.1834 (ppm)	Y_R 371.029
Mg (279.078 nm)	11.9000	ppm	0.0832	0.70	30470.0000	11.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0850	ppm	0.0009	1.02	8888.0000	0.0850 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0004	33.19	6.5670	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	64.0200	ppm	0.5277	0.82	447700.0000	64.0200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0211	ppm	0.0001	0.64	109.3000	0.0211 (ppm)	Y 371.029
P (213.618 nm)	-0.0065 u	ppm	0.0012	17.78	-16.6500	-0.0065 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0008	> 100.00	-7.4940	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0016 u	ppm	0.0027	> 100.00	0.3493	0.0016 u (ppm)	Y 371.029
Se (196.026 nm)	0.0019	ppm	0.0000	0.27	0.1301	0.0019 (ppm)	Y 371.029
Si (251.611 nm)	1.7230	ppm	0.0127	0.74	4252.0000	1.7230 (ppm)	Y 371.029
Sn (189.925 nm)	0.0039	ppm	0.0015	38.18	-1.0330	0.0039 (ppm)	Y 371.029
Sr (421.552 nm)	0.6876	ppm	0.0039	0.56	276300.0000	0.6876 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	29.01	-203.4000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002	ppm	0.0001	64.01	-3.5550	0.0002 (ppm)	Y 371.029
V (292.401 nm)	-0.0014 u	ppm	0.0002	16.34	72.0900	-0.0014 u (ppm)	Y 371.029
W (207.912 nm)	-0.0006 u	ppm	0.0015	> 100.00	-8.9010	-0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0043	ppm	0.0002	3.59	120.1000	0.0043 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	3.71	11.8600	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0540	453000.0000	0.0172	1.64
Y_R 371.029	1.0950	69150.0000	0.0135	1.23

Sample Name: 440-222369-N-13-A@10

Date: 10/19/2018 5:12:03 PM

Rack:Tube: 1:51

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-4.8710	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0106	ppm	0.0004	3.75	-968.9000	0.0106 (ppm)	Y 371.029
As (188.980 nm)	0.0017 u	ppm	0.0064	> 100.00	6.8570	0.0017 u (ppm)	Y 371.029
B (249.678 nm)	0.1297	ppm	0.0005	0.39	1596.0000	0.1297 (ppm)	Y 371.029
Ba (233.527 nm)	0.0028	ppm	0.0000	0.06	266.6000	0.0028 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	1.8360	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	15.0300	ppm	0.0571	0.38	66600.0000	15.0300 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.0170	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0014	ppm	0.0000	2.80	-3.1660	0.0014 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0002	18.89	6.3580	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0001	11.94	101.3000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0069	ppm	0.0010	14.11	13.0200	0.0069 (ppm)	Y_R 371.029
K (766.491 nm)	1.2040	ppm	0.0018	0.15	1337.0000	1.2040 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0418	ppm	0.0016	3.94	2953.0000	0.0418 (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6250	ppm	0.0797	1.05	19520.0000	7.6250 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0490	ppm	0.0001	0.18	5154.0000	0.0490 (ppm)	Y 371.029
Mo (204.598 nm)	0.0057	ppm	0.0001	2.55	26.8800	0.0057 (ppm)	Y 371.029
Na (589.592 nm)	56.8800	ppm	0.0827	0.15	397900.0000	56.8800 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0585	ppm	0.0002	0.42	301.6000	0.0585 (ppm)	Y 371.029
P (213.618 nm)	0.0012 u	ppm	0.0035	> 100.00	-9.2790	0.0012 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0010	ppm	0.0001	7.24	-6.9250	0.0010 (ppm)	Y 371.029
Sb (206.834 nm)	0.0001 u	ppm	0.0015	> 100.00	-1.3890	0.0001 u (ppm)	Y 371.029
Se (196.026 nm)	0.0030	ppm	0.0021	70.48	1.1130	0.0030 (ppm)	Y 371.029
Si (251.611 nm)	1.3860	ppm	0.0090	0.65	3427.0000	1.3860 (ppm)	Y 371.029
Sn (189.925 nm)	0.0034	ppm	0.0014	40.07	-1.3640	0.0034 (ppm)	Y 371.029
Sr (421.552 nm)	0.2280	ppm	0.0012	0.52	91600.0000	0.2280 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	15.25	-171.0000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0003 u	ppm	0.0002	82.54	-3.9710	-0.0003 u (ppm)	Y 371.029
V (292.401 nm)	-0.0004 u	ppm	0.0002	52.13	64.8600	-0.0004 u (ppm)	Y 371.029
W (207.912 nm)	0.0004 u	ppm	0.0016	> 100.00	-6.2460	0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0302	ppm	0.0001	0.19	585.9000	0.0302 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	15.51	10.9500	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0770	462800.0000	0.0036	0.33
Y_R 371.029	1.0970	69270.0000	0.0094	0.86

Sample Name: 440-222360-S-5-B@5

Date: 10/19/2018 5:14:26 PM

Rack:Tube: 1:52

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0002	71.50	15.4100	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	2.4280	ppm	0.0129	0.53	51640.0000	2.4280 (ppm)	Y 371.029
As (188.980 nm)	0.0059	ppm	0.0039	66.62	9.4210	0.0059 (ppm)	Y 371.029
B (249.678 nm)	0.1640	ppm	0.0026	1.61	2013.0000	0.1640 (ppm)	Y 371.029
Ba (233.527 nm)	0.0076	ppm	0.0002	2.16	650.2000	0.0076 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0008	ppm	0.0000	1.14	147.4000	0.0008 (ppm)	Y 371.029
Ca (422.673 nm)	95.3600	ppm	0.0316	0.03	421900.0000	95.3600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0340	ppm	0.0003	0.80	786.8000	0.0340 (ppm)	Y 371.029
Co (228.615 nm)	0.0552	ppm	0.0002	0.34	726.7000	0.0552 (ppm)	Y 371.029
Cr (205.560 nm)	0.0039	ppm	0.0001	1.37	25.5500	0.0039 (ppm)	Y 371.029
Cu (324.754 nm)	0.0008	ppm	0.0002	20.63	103.7000	0.0008 (ppm)	Y 371.029
Fe (238.204 nm)	0.0307	ppm	0.0018	6.01	121.6000	0.0307 (ppm)	Y_R 371.029
K (766.491 nm)	3.4270	ppm	0.0842	2.46	4024.0000	3.4270 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0686	ppm	0.0008	1.22	4549.0000	0.0686 (ppm)	Y_R 371.029
Mg (279.078 nm)	42.0300	ppm	0.1792	0.43	107600.0000	42.0300 (ppm)	Y_R 371.029
Mn (259.372 nm)	13.3500	ppm	0.0862	0.65	1378000.0000	13.3500 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0006	> 100.00	3.7400	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	46.1400	ppm	0.1761	0.38	323100.0000	46.1400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.3480	ppm	0.0021	0.60	1780.0000	0.3480 (ppm)	Y 371.029
P (213.618 nm)	0.0001 u	ppm	0.0038	> 100.00	-13.1200	0.0001 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0020 u	ppm	0.0010	51.96	-5.7150	-0.0020 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0029	ppm	0.0016	53.27	0.8690	0.0029 (ppm)	Y 371.029
Se (196.026 nm)	0.0060	ppm	0.0001	1.13	8.8580	0.0060 (ppm)	Y 371.029
Si (251.611 nm)	5.9060	ppm	0.0494	0.84	14460.0000	5.9060 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0023 u	ppm	0.0010	45.00	-4.5650	-0.0023 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2391	ppm	0.0014	0.60	97300.0000	0.2391 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0001	7.07	-169.5000	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0043 u	ppm	0.0015	35.91	15.3300	-0.0043 u (ppm)	Y 371.029
V (292.401 nm)	-0.0036 u	ppm	0.0002	5.22	95.5400	-0.0036 u (ppm)	Y 371.029
W (207.912 nm)	0.0005	ppm	0.0002	43.55	-4.4000	0.0005 (ppm)	Y 371.029
Zn (202.548 nm)	0.3897	ppm	0.0023	0.59	7141.0000	0.3897 (ppm)	Y 371.029
Zr (343.823 nm)	0.0010	ppm	0.0001	11.74	61.3800	0.0010 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0580	454800.0000	0.0047	0.44
Y_R 371.029	1.1030	69680.0000	0.0070	0.63

Sample Name: CCV 5129881

Date: 10/19/2018 5:16:49 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5100	ppm	0.0015	0.29	21480.0000	0.5100 (ppm)	Y 371.029
Al (396.152 nm)	1.0690	ppm	0.0035	0.33	22810.0000	1.0690 (ppm)	Y 371.029
As (188.980 nm)	1.0110	ppm	0.0034	0.33	689.7000	1.0110 (ppm)	Y 371.029
B (249.678 nm)	1.0280	ppm	0.0066	0.64	12730.0000	1.0280 (ppm)	Y 371.029
Ba (233.527 nm)	1.0040	ppm	0.0043	0.43	79190.0000	1.0040 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0150	ppm	0.0020	0.19	186900.0000	1.0150 (ppm)	Y 371.029
Ca (422.673 nm)	5.1130	ppm	0.0211	0.41	22710.0000	5.1130 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0100	ppm	0.0002	0.02	23420.0000	1.0100 (ppm)	Y 371.029
Co (228.615 nm)	1.0150	ppm	0.0041	0.41	13740.0000	1.0150 (ppm)	Y 371.029
Cr (205.560 nm)	1.0170	ppm	0.0010	0.10	5420.0000	1.0170 (ppm)	Y 371.029
Cu (324.754 nm)	1.0320	ppm	0.0030	0.29	41310.0000	1.0320 (ppm)	Y 371.029
Fe (238.204 nm)	1.0210	ppm	0.0027	0.26	4445.0000	1.0210 (ppm)	Y_R 371.029
K (766.491 nm)	10.1700	ppm	0.0358	0.35	12110.0000	10.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0080	ppm	0.0014	0.13	68380.0000	1.0080 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0490	ppm	0.0340	0.67	12930.0000	5.0490 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0250	ppm	0.0018	0.18	106500.0000	1.0250 (ppm)	Y 371.029
Mo (204.598 nm)	1.0210	ppm	0.0044	0.43	4737.0000	1.0210 (ppm)	Y 371.029
Na (589.592 nm)	10.2500	ppm	0.0267	0.26	72880.0000	10.2500 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0120	ppm	0.0002	0.02	5185.0000	1.0120 (ppm)	Y 371.029
P (213.618 nm)	1.0030	ppm	0.0026	0.26	852.9000	1.0030 (ppm)	Y 371.029
Pb (220.353 nm)	1.0180	ppm	0.0022	0.21	1950.0000	1.0180 (ppm)	Y 371.029
Sb (206.834 nm)	1.0200	ppm	0.0100	0.98	1045.0000	1.0200 (ppm)	Y 371.029
Se (196.026 nm)	1.0110	ppm	0.0026	0.26	766.7000	1.0110 (ppm)	Y 371.029
Si (251.611 nm)	5.1070	ppm	0.0862	1.69	12670.0000	5.1070 (ppm)	Y 371.029
Sn (189.925 nm)	1.0170	ppm	0.0010	0.10	662.2000	1.0170 (ppm)	Y 371.029
Sr (421.552 nm)	1.0250	ppm	0.0187	1.82	411100.0000	1.0250 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0220	ppm	0.0024	0.23	126100.0000	1.0220 (ppm)	Y 371.029
Tl (190.794 nm)	1.0200	ppm	0.0004	0.04	1215.0000	1.0200 (ppm)	Y 371.029
V (292.401 nm)	1.0240	ppm	0.0020	0.19	28800.0000	1.0240 (ppm)	Y 371.029
W (207.912 nm)	1.0180	ppm	0.0035	0.35	1918.0000	1.0180 (ppm)	Y 371.029
Zn (202.548 nm)	1.0090	ppm	0.0011	0.11	18490.0000	1.0090 (ppm)	Y 371.029
Zr (343.823 nm)	1.0210	ppm	0.0025	0.24	85900.0000	1.0210 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0750	461900.0000	0.0067	0.62
Y_R 371.029	1.1010	69530.0000	0.0002	0.01

Sample Name: CCB 5129880

Date: 10/19/2018 5:19:12 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002 u	ppm	0.0003	> 100.00	8.0590	0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0099	ppm	0.0005	4.58	-998.8000	0.0099 (ppm)	Y 371.029
As (188.980 nm)	0.0027	ppm	0.0032	> 100.00	7.5480	0.0027 (ppm)	Y 371.029
B (249.678 nm)	0.0033	ppm	0.0008	23.61	17.2200	0.0033 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0002	47.59	72.8000	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	55.15	82.6500	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0208	ppm	0.0067	32.22	184.0000	0.0208 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0003	69.30	5.1120	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0006	80.02	-13.1300	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0005	57.45	5.9190	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0003	31.29	119.3000	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0009	ppm	0.0012	> 100.00	-14.1700	0.0009 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0740 u	ppm	0.0126	17.08	-203.6000	-0.0740 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0006	ppm	0.0008	> 100.00	92.9000	0.0006 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0085	ppm	0.0003	3.94	27.7200	0.0085 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0015	ppm	0.0006	44.67	214.7000	0.0015 (ppm)	Y 371.029
Mo (204.598 nm)	0.0011	ppm	0.0008	73.47	5.4840	0.0011 (ppm)	Y 371.029
Na (589.592 nm)	0.0932	ppm	0.0016	1.76	1961.0000	0.0932 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0000	1.82	4.4000	0.0005 (ppm)	Y 371.029
P (213.618 nm)	-0.0041 u	ppm	0.0010	24.69	-13.9000	-0.0041 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0005	40.27	-6.7990	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0020	ppm	0.0003	12.80	0.5995	0.0020 (ppm)	Y 371.029
Se (196.026 nm)	0.0018	ppm	0.0010	53.34	0.3493	0.0018 (ppm)	Y 371.029
Si (251.611 nm)	0.0034	ppm	0.0024	69.64	57.2100	0.0034 (ppm)	Y 371.029
Sn (189.925 nm)	0.0042	ppm	0.0021	50.76	-0.8401	0.0042 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	28.86	16.0500	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0002	28.26	-71.5600	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	0.0003	ppm	0.0003	92.26	-3.3090	0.0003 (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0002	92.60	63.6200	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0013 u	ppm	0.0020	> 100.00	-4.5200	0.0013 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0002	9.03	68.9500	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0003	52.84	36.5200	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0760	462100.0000	0.0034	0.32
Y_R 371.029	1.0850	68530.0000	0.0085	0.78

Sample Name: 440-222369-N-5-A@10

Date: 10/19/2018 5:21:36 PM

Rack:Tube: 1:55

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0004	> 100.00	3.9120	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0056	ppm	0.0001	1.97	-1079.0000	0.0056 (ppm)	Y 371.029
As (188.980 nm)	0.0038	ppm	0.0032	85.81	8.3350	0.0038 (ppm)	Y 371.029
B (249.678 nm)	0.7090	ppm	0.0104	1.46	8829.0000	0.7090 (ppm)	Y 371.029
Ba (233.527 nm)	0.0034	ppm	0.0000	0.90	309.2000	0.0034 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	34.05	30.9400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	3.7410	ppm	0.0113	0.30	16650.0000	3.7410 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	10.14	-1.1690	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0002	41.55	-16.1400	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0001	20.82	3.3040	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0000	3.91	109.4000	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.3518	ppm	0.0008	0.23	1522.0000	0.3518 (ppm)	Y_R 371.029
K (766.491 nm)	1.5900	ppm	0.0482	3.03	1800.0000	1.5900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1449	ppm	0.0003	0.23	9989.0000	0.1449 (ppm)	Y_R 371.029
Mg (279.078 nm)	12.3600	ppm	0.0199	0.16	31650.0000	12.3600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0050	ppm	0.0000	0.03	674.5000	0.0050 (ppm)	Y 371.029
Mo (204.598 nm)	0.0007	ppm	0.0002	24.79	3.7550	0.0007 (ppm)	Y 371.029
Na (589.592 nm)	157.9000	ppm	0.1125	0.07	1102000.0000	157.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0002	38.38	4.3800	0.0005 (ppm)	Y 371.029
P (213.618 nm)	0.0271	ppm	0.0053	19.72	14.7000	0.0271 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0004 u	ppm	0.0022	> 100.00	-9.5900	-0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0013 u	ppm	0.0018	> 100.00	-2.8020	-0.0013 u (ppm)	Y 371.029
Se (196.026 nm)	0.0024	ppm	0.0014	58.66	0.6728	0.0024 (ppm)	Y 371.029
Si (251.611 nm)	1.3980	ppm	0.0099	0.71	3457.0000	1.3980 (ppm)	Y 371.029
Sn (189.925 nm)	0.0022	ppm	0.0001	3.43	-2.1150	0.0022 (ppm)	Y 371.029
Sr (421.552 nm)	0.2321	ppm	0.0008	0.35	93080.0000	0.2321 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	6.52	-141.8000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0008	> 100.00	-3.6580	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0003	> 100.00	64.6800	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0005 u	ppm	0.0003	63.02	-8.1090	-0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0009 u	ppm	0.0001	8.01	24.1800	-0.0009 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0003	77.20	26.1900	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0280	441800.0000	0.0050	0.48
Y_R 371.029	1.0490	66260.0000	0.0006	0.06

Sample Name: 440-222474-T-1-B@10

Date: 10/19/2018 5:23:59 PM

Rack:Tube: 1:56

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0030 u	ppm	0.0004	13.94	-27.9700	-0.0030 u (ppm)	Y 371.029
Al (396.152 nm)	17.7500	ppm	0.0969	0.55	384800.0000	17.7500 (ppm)	Y 371.029
As (188.980 nm)	0.0139	ppm	0.0010	7.16	14.8100	0.0139 (ppm)	Y 371.029
B (249.678 nm)	0.2479	ppm	0.0008	0.30	3041.0000	0.2479 (ppm)	Y 371.029
Ba (233.527 nm)	0.0044	ppm	0.0000	0.76	393.1000	0.0044 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0027	ppm	0.0000	0.18	483.9000	0.0027 (ppm)	Y 371.029
Ca (422.673 nm)	53.0500	ppm	0.0011	0.00	234800.0000	53.0500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0987	ppm	0.0008	0.76	2287.0000	0.0987 (ppm)	Y 371.029
Co (228.615 nm)	0.1707	ppm	0.0018	1.06	2290.0000	0.1707 (ppm)	Y 371.029
Cr (205.560 nm)	0.0554	ppm	0.0002	0.44	301.4000	0.0554 (ppm)	Y 371.029
Cu (324.754 nm)	0.0423	ppm	0.0002	0.46	1814.0000	0.0423 (ppm)	Y 371.029
Fe (238.204 nm)	0.5662	ppm	0.0034	0.60	2467.0000	0.5662 (ppm)	Y_R 371.029
K (766.491 nm)	3.8130	ppm	0.0088	0.23	4484.0000	3.8130 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1033	ppm	0.0013	1.22	6218.0000	0.1033 (ppm)	Y_R 371.029
Mg (279.078 nm)	73.1800	ppm	0.0235	0.03	187400.0000	73.1800 (ppm)	Y_R 371.029
Mn (259.372 nm)	32.8400 o	ppm	0.1586	0.48	3390000.0000	32.8400 o (ppm)	Y 371.029
Mo (204.598 nm)	-0.0002 u	ppm	0.0006	> 100.00	6.4160	-0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	75.8900	ppm	0.0619	0.08	530600.0000	75.8900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9898	ppm	0.0060	0.61	5066.0000	0.9898 (ppm)	Y 371.029
P (213.618 nm)	-0.0014 u	ppm	0.0011	77.66	-18.1300	-0.0014 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0032 u	ppm	0.0000	0.97	-0.7281	-0.0032 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0026 u	ppm	0.0023	88.60	-6.0890	-0.0026 u (ppm)	Y 371.029
Se (196.026 nm)	0.0022	ppm	0.0008	37.40	14.7800	0.0022 (ppm)	Y 371.029
Si (251.611 nm)	2.4900	ppm	0.0262	1.05	6158.0000	2.4900 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0013 u	ppm	0.0019	> 100.00	-3.1810	-0.0013 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2877	ppm	0.0001	0.03	116100.0000	0.2877 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0000	> 100.00	-217.8000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0160 u	ppm	0.0009	5.55	37.4700	-0.0160 u (ppm)	Y 371.029
V (292.401 nm)	-0.0022 u	ppm	0.0003	14.28	88.1800	-0.0022 u (ppm)	Y 371.029
W (207.912 nm)	0.0020	ppm	0.0005	23.21	15.3000	0.0020 (ppm)	Y 371.029
Zn (202.548 nm)	1.9290	ppm	0.0138	0.72	35100.0000	1.9290 (ppm)	Y 371.029
Zr (343.823 nm)	0.0016	ppm	0.0001	7.90	58.8900	0.0016 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0980	471700.0000	0.0039	0.36
Y_R 371.029	1.1250	71090.0000	0.0116	1.03

Sample Name: 440-222474-n-1-c@10

Date: 10/19/2018 5:26:23 PM

Rack:Tube: 1:57

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0030 u	ppm	0.0001	3.74	-37.9700	-0.0030 u (ppm)	Y 371.029
Al (396.152 nm)	15.7000	ppm	0.1136	0.72	340100.0000	15.7000 (ppm)	Y 371.029
As (188.980 nm)	0.0090	ppm	0.0029	32.71	11.4900	0.0090 (ppm)	Y 371.029
B (249.678 nm)	0.2224	ppm	0.0020	0.88	2725.0000	0.2224 (ppm)	Y 371.029
Ba (233.527 nm)	0.0039	ppm	0.0000	0.52	356.5000	0.0039 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0023	ppm	0.0000	0.16	415.8000	0.0023 (ppm)	Y 371.029
Ca (422.673 nm)	48.2700	ppm	0.0911	0.19	213600.0000	48.2700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0884	ppm	0.0003	0.38	2049.0000	0.0884 (ppm)	Y 371.029
Co (228.615 nm)	0.1528	ppm	0.0010	0.64	2047.0000	0.1528 (ppm)	Y 371.029
Cr (205.560 nm)	0.0471	ppm	0.0005	0.97	256.5000	0.0471 (ppm)	Y 371.029
Cu (324.754 nm)	0.0370	ppm	0.0001	0.38	1606.0000	0.0370 (ppm)	Y 371.029
Fe (238.204 nm)	0.4682	ppm	0.0023	0.48	2037.0000	0.4682 (ppm)	Y_R 371.029
K (766.491 nm)	3.4570	ppm	0.0327	0.95	4054.0000	3.4570 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0942	ppm	0.0017	1.85	5673.0000	0.0942 (ppm)	Y_R 371.029
Mg (279.078 nm)	65.2700	ppm	0.0427	0.07	167100.0000	65.2700 (ppm)	Y_R 371.029
Mn (259.372 nm)	29.7900 o	ppm	0.1393	0.47	3075000.0000	29.7900 o (ppm)	Y 371.029
Mo (204.598 nm)	-0.0005 u	ppm	0.0004	74.48	4.1840	-0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	69.2300	ppm	0.1948	0.28	484200.0000	69.2300 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8782	ppm	0.0038	0.44	4495.0000	0.8782 (ppm)	Y 371.029
P (213.618 nm)	-0.0011 u	ppm	0.0021	> 100.00	-17.1700	-0.0011 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0024 u	ppm	0.0009	35.75	-0.5514	-0.0024 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0013 u	ppm	0.0006	45.21	-4.5270	-0.0013 u (ppm)	Y 371.029
Se (196.026 nm)	0.0012	ppm	0.0008	61.47	12.7600	0.0012 (ppm)	Y 371.029
Si (251.611 nm)	2.2220	ppm	0.0088	0.40	5499.0000	2.2220 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0035 u	ppm	0.0003	7.36	-4.7270	-0.0035 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2618	ppm	0.0004	0.16	105700.0000	0.2618 (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	12.83	-226.7000	-0.0001 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0145 u	ppm	0.0008	5.81	33.7300	-0.0145 u (ppm)	Y 371.029
V (292.401 nm)	-0.0019 u	ppm	0.0001	3.55	87.5000	-0.0019 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0004	29.76	12.3200	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	1.7280	ppm	0.0057	0.33	31430.0000	1.7280 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0001	16.43	-5.3430	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0880	467500.0000	0.0014	0.13
Y_R 371.029	1.1210	70780.0000	0.0035	0.32

Sample Name: MB 440-505595/1-A@20

Date: 10/19/2018 5:31:49 PM

Rack:Tube: 4:2

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0001	12.34	27.2000	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	0.0028	ppm	0.0008	28.06	-1153.0000	0.0028 (ppm)	Y 371.029
As (188.980 nm)	0.0052	ppm	0.0016	31.80	9.2390	0.0052 (ppm)	Y 371.029
B (249.678 nm)	0.0037	ppm	0.0000	0.59	21.8100	0.0037 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	21.78	40.0200	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	72.54	12.9700	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	-0.0062 u	ppm	0.0033	53.05	64.4300	-0.0062 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-4.1060	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0001	15.04	-14.8900	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0001	27.42	4.2320	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0000	5.30	134.1000	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0001 u	ppm	0.0018	> 100.00	-18.7600	-0.0001 u (ppm)	Y_R 371.029
K (766.491 nm)	0.0577	ppm	0.0333	57.65	-45.3700	0.0577 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0008	> 100.00	43.5600	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0088	ppm	0.0072	81.46	28.4300	0.0088 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0032	ppm	0.0019	60.39	391.3000	0.0032 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0003 u	ppm	0.0001	47.30	-0.9389	-0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	468.2000 o	ppm	1.2250	0.26	3266000.0000	468.2000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0043	ppm	0.0002	4.73	23.8900	0.0043 (ppm)	Y 371.029
P (213.618 nm)	0.0053	ppm	0.0020	38.33	-5.2870	0.0053 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0009 u	ppm	0.0025	> 100.00	-10.9500	-0.0009 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0017	ppm	0.0003	14.90	0.3687	0.0017 (ppm)	Y 371.029
Se (196.026 nm)	-0.0014 u	ppm	0.0006	38.13	-2.1280	-0.0014 u (ppm)	Y 371.029
Si (251.611 nm)	0.0032	ppm	0.0009	29.56	56.6200	0.0032 (ppm)	Y 371.029
Sn (189.925 nm)	0.0000 u	ppm	0.0008	> 100.00	-3.5710	0.0000 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-72.8100	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	0.08	-151.5000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0040 u	ppm	0.0004	10.64	-8.6140	-0.0040 u (ppm)	Y 371.029
V (292.401 nm)	-0.0002 u	ppm	0.0001	29.19	51.2600	-0.0002 u (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0007	> 100.00	-7.1180	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0009 u	ppm	0.0002	22.16	17.8500	-0.0009 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	8.23	5.4030	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9887	424800.0000	0.0001	0.01
Y_R 371.029	1.0560	66690.0000	0.0081	0.77

Sample Name: LCS 440-505595/2-A@20

Date: 10/19/2018 5:34:13 PM

Rack:Tube: 4:3

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4843	ppm	0.0001	0.02	20400.0000	0.4843 (ppm)	Y 371.029
Al (396.152 nm)	1.2270	ppm	0.0002	0.01	26220.0000	1.2270 (ppm)	Y 371.029
As (188.980 nm)	1.0010	ppm	0.0015	0.15	683.4000	1.0010 (ppm)	Y 371.029
B (249.678 nm)	1.0260	ppm	0.0036	0.35	12700.0000	1.0260 (ppm)	Y 371.029
Ba (233.527 nm)	0.9417	ppm	0.0004	0.04	74280.0000	0.9417 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9944	ppm	0.0002	0.02	183100.0000	0.9944 (ppm)	Y 371.029
Ca (422.673 nm)	4.9110	ppm	0.0272	0.55	21820.0000	4.9110 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9566	ppm	0.0047	0.49	22190.0000	0.9566 (ppm)	Y 371.029
Co (228.615 nm)	0.9790	ppm	0.0002	0.02	13250.0000	0.9790 (ppm)	Y 371.029
Cr (205.560 nm)	0.9838	ppm	0.0008	0.09	5244.0000	0.9838 (ppm)	Y 371.029
Cu (324.754 nm)	1.0770	ppm	0.0013	0.12	43090.0000	1.0770 (ppm)	Y 371.029
Fe (238.204 nm)	0.9706	ppm	0.0074	0.76	4226.0000	0.9706 (ppm)	Y_R 371.029
K (766.491 nm)	10.1000	ppm	0.1242	1.23	12030.0000	10.1000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9884	ppm	0.0064	0.64	67070.0000	0.9884 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.6600	ppm	0.0065	0.14	11930.0000	4.6600 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9645	ppm	0.0010	0.10	100200.0000	0.9645 (ppm)	Y 371.029
Mo (204.598 nm)	1.0180	ppm	0.0012	0.11	4725.0000	1.0180 (ppm)	Y 371.029
Na (589.592 nm)	467.0000 o	ppm	2.4230	0.52	3258000.0000	467.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9738	ppm	0.0021	0.22	4991.0000	0.9738 (ppm)	Y 371.029
P (213.618 nm)	1.0300	ppm	0.0029	0.28	876.0000	1.0300 (ppm)	Y 371.029
Pb (220.353 nm)	0.9638	ppm	0.0007	0.08	1845.0000	0.9638 (ppm)	Y 371.029
Sb (206.834 nm)	1.0160	ppm	0.0026	0.25	1041.0000	1.0160 (ppm)	Y 371.029
Se (196.026 nm)	0.9627	ppm	0.0002	0.03	730.4000	0.9627 (ppm)	Y 371.029
Si (251.611 nm)	5.0810	ppm	0.0759	1.49	12600.0000	5.0810 (ppm)	Y 371.029
Sn (189.925 nm)	0.9902	ppm	0.0005	0.05	644.5000	0.9902 (ppm)	Y 371.029
Sr (421.552 nm)	0.9822	ppm	0.0078	0.80	393800.0000	0.9822 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0050	ppm	0.0002	0.02	124000.0000	1.0050 (ppm)	Y 371.029
Tl (190.794 nm)	0.9511	ppm	0.0019	0.19	1131.0000	0.9511 (ppm)	Y 371.029
V (292.401 nm)	1.0140	ppm	0.0016	0.16	28530.0000	1.0140 (ppm)	Y 371.029
W (207.912 nm)	1.0200	ppm	0.0058	0.57	1922.0000	1.0200 (ppm)	Y 371.029
Zn (202.548 nm)	0.9588	ppm	0.0012	0.12	17580.0000	0.9588 (ppm)	Y 371.029
Zr (343.823 nm)	1.0010	ppm	0.0003	0.03	84200.0000	1.0010 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9893	425100.0000	0.0032	0.33
Y_R 371.029	1.0390	65620.0000	0.0038	0.37

Sample Name: 440-222037-A-3-B@20

Date: 10/19/2018 5:36:38 PM

Rack:Tube: 4:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	1.7600	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0360	ppm	0.0000	0.05	-430.6000	0.0360 (ppm)	Y 371.029
As (188.980 nm)	0.0047	ppm	0.0007	15.02	8.9400	0.0047 (ppm)	Y 371.029
B (249.678 nm)	0.0052	ppm	0.0008	15.93	41.3900	0.0052 (ppm)	Y 371.029
Ba (233.527 nm)	0.0021	ppm	0.0002	7.86	206.7000	0.0021 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	49.72	99.1400	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.1603	ppm	0.0038	2.37	800.9000	0.1603 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0002	39.08	9.6230	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0001	9.86	-11.0900	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0006	56.50	7.1770	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	0.0025	ppm	0.0001	3.20	251.7000	0.0025 (ppm)	Y 371.029
Fe (238.204 nm)	0.2146	ppm	0.0018	0.82	920.6000	0.2146 (ppm)	Y_R 371.029
K (766.491 nm)	0.1044	ppm	0.0469	44.89	10.8000	0.1044 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0004 u	ppm	0.0011	> 100.00	74.4900	0.0004 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0224	ppm	0.0014	6.03	63.1700	0.0224 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0050	ppm	0.0004	8.57	609.5000	0.0050 (ppm)	Y 371.029
Mo (204.598 nm)	0.0017	ppm	0.0002	12.97	8.5920	0.0017 (ppm)	Y 371.029
Na (589.592 nm)	456.5000 o	ppm	0.1235	0.03	3185000.0000	456.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0060	ppm	0.0000	0.45	32.5400	0.0060 (ppm)	Y 371.029
P (213.618 nm)	0.0052	ppm	0.0007	14.40	-5.5860	0.0052 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0001 u	ppm	0.0011	> 100.00	-9.3030	-0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0542	ppm	0.0015	2.85	54.6100	0.0542 (ppm)	Y 371.029
Se (196.026 nm)	0.0064	ppm	0.0011	16.88	3.7760	0.0064 (ppm)	Y 371.029
Si (251.611 nm)	0.1409	ppm	0.0032	2.31	392.1000	0.1409 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0012	53.56	-2.0870	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0005	ppm	0.0000	7.53	155.3000	0.0005 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0025	ppm	0.0002	9.23	139.4000	0.0025 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0015 u	ppm	0.0024	> 100.00	-5.5740	-0.0015 u (ppm)	Y 371.029
V (292.401 nm)	0.0009	ppm	0.0005	55.85	83.3600	0.0009 (ppm)	Y 371.029
W (207.912 nm)	-0.0008 u	ppm	0.0005	58.67	-8.4540	-0.0008 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0104	ppm	0.0005	4.77	223.1000	0.0104 (ppm)	Y 371.029
Zr (343.823 nm)	0.0011	ppm	0.0004	32.08	88.9500	0.0011 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9847	423100.0000	0.0030	0.31
Y_R 371.029	1.0310	65110.0000	0.0083	0.80

Sample Name: 440-222037-A-3-Bms@20

Date: 10/19/2018 5:39:03 PM

Rack:Tube: 4:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4918	ppm	0.0007	0.15	20720.0000	0.4918 (ppm)	Y 371.029
Al (396.152 nm)	1.2710	ppm	0.0014	0.11	27190.0000	1.2710 (ppm)	Y 371.029
As (188.980 nm)	1.0050	ppm	0.0037	0.37	686.3000	1.0050 (ppm)	Y 371.029
B (249.678 nm)	1.0320	ppm	0.0038	0.37	12770.0000	1.0320 (ppm)	Y 371.029
Ba (233.527 nm)	0.9602	ppm	0.0002	0.02	75740.0000	0.9602 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0050	ppm	0.0011	0.11	185100.0000	1.0050 (ppm)	Y 371.029
Ca (422.673 nm)	5.1400	ppm	0.0099	0.19	22830.0000	5.1400 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9665	ppm	0.0063	0.65	22420.0000	0.9665 (ppm)	Y 371.029
Co (228.615 nm)	0.9926	ppm	0.0049	0.50	13430.0000	0.9926 (ppm)	Y 371.029
Cr (205.560 nm)	0.9977	ppm	0.0000	0.00	5318.0000	0.9977 (ppm)	Y 371.029
Cu (324.754 nm)	1.0910	ppm	0.0041	0.37	43660.0000	1.0910 (ppm)	Y 371.029
Fe (238.204 nm)	1.1910	ppm	0.0052	0.44	5188.0000	1.1910 (ppm)	Y_R 371.029
K (766.491 nm)	10.3000	ppm	0.0848	0.82	12270.0000	10.3000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0030	ppm	0.0047	0.47	68030.0000	1.0030 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7540	ppm	0.0054	0.11	12170.0000	4.7540 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9782	ppm	0.0002	0.02	101700.0000	0.9782 (ppm)	Y 371.029
Mo (204.598 nm)	1.0330	ppm	0.0009	0.08	4793.0000	1.0330 (ppm)	Y 371.029
Na (589.592 nm)	455.5000 o	ppm	3.0930	0.68	3178000.0000	455.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9852	ppm	0.0022	0.22	5049.0000	0.9852 (ppm)	Y 371.029
P (213.618 nm)	1.0420	ppm	0.0010	0.10	886.7000	1.0420 (ppm)	Y 371.029
Pb (220.353 nm)	0.9730	ppm	0.0035	0.36	1863.0000	0.9730 (ppm)	Y 371.029
Sb (206.834 nm)	1.0790	ppm	0.0070	0.65	1106.0000	1.0790 (ppm)	Y 371.029
Se (196.026 nm)	0.9720	ppm	0.0072	0.74	737.5000	0.9720 (ppm)	Y 371.029
Si (251.611 nm)	5.2650	ppm	0.0823	1.56	13050.0000	5.2650 (ppm)	Y 371.029
Sn (189.925 nm)	1.0010	ppm	0.0025	0.25	651.5000	1.0010 (ppm)	Y 371.029
Sr (421.552 nm)	0.9843	ppm	0.0200	2.03	394700.0000	0.9843 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0190	ppm	0.0011	0.11	125700.0000	1.0190 (ppm)	Y 371.029
Tl (190.794 nm)	0.9664	ppm	0.0029	0.30	1149.0000	0.9664 (ppm)	Y 371.029
V (292.401 nm)	1.0270	ppm	0.0001	0.01	28890.0000	1.0270 (ppm)	Y 371.029
W (207.912 nm)	1.0290	ppm	0.0048	0.47	1939.0000	1.0290 (ppm)	Y 371.029
Zn (202.548 nm)	0.9825	ppm	0.0007	0.07	18020.0000	0.9825 (ppm)	Y 371.029
Zr (343.823 nm)	1.0130	ppm	0.0011	0.11	85210.0000	1.0130 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9810	421500.0000	0.0051	0.52
Y_R 371.029	1.0250	64740.0000	0.0050	0.49

Sample Name: 440-222037-A-3-Bmsd@20

Date: 10/19/2018 5:41:27 PM

Rack:Tube: 4:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4916	ppm	0.0011	0.22	20710.0000	0.4916 (ppm)	Y 371.029
Al (396.152 nm)	1.2790	ppm	0.0011	0.09	27370.0000	1.2790 (ppm)	Y 371.029
As (188.980 nm)	1.0110	ppm	0.0001	0.01	690.2000	1.0110 (ppm)	Y 371.029
B (249.678 nm)	1.0390	ppm	0.0032	0.31	12850.0000	1.0390 (ppm)	Y 371.029
Ba (233.527 nm)	0.9641	ppm	0.0031	0.32	76040.0000	0.9641 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0090	ppm	0.0000	0.00	185800.0000	1.0090 (ppm)	Y 371.029
Ca (422.673 nm)	5.1340	ppm	0.0555	1.08	22800.0000	5.1340 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9736	ppm	0.0067	0.69	22590.0000	0.9736 (ppm)	Y 371.029
Co (228.615 nm)	0.9957	ppm	0.0058	0.58	13480.0000	0.9957 (ppm)	Y 371.029
Cr (205.560 nm)	1.0000	ppm	0.0028	0.28	5331.0000	1.0000 (ppm)	Y 371.029
Cu (324.754 nm)	1.0950	ppm	0.0007	0.06	43800.0000	1.0950 (ppm)	Y 371.029
Fe (238.204 nm)	1.1860	ppm	0.0098	0.82	5167.0000	1.1860 (ppm)	Y_R 371.029
K (766.491 nm)	10.2600	ppm	0.1502	1.46	12220.0000	10.2600 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0020	ppm	0.0088	0.88	67990.0000	1.0020 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7630	ppm	0.0134	0.28	12190.0000	4.7630 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9819	ppm	0.0005	0.05	102000.0000	0.9819 (ppm)	Y 371.029
Mo (204.598 nm)	1.0330	ppm	0.0000	0.00	4794.0000	1.0330 (ppm)	Y 371.029
Na (589.592 nm)	454.1000 o	ppm	3.8800	0.85	3168000.0000	454.1000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9883	ppm	0.0009	0.09	5065.0000	0.9883 (ppm)	Y 371.029
P (213.618 nm)	1.0370	ppm	0.0045	0.44	881.2000	1.0370 (ppm)	Y 371.029
Pb (220.353 nm)	0.9781	ppm	0.0035	0.35	1873.0000	0.9781 (ppm)	Y 371.029
Sb (206.834 nm)	1.0780	ppm	0.0001	0.01	1105.0000	1.0780 (ppm)	Y 371.029
Se (196.026 nm)	0.9729	ppm	0.0005	0.05	738.2000	0.9729 (ppm)	Y 371.029
Si (251.611 nm)	5.3190	ppm	0.0685	1.29	13190.0000	5.3190 (ppm)	Y 371.029
Sn (189.925 nm)	1.0060	ppm	0.0030	0.30	654.5000	1.0060 (ppm)	Y 371.029
Sr (421.552 nm)	0.9913	ppm	0.0068	0.68	397500.0000	0.9913 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0240	ppm	0.0010	0.10	126300.0000	1.0240 (ppm)	Y 371.029
Tl (190.794 nm)	0.9724	ppm	0.0018	0.18	1156.0000	0.9724 (ppm)	Y 371.029
V (292.401 nm)	1.0300	ppm	0.0018	0.18	28990.0000	1.0300 (ppm)	Y 371.029
W (207.912 nm)	1.0310	ppm	0.0005	0.05	1944.0000	1.0310 (ppm)	Y 371.029
Zn (202.548 nm)	0.9830	ppm	0.0013	0.14	18020.0000	0.9830 (ppm)	Y 371.029
Zr (343.823 nm)	1.0160	ppm	0.0014	0.14	85520.0000	1.0160 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9841	422800.0000	0.0045	0.45
Y_R 371.029	1.0280	64920.0000	0.0026	0.25

Sample Name: 440-222037-A-3-Bsd@100

Date: 10/19/2018 5:43:52 PM

Rack:Tube: 4:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0004	ppm	0.0001	36.87	17.6000	0.0004 (ppm)	Y 371.029
Al (396.152 nm)	0.0113	ppm	0.0003	2.67	-968.1000	0.0113 (ppm)	Y 371.029
As (188.980 nm)	0.0061	ppm	0.0010	17.04	9.8650	0.0061 (ppm)	Y 371.029
B (249.678 nm)	0.0042	ppm	0.0007	16.47	27.9800	0.0042 (ppm)	Y 371.029
Ba (233.527 nm)	0.0009	ppm	0.0002	24.41	109.1000	0.0009 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	40.28	108.0000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	0.0364	ppm	0.0035	9.73	253.0000	0.0364 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0003	61.22	8.2470	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0002	13.70	-5.7080	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0001	7.86	6.9580	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	0.0004	ppm	0.0003	82.88	165.7000	0.0004 (ppm)	Y 371.029
Fe (238.204 nm)	0.0451	ppm	0.0020	4.52	178.8000	0.0451 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0314 u	ppm	0.0131	41.83	-152.4000	-0.0314 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0003	> 100.00	39.5500	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0079	ppm	0.0000	0.09	26.0900	0.0079 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0016	ppm	0.0003	15.99	234.1000	0.0016 (ppm)	Y 371.029
Mo (204.598 nm)	0.0015	ppm	0.0002	16.35	7.2830	0.0015 (ppm)	Y 371.029
Na (589.592 nm)	98.2100	ppm	0.6139	0.63	686200.0000	98.2100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0015	ppm	0.0015	> 100.00	9.4340	0.0015 (ppm)	Y 371.029
P (213.618 nm)	-0.0044 u	ppm	0.0008	17.26	-14.2600	-0.0044 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0004 u	ppm	0.0006	> 100.00	-8.4140	0.0004 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0117	ppm	0.0005	4.26	10.6400	0.0117 (ppm)	Y 371.029
Se (196.026 nm)	-0.0009 u	ppm	0.0006	68.14	-1.7460	-0.0009 u (ppm)	Y 371.029
Si (251.611 nm)	0.0339	ppm	0.0042	12.44	131.5000	0.0339 (ppm)	Y 371.029
Sn (189.925 nm)	0.0025	ppm	0.0015	61.11	-1.9670	0.0025 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	0.08	77.8500	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0013	ppm	0.0002	16.11	-12.4400	0.0013 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0015	> 100.00	-3.1990	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0006	ppm	0.0005	80.43	72.9300	0.0006 (ppm)	Y 371.029
W (207.912 nm)	0.0010	ppm	0.0005	45.96	-5.0290	0.0010 (ppm)	Y 371.029
Zn (202.548 nm)	0.0023	ppm	0.0002	6.99	76.4100	0.0023 (ppm)	Y 371.029
Zr (343.823 nm)	0.0009	ppm	0.0001	9.33	65.9600	0.0009 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0390	446400.0000	0.0060	0.57
Y_R 371.029	1.0750	67930.0000	0.0102	0.95

Sample Name: 440-222037-A-4-B@20

Date: 10/19/2018 5:46:16 PM

Rack:Tube: 4:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0000	42.11	4.2240	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0066	ppm	0.0003	3.97	-1071.0000	0.0066 (ppm)	Y 371.029
As (188.980 nm)	0.0038	ppm	0.0002	6.39	8.2800	0.0038 (ppm)	Y 371.029
B (249.678 nm)	0.0049	ppm	0.0001	1.99	37.6500	0.0049 (ppm)	Y 371.029
Ba (233.527 nm)	0.0009	ppm	0.0001	7.86	112.4000	0.0009 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	36.07	40.2700	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.0318	ppm	0.0037	11.77	232.6000	0.0318 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0001	46.54	3.4180	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0001	18.22	-16.3800	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0002	32.51	5.3110	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0002	ppm	0.0003	> 100.00	159.6000	0.0002 (ppm)	Y 371.029
Fe (238.204 nm)	0.0193	ppm	0.0023	11.80	66.2300	0.0193 (ppm)	Y_R 371.029
K (766.491 nm)	0.1508	ppm	0.0971	64.40	66.3700	0.1508 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0010	ppm	0.0003	31.26	118.5000	0.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0049	ppm	0.0002	3.73	18.5400	0.0049 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0010	ppm	0.0002	15.99	165.4000	0.0010 (ppm)	Y 371.029
Mo (204.598 nm)	0.0004	ppm	0.0001	15.07	2.4850	0.0004 (ppm)	Y 371.029
Na (589.592 nm)	459.3000 o	ppm	0.1571	0.03	3204000.0000	459.3000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0050	ppm	0.0004	8.53	27.5600	0.0050 (ppm)	Y 371.029
P (213.618 nm)	-0.0008 u	ppm	0.0084	> 100.00	-10.9300	-0.0008 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0002 u	ppm	0.0018	> 100.00	-8.8140	0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0019	ppm	0.0026	> 100.00	0.5749	0.0019 (ppm)	Y 371.029
Se (196.026 nm)	0.0058	ppm	0.0010	17.00	3.3080	0.0058 (ppm)	Y 371.029
Si (251.611 nm)	0.0164	ppm	0.0000	0.21	88.6900	0.0164 (ppm)	Y 371.029
Sn (189.925 nm)	0.0007	ppm	0.0009	> 100.00	-3.1360	0.0007 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	47.92	6.3890	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0006	ppm	0.0000	0.20	-95.8400	0.0006 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0021 u	ppm	0.0019	90.39	-6.2180	-0.0021 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	56.68	68.2600	0.0004 (ppm)	Y 371.029
W (207.912 nm)	-0.0006 u	ppm	0.0005	80.34	-8.0280	-0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0001	5.84	64.4700	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0006	ppm	0.0000	2.15	47.6000	0.0006 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9883	424600.0000	0.0108	1.09
Y_R 371.029	1.0390	65610.0000	0.0119	1.14

Sample Name: CCV 5129881

Date: 10/19/2018 5:48:40 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.5073	ppm	0.0024	0.47	21360.0000	0.5073 (ppm)	Y 371.029
Al (396.152 nm)	1.0620	ppm	0.0061	0.57	22630.0000	1.0620 (ppm)	Y 371.029
As (188.980 nm)	1.0020	ppm	0.0025	0.25	683.7000	1.0020 (ppm)	Y 371.029
B (249.678 nm)	1.0140	ppm	0.0131	1.29	12540.0000	1.0140 (ppm)	Y 371.029
Ba (233.527 nm)	1.0140	ppm	0.0076	0.75	79950.0000	1.0140 (ppm)	Y_R 371.029
Be (234.861 nm)	1.0100	ppm	0.0060	0.59	186000.0000	1.0100 (ppm)	Y 371.029
Ca (422.673 nm)	5.0670	ppm	0.0030	0.06	22500.0000	5.0670 (ppm)	Y_R 371.029
Cd (214.439 nm)	1.0070	ppm	0.0059	0.59	23370.0000	1.0070 (ppm)	Y 371.029
Co (228.615 nm)	1.0110	ppm	0.0133	1.32	13690.0000	1.0110 (ppm)	Y 371.029
Cr (205.560 nm)	1.0130	ppm	0.0029	0.28	5401.0000	1.0130 (ppm)	Y 371.029
Cu (324.754 nm)	1.0210	ppm	0.0056	0.55	40870.0000	1.0210 (ppm)	Y 371.029
Fe (238.204 nm)	1.0210	ppm	0.0008	0.08	4445.0000	1.0210 (ppm)	Y_R 371.029
K (766.491 nm)	10.2200	ppm	0.0635	0.62	12180.0000	10.2200 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0030	ppm	0.0039	0.39	68040.0000	1.0030 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0830	ppm	0.0419	0.82	13010.0000	5.0830 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.0140	ppm	0.0055	0.54	105300.0000	1.0140 (ppm)	Y 371.029
Mo (204.598 nm)	1.0200	ppm	0.0103	1.00	4731.0000	1.0200 (ppm)	Y 371.029
Na (589.592 nm)	10.6500	ppm	0.0200	0.19	75670.0000	10.6500 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.0100	ppm	0.0035	0.34	5176.0000	1.0100 (ppm)	Y 371.029
P (213.618 nm)	0.9974	ppm	0.0088	0.88	848.0000	0.9974 (ppm)	Y 371.029
Pb (220.353 nm)	1.0150	ppm	0.0048	0.47	1944.0000	1.0150 (ppm)	Y 371.029
Sb (206.834 nm)	1.0130	ppm	0.0202	1.99	1037.0000	1.0130 (ppm)	Y 371.029
Se (196.026 nm)	0.9937	ppm	0.0058	0.58	753.8000	0.9937 (ppm)	Y 371.029
Si (251.611 nm)	5.0740	ppm	0.1110	2.19	12590.0000	5.0740 (ppm)	Y 371.029
Sn (189.925 nm)	1.0090	ppm	0.0025	0.25	656.8000	1.0090 (ppm)	Y 371.029
Sr (421.552 nm)	1.0190	ppm	0.0022	0.22	408600.0000	1.0190 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.0170	ppm	0.0062	0.61	125500.0000	1.0170 (ppm)	Y 371.029
Tl (190.794 nm)	1.0160	ppm	0.0046	0.46	1210.0000	1.0160 (ppm)	Y 371.029
V (292.401 nm)	1.0190	ppm	0.0063	0.62	28650.0000	1.0190 (ppm)	Y 371.029
W (207.912 nm)	1.0140	ppm	0.0037	0.36	1912.0000	1.0140 (ppm)	Y 371.029
Zn (202.548 nm)	1.0070	ppm	0.0050	0.50	18460.0000	1.0070 (ppm)	Y 371.029
Zr (343.823 nm)	1.0150	ppm	0.0054	0.53	85430.0000	1.0150 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0600	455400.0000	0.0080	0.75
Y_R 371.029	1.0710	67650.0000	0.0059	0.55

Sample Name: CCB 5129880

Date: 10/19/2018 5:51:04 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0004	> 100.00	16.1800	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0091	ppm	0.0006	6.74	-1017.0000	0.0091 (ppm)	Y 371.029
As (188.980 nm)	0.0025	ppm	0.0028	> 100.00	7.4120	0.0025 (ppm)	Y 371.029
B (249.678 nm)	0.0045	ppm	0.0014	32.21	31.6600	0.0045 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	42.38	78.5100	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	48.07	100.9000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0166	ppm	0.0079	47.71	165.4000	0.0166 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	52.31	11.4100	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0000	0.67	-11.2300	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0003	36.82	5.3380	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0006	> 100.00	128.7000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0006 u	ppm	0.0013	> 100.00	-15.5500	0.0006 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0235 u	ppm	0.0566	> 100.00	-143.0000	-0.0235 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0014	ppm	0.0020	> 100.00	146.3000	0.0014 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0039	ppm	0.0010	24.70	15.9700	0.0039 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0007	ppm	0.0003	47.77	137.5000	0.0007 (ppm)	Y 371.029
Mo (204.598 nm)	0.0012	ppm	0.0008	70.23	6.1310	0.0012 (ppm)	Y 371.029
Na (589.592 nm)	0.4101	ppm	0.0094	2.28	4171.0000	0.4101 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0007	ppm	0.0006	93.54	5.3610	0.0007 (ppm)	Y 371.029
P (213.618 nm)	0.0057	ppm	0.0034	59.18	-4.9270	0.0057 (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0002	> 100.00	-9.0450	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0018 u	ppm	0.0035	> 100.00	0.4315	0.0018 u (ppm)	Y 371.029
Se (196.026 nm)	0.0042	ppm	0.0022	52.08	2.1150	0.0042 (ppm)	Y 371.029
Si (251.611 nm)	0.0046	ppm	0.0018	40.13	60.1800	0.0046 (ppm)	Y 371.029
Sn (189.925 nm)	0.0059	ppm	0.0017	28.24	0.2786	0.0059 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	25.20	34.3100	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0002	19.51	-61.8500	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0013	ppm	0.0010	79.94	-2.1510	0.0013 (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	51.87	66.9900	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0022	ppm	0.0012	52.73	-2.8390	0.0022 (ppm)	Y 371.029
Zn (202.548 nm)	0.0020	ppm	0.0003	15.18	69.5400	0.0020 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	39.87	36.4400	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0720	460500.0000	0.0053	0.49
Y_R 371.029	1.0730	67760.0000	0.0127	1.19

Sample Name: 440-221144-A-1-L@20

Date: 10/19/2018 5:53:29 PM

Rack:Tube: 4:9

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-21.3000	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	3.1470	ppm	0.0152	0.48	67270.0000	3.1470 (ppm)	Y 371.029
As (188.980 nm)	0.0164	ppm	0.0035	21.11	16.2800	0.0164 (ppm)	Y 371.029
B (249.678 nm)	0.1196	ppm	0.0001	0.09	1468.0000	0.1196 (ppm)	Y 371.029
Ba (233.527 nm)	0.0313	ppm	0.0001	0.39	2516.0000	0.0313 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0000	5.65	148.7000	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	107.4000	ppm	0.1699	0.16	475100.0000	107.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0333	ppm	0.0001	0.34	770.5000	0.0333 (ppm)	Y 371.029
Co (228.615 nm)	0.0123	ppm	0.0004	2.91	147.9000	0.0123 (ppm)	Y 371.029
Cr (205.560 nm)	0.0435	ppm	0.0008	1.83	235.9000	0.0435 (ppm)	Y 371.029
Cu (324.754 nm)	1.7470	ppm	0.0099	0.57	69680.0000	1.7470 (ppm)	Y 371.029
Fe (238.204 nm)	2.7730	ppm	0.0031	0.11	12110.0000	2.7730 (ppm)	Y_R 371.029
K (766.491 nm)	22.0100	ppm	0.0464	0.21	26340.0000	22.0100 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0105	ppm	0.0004	3.66	802.3000	0.0105 (ppm)	Y_R 371.029
Mg (279.078 nm)	1.7050	ppm	0.0122	0.72	4370.0000	1.7050 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1495	ppm	0.0003	0.20	15890.0000	0.1495 (ppm)	Y 371.029
Mo (204.598 nm)	0.0144	ppm	0.0004	2.87	67.7100	0.0144 (ppm)	Y 371.029
Na (589.592 nm)	462.7000 o	ppm	0.6165	0.13	3228000.0000	462.7000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0194	ppm	0.0003	1.57	98.7400	0.0194 (ppm)	Y 371.029
P (213.618 nm)	0.3910	ppm	0.0047	1.19	278.6000	0.3910 (ppm)	Y 371.029
Pb (220.353 nm)	0.1455	ppm	0.0012	0.81	271.9000	0.1455 (ppm)	Y 371.029
Sb (206.834 nm)	0.0680	ppm	0.0073	10.67	69.6700	0.0680 (ppm)	Y 371.029
Se (196.026 nm)	0.0044	ppm	0.0001	1.20	1.0670	0.0044 (ppm)	Y 371.029
Si (251.611 nm)	0.9706	ppm	0.0037	0.38	2424.0000	0.9706 (ppm)	Y 371.029
Sn (189.925 nm)	0.0031	ppm	0.0011	36.24	-1.5140	0.0031 (ppm)	Y 371.029
Sr (421.552 nm)	0.1391	ppm	0.0002	0.12	57370.0000	0.1391 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0640	ppm	0.0003	0.48	7605.0000	0.0640 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0018 u	ppm	0.0033	> 100.00	-8.6800	-0.0018 u (ppm)	Y 371.029
V (292.401 nm)	0.0389	ppm	0.0001	0.27	1302.0000	0.0389 (ppm)	Y 371.029
W (207.912 nm)	0.0041	ppm	0.0016	39.14	3.3130	0.0041 (ppm)	Y 371.029
Zn (202.548 nm)	0.4377	ppm	0.0005	0.11	8255.0000	0.4377 (ppm)	Y 371.029
Zr (343.823 nm)	0.0077	ppm	0.0000	0.11	658.9000	0.0077 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9791	420700.0000	0.0028	0.29
Y_R 371.029	1.0220	64570.0000	0.0048	0.47

Sample Name: MB 440-506229/1-A

Date: 10/19/2018 5:55:53 PM

Rack:Tube: 4:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	2.2940	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0110	ppm	0.0009	8.15	-976.3000	0.0110 (ppm)	Y 371.029
As (188.980 nm)	0.0020 u	ppm	0.0029	> 100.00	7.0650	0.0020 u (ppm)	Y 371.029
B (249.678 nm)	0.0025	ppm	0.0005	18.78	6.9420	0.0025 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0001	81.53	50.0500	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	7.50	25.6500	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0355	ppm	0.0096	27.17	248.8000	0.0355 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-2.3660	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0007	72.22	-8.9030	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0004	ppm	0.0002	49.01	3.3120	0.0004 (ppm)	Y 371.029
Cu (324.754 nm)	0.0005	ppm	0.0007	> 100.00	173.0000	0.0005 (ppm)	Y 371.029
Fe (238.204 nm)	0.0033	ppm	0.0017	49.99	-3.6910	0.0033 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0466 u	ppm	0.0415	89.17	-170.7000	-0.0466 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0010	ppm	0.0004	37.56	115.2000	0.0010 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0046	ppm	0.0001	2.64	17.8100	0.0046 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	1.37	94.3500	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0006	ppm	0.0001	17.20	3.4890	0.0006 (ppm)	Y 371.029
Na (589.592 nm)	0.5360	ppm	0.0022	0.40	5049.0000	0.5360 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004 u	ppm	0.0007	> 100.00	3.9850	0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0012 u	ppm	0.0072	> 100.00	-9.0720	0.0012 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0011	ppm	0.0008	70.74	-6.9670	0.0011 (ppm)	Y 371.029
Sb (206.834 nm)	0.0023	ppm	0.0029	> 100.00	0.9758	0.0023 (ppm)	Y 371.029
Se (196.026 nm)	0.0031	ppm	0.0030	94.54	1.3220	0.0031 (ppm)	Y 371.029
Si (251.611 nm)	0.0023	ppm	0.0010	43.30	54.4300	0.0023 (ppm)	Y 371.029
Sn (189.925 nm)	0.0039	ppm	0.0005	12.82	-1.0590	0.0039 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	94.69	-65.1700	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0000	7.94	-122.5000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002 u	ppm	0.0021	> 100.00	-3.4760	0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0002 u	ppm	0.0003	> 100.00	61.3200	0.0002 u (ppm)	Y 371.029
W (207.912 nm)	0.0003	ppm	0.0002	53.28	-6.3870	0.0003 (ppm)	Y 371.029
Zn (202.548 nm)	0.0042	ppm	0.0001	1.59	111.0000	0.0042 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	9.54	7.8100	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0830	465200.0000	0.0108	0.99
Y_R 371.029	1.0920	68960.0000	0.0046	0.42

Sample Name: LCS 440-506229/2-A

Date: 10/19/2018 5:58:17 PM

Rack:Tube: 4:11

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2593	ppm	0.0018	0.68	10920.0000	0.2593 (ppm)	Y 371.029
Al (396.152 nm)	0.5487	ppm	0.0051	0.92	11100.0000	0.5487 (ppm)	Y 371.029
As (188.980 nm)	0.5106	ppm	0.0010	0.19	351.2000	0.5106 (ppm)	Y 371.029
B (249.678 nm)	0.5093	ppm	0.0068	1.34	6290.0000	0.5093 (ppm)	Y 371.029
Ba (233.527 nm)	0.5164	ppm	0.0038	0.73	40750.0000	0.5164 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5135	ppm	0.0035	0.68	94580.0000	0.5135 (ppm)	Y 371.029
Ca (422.673 nm)	2.6230	ppm	0.0137	0.52	11700.0000	2.6230 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.5159	ppm	0.0039	0.76	11970.0000	0.5159 (ppm)	Y 371.029
Co (228.615 nm)	0.5199	ppm	0.0013	0.24	7025.0000	0.5199 (ppm)	Y 371.029
Cr (205.560 nm)	0.5207	ppm	0.0039	0.75	2776.0000	0.5207 (ppm)	Y 371.029
Cu (324.754 nm)	0.5221	ppm	0.0040	0.77	20970.0000	0.5221 (ppm)	Y 371.029
Fe (238.204 nm)	0.5283	ppm	0.0022	0.42	2292.0000	0.5283 (ppm)	Y_R 371.029
K (766.491 nm)	5.2270	ppm	0.0879	1.68	6171.0000	5.2270 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5090	ppm	0.0032	0.62	34560.0000	0.5090 (ppm)	Y_R 371.029
Mg (279.078 nm)	2.5750	ppm	0.0220	0.86	6594.0000	2.5750 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5218	ppm	0.0024	0.46	54220.0000	0.5218 (ppm)	Y 371.029
Mo (204.598 nm)	0.5123	ppm	0.0060	1.18	2378.0000	0.5123 (ppm)	Y 371.029
Na (589.592 nm)	5.5040	ppm	0.0465	0.84	39730.0000	5.5040 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.5181	ppm	0.0022	0.42	2656.0000	0.5181 (ppm)	Y 371.029
P (213.618 nm)	0.5089	ppm	0.0002	0.05	427.7000	0.5089 (ppm)	Y 371.029
Pb (220.353 nm)	0.5180	ppm	0.0012	0.23	987.7000	0.5180 (ppm)	Y 371.029
Sb (206.834 nm)	0.5443	ppm	0.0051	0.93	557.3000	0.5443 (ppm)	Y 371.029
Se (196.026 nm)	0.5119	ppm	0.0081	1.58	387.8000	0.5119 (ppm)	Y 371.029
Si (251.611 nm)	2.5980	ppm	0.0247	0.95	6468.0000	2.5980 (ppm)	Y 371.029
Sn (189.925 nm)	0.5235	ppm	0.0054	1.04	339.1000	0.5235 (ppm)	Y 371.029
Sr (421.552 nm)	0.5183	ppm	0.0052	0.99	207800.0000	0.5183 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5170	ppm	0.0030	0.58	63710.0000	0.5170 (ppm)	Y 371.029
Tl (190.794 nm)	0.4997	ppm	0.0190	3.80	592.8000	0.4997 (ppm)	Y 371.029
V (292.401 nm)	0.5183	ppm	0.0029	0.56	14610.0000	0.5183 (ppm)	Y 371.029
W (207.912 nm)	0.5096	ppm	0.0018	0.36	957.3000	0.5096 (ppm)	Y 371.029
Zn (202.548 nm)	0.5221	ppm	0.0032	0.62	9581.0000	0.5221 (ppm)	Y 371.029
Zr (343.823 nm)	0.5196	ppm	0.0042	0.80	43710.0000	0.5196 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0780	463400.0000	0.0085	0.79
Y_R 371.029	1.0960	69210.0000	0.0045	0.41

Sample Name: 440-222488-L-2-A

Date: 10/19/2018 6:00:41 PM

Rack:Tube: 4:12

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	28.27	-64.3600	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.1722	ppm	0.0004	0.21	2750.0000	0.1722 (ppm)	Y 371.029
As (188.980 nm)	0.4090	ppm	0.0124	3.03	284.9000	0.4090 (ppm)	Y 371.029
B (249.678 nm)	0.7818	ppm	0.0071	0.91	9737.0000	0.7818 (ppm)	Y 371.029
Ba (233.527 nm)	0.2101	ppm	0.0009	0.43	16630.0000	0.2101 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0001	52.18	148.9000	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	218.3000	ppm	1.2420	0.57	965800.0000	218.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0001	17.45	5.9090	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0000	1.04	-5.9770	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0004	37.00	10.8900	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	0.0011	ppm	0.0002	15.32	2.6260	0.0011 (ppm)	Y 371.029
Fe (238.204 nm)	3.7480	ppm	0.0208	0.56	16390.0000	3.7480 (ppm)	Y_R 371.029
K (766.491 nm)	5.4600	ppm	0.0664	1.22	6518.0000	5.4600 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0082 u	ppm	0.0022	27.37	353.1000	-0.0082 u (ppm)	Y_R 371.029
Mg (279.078 nm)	126.0000	ppm	0.7182	0.57	322400.0000	126.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.1190	ppm	0.0049	0.44	116600.0000	1.1190 (ppm)	Y 371.029
Mo (204.598 nm)	0.0255	ppm	0.0013	4.92	119.3000	0.0255 (ppm)	Y 371.029
Na (589.592 nm)	362.0000	ppm	1.3890	0.38	2525000.0000	362.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0017	ppm	0.0005	31.52	4.8540	0.0017 (ppm)	Y 371.029
P (213.618 nm)	0.3250	ppm	0.0055	1.68	284.6000	0.3250 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0034 u	ppm	0.0009	26.83	-10.7600	-0.0034 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0023 u	ppm	0.0062	> 100.00	-3.5590	-0.0023 u (ppm)	Y 371.029
Se (196.026 nm)	0.0023 u	ppm	0.0047	> 100.00	-0.8598	0.0023 u (ppm)	Y 371.029
Si (251.611 nm)	15.3700	ppm	0.0821	0.53	37530.0000	15.3700 (ppm)	Y 371.029
Sn (189.925 nm)	0.0008 u	ppm	0.0037	> 100.00	-2.8710	0.0008 u (ppm)	Y 371.029
Sr (421.552 nm)	3.3230	ppm	0.0216	0.65	1336000.0000	3.3230 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0102	ppm	0.0002	2.02	825.3000	0.0102 (ppm)	Y 371.029
Tl (190.794 nm)	0.0019	ppm	0.0017	88.35	-0.2229	0.0019 (ppm)	Y 371.029
V (292.401 nm)	-0.0060 u	ppm	0.0001	2.42	189.6000	-0.0060 u (ppm)	Y 371.029
W (207.912 nm)	0.0002 u	ppm	0.0021	> 100.00	-11.6900	0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0040	ppm	0.0001	3.13	185.4000	0.0040 (ppm)	Y 371.029
Zr (343.823 nm)	0.0006	ppm	0.0000	5.63	81.1600	0.0006 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9801	421100.0000	0.0033	0.34
Y_R 371.029	1.0220	64570.0000	0.0048	0.47

Sample Name: 440-222488-L-2-B MS

Date: 10/19/2018 6:03:07 PM

Rack:Tube: 4:13

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2630	ppm	0.0016	0.61	11020.0000	0.2630 (ppm)	Y 371.029
Al (396.152 nm)	0.8544	ppm	0.0049	0.58	17960.0000	0.8544 (ppm)	Y 371.029
As (188.980 nm)	0.9365	ppm	0.0102	1.09	642.1000	0.9365 (ppm)	Y 371.029
B (249.678 nm)	1.3170	ppm	0.0112	0.85	16380.0000	1.3170 (ppm)	Y 371.029
Ba (233.527 nm)	0.6917	ppm	0.0019	0.28	54590.0000	0.6917 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5221	ppm	0.0025	0.48	96250.0000	0.5221 (ppm)	Y 371.029
Ca (422.673 nm)	221.3000	ppm	0.9027	0.41	979400.0000	221.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4796	ppm	0.0022	0.46	11130.0000	0.4796 (ppm)	Y 371.029
Co (228.615 nm)	0.4870	ppm	0.0030	0.62	6588.0000	0.4870 (ppm)	Y 371.029
Cr (205.560 nm)	0.5025	ppm	0.0030	0.60	2683.0000	0.5025 (ppm)	Y 371.029
Cu (324.754 nm)	0.5496	ppm	0.0015	0.27	21870.0000	0.5496 (ppm)	Y 371.029
Fe (238.204 nm)	4.3160	ppm	0.0034	0.08	18880.0000	4.3160 (ppm)	Y_R 371.029
K (766.491 nm)	10.7200	ppm	0.0473	0.44	12850.0000	10.7200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5095	ppm	0.0031	0.60	35450.0000	0.5095 (ppm)	Y_R 371.029
Mg (279.078 nm)	128.2000	ppm	0.3895	0.30	328200.0000	128.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.6240	ppm	0.0056	0.34	169000.0000	1.6240 (ppm)	Y 371.029
Mo (204.598 nm)	0.5339	ppm	0.0055	1.04	2478.0000	0.5339 (ppm)	Y 371.029
Na (589.592 nm)	368.5000	ppm	0.5959	0.16	2571000.0000	368.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4823	ppm	0.0016	0.34	2467.0000	0.4823 (ppm)	Y 371.029
P (213.618 nm)	0.8694	ppm	0.0042	0.49	754.4000	0.8694 (ppm)	Y 371.029
Pb (220.353 nm)	0.4842	ppm	0.0017	0.35	927.5000	0.4842 (ppm)	Y 371.029
Sb (206.834 nm)	0.5395	ppm	0.0023	0.43	552.6000	0.5395 (ppm)	Y 371.029
Se (196.026 nm)	0.5040	ppm	0.0064	1.27	380.2000	0.5040 (ppm)	Y 371.029
Si (251.611 nm)	17.8700	ppm	0.1058	0.59	43710.0000	17.8700 (ppm)	Y 371.029
Sn (189.925 nm)	0.5005	ppm	0.0032	0.65	324.2000	0.5005 (ppm)	Y 371.029
Sr (421.552 nm)	3.8280	ppm	0.0237	0.62	1538000.0000	3.8280 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5257	ppm	0.0035	0.66	64520.0000	0.5257 (ppm)	Y 371.029
Tl (190.794 nm)	0.4690	ppm	0.0170	3.62	555.7000	0.4690 (ppm)	Y 371.029
V (292.401 nm)	0.5230	ppm	0.0023	0.43	15050.0000	0.5230 (ppm)	Y 371.029
W (207.912 nm)	0.5042	ppm	0.0052	1.03	941.5000	0.5042 (ppm)	Y 371.029
Zn (202.548 nm)	0.4812	ppm	0.0022	0.45	8922.0000	0.4812 (ppm)	Y 371.029
Zr (343.823 nm)	0.5098	ppm	0.0033	0.65	42930.0000	0.5098 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9588	411900.0000	0.0017	0.18
Y_R 371.029	1.0100	63780.0000	0.0082	0.81

Sample Name: 440-222488-L-2-C MSD

Date: 10/19/2018 6:05:31 PM

Rack:Tube: 4:14

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2617	ppm	0.0009	0.33	10970.0000	0.2617 (ppm)	Y 371.029
Al (396.152 nm)	0.8422	ppm	0.0017	0.20	17700.0000	0.8422 (ppm)	Y 371.029
As (188.980 nm)	0.9190	ppm	0.0009	0.10	630.2000	0.9190 (ppm)	Y 371.029
B (249.678 nm)	1.2960	ppm	0.0056	0.43	16110.0000	1.2960 (ppm)	Y 371.029
Ba (233.527 nm)	0.6948	ppm	0.0056	0.80	54840.0000	0.6948 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5191	ppm	0.0009	0.17	95700.0000	0.5191 (ppm)	Y 371.029
Ca (422.673 nm)	215.9000	ppm	3.1300	1.45	955500.0000	215.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4801	ppm	0.0016	0.33	11140.0000	0.4801 (ppm)	Y 371.029
Co (228.615 nm)	0.4900	ppm	0.0010	0.21	6628.0000	0.4900 (ppm)	Y 371.029
Cr (205.560 nm)	0.5007	ppm	0.0002	0.03	2674.0000	0.5007 (ppm)	Y 371.029
Cu (324.754 nm)	0.5501	ppm	0.0004	0.07	21900.0000	0.5501 (ppm)	Y 371.029
Fe (238.204 nm)	4.1740	ppm	0.0732	1.75	18250.0000	4.1740 (ppm)	Y_R 371.029
K (766.491 nm)	10.6900	ppm	0.2541	2.38	12810.0000	10.6900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5022	ppm	0.0072	1.42	34950.0000	0.5022 (ppm)	Y_R 371.029
Mg (279.078 nm)	126.9000	ppm	1.1350	0.89	324800.0000	126.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.5990	ppm	0.0016	0.10	166400.0000	1.5990 (ppm)	Y 371.029
Mo (204.598 nm)	0.5355	ppm	0.0048	0.90	2485.0000	0.5355 (ppm)	Y 371.029
Na (589.592 nm)	361.8000	ppm	5.5480	1.53	2524000.0000	361.8000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4806	ppm	0.0018	0.37	2458.0000	0.4806 (ppm)	Y 371.029
P (213.618 nm)	0.8540	ppm	0.0005	0.06	740.2000	0.8540 (ppm)	Y 371.029
Pb (220.353 nm)	0.4795	ppm	0.0054	1.12	918.4000	0.4795 (ppm)	Y 371.029
Sb (206.834 nm)	0.5380	ppm	0.0030	0.55	551.0000	0.5380 (ppm)	Y 371.029
Se (196.026 nm)	0.5009	ppm	0.0022	0.44	377.9000	0.5009 (ppm)	Y 371.029
Si (251.611 nm)	17.5700	ppm	0.0452	0.26	42980.0000	17.5700 (ppm)	Y 371.029
Sn (189.925 nm)	0.4964	ppm	0.0058	1.17	321.5000	0.4964 (ppm)	Y 371.029
Sr (421.552 nm)	3.7340	ppm	0.0509	1.36	1500000.0000	3.7340 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5276	ppm	0.0005	0.10	64770.0000	0.5276 (ppm)	Y 371.029
Tl (190.794 nm)	0.4654	ppm	0.0148	3.19	551.3000	0.4654 (ppm)	Y 371.029
V (292.401 nm)	0.5208	ppm	0.0004	0.08	14980.0000	0.5208 (ppm)	Y 371.029
W (207.912 nm)	0.5097	ppm	0.0007	0.14	952.0000	0.5097 (ppm)	Y 371.029
Zn (202.548 nm)	0.4776	ppm	0.0010	0.20	8855.0000	0.4776 (ppm)	Y 371.029
Zr (343.823 nm)	0.5117	ppm	0.0012	0.23	43090.0000	0.5117 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9652	414700.0000	0.0072	0.75
Y_R 371.029	1.0060	63530.0000	0.0027	0.27

Sample Name: 440-222488-L-7-A

Date: 10/19/2018 6:07:55 PM

Rack:Tube: 4:15

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	15.22	-36.7200	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	16.5600	ppm	0.0441	0.27	359000.0000	16.5600 (ppm)	Y 371.029
As (188.980 nm)	0.0169	ppm	0.0005	3.23	17.2500	0.0169 (ppm)	Y 371.029
B (249.678 nm)	1.3250	ppm	0.0066	0.50	16490.0000	1.3250 (ppm)	Y 371.029
Ba (233.527 nm)	0.2404	ppm	0.0043	1.78	19010.0000	0.2404 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0008	ppm	0.0001	6.10	621.5000	0.0008 (ppm)	Y 371.029
Ca (422.673 nm)	122.6000	ppm	0.0066	0.01	542600.0000	122.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0009	ppm	0.0002	17.33	23.0800	0.0009 (ppm)	Y 371.029
Co (228.615 nm)	0.0134	ppm	0.0007	5.37	184.9000	0.0134 (ppm)	Y 371.029
Cr (205.560 nm)	0.0244	ppm	0.0004	1.82	135.1000	0.0244 (ppm)	Y 371.029
Cu (324.754 nm)	0.0235	ppm	0.0000	0.07	1005.0000	0.0235 (ppm)	Y 371.029
Fe (238.204 nm)	18.6300	ppm	0.0908	0.49	81490.0000	18.6300 (ppm)	Y_R 371.029
K (766.491 nm)	8.0350	ppm	0.0254	0.32	9588.0000	8.0350 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0049	ppm	0.0010	19.98	809.3000	0.0049 (ppm)	Y_R 371.029
Mg (279.078 nm)	81.0700	ppm	1.0250	1.26	207500.0000	81.0700 (ppm)	Y_R 371.029
Mn (259.372 nm)	5.2910	ppm	0.0149	0.28	549100.0000	5.2910 (ppm)	Y 371.029
Mo (204.598 nm)	0.0198	ppm	0.0018	9.08	95.5500	0.0198 (ppm)	Y 371.029
Na (589.592 nm)	507.7000 o	ppm	3.9790	0.78	3542000.0000	507.7000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0162	ppm	0.0004	2.61	80.5900	0.0162 (ppm)	Y 371.029
P (213.618 nm)	0.4530	ppm	0.0003	0.06	401.8000	0.4530 (ppm)	Y 371.029
Pb (220.353 nm)	0.0020	ppm	0.0021	> 100.00	-3.5390	0.0020 (ppm)	Y 371.029
Sb (206.834 nm)	0.0052	ppm	0.0029	55.70	4.1890	0.0052 (ppm)	Y 371.029
Se (196.026 nm)	0.0981	ppm	0.0023	2.32	71.8000	0.0981 (ppm)	Y 371.029
Si (251.611 nm)	39.9600	ppm	0.0614	0.15	97440.0000	39.9600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0031 u	ppm	0.0002	7.63	-5.4020	-0.0031 u (ppm)	Y 371.029
Sr (421.552 nm)	1.9350	ppm	0.0024	0.12	777600.0000	1.9350 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.8560	ppm	0.0051	0.59	105500.0000	0.8560 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017	ppm	0.0004	22.71	-5.7670	0.0017 (ppm)	Y 371.029
V (292.401 nm)	0.0542	ppm	0.0001	0.23	1782.0000	0.0542 (ppm)	Y 371.029
W (207.912 nm)	0.0004 u	ppm	0.0016	> 100.00	-9.1720	0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0474	ppm	0.0001	0.12	940.3000	0.0474 (ppm)	Y 371.029
Zr (343.823 nm)	0.0026	ppm	0.0001	5.35	237.0000	0.0026 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9556	410600.0000	0.0139	1.46
Y_R 371.029	0.9623	60790.0000	0.0004	0.04

Sample Name: 440-222511-C-1-A

Date: 10/19/2018 6:10:19 PM

Rack:Tube: 4:16

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0002	46.39	-99.0300	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.0033 u	ppm	0.0065	> 100.00	-785.5000	0.0033 u (ppm)	Y 371.029
As (188.980 nm)	0.0180	ppm	0.0027	14.87	14.0900	0.0180 (ppm)	Y 371.029
B (249.678 nm)	6.9840	ppm	0.0498	0.71	87180.0000	6.9840 (ppm)	Y 371.029
Ba (233.527 nm)	0.0245	ppm	0.0006	2.34	2010.0000	0.0245 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	235.5000	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	392.8000	ppm	1.6990	0.43	1738000.0000	392.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	1.4360	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0030	ppm	0.0007	22.86	30.2600	0.0030 (ppm)	Y 371.029
Cr (205.560 nm)	0.5074	ppm	0.0006	0.11	2713.0000	0.5074 (ppm)	Y 371.029
Cu (324.754 nm)	0.0011	ppm	0.0000	0.08	-152.4000	0.0011 (ppm)	Y 371.029
Fe (238.204 nm)	8.5660	ppm	0.0122	0.14	37480.0000	8.5660 (ppm)	Y_R 371.029
K (766.491 nm)	32.0200	ppm	0.0468	0.15	38470.0000	32.0200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5033	ppm	0.0003	0.06	35870.0000	0.5033 (ppm)	Y_R 371.029
Mg (279.078 nm)	198.2000	ppm	4.9780	2.51	507400.0000	198.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2579	ppm	0.0006	0.22	28670.0000	0.2579 (ppm)	Y 371.029
Mo (204.598 nm)	0.0240	ppm	0.0006	2.37	112.4000	0.0240 (ppm)	Y 371.029
Na (589.592 nm)	976.6000 o	ppm	1.7070	0.17	6812000.0000	976.6000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0208	ppm	0.0008	3.67	98.4000	0.0208 (ppm)	Y 371.029
P (213.618 nm)	0.0014	ppm	0.0014	97.79	-14.3600	0.0014 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0065 u	ppm	0.0014	21.01	-14.2900	-0.0065 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0030	> 100.00	1.7660	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0108	ppm	0.0033	30.70	3.2610	0.0108 (ppm)	Y 371.029
Si (251.611 nm)	42.4900	ppm	0.0458	0.11	103600.0000	42.4900 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0089 u	ppm	0.0028	31.19	-9.1350	-0.0089 u (ppm)	Y 371.029
Sr (421.552 nm)	10.3600	ppm	0.0657	0.63	4158000.0000	10.3600 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0004	44.04	-544.6000	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0033	ppm	0.0010	31.60	-0.5478	0.0033 (ppm)	Y 371.029
V (292.401 nm)	-0.0138 u	ppm	0.0004	3.10	217.2000	-0.0138 u (ppm)	Y 371.029
W (207.912 nm)	0.0007	ppm	0.0005	76.88	-14.4500	0.0007 (ppm)	Y 371.029
Zn (202.548 nm)	0.0389	ppm	0.0001	0.38	853.0000	0.0389 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0000	3.29	104.6000	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8799	378100.0000	0.0053	0.60
Y_R 371.029	0.9570	60450.0000	0.0143	1.49

Sample Name: 440-222511-C-2-A

Date: 10/19/2018 6:12:44 PM

Rack:Tube: 4:17

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0005	> 100.00	-99.9600	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	-0.0045 u	ppm	0.0008	18.43	-914.1000	-0.0045 u (ppm)	Y 371.029
As (188.980 nm)	0.1010	ppm	0.0078	7.72	13.9400	0.1010 (ppm)	Y 371.029
B (249.678 nm)	8.1900	ppm	0.0772	0.94	102300.0000	8.1900 (ppm)	Y 371.029
Ba (233.527 nm)	0.0271	ppm	0.0005	1.99	2210.0000	0.0271 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	11.06	5.9450	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	423.0000	ppm	0.4257	0.10	1872000.0000	423.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-1.5130	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0003	39.34	8.6970	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	8.7540	ppm	0.1192	1.36	46670.0000	8.7540 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0005	99.47	-247.0000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0067	ppm	0.0010	15.49	34.2200	0.0067 (ppm)	Y_R 371.029
K (766.491 nm)	34.4300	ppm	0.0586	0.17	41400.0000	34.4300 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5333	ppm	0.0010	0.19	37970.0000	0.5333 (ppm)	Y_R 371.029
Mg (279.078 nm)	219.5000	ppm	4.4580	2.03	561900.0000	219.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0379	ppm	0.0002	0.59	4879.0000	0.0379 (ppm)	Y 371.029
Mo (204.598 nm)	0.0242	ppm	0.0003	1.42	115.2000	0.0242 (ppm)	Y 371.029
Na (589.592 nm)	1038.0000 o	ppm	0.4485	0.04	7239000.0000	1038.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0055	ppm	0.0007	12.04	19.2100	0.0055 (ppm)	Y 371.029
P (213.618 nm)	0.0080	ppm	0.0047	58.41	-7.6520	0.0080 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0077 u	ppm	0.0009	11.34	-15.3000	-0.0077 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0408	ppm	0.0042	10.22	115.7000	0.0408 (ppm)	Y 371.029
Se (196.026 nm)	0.0164	ppm	0.0016	9.93	8.1590	0.0164 (ppm)	Y 371.029
Si (251.611 nm)	45.7800	ppm	0.2561	0.56	111700.0000	45.7800 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0050 u	ppm	0.0037	74.03	-6.4950	-0.0050 u (ppm)	Y 371.029
Sr (421.552 nm)	11.2500	ppm	0.0327	0.29	4516000.0000	11.2500 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0002	> 100.00	-689.4000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0050	ppm	0.0017	34.60	1.4210	0.0050 (ppm)	Y 371.029
V (292.401 nm)	0.0292	ppm	0.0001	0.18	1510.0000	0.0292 (ppm)	Y 371.029
W (207.912 nm)	0.0093	ppm	0.0013	14.30	0.7357	0.0093 (ppm)	Y 371.029
Zn (202.548 nm)	0.0030	ppm	0.0001	4.38	32.6900	0.0030 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0003 u	ppm	0.0003	80.56	37.9700	-0.0003 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8621	370400.0000	0.0075	0.87
Y_R 371.029	0.9311	58820.0000	0.0084	0.90

Sample Name: 440-222511-C-3-A

Date: 10/19/2018 6:15:08 PM

Rack:Tube: 4:18

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0003	37.68	-85.1400	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0075	ppm	0.0010	13.59	-802.2000	0.0075 (ppm)	Y 371.029
As (188.980 nm)	0.1309	ppm	0.0032	2.42	89.6100	0.1309 (ppm)	Y 371.029
B (249.678 nm)	3.2130	ppm	0.0221	0.69	40100.0000	3.2130 (ppm)	Y 371.029
Ba (233.527 nm)	0.0222	ppm	0.0004	1.93	1809.0000	0.0222 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	5.0810	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	256.6000	ppm	0.9603	0.37	1135000.0000	256.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	1.7610	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0005 u	ppm	0.0008	> 100.00	-7.4770	0.0005 u (ppm)	Y 371.029
Cr (205.560 nm)	0.7649	ppm	0.0041	0.53	4083.0000	0.7649 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0011 u	ppm	0.0000	4.38	-122.6000	-0.0011 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0102	ppm	0.0014	13.88	43.4500	0.0102 (ppm)	Y_R 371.029
K (766.491 nm)	22.1000	ppm	0.1404	0.64	26520.0000	22.1000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3164	ppm	0.0014	0.43	22640.0000	0.3164 (ppm)	Y_R 371.029
Mg (279.078 nm)	137.1000	ppm	1.8260	1.33	350900.0000	137.1000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0078	ppm	0.0002	2.99	1437.0000	0.0078 (ppm)	Y 371.029
Mo (204.598 nm)	0.0267	ppm	0.0001	0.22	124.6000	0.0267 (ppm)	Y 371.029
Na (589.592 nm)	640.5000 o	ppm	0.1788	0.03	4468000.0000	640.5000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0014	ppm	0.0011	76.50	2.6430	0.0014 (ppm)	Y 371.029
P (213.618 nm)	0.0045	ppm	0.0051	> 100.00	-9.5860	0.0045 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0055 u	ppm	0.0004	8.01	-14.5400	-0.0055 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0009 u	ppm	0.0019	> 100.00	6.2990	0.0009 u (ppm)	Y 371.029
Se (196.026 nm)	0.0070	ppm	0.0027	38.36	2.3920	0.0070 (ppm)	Y 371.029
Si (251.611 nm)	41.5100	ppm	0.0407	0.10	101200.0000	41.5100 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0035 u	ppm	0.0041	> 100.00	-5.6840	-0.0035 u (ppm)	Y 371.029
Sr (421.552 nm)	6.6800	ppm	0.0342	0.51	2682000.0000	6.6800 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	13.64	-433.0000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	0.0081	ppm	0.0024	29.66	4.7110	0.0081 (ppm)	Y 371.029
V (292.401 nm)	0.0184	ppm	0.0003	1.63	932.9000	0.0184 (ppm)	Y 371.029
W (207.912 nm)	-0.0019 u	ppm	0.0005	25.48	-16.4900	-0.0019 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0026	ppm	0.0003	10.58	152.6000	0.0026 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0002 u	ppm	0.0001	72.27	22.4800	-0.0002 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9045	388600.0000	0.0120	1.33
Y_R 371.029	0.8870	56030.0000	0.0207	2.33

Sample Name: CCV 5129881

Date: 10/19/2018 6:17:32 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4858	ppm	0.0028	0.58	20460.0000	0.4858 (ppm)	Y 371.029
Al (396.152 nm)	1.0100	ppm	0.0196	1.94	21480.0000	1.0100 (ppm)	Y 371.029
As (188.980 nm)	0.9662	ppm	0.0024	0.25	659.6000	0.9662 (ppm)	Y 371.029
B (249.678 nm)	0.9886	ppm	0.0063	0.63	12230.0000	0.9886 (ppm)	Y 371.029
Ba (233.527 nm)	0.9196	ppm	0.0806	8.77	72530.0000	0.9196 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9717	ppm	0.0028	0.29	179000.0000	0.9717 (ppm)	Y 371.029
Ca (422.673 nm)	5.0080	ppm	0.0108	0.22	22250.0000	5.0080 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9719	ppm	0.0030	0.31	22550.0000	0.9719 (ppm)	Y 371.029
Co (228.615 nm)	0.9767	ppm	0.0039	0.40	13220.0000	0.9767 (ppm)	Y 371.029
Cr (205.560 nm)	0.9811	ppm	0.0028	0.29	5229.0000	0.9811 (ppm)	Y 371.029
Cu (324.754 nm)	0.9735	ppm	0.0079	0.81	38970.0000	0.9735 (ppm)	Y 371.029
Fe (238.204 nm)	0.9894	ppm	0.0010	0.10	4308.0000	0.9894 (ppm)	Y_R 371.029
K (766.491 nm)	9.8050	ppm	0.0632	0.64	11680.0000	9.8050 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9656	ppm	0.0022	0.23	65520.0000	0.9656 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7250	ppm	0.3645	7.71	12100.0000	4.7250 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9784	ppm	0.0011	0.11	101600.0000	0.9784 (ppm)	Y 371.029
Mo (204.598 nm)	0.9830	ppm	0.0028	0.28	4561.0000	0.9830 (ppm)	Y 371.029
Na (589.592 nm)	10.6000	ppm	0.0139	0.13	75310.0000	10.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9757	ppm	0.0017	0.18	5001.0000	0.9757 (ppm)	Y 371.029
P (213.618 nm)	0.9625	ppm	0.0039	0.41	818.4000	0.9625 (ppm)	Y 371.029
Pb (220.353 nm)	0.9775	ppm	0.0005	0.06	1872.0000	0.9775 (ppm)	Y 371.029
Sb (206.834 nm)	0.9604	ppm	0.0193	2.01	983.8000	0.9604 (ppm)	Y 371.029
Se (196.026 nm)	0.9590	ppm	0.0059	0.61	727.5000	0.9590 (ppm)	Y 371.029
Si (251.611 nm)	4.9370	ppm	0.1069	2.17	12250.0000	4.9370 (ppm)	Y 371.029
Sn (189.925 nm)	0.9750	ppm	0.0010	0.10	634.6000	0.9750 (ppm)	Y 371.029
Sr (421.552 nm)	0.9984	ppm	0.0056	0.57	400300.0000	0.9984 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9800	ppm	0.0041	0.41	120900.0000	0.9800 (ppm)	Y 371.029
Tl (190.794 nm)	0.9776	ppm	0.0034	0.34	1164.0000	0.9776 (ppm)	Y 371.029
V (292.401 nm)	0.9837	ppm	0.0003	0.03	27680.0000	0.9837 (ppm)	Y 371.029
W (207.912 nm)	0.9824	ppm	0.0011	0.12	1852.0000	0.9824 (ppm)	Y 371.029
Zn (202.548 nm)	0.9779	ppm	0.0071	0.72	17910.0000	0.9779 (ppm)	Y 371.029
Zr (343.823 nm)	0.9801	ppm	0.0049	0.50	82460.0000	0.9801 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0820	464900.0000	0.0784	7.25
Y_R 371.029	1.1630	73470.0000	0.0151	1.30

Sample Name: CCB 5129880

Date: 10/19/2018 6:19:55 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0001	27.73	23.9100	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.0114	ppm	0.0000	0.22	-966.2000	0.0114 (ppm)	Y 371.029
As (188.980 nm)	-0.0010 u	ppm	0.0022	> 100.00	5.0170	-0.0010 u (ppm)	Y 371.029
B (249.678 nm)	0.0083	ppm	0.0015	18.07	79.2600	0.0083 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0002	52.29	76.1800	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	50.17	96.0000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0460	ppm	0.0027	5.97	295.5000	0.0460 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	35.88	8.9480	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0002	18.85	-8.0230	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0010	75.16	8.3130	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0008 u	ppm	0.0001	12.93	118.8000	-0.0008 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0026	ppm	0.0021	80.98	-6.7900	0.0026 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0297 u	ppm	0.0280	94.08	-150.4000	-0.0297 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0002 u	ppm	0.0006	> 100.00	62.1200	0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0381 Z	ppm	0.0103	26.91	103.5000 Z	0.0381 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0008	ppm	0.0002	31.73	144.9000	0.0008 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0002	13.84	7.0280	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.6233 Z	ppm	0.0155	2.49	5658.0000 Z	0.6233 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001	ppm	0.0001	80.38	2.5710	0.0001 (ppm)	Y 371.029
P (213.618 nm)	-0.0004 u	ppm	0.0008	> 100.00	-10.4900	-0.0004 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0015	ppm	0.0008	54.41	-6.1850	0.0015 (ppm)	Y 371.029
Sb (206.834 nm)	0.0031	ppm	0.0005	15.97	1.7470	0.0031 (ppm)	Y 371.029
Se (196.026 nm)	0.0027	ppm	0.0001	2.66	1.0270	0.0027 (ppm)	Y 371.029
Si (251.611 nm)	0.0127	ppm	0.0071	55.70	79.8400	0.0127 (ppm)	Y 371.029
Sn (189.925 nm)	0.0028	ppm	0.0025	89.60	-1.7710	0.0028 (ppm)	Y 371.029
Sr (421.552 nm)	0.0013	ppm	0.0000	1.02	468.4000	0.0013 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0002	17.16	-57.2800	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0007	> 100.00	-3.2010	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0001	32.46	69.0700	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0009	ppm	0.0003	33.94	-5.2780	0.0009 (ppm)	Y 371.029
Zn (202.548 nm)	0.0015	ppm	0.0002	13.54	61.0600	0.0015 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	10.95	37.7000	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1360	488100.0000	0.0017	0.15
Y_R 371.029	1.1480	72530.0000	0.0056	0.49

Sample Name: 440-222222-O-1-D

Date: 10/19/2018 6:22:20 PM

Rack:Tube: 4:19

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0073	ppm	0.0002	2.99	305.7000	0.0073 (ppm)	Y 371.029
Al (396.152 nm)	0.0314	ppm	0.0004	1.35	-530.9000	0.0314 (ppm)	Y 371.029
As (188.980 nm)	0.0096	ppm	0.0023	23.89	12.2500	0.0096 (ppm)	Y 371.029
B (249.678 nm)	0.0114	ppm	0.0010	8.38	118.6000	0.0114 (ppm)	Y 371.029
Ba (233.527 nm)	0.0058	ppm	0.0000	0.79	501.8000	0.0058 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0001	70.77	22.8000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.5052	ppm	0.0044	0.87	2327.0000	0.5052 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0001	21.72	3.6670	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0000	0.33	-15.9400	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0028	ppm	0.0004	13.84	16.4800	0.0028 (ppm)	Y 371.029
Cu (324.754 nm)	0.0327	ppm	0.0001	0.28	1455.0000	0.0327 (ppm)	Y 371.029
Fe (238.204 nm)	0.0187	ppm	0.0012	6.42	63.3500	0.0187 (ppm)	Y_R 371.029
K (766.491 nm)	0.9878	ppm	0.0375	3.80	1073.0000	0.9878 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0060	ppm	0.0001	1.27	434.6000	0.0060 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0388	ppm	0.0037	9.46	105.2000	0.0388 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0084	ppm	0.0009	11.23	934.3000	0.0084 (ppm)	Y 371.029
Mo (204.598 nm)	0.0011	ppm	0.0002	14.55	5.7430	0.0011 (ppm)	Y 371.029
Na (589.592 nm)	940.6000 o	ppm	5.5030	0.59	6560000.0000	940.6000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0077	ppm	0.0012	16.02	41.4800	0.0077 (ppm)	Y 371.029
P (213.618 nm)	50.5200 o	ppm	1.6800	3.32	46320.0000	50.5200 o (ppm)	Y 371.029
Pb (220.353 nm)	-0.0005 u	ppm	0.0004	68.74	-10.1200	-0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0029	ppm	0.0029	98.45	1.6570	0.0029 (ppm)	Y 371.029
Se (196.026 nm)	0.0072	ppm	0.0029	40.75	4.4020	0.0072 (ppm)	Y 371.029
Si (251.611 nm)	0.0767	ppm	0.0023	2.96	236.2000	0.0767 (ppm)	Y 371.029
Sn (189.925 nm)	0.3772	ppm	0.0034	0.91	243.0000	0.3772 (ppm)	Y 371.029
Sr (421.552 nm)	0.0016	ppm	0.0000	1.38	578.3000	0.0016 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0014	ppm	0.0001	3.86	3.0220	0.0014 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0067 u	ppm	0.0028	41.89	-12.0300	-0.0067 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0004	> 100.00	59.9800	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	-0.0018 u	ppm	0.0004	20.72	-9.8490	-0.0018 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0519	ppm	0.0005	1.01	980.1000	0.0519 (ppm)	Y 371.029
Zr (343.823 nm)	0.0018	ppm	0.0002	12.20	147.7000	0.0018 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0380	446000.0000	0.0025	0.24
Y_R 371.029	1.1160	70490.0000	0.0065	0.58

Sample Name: 440-222283-B-1-A

Date: 10/19/2018 6:24:44 PM

Rack:Tube: 4:20

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	37.92	-70.1300	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	0.0289	ppm	0.0005	1.77	-284.3000	0.0289 (ppm)	Y 371.029
As (188.980 nm)	0.0651	ppm	0.0014	2.13	49.7500	0.0651 (ppm)	Y 371.029
B (249.678 nm)	2.1010	ppm	0.0267	1.27	26210.0000	2.1010 (ppm)	Y 371.029
Ba (233.527 nm)	0.0192	ppm	0.0004	1.90	1568.0000	0.0192 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	0.77	37.5400	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	245.8000	ppm	0.6592	0.27	1088000.0000	245.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0002	> 100.00	1.3040	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0117	ppm	0.0010	8.14	142.1000	0.0117 (ppm)	Y 371.029
Cr (205.560 nm)	0.0041	ppm	0.0003	6.55	27.2800	0.0041 (ppm)	Y 371.029
Cu (324.754 nm)	0.0002	ppm	0.0003	> 100.00	-60.9300	0.0002 (ppm)	Y 371.029
Fe (238.204 nm)	0.8876	ppm	0.0037	0.41	3879.0000	0.8876 (ppm)	Y_R 371.029
K (766.491 nm)	22.2400	ppm	0.0152	0.07	26680.0000	22.2400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.2800	ppm	0.0006	0.21	20010.0000	0.2800 (ppm)	Y_R 371.029
Mg (279.078 nm)	108.0000	ppm	1.6720	1.55	276400.0000	108.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.2672	ppm	0.0019	0.72	28290.0000	0.2672 (ppm)	Y 371.029
Mo (204.598 nm)	0.2023	ppm	0.0054	2.68	938.8000	0.2023 (ppm)	Y 371.029
Na (589.592 nm)	873.3000 o	ppm	4.3000	0.49	6091000.0000	873.3000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0196	ppm	0.0003	1.30	95.9400	0.0196 (ppm)	Y 371.029
P (213.618 nm)	0.3620	ppm	0.0103	2.86	315.3000	0.3620 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0039 u	ppm	0.0003	7.16	-12.4100	-0.0039 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0042 u	ppm	0.0007	16.99	-8.2470	-0.0042 u (ppm)	Y 371.029
Se (196.026 nm)	0.0060	ppm	0.0067	> 100.00	1.7410	0.0060 (ppm)	Y 371.029
Si (251.611 nm)	36.7700	ppm	0.4218	1.15	89680.0000	36.7700 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0019 u	ppm	0.0013	67.02	-4.7170	-0.0019 u (ppm)	Y 371.029
Sr (421.552 nm)	6.7630	ppm	0.0300	0.44	2715000.0000	6.7630 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0006	ppm	0.0001	11.72	-399.9000	0.0006 (ppm)	Y 371.029
Tl (190.794 nm)	0.0074	ppm	0.0014	18.46	3.7650	0.0074 (ppm)	Y 371.029
V (292.401 nm)	0.0262	ppm	0.0001	0.21	1100.0000	0.0262 (ppm)	Y 371.029
W (207.912 nm)	-0.0011 u	ppm	0.0011	94.79	-14.5500	-0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0130	ppm	0.0003	2.34	342.4000	0.0130 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	11.37	22.2200	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9881	424500.0000	0.0067	0.68
Y_R 371.029	1.0720	67690.0000	0.0035	0.33

Sample Name: 440-222203-I-2-A

Date: 10/19/2018 6:27:08 PM

Rack:Tube: 4:21

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0000	16.54	9.0370	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0594	ppm	0.0005	0.76	77.0300	0.0594 (ppm)	Y 371.029
As (188.980 nm)	0.0023	ppm	0.0002	8.09	7.3090	0.0023 (ppm)	Y 371.029
B (249.678 nm)	0.0148	ppm	0.0015	10.28	160.4000	0.0148 (ppm)	Y 371.029
Ba (233.527 nm)	0.0015	ppm	0.0000	1.19	158.2000	0.0015 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	23.79	11.6700	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	1.4700	ppm	0.0082	0.56	6594.0000	1.4700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.9630	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0000	5.33	-13.9400	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	19.01	4.9430	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0015	ppm	0.0001	3.27	211.1000	0.0015 (ppm)	Y 371.029
Fe (238.204 nm)	0.0265	ppm	0.0027	10.26	97.5900	0.0265 (ppm)	Y_R 371.029
K (766.491 nm)	0.5024	ppm	0.0342	6.81	489.1000	0.5024 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0018	ppm	0.0012	67.42	176.4000	0.0018 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.3273	ppm	0.0307	9.39	843.7000	0.3273 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0029	ppm	0.0001	2.77	365.8000	0.0029 (ppm)	Y 371.029
Mo (204.598 nm)	0.0004	ppm	0.0001	29.92	2.5090	0.0004 (ppm)	Y 371.029
Na (589.592 nm)	2.9490	ppm	0.0173	0.59	21880.0000	2.9490 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0006	ppm	0.0005	76.34	5.0730	0.0006 (ppm)	Y 371.029
P (213.618 nm)	0.0362	ppm	0.0014	3.92	22.9700	0.0362 (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0003	21.85	-6.7710	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0100	ppm	0.0000	0.20	8.8870	0.0100 (ppm)	Y 371.029
Se (196.026 nm)	0.0023 u	ppm	0.0042	> 100.00	0.6529	0.0023 u (ppm)	Y 371.029
Si (251.611 nm)	0.6007	ppm	0.0077	1.28	1513.0000	0.6007 (ppm)	Y 371.029
Sn (189.925 nm)	0.0031	ppm	0.0006	18.62	-1.5220	0.0031 (ppm)	Y 371.029
Sr (421.552 nm)	0.0067	ppm	0.0001	1.17	2636.0000	0.0067 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0014	ppm	0.0001	4.92	-5.2290	0.0014 (ppm)	Y 371.029
Tl (190.794 nm)	0.0005 u	ppm	0.0039	> 100.00	-3.2050	0.0005 u (ppm)	Y 371.029
V (292.401 nm)	0.0020	ppm	0.0001	6.22	115.8000	0.0020 (ppm)	Y 371.029
W (207.912 nm)	0.0007 u	ppm	0.0010	> 100.00	-5.4350	0.0007 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0290	ppm	0.0003	0.93	561.1000	0.0290 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	42.16	12.9300	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1370	488400.0000	0.0071	0.63
Y_R 371.029	1.1460	72390.0000	0.0047	0.41

Sample Name: 440-222586-B-1-B

Date: 10/19/2018 6:29:32 PM

Rack:Tube: 4:22

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0233 b	ppm	0.0003	1.16	1073.0000	0.0233 b (ppm)	Y 371.029
Al (396.152 nm)	0.2081 b	ppm	0.0034	1.64	6035.0000	0.2081 b (ppm)	Y 371.029
As (188.980 nm)	0.0137 b	ppm	0.0003	2.22	21.7000	0.0137 b (ppm)	Y 371.029
B (249.678 nm)	119.3000 bo	ppm	0.7953	0.67	1490000.0000	119.3000 bo (ppm)	Y 371.029
Ba (233.527 nm)	0.0132 b	ppm	0.0000	0.36	942.2000	0.0132 b (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0005 bu	ppm	0.0000	5.49	-470.6000	-0.0005 bu (ppm)	Y 371.029
Ca (422.673 nm)	0.8031 b	ppm	0.0086	1.07	3430.0000	0.8031 b (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0013 b	ppm	0.0001	8.02	37.1700	0.0013 b (ppm)	Y 371.029
Co (228.615 nm)	0.0125 b	ppm	0.0004	3.56	388.0000	0.0125 b (ppm)	Y 371.029
Cr (205.560 nm)	0.1243 b	ppm	0.0017	1.33	458.6000	0.1243 b (ppm)	Y 371.029
Cu (324.754 nm)	0.3211 b	ppm	0.0021	0.64	13090.0000	0.3211 b (ppm)	Y 371.029
Fe (238.204 nm)	1.2870 b	ppm	0.0050	0.39	5553.0000	1.2870 b (ppm)	Y_R 371.029
K (766.491 nm)	396.0000 b	ppm	0.2920	0.07	475800.0000	396.0000 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.0808 b	ppm	0.0011	1.37	1787.0000	0.0808 b (ppm)	Y_R 371.029
Mg (279.078 nm)	0.1428 b	ppm	0.0236	16.49	403.3000	0.1428 b (ppm)	Y_R 371.029
Mn (259.372 nm)	22.8600 b	ppm	0.1081	0.47	2362000.0000	22.8600 b (ppm)	Y 371.029
Mo (204.598 nm)	5.9160 b	ppm	0.0877	1.48	27490.0000	5.9160 b (ppm)	Y 371.029
Na (589.592 nm)	980.7000 bo	ppm	2.9800	0.30	6840000.0000	980.7000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	120.5000 bo	ppm	1.3110	1.09	618100.0000	120.5000 bo (ppm)	Y 371.029
P (213.618 nm)	328.6000 bo	ppm	6.3650	1.94	301200.0000	328.6000 bo (ppm)	Y 371.029
Pb (220.353 nm)	-0.0030 bu	ppm	0.0005	15.10	-17.2300	-0.0030 bu (ppm)	Y 371.029
Sb (206.834 nm)	0.0126 b	ppm	0.0015	12.11	-90.7300	0.0126 b (ppm)	Y 371.029
Se (196.026 nm)	0.0383 b	ppm	0.0005	1.31	17.5600	0.0383 b (ppm)	Y 371.029
Si (251.611 nm)	20.3000 b	ppm	0.0823	0.41	49720.0000	20.3000 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0045 bu	ppm	0.0002	4.55	-2.7160	-0.0045 bu (ppm)	Y 371.029
Sr (421.552 nm)	0.0202 b	ppm	0.0001	0.31	8120.0000	0.0202 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0624 b	ppm	0.0003	0.48	6940.0000	0.0624 b (ppm)	Y 371.029
Tl (190.794 nm)	-0.0210 bu	ppm	0.0013	6.38	12.0100	-0.0210 bu (ppm)	Y 371.029
V (292.401 nm)	-0.0180 bu	ppm	0.0004	2.28	-1625.0000	-0.0180 bu (ppm)	Y 371.029
W (207.912 nm)	-0.0001 bu	ppm	0.0015	> 100.00	-7.4740	-0.0001 bu (ppm)	Y 371.029
Zn (202.548 nm)	0.3986 b	ppm	0.0017	0.42	7210.0000	0.3986 b (ppm)	Y 371.029
Zr (343.823 nm)	0.0084 b	ppm	0.0000	0.59	560.4000	0.0084 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9733	418200.0000	0.0044	0.45
Y_R 371.029	1.0480	66170.0000	0.0000	0.00

Sample Name: 440-222318-H-1-B

Date: 10/19/2018 6:31:57 PM

Rack:Tube: 4:23

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 bu	ppm	0.0005	75.06	-157.7000	-0.0007 bu (ppm)	Y 371.029
Al (396.152 nm)	-0.0222 bu	ppm	0.0027	12.30	-627.3000	-0.0222 bu (ppm)	Y 371.029
As (188.980 nm)	-0.0017 bu	ppm	0.0012	70.87	7.8140	-0.0017 bu (ppm)	Y 371.029
B (249.678 nm)	4.5010 b	ppm	0.0737	1.64	56180.0000	4.5010 b (ppm)	Y 371.029
Ba (233.527 nm)	0.0029 b	ppm	0.0002	6.38	353.5000	0.0029 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 bu	ppm	0.0000	30.89	19.2500	0.0000 bu (ppm)	Y 371.029
Ca (422.673 nm)	373.1000 b	ppm	0.7673	0.21	1651000.0000	373.1000 b (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 bu	ppm	0.0000	85.52	-0.7382	-0.0001 bu (ppm)	Y 371.029
Co (228.615 nm)	-0.0010 bu	ppm	0.0002	15.25	-9.5630	-0.0010 bu (ppm)	Y 371.029
Cr (205.560 nm)	0.0020 b	ppm	0.0002	9.76	18.8500	0.0020 b (ppm)	Y 371.029
Cu (324.754 nm)	-0.0018 bu	ppm	0.0001	5.30	-209.6000	-0.0018 bu (ppm)	Y 371.029
Fe (238.204 nm)	-0.0041 bu	ppm	0.0026	62.33	63.7700	-0.0041 bu (ppm)	Y_R 371.029
K (766.491 nm)	404.2000 b	ppm	1.4400	0.36	485800.0000	404.2000 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.1923 b	ppm	0.0021	1.11	17450.0000	0.1923 b (ppm)	Y_R 371.029
Mg (279.078 nm)	882.5000 bo	ppm	39.1200	4.43	2259000.0000	882.5000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0212 bu	ppm	0.0111	52.38	1373.0000	-0.0212 bu (ppm)	Y 371.029
Mo (204.598 nm)	0.0137 b	ppm	0.0027	19.84	65.4400	0.0137 b (ppm)	Y 371.029
Na (589.592 nm)	3048.0000 bo	ppm	12.7300	0.42	21250000.0000	3048.0000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0646 b	ppm	0.0543	84.06	316.1000	0.0646 b (ppm)	Y 371.029
P (213.618 nm)	0.2028 b	ppm	0.1668	82.25	173.8000	0.2028 b (ppm)	Y 371.029
Pb (220.353 nm)	-0.0179 bu	ppm	0.0003	1.49	-20.2900	-0.0179 bu (ppm)	Y 371.029
Sb (206.834 nm)	0.0034 b	ppm	0.0037	> 100.00	1.5360	0.0034 b (ppm)	Y 371.029
Se (196.026 nm)	0.0065 b	ppm	0.0045	69.31	0.3993	0.0065 b (ppm)	Y 371.029
Si (251.611 nm)	0.1164 b	ppm	0.0053	4.55	464.3000	0.1164 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0165 bu	ppm	0.0005	2.99	-12.9100	-0.0165 bu (ppm)	Y 371.029
Sr (421.552 nm)	6.8940 b	ppm	0.0169	0.24	2770000.0000	6.8940 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002 b	ppm	0.0000	2.98	-575.6000	0.0002 b (ppm)	Y 371.029
Tl (190.794 nm)	0.0054 b	ppm	0.0010	18.87	6.1500	0.0054 b (ppm)	Y 371.029
V (292.401 nm)	-0.0150 bu	ppm	0.0002	1.41	191.5000	-0.0150 bu (ppm)	Y 371.029
W (207.912 nm)	-0.0048 bu	ppm	0.0010	21.06	-26.9400	-0.0048 bu (ppm)	Y 371.029
Zn (202.548 nm)	-0.0446 bu	ppm	0.0005	1.18	-280.4000	-0.0446 bu (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 bu	ppm	0.0002	30.84	0.9616	-0.0005 bu (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7092	304700.0000	0.0306	4.32
Y_R 371.029	0.8735	55180.0000	0.0191	2.18

Sample Name: 440-222321-H-1-B

Date: 10/19/2018 6:34:21 PM

Rack:Tube: 4:24

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0001	20.94	-117.9000	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.0947	ppm	0.0005	0.50	1589.0000	0.0947 (ppm)	Y 371.029
As (188.980 nm)	-0.0025 u	ppm	0.0046	> 100.00	6.1980	-0.0025 u (ppm)	Y 371.029
B (249.678 nm)	2.8350	ppm	0.0319	1.12	35380.0000	2.8350 (ppm)	Y 371.029
Ba (233.527 nm)	0.0045	ppm	0.0000	1.04	449.4000	0.0045 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	38.3800	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	247.8000	ppm	1.8760	0.76	1096000.0000	247.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-2.2730	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	-0.0003 u	ppm	0.0000	10.65	-7.3630	-0.0003 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0234	ppm	0.0003	1.16	130.6000	0.0234 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0003	17.32	-98.5700	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.9108	ppm	0.0004	0.04	4036.0000	0.9108 (ppm)	Y_R 371.029
K (766.491 nm)	257.1000	ppm	1.3250	0.52	308900.0000	257.1000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.1120	ppm	0.0047	4.16	10670.0000	0.1120 (ppm)	Y_R 371.029
Mg (279.078 nm)	619.4000 o	ppm	2.6470	0.43	1585000.0000	619.4000 o (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0791	ppm	0.0001	0.15	10810.0000	0.0791 (ppm)	Y 371.029
Mo (204.598 nm)	0.0059	ppm	0.0001	1.87	29.1200	0.0059 (ppm)	Y 371.029
Na (589.592 nm)	2719.0000 o	ppm	3.8170	0.14	18970000.0000	2719.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0115	ppm	0.0018	15.36	49.4900	0.0115 (ppm)	Y 371.029
P (213.618 nm)	0.0496	ppm	0.0041	8.32	34.1200	0.0496 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0133 u	ppm	0.0007	5.10	-18.4800	-0.0133 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0031 u	ppm	0.0056	> 100.00	-4.8350	-0.0031 u (ppm)	Y 371.029
Se (196.026 nm)	0.0044	ppm	0.0061	> 100.00	-0.2107	0.0044 (ppm)	Y 371.029
Si (251.611 nm)	5.2460	ppm	0.0266	0.51	12920.0000	5.2460 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0084 u	ppm	0.0036	42.47	-8.0190	-0.0084 u (ppm)	Y 371.029
Sr (421.552 nm)	4.4790	ppm	0.0516	1.15	1800000.0000	4.4790 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0071	ppm	0.0001	1.94	418.3000	0.0071 (ppm)	Y 371.029
Tl (190.794 nm)	0.0023	ppm	0.0010	42.42	1.5310	0.0023 (ppm)	Y 371.029
V (292.401 nm)	-0.0093 u	ppm	0.0001	1.31	170.3000	-0.0093 u (ppm)	Y 371.029
W (207.912 nm)	-0.0070 u	ppm	0.0004	5.91	-27.5000	-0.0070 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0252 u	ppm	0.0003	1.33	-77.2900	-0.0252 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	82.43	34.1600	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7703	331000.0000	0.0080	1.04
Y_R 371.029	0.9115	57580.0000	0.0008	0.09

Sample Name: 440-222321-H-1-C MS

Date: 10/19/2018 6:36:45 PM

Rack:Tube: 4:25

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2825	ppm	0.0028	1.00	11780.0000	0.2825 (ppm)	Y 371.029
Al (396.152 nm)	0.8184	ppm	0.0076	0.93	17720.0000	0.8184 (ppm)	Y 371.029
As (188.980 nm)	0.5043	ppm	0.0055	1.09	349.8000	0.5043 (ppm)	Y 371.029
B (249.678 nm)	3.3220	ppm	0.0357	1.08	41410.0000	3.3220 (ppm)	Y 371.029
Ba (233.527 nm)	0.4167	ppm	0.0041	0.99	32950.0000	0.4167 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5221	ppm	0.0011	0.20	96200.0000	0.5221 (ppm)	Y 371.029
Ca (422.673 nm)	248.4000	ppm	1.1580	0.47	1099000.0000	248.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4204	ppm	0.0037	0.87	9754.0000	0.4204 (ppm)	Y 371.029
Co (228.615 nm)	0.4351	ppm	0.0014	0.33	5897.0000	0.4351 (ppm)	Y 371.029
Cr (205.560 nm)	0.4603	ppm	0.0026	0.57	2459.0000	0.4603 (ppm)	Y 371.029
Cu (324.754 nm)	0.5804	ppm	0.0050	0.86	23110.0000	0.5804 (ppm)	Y 371.029
Fe (238.204 nm)	1.2990	ppm	0.0111	0.86	5737.0000	1.2990 (ppm)	Y_R 371.029
K (766.491 nm)	263.2000	ppm	1.0050	0.38	316400.0000	263.2000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.6874	ppm	0.0050	0.73	49870.0000	0.6874 (ppm)	Y_R 371.029
Mg (279.078 nm)	656.4000 o	ppm	6.4420	0.98	1680000.0000	656.4000 o (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5374	ppm	0.0027	0.51	58520.0000	0.5374 (ppm)	Y 371.029
Mo (204.598 nm)	0.4757	ppm	0.0074	1.55	2209.0000	0.4757 (ppm)	Y 371.029
Na (589.592 nm)	2700.0000 o	ppm	36.4900	1.35	18830000.0000	2700.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4314	ppm	0.0016	0.36	2200.0000	0.4314 (ppm)	Y 371.029
P (213.618 nm)	0.5661	ppm	0.0037	0.66	478.0000	0.5661 (ppm)	Y 371.029
Pb (220.353 nm)	0.4126	ppm	0.0068	1.65	801.8000	0.4126 (ppm)	Y 371.029
Sb (206.834 nm)	0.5163	ppm	0.0033	0.65	528.2000	0.5163 (ppm)	Y 371.029
Se (196.026 nm)	0.4591	ppm	0.0022	0.47	345.2000	0.4591 (ppm)	Y 371.029
Si (251.611 nm)	7.9960	ppm	0.0551	0.69	19710.0000	7.9960 (ppm)	Y 371.029
Sn (189.925 nm)	0.4281	ppm	0.0087	2.04	277.7000	0.4281 (ppm)	Y 371.029
Sr (421.552 nm)	4.9220	ppm	0.0308	0.62	1977000.0000	4.9220 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4928	ppm	0.0032	0.65	60440.0000	0.4928 (ppm)	Y 371.029
Tl (190.794 nm)	0.3835	ppm	0.0262	6.84	453.0000	0.3835 (ppm)	Y 371.029
V (292.401 nm)	0.4863	ppm	0.0035	0.72	14090.0000	0.4863 (ppm)	Y 371.029
W (207.912 nm)	0.4605	ppm	0.0047	1.02	856.4000	0.4605 (ppm)	Y 371.029
Zn (202.548 nm)	0.3824	ppm	0.0021	0.56	7421.0000	0.3824 (ppm)	Y 371.029
Zr (343.823 nm)	0.4800	ppm	0.0055	1.14	40410.0000	0.4800 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7928	340700.0000	0.0039	0.49
Y_R 371.029	0.8864	55990.0000	0.0075	0.85

Sample Name: 440-222321-H-1-D MSD

Date: 10/19/2018 6:39:10 PM

Rack:Tube: 4:26

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2923 b	ppm	0.0031	1.07	12200.0000	0.2923 b (ppm)	Y 371.029
Al (396.152 nm)	0.8541 b	ppm	0.0075	0.88	18520.0000	0.8541 b (ppm)	Y 371.029
As (188.980 nm)	0.5225 b	ppm	0.0055	1.05	362.2000	0.5225 b (ppm)	Y 371.029
B (249.678 nm)	3.4690 b	ppm	0.0230	0.66	43250.0000	3.4690 b (ppm)	Y 371.029
Ba (233.527 nm)	0.4176 b	ppm	0.0188	4.49	33020.0000	0.4176 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.5396 b	ppm	0.0006	0.10	99430.0000	0.5396 b (ppm)	Y 371.029
Ca (422.673 nm)	259.3000 b	ppm	1.2750	0.49	1147000.0000	259.3000 b (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4253 b	ppm	0.0021	0.49	9867.0000	0.4253 b (ppm)	Y 371.029
Co (228.615 nm)	0.4461 b	ppm	0.0070	1.58	6046.0000	0.4461 b (ppm)	Y 371.029
Cr (205.560 nm)	0.4704 b	ppm	0.0016	0.35	2513.0000	0.4704 b (ppm)	Y 371.029
Cu (324.754 nm)	0.6013 b	ppm	0.0051	0.84	23930.0000	0.6013 b (ppm)	Y 371.029
Fe (238.204 nm)	1.3420 b	ppm	0.0083	0.62	5925.0000	1.3420 b (ppm)	Y_R 371.029
K (766.491 nm)	275.5000 b	ppm	0.5625	0.20	331100.0000	275.5000 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.7196 b	ppm	0.0030	0.41	52110.0000	0.7196 b (ppm)	Y_R 371.029
Mg (279.078 nm)	662.2000 bo	ppm	30.8200	4.65	1695000.0000	662.2000 bo (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5525 b	ppm	0.0021	0.37	60120.0000	0.5525 b (ppm)	Y 371.029
Mo (204.598 nm)	0.4869 b	ppm	0.0036	0.73	2261.0000	0.4869 b (ppm)	Y 371.029
Na (589.592 nm)	2702.0000 bo	ppm	88.8800	3.29	18840000.0000	2702.0000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4417 b	ppm	0.0030	0.68	2253.0000	0.4417 b (ppm)	Y 371.029
P (213.618 nm)	0.5775 b	ppm	0.0043	0.74	487.3000	0.5775 b (ppm)	Y 371.029
Pb (220.353 nm)	0.4219 b	ppm	0.0014	0.33	819.9000	0.4219 b (ppm)	Y 371.029
Sb (206.834 nm)	0.5228 b	ppm	0.0046	0.88	534.8000	0.5228 b (ppm)	Y 371.029
Se (196.026 nm)	0.4665 b	ppm	0.0002	0.05	350.8000	0.4665 b (ppm)	Y 371.029
Si (251.611 nm)	8.3040 b	ppm	0.0789	0.95	20460.0000	8.3040 b (ppm)	Y 371.029
Sn (189.925 nm)	0.4318 b	ppm	0.0064	1.49	280.2000	0.4318 b (ppm)	Y 371.029
Sr (421.552 nm)	5.1340 b	ppm	0.0059	0.11	2062000.0000	5.1340 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5061 b	ppm	0.0027	0.52	62070.0000	0.5061 b (ppm)	Y 371.029
Tl (190.794 nm)	0.3969 b	ppm	0.0176	4.43	469.0000	0.3969 b (ppm)	Y 371.029
V (292.401 nm)	0.4981 b	ppm	0.0024	0.49	14440.0000	0.4981 b (ppm)	Y 371.029
W (207.912 nm)	0.4732 b	ppm	0.0035	0.73	880.1000	0.4732 b (ppm)	Y 371.029
Zn (202.548 nm)	0.3914 b	ppm	0.0003	0.07	7592.0000	0.3914 b (ppm)	Y 371.029
Zr (343.823 nm)	0.4968 b	ppm	0.0033	0.67	41830.0000	0.4968 b (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7944	341300.0000	0.0101	1.27
Y_R 371.029	0.9095	57450.0000	0.0315	3.46

Sample Name: 440-222576-L-2-A

Date: 10/19/2018 6:41:34 PM

Rack:Tube: 4:27

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	43.48	-40.4400	-0.0005 u (ppm)	Y 371.029
Al (396.152 nm)	1.1630	ppm	0.0061	0.52	24350.0000	1.1630 (ppm)	Y 371.029
As (188.980 nm)	0.0298	ppm	0.0019	6.27	26.1900	0.0298 (ppm)	Y 371.029
B (249.678 nm)	1.2810	ppm	0.0082	0.64	15970.0000	1.2810 (ppm)	Y 371.029
Ba (233.527 nm)	0.0312	ppm	0.0003	1.09	2510.0000	0.0312 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0002	73.26	79.1900	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	96.2100	ppm	0.0239	0.02	425800.0000	96.2100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0005	> 100.00	5.5570	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0020	ppm	0.0003	15.80	8.9700	0.0020 (ppm)	Y 371.029
Cr (205.560 nm)	0.0029	ppm	0.0004	15.35	17.6300	0.0029 (ppm)	Y 371.029
Cu (324.754 nm)	0.0044	ppm	0.0001	2.75	244.9000	0.0044 (ppm)	Y 371.029
Fe (238.204 nm)	1.0230	ppm	0.0046	0.45	4465.0000	1.0230 (ppm)	Y_R 371.029
K (766.491 nm)	4.1280	ppm	0.0048	0.12	4888.0000	4.1280 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0018	ppm	0.0002	9.62	700.1000	0.0018 (ppm)	Y_R 371.029
Mg (279.078 nm)	87.3400	ppm	0.7271	0.83	223600.0000	87.3400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0600	ppm	0.0001	0.12	6880.0000	0.0600 (ppm)	Y 371.029
Mo (204.598 nm)	0.3058	ppm	0.0070	2.28	1419.0000	0.3058 (ppm)	Y 371.029
Na (589.592 nm)	588.6000 o	ppm	0.3031	0.05	4106000.0000	588.6000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0067	ppm	0.0005	6.91	33.5500	0.0067 (ppm)	Y 371.029
P (213.618 nm)	0.2750	ppm	0.0011	0.41	235.8000	0.2750 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0019 u	ppm	0.0003	17.12	-10.5500	-0.0019 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0005 u	ppm	0.0023	> 100.00	-5.6970	0.0005 u (ppm)	Y 371.029
Se (196.026 nm)	0.0086	ppm	0.0009	10.05	4.5810	0.0086 (ppm)	Y 371.029
Si (251.611 nm)	12.4700	ppm	0.0706	0.57	30470.0000	12.4700 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0009 u	ppm	0.0026	> 100.00	-4.0150	-0.0009 u (ppm)	Y 371.029
Sr (421.552 nm)	1.7570	ppm	0.0021	0.12	706000.0000	1.7570 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0569	ppm	0.0004	0.66	6739.0000	0.0569 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017	ppm	0.0019	> 100.00	-2.6550	0.0017 (ppm)	Y 371.029
V (292.401 nm)	0.0083	ppm	0.0003	3.94	368.6000	0.0083 (ppm)	Y 371.029
W (207.912 nm)	-0.0005 u	ppm	0.0011	> 100.00	-9.9560	-0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0149	ppm	0.0000	0.08	357.5000	0.0149 (ppm)	Y 371.029
Zr (343.823 nm)	0.0017	ppm	0.0002	12.44	151.0000	0.0017 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0180	437400.0000	0.0028	0.27
Y_R 371.029	1.1020	69610.0000	0.0067	0.60

Sample Name: 440-222576-L-6-A

Date: 10/19/2018 6:43:58 PM

Rack:Tube: 4:28

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-47.4300	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.7300	ppm	0.0033	0.46	14840.0000	0.7300 (ppm)	Y 371.029
As (188.980 nm)	0.0091	ppm	0.0077	84.77	11.3100	0.0091 (ppm)	Y 371.029
B (249.678 nm)	0.5187	ppm	0.0004	0.08	6455.0000	0.5187 (ppm)	Y 371.029
Ba (233.527 nm)	0.0585	ppm	0.0001	0.23	4669.0000	0.0585 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	52.4400	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	250.8000	ppm	1.2190	0.49	1110000.0000	250.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0001	23.54	12.2900	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0016	ppm	0.0001	4.00	6.7530	0.0016 (ppm)	Y 371.029
Cr (205.560 nm)	0.0016	ppm	0.0003	17.94	14.3400	0.0016 (ppm)	Y 371.029
Cu (324.754 nm)	0.0044	ppm	0.0001	1.69	96.7600	0.0044 (ppm)	Y 371.029
Fe (238.204 nm)	1.5380	ppm	0.0000	0.00	6721.0000	1.5380 (ppm)	Y_R 371.029
K (766.491 nm)	7.4590	ppm	0.0661	0.89	8906.0000	7.4590 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0042 u	ppm	0.0001	3.12	503.4000	-0.0042 u (ppm)	Y_R 371.029
Mg (279.078 nm)	78.8300	ppm	0.6943	0.88	201800.0000	78.8300 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9030	ppm	0.0031	0.34	93820.0000	0.9030 (ppm)	Y 371.029
Mo (204.598 nm)	0.0125	ppm	0.0003	2.34	58.6200	0.0125 (ppm)	Y 371.029
Na (589.592 nm)	213.7000	ppm	0.3135	0.15	1492000.0000	213.7000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0044	ppm	0.0012	28.27	18.3400	0.0044 (ppm)	Y 371.029
P (213.618 nm)	0.1793	ppm	0.0024	1.35	150.4000	0.1793 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0006 u	ppm	0.0006	91.48	-6.3080	-0.0006 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0008	ppm	0.0010	> 100.00	0.1431	0.0008 (ppm)	Y 371.029
Se (196.026 nm)	0.0126	ppm	0.0051	40.45	6.9540	0.0126 (ppm)	Y 371.029
Si (251.611 nm)	10.3600	ppm	0.0279	0.27	25320.0000	10.3600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0033 u	ppm	0.0008	23.03	-5.6400	-0.0033 u (ppm)	Y 371.029
Sr (421.552 nm)	2.3470	ppm	0.0131	0.56	944900.0000	2.3470 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0446	ppm	0.0001	0.28	5035.0000	0.0446 (ppm)	Y 371.029
Tl (190.794 nm)	0.0004 u	ppm	0.0013	> 100.00	-3.8120	0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0022	ppm	0.0002	9.53	466.0000	0.0022 (ppm)	Y 371.029
W (207.912 nm)	0.0005 u	ppm	0.0017	> 100.00	-11.6300	0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0121	ppm	0.0000	0.16	311.5000	0.0121 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	5.25	24.6700	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0450	449100.0000	0.0203	1.94
Y_R 371.029	1.0820	68350.0000	0.0068	0.63

Sample Name: CCV 5129881

Date: 10/19/2018 6:46:22 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4869	ppm	0.0017	0.34	20500.0000	0.4869 (ppm)	Y 371.029
Al (396.152 nm)	1.0120	ppm	0.0008	0.08	21520.0000	1.0120 (ppm)	Y 371.029
As (188.980 nm)	0.9664	ppm	0.0099	1.02	659.7000	0.9664 (ppm)	Y 371.029
B (249.678 nm)	0.9982	ppm	0.0029	0.30	12350.0000	0.9982 (ppm)	Y 371.029
Ba (233.527 nm)	0.9786	ppm	0.0152	1.56	77190.0000	0.9786 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9692	ppm	0.0021	0.22	178500.0000	0.9692 (ppm)	Y 371.029
Ca (422.673 nm)	5.0010	ppm	0.0010	0.02	22210.0000	5.0010 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9731	ppm	0.0028	0.29	22580.0000	0.9731 (ppm)	Y 371.029
Co (228.615 nm)	0.9739	ppm	0.0079	0.81	13180.0000	0.9739 (ppm)	Y 371.029
Cr (205.560 nm)	0.9768	ppm	0.0012	0.12	5206.0000	0.9768 (ppm)	Y 371.029
Cu (324.754 nm)	0.9803	ppm	0.0014	0.14	39240.0000	0.9803 (ppm)	Y 371.029
Fe (238.204 nm)	0.9837	ppm	0.0002	0.02	4283.0000	0.9837 (ppm)	Y_R 371.029
K (766.491 nm)	10.0400	ppm	0.0268	0.27	11960.0000	10.0400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9659	ppm	0.0015	0.16	65540.0000	0.9659 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0420	ppm	0.1182	2.34	12910.0000	5.0420 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9772	ppm	0.0019	0.20	101500.0000	0.9772 (ppm)	Y 371.029
Mo (204.598 nm)	0.9819	ppm	0.0063	0.64	4556.0000	0.9819 (ppm)	Y 371.029
Na (589.592 nm)	12.1500 Q	ppm	0.0062	0.05	86100.0000 Q	12.1500 Q (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9728	ppm	0.0031	0.32	4985.0000	0.9728 (ppm)	Y 371.029
P (213.618 nm)	0.9699	ppm	0.0010	0.10	824.9000	0.9699 (ppm)	Y 371.029
Pb (220.353 nm)	0.9778	ppm	0.0001	0.01	1873.0000	0.9778 (ppm)	Y 371.029
Sb (206.834 nm)	0.9693	ppm	0.0098	1.01	993.0000	0.9693 (ppm)	Y 371.029
Se (196.026 nm)	0.9623	ppm	0.0019	0.20	730.0000	0.9623 (ppm)	Y 371.029
Si (251.611 nm)	4.8870	ppm	0.0768	1.57	12130.0000	4.8870 (ppm)	Y 371.029
Sn (189.925 nm)	0.9779	ppm	0.0044	0.44	636.4000	0.9779 (ppm)	Y 371.029
Sr (421.552 nm)	0.9859	ppm	0.0040	0.41	395300.0000	0.9859 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9785	ppm	0.0029	0.29	120700.0000	0.9785 (ppm)	Y 371.029
Tl (190.794 nm)	0.9738	ppm	0.0002	0.02	1160.0000	0.9738 (ppm)	Y 371.029
V (292.401 nm)	0.9800	ppm	0.0023	0.24	27570.0000	0.9800 (ppm)	Y 371.029
W (207.912 nm)	0.9805	ppm	0.0061	0.62	1848.0000	0.9805 (ppm)	Y 371.029
Zn (202.548 nm)	0.9743	ppm	0.0026	0.26	17850.0000	0.9743 (ppm)	Y 371.029
Zr (343.823 nm)	0.9769	ppm	0.0026	0.26	82200.0000	0.9769 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0870	466900.0000	0.0158	1.45
Y_R 371.029	1.0940	69110.0000	0.0042	0.39

Sample Name: CCB 5129880

Date: 10/19/2018 6:48:46 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0001	11.89	26.4800	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	0.0104	ppm	0.0009	8.81	-987.6000	0.0104 (ppm)	Y 371.029
As (188.980 nm)	0.0013 u	ppm	0.0037	> 100.00	6.6170	0.0013 u (ppm)	Y 371.029
B (249.678 nm)	0.0220	ppm	0.0025	11.42	251.1000	0.0220 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0003	55.63	78.3300	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	58.61	92.6900	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0541	ppm	0.0043	7.93	331.1000	0.0541 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	44.27	10.0900	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0000	2.15	-10.2000	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0005	77.81	4.6300	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0004	49.44	115.1000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0009	ppm	0.0001	15.40	-14.1100	0.0009 (ppm)	Y_R 371.029
K (766.491 nm)	0.1742	ppm	0.0121	6.94	94.5700	0.1742 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0007	ppm	0.0003	41.31	99.5300	0.0007 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0510 Z	ppm	0.0119	23.34	136.5000 Z	0.0510 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0008	ppm	0.0003	34.79	144.7000	0.0008 (ppm)	Y 371.029
Mo (204.598 nm)	0.0015	ppm	0.0007	50.27	7.2940	0.0015 (ppm)	Y 371.029
Na (589.592 nm)	2.0150 Z	ppm	0.0277	1.37	15360.0000 Z	2.0150 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0012	ppm	0.0004	34.26	8.1300	0.0012 (ppm)	Y 371.029
P (213.618 nm)	0.0046	ppm	0.0035	75.51	-5.9120	0.0046 (ppm)	Y 371.029
Pb (220.353 nm)	0.0010	ppm	0.0002	24.41	-7.2660	0.0010 (ppm)	Y 371.029
Sb (206.834 nm)	0.0019	ppm	0.0005	28.09	0.4928	0.0019 (ppm)	Y 371.029
Se (196.026 nm)	0.0023	ppm	0.0007	31.21	0.6754	0.0023 (ppm)	Y 371.029
Si (251.611 nm)	0.0064	ppm	0.0036	55.58	64.7000	0.0064 (ppm)	Y 371.029
Sn (189.925 nm)	0.0022	ppm	0.0022	> 100.00	-2.1470	0.0022 (ppm)	Y 371.029
Sr (421.552 nm)	0.0008	ppm	0.0001	10.59	248.7000	0.0008 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0001	10.64	-45.0400	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0032	ppm	0.0001	2.77	0.2234	0.0032 (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0003	51.65	71.3300	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0019	ppm	0.0010	51.39	-3.4080	0.0019 (ppm)	Y 371.029
Zn (202.548 nm)	0.0016	ppm	0.0003	17.41	62.9100	0.0016 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0002	47.40	28.9900	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1130	478300.0000	0.0061	0.55
Y_R 371.029	1.1140	70380.0000	0.0000	0.00

Sample Name: MB 440-506240/1-A

Date: 10/19/2018 6:51:11 PM

Rack:Tube: 4:29

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0004	ppm	0.0002	40.58	17.8200	0.0004 (ppm)	Y 371.029
Al (396.152 nm)	0.0203	ppm	0.0003	1.47	-772.2000	0.0203 (ppm)	Y 371.029
As (188.980 nm)	0.0043	ppm	0.0008	19.47	8.5920	0.0043 (ppm)	Y 371.029
B (249.678 nm)	0.0171	ppm	0.0015	8.83	189.7000	0.0171 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0001	49.07	59.7600	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	35.73	37.4400	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.0474	ppm	0.0101	21.32	301.6000	0.0474 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	44.12	0.6079	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0001	17.97	-12.8000	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0131	ppm	0.0003	2.09	71.2600	0.0131 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0002	40.57	126.7000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0375	ppm	0.0002	0.52	146.0000	0.0375 (ppm)	Y_R 371.029
K (766.491 nm)	0.1262	ppm	0.0323	25.59	36.8700	0.1262 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0001 u	ppm	0.0004	> 100.00	56.6100	0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0399	ppm	0.0088	22.08	108.1000	0.0399 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0010	ppm	0.0001	5.52	169.9000	0.0010 (ppm)	Y 371.029
Mo (204.598 nm)	0.0005 u	ppm	0.0007	> 100.00	2.6900	0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	1.6730	ppm	0.0226	1.35	12980.0000	1.6730 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0050	ppm	0.0000	0.53	27.3000	0.0050 (ppm)	Y 371.029
P (213.618 nm)	-0.0021 u	ppm	0.0011	53.90	-12.0600	-0.0021 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0018	ppm	0.0005	30.12	-5.7330	0.0018 (ppm)	Y 371.029
Sb (206.834 nm)	0.0022	ppm	0.0005	21.15	0.9472	0.0022 (ppm)	Y 371.029
Se (196.026 nm)	0.0004 u	ppm	0.0018	> 100.00	-0.7721	0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	0.0029	ppm	0.0018	63.70	55.8200	0.0029 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032 u	ppm	0.0048	> 100.00	-1.4900	0.0032 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0000	0.09	116.7000	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	16.17	-108.5000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0022	ppm	0.0011	48.27	-0.9430	0.0022 (ppm)	Y 371.029
V (292.401 nm)	0.0001	ppm	0.0001	65.23	59.6800	0.0001 (ppm)	Y 371.029
W (207.912 nm)	0.0011	ppm	0.0003	27.66	-4.8120	0.0011 (ppm)	Y 371.029
Zn (202.548 nm)	0.0052	ppm	0.0001	2.24	127.6000	0.0052 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	25.38	13.9400	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1120	477800.0000	0.0103	0.93
Y_R 371.029	1.1090	70020.0000	0.0005	0.04

Sample Name: LCS 440-506240/2-A

Date: 10/19/2018 6:53:35 PM

Rack:Tube: 4:30

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2368	ppm	0.0012	0.50	9975.0000	0.2368 (ppm)	Y 371.029
Al (396.152 nm)	0.4939	ppm	0.0021	0.42	9881.0000	0.4939 (ppm)	Y 371.029
As (188.980 nm)	0.4691	ppm	0.0013	0.27	323.1000	0.4691 (ppm)	Y 371.029
B (249.678 nm)	0.4784	ppm	0.0068	1.42	5907.0000	0.4784 (ppm)	Y 371.029
Ba (233.527 nm)	0.4673	ppm	0.0008	0.17	36880.0000	0.4673 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4697	ppm	0.0013	0.28	86510.0000	0.4697 (ppm)	Y 371.029
Ca (422.673 nm)	2.4430	ppm	0.0230	0.94	10900.0000	2.4430 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4742	ppm	0.0007	0.14	11000.0000	0.4742 (ppm)	Y 371.029
Co (228.615 nm)	0.4772	ppm	0.0022	0.45	6446.0000	0.4772 (ppm)	Y 371.029
Cr (205.560 nm)	0.4748	ppm	0.0003	0.06	2532.0000	0.4748 (ppm)	Y 371.029
Cu (324.754 nm)	0.4694	ppm	0.0011	0.24	18870.0000	0.4694 (ppm)	Y 371.029
Fe (238.204 nm)	0.4838	ppm	0.0032	0.66	2097.0000	0.4838 (ppm)	Y_R 371.029
K (766.491 nm)	4.9220	ppm	0.0470	0.95	5804.0000	4.9220 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4728	ppm	0.0001	0.03	32110.0000	0.4728 (ppm)	Y_R 371.029
Mg (279.078 nm)	2.3580	ppm	0.0111	0.47	6041.0000	2.3580 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4789	ppm	0.0004	0.09	49770.0000	0.4789 (ppm)	Y 371.029
Mo (204.598 nm)	0.4698	ppm	0.0023	0.50	2180.0000	0.4698 (ppm)	Y 371.029
Na (589.592 nm)	6.0990	ppm	0.0052	0.09	43880.0000	6.0990 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4755	ppm	0.0013	0.28	2438.0000	0.4755 (ppm)	Y 371.029
P (213.618 nm)	0.4628	ppm	0.0053	1.14	388.2000	0.4628 (ppm)	Y 371.029
Pb (220.353 nm)	0.4774	ppm	0.0014	0.29	909.6000	0.4774 (ppm)	Y 371.029
Sb (206.834 nm)	0.4981	ppm	0.0017	0.35	509.9000	0.4981 (ppm)	Y 371.029
Se (196.026 nm)	0.4617	ppm	0.0009	0.19	349.7000	0.4617 (ppm)	Y 371.029
Si (251.611 nm)	2.3680	ppm	0.0153	0.65	5900.0000	2.3680 (ppm)	Y 371.029
Sn (189.925 nm)	0.4815	ppm	0.0013	0.27	311.6000	0.4815 (ppm)	Y 371.029
Sr (421.552 nm)	0.4737	ppm	0.0096	2.03	189900.0000	0.4737 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4765	ppm	0.0008	0.16	58710.0000	0.4765 (ppm)	Y 371.029
Tl (190.794 nm)	0.4651	ppm	0.0092	1.98	551.7000	0.4651 (ppm)	Y 371.029
V (292.401 nm)	0.4758	ppm	0.0004	0.09	13420.0000	0.4758 (ppm)	Y 371.029
W (207.912 nm)	0.4675	ppm	0.0021	0.45	877.6000	0.4675 (ppm)	Y 371.029
Zn (202.548 nm)	0.4799	ppm	0.0005	0.10	8808.0000	0.4799 (ppm)	Y 371.029
Zr (343.823 nm)	0.4755	ppm	0.0023	0.48	40010.0000	0.4755 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1300	485600.0000	0.0033	0.29
Y_R 371.029	1.1620	73390.0000	0.0063	0.55

Sample Name: 440-222514-E-1-A

Date: 10/19/2018 6:56:00 PM

Rack:Tube: 4:31

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0009	ppm	0.0001	13.52	-68.9600	0.0009 (ppm)	Y 371.029
Al (396.152 nm)	-0.0011 u	ppm	0.0011	95.42	-781.8000	-0.0011 u (ppm)	Y 371.029
As (188.980 nm)	0.1289	ppm	0.0046	3.59	83.5300	0.1289 (ppm)	Y 371.029
B (249.678 nm)	4.0990	ppm	0.0359	0.88	51170.0000	4.0990 (ppm)	Y 371.029
Ba (233.527 nm)	0.0165	ppm	0.0004	2.61	1383.0000	0.0165 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	23.65	51.5200	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	506.7000	ppm	0.6528	0.13	2242000.0000	506.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0002	58.18	7.6500	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0005 u	ppm	0.0009	> 100.00	-0.8928	0.0005 u (ppm)	Y 371.029
Cr (205.560 nm)	1.3760	ppm	0.0206	1.50	7344.0000	1.3760 (ppm)	Y 371.029
Cu (324.754 nm)	0.0017	ppm	0.0007	42.70	-238.7000	0.0017 (ppm)	Y 371.029
Fe (238.204 nm)	0.0535	ppm	0.0004	0.74	246.5000	0.0535 (ppm)	Y_R 371.029
K (766.491 nm)	19.0600	ppm	0.0314	0.16	22930.0000	19.0600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.6778	ppm	0.0003	0.05	48130.0000	0.6778 (ppm)	Y_R 371.029
Mg (279.078 nm)	237.0000	ppm	0.9570	0.40	606700.0000	237.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0266	ppm	0.0001	0.53	3808.0000	0.0266 (ppm)	Y 371.029
Mo (204.598 nm)	0.0461	ppm	0.0019	4.17	214.8000	0.0461 (ppm)	Y 371.029
Na (589.592 nm)	672.4000 o	ppm	0.3982	0.06	4691000.0000	672.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0080	ppm	0.0008	10.49	30.2900	0.0080 (ppm)	Y 371.029
P (213.618 nm)	0.0149	ppm	0.0018	12.17	-3.6660	0.0149 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0053 u	ppm	0.0026	48.75	-9.6770	-0.0053 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0039	ppm	0.0027	70.30	15.2500	0.0039 (ppm)	Y 371.029
Se (196.026 nm)	0.0072	ppm	0.0065	89.94	1.4080	0.0072 (ppm)	Y 371.029
Si (251.611 nm)	46.2400	ppm	0.4618	1.00	112800.0000	46.2400 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0074 u	ppm	0.0008	10.98	-8.1280	-0.0074 u (ppm)	Y 371.029
Sr (421.552 nm)	11.4200	ppm	0.0326	0.29	4585000.0000	11.4200 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	10.59	-734.5000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0065	ppm	0.0034	52.47	1.2980	0.0065 (ppm)	Y 371.029
V (292.401 nm)	0.0195	ppm	0.0006	3.06	1316.0000	0.0195 (ppm)	Y 371.029
W (207.912 nm)	0.0983	ppm	0.0013	1.29	168.0000	0.0983 (ppm)	Y 371.029
Zn (202.548 nm)	0.1668	ppm	0.0016	0.96	3187.0000	0.1668 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0002	> 100.00	94.3700	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9759	419300.0000	0.0253	2.59
Y_R 371.029	1.0540	66560.0000	0.0119	1.13

Sample Name: 440-222514-E-1-B MS

Date: 10/19/2018 6:58:24 PM

Rack:Tube: 4:32

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2602	ppm	0.0004	0.17	10840.0000	0.2602 (ppm)	Y 371.029
Al (396.152 nm)	0.6227	ppm	0.0011	0.17	13160.0000	0.6227 (ppm)	Y 371.029
As (188.980 nm)	0.6356	ppm	0.0028	0.44	426.6000	0.6356 (ppm)	Y 371.029
B (249.678 nm)	4.6860	ppm	0.0227	0.49	58440.0000	4.6860 (ppm)	Y 371.029
Ba (233.527 nm)	0.4617	ppm	0.0044	0.95	36480.0000	0.4617 (ppm)	Y_R 371.029
Be (234.861 nm)	0.5020	ppm	0.0019	0.37	92470.0000	0.5020 (ppm)	Y 371.029
Ca (422.673 nm)	512.4000	ppm	0.7566	0.15	2267000.0000	512.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4440	ppm	0.0014	0.33	10300.0000	0.4440 (ppm)	Y 371.029
Co (228.615 nm)	0.4595	ppm	0.0044	0.96	6223.0000	0.4595 (ppm)	Y 371.029
Cr (205.560 nm)	1.8610	ppm	0.0106	0.57	9930.0000	1.8610 (ppm)	Y 371.029
Cu (324.754 nm)	0.5468	ppm	0.0017	0.32	21490.0000	0.5468 (ppm)	Y 371.029
Fe (238.204 nm)	0.5255	ppm	0.0003	0.05	2311.0000	0.5255 (ppm)	Y_R 371.029
K (766.491 nm)	24.2600	ppm	0.1165	0.48	29190.0000	24.2600 (ppm)	Y_R 371.029
Li (670.783 nm)	1.2000	ppm	0.0029	0.24	83570.0000	1.2000 (ppm)	Y_R 371.029
Mg (279.078 nm)	242.7000	ppm	2.0950	0.86	621300.0000	242.7000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5027	ppm	0.0002	0.04	53250.0000	0.5027 (ppm)	Y 371.029
Mo (204.598 nm)	0.5352	ppm	0.0052	0.98	2484.0000	0.5352 (ppm)	Y 371.029
Na (589.592 nm)	683.4000 o	ppm	2.7230	0.40	4767000.0000	683.4000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4532	ppm	0.0018	0.39	2311.0000	0.4532 (ppm)	Y 371.029
P (213.618 nm)	0.5291	ppm	0.0034	0.65	438.8000	0.5291 (ppm)	Y 371.029
Pb (220.353 nm)	0.4475	ppm	0.0028	0.63	861.6000	0.4475 (ppm)	Y 371.029
Sb (206.834 nm)	0.5306	ppm	0.0005	0.09	555.9000	0.5306 (ppm)	Y 371.029
Se (196.026 nm)	0.4923	ppm	0.0051	1.05	369.9000	0.4923 (ppm)	Y 371.029
Si (251.611 nm)	48.8600	ppm	0.0201	0.04	119300.0000	48.8600 (ppm)	Y 371.029
Sn (189.925 nm)	0.4679	ppm	0.0003	0.07	303.0000	0.4679 (ppm)	Y 371.029
Sr (421.552 nm)	11.8100	ppm	0.1121	0.95	4743000.0000	11.8100 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4977	ppm	0.0005	0.09	60710.0000	0.4977 (ppm)	Y 371.029
Tl (190.794 nm)	0.4394	ppm	0.0095	2.16	515.9000	0.4394 (ppm)	Y 371.029
V (292.401 nm)	0.5243	ppm	0.0008	0.15	15490.0000	0.5243 (ppm)	Y 371.029
W (207.912 nm)	0.5866	ppm	0.0054	0.93	1091.0000	0.5866 (ppm)	Y 371.029
Zn (202.548 nm)	0.6018	ppm	0.0011	0.18	11160.0000	0.6018 (ppm)	Y 371.029
Zr (343.823 nm)	0.4911	ppm	0.0015	0.31	41410.0000	0.4911 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9643	414300.0000	0.0060	0.62
Y_R 371.029	1.0380	65580.0000	0.0026	0.25

Sample Name: 440-222514-E-1-C MSD

Date: 10/19/2018 7:00:48 PM

Rack:Tube: 4:33

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2600	ppm	0.0023	0.89	10830.0000	0.2600 (ppm)	Y 371.029
Al (396.152 nm)	0.6209	ppm	0.0042	0.68	13130.0000	0.6209 (ppm)	Y 371.029
As (188.980 nm)	0.6346	ppm	0.0084	1.33	425.7000	0.6346 (ppm)	Y 371.029
B (249.678 nm)	4.8060	ppm	0.0514	1.07	59940.0000	4.8060 (ppm)	Y 371.029
Ba (233.527 nm)	0.4620	ppm	0.0024	0.51	36510.0000	0.4620 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4996	ppm	0.0034	0.69	92030.0000	0.4996 (ppm)	Y 371.029
Ca (422.673 nm)	529.6000	ppm	0.6935	0.13	2343000.0000	529.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4393	ppm	0.0045	1.02	10190.0000	0.4393 (ppm)	Y 371.029
Co (228.615 nm)	0.4564	ppm	0.0052	1.15	6182.0000	0.4564 (ppm)	Y 371.029
Cr (205.560 nm)	1.8960	ppm	0.0328	1.73	10120.0000	1.8960 (ppm)	Y 371.029
Cu (324.754 nm)	0.5453	ppm	0.0019	0.35	21420.0000	0.5453 (ppm)	Y 371.029
Fe (238.204 nm)	0.5289	ppm	0.0037	0.70	2327.0000	0.5289 (ppm)	Y_R 371.029
K (766.491 nm)	24.7300	ppm	0.0245	0.10	29760.0000	24.7300 (ppm)	Y_R 371.029
Li (670.783 nm)	1.2290	ppm	0.0002	0.01	85600.0000	1.2290 (ppm)	Y_R 371.029
Mg (279.078 nm)	249.9000	ppm	1.4930	0.60	639600.0000	249.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5003	ppm	0.0029	0.58	53030.0000	0.5003 (ppm)	Y 371.029
Mo (204.598 nm)	0.5323	ppm	0.0048	0.90	2471.0000	0.5323 (ppm)	Y 371.029
Na (589.592 nm)	709.3000 o	ppm	0.5604	0.08	4948000.0000	709.3000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4474	ppm	0.0033	0.74	2280.0000	0.4474 (ppm)	Y 371.029
P (213.618 nm)	0.5369	ppm	0.0014	0.26	445.9000	0.5369 (ppm)	Y 371.029
Pb (220.353 nm)	0.4453	ppm	0.0057	1.28	857.8000	0.4453 (ppm)	Y 371.029
Sb (206.834 nm)	0.5230	ppm	0.0003	0.06	548.5000	0.5230 (ppm)	Y 371.029
Se (196.026 nm)	0.4922	ppm	0.0013	0.26	369.6000	0.4922 (ppm)	Y 371.029
Si (251.611 nm)	50.1700	ppm	0.3181	0.63	122500.0000	50.1700 (ppm)	Y 371.029
Sn (189.925 nm)	0.4643	ppm	0.0045	0.96	300.6000	0.4643 (ppm)	Y 371.029
Sr (421.552 nm)	12.1000	ppm	0.0264	0.22	4859000.0000	12.1000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4958	ppm	0.0035	0.70	60450.0000	0.4958 (ppm)	Y 371.029
Tl (190.794 nm)	0.4396	ppm	0.0131	2.99	516.0000	0.4396 (ppm)	Y 371.029
V (292.401 nm)	0.5218	ppm	0.0028	0.54	15450.0000	0.5218 (ppm)	Y 371.029
W (207.912 nm)	0.5878	ppm	0.0050	0.84	1093.0000	0.5878 (ppm)	Y 371.029
Zn (202.548 nm)	0.5998	ppm	0.0039	0.65	11130.0000	0.5998 (ppm)	Y 371.029
Zr (343.823 nm)	0.4891	ppm	0.0036	0.73	41240.0000	0.4891 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9727	417900.0000	0.0039	0.40
Y_R 371.029	1.0420	65800.0000	0.0033	0.31

Sample Name: 440-222514-E-2-A

Date: 10/19/2018 7:03:13 PM

Rack:Tube: 4:34

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0013 b	ppm	0.0006	42.57	-74.4900	0.0013 b (ppm)	Y 371.029
Al (396.152 nm)	-0.0025 bu	ppm	0.0011	43.25	-722.0000	-0.0025 bu (ppm)	Y 371.029
As (188.980 nm)	0.1358 b	ppm	0.0086	6.36	81.5700	0.1358 b (ppm)	Y 371.029
B (249.678 nm)	7.6990 b	ppm	0.0847	1.10	96120.0000	7.6990 b (ppm)	Y 371.029
Ba (233.527 nm)	0.0148 b	ppm	0.0002	1.05	1255.0000	0.0148 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002 b	ppm	0.0002	93.25	62.1200	0.0002 b (ppm)	Y 371.029
Ca (422.673 nm)	604.9000 bo	ppm	0.1972	0.03	2676000.0000	604.9000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002 b	ppm	0.0001	37.99	5.3610	0.0002 b (ppm)	Y 371.029
Co (228.615 nm)	0.0007 b	ppm	0.0002	31.41	6.0450	0.0007 b (ppm)	Y 371.029
Cr (205.560 nm)	2.3140 b	ppm	0.0124	0.54	12350.0000	2.3140 b (ppm)	Y 371.029
Cu (324.754 nm)	0.0028 b	ppm	0.0000	0.03	-285.8000	0.0028 b (ppm)	Y 371.029
Fe (238.204 nm)	0.0754 b	ppm	0.0009	1.22	348.9000	0.0754 b (ppm)	Y_R 371.029
K (766.491 nm)	21.9400 b	ppm	0.0807	0.37	26430.0000	21.9400 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.9539 b	ppm	0.0031	0.33	67310.0000	0.9539 b (ppm)	Y_R 371.029
Mg (279.078 nm)	290.4000 b	ppm	1.5420	0.53	743300.0000	290.4000 b (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0805 b	ppm	0.0002	0.29	9599.0000	0.0805 b (ppm)	Y 371.029
Mo (204.598 nm)	0.0405 b	ppm	0.0000	0.05	189.6000	0.0405 b (ppm)	Y 371.029
Na (589.592 nm)	727.6000 bo	ppm	3.4660	0.48	5075000.0000	727.6000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0220 b	ppm	0.0002	0.86	99.3100	0.0220 b (ppm)	Y 371.029
P (213.618 nm)	0.0172 b	ppm	0.0042	24.11	-2.6490	0.0172 b (ppm)	Y 371.029
Pb (220.353 nm)	-0.0073 bu	ppm	0.0006	8.37	-11.5600	-0.0073 bu (ppm)	Y 371.029
Sb (206.834 nm)	0.0072 b	ppm	0.0003	4.27	27.1200	0.0072 b (ppm)	Y 371.029
Se (196.026 nm)	0.0117 b	ppm	0.0010	8.47	3.9050	0.0117 b (ppm)	Y 371.029
Si (251.611 nm)	50.7900 b	ppm	0.3514	0.69	123900.0000	50.7900 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0080 bu	ppm	0.0005	5.86	-8.4490	-0.0080 bu (ppm)	Y 371.029
Sr (421.552 nm)	13.9600 b	ppm	0.1320	0.95	5605000.0000	13.9600 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004 b	ppm	0.0001	22.21	-868.1000	0.0004 b (ppm)	Y 371.029
Tl (190.794 nm)	0.0076 b	ppm	0.0015	19.45	2.3710	0.0076 b (ppm)	Y 371.029
V (292.401 nm)	0.0210 b	ppm	0.0006	2.71	1504.0000	0.0210 b (ppm)	Y 371.029
W (207.912 nm)	0.0719 b	ppm	0.0014	1.99	126.1000	0.0719 b (ppm)	Y 371.029
Zn (202.548 nm)	1.0490 b	ppm	0.0021	0.20	19210.0000	1.0490 b (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 bu	ppm	0.0002	> 100.00	98.1200	0.0000 bu (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9966	428200.0000	0.0012	0.12
Y_R 371.029	1.0830	68420.0000	0.0078	0.72

Sample Name: 440-222514-E-3-A

Date: 10/19/2018 7:05:37 PM

Rack:Tube: 4:35

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0030 b	ppm	0.0002	7.14	-3.8550	0.0030 b (ppm)	Y 371.029
Al (396.152 nm)	0.2126 b	ppm	0.0002	0.07	3964.0000	0.2126 b (ppm)	Y 371.029
As (188.980 nm)	0.1415 b	ppm	0.0037	2.64	85.4600	0.1415 b (ppm)	Y 371.029
B (249.678 nm)	7.5170 b	ppm	0.0694	0.92	93840.0000	7.5170 b (ppm)	Y 371.029
Ba (233.527 nm)	0.0163 b	ppm	0.0001	0.78	1373.0000	0.0163 b (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 bu	ppm	0.0000	78.65	21.8600	0.0000 bu (ppm)	Y 371.029
Ca (422.673 nm)	595.6000 bo	ppm	0.9217	0.15	2635000.0000	595.6000 bo (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 bu	ppm	0.0001	> 100.00	1.8600	0.0001 bu (ppm)	Y 371.029
Co (228.615 nm)	0.0006 b	ppm	0.0002	35.31	5.5360	0.0006 b (ppm)	Y 371.029
Cr (205.560 nm)	2.3300 b	ppm	0.0426	1.83	12430.0000	2.3300 b (ppm)	Y 371.029
Cu (324.754 nm)	0.0036 b	ppm	0.0001	2.52	-246.7000	0.0036 b (ppm)	Y 371.029
Fe (238.204 nm)	0.3561 b	ppm	0.0019	0.53	1578.0000	0.3561 b (ppm)	Y_R 371.029
K (766.491 nm)	21.3000 b	ppm	0.0994	0.47	25660.0000	21.3000 b (ppm)	Y_R 371.029
Li (670.783 nm)	0.9104 b	ppm	0.0009	0.10	64420.0000	0.9104 b (ppm)	Y_R 371.029
Mg (279.078 nm)	302.9000 b	ppm	0.9094	0.30	775300.0000	302.9000 b (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0994 b	ppm	0.0008	0.80	11640.0000	0.0994 b (ppm)	Y 371.029
Mo (204.598 nm)	0.0389 b	ppm	0.0017	4.49	181.7000	0.0389 b (ppm)	Y 371.029
Na (589.592 nm)	717.0000 bo	ppm	2.9180	0.41	5002000.0000	717.0000 bo (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0288 b	ppm	0.0010	3.62	134.4000	0.0288 b (ppm)	Y 371.029
P (213.618 nm)	0.0654 b	ppm	0.0048	7.38	41.8100	0.0654 b (ppm)	Y 371.029
Pb (220.353 nm)	-0.0072 bu	ppm	0.0007	9.15	-11.0500	-0.0072 bu (ppm)	Y 371.029
Sb (206.834 nm)	0.0074 b	ppm	0.0015	20.16	27.4600	0.0074 b (ppm)	Y 371.029
Se (196.026 nm)	0.0145 b	ppm	0.0019	13.18	5.9360	0.0145 b (ppm)	Y 371.029
Si (251.611 nm)	49.7100 b	ppm	0.4022	0.81	121300.0000	49.7100 b (ppm)	Y 371.029
Sn (189.925 nm)	-0.0102 bu	ppm	0.0002	1.76	-9.8910	-0.0102 bu (ppm)	Y 371.029
Sr (421.552 nm)	13.3900 b	ppm	0.0390	0.29	5378000.0000	13.3900 b (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0032 b	ppm	0.0002	5.28	-516.6000	0.0032 b (ppm)	Y 371.029
Tl (190.794 nm)	0.0070 b	ppm	0.0011	15.85	1.7050	0.0070 b (ppm)	Y 371.029
V (292.401 nm)	0.0245 b	ppm	0.0005	1.89	1590.0000	0.0245 b (ppm)	Y 371.029
W (207.912 nm)	0.0667 b	ppm	0.0014	2.03	105.0000	0.0667 b (ppm)	Y 371.029
Zn (202.548 nm)	0.0321 b	ppm	0.0002	0.65	765.1000	0.0321 b (ppm)	Y 371.029
Zr (343.823 nm)	-0.0004 bu	ppm	0.0001	16.91	55.7300	-0.0004 bu (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9756	419200.0000	0.0175	1.79
Y_R 371.029	0.9902	62550.0000	0.0056	0.57

Sample Name: 440-222514-E-4-A

Date: 10/19/2018 7:08:01 PM

Rack:Tube: 4:36

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0012	ppm	0.0000	0.39	-62.1900	0.0012 (ppm)	Y 371.029
Al (396.152 nm)	0.0241	ppm	0.0025	10.54	-197.7000	0.0241 (ppm)	Y 371.029
As (188.980 nm)	0.1423	ppm	0.0076	5.32	74.9800	0.1423 (ppm)	Y 371.029
B (249.678 nm)	12.2700	ppm	0.1539	1.25	153200.0000	12.2700 (ppm)	Y 371.029
Ba (233.527 nm)	0.0169	ppm	0.0011	6.63	1417.0000	0.0169 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	7.30	0.0060	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	520.0000	ppm	1.9730	0.38	2300000.0000	520.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-2.0640	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0014	ppm	0.0003	24.57	15.2000	0.0014 (ppm)	Y 371.029
Cr (205.560 nm)	3.9460	ppm	0.0520	1.32	21040.0000	3.9460 (ppm)	Y 371.029
Cu (324.754 nm)	0.0055	ppm	0.0002	4.11	-96.7800	0.0055 (ppm)	Y 371.029
Fe (238.204 nm)	0.2772	ppm	0.0001	0.03	1228.0000	0.2772 (ppm)	Y_R 371.029
K (766.491 nm)	22.3200	ppm	0.1116	0.50	26870.0000	22.3200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9237	ppm	0.0051	0.55	65050.0000	0.9237 (ppm)	Y_R 371.029
Mg (279.078 nm)	275.3000	ppm	14.4900	5.26	704500.0000	275.3000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1218	ppm	0.0002	0.17	13810.0000	0.1218 (ppm)	Y 371.029
Mo (204.598 nm)	0.0249	ppm	0.0011	4.55	117.4000	0.0249 (ppm)	Y 371.029
Na (589.592 nm)	719.8000 o	ppm	0.5895	0.08	5021000.0000	719.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0113	ppm	0.0001	1.18	46.5900	0.0113 (ppm)	Y 371.029
P (213.618 nm)	0.0126	ppm	0.0048	38.60	-5.3910	0.0126 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0064 u	ppm	0.0009	13.44	-10.7400	-0.0064 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0133	ppm	0.0024	18.41	47.2000	0.0133 (ppm)	Y 371.029
Se (196.026 nm)	0.0084	ppm	0.0003	4.07	1.6720	0.0084 (ppm)	Y 371.029
Si (251.611 nm)	49.6100	ppm	0.4559	0.92	121000.0000	49.6100 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0058 u	ppm	0.0012	20.55	-7.0050	-0.0058 u (ppm)	Y 371.029
Sr (421.552 nm)	12.7400	ppm	0.1242	0.97	5117000.0000	12.7400 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0006	ppm	0.0002	27.48	-745.7000	0.0006 (ppm)	Y 371.029
Tl (190.794 nm)	0.0041	ppm	0.0026	63.41	-1.0970	0.0041 (ppm)	Y 371.029
V (292.401 nm)	0.0304	ppm	0.0001	0.47	1662.0000	0.0304 (ppm)	Y 371.029
W (207.912 nm)	0.0272	ppm	0.0023	8.57	32.9800	0.0272 (ppm)	Y 371.029
Zn (202.548 nm)	0.0836	ppm	0.0007	0.89	1642.0000	0.0836 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0005 u	ppm	0.0000	6.38	39.5600	-0.0005 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9893	425100.0000	0.0305	3.08
Y_R 371.029	1.1040	69730.0000	0.0229	2.07

Sample Name: 440-222514-E-5-A

Date: 10/19/2018 7:10:26 PM

Rack:Tube: 4:37

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0000	> 100.00	-74.7600	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	0.0122	ppm	0.0004	3.25	-623.2000	0.0122 (ppm)	Y 371.029
As (188.980 nm)	0.1182	ppm	0.0048	4.07	31.0700	0.1182 (ppm)	Y 371.029
B (249.678 nm)	13.0200	ppm	0.1447	1.11	162600.0000	13.0200 (ppm)	Y 371.029
Ba (233.527 nm)	0.0234	ppm	0.0004	1.67	1914.0000	0.0234 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	10.5100	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	319.7000	ppm	0.5325	0.17	1414000.0000	319.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	16.19	1.0410	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0002	16.22	7.4490	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	7.9480	ppm	0.1740	2.19	42370.0000	7.9480 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0005	> 100.00	-136.8000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0140	ppm	0.0012	8.87	61.7100	0.0140 (ppm)	Y_R 371.029
K (766.491 nm)	43.5800	ppm	0.0009	0.00	52360.0000	43.5800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.6201	ppm	0.0017	0.27	43570.0000	0.6201 (ppm)	Y_R 371.029
Mg (279.078 nm)	185.2000	ppm	1.4270	0.77	474000.0000	185.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0042 u	ppm	0.0001	1.96	394.2000	-0.0042 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0240	ppm	0.0004	1.56	113.9000	0.0240 (ppm)	Y 371.029
Na (589.592 nm)	915.9000 o	ppm	3.1440	0.34	6388000.0000	915.9000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0219	ppm	0.0008	3.81	105.7000	0.0219 (ppm)	Y 371.029
P (213.618 nm)	0.0116	ppm	0.0038	32.94	-3.1240	0.0116 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0054 u	ppm	0.0013	24.07	-12.6600	-0.0054 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0354	ppm	0.0004	1.16	103.5000	0.0354 (ppm)	Y 371.029
Se (196.026 nm)	0.0083	ppm	0.0020	24.13	2.7600	0.0083 (ppm)	Y 371.029
Si (251.611 nm)	46.0600	ppm	0.3827	0.83	112300.0000	46.0600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0067 u	ppm	0.0029	43.46	-7.6670	-0.0067 u (ppm)	Y 371.029
Sr (421.552 nm)	8.7480	ppm	0.0118	0.13	3513000.0000	8.7480 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	2.15	-566.4000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0042	ppm	0.0008	19.78	0.5100	0.0042 (ppm)	Y 371.029
V (292.401 nm)	0.0415	ppm	0.0006	1.32	1714.0000	0.0415 (ppm)	Y 371.029
W (207.912 nm)	0.0081	ppm	0.0002	2.07	1.8880	0.0081 (ppm)	Y 371.029
Zn (202.548 nm)	0.0982	ppm	0.0005	0.46	1752.0000	0.0982 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	79.28	37.9500	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	430100.0000	0.0011	0.11
Y_R 371.029	1.1110	70160.0000	0.0017	0.15

Sample Name: 440-222514-E-6-A

Date: 10/19/2018 7:12:49 PM

Rack:Tube: 4:38

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-78.9300	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0187	ppm	0.0009	4.69	-466.4000	0.0187 (ppm)	Y 371.029
As (188.980 nm)	0.0886	ppm	0.0018	1.99	-0.4167	0.0886 (ppm)	Y 371.029
B (249.678 nm)	10.2500	ppm	0.0937	0.91	128000.0000	10.2500 (ppm)	Y 371.029
Ba (233.527 nm)	0.0295	ppm	0.0008	2.86	2393.0000	0.0295 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	8.0190	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	362.5000	ppm	2.4010	0.66	1604000.0000	362.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-1.6080	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0002	26.99	8.2090	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	9.5800	ppm	0.1083	1.13	51070.0000	9.5800 (ppm)	Y 371.029
Cu (324.754 nm)	0.0777	ppm	0.0005	0.70	2926.0000	0.0777 (ppm)	Y 371.029
Fe (238.204 nm)	0.0153	ppm	0.0004	2.60	67.1900	0.0153 (ppm)	Y_R 371.029
K (766.491 nm)	49.4800	ppm	0.1204	0.24	59450.0000	49.4800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.5122	ppm	0.0005	0.10	36270.0000	0.5122 (ppm)	Y_R 371.029
Mg (279.078 nm)	187.0000	ppm	4.6060	2.46	478700.0000	187.0000 (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0039 u	ppm	0.0001	1.92	428.4000	-0.0039 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0175	ppm	0.0001	0.52	84.3400	0.0175 (ppm)	Y 371.029
Na (589.592 nm)	1031.0000 o	ppm	8.2710	0.80	7191000.0000	1031.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0061	ppm	0.0013	21.48	23.8900	0.0061 (ppm)	Y 371.029
P (213.618 nm)	0.0127	ppm	0.0016	12.34	-5.4770	0.0127 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0062 u	ppm	0.0005	7.79	-13.7900	-0.0062 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0423	ppm	0.0016	3.70	124.4000	0.0423 (ppm)	Y 371.029
Se (196.026 nm)	0.0095	ppm	0.0011	11.22	3.2760	0.0095 (ppm)	Y 371.029
Si (251.611 nm)	45.4600	ppm	0.2758	0.61	110900.0000	45.4600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0081 u	ppm	0.0022	27.24	-8.5740	-0.0081 u (ppm)	Y 371.029
Sr (421.552 nm)	9.7400	ppm	0.0829	0.85	3911000.0000	9.7400 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	19.67	-631.1000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0028	ppm	0.0001	4.97	-1.3370	0.0028 (ppm)	Y 371.029
V (292.401 nm)	0.0416	ppm	0.0005	1.10	1781.0000	0.0416 (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0017	> 100.00	-10.7700	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.1854	ppm	0.0006	0.30	3313.0000	0.1854 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	75.18	44.8500	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9917	426100.0000	0.0034	0.34
Y_R 371.029	1.1090	70030.0000	0.0171	1.54

Sample Name: CCV 5129881

Date: 10/19/2018 7:15:13 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4873	ppm	0.0021	0.44	20520.0000	0.4873 (ppm)	Y 371.029
Al (396.152 nm)	1.0150	ppm	0.0088	0.87	21590.0000	1.0150 (ppm)	Y 371.029
As (188.980 nm)	0.9607	ppm	0.0059	0.61	655.8000	0.9607 (ppm)	Y 371.029
B (249.678 nm)	1.0140	ppm	0.0015	0.14	12540.0000	1.0140 (ppm)	Y 371.029
Ba (233.527 nm)	0.9486	ppm	0.0016	0.17	74820.0000	0.9486 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9631	ppm	0.0061	0.63	177400.0000	0.9631 (ppm)	Y 371.029
Ca (422.673 nm)	5.0710	ppm	0.0640	1.26	22520.0000	5.0710 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9555	ppm	0.0036	0.38	22170.0000	0.9555 (ppm)	Y 371.029
Co (228.615 nm)	0.9641	ppm	0.0067	0.69	13050.0000	0.9641 (ppm)	Y 371.029
Cr (205.560 nm)	0.9746	ppm	0.0003	0.03	5194.0000	0.9746 (ppm)	Y 371.029
Cu (324.754 nm)	0.9859	ppm	0.0084	0.85	39460.0000	0.9859 (ppm)	Y 371.029
Fe (238.204 nm)	0.9804	ppm	0.0082	0.83	4269.0000	0.9804 (ppm)	Y_R 371.029
K (766.491 nm)	9.9590	ppm	0.0921	0.92	11860.0000	9.9590 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9825	ppm	0.0072	0.73	66670.0000	0.9825 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.9120	ppm	0.0750	1.53	12580.0000	4.9120 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9657	ppm	0.0041	0.42	100300.0000	0.9657 (ppm)	Y 371.029
Mo (204.598 nm)	0.9741	ppm	0.0079	0.81	4520.0000	0.9741 (ppm)	Y 371.029
Na (589.592 nm)	11.5200 Q	ppm	0.1034	0.90	81740.0000 Q	11.5200 Q (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9597	ppm	0.0040	0.42	4919.0000	0.9597 (ppm)	Y 371.029
P (213.618 nm)	0.9526	ppm	0.0028	0.30	808.7000	0.9526 (ppm)	Y 371.029
Pb (220.353 nm)	0.9600	ppm	0.0039	0.41	1838.0000	0.9600 (ppm)	Y 371.029
Sb (206.834 nm)	0.9641	ppm	0.0131	1.36	987.7000	0.9641 (ppm)	Y 371.029
Se (196.026 nm)	0.9592	ppm	0.0063	0.66	727.6000	0.9592 (ppm)	Y 371.029
Si (251.611 nm)	4.9690	ppm	0.0935	1.88	12320.0000	4.9690 (ppm)	Y 371.029
Sn (189.925 nm)	0.9641	ppm	0.0054	0.56	627.4000	0.9641 (ppm)	Y 371.029
Sr (421.552 nm)	0.9910	ppm	0.0022	0.22	397300.0000	0.9910 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9744	ppm	0.0049	0.51	120200.0000	0.9744 (ppm)	Y 371.029
Tl (190.794 nm)	0.9687	ppm	0.0017	0.18	1154.0000	0.9687 (ppm)	Y 371.029
V (292.401 nm)	0.9747	ppm	0.0039	0.40	27420.0000	0.9747 (ppm)	Y 371.029
W (207.912 nm)	0.9692	ppm	0.0047	0.49	1827.0000	0.9692 (ppm)	Y 371.029
Zn (202.548 nm)	0.9525	ppm	0.0027	0.28	17460.0000	0.9525 (ppm)	Y 371.029
Zr (343.823 nm)	0.9740	ppm	0.0056	0.57	81950.0000	0.9740 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1630	499600.0000	0.0038	0.33
Y_R 371.029	1.1940	75430.0000	0.0010	0.09

Sample Name: CCB 5129880

Date: 10/19/2018 7:17:36 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0004	72.54	23.1600	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.0124	ppm	0.0002	1.38	-945.0000	0.0124 (ppm)	Y 371.029
As (188.980 nm)	0.0040	ppm	0.0007	16.20	8.4480	0.0040 (ppm)	Y 371.029
B (249.678 nm)	0.0235	ppm	0.0031	13.17	269.5000	0.0235 (ppm)	Y 371.029
Ba (233.527 nm)	0.0004	ppm	0.0003	60.31	75.8900	0.0004 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	55.25	98.7300	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0823	ppm	0.0092	11.20	455.9000	0.0823 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	51.98	10.5000	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0010	94.71	-8.1510	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0029	ppm	0.0003	9.69	16.6900	0.0029 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0000	2.60	133.6000	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0002 u	ppm	0.0014	> 100.00	-17.4300	0.0002 u (ppm)	Y_R 371.029
K (766.491 nm)	0.0552 u	ppm	0.1195	> 100.00	-48.4400	0.0552 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0016	ppm	0.0001	4.70	159.0000	0.0016 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0558 Z	ppm	0.0156	27.96	148.8000 Z	0.0558 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0003	58.89	121.9000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0010	77.61	6.3950	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	1.3770 Z	ppm	0.0143	1.04	10920.0000 Z	1.3770 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0008	92.55	6.5430	0.0009 (ppm)	Y 371.029
P (213.618 nm)	0.0011	ppm	0.0008	69.18	-9.1270	0.0011 (ppm)	Y 371.029
Pb (220.353 nm)	0.0016	ppm	0.0007	46.56	-6.1140	0.0016 (ppm)	Y 371.029
Sb (206.834 nm)	0.0023	ppm	0.0013	55.73	0.9168	0.0023 (ppm)	Y 371.029
Se (196.026 nm)	0.0005 u	ppm	0.0010	> 100.00	-0.6259	0.0005 u (ppm)	Y 371.029
Si (251.611 nm)	0.0114	ppm	0.0068	60.18	76.6900	0.0114 (ppm)	Y 371.029
Sn (189.925 nm)	0.0041	ppm	0.0003	8.40	-0.8931	0.0041 (ppm)	Y 371.029
Sr (421.552 nm)	0.0018	ppm	0.0001	5.32	678.9000	0.0018 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0011	ppm	0.0002	21.57	-43.8700	0.0011 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0003 u	ppm	0.0017	> 100.00	-4.0870	-0.0003 u (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0002	40.18	67.8100	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0004	24.85	-3.7980	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	0.0016	ppm	0.0003	18.34	62.1200	0.0016 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0000	2.32	36.5700	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1520	495100.0000	0.0021	0.19
Y_R 371.029	1.1690	73840.0000	0.0040	0.35

Sample Name: 440-222514-E-7-A

Date: 10/19/2018 7:20:01 PM

Rack:Tube: 4:39

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	39.20	-86.1500	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0343	ppm	0.0001	0.26	-107.2000	0.0343 (ppm)	Y 371.029
As (188.980 nm)	0.1301	ppm	0.0004	0.29	-0.3647	0.1301 (ppm)	Y 371.029
B (249.678 nm)	5.1950	ppm	0.0448	0.86	64890.0000	5.1950 (ppm)	Y 371.029
Ba (233.527 nm)	0.0309	ppm	0.0002	0.71	2511.0000	0.0309 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	59.33	38.2000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	412.8000	ppm	0.8337	0.20	1826000.0000	412.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	35.07	0.9467	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0001	8.85	15.1800	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	13.5500	ppm	0.1683	1.24	72230.0000	13.5500 (ppm)	Y 371.029
Cu (324.754 nm)	0.0046	ppm	0.0003	5.58	-33.6200	0.0046 (ppm)	Y 371.029
Fe (238.204 nm)	0.4535	ppm	0.0027	0.60	1983.0000	0.4535 (ppm)	Y_R 371.029
K (766.491 nm)	40.4400	ppm	0.0480	0.12	48600.0000	40.4400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4205	ppm	0.0013	0.32	29870.0000	0.4205 (ppm)	Y_R 371.029
Mg (279.078 nm)	184.5000	ppm	1.8360	0.99	472300.0000	184.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0694	ppm	0.0002	0.27	8065.0000	0.0694 (ppm)	Y 371.029
Mo (204.598 nm)	0.0261	ppm	0.0003	1.09	126.0000	0.0261 (ppm)	Y 371.029
Na (589.592 nm)	1212.0000 o	ppm	2.9960	0.25	8451000.0000	1212.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0063	ppm	0.0002	3.61	24.3200	0.0063 (ppm)	Y 371.029
P (213.618 nm)	0.0158	ppm	0.0011	6.97	-0.6776	0.0158 (ppm)	Y 371.029
Pb (220.353 nm)	0.0385	ppm	0.0011	2.73	72.6600	0.0385 (ppm)	Y 371.029
Sb (206.834 nm)	0.0666	ppm	0.0025	3.76	184.3000	0.0666 (ppm)	Y 371.029
Se (196.026 nm)	0.0106	ppm	0.0019	17.49	3.7790	0.0106 (ppm)	Y 371.029
Si (251.611 nm)	48.3700	ppm	0.1593	0.33	118000.0000	48.3700 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0082 u	ppm	0.0007	8.88	-8.5090	-0.0082 u (ppm)	Y 371.029
Sr (421.552 nm)	11.5800	ppm	0.0345	0.30	4651000.0000	11.5800 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0000	27.82	-719.2000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0061	ppm	0.0002	3.16	3.0480	0.0061 (ppm)	Y 371.029
V (292.401 nm)	0.0472	ppm	0.0001	0.23	2034.0000	0.0472 (ppm)	Y 371.029
W (207.912 nm)	0.0115	ppm	0.0018	15.46	63.7000	0.0115 (ppm)	Y 371.029
Zn (202.548 nm)	5.2190	ppm	0.0115	0.22	94500.0000	5.2190 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0000	> 100.00	69.6300	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9737	418400.0000	0.0077	0.79
Y_R 371.029	1.1150	70400.0000	0.0033	0.29

Sample Name: 440-222465-A-1-A

Date: 10/19/2018 7:22:25 PM

Rack:Tube: 4:40

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0368	ppm	0.0004	1.03	1516.0000	0.0368 (ppm)	Y 371.029
Al (396.152 nm)	1.3490	ppm	0.0218	1.62	28180.0000	1.3490 (ppm)	Y 371.029
As (188.980 nm)	-0.0008 u	ppm	0.0005	63.54	-15.5400	-0.0008 u (ppm)	Y 371.029
B (249.678 nm)	0.4684	ppm	0.0066	1.41	5750.0000	0.4684 (ppm)	Y 371.029
Ba (233.527 nm)	0.1298	ppm	0.0031	2.39	10280.0000	0.1298 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0003	> 100.00	2006.0000	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	24.0200	ppm	0.2549	1.06	106300.0000	24.0200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0105	ppm	0.0002	1.65	258.8000	0.0105 (ppm)	Y 371.029
Co (228.615 nm)	0.2050	ppm	0.0056	2.72	2774.0000	0.2050 (ppm)	Y 371.029
Cr (205.560 nm)	3.1360	ppm	0.1149	3.66	16710.0000	3.1360 (ppm)	Y 371.029
Cu (324.754 nm)	1.6690	ppm	0.0168	1.01	66720.0000	1.6690 (ppm)	Y 371.029
Fe (238.204 nm)	78.0300	ppm	0.3423	0.44	341300.0000	78.0300 (ppm)	Y_R 371.029
K (766.491 nm)	2.2170	ppm	0.0380	1.71	2577.0000	2.2170 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0096	ppm	0.0008	7.84	354.4000	0.0096 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.9575	ppm	0.1704	17.79	2415.0000	0.9575 (ppm)	Y_R 371.029
Mn (259.372 nm)	2.2390	ppm	0.0445	1.99	241900.0000	2.2390 (ppm)	Y 371.029
Mo (204.598 nm)	0.2021	ppm	0.0039	1.93	941.9000	0.2021 (ppm)	Y 371.029
Na (589.592 nm)	19.6900	ppm	0.1440	0.73	138700.0000	19.6900 (ppm)	Y_R 371.029
Ni (231.604 nm)	3.1980	ppm	0.0963	3.01	16400.0000	3.1980 (ppm)	Y 371.029
P (213.618 nm)	2.4380	ppm	0.0836	3.43	2156.0000	2.4380 (ppm)	Y 371.029
Pb (220.353 nm)	0.0515	ppm	0.0003	0.49	84.5100	0.0515 (ppm)	Y 371.029
Sb (206.834 nm)	0.0780	ppm	0.0008	0.99	103.0000	0.0780 (ppm)	Y 371.029
Se (196.026 nm)	0.0050	ppm	0.0041	82.97	-8.1680	0.0050 (ppm)	Y 371.029
Si (251.611 nm)	2.5220	ppm	0.0093	0.37	6205.0000	2.5220 (ppm)	Y 371.029
Sn (189.925 nm)	0.0539	ppm	0.0011	2.00	31.9100	0.0539 (ppm)	Y 371.029
Sr (421.552 nm)	0.0471	ppm	0.0002	0.43	19240.0000	0.0471 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.2270	ppm	0.0043	1.89	27830.0000	0.2270 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0076 u	ppm	0.0026	34.00	-12.8500	-0.0076 u (ppm)	Y 371.029
V (292.401 nm)	0.0943	ppm	0.0018	1.88	2735.0000	0.0943 (ppm)	Y 371.029
W (207.912 nm)	0.0245	ppm	0.0008	3.47	46.7900	0.0245 (ppm)	Y 371.029
Zn (202.548 nm)	0.8222	ppm	0.0116	1.41	15080.0000	0.8222 (ppm)	Y 371.029
Zr (343.823 nm)	0.0158	ppm	0.0003	1.88	1394.0000	0.0158 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1020	473600.0000	0.0102	0.92
Y_R 371.029	1.1350	71670.0000	0.0034	0.30

Sample Name: 440-222465-A-2-A

Date: 10/19/2018 7:24:50 PM

Rack:Tube: 4:41

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0017	ppm	0.0001	5.14	67.6900	0.0017 (ppm)	Y 371.029
Al (396.152 nm)	0.9063	ppm	0.0078	0.87	18640.0000	0.9063 (ppm)	Y 371.029
As (188.980 nm)	-0.0004 u	ppm	0.0006	> 100.00	-12.7200	-0.0004 u (ppm)	Y 371.029
B (249.678 nm)	0.1574	ppm	0.0007	0.47	1923.0000	0.1574 (ppm)	Y 371.029
Ba (233.527 nm)	0.0420	ppm	0.0016	3.82	3351.0000	0.0420 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0216	ppm	0.0007	3.22	4412.0000	0.0216 (ppm)	Y 371.029
Ca (422.673 nm)	4.3330	ppm	0.0087	0.20	19250.0000	4.3330 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0022	ppm	0.0000	1.90	49.8400	0.0022 (ppm)	Y 371.029
Co (228.615 nm)	0.0315	ppm	0.0004	1.29	423.7000	0.0315 (ppm)	Y 371.029
Cr (205.560 nm)	2.7040	ppm	0.1113	4.12	14410.0000	2.7040 (ppm)	Y 371.029
Cu (324.754 nm)	6.8250	ppm	0.1849	2.71	272200.0000	6.8250 (ppm)	Y 371.029
Fe (238.204 nm)	17.2200	ppm	0.0360	0.21	75280.0000	17.2200 (ppm)	Y_R 371.029
K (766.491 nm)	1.5060	ppm	0.0079	0.52	1701.0000	1.5060 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0181	ppm	0.0024	13.04	606.2000	0.0181 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.3528	ppm	0.0119	3.37	895.4000	0.3528 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.3569	ppm	0.0032	0.89	39400.0000	0.3569 (ppm)	Y 371.029
Mo (204.598 nm)	0.3240	ppm	0.1179	36.40	1505.0000	0.3240 (ppm)	Y 371.029
Na (589.592 nm)	3.6760	ppm	0.0082	0.22	26990.0000	3.6760 (ppm)	Y_R 371.029
Ni (231.604 nm)	1.3740	ppm	0.0398	2.89	7044.0000	1.3740 (ppm)	Y 371.029
P (213.618 nm)	0.4418	ppm	0.0239	5.41	122.3000	0.4418 (ppm)	Y 371.029
Pb (220.353 nm)	0.0165	ppm	0.0004	2.41	21.0900	0.0165 (ppm)	Y 371.029
Sb (206.834 nm)	0.2478	ppm	0.0125	5.03	273.1000	0.2478 (ppm)	Y 371.029
Se (196.026 nm)	0.0015 u	ppm	0.0030	> 100.00	-2.7550	0.0015 u (ppm)	Y 371.029
Si (251.611 nm)	1.2000	ppm	0.1571	13.09	2999.0000	1.2000 (ppm)	Y 371.029
Sn (189.925 nm)	0.0603	ppm	0.0020	3.25	36.0500	0.0603 (ppm)	Y 371.029
Sr (421.552 nm)	0.0155	ppm	0.0002	1.21	6247.0000	0.0155 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4420	ppm	0.0082	1.86	54440.0000	0.4420 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0121 u	ppm	0.0007	5.39	-24.1200	-0.0121 u (ppm)	Y 371.029
V (292.401 nm)	0.0155	ppm	0.0016	10.08	463.9000	0.0155 (ppm)	Y 371.029
W (207.912 nm)	0.0687	ppm	0.0153	22.32	129.8000	0.0687 (ppm)	Y 371.029
Zn (202.548 nm)	0.7056	ppm	0.0113	1.61	13850.0000	0.7056 (ppm)	Y 371.029
Zr (343.823 nm)	0.0125	ppm	0.0007	5.29	1060.0000	0.0125 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0850	466200.0000	0.0253	2.34
Y_R 371.029	1.1100	70120.0000	0.0004	0.04

Sample Name: 440-222502-K-1-B

Date: 10/19/2018 7:27:14 PM

Rack:Tube: 4:42

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0003	> 100.00	-10.8200	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0762	ppm	0.0005	0.63	465.4000	0.0762 (ppm)	Y 371.029
As (188.980 nm)	0.0053	ppm	0.0001	2.04	9.1710	0.0053 (ppm)	Y 371.029
B (249.678 nm)	0.0619	ppm	0.0018	2.89	749.7000	0.0619 (ppm)	Y 371.029
Ba (233.527 nm)	0.0838	ppm	0.0007	0.88	6650.0000	0.0838 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	13.8200	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	40.4900	ppm	0.1109	0.27	179200.0000	40.4900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	7.96	0.5864	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0006	ppm	0.0001	21.77	-13.2400	0.0006 (ppm)	Y 371.029
Cr (205.560 nm)	0.0031	ppm	0.0018	56.82	18.7700	0.0031 (ppm)	Y 371.029
Cu (324.754 nm)	0.0799	ppm	0.0028	3.46	3299.0000	0.0799 (ppm)	Y 371.029
Fe (238.204 nm)	0.1915	ppm	0.0000	0.02	820.9000	0.1915 (ppm)	Y_R 371.029
K (766.491 nm)	2.8640	ppm	0.0465	1.62	3334.0000	2.8640 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0008 u	ppm	0.0006	75.54	87.2500	-0.0008 u (ppm)	Y_R 371.029
Mg (279.078 nm)	7.6680	ppm	0.0877	1.14	19630.0000	7.6680 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0030	ppm	0.0002	6.89	433.3000	0.0030 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0001	> 100.00	0.5299	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	12.2400	ppm	0.0002	0.00	86650.0000	12.2400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0007 u	ppm	0.0014	> 100.00	4.5740	0.0007 u (ppm)	Y 371.029
P (213.618 nm)	0.0194	ppm	0.0030	15.45	3.9290	0.0194 (ppm)	Y 371.029
Pb (220.353 nm)	0.0082	ppm	0.0003	3.35	7.1570	0.0082 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0020 u	ppm	0.0019	95.85	-3.3320	-0.0020 u (ppm)	Y 371.029
Se (196.026 nm)	0.0029	ppm	0.0020	67.46	0.8542	0.0029 (ppm)	Y 371.029
Si (251.611 nm)	7.0080	ppm	0.0944	1.35	17130.0000	7.0080 (ppm)	Y 371.029
Sn (189.925 nm)	0.0058	ppm	0.0006	10.41	0.1874	0.0058 (ppm)	Y 371.029
Sr (421.552 nm)	0.3760	ppm	0.0009	0.24	151300.0000	0.3760 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0029	ppm	0.0002	6.43	134.1000	0.0029 (ppm)	Y 371.029
Tl (190.794 nm)	0.0003 u	ppm	0.0018	> 100.00	-3.6130	0.0003 u (ppm)	Y 371.029
V (292.401 nm)	0.0002	ppm	0.0000	11.28	117.2000	0.0002 (ppm)	Y 371.029
W (207.912 nm)	0.0006 u	ppm	0.0009	> 100.00	-6.4930	0.0006 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0255	ppm	0.0004	1.51	515.2000	0.0255 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	39.60	17.9500	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1870	510100.0000	0.0130	1.09
Y_R 371.029	1.2100	76420.0000	0.0045	0.37

Sample Name: 440-222502-K-2-A

Date: 10/19/2018 7:29:38 PM

Rack:Tube: 4:43

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0000	7.54	12.4800	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.7193	ppm	0.0058	0.80	14440.0000	0.7193 (ppm)	Y 371.029
As (188.980 nm)	0.0183	ppm	0.0020	10.97	18.1100	0.0183 (ppm)	Y 371.029
B (249.678 nm)	0.0890	ppm	0.0008	0.93	1087.0000	0.0890 (ppm)	Y 371.029
Ba (233.527 nm)	0.0258	ppm	0.0000	0.13	2074.0000	0.0258 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	24.14	23.8400	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	16.1100	ppm	0.0278	0.17	71370.0000	16.1100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.2870	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0012	ppm	0.0001	9.96	-6.1610	0.0012 (ppm)	Y 371.029
Cr (205.560 nm)	0.0034	ppm	0.0000	0.24	19.6700	0.0034 (ppm)	Y 371.029
Cu (324.754 nm)	0.0028	ppm	0.0001	4.10	248.6000	0.0028 (ppm)	Y 371.029
Fe (238.204 nm)	0.5812	ppm	0.0015	0.26	2524.0000	0.5812 (ppm)	Y_R 371.029
K (766.491 nm)	7.1040	ppm	0.0385	0.54	8422.0000	7.1040 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0019	ppm	0.0008	43.11	210.5000	0.0019 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.7322	ppm	0.0020	0.28	1880.0000	0.7322 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0230	ppm	0.0002	0.66	2524.0000	0.0230 (ppm)	Y 371.029
Mo (204.598 nm)	0.0079	ppm	0.0000	0.21	37.1600	0.0079 (ppm)	Y 371.029
Na (589.592 nm)	39.3100	ppm	0.0059	0.02	275400.0000	39.3100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0003	ppm	0.0003	94.43	3.0990	0.0003 (ppm)	Y 371.029
P (213.618 nm)	0.0351	ppm	0.0085	24.28	21.5800	0.0351 (ppm)	Y 371.029
Pb (220.353 nm)	0.0023	ppm	0.0000	1.96	-4.5980	0.0023 (ppm)	Y 371.029
Sb (206.834 nm)	0.0042	ppm	0.0027	63.51	2.9070	0.0042 (ppm)	Y 371.029
Se (196.026 nm)	0.0007 u	ppm	0.0039	> 100.00	-0.6512	0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	9.9420	ppm	0.0877	0.88	24280.0000	9.9420 (ppm)	Y 371.029
Sn (189.925 nm)	0.0032	ppm	0.0006	18.64	-1.4920	0.0032 (ppm)	Y 371.029
Sr (421.552 nm)	0.1481	ppm	0.0001	0.09	59560.0000	0.1481 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0224	ppm	0.0000	0.18	2570.0000	0.0224 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0002 u	ppm	0.0001	46.41	-5.0500	-0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0244	ppm	0.0004	1.78	766.0000	0.0244 (ppm)	Y 371.029
W (207.912 nm)	0.0041	ppm	0.0001	2.71	0.5725	0.0041 (ppm)	Y 371.029
Zn (202.548 nm)	0.0106	ppm	0.0001	0.52	228.4000	0.0106 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	9.12	33.1800	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1650	500700.0000	0.0071	0.61
Y_R 371.029	1.1960	75570.0000	0.0066	0.55

Sample Name: 440-222502-K-2-B MS

Date: 10/19/2018 7:32:03 PM

Rack:Tube: 4:44

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2378	ppm	0.0020	0.84	10010.0000	0.2378 (ppm)	Y 371.029
Al (396.152 nm)	1.5760	ppm	0.0091	0.58	33420.0000	1.5760 (ppm)	Y 371.029
As (188.980 nm)	0.4772	ppm	0.0064	1.33	328.7000	0.4772 (ppm)	Y 371.029
B (249.678 nm)	0.5607	ppm	0.0056	1.00	6934.0000	0.5607 (ppm)	Y 371.029
Ba (233.527 nm)	0.4958	ppm	0.0022	0.45	39130.0000	0.4958 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4719	ppm	0.0039	0.83	86930.0000	0.4719 (ppm)	Y 371.029
Ca (422.673 nm)	18.7500	ppm	0.0041	0.02	83030.0000	18.7500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4724	ppm	0.0027	0.56	10960.0000	0.4724 (ppm)	Y 371.029
Co (228.615 nm)	0.4722	ppm	0.0030	0.64	6379.0000	0.4722 (ppm)	Y 371.029
Cr (205.560 nm)	0.4679	ppm	0.0018	0.38	2495.0000	0.4679 (ppm)	Y 371.029
Cu (324.754 nm)	0.5031	ppm	0.0002	0.05	20200.0000	0.5031 (ppm)	Y 371.029
Fe (238.204 nm)	1.2260	ppm	0.0013	0.11	5345.0000	1.2260 (ppm)	Y_R 371.029
K (766.491 nm)	11.9900	ppm	0.0960	0.80	14300.0000	11.9900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4869	ppm	0.0003	0.06	33100.0000	0.4869 (ppm)	Y_R 371.029
Mg (279.078 nm)	3.1150	ppm	0.0089	0.29	7977.0000	3.1150 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4962	ppm	0.0028	0.57	51670.0000	0.4962 (ppm)	Y 371.029
Mo (204.598 nm)	0.4764	ppm	0.0040	0.84	2211.0000	0.4764 (ppm)	Y 371.029
Na (589.592 nm)	44.2100	ppm	0.0830	0.19	309700.0000	44.2100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4710	ppm	0.0017	0.36	2415.0000	0.4710 (ppm)	Y 371.029
P (213.618 nm)	0.5107	ppm	0.0040	0.79	430.4000	0.5107 (ppm)	Y 371.029
Pb (220.353 nm)	0.4736	ppm	0.0043	0.90	902.3000	0.4736 (ppm)	Y 371.029
Sb (206.834 nm)	0.4947	ppm	0.0052	1.05	506.3000	0.4947 (ppm)	Y 371.029
Se (196.026 nm)	0.4456	ppm	0.0033	0.74	337.3000	0.4456 (ppm)	Y 371.029
Si (251.611 nm)	12.9200	ppm	0.0524	0.41	31620.0000	12.9200 (ppm)	Y 371.029
Sn (189.925 nm)	0.4732	ppm	0.0014	0.29	306.1000	0.4732 (ppm)	Y 371.029
Sr (421.552 nm)	0.6329	ppm	0.0007	0.11	254000.0000	0.6329 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5089	ppm	0.0036	0.70	62690.0000	0.5089 (ppm)	Y 371.029
Tl (190.794 nm)	0.4736	ppm	0.0055	1.16	560.8000	0.4736 (ppm)	Y 371.029
V (292.401 nm)	0.5023	ppm	0.0028	0.55	14190.0000	0.5023 (ppm)	Y 371.029
W (207.912 nm)	0.4705	ppm	0.0024	0.52	883.0000	0.4705 (ppm)	Y 371.029
Zn (202.548 nm)	0.4900	ppm	0.0023	0.46	8997.0000	0.4900 (ppm)	Y 371.029
Zr (343.823 nm)	0.4759	ppm	0.0048	1.01	40040.0000	0.4759 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1600	498400.0000	0.0068	0.59
Y_R 371.029	1.1760	743000.0000	0.0065	0.55

Sample Name: 440-222502-K-2-C MSD

Date: 10/19/2018 7:34:27 PM

Rack:Tube: 4:45

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.2377	ppm	0.0016	0.69	10010.0000	0.2377 (ppm)	Y 371.029
Al (396.152 nm)	1.5490	ppm	0.0108	0.70	32840.0000	1.5490 (ppm)	Y 371.029
As (188.980 nm)	0.4789	ppm	0.0004	0.08	329.8000	0.4789 (ppm)	Y 371.029
B (249.678 nm)	0.5643	ppm	0.0056	0.99	6978.0000	0.5643 (ppm)	Y 371.029
Ba (233.527 nm)	0.4914	ppm	0.0025	0.51	38780.0000	0.4914 (ppm)	Y_R 371.029
Be (234.861 nm)	0.4713	ppm	0.0035	0.74	86830.0000	0.4713 (ppm)	Y 371.029
Ca (422.673 nm)	19.1200	ppm	0.0436	0.23	84660.0000	19.1200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.4707	ppm	0.0046	0.99	10920.0000	0.4707 (ppm)	Y 371.029
Co (228.615 nm)	0.4687	ppm	0.0061	1.30	6333.0000	0.4687 (ppm)	Y 371.029
Cr (205.560 nm)	0.4679	ppm	0.0012	0.26	2495.0000	0.4679 (ppm)	Y 371.029
Cu (324.754 nm)	0.5031	ppm	0.0009	0.19	20200.0000	0.5031 (ppm)	Y 371.029
Fe (238.204 nm)	1.1980	ppm	0.0026	0.22	5222.0000	1.1980 (ppm)	Y_R 371.029
K (766.491 nm)	12.1800	ppm	0.0651	0.53	14530.0000	12.1800 (ppm)	Y_R 371.029
Li (670.783 nm)	0.4874	ppm	0.0013	0.26	33130.0000	0.4874 (ppm)	Y_R 371.029
Mg (279.078 nm)	3.0880	ppm	0.0222	0.72	7909.0000	3.0880 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.4971	ppm	0.0020	0.41	51750.0000	0.4971 (ppm)	Y 371.029
Mo (204.598 nm)	0.4799	ppm	0.0031	0.65	2227.0000	0.4799 (ppm)	Y 371.029
Na (589.592 nm)	45.0200	ppm	0.0164	0.04	315300.0000	45.0200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.4739	ppm	0.0023	0.50	2429.0000	0.4739 (ppm)	Y 371.029
P (213.618 nm)	0.5086	ppm	0.0071	1.40	428.5000	0.5086 (ppm)	Y 371.029
Pb (220.353 nm)	0.4729	ppm	0.0025	0.52	900.9000	0.4729 (ppm)	Y 371.029
Sb (206.834 nm)	0.4932	ppm	0.0034	0.69	504.7000	0.4932 (ppm)	Y 371.029
Se (196.026 nm)	0.4444	ppm	0.0032	0.73	336.4000	0.4444 (ppm)	Y 371.029
Si (251.611 nm)	13.1400	ppm	0.0573	0.44	32150.0000	13.1400 (ppm)	Y 371.029
Sn (189.925 nm)	0.4753	ppm	0.0017	0.35	307.5000	0.4753 (ppm)	Y 371.029
Sr (421.552 nm)	0.6352	ppm	0.0014	0.22	254900.0000	0.6352 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.5090	ppm	0.0013	0.26	62710.0000	0.5090 (ppm)	Y 371.029
Tl (190.794 nm)	0.4688	ppm	0.0141	3.01	554.8000	0.4688 (ppm)	Y 371.029
V (292.401 nm)	0.5028	ppm	0.0022	0.44	14200.0000	0.5028 (ppm)	Y 371.029
W (207.912 nm)	0.4714	ppm	0.0043	0.92	884.8000	0.4714 (ppm)	Y 371.029
Zn (202.548 nm)	0.4955	ppm	0.0008	0.16	9097.0000	0.4955 (ppm)	Y 371.029
Zr (343.823 nm)	0.4791	ppm	0.0032	0.66	40310.0000	0.4791 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1660	500800.0000	0.0023	0.20
Y_R 371.029	1.1950	75470.0000	0.0082	0.68

Sample Name: 440-222502-K-3-B

Date: 10/19/2018 7:36:51 PM

Rack:Tube: 4:46

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	52.59	6.5180	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.7954	ppm	0.0023	0.29	16090.0000	0.7954 (ppm)	Y 371.029
As (188.980 nm)	0.0170	ppm	0.0005	3.22	17.2300	0.0170 (ppm)	Y 371.029
B (249.678 nm)	0.0927	ppm	0.0002	0.18	1132.0000	0.0927 (ppm)	Y 371.029
Ba (233.527 nm)	0.0271	ppm	0.0003	1.13	2180.0000	0.0271 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0001	25.00	83.8100	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	16.5300	ppm	0.0122	0.07	73200.0000	16.5300 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	26.91	4.8100	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0017	ppm	0.0001	4.00	1.2330	0.0017 (ppm)	Y 371.029
Cr (205.560 nm)	0.0049	ppm	0.0003	6.93	27.6800	0.0049 (ppm)	Y 371.029
Cu (324.754 nm)	0.0032	ppm	0.0001	2.52	263.7000	0.0032 (ppm)	Y 371.029
Fe (238.204 nm)	0.6632	ppm	0.0011	0.16	2883.0000	0.6632 (ppm)	Y_R 371.029
K (766.491 nm)	7.2660	ppm	0.0329	0.45	8617.0000	7.2660 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0013	ppm	0.0001	7.78	168.6000	0.0013 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.7610	ppm	0.0028	0.36	1954.0000	0.7610 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0248	ppm	0.0002	0.69	2724.0000	0.0248 (ppm)	Y 371.029
Mo (204.598 nm)	0.0092	ppm	0.0006	6.33	43.2900	0.0092 (ppm)	Y 371.029
Na (589.592 nm)	40.2900	ppm	0.0352	0.09	282300.0000	40.2900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0013	ppm	0.0000	1.30	8.3400	0.0013 (ppm)	Y 371.029
P (213.618 nm)	0.0402	ppm	0.0035	8.70	26.2000	0.0402 (ppm)	Y 371.029
Pb (220.353 nm)	0.0028	ppm	0.0010	36.59	-3.7260	0.0028 (ppm)	Y 371.029
Sb (206.834 nm)	0.0055	ppm	0.0023	41.63	4.2770	0.0055 (ppm)	Y 371.029
Se (196.026 nm)	-0.0016 u	ppm	0.0008	52.83	-2.4060	-0.0016 u (ppm)	Y 371.029
Si (251.611 nm)	10.4000	ppm	0.0667	0.64	25390.0000	10.4000 (ppm)	Y 371.029
Sn (189.925 nm)	0.0019	ppm	0.0002	12.15	-2.3260	0.0019 (ppm)	Y 371.029
Sr (421.552 nm)	0.1521	ppm	0.0000	0.03	61180.0000	0.1521 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0281	ppm	0.0001	0.25	3280.0000	0.0281 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0011 u	ppm	0.0020	> 100.00	-6.3280	-0.0011 u (ppm)	Y 371.029
V (292.401 nm)	0.0252	ppm	0.0001	0.58	791.0000	0.0252 (ppm)	Y 371.029
W (207.912 nm)	0.0044	ppm	0.0002	5.36	1.4260	0.0044 (ppm)	Y 371.029
Zn (202.548 nm)	0.0454	ppm	0.0003	0.56	857.8000	0.0454 (ppm)	Y 371.029
Zr (343.823 nm)	0.0009	ppm	0.0001	6.79	69.5100	0.0009 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1710	503300.0000	0.0020	0.17
Y_R 371.029	1.2060	76170.0000	0.0010	0.09

Sample Name: 440-222505-I-1-A

Date: 10/19/2018 7:39:16 PM

Rack:Tube: 4:47

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-0.1767	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.5548	ppm	0.0001	0.01	10870.0000	0.5548 (ppm)	Y 371.029
As (188.980 nm)	0.0015	ppm	0.0005	32.93	6.6030	0.0015 (ppm)	Y 371.029
B (249.678 nm)	0.0880	ppm	0.0004	0.44	1075.0000	0.0880 (ppm)	Y 371.029
Ba (233.527 nm)	0.0675	ppm	0.0006	0.85	5367.0000	0.0675 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	25.73	39.1200	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	38.5700	ppm	0.0058	0.01	170700.0000	38.5700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	20.48	0.7426	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0002	19.34	-8.4170	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0026	ppm	0.0003	13.37	15.7600	0.0026 (ppm)	Y 371.029
Cu (324.754 nm)	0.0012	ppm	0.0000	0.03	164.6000	0.0012 (ppm)	Y 371.029
Fe (238.204 nm)	0.4612	ppm	0.0005	0.11	2001.0000	0.4612 (ppm)	Y_R 371.029
K (766.491 nm)	3.7320	ppm	0.0398	1.07	4377.0000	3.7320 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0016 u	ppm	0.0000	0.12	44.8600	-0.0016 u (ppm)	Y_R 371.029
Mg (279.078 nm)	8.5190	ppm	0.0646	0.76	21810.0000	8.5190 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0419	ppm	0.0001	0.25	4493.0000	0.0419 (ppm)	Y 371.029
Mo (204.598 nm)	0.0035	ppm	0.0002	6.25	16.9700	0.0035 (ppm)	Y 371.029
Na (589.592 nm)	20.5300	ppm	0.0709	0.35	144500.0000	20.5300 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0006	ppm	0.0005	88.93	3.9450	0.0006 (ppm)	Y 371.029
P (213.618 nm)	0.0219	ppm	0.0004	2.03	9.3030	0.0219 (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0008	97.41	-7.0550	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0016 u	ppm	0.0051	> 100.00	0.3435	0.0016 u (ppm)	Y 371.029
Se (196.026 nm)	0.0026	ppm	0.0029	> 100.00	0.6028	0.0026 (ppm)	Y 371.029
Si (251.611 nm)	7.4110	ppm	0.0278	0.37	18110.0000	7.4110 (ppm)	Y 371.029
Sn (189.925 nm)	0.0008	ppm	0.0000	0.35	-3.0710	0.0008 (ppm)	Y 371.029
Sr (421.552 nm)	0.3587	ppm	0.0004	0.12	144400.0000	0.3587 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0223	ppm	0.0000	0.13	2532.0000	0.0223 (ppm)	Y 371.029
Tl (190.794 nm)	0.0006	ppm	0.0003	40.94	-3.4970	0.0006 (ppm)	Y 371.029
V (292.401 nm)	0.0030	ppm	0.0000	1.47	195.5000	0.0030 (ppm)	Y 371.029
W (207.912 nm)	0.0009	ppm	0.0003	36.39	-6.0690	0.0009 (ppm)	Y 371.029
Zn (202.548 nm)	0.0094	ppm	0.0001	1.18	210.7000	0.0094 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0002	37.49	36.9800	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1740	504500.0000	0.0032	0.27
Y_R 371.029	1.2170	76900.0000	0.0080	0.66

Sample Name: 440-222505-I-2-B

Date: 10/19/2018 7:41:40 PM

Rack:Tube: 4:48

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	37.70	-16.1500	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.3284	ppm	0.0031	0.94	5949.0000	0.3284 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0004	13.01	7.7380	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.0878	ppm	0.0001	0.12	1073.0000	0.0878 (ppm)	Y 371.029
Ba (233.527 nm)	0.0644	ppm	0.0005	0.73	5120.0000	0.0644 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	66.80	22.3400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	38.2900	ppm	0.0688	0.18	169500.0000	38.2900 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.6820	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0000	2.43	-8.6320	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0001	4.32	8.9130	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0001	> 100.00	113.0000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.2630	ppm	0.0028	1.05	1134.0000	0.2630 (ppm)	Y_R 371.029
K (766.491 nm)	3.6930	ppm	0.0436	1.18	4330.0000	3.6930 (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0007 u	ppm	0.0005	75.51	107.0000	-0.0007 u (ppm)	Y_R 371.029
Mg (279.078 nm)	8.5950	ppm	0.0287	0.33	22000.0000	8.5950 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0331	ppm	0.0000	0.09	3551.0000	0.0331 (ppm)	Y 371.029
Mo (204.598 nm)	0.0030	ppm	0.0008	25.29	14.6200	0.0030 (ppm)	Y 371.029
Na (589.592 nm)	20.3900	ppm	0.0362	0.18	143500.0000	20.3900 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002	ppm	0.0001	78.71	1.9510	0.0002 (ppm)	Y 371.029
P (213.618 nm)	0.0199	ppm	0.0033	16.80	7.4880	0.0199 (ppm)	Y 371.029
Pb (220.353 nm)	0.0007	ppm	0.0008	> 100.00	-7.3360	0.0007 (ppm)	Y 371.029
Sb (206.834 nm)	0.0006	ppm	0.0006	> 100.00	-0.7308	0.0006 (ppm)	Y 371.029
Se (196.026 nm)	-0.0007 u	ppm	0.0025	> 100.00	-1.8010	-0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	7.0000	ppm	0.0264	0.38	17110.0000	7.0000 (ppm)	Y 371.029
Sn (189.925 nm)	0.0025	ppm	0.0013	49.10	-1.9130	0.0025 (ppm)	Y 371.029
Sr (421.552 nm)	0.3564	ppm	0.0005	0.14	143400.0000	0.3564 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0126	ppm	0.0003	2.33	1340.0000	0.0126 (ppm)	Y 371.029
Tl (190.794 nm)	0.0013 u	ppm	0.0020	> 100.00	-2.5790	0.0013 u (ppm)	Y 371.029
V (292.401 nm)	0.0028	ppm	0.0002	6.46	187.3000	0.0028 (ppm)	Y 371.029
W (207.912 nm)	0.0004	ppm	0.0003	78.26	-6.9630	0.0004 (ppm)	Y 371.029
Zn (202.548 nm)	0.0178	ppm	0.0001	0.63	363.1000	0.0178 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	19.33	31.6300	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1580	497400.0000	0.0135	1.16
Y_R 371.029	1.1820	74690.0000	0.0077	0.65

Sample Name: CCV 5129881

Date: 10/19/2018 7:44:04 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4851	ppm	0.0010	0.21	20430.0000	0.4851 (ppm)	Y 371.029
Al (396.152 nm)	1.0090	ppm	0.0031	0.31	21460.0000	1.0090 (ppm)	Y 371.029
As (188.980 nm)	0.9575	ppm	0.0003	0.03	653.7000	0.9575 (ppm)	Y 371.029
B (249.678 nm)	0.9790	ppm	0.0012	0.12	12110.0000	0.9790 (ppm)	Y 371.029
Ba (233.527 nm)	0.9514	ppm	0.0100	1.05	75050.0000	0.9514 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9596	ppm	0.0016	0.17	176700.0000	0.9596 (ppm)	Y 371.029
Ca (422.673 nm)	4.8840	ppm	0.0081	0.17	21700.0000	4.8840 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9545	ppm	0.0016	0.17	22140.0000	0.9545 (ppm)	Y 371.029
Co (228.615 nm)	0.9612	ppm	0.0027	0.28	13010.0000	0.9612 (ppm)	Y 371.029
Cr (205.560 nm)	0.9645	ppm	0.0017	0.18	5141.0000	0.9645 (ppm)	Y 371.029
Cu (324.754 nm)	0.9821	ppm	0.0018	0.19	39310.0000	0.9821 (ppm)	Y 371.029
Fe (238.204 nm)	0.9756	ppm	0.0058	0.59	4248.0000	0.9756 (ppm)	Y_R 371.029
K (766.491 nm)	9.7830	ppm	0.0329	0.34	11650.0000	9.7830 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9747	ppm	0.0000	0.00	66140.0000	0.9747 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7490	ppm	0.0507	1.07	12160.0000	4.7490 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9643	ppm	0.0024	0.25	100200.0000	0.9643 (ppm)	Y 371.029
Mo (204.598 nm)	0.9727	ppm	0.0012	0.12	4513.0000	0.9727 (ppm)	Y 371.029
Na (589.592 nm)	10.3200	ppm	0.0035	0.03	73380.0000	10.3200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9578	ppm	0.0022	0.23	4909.0000	0.9578 (ppm)	Y 371.029
P (213.618 nm)	0.9519	ppm	0.0017	0.18	808.3000	0.9519 (ppm)	Y 371.029
Pb (220.353 nm)	0.9602	ppm	0.0017	0.17	1839.0000	0.9602 (ppm)	Y 371.029
Sb (206.834 nm)	0.9708	ppm	0.0172	1.77	994.5000	0.9708 (ppm)	Y 371.029
Se (196.026 nm)	0.9567	ppm	0.0011	0.11	725.7000	0.9567 (ppm)	Y 371.029
Si (251.611 nm)	4.8550	ppm	0.0569	1.17	12050.0000	4.8550 (ppm)	Y 371.029
Sn (189.925 nm)	0.9557	ppm	0.0022	0.23	621.9000	0.9557 (ppm)	Y 371.029
Sr (421.552 nm)	0.9829	ppm	0.0028	0.29	394100.0000	0.9829 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9725	ppm	0.0006	0.06	120000.0000	0.9725 (ppm)	Y 371.029
Tl (190.794 nm)	0.9681	ppm	0.0018	0.18	1153.0000	0.9681 (ppm)	Y 371.029
V (292.401 nm)	0.9718	ppm	0.0014	0.14	27340.0000	0.9718 (ppm)	Y 371.029
W (207.912 nm)	0.9679	ppm	0.0008	0.08	1824.0000	0.9679 (ppm)	Y 371.029
Zn (202.548 nm)	0.9518	ppm	0.0015	0.16	17440.0000	0.9518 (ppm)	Y 371.029
Zr (343.823 nm)	0.9722	ppm	0.0014	0.14	81800.0000	0.9722 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1460	492500.0000	0.0036	0.31
Y_R 371.029	1.1710	74000.0000	0.0065	0.55

Sample Name: CCB 5129880

Date: 10/19/2018 7:46:27 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0007	ppm	0.0002	21.36	31.3700	0.0007 (ppm)	Y 371.029
Al (396.152 nm)	0.0141	ppm	0.0005	3.87	-908.1000	0.0141 (ppm)	Y 371.029
As (188.980 nm)	0.0020	ppm	0.0001	4.53	7.0700	0.0020 (ppm)	Y 371.029
B (249.678 nm)	0.0123	ppm	0.0014	11.58	129.1000	0.0123 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0001	21.81	85.8400	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	27.53	115.6000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	0.0180	ppm	0.0009	5.22	171.8000	0.0180 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0002	43.34	9.3170	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0001	4.73	-5.5880	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0000	1.65	5.8540	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	85.82	140.4000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0020	ppm	0.0013	65.87	-9.7200	0.0020 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0430 u	ppm	0.0383	88.98	-166.4000	-0.0430 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0014	ppm	0.0006	40.73	140.8000	0.0014 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0064	ppm	0.0005	7.71	22.4300	0.0064 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0001	17.01	126.7000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0002	12.82	7.1440	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.6074 Z	ppm	0.0079	1.30	5547.0000 Z	0.6074 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0004	77.63	4.2630	0.0005 (ppm)	Y 371.029
P (213.618 nm)	-0.0008 u	ppm	0.0028	> 100.00	-10.9000	-0.0008 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0017	ppm	0.0006	35.82	-5.9120	0.0017 (ppm)	Y 371.029
Sb (206.834 nm)	0.0054	ppm	0.0014	25.61	4.1360	0.0054 (ppm)	Y 371.029
Se (196.026 nm)	0.0027	ppm	0.0021	79.24	1.0100	0.0027 (ppm)	Y 371.029
Si (251.611 nm)	0.0046	ppm	0.0017	38.00	60.2200	0.0046 (ppm)	Y 371.029
Sn (189.925 nm)	0.0031	ppm	0.0009	28.93	-1.5370	0.0031 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0001	30.57	90.7600	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0001	8.24	-46.0100	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0003	ppm	0.0001	30.40	-3.3320	0.0003 (ppm)	Y 371.029
V (292.401 nm)	0.0004	ppm	0.0001	15.03	67.4900	0.0004 (ppm)	Y 371.029
W (207.912 nm)	0.0019	ppm	0.0014	74.21	-3.4520	0.0019 (ppm)	Y 371.029
Zn (202.548 nm)	0.0015	ppm	0.0001	5.54	60.7400	0.0015 (ppm)	Y 371.029
Zr (343.823 nm)	0.0006	ppm	0.0002	29.42	39.8100	0.0006 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1630	499900.0000	0.0027	0.23
Y_R 371.029	1.1780	74390.0000	0.0094	0.80

Sample Name: 440-222505-I-3-A

Date: 10/19/2018 7:48:51 PM

Rack:Tube: 4:49

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0003	> 100.00	-17.8500	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	3.4850	ppm	0.0078	0.22	74570.0000	3.4850 (ppm)	Y 371.029
As (188.980 nm)	0.0067	ppm	0.0011	16.87	10.2200	0.0067 (ppm)	Y 371.029
B (249.678 nm)	0.0879	ppm	0.0012	1.34	1070.0000	0.0879 (ppm)	Y 371.029
Ba (233.527 nm)	0.0915	ppm	0.0003	0.35	7259.0000	0.0915 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	7.21	144.5000	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	42.9600	ppm	0.1457	0.34	190200.0000	42.9600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	24.85	1.9270	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0025	ppm	0.0002	8.23	17.4700	0.0025 (ppm)	Y 371.029
Cr (205.560 nm)	0.0048	ppm	0.0001	1.18	27.7100	0.0048 (ppm)	Y 371.029
Cu (324.754 nm)	0.0063	ppm	0.0002	3.72	367.0000	0.0063 (ppm)	Y 371.029
Fe (238.204 nm)	4.0820	ppm	0.0027	0.07	17840.0000	4.0820 (ppm)	Y_R 371.029
K (766.491 nm)	4.2150	ppm	0.0415	0.98	4959.0000	4.2150 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0033	ppm	0.0004	10.91	402.0000	0.0033 (ppm)	Y_R 371.029
Mg (279.078 nm)	9.1920	ppm	0.0026	0.03	23530.0000	9.1920 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1128	ppm	0.0002	0.19	12310.0000	0.1128 (ppm)	Y 371.029
Mo (204.598 nm)	0.0022	ppm	0.0004	18.92	11.1200	0.0022 (ppm)	Y 371.029
Na (589.592 nm)	18.7600	ppm	0.0983	0.52	132100.0000	18.7600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0068	ppm	0.0005	7.78	35.8100	0.0068 (ppm)	Y 371.029
P (213.618 nm)	0.1248	ppm	0.0061	4.86	103.4000	0.1248 (ppm)	Y 371.029
Pb (220.353 nm)	0.0028	ppm	0.0004	13.92	-3.8300	0.0028 (ppm)	Y 371.029
Sb (206.834 nm)	0.0049 u	ppm	0.0095	> 100.00	3.9170	0.0049 u (ppm)	Y 371.029
Se (196.026 nm)	0.0007 u	ppm	0.0011	> 100.00	-1.3290	0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	14.0700	ppm	0.0009	0.01	34340.0000	14.0700 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0012 u	ppm	0.0011	86.15	-4.3970	-0.0012 u (ppm)	Y 371.029
Sr (421.552 nm)	0.3777	ppm	0.0012	0.31	152000.0000	0.3777 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.2094	ppm	0.0019	0.89	25650.0000	0.2094 (ppm)	Y 371.029
Tl (190.794 nm)	0.0005	ppm	0.0000	2.00	-6.3170	0.0005 (ppm)	Y 371.029
V (292.401 nm)	0.0082	ppm	0.0001	1.15	354.4000	0.0082 (ppm)	Y 371.029
W (207.912 nm)	0.0016	ppm	0.0004	23.79	-4.6970	0.0016 (ppm)	Y 371.029
Zn (202.548 nm)	0.0255	ppm	0.0004	1.40	502.2000	0.0255 (ppm)	Y 371.029
Zr (343.823 nm)	0.0007	ppm	0.0000	3.25	62.3000	0.0007 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1550	496500.0000	0.0028	0.24
Y_R 371.029	1.1780	74430.0000	0.0039	0.33

Sample Name: 440-222577-D-1-A

Date: 10/19/2018 7:51:16 PM

Rack:Tube: 4:50

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0000	13.63	-24.1500	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0383	ppm	0.0009	2.24	-312.4000	0.0383 (ppm)	Y 371.029
As (188.980 nm)	0.0009 u	ppm	0.0021	> 100.00	5.9690	0.0009 u (ppm)	Y 371.029
B (249.678 nm)	0.3744	ppm	0.0025	0.66	4653.0000	0.3744 (ppm)	Y 371.029
Ba (233.527 nm)	0.0498	ppm	0.0003	0.54	3973.0000	0.0498 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	71.68	12.0100	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	117.0000	ppm	0.1150	0.10	517600.0000	117.0000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.2680	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0002	34.92	-10.6200	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0022	ppm	0.0002	7.91	15.1100	0.0022 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0012 u	ppm	0.0000	0.60	-6.3210	-0.0012 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0274	ppm	0.0025	9.26	105.4000	0.0274 (ppm)	Y_R 371.029
K (766.491 nm)	2.1310	ppm	0.0578	2.71	2469.0000	2.1310 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0043	ppm	0.0008	18.88	654.0000	0.0043 (ppm)	Y_R 371.029
Mg (279.078 nm)	24.2700	ppm	0.1079	0.44	62120.0000	24.2700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0014	ppm	0.0001	4.94	318.4000	0.0014 (ppm)	Y 371.029
Mo (204.598 nm)	0.0041	ppm	0.0010	25.03	19.6500	0.0041 (ppm)	Y 371.029
Na (589.592 nm)	47.7400	ppm	0.0402	0.08	334200.0000	47.7400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0005	> 100.00	0.3350	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0167	ppm	0.0043	25.54	3.5010	0.0167 (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0009	77.24	-5.2820	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0057	ppm	0.0079	> 100.00	4.8960	0.0057 (ppm)	Y 371.029
Se (196.026 nm)	0.0053	ppm	0.0005	10.22	2.1770	0.0053 (ppm)	Y 371.029
Si (251.611 nm)	13.8300	ppm	0.1356	0.98	33760.0000	13.8300 (ppm)	Y 371.029
Sn (189.925 nm)	0.0028	ppm	0.0012	41.59	-1.7500	0.0028 (ppm)	Y 371.029
Sr (421.552 nm)	0.6333	ppm	0.0021	0.34	255700.0000	0.6333 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0019	ppm	0.0001	6.42	-81.7300	0.0019 (ppm)	Y 371.029
Tl (190.794 nm)	0.0024	ppm	0.0019	81.89	-1.6130	0.0024 (ppm)	Y 371.029
V (292.401 nm)	-0.0017 u	ppm	0.0001	5.73	169.0000	-0.0017 u (ppm)	Y 371.029
W (207.912 nm)	-0.0004 u	ppm	0.0001	26.22	-10.2200	-0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0043	ppm	0.0002	3.73	132.9000	0.0043 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	24.03	20.8300	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1350	487600.0000	0.0068	0.60
Y_R 371.029	1.1720	74030.0000	0.0025	0.21

Sample Name: 440-222577-D-2-A

Date: 10/19/2018 7:53:39 PM

Rack:Tube: 4:51

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	60.27	-36.2200	-0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.1349	ppm	0.0007	0.50	1807.0000	0.1349 (ppm)	Y 371.029
As (188.980 nm)	0.0054	ppm	0.0010	19.27	8.9350	0.0054 (ppm)	Y 371.029
B (249.678 nm)	0.3872	ppm	0.0023	0.59	4813.0000	0.3872 (ppm)	Y 371.029
Ba (233.527 nm)	0.0935	ppm	0.0013	1.41	7422.0000	0.0935 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	96.29	7.1310	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	150.2000	ppm	1.1770	0.78	664600.0000	150.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	63.75	-0.9542	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0035	ppm	0.0000	1.43	27.6700	0.0035 (ppm)	Y 371.029
Cr (205.560 nm)	0.0040	ppm	0.0003	7.78	25.3300	0.0040 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0014 u	ppm	0.0001	4.44	-45.1500	-0.0014 u (ppm)	Y 371.029
Fe (238.204 nm)	0.1577	ppm	0.0008	0.48	676.6000	0.1577 (ppm)	Y_R 371.029
K (766.491 nm)	2.6190	ppm	0.0430	1.64	3062.0000	2.6190 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0033	ppm	0.0004	11.40	674.3000	0.0033 (ppm)	Y_R 371.029
Mg (279.078 nm)	31.7400	ppm	0.1208	0.38	81250.0000	31.7400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0016	ppm	0.0000	2.06	391.6000	0.0016 (ppm)	Y 371.029
Mo (204.598 nm)	0.0019	ppm	0.0011	58.59	9.3710	0.0019 (ppm)	Y 371.029
Na (589.592 nm)	58.9200	ppm	0.1664	0.28	412300.0000	58.9200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0045	ppm	0.0002	3.62	21.5100	0.0045 (ppm)	Y 371.029
P (213.618 nm)	0.0187	ppm	0.0025	13.55	4.9050	0.0187 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0011 u	ppm	0.0005	42.28	-9.2490	-0.0011 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0026 u	ppm	0.0027	> 100.00	-3.5250	-0.0026 u (ppm)	Y 371.029
Se (196.026 nm)	0.0035	ppm	0.0046	> 100.00	0.5827	0.0035 (ppm)	Y 371.029
Si (251.611 nm)	14.0300	ppm	0.0656	0.47	34240.0000	14.0300 (ppm)	Y 371.029
Sn (189.925 nm)	0.0012	ppm	0.0008	66.44	-2.8120	0.0012 (ppm)	Y 371.029
Sr (421.552 nm)	0.8051	ppm	0.0035	0.43	325100.0000	0.8051 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0069	ppm	0.0000	0.62	495.3000	0.0069 (ppm)	Y 371.029
Tl (190.794 nm)	0.0010	ppm	0.0011	> 100.00	-3.5190	0.0010 (ppm)	Y 371.029
V (292.401 nm)	-0.0041 u	ppm	0.0001	2.00	149.7000	-0.0041 u (ppm)	Y 371.029
W (207.912 nm)	0.0002	ppm	0.0001	76.01	-9.9690	0.0002 (ppm)	Y 371.029
Zn (202.548 nm)	0.0029	ppm	0.0002	5.69	112.7000	0.0029 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	14.40	28.3000	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1080	476000.0000	0.0073	0.66
Y_R 371.029	1.1450	723000.0000	0.0108	0.94

Sample Name: 440-222577-D-3-A

Date: 10/19/2018 7:56:04 PM

Rack:Tube: 4:52

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	45.20	-35.4800	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.1277	ppm	0.0006	0.50	1643.0000	0.1277 (ppm)	Y 371.029
As (188.980 nm)	0.0033	ppm	0.0007	20.90	7.5870	0.0033 (ppm)	Y 371.029
B (249.678 nm)	0.3887	ppm	0.0016	0.41	4832.0000	0.3887 (ppm)	Y 371.029
Ba (233.527 nm)	0.0943	ppm	0.0010	1.03	7488.0000	0.0943 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	51.77	7.8360	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	136.2000	ppm	0.4719	0.35	602600.0000	136.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	28.63	-0.3909	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0044	ppm	0.0002	4.32	40.0800	0.0044 (ppm)	Y 371.029
Cr (205.560 nm)	0.0030	ppm	0.0002	6.93	19.5500	0.0030 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0012 u	ppm	0.0002	17.13	-22.5000	-0.0012 u (ppm)	Y 371.029
Fe (238.204 nm)	0.2230	ppm	0.0013	0.57	962.0000	0.2230 (ppm)	Y_R 371.029
K (766.491 nm)	2.5130	ppm	0.0489	1.95	2932.0000	2.5130 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0039	ppm	0.0007	19.00	677.5000	0.0039 (ppm)	Y_R 371.029
Mg (279.078 nm)	28.9400	ppm	0.0797	0.28	74090.0000	28.9400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0021	ppm	0.0000	0.64	441.0000	0.0021 (ppm)	Y 371.029
Mo (204.598 nm)	0.0022	ppm	0.0021	96.98	10.5900	0.0022 (ppm)	Y 371.029
Na (589.592 nm)	55.8100	ppm	0.0981	0.18	390500.0000	55.8100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0040	ppm	0.0004	8.73	19.3900	0.0040 (ppm)	Y 371.029
P (213.618 nm)	0.0205	ppm	0.0024	11.56	6.7830	0.0205 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0005 u	ppm	0.0011	> 100.00	-8.4210	-0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0004 u	ppm	0.0003	65.10	-1.3180	-0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.0067	ppm	0.0027	40.37	3.0440	0.0067 (ppm)	Y 371.029
Si (251.611 nm)	14.1900	ppm	0.1253	0.88	34630.0000	14.1900 (ppm)	Y 371.029
Sn (189.925 nm)	0.0018	ppm	0.0010	54.48	-2.4050	0.0018 (ppm)	Y 371.029
Sr (421.552 nm)	0.7347	ppm	0.0011	0.15	296600.0000	0.7347 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0067	ppm	0.0002	2.64	491.6000	0.0067 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0011 u	ppm	0.0014	> 100.00	-6.0470	-0.0011 u (ppm)	Y 371.029
V (292.401 nm)	-0.0024 u	ppm	0.0002	6.22	176.6000	-0.0024 u (ppm)	Y 371.029
W (207.912 nm)	0.0004 u	ppm	0.0013	> 100.00	-9.2200	0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0027	ppm	0.0000	0.35	107.0000	0.0027 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	42.94	29.3800	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1060	475400.0000	0.0086	0.78
Y_R 371.029	1.1380	71900.0000	0.0016	0.14

Sample Name: 440-222577-D-4-A

Date: 10/19/2018 7:58:28 PM

Rack:Tube: 4:53

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	43.98	-38.1100	-0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	0.1037	ppm	0.0000	0.01	1124.0000	0.1037 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0044	> 100.00	7.4310	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.4049	ppm	0.0009	0.22	5034.0000	0.4049 (ppm)	Y 371.029
Ba (233.527 nm)	0.0980	ppm	0.0024	2.41	7776.0000	0.0980 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	12.11	6.1700	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	141.6000	ppm	0.7773	0.55	626700.0000	141.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	23.14	0.6601	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0041	ppm	0.0001	1.95	36.4600	0.0041 (ppm)	Y 371.029
Cr (205.560 nm)	0.0029	ppm	0.0001	2.83	19.4400	0.0029 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0001	11.11	-3.1710	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.1311	ppm	0.0030	2.28	560.2000	0.1311 (ppm)	Y_R 371.029
K (766.491 nm)	2.5340	ppm	0.0385	1.52	2959.0000	2.5340 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0038	ppm	0.0010	25.77	687.4000	0.0038 (ppm)	Y_R 371.029
Mg (279.078 nm)	30.0700	ppm	0.2144	0.71	76970.0000	30.0700 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0013	ppm	0.0001	4.24	343.4000	0.0013 (ppm)	Y 371.029
Mo (204.598 nm)	0.0017	ppm	0.0003	14.74	8.6090	0.0017 (ppm)	Y 371.029
Na (589.592 nm)	57.7100	ppm	0.0848	0.15	403800.0000	57.7100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0049	ppm	0.0002	5.03	23.6100	0.0049 (ppm)	Y 371.029
P (213.618 nm)	0.0089	ppm	0.0016	18.09	-3.9890	0.0089 (ppm)	Y 371.029
Pb (220.353 nm)	0.0003	ppm	0.0003	89.29	-6.7240	0.0003 (ppm)	Y 371.029
Sb (206.834 nm)	0.0001 u	ppm	0.0055	> 100.00	-0.7275	0.0001 u (ppm)	Y 371.029
Se (196.026 nm)	0.0024	ppm	0.0001	2.21	-0.1625	0.0024 (ppm)	Y 371.029
Si (251.611 nm)	14.8200	ppm	0.0504	0.34	36180.0000	14.8200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0011 u	ppm	0.0023	> 100.00	-4.2670	-0.0011 u (ppm)	Y 371.029
Sr (421.552 nm)	0.7587	ppm	0.0028	0.36	306300.0000	0.7587 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0053	ppm	0.0001	2.09	309.0000	0.0053 (ppm)	Y 371.029
Tl (190.794 nm)	0.0017	ppm	0.0002	14.41	-2.5950	0.0017 (ppm)	Y 371.029
V (292.401 nm)	-0.0032 u	ppm	0.0001	4.42	162.3000	-0.0032 u (ppm)	Y 371.029
W (207.912 nm)	-0.0012 u	ppm	0.0013	> 100.00	-12.3700	-0.0012 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0067	ppm	0.0002	3.02	180.1000	0.0067 (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	17.9000	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0880	467600.0000	0.0055	0.50
Y_R 371.029	1.1240	71020.0000	0.0052	0.46

Sample Name: 440-222577-D-5-A

Date: 10/19/2018 8:00:53 PM

Rack:Tube: 4:54

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0004 u	ppm	0.0002	38.14	-41.7600	-0.0004 u (ppm)	Y 371.029
Al (396.152 nm)	0.3629	ppm	0.0007	0.19	6756.0000	0.3629 (ppm)	Y 371.029
As (188.980 nm)	0.0029	ppm	0.0020	69.71	7.2850	0.0029 (ppm)	Y 371.029
B (249.678 nm)	0.4213	ppm	0.0053	1.25	5238.0000	0.4213 (ppm)	Y 371.029
Ba (233.527 nm)	0.0624	ppm	0.0000	0.01	4967.0000	0.0624 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	12.5300	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	135.4000	ppm	0.2638	0.19	599300.0000	135.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-0.8798	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0018	ppm	0.0001	3.54	5.1310	0.0018 (ppm)	Y 371.029
Cr (205.560 nm)	0.0048	ppm	0.0006	11.45	29.4500	0.0048 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0010 u	ppm	0.0002	15.80	-15.9200	-0.0010 u (ppm)	Y 371.029
Fe (238.204 nm)	0.4741	ppm	0.0002	0.05	2060.0000	0.4741 (ppm)	Y_R 371.029
K (766.491 nm)	2.8140	ppm	0.0251	0.89	3293.0000	2.8140 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0046	ppm	0.0000	0.28	720.3000	0.0046 (ppm)	Y_R 371.029
Mg (279.078 nm)	28.0200	ppm	0.0247	0.09	71730.0000	28.0200 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0076	ppm	0.0001	1.35	1036.0000	0.0076 (ppm)	Y 371.029
Mo (204.598 nm)	0.0032	ppm	0.0008	24.11	15.3800	0.0032 (ppm)	Y 371.029
Na (589.592 nm)	60.5400	ppm	0.0219	0.04	423500.0000	60.5400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0025	ppm	0.0003	10.52	11.5500	0.0025 (ppm)	Y 371.029
P (213.618 nm)	0.0241	ppm	0.0039	16.18	10.0700	0.0241 (ppm)	Y 371.029
Pb (220.353 nm)	0.0001 u	ppm	0.0008	> 100.00	-7.2780	0.0001 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0089 u	ppm	0.0062	69.42	-10.1000	-0.0089 u (ppm)	Y 371.029
Se (196.026 nm)	0.0056	ppm	0.0008	14.49	2.1990	0.0056 (ppm)	Y 371.029
Si (251.611 nm)	14.8600	ppm	0.0922	0.62	36280.0000	14.8600 (ppm)	Y 371.029
Sn (189.925 nm)	0.0019 u	ppm	0.0052	> 100.00	-2.3100	0.0019 u (ppm)	Y 371.029
Sr (421.552 nm)	0.6908	ppm	0.0007	0.09	279000.0000	0.6908 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0196	ppm	0.0008	4.11	2079.0000	0.0196 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0004 u	ppm	0.0022	> 100.00	-5.2800	-0.0004 u (ppm)	Y 371.029
V (292.401 nm)	-0.0031 u	ppm	0.0002	6.86	158.0000	-0.0031 u (ppm)	Y 371.029
W (207.912 nm)	-0.0004 u	ppm	0.0005	> 100.00	-10.6800	-0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0076	ppm	0.0000	0.05	194.6000	0.0076 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0000	1.46	45.8800	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1030	473700.0000	0.0023	0.21
Y_R 371.029	1.1500	72660.0000	0.0024	0.21

Sample Name: CCV 5129881

Date: 10/19/2018 8:03:16 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4817	ppm	0.0026	0.53	20280.0000	0.4817 (ppm)	Y 371.029
Al (396.152 nm)	1.0060	ppm	0.0047	0.47	21400.0000	1.0060 (ppm)	Y 371.029
As (188.980 nm)	0.9510	ppm	0.0038	0.40	649.3000	0.9510 (ppm)	Y 371.029
B (249.678 nm)	0.9750	ppm	0.0061	0.62	12060.0000	0.9750 (ppm)	Y 371.029
Ba (233.527 nm)	0.9450	ppm	0.0041	0.44	74540.0000	0.9450 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9548	ppm	0.0031	0.33	175800.0000	0.9548 (ppm)	Y 371.029
Ca (422.673 nm)	4.8700	ppm	0.0190	0.39	21640.0000	4.8700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9521	ppm	0.0022	0.23	22090.0000	0.9521 (ppm)	Y 371.029
Co (228.615 nm)	0.9584	ppm	0.0083	0.87	12970.0000	0.9584 (ppm)	Y 371.029
Cr (205.560 nm)	0.9604	ppm	0.0030	0.31	5119.0000	0.9604 (ppm)	Y 371.029
Cu (324.754 nm)	0.9755	ppm	0.0027	0.28	39050.0000	0.9755 (ppm)	Y 371.029
Fe (238.204 nm)	0.9686	ppm	0.0007	0.08	4217.0000	0.9686 (ppm)	Y_R 371.029
K (766.491 nm)	9.6950	ppm	0.0079	0.08	11540.0000	9.6950 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9675	ppm	0.0016	0.17	65650.0000	0.9675 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7550	ppm	0.0341	0.72	12170.0000	4.7550 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9585	ppm	0.0023	0.23	99560.0000	0.9585 (ppm)	Y 371.029
Mo (204.598 nm)	0.9651	ppm	0.0052	0.54	4478.0000	0.9651 (ppm)	Y 371.029
Na (589.592 nm)	10.1700	ppm	0.0146	0.14	72300.0000	10.1700 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9551	ppm	0.0017	0.18	4895.0000	0.9551 (ppm)	Y 371.029
P (213.618 nm)	0.9483	ppm	0.0028	0.29	805.3000	0.9483 (ppm)	Y 371.029
Pb (220.353 nm)	0.9604	ppm	0.0009	0.09	1839.0000	0.9604 (ppm)	Y 371.029
Sb (206.834 nm)	0.9638	ppm	0.0200	2.08	987.3000	0.9638 (ppm)	Y 371.029
Se (196.026 nm)	0.9461	ppm	0.0073	0.77	717.7000	0.9461 (ppm)	Y 371.029
Si (251.611 nm)	4.8340	ppm	0.0904	1.87	11990.0000	4.8340 (ppm)	Y 371.029
Sn (189.925 nm)	0.9593	ppm	0.0062	0.65	624.3000	0.9593 (ppm)	Y 371.029
Sr (421.552 nm)	0.9889	ppm	0.0029	0.29	396500.0000	0.9889 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9657	ppm	0.0032	0.33	119200.0000	0.9657 (ppm)	Y 371.029
Tl (190.794 nm)	0.9655	ppm	0.0005	0.05	1150.0000	0.9655 (ppm)	Y 371.029
V (292.401 nm)	0.9672	ppm	0.0027	0.28	27210.0000	0.9672 (ppm)	Y 371.029
W (207.912 nm)	0.9625	ppm	0.0041	0.42	1814.0000	0.9625 (ppm)	Y 371.029
Zn (202.548 nm)	0.9503	ppm	0.0023	0.24	17410.0000	0.9503 (ppm)	Y 371.029
Zr (343.823 nm)	0.9648	ppm	0.0034	0.35	81180.0000	0.9648 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1410	490100.0000	0.0022	0.19
Y_R 371.029	1.1680	73750.0000	0.0060	0.51

Sample Name: CCB 5129880

Date: 10/19/2018 8:05:40 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0000	8.51	24.1600	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.0135	ppm	0.0002	1.85	-920.4000	0.0135 (ppm)	Y 371.029
As (188.980 nm)	0.0020	ppm	0.0011	53.65	7.1060	0.0020 (ppm)	Y 371.029
B (249.678 nm)	0.0128	ppm	0.0011	8.36	135.8000	0.0128 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	45.24	76.9500	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0002	46.41	95.2200	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0372	ppm	0.0087	23.28	256.7000	0.0372 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0002	37.82	7.2960	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0013	ppm	0.0001	9.87	-5.1180	0.0013 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0005	61.86	5.3240	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	53.04	132.4000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0011 u	ppm	0.0017	> 100.00	-13.4000	0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0287 u	ppm	0.0152	52.97	-149.2000	-0.0287 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0002 u	ppm	0.0001	39.48	36.0200	-0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0111	ppm	0.0041	37.49	34.2000	0.0111 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0004	ppm	0.0002	42.00	109.5000	0.0004 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0002	19.34	6.4990	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	0.4726	ppm	0.0095	2.02	4607.0000	0.4726 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002	ppm	0.0002	81.27	2.8670	0.0002 (ppm)	Y 371.029
P (213.618 nm)	0.0039	ppm	0.0020	50.61	-6.5480	0.0039 (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0000	5.08	-7.3450	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0029	ppm	0.0027	90.28	1.5850	0.0029 (ppm)	Y 371.029
Se (196.026 nm)	0.0039	ppm	0.0001	2.96	1.9190	0.0039 (ppm)	Y 371.029
Si (251.611 nm)	0.0047	ppm	0.0043	91.49	60.3700	0.0047 (ppm)	Y 371.029
Sn (189.925 nm)	0.0027	ppm	0.0002	7.33	-1.8360	0.0027 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0002	65.45	64.0500	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0002	15.58	-50.6900	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0008	ppm	0.0009	> 100.00	-2.6860	0.0008 (ppm)	Y 371.029
V (292.401 nm)	0.0002 u	ppm	0.0004	> 100.00	63.1200	0.0002 u (ppm)	Y 371.029
W (207.912 nm)	0.0020	ppm	0.0000	0.51	-3.2040	0.0020 (ppm)	Y 371.029
Zn (202.548 nm)	0.0014	ppm	0.0003	18.63	59.7800	0.0014 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	36.98	35.8800	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1600	498200.0000	0.0070	0.60
Y_R 371.029	1.1780	74390.0000	0.0052	0.44

Sample Name: MB 440-506097/1-A

Date: 10/19/2018 8:08:04 PM

Rack:Tube: 3:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0000	8.79	15.3200	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0119	ppm	0.0005	4.06	-956.0000	0.0119 (ppm)	Y 371.029
As (188.980 nm)	0.0024	ppm	0.0011	45.96	7.3830	0.0024 (ppm)	Y 371.029
B (249.678 nm)	0.0153	ppm	0.0006	3.74	166.9000	0.0153 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	41.2000	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	76.00	13.1400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0040	ppm	0.0004	9.62	109.7000	0.0040 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-3.6410	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0001	ppm	0.0000	42.78	-21.9100	0.0001 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0001	12.17	6.2120	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0004	40.05	113.5000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0034	ppm	0.0000	0.93	-3.3020	0.0034 (ppm)	Y_R 371.029
K (766.491 nm)	0.0023 u	ppm	0.0239	> 100.00	-112.0000	0.0023 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0001	> 100.00	49.6300	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0045	ppm	0.0002	4.43	17.4300	0.0045 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000	ppm	0.0000	82.47	65.6700	0.0000 (ppm)	Y 371.029
Mo (204.598 nm)	0.0001 u	ppm	0.0003	> 100.00	0.9494	0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.4899	ppm	0.0060	1.22	4728.0000	0.4899 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004 u	ppm	0.0011	> 100.00	4.1630	0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0005 u	ppm	0.0020	> 100.00	-9.6780	0.0005 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0020	ppm	0.0002	9.70	-5.2480	0.0020 (ppm)	Y 371.029
Sb (206.834 nm)	0.0023	ppm	0.0001	5.98	0.9597	0.0023 (ppm)	Y 371.029
Se (196.026 nm)	0.0012	ppm	0.0007	60.56	-0.1444	0.0012 (ppm)	Y 371.029
Si (251.611 nm)	0.0013	ppm	0.0002	12.29	52.1300	0.0013 (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0012	44.38	-1.8710	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0001	43.49	-4.7820	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	1.96	-139.6000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	0.0012	ppm	0.0014	> 100.00	-2.2690	0.0012 (ppm)	Y 371.029
V (292.401 nm)	-0.0003 u	ppm	0.0002	70.21	48.1400	-0.0003 u (ppm)	Y 371.029
W (207.912 nm)	0.0012	ppm	0.0012	> 100.00	-4.7180	0.0012 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0006 u	ppm	0.0001	9.82	23.0400	-0.0006 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	35.89	12.1600	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1270	484400.0000	0.0013	0.12
Y_R 371.029	1.1460	72410.0000	0.0088	0.76

Sample Name: LCS 440-506097/2-A

Date: 10/19/2018 8:10:29 PM

Rack:Tube: 3:2

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4415	ppm	0.0018	0.40	18590.0000	0.4415 (ppm)	Y 371.029
Al (396.152 nm)	0.9183	ppm	0.0026	0.28	19430.0000	0.9183 (ppm)	Y 371.029
As (188.980 nm)	0.8683	ppm	0.0022	0.25	593.3000	0.8683 (ppm)	Y 371.029
B (249.678 nm)	0.8949	ppm	0.0041	0.46	11070.0000	0.8949 (ppm)	Y 371.029
Ba (233.527 nm)	0.8709	ppm	0.0036	0.41	68700.0000	0.8709 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8683	ppm	0.0022	0.25	159900.0000	0.8683 (ppm)	Y 371.029
Ca (422.673 nm)	4.4240	ppm	0.0110	0.25	19660.0000	4.4240 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8663	ppm	0.0039	0.45	20100.0000	0.8663 (ppm)	Y 371.029
Co (228.615 nm)	0.8766	ppm	0.0058	0.66	11860.0000	0.8766 (ppm)	Y 371.029
Cr (205.560 nm)	0.8804	ppm	0.0027	0.31	4693.0000	0.8804 (ppm)	Y 371.029
Cu (324.754 nm)	0.9007	ppm	0.0004	0.04	36070.0000	0.9007 (ppm)	Y 371.029
Fe (238.204 nm)	0.8893	ppm	0.0012	0.13	3870.0000	0.8893 (ppm)	Y_R 371.029
K (766.491 nm)	8.9130	ppm	0.0514	0.58	10600.0000	8.9130 (ppm)	Y_R 371.029
Li (670.783 nm)	0.8911	ppm	0.0011	0.12	60480.0000	0.8911 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.3510	ppm	0.0185	0.43	11140.0000	4.3510 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8787	ppm	0.0014	0.16	91290.0000	0.8787 (ppm)	Y 371.029
Mo (204.598 nm)	0.8888	ppm	0.0038	0.43	4124.0000	0.8888 (ppm)	Y 371.029
Na (589.592 nm)	9.3340	ppm	0.0126	0.13	66460.0000	9.3340 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8725	ppm	0.0024	0.28	4471.0000	0.8725 (ppm)	Y 371.029
P (213.618 nm)	0.8552	ppm	0.0084	0.98	724.1000	0.8552 (ppm)	Y 371.029
Pb (220.353 nm)	0.8796	ppm	0.0004	0.04	1683.0000	0.8796 (ppm)	Y 371.029
Sb (206.834 nm)	0.8908	ppm	0.0097	1.08	912.4000	0.8908 (ppm)	Y 371.029
Se (196.026 nm)	0.8395	ppm	0.0011	0.13	636.9000	0.8395 (ppm)	Y 371.029
Si (251.611 nm)	4.4410	ppm	0.0913	2.05	11020.0000	4.4410 (ppm)	Y 371.029
Sn (189.925 nm)	0.8716	ppm	0.0014	0.17	566.9000	0.8716 (ppm)	Y 371.029
Sr (421.552 nm)	0.9024	ppm	0.0048	0.54	361800.0000	0.9024 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.8847	ppm	0.0029	0.33	109200.0000	0.8847 (ppm)	Y 371.029
Tl (190.794 nm)	0.8810	ppm	0.0041	0.47	1049.0000	0.8810 (ppm)	Y 371.029
V (292.401 nm)	0.8863	ppm	0.0001	0.01	24940.0000	0.8863 (ppm)	Y 371.029
W (207.912 nm)	0.8852	ppm	0.0008	0.09	1667.0000	0.8852 (ppm)	Y 371.029
Zn (202.548 nm)	0.8614	ppm	0.0015	0.17	15790.0000	0.8614 (ppm)	Y 371.029
Zr (343.823 nm)	0.8844	ppm	0.0032	0.36	74410.0000	0.8844 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1240	482900.0000	0.0016	0.14
Y_R 371.029	1.1460	72420.0000	0.0015	0.13

Sample Name: 440-222004-D-1-B

Date: 10/19/2018 8:12:53 PM

Rack:Tube: 3:3

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002 u	ppm	0.0004	> 100.00	-25.6000	0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.1204	ppm	0.0021	1.76	1571.0000	0.1204 (ppm)	Y 371.029
As (188.980 nm)	0.0040 u	ppm	0.0059	> 100.00	7.7040	0.0040 u (ppm)	Y 371.029
B (249.678 nm)	0.2236	ppm	0.0003	0.15	2769.0000	0.2236 (ppm)	Y 371.029
Ba (233.527 nm)	0.0051	ppm	0.0002	3.43	463.0000	0.0051 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0003	ppm	0.0002	67.27	66.8400	0.0003 (ppm)	Y 371.029
Ca (422.673 nm)	258.9000	ppm	1.8960	0.73	1146000.0000	258.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	28.88	6.5350	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0059	ppm	0.0003	4.68	62.2300	0.0059 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0000	8.33	9.6840	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0003	45.94	-108.4000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0071	ppm	0.0010	14.02	23.2800	0.0071 (ppm)	Y_R 371.029
K (766.491 nm)	21.0500	ppm	0.0353	0.17	25230.0000	21.0500 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0426	ppm	0.0003	0.68	3514.0000	0.0426 (ppm)	Y_R 371.029
Mg (279.078 nm)	69.5000	ppm	3.3450	4.81	177900.0000	69.5000 (ppm)	Y_R 371.029
Mn (259.372 nm)	5.0820	ppm	0.0172	0.34	524900.0000	5.0820 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0002 u	ppm	0.0003	> 100.00	0.3847	-0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	283.1000	ppm	0.6408	0.23	1976000.0000	283.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0060	ppm	0.0005	7.97	25.1700	0.0060 (ppm)	Y 371.029
P (213.618 nm)	0.0006	ppm	0.0007	> 100.00	-13.8300	0.0006 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0035 u	ppm	0.0010	28.22	-9.9870	-0.0035 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0004 u	ppm	0.0033	> 100.00	-0.3767	0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.0047	ppm	0.0014	30.78	3.0500	0.0047 (ppm)	Y 371.029
Si (251.611 nm)	1.5780	ppm	0.0012	0.07	3921.0000	1.5780 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0023 u	ppm	0.0025	> 100.00	-4.8550	-0.0023 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2824	ppm	0.0017	0.59	117200.0000	0.2824 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0007	ppm	0.0001	17.24	-396.7000	0.0007 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0025 u	ppm	0.0019	74.73	1.1870	-0.0025 u (ppm)	Y 371.029
V (292.401 nm)	-0.0113 u	ppm	0.0003	2.68	102.3000	-0.0113 u (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0016	81.77	-16.8000	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0005 u	ppm	0.0002	38.01	82.6600	-0.0005 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0021	ppm	0.0005	22.48	203.7000	0.0021 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0610	455700.0000	0.0362	3.41
Y_R 371.029	1.1820	74680.0000	0.0229	1.93

Sample Name: 440-222004-D-1-C MS

Date: 10/19/2018 8:15:16 PM

Rack:Tube: 3:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4535	ppm	0.0006	0.14	19060.0000	0.4535 (ppm)	Y 371.029
Al (396.152 nm)	1.1820	ppm	0.0003	0.02	25350.0000	1.1820 (ppm)	Y 371.029
As (188.980 nm)	0.9095	ppm	0.0033	0.37	620.8000	0.9095 (ppm)	Y 371.029
B (249.678 nm)	1.1450	ppm	0.0059	0.52	14190.0000	1.1450 (ppm)	Y 371.029
Ba (233.527 nm)	0.8414	ppm	0.0085	1.01	66390.0000	0.8414 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8840	ppm	0.0038	0.43	162800.0000	0.8840 (ppm)	Y 371.029
Ca (422.673 nm)	261.5000	ppm	0.1603	0.06	1157000.0000	261.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8175	ppm	0.0087	1.06	18970.0000	0.8175 (ppm)	Y 371.029
Co (228.615 nm)	0.8589	ppm	0.0056	0.66	11630.0000	0.8589 (ppm)	Y 371.029
Cr (205.560 nm)	0.8652	ppm	0.0005	0.06	4617.0000	0.8652 (ppm)	Y 371.029
Cu (324.754 nm)	0.9738	ppm	0.0046	0.47	38750.0000	0.9738 (ppm)	Y 371.029
Fe (238.204 nm)	0.9108	ppm	0.0074	0.81	3976.0000	0.9108 (ppm)	Y_R 371.029
K (766.491 nm)	30.0400	ppm	0.1368	0.46	36040.0000	30.0400 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9645	ppm	0.0034	0.35	66050.0000	0.9645 (ppm)	Y_R 371.029
Mg (279.078 nm)	78.2600	ppm	0.4897	0.63	200300.0000	78.2600 (ppm)	Y_R 371.029
Mn (259.372 nm)	5.9170	ppm	0.0280	0.47	611700.0000	5.9170 (ppm)	Y 371.029
Mo (204.598 nm)	0.9047	ppm	0.0021	0.24	4199.0000	0.9047 (ppm)	Y 371.029
Na (589.592 nm)	291.1000	ppm	1.4650	0.50	2031000.0000	291.1000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8519	ppm	0.0017	0.21	4359.0000	0.8519 (ppm)	Y 371.029
P (213.618 nm)	0.9267	ppm	0.0041	0.44	782.9000	0.9267 (ppm)	Y 371.029
Pb (220.353 nm)	0.8370	ppm	0.0001	0.01	1608.0000	0.8370 (ppm)	Y 371.029
Sb (206.834 nm)	0.9132	ppm	0.0141	1.55	935.7000	0.9132 (ppm)	Y 371.029
Se (196.026 nm)	0.8291	ppm	0.0019	0.23	629.7000	0.8291 (ppm)	Y 371.029
Si (251.611 nm)	6.1800	ppm	0.0902	1.46	15290.0000	6.1800 (ppm)	Y 371.029
Sn (189.925 nm)	0.8720	ppm	0.0025	0.29	567.4000	0.8720 (ppm)	Y 371.029
Sr (421.552 nm)	1.1550	ppm	0.0025	0.21	467100.0000	1.1550 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9024	ppm	0.0016	0.18	111000.0000	0.9024 (ppm)	Y 371.029
Tl (190.794 nm)	0.8358	ppm	0.0022	0.26	999.9000	0.8358 (ppm)	Y 371.029
V (292.401 nm)	0.9051	ppm	0.0002	0.02	25830.0000	0.9051 (ppm)	Y 371.029
W (207.912 nm)	0.9013	ppm	0.0049	0.54	1691.0000	0.9013 (ppm)	Y 371.029
Zn (202.548 nm)	0.8118	ppm	0.0004	0.05	14960.0000	0.8118 (ppm)	Y 371.029
Zr (343.823 nm)	0.8959	ppm	0.0020	0.22	75410.0000	0.8959 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0300	442300.0000	0.0018	0.18
Y_R 371.029	1.0790	68140.0000	0.0064	0.60

Sample Name: 440-222004-D-1-D MSD

Date: 10/19/2018 8:17:41 PM

Rack:Tube: 3:5

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4451	ppm	0.0093	2.10	18710.0000	0.4451 (ppm)	Y 371.029
Al (396.152 nm)	1.1510	ppm	0.0304	2.64	24650.0000	1.1510 (ppm)	Y 371.029
As (188.980 nm)	0.9009	ppm	0.0155	1.71	615.0000	0.9009 (ppm)	Y 371.029
B (249.678 nm)	1.1310	ppm	0.0246	2.17	14010.0000	1.1310 (ppm)	Y 371.029
Ba (233.527 nm)	0.7943	ppm	0.0230	2.89	62670.0000	0.7943 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8684	ppm	0.0175	2.01	159900.0000	0.8684 (ppm)	Y 371.029
Ca (422.673 nm)	261.9000	ppm	0.8475	0.32	1159000.0000	261.9000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.7993	ppm	0.0219	2.74	18540.0000	0.7993 (ppm)	Y 371.029
Co (228.615 nm)	0.8379	ppm	0.0289	3.45	11340.0000	0.8379 (ppm)	Y 371.029
Cr (205.560 nm)	0.8460	ppm	0.0136	1.60	4515.0000	0.8460 (ppm)	Y 371.029
Cu (324.754 nm)	0.9550	ppm	0.0262	2.74	37990.0000	0.9550 (ppm)	Y 371.029
Fe (238.204 nm)	0.8800	ppm	0.0031	0.35	3840.0000	0.8800 (ppm)	Y_R 371.029
K (766.491 nm)	30.0200	ppm	0.1868	0.62	36010.0000	30.0200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9655	ppm	0.0074	0.76	66110.0000	0.9655 (ppm)	Y_R 371.029
Mg (279.078 nm)	73.8100	ppm	2.3330	3.16	188900.0000	73.8100 (ppm)	Y_R 371.029
Mn (259.372 nm)	5.7900	ppm	0.2012	3.47	598600.0000	5.7900 (ppm)	Y 371.029
Mo (204.598 nm)	0.8879	ppm	0.0147	1.65	4121.0000	0.8879 (ppm)	Y 371.029
Na (589.592 nm)	290.5000	ppm	1.7890	0.62	2028000.0000	290.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8362	ppm	0.0156	1.87	4278.0000	0.8362 (ppm)	Y 371.029
P (213.618 nm)	0.9101	ppm	0.0166	1.82	768.6000	0.9101 (ppm)	Y 371.029
Pb (220.353 nm)	0.8180	ppm	0.0123	1.50	1571.0000	0.8180 (ppm)	Y 371.029
Sb (206.834 nm)	0.9059	ppm	0.0190	2.10	928.3000	0.9059 (ppm)	Y 371.029
Se (196.026 nm)	0.8275	ppm	0.0233	2.82	628.3000	0.8275 (ppm)	Y 371.029
Si (251.611 nm)	6.1200	ppm	0.2056	3.36	15140.0000	6.1200 (ppm)	Y 371.029
Sn (189.925 nm)	0.8527	ppm	0.0134	1.57	554.7000	0.8527 (ppm)	Y 371.029
Sr (421.552 nm)	1.1650	ppm	0.0036	0.31	471000.0000	1.1650 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.8867	ppm	0.0175	1.97	109100.0000	0.8867 (ppm)	Y 371.029
Tl (190.794 nm)	0.8212	ppm	0.0072	0.88	982.3000	0.8212 (ppm)	Y 371.029
V (292.401 nm)	0.8854	ppm	0.0145	1.64	25270.0000	0.8854 (ppm)	Y 371.029
W (207.912 nm)	0.8836	ppm	0.0160	1.81	1660.0000	0.8836 (ppm)	Y 371.029
Zn (202.548 nm)	0.9630	ppm	0.0103	1.07	17700.0000	0.9630 (ppm)	Y 371.029
Zr (343.823 nm)	0.8809	ppm	0.0130	1.47	74160.0000	0.8809 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0300	442700.0000	0.0181	1.75
Y_R 371.029	1.1200	70750.0000	0.0024	0.21

Sample Name: 440-222004-D-1-Bsd@5

Date: 10/19/2018 8:20:05 PM

Rack:Tube: 3:6

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 u	ppm	0.0003	> 100.00	-8.7010	-0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.0359	ppm	0.0001	0.19	-397.3000	0.0359 (ppm)	Y 371.029
As (188.980 nm)	0.0004 u	ppm	0.0024	> 100.00	5.8640	0.0004 u (ppm)	Y 371.029
B (249.678 nm)	0.0560	ppm	0.0015	2.60	675.6000	0.0560 (ppm)	Y 371.029
Ba (233.527 nm)	0.0015	ppm	0.0002	14.24	162.5000	0.0015 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	56.25	77.8900	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	55.1500	ppm	0.0502	0.09	244100.0000	55.1500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0003	99.01	4.5930	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0025	ppm	0.0003	12.44	11.8400	0.0025 (ppm)	Y 371.029
Cr (205.560 nm)	0.0011	ppm	0.0005	51.51	8.1410	0.0011 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0003	33.51	63.8800	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0038	ppm	0.0002	6.04	0.9489	0.0038 (ppm)	Y_R 371.029
K (766.491 nm)	4.3620	ppm	0.0252	0.58	5138.0000	4.3620 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0087	ppm	0.0007	7.47	766.2000	0.0087 (ppm)	Y_R 371.029
Mg (279.078 nm)	16.0200	ppm	0.2873	1.79	41010.0000	16.0200 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.1180	ppm	0.0024	0.21	115500.0000	1.1180 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0008	> 100.00	0.7505	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	60.9000	ppm	0.3028	0.50	426000.0000	60.9000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0013	ppm	0.0006	42.46	6.9670	0.0013 (ppm)	Y 371.029
P (213.618 nm)	0.0004 u	ppm	0.0050	> 100.00	-10.6400	0.0004 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0008	ppm	0.0001	11.73	-6.3600	0.0008 (ppm)	Y 371.029
Sb (206.834 nm)	0.0052	ppm	0.0027	52.14	4.0830	0.0052 (ppm)	Y 371.029
Se (196.026 nm)	-0.0004 u	ppm	0.0026	> 100.00	-1.1870	-0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	0.3349	ppm	0.0058	1.73	871.0000	0.3349 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0002	9.05	-2.0160	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0596	ppm	0.0007	1.14	24670.0000	0.0596 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0001	14.26	-142.1000	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0005 u	ppm	0.0011	> 100.00	-2.5130	-0.0005 u (ppm)	Y 371.029
V (292.401 nm)	-0.0017 u	ppm	0.0000	0.13	85.0400	-0.0017 u (ppm)	Y 371.029
W (207.912 nm)	-0.0009 u	ppm	0.0009	97.51	-9.9470	-0.0009 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0001 u	ppm	0.0002	> 100.00	44.9700	-0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0008	ppm	0.0001	11.98	70.0700	0.0008 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1030	474100.0000	0.0027	0.24
Y_R 371.029	1.1370	71800.0000	0.0143	1.26

Sample Name: 440-222004-D-3-G

Date: 10/19/2018 8:22:29 PM

Rack:Tube: 3:7

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-22.4000	0.0001 u (ppm)	Y 371.029
Al (396.152 nm)	0.5425	ppm	0.0009	0.16	10750.0000	0.5425 (ppm)	Y 371.029
As (188.980 nm)	0.0084	ppm	0.0040	47.06	10.7500	0.0084 (ppm)	Y 371.029
B (249.678 nm)	0.2298	ppm	0.0007	0.32	2845.0000	0.2298 (ppm)	Y 371.029
Ba (233.527 nm)	0.0035	ppm	0.0001	2.62	334.2000	0.0035 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	72.72	10.9500	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	260.2000	ppm	0.4225	0.16	1151000.0000	260.2000 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0002 u	ppm	0.0002	> 100.00	-5.2940	-0.0002 u (ppm)	Y 371.029
Co (228.615 nm)	0.0094	ppm	0.0006	6.22	110.3000	0.0094 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002	ppm	0.0001	45.46	8.2750	0.0002 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0015 u	ppm	0.0002	13.21	-143.9000	-0.0015 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0331	ppm	0.0027	8.16	137.5000	0.0331 (ppm)	Y_R 371.029
K (766.491 nm)	20.4200	ppm	0.0190	0.09	24470.0000	20.4200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0451	ppm	0.0000	0.00	3630.0000	0.0451 (ppm)	Y_R 371.029
Mg (279.078 nm)	72.1700	ppm	1.2150	1.68	184700.0000	72.1700 (ppm)	Y_R 371.029
Mn (259.372 nm)	6.8550	ppm	0.0002	0.00	707900.0000	6.8550 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0009 u	ppm	0.0000	4.79	-2.8680	-0.0009 u (ppm)	Y 371.029
Na (589.592 nm)	271.3000	ppm	0.2137	0.08	1894000.0000	271.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0135	ppm	0.0005	3.79	63.2600	0.0135 (ppm)	Y 371.029
P (213.618 nm)	-0.0008 u	ppm	0.0001	14.40	-15.3400	-0.0008 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0050 u	ppm	0.0017	34.47	-12.0500	-0.0050 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0004 u	ppm	0.0028	> 100.00	-1.4210	-0.0004 u (ppm)	Y 371.029
Se (196.026 nm)	0.0061	ppm	0.0030	49.06	4.8860	0.0061 (ppm)	Y 371.029
Si (251.611 nm)	1.5040	ppm	0.0004	0.03	3744.0000	1.5040 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0023 u	ppm	0.0004	18.62	-4.8020	-0.0023 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2813	ppm	0.0003	0.09	116800.0000	0.2813 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	22.02	-462.3000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0055 u	ppm	0.0016	29.22	0.7337	-0.0055 u (ppm)	Y 371.029
V (292.401 nm)	-0.0117 u	ppm	0.0000	0.23	90.1300	-0.0117 u (ppm)	Y 371.029
W (207.912 nm)	0.0003 u	ppm	0.0020	> 100.00	-12.6000	0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0047 u	ppm	0.0001	1.84	9.3320	-0.0047 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0011	ppm	0.0001	8.91	113.6000	0.0011 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0380	445900.0000	0.0000	0.00
Y_R 371.029	1.0720	67720.0000	0.0163	1.52

Sample Name: 440-222004-D-4-C

Date: 10/19/2018 8:24:54 PM

Rack:Tube: 3:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	29.48	-18.5300	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.1240	ppm	0.0008	0.64	1652.0000	0.1240 (ppm)	Y 371.029
As (188.980 nm)	0.0071	ppm	0.0052	73.51	9.8270	0.0071 (ppm)	Y 371.029
B (249.678 nm)	0.2228	ppm	0.0002	0.08	2757.0000	0.2228 (ppm)	Y 371.029
Ba (233.527 nm)	0.0066	ppm	0.0001	1.19	582.5000	0.0066 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	9.3750	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	259.5000	ppm	1.1890	0.46	1148000.0000	259.5000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-0.1197	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0057	ppm	0.0003	5.53	60.6700	0.0057 (ppm)	Y 371.029
Cr (205.560 nm)	0.0004 u	ppm	0.0007	> 100.00	9.2250	0.0004 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0009 u	ppm	0.0002	28.31	-120.3000	-0.0009 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0937	ppm	0.0026	2.75	402.5000	0.0937 (ppm)	Y_R 371.029
K (766.491 nm)	20.2600	ppm	0.1769	0.87	24280.0000	20.2600 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0391	ppm	0.0008	2.09	3243.0000	0.0391 (ppm)	Y_R 371.029
Mg (279.078 nm)	72.6900	ppm	0.3727	0.51	186100.0000	72.6900 (ppm)	Y_R 371.029
Mn (259.372 nm)	6.3090	ppm	0.0086	0.14	651600.0000	6.3090 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0004	> 100.00	1.3720	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	274.3000	ppm	0.1916	0.07	1914000.0000	274.3000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0086	ppm	0.0000	0.41	38.4600	0.0086 (ppm)	Y 371.029
P (213.618 nm)	0.0028	ppm	0.0012	43.19	-11.9800	0.0028 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0032 u	ppm	0.0026	79.11	-8.8240	-0.0032 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0044	ppm	0.0015	34.40	3.6020	0.0044 (ppm)	Y 371.029
Se (196.026 nm)	0.0121	ppm	0.0083	68.59	9.1670	0.0121 (ppm)	Y 371.029
Si (251.611 nm)	1.7220	ppm	0.0004	0.02	4275.0000	1.7220 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0035 u	ppm	0.0017	47.37	-5.6440	-0.0035 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2796	ppm	0.0020	0.72	116100.0000	0.2796 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000	ppm	0.0000	30.73	-484.2000	0.0000 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0037 u	ppm	0.0014	38.64	1.9340	-0.0037 u (ppm)	Y 371.029
V (292.401 nm)	-0.0116 u	ppm	0.0000	0.42	94.0400	-0.0116 u (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0002	7.86	-16.8800	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0017 u	ppm	0.0002	11.82	63.6400	-0.0017 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	27.06	43.3900	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	431300.0000	0.0013	0.13
Y_R 371.029	1.0230	64650.0000	0.0081	0.79

Sample Name: 440-222004-D-5-C

Date: 10/19/2018 8:27:18 PM

Rack:Tube: 3:9

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0000	18.14	-10.6500	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.4337	ppm	0.0037	0.85	8379.0000	0.4337 (ppm)	Y 371.029
As (188.980 nm)	0.0091	ppm	0.0026	28.66	11.1500	0.0091 (ppm)	Y 371.029
B (249.678 nm)	0.2222	ppm	0.0020	0.90	2749.0000	0.2222 (ppm)	Y 371.029
Ba (233.527 nm)	0.0034	ppm	0.0000	0.66	326.6000	0.0034 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	52.51	4.4380	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	260.7000	ppm	1.8240	0.70	1154000.0000	260.7000 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-2.7440	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0327	ppm	0.0005	1.60	425.1000	0.0327 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0001	20.43	10.2600	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	0.0013	ppm	0.0001	7.12	-33.2400	0.0013 (ppm)	Y 371.029
Fe (238.204 nm)	0.0860	ppm	0.0010	1.19	368.3000	0.0860 (ppm)	Y_R 371.029
K (766.491 nm)	19.7900	ppm	0.0184	0.09	23710.0000	19.7900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0473	ppm	0.0006	1.37	3704.0000	0.0473 (ppm)	Y_R 371.029
Mg (279.078 nm)	66.4600	ppm	0.3288	0.49	170100.0000	66.4600 (ppm)	Y_R 371.029
Mn (259.372 nm)	8.2560	ppm	0.0043	0.05	852600.0000	8.2560 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0005 u	ppm	0.0005	85.32	-0.9452	-0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	260.2000	ppm	0.5898	0.23	1816000.0000	260.2000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0309	ppm	0.0004	1.29	151.8000	0.0309 (ppm)	Y 371.029
P (213.618 nm)	-0.0052 u	ppm	0.0049	93.40	-19.6900	-0.0052 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0049 u	ppm	0.0031	62.96	-11.3500	-0.0049 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0007 u	ppm	0.0045	> 100.00	-1.7990	-0.0007 u (ppm)	Y 371.029
Se (196.026 nm)	0.0011	ppm	0.0009	77.44	1.7990	0.0011 (ppm)	Y 371.029
Si (251.611 nm)	4.5550	ppm	0.0129	0.28	11180.0000	4.5550 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0036 u	ppm	0.0013	34.50	-5.6490	-0.0036 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2770	ppm	0.0009	0.34	115000.0000	0.2770 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0000 u	ppm	0.0000	85.23	-493.7000	0.0000 u (ppm)	Y 371.029
Tl (190.794 nm)	-0.0043 u	ppm	0.0023	53.72	4.9530	-0.0043 u (ppm)	Y 371.029
V (292.401 nm)	-0.0115 u	ppm	0.0001	1.11	101.0000	-0.0115 u (ppm)	Y 371.029
W (207.912 nm)	0.0003 u	ppm	0.0010	> 100.00	-11.9300	0.0003 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0648	ppm	0.0007	1.04	1268.0000	0.0648 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	> 100.00	13.3300	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9682	416000.0000	0.0194	2.01
Y_R 371.029	1.0600	66970.0000	0.0256	2.42

Sample Name: 440-222004-D-6-C

Date: 10/19/2018 8:29:42 PM

Rack:Tube: 3:10

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	51.23	-20.1800	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0659	ppm	0.0040	6.09	379.8000	0.0659 (ppm)	Y 371.029
As (188.980 nm)	0.0110	ppm	0.0050	45.54	12.4700	0.0110 (ppm)	Y 371.029
B (249.678 nm)	0.2168	ppm	0.0016	0.72	2683.0000	0.2168 (ppm)	Y 371.029
Ba (233.527 nm)	0.0080	ppm	0.0003	3.68	688.3000	0.0080 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	7.1470	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	252.3000	ppm	0.9804	0.39	1116000.0000	252.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	59.32	0.9395	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0029	ppm	0.0001	2.56	21.4700	0.0029 (ppm)	Y 371.029
Cr (205.560 nm)	0.0001 u	ppm	0.0006	> 100.00	7.5060	0.0001 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0007 u	ppm	0.0000	3.54	-110.1000	-0.0007 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0249	ppm	0.0020	7.96	100.7000	0.0249 (ppm)	Y_R 371.029
K (766.491 nm)	19.9900	ppm	0.0152	0.08	23950.0000	19.9900 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0399	ppm	0.0000	0.01	3285.0000	0.0399 (ppm)	Y_R 371.029
Mg (279.078 nm)	66.1600	ppm	2.5320	3.83	169300.0000	66.1600 (ppm)	Y_R 371.029
Mn (259.372 nm)	5.5850	ppm	0.0167	0.30	576800.0000	5.5850 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0002 u	ppm	0.0016	> 100.00	0.4066	-0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	270.0000	ppm	1.4340	0.53	1884000.0000	270.0000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0025	ppm	0.0001	3.58	7.1090	0.0025 (ppm)	Y 371.029
P (213.618 nm)	-0.0006 u	ppm	0.0001	25.50	-14.8400	-0.0006 u (ppm)	Y 371.029
Pb (220.353 nm)	-0.0033 u	ppm	0.0011	34.62	-9.4450	-0.0033 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0048	ppm	0.0057	> 100.00	4.0620	0.0048 (ppm)	Y 371.029
Se (196.026 nm)	0.0059	ppm	0.0036	61.27	4.2400	0.0059 (ppm)	Y 371.029
Si (251.611 nm)	1.7560	ppm	0.0086	0.49	4356.0000	1.7560 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0009 u	ppm	0.0020	> 100.00	-3.9520	-0.0009 u (ppm)	Y 371.029
Sr (421.552 nm)	0.2771	ppm	0.0028	1.03	115000.0000	0.2771 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	21.60	-468.1000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0037 u	ppm	0.0018	50.11	0.6935	-0.0037 u (ppm)	Y 371.029
V (292.401 nm)	-0.0111 u	ppm	0.0002	1.65	98.1600	-0.0111 u (ppm)	Y 371.029
W (207.912 nm)	0.0002 u	ppm	0.0017	> 100.00	-12.5600	0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0041 u	ppm	0.0002	4.20	16.0000	-0.0041 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	3.07	37.3900	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0380	446200.0000	0.0281	2.70
Y_R 371.029	1.1400	72030.0000	0.0110	0.96

Sample Name: CCV 5129881

Date: 10/19/2018 8:32:06 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.3601 Q	ppm	0.0372	10.34	15210.0000 Q	0.3601 Q (ppm)	Y 371.029
Al (396.152 nm)	1.0020	ppm	0.0028	0.28	21310.0000	1.0020 (ppm)	Y 371.029
As (188.980 nm)	0.9495	ppm	0.0027	0.29	648.2000	0.9495 (ppm)	Y 371.029
B (249.678 nm)	0.9669	ppm	0.0062	0.64	11960.0000	0.9669 (ppm)	Y 371.029
Ba (233.527 nm)	0.9374	ppm	0.0037	0.40	73940.0000	0.9374 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9537	ppm	0.0015	0.16	175700.0000	0.9537 (ppm)	Y 371.029
Ca (422.673 nm)	4.9210	ppm	0.0000	0.00	21860.0000	4.9210 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9553	ppm	0.0001	0.02	22160.0000	0.9553 (ppm)	Y 371.029
Co (228.615 nm)	0.9559	ppm	0.0029	0.31	12940.0000	0.9559 (ppm)	Y 371.029
Cr (205.560 nm)	0.9612	ppm	0.0007	0.07	5123.0000	0.9612 (ppm)	Y 371.029
Cu (324.754 nm)	0.9666	ppm	0.0035	0.37	38690.0000	0.9666 (ppm)	Y 371.029
Fe (238.204 nm)	0.9707	ppm	0.0004	0.04	4226.0000	0.9707 (ppm)	Y_R 371.029
K (766.491 nm)	9.7840	ppm	0.0201	0.21	11650.0000	9.7840 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9643	ppm	0.0007	0.07	65430.0000	0.9643 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7830	ppm	0.0161	0.34	12250.0000	4.7830 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9657	ppm	0.0021	0.22	100300.0000	0.9657 (ppm)	Y 371.029
Mo (204.598 nm)	0.9649	ppm	0.0034	0.35	4477.0000	0.9649 (ppm)	Y 371.029
Na (589.592 nm)	10.2200	ppm	0.0275	0.27	72670.0000	10.2200 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9553	ppm	0.0029	0.30	4896.0000	0.9553 (ppm)	Y 371.029
P (213.618 nm)	0.9450	ppm	0.0049	0.51	802.6000	0.9450 (ppm)	Y 371.029
Pb (220.353 nm)	0.9611	ppm	0.0011	0.11	1840.0000	0.9611 (ppm)	Y 371.029
Sb (206.834 nm)	0.9672	ppm	0.0132	1.37	990.8000	0.9672 (ppm)	Y 371.029
Se (196.026 nm)	0.9470	ppm	0.0016	0.17	718.5000	0.9470 (ppm)	Y 371.029
Si (251.611 nm)	4.8330	ppm	0.0908	1.88	11990.0000	4.8330 (ppm)	Y 371.029
Sn (189.925 nm)	0.9645	ppm	0.0016	0.17	627.7000	0.9645 (ppm)	Y 371.029
Sr (421.552 nm)	0.9789	ppm	0.0130	1.33	392500.0000	0.9789 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9649	ppm	0.0026	0.27	119100.0000	0.9649 (ppm)	Y 371.029
Tl (190.794 nm)	0.9619	ppm	0.0015	0.15	1146.0000	0.9619 (ppm)	Y 371.029
V (292.401 nm)	0.9667	ppm	0.0005	0.06	27200.0000	0.9667 (ppm)	Y 371.029
W (207.912 nm)	0.9646	ppm	0.0016	0.16	1818.0000	0.9646 (ppm)	Y 371.029
Zn (202.548 nm)	0.9566	ppm	0.0022	0.23	17530.0000	0.9566 (ppm)	Y 371.029
Zr (343.823 nm)	0.9640	ppm	0.0028	0.29	81110.0000	0.9640 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1510	494400.0000	0.0068	0.59
Y_R 371.029	1.1870	75000.0000	0.0032	0.27

Sample Name: CCB 5129880

Date: 10/19/2018 8:34:29 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0015	ppm	0.0002	13.89	64.9900	0.0015 (ppm)	Y 371.029
Al (396.152 nm)	0.0137	ppm	0.0004	2.88	-914.9000	0.0137 (ppm)	Y 371.029
As (188.980 nm)	0.0006 u	ppm	0.0018	> 100.00	6.1100	0.0006 u (ppm)	Y 371.029
B (249.678 nm)	0.0100	ppm	0.0005	5.15	100.3000	0.0100 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0003	60.90	78.1200	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	47.80	102.6000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0277	ppm	0.0073	26.30	214.4000	0.0277 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0002	34.93	10.5600	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0002	19.91	-9.8500	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0002	29.00	5.0710	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	44.19	130.0000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0020	ppm	0.0001	6.52	-9.4470	0.0020 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0074 u	ppm	0.0004	4.79	-123.6000	-0.0074 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0004 u	ppm	0.0002	50.52	22.9400	-0.0004 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0126	ppm	0.0039	31.36	38.1100	0.0126 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0013	ppm	0.0004	33.27	194.3000	0.0013 (ppm)	Y 371.029
Mo (204.598 nm)	0.0010	ppm	0.0002	22.69	5.2750	0.0010 (ppm)	Y 371.029
Na (589.592 nm)	0.4308	ppm	0.0057	1.31	4315.0000	0.4308 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0004	ppm	0.0002	67.41	3.7490	0.0004 (ppm)	Y 371.029
P (213.618 nm)	0.0066	ppm	0.0016	23.83	-4.1340	0.0066 (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0025	> 100.00	-5.0860	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0065	ppm	0.0031	46.94	5.2850	0.0065 (ppm)	Y 371.029
Se (196.026 nm)	-0.0010 u	ppm	0.0010	95.94	-1.8090	-0.0010 u (ppm)	Y 371.029
Si (251.611 nm)	0.0012 u	ppm	0.0040	> 100.00	51.9300	0.0012 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0026	ppm	0.0002	5.69	-1.8550	0.0026 (ppm)	Y 371.029
Sr (421.552 nm)	0.0004	ppm	0.0000	10.07	97.9300	0.0004 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0011	ppm	0.0002	14.60	-44.2900	0.0011 (ppm)	Y 371.029
Tl (190.794 nm)	0.0024	ppm	0.0005	20.53	-0.7116	0.0024 (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0002	> 100.00	60.2300	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0023	ppm	0.0013	55.36	-2.5880	0.0023 (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0001	8.57	64.9700	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	49.29	35.9600	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1770	505600.0000	0.0039	0.33
Y_R 371.029	1.2010	75840.0000	0.0055	0.46

Sample Name: 440-222004-E-7-C

Date: 10/19/2018 8:36:53 PM

Rack:Tube: 3:11

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0059	ppm	0.0010	16.99	245.9000	0.0059 (ppm)	Y 371.029
Al (396.152 nm)	0.0138	ppm	0.0005	3.40	-915.0000	0.0138 (ppm)	Y 371.029
As (188.980 nm)	0.0031	ppm	0.0013	42.60	7.7990	0.0031 (ppm)	Y 371.029
B (249.678 nm)	0.0116	ppm	0.0001	0.89	121.1000	0.0116 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	39.7200	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	35.27	22.1800	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0064	ppm	0.0074	> 100.00	120.2000	0.0064 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.7230	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0001	16.47	-11.7000	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0000	0.43	6.2770	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0001	22.26	131.7000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0017	ppm	0.0001	4.24	-11.0100	0.0017 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0027 u	ppm	0.0560	> 100.00	-118.0000	-0.0027 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0015	ppm	0.0005	32.06	151.9000	0.0015 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0022	ppm	0.0001	4.02	11.6400	0.0022 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0001	25.37	93.8900	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0004	> 100.00	0.5330	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	0.4215	ppm	0.0030	0.72	4251.0000	0.4215 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0001	> 100.00	2.2380	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0001 u	ppm	0.0028	> 100.00	-10.0100	0.0001 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0003	> 100.00	-9.0480	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0062	ppm	0.0003	4.62	4.9920	0.0062 (ppm)	Y 371.029
Se (196.026 nm)	-0.0010 u	ppm	0.0021	> 100.00	-1.7790	-0.0010 u (ppm)	Y 371.029
Si (251.611 nm)	-0.0017 u	ppm	0.0000	0.13	44.6700	-0.0017 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0039	ppm	0.0002	5.22	-1.0310	0.0039 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	25.30	-4.5620	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0001	22.63	-141.4000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0021 u	ppm	0.0010	46.47	-6.2440	-0.0021 u (ppm)	Y 371.029
V (292.401 nm)	0.0001 u	ppm	0.0002	> 100.00	58.6700	0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0006	ppm	0.0004	79.56	-5.9060	0.0006 (ppm)	Y 371.029
Zn (202.548 nm)	0.0015	ppm	0.0001	6.35	61.3700	0.0015 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0002	61.31	15.6900	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1570	497100.0000	0.0027	0.23
Y_R 371.029	1.1810	74620.0000	0.0083	0.71

Sample Name: 440-222092-F-2-C

Date: 10/19/2018 8:39:17 PM

Rack:Tube: 3:12

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0058	ppm	0.0009	16.06	242.5000	0.0058 (ppm)	Y 371.029
Al (396.152 nm)	0.0126	ppm	0.0005	4.07	-940.1000	0.0126 (ppm)	Y 371.029
As (188.980 nm)	0.0012	ppm	0.0005	42.06	6.5350	0.0012 (ppm)	Y 371.029
B (249.678 nm)	0.0187	ppm	0.0001	0.66	209.5000	0.0187 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000	ppm	0.0000	81.53	44.0800	0.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	36.79	16.9500	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0097	ppm	0.0050	51.19	134.8000	0.0097 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	13.05	0.9929	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0000	3.62	-10.2700	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0000	2.79	6.3410	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	0.0002	ppm	0.0000	4.24	158.2000	0.0002 (ppm)	Y 371.029
Fe (238.204 nm)	0.0036	ppm	0.0000	1.23	-2.4050	0.0036 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0352 u	ppm	0.0609	> 100.00	-157.0000	-0.0352 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0002 u	ppm	0.0009	> 100.00	60.0700	0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0028	ppm	0.0008	29.87	13.1400	0.0028 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	0.66	96.2700	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0003	> 100.00	0.1336	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.4170	ppm	0.0143	3.42	4219.0000	0.4170 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0003 u	ppm	0.0001	47.53	0.5745	-0.0003 u (ppm)	Y 371.029
P (213.618 nm)	0.0011 u	ppm	0.0065	> 100.00	-9.1760	0.0011 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0016	ppm	0.0005	29.37	-5.9900	0.0016 (ppm)	Y 371.029
Sb (206.834 nm)	0.0050	ppm	0.0007	13.25	3.7390	0.0050 (ppm)	Y 371.029
Se (196.026 nm)	-0.0013 u	ppm	0.0000	0.03	-2.0080	-0.0013 u (ppm)	Y 371.029
Si (251.611 nm)	0.0004 u	ppm	0.0012	> 100.00	49.7800	0.0004 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0017	ppm	0.0011	64.41	-2.4910	0.0017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	51.81	9.0160	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0001	34.90	-149.7000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0008 u	ppm	0.0023	> 100.00	-4.7350	-0.0008 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0000	42.84	55.1600	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0004 u	ppm	0.0006	> 100.00	-6.2110	0.0004 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0002	ppm	0.0001	50.41	37.5200	0.0002 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	46.94	8.1500	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1610	499000.0000	0.0053	0.45
Y_R 371.029	1.1760	74260.0000	0.0119	1.01

Sample Name: 440-222092-F-8-C

Date: 10/19/2018 8:41:41 PM

Rack:Tube: 3:13

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0052	ppm	0.0014	27.28	219.4000	0.0052 (ppm)	Y 371.029
Al (396.152 nm)	0.0168	ppm	0.0003	2.05	-849.1000	0.0168 (ppm)	Y 371.029
As (188.980 nm)	0.0020	ppm	0.0020	97.31	7.0880	0.0020 (ppm)	Y 371.029
B (249.678 nm)	0.0172	ppm	0.0001	0.81	190.7000	0.0172 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	39.4900	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	31.99	14.1300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0137	ppm	0.0041	29.92	152.5000	0.0137 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	81.53	-1.9570	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0003	32.04	-11.5900	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0007	ppm	0.0001	9.29	4.9410	0.0007 (ppm)	Y 371.029
Cu (324.754 nm)	0.0027	ppm	0.0003	12.02	258.3000	0.0027 (ppm)	Y 371.029
Fe (238.204 nm)	0.0012	ppm	0.0000	3.90	-13.1100	0.0012 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0476 u	ppm	0.0982	> 100.00	-171.9000	-0.0476 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0018	ppm	0.0014	80.68	168.1000	0.0018 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0030	ppm	0.0038	> 100.00	13.4800	0.0030 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0002	ppm	0.0000	19.25	81.8700	0.0002 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0003	> 100.00	0.5147	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	0.3843	ppm	0.0047	1.21	3991.0000	0.3843 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0001 u	ppm	0.0005	> 100.00	1.5890	-0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0018 u	ppm	0.0033	> 100.00	-8.5860	0.0018 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0017	ppm	0.0021	> 100.00	-5.7980	0.0017 (ppm)	Y 371.029
Sb (206.834 nm)	0.0041	ppm	0.0038	93.57	2.8210	0.0041 (ppm)	Y 371.029
Se (196.026 nm)	-0.0008 u	ppm	0.0012	> 100.00	-1.6260	-0.0008 u (ppm)	Y 371.029
Si (251.611 nm)	0.0027	ppm	0.0003	10.14	55.4800	0.0027 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0014	60.07	-2.1000	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0001	68.51	-23.2900	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	59.35	-160.8000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0005	> 100.00	-3.7140	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0002	> 100.00	52.8500	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0017	> 100.00	-4.4340	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0002 u	ppm	0.0000	18.27	31.0000	-0.0002 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	12.88	11.2400	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1560	496700.0000	0.0015	0.13
Y_R 371.029	1.1720	74060.0000	0.0061	0.52

Sample Name: 440-221855-F-3-C

Date: 10/19/2018 8:44:05 PM

Rack:Tube: 3:14

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0884	ppm	0.0846	95.77	3596.0000	0.0884 (ppm)	Y 371.029
Al (396.152 nm)	-0.0049 u	ppm	0.0004	7.27	-783.7000	-0.0049 u (ppm)	Y 371.029
As (188.980 nm)	0.0419	ppm	0.0021	4.93	33.5500	0.0419 (ppm)	Y 371.029
B (249.678 nm)	3.1830	ppm	0.0252	0.79	39720.0000	3.1830 (ppm)	Y 371.029
Ba (233.527 nm)	0.0273	ppm	0.0003	1.04	2228.0000	0.0273 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	11.48	4.0330	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	472.3000	ppm	2.1450	0.45	2090000.0000	472.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0001	50.99	2.1820	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0053	ppm	0.0001	1.27	61.5900	0.0053 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0003	21.75	16.2700	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	0.0019	ppm	0.0003	13.84	-202.3000	0.0019 (ppm)	Y 371.029
Fe (238.204 nm)	0.0005 u	ppm	0.0010	> 100.00	12.4800	0.0005 u (ppm)	Y_R 371.029
K (766.491 nm)	52.1700	ppm	0.2662	0.51	62700.0000	52.1700 (ppm)	Y_R 371.029
Li (670.783 nm)	0.3951	ppm	0.0030	0.75	28610.0000	0.3951 (ppm)	Y_R 371.029
Mg (279.078 nm)	211.9000	ppm	1.4250	0.67	542400.0000	211.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	2.7460	ppm	0.0007	0.03	284500.0000	2.7460 (ppm)	Y 371.029
Mo (204.598 nm)	0.2836	ppm	0.0003	0.11	1316.0000	0.2836 (ppm)	Y 371.029
Na (589.592 nm)	662.1000 o	ppm	1.9830	0.30	4619000.0000	662.1000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0100	ppm	0.0003	3.19	40.5200	0.0100 (ppm)	Y 371.029
P (213.618 nm)	0.0091	ppm	0.0025	27.18	-12.9500	0.0091 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0073 u	ppm	0.0005	6.31	-13.4800	-0.0073 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0021	ppm	0.0007	31.64	-2.5270	0.0021 (ppm)	Y 371.029
Se (196.026 nm)	0.0312	ppm	0.0025	7.98	20.4800	0.0312 (ppm)	Y 371.029
Si (251.611 nm)	28.4200	ppm	0.0568	0.20	69370.0000	28.4200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0062 u	ppm	0.0015	24.57	-7.3040	-0.0062 u (ppm)	Y 371.029
Sr (421.552 nm)	10.8500	ppm	0.0167	0.15	4359000.0000	10.8500 (ppm)	Y_R 371.029
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	6.97	-772.8000	-0.0001 u (ppm)	Y 371.029
Tl (190.794 nm)	0.0004	ppm	0.0002	40.17	-0.7145	0.0004 (ppm)	Y 371.029
V (292.401 nm)	-0.0003 u	ppm	0.0001	35.93	657.5000	-0.0003 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0007	53.85	-15.4300	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0058 u	ppm	0.0002	2.68	77.4100	-0.0058 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0000 u	ppm	0.0000	88.06	62.3300	0.0000 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9933	426800.0000	0.0142	1.43
Y_R 371.029	1.0890	68770.0000	0.0058	0.53

Sample Name: 440-221855-M-6-C

Date: 10/19/2018 8:46:30 PM

Rack:Tube: 3:15

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0009	ppm	0.0001	10.71	40.5600	0.0009 (ppm)	Y 371.029
Al (396.152 nm)	0.0119	ppm	0.0015	12.92	-955.6000	0.0119 (ppm)	Y 371.029
As (188.980 nm)	0.0036	ppm	0.0040	> 100.00	8.1480	0.0036 (ppm)	Y 371.029
B (249.678 nm)	0.0186	ppm	0.0016	8.64	207.7000	0.0186 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000	ppm	0.0000	47.16	44.5200	0.0000 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	20.90	16.3300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0395	ppm	0.0051	13.04	266.7000	0.0395 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-2.4010	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0001	8.75	-11.6200	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0004	45.35	5.6480	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	0.0004	ppm	0.0003	69.17	167.6000	0.0004 (ppm)	Y 371.029
Fe (238.204 nm)	0.0018	ppm	0.0016	86.35	-10.2000	0.0018 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0845 u	ppm	0.0368	43.55	-216.2000	-0.0845 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0005 u	ppm	0.0012	> 100.00	80.4800	0.0005 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0616	ppm	0.0481	78.04	163.5000	0.0616 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0009	ppm	0.0006	66.14	154.1000	0.0009 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0007	> 100.00	2.0570	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	0.6429	ppm	0.0133	2.06	5794.0000	0.6429 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0001	25.50	-0.0883	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	-0.0015 u	ppm	0.0006	37.37	-11.5300	-0.0015 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0008	ppm	0.0002	18.83	-7.5910	0.0008 (ppm)	Y 371.029
Sb (206.834 nm)	0.0047	ppm	0.0028	59.90	3.4230	0.0047 (ppm)	Y 371.029
Se (196.026 nm)	0.0011	ppm	0.0009	74.97	-0.1815	0.0011 (ppm)	Y 371.029
Si (251.611 nm)	0.0093	ppm	0.0067	72.43	71.5000	0.0093 (ppm)	Y 371.029
Sn (189.925 nm)	0.0020	ppm	0.0012	61.82	-2.2720	0.0020 (ppm)	Y 371.029
Sr (421.552 nm)	0.0007	ppm	0.0000	5.81	206.2000	0.0007 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0001	84.13	-161.3000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0007 u	ppm	0.0013	> 100.00	-4.5610	-0.0007 u (ppm)	Y 371.029
V (292.401 nm)	-0.0004 u	ppm	0.0002	64.51	46.1700	-0.0004 u (ppm)	Y 371.029
W (207.912 nm)	0.0018	ppm	0.0005	26.58	-3.4930	0.0018 (ppm)	Y 371.029
Zn (202.548 nm)	0.0007	ppm	0.0000	3.33	47.3000	0.0007 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	20.32	-0.0991	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1450	492000.0000	0.0113	0.99
Y_R 371.029	1.1190	70710.0000	0.0050	0.44

Sample Name: MB 440-506290/1-A

Date: 10/19/2018 8:48:55 PM

Rack:Tube: 3:16

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0002	43.27	25.6500	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	0.0108	ppm	0.0005	4.88	-979.6000	0.0108 (ppm)	Y 371.029
As (188.980 nm)	0.0026	ppm	0.0023	87.34	7.4810	0.0026 (ppm)	Y 371.029
B (249.678 nm)	0.0083	ppm	0.0002	2.76	79.2800	0.0083 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	44.13	36.4400	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	31.93	6.3650	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0051 u	ppm	0.0073	> 100.00	114.4000	0.0051 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-3.9930	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0000	6.39	-13.6300	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0002	31.30	4.2870	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0000	2.16	125.8000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0004 u	ppm	0.0010	> 100.00	-16.3900	0.0004 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0127 u	ppm	0.0232	> 100.00	-130.0000	-0.0127 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0004 u	ppm	0.0001	40.81	24.6900	-0.0004 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0066	ppm	0.0010	14.69	22.8500	0.0066 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	25.68	76.3100	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0001	> 100.00	0.2275	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.4702	ppm	0.0043	0.91	4590.0000	0.4702 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0003	64.93	4.3830	0.0005 (ppm)	Y 371.029
P (213.618 nm)	-0.0032 u	ppm	0.0015	46.10	-13.0800	-0.0032 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0011 u	ppm	0.0018	> 100.00	-7.0830	0.0011 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0029	ppm	0.0004	12.75	1.5590	0.0029 (ppm)	Y 371.029
Se (196.026 nm)	0.0011	ppm	0.0000	3.61	-0.2380	0.0011 (ppm)	Y 371.029
Si (251.611 nm)	0.0006	ppm	0.0001	11.29	50.3000	0.0006 (ppm)	Y 371.029
Sn (189.925 nm)	0.0017	ppm	0.0012	68.71	-2.4580	0.0017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0002	ppm	0.0001	30.74	21.1800	0.0002 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0001	ppm	0.0000	2.94	-158.9000	0.0001 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0014 u	ppm	0.0008	54.64	-5.4090	-0.0014 u (ppm)	Y 371.029
V (292.401 nm)	-0.0002 u	ppm	0.0002	96.33	51.1600	-0.0002 u (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0001	10.57	-4.3180	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0008 u	ppm	0.0001	7.94	18.9600	-0.0008 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	84.38	0.5889	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1260	484000.0000	0.0048	0.43
Y_R 371.029	1.1510	72680.0000	0.0042	0.37

Sample Name: LCS 440-506290/2-A

Date: 10/19/2018 8:51:19 PM

Rack:Tube: 3:17

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4392	ppm	0.0020	0.44	18490.0000	0.4392 (ppm)	Y 371.029
Al (396.152 nm)	0.9102	ppm	0.0029	0.32	19240.0000	0.9102 (ppm)	Y 371.029
As (188.980 nm)	0.8708	ppm	0.0021	0.25	595.0000	0.8708 (ppm)	Y 371.029
B (249.678 nm)	0.8866	ppm	0.0059	0.66	10970.0000	0.8866 (ppm)	Y 371.029
Ba (233.527 nm)	0.8709	ppm	0.0042	0.48	68700.0000	0.8709 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8661	ppm	0.0026	0.29	159500.0000	0.8661 (ppm)	Y 371.029
Ca (422.673 nm)	4.3890	ppm	0.0154	0.35	19510.0000	4.3890 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8693	ppm	0.0083	0.95	20170.0000	0.8693 (ppm)	Y 371.029
Co (228.615 nm)	0.8762	ppm	0.0061	0.69	11860.0000	0.8762 (ppm)	Y 371.029
Cr (205.560 nm)	0.8780	ppm	0.0017	0.19	4680.0000	0.8780 (ppm)	Y 371.029
Cu (324.754 nm)	0.8925	ppm	0.0021	0.23	35740.0000	0.8925 (ppm)	Y 371.029
Fe (238.204 nm)	0.8820	ppm	0.0035	0.39	3838.0000	0.8820 (ppm)	Y_R 371.029
K (766.491 nm)	8.8540	ppm	0.0602	0.68	10530.0000	8.8540 (ppm)	Y_R 371.029
Li (670.783 nm)	0.8765	ppm	0.0031	0.35	59480.0000	0.8765 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.3790	ppm	0.0202	0.46	11210.0000	4.3790 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8777	ppm	0.0024	0.28	91170.0000	0.8777 (ppm)	Y 371.029
Mo (204.598 nm)	0.8782	ppm	0.0038	0.44	4075.0000	0.8782 (ppm)	Y 371.029
Na (589.592 nm)	9.1570	ppm	0.0308	0.34	65230.0000	9.1570 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8728	ppm	0.0040	0.45	4473.0000	0.8728 (ppm)	Y 371.029
P (213.618 nm)	0.8632	ppm	0.0001	0.01	731.9000	0.8632 (ppm)	Y 371.029
Pb (220.353 nm)	0.8793	ppm	0.0007	0.08	1683.0000	0.8793 (ppm)	Y 371.029
Sb (206.834 nm)	0.8821	ppm	0.0037	0.42	903.6000	0.8821 (ppm)	Y 371.029
Se (196.026 nm)	0.8400	ppm	0.0038	0.46	637.2000	0.8400 (ppm)	Y 371.029
Si (251.611 nm)	4.3760	ppm	0.0801	1.83	10860.0000	4.3760 (ppm)	Y 371.029
Sn (189.925 nm)	0.8650	ppm	0.0034	0.39	562.5000	0.8650 (ppm)	Y 371.029
Sr (421.552 nm)	0.8909	ppm	0.0047	0.53	357200.0000	0.8909 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.8722	ppm	0.0025	0.28	107600.0000	0.8722 (ppm)	Y 371.029
Tl (190.794 nm)	0.8731	ppm	0.0038	0.44	1039.0000	0.8731 (ppm)	Y 371.029
V (292.401 nm)	0.8820	ppm	0.0007	0.08	24820.0000	0.8820 (ppm)	Y 371.029
W (207.912 nm)	0.8767	ppm	0.0059	0.68	1652.0000	0.8767 (ppm)	Y 371.029
Zn (202.548 nm)	0.8650	ppm	0.0027	0.31	15860.0000	0.8650 (ppm)	Y 371.029
Zr (343.823 nm)	0.8713	ppm	0.0021	0.24	73310.0000	0.8713 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1160	479700.0000	0.0067	0.60
Y_R 371.029	1.1350	71730.0000	0.0013	0.11

Sample Name: LCSD 440-506290/4-A

Date: 10/19/2018 8:53:44 PM

Rack:Tube: 3:18

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4390	ppm	0.0020	0.45	18490.0000	0.4390 (ppm)	Y 371.029
Al (396.152 nm)	0.9074	ppm	0.0031	0.34	19180.0000	0.9074 (ppm)	Y 371.029
As (188.980 nm)	0.8624	ppm	0.0033	0.38	589.3000	0.8624 (ppm)	Y 371.029
B (249.678 nm)	0.8857	ppm	0.0054	0.61	10950.0000	0.8857 (ppm)	Y 371.029
Ba (233.527 nm)	0.8683	ppm	0.0025	0.28	68500.0000	0.8683 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8653	ppm	0.0029	0.34	159400.0000	0.8653 (ppm)	Y 371.029
Ca (422.673 nm)	4.3920	ppm	0.0172	0.39	19520.0000	4.3920 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8649	ppm	0.0078	0.90	20060.0000	0.8649 (ppm)	Y 371.029
Co (228.615 nm)	0.8733	ppm	0.0088	1.01	11820.0000	0.8733 (ppm)	Y 371.029
Cr (205.560 nm)	0.8777	ppm	0.0007	0.08	4678.0000	0.8777 (ppm)	Y 371.029
Cu (324.754 nm)	0.8865	ppm	0.0020	0.22	35500.0000	0.8865 (ppm)	Y 371.029
Fe (238.204 nm)	0.8840	ppm	0.0007	0.08	3847.0000	0.8840 (ppm)	Y_R 371.029
K (766.491 nm)	8.7690	ppm	0.0753	0.86	10430.0000	8.7690 (ppm)	Y_R 371.029
Li (670.783 nm)	0.8821	ppm	0.0028	0.32	59860.0000	0.8821 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.3650	ppm	0.0124	0.28	11180.0000	4.3650 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.8769	ppm	0.0028	0.32	91090.0000	0.8769 (ppm)	Y 371.029
Mo (204.598 nm)	0.8849	ppm	0.0014	0.15	4106.0000	0.8849 (ppm)	Y 371.029
Na (589.592 nm)	9.1520	ppm	0.0126	0.14	65200.0000	9.1520 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.8734	ppm	0.0015	0.17	4476.0000	0.8734 (ppm)	Y 371.029
P (213.618 nm)	0.8566	ppm	0.0048	0.57	726.1000	0.8566 (ppm)	Y 371.029
Pb (220.353 nm)	0.8776	ppm	0.0033	0.38	1680.0000	0.8776 (ppm)	Y 371.029
Sb (206.834 nm)	0.8898	ppm	0.0118	1.32	911.4000	0.8898 (ppm)	Y 371.029
Se (196.026 nm)	0.8399	ppm	0.0007	0.08	637.2000	0.8399 (ppm)	Y 371.029
Si (251.611 nm)	4.4360	ppm	0.0747	1.68	11010.0000	4.4360 (ppm)	Y 371.029
Sn (189.925 nm)	0.8740	ppm	0.0034	0.38	568.5000	0.8740 (ppm)	Y 371.029
Sr (421.552 nm)	0.8845	ppm	0.0033	0.38	354600.0000	0.8845 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.8777	ppm	0.0039	0.44	108300.0000	0.8777 (ppm)	Y 371.029
Tl (190.794 nm)	0.8770	ppm	0.0039	0.45	1044.0000	0.8770 (ppm)	Y 371.029
V (292.401 nm)	0.8816	ppm	0.0016	0.19	24810.0000	0.8816 (ppm)	Y 371.029
W (207.912 nm)	0.8837	ppm	0.0024	0.27	1665.0000	0.8837 (ppm)	Y 371.029
Zn (202.548 nm)	0.8661	ppm	0.0026	0.31	15880.0000	0.8661 (ppm)	Y 371.029
Zr (343.823 nm)	0.8759	ppm	0.0033	0.38	73700.0000	0.8759 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1100	476900.0000	0.0010	0.09
Y_R 371.029	1.1310	71430.0000	0.0004	0.04

Sample Name: 440-221975-N-3-C

Date: 10/19/2018 8:56:08 PM

Rack:Tube: 3:19

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0002	27.04	36.4200	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	0.0132	ppm	0.0000	0.05	-928.1000	0.0132 (ppm)	Y 371.029
As (188.980 nm)	-0.0014 u	ppm	0.0029	> 100.00	4.7850	-0.0014 u (ppm)	Y 371.029
B (249.678 nm)	0.0166	ppm	0.0004	2.42	183.4000	0.0166 (ppm)	Y 371.029
Ba (233.527 nm)	0.0003	ppm	0.0002	65.69	66.1700	0.0003 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0004	ppm	0.0002	49.80	77.0100	0.0004 (ppm)	Y 371.029
Ca (422.673 nm)	0.0200	ppm	0.0051	25.31	180.2000	0.0200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0002	60.65	4.8790	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0003	46.42	-13.4200	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0013	ppm	0.0003	20.26	8.5480	0.0013 (ppm)	Y 371.029
Cu (324.754 nm)	0.0002	ppm	0.0002	> 100.00	160.0000	0.0002 (ppm)	Y 371.029
Fe (238.204 nm)	0.0019	ppm	0.0026	> 100.00	-9.9830	0.0019 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0535 u	ppm	0.0030	5.69	-179.0000	-0.0535 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0000 u	ppm	0.0008	> 100.00	48.7600	0.0000 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0054	ppm	0.0012	21.70	19.8400	0.0054 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0002	37.40	113.0000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003	ppm	0.0001	35.23	2.0920	0.0003 (ppm)	Y 371.029
Na (589.592 nm)	0.3818	ppm	0.0068	1.78	3974.0000	0.3818 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0009	ppm	0.0001	12.59	6.5740	0.0009 (ppm)	Y 371.029
P (213.618 nm)	0.0014 u	ppm	0.0027	> 100.00	-8.8950	0.0014 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0004	35.23	-6.8770	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0069	ppm	0.0039	56.02	5.6810	0.0069 (ppm)	Y 371.029
Se (196.026 nm)	-0.0007 u	ppm	0.0018	> 100.00	-1.5300	-0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	0.0066	ppm	0.0015	22.83	65.0600	0.0066 (ppm)	Y 371.029
Sn (189.925 nm)	0.0029	ppm	0.0026	87.91	-1.6650	0.0029 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	4.34	62.1000	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0006	ppm	0.0002	27.24	-102.1000	0.0006 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0006 u	ppm	0.0013	> 100.00	-4.4080	-0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0002 u	ppm	0.0003	> 100.00	61.1200	0.0002 u (ppm)	Y 371.029
W (207.912 nm)	0.0019	ppm	0.0013	68.66	-3.3690	0.0019 (ppm)	Y 371.029
Zn (202.548 nm)	0.0000 u	ppm	0.0001	> 100.00	34.5000	0.0000 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	35.20	33.9200	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1160	479300.0000	0.0004	0.04
Y_R 371.029	1.1220	70880.0000	0.0003	0.02

Sample Name: 440-221975-N-3-Csd@5

Date: 10/19/2018 8:58:32 PM

Rack:Tube: 3:20

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	30.74	13.3700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0098	ppm	0.0007	7.36	-1002.0000	0.0098 (ppm)	Y 371.029
As (188.980 nm)	0.0016	ppm	0.0003	17.37	6.8140	0.0016 (ppm)	Y 371.029
B (249.678 nm)	0.0088	ppm	0.0001	1.40	85.3900	0.0088 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	34.05	51.9700	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0001	28.56	44.5400	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.0073	ppm	0.0001	1.85	124.3000	0.0073 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0000	9.62	3.3310	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0004 u	ppm	0.0012	> 100.00	-16.7400	0.0004 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0008	ppm	0.0002	21.33	5.6730	0.0008 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0004	> 100.00	150.1000	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0010	ppm	0.0011	> 100.00	-13.9400	0.0010 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0342 u	ppm	0.0212	62.00	-155.8000	-0.0342 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0008	ppm	0.0005	57.90	104.7000	0.0008 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0039	ppm	0.0002	4.94	15.8600	0.0039 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0001	25.18	90.5000	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0005 u	ppm	0.0001	18.43	-1.5840	-0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	0.3166	ppm	0.0012	0.38	3519.0000	0.3166 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0002 u	ppm	0.0000	19.29	0.8575	-0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0056	ppm	0.0042	74.50	-4.9880	0.0056 (ppm)	Y 371.029
Pb (220.353 nm)	0.0005 u	ppm	0.0012	> 100.00	-8.1890	0.0005 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0024	ppm	0.0015	62.48	1.0110	0.0024 (ppm)	Y 371.029
Se (196.026 nm)	0.0011 u	ppm	0.0020	> 100.00	-0.2376	0.0011 u (ppm)	Y 371.029
Si (251.611 nm)	0.0006 u	ppm	0.0026	> 100.00	50.2500	0.0006 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0012 u	ppm	0.0023	> 100.00	-2.8150	0.0012 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0001	22.81	51.2100	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0000	8.90	-113.9000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002 u	ppm	0.0016	> 100.00	-3.4200	0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0003	> 100.00	57.8400	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	-0.0001 u	ppm	0.0021	> 100.00	-7.2400	-0.0001 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0003 u	ppm	0.0001	37.72	27.5600	-0.0003 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	54.60	9.0780	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1400	489900.0000	0.0053	0.47
Y_R 371.029	1.1610	733300.0000	0.0076	0.65

Sample Name: CCV 5129881

Date: 10/19/2018 9:00:56 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4808	ppm	0.0030	0.62	20250.0000	0.4808 (ppm)	Y 371.029
Al (396.152 nm)	1.0030	ppm	0.0071	0.70	21330.0000	1.0030 (ppm)	Y 371.029
As (188.980 nm)	0.9545	ppm	0.0077	0.81	651.6000	0.9545 (ppm)	Y 371.029
B (249.678 nm)	0.9712	ppm	0.0085	0.88	12010.0000	0.9712 (ppm)	Y 371.029
Ba (233.527 nm)	0.9567	ppm	0.0064	0.67	75460.0000	0.9567 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9559	ppm	0.0049	0.51	176100.0000	0.9559 (ppm)	Y 371.029
Ca (422.673 nm)	4.8810	ppm	0.0147	0.30	21680.0000	4.8810 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9549	ppm	0.0050	0.52	22150.0000	0.9549 (ppm)	Y 371.029
Co (228.615 nm)	0.9565	ppm	0.0098	1.03	12940.0000	0.9565 (ppm)	Y 371.029
Cr (205.560 nm)	0.9596	ppm	0.0038	0.40	5115.0000	0.9596 (ppm)	Y 371.029
Cu (324.754 nm)	0.9730	ppm	0.0042	0.43	38950.0000	0.9730 (ppm)	Y 371.029
Fe (238.204 nm)	0.9713	ppm	0.0032	0.33	4229.0000	0.9713 (ppm)	Y_R 371.029
K (766.491 nm)	9.7880	ppm	0.0744	0.76	11660.0000	9.7880 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9710	ppm	0.0003	0.03	65890.0000	0.9710 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.8080	ppm	0.0300	0.62	12310.0000	4.8080 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9598	ppm	0.0050	0.52	99700.0000	0.9598 (ppm)	Y 371.029
Mo (204.598 nm)	0.9652	ppm	0.0077	0.79	4479.0000	0.9652 (ppm)	Y 371.029
Na (589.592 nm)	10.0100	ppm	0.0088	0.09	71220.0000	10.0100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9535	ppm	0.0045	0.47	4887.0000	0.9535 (ppm)	Y 371.029
P (213.618 nm)	0.9508	ppm	0.0032	0.33	807.6000	0.9508 (ppm)	Y 371.029
Pb (220.353 nm)	0.9613	ppm	0.0023	0.24	1841.0000	0.9613 (ppm)	Y 371.029
Sb (206.834 nm)	0.9623	ppm	0.0244	2.53	985.7000	0.9623 (ppm)	Y 371.029
Se (196.026 nm)	0.9503	ppm	0.0078	0.82	720.9000	0.9503 (ppm)	Y 371.029
Si (251.611 nm)	4.8280	ppm	0.0967	2.00	11980.0000	4.8280 (ppm)	Y 371.029
Sn (189.925 nm)	0.9615	ppm	0.0003	0.03	625.7000	0.9615 (ppm)	Y 371.029
Sr (421.552 nm)	0.9718	ppm	0.0018	0.18	389600.0000	0.9718 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9642	ppm	0.0064	0.67	119000.0000	0.9642 (ppm)	Y 371.029
Tl (190.794 nm)	0.9655	ppm	0.0017	0.17	1150.0000	0.9655 (ppm)	Y 371.029
V (292.401 nm)	0.9662	ppm	0.0051	0.52	27180.0000	0.9662 (ppm)	Y 371.029
W (207.912 nm)	0.9646	ppm	0.0039	0.40	1818.0000	0.9646 (ppm)	Y 371.029
Zn (202.548 nm)	0.9563	ppm	0.0037	0.39	17520.0000	0.9563 (ppm)	Y 371.029
Zr (343.823 nm)	0.9635	ppm	0.0053	0.55	81070.0000	0.9635 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1360	488200.0000	0.0055	0.49
Y_R 371.029	1.1480	72540.0000	0.0065	0.57

Sample Name: CCB 5129880

Date: 10/19/2018 9:03:19 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0001	22.41	28.4500	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	0.0123	ppm	0.0002	1.34	-946.2000	0.0123 (ppm)	Y 371.029
As (188.980 nm)	0.0033	ppm	0.0020	60.32	7.9810	0.0033 (ppm)	Y 371.029
B (249.678 nm)	0.0088	ppm	0.0008	8.66	86.1200	0.0088 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	47.34	80.6100	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	43.18	108.3000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	0.0140	ppm	0.0076	54.19	153.7000	0.0140 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0002	28.73	11.0400	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0008	ppm	0.0011	> 100.00	-11.6600	0.0008 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0004	72.89	4.5720	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0003	> 100.00	151.4000	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0025	ppm	0.0009	36.98	-7.1320	0.0025 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0486 u	ppm	0.0514	> 100.00	-173.1000	-0.0486 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0002	ppm	0.0001	49.80	64.8900	0.0002 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0046	ppm	0.0024	51.52	17.8000	0.0046 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0002	43.72	122.5000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0014	ppm	0.0001	9.41	7.0900	0.0014 (ppm)	Y 371.029
Na (589.592 nm)	0.2617	ppm	0.0045	1.74	3136.0000	0.2617 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0005	ppm	0.0002	34.16	4.2750	0.0005 (ppm)	Y 371.029
P (213.618 nm)	-0.0012 u	ppm	0.0015	> 100.00	-11.2400	-0.0012 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0020	ppm	0.0014	72.44	-5.3760	0.0020 (ppm)	Y 371.029
Sb (206.834 nm)	0.0053	ppm	0.0012	23.47	4.0320	0.0053 (ppm)	Y 371.029
Se (196.026 nm)	-0.0006 u	ppm	0.0027	> 100.00	-1.5110	-0.0006 u (ppm)	Y 371.029
Si (251.611 nm)	0.0030	ppm	0.0006	18.64	56.2200	0.0030 (ppm)	Y 371.029
Sn (189.925 nm)	0.0039	ppm	0.0019	50.18	-1.0480	0.0039 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	12.15	61.9200	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0002	18.35	-45.4400	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0014	ppm	0.0004	29.01	-1.9650	0.0014 (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0001	24.54	70.5100	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0028	ppm	0.0005	19.06	-1.6730	0.0028 (ppm)	Y 371.029
Zn (202.548 nm)	0.0016	ppm	0.0002	12.53	62.5300	0.0016 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	42.36	35.0700	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1470	493000.0000	0.0032	0.28
Y_R 371.029	1.1740	74170.0000	0.0107	0.91

Sample Name: MB 440-506241/1-A

Date: 10/19/2018 9:05:44 PM

Rack:Tube: 3:21

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0001	20.73	23.8600	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.0164	ppm	0.0002	1.36	-857.6000	0.0164 (ppm)	Y 371.029
As (188.980 nm)	0.0003 u	ppm	0.0026	> 100.00	5.9110	0.0003 u (ppm)	Y 371.029
B (249.678 nm)	0.0102	ppm	0.0004	4.21	103.2000	0.0102 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	44.4500	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	68.76	15.2300	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0115	ppm	0.0013	11.41	143.0000	0.0115 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.7990	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0006	94.86	-13.9000	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0005	51.69	6.1300	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0000	0.61	130.3000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0056	ppm	0.0034	59.41	6.4460	0.0056 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0736 u	ppm	0.1054	> 100.00	-203.1000	-0.0736 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0011	ppm	0.0001	7.01	122.4000	0.0011 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0043	ppm	0.0020	45.57	16.9400	0.0043 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0003	ppm	0.0000	4.86	93.0800	0.0003 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0001	> 100.00	0.4546	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	0.2904	ppm	0.0043	1.48	3336.0000	0.2904 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0002 u	ppm	0.0008	> 100.00	0.7398	-0.0002 u (ppm)	Y 371.029
P (213.618 nm)	-0.0066 u	ppm	0.0055	83.22	-16.1900	-0.0066 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0009	ppm	0.0008	94.49	-7.4130	0.0009 (ppm)	Y 371.029
Sb (206.834 nm)	0.0057	ppm	0.0003	5.97	4.5020	0.0057 (ppm)	Y 371.029
Se (196.026 nm)	0.0015 u	ppm	0.0029	> 100.00	0.0928	0.0015 u (ppm)	Y 371.029
Si (251.611 nm)	0.0034	ppm	0.0008	22.42	56.9100	0.0034 (ppm)	Y 371.029
Sn (189.925 nm)	0.0028	ppm	0.0020	69.63	-1.7400	0.0028 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	15.06	1.0980	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0004	ppm	0.0001	25.10	-129.9000	0.0004 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0001 u	ppm	0.0017	> 100.00	-3.7700	-0.0001 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0002	> 100.00	54.9800	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0009	ppm	0.0004	38.78	-5.1890	0.0009 (ppm)	Y 371.029
Zn (202.548 nm)	0.0048	ppm	0.0000	0.44	120.7000	0.0048 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	14.08	12.0800	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1420	490800.0000	0.0040	0.35
Y_R 371.029	1.1620	73400.0000	0.0010	0.09

Sample Name: LCS 440-506241/2-A

Date: 10/19/2018 9:08:08 PM

Rack:Tube: 3:22

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4727	ppm	0.0011	0.24	19910.0000	0.4727 (ppm)	Y 371.029
Al (396.152 nm)	0.9966	ppm	0.0063	0.63	21180.0000	0.9966 (ppm)	Y 371.029
As (188.980 nm)	0.9223	ppm	0.0016	0.17	629.8000	0.9223 (ppm)	Y 371.029
B (249.678 nm)	0.9494	ppm	0.0084	0.89	11740.0000	0.9494 (ppm)	Y 371.029
Ba (233.527 nm)	0.9332	ppm	0.0013	0.14	73610.0000	0.9332 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9273	ppm	0.0066	0.71	170800.0000	0.9273 (ppm)	Y 371.029
Ca (422.673 nm)	4.7520	ppm	0.0208	0.44	21110.0000	4.7520 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9271	ppm	0.0103	1.11	21510.0000	0.9271 (ppm)	Y 371.029
Co (228.615 nm)	0.9362	ppm	0.0133	1.42	12670.0000	0.9362 (ppm)	Y 371.029
Cr (205.560 nm)	0.9379	ppm	0.0044	0.47	4999.0000	0.9379 (ppm)	Y 371.029
Cu (324.754 nm)	0.9634	ppm	0.0069	0.72	38570.0000	0.9634 (ppm)	Y 371.029
Fe (238.204 nm)	0.9543	ppm	0.0062	0.65	4154.0000	0.9543 (ppm)	Y_R 371.029
K (766.491 nm)	9.4190	ppm	0.0379	0.40	11210.0000	9.4190 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9509	ppm	0.0051	0.54	64530.0000	0.9509 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.6820	ppm	0.0091	0.19	11990.0000	4.6820 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9373	ppm	0.0055	0.59	97370.0000	0.9373 (ppm)	Y 371.029
Mo (204.598 nm)	0.9573	ppm	0.0071	0.74	4442.0000	0.9573 (ppm)	Y 371.029
Na (589.592 nm)	9.7320	ppm	0.0321	0.33	69240.0000	9.7320 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9331	ppm	0.0055	0.59	4782.0000	0.9331 (ppm)	Y 371.029
P (213.618 nm)	0.9231	ppm	0.0012	0.13	782.8000	0.9231 (ppm)	Y 371.029
Pb (220.353 nm)	0.9396	ppm	0.0070	0.75	1799.0000	0.9396 (ppm)	Y 371.029
Sb (206.834 nm)	0.9817	ppm	0.0030	0.31	1006.0000	0.9817 (ppm)	Y 371.029
Se (196.026 nm)	0.8953	ppm	0.0012	0.13	679.4000	0.8953 (ppm)	Y 371.029
Si (251.611 nm)	4.7250	ppm	0.0847	1.79	11730.0000	4.7250 (ppm)	Y 371.029
Sn (189.925 nm)	0.9288	ppm	0.0012	0.13	604.3000	0.9288 (ppm)	Y 371.029
Sr (421.552 nm)	0.9508	ppm	0.0011	0.12	381200.0000	0.9508 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9512	ppm	0.0060	0.64	117400.0000	0.9512 (ppm)	Y 371.029
Tl (190.794 nm)	0.9188	ppm	0.0257	2.79	1093.0000	0.9188 (ppm)	Y 371.029
V (292.401 nm)	0.9451	ppm	0.0048	0.51	26590.0000	0.9451 (ppm)	Y 371.029
W (207.912 nm)	0.9484	ppm	0.0036	0.38	1787.0000	0.9484 (ppm)	Y 371.029
Zn (202.548 nm)	0.9246	ppm	0.0051	0.56	16950.0000	0.9246 (ppm)	Y 371.029
Zr (343.823 nm)	0.9495	ppm	0.0052	0.55	79890.0000	0.9495 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1270	484400.0000	0.0017	0.15
Y_R 371.029	1.1440	72260.0000	0.0067	0.58

Sample Name: 440-222317-A-1-A

Date: 10/19/2018 9:10:32 PM

Rack:Tube: 3:23

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003 u	ppm	0.0006	> 100.00	-1.6300	0.0003 u (ppm)	Y 371.029
Al (396.152 nm)	23.7000	ppm	0.1323	0.56	514200.0000	23.7000 (ppm)	Y 371.029
As (188.980 nm)	0.0111	ppm	0.0030	26.78	13.3500	0.0111 (ppm)	Y 371.029
B (249.678 nm)	0.0557	ppm	0.0005	0.86	649.7000	0.0557 (ppm)	Y 371.029
Ba (233.527 nm)	0.3590	ppm	0.0056	1.56	28360.0000	0.3590 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0016	ppm	0.0004	24.01	815.1000	0.0016 (ppm)	Y 371.029
Ca (422.673 nm)	60.5200	ppm	0.0419	0.07	267800.0000	60.5200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0009	ppm	0.0004	45.19	23.1600	0.0009 (ppm)	Y 371.029
Co (228.615 nm)	0.0083	ppm	0.0002	2.25	104.2000	0.0083 (ppm)	Y 371.029
Cr (205.560 nm)	0.0230	ppm	0.0002	0.93	125.8000	0.0230 (ppm)	Y 371.029
Cu (324.754 nm)	0.0211	ppm	0.0001	0.58	959.5000	0.0211 (ppm)	Y 371.029
Fe (238.204 nm)	20.6500	ppm	0.0097	0.05	90330.0000	20.6500 (ppm)	Y_R 371.029
K (766.491 nm)	7.7330	ppm	0.0171	0.22	9197.0000	7.7330 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0392	ppm	0.0005	1.29	2965.0000	0.0392 (ppm)	Y_R 371.029
Mg (279.078 nm)	15.1000	ppm	0.2740	1.82	38640.0000	15.1000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5464	ppm	0.0036	0.66	59380.0000	0.5464 (ppm)	Y 371.029
Mo (204.598 nm)	0.0019	ppm	0.0004	22.34	12.8400	0.0019 (ppm)	Y 371.029
Na (589.592 nm)	4.2110	ppm	0.0024	0.06	30710.0000	4.2110 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0183	ppm	0.0005	2.71	94.4700	0.0183 (ppm)	Y 371.029
P (213.618 nm)	0.6727	ppm	0.0134	2.00	604.9000	0.6727 (ppm)	Y 371.029
Pb (220.353 nm)	0.0164	ppm	0.0003	1.86	19.7800	0.0164 (ppm)	Y 371.029
Sb (206.834 nm)	0.0098	ppm	0.0070	71.26	9.5400	0.0098 (ppm)	Y 371.029
Se (196.026 nm)	0.0023	ppm	0.0010	45.24	-2.5520	0.0023 (ppm)	Y 371.029
Si (251.611 nm)	35.1600	ppm	0.3670	1.04	85730.0000	35.1600 (ppm)	Y 371.029
Sn (189.925 nm)	0.0006	ppm	0.0004	67.22	-3.1900	0.0006 (ppm)	Y 371.029
Sr (421.552 nm)	0.2108	ppm	0.0004	0.19	85420.0000	0.2108 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4262	ppm	0.0009	0.20	52420.0000	0.4262 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0007 u	ppm	0.0004	48.93	-11.1000	-0.0007 u (ppm)	Y 371.029
V (292.401 nm)	0.0458	ppm	0.0003	0.61	1448.0000	0.0458 (ppm)	Y 371.029
W (207.912 nm)	0.0020	ppm	0.0012	58.07	-4.2050	0.0020 (ppm)	Y 371.029
Zn (202.548 nm)	0.0782	ppm	0.0002	0.27	1453.0000	0.0782 (ppm)	Y 371.029
Zr (343.823 nm)	0.0131	ppm	0.0004	3.24	1125.0000	0.0131 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1040	474300.0000	0.0076	0.69
Y_R 371.029	1.1280	71250.0000	0.0056	0.50

Sample Name: 440-222317-A-1-B MS

Date: 10/19/2018 9:12:56 PM

Rack:Tube: 3:24

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4690	ppm	0.0045	0.96	19740.0000	0.4690 (ppm)	Y 371.029
Al (396.152 nm)	40.4200	ppm	0.5214	1.29	878300.0000	40.4200 (ppm)	Y 371.029
As (188.980 nm)	0.9002	ppm	0.0087	0.97	614.7000	0.9002 (ppm)	Y 371.029
B (249.678 nm)	0.9835	ppm	0.0122	1.24	12150.0000	0.9835 (ppm)	Y 371.029
Ba (233.527 nm)	1.3100	ppm	0.0074	0.56	103300.0000	1.3100 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9033	ppm	0.0105	1.16	167000.0000	0.9033 (ppm)	Y 371.029
Ca (422.673 nm)	66.6200	ppm	0.2547	0.38	294800.0000	66.6200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8812	ppm	0.0131	1.48	20450.0000	0.8812 (ppm)	Y 371.029
Co (228.615 nm)	0.9102	ppm	0.0181	1.99	12340.0000	0.9102 (ppm)	Y 371.029
Cr (205.560 nm)	0.9803	ppm	0.0121	1.23	5227.0000	0.9803 (ppm)	Y 371.029
Cu (324.754 nm)	1.0120	ppm	0.0129	1.27	40470.0000	1.0120 (ppm)	Y 371.029
Fe (238.204 nm)	23.8900	ppm	0.0305	0.13	104500.0000	23.8900 (ppm)	Y_R 371.029
K (766.491 nm)	20.8400	ppm	0.0700	0.34	24960.0000	20.8400 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0090	ppm	0.0003	0.03	68780.0000	1.0090 (ppm)	Y_R 371.029
Mg (279.078 nm)	21.1700	ppm	0.1438	0.68	54190.0000	21.1700 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.4840	ppm	0.0170	1.15	157100.0000	1.4840 (ppm)	Y 371.029
Mo (204.598 nm)	0.9499	ppm	0.0125	1.31	4413.0000	0.9499 (ppm)	Y 371.029
Na (589.592 nm)	13.9300	ppm	0.0326	0.23	98540.0000	13.9300 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9148	ppm	0.0126	1.38	4688.0000	0.9148 (ppm)	Y 371.029
P (213.618 nm)	1.5810	ppm	0.0210	1.32	1383.0000	1.5810 (ppm)	Y 371.029
Pb (220.353 nm)	0.9208	ppm	0.0067	0.72	1759.0000	0.9208 (ppm)	Y 371.029
Sb (206.834 nm)	0.9267	ppm	0.0130	1.40	950.2000	0.9267 (ppm)	Y 371.029
Se (196.026 nm)	0.7831	ppm	0.0003	0.03	590.9000	0.7831 (ppm)	Y 371.029
Si (251.611 nm)	52.4900	ppm	0.0538	0.10	128100.0000	52.4900 (ppm)	Y 371.029
Sn (189.925 nm)	0.9223	ppm	0.0066	0.72	600.1000	0.9223 (ppm)	Y 371.029
Sr (421.552 nm)	1.1860	ppm	0.0062	0.52	476500.0000	1.1860 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.5530	ppm	0.0167	1.08	191600.0000	1.5530 (ppm)	Y 371.029
Tl (190.794 nm)	0.9052	ppm	0.0177	1.96	1066.0000	0.9052 (ppm)	Y 371.029
V (292.401 nm)	1.0170	ppm	0.0110	1.08	28730.0000	1.0170 (ppm)	Y 371.029
W (207.912 nm)	0.9239	ppm	0.0150	1.62	1739.0000	0.9239 (ppm)	Y 371.029
Zn (202.548 nm)	0.9472	ppm	0.0104	1.10	17360.0000	0.9472 (ppm)	Y 371.029
Zr (343.823 nm)	0.9703	ppm	0.0108	1.11	81670.0000	0.9703 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0970	471500.0000	0.0019	0.17
Y_R 371.029	1.1280	71250.0000	0.0038	0.34

Sample Name: 440-222317-A-1-C MSD

Date: 10/19/2018 9:15:21 PM

Rack:Tube: 3:25

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4744	ppm	0.0034	0.72	19970.0000	0.4744 (ppm)	Y 371.029
Al (396.152 nm)	39.0600	ppm	0.3145	0.81	848800.0000	39.0600 (ppm)	Y 371.029
As (188.980 nm)	0.9111	ppm	0.0082	0.90	622.0000	0.9111 (ppm)	Y 371.029
B (249.678 nm)	0.9937	ppm	0.0095	0.96	12270.0000	0.9937 (ppm)	Y 371.029
Ba (233.527 nm)	1.3040	ppm	0.0256	1.96	102900.0000	1.3040 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9159	ppm	0.0091	1.00	169300.0000	0.9159 (ppm)	Y 371.029
Ca (422.673 nm)	66.6200	ppm	0.5904	0.89	294800.0000	66.6200 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8903	ppm	0.0170	1.90	20660.0000	0.8903 (ppm)	Y 371.029
Co (228.615 nm)	0.9151	ppm	0.0107	1.17	12400.0000	0.9151 (ppm)	Y 371.029
Cr (205.560 nm)	1.0020	ppm	0.0094	0.94	5340.0000	1.0020 (ppm)	Y 371.029
Cu (324.754 nm)	1.0280	ppm	0.0098	0.95	41100.0000	1.0280 (ppm)	Y 371.029
Fe (238.204 nm)	23.1600	ppm	0.0851	0.37	101300.0000	23.1600 (ppm)	Y_R 371.029
K (766.491 nm)	20.6000	ppm	0.0522	0.25	24660.0000	20.6000 (ppm)	Y_R 371.029
Li (670.783 nm)	1.0190	ppm	0.0038	0.37	69450.0000	1.0190 (ppm)	Y_R 371.029
Mg (279.078 nm)	20.7600	ppm	0.3934	1.90	53120.0000	20.7600 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.4910	ppm	0.0152	1.02	157600.0000	1.4910 (ppm)	Y 371.029
Mo (204.598 nm)	0.9659	ppm	0.0099	1.02	4488.0000	0.9659 (ppm)	Y 371.029
Na (589.592 nm)	13.9400	ppm	0.0502	0.36	98640.0000	13.9400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9287	ppm	0.0081	0.87	4759.0000	0.9287 (ppm)	Y 371.029
P (213.618 nm)	1.5880	ppm	0.0152	0.96	1388.0000	1.5880 (ppm)	Y 371.029
Pb (220.353 nm)	0.9333	ppm	0.0063	0.67	1783.0000	0.9333 (ppm)	Y 371.029
Sb (206.834 nm)	0.9472	ppm	0.0062	0.65	971.2000	0.9472 (ppm)	Y 371.029
Se (196.026 nm)	0.8001	ppm	0.0112	1.39	603.9000	0.8001 (ppm)	Y 371.029
Si (251.611 nm)	53.6100	ppm	0.8105	1.51	130900.0000	53.6100 (ppm)	Y 371.029
Sn (189.925 nm)	0.9333	ppm	0.0048	0.51	607.3000	0.9333 (ppm)	Y 371.029
Sr (421.552 nm)	1.1920	ppm	0.0101	0.85	479000.0000	1.1920 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.5490	ppm	0.0109	0.71	191200.0000	1.5490 (ppm)	Y 371.029
Tl (190.794 nm)	0.9191	ppm	0.0155	1.69	1083.0000	0.9191 (ppm)	Y 371.029
V (292.401 nm)	1.0290	ppm	0.0077	0.74	29070.0000	1.0290 (ppm)	Y 371.029
W (207.912 nm)	0.9414	ppm	0.0110	1.16	1772.0000	0.9414 (ppm)	Y 371.029
Zn (202.548 nm)	0.9541	ppm	0.0087	0.91	17490.0000	0.9541 (ppm)	Y 371.029
Zr (343.823 nm)	0.9854	ppm	0.0091	0.92	82950.0000	0.9854 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0940	470200.0000	0.0050	0.46
Y_R 371.029	1.1360	71770.0000	0.0059	0.52

Sample Name: 440-222317-A-1-D PDS

Date: 10/19/2018 9:17:45 PM

Rack:Tube: 3:26

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4667	ppm	0.0037	0.79	19650.0000	0.4667 (ppm)	Y 371.029
Al (396.152 nm)	25.4900	ppm	0.2769	1.09	553800.0000	25.4900 (ppm)	Y 371.029
As (188.980 nm)	0.8984	ppm	0.0100	1.11	613.5000	0.8984 (ppm)	Y 371.029
B (249.678 nm)	0.9717	ppm	0.0088	0.90	12000.0000	0.9717 (ppm)	Y 371.029
Ba (233.527 nm)	1.2640	ppm	0.0014	0.11	99730.0000	1.2640 (ppm)	Y_R 371.029
Be (234.861 nm)	0.8990	ppm	0.0066	0.74	166100.0000	0.8990 (ppm)	Y 371.029
Ca (422.673 nm)	66.6100	ppm	0.0340	0.05	294800.0000	66.6100 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.8839	ppm	0.0065	0.74	20510.0000	0.8839 (ppm)	Y 371.029
Co (228.615 nm)	0.9072	ppm	0.0099	1.09	12290.0000	0.9072 (ppm)	Y 371.029
Cr (205.560 nm)	0.9543	ppm	0.0086	0.90	5088.0000	0.9543 (ppm)	Y 371.029
Cu (324.754 nm)	1.0020	ppm	0.0103	1.02	40080.0000	1.0020 (ppm)	Y 371.029
Fe (238.204 nm)	21.3800	ppm	0.0218	0.10	93520.0000	21.3800 (ppm)	Y_R 371.029
K (766.491 nm)	17.3000	ppm	0.0318	0.18	20710.0000	17.3000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9919	ppm	0.0045	0.45	67570.0000	0.9919 (ppm)	Y_R 371.029
Mg (279.078 nm)	19.4900	ppm	0.0429	0.22	49890.0000	19.4900 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.4690	ppm	0.0131	0.89	155200.0000	1.4690 (ppm)	Y 371.029
Mo (204.598 nm)	0.9621	ppm	0.0089	0.93	4468.0000	0.9621 (ppm)	Y 371.029
Na (589.592 nm)	13.6000	ppm	0.0224	0.16	96240.0000	13.6000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9000	ppm	0.0088	0.98	4612.0000	0.9000 (ppm)	Y 371.029
P (213.618 nm)	1.5810	ppm	0.0093	0.59	1384.0000	1.5810 (ppm)	Y 371.029
Pb (220.353 nm)	0.9200	ppm	0.0061	0.66	1758.0000	0.9200 (ppm)	Y 371.029
Sb (206.834 nm)	0.9446	ppm	0.0115	1.22	968.1000	0.9446 (ppm)	Y 371.029
Se (196.026 nm)	0.7864	ppm	0.0005	0.06	593.9000	0.7864 (ppm)	Y 371.029
Si (251.611 nm)	41.5500	ppm	0.3997	0.96	101500.0000	41.5500 (ppm)	Y 371.029
Sn (189.925 nm)	0.9348	ppm	0.0051	0.54	608.3000	0.9348 (ppm)	Y 371.029
Sr (421.552 nm)	1.1750	ppm	0.0001	0.01	472000.0000	1.1750 (ppm)	Y_R 371.029
Ti (336.122 nm)	1.3690	ppm	0.0110	0.80	169000.0000	1.3690 (ppm)	Y 371.029
Tl (190.794 nm)	0.9053	ppm	0.0130	1.44	1070.0000	0.9053 (ppm)	Y 371.029
V (292.401 nm)	0.9956	ppm	0.0098	0.99	28110.0000	0.9956 (ppm)	Y 371.029
W (207.912 nm)	0.9523	ppm	0.0060	0.63	1793.0000	0.9523 (ppm)	Y 371.029
Zn (202.548 nm)	0.9350	ppm	0.0078	0.83	17140.0000	0.9350 (ppm)	Y 371.029
Zr (343.823 nm)	0.9724	ppm	0.0082	0.84	81850.0000	0.9724 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0960	470900.0000	0.0034	0.31
Y_R 371.029	1.1380	71870.0000	0.0110	0.97

Sample Name: 440-222317-A-1-Asd@5

Date: 10/19/2018 9:20:10 PM

Rack:Tube: 3:27

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0002	38.08	24.3900	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	5.2340	ppm	0.0493	0.94	112600.0000	5.2340 (ppm)	Y 371.029
As (188.980 nm)	0.0033	ppm	0.0019	58.43	7.9770	0.0033 (ppm)	Y 371.029
B (249.678 nm)	0.0192	ppm	0.0008	4.38	210.1000	0.0192 (ppm)	Y 371.029
Ba (233.527 nm)	0.0813	ppm	0.0002	0.22	6454.0000	0.0813 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0014	ppm	0.0003	20.17	369.5000	0.0014 (ppm)	Y 371.029
Ca (422.673 nm)	13.0600	ppm	0.0880	0.67	57860.0000	13.0600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0012	ppm	0.0004	30.62	26.0000	0.0012 (ppm)	Y 371.029
Co (228.615 nm)	0.0033	ppm	0.0006	18.10	24.8900	0.0033 (ppm)	Y 371.029
Cr (205.560 nm)	0.0065	ppm	0.0001	1.56	36.3800	0.0065 (ppm)	Y 371.029
Cu (324.754 nm)	0.0049	ppm	0.0002	3.94	339.3000	0.0049 (ppm)	Y 371.029
Fe (238.204 nm)	4.5880	ppm	0.0353	0.77	20050.0000	4.5880 (ppm)	Y_R 371.029
K (766.491 nm)	1.6570	ppm	0.0341	2.06	1880.0000	1.6570 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0095	ppm	0.0005	5.17	750.7000	0.0095 (ppm)	Y_R 371.029
Mg (279.078 nm)	3.3950	ppm	0.0029	0.08	8694.0000	3.3950 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1225	ppm	0.0009	0.71	13360.0000	0.1225 (ppm)	Y 371.029
Mo (204.598 nm)	0.0015	ppm	0.0008	57.54	8.0630	0.0015 (ppm)	Y 371.029
Na (589.592 nm)	1.0500	ppm	0.0050	0.48	8641.0000	1.0500 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0052	ppm	0.0001	2.75	28.2200	0.0052 (ppm)	Y 371.029
P (213.618 nm)	0.1560	ppm	0.0017	1.07	132.4000	0.1560 (ppm)	Y 371.029
Pb (220.353 nm)	0.0051	ppm	0.0021	41.79	-0.0274	0.0051 (ppm)	Y 371.029
Sb (206.834 nm)	-0.0009 u	ppm	0.0012	> 100.00	-2.2020	-0.0009 u (ppm)	Y 371.029
Se (196.026 nm)	-0.0005 u	ppm	0.0014	> 100.00	-2.1240	-0.0005 u (ppm)	Y 371.029
Si (251.611 nm)	8.8210	ppm	0.1333	1.51	21550.0000	8.8210 (ppm)	Y 371.029
Sn (189.925 nm)	0.0023	ppm	0.0004	18.70	-2.0760	0.0023 (ppm)	Y 371.029
Sr (421.552 nm)	0.0469	ppm	0.0002	0.49	18950.0000	0.0469 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.1113	ppm	0.0053	4.74	13570.0000	0.1113 (ppm)	Y 371.029
Tl (190.794 nm)	0.0002 u	ppm	0.0027	> 100.00	-5.1950	0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0113	ppm	0.0002	1.79	398.2000	0.0113 (ppm)	Y 371.029
W (207.912 nm)	0.0014	ppm	0.0017	> 100.00	-4.6070	0.0014 (ppm)	Y 371.029
Zn (202.548 nm)	0.0185	ppm	0.0003	1.85	369.9000	0.0185 (ppm)	Y 371.029
Zr (343.823 nm)	0.0038	ppm	0.0004	11.65	320.1000	0.0038 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1400	489900.0000	0.0019	0.17
Y_R 371.029	1.1610	73360.0000	0.0099	0.85

Sample Name: 440-222317-A-2-A

Date: 10/19/2018 9:22:34 PM

Rack:Tube: 3:28

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-11.6800	0.0000 u (ppm)	Y 371.029
Al (396.152 nm)	26.0100	ppm	0.0386	0.15	564400.0000	26.0100 (ppm)	Y 371.029
As (188.980 nm)	0.0075	ppm	0.0004	5.22	10.8400	0.0075 (ppm)	Y 371.029
B (249.678 nm)	0.0576	ppm	0.0003	0.53	673.9000	0.0576 (ppm)	Y 371.029
Ba (233.527 nm)	0.2937	ppm	0.0005	0.17	23200.0000	0.2937 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0013	ppm	0.0003	22.28	752.0000	0.0013 (ppm)	Y 371.029
Ca (422.673 nm)	46.0600	ppm	0.1270	0.28	203900.0000	46.0600 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0008	ppm	0.0002	20.37	19.0500	0.0008 (ppm)	Y 371.029
Co (228.615 nm)	0.0089	ppm	0.0002	2.52	113.1000	0.0089 (ppm)	Y 371.029
Cr (205.560 nm)	0.0383	ppm	0.0007	1.70	207.2000	0.0383 (ppm)	Y 371.029
Cu (324.754 nm)	0.0247	ppm	0.0003	1.29	1115.0000	0.0247 (ppm)	Y 371.029
Fe (238.204 nm)	19.9100	ppm	0.0048	0.02	87060.0000	19.9100 (ppm)	Y_R 371.029
K (766.491 nm)	9.5240	ppm	0.0418	0.44	11350.0000	9.5240 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0323	ppm	0.0001	0.35	2470.0000	0.0323 (ppm)	Y_R 371.029
Mg (279.078 nm)	13.5400	ppm	0.0537	0.40	34640.0000	13.5400 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.5712	ppm	0.0023	0.41	61830.0000	0.5712 (ppm)	Y 371.029
Mo (204.598 nm)	0.0002 u	ppm	0.0018	> 100.00	5.1590	0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	4.1710	ppm	0.0235	0.56	30430.0000	4.1710 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0240	ppm	0.0001	0.59	124.5000	0.0240 (ppm)	Y 371.029
P (213.618 nm)	0.8252	ppm	0.0085	1.03	744.8000	0.8252 (ppm)	Y 371.029
Pb (220.353 nm)	0.0190	ppm	0.0016	8.58	24.4300	0.0190 (ppm)	Y 371.029
Sb (206.834 nm)	0.0074	ppm	0.0034	46.28	7.2040	0.0074 (ppm)	Y 371.029
Se (196.026 nm)	0.0065	ppm	0.0025	38.29	0.8598	0.0065 (ppm)	Y 371.029
Si (251.611 nm)	32.7400	ppm	0.0276	0.08	79840.0000	32.7400 (ppm)	Y 371.029
Sn (189.925 nm)	0.0024 u	ppm	0.0039	> 100.00	-1.9780	0.0024 u (ppm)	Y 371.029
Sr (421.552 nm)	0.1845	ppm	0.0006	0.31	74640.0000	0.1845 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.4838	ppm	0.0014	0.29	59560.0000	0.4838 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0021 u	ppm	0.0009	40.59	-13.3200	-0.0021 u (ppm)	Y 371.029
V (292.401 nm)	0.0413	ppm	0.0000	0.04	1303.0000	0.0413 (ppm)	Y 371.029
W (207.912 nm)	0.0023	ppm	0.0014	59.50	-3.2330	0.0023 (ppm)	Y 371.029
Zn (202.548 nm)	0.0940	ppm	0.0003	0.37	1739.0000	0.0940 (ppm)	Y 371.029
Zr (343.823 nm)	0.0150	ppm	0.0003	2.28	1277.0000	0.0150 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1010	473200.0000	0.0011	0.10
Y_R 371.029	1.1220	70860.0000	0.0019	0.17

Sample Name: 440-222470-H-2-A

Date: 10/19/2018 9:24:59 PM

Rack:Tube: 3:29

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0001	13.79	-59.5500	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	0.5351	ppm	0.0042	0.78	10750.0000	0.5351 (ppm)	Y 371.029
As (188.980 nm)	0.0129	ppm	0.0043	33.23	13.2900	0.0129 (ppm)	Y 371.029
B (249.678 nm)	0.1533	ppm	0.0015	0.99	1899.0000	0.1533 (ppm)	Y 371.029
Ba (233.527 nm)	0.0217	ppm	0.0001	0.45	1785.0000	0.0217 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	23.3300	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	474.4000	ppm	0.0564	0.01	2099000.0000	474.4000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	27.70	3.0650	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0060	ppm	0.0001	1.83	70.5700	0.0060 (ppm)	Y 371.029
Cr (205.560 nm)	0.0157	ppm	0.0002	1.54	93.7700	0.0157 (ppm)	Y 371.029
Cu (324.754 nm)	0.0028	ppm	0.0002	6.24	-176.4000	0.0028 (ppm)	Y 371.029
Fe (238.204 nm)	0.5057	ppm	0.0018	0.35	2215.0000	0.5057 (ppm)	Y_R 371.029
K (766.491 nm)	4.0070	ppm	0.0111	0.28	4814.0000	4.0070 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0155	ppm	0.0002	1.05	2561.0000	0.0155 (ppm)	Y_R 371.029
Mg (279.078 nm)	144.2000	ppm	0.0332	0.02	369100.0000	144.2000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0257	ppm	0.0000	0.01	3399.0000	0.0257 (ppm)	Y 371.029
Mo (204.598 nm)	0.0028	ppm	0.0003	11.39	13.5100	0.0028 (ppm)	Y 371.029
Na (589.592 nm)	351.5000	ppm	0.9372	0.27	2453000.0000	351.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0139	ppm	0.0007	5.02	61.7900	0.0139 (ppm)	Y 371.029
P (213.618 nm)	0.0456	ppm	0.0009	1.93	25.1200	0.0456 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0029 u	ppm	0.0011	38.23	-7.5200	-0.0029 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0049 u	ppm	0.0017	34.98	-4.5960	-0.0049 u (ppm)	Y 371.029
Se (196.026 nm)	0.0225	ppm	0.0082	36.64	12.6300	0.0225 (ppm)	Y 371.029
Si (251.611 nm)	13.7200	ppm	0.0588	0.43	33540.0000	13.7200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0056 u	ppm	0.0002	3.55	-7.1170	-0.0056 u (ppm)	Y 371.029
Sr (421.552 nm)	3.1230	ppm	0.0020	0.06	1259000.0000	3.1230 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0173	ppm	0.0009	5.46	1379.0000	0.0173 (ppm)	Y 371.029
Tl (190.794 nm)	0.0049	ppm	0.0010	21.23	-0.4390	0.0049 (ppm)	Y 371.029
V (292.401 nm)	-0.0187 u	ppm	0.0001	0.30	192.1000	-0.0187 u (ppm)	Y 371.029
W (207.912 nm)	0.0012 u	ppm	0.0017	> 100.00	-15.5000	0.0012 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0041	ppm	0.0002	4.29	216.3000	0.0041 (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	81.60	65.6600	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0150	436100.0000	0.0025	0.24
Y_R 371.029	1.0940	69110.0000	0.0059	0.54

Sample Name: 440-222470-H-3-A

Date: 10/19/2018 9:27:23 PM

Rack:Tube: 3:30

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	25.85	-77.4300	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.2928	ppm	0.0025	0.84	5618.0000	0.2928 (ppm)	Y 371.029
As (188.980 nm)	0.0049	ppm	0.0051	> 100.00	9.0640	0.0049 (ppm)	Y 371.029
B (249.678 nm)	0.1637	ppm	0.0013	0.79	2027.0000	0.1637 (ppm)	Y 371.029
Ba (233.527 nm)	0.0157	ppm	0.0001	0.34	1321.0000	0.0157 (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	17.55	6.2400	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	394.6000	ppm	0.9813	0.25	1746000.0000	394.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	0.4993	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0023	ppm	0.0001	6.41	22.3000	0.0023 (ppm)	Y 371.029
Cr (205.560 nm)	0.0036	ppm	0.0001	2.52	27.6400	0.0036 (ppm)	Y 371.029
Cu (324.754 nm)	0.0019	ppm	0.0008	41.11	-123.5000	0.0019 (ppm)	Y 371.029
Fe (238.204 nm)	0.2059	ppm	0.0052	2.54	920.1000	0.2059 (ppm)	Y_R 371.029
K (766.491 nm)	3.5620	ppm	0.0305	0.86	4324.0000	3.5620 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0079	ppm	0.0010	12.90	2549.0000	0.0079 (ppm)	Y_R 371.029
Mg (279.078 nm)	301.9000	ppm	1.0720	0.36	772700.0000	301.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1439	ppm	0.0009	0.62	16180.0000	0.1439 (ppm)	Y 371.029
Mo (204.598 nm)	0.0066	ppm	0.0013	19.48	31.5400	0.0066 (ppm)	Y 371.029
Na (589.592 nm)	903.8000 o	ppm	1.8630	0.21	6304000.0000	903.8000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0052	ppm	0.0001	1.73	17.0800	0.0052 (ppm)	Y 371.029
P (213.618 nm)	0.0692	ppm	0.0054	7.81	48.5600	0.0692 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0076 u	ppm	0.0006	8.19	-13.4600	-0.0076 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0048 u	ppm	0.0004	7.43	-5.4070	-0.0048 u (ppm)	Y 371.029
Se (196.026 nm)	0.0166	ppm	0.0030	18.07	8.5670	0.0166 (ppm)	Y 371.029
Si (251.611 nm)	13.8600	ppm	0.0882	0.64	33880.0000	13.8600 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0048 u	ppm	0.0019	39.83	-6.3200	-0.0048 u (ppm)	Y 371.029
Sr (421.552 nm)	3.3010	ppm	0.0109	0.33	1330000.0000	3.3010 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0104	ppm	0.0002	1.73	632.4000	0.0104 (ppm)	Y 371.029
Tl (190.794 nm)	0.0048	ppm	0.0022	45.33	1.4770	0.0048 (ppm)	Y 371.029
V (292.401 nm)	-0.0156 u	ppm	0.0004	2.75	179.5000	-0.0156 u (ppm)	Y 371.029
W (207.912 nm)	-0.0005 u	ppm	0.0019	> 100.00	-17.4800	-0.0005 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0053 u	ppm	0.0004	7.03	127.2000	-0.0053 u (ppm)	Y 371.029
Zr (343.823 nm)	-0.0001 u	ppm	0.0003	> 100.00	51.3100	-0.0001 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9690	416300.0000	0.0058	0.60
Y_R 371.029	1.0570	66780.0000	0.0036	0.34

Sample Name: CCV 5129881

Date: 10/19/2018 9:29:47 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4804	ppm	0.0037	0.76	20230.0000	0.4804 (ppm)	Y 371.029
Al (396.152 nm)	0.9966	ppm	0.0063	0.63	21180.0000	0.9966 (ppm)	Y 371.029
As (188.980 nm)	0.9542	ppm	0.0084	0.88	651.4000	0.9542 (ppm)	Y 371.029
B (249.678 nm)	0.9716	ppm	0.0101	1.04	12020.0000	0.9716 (ppm)	Y 371.029
Ba (233.527 nm)	0.9292	ppm	0.0023	0.24	73300.0000	0.9292 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9559	ppm	0.0057	0.59	176100.0000	0.9559 (ppm)	Y 371.029
Ca (422.673 nm)	5.2940	ppm	0.0265	0.50	23510.0000	5.2940 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9529	ppm	0.0033	0.34	22110.0000	0.9529 (ppm)	Y 371.029
Co (228.615 nm)	0.9527	ppm	0.0009	0.09	12890.0000	0.9527 (ppm)	Y 371.029
Cr (205.560 nm)	0.9574	ppm	0.0056	0.59	5103.0000	0.9574 (ppm)	Y 371.029
Cu (324.754 nm)	0.9715	ppm	0.0038	0.40	38890.0000	0.9715 (ppm)	Y 371.029
Fe (238.204 nm)	0.9734	ppm	0.0113	1.16	4238.0000	0.9734 (ppm)	Y_R 371.029
K (766.491 nm)	9.7180	ppm	0.0977	1.01	11570.0000	9.7180 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9707	ppm	0.0046	0.47	65880.0000	0.9707 (ppm)	Y_R 371.029
Mg (279.078 nm)	5.0030	ppm	0.1006	2.01	12810.0000	5.0030 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9571	ppm	0.0031	0.32	99420.0000	0.9571 (ppm)	Y 371.029
Mo (204.598 nm)	0.9606	ppm	0.0069	0.72	4457.0000	0.9606 (ppm)	Y 371.029
Na (589.592 nm)	10.5600	ppm	0.0113	0.11	75020.0000	10.5600 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9514	ppm	0.0025	0.26	4876.0000	0.9514 (ppm)	Y 371.029
P (213.618 nm)	0.9544	ppm	0.0017	0.18	811.0000	0.9544 (ppm)	Y 371.029
Pb (220.353 nm)	0.9560	ppm	0.0020	0.21	1831.0000	0.9560 (ppm)	Y 371.029
Sb (206.834 nm)	0.9583	ppm	0.0267	2.78	981.7000	0.9583 (ppm)	Y 371.029
Se (196.026 nm)	0.9555	ppm	0.0087	0.91	724.8000	0.9555 (ppm)	Y 371.029
Si (251.611 nm)	5.0380	ppm	0.1261	2.50	12490.0000	5.0380 (ppm)	Y 371.029
Sn (189.925 nm)	0.9629	ppm	0.0001	0.01	626.6000	0.9629 (ppm)	Y 371.029
Sr (421.552 nm)	0.9665	ppm	0.0009	0.09	387500.0000	0.9665 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9618	ppm	0.0056	0.58	118700.0000	0.9618 (ppm)	Y 371.029
Tl (190.794 nm)	0.9615	ppm	0.0006	0.06	1145.0000	0.9615 (ppm)	Y 371.029
V (292.401 nm)	0.9635	ppm	0.0046	0.48	27110.0000	0.9635 (ppm)	Y 371.029
W (207.912 nm)	0.9628	ppm	0.0033	0.34	1814.0000	0.9628 (ppm)	Y 371.029
Zn (202.548 nm)	0.9556	ppm	0.0021	0.22	17510.0000	0.9556 (ppm)	Y 371.029
Zr (343.823 nm)	0.9601	ppm	0.0058	0.60	80780.0000	0.9601 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1180	480200.0000	0.0013	0.12
Y_R 371.029	1.1570	73120.0000	0.0061	0.52

Sample Name: CCB 5129880

Date: 10/19/2018 9:32:10 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0006	ppm	0.0002	35.65	26.9400	0.0006 (ppm)	Y 371.029
Al (396.152 nm)	0.0136	ppm	0.0015	11.04	-918.6000	0.0136 (ppm)	Y 371.029
As (188.980 nm)	0.0019	ppm	0.0019	96.57	7.0360	0.0019 (ppm)	Y 371.029
B (249.678 nm)	0.0084	ppm	0.0008	9.83	81.1000	0.0084 (ppm)	Y 371.029
Ba (233.527 nm)	0.0006	ppm	0.0003	46.75	87.1800	0.0006 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	36.13	116.5000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	0.1294 Z	ppm	0.0059	4.58	664.4000 Z	0.1294 Z (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	43.53	10.1600	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0002	23.06	-8.3740	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0009	ppm	0.0002	22.69	6.2920	0.0009 (ppm)	Y 371.029
Cu (324.754 nm)	0.0000 u	ppm	0.0005	> 100.00	151.3000	0.0000 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0033	ppm	0.0020	60.75	-3.8010	0.0033 (ppm)	Y_R 371.029
K (766.491 nm)	0.0301 u	ppm	0.0651	> 100.00	-78.5500	0.0301 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0003 u	ppm	0.0013	> 100.00	68.2900	0.0003 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0827 Z	ppm	0.0181	21.85	217.6000 Z	0.0827 Z (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0003	49.21	132.2000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0012	ppm	0.0003	28.10	6.1530	0.0012 (ppm)	Y 371.029
Na (589.592 nm)	0.4696	ppm	0.0012	0.26	4586.0000	0.4696 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0006	> 100.00	0.0198	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0042 u	ppm	0.0069	> 100.00	-6.3390	0.0042 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0015	ppm	0.0016	> 100.00	-6.3410	0.0015 (ppm)	Y 371.029
Sb (206.834 nm)	0.0030	ppm	0.0032	> 100.00	1.6200	0.0030 (ppm)	Y 371.029
Se (196.026 nm)	0.0006 u	ppm	0.0031	> 100.00	-0.5773	0.0006 u (ppm)	Y 371.029
Si (251.611 nm)	0.0105	ppm	0.0041	39.28	74.5900	0.0105 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0000	1.47	-1.6500	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0013	ppm	0.0000	0.78	472.5000	0.0013 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0011	ppm	0.0001	13.52	-39.4000	0.0011 (ppm)	Y 371.029
Tl (190.794 nm)	0.0032	ppm	0.0004	11.42	0.2034	0.0032 (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0003	87.18	65.0400	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0010	60.03	-3.6720	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0004	21.75	63.9100	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0001	23.68	38.6000	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1260	483800.0000	0.0017	0.16
Y_R 371.029	1.1490	72570.0000	0.0027	0.23

Sample Name: 440-222470-H-4-A

Date: 10/19/2018 9:34:35 PM

Rack:Tube: 3:31

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0000	5.79	-58.4200	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	0.4162	ppm	0.0010	0.23	8169.0000	0.4162 (ppm)	Y 371.029
As (188.980 nm)	0.0208	ppm	0.0015	7.25	18.6300	0.0208 (ppm)	Y 371.029
B (249.678 nm)	0.2079	ppm	0.0027	1.30	2574.0000	0.2079 (ppm)	Y 371.029
Ba (233.527 nm)	0.0381	ppm	0.0002	0.46	3077.0000	0.0381 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	7.45	159.5000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	503.8000	ppm	0.7055	0.14	2229000.0000	503.8000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0003	ppm	0.0002	56.27	8.1970	0.0003 (ppm)	Y 371.029
Co (228.615 nm)	0.0111	ppm	0.0002	1.92	139.9000	0.0111 (ppm)	Y 371.029
Cr (205.560 nm)	0.0104	ppm	0.0000	0.05	66.4900	0.0104 (ppm)	Y 371.029
Cu (324.754 nm)	0.0037	ppm	0.0003	8.39	-158.5000	0.0037 (ppm)	Y 371.029
Fe (238.204 nm)	4.9290	ppm	0.0066	0.13	21560.0000	4.9290 (ppm)	Y_R 371.029
K (766.491 nm)	5.3090	ppm	0.0473	0.89	6382.0000	5.3090 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0070	ppm	0.0025	35.63	1936.0000	0.0070 (ppm)	Y_R 371.029
Mg (279.078 nm)	146.9000	ppm	0.8362	0.57	376000.0000	146.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	2.5980	ppm	0.0201	0.77	269500.0000	2.5980 (ppm)	Y 371.029
Mo (204.598 nm)	0.0028	ppm	0.0001	5.15	13.8200	0.0028 (ppm)	Y 371.029
Na (589.592 nm)	273.5000	ppm	0.8577	0.31	1909000.0000	273.5000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0050	ppm	0.0005	9.90	15.3700	0.0050 (ppm)	Y 371.029
P (213.618 nm)	0.1387	ppm	0.0027	1.95	109.7000	0.1387 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0045 u	ppm	0.0012	27.75	-9.4700	-0.0045 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0035 u	ppm	0.0035	98.72	-3.2300	-0.0035 u (ppm)	Y 371.029
Se (196.026 nm)	0.0073	ppm	0.0027	37.59	1.5360	0.0073 (ppm)	Y 371.029
Si (251.611 nm)	15.4300	ppm	0.2568	1.66	37700.0000	15.4300 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0064 u	ppm	0.0000	0.13	-7.6110	-0.0064 u (ppm)	Y 371.029
Sr (421.552 nm)	3.1940	ppm	0.0037	0.11	1288000.0000	3.1940 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0189	ppm	0.0003	1.74	1545.0000	0.0189 (ppm)	Y 371.029
Tl (190.794 nm)	0.0031	ppm	0.0016	52.24	2.0000	0.0031 (ppm)	Y 371.029
V (292.401 nm)	-0.0211 u	ppm	0.0004	1.75	163.2000	-0.0211 u (ppm)	Y 371.029
W (207.912 nm)	0.0011 u	ppm	0.0016	> 100.00	-16.3800	0.0011 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0045	ppm	0.0001	1.53	226.4000	0.0045 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	41.43	97.6800	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0050	431600.0000	0.0123	1.22
Y_R 371.029	1.0400	65710.0000	0.0096	0.92

Sample Name: 440-222470-H-5-A

Date: 10/19/2018 9:36:59 PM

Rack:Tube: 3:32

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0007	ppm	0.0000	0.52	-56.4900	0.0007 (ppm)	Y 371.029
Al (396.152 nm)	0.1665	ppm	0.0004	0.24	2814.0000	0.1665 (ppm)	Y 371.029
As (188.980 nm)	0.0114	ppm	0.0065	56.70	13.1300	0.0114 (ppm)	Y 371.029
B (249.678 nm)	1.1010	ppm	0.0067	0.61	13730.0000	1.1010 (ppm)	Y 371.029
Ba (233.527 nm)	0.0160	ppm	0.0002	1.04	1341.0000	0.0160 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	26.7900	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	406.6000	ppm	0.4990	0.12	1799000.0000	406.6000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0015	ppm	0.0003	19.96	34.8100	0.0015 (ppm)	Y 371.029
Co (228.615 nm)	0.0039	ppm	0.0005	11.82	43.4300	0.0039 (ppm)	Y 371.029
Cr (205.560 nm)	0.0050	ppm	0.0001	2.85	35.3800	0.0050 (ppm)	Y 371.029
Cu (324.754 nm)	0.0036	ppm	0.0000	1.15	-71.6100	0.0036 (ppm)	Y 371.029
Fe (238.204 nm)	0.5791	ppm	0.0014	0.25	2547.0000	0.5791 (ppm)	Y_R 371.029
K (766.491 nm)	1.1000	ppm	0.0809	7.35	1347.0000	1.1000 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0447	ppm	0.0012	2.59	4799.0000	0.0447 (ppm)	Y_R 371.029
Mg (279.078 nm)	245.7000	ppm	2.7180	1.11	628800.0000	245.7000 (ppm)	Y_R 371.029
Mn (259.372 nm)	1.1380	ppm	0.0024	0.21	118600.0000	1.1380 (ppm)	Y 371.029
Mo (204.598 nm)	0.0067	ppm	0.0001	1.26	32.2000	0.0067 (ppm)	Y 371.029
Na (589.592 nm)	267.4000	ppm	0.0148	0.01	1866000.0000	267.4000 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0070	ppm	0.0000	0.66	26.6200	0.0070 (ppm)	Y 371.029
P (213.618 nm)	0.0303	ppm	0.0022	7.24	12.2800	0.0303 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0057 u	ppm	0.0015	26.37	-10.6500	-0.0057 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0023 u	ppm	0.0013	57.27	-2.6820	-0.0023 u (ppm)	Y 371.029
Se (196.026 nm)	0.0006	ppm	0.0006	98.15	-3.0990	0.0006 (ppm)	Y 371.029
Si (251.611 nm)	11.6000	ppm	0.0394	0.34	28380.0000	11.6000 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0056 u	ppm	0.0011	18.70	-6.9050	-0.0056 u (ppm)	Y 371.029
Sr (421.552 nm)	5.5060	ppm	0.0170	0.31	2214000.0000	5.5060 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0069	ppm	0.0002	3.23	179.1000	0.0069 (ppm)	Y 371.029
Tl (190.794 nm)	0.0028	ppm	0.0017	61.31	0.3899	0.0028 (ppm)	Y 371.029
V (292.401 nm)	-0.0165 u	ppm	0.0001	0.41	165.3000	-0.0165 u (ppm)	Y 371.029
W (207.912 nm)	-0.0018 u	ppm	0.0005	26.99	-19.8800	-0.0018 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0129	ppm	0.0001	0.53	427.1000	0.0129 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	70.44	69.1000	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9598	412400.0000	0.0080	0.83
Y_R 371.029	1.0280	64930.0000	0.0022	0.21

Sample Name: 440-222470-H-6-A

Date: 10/19/2018 9:39:23 PM

Rack:Tube: 3:33

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0003	68.87	-62.0500	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.2911	ppm	0.0060	2.07	5569.0000	0.2911 (ppm)	Y 371.029
As (188.980 nm)	0.0080	ppm	0.0064	79.68	10.8100	0.0080 (ppm)	Y 371.029
B (249.678 nm)	0.8880	ppm	0.0141	1.59	11070.0000	0.8880 (ppm)	Y 371.029
Ba (233.527 nm)	0.0144	ppm	0.0009	6.46	1220.0000	0.0144 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	17.7500	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	443.3000	ppm	2.8820	0.65	1961000.0000	443.3000 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0005	ppm	0.0001	19.34	12.4800	0.0005 (ppm)	Y 371.029
Co (228.615 nm)	0.0083	ppm	0.0002	1.96	103.2000	0.0083 (ppm)	Y 371.029
Cr (205.560 nm)	0.0027	ppm	0.0002	8.22	24.7000	0.0027 (ppm)	Y 371.029
Cu (324.754 nm)	0.0044	ppm	0.0001	2.35	-69.9400	0.0044 (ppm)	Y 371.029
Fe (238.204 nm)	0.2418	ppm	0.0015	0.61	1075.0000	0.2418 (ppm)	Y_R 371.029
K (766.491 nm)	1.1610	ppm	0.0739	6.37	1433.0000	1.1610 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0317	ppm	0.0008	2.62	3960.0000	0.0317 (ppm)	Y_R 371.029
Mg (279.078 nm)	275.1000	ppm	14.9000	5.41	704200.0000	275.1000 (ppm)	Y_R 371.029
Mn (259.372 nm)	4.9920	ppm	0.0255	0.51	516500.0000	4.9920 (ppm)	Y 371.029
Mo (204.598 nm)	0.0056	ppm	0.0007	13.02	27.5800	0.0056 (ppm)	Y 371.029
Na (589.592 nm)	536.2000 o	ppm	3.7420	0.70	3741000.0000	536.2000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0059	ppm	0.0003	4.36	18.7200	0.0059 (ppm)	Y 371.029
P (213.618 nm)	0.0306	ppm	0.0002	0.58	11.5800	0.0306 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0074 u	ppm	0.0014	19.44	-11.2500	-0.0074 u (ppm)	Y 371.029
Sb (206.834 nm)	-0.0053 u	ppm	0.0001	1.59	-5.9910	-0.0053 u (ppm)	Y 371.029
Se (196.026 nm)	0.0090	ppm	0.0014	15.22	4.7830	0.0090 (ppm)	Y 371.029
Si (251.611 nm)	14.1000	ppm	0.1230	0.87	34480.0000	14.1000 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0094 u	ppm	0.0027	28.50	-9.2220	-0.0094 u (ppm)	Y 371.029
Sr (421.552 nm)	3.3780	ppm	0.0342	1.01	1361000.0000	3.3780 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0117	ppm	0.0001	0.95	738.4000	0.0117 (ppm)	Y 371.029
Tl (190.794 nm)	0.0012	ppm	0.0014	> 100.00	5.4390	0.0012 (ppm)	Y 371.029
V (292.401 nm)	-0.0182 u	ppm	0.0002	1.29	171.3000	-0.0182 u (ppm)	Y 371.029
W (207.912 nm)	-0.0002 u	ppm	0.0015	> 100.00	-17.9500	-0.0002 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0027 u	ppm	0.0004	14.00	166.6000	-0.0027 u (ppm)	Y 371.029
Zr (343.823 nm)	-0.0002 u	ppm	0.0002	> 100.00	39.0800	-0.0002 u (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9204	395400.0000	0.0319	3.46
Y_R 371.029	0.9845	62190.0000	0.0184	1.87

Sample Name: 440-222418-L-22-A

Date: 10/19/2018 9:41:47 PM

Rack:Tube: 3:35

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	26.61	14.4000	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0178	ppm	0.0005	2.88	-828.0000	0.0178 (ppm)	Y 371.029
As (188.980 nm)	0.0009 u	ppm	0.0025	> 100.00	6.2850	0.0009 u (ppm)	Y 371.029
B (249.678 nm)	0.0090	ppm	0.0008	8.31	88.7800	0.0090 (ppm)	Y 371.029
Ba (233.527 nm)	0.0002	ppm	0.0000	19.20	54.0700	0.0002 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	40.84	19.2000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0687	ppm	0.0016	2.34	395.9000	0.0687 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	26.54	-0.9824	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0002 u	ppm	0.0004	> 100.00	-20.1300	0.0002 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0025	ppm	0.0003	10.65	14.6800	0.0025 (ppm)	Y 371.029
Cu (324.754 nm)	0.0004	ppm	0.0002	47.66	165.6000	0.0004 (ppm)	Y 371.029
Fe (238.204 nm)	0.0169	ppm	0.0026	15.69	55.6000	0.0169 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0273 u	ppm	0.0292	> 100.00	-147.4000	-0.0273 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0024	ppm	0.0005	21.29	212.0000	0.0024 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0947	ppm	0.0685	72.28	248.3000	0.0947 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0019	ppm	0.0013	67.57	259.2000	0.0019 (ppm)	Y 371.029
Mo (204.598 nm)	0.0006	ppm	0.0004	62.42	3.3680	0.0006 (ppm)	Y 371.029
Na (589.592 nm)	0.5321	ppm	0.0036	0.68	5022.0000	0.5321 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0016	ppm	0.0010	62.67	10.1200	0.0016 (ppm)	Y 371.029
P (213.618 nm)	-0.0005 u	ppm	0.0017	> 100.00	-10.6100	-0.0005 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0021	ppm	0.0000	0.44	-5.0380	0.0021 (ppm)	Y 371.029
Sb (206.834 nm)	0.0020	ppm	0.0006	29.79	0.6487	0.0020 (ppm)	Y 371.029
Se (196.026 nm)	-0.0016 u	ppm	0.0007	41.56	-2.2350	-0.0016 u (ppm)	Y 371.029
Si (251.611 nm)	0.0142	ppm	0.0041	29.10	83.5800	0.0142 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0011	37.63	-1.6290	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0006	ppm	0.0001	9.33	173.3000	0.0006 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	0.56	-134.5000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0006 u	ppm	0.0032	> 100.00	-4.4750	-0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0003	> 100.00	58.0600	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0005	ppm	0.0001	25.48	-5.9670	0.0005 (ppm)	Y 371.029
Zn (202.548 nm)	0.0060	ppm	0.0001	1.59	143.6000	0.0060 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	61.56	6.6920	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0890	467900.0000	0.0078	0.71
Y_R 371.029	1.1290	71330.0000	0.0020	0.18

Sample Name: 440-222544-A-4-A

Date: 10/19/2018 9:44:11 PM

Rack:Tube: 3:36

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0006 u	ppm	0.0003	46.13	-37.5300	-0.0006 u (ppm)	Y 371.029
Al (396.152 nm)	0.6780	ppm	0.0069	1.01	13690.0000	0.6780 (ppm)	Y 371.029
As (188.980 nm)	0.0859	ppm	0.0066	7.63	64.6900	0.0859 (ppm)	Y 371.029
B (249.678 nm)	1.2690	ppm	0.0159	1.25	15810.0000	1.2690 (ppm)	Y 371.029
Ba (233.527 nm)	0.5784	ppm	0.0055	0.95	45660.0000	0.5784 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0001	61.63	76.9400	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	38.0700	ppm	0.1802	0.47	168500.0000	38.0700 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0004	ppm	0.0001	35.40	6.8510	0.0004 (ppm)	Y 371.029
Co (228.615 nm)	0.0056	ppm	0.0002	3.71	56.9900	0.0056 (ppm)	Y 371.029
Cr (205.560 nm)	0.0160	ppm	0.0002	1.38	86.9200	0.0160 (ppm)	Y 371.029
Cu (324.754 nm)	0.0114	ppm	0.0003	3.07	578.5000	0.0114 (ppm)	Y 371.029
Fe (238.204 nm)	1.9810	ppm	0.0022	0.11	8657.0000	1.9810 (ppm)	Y_R 371.029
K (766.491 nm)	40.8300	ppm	0.0405	0.10	48970.0000	40.8300 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0492	ppm	0.0003	0.59	3876.0000	0.0492 (ppm)	Y_R 371.029
Mg (279.078 nm)	100.3000	ppm	1.1560	1.15	256700.0000	100.3000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1658	ppm	0.0015	0.90	17890.0000	0.1658 (ppm)	Y 371.029
Mo (204.598 nm)	0.0932	ppm	0.0045	4.78	433.1000	0.0932 (ppm)	Y 371.029
Na (589.592 nm)	1056.0000 o	ppm	2.5330	0.24	7367000.0000	1056.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0179	ppm	0.0002	1.07	91.6600	0.0179 (ppm)	Y 371.029
P (213.618 nm)	0.4580	ppm	0.0098	2.14	407.7000	0.4580 (ppm)	Y 371.029
Pb (220.353 nm)	0.0294	ppm	0.0016	5.58	49.9600	0.0294 (ppm)	Y 371.029
Sb (206.834 nm)	0.0055	ppm	0.0026	47.72	2.7580	0.0055 (ppm)	Y 371.029
Se (196.026 nm)	0.0546	ppm	0.0002	0.35	39.6000	0.0546 (ppm)	Y 371.029
Si (251.611 nm)	10.9200	ppm	0.1332	1.22	26680.0000	10.9200 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0026 u	ppm	0.0035	> 100.00	-5.0780	-0.0026 u (ppm)	Y 371.029
Sr (421.552 nm)	1.0560	ppm	0.0041	0.39	423800.0000	1.0560 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0032	ppm	0.0000	1.15	180.5000	0.0032 (ppm)	Y 371.029
Tl (190.794 nm)	0.0001 u	ppm	0.0003	> 100.00	-3.2380	0.0001 u (ppm)	Y 371.029
V (292.401 nm)	0.0122	ppm	0.0002	1.56	441.5000	0.0122 (ppm)	Y 371.029
W (207.912 nm)	-0.0020 u	ppm	0.0009	45.87	-10.4500	-0.0020 u (ppm)	Y 371.029
Zn (202.548 nm)	0.1190	ppm	0.0007	0.59	2248.0000	0.1190 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	12.31	31.9400	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9684	416100.0000	0.0020	0.20
Y_R 371.029	1.0530	66510.0000	0.0002	0.02

Sample Name: 440-222535-A-4-A

Date: 10/19/2018 9:46:35 PM

Rack:Tube: 3:37

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0007 u	ppm	0.0003	38.64	-42.5400	-0.0007 u (ppm)	Y 371.029
Al (396.152 nm)	0.4225	ppm	0.0024	0.56	8138.0000	0.4225 (ppm)	Y 371.029
As (188.980 nm)	0.0845	ppm	0.0031	3.69	63.8900	0.0845 (ppm)	Y 371.029
B (249.678 nm)	1.3350	ppm	0.0080	0.60	16640.0000	1.3350 (ppm)	Y 371.029
Ba (233.527 nm)	0.4469	ppm	0.0086	1.91	35290.0000	0.4469 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	12.98	52.6600	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	33.6500	ppm	0.0746	0.22	149000.0000	33.6500 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0000	21.38	2.5230	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0039	ppm	0.0002	4.26	33.1000	0.0039 (ppm)	Y 371.029
Cr (205.560 nm)	0.0071	ppm	0.0003	4.10	39.6400	0.0071 (ppm)	Y 371.029
Cu (324.754 nm)	0.0059	ppm	0.0004	5.98	365.7000	0.0059 (ppm)	Y 371.029
Fe (238.204 nm)	1.1790	ppm	0.0007	0.06	5152.0000	1.1790 (ppm)	Y_R 371.029
K (766.491 nm)	50.0200	ppm	0.0763	0.15	60020.0000	50.0200 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0667	ppm	0.0005	0.77	5125.0000	0.0667 (ppm)	Y_R 371.029
Mg (279.078 nm)	114.9000	ppm	0.9005	0.78	294100.0000	114.9000 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.1241	ppm	0.0003	0.21	13520.0000	0.1241 (ppm)	Y 371.029
Mo (204.598 nm)	0.0642	ppm	0.0015	2.34	298.7000	0.0642 (ppm)	Y 371.029
Na (589.592 nm)	1210.0000 o	ppm	1.9890	0.16	8439000.0000	1210.0000 o (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0108	ppm	0.0006	5.17	55.4800	0.0108 (ppm)	Y 371.029
P (213.618 nm)	0.4559	ppm	0.0063	1.39	406.6000	0.4559 (ppm)	Y 371.029
Pb (220.353 nm)	0.0091	ppm	0.0012	13.00	11.1500	0.0091 (ppm)	Y 371.029
Sb (206.834 nm)	0.0027	ppm	0.0019	69.27	0.2168	0.0027 (ppm)	Y 371.029
Se (196.026 nm)	0.0543	ppm	0.0003	0.49	39.4600	0.0543 (ppm)	Y 371.029
Si (251.611 nm)	10.7500	ppm	0.0356	0.33	26260.0000	10.7500 (ppm)	Y 371.029
Sn (189.925 nm)	-0.0046 u	ppm	0.0005	11.33	-6.3830	-0.0046 u (ppm)	Y 371.029
Sr (421.552 nm)	1.0670	ppm	0.0026	0.25	428100.0000	1.0670 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0017	ppm	0.0000	0.64	2.1740	0.0017 (ppm)	Y 371.029
Tl (190.794 nm)	0.0012	ppm	0.0016	> 100.00	-1.6180	0.0012 (ppm)	Y 371.029
V (292.401 nm)	0.0065	ppm	0.0003	4.00	279.2000	0.0065 (ppm)	Y 371.029
W (207.912 nm)	-0.0047 u	ppm	0.0006	13.62	-16.1600	-0.0047 u (ppm)	Y 371.029
Zn (202.548 nm)	0.0564	ppm	0.0002	0.41	1121.0000	0.0564 (ppm)	Y 371.029
Zr (343.823 nm)	0.0003	ppm	0.0001	37.35	25.3700	0.0003 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9693	416500.0000	0.0023	0.24
Y_R 371.029	1.0380	65600.0000	0.0042	0.41

Sample Name: 440-222480-A-1-A

Date: 10/19/2018 9:48:59 PM

Rack:Tube: 3:38

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002 u	ppm	0.0004	> 100.00	9.6080	0.0002 u (ppm)	Y 371.029
Al (396.152 nm)	0.0226	ppm	0.0010	4.47	-724.1000	0.0226 (ppm)	Y 371.029
As (188.980 nm)	0.0017	ppm	0.0014	83.67	6.7430	0.0017 (ppm)	Y 371.029
B (249.678 nm)	0.0148	ppm	0.0008	5.09	161.1000	0.0148 (ppm)	Y 371.029
Ba (233.527 nm)	0.0008	ppm	0.0002	24.56	104.9000	0.0008 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	27.82	7.6410	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.2498	ppm	0.0028	1.13	1197.0000	0.2498 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	56.75	-2.8710	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0005	96.16	-15.2500	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0152	ppm	0.0003	1.83	82.3800	0.0152 (ppm)	Y 371.029
Cu (324.754 nm)	0.0001 u	ppm	0.0001	> 100.00	153.1000	0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0474	ppm	0.0028	5.80	189.0000	0.0474 (ppm)	Y_R 371.029
K (766.491 nm)	0.0771	ppm	0.0833	> 100.00	-22.0300	0.0771 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0013	ppm	0.0011	84.12	140.7000	0.0013 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.1040	ppm	0.0338	32.54	272.1000	0.1040 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0012	ppm	0.0000	3.14	193.5000	0.0012 (ppm)	Y 371.029
Mo (204.598 nm)	0.0000 u	ppm	0.0004	> 100.00	0.7184	0.0000 u (ppm)	Y 371.029
Na (589.592 nm)	2.6880	ppm	0.0407	1.51	20060.0000	2.6880 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0047	ppm	0.0010	20.16	26.1200	0.0047 (ppm)	Y 371.029
P (213.618 nm)	0.0059	ppm	0.0005	8.62	-4.7320	0.0059 (ppm)	Y 371.029
Pb (220.353 nm)	-0.0002 u	ppm	0.0004	> 100.00	-9.5720	-0.0002 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0058	ppm	0.0003	4.55	4.6540	0.0058 (ppm)	Y 371.029
Se (196.026 nm)	0.0007	ppm	0.0007	94.98	-0.5156	0.0007 (ppm)	Y 371.029
Si (251.611 nm)	0.6658	ppm	0.0033	0.50	1671.0000	0.6658 (ppm)	Y 371.029
Sn (189.925 nm)	0.0045	ppm	0.0001	2.15	-0.6256	0.0045 (ppm)	Y 371.029
Sr (421.552 nm)	0.0022	ppm	0.0000	1.35	839.3000	0.0022 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0005	ppm	0.0001	11.41	-109.2000	0.0005 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0003 u	ppm	0.0011	> 100.00	-4.0640	-0.0003 u (ppm)	Y 371.029
V (292.401 nm)	0.0001	ppm	0.0001	> 100.00	60.1400	0.0001 (ppm)	Y 371.029
W (207.912 nm)	0.0020	ppm	0.0006	28.85	-3.1640	0.0020 (ppm)	Y 371.029
Zn (202.548 nm)	0.0079	ppm	0.0001	0.86	177.2000	0.0079 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	1.46	6.7630	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0960	470700.0000	0.0038	0.35
Y_R 371.029	1.1090	70050.0000	0.0029	0.26

Sample Name: 440-222480-A-2-A

Date: 10/19/2018 9:51:24 PM

Rack:Tube: 3:39

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	38.12	11.0700	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0261	ppm	0.0008	3.23	-648.3000	0.0261 (ppm)	Y 371.029
As (188.980 nm)	0.0015 u	ppm	0.0032	> 100.00	6.4420	0.0015 u (ppm)	Y 371.029
B (249.678 nm)	0.0151	ppm	0.0001	0.53	164.1000	0.0151 (ppm)	Y 371.029
Ba (233.527 nm)	0.0012	ppm	0.0000	3.57	135.6000	0.0012 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	14.83	13.9200	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.2554	ppm	0.0062	2.45	1222.0000	0.2554 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.0430	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0001	7.96	-7.4300	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0411	ppm	0.0001	0.30	220.2000	0.0411 (ppm)	Y 371.029
Cu (324.754 nm)	0.0007	ppm	0.0002	32.92	178.9000	0.0007 (ppm)	Y 371.029
Fe (238.204 nm)	0.1476	ppm	0.0001	0.06	627.4000	0.1476 (ppm)	Y_R 371.029
K (766.491 nm)	0.1379	ppm	0.0027	1.93	51.0900	0.1379 (ppm)	Y_R 371.029
Li (670.783 nm)	0.0012 u	ppm	0.0017	> 100.00	127.8000	0.0012 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0549	ppm	0.0052	9.48	146.3000	0.0549 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0032	ppm	0.0000	0.91	412.4000	0.0032 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003	ppm	0.0000	7.09	2.0690	0.0003 (ppm)	Y 371.029
Na (589.592 nm)	2.3100	ppm	0.0110	0.47	17420.0000	2.3100 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0208	ppm	0.0004	1.80	108.5000	0.0208 (ppm)	Y 371.029
P (213.618 nm)	0.0037	ppm	0.0001	2.90	-6.8210	0.0037 (ppm)	Y 371.029
Pb (220.353 nm)	0.0007 u	ppm	0.0019	> 100.00	-7.7850	0.0007 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0044	ppm	0.0024	54.41	3.4630	0.0044 (ppm)	Y 371.029
Se (196.026 nm)	-0.0007 u	ppm	0.0007	96.05	-1.5810	-0.0007 u (ppm)	Y 371.029
Si (251.611 nm)	0.6573	ppm	0.0035	0.53	1651.0000	0.6573 (ppm)	Y 371.029
Sn (189.925 nm)	0.0039	ppm	0.0007	19.19	-1.0440	0.0039 (ppm)	Y 371.029
Sr (421.552 nm)	0.0021	ppm	0.0001	3.93	786.6000	0.0021 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0012	ppm	0.0001	7.97	-24.9800	0.0012 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0006 u	ppm	0.0014	> 100.00	-4.4170	-0.0006 u (ppm)	Y 371.029
V (292.401 nm)	0.0005	ppm	0.0000	1.39	72.0700	0.0005 (ppm)	Y 371.029
W (207.912 nm)	0.0013	ppm	0.0008	57.38	-4.4160	0.0013 (ppm)	Y 371.029
Zn (202.548 nm)	0.0069	ppm	0.0000	0.66	158.5000	0.0069 (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	> 100.00	1.6210	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0770	462900.0000	0.0059	0.55
Y_R 371.029	1.0770	68060.0000	0.0095	0.89

Sample Name: CCV 5129881

Date: 10/19/2018 9:53:47 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4841	ppm	0.0009	0.20	20380.0000	0.4841 (ppm)	Y 371.029
Al (396.152 nm)	0.9895	ppm	0.0023	0.23	21030.0000	0.9895 (ppm)	Y 371.029
As (188.980 nm)	0.9526	ppm	0.0044	0.46	650.3000	0.9526 (ppm)	Y 371.029
B (249.678 nm)	0.9689	ppm	0.0076	0.79	11990.0000	0.9689 (ppm)	Y 371.029
Ba (233.527 nm)	0.9541	ppm	0.0086	0.90	75260.0000	0.9541 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9582	ppm	0.0023	0.24	176500.0000	0.9582 (ppm)	Y 371.029
Ca (422.673 nm)	4.8400	ppm	0.0259	0.54	21500.0000	4.8400 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9532	ppm	0.0102	1.07	22110.0000	0.9532 (ppm)	Y 371.029
Co (228.615 nm)	0.9594	ppm	0.0062	0.65	12980.0000	0.9594 (ppm)	Y 371.029
Cr (205.560 nm)	0.9620	ppm	0.0013	0.13	5127.0000	0.9620 (ppm)	Y 371.029
Cu (324.754 nm)	0.9700	ppm	0.0068	0.70	38830.0000	0.9700 (ppm)	Y 371.029
Fe (238.204 nm)	0.9651	ppm	0.0012	0.12	4202.0000	0.9651 (ppm)	Y_R 371.029
K (766.491 nm)	9.7010	ppm	0.0371	0.38	11550.0000	9.7010 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9685	ppm	0.0023	0.24	65720.0000	0.9685 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.8130	ppm	0.0403	0.84	12320.0000	4.8130 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9595	ppm	0.0004	0.04	99680.0000	0.9595 (ppm)	Y 371.029
Mo (204.598 nm)	0.9674	ppm	0.0048	0.50	4489.0000	0.9674 (ppm)	Y 371.029
Na (589.592 nm)	10.2400	ppm	0.0233	0.23	72780.0000	10.2400 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9571	ppm	0.0024	0.25	4905.0000	0.9571 (ppm)	Y 371.029
P (213.618 nm)	0.9585	ppm	0.0003	0.03	814.7000	0.9585 (ppm)	Y 371.029
Pb (220.353 nm)	0.9633	ppm	0.0025	0.26	1845.0000	0.9633 (ppm)	Y 371.029
Sb (206.834 nm)	0.9686	ppm	0.0178	1.83	992.2000	0.9686 (ppm)	Y 371.029
Se (196.026 nm)	0.9583	ppm	0.0085	0.88	727.0000	0.9583 (ppm)	Y 371.029
Si (251.611 nm)	4.8940	ppm	0.1000	2.04	12140.0000	4.8940 (ppm)	Y 371.029
Sn (189.925 nm)	0.9574	ppm	0.0011	0.11	623.1000	0.9574 (ppm)	Y 371.029
Sr (421.552 nm)	0.9675	ppm	0.0070	0.72	387900.0000	0.9675 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9621	ppm	0.0022	0.23	118700.0000	0.9621 (ppm)	Y 371.029
Tl (190.794 nm)	0.9682	ppm	0.0008	0.08	1153.0000	0.9682 (ppm)	Y 371.029
V (292.401 nm)	0.9665	ppm	0.0007	0.08	27190.0000	0.9665 (ppm)	Y 371.029
W (207.912 nm)	0.9658	ppm	0.0036	0.37	1820.0000	0.9658 (ppm)	Y 371.029
Zn (202.548 nm)	0.9625	ppm	0.0002	0.02	17640.0000	0.9625 (ppm)	Y 371.029
Zr (343.823 nm)	0.9603	ppm	0.0028	0.30	80800.0000	0.9603 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0610	455800.0000	0.0056	0.53
Y_R 371.029	1.0720	67720.0000	0.0044	0.41

Sample Name: CCB 5129880

Date: 10/19/2018 9:56:11 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0005	ppm	0.0001	23.22	23.0500	0.0005 (ppm)	Y 371.029
Al (396.152 nm)	0.0093	ppm	0.0004	4.37	-1013.0000	0.0093 (ppm)	Y 371.029
As (188.980 nm)	0.0019 u	ppm	0.0050	> 100.00	7.0110	0.0019 u (ppm)	Y 371.029
B (249.678 nm)	0.0074	ppm	0.0013	17.92	68.4200	0.0074 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	35.28	82.1900	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0006	ppm	0.0002	34.09	106.7000	0.0006 (ppm)	Y 371.029
Ca (422.673 nm)	0.0322	ppm	0.0035	10.95	234.5000	0.0322 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	41.92	10.2800	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0005	41.84	-7.6610	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0010	ppm	0.0003	26.88	6.8030	0.0010 (ppm)	Y 371.029
Cu (324.754 nm)	0.0007	ppm	0.0005	76.31	179.6000	0.0007 (ppm)	Y 371.029
Fe (238.204 nm)	0.0013 u	ppm	0.0020	> 100.00	-12.7000	0.0013 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0143 u	ppm	0.0121	84.87	-131.9000	-0.0143 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0007	ppm	0.0005	77.79	96.6100	0.0007 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0151	ppm	0.0057	37.54	44.5600	0.0151 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0006	ppm	0.0003	41.08	130.8000	0.0006 (ppm)	Y 371.029
Mo (204.598 nm)	0.0013	ppm	0.0005	40.08	6.5480	0.0013 (ppm)	Y 371.029
Na (589.592 nm)	0.5006 Z	ppm	0.0014	0.28	4802.0000 Z	0.5006 Z (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0006	> 100.00	2.8770	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0055	ppm	0.0014	26.08	-5.1840	0.0055 (ppm)	Y 371.029
Pb (220.353 nm)	0.0013	ppm	0.0002	11.84	-6.6820	0.0013 (ppm)	Y 371.029
Sb (206.834 nm)	0.0048	ppm	0.0010	21.50	3.5520	0.0048 (ppm)	Y 371.029
Se (196.026 nm)	0.0037	ppm	0.0002	4.39	1.7710	0.0037 (ppm)	Y 371.029
Si (251.611 nm)	0.0059	ppm	0.0037	61.55	63.4100	0.0059 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0015	50.53	-1.6110	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0005	ppm	0.0001	26.92	125.6000	0.0005 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0002	24.43	-55.8000	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	0.0031	ppm	0.0007	23.45	0.0682	0.0031 (ppm)	Y 371.029
V (292.401 nm)	0.0003	ppm	0.0003	98.88	63.9800	0.0003 (ppm)	Y 371.029
W (207.912 nm)	0.0029	ppm	0.0003	11.93	-1.4370	0.0029 (ppm)	Y 371.029
Zn (202.548 nm)	0.0019	ppm	0.0001	6.04	67.7800	0.0019 (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0001	15.76	31.2600	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0800	463900.0000	0.0057	0.52
Y_R 371.029	1.0760	67940.0000	0.0073	0.67

Sample Name: 440-222470-H-7-A@100

Date: 10/19/2018 9:58:34 PM

Rack:Tube: 3:34

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	25.70	12.8700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0289	ppm	0.0002	0.57	-585.5000	0.0289 (ppm)	Y 371.029
As (188.980 nm)	0.0014	ppm	0.0016	> 100.00	6.6920	0.0014 (ppm)	Y 371.029
B (249.678 nm)	0.0066	ppm	0.0007	10.63	57.7500	0.0066 (ppm)	Y 371.029
Ba (233.527 nm)	0.0015	ppm	0.0001	3.51	157.7000	0.0015 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0002	ppm	0.0000	7.45	53.3900	0.0002 (ppm)	Y 371.029
Ca (422.673 nm)	0.0493	ppm	0.0070	14.23	309.9000	0.0493 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	73.30	1.0750	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0002	ppm	0.0001	57.63	-19.4500	0.0002 (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0000	3.45	4.5920	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	0.0007	ppm	0.0001	15.64	178.8000	0.0007 (ppm)	Y 371.029
Fe (238.204 nm)	0.3798	ppm	0.0002	0.04	1643.0000	0.3798 (ppm)	Y_R 371.029
K (766.491 nm)	0.0067 u	ppm	0.0239	> 100.00	-106.6000	0.0067 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0022	ppm	0.0007	30.36	199.9000	0.0022 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0132	ppm	0.0025	19.31	39.5000	0.0132 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0035	ppm	0.0001	3.27	476.4000	0.0035 (ppm)	Y 371.029
Mo (204.598 nm)	0.0006	ppm	0.0003	61.60	3.1570	0.0006 (ppm)	Y 371.029
Na (589.592 nm)	0.4709	ppm	0.0022	0.46	4595.0000	0.4709 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0002	58.37	0.0371	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0026	ppm	0.0009	33.18	-7.7670	0.0026 (ppm)	Y 371.029
Pb (220.353 nm)	0.0023	ppm	0.0011	44.78	-4.6480	0.0023 (ppm)	Y 371.029
Sb (206.834 nm)	0.0006 u	ppm	0.0045	> 100.00	-0.8424	0.0006 u (ppm)	Y 371.029
Se (196.026 nm)	0.0007	ppm	0.0009	> 100.00	-0.5601	0.0007 (ppm)	Y 371.029
Si (251.611 nm)	0.0069	ppm	0.0002	3.50	65.5000	0.0069 (ppm)	Y 371.029
Sn (189.925 nm)	0.0018	ppm	0.0009	49.30	-2.4030	0.0018 (ppm)	Y 371.029
Sr (421.552 nm)	0.0005	ppm	0.0000	5.82	140.1000	0.0005 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0008	ppm	0.0000	0.27	-76.5700	0.0008 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0002 u	ppm	0.0032	> 100.00	-3.9680	-0.0002 u (ppm)	Y 371.029
V (292.401 nm)	0.0016	ppm	0.0001	3.52	101.8000	0.0016 (ppm)	Y 371.029
W (207.912 nm)	0.0008	ppm	0.0005	64.03	-5.4070	0.0008 (ppm)	Y 371.029
Zn (202.548 nm)	0.0141	ppm	0.0000	0.09	288.9000	0.0141 (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	47.67	10.4500	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1130	478100.0000	0.0029	0.26
Y_R 371.029	1.1250	71090.0000	0.0126	1.12

Sample Name: RINSE 5129898

Date: 10/19/2018 10:00:57 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	32.21	11.9700	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0060	ppm	0.0006	9.99	-1084.0000	0.0060 (ppm)	Y 371.029
As (188.980 nm)	-0.0003 u	ppm	0.0007	> 100.00	5.4850	-0.0003 u (ppm)	Y 371.029
B (249.678 nm)	0.0057	ppm	0.0003	5.10	47.0900	0.0057 (ppm)	Y 371.029
Ba (233.527 nm)	0.0001	ppm	0.0000	39.28	46.5200	0.0001 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0001	42.45	25.5600	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0082	ppm	0.0101	> 100.00	128.2000	0.0082 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002	ppm	0.0001	46.21	1.7900	0.0002 (ppm)	Y 371.029
Co (228.615 nm)	0.0002 u	ppm	0.0005	> 100.00	-19.8500	0.0002 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0003	ppm	0.0001	23.26	2.9630	0.0003 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	68.36	139.0000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0011 u	ppm	0.0031	> 100.00	-13.6200	0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0470 u	ppm	0.0115	24.40	-171.2000	-0.0470 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0002 u	ppm	0.0003	> 100.00	32.3000	-0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0038	ppm	0.0006	15.00	15.6400	0.0038 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0001	ppm	0.0000	43.73	74.6400	0.0001 (ppm)	Y 371.029
Mo (204.598 nm)	0.0003	ppm	0.0001	32.37	1.7560	0.0003 (ppm)	Y 371.029
Na (589.592 nm)	0.3514	ppm	0.0000	0.00	3761.0000	0.3514 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0006 u	ppm	0.0006	99.21	-1.0940	-0.0006 u (ppm)	Y 371.029
P (213.618 nm)	-0.0019 u	ppm	0.0010	54.96	-11.8800	-0.0019 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0011	ppm	0.0010	89.78	-7.0370	0.0011 (ppm)	Y 371.029
Sb (206.834 nm)	0.0027	ppm	0.0003	12.61	1.3730	0.0027 (ppm)	Y 371.029
Se (196.026 nm)	-0.0020 u	ppm	0.0003	16.06	-2.5170	-0.0020 u (ppm)	Y 371.029
Si (251.611 nm)	0.0011	ppm	0.0003	24.99	51.7200	0.0011 (ppm)	Y 371.029
Sn (189.925 nm)	0.0031	ppm	0.0017	53.66	-1.5430	0.0031 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	69.55	-36.4600	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	1.45	-139.8000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0007 u	ppm	0.0005	75.42	-4.5280	-0.0007 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0001	97.48	54.6600	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0019	ppm	0.0012	66.37	-3.4480	0.0019 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0001 u	ppm	0.0001	68.22	31.6100	-0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	99.95	3.3190	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0820	464800.0000	0.0036	0.33
Y_R 371.029	1.0860	68590.0000	0.0014	0.13

Sample Name: RINSE 5129898

Date: 10/19/2018 10:03:21 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0002	77.04	10.1000	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0063	ppm	0.0005	8.65	-1077.0000	0.0063 (ppm)	Y 371.029
As (188.980 nm)	0.0034	ppm	0.0022	64.81	8.0310	0.0034 (ppm)	Y 371.029
B (249.678 nm)	0.0058	ppm	0.0004	6.31	48.4200	0.0058 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	41.9700	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	2.43	20.9100	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	-0.0049 u	ppm	0.0020	39.72	70.2300	-0.0049 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	19.92	-1.2140	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0003	29.59	-8.9190	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002	ppm	0.0000	19.38	2.5420	0.0002 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0004 u	ppm	0.0004	> 100.00	136.5000	-0.0004 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0016	ppm	0.0001	9.33	-11.4300	0.0016 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0703 u	ppm	0.0596	84.73	-199.2000	-0.0703 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0002 u	ppm	0.0004	> 100.00	33.2000	-0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0031	ppm	0.0017	54.92	13.8700	0.0031 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000	ppm	0.0000	22.66	69.2100	0.0000 (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0008	> 100.00	0.2176	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.3226	ppm	0.0022	0.69	3560.0000	0.3226 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0004 u	ppm	0.0007	> 100.00	-0.2736	-0.0004 u (ppm)	Y 371.029
P (213.618 nm)	0.0043	ppm	0.0029	66.52	-6.1550	0.0043 (ppm)	Y 371.029
Pb (220.353 nm)	0.0022	ppm	0.0003	13.53	-4.9220	0.0022 (ppm)	Y 371.029
Sb (206.834 nm)	0.0025	ppm	0.0028	> 100.00	1.1890	0.0025 (ppm)	Y 371.029
Se (196.026 nm)	-0.0028 u	ppm	0.0043	> 100.00	-3.1550	-0.0028 u (ppm)	Y 371.029
Si (251.611 nm)	0.0018	ppm	0.0008	46.61	53.1100	0.0018 (ppm)	Y 371.029
Sn (189.925 nm)	0.0007 u	ppm	0.0014	> 100.00	-3.1100	0.0007 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0000	ppm	0.0000	> 100.00	-44.8000	0.0000 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0003	ppm	0.0000	0.35	-143.3000	0.0003 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0010 u	ppm	0.0013	> 100.00	-4.9560	-0.0010 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	57.8900	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0003	19.65	-3.6820	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0001 u	ppm	0.0000	30.61	31.4000	-0.0001 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	> 100.00	0.4515	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0840	465900.0000	0.0021	0.20
Y_R 371.029	1.1050	69780.0000	0.0057	0.52

Sample Name: RINSE 5129898

Date: 10/19/2018 10:05:44 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0001	ppm	0.0000	41.22	6.2220	0.0001 (ppm)	Y 371.029
Al (396.152 nm)	0.0063	ppm	0.0005	8.11	-1078.0000	0.0063 (ppm)	Y 371.029
As (188.980 nm)	0.0006	ppm	0.0008	> 100.00	6.1550	0.0006 (ppm)	Y 371.029
B (249.678 nm)	0.0058	ppm	0.0003	5.26	48.2100	0.0058 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	38.6200	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001	ppm	0.0000	19.63	13.1000	0.0001 (ppm)	Y 371.029
Ca (422.673 nm)	0.0032 u	ppm	0.0047	> 100.00	106.0000	0.0032 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	38.46	-2.4590	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0004	59.27	-13.0700	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0001 u	ppm	0.0002	> 100.00	2.0060	0.0001 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0000	5.48	137.6000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0006 u	ppm	0.0024	> 100.00	-15.5300	0.0006 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0209 u	ppm	0.0225	> 100.00	-139.9000	-0.0209 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0002	> 100.00	44.9400	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0041	ppm	0.0007	18.09	16.4300	0.0041 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000	ppm	0.0000	6.39	67.1500	0.0000 (ppm)	Y 371.029
Mo (204.598 nm)	0.0001	ppm	0.0001	93.33	1.0300	0.0001 (ppm)	Y 371.029
Na (589.592 nm)	0.3125	ppm	0.0083	2.66	3490.0000	0.3125 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001	ppm	0.0000	56.14	2.2760	0.0001 (ppm)	Y 371.029
P (213.618 nm)	0.0055	ppm	0.0069	> 100.00	-5.1390	0.0055 (ppm)	Y 371.029
Pb (220.353 nm)	0.0012	ppm	0.0012	96.78	-6.7570	0.0012 (ppm)	Y 371.029
Sb (206.834 nm)	0.0020	ppm	0.0016	81.97	0.5895	0.0020 (ppm)	Y 371.029
Se (196.026 nm)	-0.0003 u	ppm	0.0009	> 100.00	-1.2850	-0.0003 u (ppm)	Y 371.029
Si (251.611 nm)	0.0005	ppm	0.0001	27.88	50.2000	0.0005 (ppm)	Y 371.029
Sn (189.925 nm)	0.0017	ppm	0.0007	39.58	-2.4730	0.0017 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-58.5900	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0002	ppm	0.0000	10.17	-146.6000	0.0002 (ppm)	Y 371.029
Tl (190.794 nm)	0.0014	ppm	0.0009	62.80	-2.0030	0.0014 (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0003	> 100.00	56.6000	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0019	ppm	0.0009	47.96	-3.3450	0.0019 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0003 u	ppm	0.0000	11.90	29.2200	-0.0003 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	4.45	8.0390	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0880	467700.0000	0.0065	0.60
Y_R 371.029	1.0930	69030.0000	0.0020	0.19

Sample Name: CCV 5129881

Date: 10/19/2018 10:08:08 PM

Rack:Tube: S1:4

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.4851	ppm	0.0018	0.37	20430.0000	0.4851 (ppm)	Y 371.029
Al (396.152 nm)	0.9943	ppm	0.0033	0.33	21140.0000	0.9943 (ppm)	Y 371.029
As (188.980 nm)	0.9595	ppm	0.0020	0.20	655.1000	0.9595 (ppm)	Y 371.029
B (249.678 nm)	0.9709	ppm	0.0049	0.50	12010.0000	0.9709 (ppm)	Y 371.029
Ba (233.527 nm)	0.9415	ppm	0.0098	1.04	74270.0000	0.9415 (ppm)	Y_R 371.029
Be (234.861 nm)	0.9591	ppm	0.0011	0.12	176700.0000	0.9591 (ppm)	Y 371.029
Ca (422.673 nm)	4.7720	ppm	0.0147	0.31	21200.0000	4.7720 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.9553	ppm	0.0018	0.19	22160.0000	0.9553 (ppm)	Y 371.029
Co (228.615 nm)	0.9563	ppm	0.0019	0.20	12940.0000	0.9563 (ppm)	Y 371.029
Cr (205.560 nm)	0.9608	ppm	0.0024	0.25	5121.0000	0.9608 (ppm)	Y 371.029
Cu (324.754 nm)	0.9741	ppm	0.0034	0.35	39000.0000	0.9741 (ppm)	Y 371.029
Fe (238.204 nm)	0.9544	ppm	0.0020	0.21	4155.0000	0.9544 (ppm)	Y_R 371.029
K (766.491 nm)	9.6910	ppm	0.0152	0.16	11540.0000	9.6910 (ppm)	Y_R 371.029
Li (670.783 nm)	0.9659	ppm	0.0011	0.12	65550.0000	0.9659 (ppm)	Y_R 371.029
Mg (279.078 nm)	4.7310	ppm	0.0505	1.07	12110.0000	4.7310 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.9591	ppm	0.0006	0.07	99630.0000	0.9591 (ppm)	Y 371.029
Mo (204.598 nm)	0.9678	ppm	0.0028	0.29	4491.0000	0.9678 (ppm)	Y 371.029
Na (589.592 nm)	9.8740	ppm	0.0004	0.00	70240.0000	9.8740 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.9582	ppm	0.0024	0.25	4911.0000	0.9582 (ppm)	Y 371.029
P (213.618 nm)	0.9534	ppm	0.0009	0.09	809.8000	0.9534 (ppm)	Y 371.029
Pb (220.353 nm)	0.9598	ppm	0.0011	0.11	1838.0000	0.9598 (ppm)	Y 371.029
Sb (206.834 nm)	0.9686	ppm	0.0133	1.37	992.1000	0.9686 (ppm)	Y 371.029
Se (196.026 nm)	0.9604	ppm	0.0021	0.22	728.5000	0.9604 (ppm)	Y 371.029
Si (251.611 nm)	4.8570	ppm	0.0923	1.90	12050.0000	4.8570 (ppm)	Y 371.029
Sn (189.925 nm)	0.9623	ppm	0.0014	0.15	626.2000	0.9623 (ppm)	Y 371.029
Sr (421.552 nm)	0.9713	ppm	0.0000	0.00	389400.0000	0.9713 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.9636	ppm	0.0014	0.14	118900.0000	0.9636 (ppm)	Y 371.029
Tl (190.794 nm)	0.9695	ppm	0.0029	0.30	1155.0000	0.9695 (ppm)	Y 371.029
V (292.401 nm)	0.9655	ppm	0.0009	0.10	27160.0000	0.9655 (ppm)	Y 371.029
W (207.912 nm)	0.9641	ppm	0.0009	0.10	1817.0000	0.9641 (ppm)	Y 371.029
Zn (202.548 nm)	0.9591	ppm	0.0025	0.26	17580.0000	0.9591 (ppm)	Y 371.029
Zr (343.823 nm)	0.9616	ppm	0.0009	0.10	80910.0000	0.9616 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0790	463600.0000	0.0023	0.22
Y_R 371.029	1.1040	69760.0000	0.0099	0.90

Sample Name: CCB 5129880

Date: 10/19/2018 10:10:31 PM

Rack:Tube: S1:1

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	48.97	12.2700	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0101	ppm	0.0001	1.15	-994.2000	0.0101 (ppm)	Y 371.029
As (188.980 nm)	0.0024	ppm	0.0010	42.39	7.3420	0.0024 (ppm)	Y 371.029
B (249.678 nm)	0.0077	ppm	0.0013	16.90	72.2800	0.0077 (ppm)	Y 371.029
Ba (233.527 nm)	0.0005	ppm	0.0002	48.91	78.1700	0.0005 (ppm)	Y_R 371.029
Be (234.861 nm)	0.0005	ppm	0.0003	51.58	100.2000	0.0005 (ppm)	Y 371.029
Ca (422.673 nm)	0.0086	ppm	0.0029	34.12	130.1000	0.0086 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0006	ppm	0.0003	50.84	9.2070	0.0006 (ppm)	Y 371.029
Co (228.615 nm)	0.0015	ppm	0.0000	1.74	-2.5300	0.0015 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0006	> 100.00	3.9640	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	0.0001 u	ppm	0.0004	> 100.00	155.5000	0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0010 u	ppm	0.0016	> 100.00	-13.9900	0.0010 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0235 u	ppm	0.0168	71.74	-142.9000	-0.0235 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0014	ppm	0.0004	31.26	142.8000	0.0014 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0050	ppm	0.0006	11.91	18.7200	0.0050 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0005	ppm	0.0002	43.33	118.3000	0.0005 (ppm)	Y 371.029
Mo (204.598 nm)	0.0012	ppm	0.0006	52.62	6.1720	0.0012 (ppm)	Y 371.029
Na (589.592 nm)	0.2535	ppm	0.0038	1.49	3079.0000	0.2535 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0009	> 100.00	2.6670	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	0.0030	ppm	0.0017	58.49	-7.4620	0.0030 (ppm)	Y 371.029
Pb (220.353 nm)	0.0030	ppm	0.0011	38.22	-3.4150	0.0030 (ppm)	Y 371.029
Sb (206.834 nm)	0.0058	ppm	0.0023	39.22	4.5450	0.0058 (ppm)	Y 371.029
Se (196.026 nm)	0.0018	ppm	0.0013	71.07	0.3444	0.0018 (ppm)	Y 371.029
Si (251.611 nm)	0.0022 u	ppm	0.0035	> 100.00	54.4200	0.0022 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0043	ppm	0.0019	43.75	-0.7638	0.0043 (ppm)	Y 371.029
Sr (421.552 nm)	0.0003	ppm	0.0000	9.42	45.5800	0.0003 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0009	ppm	0.0002	23.62	-59.7700	0.0009 (ppm)	Y 371.029
Tl (190.794 nm)	0.0013	ppm	0.0018	> 100.00	-2.1130	0.0013 (ppm)	Y 371.029
V (292.401 nm)	0.0006	ppm	0.0002	38.97	73.7500	0.0006 (ppm)	Y 371.029
W (207.912 nm)	0.0026	ppm	0.0019	72.08	-2.0150	0.0026 (ppm)	Y 371.029
Zn (202.548 nm)	0.0017	ppm	0.0001	4.39	64.2100	0.0017 (ppm)	Y 371.029
Zr (343.823 nm)	0.0005	ppm	0.0002	46.69	33.4800	0.0005 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0990	472100.0000	0.0002	0.02
Y_R 371.029	1.1190	70700.0000	0.0121	1.08

Sample Name: CRI 5129894

Date: 10/19/2018 10:12:55 PM

Rack:Tube: S1:11

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008 R	ppm	0.0002	19.84	36.6500 R	0.0008 R (ppm)	Y 371.029
Al (396.152 nm)	0.0551 R	ppm	0.0083	14.98	-16.2600 R	0.0551 R (ppm)	Y 371.029
As (188.980 nm)	-0.0019 Ru	ppm	0.0017	87.99	4.4370 R	-0.0019 Ru (ppm)	Y 371.029
B (249.678 nm)	0.0046 R	ppm	0.0002	4.76	32.6200 R	0.0046 R (ppm)	Y 371.029
Ba (233.527 nm)	0.0001 R	ppm	0.0000	69.08	46.2600 R	0.0001 R (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001 R	ppm	0.0000	42.13	18.3100 R	0.0001 R (ppm)	Y 371.029
Ca (422.673 nm)	-0.0079 Ru	ppm	0.0027	34.38	56.8900 R	-0.0079 Ru (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0002 R	ppm	0.0000	4.56	2.1570 R	0.0002 R (ppm)	Y 371.029
Co (228.615 nm)	0.0009 R	ppm	0.0002	20.35	-9.7770 R	0.0009 R (ppm)	Y 371.029
Cr (205.560 nm)	0.0003 R	ppm	0.0001	30.42	2.8160 R	0.0003 R (ppm)	Y 371.029
Cu (324.754 nm)	-0.0017 Ru	ppm	0.0002	11.09	81.7300 R	-0.0017 Ru (ppm)	Y 371.029
Fe (238.204 nm)	0.0032 R	ppm	0.0012	38.56	-4.0970 R	0.0032 R (ppm)	Y_R 371.029
K (766.491 nm)	0.0575 R	ppm	0.0221	38.37	-45.6800 R	0.0575 R (ppm)	Y_R 371.029
Li (670.783 nm)	0.0001 Ru	ppm	0.0003	> 100.00	53.9500 R	0.0001 Ru (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0049 R	ppm	0.0001	2.61	18.4900 R	0.0049 R (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000 Ru	ppm	0.0000	57.79	60.0500 R	0.0000 Ru (ppm)	Y 371.029
Mo (204.598 nm)	0.0007 R	ppm	0.0002	23.76	3.6790 R	0.0007 R (ppm)	Y 371.029
Na (589.592 nm)	0.0718 R	ppm	0.0012	1.67	1812.0000 R	0.0718 R (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 Ru	ppm	0.0004	> 100.00	1.9370 R	0.0000 Ru (ppm)	Y 371.029
P (213.618 nm)	0.0016 R	ppm	0.0016	> 100.00	-8.5460 R	0.0016 R (ppm)	Y 371.029
Pb (220.353 nm)	0.0035 R	ppm	0.0005	15.55	-2.3310 R	0.0035 R (ppm)	Y 371.029
Sb (206.834 nm)	0.0044 R	ppm	0.0003	7.15	3.1050 R	0.0044 R (ppm)	Y 371.029
Se (196.026 nm)	-0.0005 Ru	ppm	0.0026	> 100.00	-1.4160 R	-0.0005 Ru (ppm)	Y 371.029
Si (251.611 nm)	0.1475 R	ppm	0.0466	31.59	408.6000 R	0.1475 R (ppm)	Y 371.029
Sn (189.925 nm)	0.0032 R	ppm	0.0001	3.33	-1.4910 R	0.0032 R (ppm)	Y 371.029
Sr (421.552 nm)	0.0001 R	ppm	0.0000	16.83	-19.5000 R	0.0001 R (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0034 R	ppm	0.0010	31.26	240.3000 R	0.0034 R (ppm)	Y 371.029
Tl (190.794 nm)	-0.0009 Ru	ppm	0.0012	> 100.00	-4.7990 R	-0.0009 Ru (ppm)	Y 371.029
V (292.401 nm)	-0.0006 Ru	ppm	0.0001	23.61	39.9100 R	-0.0006 Ru (ppm)	Y 371.029
W (207.912 nm)	0.0032 R	ppm	0.0007	23.24	-1.0330 R	0.0032 R (ppm)	Y 371.029
Zn (202.548 nm)	-0.0009 Ru	ppm	0.0001	6.14	16.3000 R	-0.0009 Ru (ppm)	Y 371.029
Zr (343.823 nm)	0.0005 R	ppm	0.0000	3.07	36.9800 R	0.0005 R (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.8820	808800.0000	0.0196	1.04
Y_R 371.029	1.7140	108200.0000	0.0335	1.96

Sample Name: ICSA 5129891

Date: 10/19/2018 10:15:18 PM

Rack:Tube: S1:12

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0007	ppm	0.0001	13.34	31.3100	0.0007 (ppm)	Y 371.029
Al (396.152 nm)	0.0415 K	ppm	0.0063	15.14	-311.3000 K	0.0415 K (ppm)	Y 371.029
As (188.980 nm)	-0.0030 u	ppm	0.0025	84.38	3.6820	-0.0030 u (ppm)	Y 371.029
B (249.678 nm)	0.0043	ppm	0.0001	1.29	28.9600	0.0043 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	38.53	30.8000	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	4.4370	0.0000 u (ppm)	Y 371.029
Ca (422.673 nm)	-0.0090 Ku	ppm	0.0020	22.43	51.9800 K	-0.0090 Ku (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-2.1820	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0010	ppm	0.0002	15.45	-9.1690	0.0010 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002	ppm	0.0002	> 100.00	2.3290	0.0002 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0020 u	ppm	0.0002	8.77	70.0200	-0.0020 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0026 K	ppm	0.0017	64.64	-6.8670 K	0.0026 K (ppm)	Y_R 371.029
K (766.491 nm)	0.0059 u	ppm	0.0228	> 100.00	-107.7000	0.0059 u (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0001 u	ppm	0.0006	> 100.00	43.4800	-0.0001 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0028 K	ppm	0.0011	40.84	13.0800 K	0.0028 K (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0002 u	ppm	0.0000	21.43	43.5400	-0.0002 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0001	ppm	0.0000	10.06	0.9912	0.0001 (ppm)	Y 371.029
Na (589.592 nm)	0.0409	ppm	0.0045	11.08	1597.0000	0.0409 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0003 u	ppm	0.0002	68.11	0.5231	-0.0003 u (ppm)	Y 371.029
P (213.618 nm)	-0.0011 u	ppm	0.0017	> 100.00	-10.9900	-0.0011 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0033	ppm	0.0002	6.71	-2.6880	0.0033 (ppm)	Y 371.029
Sb (206.834 nm)	0.0022	ppm	0.0002	8.72	0.8337	0.0022 (ppm)	Y 371.029
Se (196.026 nm)	0.0028	ppm	0.0004	13.27	1.0770	0.0028 (ppm)	Y 371.029
Si (251.611 nm)	0.0706	ppm	0.0297	42.04	221.1000	0.0706 (ppm)	Y 371.029
Sn (189.925 nm)	0.0030	ppm	0.0008	27.22	-1.6280	0.0030 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	27.08	-9.2890	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0017	ppm	0.0010	57.70	40.4700	0.0017 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0013 u	ppm	0.0015	> 100.00	-5.3560	-0.0013 u (ppm)	Y 371.029
V (292.401 nm)	-0.0008 u	ppm	0.0000	0.47	34.3100	-0.0008 u (ppm)	Y 371.029
W (207.912 nm)	0.0026	ppm	0.0005	17.56	-2.1570	0.0026 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0011 u	ppm	0.0001	4.90	13.1300	-0.0011 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	0.36	28.8300	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.9250	827200.0000	0.0470	2.44
Y_R 371.029	1.9040	120300.0000	0.0457	2.40

Sample Name: ICSAB 5129892

Date: 10/19/2018 10:17:43 PM

Rack:Tube: S1:13

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	-0.0001 Gu	ppm	0.0004	> 100.00	-128.3000 G	-0.0001 Gu (ppm)	Y 371.029
Al (396.152 nm)	0.0270 G	ppm	0.0002	0.83	-751.9000 G	0.0270 G (ppm)	Y 371.029
As (188.980 nm)	0.0027 Gu	ppm	0.0041	> 100.00	6.3420 G	0.0027 Gu (ppm)	Y 371.029
B (249.678 nm)	0.0076 G	ppm	0.0000	0.61	60.5500 G	0.0076 G (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 G	ppm	0.0000	> 100.00	50.0600 G	0.0000 G (ppm)	Y_R 371.029
Be (234.861 nm)	0.0001 G	ppm	0.0001	56.02	35.9900 G	0.0001 G (ppm)	Y 371.029
Ca (422.673 nm)	0.0123 G	ppm	0.0080	65.42	129.8000 G	0.0123 G (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 Gu	ppm	0.0000	94.30	-1.2980 G	-0.0001 Gu (ppm)	Y 371.029
Co (228.615 nm)	0.0059 G	ppm	0.0010	16.15	740.8000 G	0.0059 G (ppm)	Y 371.029
Cr (205.560 nm)	0.0000 Gu	ppm	0.0002	> 100.00	5.5960 G	0.0000 Gu (ppm)	Y 371.029
Cu (324.754 nm)	0.0013 G	ppm	0.0005	37.44	437.6000 G	0.0013 G (ppm)	Y 371.029
Fe (238.204 nm)	0.0061 G	ppm	0.0006	10.25	-8.1690 G	0.0061 G (ppm)	Y_R 371.029
K (766.491 nm)	-0.0794 Gu	ppm	0.0015	1.86	-146.8000 G	-0.0794 Gu (ppm)	Y_R 371.029
Li (670.783 nm)	-0.0105 Gu	ppm	0.0005	4.75	70.0200 G	-0.0105 Gu (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0040 G	ppm	0.0009	21.74	2.4480 G	0.0040 G (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0357 G	ppm	0.0004	1.01	3807.0000 G	0.0357 G (ppm)	Y 371.029
Mo (204.598 nm)	-0.0012 Gu	ppm	0.0004	33.25	1.3890 G	-0.0012 Gu (ppm)	Y 371.029
Na (589.592 nm)	0.1437 G	ppm	0.0153	10.66	2358.0000 G	0.1437 G (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0002 Gu	ppm	0.0008	> 100.00	2.0250 G	-0.0002 Gu (ppm)	Y 371.029
P (213.618 nm)	-0.0043 Gu	ppm	0.0007	16.93	-10.5200 G	-0.0043 Gu (ppm)	Y 371.029
Pb (220.353 nm)	-0.0004 Gu	ppm	0.0021	> 100.00	-33.5000 G	-0.0004 Gu (ppm)	Y 371.029
Sb (206.834 nm)	0.0063 G	ppm	0.0059	92.82	11.2000 G	0.0063 G (ppm)	Y 371.029
Se (196.026 nm)	0.0047 G	ppm	0.0012	24.50	1.0870 G	0.0047 G (ppm)	Y 371.029
Si (251.611 nm)	0.2074 G	ppm	0.1241	59.82	840.4000 G	0.2074 G (ppm)	Y 371.029
Sn (189.925 nm)	-0.0024 Gu	ppm	0.0008	35.83	-7.3350 G	-0.0024 Gu (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 Gu	ppm	0.0001	> 100.00	-44.5200 G	0.0000 Gu (ppm)	Y_R 371.029
Ti (336.122 nm)	27.4900 Go	ppm	0.3647	1.33	3398000.0000 G	27.4900 Go (ppm)	Y 371.029
Tl (190.794 nm)	0.0344 G	ppm	0.0039	11.33	-346.7000 G	0.0344 G (ppm)	Y 371.029
V (292.401 nm)	-0.0040 Gu	ppm	0.0002	5.95	671.5000 G	-0.0040 Gu (ppm)	Y 371.029
W (207.912 nm)	0.0028 G	ppm	0.0007	25.59	-2.0790 G	0.0028 G (ppm)	Y 371.029
Zn (202.548 nm)	-0.0014 Gu	ppm	0.0001	8.70	35.8400 G	-0.0014 Gu (ppm)	Y 371.029
Zr (343.823 nm)	0.0026 G	ppm	0.0013	51.33	150.7000 G	0.0026 G (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1180	480100.0000	0.0038	0.34
Y_R 371.029	1.1250	71080.0000	0.0103	0.91

Sample Name: RINSE 5129898

Date: 10/19/2018 10:20:06 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0001	27.11	14.2400	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0068	ppm	0.0002	3.50	-1066.0000	0.0068 (ppm)	Y 371.029
As (188.980 nm)	0.0011 u	ppm	0.0035	> 100.00	6.4840	0.0011 u (ppm)	Y 371.029
B (249.678 nm)	0.0065	ppm	0.0006	8.46	57.6000	0.0065 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	37.80	33.5100	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	19.01	11.3100	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	-0.0058 u	ppm	0.0033	56.13	66.2100	-0.0058 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000	ppm	0.0000	84.76	-3.3600	0.0000 (ppm)	Y 371.029
Co (228.615 nm)	0.0007	ppm	0.0004	66.84	-13.3900	0.0007 (ppm)	Y 371.029
Cr (205.560 nm)	0.0003 u	ppm	0.0005	> 100.00	2.7210	0.0003 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0005 u	ppm	0.0003	59.40	130.1000	-0.0005 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0014 u	ppm	0.0009	62.29	-24.4600	-0.0014 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.1123 u	ppm	0.0287	25.59	-249.6000	-0.1123 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0006	ppm	0.0006	> 100.00	87.7100	0.0006 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0028	ppm	0.0014	49.54	13.1400	0.0028 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000 u	ppm	0.0000	> 100.00	64.0400	0.0000 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0003 u	ppm	0.0004	> 100.00	1.7140	0.0003 u (ppm)	Y 371.029
Na (589.592 nm)	0.1401	ppm	0.0076	5.46	2288.0000	0.1401 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0006 u	ppm	0.0005	84.48	-1.3220	-0.0006 u (ppm)	Y 371.029
P (213.618 nm)	0.0048	ppm	0.0015	30.41	-5.7280	0.0048 (ppm)	Y 371.029
Pb (220.353 nm)	0.0023	ppm	0.0014	59.57	-4.7610	0.0023 (ppm)	Y 371.029
Sb (206.834 nm)	0.0012 u	ppm	0.0033	> 100.00	-0.1629	0.0012 u (ppm)	Y 371.029
Se (196.026 nm)	0.0008 u	ppm	0.0021	> 100.00	-0.3965	0.0008 u (ppm)	Y 371.029
Si (251.611 nm)	0.0037	ppm	0.0023	62.95	58.0200	0.0037 (ppm)	Y 371.029
Sn (189.925 nm)	0.0011 u	ppm	0.0019	> 100.00	-2.8490	0.0011 u (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-68.1300	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0179 Z	ppm	0.0063	35.14	2038.0000 Z	0.0179 Z (ppm)	Y 371.029
Tl (190.794 nm)	0.0008	ppm	0.0003	38.95	-2.9390	0.0008 (ppm)	Y 371.029
V (292.401 nm)	0.0001	ppm	0.0001	64.64	61.0500	0.0001 (ppm)	Y 371.029
W (207.912 nm)	0.0015	ppm	0.0008	53.83	-4.2120	0.0015 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0000	2.17	25.9700	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0000	75.70	-1.4330	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1020	473500.0000	0.0056	0.51
Y_R 371.029	1.1110	70170.0000	0.0029	0.26

Sample Name: RINSE 5129898

Date: 10/19/2018 10:22:29 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	39.07	11.8400	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0064	ppm	0.0000	0.42	-1075.0000	0.0064 (ppm)	Y 371.029
As (188.980 nm)	0.0005	ppm	0.0002	33.18	6.0340	0.0005 (ppm)	Y 371.029
B (249.678 nm)	0.0064	ppm	0.0004	6.23	56.3700	0.0064 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	26.01	33.8900	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	47.15	4.2330	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0046	ppm	0.0014	30.74	112.5000	0.0046 (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-4.8130	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0000 u	ppm	0.0003	> 100.00	-22.0000	0.0000 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0004	ppm	0.0001	18.18	3.5370	0.0004 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0003 u	ppm	0.0001	18.14	139.4000	-0.0003 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0011 u	ppm	0.0006	57.38	-23.0100	-0.0011 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0354 u	ppm	0.0021	5.95	-157.2000	-0.0354 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0008	ppm	0.0001	12.10	100.9000	0.0008 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0013	ppm	0.0010	81.07	9.1970	0.0013 (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000 u	ppm	0.0001	> 100.00	63.8400	0.0000 u (ppm)	Y 371.029
Mo (204.598 nm)	0.0004 u	ppm	0.0011	> 100.00	2.5720	0.0004 u (ppm)	Y 371.029
Na (589.592 nm)	0.1408	ppm	0.0108	7.66	2293.0000	0.1408 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0000 u	ppm	0.0004	> 100.00	1.9630	0.0000 u (ppm)	Y 371.029
P (213.618 nm)	-0.0026 u	ppm	0.0024	92.39	-12.5200	-0.0026 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0005	ppm	0.0006	> 100.00	-8.0890	0.0005 (ppm)	Y 371.029
Sb (206.834 nm)	0.0019	ppm	0.0008	39.66	0.5596	0.0019 (ppm)	Y 371.029
Se (196.026 nm)	0.0004 u	ppm	0.0015	> 100.00	-0.7445	0.0004 u (ppm)	Y 371.029
Si (251.611 nm)	-0.0013 u	ppm	0.0010	72.23	45.6600	-0.0013 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0028	ppm	0.0012	44.79	-1.7730	0.0028 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-62.8900	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0067 Z	ppm	0.0006	9.10	649.6000 Z	0.0067 Z (ppm)	Y 371.029
Tl (190.794 nm)	0.0003 u	ppm	0.0015	> 100.00	-3.4590	0.0003 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0001	> 100.00	54.3200	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0012	ppm	0.0008	65.61	-4.6770	0.0012 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0001	37.37	26.8100	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	70.57	3.5860	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1030	474000.0000	0.0022	0.20
Y_R 371.029	1.1260	71140.0000	0.0027	0.24

Sample Name: RINSE 5129898

Date: 10/19/2018 10:24:52 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0001	53.58	9.6720	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0069	ppm	0.0000	0.67	-1065.0000	0.0069 (ppm)	Y 371.029
As (188.980 nm)	0.0041	ppm	0.0002	5.93	8.5000	0.0041 (ppm)	Y 371.029
B (249.678 nm)	0.0060	ppm	0.0000	0.02	50.6800	0.0060 (ppm)	Y 371.029
Ba (233.527 nm)	0.0000 u	ppm	0.0000	30.23	39.1500	0.0000 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	67.55	9.1680	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	-0.0009 u	ppm	0.0018	> 100.00	87.9200	-0.0009 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001	ppm	0.0000	26.46	-0.7829	0.0001 (ppm)	Y 371.029
Co (228.615 nm)	0.0009	ppm	0.0003	31.96	-10.1500	0.0009 (ppm)	Y 371.029
Cr (205.560 nm)	0.0005	ppm	0.0000	1.89	4.1690	0.0005 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0001 u	ppm	0.0004	> 100.00	145.8000	-0.0001 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0016	ppm	0.0013	82.35	-11.1700	0.0016 (ppm)	Y_R 371.029
K (766.491 nm)	-0.0753 u	ppm	0.0431	57.16	-205.2000	-0.0753 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0016	ppm	0.0012	75.88	159.4000	0.0016 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0011 u	ppm	0.0019	> 100.00	8.8560	0.0011 u (ppm)	Y_R 371.029
Mn (259.372 nm)	0.0000 u	ppm	0.0000	> 100.00	62.0700	0.0000 u (ppm)	Y 371.029
Mo (204.598 nm)	-0.0005 u	ppm	0.0006	> 100.00	-1.8010	-0.0005 u (ppm)	Y 371.029
Na (589.592 nm)	0.1429	ppm	0.0046	3.21	2308.0000	0.1429 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0001 u	ppm	0.0004	> 100.00	2.1500	0.0001 u (ppm)	Y 371.029
P (213.618 nm)	0.0013 u	ppm	0.0025	> 100.00	-8.9010	0.0013 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0009	> 100.00	-9.0980	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0018	ppm	0.0024	> 100.00	0.4511	0.0018 (ppm)	Y 371.029
Se (196.026 nm)	0.0011	ppm	0.0005	47.11	-0.2376	0.0011 (ppm)	Y 371.029
Si (251.611 nm)	-0.0009 u	ppm	0.0018	> 100.00	46.7000	-0.0009 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0021	ppm	0.0029	> 100.00	-2.2060	0.0021 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-61.4500	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0040	ppm	0.0005	12.26	317.2000	0.0040 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0004 u	ppm	0.0001	16.95	-4.2330	-0.0004 u (ppm)	Y 371.029
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	57.8800	0.0000 u (ppm)	Y 371.029
W (207.912 nm)	0.0015 u	ppm	0.0022	> 100.00	-4.2280	0.0015 u (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0001	15.56	26.8700	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0001	ppm	0.0001	38.43	4.7920	0.0001 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1110	477300.0000	0.0041	0.37
Y_R 371.029	1.1140	70400.0000	0.0068	0.61

Sample Name: RINSE 5129898

Date: 10/19/2018 10:27:16 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0003	ppm	0.0002	69.07	15.8600	0.0003 (ppm)	Y 371.029
Al (396.152 nm)	0.0067	ppm	0.0001	1.09	-1069.0000	0.0067 (ppm)	Y 371.029
As (188.980 nm)	-0.0013 u	ppm	0.0047	> 100.00	4.8100	-0.0013 u (ppm)	Y 371.029
B (249.678 nm)	0.0064	ppm	0.0003	4.18	56.4200	0.0064 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	30.37	33.3300	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	28.52	7.8450	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0047 u	ppm	0.0072	> 100.00	112.8000	0.0047 u (ppm)	Y_R 371.029
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	55.39	-5.1660	-0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0001 u	ppm	0.0001	> 100.00	-21.7200	0.0001 u (ppm)	Y 371.029
Cr (205.560 nm)	0.0006	ppm	0.0005	91.98	4.3620	0.0006 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0002 u	ppm	0.0000	4.58	142.7000	-0.0002 u (ppm)	Y 371.029
Fe (238.204 nm)	-0.0013 u	ppm	0.0011	82.78	-23.8300	-0.0013 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0897 u	ppm	0.0498	55.45	-222.5000	-0.0897 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0013 u	ppm	0.0020	> 100.00	138.6000	0.0013 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0009 u	ppm	0.0020	> 100.00	8.2220	0.0009 u (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0001 u	ppm	0.0000	30.43	55.6400	-0.0001 u (ppm)	Y 371.029
Mo (204.598 nm)	-0.0002 u	ppm	0.0005	> 100.00	-0.3957	-0.0002 u (ppm)	Y 371.029
Na (589.592 nm)	0.1310	ppm	0.0040	3.08	2225.0000	0.1310 (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0006 u	ppm	0.0005	71.04	-1.4010	-0.0006 u (ppm)	Y 371.029
P (213.618 nm)	0.0024	ppm	0.0014	60.34	-7.9370	0.0024 (ppm)	Y 371.029
Pb (220.353 nm)	0.0008	ppm	0.0010	> 100.00	-7.5850	0.0008 (ppm)	Y 371.029
Sb (206.834 nm)	0.0028	ppm	0.0028	98.62	1.4770	0.0028 (ppm)	Y 371.029
Se (196.026 nm)	0.0000 u	ppm	0.0025	> 100.00	-1.0500	0.0000 u (ppm)	Y 371.029
Si (251.611 nm)	0.0004 u	ppm	0.0011	> 100.00	49.7500	0.0004 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0035	ppm	0.0001	2.71	-1.3190	0.0035 (ppm)	Y 371.029
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-48.0200	0.0000 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0025	ppm	0.0003	12.45	137.0000	0.0025 (ppm)	Y 371.029
Tl (190.794 nm)	0.0000 u	ppm	0.0028	> 100.00	-3.7340	0.0000 u (ppm)	Y 371.029
V (292.401 nm)	-0.0001 u	ppm	0.0004	> 100.00	53.2000	-0.0001 u (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0005	32.40	-3.8380	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0004 u	ppm	0.0001	19.41	26.3600	-0.0004 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0000	4.70	7.5980	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1100	476900.0000	0.0020	0.18
Y_R 371.029	1.1220	70860.0000	0.0169	1.50

Sample Name: RINSE 5129898

Date: 10/19/2018 10:29:39 PM

Rack:Tube: S1:8

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0002	ppm	0.0000	10.55	11.4300	0.0002 (ppm)	Y 371.029
Al (396.152 nm)	0.0067	ppm	0.0003	3.82	-1069.0000	0.0067 (ppm)	Y 371.029
As (188.980 nm)	0.0008 u	ppm	0.0040	> 100.00	6.2670	0.0008 u (ppm)	Y 371.029
B (249.678 nm)	0.0066	ppm	0.0003	4.89	58.5300	0.0066 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	2.39	31.7900	-0.0001 u (ppm)	Y_R 371.029
Be (234.861 nm)	0.0000	ppm	0.0000	34.41	7.6180	0.0000 (ppm)	Y 371.029
Ca (422.673 nm)	0.0040	ppm	0.0031	76.29	109.8000	0.0040 (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-2.4110	0.0001 u (ppm)	Y 371.029
Co (228.615 nm)	0.0005	ppm	0.0003	61.82	-15.9900	0.0005 (ppm)	Y 371.029
Cr (205.560 nm)	0.0004	ppm	0.0003	76.30	3.6250	0.0004 (ppm)	Y 371.029
Cu (324.754 nm)	-0.0006 u	ppm	0.0000	1.91	128.1000	-0.0006 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0004 u	ppm	0.0022	> 100.00	-16.6800	0.0004 u (ppm)	Y_R 371.029
K (766.491 nm)	-0.0672 u	ppm	0.0196	29.16	-195.5000	-0.0672 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0017	ppm	0.0002	10.81	165.6000	0.0017 (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0007	ppm	0.0010	> 100.00	7.7990	0.0007 (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0001 u	ppm	0.0000	37.88	53.9000	-0.0001 u (ppm)	Y 371.029
Mo (204.598 nm)	-0.0004 u	ppm	0.0011	> 100.00	-1.4770	-0.0004 u (ppm)	Y 371.029
Na (589.592 nm)	0.1285	ppm	0.0073	5.68	2207.0000	0.1285 (ppm)	Y_R 371.029
Ni (231.604 nm)	0.0002 u	ppm	0.0012	> 100.00	2.9080	0.0002 u (ppm)	Y 371.029
P (213.618 nm)	-0.0015 u	ppm	0.0022	> 100.00	-11.5100	-0.0015 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0000 u	ppm	0.0007	> 100.00	-9.0920	0.0000 u (ppm)	Y 371.029
Sb (206.834 nm)	0.0019	ppm	0.0012	63.71	0.5778	0.0019 (ppm)	Y 371.029
Se (196.026 nm)	0.0003 u	ppm	0.0010	> 100.00	-0.7931	0.0003 u (ppm)	Y 371.029
Si (251.611 nm)	0.0001 u	ppm	0.0006	> 100.00	49.0700	0.0001 u (ppm)	Y 371.029
Sn (189.925 nm)	0.0014	ppm	0.0018	> 100.00	-2.6860	0.0014 (ppm)	Y 371.029
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-82.2500	-0.0001 u (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0017	ppm	0.0003	16.70	37.3000	0.0017 (ppm)	Y 371.029
Tl (190.794 nm)	0.0018	ppm	0.0008	41.33	-1.4430	0.0018 (ppm)	Y 371.029
V (292.401 nm)	-0.0002 u	ppm	0.0002	89.61	51.5900	-0.0002 u (ppm)	Y 371.029
W (207.912 nm)	0.0017	ppm	0.0007	40.00	-3.7120	0.0017 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0003 u	ppm	0.0001	51.92	29.1100	-0.0003 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0002	ppm	0.0001	67.78	8.2270	0.0002 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.1110	477300.0000	0.0015	0.14
Y_R 371.029	1.1240	71000.0000	0.0048	0.43

Sample Name: Sample 226

Date: 10/19/2018 10:32:03 PM

Rack:Tube: 3:41

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration	Internal Standard
Ag (328.068 nm)	0.0008	ppm	0.0001	14.84	33.7900	0.0008 (ppm)	Y 371.029
Al (396.152 nm)	0.0310	ppm	0.0021	6.62	-540.6000	0.0310 (ppm)	Y 371.029
As (188.980 nm)	-0.0012 u	ppm	0.0029	> 100.00	4.9190	-0.0012 u (ppm)	Y 371.029
B (249.678 nm)	0.0046	ppm	0.0005	11.43	33.4500	0.0046 (ppm)	Y 371.029
Ba (233.527 nm)	-0.0003 u	ppm	0.0000	4.42	16.5900	-0.0003 u (ppm)	Y_R 371.029
Be (234.861 nm)	-0.0001 u	ppm	0.0000	14.94	-13.5400	-0.0001 u (ppm)	Y 371.029
Ca (422.673 nm)	-0.0117 u	ppm	0.0116	99.61	40.4600	-0.0117 u (ppm)	Y_R 371.029
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-2.9920	0.0000 u (ppm)	Y 371.029
Co (228.615 nm)	0.0011	ppm	0.0000	3.40	-7.3850	0.0011 (ppm)	Y 371.029
Cr (205.560 nm)	0.0002 u	ppm	0.0003	> 100.00	2.3500	0.0002 u (ppm)	Y 371.029
Cu (324.754 nm)	-0.0022 u	ppm	0.0002	7.72	65.1600	-0.0022 u (ppm)	Y 371.029
Fe (238.204 nm)	0.0030	ppm	0.0004	12.90	-5.2790	0.0030 (ppm)	Y_R 371.029
K (766.491 nm)	0.0083 u	ppm	0.0597	> 100.00	-104.8000	0.0083 u (ppm)	Y_R 371.029
Li (670.783 nm)	0.0002 u	ppm	0.0010	> 100.00	64.1100	0.0002 u (ppm)	Y_R 371.029
Mg (279.078 nm)	0.0007 u	ppm	0.0014	> 100.00	7.6070	0.0007 u (ppm)	Y_R 371.029
Mn (259.372 nm)	-0.0003 u	ppm	0.0000	5.93	33.3700	-0.0003 u (ppm)	Y 371.029
Mo (204.598 nm)	-0.0001 u	ppm	0.0002	> 100.00	0.1082	-0.0001 u (ppm)	Y 371.029
Na (589.592 nm)	0.0032 u	ppm	0.0158	> 100.00	1333.0000	0.0032 u (ppm)	Y_R 371.029
Ni (231.604 nm)	-0.0005 u	ppm	0.0005	85.28	-0.9112	-0.0005 u (ppm)	Y 371.029
P (213.618 nm)	-0.0005 u	ppm	0.0002	40.57	-10.3700	-0.0005 u (ppm)	Y 371.029
Pb (220.353 nm)	0.0029	ppm	0.0009	30.68	-3.6450	0.0029 (ppm)	Y 371.029
Sb (206.834 nm)	0.0026	ppm	0.0007	26.68	1.2480	0.0026 (ppm)	Y 371.029
Se (196.026 nm)	0.0018	ppm	0.0008	45.13	0.3379	0.0018 (ppm)	Y 371.029
Si (251.611 nm)	0.0163	ppm	0.0045	27.70	88.8500	0.0163 (ppm)	Y 371.029
Sn (189.925 nm)	0.0018	ppm	0.0014	77.00	-2.4230	0.0018 (ppm)	Y 371.029
Sr (421.552 nm)	0.0001	ppm	0.0000	82.85	-37.0700	0.0001 (ppm)	Y_R 371.029
Ti (336.122 nm)	0.0010	ppm	0.0000	2.80	-50.2100	0.0010 (ppm)	Y 371.029
Tl (190.794 nm)	-0.0011 u	ppm	0.0003	31.71	-5.0230	-0.0011 u (ppm)	Y 371.029
V (292.401 nm)	-0.0008 u	ppm	0.0002	19.91	35.2400	-0.0008 u (ppm)	Y 371.029
W (207.912 nm)	0.0027	ppm	0.0000	1.15	-1.8390	0.0027 (ppm)	Y 371.029
Zn (202.548 nm)	-0.0012 u	ppm	0.0001	6.83	12.2500	-0.0012 u (ppm)	Y 371.029
Zr (343.823 nm)	0.0004	ppm	0.0000	11.36	24.1600	0.0004 (ppm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.9100	820800.0000	0.0809	4.24
Y_R 371.029	1.8000	113700.0000	0.1053	5.85

Shipping and Receiving Documents

Tetra Tech

17885 Von Karman Ave, Suite 500
Irvine, CA 9261437830
(665)483-9900

NERT-M16

Groundwater Sampling

CHAIN-OF-CUSTODY

Laboratory Name: TestAmerica Irvine (949) 261-1022		Address: 17461 Dorian Ave Suite 100 Irvine, CA 92614-5817		Contact: Patty Mata (949) 260-3213	
Project Name: Tetra Tech NERT VER M16		Location: Henderson, NV		Analysis Requested	
Project No: M16		Project Contact: Maureen McMyler (702) 966-8340		Perchlorate E3140	
Vacuum Enhanced Recovery Treatability Study		Site Telephone No: (702) 966-8340		Chlorate/Chlorite E300.1B	
Report to: Maureen McMyler, 1093 Commerce Park Dr. Oak Ridge (865)220-4762		Project Manager/Supervisor: Arul Ayyaswami		Hexavalent Chromium SW7199	
Bill to: Sunshine Pryor, 350 Indiana St., Golden, CO 80401 (303) 217-5700				Total Chromium SW6010B	
				VOCs by SW8260B Unpreserved	
				Matrix Spike/ Spike Duplicate	

Sl. No	Sample Number	Date	Time	Grab	Matrix	Sample Description, Location	Number of Containers	Field Filtered Perchlorate? (Y/N)	Analysis Requested	Remarks
1	VER-01D-20181015	10/15/2018	1315	X	WG	VER-01D	7	Y	1 1 1 1 1 3	
2	VER-01I-20181015	10/15/2018	1140	X	WG	VER-01I	7	Y	1 1 1 1 1 3	
3	VER-01I-20181015-MS/MSD	10/15/2018	1140	X	WG	VER-01I	7	Y	1 1 1 1 1 3	
4	VER-20181015-TB	10/15/2018	0800	X	WQ	Trip Blank	2	N		
5	VER-20181015-FB	10/15/2018	1415	X	WQ	Field Blank	7	N	1 1 1 1 1 3	
6	VER-20181015-EB	10/15/2018	1400	X	WQ	Equipment Blank	7	N	1 1 1 1 1 3	
7										

Transfers Relinquished By (Signature): <i>Patty Mata</i>	Transfers Accepted By (Signature): <i>TALKS</i>	Date/Time: 10/15/18 1500	Special Instructions: 24 hour hold for Hexavalent Chromium Unpreserved VOCs: Short 7-day hold
Laboratory: <i>STAM</i>	Date/Time: 10-15-18 1600		
	Date/Time: 10/14/18 0710		
FedEx Airbill No.:	FedEx Airbill No.:		
Sampler's Signature: <i>Patty Mata</i>	Sampler's Signature: <i>Patty Mata</i>		

TAT Standard Rush Due Received Good Condition Y N Cold

cls SWA 520 2828 0511 *2.9/2.9 10/18*



Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 440-222284-1

Login Number: 222284
List Number: 1
Creator: Avila, Stephanie 1

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	