

### Laboratory Report

for

Tronox LLC - Henderson PO Box 55

Henderson , NV 89009

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

DATE OF ISSUE Jun 13 2009 MWH LABORATORIES

ADE Andy Eaton Project Manager

Report#: 270369 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 12 page[s].



June 15, 2009

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

Subject: Case Narrative report 270369

Sample receipt: The samples arrived at MWH Laboratories, Monrovia, CA on May 06, 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 and the package, along with the chain of custody.

### Case Narrative:

For the MWH Laboratories data the following issues were observed:

Phenolics – (2905060129) The associated blank spike recovery was below the recovery was below to be a recovery was below the recovery was below the recovery was below the recovery was below to be a recovery was below the recovery was below to be a recovery was below the recovery was below to be a recovery was

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 on the state of the time of injection of the first sample in the batch.

Sincerely,

Andrew Eaton, PhD

andrew Eaton

**Project Manager** 

- 445 0 - 1805 to 185 to



# MONTGOMERY WATSON LABORATORIES

# CHAIN OF CUSTODY RECORD

270369

			M	MWLABS USE ONLY:																-		
50 Roys	1 Oaks dr. S	50 Royal Oaks dr. Suite 100 Monrovia, Ca., 91016-3629 LOGIN COMMENTS:	a., 91016-3629 <b>LC</b>	GIN COMMENT	ë	ı				1	SA	MPLE	SCE	ECK	ED/LO	SAMPLES CHECKED/LOGGED IN BY: 📆	O IN E	×	#			
626) 386-1100	-1100	(800) 566-5227	,,,,,,, <u>,</u> ,								SA	MPLE	TEN	P, RE	CEIP	SAMPLE TEMP, RECEIPT AT LAB:	, MB:	8				
											В	BLUE ICE:	ننږ	FROZ	SEN SEN	PA	RTIAL	LY FRO	FROZEN 左 PARTIALLY FROZEN		THAWED	
O BE CO	O BE COMPLETED BY SAMPLER:	SAMPLER:																				
OMPANY	OMPANY / PROJECT NAME	NAME	PROJECT JOB #/P.O.#	#"				REF	ER T	O AT	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	ED B	ОТТ	E OR	DER !	FOR A	NAL	/SES	Ш	(chec	(check for yes)	
ERRMCGEE-MP	EE-MP		Quarterly Sampling						ANAL	YSES	REQU	JIRED	(mark	t an 'X	' in all	tests	requir	ed for	each s	ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)	ine)	
ampler Signature:  Susan C	Susan Crowley	Michele-Brown  O. Drottor  (702) 651-2234	$\hat{}$	Tronox LLC - Henderson Plant PO Box 55 Henderson, NV 89009	Plant				0500	none	<u></u>	9906		(0109 115							SAMPLER	
TIME	DATE	LOCATION	DENTIFIER, STATE ID#	, STATE ID#	* XIATAM	СВАВ	сомь	1OC9060	XOT	PH 9040, EC	сго	2043029' CI	96lonariq	NA, CR, FE, MN (	_						COMMENTS	
9:42 AM	5/2/2009			M-5A	RGW	×		×	×	×	×	×	×	×	_						14 bottles	
			,						<u> </u>													
						<del></del>												-				
MATRIX	MATRIX TYPES:	Repor	Reported by Volume:					,										L.	Reporte	Reported by Weight:	eight:	
		CFW =	CFW = Chlor(am)inated Finished Water FW = Other Finished Water	shed Water ir	<b>-</b>	RGW = Raw Ground Water RSW = Raw Surface Water	Raw Gr Raw Sul	face W	ater ater		SW CWW	CWW = Chlorinated Waste Water WW = Other Waste Water SW = Storm Water	= Chlorinated ' = Other Waste = Storm Water	f = Chlorinated Waste = Other Waste Water = Storm Water	te Wate er	ኤ		<i>o</i> , <i>o</i> ,	SO = Soil SL = Sludge	- age		
		SIGNATURE	J.			PR	PRINT NAME						COMP	COMPANY/TITLE	щ				DATE	ш	TIME	
ELINQLUSHED BY	MM	a helle &	ZIMIN		Mich	Michele Brown	wn				Veoli	ia Wate	er NA fo	or Tron	ox LLC	Veolia Water NA for Tronox LLC - Henderson Plant	erson F	Jant	5/5/2009	600	12:00 PM	
ECEIVED BY:	BY:	XX	7		3	4	les.	2					W	3	Ŧ				5	9	14:00	
ELINQUISHED &Y:	HED. SY:	,					-														-	
ECEIVED BY:	8Y:				1					-								┢				Г

PAGE 1 of 1

ŧ	MWH Laboratori	MWH Laboratories, a Division of MWH Americas, Inc. Bottle Ord	c. <b>Bottle Order for</b> Kerr McGee Chemical Company Henderson.	Henderson	Page 1 of 47276
B	750 Royal Oaks , Monrovia CA 910	750 Royal Oaks Avenue Suite 100 Monrovia CA 91016 (626) 386-1100 FAX (626) 386-1124	Stariumy Client Code KERRMCGEE-MP Annual	al Period	Ō
	Andrew Eaton		Project Code CLO4 Week 1		
,	(626	Dire	Blanket PO		
#0s	# <b>47276</b> 16933	RS	Sampler: Please Return this Paper with your samples		
Creat	Created by GJY	Ship Sample Kits to	o Send Report to	Billing	Billing Address
Order Date	ห Date กรุงศรกฤ	Kerr McGee 8000 West Lake Mead Drive	Kerr McGee Henderson Plant PO Box 55	. Kerr McGee H PO Box 55	Kerr McGee Henderson Plant PO Rox 55
Date I	Date Needed	Henderson, NV 89015	Henderson, NV 89009	Henderson, NV 89009	7 89009
by Client	ient				
		ATTM. Cuesa Croudou	· IATE		
to Arri	to Arrive at MWI		NITE I		Quote#
		PHONE: (.U.Z6.5.11-2.2.3.4	PHONE: (.04.52)4434		GJY
HS T				#NI	-
# 01 v	# of Samples lests	w.	Bottles-Qty for each sample, type & preservative if any	\$ 100 m	Important Comments
16	TOC9060		1 125ml amber glass + 0.5ml H2SO4(50%)	UN 2796	LANDFILL WELLS:
1 4	, XOT		4 250ml amber glass + 1ml H2S04		M-5A, M-6A, M-7A, H-28A
T — 6	- PH9040, EC9050		1 125ml poly/ no preservative	  -	
4	- SO49056, CL9056		1 125ml poly/ no preservative	1	LOGIN - Please assign 4
<u>† 4</u>	FE6010, MN6010, CR6010, NA6010	CR6010, NA6010	1 250ml poly acid rinsed + 1ml HNO3 (18%)	- UN 2031	the quadruplicate tests -
T_4	- PHENOL96		1 500ml amber glass+ 1ml H2S2O4(50%)	- UN 2796	тох, тос, Ес, рн
<u> </u>	TDS,		1 125ml poly/ no preservative	-	
1 4	, CL04		1 125ml poly /no preservative AMBER IF WITH CLO3!	1	EVENT
1	ı	•		1	Testcodes updated
	ı			1	3-16-06
!	ı			1	TDS and CLO4 added
					6/16/06. (not in quad)

replicates of each well for

Prepared By

Qty of Coolers Tracking Number

Carrier

Date Shipped

Status

ActiveCode

Quad1, Quad2, Quad3, Quad4 for the 4 each of these at login -

note to login - please

add location code on

THIS MEMORANDUM is an acknowledgement that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filling or record.

RECEIVED subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading.

From: TRONOX LLC

73126-8859

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said Carrier (the word Carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another Carrier on the route to said destination. It is mutually agreed, as to each Carrier of all or any said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said Bill of Lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the Shipper and accepted for himself and his assigns.

FROM NO. STATION: STATE CARRIER Date 5/5/09 Federal Express Henderson, NV 89015 Authorization MWH LABORATORIES M. Skromyda 750 Royal Oaks Avenue, Suite #100 **FULL NAME OF SHIPPER** Monrovia, CA 91016-3629 TRONOX LLC Phone: 626-568-6400 CODE NO. WCN IS FREIGHT CHARGES 1321.10181 Prepaid ☐ Collect f it moves between two ports by water, the SHIPPED FROM CUSTOMER PO OR REQ'N NO. law requires that the Bill of Lading shall state N/AR Henderson, NV whether it is Carrier's or Shippers weight. LINE STOCK NO TOTAL QUANTITY DESCRIPTION AND CLASSIFICATION 3 Coolers Subject to Section 7 of Conditions of Ice chest with water samples applicable Bill of Lading, if this shipment is to be delivered to the Consignee without Monitoring Wells quarterly recourse on the Consignor, the Consignor shall sign the following statement: The Carrier shall not make delivery of this One ice chest @ 28 lbs shipment without payment of freight and all One ice chest @ 52 lbs other lawful charges. TRONOX LLC One ice chest @ 72 lbs The description and weight indicated on this Bill of Lading are correct. Subject to Not Regulated verification by the Governing Weighing and Inspection Bureau according to Agreement. FOR CHEMICAL EMERGENCY-SPILL LEAK TRUCK SHIPMENTS FIRE EXPOSURE OR ACCIDENT □ YES PLACARDS ACCEPTED ☐ YES PLACARDS OFFERED CALL CHEMTREC - DAY OR NIGHT NO ☑ NO 800-424-9300 483-7616 IN DISTRICT OF COLUMBIA NUMBER OF PACKAGES GROSS WEIGHT TARE WEIGHT **NET WEIGHT** 202-483-7616 FROM OUTSIDE THE 0 CONTINENTAL US. TOTAL GROSS WEIGHT TOTAL TARE WEIGHT 152 1 0 152 "Shippers imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission" NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION. AGENT PER TRONOX LLC Shipper permanent post office address of shipper, PO Box 268859, Oklahoma City, OK **Carron Williams** 

SHIPPER'S NUMBER: 143688

**A2** 

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

J90110901302023

SHIP TO: (626) 568-6400

**BILL SENDER** 

ATTN: SAMPLE RECEIVING **MONTGOMERY WATSON LABS 750 ROYAL OAKS DR # 100** 



Delivery Address Bar Code



Ref# MSO #143688

Invoice # PO# Dept #

WED - 06MAY 7965 7944 9667 PRIORITY OVERNIGHT 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.

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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#: 270369

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

The following samples were received from you on 05/06/09. 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 Date	
	<u>r</u>	Tests So	cheduled				
2905060129	M-5A			Water		05-may-2009	09:42:00
		CL9056	CLO4	CR6010	EC9050	FE6010 M	N6010
	51	NA6010	P	PH9040	PHENOL	SO49056 T	
		TDS	TOC9060	TOX			
2905060131	M-5A			Water		05-may-2009	09:42:00
		EC9050	PH9040	TOC9060	TOX		
2905060132	M-5A	***************************************		Water		05-may-2009	09:42:00
		EC9050	PH9040	TOC9060	TOX		
2905060133	M-5A	Principle and the sign of the second section is a second section of the second section is a second section of the second section is a second section of the second section section is a second section of the second section s		Water		05-may-2009	09:42:00
		EC9050	PH9040	TOC9060	TOX		

### Test Acronym Description

Test Acronym	Description
CL9056	Chloride
CLO4	Perchlorate
CR6010	Chromium, Total, ICAP
EC9050	Specific Conductance
FE6010	Iron, Total, ICAP
MN6010	Manganese, Total, ICAP
NA6010	Sodium, Total, ICAP
P	Metals sample pH
PH9040	PH (H3=past HT, not compliant)
PHENOL	Phenolic Compounds
SO49056	Sulfate
T	Metals Turbidity
TDS	Total Dissolved Solid (TDS)
TOC9060	Total Organic Carbon
TOX	Total Organic Halogen



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#: 2905060129)

Test: Perchlorate (EPA 314)

Sample has a large interfering peak close to that of CLO4.

at lower dilutions unable to get a good resolution.

Test: Phenolic Compounds (MWH 420/SW9066)

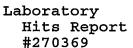
L4 - The associated blank spike recovery was below method

acceptance limits.



Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 06-may-2009 14:00:00

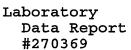
Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2905060129	M-5A				
05/21/09 06/07/09 06/07/09 06/04/09 05/06/09 05/28/09 05/14/09 06/08/09 05/07/09 05/19/09 05/12/09 05/18/09 05/13/09	PH (H3=past H Perchlorate Phenolic Comp Sodium, Total Specific Cond Sulfate	otal, ICAP sion performed. MT, not compliant) counds ductance red Solid (TDS) counds	6000 0.61 1.5 Y 7.2 397 0.02 1800 17600 1400 14800 26 13300	500	mg/l mg/l mg/l Yes/No Units ug/l mg/l mg/l umho/cm mg/l mg/l mg/l ug/l	200 0.020 0.0020 0.0010 200 0.010 10 2.0 25 10 6.0 1000
	2905060131	M-5A				
05/06/09 05/07/09 05/18/09 05/13/09	PH (H3=past H Specific Cond Total Organic Total Organic	: Carbon	7.3 17500 26 13800		Units umho/cm mg/l ug/l	0.0010 2.0 6.0 1000
	2905060132	M-5A				
05/06/09 05/07/09 05/18/09 05/13/09	PH (H3=past H Specific Cond Total Organic Total Organic	: Carbon	7.3 17600 26 13100		Units umho/cm mg/l ug/l	0.0010 2.0 6.0 1000
	2905060133	M-5A				





Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 06-may-2009 14:00:00

Analyzed	Sample# Sa	ample ID	Result	Federal MCL	UNITS	MRL
	2905060133 M	-5A				
05/06/09 05/07/09 05/18/09 05/13/09	Total Organic Car	ance rbon	7.3 17700 25 13300		Units umho/cm mg/l ug/l	0.0010 2.0 6.0 1000





Tronox LLC - Henderson Susan Crowley PO Box 55 Henderson , NV 89009 Samples Received 05/06/09

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
M-5A	(290506012	9)	Sampled	on 05/05/09 09:42				
	05/21/09 13:27	485617	( ML/EPA 9056	) Chloride	6000	mg/l	200	200
	05/28/09 07:30	486373	( EPA 314	) Perchlorate	397	ug/l	200	100
06/01/09	06/07/09 00:00	487102	( ML/EPA 6010B	) Chromium, Total, ICAP	ND	mg/l	0.010	1
	06/04/09 00:00		( EPA 200 Prep	) Metals digestion performed.	Y	Yes/No	0	1
	05/07/09 11:39	483793	( ML/EPA 9050A	) Specific Conductance	17600	umho/cm	2.0	1
06/01/09	06/07/09 22:15	487117	( ML/EPA 6010B	) Iron, Total, ICAP	0.61	mg/l	0.020	1
06/01/09	06/07/09 22:15	487118	( ML/EPA 6010B	) Manganese, Total, ICAP	1.5	mg/l	0.0020	1
06/01/09	06/08/09 23:02	487723	( ML/EPA 6010B	) Sodium, Total, ICAP	1800	mg/l	10	10
	05/06/09 20:20	483930	( ML/EPA 9040B	) PH (H3=past HT, not compliant)	7.2	Units	0.0010	1
05/14/09	05/14/09 00:00	485524	( MWH 420/SW906	6) Phenolic Compounds	0.02(L4)	mg/l	0.010	1
	05/19/09 00:09	485142	( ML/EPA 9056	) Sulfate	1400	mg/l	25	50
05/12/09	05/12/09 19:30	484871	( E160.1/SM2540	C) Total Dissolved Solid (TDS)	14800	mg/l	10	1
	05/18/09 15:11	485305	( ML/EPA 9060	) Total Organic Carbon	26	mg/l	6.0	20
	05/13/09 12:28	484442	( SW9020/SM5320	) Total Organic Halogen	13300	ug/l	1000	100
M-5A	(290506013	1)	Sampled	on 05/05/09 09:42				
	05/07/09 11:39	483793	( ML/EPA 9050A	) Specific Conductance	17500	umho/cm	2.0	1
	05/06/09 20:20	483930	( ML/EPA 9040B	) PH (H3=past HT, not compliant)	7.3	Units	0.0010	1
	05/18/09 15:11	485305	( ML/EPA 9060	) Total Organic Carbon	26	mg/l	6.0	20
	05/13/09 12:28	484442	( SW9020/SM5320	) Total Organic Halogen	13800	ug/l	1000	100
M-5A	(290506013	2)	Sampled	on 05/05/09 09:42				
	05/07/09 11:39	483793	( ML/EPA 9050A	) Specific Conductance	17600	umho/cm	2.0	1
	05/06/09 20:20	483930	( ML/EPA 9040B	) PH (H3=past HT, not compliant)	7.3	Units	0.0010	1
	05/18/09 15:11	485305	( ML/EPA 9060	) Total Organic Carbon	26	mg/l	6.0	20
	05/13/09 12:28	484442	( SW9020/SM5320	) Total Organic Halogen	13100	ug/l	1000	100



Tronox LLC - Henderson (continued)

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
M-5A	(29050601	33)	Sampled o	n 05/05/09 09:42				
	05/07/09 11:39	483793	( ML/EPA 9050A )	Specific Conductance	17700	umho/cm	2.0	1
	05/06/09 20:20	483930	( ML/EPA 9040B )	PH (H3=past HT, not compliant)	7.3	Units	0.0010	1
	05/18/09 15:11	485305	( ML/EPA 9060 )	Total Organic Carbon	25	mg/l	6.0	20
	05/13/09 12:28	484442	( SW9020/SM5320 )	Total Organic Halogen	13300	ug/l	1000	100



Tronox LLC - Henderson

QC	Ref	#483793 - Sp	ecific Conductance	Analysis Date: 05/07/2009
		2905060129 2905060131 2905060132	M-5A M-5A	Analyzed by: sar Analyzed by: sar Analyzed by: sar
		2905060133	M-5A	Analyzed by: sar
QC	Ref	#483930 - PH	(H3=past HT, not	compliant) Analysis Date: 05/06/2009
		2905060129 2905060131 2905060132 2905060133	M-5A M-5A	Analyzed by: sar Analyzed by: sar Analyzed by: sar Analyzed by: sar
QC	Ref	#484442 - To	tal Organic Haloge	en Analysis Date: 05/13/2009
		2905060129 2905060131 2905060132 2905060133	M-5A M-5A	Analyzed by: kxs Analyzed by: kxs Analyzed by: kxs Analyzed by: kxs
QC	Ref	#484871 - To	tal Dissolved Sol:	id (TDS) Analysis Date: 05/12/2009
		2905060129	M-5A	Analyzed by: jrf
QC	Ref	#485142 - Su	lfate	Analysis Date: 05/19/2009
		2905060129	M-5A	Analyzed by: vxt
QC	Ref	#485305 - To	tal Organic Carbo	n Analysis Date: 05/18/2009
		2905060129 2905060131 2905060132 2905060133	M-5A	Analyzed by: kxs Analyzed by: kxs Analyzed by: kxs Analyzed by: kxs





Tronox LLC - Henderson (continued)

QC	Ref	#485524	-	Phenolic	Compounds
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2905060129

M-5A

QC Ref #485617 - Chloride

2905060129

M-5A

QC Ref #486373 - Perchlorate

2905060129

M-5A

OC Ref #487102 - Chromium, Total, ICAP

2905060129

M-5A

QC Ref #487117 - Iron, Total, ICAP

2905060129

M-5A

QC Ref #487118 - Manganese, Total, ICAP

2905060129

M-5A

QC Ref #487723 - Sodium, Total, ICAP

2905060129

M-5A

Analysis Date: 05/14/2009

Analyzed by: azs

Analysis Date: 05/21/2009

Analyzed by: vxt

Analysis Date: 05/28/2009

Analyzed by: ser

Analysis Date: 06/07/2009

Analyzed by: csk

Analysis Date: 06/07/2009

Analyzed by: csk

Analysis Date: 06/07/2009

Analyzed by: csk

Analysis Date: 06/08/2009

Analyzed by: csk

Tronox LLC - Henderson

QC Ref	#483793	Specific	Condu	ctance				
QC DUP MRL_CHK	Analyte Specific Conductance Specific Conductance		Spiked 860 2.000	Recovered 863 2.53	Units UMHO UMHO	Yield (%)	Limits (%) ( 0-20 ) ( 50-150 )	RPD (%)
QC Ref	#483930	РН (Н3=р	ast HI	, not c	ompli	.ant)		
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
DUP	PH (H3=past HT, not o	ompliant)	7.29	7.29	UNIT		( 0-20 )	0.0
QC Ref	#484442	Total Or	ganic	Halogen				
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
rcs1	Total Organic Halogen		10	11.2	UGL	112.0	( 85-115 )	
LCS2	Total Organic Halogen		200	188	UGL	94.0	( 85-115 )	
MBLK	Total Organic Halogen		ND	<10	UGL			
QC Ref	#484871	Total Di	.ssolve	ed Solid	TDS	5)		
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample		Lab # 29	05060169	MGL		( 0-0 )	
DUP	Total Dissolved Solid	(TDS)	590	576	MGL		( 0-10 )	2.4
LCS1	Total Dissolved Solid	(TDS)	175	182	MGL	104.0	( 80-114 )	
LCS2	Total Dissolved Solid	(TDS)	700	690	MGL	98.6	( 80-114 )	
MBLK	Total Dissolved Solid	(TDS)	ND	<10	MGL			
MRL_CHK	Total Dissolved Solid	(TDS)	10.0	12	MGL	120.0	( 50-150 )	
RPD_LCS	Total Dissolved Solid	(TDS)	104.000	98.571	MGL	5.4	( 0-20 )	

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Tronox LLC - Henderson (continued)

QC	Ref	#485142	Sulfate						
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 200	905180111	MGL		( 0-0 )	
LCS1		Sulfate		50	49.9	MGL	99.8	( 90-110 )	
LCS2		Sulfate		50	50.2	MGL	100.4	( 90-110 )	
MBLK		Sulfate		ND	<0.50	MGL			
MRL_CHK		Sulfate		0.250	0.316	MGL	126.4	( 50-150 )	
MS		Sulfate		25	26.1	MGL	104.4	( 84-130 )	
msd		Sulfate		25	26.9	MGL	107.6	( 84-130 )	
RPD_LCS		Sulfate		99.800	100.400	MGL	0.6	( 0-20 )	
RPD_MS		Sulfate		104.400	107.600	MGL	3.0	( 0-20 )	
QC	Ref	#485305	Total Or	rganic	Carbon				
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 200	905110086	MGL		( 0-0 )	
LCS1		Total Organic Carbon		5.0	4.92	MGL	98.4	( 50-150 )	
LCS2		Total Organic Carbon		5.0	4.99	MGL	99.8	( 90-110 )	
MBLK		Total Organic Carbon		ND	<0.30	MGL			
MRL_CHK		Total Organic Carbon		0.200	0.211	MGL	105.5	( 50-150 )	
MS		Total Organic Carbon		4.0	3.78	MGL	94.5	( 80-120 )	
MSD		Total Organic Carbon		4.0	3.88	MGL	97.0	( 80-120 )	
RPD_LCS		Total Organic Carbon		98.400	99.800	MGL	1.4	( 0-20 )	
RPD_MS		Total Organic Carbon		94.500	97.000	MGL	2.6	( 0-20 )	
QC	Ref	#485524	Phenolic	Compo	ounds				
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS		Spiked sample		Lab # 29	04130173	MGL	•	( 0-0 )	
LCS1		Phenolic Compounds		0.08	0.0713	MGL	89.1	( 90-110 )	
LCS2		Phenolic Compounds		0.08	0.0773	MGL	96.6	( 90-110 )	

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RPD\_MS

Perchlorate

## Tronox LLC - Henderson (continued)

MBLK	Phenolic Compounds		ND	<0.010	MGL			
MRL_CHK	Phenolic Compounds		0.01	0.00827	MGL	82.7	( 50-150 )	
MS	Phenolic Compounds		0.08	0.0793	MGL	99.1	( 90-110 )	
MSD	Phenolic Compounds		0.08	0.0785	MGL	98.1	( 90-110 )	
QC Ref	#485617	Chloride	•					
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample		Lab # 29	05200256	MGL		( 0-0 )	
LCS1	Chloride		25	25.2	MGL	100.8	( 90-110 )	
LCS2	Chloride		25	25.1	MGL	100.4	( 90-110 )	
MBLK	Chloride		ND	<1.0	MGL			
MRL_CHK	Chloride		0.50	0.454	MGL	90.8	( 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		100.800	100.400	MGL	0.4	( 0-20 )	
RPD_MS	Chloride		107.200	108.000	MGL	0.7	( 0-20 )	
QC Rei	#486373	Perchlor	cate					
QC	Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample		Lab # 29	05120284	UGL		( 0-0 )	
LCS1	Perchlorate		25.0	25.5	UGL	102.0	( 85-115 )	
LCS2	Perchlorate		25.0	25.5	UGL	102.0	( 85-115 )	
LCS3	Perchlorate		4	4.45	UGL	111.2	( 75-125 )	
MBLK	Perchlorate		ND	<4.0	UGL			
MS	Perchlorate		25.0	25.4	UGL	101.6	( 80-120 )	
MSD	Perchlorate		25.0	25.3	UGL	101.2	( 80-120 )	
RPD_LCS	Perchlorate		102.000	102.000	UGL	0.0	( 0-15 )	

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101.600 101.200

( 0-15 )

1.0

UGL



Tronox LLC - Henderson (continued)

MRL\_CHK

Manganese, Total, ICAP

QC	Ref	#487102	Chromium	ı, Tota	l, ICAP				
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 29	05060129	MGL		( 0-0 )	
LCS1		Chromium, Total, ICAP		1.00	1.05	MGL	105.0	( 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	0.0103	MGL	103.0	( 50-150 )	
MS		Chromium, Total, ICAP		1.00	0.911	MGL	91.1	( 70-130 )	
MS2		Chromium, Total, ICAP		1.00	0.978	MGL	97.8	( 70-130 )	
MSD		Chromium, Total, ICAP		1.00	0.921	MGL	92.1	( 70-130 )	
MSD2		Chromium, Total, ICAP		1.00	0.937	MGL	93.7	( 70-130 )	
QC Ref #487117 Iron, Total, ICAP									
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 29	05060129	MGL		( 0-0 )	
LCS1		Iron, Total, ICAP		5.0	5.32	MGL	106.4	( 85-115 )	
LCS2		Iron, Total, ICAP		5.0	5.10	MGL	102.0	( 85-115 )	
MBLK		Iron, Total, ICAP		ND	<0.020	MGL			
MRL_CHK		Iron, Total, ICAP		0.020	0.0211	MGL	105.5	( 50-150 )	
MS		Iron, Total, ICAP		5.0	4.60	MGL	92.0	( 70-130 )	
MSD		Iron, Total, ICAP		5.0	4.62	MGL	92.4	( 70-130 )	
QC Ref #487118 Manganese, Total, ICAP									
QC		Analyte		Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP		Spiked sample		Lab # 29	05060129	MGL		( 0-0 )	
LCS1		Manganese, Total, ICA	P	0.50	0.536	MGL	107.2	( 85-115 )	
LCS2		Manganese, Total, ICA	P	0.50	0.525	MGL	105.0	( 85-115 )	
MBLK		Manganese, Total, ICA	P	ND	<0.0020	MGL			

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0.002

0.0018

MGL

90.0

( 50-150 )



## Tronox LLC - Henderson (continued)

Sodium, Total, ICAP

RPD\_MS

MS	Manganese, Total, ICAP	0.50	0.422	MGL	84.4	( 70-130 )
MSD	Manganese, Total, ICAP	0.50	0.414	MGL	82.8	( 70-130 )
QC Ref	#487723 Sodium,	Total,	ICAP			
QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%) RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05060129	MGL		( 0-0 )
LCS1	Sodium, Total, ICAP	50	51.9	MGL	103.8	( 85-115 )
LCS2	Sodium, Total, ICAP	50	51.5	MGL	103.0	( 85-115 )
MBLK	Sodium, Total, ICAP	ND	<1.0	MGL		
MRL_CHK	Sodium, Total, ICAP	1.000	1.00	MGL	100.0	( 50-150 )
RPD_LCS	Sodium, Total, ICAP	103.800	103.000	MGL	0.8	( 0-20 )

246.000 240.000

MGL

2.5

( 0-20 )

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