

Laboratory Report

for

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

Date of Issue 10/20/2010 H LABORATOF

LXG: Linda Geddes Project Manager



Report#: 344158 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 #: 344158 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 21, 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
201009210228	Effluent-Comp	18-Sep-2010 1000
	Perchlorate	
201009210230	Influent-Comp	18-Sep-2010 1000
	Perchlorate	
Test	Description	

0	MONTGOMERY V	MONTGOMERY WATSON LABORATORIES	LES	CHA	IN OF	CUSTOD	HAIN OF CUSTODY RECORD	56	241100	
)			MWLABS USE ONLY:				9) /		
750 Roval	Oaks Drive. Suite 100.	750 Roval Oaks Drive. Suite 100. Monrovia, CA> 91016-3629	4-,200	VTS:			SAMPLES CHECKED/LOGGED IN BY:	U 18777		
(626) 568-6400	6400 (800) 566-5227	-5227					SAMPLE TEMP, RECEIPT AT LAB: 🔔			·····-
							BLUE ICE: FROZEN PARTIALLY FROZEN	OZENTHAWED		-
TO BE COM	TO BE COMPLETED BY SAMPLER:									
COMPANY	COMPANY / PROJECT NAME	PROJEC	PROJECT JOB #/P.O.#			REFER TO AT	REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES	(check lot yes)	Jr yes/	
Tronox	1,	CWA-RCRA Weekly Permi	CWA-RCRA Weekly Permit CIO4 Compliance Samples	s		ANALY	ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)	d for each sample line	(
Sampler: Michele Brown	er: Michele Brown Durae Jun Lan Consulary	570 WV	Tronox Chemical LLC PO Box 55 Henderson, NV 89009	ບ ິ6 6		red CLO4			SAMPLER	
TIME	DATE	LOCATION	DENTIFIER, STATE D#	* XIATAM	СОМЬ СЕКУВ	CIO4				
10:00am	9-12-10 thru 9-1	rilaz/al	Effluent-Comp	RSW	×	X X			BO# 19142	
	3/		1-A	Dew/		×				- -
10:00an	10:00am $305-10$ thru 9-18-10		mineur-comp							
										- T
								Denorted hv Weight.	ht.	1
* MATI	* MATRIX TYPES:	Reported by Volume: CFW = Chlor(am)inated FW = Other Finished V	Reported by Volume: CFW = Chlor(am)inated Finished Water FW = Other Finished Water	ater	RGW = R RSW = Ra	RGW = Raw Ground Water RSW = Raw Surface Water	CWW = Chlorinated Waste Water WW = Other Waste Water SW = Storm Water	SO = Soil SL = Sludge		
					PRINT NAME	NAME	COMPANY/TITLE	DATE	TIME	
RECEIVED BY:	W Lake		Viche	Michele Brown			Veloia Water NA for Tronox Chemical LLC	9/20/2010	12:00	
RELINQUISHED BY:	SHED BY:			CHUN	1 Atria	Angul S	VILWI	a/21/10	[[* [6]	1 1
								PAGE OF	6	
#0-0-0										

Page 1	Group#	Date Sampled	Date Received	Billing Address NV 89009		UN DOT #			
				Billing Add Tronox LLC PO Box 55 Henderson, NV 89009	Attn: Susan Crowley Phone: 702-651-2234 Fax: 702-651-2310				Prepared By
ronox LLC		Client Code TRONOX	Project Code BOTTLES Bottle Orders Group Name Weekly CLO4 Composites PO# / Job#	Send Report to Tronox LLC PO Box 55 Henderson, NV 89009	<u>Attri Susan Crowley</u> Phore: 702-651-2234 Fax: 702-651-2310	Bottles - Qty for each semple, type & preservative if any 1 125 ml poly + syringe, filter 125ml STERILE bottle			# of Coolers
nericas, Inc. Bottle Order for Tronox ILC	6) 386-1124		Sampler: please return this paper with your samples PO#/Job#	Ship Sample Kits to Tronox LLC 9 Mead Pkwy V 89015		Qteline# Bottles - Qty for e 1 125 ml poly		ent and Effluent as EFFLUENT-COMP and INFLUENT-COMP	Tracking #
MWH Letonatories, a Division of MWH Americas, Inc. 750 Royal Oaks Drive Suite 100	(626) 386-1100 FAX (62	<u>Linda Geddes</u> Your MWHL Project Manager	Sampler: p this paper v	Ship Sample Veolia Water-Tronox LLC Gate 1 560 West Lake Mead Pkwy Henderson, NV 89015	Attn: Wendy Prescott Phone: Fax:	ltered		Influent and Efflue	Date Shipped Via
750 Royal Oaks Drive	Monrovia, CA 91016	Linda	BO #: 22653 Created By: LXG Order Date: 09/17/2010 Bottle Orders	Bottle Orders Ship By: 09/07/2010		# of Samples Tests Perstiorate Sterile Filtered	Comments	Weekly composite for Influent and Effluent Client - please label COC as EFFLUENT.	Code Status
0			BO # Crea Orde	Sh 05		5 #	S L	5 0	0



October 20, 2010

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

Subject: Case Narrative report 344158

Sample receipt: The samples arrived at MWH Laboratories, Monrovia, CA on September 21, 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:

Report revised to reflect sampling dates of 9/18/10. LXG 102010

Other Observations:

There were no other observations on this sample set.

Sincerely,

Aldes

Linda Geddes Project Manager

5/10

750 Royal Oaks Drive Suite 100 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.

Rinda Seddes

Group Comments

Signature:

Report revised to reflect sampling dates of 9/18/10. LXG 102010

Laboratory Comments Report: #344158



Tronox LLC

Susan Crowley PO Box 55 Henderson, NV 89009 Laboratory Hits Report: 344158

Samples Received on: 09/21/2010

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/05/2010 0	201009210230 3:35 Perchlorate	Influent-Comp	170000	6	ug/L	20000



Tronox LLC Susan Crowley PO Box 55 Henderson, NV 89009 Laboratory Data Report: 344158

Samples Received on: 09/21/2010

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MDL	MRL	SQL	Dilution
Effluent-Co	omp (2010092	10228)					Sample	d on 09/	18/2010	1000
	EP	A 314.0 - Po	erchlorate							
1	0/05/2010 03:1	3 571546	(EPA 314.0)	Perchlorate	ND	ug/L	0.25	8	1.00	4
Influent-Co	omp (2010092	<u>10230)</u>				Sample	d on 09/	18/2010	1000	
	EP	A 314.0 - Po	erchlorate							
1	0/05/2010 03:3	5 571546	(EPA 314.0)	Perchlorate	170000	ug/L	0.25	20000	1250	5000



Tronox LLC

QC Ref # 571546 - Perchlorate

201009210228 201009210230 Effluent-Comp Influent-Comp Analysis Date: 10/05/2010 Analyzed by: LUPE Analyzed by: LUPE



Tronox LLC

QC Туре	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 571546 -	Perchlorate by EPA 314.0				A	nalysis Da	ate: 10/04/2	010	
LCS1	Perchlorate		25	23.1	ug/L	93	(85-115)		
LCS2	Perchlorate		25	24.5	ug/L	98	(85-115)	15	5.9
MBLK	Perchlorate			<4	ug/L				
MRL_CHK	Perchlorate		4.0	4.36	ug/L	109	(75-125)		
MRLLW	Perchlorate		2.0	2.47	ug/L	123	(50-150)		
MS_20100927015	5 Perchlorate	ND	25	23.6	ug/L	94	(80-120)		
MSD_2010092701	55 Perchlorate	ND	25	23.6	ug/L	94	(80-120)	15	0.0

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)