

Laboratory Report

for

Tronox LLC PO Box 55 Henderson, NV 89009 Attention: Susan Crowley Fax: 702-651-2310

Date of Issue 09/29/2010 LABORATOR

LXG: Linda Geddes Project Manager



Report#: 342876 Project: CWA-RCRA Group: Weekly CLO4 Composites

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 Hits Reports, Comments, QC Summary, QC Report and Regulatory Forms. This report shall not be reproduced except in full, without the written approval of the laboratory.



750 Royal Oaks Drive Suite 100, Monrovia, Ca 91016 Phone 626-386-1100/Fax: 626-386-1101

## **Acknowledgement of Samples Received**

**Tronox LLC** 

PO Box 55 Henderson, NV 89009 Attn: Susan Crowley Phone: 702-651-2234 Customer Code: TRONOX Group #: 342876 Project #: CWA-RCRA Sample Group: Weekly CLO4 Composites Project Manager: Linda Geddes Phone: (626) 386-1163

The following samples were received from you on **September 08, 2010**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

Sample #	Sample Id	Sample Date
201009080278	Effluent-Comp	04-Sep-2010 1000
	Perchlorate	
201009080279	Influent-Comp	04-Sep-2010 1000
	Perchlorate	
Test	Description	

1

	MONTGOMERY WATSON LABORATORIES	WATSON LABOR.	ATORIES	MWLABS USE ONLY:	CHA	0 N	С Ч	CHAIN OF CUSTODY RECORD	DΥ	RECC	RD					
750 Royal	750 Royal Oaks Drive, Suite 100, Monrovia, CA> 91016-3629	Monrovia, CA> 91016		LOGIN COMMENTS:					S	AMPLES (	SAMPLES CHECKED/LOGGED IN BY:	GGED IN BY:	35/50			
(626) 568-6400	6400 (800) 566-5227	5-5227					1		ŝ	AMPLE TE	SAMPLE TEMP, RECEIPT AT LAB:	LAB:	30			
-									Ø	BLUE ICE:	FROZEN	PARTIALLY FROZEN		THAWED		
TO BE COM	TO BE COMPLETED BY SAMPLER:															
COMPANY.	COMPANY / PROJECT NAME		PROJECT JOB # / P.O.#	# <b>·</b> C				REFER TO	ATTACI	HED BOT	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	OR ANALYSI	S	(check for yes)	'yes)	
Tronox			CWA-RCRA Washly Darmit CIO Compliance Sounded	unliance Commiss				NA	N VSFS		ri 'Y' ne drem'	all toote your	ANAL VSES BEOLIIDED (mask an 'Y' in all toots vooriend for and anothe	louil class		Γ
Country Mitchele Ducun	hole Ducura		WEEKLY FEILING CIO4 CO.	inpuance sampres			╡		71-10-0			nhai sisai ila	Ireu Ior each sain	ible line)		
Susan Crowley	le d	60000000000000000000000000000000000000	Tronox Che PO Box 55 Henderson,	Tronox Chemical LLC PO Box 55 Henderson, NV 89009											SAMPLER	
TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	STATE ID#	* XIATAM	COMP	1	CIO†							COMMENTS	
10:00am	8-29-10 thru 9-04-10		Effluent-Comp		RSW	×	×								BO # 19142	
				_												
10:00am	8-29-40 thru 9-04-10		Influent-Comp		RSW	X	×									
	2															
-																
						_										
				-	-	-	=	_	_		_					
* MATR	* MATRIX TYPES:	<u>Report</u> CFW = FW	Reported by Volume: CFW = Chlor(am)inated Finished Water FW = Other Finished Water	Finished Water Vater	R	GW = R SW = R	kaw Grc aw Surf	RGW = Raw Ground Water RSW = Raw Surface Water	CWW WW SW	VW = Chlorinated W = Other Waste V = Storm Water	CWW = Chlorinated Waste Water WW = Other Waste Water SW = Storm Water	/ater	<u>Reported by Weight:</u> SO = Soil SL = Sludge	· Weight	73	
		SIGNATURE	1			PRINT NAME	NAME			CON	COMPANY/TITLE		DATE		TIME	
RELINQUISHED BY	IPP Leho	Or ADAM.	IN	Michele Brown					Ve	loia Water	Veloia Water NA for Tronox Chemical LLC	Chemical LLC	9/7/2010		12:00	
RECEIVED BY:	37. 1	1 Nev Lon	nche		Jue	Sancher	ich	N		M	wit		01-8-10		050	
RELINQUISHED BY:	HED BY:		Ø											·		
RECEIVED BY:	3Y:	•														
C-0-C#													PAGE	OF		

342876

C-0-C#

WWH Laboratories, a Divisi 750 Roval Oaks Drive Suite 100	on of MWH Americas, Inc.	Bottle Order for Tronox LLC	Page 1	
Monrovia, CA 91016 (626)	Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124			1
			Group#	
Linda Ged	<u>Linda Geddes</u> Your MWHL Project Manager	Client Code TRONOX	Date Sampled	
BO #: 21222	Sampler: please return	Project Code CWA-RCRA Bottle Orders	Date Received	
Created By: LXG	this paper with your samples	Group Name Every 1 week on Fri		
Order Date: 07/14/2010		PO#/Job#		
Bottle Orders				
	Ship Sample Kits to	Send Report to		
	Veolia Water-Tronox LLC	Tronox LLC	Billing Address	
Ship By:	Gate 1	PO Box 55	I ronox LLC	
08/03/2010	560 West Lake Mead Pkwy	Henderson, NV 89009	PO Box 55	
	Henderson, NV 89015		Henderson, NV 89009	
	Attn: Wendy Prescott	Attn: Susan Crowley	Attri Susan Crowley	
	Phone:	Phone: 702-651-2234		
	Fax:	Fax: 702-651-2310	FII0116: / 02-03 1-2234 Fax: 702-651-2310	
# of Samples Tests	Qteline# Bottles - Q	Bottles - Qty for each sample, type & preservative if any	UN DOT #	
2 Perthorate	1 125m	125ml poly CLO4 - no preservative		
5 Comments				1
Weekly composite for Influent and Effluent	uent and Effluent			
Client - please label COC	as EFFLUENT-COMP and INFLUENT-COMP	MP		

Bottle Order for Tronox LLC

Tracking # Via Date Shipped Status

Code

Prepared By

# of Coolers

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 filing or record.

SHIPPER'S NUMBER: 144449

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

It be properly 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 wore 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.

CARRIER		FROM NO. STATION: STATE							
Federa	al Express					9	/7/1	0	Henderson, NV 89015
									Authorization
MWH	LABORATO	RIES							S. Crowley
750 R	oyal Oaks Av	enue, S	Suite #100						FULL NAME OF SHIPPER
Monro	via, CA 9101	6-3629	)						TRONOX LLC
Phone	: 626-568-64	00							CODE NO. WCN IS
		11							10181
🛛 Prep		llect	CUSTOMER PO OR RE				IIPPED	FDOM	If it moves between two ports by water, the
N/AR			COSTOMER FO OR RE	QININO.				rson, NV	law requires that the Bill of Lading shall state
LINE NO.		DESCRI	PTION AND CLASSIFICA			STOCK		TOTAL QUANTI	whether it is Carrier's or Shippers weight.
110.	Ice Chest w			non		STOCK		1 COOLER	T
		the mat	or campico						Subject to Section 7 of Conditions of
	2 bottles – I	nfluent	Effluent						applicable Bill of Lading, if this shipment is to be delivered to the Consignee without
		maom	, Emdonie						recourse on the Consigner, the Consignor
									shall sign the following statement:
	Not Regulat	hed							The Carrier shall not make delivery of this
	notrogula	.00							shipment without payment of freight and all other lawful charges.
									TRONOX LLC
	= =								
									The description and weight indicated on this
									Bill of Lading are correct. Subject to
									verification by the Governing Weighing and Inspection Bureau according to Agreement.
									inspection paread decording to Agreement.
TRUCK SHIF	PMENTS								FOR CHEMICAL EMERGENCY-SPILL, LEAK,
PLACARDS	offered 📃 YI	ES	PLACARDS ACC	CEPTED 🗌 Y	YES				FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC – DAY OR NIGHT
				NO				800-424-9300	
NUMBER OF PACKAGES GROSS WEIGHT TARE WEIGHT				WEIGHT		NET	WEIGHT	483-7616 IN DISTRICT OF COLUMBIA	
					0				202-483-7616 FROM OUTSIDE THE CONTINENTAL US.
			TOTAL		DTAL				
	1	GF	ROSS WEIGHT	- 10 C	WEIGHT 0	10			
									"Shippers imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate
NOTE: Wher	re the rate is dependent or	n value, shipp	ers are required to state sp	ecifically in writing	the agreed or decla	ared value of	the prop	perty. The agreed or	Commerce Commission"
declared valu	e of the property is hereby	y specifically s	tated by the shipper to be	not exceeding	per				
			IATERIALS ARE PROPER ABLE REGULATIONS OF				≺KED A	ND LABELED AND A	RE IN PROPER CONDITION FOR
	anent post office address	of	Carron W	illiams	AGENT			F	ER
shipper, PO I 73126-8859	Box 268859, Oklahoma C	ity, OK	ourion W						
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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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September 29, 2010

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

Subject: Case Narrative report 342876

Sample receipt: The samples arrived at MWH Laboratories, Monrovia, CA on September 08, 2010 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:

Other Observations:

There were no unusual observations on this sample set.

Sincerely,

ila Seddes

Linda Geddes Project Manager



7/12

TEL 626-3865-1100 FAX 626-386-1101

Monrovia, CA 91016 www.mwhlabs.com



Tronox LLC Susan Crowley PO Box 55 Henderson, NV 89009

**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.

Kinda Seddes

Signature:



**Tronox LLC** 

Susan Crowley PO Box 55 Henderson, NV 89009 Laboratory Hits Report: 342876

Samples Received on: 09/08/2010

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	201009080279	Influent-Comp	400000	_		
09/27/2010	22:15 Perchlorate		190000	6	ug/L	20000



Laboratory Data Report: 342876

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

Samples Received on: 09/08/2010

Prepared	Analyzed	D QC F	Ref #	Method	Analyte	Re	esult U	nits N	MDL	MRL	SQL	Dilution
Effluent-Co	omp (2010)	09080278	)					S	ampled o	n 09/04	4/2010	1000
	I	EPA 314.0	) - P	erchlorate								
C	09/27/2010 2	21:52 570	690	(EPA 314.0)	Perchlorate	ND	u	g/L (	).25	8	1.00	4
Influent-Co	omp (20100	9080279	<u>)</u>					S	ampled o	n 09/04	4/2010	1000
	I	EPA 314.	) - P	erchlorate								
C	)9/27/2010 2	22:15 570	690	(EPA 314.0)	Perchlorate	190	000 u	ig/L (	).25	20000	1250	5000



Tronox LLC

## QC Ref # 570690 - Perchlorate

201009080278 201009080279 Effluent-Comp Influent-Comp Analysis Date: 09/27/2010 Analyzed by: LUPE Analyzed by: LUPE



## Tronox LLC

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 570690	- Perchlorate by EPA 314.0				Δ	nalysis Da	ate: 09/27/2	010	
LCS1	Perchlorate		25	25.4	ug/L	102	(85-115)		
LCS2	Perchlorate		25	22.7	ug/L	91	(85-115)	15	11
MBLK	Perchlorate			<4	ug/L				
MRL_CHK	Perchlorate		4.0	3.87	ug/L	97	(75-125)		
MRLLW	Perchlorate		2.0	2.01	ug/L	100	(50-150)		
MS_20100915005	57 Perchlorate	ND	25	24.9	ug/L	99	(80-120)		
MSD_201009150	057 Perchlorate	ND	25	25.2	ug/L	101	(80-120)	15	1.6

Spike recovery is already corrected for native results.

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. (S) Indicates surrogate compound.

(I) Indicates internal standard compound.

RPD not calculated for LCS2 when different a concentration than LCS1 is used RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)