



MWH Laboratories

A Division of MWH Americas, Inc.

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: 626 386 1100
Fax: 626 386 1101
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Tronox LLC - Henderson
PO Box 55

Henderson , NV 89009

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

DATE OF ISSUE
Jun 10 2009
MWH LABORATORIES

ADE Andy Eaton
Project Manager



Report#: 270708
Project: CL04
PO#: Susan Crowle

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 6 page[s].



BUILDING A BETTER WORLD

June 11, 2009

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

Subject: Case Narrative report 270708

Sample receipt: The samples arrived at MWH Laboratories, Monrovia, CA on May 13, 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:

TDS – Analysis performed past hold time.

Note that for ion chromatography analyses such as perchlorate, the exact analysis time is not typically shown on the report. Either a 00:00 is shown or the time of injection of the first sample in the batch.

Sincerely,

A handwritten signature in cursive script that reads "Andrew Eaton".

Andrew Eaton, PhD
Project Manager



MWH Laboratories, a Division of MWH Americas, Inc.
 750 Royal Oaks Avenue Suite 100
 Monrovia CA 91016 (626) 386-1100 FAX (626) 386-1124

Bottle Order for Tronox LLC - Henderson
Standing

Andrew Eaton Your MWL Project Manager
 (626) 386-1125 Direct Phone/Voice Mail

Client Code KERRMCGEE-MP
 Project Code CLO4
 PO# / Job# GWREMEDICATION
 Blanket PO

Period

SO# 47684 12374 RS

Sampler: Please Return this Paper with your samples

Created by GJY

Order Date 04/16/09
 Date Needed by Client
 Ship Sample Kits to
 Veolia Water-Tronox LLC
 Gate 1
 8000 West Lake Mead Drive
 Henderson, NV 89015

Send Report to

Tronox LLC, Henderson Plant
 P.O. Box 55
 Henderson, NV 89009

Billing Address

Tronox, LLC
 Attn: Accounts Payable
 P.O. BOX 268859
 Oklahoma City, OK 73126-8859

Date Samples to Arrive at MWL

ATTN: Susan Crowley
 PHONE: 702-651-2234

ATTN: Susan Crowley
 PHONE: 702-651-2234
 FAX: 702-651-2310

Quote#

GJY

of Samples Tests

Bottles-Qty for each sample, type & preservative if any

UN#

Important Comments

# of Samples	Tests	Bottles-Qty for each sample, type & preservative if any	UN#	Important Comments
41	CLO4, TDS	1 250 ml poly /no preservative		These sites are monthly till further notice.
-	SHEET OF LABELS WITH WELL-IDS	see comments section		Shipping - please send bottles in cooler rather than a box
-				PC-86, PC-89, PC-91, PC-95, PC-97, PC-10, PC-12, PC-17, PC-18, PC-55, PC-101R L-635, L-637
-				MW-K2, MW-K4
-				ARP-1, ARP-2, ARP-3, ARP-4
-				ARP-5, ARP-6, ARP-7, PC-53
-				PC-103, MW-K5, M-83
-				M-87, PC-98R, PC-56, PC-58, PC-59, PC-60, PC-62, PC-68, PC-122
-				Do NOT prelabel bottles with site, but provide pre-printed labels for client to stick on
-				EXTRA BOTTLES INCLUDED
-				client code changed 7/25/03
-				bottle order and IDs updated 9/9/03

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#: 270708
 Project#: CLO4
 Proj Mgr: Andrew Eaton
 Phone: (626) 386-1125

The following samples were received from you on 05/13/09. 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	Tests Scheduled	Matrix	Sample Date
2905130203	HMW16	CLO4 TDS	Water	12-may-2009 12:35:00
2905130204	PC-24	CLO4 CR6010	Water P T	12-may-2009 13:42:00 TDS
2905130205	PC-50	CLO4 CR6010	Water P T	12-may-2009 14:20:00 TDS

Test Acronym Description

Test Acronym	Description
CLO4	Perchlorate
CR6010	Chromium, Total, ICAP
P	Metals sample pH
T	Metals Turbidity
TDS	Total Dissolved Solid (TDS)



MWH Laboratories

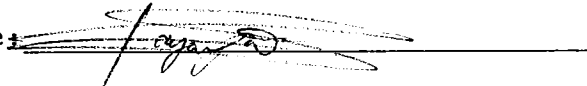
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Report
Comments
#270708

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: 

(QC Ref#: 2905130203)

Test: Total Dissolved Solid (TDS) (E160.1/SM2540C)

H1 - Sample analysis performed past holding time. Data not acceptable for regulatory compliance.

(QC Ref#: 2905130204)

Test: Total Dissolved Solid (TDS) (E160.1/SM2540C)

H1 - Sample analysis performed past holding time. Data not acceptable for regulatory compliance.

(QC Ref#: 2905130205)

Test: Total Dissolved Solid (TDS) (E160.1/SM2540C)

H1 - Sample analysis performed past holding time. Data not acceptable for regulatory compliance.



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Laboratory
Hits Report
#270708

Tronox LLC - Henderson
Susan Crowley
PO Box 55
Henderson , NV 89009

Samples Received
13-may-2009 21:25:29

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2905130203	HMW-16				
06/05/09	Perchlorate		17400		ug/l	800
05/20/09	Total Dissolved Solid (TDS)		5990	500	mg/l	10
	2905130204	PC-24				
06/09/09	Chromium, Total, ICAP		0.110		mg/l	0.020
06/08/09	Metals digestion performed.		Y		Yes/No	
06/05/09	Perchlorate		15300		ug/l	800
05/20/09	Total Dissolved Solid (TDS)		9800	500	mg/l	10
	2905130205	PC-50				
06/09/09	Chromium, Total, ICAP		0.094		mg/l	0.050
06/08/09	Metals digestion performed.		Y		Yes/No	
06/05/09	Perchlorate		212000		ug/l	20000
05/20/09	Total Dissolved Solid (TDS)		10500	500	mg/l	10

SUMMARY OF POSITIVE DATA ONLY.



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Laboratory
Data Report
#270708

Tronox LLC - Henderson
Susan Crowley
PO Box 55
Henderson , NV 89009

Samples Received
05/13/09

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
HMW-16 (2905130203)				Sampled on 05/12/09 12:35				
	06/05/09 00:00	487099	(EPA 314)	Perchlorate	17400	ug/l	800	200
05/20/09	05/20/09 19:35	485818	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	5990 (H1)	mg/l	10	1
PC-24 (2905130204)				Sampled on 05/12/09 13:42				
	06/05/09 00:00	487099	(EPA 314)	Perchlorate	15300	ug/l	800	200
06/09/09	06/09/09 00:00	487356	(ML/EPA 6010B)	Chromium, Total, ICAP	0.110	mg/l	0.020	2
	06/08/09 13:47		(EPA 200 Prep)	Metals digestion performed.	Y	Yes/No	0	1
05/20/09	05/20/09 19:35	485818	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	9800 (H1)	mg/l	10	1
PC-50 (2905130205)				Sampled on 05/12/09 14:20				
	06/05/09 00:00	487099	(EPA 314)	Perchlorate	212000	ug/l	20000	5000
06/05/09	06/09/09 00:00	487350	(ML/EPA 6010B)	Chromium, Total, ICAP	0.094	mg/l	0.050	5
	06/08/09 13:47		(EPA 200 Prep)	Metals digestion performed.	Y	Yes/No	0	1
05/20/09	05/20/09 19:35	485818	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	10500 (H1)	mg/l	10	1



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Laboratory
QC Summary
#270708

Tronox LLC - Henderson

QC Ref #485818 - Total Dissolved Solid (TDS) Analysis Date: 05/20/2009

2905130203	HMW-16	Analyzed by: lmr
2905130204	PC-24	Analyzed by: lmr
2905130205	PC-50	Analyzed by: lmr

QC Ref #487099 - Perchlorate Analysis Date: 06/05/2009

2905130203	HMW-16	Analyzed by: ser
2905130204	PC-24	Analyzed by: ser
2905130205	PC-50	Analyzed by: ser

QC Ref #487350 - Chromium, Total, ICAP Analysis Date: 06/09/2009

2905130205	PC-50	Analyzed by: csk
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QC Ref #487356 - Chromium, Total, ICAP Analysis Date: 06/09/2009

2905130204	PC-24	Analyzed by: csk
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Laboratory
QC Report
#270708

Tronox LLC - Henderson

QC Ref #485818 Total Dissolved Solid (TDS)

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05140263	MGL		(0-0)	
DUP	Total Dissolved Solid (TDS)	3480	3410	MGL		(0-10)	2.0
LCS1	Total Dissolved Solid (TDS)	175	180	MGL	102.9	(80-114)	
LCS2	Total Dissolved Solid (TDS)	700	680	MGL	97.1	(80-114)	
MBLK	Total Dissolved Solid (TDS)	ND	<10	MGL			
MRL_CHK	Total Dissolved Solid (TDS)	10.0	13	MGL	130.0	(50-150)	
RPD_LCS	Total Dissolved Solid (TDS)	102.857	97.143	MGL	5.7	(0-20)	

QC Ref #487099 Perchlorate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	05120283	UGL		(0-0)	
LCS1	Perchlorate	25.0	25.0	UGL	100.0	(85-115)	
LCS2	Perchlorate	25.0	25.1	UGL	100.4	(85-115)	
LCS3	Perchlorate	4	3.46	UGL	86.5	(75-125)	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	24.6	UGL	98.4	(80-120)	
MSD	Perchlorate	25.0	25.2	UGL	100.8	(80-120)	
RPD_LCS	Perchlorate	100.000	100.400	UGL	0.4	(0-15)	
RPD_MS	Perchlorate	98.400	100.800	UGL	1.0	(0-15)	

QC Ref #487350 Chromium, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05120264	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	0.928	MGL	92.8	(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	0.0096	MGL	96.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	0.000	MGL	<u>0.0</u>	(70-130)	
MS2	Chromium, Total, ICAP	1.00	0.928	MGL	92.8	(70-130)	

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and DUP are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

Tronox LLC - Henderson
(continued)

MSD	Chromium, Total, ICAP	1.00	0.000	MGL	<u>0.0</u>	(70-130)
MSD2	Chromium, Total, ICAP	1.00	0.908	MGL	90.8	(70-130)

QC Ref #487356 Chromium, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05200129	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	1.03	MGL	103.0	(85-115)	
LCS2	Chromium, Total, ICAP	1.00	1.09	MGL	109.0	(85-115)	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL_CHK	Chromium, Total, ICAP	0.010	0.0102	MGL	102.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	1.01	MGL	101.0	(70-130)	
MS2	Chromium, Total, ICAP	1.00	0.877	MGL	87.7	(70-130)	
MSD	Chromium, Total, ICAP	1.00	1.02	MGL	102.0	(70-130)	
MSD2	Chromium, Total, ICAP	1.00	0.925	MGL	92.5	(70-130)	

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and DUP are advisory only, batch control is based on LCS. Criteria for duplicates
are advisory only, unless otherwise specified in the method.