

### Laboratory Report

for

Tronox LLC - Henderson PO Box 55

89009 Henderson , NV

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

DATE OF ISSUE Jul 02 2009 MWH LABORATORIES

ADE Andy Eaton Project Manager

Report#: 271999 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 6 page[s].



July 2, 2009

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

Subject: Case Narrative report 271999

Sample receipt: The samples arrived at MWH on June 16, 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:

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

Andrew Eaton, PhD

Project Manager

## MONTGOMERY WATSON LABORATORIES

# **CHAIN OF CUSTODY RECORD**

			- L	MWLABS USE ONLY:					***************************************										
750 Royal	Oaks Dr, {	750 Royal Oaks Dr, Suite 100, Monrovia, CA 91016-3629	91016-3629	LOGIN COMMENTS:		ı				<i>.,</i>	SAMPLES CHECKED/LOGGED IN BY:	S CHEC	KED/LC	GGED	IN BY:	CJ17	J/ C		
(626) 568-6400	9400	(800) 566-5227	,,,,,,,,,,,,l							<b>U)</b>	SAMPLE TEMP, RECEIPT AT LAB:	TEMP,	RECEIP	TATL	B:	` /	81/7,E	انما	
		G.	.e.:								BLUE ICE:	Ü	FROZEN X	X	PARTIALLY FROZEN	Y FROZE	V THAWED	e.	
TO BE COM	LETED BY S.	AMPLE		,		Į	ŀ												
COMPANY / PROJECT NAME	ROJECT NA	ME	PROJECT JOB#/P.O.#	1/P.O.#				REFEF	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	TACHE	р вотт	LE ORD	ER FOR	ANALY	SES			check for yes)	. yes)
Tronox LLC			Annual Groundwa	Annual Groundwater Sampting - April / May					¥	NALYSE	S REQU	IRED (m	ark an 'X	in all te	sts requ	ired for	ANALYSES REQUIRED (mark an ${\mathcal X}$ in all tests required for each sample line)	line)	
Sampler Brian Ho / 9	Sampler Brian Ho / Susan Crowley		(702) 651-2234	Tronox LLC PO Box 55 Henderson, NV 89009						٠.	<sup>‡</sup> Ol								SAMPLER
TIME	DATE	LOCATIO			* XIRTAM	амяэ	сомь	Hq	Specific Cond Total Chromiu	Hexavalent Cl	Perchlorate, C	SOI						8 	COMMENTS
[385]	lo-15-09	mc-53			RGW	×			X				$\vdash$	$\square$					
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* MATRI	* MATRIX TYPES:	CFW =	rted by Volu = Chlor(am)ina	Reported by Volume: CFW = Chlor(am)inated Finished Water		RGW = Raw Ground Water	Raw Gro	and We	ţe.	_		Chlorina	ed Was	te Water			Keported SO = Soil	Reported by Weight: SO = Soil	빎
		EW	= Other Finished Water	ed Water		<b>RSW</b> = Raw Surface Water	Raw Sui	face Wa	iter	,	)= MM SM =(	= Other Waste Water = Storm Water	aste Wat ater	•			SL = Sludge	ge	
	ĺ	SIGNATURE	型			P.	PRINT NAME					Ö	COMPANYITILE	щ			DATE	핃	TIME
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RELINQUISHED BY:	HED BY:																		
RECEIVED BY:	BY:																		

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MWF	MWH Laboratories, a Division of MWH Americas, Inc. Bottle Order	ion of MWH Americas	, Inc. Bottle Or	der for Tron	for Tronox LLC- Henderson			Page 1 of 47684
750 I Monr	750 Royal Oaks Avenue Suite 100 Monrovia CA 91016 (626) 386-1100 FAX (626) 386-1124	ite 100 86-1100 FAX (626) 38	Standing 8-1124	Client Code KE	ent Code KERRMCGEE-MP	M Monthly	Period	Ţ
Andı (626)	Andrew Eaton You! (626) 386-1125 Dire	Your MWL Project Manager Direct Phone/Voice Mail	nager ail	Project Code CL PO# / Job# GN Blanket PO	CLO4 GWREMEDIATION			
SO# 4	<b>ব</b> '	RS Sampler:	Please Return	this Paper w	Sampler: Please Return this Paper with your samples			
Created by Order Date	GJY 0 Veolia	Ship Sample Kits to Veolia Water-Tronox LLC	ts to	Tronox LL	Send Report to Tronox LLC Henderson Plant		Billin Tronox LLC	Billing Address
04/16/09 Date Needed by Client		Gate 1 8000 West Lake Mead Drive Henderson, NV 89015	IVe	PO Box 55 Henderson	PO Box 55 Henderson, NV 89009		Atto.: Accounts. Payable. PO BOX 268859 Oklahoma.CityOK.73.1	Attn: Accounts Payable
Date Samples to Arrive at MWL	ATTN: NWL PHONE:	rn: Susan Crowley	ey. 4	1	Susan Crowley 702-651-2234			Quote# GJY
SHIP LOCATION # of Samples	ATION .		Bottles-C	FAX: Ity for each samp	FAX: (UK-051-451U Bottles-Qty for each sample, type & preservative if any	ny	#N0	Important Comments
41 CLO4	CLO4, TDS		1 250 ml poly /no preservative	preservative				These sites are monthly till further notice.
SHEE	SHEET OF LABELS WITH WELL-IDS	VELL-IDS	see comments section	ction		ı	l	Shipping - please send bottles in cooler rather than a box
ı 1		•				i	1	PC-86, PC-89, PC-91, PC-95, PC-97, PC-17
ı		٠				ş	I	PC-18, PC-55, PC-101R L-635, L-637
. '		٠	,				I	MW-K2, MW-K4 ARP-1, ARP-2, ARP-3, ARP-4
ı						I	I	ARP-5, ARP-6, ARP-7, PC-53
1		٠					l	M-87, PC-98R; PC-56, PC-58; PC-59, PC-62, PC-68,
ı						I	I	PC-122
ı				•		1	l	Do NOT
1						1	1	bottles with site, but provide
ı		•					<b>!</b>	pre-printed labels for client to stick on
i 1		•				-		EXTRA BOTTLES INCLUDED
·							1	client code changed 7/25/03
						ı	<b> </b>	bottle order and IDs updated 9/9/03
 ActiveCode	Status	Date Shipped	Carter Oty o	Oty of Coolers Trackin	Tracking Number	- <del>1</del>	ээс Ву	

From: Ungin ID: LASA (702) 651-2230 Shipping Tronox LLC 8000 lake Mead parkway

**BILL SENDER** 

henderson, NV 89015

SHIP TO: (626) 568-6400

sample receiving **Montgomery Watson labs** 

750 ROYAL OAKS DR # 100

MONROVIA, CA 91016



Ship Date: 15JUN09 ActWgt 50.0 LB CAD: 100263135/INET9060 Account#: S \*\*\*\*\*\*\*\*\*

Dims: 21 X 15 X 15 IN



Ref# Invoice # PO#

Dept #

7976 8323 8611

TUE - 16JUN

Α2 PRIORITY OVERNIGHT

DSR

**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 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 ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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Custody Seal

Date 6-15-09

Project 20092544V |

Signature Bland Container# 1 of 1

### 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#: 271999

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

The following samples were received from you on 06/16/09. 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
2906160064	MC-53	CLO4 CR6010	Water P T	15-jun-2009 13:55:00 TDS
		Test Acronym	Description	
Test Ac	ronym	Description		
CLO CR6 P T TDS	010	Perchlorate Chromium, Total, ICAP Metals sample pH Metals Turbidity Total Dissolved Solid	(TDS)	

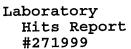




Client Specific Comments

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

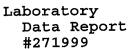
Signature: (Color)





Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 16-jun-2009 13:16:22

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2906160064	MC-53		,		
06/30/09 06/29/09 06/28/09 06/19/09	Chromium, Tota Metals digesti Perchlorate Total Dissolve	on performed.	0.041 Y 8560 10500	500	mg/l Yes/No ug/l mg/l	0.020 400 10

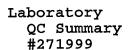




Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009

Samples Received 06/16/09

Prepared	Analyzed QC Re	f# Method	Analyte	Result	Units	MRL	Dilution
MC-53	•	Sampled		8560	ug/1	400	100
	06/28/09 00:00 4891		) Perchlorate		mg/1	0.020	2
06/29/09	06/30/09 00:00 4891			0.041			
	06/29/09 00:00	( EPA 200 Prep	) Metals digestion performed.	Y	Yes/No	0	1
06/19/09	06/19/09 11:00 4888	5 ( E160.1/SM2540	OC) Total Dissolved Solid (TDS)	10500	mg/l	10	1





Tronox LLC - Henderson

QC Ref #488855 - Total Dissolved Solid (TDS) Analysis Date: 06/19/2009

2906160064 MC-53 Analyzed by: jrf

QC Ref #489148 - Perchlorate Analysis Date: 06/28/2009

2906160064 MC-53 Analyzed by: ser

QC Ref #489156 - Chromium, Total, ICAP Analysis Date: 06/30/2009

2906160064 MC-53 Analyzed by: csk

Tronox LLC - Henderson

OC Ref #488855	Total	Dissolved	Solid	(TDS)
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QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	06160100	MGL		( 0-0 )	
DUP	Total Dissolved Solid (TDS)	1506	1500	MGL		( 0-10 )	0.4
LCS1	Total Dissolved Solid (TDS)	175	176	MGL	100.6	( 80-114 )	
LCS2	Total Dissolved Solid (TDS)	700	696	MGL	99.4	( 80-114 )	
MBLK	Total Dissolved Solid (TDS)	ND	<10	MGL			
MRL CHK	Total Dissolved Solid (TDS)	10.0	12.0	MGL	120.0	( 50-150 )	
RPD LCS	Total Dissolved Solid (TDS)	100.571	99.429	MGL	1.1	( 0-20 )	

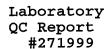
## QC Ref #489148 Perchlorate

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	06240295	UGL		( 0-0 )	
LCS1	Perchlorate	25.0	24.4	UGL	97.6	( 85-115 )	
LCS2	Perchlorate	25.0	24.2	UGL	96.8	( 85-115 )	
LCS3	Perchlorate	4	4.18	UGL	104.5	( 75-125 )	
MBLK	Perchlorate	ND	<4.0	UGL			
MS	Perchlorate	25.0	23.1	UGL	92.4	( 80-120 )	
MSD	Perchlorate	25.0	23.3	UGL	93.2	( 80-120 )	
RPD LCS	Perchlorate	97.600	96.800	UGL	0.8	( 0-15 )	
RPD MS	Perchlorate	92.400	93.200	UGL	1.0	( 0-15 )	

## QC Ref #489156 Chromium, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 200	0905290036	MGL		( 0-0 )	
LCS1	Chromium, Total, ICAP	1.00	1.00	MGL	100.0	( 85-115 )	
LCS2	Chromium, Total, ICAP	1.00	1.04	MGL	104.0	( 85-115 )	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL CHK	Chromium, Total, ICAP	0.010	0.0104	MGL	104.0	( 50-150 )	
MS	Chromium, Total, ICAP	1.00	0.996	MGL	99.6	( 70-130 )	
MS2	Chromium, Total, ICAP	1.00	0.984	MGL	98.4	( 70-130 )	

Spikes which exceed Limits and Method Blanks with positive results are highlighted by <u>Underlining</u>. 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 0.970 MGL 97.0 (70-130)
MSD2 Chromium, Total, ICAP 1.00 1.004 MGL 100.4 (70-130)

Spikes which exceed Limits and Method Blanks with positive results are highlighted by <u>Underlining.</u> 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.