



MWH Laboratories

A Division of MWH Americas, Inc.

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: 626 386 1100
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1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Tronox LLC - Henderson
PO Box 55

Henderson , NV 89009

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

DATE OF ISSUE
Jun 26 2009
MWH LABORATORIES

ADE Andy Eaton
Project Manager

Report#270531R replaces the original Report.



Report#: 270531R
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 9 page[s].



MVLABS USE ONLY:

750 Royal Oaks dr. Suite 100 Montrovia, Ca., 91016-3629
(626) 386-1100 (800) 566-5227

LOGIN COMMENTS:

SAMPLES CHECKED/LOGGED IN BY: WCS
SAMPLE TEMP, RECEIPT AT LAB: 4.8
BLUE ICE: FROZEN PARTIALLY FROZEN THAWED

TO BE COMPLETED BY SAMPLER:

COMPANY / PROJECT NAME: **KERRMCGEE-MP** PROJECT JOB # / P.O.#: **CLO4**

Sampler Signature: Michele Brown Tronox LLC - Henderson Plant
Susan Crowley (702) 651-2234 PO Box 55
Henderson, NV 89009

IDENTIFIER, STATE ID#: **M-10**

TIME	DATE	LOCATION	MATRIX *	GRAB	COMP	ANALYSES REQUIRED (mark an 'X' in all tests required for each sample line)	SAMPLER COMMENTS
10:05 AM	5/7/2009		RSW	X		see bottle order	

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

* MATRIX TYPES: **Reported by Volume:**
 CFW = Chlor(amin)ated Finished Water
 FW = Other Finished Water

Reported by Weight:
 SO = Soil
 SL = Sludge

RGW = Raw Ground Water
 RSW = Raw Surface Water
 CWW = Chlorinated Waste Water
 WW = Other Waste Water
 SW = Storm Water

SIGNATURE: Michele Brown PRINT NAME: **Michele Brown** COMPANY/TITLE: MW COMPANY/TITLE: **Vecilia Water NA for Tronox LLC - Henderson Plant**

RECEIVED BY: [Signature] DATE: **5/7/2009** TIME: **12:00 PM**

RECEIVED BY: [Signature] DATE: **5/8/09** TIME: **11:14**



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

Bottle Order for Tronox LLC- Henderson Standing

Andrew Eaton, Your MWL Project Manager
 (626) 386-1125 Direct Phone/Voice Mail

Client Code: KERRMCGEE-MP Q Quarterly Period

Project Code: CLO4
 PO# / Job#
 Blanket PO

SO# 47270 6529 RS **Sampler: Please Return this Paper with your samples**

Created by: GJY

Order Date: 03/16/09

Date Needed by Client: SHIP LOCATION

Ship Sample Kits to
 Veolia Water-Tronox LLC
 Gate 1
 8000 West Lake Mead Drive
 Henderson, NV 89015

ATTN: Susan Crowley
 PHONE: 702-651-2234

ATTN: Susan Crowley
 PHONE: 702-651-2234
 FAX: 702-651-2310

Billing Address
 Tronox LLC
 Attn: Accounts Payable
 P.O. BOX 268859
 Oklahoma City, OK 73126-8859

Quote#
GJY

of Samples Tests

Bottles-Qty for each sample, type & preservative if any

UN#

Important Comments

# of Samples	Tests	Bottles-Qty for each sample, type & preservative if any	UN#	Important Comments
1	CR, MN, FE, B	1 250ml poly acid rinsed + 1ml HNC3 (18%)	UN2031	This is a quarterly sample for the "M-10 by the NPDES permit NV0023060
1	CL, TDS, NO3, NO2-N, N-NH3	1 500 ml poly, no preservative SHORT HOLDING TIME!!!!		
1	NH3, NH3-DIST	1 250 ml poly+ 1 ml H2SO4 (50%)	UN2796	
-	-	-	-	NO BLUE ICE NEEDED - CLIENT USING WET ICE TO COOL BOTTLES
-	-	-	-	CLIENT CODE CHANGED 7/25/03
-	-	-	-	changed 12/8/05- dropped Cu, Mo, F as per new permit and changed metals to all ICP

Active Code Status Date Shipped Carrier Qty of Coolers Tracking Number Prepared By

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#: 270531
 Project#: CLO4
 Proj Mgr: Andrew Eaton
 Phone: (626) 386-1125

The following samples were received from you on **05/08/09**. 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
2905080170	M-10	B CL N-INOR NH3 T TDS	Water CR NH3-DIST	07-may-2009 10:05:00 FE MN NO3 P

Test Acronym Description

Test Acronym	Description
B	Boron, Total, ICAP
CL	Chloride
CR	Chromium, Total, ICAP
DIGEST	Metals digestion performed.
FE	Iron, Total, ICAP
MN	Manganese, Total, ICAP
N-INOR	Total Inorganic Nitrogen-Calc
NH3	Ammonia Nitrogen
NH3-DIST	NPDES Ammonia Distillation
NO2-N	Nitrite, Nitrogen by IC
NO3	Nitrate as Nitrogen by IC
P	Metals sample pH
T	Metals Turbidity
TDS	Total Dissolved Solid (TDS)



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Report
Comments
#270531

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: 

Group Comments

Report revised to correct QC for CR, MN, and NO3.



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Laboratory
Hits Report
#270531

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

Samples Received
08-may-2009 18:45:32

Analyzed	Sample#	Sample ID	Result	Federal MCL	UNITS	MRL
	2905080170	M-10				
05/27/09	Boron, Total, ICAP		3.3		mg/l	0.050
05/08/09	Chloride		310	250	mg/l	10
06/03/09	Chromium, Total, ICAP		0.71		mg/l	0.050
05/27/09	Iron, Total, ICAP		4.4	0.3	mg/l	0.020
06/03/09	Manganese, Total, ICAP		0.29		mg/l	0.010
06/04/09	Metals digestion performed.		Y		Yes/No	
05/14/09	Total Dissolved Solid (TDS)		3210	500	mg/l	10

SUMMARY OF POSITIVE DATA ONLY.



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Laboratory
Data Report
#270531

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

Samples Received
05/08/09

Prepared	Analyzed	QC Ref#	Method	Analyte	Result	Units	MRL	Dilution
M-10 (2905080170)				Sampled on 05/07/09 10:05				
	05/27/09 21:35	486293	(ML/EPA 200.7)	Boron, Total, ICAP	3.3	mg/l	0.050	1
	05/08/09 22:44	485629	(ML/EPA 300.0)	Chloride	310	mg/l	10	10
	06/03/09 02:30	486818	(ML/EPA 200.7)	Chromium, Total, ICAP	0.71	mg/l	0.050	5
	06/04/09 00:00		(EPA 200 Prep)	Metals digestion performed.	Y	Yes/No	0	1
	05/27/09 21:35	486264	(ML/EPA 200.7)	Iron, Total, ICAP	4.4	mg/l	0.020	1
	06/03/09 02:30	486840	(ML/EPA 200.7)	Manganese, Total, ICAP	0.29	mg/l	0.010	5
	06/25/09 21:57		(EPA 300.0)	Total Inorganic Nitrogen-Calc	ND	mg/l	2.5	1
	05/11/09 15:08	484268	(EPA 350.1)	Ammonia Nitrogen	ND	mg/l	0.050	1
	05/08/09 22:44	484220	(ML/EPA 300.0)	Nitrite, Nitrogen by IC	ND	mg/l	1.0	10
	05/14/09 17:57	484773	(ML/EPA 300.0)	Nitrate as Nitrogen by IC	ND	mg/l	2.5	25
05/14/09	05/14/09 10:10	484912	(E160.1/SM2540C)	Total Dissolved Solid (TDS)	3210	mg/l	10	1



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Laboratory
QC Summary
#270531

Tronox LLC - Henderson

QC Ref #484220 - Nitrite, Nitrogen by IC	Analysis Date: 05/08/2009
2905080170 M-10	Analyzed by: vxt
QC Ref #484268 - Ammonia Nitrogen	Analysis Date: 05/11/2009
2905080170 M-10	Analyzed by: njr
QC Ref #484490 - NPDES Ammonia Distillation	Analysis Date: 05/14/2009
2905080170 M-10	Analyzed by: ali
QC Ref #484773 - Nitrate as Nitrogen by IC	Analysis Date: 05/14/2009
2905080170 M-10	Analyzed by: sxk
QC Ref #484912 - Total Dissolved Solid (TDS)	Analysis Date: 05/14/2009
2905080170 M-10	Analyzed by: maria
QC Ref #485629 - Chloride	Analysis Date: 05/08/2009
2905080170 M-10	Analyzed by: vxt
QC Ref #486264 - Iron, Total, ICAP	Analysis Date: 05/27/2009
2905080170 M-10	Analyzed by: csk
QC Ref #486293 - Boron, Total, ICAP	Analysis Date: 05/27/2009
2905080170 M-10	Analyzed by: csk



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Laboratory
QC Summary
#270531

Tronox LLC - Henderson
(continued)

QC Ref #486818 - Chromium, Total, ICAP

2905080170 M-10

Analysis Date: 06/03/2009

Analyzed by: csk

QC Ref #486840 - Manganese, Total, ICAP

2905080170 M-10

Analysis Date: 06/03/2009

Analyzed by: csk



Tronox LLC - Henderson

QC Ref #484220

Nitrite, Nitrogen by IC

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05070111	MGL		(0-0)	
AASPKSMP	Spiked sample	Lab # 29	05080100	MGL		(0-0)	
LCS1	Nitrite, Nitrogen by IC	1.0	0.925	MGL	92.5	(90-110)	
LCS2	Nitrite, Nitrogen by IC	1.0	0.937	MGL	93.7	(90-110)	
MBLK	Nitrite, Nitrogen by IC	ND	<0.10	MGL			
MRL_CHK	Nitrite, Nitrogen by IC	0.050	0.0480	MGL	96.0	(50-150)	
MS	Nitrite, Nitrogen by IC	0.500	0.473	MGL	94.6	(69-123)	
MSD	Nitrite, Nitrogen by IC	0.500	0.47	MGL	94.0	(69-123)	
RPD_LCS	Nitrite, Nitrogen by IC	92.500	93.700	MGL	1.3	(0-20)	
RPD_MS	Nitrite, Nitrogen by IC	94.600	94.000	MGL	0.6	(0-20)	
AASPKSMP	Spiked sample	Lab # 29	05080002	MGL		(0-0)	
AASPKSMP	Spiked sample	Lab # 29	05090034	MGL		(0-0)	
LCS1	Nitrate as Nitrogen by IC	2.5	2.49	MGL	99.6	(90-110)	
LCS2	Nitrate as Nitrogen by IC	2.5	2.47	MGL	98.8	(90-110)	
MS	Nitrate as Nitrogen by IC	1.25	1.22	MGL	97.6	(87-121)	
MSD	Nitrate as Nitrogen by IC	1.25	1.24	MGL	99.2	(87-121)	
RPD_LCS	Nitrate as Nitrogen by IC	99.600	98.800	MGL	0.8	(0-20)	
RPD_MS	Nitrate as Nitrogen by IC	97.600	99.200	MGL	1.6	(0-20)	

QC Ref #484268

Ammonia Nitrogen

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
MS	Spiked sample	Lab # 29	05060130	MGL		(0-0)	
LCS1	Ammonia Nitrogen	1.00	1.04	MGL	104.0	(90-110)	
LCS2	Ammonia Nitrogen	1.00	1.04	MGL	104.0	(90-110)	
MBLK	Ammonia Nitrogen	ND	<0.050	MGL			
MRL_CHK	Ammonia Nitrogen	0.05	0.047	MGL	94.0	(50-150)	
MS	Ammonia Nitrogen	1.00	0.934	MGL	93.4	(90-110)	
MSD	Ammonia Nitrogen	1.00	0.934	MGL	93.4	(90-110)	
MS_2ND	Ammonia Nitrogen	1.00	1.07	MGL	107.0	(90-110)	
RPD_LCS	Ammonia Nitrogen	104.000	104.000	MGL	0.0	(0-20)	
RPD_MS	Ammonia Nitrogen	93.400	93.400	MGL	0.0	(0-20)	

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
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Tronox LLC - Henderson
(continued)

QC Ref #484773 Nitrate as Nitrogen by IC

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 20	0905150021	MGL		(0-0)	
LCS1	Nitrate as Nitrogen by IC	2.5	2.49	MGL	99.6	(90-110)	
LCS2	Nitrate as Nitrogen by IC	2.5	2.39	MGL	95.6	(90-110)	
MBLK	Nitrate as Nitrogen by IC	ND	<0.10	MGL			
MRL_CHK	Nitrate as Nitrogen by IC	0.050	0.0486	MGL	97.2	(50-150)	
MS	Nitrate as Nitrogen by IC	1.25	1.28	MGL	102.4	(87-121)	
MSD	Nitrate as Nitrogen by IC	1.25	1.25	MGL	100.0	(87-121)	
RPD_LCS	Nitrate as Nitrogen by IC	99.600	95.600	MGL	4.1	(0-20)	
RPD_MS	Nitrate as Nitrogen by IC	102.400	100.000	MGL	2.4	(0-20)	

QC Ref #484912 Total Dissolved Solid (TDS)

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05080019	MGL		(0-0)	
DUP	Total Dissolved Solid (TDS)	534	530	MGL		(0-10)	0.8
LCS1	Total Dissolved Solid (TDS)	175	170	MGL	97.1	(80-114)	
LCS2	Total Dissolved Solid (TDS)	700	640	MGL	91.4	(80-114)	
MBLK	Total Dissolved Solid (TDS)	ND	<10	MGL			
MRL_CHK	Total Dissolved Solid (TDS)	10.0	11	MGL	110.0	(50-150)	
RPD_LCS	Total Dissolved Solid (TDS)	97.143	91.429	MGL	6.1	(0-20)	

QC Ref #485629 Chloride

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05080100	MGL		(0-0)	
LCS1	Chloride	25	24.3	MGL	97.2	(90-110)	
LCS2	Chloride	25	25.3	MGL	101.2	(90-110)	
MBLK	Chloride	ND	<1.0	MGL			
MRL_CHK	Chloride	0.050	0.049	MGL	98.0	(50-150)	

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 Tronox LLC - Henderson
 (continued)

MS	Chloride	12.5	13.4	MGL	107.2	(74-138)
MSD	Chloride	12.5	13.4	MGL	107.2	(74-138)
MS_2ND	Chloride	12.5	13.5	MGL	108.0	(74-138)
RPD_LCS	Chloride	97.200	101.200	MGL	4.0	(0-20)
RPD_MS	Chloride	107.200	107.200	MGL	0.0	(0-20)

QC Ref #486264 Iron, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05080170	MGL		(0-0)	
AASPKSMP	Spiked sample	Lab # 29	05210197	MGL		(0-0)	
LCS1	Iron, Total, ICAP	5.0	5.29	MGL	105.8	(85-115)	
LCS2	Iron, Total, ICAP	5.0	4.96	MGL	99.2	(85-115)	
MBLK	Iron, Total, ICAP	ND	<0.020	MGL			
MRL_CHK	Iron, Total, ICAP	0.020	0.0215	MGL	107.5	(50-150)	
MS	Iron, Total, ICAP	5.0	4.75	MGL	95.0	(70-130)	
MS2	Iron, Total, ICAP	5.0	5.00	MGL	100.0	(70-130)	
MSD	Iron, Total, ICAP	5.0	4.6	MGL	92.0	(70-130)	
MSD2	Iron, Total, ICAP	5.0	5.05	MGL	101.0	(70-130)	
RPD_LCS	Iron, Total, ICAP	105.800	99.200	MGL	6.4	(0-20)	
RPD_MS	Iron, Total, ICAP	95.000	92.000	MGL	3.2	(0-20)	

QC Ref #486293 Boron, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 29	05080170	MGL		(0-0)	
AASPKSMP	Spiked sample	Lab # 29	05210197	MGL		(0-0)	
LCS1	Boron, Total, ICAP	0.5	0.507	MGL	101.4	(85-115)	
LCS2	Boron, Total, ICAP	0.5	0.477	MGL	95.4	(85-115)	
MBLK	Boron, Total, ICAP	ND	<0.050	MGL			
MRL_CHK	Boron, Total, ICAP	0.050	0.0519	MGL	103.8	(50-150)	
MS	Boron, Total, ICAP	0.5	0.443	MGL	88.6	(70-130)	
MS2	Boron, Total, ICAP	0.5	0.485	MGL	97.0	(70-130)	
MSD	Boron, Total, ICAP	0.5	0.408	MGL	81.6	(70-130)	

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Tronox LLC - Henderson
(continued)

MSD2	Boron, Total, ICAP	0.5	0.500	MGL	100.0	(70-130)
RPD_LCS	Boron, Total, ICAP	101.400	95.400	MGL	6.1	(0-20)
RPD_MS	Boron, Total, ICAP	88.600	81.600	MGL	8.2	(0-20)

QC Ref #486818 Chromium, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 20	0906020502	MGL		(0-0)	
LCS1	Chromium, Total, ICAP	1.00	1.06	MGL	106.0	(85-115)	
LCS2	Chromium, Total, ICAP	1.00	1.05	MGL	105.0	(85-115)	
MBLK	Chromium, Total, ICAP	ND	<0.010	MGL			
MRL_CHK	Chromium, Total, ICAP	0.010	0.0109	MGL	109.0	(50-150)	
MS	Chromium, Total, ICAP	1.00	1.04	MGL	104.0	(70-130)	
MS2	Chromium, Total, ICAP	1.00	1.05	MGL	105.0	(70-130)	
MSD	Chromium, Total, ICAP	1.00	1.04	MGL	104.0	(70-130)	
MSD2	Chromium, Total, ICAP	1.00	1.03	MGL	103.0	(70-130)	

QC Ref #486840 Manganese, Total, ICAP

QC	Analyte	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPD (%)
AASPKSMP	Spiked sample	Lab # 20	0906020502	MGL		(0-0)	
LCS1	Manganese, Total, ICAP	0.50	0.545	MGL	109.0	(85-115)	
LCS2	Manganese, Total, ICAP	0.50	0.543	MGL	108.6	(85-115)	
MBLK	Manganese, Total, ICAP	ND	<0.0020	MGL			
MRL_CHK	Manganese, Total, ICAP	0.002	0.0024	MGL	120.0	(50-150)	
MS	Manganese, Total, ICAP	0.50	0.529	MGL	105.8	(70-130)	
MSD	Manganese, Total, ICAP	0.50	0.530	MGL	106.0	(70-130)	

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