MWH
LABORATORIES
A Division of MWH Americas, Inc.

750 Royal Oak Dr., 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
PO Box 55
Henderson, NV 89009
Attention: Susan Crowley
Fax: 702-651-2310

Date of Issue
12/06/2010
Linda Geddes
MWH LABORATORIES

ACCREDITED IN ACCORDANCE WITH nelac 01114CA

Report#: 344166
Project: CWA-RCRA
Group: LV Wash

LXG: Linda Geddes

Project Manager

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.

MWH LABORATORIES

Acknowledgement of Samples Received

Tronox LLC
PO Box 55
Henderson, NV 89009
Attn: Susan Crowley
Phone: 702-651-2234

Customer Code: TRONOX
Folder #: 344166
Project: CWA-RCRA
Sample Group: LV Wash
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
201009210241	LVW UPGRADIENT			Sep 20, 2010 06:27
	@ACOPEDD	Ammonia Nitrogen	Nitrate as Nitrogen by IC	
	Nitrite Nitrogen by IC	Perchlorate	Total Inorganic Nitrogen-Calc	
201009210243	LVW 6.05			Sep 20, 2010 06:44
	@ACOPEDD	Ammonia Nitrogen	Nitrate as Nitrogen by IC	
	Nitrite Nitrogen by IC	Perchlorate	Total Inorganic Nitrogen-Calc	
201009210244	LVW 5.5			Sep 20, 2010 06:52
	@ACOPEDD	Ammonia Nitrogen	Nitrate as Nitrogen by IC	
	Nitrite Nitrogen by IC	Perchlorate	Total Inorganic Nitrogen-Calc	
201009210245	LVW 0.55			Sep 20, 2010 07:30
	Ammonia Nitrogen	Perchlorate	Total phosphorus as P	

Test Description

@ACOPEDD -- Gross Alpha by Co-precipitation (Sub)

750 Royal Oaks Dr., Ste 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (626) 386-1101 http://MWHLabs.com

MONTGOMERY WATSON LABORATORIES

CHAIN OF CUSTODY RECORD

9/4/06

750 Royal Oaks Drive, Suite #100 Monrovia, CA. 91016.
(626) 386-1100 (800) 566-5227

MWLABS USE ONLY:

LOGIN COMMENTS:

SAMPLES CHECKED/LOGGED IN BY: JS/JS

SAMPLE TEMP, RECEIPT AT LAB: 5°

BLUE ICE: FROZEN ✓ PARTIALLY FROZEN ___ THAWED ___

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME
TRONOX

PROJECT JOB # / P.O.#
CWA-RCRA
Bi- Monthly Permit Compliance- Wash Samples

Sampler Signature- Michele Brown Michele Brown
Susan Crowley (702) 651-2234

Tronox LLC - Henderson Plant
PO Box 55
Henderson, NV 89009

REFER TO ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes)

ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)

TIME	DATE	LOCATION	IDENTIFIER, STATE ID#	MATRIX *	GRAB	COMP	Bi-monthly Permit 002	see bottle order	Sterile filter 0.45	SAMPLER COMMENTS
627	9/20/2010		LVW UPGRADIENT	RSW	X			X	X	BO #8733
644	9/20/2010		LVW 6.05	RSW	X			X	X	BO #8733
652	9/20/2010		LVW 5.5	RSW	X			X	X	BO #8733
730	9/20/2010		LVW 0.55	RSW	X			X	X	BO #8733

3723

* **MATRIX TYPES:**

Reported by Volume:
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
RGW = Raw Ground Water
RSW = Raw Surface Water
CWW = Chlorinated Waste Water
WW = Other Waste Water
SW = Storm Water

Reported by Weight:
SO = Soil
SL = Sludge

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	Michele Brown	Michele Brown	Veolia Water for Tronox LLC	9/20/2010	12:00PM
RECEIVED BY:	JC Sanchez	JC Sanchez	MWH	9/21/10	1105
RELINQUISHED BY:					
RECEIVED BY:					

C-O-C# KH062002

MWH Laboratories, a Division of MWH Americas, Inc.
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016 (626) 386-1100 FAX (626) 386-1124

Bottle Order for Tronox LLC

Group#
Date Sampled
Date Received

Linda Geddes Your MWHL Project Manager

BO #: 21971
Created By: LXG
Order Date: 09/02/2010
Bottle Orders

Sampler: please return this paper with your samples

Client Code TRONOX
Project Code CWA-RCRA Bottle Orders
Group Name LV Wash
PO# / Job#

Ship By:
08/23/2010

Ship Sample Kits to
Veolia Water-Tronox LLC
Gate 1
560 West Lake Mead Pkwy
Henderson, NV 89015

Attn: Wendy Prescott
Phone:
Fax:

Send Report to
Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

Billing Address
Tronox LLC
PO Box 55
Henderson, NV 89009

Attn: Susan Crowley
Phone: 702-651-2234
Fax: 702-651-2310

# of Samples	Tests	Qteline#	Bottles - Qty for each sample, type & preservative if any	UN DOT #
3	@ALPHA		1 500ml poly 2ml 18%HNO3+125ml poly/no pres	
3	Ammonia Nitrogen		1 250ml poly 0.5ml H2SO4 (50%)	
1	Ammonia Nitrogen, Total phosphorus as P		1 250ml poly 0.5ml H2SO4 (50%)	
3	Nitrate as Nitrogen by IC, Nitrite Nitrogen by IC, Total Inorganic Nitrogen-Calc		1 125ml poly no preservative	
4	Perchlorate Sterile Filtered		1 125 ml poly + syringe, filter 125ml STERILE bottle	

Comments

Biweekly Las Vegas Wash

T-P, NH3, CLO4 on LVW 0.55
clo4, alpha, no3, no2, n-inor, NH3 on LVW 5.5, LVW 6.05, LVW Upgradient

PUT IN LARGER COOLER WITH MORE BLUE ICE DURING SUMMER MONTHS

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

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: 144471

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

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.

CARRIER	Date	FROM NO. STATION: STATE
Federal Express	9/20/10	Henderson, NV 89015

MWH LABORATORIES
750 Royal Oaks Avenue, Suite #100
Monrovia, CA 91016-3629
Phone: 626-568-6400

Authorization
S. Crowley

FULL NAME OF SHIPPER
TRONOX LLC

CODE NO. WCN IS

10181

If it moves between two ports by water, the law requires that the Bill of Lading shall state whether it is Carrier's or Shippers weight.

FREIGHT CHARGES
☒ Prepaid ☐ Collect

N/AR	CUSTOMER PO OR REQ'N NO.	SHIPPED FROM
		Henderson, NV

LINE NO.	DESCRIPTION AND CLASSIFICATION	STOCK NO.	TOTAL QUANTITY
	Ice Chest with water samples 2 bottles – Influent, Effluent 2 bottles sterile filtered 25ml CLO4 Not Regulated		1 COOLER

Subject to Section 7 of Conditions of applicable Bill of Lading, if this shipment is to be delivered to the Consignee without recourse on the Consignor, the Consignor shall sign the following statement:

The Carrier shall not make delivery of this 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.

TRUCK SHIPMENTS

PLACARDS OFFERED ☐ YES ☒ NO

PLACARDS ACCEPTED ☐ YES ☒ NO

NUMBER OF PACKAGES	GROSS WEIGHT	TARE WEIGHT	NET WEIGHT
		0	
1	**TOTAL GROSS WEIGHT** 10	TOTAL TARE WEIGHT 0	10

FOR CHEMICAL EMERGENCY-SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT
CALL CHEMTREC – DAY OR NIGHT
800-424-9300
483-7616 IN DISTRICT OF COLUMBIA
202-483-7616 FROM OUTSIDE THE CONTINENTAL US.

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 per

"Shippers imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission"

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.

TRONOX LLC Shipper permanent post office address of shipper, PO Box 268859, Oklahoma City, OK 73126-8859	PER **Chuck Whitney**	AGENT	PER

5/23

From: Origin ID: LASA (702) 651-2200
Tronox
Tronox
560 W. Lake Mead Parkway

Henderson, NV 89015

FedEx Express

J10301008090225

Ship Date: 20SEP10
ActWgt: 29.0 LB
CAD: 100845654/INET3090

Delivery Address Bar Code

SHIP TO: (626) 568-6400 **BILL SENDER**

Attn: Sample Receiving
Montgomery Watson Labs
750 ROYAL OAKS DR STE 100

MONROVIA, CA 91016

Ref # MSO #144472
Invoice #
PO #
Dept #

TRK# 0201 7962 6260 6015

TUE - 21 SEP A1
PRIORITY OVERNIGHT

91016
CA-US
BUR

QZ WHPA

50AG3/9292/278D

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 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

BUILDING A BETTER WORLD

December 06, 2010

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

Subject: Case Narrative report 344166

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:

Other Observations:

Gross Alpha was submitted by Pace Labs. Please see their case narrative for any issues.

Sincerely,

Linda Geddes

Linda Geddes
Project Manager

750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016
TEL 626-3865-1100
FAX 626-386-1101
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Laboratory Comments
Report: #344166

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.

Signature: Linda Seddes

Group Comments

Analytical results for Gross Alpha are submitted by Pace Analytical Services, Greensburg, PA

The Comments Report may be blank if there are no comments for this report.

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Laboratory
Hits Report: 344166

Tronox LLC
Susan Crowley
PO Box 55
Henderson, NV 89009

Samples Received on:
09/21/2010

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		201009210241 LVW UPGRADIENT				
11/22/2010	21:45 Gross Alpha by Coprecipitation		3.86	15	pCi/L	2.5
09/21/2010	12:31 Nitrate as Nitrogen by IC		15	10	mg/L	0.5
10/05/2010	20:32 Perchlorate		22	6	ug/L	4
09/28/2010	11:53 Total Inorganic Nitrogen-Calc		15		mg/L	0.2
		201009210243 LVW 6.05				
11/22/2010	21:45 Gross Alpha by Coprecipitation		3.96	15	pCi/L	3
09/21/2010	12:56 Nitrate as Nitrogen by IC		14	10	mg/L	0.5
10/05/2010	20:55 Perchlorate		19	6	ug/L	4
09/28/2010	11:53 Total Inorganic Nitrogen-Calc		14		mg/L	0.2
		201009210244 LVW 5.5				
11/22/2010	21:45 Gross Alpha by Coprecipitation		4.96	15	pCi/L	3
09/21/2010	12:43 Nitrate as Nitrogen by IC		14	10	mg/L	0.5
10/05/2010	21:17 Perchlorate		19	6	ug/L	4
09/28/2010	11:53 Total Inorganic Nitrogen-Calc		14		mg/L	0.2
		201009210245 LVW 0.55				
10/05/2010	21:40 Perchlorate		52	6	ug/L	4
09/23/2010	20:19 Total phosphorus as P		0.073		mg/L	0.02

SUMMARY OF POSITIVE DATA ONLY

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Laboratory Data
Report: 344166

Tronox LLC
Susan Crowley
PO Box 55
Henderson, NV 89009

Samples Received on:
09/21/2010

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MDL	MRL	SQL	Dilution
LVW UPGRADIENT (201009210241)								**Sampled on**	**09/20/2010 0627**	
				SM 7110C - Gross Alpha by Co-precipitation (Sub)						
11/22/2010	21:45		(SM 7110C)	Alpha, Min Detectable Activity	2.54	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Alpha, Two Sigma Error	1.87	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Gross Alpha by Coprecipitation	3.86	pCi/L		2.5	0.0000	1
				CALC_300.0 - Total Inorganic Nitrogen-Calc						
09/28/2010	11:53		(CALC_300.0)	Total Inorganic Nitrogen-Calc	15	mg/L	0.20	0.2	0.20	1
				EPA 350.1 - Ammonia Nitrogen						
09/27/2010	17:37	570727	(EPA 350.1)	Ammonia Nitrogen	0.021J	mg/L	0.0030	0.05	0.0030	1
				EPA 300.0 - Nitrate, Nitrite by EPA 300.0						
09/21/2010	12:31	569942	(EPA 300.0)	Nitrate as Nitrogen by IC	15	mg/L	0.0050	0.5	0.025	5
09/21/2010	12:31	569942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.0040	0.25	0.020	5
				EPA 314.0 - Perchlorate						
10/05/2010	20:32	571650	(EPA 314.0)	Perchlorate	22	ug/L	0.25	4	0.25	1
LVW 6.05 (201009210243)								**Sampled on**	**09/20/2010 0644**	
				SM 7110C - Gross Alpha by Co-precipitation (Sub)						
11/22/2010	21:45		(SM 7110C)	Alpha, Min Detectable Activity	2.95	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Alpha, Two Sigma Error	2.01	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Gross Alpha by Coprecipitation	3.96	pCi/L		3	0.0000	1
				CALC_300.0 - Total Inorganic Nitrogen-Calc						
09/28/2010	11:53		(CALC_300.0)	Total Inorganic Nitrogen-Calc	14	mg/L	0.20	0.2	0.20	1
				EPA 350.1 - Ammonia Nitrogen						
09/27/2010	17:39	570727	(EPA 350.1)	Ammonia Nitrogen	0.027J	mg/L	0.0030	0.05	0.0030	1
				EPA 300.0 - Nitrate, Nitrite by EPA 300.0						
09/21/2010	12:56	569942	(EPA 300.0)	Nitrate as Nitrogen by IC	14	mg/L	0.0050	0.5	0.025	5
09/21/2010	12:56	569942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.0040	0.25	0.020	5
				EPA 314.0 - Perchlorate						
10/05/2010	20:55	571650	(EPA 314.0)	Perchlorate	19	ug/L	0.25	4	0.25	1

Rounding on totals after summation.
(c) - indicates calculated results

Sample Quantitation Limit (SQL) = MDL * Dilution Factor

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Laboratory Data
Report: 344166

Tronox LLC
Susan Crowley
PO Box 55
Henderson, NV 89009

Samples Received on:
09/21/2010

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MDL	MRL	SQL	Dilution
LVW 5.5 (201009210244)								**Sampled on**	**09/20/2010 0652**	
			SM 7110C - Gross Alpha by Co-precipitation (Sub)							
11/22/2010	21:45		(SM 7110C)	Alpha, Min Detectable Activity	2.99	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Alpha, Two Sigma Error	2.17	pCi/L			0.0000	1
11/22/2010	21:45		(SM 7110C)	Gross Alpha by Coprecipitation	4.96	pCi/L		3	0.0000	1
			CALC_300.0 - Total Inorganic Nitrogen-Calc							
09/28/2010	11:53		(CALC_300.0)	Total Inorganic Nitrogen-Calc	14	mg/L	0.20	0.2	0.20	1
			EPA 350.1 - Ammonia Nitrogen							
09/27/2010	17:40	570727	(EPA 350.1)	Ammonia Nitrogen	0.026J	mg/L	0.0030	0.05	0.0030	1
			EPA 300.0 - Nitrate, Nitrite by EPA 300.0							
09/21/2010	12:43	569942	(EPA 300.0)	Nitrate as Nitrogen by IC	14	mg/L	0.0050	0.5	0.025	5
09/21/2010	12:43	569942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.0040	0.25	0.020	5
			EPA 314.0 - Perchlorate							
10/05/2010	21:17	571650	(EPA 314.0)	Perchlorate	19	ug/L	0.25	4	0.25	1
LVW 0.55 (201009210245)								**Sampled on**	**09/20/2010 0730**	
			EPA 350.1 - Ammonia Nitrogen							
09/27/2010	17:41	570727	(EPA 350.1)	Ammonia Nitrogen	0.023J	mg/L	0.0030	0.05	0.0030	1
			EPA 314.0 - Perchlorate							
10/05/2010	21:40	571650	(EPA 314.0)	Perchlorate	52	ug/L	0.25	4	0.25	1
			SM4500-PE/EPA 365.1 - Total phosphorus as P (T-P)							
09/23/2010	20:19	570676	(SM4500-PE/EPA 365.1)	Total phosphorus as P	0.073	mg/L	0.0084	0.02	0.0084	1

Rounding on totals after summation.
(c) - indicates calculated results

Sample Quantitation Limit (SQL) = MDL * Dilution Factor

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QC Ref # 569942 - Nitrate, Nitrite by EPA 300.0 — **Analysis Date: 09/21/2010**

201009210241	LVW UPGRADIENT	Analyzed by: SXK
201009210243	LVW 6.05	Analyzed by: SXK
201009210244	LVW 5.5	Analyzed by: SXK

QC Ref # 570676 - Total phosphorus as P (T-P) — **Analysis Date: 09/23/2010**

201009210245	LVW 0.55	Analyzed by: NJR

QC Ref # 570727 - Ammonia Nitrogen — **Analysis Date: 09/27/2010**

201009210241	LVW UPGRADIENT	Analyzed by: NJR
201009210243	LVW 6.05	Analyzed by: NJR
201009210244	LVW 5.5	Analyzed by: NJR
201009210245	LVW 0.55	Analyzed by: NJR

QC Ref # 571650 - Perchlorate — **Analysis Date: 10/05/2010**

201009210241	LVW UPGRADIENT	Analyzed by: LUPE
201009210243	LVW 6.05	Analyzed by: LUPE
201009210244	LVW 5.5	Analyzed by: LUPE
201009210245	LVW 0.55	Analyzed by: LUPE

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Laboratory
QC Report: 344166

Tronox LLC

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 569942 - Nitrate, Nitrite by EPA 300.0 by EPA 300.0						**Analysis Date: 09/21/2010**			
LCS1	Nitrate as Nitrogen by IC		2.5	2.52	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	100	(90-110)	20	0.40
MBLK	Nitrate as Nitrogen by IC			<0.10	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0507	mg/L	101	(50-150)		
MS_201009210080	Nitrate as Nitrogen by IC	0.47	1.3	1.88	mg/L	112	(80-120)		
MS_201009210269	Nitrate as Nitrogen by IC	5.1	1.3	6.45	mg/L	106	(80-120)		
MSD_201009210080	Nitrate as Nitrogen by IC	0.47	1.3	1.85	mg/L	110	(80-120)	20	1.8
MSD_201009210269	Nitrate as Nitrogen by IC	5.1	1.3	6.46	mg/L	107	(80-120)	20	0.94
LCS1	Nitrite Nitrogen by IC		1.0	0.972	mg/L	97	(90-110)		
LCS2	Nitrite Nitrogen by IC		1.0	0.967	mg/L	97	(90-110)	20	0.52
MBLK	Nitrite Nitrogen by IC			<0.10	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0475	mg/L	95	(50-150)		
MS_201009210080	Nitrite Nitrogen by IC	ND	0.5	0.509	mg/L	102	(80-120)		
MS_201009210269	Nitrite Nitrogen by IC	ND	0.5	0.463	mg/L	93	(80-120)		
MSD_201009210080	Nitrite Nitrogen by IC	ND	0.5	0.503	mg/L	101	(80-120)	20	0.99
MSD_201009210269	Nitrite Nitrogen by IC	ND	0.5	0.469	mg/L	94	(80-120)	20	1.2
QC Ref# 570676 - Total phosphorus as P (T-P) by SM4500-PE/EPA 365.1						**Analysis Date: 09/23/2010**			
LCS1	Total phosphorus as P		0.4	0.374	mg/L	94	(90-110)		
LCS2	Total phosphorus as P		0.4	0.377	mg/L	94	(90-110)	20	0.80
MBLK	Total phosphorus as P			<0.02	mg/L				
MRL_CHK	Total phosphorus as P		0.02	0.0174	mg/L	87	(50-150)		
MS_201009180087	Total phosphorus as P	0.47	0.4	0.911	mg/L	110	(90-110)		
MS2_201009180088	Total phosphorus as P	0.47	0.4	0.902	mg/L	108	(90-110)		
MSD_201009180087	Total phosphorus as P	0.47	0.4	0.910	mg/L	110	(90-110)	20	0.0
QC Ref# 570727 - Ammonia Nitrogen by EPA 350.1						**Analysis Date: 09/27/2010**			
LCS1	Ammonia Nitrogen		1.0	1.06	mg/L	106	(90-110)		
LCS2	Ammonia Nitrogen		1.0	1.06	mg/L	106	(90-110)	20	0.0
MBLK	Ammonia Nitrogen			<0.05	mg/L				
MRL_CHK	Ammonia Nitrogen		0.05	0.0400	mg/L	80	(50-150)		
MS_201009210307	Ammonia Nitrogen	ND	1.0	1.05	mg/L	105	(90-110)		
MS2_201009210309	Ammonia Nitrogen	ND	1.0	1.06	mg/L	106	(90-110)		
MSD_201009210307	Ammonia Nitrogen	ND	1.0	1.06	mg/L	106	(90-110)	20	0.95
QC Ref# 571650 - Perchlorate by EPA 314.0						**Analysis Date: 10/05/2010**			
LCS1	Perchlorate		25	24.7	ug/L	99	(85-115)		
LCS2	Perchlorate		25	24.3	ug/L	97	(85-115)	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)

MWH
LABORATORIES
A Division of MWH Americas, Inc.

750 Royal Oak Dr., 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: 344166

Tronox LLC
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Perchlorate			<4	ug/L				
MRL_CHK	Perchlorate		4.0	3.27	ug/L	82	(75-125)		
MRLLW	Perchlorate		2.0	1.99	ug/L	100	(50-150)		
MS_201009210307	Perchlorate	ND	25	24.3	ug/L	97	(80-120)		
MSD_201009210307	Perchlorate	ND	25	24.8	ug/L	99	(80-120)	15	1.9

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)

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 23, 2010

Ms. Jaclyn L. Contreras
MWH Americas, Inc.
Royal Oaks Dr.
Suite 100
Monrovia, CA 910163629

RE: Project: PACE-PA 344166
Pace Project No.: 3037414

Dear Ms. Contreras:
Enclosed are the analytical results for sample(s) received by the laboratory on November 17, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

cc: Mr. Aleksandar D. Tomovich, MWH Americas, Inc.

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: PACE-PA 344166
Pace Project No.: 3037414

Pennsylvania Certification IDs
1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: PACE-PA 344166
Pace Project No.: 3037414

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3037414001	**201009210241**	Water	09/20/10 06:27	11/17/10 10:30
3037414002	**201009210243**	Water	09/20/10 06:44	11/17/10 10:30
3037414003	**201009210244**	Water	09/20/10 06:52	11/17/10 10:30

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SAMPLE ANALYTE COUNT

Project: PACE-PA 344166
Pace Project No.: 3037414

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3037414001	**201009210241**	SM 7110C	SJH	1	PASI-PA
3037414002	**201009210243**	SM 7110C	SJH	1	PASI-PA
3037414003	**201009210244**	SM 7110C	SJH	1	PASI-PA

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PROJECT NARRATIVE

Project: PACE-PA 344166
Pace Project No.: 3037414

Method: **SM 7110C**
Description: 7110C Gross Alpha
Client: MWH Laboratories
Date: November 23, 2010

General Information:
3 samples were analyzed for SM 7110C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: PACE-PA 344166
Pace Project No.: 3037414

Sample: 201009210241 **Lab ID: 3037414001** Collected: 09/20/10 06:27 Received: 11/17/10 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Gross Alpha	SM 7110C	**3.86 ± 1.87 (2.54)**	pCi/L	11/22/10 21:45	12587-46-1	

Sample: 201009210243 **Lab ID: 3037414002** Collected: 09/20/10 06:44 Received: 11/17/10 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Gross Alpha	SM 7110C	**3.96 ± 2.01 (2.95)**	pCi/L	11/22/10 21:45	12587-46-1	

Sample: 201009210244 **Lab ID: 3037414003** Collected: 09/20/10 06:52 Received: 11/17/10 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Gross Alpha	SM 7110C	**4.96 ± 2.17 (2.99)**	pCi/L	11/22/10 21:45	12587-46-1	

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QUALITY CONTROL DATA

Project: PACE-PA 344166
Pace Project No.: 3037414

QC Batch: RADC/6766 Analysis Method: SM 7110C
QC Batch Method: SM 7110C Analysis Description: 7110C Gross Alpha
Associated Lab Samples: 3037414001, 3037414002, 3037414003

METHOD BLANK: 240239 Matrix: Water
Associated Lab Samples: 3037414001, 3037414002, 3037414003

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Alpha	0.556 ± 0.939 (2.09)	pCi/L	11/22/10 13:29	

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QUALIFIERS

Project: PACE-PA 344166
Pace Project No.: 3037414

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Quality Control Sample Performance Assessment

Test:	Gross Alpha
Analyst:	SJH
Date:	11/23/2010
Worklist:	6766
Matrix (DW, W, F, Solid):	DW

Method Blank Assessment

MB concentration:	0.229
M/B Counting Uncertainty:	0.482
MB MDC:	1.121
MB Numerical Performance Indicator:	0.93
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment

	LCS	LSCD
Count Date:	11/22/2010	11/22/2010
Spike I.D.:	08-026	08-026
Spike Concentration (pCi/mL):	30.198	30.198
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.200	0.200
Target Conc. (pCi/L, g, F):	15.099	15.099
Uncertainty (Calculated):	0.947	0.947
Result (pCi/L, g, F):	15.179	15.126
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	2.481	2.493
Numerical Performance Indicator:	0.06	0.02
Percent Recovery:	100.53%	100.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass

23/23

Sample Matrix Spike Control Assessment

Sample Collection Date:	11/3/2010
Sample I.D.	3521596010
Sample MS I.D.	3521596010MS
Sample MSD I.D.	
Spike I.D.:	08-026
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	30.198
Spike Volume Used in MS (mL):	0.20
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	0.050
MS Target Conc.(pCi/L, g, F):	120.793
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
Spike uncertainty (calculated):	7.576
Sample Result:	18.292
Sample Result Counting Uncertainty (pCi/L, g, F):	2.576
Sample Matrix Spike Result:	100.933
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	13.683
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	-4.717
MSD Numerical Performance Indicator:	
MS Percent Recovery:	68.42%
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	N/A
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	Pass
MSD Status vs Recovery:	

Duplicate Sample Assessment

Sample I.D.:	LCS
Duplicate Sample I.D.	LCSD
Sample Result (pCi/L, g, F):	15.179
Sample Result Counting Uncertainty (pCi/L, g, F):	2.481
Sample Duplicate Result (pCi/L, g, F):	15.126
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.493
Are sample and/or duplicate results below MDC?	NO
Duplicate Numerical Performance Indicator:	0.030
Duplicate RPD:	0.35%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
MS/ MSD Duplicate RPD:	
MS/ MSD Duplicate Status vs Numerical Indicator:	
MS/ MSD Duplicate Status vs RPD:	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments: