Laboratory Report

for

Tronox LLC - Henderson PO Box 55

Henderson , NV 89009

Attention: Susan Crowley Fax: (405) 302-4607

DATE OF ISSUE Jun 30 2009 MWH LABORATORIES

ADE Andy Eaton Project Manager Report#: 271465R Project: CLO4 PO#: Susan Crowle

Report#271465R replaces the original Report.

This report shall not be reproduced except in full, without the written approval of the laboratory. Laboratory certifies that the test results meet all NELAC requirements unless noted in the Comments section or the Case Narrative. Following the cover page are Comments, QC Report, QC Summary, Data Report, Hits Report, totaling 15 page[s].



July 2, 2009

Ms. Susan Crowley Tronox PO Box 55 Henderson, NV 89009

Subject: Case Narrative report 271465R

Sample receipt: The samples arrived at MWH on June 6, 2009, with proper chain of custody. All containers were received without any visible signs of tampering or breakage at proper temperature. Samples are identified on the acknowledgement, which is part of the report package, along with the chain of custody.

Case Narrative:

For the MWH Laboratories data the following issues were observed:

Report revised to remove duplicate QC.

Endrun Eaton

Note that for ion chromatography tests such as perchlorate, the exact analysis time is not shown on the report. Only the date of analysis appears. The time normally defaults to 00:00.

If you have any questions, do not hesitate to contact us.

Sincerely yours,

Andrew Eaton, PhD Project Manager

750 Royal Oaks Drive Suite 100 Monrovia, CA 91016 TEL 626-3865-1100 FAX 626-386-1101 www.mwhlabs.com

CHAIN OF CUSTODY RECORD

ONTGOMERY WATSON LABORATORIES
MONTG

MWLABS USE ONLY:

750 Royal O	aks Dr, S	uite 100, Monrovia, CA 9	750 Royal Oaks Dr, Suite 100, Monrovia, CA 91016-3629 LOGIN COMMENTS:					ı	SAMPL	ES CHE	SAMPLES CHECKED/LOGGED IN BY:	GGED IN	;;	7	/35		
(626) 568-6400	8	(800) 566-5227						1	SAMPL	ETEMP	SAMPLE TEMP, RECEIPT ATLAB:	T ATLAB		30			
				1 	,				BLUE ICE:	ij	FROZEN _	l	TALLY F	PARTIALLY FROZEN THAWED	THAWE		•••••••••••••••••••••••••••••••••••••••
TO BE COMPLETED BY SAMPLER:	TED BY SA	MPLER:															Г
COMPANY / PROJECT NAME	OJECT NAN	끹	PROJECT JOB #1 P.O.#			照	ER TO A	TTACHE	ED BOT	TLE OR	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	ANALYSI	SS		Ц	(check for yes)	
Tronox LLC			Annual Groundwater Sampling - April / May					ANALYS	ES REQ	UIRED (r	ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)	in all tests	requirec	for each	sample li	(ə.	
Sampler Brian Ho / Susan Crowley	san Crowle	(702) 65	Tronox LLC PO Box 55 PO Box 54 Henderson, NV 89009						*OK	Sug	101					SAMPLER	
TIME	DATE	LOCATIO	DENT	*XIATAM BARD	СОМР	Hq	Specific Cond	Total Chromlu D Juelevsxalent	Perchlorate, C	ا00 الأيرار (م	M. CaM				<u>-</u> -	COMMENTS	
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* MATRIX TYPES:	TYPES:	Repor		1					2000	1	4146 52	10/2010		E 6	Seported	Reported by Weight:	
		" " A	<pre>CFW = Chlor(am)inated Finished Water FW = Other Finished Water</pre>	\$ &	W = Kaw W = Raw	RGW = Kaw Ground Water RSW = Raw Surface Water	vater Vater		WW."	Other	CWW = Chlorinated waste water WW = Other Waste Water	e water		, w	SL = Sludge	<u>o</u> _	

SIGNATURE	PRINT NAME	COMPANYITILE	DATE TIME
RELINGUISHEDEK	Dal 2415	CES/ GEDLOGIS7	0/2/04 1400
RECEIVED BY:	JOE Sanchie	MWH	10.3-07 10 rad
RELINQUISHED BY:			
RECEIVED BY:			

CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

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	MWH Laboratories	MWH Laboratories, a Division of MWH Americas, Inc. Bottle Order for Tronox LLC- Henderson	as, inc. Bottle (Order for	Tronox LLC	- Henderso	<u> </u>		Page 1 of 47684
	750 Royal Oaks Ave Monrovia CA 91016	750 Royal Oaks Avenue Suite 100 Monrovia CA 91016 (626) 386-1100 FAX (626) 386-1124	Standing 386-1124	Client Coc	Client Code KERRMCGEE-MP	EE-MP	M Monthly	Per	Period
#0s	Andrew Eaton (626) 386-1125 47684 12374	Your MWI Direct Ph RS	a Refi	Project Code PO# / Job# Blanket PO	Project Code CLO4 PO# / Job# GWREMEDIATION Blanket PO rn this Paper with your samples	DIATION Ir samples		·	
Created by Order Date 0.04/(16)69 Date Needed by Client	0 Y.S /	Shi Veolia Water Gate 1 8000 West L Henderson,	is to	Tron P.O.E Hens	Send Report to Tronox LLC Henderson Plant PO Box 55. Henderson, NV 89009.	Send Report to Henderson Plant NV 89009		Billing Address Tronox L.L.C	Billing Address Tronox Li.C. Attn: Accounts Payable PO BOX 268859 Oklahoma City, OK 73126-8859
Date Samples to Arrive at MV	Date Samples to Arrive at MWL SHIP-LOCATION # of Samples Tests	ATTN: .Susan.Crowley PHONE: 702-651.2234		ATTN: PHONE: FAX: S-Qty for each sam	ATTN: Susan Crowley. PHONE: 702-651-2234 FAX: 702-651-2310 Bottles-Qty for each sample, type & preservative if any	owley 2234 2310 Preservative	if any	# N	Ouote# GJY Important Comments
1.4	CLO4, TDS		1 250 ml poly //	1 250 ml poly /no preservative			1	1	These sites are monthly till further notice.
· · · ·	SHEET OF LABELS WITH WELL-IDS	WITH WELL-IDS	see comments s	section		·	. 1	i I	Shipping - please send bottles in cooler rather than a box
· · · · ·							l	l	PC-86, PC-89, PC-91, PC-95,
							ı	I	PC-16, PC-16, PC-17, PC-17, PC-18, PC-56, PC-101R
. '								l	MW-K2, MW-K4
				·			•	I	ARF-1, ARF-2, ARF-3, ARF-3 ARP-5, ARP-6, ARP-7, PC-53
, l_							ı	I	M-87, PC-98R; PC-56, PC-58;
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								ì	bottle order and IDs updated 9/9/03
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From: Origin ID: LASA (702) 651-2230

Shipping Tronox LLC

8000 lake Mead parkway

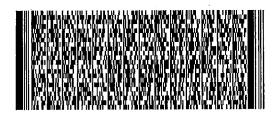
henderson, NV 89015

SHIP TO: (626) 568-6400

BILL SENDER

sample receiving **Montgomery Watson labs** 750 ROYAL OAKS DR # 100

MONROVIA, CA 91016



Ship Date: 02JUN09 ActWgt: 40.0 LB CAD: 100263135/INET9011 Account#: S *********

Delivery Address Bar Code



Dims: 21 X 15 X 15 IN

Ref# Invoice #

PO# Dept#

TRK# 0201 7966 5846 7844 WED - 03JUN

PRIORITY OVERNIGHT DSR

91016 CA-US BUR



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income Interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

MWH Laboratories

750 Royal Oaks Drive, Monrovia, CA 91016 PHONE: 626-386-1100/FAX: 626-386-1101

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Tronox LLC - Henderson

PO Box 55

Henderson, NV 89009 Attn: Susan Crowley Phone: 702-651-2234 Customer Code: KERRMCGEE-MP

PO#: Susan Crowley PO

Group#: 271465 Project#: CLO4

Proj Mgr: Andrew Eaton Phone: (626) 386-1125

The following samples were received from you on 06/03/09. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

Sample#	Sample Id			Matrix		Sample Dat	e
		Tests :	Scheduled				
2906030033	M-121			Water		//www.com/article-com/articles/2007/00/00/00/00/00/00/00/00/00/00/00/00/	9 07:46:00
202502024	M 100	CLO4	CR6010	P Water	T	TDS 02-jun-200	9 08:26:00
2906030034	M-120	CLO4	CR6010	P	${f T}$	TDS	
2906030035	FB060209		85.461.5	Water	T	02-jun-200 TDS	9 09:05:00
2906030036	TR-4	CLO4	CR6010	P Water	1		09:27:00
2500030030		ALK	ANION1	BALANCE	CA	CATION1	CL
		CLO4	CO3 MG	CR6010 MN	EC NA	FE NO3	HCO3 NO3A
		P	PH	SO4	T	TDS	
2906030037	DUPLICATE		07.601.0	Water	m	02-jun-20 TDS	00:00:00
		CLO4	CR6010	P	T	108	

Test Acronym Description

Test Acronym	Description
ALK	Alkalinity in CaCO3 units
ANION1	Anion Sum - Calculated
BALANCE	Tonic Balance - Calculated
CA	Calcium, Total, ICAP
CATION1	Cation Sum - Calculated
CL	Chloride
CLO4	Perchlorate
CO3	Carbonate as CO3, Calculated
CR6010	Chromium, Total, ICAP
EC	Specific Conductance at 25 C
FE	Iron, Total, ICAP
HCO3	Bicarb.Alkalinity as HCO3, calc
K	Potassium, Total, ICAP
MG	Magnesium, Total, ICAP
MN	Manganese, Total, ICAP
NA	Sodium, Total, ICAP

Tronox LLC - Henderson

PO Box 55

Henderson, NV 89009 Attn: Susan Crowley Phone: 702-651-2234 Customer Code: KERRMCGEE-MP

PO#: Susan Crowley PO

Group#: 271465
Project#: CLO4
Proj Mgr: Andrew Eaton
Phone: (626) 386-1125

Test Acronym Description

Test Acronym	Description
NO3	Nitrate as Nitrogen by IC
AEON	Nitrate as NO3 (calc)
P PH	Metals sample pH PH (H3=past HT, not compliant)
SO4	Sulfate
T	Metals Turbidity
TDS	Total Dissolved Solid (TDS)

Client Specific Comments

I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

Signature:	acator

Group Comments

Report revised to correct QC for CL and CR6010.

Laboratory Hits Report #271465

Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 03-jun-2009 13:53:30

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2906030033	M-121				
06/17/09 06/15/09 06/18/09 06/05/09	Perchlorate Total Dissolv	ion performed.	0.093 Y 1940 2270	500	mg/l Yes/No ug/l mg/l	0.010 80 10
06/15/09 06/19/09 06/05/09	Perchlorate	M-120 ion performed. ed Solid (TDS) FB060209	Y 166 1980	500	Yes/No ug/l mg/l	40 10
	2906030036	TR-4				
06/04/09 06/18/09 06/05/09 06/05/09 06/09/09 06/13/09 06/17/09 06/05/09 06/03/09 06/03/09 06/05/09 06/05/09 06/05/09	Calcium, Tota Cation Sum - Chloride Chromium, Tot. Magnesium, To Nitrate as No Nitrate as Ni PH (H3=past H Potassium, To Sodium, Total	alculated nity as HCO3,calc l, ICAP Calculated al, ICAP tal, ICAP 3 (calc) trogen by IC T, not compliant) tal, ICAP	68 13. 82.8 93 13. 280 0.030 20 24 1.34 7.8 8.5 150 1420	250 45 10 6.5-8.5	mg/l meq/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg	2.0 0.0010 2.0 2.0 0.0010 10 0.010 0.20 0.88 0.50 0.010 2.0 2.0

Laboratory Hits Report #271465

Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 03-jun-2009 13:53:30

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2906030036	TR-4				
06/03/09 06/05/09	Sulfate Total Dissolve	ed Solid (TDS)	163 874	250 500	mg/l mg/l	2.5 10
	2906030037	DUPLICATE				
06/16/09 06/05/09			0.028 888	500	mg/l mg/l	0.010 10

Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 06/03/09

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
M-121	(29060300	33)	Sample	ed on 06/02/09 07:46				
	06/18/09 15:51	488356	(EPA 314) Perchlorate	1940	ug/l	80	20
06/15/09	06/17/09 00:00	488229	(ML/EPA 6010	B) Chromium, Total, ICAP	0.093	mg/l	0.010	1
	06/15/09 11:54		(EPA 200 Pre	p) Metals digestion performed.	Y	Yes/No	0	1
06/05/09	06/05/09 15:50	487591	(E160.1/SM25	40C) Total Dissolved Solid (TDS)	2270	mg/l	10	1
M-120	(29060300	34)	Sample	ed on 06/02/09 08:26				
	06/19/09 00:00	488356	(EPA 314) Perchlorate	166	ug/l	40	10
06/15/09	06/17/09 00:00	488229	(ML/EPA 6010	B) Chromium, Total, ICAP	ND	mg/l	0.010	1
	06/15/09 11:54		(EPA 200 Pre	p) Metals digestion performed.	Y	Yes/No	0	1
06/05/09	06/05/09 15:50	487591	(E160.1/SM25	40C) Total Dissolved Solid (TDS)	1980	mg/l	10	1
FB060	209 (29060	30035) Sam	npled on 06/02/09 09	:05			
	06/19/09 00:00		(EPA 314) Perchlorate	ND	ug/l	4.0	1
06/15/09	06/17/09 00:00	488229	(ML/EPA 6010	B) Chromium, Total, ICAP	ND	mg/l	0.010	1
06/05/09	06/05/09 15:50	487591	(E160.1/SM25	40C) Total Dissolved Solid (TDS)	ND	mg/l	10	1
TR-4	(290603003	(6)	Sampled	i on 06/02/09 09:27				
	06/04/09 00:00	486965	(SM 2320B) Alkalinity in CaCO3 units	68	mg/l	2.0	1
	06/18/09 16:53		(ML/SM1030E) Anion Sum - Calculated	13.	meq/l	0.0010	1
	06/05/09 01:54	487209	(ML/EPA 200.	7) Calcium, Total, ICAP	93	mg/l	2.0	2
	06/09/09 11:59		(SM 1030E) Cation Sum - Calculated	13.	meq/l	0.0010	1
	06/13/09 01:57	487988	(ML/EPA 300.	0) Chloride	280	mg/l	10	10
	06/19/09 00:00	488356	(EPA 314) Perchlorate	ND	ug/l	4.0	1
	06/05/09 13:36		(SM 2330B) Carbonate as CO3, Calculated	ND	mg/l	2.0	1
06/15/09	06/17/09 00:00	488229	(ML/EPA 6010	B) Chromium, Total, ICAP	0.030	mg/l	0.010	1
	06/05/09 10:42	487004	(SM 2510B) Specific Conductance at 25 C	1420	umho/cm	2.0	1
	06/05/09 01:54	487219	(ML/EPA 200.	.7) Iron, Total, ICAP	ND	mg/l	0.040	2
	06/05/09 13:33		(SM 2330B) Bicarb.Alkalinity as HCO3,ca	lc 82.8	mg/l	2.0	1
	06/05/09 01:54	487224	(ML/EPA 200.	.7) Potassium, Total, ICAP	8.5	mg/l	2.0	2
	06/05/09 01:54	487230	(ML/EPA 200.	.7) Magnesium, Total, ICAP	20	mg/l	0.20	2
	06/05/09 01:54	487235	(ML/EPA 200.	.7) Manganese, Total, ICAP	ND	mg/l	0.0040	2
	06/05/09 01:54			7) Sodium, Total, ICAP	150	mg/l	2.0	2

Tronox LLC - Henderson (continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
	06/03/09 14:30	486964	(ML/EPA 300.0)	Nitrate as Nitrogen by IC	1.34	mg/l	0.50	5
	06/03/09 23:32	486872	(ML/EPA 300.0)	Nitrate as NO3 (calc)	24	mg/l	0.88	2
	06/04/09 11:08	486900	(SM 4500-HB)	PH (H3=past HT, not compliant)	7.8	Units	0.010	1
	06/03/09 14:30	487014	(ML/EPA 300.0)	Sulfate	163	mg/l	2.5	5
06/05/09	06/05/09 15:50	487591	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	874	mg/l	10	1
DUPLI	CATE (2906	03003'	7) Samp	led on 06/02/09 00:0	0			
	06/19/09 00:00	488356	(EPA 314)	Perchlorate	ND	ug/l	4.0	1
06/15/09	06/16/09 00:00	488241	(ML/EPA 6010B)	Chromium, Total, ICAP	0.028	mg/l	0.010	1
06/05/09	06/05/09 15:50	487591	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	888	mg/l	10	1

Tronox LLC - Henderson

Analysis Date: 06/03/2009 QC Ref #486872 - Nitrate as NO3 (calc)

2906030036

TR-4

Analyzed by: sxk

QC Ref #486900 - PH (H3=past HT, not compliant) Analysis Date: 06/04/2009

2906030036

TR-4

Analyzed by: sar

Analysis Date: 06/03/2009 OC Ref #486964 - Nitrate as Nitrogen by IC

2906030036

TR-4

Analysis Date: 06/04/2009 QC Ref #486965 - Alkalinity in CaCO3 units

2906030036

TR-4

Analyzed by: anh

Analyzed by: sxk

QC Ref #487004 - Specific Conductance at 25 C Analysis Date: 06/05/2009

2906030036

TR-4

Analyzed by: sar

Analysis Date: 06/03/2009 OC Ref #487014 - Sulfate

2906030036

TR-4

Analyzed by: sxk

QC Ref #487209 - Calcium, Total, ICAP Analysis Date: 06/05/2009

2906030036

TR-4

Analyzed by: csk

Analysis Date: 06/05/2009 QC Ref #487219 - Iron, Total, ICAP

> 2906030036 TR-4

Analyzed by: csk

2906030036

QC Ref #487224 - Potassium, Total, ICAP Analysis Date: 06/05/2009 2906030036 TR-4 Analyzed by: csk QC Ref #487230 - Magnesium, Total, ICAP Analysis Date: 06/05/2009 2906030036 TR-4 Analyzed by: csk QC Ref #487235 - Manganese, Total, ICAP Analysis Date: 06/05/2009 2906030036 TR-4 Analyzed by: csk QC Ref #487241 - Sodium, Total, ICAP Analysis Date: 06/05/2009 2906030036 TR-4 Analyzed by: csk QC Ref #487591 - Total Dissolved Solid (TDS) Analysis Date: 06/05/2009 2906030033 M-121 Analyzed by: jrf 2906030034 M-120 Analyzed by: jrf Analyzed by: jrf 2906030035 FB060209 Analyzed by: jrf 2906030036 TR-4 Analyzed by: jrf 2906030037 DUPLICATE QC Ref #487988 - Chloride Analysis Date: 06/13/2009 2906030036 TR-4 Analyzed by: sxk QC Ref #488229 - Chromium, Total, ICAP Analysis Date: 06/17/2009 2906030033 M-121 Analyzed by: csk 2906030034 M-120 Analyzed by: csk 2906030035 Analyzed by: csk FB060209

TR-4

Analyzed by: csk

QC Ref #488241 - Chromium,	Total, ICAP	Analysis Date: 06/16/2009
2906030037	DUPLICATE	Analyzed by: csk

QC Ref #488356 - Perchlorate Analysis Date: 06/18/2009

2906030033	M-121	Analyzed by: ser
2906030034	M-120	Analyzed by: ser
2906030035	FB060209	Analyzed by: ser
2906030036	TR-4	Analyzed by: ser
2906030037	DUPLICATE	Analyzed by: ser

Tronox LLC - Henderson

QC Ref	#486900 PH (H3=p	past HT	, not c	compli	.ant)		
QC AASPKSMP DUP	Analyte Spiked sample PH (H3=past HT, not compliant)	Spiked Lab # 29 7.75	Recovered 06030470 7.68	Units UNIT UNIT	Yield (%)	Limits (%) (0-0) (0-20)	RPD (%)
QC Ref	#486964 Nitrate	as Nit	rogen b	y IC			
QC AASPKSMP LCS1 LCS2 MBLK MRL_CHK MS MSD MS_2ND RPD_LCS RPD_MS	Analyte Spiked sample Nitrate as Nitrogen by IC	Spiked Lab # 29 2.5 2.5 ND 0.050 1.25 1.25 1.25 96.800 100.800	Recovered 20090603044 2.42 2.44 <0.10 0.045 1.26 1.27 1.27 97.600 101.600	Units 17MGL MGL MGL MGL MGL MGL MGL MGL MGL MGL	96.8 97.6 90.0 100.8 101.6 101.6 0.8	Limits (%) (0-0) (90-110) (90-110) (50-150) (87-121) (87-121) (87-121) (0-20) (0-20)	RPD (%)
QC Ref	#486965 Alkalin	ity in	CaCO3 u	nits			
QC MS LCS1 LCS2 MBLK MRL_CHK MS MS2 MSD MSD2 RPD_LCS RPD_MS	Analyte Spiked sample Alkalinity in CaCO3 units	Spiked Lab # 29 100 100 ND 2.00 100 100 100 95.000 98.000	Recovered 06030112 95.0 96.0 <2.0 1.37 98.0 60.0 68.0 61.0 96.000 68.000	Units MGL	Yield (%) 95.0 96.0 68.5 98.0 60.0 61.0 1.0 36.1	Limits (%) (0-0) (90-110) (90-110) (50-150) (80-120) (80-120) (80-120) (80-120)	RPD (%)

Calcium, Total, ICAP

MBLK

QC	Ref	#487004	Specific	Condu	ctance	at 25	C		
•		Bur a Turk a		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
QC DUP		Analyte Specific Conductance	at 25 C	310	303	UMHO	11010 (8)	(0-20)	2.3
DUP2		Specific Conductance		702	700	UMHO		(0-20)	0.3
LCS1		Specific Conductance		1000	989	UMHO	98.9	(90-110)	
LCS2		Specific Conductance		1000	993	UMHO	99.3	(90-110)	
MBLK		Specific Conductance		ND	<2.0	UMHO	33.0	() ()	
		Specific Conductance		2.00	1.79	UMHO	89.5	(50-150)	
MRL_CHK		Specific Conductance	ac 25 C	2.00	1.75	omio	03.3	(30 130)	
QC	Ref	#487014	Sulfate						
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 29	20090603044	7MGL		(0-0)	
LCS1		Sulfate		50	50.2	MGL	100.4	(90-110)	
LCS2		Sulfate		50	50.5	MGL	101.0	(90-110)	
MBLK		Sulfate		ND	<0.50	MGL			
MRL_CHK		Sulfate		0.25	0.243	MGL	97.2	(50-150)	
MS		Sulfate		25	25.1	MGL	100.4	(84-130)	
MSD		Sulfate		25	24.6	MGL	98.4	(84-130)	
MS_2ND		Sulfate		25	27.0	MGL	108.0	(84-130)	
RPD_LCS		Sulfate		100.400	101.000	MGL	0.6	(0-20)	
RPD_MS		Sulfate		100.400	98.400	MGL	2.0	(0-20)	
			_	_					
QC	Ref	#487209	Calcium,	Total	, ICAP				
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 29	05270343	MGL		(0-0)	
AASPKSMP		Spiked sample		Lab # 29	06030176	MGL		(0-0)	
LCS1		Calcium, Total, ICAP		50	50.9	MGL	101.8	(85-115)	
LCS2		Calcium, Total, ICAP		50	50.6	MGL	101.2	(85-115)	

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ND

<1.0

MGL

(50-150)

Tronox LLC - Henderson (continued)

Calcium, Total, ICAP

Potassium, Total, ICAP

Potassium, Total, ICAP

MRL_CHK

MRL_CHK

MS

MS	Calcium, Total, ICAP		50	50.5	MGL	101.0	(70-130)	
MS2	Calcium, Total, ICAP		50	50.8	MGL	101.6	(70-130)	
MSD	Calcium, Total, ICAP		50	50.7	MGL	101.4	(70-130)	
MSD2	Calcium, Total, ICAP		50	50.8	MGL	101.6	(70-130)	
RPD_LCS	Calcium, Total, ICAP		101.800	101.200	MGL	0.6	(0-20)	
RPD_MS	Calcium, Total, ICAP		101.000	101.400	MGL	0.4	(0-20)	
QC Ref	#487219	Iron, To	otal, l	CAP				
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample		Lab # 29	05270343	MGL		(0-0)	
AASPKSMP	Spiked sample		Lab # 29	06030176	MGL		(0-0)	
LCS1	Iron, Total, ICAP		5.0	4.98	MGL	99.6	(85-115)	
LCS2	Iron, Total, ICAP		5.0	4.95	MGL	99.0	(85-115)	
MBLK	Iron, Total, ICAP		ND	<0.020	MGL			
MRL_CHK	Iron, Total, ICAP		0.020	0.0244	MGL	122.0	(50-150)	
MS	Iron, Total, ICAP		5.0	4.93	MGL	98.6	(70-130)	
MS2	Iron, Total, ICAP		5.0	4.95	MGL	99.0	(70-130)	
MSD	Iron, Total, ICAP		5.0	4.97	MGL	99.4	(70-130)	
MSD2	Iron, Total, ICAP		5.0	4.97	MGL	99.4	(70-130)	
RPD_LCS	Iron, Total, ICAP		99.600	99.000	MGL	0.6	(0-20)	
RPD_MS	Iron, Total, ICAP		98.600	99.400	MGL	0.8	(0-20)	
QC Ref #487224 Potassium, Total, ICAP								
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample		Lab # 29	05270343	MGL		(0-0)	
AASPKSMP	Spiked sample		Lab # 29	06030176	MGL		(0-0)	
LCS1	Potassium, Total, ICA	P	20	20.0	MGL	100.0	(85-115)	
LCS2	Potassium, Total, ICA	P	20	20.0	MGL	100.0	(85-115)	
MBLK	Potassium, Total, ICA	P	ND	<1.0	MGL			

1.000

1.06

MGL

106.0

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1.000

20

0.979

20.2

MGL

MGL

97.9

101.0

(50-150)

(70-130)

Potassium, Total, IC. Potassium, Total, IC. Potassium, Total, IC.	CAP 20 CAP 20 CAP 100.0		MGL MGL	101.5	(70-130) (70-130) (70-130) (0-20) (0-20)	
#487230	Magnesium,	Total, IC	!AP			
Magnesium, Total, IC.	Lab :	# 29 05270343 # 29 06030176 20.5 20.5 <0.10 0 0.103 20.5 20.8 20.7 20.9	MGL	102.5 102.5 103.0 102.5 104.0 103.5 104.5	Limits (%) (0-0) (0-0) (85-115) (85-115) (70-130) (70-130) (70-130) (70-130) (70-130) (0-20)	RPD (%)
#487235	Manganese,	Total, IC	!AP			
Manganese, Total, IC. Manganese, Total, IC. Manganese, Total, IC. Manganese, Total, IC.	Lab : Lab : Lab : CAP 0.50 CAP ND CAP ND CAP 0.002 CAP 0.50	# 29 05270343 # 29 06030176 0.510 0.506 <0.0020 0.0024 0.500	MGL MGL MGL MGL MGL	102.0 101.2 120.0 100.0	(0-0) (0-0) (85-115) (85-115) (50-150) (70-130)	RPD (%)
	Potassium, Total, 10 #487230 Analyte Spiked sample Magnesium, Total, 10 Manganese, Total, 10	Potassium, Total, ICAP Analyte Spiked sample Spiked sample Magnesium, Total, ICAP Magnese, Total, ICAP Manganese, Total, ICAP	Potassium, Total, ICAP 20 20.9 Potassium, Total, ICAP 100.000 100.000 Potassium, Total, ICAP 101.000 101.500 #487230 Magnesium, Total, ICAP 101.000 101.500 Analyte Spiked sample Lab # 29 05270343 Spiked sample Lab # 29 06030176 Magnesium, Total, ICAP 20 20.5 Magnesium, Total, ICAP 20 20.5 Magnesium, Total, ICAP ND <0.100 Magnesium, Total, ICAP 20 20.5 Magnesium, Total, ICAP 20 20.8 Magnesium, Total, ICAP 20 20.7 Magnesium, Total, ICAP 20 20.9 Magnesium, Total, ICAP 102.500 102.500 Magnesium, Total, ICAP 102.500 102.500 Magnesium, Total, ICAP 102.500 103.500 #487235 Manganese, Total, ICAP 0.50 0.510 Manganese, Total, ICAP 0.50 0.510 Manganese, Total, ICAP 0.50 0.506 Manganese, Total, ICAP 0.50 0.506 Manganese, Total, ICAP 0.50 0.506 Manganese, Total, ICAP 0.002 0.0024 Manganese, Total, ICAP 0.002 0.0024 Manganese, Total, ICAP 0.50 0.500	#487230 Magnesium, Total, ICAP 20 20.3 MGL Potassium, Total, ICAP 100.000 100.000 MGL Potassium, Total, ICAP 101.000 101.500 MGL #487230 Magnesium, Total, ICAP Analyte Spiked Recovered Units Spiked sample Lab # 29 05270343 MGL Magnesium, Total, ICAP 20 20.5 MGL Magnesium, Total, ICAP ND <0.100 MGL Magnesium, Total, ICAP 20 20.5 MGL Magnesium, Total, ICAP 20 20.8 MGL Magnesium, Total, ICAP 20 20.8 MGL Magnesium, Total, ICAP 20 20.9 MGL Magnesium, Total, ICAP 20 20.9 MGL Magnesium, Total, ICAP 102.500 102.500 MGL Magnesium, Total, ICAP 102.500 102.500 MGL Magnesium, Total, ICAP 102.500 103.500 MGL #487235 Manganese, Total, ICAP Analyte Spiked Recovered Units Spiked sample Lab # 29 06030176 MGL Manganese, Total, ICAP 0.50 0.510 MGL Manganese, Total, ICAP 0.50 0.510 MGL Manganese, Total, ICAP 0.50 0.506 MGL Manganese, Total, ICAP 0.50 0.506 MGL Manganese, Total, ICAP 0.50 0.500 MGL Manganese, Total, ICAP 0.002 0.0024 MGL	Potassium, Total, ICAP 20 20.3 MGL 101.5 Potassium, Total, ICAP 100.000 100.000 MGL 0.0 Potassium, Total, ICAP 101.000 101.500 MGL 0.5 Potassium, Total, ICAP 20 20.7 MGL 102.5 Magnesium, Total, ICAP 20 20.5 MGL 102.5 Magnesium, Total, ICAP 20 20.5 MGL 102.5 Magnesium, Total, ICAP ND <0.100 MGL 103.0 Magnesium, Total, ICAP 20 20.5 MGL 102.5 Magnesium, Total, ICAP 20 20.8 MGL 103.0 Magnesium, Total, ICAP 20 20.7 MGL 103.5 Magnesium, Total, ICAP 20 20.7 MGL 103.5 Magnesium, Total, ICAP 20 20.9 MGL 104.0 Magnesium, Total, ICAP 20 20.9 MGL 104.5 Magnesium, Total, ICAP 102.500 102.500 MGL 104.5 Magnesium, Total, ICAP 102.500 103.500 MGL 104.5 Manganese, Total, ICAP 105.0 0.510 MGL 102.0 Manganese, Total, ICAP 0.50 0.510 MGL 102.0 Manganese, Total, ICAP 0.50 0.506 MGL 101.2 Manganese, Total, ICAP 0.50 0.506 MGL 101.2 Manganese, Total, ICAP 0.50 0.500 MGL 101.0 Manganese, Total, ICAP 0.50 0.500 MGL 101.0 Manganese, Total, ICAP 0.50 0.500 MGL 101.0 Manganese, Total, ICAP 0.500 0.500 MGL 100.0 Manganese, Total, ICAP 0.500 0.500 MGL 100.0 Manganese, Total, ICAP	Potassium, Total, ICAP 20 20.3 MGL 101.5 (70-130 70-

QC Rei	#487241	Sodium,	Total,	ICAP				
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
LCS1	Sodium, Total, ICAP		50	51.2	MGL	102.4	(85-115)	
LCS2	Sodium, Total, ICAP		50	51.1	MGL	102.2	(85-115)	
MBLK	Sodium, Total, ICAP		ND	<1.0	MGL			
MRL_CHK	Sodium, Total, ICAP		1.000	1.01	MGL	101.0	(50-150)	
MS	Sodium, Total, ICAP		50	51.4	MGL	102.8	(70-130)	
MS2	Sodium, Total, ICAP		50	51.2	MGL	102.4	(70-130)	
MSD	Sodium, Total, ICAP		50	51.7	MGL	103.4	(70-130)	
MSD2	Sodium, Total, ICAP		50	50.8	MGL	101.6	(70-130)	
RPD_LCS	Sodium, Total, ICAP		102.400	102.200	MGL	0.2	(0-20)	
RPD_MS	Sodium, Total, ICAP		102.800	103.400	MGL	0.6	(0-20)	
QC Ref	Analyte Spiked sample Total Dissolved Solid	(TDS) (TDS) (TDS)	Spiked Lab # 29 882 175 700 ND 10.0 98.286	Recovered 06030037 888 172 690 <10 13 98.571	Units MGL	98.3 98.6 130.0	Limits (%) (0-0) (0-10) (80-114) (80-114) (50-150) (0-20)	RPD (%)
QC Ref	#487988	Chloride	ı.					
QC Ref	#487988	Chloride	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
~		Chloride		Recovered 0906120063	Units MGL	Yield (%)	Limits (%)	RPD (%)
QC	Analyte	Chloride	Spiked			Yield (%)		RPD (%)
QC AASPKSMP	Analyte Spiked sample	Chloride	Spiked Lab # 20	0906120063	MGL		(0-0)	RPD (%)

Chromium, Total, ICAP

MSD

MRL_CHK	Chloride	0.500	0.396	MGL	79.2	(50-150)	
MS	Chloride	12.5	13.4	MGL	107.2	(74-138)	
MSD	Chloride	12.5	13.5	MGL	108.0	(74-138)	
RPD_LCS	Chloride	99.200	99.600	MGL	0.4	(0-20)	
RPD_MS	Chloride	107.200	108.000	MGL	0.7	(0-20)	
QC Ref	#488229 Chromiu	m, Tota	al, ICAE	•			
QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	06020044	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	1.01	MGL	101.0	(85-115)	
LCS2	Chromium, Total, ICAP	1.00	1.07	MGL	107.0	(85-115)	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL_CHK	Chromium, Total, ICAP	0.010	0.0103	MGL	103.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	1.00	MGL	100.0	(70-130)	
MS2	Chromium, Total, ICAP	1.00	1.05	MGL	105.0	(70-130)	
MSD	Chromium, Total, ICAP	1.00	1.02	MGL	102.0	(70-130)	
MSD2	Chromium, Total, ICAP	1.00	0.99	MGL	99.0	(70-130)	
			-				
QC Ref	#488241 Chromiu	m, Tota	al, ICAF	•			
QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	06030037	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	1.03	MGL	103.0	(85-115)	
LCS2	Chromium, Total, ICAP	1.00	1.03	MGL	103.0	(85-115)	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL_CHK	Chromium, Total, ICAP	0.010	0.0099	MGL	99.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	1.01	MGL	101.0	(70-130)	

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1.00

1.00

MGL

100.0

(70-130)

QC Ref	#488356	Perchlorate					
QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	06120011	UGL		(0-0)	
LCS1	Perchlorate	25.0	24.4	UGL	97.6	(85-115)	
LCS2	Perchlorate	25.0	24.4	UGL	97.6	(85-115)	
LCS3	Perchlorate	4	4.63	UGL	115.8	(75-125)	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	22.6	UGL	90.4	(80-120)	
MSD	Perchlorate	25.0	22.8	UGL	91.2	(80-120)	
RPD_LCS	Perchlorate	97.600	97.600	UGL	0.0	(0-15)	
RPD_MS	Perchlorate	90.400	91.200	UGL	1.0	(0-15)	