



FIELD ACTIVITY REPORT

Report Number/Date:

6-2-09

Project Name: **TRONOX ANNUAL**

Project Number: **20092544V1**

Report By: **DOUG DAVIS**

Personnel: **Davis**

Location: **Various**

Equipment: **Dedicated Bladder**

Client: **TRONOX**

Weather: **Sunny, Humid.**

0600 - AT OFFICE COORDINATE WITH RICH. NEED ADDITIONAL WATER LEVELS. NEED ADDITIONAL PUMP/PARTS FOR TR-3, M-11

0700 AT SITE, M-12A

0746 Collect samples at M-12A

0826 collect samples at M-12A

0905 Field blank FB060209

0927 Collect sample at TR-4

Collect duplicate sample for Total Chlorine, TDS and Perchlorate. — No bottles to do Anions/cations

0930 Cannot sample until the new bladder pump arrives, Pack up samples equipment. Will collect some water level data and sp. samples.

~~1300 at other park samples for reference~~

1200 Collect DTCW for PC-87, PC-88, PC-83.

PC-85 - Buried / destroyed

PC-76 - IN RECLAMATION AREA.

Printed Name/Signature: **Doug Davis**



Groundwater Sampling Data Sheet

Well I.D. M-121 Date: 6-2-09
 Sampler's Name: DAVIS
 Purging Equipment: Dedicated bladder
 Client: TROLOX Project No.: 2009254(N)

Casing Type: PVC
 Casing Diameter: 2 inch
 Total Well Depth: 102 feet
 Depth to Water: - 75.65 feet
 Water Column Thickness: = 26.35 feet
 Unit Casing Volume: x 0.16 gallon / foot
 Casing Water Volume: x 4.2 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 126 gallons

UNIT CASING VOLUMES

2" = 0.16 gal/lin ft.
 4" = 0.67 gal/lin ft.
 6" = 1.47 gal/lin ft.

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
0.5	0730					24.7	7.83	cloudy
1	0735	X	X	X		24.7	7.84 7.84	
1.5	0740	X	X	X		24.8	7.85	clear
2.0	0745	X	X	X		24.6	7.84	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 2 Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: 0746
 Purged Dry (Y/N): N

Comments: Sediment: 60 psi
& second exhaust
5 second charge



Groundwater Sampling Data Sheet

Well I.D. M-120 Date: 6-2-09
 Sampler's Name: DAVIS
 Purging Equipment: Dedicated Bladder
 Client: TRONOX Project No.: 20092544V1

Casing Type: PVC
 Casing Diameter: 2 inch
 Total Well Depth: 105 feet
 Depth to Water: - 76.61 feet
 Water Column Thickness: = 28.39 feet
 Unit Casing Volume: x 0.16 gallon / foot
 Casing Water Volume: x 4.5 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 135 gallons

UNIT CASING VOLUMES

2" = 0.16 gal/lin ft.
 4" = 0.67 gal/lin ft.
 6" = 1.47 gal/lin ft.

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
0.5	0810					23.2	7.49	cloudy
1.0	0815	X	X	X		22.8	7.51	
1.5	0820	X	X	X		22.6	7.50	clear clear
2	0825	X	X	X		22.3	7.51	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 2 Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: 0826
 Purged Dry (Y/N): N

Comments: Setbacks: 55 psi
7 sec. exhaust
5 sec. charge.



Groundwater Sampling Data Sheet

Well I.D. TR-4 Date: 6-2-09
 Sampler's Name: DAVIS
 Purging Equipment: Dedicated Bleeder
 Client: TRONOX Project No.: 20092544V1

Casing Type: PVC
 Casing Diameter: 4 inch
 Total Well Depth: 147 feet
 Depth to Water: - 36.69 feet
 Water Column Thickness: = 110.31 feet
 Unit Casing Volume: x 0.67 gallon / foot
 Casing Water Volume: x 74 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 222 gallons

UNIT CASING VOLUMES
 2" = 0.16 gal/lin ft.
 4" = 0.67 gal/lin ft.
 6" = 1.47 gal/lin ft.

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
<u>0.5</u>	<u>0905</u>					<u>26.5</u>	<u>7.93</u>	<u>Clear</u>
<u>1.0</u>	<u>0910</u>	X	X	X		<u>26.2</u>	<u>8.16</u>	
<u>1.5</u>	<u>0915</u>	X	X	X		<u>26.1</u>	<u>8.20</u>	
<u>2.0</u>	<u>0920</u>	X	X	X		<u>26.5</u>	<u>8.19</u>	
<u>2.5</u>	<u>0925</u>	X	X	X		<u>28.1</u>	<u>8.15</u>	
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: 2.5 Gallons
 Depth to Water at Sample Collection:
 Sample Collection Time: 0927
 Purged Dry (Y/N): N

Comments: Settings - 70 psi
15 sec exhaust time
11 sec charge time
Duplicate sample for Total Chromium, Perchlorate, TDS.



Groundwater Sampling Data Sheet

Well I.D. PC-87 Date: 6-2-09
 Sampler's Name: _____
 Purging Equipment: _____
 Client: _____ Project No.: _____

Casing Type: PVC **UNIT CASING VOLUMES**
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Total Well Depth: _____ feet 4" = 0.67 gal/lin ft.
 Depth to Water: - 6.78 feet 6" = 1.47 gal/lin ft.
 Water Column Thickness: = _____ feet
 Unit Casing Volume: x _____ gallon / foot
 Casing Water Volume: x _____ gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = _____ gallons

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: _____
 Purged Dry (Y/N): _____

Comments: PTW only



Groundwater Sampling Data Sheet

Well I.D. PL-88 Date: 6-2-09
 Sampler's Name: _____
 Purging Equipment: _____
 Client: _____ Project No.: _____
 Casing Type: PVC **UNIT CASING VOLUMES**
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Total Well Depth: _____ feet 4" = 0.67 gal/lin ft.
 Depth to Water: - 0.07 feet 6" = 1.47 gal/lin ft.
 Water Column Thickness: = _____ feet
 Unit Casing Volume: x _____ gallon / foot
 Casing Water Volume: x _____ gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = _____ gallons

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: _____
 Purged Dry (Y/N): _____

Comments: 1) Tur only



Groundwater Sampling Data Sheet

Well I.D. PC-83 Date: 6-2-09
 Sampler's Name: _____
 Purging Equipment: _____
 Client: _____ Project No.: _____

Casing Type: PVC **UNIT CASING VOLUMES**
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Total Well Depth: _____ feet 4" = 0.67 gal/lin ft.
 Depth to Water: - 8.21 feet 6" = 1.47 gal/lin ft.
 Water Column Thickness: = _____ feet
 Unit Casing Volume: x _____ gallon / foot
 Casing Water Volume: x _____ gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = _____ gallons

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: _____
 Purged Dry (Y/N): _____

Comments: PTW only



Groundwater Sampling Data Sheet

Well I.D. PC-85 Date: 7-2009
 Sampler's Name: _____
 Purging Equipment: _____
 Client: _____ Project No.: _____

Casing Type: PVC **UNIT CASING VOLUMES**
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Total Well Depth: _____ feet 4" = 0.67 gal/lin ft.
 Depth to Water: - _____ feet 6" = 1.47 gal/lin ft.
 Water Column Thickness: = _____ feet
 Unit Casing Volume: x _____ gallon / foot
 Casing Water Volume: x _____ gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = _____ gallons

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: _____
 Purged Dry (Y/N): _____

Comments: Buried / Destroyed by road work around
PC-86, PC-87



Groundwater Sampling Data Sheet

Well I.D. PC-76 Date: 6-2-09
 Sampler's Name: PC-76
 Purging Equipment: _____
 Client: _____ Project No.: _____

Casing Type: PVC **UNIT CASING VOLUMES**
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Total Well Depth: _____ feet 4" = 0.67 gal/lin ft.
 Depth to Water: - _____ feet 6" = 1.47 gal/lin ft.
 Water Column Thickness: = _____ feet
 Unit Casing Volume: x _____ gallon / foot
 Casing Water Volume: x _____ gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = _____ gallons

Purged (gallons)	Time	DO	Redox	Fe	Conductance (u mhos / x1000)	Temperature (Celcius)	pH	Observations
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ Gallons
 Depth to Water at Sample Collection: _____
 Sample Collection Time: _____
 Purged Dry (Y/N): _____

Comments: Well is located in Placid reclamation area, cannot locate.



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 Ironox LLC- Henderson Standing

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

Client Code KERRMCGEE-MP
Project Code CLO4
PO# / Job# GWREMIATION
Blanket PO

SO# 47684 12374 RS

Sampler: Please Return this Paper with your samples

Created by GJY
Order Date 04/16/09
Date Needed by Client
SHIP LOCATION

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

Send Report to
Ironox LLC, Henderson Plant
P.O. Box 55
Henderson, NV 89009

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

ATTN: Susan Crowley
PHONE: 702-651-2234

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

Quote#

GJY

of Samples Tests

UN#

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

Important Comments

# of Samples	Tests	Bottles-Qty for each sample, type & preservative if any	UN#	Important Comments
41	CLO4, TDS	1 250 ml poly /no preservative		These sites are monthly till further notice.
	SHEET OF LABELS WITH WELL-IDS	see comments section		Shipping - please send bottles in cooler rather than a box
				PC-86, PC-89, PC-91, PC-95, PC-97, PC-10, PC-12, PC-17, PC-18, PC-55, PC-101R
				L-635, L-637
				MW-K2, MW-K4
				ARP-1, ARP-2, ARP-3, ARP-4
				ARP-5, ARP-6, ARP-7, PC-53
				PC-103, MW-K5, M-83
				M-87, PC-98R; PC-56, PC-58;
				PC-59, PC-60, PC-62, PC-68, PC-122
				Do NOT prelabel bottles with site, but provide pre-printed labels for client to stick on
				EXTRA BOTTLES INCLUDED
				client code changed 7/25/03
				bottle order and IDs updated 9/9/03

ActiveCode Status Date Shipped Qty of Coolers Tracking Number