



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 26 2009
MWH LABORATORIES

ADE Andy Eaton
Project Manager



01114CA

Report#: 271248

Project: CLO4

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 7 page[s].



MWH

BUILDING A BETTER WORLD

June 26, 2009

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

Subject: Case Narrative report 271248

Sample receipt: The samples arrived at MWH on May 27, 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:

None

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



CHAIN OF CUSTODY RECORD

271248

MONTGOMERY WATSON LABORATORIES

MWLBS USE ONLY:

750 Royal Oaks Dr, Suite 100, Monrovia, CA 91016-3629

(626) 568-6400 (800) 566-5227

LOG IN COMMENTS: * ON SAMPLE

SAMPLES CHECKED/LOGGED IN BY: JS/MD

SAMPLE TEMP, RECEIPT AT LAB: 3

BLUE ICE: FROZEN PARTIALLY FROZEN THAWED

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME	PROJECT JOB # / P.O.#	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)					(check for yes)				
Tronox LLC Sampler	Annual Groundwater Sampling - April / May		PH	Specific Conductance	Total Chromium <u>600</u>	Hexavalent Chromium	Perchlorate, ClO ₄	TDS		SAMPLER COMMENTS		
Tronox LLC PO Box 55 Henderson, NV 89009												
Brian Ho / Susan Crowley (702) 651-2234												
TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP					SAMPLER COMMENTS	
0852	5-26-09	HM-2		RGW	X		X	X	X	X		
0946	5-26-09	M-111A		RGW	X		X	X	X	X		
0956	5-26-09	FB052609		RGW	X		X	X	X	X		
1026	5-26-09	MM-142		RGW	X		X	X	X	X		M-142
1030	5-26-09	EB052609		RGW	X		X	X	X	X		
5-26-09		Duplicate		RGW	X		X	X	X	X		

* MATRIX TYPES:

Reported by Volume:

CFW = Chlor(am)inated Finished Water
FW = Other Finished Water

Reported by Weight:

SO = Soil
SL = Sludge
CW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

RGW = Raw Ground Water
RSW = Raw Surface Water

SIGNATURE

PRINT NAME

DOUG DAVIS

COMPANY/TITLE

GES/ Geologist
MWT

DATE

5-26-09 1056

RELINQUISHED BY:

JILL SANCHEZ

RECEIVED BY:

527-09 10-2-

RELINQUISHED BY:

527-09 10-2-

RECEIVED BY:



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 Ironox LLC- Henderson Standing

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

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

SO# 47684 12374 RS

Sampler: Please Return this Paper with your samples

Created by GJY

Order Date 04/16/09

Date Needed by Client

0 Ship Sample Kits to
 Veolia Water-Tronox LLC
 Gate 1
 8000 West Lake Mead Drive
 Henderson, NV 89015

Send Report to

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

Billing Address

Ironox LLC
 Attn: Accounts Payable
 PO 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

SHIP LOCATION

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

From: Origin ID: LASA (702) 651-2230
TRONOX LLC
TRONOX LLC
8000 LAKE MEAD PARKWAY
SHIPPING DEPARTMENT
HENDERSON, NV 89015



J30110801302023

Ship Date: 26MAY09
ActWgt: 31.0 LB
CAD: 2274147/INET9011
Account#: S *****

Delivery Address Bar Code



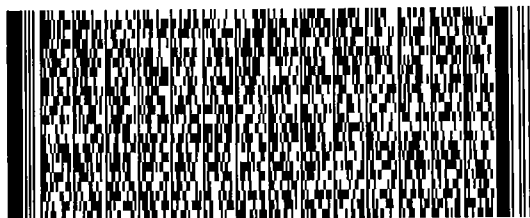
Ref # ANNUAL WATER SAMPLING-10181.23
Invoice #
PO #
Dept #

SHIP TO: (626) 568-6400 BILL SENDER
ATTN: SAMPLE RECEIVING
MONTGOMERY WATSON LABS
750 ROYAL OAKS DR # 100

MONROVIA, CA 91016

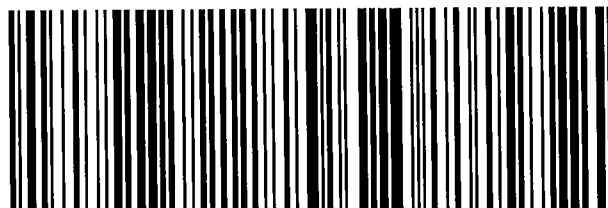
WED - 27MAY A2
PRIORITY OVERNIGHT

TRK# 7976 2362 0740
0201



QZ WHPA

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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 value of 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 Service Guide. 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#: 271248
 Project#: CLO4
 Proj Mgr: Andrew Eaton
 Phone: (626) 386-1125

The following samples were received from you on **05/27/09**. 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
2905270103	HM-2	CLO4 TDS	Water	26-may-2009 08:52:00
2905270104	M-111A	CLO4 CR6010	Water P T	26-may-2009 09:46:00 TDS
2905270105	FB052609	CLO4 TDS	Water	26-may-2009 09:56:00
2905270106	M-142	CLO4 TDS	Water	26-may-2009 10:26:00
2905270107	EB052609	CLO4 TDS	Water	26-may-2009 10:30:00
2905270109	DUPLICATE	CLO4 TDS	Water	26-may-2009 00:00:00

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
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)

Report
Comments
#271248

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: _____



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
 Hits Report
 #271248

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

Samples Received
 27-may-2009 10:30:00

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2905270103	HM-2				
06/12/09	Perchlorate		2520		ug/l	200
05/28/09	Total Dissolved Solid (TDS)		4240	500	mg/l	10
	2905270104	M-111A				
06/09/09	Chromium, Total, ICAP		0.062		mg/l	0.010
06/10/09	Metals digestion performed.		Y		Yes/No	
06/12/09	Perchlorate		409000		ug/l	20000
05/28/09	Total Dissolved Solid (TDS)		4868	500	mg/l	10
	2905270105	FB052609				
	2905270106	M-142				
06/17/09	Perchlorate		24700		ug/l	4000
05/28/09	Total Dissolved Solid (TDS)		2938	500	mg/l	10
	2905270107	EB052609				
	2905270109	DUPLICATE				
06/19/09	Perchlorate		24800		ug/l	2000
05/28/09	Total Dissolved Solid (TDS)		2814	500	mg/l	10



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
Data Report
#271248

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

Samples Received
05/27/09

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
HM-2 (2905270103)				Sampled on 05/26/09 08:52				
	06/12/09 00:00	487776	(EPA 314)	Perchlorate	2520	ug/l	200	50
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	4240	mg/l	10	1
M-111A (2905270104)				Sampled on 05/26/09 09:46				
	06/12/09 00:00	487776	(EPA 314)	Perchlorate	409000	ug/l	20000	5000
06/09/09	06/09/09 18:49	487360	(ML/EPA 6010B)	Chromium, Total, ICAP	0.062	mg/l	0.010	1
	06/10/09 16:44		(EPA 200 Prep)	Metals digestion performed.	Y	Yes/No	0	1
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	4868	mg/l	10	1
FB052609 (2905270105)				Sampled on 05/26/09 09:56				
	06/13/09 09:21	488027	(EPA 314)	Perchlorate	ND	ug/l	4.0	1
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	ND	mg/l	10	1
M-142 (2905270106)				Sampled on 05/26/09 10:26				
	06/17/09 02:37	488222	(EPA 314)	Perchlorate	24700	ug/l	4000	1000
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	2938	mg/l	10	1
EB052609 (2905270107)				Sampled on 05/26/09 10:30				
	06/13/09 09:21	488027	(EPA 314)	Perchlorate	ND	ug/l	4.0	1
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	ND	mg/l	10	1
DUPLICATE (2905270109)				Sampled on 05/26/09 00:00				
	06/19/09 00:00	488356	(EPA 314)	Perchlorate	24800	ug/l	2000	500
05/28/09	05/28/09 15:15	486624	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	2814	mg/l	10	1



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
QC Summary
#271248

Tronox LLC - Henderson

QC Ref #486624 - Total Dissolved Solid (TDS) Analysis Date: 05/28/2009

2905270103	HM-2	Analyzed by: jrf
2905270104	M-111A	Analyzed by: jrf
2905270105	FB052609	Analyzed by: jrf
2905270106	M-142	Analyzed by: jrf
2905270107	EB052609	Analyzed by: jrf
2905270109	DUPLICATE	Analyzed by: jrf

QC Ref #487360 - Chromium, Total, ICAP Analysis Date: 06/09/2009

2905270104	M-111A	Analyzed by: csk
------------	--------	------------------

QC Ref #487776 - Perchlorate Analysis Date: 06/12/2009

2905270103	HM-2	Analyzed by: ser
2905270104	M-111A	Analyzed by: ser

QC Ref #488027 - Perchlorate Analysis Date: 06/13/2009

2905270105	FB052609	Analyzed by: ser
2905270107	EB052609	Analyzed by: ser

QC Ref #488222 - Perchlorate Analysis Date: 06/17/2009

2905270106	M-142	Analyzed by: ser
------------	-------	------------------

QC Ref #488356 - Perchlorate Analysis Date: 06/19/2009

2905270109	DUPLICATE	Analyzed by: ser
------------	-----------	------------------



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
QC Report
#271248

Tronox LLC - Henderson

QC Ref #486624 Total Dissolved Solid (TDS)

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05270029	MGL		(0-0)	
DUP	Total Dissolved Solid (TDS)	392	398	MGL		(0-10)	1.5
LCS1	Total Dissolved Solid (TDS)	175	188	MGL	107.4	(80-114)	
LCS2	Total Dissolved Solid (TDS)	700	652	MGL	93.1	(80-114)	
MBLK	Total Dissolved Solid (TDS)	ND	<10	MGL			
MRL_CHK	Total Dissolved Solid (TDS)	10.0	9	MGL	90.0	(50-150)	
RPD_LCS	Total Dissolved Solid (TDS)	107.429	93.143	MGL	14.2	(0-20)	

QC Ref #487360 Chromium, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05210060	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	0.912	MGL	91.2	(85-115)	
LCS2	Chromium, Total, ICAP	1.00	0.999	MGL	99.9	(85-115)	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL_CHK	Chromium, Total, ICAP	0.010	0.0112	MGL	112.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	0.977	MGL	97.7	(70-130)	
MS2	Chromium, Total, ICAP	1.00	0.904	MGL	90.4	(70-130)	
MSD	Chromium, Total, ICAP	1.00	1.010	MGL	101.0	(70-130)	
MSD2	Chromium, Total, ICAP	1.00	0.864	MGL	86.4	(70-130)	

QC Ref #487776 Perchlorate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	06040288	UGL		(0-0)	
LCS1	Perchlorate	25.0	23.8	UGL	95.2	(85-115)	
LCS2	Perchlorate	25.0	23.2	UGL	92.8	(85-115)	
LCS3	Perchlorate	4	3.89	UGL	97.2	(75-125)	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	23.2	UGL	92.8	(80-120)	
MSD	Perchlorate	25.0	25.4	UGL	101.6	(80-120)	

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.



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
QC Report
#271248

Tronox LLC - Henderson
(continued)

RPD_LCS	Perchlorate	95.200	92.800	UGL	2.6	(0-15)
RPD_MS	Perchlorate	92.800	101.600	UGL	1.1	(0-15)

QC Ref #488027 Perchlorate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	06110007	UGL		(0-0)	
LCS1	Perchlorate	25.0	24.4	UGL	97.6	(85-115)	
LCS2	Perchlorate	25.0	24.6	UGL	98.4	(85-115)	
LCS3	Perchlorate	4	3.54	UGL	88.5	(75-125)	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	23.3	UGL	93.2	(80-120)	
MSD	Perchlorate	25.0	23.2	UGL	92.8	(80-120)	
RPD_LCS	Perchlorate	97.600	98.400	UGL	0.8	(0-15)	
RPD_MS	Perchlorate	93.200	92.800	UGL	1.0	(0-15)	

QC Ref #488222 Perchlorate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	06110138	UGL		(0-0)	
LCS1	Perchlorate	25.0	24.5	UGL	98.0	(85-115)	
LCS2	Perchlorate	25.0	23.9	UGL	95.6	(85-115)	
LCS3	Perchlorate	4	4.40	UGL	110.0	(75-125)	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	24.7	UGL	98.8	(80-120)	
MSD	Perchlorate	25.0	23.9	UGL	95.6	(80-120)	
RPD_LCS	Perchlorate	98.000	95.600	UGL	2.5	(0-15)	
RPD_MS	Perchlorate	98.800	95.600	UGL	1.0	(0-15)	

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.



MWH Laboratories

A Division of MWH Americas, Inc.

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3829
Tel: 626 386 1100
Fax: 626 386 1101
1 800 566 LABS (1 800 566 5227)

Laboratory
QC Report
#271248

Tronox LLC - Henderson
(continued)

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)	

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.