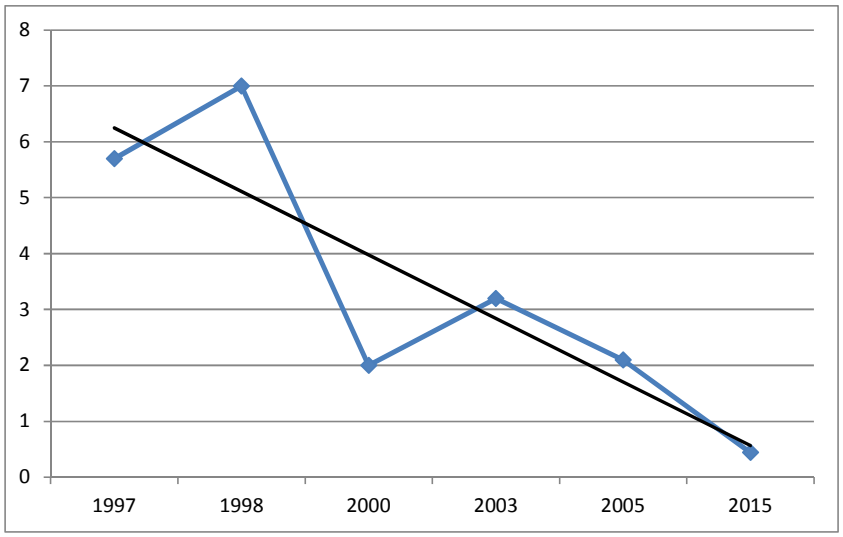
Well AP-6326

Benzene	**µg/L**
1997	**5.7**
1998	**7**
2000	2
2003	3.2
2005	2.1
2015	0.44



Mann-Kendall Trend Test for Small Sample Sizes (n≤10)

S	-9	
p	**0.068**	From Table B-10
n	6	

Ho: No trend

Ha: downward Trend

Reject Ho if p< 0.1

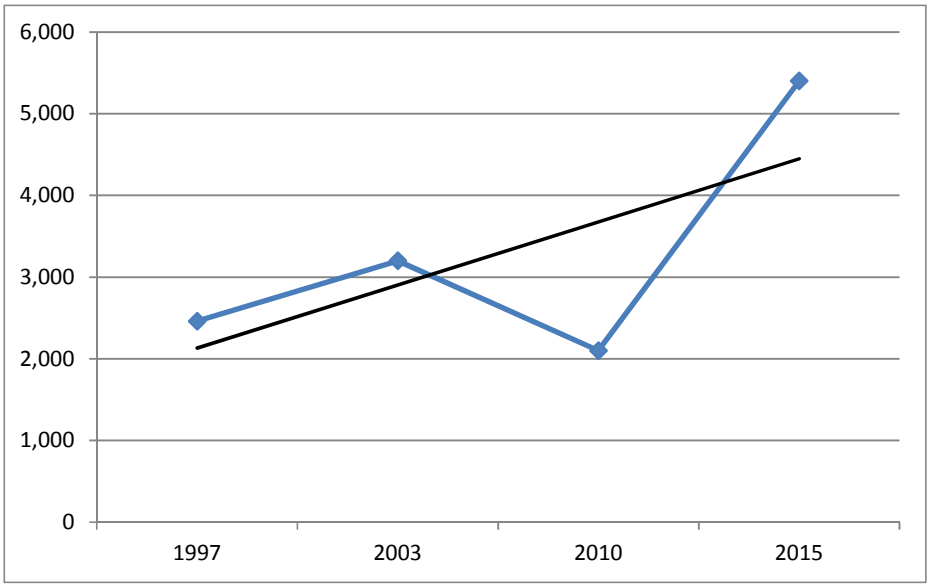
Ho is rejected, there is evidence of a downward trend at the 90% level of confidence

Reject Ho if p< 0.05

Ho is not rejected, there is no evidence of a downward trend at the 95% level of confidence

Well AP-6327

DRO	µg/L
1997	2,460
2003	3,200
2010	2,100
2015	5,400



Mann-Kendall Trend Test for Small Sample Sizes (n≤10)

S 2

p **0.375** From Table B-10

n 4

Ho: No trend

Ha: upward Trend

Reject Ho if p< 0.1

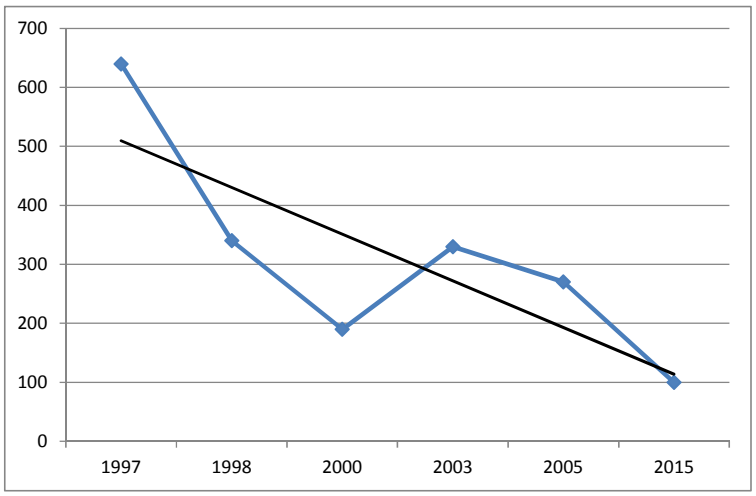
Ho is not rejected, there is no evidence of an upward trend at the 90% level of confidence

Reject Ho if p< 0.05

Ho is not rejected, there is no evidence of an upward trend at the 95% level of confidence

Well AP-6326

Cis-1,2-dichloroethene	**µg/L**
1997	640
1998	340
2000	190
2003	330
2005	270
2015	100



Mann-Kendall Trend Test for Small Sample Sizes (n≤10)

S -11

p **0.028** From Table B-10

n 6

Ho: No trend

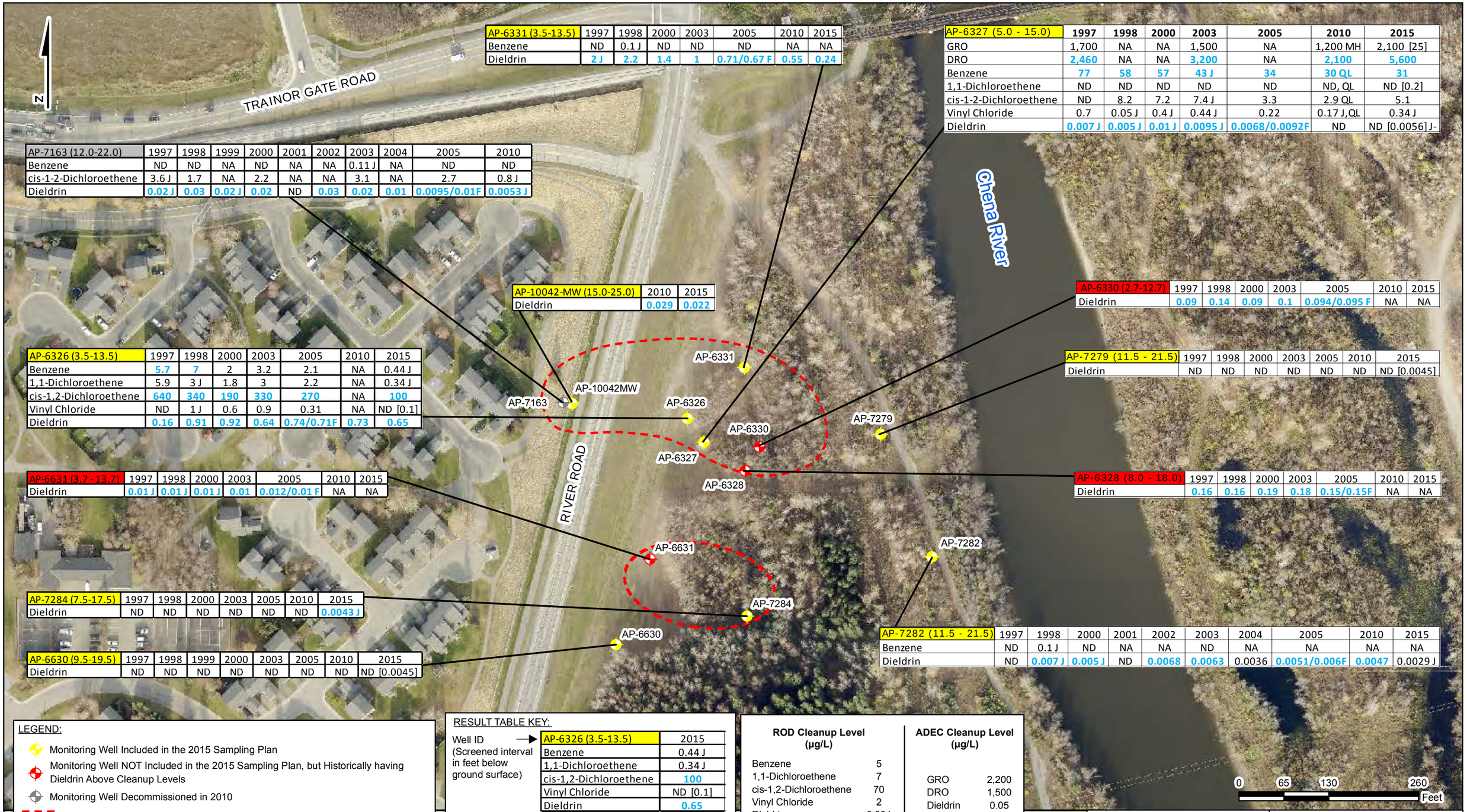
Ha: downward Trend

Reject Ho if p< 0.1

Ho is rejected, there is evidence of a downward trend at the 90% level of confidence

Reject Ho if p< 0.05

Ho is rejected, there is evidence of a downward trend at the 95% level of confidence



AP-6331 (3.5-13.5)	1997	1998	2000	2003	2005	2010	2015
Benzene	ND	0.1 J	ND	ND	ND	NA	NA
Dieldrin	2 J	2.2	1.4	1	0.71/0.67 F	0.55	0.24

AP-6327 (5.0 - 15.0)	1997	1998	2000	2003	2005	2010	2015
GRO	1,700	NA	NA	1,500	NA	1,200 MH	2,100 [25]
DRO	2,460	NA	NA	3,200	NA	2,100	5,600
Benzene	77	58	57	43 J	34	30 QL	31
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND, QL	ND [0.2]
cis-1-2-Dichloroethene	ND	8.2	7.2	7.4 J	3.3	2.9 QL	5.1
Vinyl Chloride	0.7	0.05 J	0.4 J	0.44 J	0.22	0.17 J,QL	0.34 J
Dieldrin	0.007 J	0.005 J	0.01 J	0.0095 J	0.0068/0.0092F	ND	ND [0.0056] J-

AP-7163 (12.0-22.0)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2010
Benzene	ND	ND	NA	ND	NA	NA	0.11 J	NA	ND	ND
cis-1-2-Dichloroethene	3.6 J	1.7	NA	2.2	NA	NA	3.1	NA	2.7	0.8 J
Dieldrin	0.02 J	0.03	0.02 J	0.02	ND	0.03	0.02	0.01	0.0095/0.01F	0.0053 J

AP-10042-MW (15.0-25.0)	2010	2015
Dieldrin	0.029	0.022

AP-6330 (2.7-12.7)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.09	0.14	0.09	0.1	0.094/0.095 F	NA	NA

AP-6326 (3.5-13.5)	1997	1998	2000	2003	2005	2010	2015
Benzene	5.7	7	2	3.2	2.1	NA	0.44 J
1,1-Dichloroethene	5.9	3 J	1.8	3	2.2	NA	0.34 J
cis-1,2-Dichloroethene	640	340	190	330	270	NA	100
Vinyl Chloride	ND	1 J	0.6	0.9	0.31	NA	ND [0.1]
Dieldrin	0.16	0.91	0.92	0.64	0.74/0.71F	0.73	0.65

AP-7279 (11.5 - 21.5)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	ND [0.0045]

AP-6631 (3.7 - 13.7)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.01 J	0.01 J	0.01 J	0.01	0.012/0.01 F	NA	NA

AP-6328 (8.0 - 18.0)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.16	0.16	0.19	0.18	0.15/0.15F	NA	NA

AP-7284 (7.5-17.5)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	0.0043 J

AP-7282 (11.5 - 21.5)	1997	1998	2000	2001	2002	2003	2004	2005	2010	2015
Benzene	ND	0.1 J	ND	NA	NA	ND	NA	NA	NA	NA
Dieldrin	ND	0.007 J	0.005 J	ND	0.0068	0.0063	0.0036	0.0051/0.006F	0.0047	0.0029 J

AP-6630 (9.5-19.5)	1997	1998	1999	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND [0.0045]

LEGEND:

- Monitoring Well Included in the 2015 Sampling Plan
- Monitoring Well NOT Included in the 2015 Sampling Plan, but Historically having Dieldrin Above Cleanup Levels
- Monitoring Well Decommissioned in 2010
- Dieldrin Plume

F = Filtered Sample Result
J = Estimated value
J- = Result qualified as estimate because it is less than the LOQ or due to QC failure
LOD = Limit of Detection
LOQ = Limit of Quantitation
NA = Not Analyzed
ND = Not Detected
MH = High Estimated Value
QL = Low Estimated Value

RESULT TABLE KEY:

Well ID (Screened interval in feet below ground surface)

AP-6326 (3.5-13.5)	2015
Benzene	0.44 J
1,1-Dichloroethene	0.34 J
cis-1,2-Dichloroethene	100
Vinyl Chloride	ND [0.1]
Dieldrin	0.65

Analytical results shown in µg/L

Contaminant concentrations that exceed ROD and/or ADEC cleanup levels are shown in blue

LOD presented in brackets for ND results (LODs unknown prior to 2015)

Only concentrations for remedial action objective COCs are shown. Aldrin has been non-detect or below the cleanup level.

	ROD Cleanup Level (µg/L)	ADEC Cleanup Level (µg/L)
Benzene	5	
1,1-Dichloroethene	7	
cis-1,2-Dichloroethene	70	
Vinyl Chloride	2	
Dieldrin	0.004	
GRO		2,200
DRO		1,500
Dieldrin		0.05

NOTES:

1. Coordinate System - Projection: World Geodetic System 1984 (WGS84) Universal Transverse Mercator (UTM), Zone 6N

2. Aerial imagery obtained from Department of Public Works (DPW) Environmental, 2014

Fairbanks Environmental Services
3538 International Street
Fairbanks, AK 99701

Alaska District
U.S. Army Corps of Engineers
Anchorage, AK

OU1 801 Drum Burial Site Monitoring Wells and Results
2015 Monitoring Report
Operable Unit 1
Fort Wainwright, Alaska

Contract: W911KB-12-D-0001 | Figure: 3-2 | Date: 2/16

OU-1 801 Drum Burial Site Groundwater Monitoring Data

Well	X Coordinate	Y Coordinate	Constituent	Sample Date	Result	Units	Detection Limit
AP-6327	1383268.691	3965431.576	Dieldrin	8/1/1993	0.66	ug/L	0.01
				12/1/1994	ND	ug/L	0.01
				8/1/1996	0.006	ug/L	0.01
				3/1/1997	ND	ug/L	0.02
				6/1/71997	ND	ug/L	0.02
				7/1/1997	0.007	ug/L	0.001
				9/1/1997	0.007	ug/L	0.01
				7/1/1998	0.005	ug/L	0.001
				3/1/1998	0.005	ug/L	0.01
				3/1/2000	0.01	ug/L	0.01
				7/1/2000	0.01	ug/L	0.001
				7/1/2003	0.0095	ug/L	0.001
				4/1/2003	0.0095	ug/L	0.01
				4/1/2005	0.0068	ug/L	0.01
				7/1/2005	0.0068	ug/L	0.001
				7/1/2010	ND	ug/L	0.001
				7/1/2010	ND	ug/L	0.0066
AP-6326	1383245.209	3965466.398	Dieldrin	8/1/1993	0.66	ug/L	0.01
				8/1/1996	0.78	ug/L	0.01
				12/1/1996	0.7	ug/L	0.01
				3/1/1997	0.85	ug/L	0.01
				6/1/1997	0.6	ug/L	0.01
				7/1/1997	0.16	ug/L	0.001
				9/1/1997	0.72	ug/L	0.01
				3/1/1998	0.91	ug/L	0.01
				7/1/1998	0.91	ug/L	0.001
				3/1/2000	0.92	ug/L	0.01
				7/1/2000	0.92	ug/L	0.001
				4/1/2003	0.64	ug/L	0.01
				7/1/2003	0.64	ug/L	0.001
				4/1/2005	0.74	ug/L	0.01
				7/1/2005	0.74	ug/L	0.001
				7/1/2010	0.73	ug/L	0.001
				7/1/2010	0.73	ug/L	0.01
AP-7163	1383078.698	3965490.762	Dieldrin	8/1/1996	0.02	ug/L	0.01
				12/1/1996	0.02	ug/L	0.01
				3/1/1997	ND	ug/L	0.02
				6/1/1997	ND	ug/L	0.02
				7/1/1997	0.02	ug/L	0.001
				9/1/1997	0.02	ug/L	0.01
				3/1/1998	0.02	ug/L	0.01
				7/1/1998	0.03	ug/L	0.001
				3/1/1999	0.02	ug/L	0.01
				7/1/1999	0.02	ug/L	0.001
				4/1/2000	0.021	ug/L	0.01
				7/1/2000	0.021	ug/L	0.001
				4/1/2001	ND	ug/L	0.01
				7/1/2001	0.004	ug/L	0.001
				4/1/2002	0.025	ug/L	0.01
				7/1/2002	0.025	ug/L	0.001
				4/1/2003	0.019	ug/L	0.01
				7/1/2003	0.019	ug/L	0.001
				4/1/2004	0.013	ug/L	0.01
				7/1/2004	0.013	ug/L	0.001
				4/1/2005	0.0095	ug/L	0.01
				7/1/2005	0.0095	ug/L	0.001
				7/1/2010	0.0053	ug/L	0.001
				7/1/2010	0.0053	ug/L	0.01

OU-1 801 Drum Burial Site Groundwater Monitoring Data

Well	X Coordinate	Y Coordinate	Constituent	Sample Date	Result	Units	Detection Limit
AP-6630	1383136.809	3965140.05	Dieldrin	12/1/1994	ND	ug/L	0.02
				8/1/1996	ND	ug/L	0.02
				12/1/1996	ND	ug/L	0.02
				3/1/1997	ND	ug/L	0.02
				6/1/1997	ND	ug/L	0.02
				7/1/1997	0.004	ug/L	0.001
				9/1/1997	ND	ug/L	0.02
				3/1/1998	ND	ug/L	0.02
				7/1/1998	0.004	ug/L	0.001
				3/1/1999	ND	ug/L	0.02
				7/1/1999	0.004	ug/L	0.001
				3/1/2000	0.004	ug/L	0.02
				7/1/2000	0.004	ug/L	0.001
				4/1/2003	ND	ug/L	0.02
				7/1/2003	0.004	ug/L	0.001
				7/1/2010	ND	ug/L	0.001
				7/1/2010	ND	ug/L	0.0024
AP-7284	1383327.239	3965178.978	Dieldrin	10/1/1996	0.008	ug/L	0.01
				12/1/1996	0.0007	ug/L	0.01
				9/1/1997	ND	ug/L	0.02
				7/1/1997	0.004	ug/L	0.001
				3/1/1998	ND	ug/L	0.02
				7/1/1998	0.004	ug/L	0.001
				3/1/2000	ND	ug/L	0.01
				7/1/2000	0.004	ug/L	0.001
				4/1/2003	ND	ug/L	0.01
				7/1/2003	0.004	ug/L	0.001
				4/1/2005	ND	ug/L	0.01
				7/1/2005	0.004	ug/L	0.001
				7/1/2010	ND	ug/L	0.001
				7/1/2010	ND	ug/L	0.00048
AP-6331	1383329.041	3965538.578	Dieldrin	8/1/1993	1.5	ug/L	0.01
				8/1/1996	1.1	ug/L	0.01
				12/1/1996	1.5	ug/L	0.01
				3/1/1997	ND	ug/L	0.02
				6/1/1997	1.6	ug/L	0.01
				7/1/1997	2	ug/L	0.001
				9/1/1997	2.1	ug/L	0.01
				3/1/1998	2.2	ug/L	0.01
				7/1/1998	2.2	ug/L	0.001
				3/1/2000	1.4	ug/L	0.01
				7/1/2000	1.4	ug/L	0.001
				4/1/2003	1	ug/L	0.01
				7/1/2003	1	ug/L	0.001
				4/1/2005	0.71	ug/L	0.01
				7/1/2005	0.71	ug/L	0.001
				7/1/2010	0.55	ug/L	0.001
				7/1/2010	0.55	ug/L	0.01

OU-1 801 Drum Burial Site Groundwater Monitoring Data							
Well	**X Coordinate**	**Y Coordinate**	**Constituent**	**Sample Date**	**Result**	**Units**	**Detection Limit**
AP-7279	1383525.158	3965439.068	Dieldrin	10/1/1996	0.007	ug/L	0.01
				12/1/1996	ND	ug/L	0.02
				3/1/1997	ND	ug/L	0.02
				6/1/1997	ND	ug/L	0.02
				7/1/1997	0.004	ug/L	0.001
				9/1/1997	ND	ug/L	0.002
				3/1/1998	ND	ug/L	0.01
				7/1/1998	0.004	ug/L	0.001
				3/1/2000	ND	ug/L	0.01
				7/1/2000	0.004	ug/L	0.001
				4/1/2003	ND	ug/L	0.01
				7/1/2003	0.004	ug/L	0.001
				4/1/2005	ND	ug/L	0.01
				7/1/2005	0.004	ug/L	0.001
				7/1/2010	ND	ug/L	0.001
				7/1/2010	ND	ug/L	0.00025
AP-7282	1383596.247	3965260.085	Dieldrin	10/1/1996	0.004	ug/L	0.01
				12/1/1996	0.006	ug/L	0.01
				3/1/1997	ND	ug/L	0.02
				6/1/1997	ND	ug/L	0.02
				7/1/1997	0.004	ug/L	0.001
				9/1/1997	ND	ug/L	0.02
				3/1/1998	0.007	ug/L	0.001
				7/1/1998	0.007	ug/L	0.001
				3/1/2000	0.005	ug/L	0.001
				7/1/2000	0.005	ug/L	0.001
				3/1/2001	ND	ug/L	0.01
				7/1/2001	0.004	ug/L	0.001
				4/1/2002	0.0068	ug/L	0.01
				7/1/2002	0.0068	ug/L	0.001
				7/1/2003	0.0063	ug/L	0.001
				4/1/2003	0.0063	ug/L	0.01
				4/1/2004	0.0036	ug/L	0.01
				7/1/2004	0.0036	ug/L	0.001
				4/1/2005	0.0051	ug/L	0.01
				7/1/2005	0.0051	ug/L	0.001
				7/1/2010	0.0047	ug/L	0.001
				7/1/2010	0.0047	ug/L	0.01

Note: Dieldrin ROD clean-up level is 0.004 ug/L
ROD clean-up exceedences are highlighted
ND = Not detected above the detection limit

Table A-2 - Groundwater Sample Results
Operable Unit 1, 801 Drum Burial Site
Fort Wainwright, Alaska

				1	3	4	6	8	9	10	11	12	13	14	15
			Sample ID	15FWOU101WG	15FWOU102WG	15FWOU103WG	15FWOU104WG	15FWOU105WG	15FWOU106WG	15FWOU107WG	15FWOU108WG	15FWOU109WG	15FWOU110WG	15FWOU111WG	15FWOU112WQ
			Location ID	AP-6326	AP-6331	AP-6327	AP-1010	AP-7279	AP-7282	AP-6630	AP-7284	AP-10042MW	AP-2020	AP-6001	Trip Blank
			Sample Data Group	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900
			Laboratory ID	150490001F	K150490002	150490003F	150490004F	K150490005	K150490006	K150490007	K150490008	K150490009	K150490010	K150490011	K150490012
			Collection Date	5/5/2015	5/5/2015	5/6/2015	5/6/2015	5/6/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/5/2015
			Matirx	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Type	Primary	Primary	Primary	Field Duplicate	Primary	Primary	Primary	Primary	Primary	Field Duplicate	PE Sample	Trip Blank
Analyte	Method	Units	Cleanup Level[1]	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result[[LOD] Qualifier	Result[[LOD] Qualifier
Gasoline Range Organics (C6-C10)	AK101	µg/L	2,200	-	-	2100 [25]	2000 [25]	-	-	-	-	-	-	-	ND [25]
Diesel Range Organics (C10-C25)	AK102	µg/L	1,500	-	-	**5400 [20] J-**	**5600 [20]**	-	-	-	-	-	-	-	-
Sulfate	E300.0	mg/L	NE	13.5 [0.2]	-	0.17 [0.04] J	0.24 [0.04] J	-	-	-	-	-	-	-	-
Iron	SW6010C	µg/L	NE	30.6 [10]	-	69500 [10]	68100 [10]	-	-	-	-	-	-	-	-
Manganese	SW6010C	µg/L	NE	22.1 [1]	-	6260 [1]	6080 [1]	-	-	-	-	-	-	-	-
4,4'-DDD	SW8081B	µg/L	3.5	ND [0.0046]	ND [0.0045]	ND [0.0046]	-	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0046]	-
4,4'-DDE	SW8081B	µg/L	2.5	ND [0.0021]	ND [0.002]	ND [0.0069]	-	ND [0.002]	ND [0.002]	0.0005 [0.002] J	ND [0.002]	ND [0.002]	ND [0.002]	0.0022 [0.0021] J	-
4,4'-DDT	SW8081B	µg/L	2.5	ND [0.024]	ND [0.0072]	ND [0.015]	-	ND [0.001]	ND [0.001]	ND [0.001]	ND [0.0022]	ND [0.0017]	ND [0.0015]	0.0013 [0.0011] J	-
Aldrin	SW8081B	µg/L	0.05 (0.004)	ND [0.0021]	ND [0.002]	ND [0.0041]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	0.55 [0.021]	-
alpha-BHC	SW8081B	µg/L	0.14	ND [0.0021]	ND [0.002]	ND [0.0044] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
alpha-Chlordane	SW8081B	µg/L	2	ND [0.0021]	ND [0.002]	ND [0.021] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
beta-BHC	SW8081B	µg/L	0.47	ND [0.0046]	ND [0.0045]	ND [0.0046] J-	-	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0046]	-
Chlordane	SW8081B	µg/L	2	ND [0.21]	ND [0.2]	ND [0.21]	-	ND [0.2]	ND [0.2]	ND [0.2]	ND [0.2]	ND [0.2]	ND [0.2]	ND [0.21]	-
Chlorpyrifos	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.015]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
cis-Nonachlor	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.0021]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
delta-BHC	SW8081B	µg/L	NE	ND [0.0046]	ND [0.0045]	ND [0.0046] J-	-	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0046]	-
Dieldrin	SW8081B	µg/L	0.053 (0.004)	0.65 [0.023]	0.24 [0.0045]	ND [0.0056] J-	-	ND [0.0045]	0.0029 [0.0045] J	ND [0.0045]	0.0043 [0.0045] J	0.021 [0.0045]	0.022 [0.0045]	1.5 [0.046]	-
Endosulfan I	SW8081B	µg/L	220	ND [0.0021]	ND [0.002]	ND [0.0021] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
Endosulfan II	SW8081B	µg/L	220	0.001 [0.0021] J	0.0021 [0.002] J	ND [0.025] J-	-	0.0023 [0.002] J	0.0024 [0.002] J	0.0024 [0.002] J	0.0047 [0.002] J	0.0083 [0.002] J	0.0094 [0.002] J	ND [0.0021]	-
Endosulfan sulfate	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.014] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0023]	ND [0.0021]	-
Endrin	SW8081B	µg/L	2	0.0074 [0.0021] J	0.0071 [0.002] J	ND [0.0027] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	1.5 [0.021]	-
Endrin aldehyde	SW8081B	µg/L	NE	ND [0.0046]	ND [0.0045]	0.0079 [0.0046] J-	-	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	0.0016 [0.0046] J	-
Endrin ketone	SW8081B	µg/L	NE	0.0059 [0.0021] J-	0.0073 [0.002] J-	ND [0.0021] J-	-	ND [0.002] J-	ND [0.002] J-	ND [0.002] J-	ND [0.002] J-	ND [0.002] J-	ND [0.002] J-	0.01 [0.0021] J-	-
gamma-BHC (Lindane)	SW8081B	µg/L	0.2	ND [0.0021]	ND [0.002]	ND [0.0043]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	2.4 [0.021]	-
gamma-Chlordane	SW8081B	µg/L	2	ND [0.0046]	ND [0.0045]	ND [0.0063] J-	-	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	ND [0.0045]	0.0019 [0.0046] J	-
Heptachlor	SW8081B	µg/L	0.4	ND [0.0011]	ND [0.001]	ND [0.0073]	-	ND [0.001]	ND [0.001]	ND [0.001]	ND [0.001]	ND [0.001]	ND [0.001]	0.79 [0.011]	-
Heptachlor epoxide	SW8081B	µg/L	0.2	ND [0.0021]	ND [0.002]	ND [0.0025] J-	-	0.0005 [0.002] J	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	1.2 [0.021]	-
Hexachlorobenzene	SW8081B	µg/L	1	ND [0.0021]	ND [0.002]	ND [0.0021]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	3.1 [0.021]	-
Hexachlorobutadiene	SW8081B	µg/L	7.3	ND [0.013]	ND [0.013]	ND [0.013]	-	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	0.008 [0.013] J	-
Hexachloroethane	SW8081B	µg/L	40	ND [0.013]	ND [0.013]	ND [0.013]	-	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	ND [0.013]	-
Isodrin	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.0021]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	0.0075 [0.0021] J	-
Methoxychlor	SW8081B	µg/L	40	ND [0.0021]	ND [0.002]	ND [0.0021] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	2.8 [0.021]	-
Mirex	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.005]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
Oxychlordane	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.0048]	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0036]	-
Toxaphene	SW8081B	µg/L	3	ND [0.41]	ND [0.4]	ND [0.83] J	-	ND [0.4]	ND [0.4]	ND [0.4]	ND [0.4]	ND [0.4]	ND [0.4]	ND [0.41]	-
trans-Nonachlor	SW8081B	µg/L	NE	ND [0.0021]	ND [0.002]	ND [0.0021] J-	-	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.002]	ND [0.0021]	-
1,1,1,2-Tetrachloroethane	SW8260C	µg/L	NE	ND [0.2]	-	ND [2] J-	ND [2]	-	-	-	-	-	-	-	ND [0.2]
1,1,1-Trichloroethane	SW8260C	µg/L	200	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,1,2,2-Tetrachloroethane	SW8260C	µg/L	4.3	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,1,2-Trichloroethane	SW8260C	µg/L	5	ND [0.4]	-	ND [4] J-	ND [4]	-	-	-	-	-	-	-	ND [0.4]
1,1-Dichloroethane	SW8260C	µg/L	7,300	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,1-Dichloroethene	SW8260C	µg/L	7 (7)	0.34 [0.2] J	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,1-Dichloropropene	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,2,3-Trichlorobenzene	SW8260C	µg/L	NE	ND [0.4]	-	ND [0.4]	ND [0.4]	-	-	-	-	-	-	-	ND [0.4]
1,2,3-Trichloropropane	SW8260C	µg/L	0.12	ND [0.5]	-	ND [0.5]	ND [0.5]	-	-	-	-	-	-	-	ND [0.5]
1,2,4-Trichlorobenzene	SW8260C	µg/L	70	ND [0.3]	-	ND [0.3]	ND [0.3]	-	-	-	-	-	-	-	ND [0.3]
1,2,4-Trimethylbenzene	SW8260C	µg/L	1,850	ND [0.2]	-	180 [2]	170 [2]	-	-	-	-	-	-	-	0.09 [0.2] J
1,2-Dibromo-3-chloropropane	SW8260C	µg/L	NE	ND [0.8]	-	ND [0.8]	ND [0.8]	-	-	-	-	-	-	-	ND [0.8]
1,2-Dibromoethane	SW8260C	µg/L	0.05	ND [0.2]	-	ND [2] J-	ND [2]	-	-	-	-	-	-	-	ND [0.2]
1,2-Dichlorobenzene	SW8260C	µg/L	600	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,2-Dichloroethane	SW8260C	µg/L	5	ND [0.15]	-	ND [0.15]	ND [0.15]	-	-	-	-	-	-	-	ND [0.15]
1,2-Dichloropropane	SW8260C	µg/L	5	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,3,5-Trimethylbenzene	SW8260C	µg/L	1,800	ND [0.2]	-	62 [0.2]	62 [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,3-Dichlorobenzene	SW8260C	µg/L	3,300	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
1,3-Dichloropropane	SW8260C	µg/L	8.5	ND [0.3]	-	ND [3] J-	ND [3]	-	-	-	-	-	-	-	ND [0.3]

Table A-2 - Groundwater Sample Results
Operable Unit 1, 801 Drum Burial Site
Fort Wainwright, Alaska

				1	3	4	6	8	9	10	11	12	13	14	15
			Sample ID	15FWOU101WG	15FWOU102WG	15FWOU103WG	15FWOU104WG	15FWOU105WG	15FWOU106WG	15FWOU107WG	15FWOU108WG	15FWOU109WG	15FWOU110WG	15FWOU111WG	15FWOU112WQ
			Location ID	AP-6326	AP-6331	AP-6327	AP-1010	AP-7279	AP-7282	AP-6630	AP-7284	AP-10042MW	AP-2020	AP-6001	Trip Blank
			Sample Data Group	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900	K1504900
			Laboratory ID	150490001F	K150490002	150490003F	150490004F	K150490005	K150490006	K150490007	K150490008	K150490009	K150490010	K150490011	K150490012
			Collection Date	5/5/2015	5/5/2015	5/6/2015	5/6/2015	5/6/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/7/2015	5/5/2015
			Matirx	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Type	Primary	Primary	Primary	Field Duplicate	Primary	Primary	Primary	Primary	Primary	Field Duplicate	PE Sample	Trip Blank
Analyte	Method	Units	Cleanup Level[1]	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result[[LOD] Qualifier	Result[[LOD] Qualifier
1,4-Dichlorobenzene	SW8260C	µg/L	75	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
2,2-Dichloropropane	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
2-Butanone	SW8260C	µg/L	22,000	ND [4]	-	ND [4]	ND [4]	-	-	-	-	-	-	-	ND [4]
2-Chlorotoluene	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
2-Hexanone	SW8260C	µg/L	NE	ND [10]	-	ND [100]	ND [100]	-	-	-	-	-	-	-	ND [10]
4-Chlorotoluene	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
4-Isopropyltoluene	SW8260C	µg/L	NE	ND [0.2]	-	9.7 [0.2]	9.6 [0.2]	-	-	-	-	-	-	-	ND [0.2]
4-Methyl-2-pentanone	SW8260C	µg/L	2,900	ND [10]	-	ND [10]	ND [10]	-	-	-	-	-	-	-	ND [10]
Acetone	SW8260C	µg/L	33,000	ND [10]	-	ND [10]	ND [10]	-	-	-	-	-	-	-	ND [10]
Benzene	SW8260C	µg/L	5 (5)	0.44 [0.1] J	-	30 [0.1]	31 [0.1]	-	-	-	-	-	-	-	ND [0.1]
Bromobenzene	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Bromochloromethane	SW8260C	µg/L	NE	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Bromodichloromethane	SW8260C	µg/L	14	ND [0.3]	-	ND [0.3]	ND [0.3]	-	-	-	-	-	-	-	ND [0.3]
Bromoform	SW8260C	µg/L	110	ND [0.5]	-	ND [5] J-	ND [5]	-	-	-	-	-	-	-	ND [0.5]
Bromomethane	SW8260C	µg/L	51	ND [0.3]	-	ND [0.3]	ND [0.3]	-	-	-	-	-	-	-	ND [0.3]
Carbon disulfide	SW8260C	µg/L	3,700	ND [0.2]	-	0.08 [0.2] J	0.09 [0.2] J	-	-	-	-	-	-	-	ND [0.2]
Carbon tetrachloride	SW8260C	µg/L	5	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Chlorobenzene	SW8260C	µg/L	100	ND [0.2]	-	ND [2] J-	ND [2]	-	-	-	-	-	-	-	ND [0.2]
Chloroethane	SW8260C	µg/L	290	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Chloroform	SW8260C	µg/L	140	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Chloromethane	SW8260C	µg/L	66	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
cis-1,2-Dichloroethene	SW8260C	µg/L	70	**100 [1]**	-	4.9 [0.2]	5.1 [0.2]	-	-	-	-	-	-	-	ND [0.2]
cis-1,3-Dichloropropene	SW8260C	µg/L	8.50	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Dibromochloromethane	SW8260C	µg/L	10	ND [0.5]	-	ND [5] J-	ND [5]	-	-	-	-	-	-	-	ND [0.5]
Dibromomethane	SW8260C	µg/L	370	ND [0.5]	-	ND [0.5]	ND [0.5]	-	-	-	-	-	-	-	ND [0.5]
Dichlorodifluoromethane	SW8260C	µg/L	7,300	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Ethylbenzene	SW8260C	µg/L	700	ND [0.1]	-	12 [1]	12 [1]	-	-	-	-	-	-	-	ND [0.1]
Hexachlorobutadiene	SW8260C	µg/L	7.3	ND [0.3]	-	ND [0.3]	ND [0.3]	-	-	-	-	-	-	-	ND [0.3]
Isopropylbenzene	SW8260C	µg/L	3,700	ND [0.2]	-	6.6 [2] J-	6.4 [2]	-	-	-	-	-	-	-	ND [0.2]
Methylene chloride	SW8260C	µg/L	5	ND [0.2]	-	ND [0.2]	ND [0.73]	-	-	-	-	-	-	-	ND [0.2]
Methyl-tert-butyl ether (MTBE)	SW8260C	µg/L	470	ND [0.3]	-	ND [0.3]	ND [0.3]	-	-	-	-	-	-	-	ND [0.3]
Naphthalene	SW8260C	µg/L	730	ND [0.3]	-	17 [0.3]	16 [0.3]	-	-	-	-	-	-	-	0.09 [0.3] J
n-Butylbenzene	SW8260C	µg/L	370	ND [0.1]	-	ND [5.8]	ND [5.8]	-	-	-	-	-	-	-	ND [0.1]
n-Propylbenzene	SW8260C	µg/L	370	ND [0.2]	-	8.9 [0.2]	8.9 [0.2]	-	-	-	-	-	-	-	ND [0.2]
o-Xylene	SW8260C	µg/L	10,000	ND [0.2]	-	17 [2]	17 [2]	-	-	-	-	-	-	-	ND [0.2]
sec-Butylbenzene	SW8260C	µg/L	370	ND [0.1]	-	3.9 [0.1]	3.9 [0.1]	-	-	-	-	-	-	-	ND [0.1]
Styrene	SW8260C	µg/L	100	ND [0.2]	-	ND [2] J-	ND [2]	-	-	-	-	-	-	-	ND [0.2]
tert-Butylbenzene	SW8260C	µg/L	370	ND [0.2]	-	0.61 [0.2] J	0.58 [0.2] J	-	-	-	-	-	-	-	ND [0.2]
Tetrachloroethene (PCE)	SW8260C	µg/L	5	ND [0.2]	-	ND [2]	ND [2]	-	-	-	-	-	-	-	ND [0.2]
Toluene	SW8260C	µg/L	1,000	0.14 [0.1] J	-	3.9 [0.1]	4.1 [0.1]	-	-	-	-	-	-	-	ND [0.1]
trans-1,2-Dichloroethene	SW8260C	µg/L	100	1.8 [0.2]	-	0.15 [0.2] J	0.14 [0.2] J	-	-	-	-	-	-	-	ND [0.2]
trans-1,3-Dichloropropene	SW8260C	µg/L	8.50	ND [0.2]	-	ND [2] J-	ND [2]	-	-	-	-	-	-	-	ND [0.2]
Trichloroethene (TCE)	SW8260C	µg/L	5	0.23 [0.1] J	-	ND [0.1]	ND [0.1]	-	-	-	-	-	-	-	ND [0.1]
Trichlorofluoromethane	SW8260C	µg/L	11,000	ND [0.2]	-	ND [0.2]	ND [0.2]	-	-	-	-	-	-	-	ND [0.2]
Vinyl chloride	SW8260C	µg/L	2 (2)	ND [0.1]	-	0.32 [0.1] J	0.34 [0.1] J	-	-	-	-	-	-	-	ND [0.1]
Xylene, Isomers m & p	SW8260C	µg/L	10,000	ND [0.2]	-	54 [2]	53 [2]	-	-	-	-	-	-	-	ND [0.2]

The ADEC cleanup level is the most stringent soil cleanup level from 18 AAC 75.341 (below 40 inches). The ROD Cleanup levels for the five OU1 contaminants of concern are shown in parentheses.

Table 3-1 Survey Data and Groundwater Elevations
2015 Monitoring Report, 801 Drum Burial Site, OU1
Fort Wainwright, Alaska

WELL ID	Northing[1] (UTM, Zone 6, meters)	Easting[1] (UTM, Zone 6, meters)	Top PVC Elevation[2] (feet MSL) 2004	Top PVC Elevation[3] (feet MSL) 2010	PVC Elevation Differences (feet)[4]	Screened Interval (feet BTOC)	Measured Depth to Water[5] (feet BTOC)	Measured Depth to Bottom[5] (feet BTOC)	Water Elevation (feet MSL)
AP-6326	7190972.23	469066.53	445.26	445.23	0.03	3.5' - 13.5' [6]	11.95	17.16	433.28
AP-6327	7190961.73	469073.85	443.19	443.16	0.04	5.0' - 15.0' [6]	9.81	18.50	433.35
AP-6328	7190949.26	469092.08	447.1	NM	NA	8.0' - 18.0' [6]	NM	NM	NM
AP-6330	7190959.59	469098.29	440.05	NM	NA	2.7' - 12.7' [6]	NM	NM	NM
AP-6331	7190994.62	469091.72	445.29	445.28	0.01	3.5' - 13.5' [6]	11.99	16.97	433.29
AP-6629	7190883.95	469184.64	451.7	NM	NA	11.5' - 21.5'	NM	NM	NM
AP-6630	7190872.28	469035.08	447.98	447.97	0.01	9.5' - 19.5'	14.57	22.90	433.40
AP-6631	7190910.10	469050.06	443.65	NM	NA	3.7' - 13.7'	NM	NM	NM
AP-7162	7191066.59	469037.83	463.02	NM	NA	22' - 32'	NM	NM	NM
AP-10042MW	7190978.85	469015.69	NA	452.16	NA	15' - 25'	18.88	24.75	433.28
AP-7279	7190965.25	469151.95	451.24	451.21	0.03	11.5' - 21.5'	17.87	24.93	433.34
AP-7280	7190990.86	469141.43	451.13	NM	NA	12.5' - 22.5'	NM	NM	NM
AP-7281	7190934.50	469164.89	451.24	NM	NA	12.5' - 22.5'	NM	NM	NM
AP-7282	7190911.06	469174.47	450.65	450.64	0.01	11.5' - 21.5'	17.18	24.94	433.46
AP-7283	7190869.65	469140.66	451.09	NM	NA	17.5' - 27.5'	NM	NM	NM
AP-7284	7190885.06	469092.91	439.99	440.00	-0.01	7.5' - 17.5'	6.57	19.70	433.43

BTOC	Below Top of Casing
MSL	Mean Sea Level
PVC	Polyvinyl Chloride
NA	Not Applicable
NM	Not Measured

Well Notes:

1) Horizontal survey conducted in 2009 and data retrieved from the Fort Wainwright Monitoring Well Database (AP-10042MW was surveyed in 2010).
2) Elevation survey data conducted in 2004 (ENSR, 2006).
3) Elevation survey conducted by Windy Creek Surveys of Fairbanks, Alaska, in August 2010.
4) Difference in PVC casing elevations between 2004 and 2010.
5) Water level measurements conducted by FES in May 2015.
6) No well construction diagrams available; assumed based on well soundings and boring logs.

LEGEND:

AP-6630 433.40 — Monitoring Well; Groundwater Elevations in Feet Mean Sea Level (MSL)

433.40 — Groundwater Table Contour - May 2015 C.I. = 0.2 Ft.

Inferred Groundwater Flow Direction

Fort Wainwright Post Boundary

NOTE:

1. Coordinate System - Projection: World Geodetic System 1984 (WGS84) Universal Transverse Mercator (UTM), Zone 6N.

SOURCES:

1. Aerial imagery obtained from Department of Public Works (DPW) Environmental, 2014.

2. Groundwater Contours were created with Surver v.9.

Fairbanks Environmental Services
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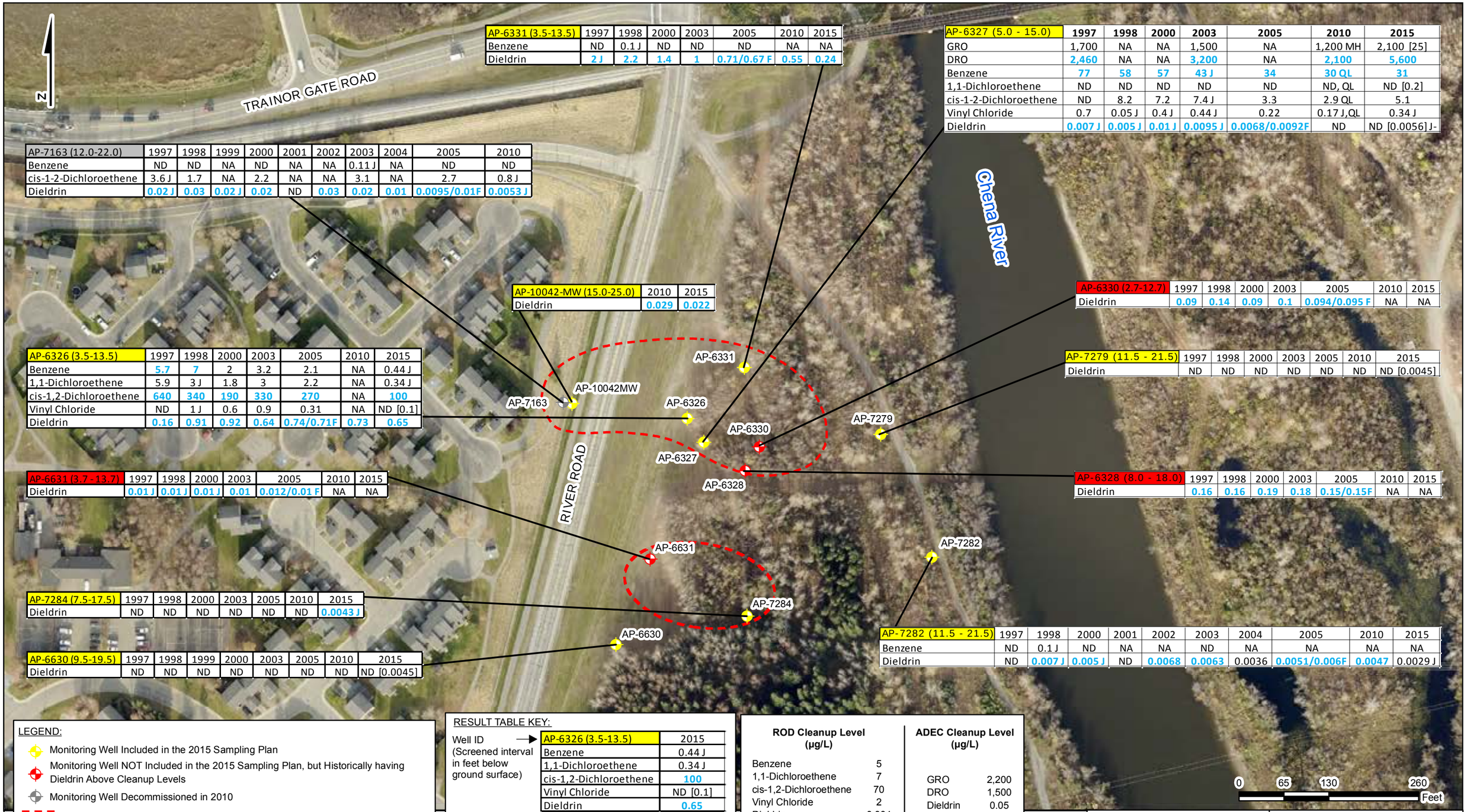
U.S. Army Corps of Engineers
Anchorage, AK

Groundwater Elevation Contours (May 2015)
2015 Monitoring Report
Operable Unit 1
Fort Wainwright, Alaska

Contract: W911KB-12-D-0001	Figure: 3-1	Date: 7/16



AP-6331 (3.5-13.5)	1997	1998	2000	2003	2005	2010	2015
Benzene	ND	0.1 J	ND	ND	ND	NA	NA
Dieldrin	2 J	2.2	1.4	1	0.71/0.67 F	0.55	0.24

AP-6327 (5.0 - 15.0)	1997	1998	2000	2003	2005	2010	2015
GRO	1,700	NA	NA	1,500	NA	1,200 MH	2,100 [25]
DRO	2,460	NA	NA	3,200	NA	2,100	5,600
Benzene	77	58	57	43 J	34	30 QL	31
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND, QL	ND [0.2]
cis-1-2-Dichloroethene	ND	8.2	7.2	7.4 J	3.3	2.9 QL	5.1
Vinyl Chloride	0.7	0.05 J	0.4 J	0.44 J	0.22	0.17 J,QL	0.34 J
Dieldrin	0.007 J	0.005 J	0.01 J	0.0095 J	0.0068/0.0092F	ND	ND [0.0056] J-

AP-7163 (12.0-22.0)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2010
Benzene	ND	ND	NA	ND	NA	NA	0.11 J	NA	ND	ND
cis-1-2-Dichloroethene	3.6 J	1.7	NA	2.2	NA	NA	3.1	NA	2.7	0.8 J
Dieldrin	0.02 J	0.03	0.02 J	0.02	ND	0.03	0.02	0.01	0.0095/0.01F	0.0053 J

AP-10042-MW (15.0-25.0)	2010	2015
Dieldrin	0.029	0.022

AP-6330 (2.7-12.7)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.09	0.14	0.09	0.1	0.094/0.095 F	NA	NA

AP-6326 (3.5-13.5)	1997	1998	2000	2003	2005	2010	2015
Benzene	5.7	7	2	3.2	2.1	NA	0.44 J
1,1-Dichloroethene	5.9	3 J	1.8	3	2.2	NA	0.34 J
cis-1,2-Dichloroethene	640	340	190	330	270	NA	100
Vinyl Chloride	ND	1 J	0.6	0.9	0.31	NA	ND [0.1]
Dieldrin	0.16	0.91	0.92	0.64	0.74/0.71F	0.73	0.65

AP-7279 (11.5 - 21.5)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	ND [0.0045]

AP-6631 (3.7 - 13.7)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.01 J	0.01 J	0.01 J	0.01	0.012/0.01 F	NA	NA

AP-6328 (8.0 - 18.0)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	0.16	0.16	0.19	0.18	0.15/0.15F	NA	NA

AP-7284 (7.5-17.5)	1997	1998	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	0.0043 J

AP-7282 (11.5 - 21.5)	1997	1998	2000	2001	2002	2003	2004	2005	2010	2015
Benzene	ND	0.1 J	ND	NA	NA	ND	NA	NA	NA	NA
Dieldrin	ND	0.007 J	0.005 J	ND	0.0068	0.0063	0.0036	0.0051/0.006F	0.0047	0.0029 J

AP-6630 (9.5-19.5)	1997	1998	1999	2000	2003	2005	2010	2015
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND [0.0045]

LEGEND:

- Monitoring Well Included in the 2015 Sampling Plan
- Monitoring Well NOT Included in the 2015 Sampling Plan, but Historically having Dieldrin Above Cleanup Levels
- Monitoring Well Decommissioned in 2010
- Dieldrin Plume

F = Filtered Sample Result
J = Estimated value
J- = Result qualified as estimate because it is less than the LOQ or due to QC failure
LOD = Limit of Detection
LOQ = Limit of Quantitation
NA = Not Analyzed
ND = Not Detected
MH = High Estimated Value
QL = Low Estimated Value

RESULT TABLE KEY:

Well ID (Screened interval in feet below ground surface) →

AP-6326 (3.5-13.5)	2015
Benzene	0.44 J
1,1-Dichloroethene	0.34 J
cis-1,2-Dichloroethene	100
Vinyl Chloride	ND [0.1]
Dieldrin	0.65

Analytical results shown in µg/L

Contaminant concentrations that exceed ROD and/or ADEC cleanup levels are shown in blue

LOD presented in brackets for ND results (LODs unknown prior to 2015)

Only concentrations for remedial action objective COCs are shown. Aldrin has been non-detect or below the cleanup level.

ROD Cleanup Level (µg/L)	
Benzene	5
1,1-Dichloroethene	7
cis-1,2-Dichloroethene	70
Vinyl Chloride	2
Dieldrin	0.004

ADEC Cleanup Level (µg/L)	
GRO	2,200
DRO	1,500
Dieldrin	0.05

NOTES:

1. Coordinate System - Projection: World Geodetic System 1984 (WGS84) Universal Transverse Mercator (UTM), Zone 6N

2. Aerial imagery obtained from Department of Public Works (DPW) Environmental, 2014

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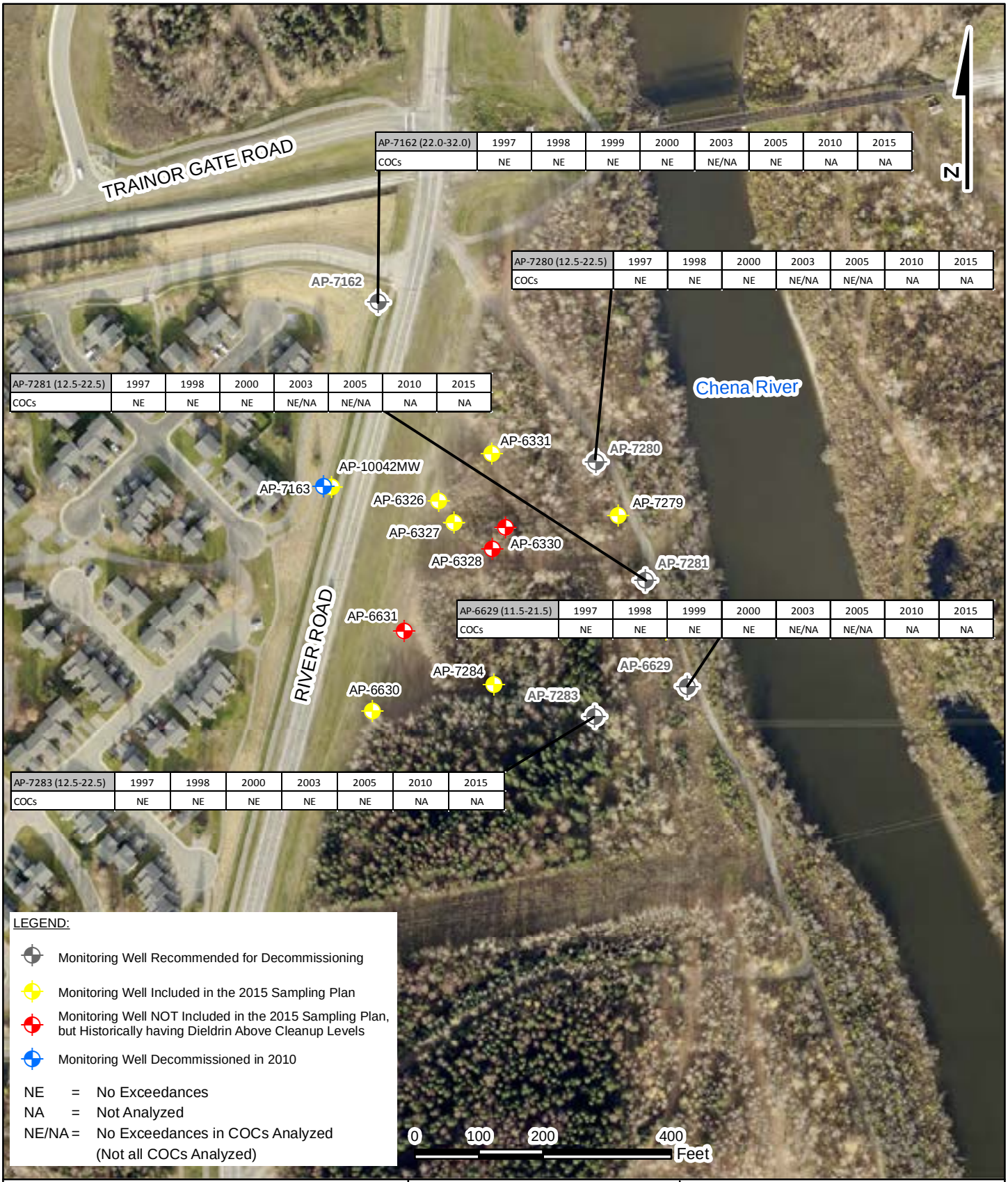
OU1 801 Drum Burial Site Monitoring Wells and Results
2015 Monitoring Report
Operable Unit 1
Fort Wainwright, Alaska

Contract: W911KB-12-D-0001 | Figure: 3-2 | Date: 7/16



AP-7162 (22.0-32.0)	1997	1998	1999	2000	2003	2005	2010	2015
COCs	NE	NE	NE	NE	NE/NA	NE	NA	NA

AP-7280 (12.5-22.5)	1997	1998	2000	2003	2005	2010	2015
COCs	NE	NE	NE	NE/NA	NE/NA	NA	NA

AP-7281 (12.5-22.5)	1997	1998	2000	2003	2005	2010	2015
COCs	NE	NE	NE	NE/NA	NE/NA	NA	NA

AP-6629 (11.5-21.5)	1997	1998	1999	2000	2003	2005	2010	2015
COCs	NE	NE	NE	NE	NE/NA	NE/NA	NA	NA

AP-7283 (12.5-22.5)	1997	1998	2000	2003	2005	2010	2015
COCs	NE	NE	NE	NE	NE	NA	NA

LEGEND:

- Monitoring Well Recommended for Decommissioning
- Monitoring Well Included in the 2015 Sampling Plan
- Monitoring Well NOT Included in the 2015 Sampling Plan, but Historically having Dieldrin Above Cleanup Levels
- Monitoring Well Decommissioned in 2010

NE = No Exceedances
NA = Not Analyzed
NE/NA = No Exceedances in COCs Analyzed (Not all COCs Analyzed)

NOTES:
1. Screened interval in feet below ground surface is shown in parenthesis next to well ID number in each call out box.

2. Coordinate System - Projection: World Geodetic System 1984 (WGS84) Universal Transverse Mercator (UTM), Zone 6N

3. Aerial imagery obtained from Department of Public Works (DPW) Environmental, 2014

SOURCE:

1. AEC Third Five-Year Review Report, September 2011

Fairbanks Environmental Services
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U.S. Army Corps of Engineers
Anchorage, AK

OU1 Monitoring Wells Recommended for Decommissioning
2015 Monitoring Report
Operable Unit 1
Fort Wainwright, Alaska

Contract: W911KB-12-D-0001 | Figure: 4-1 | Date: 7/16

OU-2 Building 1168 Leach Well

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NOTES:

1. HORIZONTAL DATUM: UTM ZONE 6N, WGS 1984, METERS
2. AERIAL IMAGERY FROM FORT WAINWRIGHT, 2012

LEGEND

MONITORING WELL SAMPLED IN 2015

FAIRBANKS ENVIRONMENTAL SERVICES
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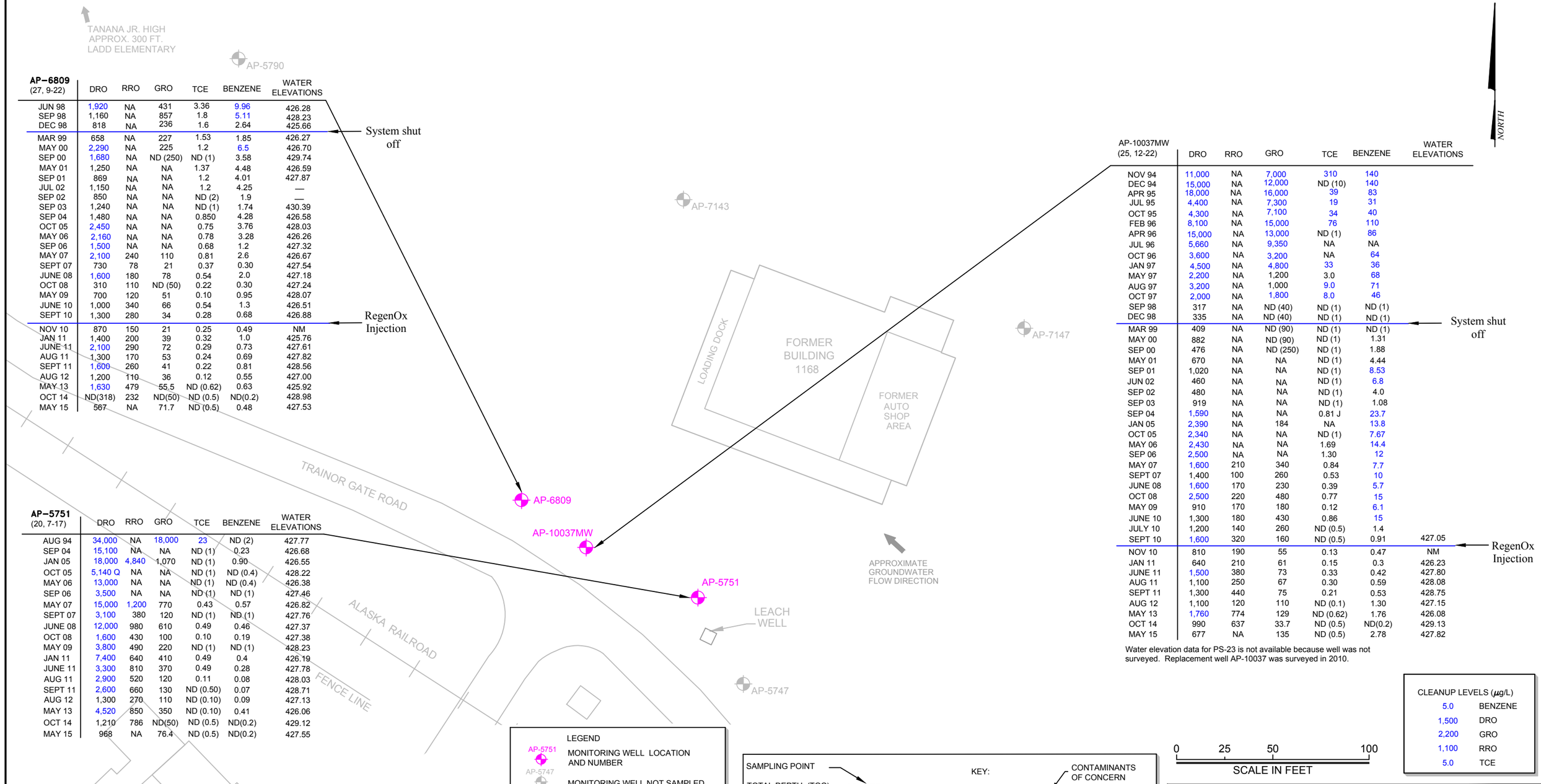
ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Former Building 1168 Groundwater Sampling Locations
2014 Monitoring Report
Operable Unit 2
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	2-2	5/15



AP-6809 (27, 9-22)

	DRO	RRO	GRO	TCE	BENZENE	WATER ELEVATIONS
JUN 98	1,920	NA	431	3.36	9.96	426.28
SEP 98	1,160	NA	857	1.8	5.11	428.23
DEC 98	818	NA	236	1.6	2.64	425.66
MAR 99	658	NA	227	1.53	1.85	426.27
MAY 00	2,290	NA	225	1.2	6.5	426.70
SEP 00	1,680	NA	ND (250)	ND (1)	3.58	429.74
MAY 01	1,250	NA	NA	1.37	4.48	426.59
SEP 01	869	NA	NA	1.2	4.01	427.87
JUL 02	1,150	NA	NA	1.2	4.25	—
SEP 02	850	NA	NA	ND (2)	1.9	—
SEP 03	1,240	NA	NA	ND (1)	1.74	430.39
SEP 04	1,480	NA	NA	0.850	4.28	426.58
OCT 05	2,450	NA	NA	0.75	3.76	428.03
MAY 06	2,160	NA	NA	0.78	3.28	426.26
SEP 06	1,500	NA	NA	0.68	1.2	427.32
MAY 07	2,100	240	110	0.81	2.6	426.67
SEPT 07	730	78	21	0.37	0.30	427.54
JUNE 08	1,600	180	78	0.54	2.0	427.18
OCT 08	310	110	ND (50)	0.22	0.30	427.24
MAY 09	700	120	51	0.10	0.95	428.07
JUNE 10	1,000	340	66	0.54	1.3	426.51
SEPT 10	1,300	280	34	0.28	0.68	426.88
NOV 10	870	150	21	0.25	0.49	NM
JAN 11	1,400	200	39	0.32	1.0	425.76
JUNE 11	2,100	290	72	0.29	0.73	427.61
AUG 11	1,300	170	53	0.24	0.69	427.82
SEPT 11	1,600	260	41	0.22	0.81	428.56
AUG 12	1,200	110	36	0.12	0.55	427.00
MAY 13	1,630	479	55.5	ND (0.62)	0.63	425.92
OCT 14	ND(318)	232	ND(50)	ND (0.5)	ND(0.2)	428.98
MAY 15	567	NA	71.7	ND (0.5)	0.48	427.53

System shut off

RegenOx Injection

AP-5751 (20, 7-17)

	DRO	RRO	GRO	TCE	BENZENE	WATER ELEVATIONS
AUG 94	34,000	NA	18,000	23	ND (2)	427.77
SEP 04	15,100	NA	NA	ND (1)	0.23	426.68
JAN 05	18,000	4,840	1,070	ND (1)	0.90	426.55
OCT 05	5,140 Q	NA	NA	ND (1)	ND (0.4)	428.22
MAY 06	13,000	NA	NA	ND (1)	ND (0.4)	426.38
SEP 06	3,500	NA	NA	ND (1)	ND (1)	427.46
MAY 07	15,000	1,200	770	0.43	0.57	426.82
SEPT 07	3,100	380	120	ND (1)	ND (1)	427.76
JUNE 08	12,000	980	610	0.49	0.46	427.37
OCT 08	1,600	430	100	0.10	0.19	427.38
MAY 09	3,800	490	220	ND (1)	ND (1)	428.23
JAN 11	7,400	640	410	0.49	0.4	426.19
JUNE 11	3,300	810	370	0.49	0.28	427.78
AUG 11	2,900	520	120	0.11	0.08	428.03
SEPT 11	2,600	660	130	ND (0.50)	0.07	428.71
AUG 12	1,300	270	110	ND (0.10)	0.09	427.13
MAY 13	4,520	850	350	ND (0.10)	0.41	426.06
OCT 14	1,210	786	ND(50)	ND (0.5)	ND(0.2)	429.12
MAY 15	968	NA	76.4	ND (0.5)	ND(0.2)	427.55

AP-10037MW (25, 12-22)

	DRO	RRO	GRO	TCE	BENZENE	WATER ELEVATIONS
NOV 94	11,000	NA	7,000	310	140	
DEC 94	15,000	NA	12,000	ND (10)	140	
APR 95	18,000	NA	16,000	39	83	
JUL 95	4,400	NA	7,300	19	31	
OCT 95	4,300	NA	7,100	34	40	
FEB 96	8,100	NA	15,000	76	110	
APR 96	15,000	NA	13,000	ND (1)	86	
JUL 96	5,660	NA	9,350	NA	NA	
OCT 96	3,600	NA	3,200	NA	64	
JAN 97	4,500	NA	4,800	33	36	
MAY 97	2,200	NA	1,200	3.0	68	
AUG 97	3,200	NA	1,000	9.0	71	
OCT 97	2,000	NA	1,800	8.0	46	
SEP 98	317	NA	ND (40)	ND (1)	ND (1)	
DEC 98	335	NA	ND (40)	ND (1)	ND (1)	
MAR 99	409	NA	ND (90)	ND (1)	ND (1)	
MAY 00	882	NA	ND (90)	ND (1)	1.31	
SEP 00	476	NA	ND (250)	ND (1)	1.88	
MAY 01	670	NA	NA	ND (1)	4.44	
SEP 01	1,020	NA	NA	ND (1)	8.53	
JUN 02	460	NA	NA	ND (1)	6.8	
SEP 02	480	NA	NA	ND (1)	4.0	
SEP 03	919	NA	NA	ND (1)	1.08	
SEP 04	1,590	NA	NA	0.81 J	23.7	
JAN 05	2,390	NA	184	NA	13.8	
OCT 05	2,340	NA	NA	ND (1)	7.67	
MAY 06	2,430	NA	NA	1.69	14.4	
SEP 06	2,500	NA	NA	1.30	12	
MAY 07	1,600	210	340	0.84	7.7	
SEPT 07	1,400	100	260	0.53	10	
JUNE 08	1,600	170	230	0.39	5.7	
OCT 08	2,500	220	480	0.77	15	
MAY 09	910	170	180	0.12	6.1	
JUNE 10	1,300	180	430	0.86	15	
JULY 10	1,200	140	260	ND (0.5)	1.4	
SEPT 10	1,600	320	160	ND (0.5)	0.91	427.05
NOV 10	810	190	55	0.13	0.47	NM
JAN 11	640	210	61	0.15	0.3	426.23
JUNE 11	1,500	380	73	0.33	0.42	427.80
AUG 11	1,100	250	67	0.30	0.59	428.08
SEPT 11	1,300	440	75	0.21	0.53	428.75
AUG 12	1,100	120	110	ND (0.1)	1.30	427.15
MAY 13	1,760	774	129	ND (0.62)	1.76	426.08
OCT 14	990	637	33.7	ND (0.5)	ND(0.2)	429.13
MAY 15	677	NA	135	ND (0.5)	2.78	427.82

System shut off

RegenOx Injection

Water elevation data for PS-23 is not available because well was not surveyed. Replacement well AP-10037 was surveyed in 2010.

NOTES:

1. TRAINOR GATE ROAD NEAR FORMER BUILDING 1168 WAS REPAVED IN THE FALL OF 2006. AP-5747 WAS WITHIN THE ALTERED ROAD AND CONVERTED INTO A FLUSH MOUNT. THE WELL WAS CONVERTED POST SAMPLING EVENT IN SEPTEMBER 2006.
2. ADEC CLEANUP LEVEL FOR GRO CHANGED FROM 1,300 mg/L TO 2,200 mg/L IN OCTOBER 2008.
3. AP-7143 AND AP-7147 ARE ASSOCIATED WITH THE 2-PARTY SITE AND HAVE NOT BEEN SAMPLED SINCE 2007.
4. AP-5790 IS ASSOCIATED WITH THE 3-PARTY SITE AND HAS NOT BEEN SAMPLED SINCE 2008
5. PS-23 WAS REPLACED BY AP-10037MW IN JULY 2010.
6. REGENESIS REGENOX AND ORC-A INJECTION COMPLETED NEAR AP-10037MW IN OCTOBER 2010.

LEGEND

AP-5751	MONITORING WELL LOCATION AND NUMBER
AP-5747	MONITORING WELL NOT SAMPLED
bgs	BELOW GROUND SURFACE
DRO	DIESEL RANGE ORGANICS
GRO	GASOLINE RANGE ORGANICS
NA	ANALYSIS NOT PERFORMED
ND	NOT DETECTED (REPORTING LIMITS)
NGVD29	NATIONAL GEODETIC VERTICAL DATUM OF 1929
NM	NOT MEASURED
RRO	RESIDUAL RANGE ORGANICS
TCE	TRICHLOROETHENE
TOC	TOP OF CASING
—	DATA NOT FOUND

KEY:

SAMPLING POINT

TOTAL DEPTH, (TOC) SCREENED INTERVAL (bgs)

SAMPLE MONTH

CONCENTRATIONS EXCEEDING CLEANUP LEVELS

CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)

ELEVATIONS IN FEET (NGVD29)

SEE LEGEND FOR ABBREVIATIONS.

AP-5751 (20, 7-17)

	DRO	GRO	TCE	BENZENE	WATER ELEVATIONS
AUG 94	34,000	18,000	23	ND (2)	427.77
SEP 04	15,100	NA	ND (1)	0.23	426.68
JAN 05	19,300	1,080	NA	0.9	426.55
OCT 05	5,140	NA	ND (1)	ND (0.4)	428.22

CONTAMINANTS OF CONCERN

CLEANUP LEVELS (µg/L)

5.0	BENZENE
1,500	DRO
2,200	GRO
1,100	RRO
5.0	TCE

0 25 50 100

SCALE IN FEET

FAIRBANKS ENVIRONMENTAL SERVICES
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FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Former Building 1168 Groundwater Monitoring Results

2015 Monitoring Report
Operable Unit 2
Fort Wainwright, Alaska

CONTRACT: W911KB-12-D-0001 | FIGURE: 5-1 | DATE: 1/16

FIGURE 5-1

Table 5-5 - 2010 - 2015 Groundwater Sample Results
Former Building 1168

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)	Residual Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2- Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS (3-Party Site)									**2,200[1]**	**1,500[1]**	**1,100[1]**			**5**	**5**	**5**	**2**	**7**	**70**	**70**
		11FW2H05WG	1/27/2011	426.19	-42.6	0.5	6.20	0.622	NA	NA	410	**7,400**	640	0.4 J	0.49 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H09WG-A	6/1/2011	427.78	66.3	0.7	6.07	0.347	5.79	7.49	370	**3,300 ML**	810	0.28 J	0.49 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H09WG-B[3]							0.03	22.4	120	**3,000**	560 J	0.07 J	ND(0.5)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H08WG-B	8/12/2011	428.03	50.6	2.5	6.22	0.59	0.04	22.3	120	**2,900**	520 J	0.08 J	0.11 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H14WG	9/21/2011	428.71	6.9	2.5	6.16	0.576	0.70 J	27.1	130	**2,600**	660 QH	0.07 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		12FW2H02WG	8/22/2012	427.13	101.9	3.6	6.34	0.481	0.51	11.7	110	1,300	270 J,Q	0.09 J	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.20)	ND(0.20)	ND(0.20)
		13FW2H01WG	5/2/2013	426.06	-24.2	0.3	6.07	0.502	5.95	13.5	350 B	**4,520**	850	0.41	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU204WG	10/9/2014	429.12	169	0.6	6.25	0.913	ND(0.25)	33.8	ND(50)	1,210	786	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
AP-5751	Upgradient	15FWOU204WG	05/12/2015	427.55	87.2	0.4	5.78	0.588	0.27	29.7	76.4 J	968 J	NA	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		10FW2H02WG	6/2/2010	NA	-87.2	0.8	6.55	0.802	30.70	22.7	430	1,300 QL	180 J	**15**	0.86	ND(0.5)	ND(0.5)	ND(0.5)	0.27 J	ND(0.5)
PS-23		10FW2H03WG[3]							NA	NA	420	1,300 QL	190 J	**15**	0.85	ND(0.5)	ND(0.5)	ND(0.5)	0.26 J	ND(0.5)
		10FW2H05WG	7/28/2010	NM	NM	NM	NM	NM	12.40	24.9	260	1,200	140 J,B	1.4	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.080 J	ND(0.5)
		10FW2H07WG	9/28/2010	427.05	24.4	0.8	6.43	0.933	NA	NA	160	**1,600**	320 J,B	0.9	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		10FW2H09WG	11/15/2010	NM	178.6	12.9[2]	8.07	2.590	0.62	295	55 J	810 J,QL	190 J,Q	0.5 J	0.13 J	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		11FW2H01WG	1/24/2011	426.23	-100.0	1.0	6.88	3.275	3.90	366	61 J	640 J	210 J	0.3 J	0.15 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H06WG-A	6/1/2011	427.80	-62.3	0.7	6.97	2.178	5.63	128	73 J	**1,500**	380 J	0.4 J	0.33 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H07WG-A[3]								128	77 J	**1,500**	420 J	0.4 J	0.34 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H07WG-B	8/12/2011	428.08	5.5	1.0	7.03	1.981	6.18	122	67 J	1,100	250 J	0.6	0.30 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H12WG	9/21/2011	428.75	-93.3	2.3	7.06	2.12	7.09 J	144	75 J	1,300	440 J,QH	0.5	0.21 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		11FW2H13WG[3]							6.86 J,QL	143	75 J	1,100	380 J,QH	0.5	0.23 J	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
		12FW2H03WG	8/22/2012	427.15	-40.6	4.0	7.17	2.179	8.21 QL	63.0	110	860	73 J,Q	1.3	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.20)	ND(0.20)	ND(0.20)
		12FW2H04WG[3]							8.27 QL	63.1	110	1,110	120 J,Q	1.3	ND(0.10)	ND(0.20)	ND(0.10)	ND(0.20)	ND(0.20)	ND(0.20)
		13FW2H02WG	5/2/2013	426.08	-107.6	0.3	6.85	1.686	8 QL	38.9	126 B	**1,760**	774 Q	1.6	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		13FW2H03WG[3]							7.77	48.7	129 B	**1,550**	527 Q	1.8	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU201WG	10/9/2014	429.13	209.5	0.7	7.2	3.758	ND(0.25) J-,J	185.0	32.5 J,B	773	490 J	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(500)
		14FWOU202WG							0.15 J-, J	188.0	33.7 J	990	637	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		15FWOU202WG	05/12/2015	427.82	24.7	0.3	6.31	1.138	8.3	34.2	135	667	NA	2.75	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(500)
AP-10037MW	Source Area	15FWOU203WG							8.37	34.1	133	610 J	NA	2.78	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		10FW2H04WG	6/2/2010	426.51	-10.3	1.3	6.34	0.970	NA	NA	66 J	1,000 QL	340 J	1.3	0.54	ND(0.5)	ND(0.5)	ND(0.5)	0.18 J	ND(0.5)
		10FW2H06WG	9/28/2010	426.88	144.8	0.8	6.08	1.017	NA	NA	34 J	1,300	280 J,B	0.7	0.28 J	ND(0.5)	ND(0.5)	ND(0.5)	0.08 J	ND(0.5)
		10FW2H10WG	11/15/2010	NM	170.6	0.7	6.50	1.172	NA	NA	21 J	870 ML,QL	150 J,B,Q	0.5 J	0.25 J	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		11FW2H02WG	1/24/2011	426.06	77.8	0.4	6.32	1.004	NA	NA	39 J	1,400	200 J	1.0	0.32 J	ND(0.50)	ND(0.50)	ND(0.50)	0.11 J	ND(0.50)
		11FW2H03WG[3]							NA	NA	39 J	1,400	190 J	0.9	0.31 J	ND(0.50)	ND(0.50)	ND(0.50)	0.09 J	ND(0.50)
		11FW2H08WG-A	6/1/2011	427.61	143.2	0.8	6.24	0.756	5.54	35.3	72 J	**2,100**	290 J	0.7	0.29 J	ND(0.50)	ND(0.50)	ND(0.50)	0.11 J	ND(0.50)
		11FW2H06WG-B	8/12/2011	427.82	61.1	1.3	6.17	0.766	1.68	40.5	53 J	1,300	170 J,B	0.7	0.24 J	ND(0.50)	ND(0.50)	ND(0.50)	0.11 J	ND(0.50)
		11FW2H11WG	9/21/2011	428.56	8.3	2.3	6.26	0.774	1.39 J	53.6	41 J,B	**1,600 ML**	260 J,B,QH	0.8	0.22 J	ND(0.50)	ND(0.50)	ND(0.50)	0.08 J	ND(0.50)
		12FW2H01WG	8/22/2012	427.00	80.2	1.4	6.45	1.017	3.19	61.4	36 J	1,200 ML	110 J,Q	0.6	0.12J	ND(0.20)	ND(0.10)	ND(0.20)	ND(0.20)	ND(0.20)
		13FW2H04WG	5/2/2013	425.92	41.3	0.3	6.33	1.005	0.96 J	80.3	56 J,B	**1,630**	479 J	0.6	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU203WG	10/9/2014	428.98	181.4	1.0	6.36	1.254	ND(0.25)	102	ND(50)	ND(318)	0.232 J	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
AP-6809	Downgradient	15FWOU201WG	05/12/2015	427.53	94.9	0.4	5.98	1.099	1.3	72	71.7 J	567 J	NA	0.48	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Notes:

Analytes exceeding remedial action goals (RAGs) established in the Record of Decision (ROD) or ADEC groundwater cleanup levels (from Table C of 18 AAC 75) are in bold type and gray shading. ROD chemicals of concern were analyzed by EPA Method 8260C.

1 Cleanup goal listed is an ADEC cleanup level and is not listed in the OU2 ROD.

2 Dissolved oxygen measured above theoretical maximum during the November 2010 sampling event in AP-10037MW. Theoretical maximum concentration is shown.

3 Sample is a Field Duplicate of the sample immediately above.

B - analytical result is qualified as a potential high estimate due to contamination present in a blank sample

btoc - below top of casing

J - analyte is reported between the detection limit and LOQ

LOD - limit of detection

LOQ - limit of quantitation

µg/L - micrograms per liter

mS/cm - milliSiemens per cemtimeter

msl - mean seal level

mV - millivolts

NA - not analyzed or not applicable

ND - not detected at the detection limit (LOD in parentheses. LOQ in parentheses for data prior to 2012.)

Q - result considered an estimate due to a quality control failure. If direction of bias is known, it is further indicated with a "L" (low) or "H" (high). mg/L - milligrams per liter

OU-2 DRMO Yard

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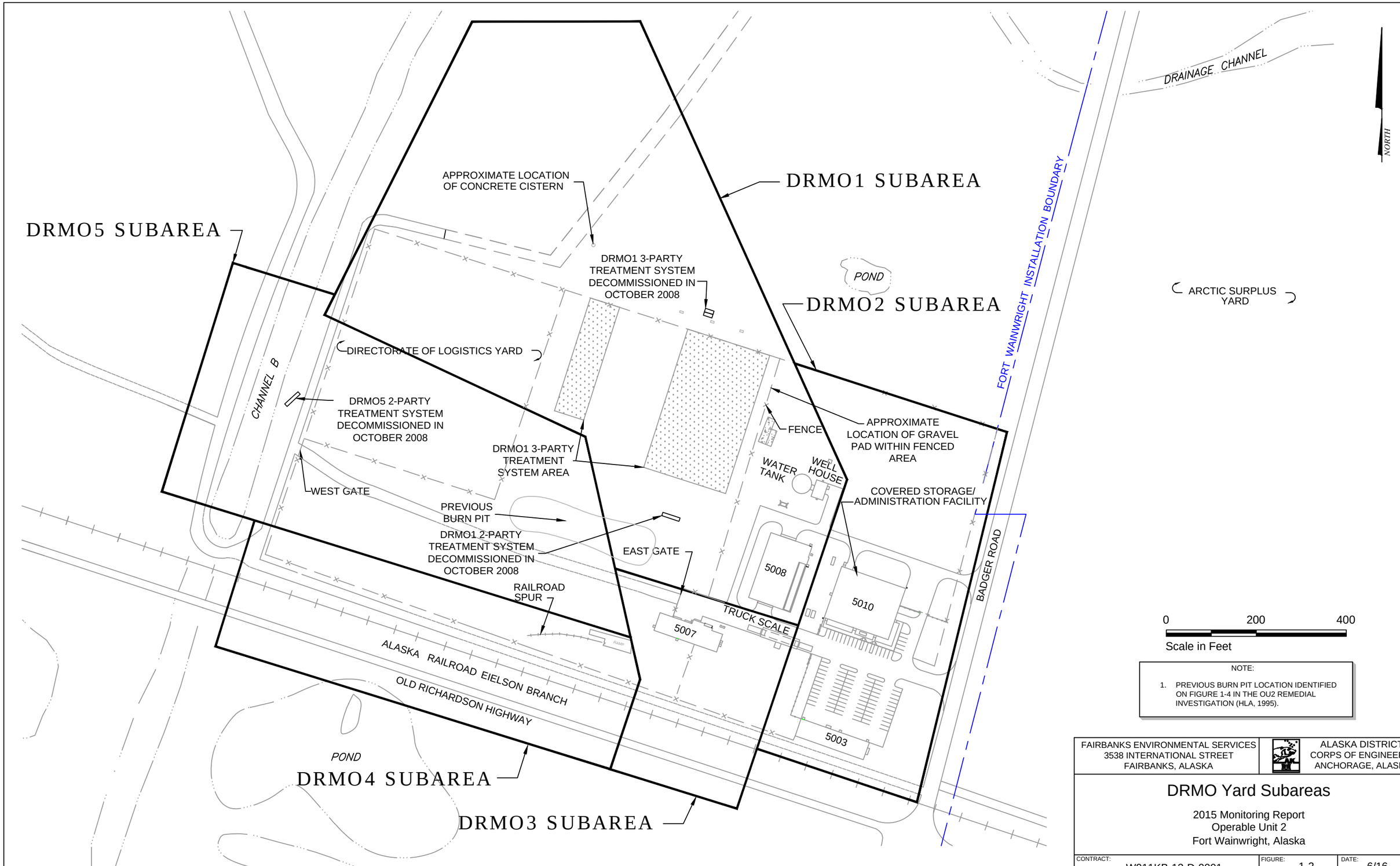


NOTE:

1. PREVIOUS BURN PIT LOCATION IDENTIFIED ON FIGURE 1-4 IN THE OU2 REMEDIAL INVESTIGATION (HLA, 1995).

FAIRBANKS ENVIRONMENTAL SERVICES 3538 INTERNATIONAL STREET FAIRBANKS, ALASKA	ALASKA DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

DRMO Yard Subareas

2015 Monitoring Report
Operable Unit 2
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	1-2	6/16

FIGURE 1-2

DRMO-1 SUBAREA

DRMO-5 SUBAREA

DRMO-4 SUBAREA

DRMO-3 SUBAREA

DRMO-2 SUBAREA

AP-7560 (13.5, 6-16)

	DRO	PCE	TCE	WATER ELEVATIONS
MAY 98	NA	3	2	—
OCT 98	NA	1	ND (1)	442.67
JUN 99	NA	3	1.3	442.21
SEP 99	ND (531)	5.3	2.7	442.59
JUN 00	13,700	4.3	1.4	—
SEP 00	NA	4.8	3	443.71
MAY 01	NA	2.42	ND (1)	442.66
OCT 01	NA	ND (1)	ND (1)	442.48
SEP 02	330	ND (2)	ND (2)	443.54
SEP 03	3,720	3.08	1.83	444.04
MAY 04	7,660	1.24	0.6	443.61
SEP 04	670	1.49	0.68	443.03
MAY 05	10,300	1.39	0.46	443.46
OCT 05	664	2.19	0.79	443.12
MAY 06	8,970	ND (1)	ND (1)	442.41
OCT 06	4,200	2.8	1.2	442.79
MAY 07	9,200	2.1	0.98	442.16
SEPT 07	550	3.6	1.9	443.13
JUNE 08	10,000	1.2	0.40	442.55
OCT 08	5,700	0.80	0.82	442.83
SEPT 09	8,100	1.8	0.9	442.91
OCT 10	11,000	1.8	0.95	442.31
SEPT 11	9,600	2.8	2.0	443.40
AUG 12	7,900	2.2	1.2	443.02
AUG 13	7,560	ND(0.62)	ND(0.62)	443.13
OCT 14	5,190	1.1	ND(0.5)	443.83
AUG 15	4,320	4.26	3.14	443.67

System shut off

AP-7559 (16, 6-16)

	DRO	PCE	TCE	WATER ELEVATIONS
MAY 98	NA	13	1	442.39
OCT 98	NA	13	ND (1)	442.96
JUN 99	NA	4.6	ND (1)	442.38
SEP 99	ND (316)	4.6	ND (1)	442.77
JUN 00	ND (353)	4.7	ND (1)	443.53
SEP 00	NA	4.9	ND (1)	443.95
MAY 01	NA	7.55	ND (1)	442.98
OCT 01	NA	6.22	ND (1)	442.70
SEP 02	112	4.49	0.41	444.33
MAY 04	146	4.59	0.5	443.87
SEP 04	150	4.48	0.49	443.18
MAY 05	80	3.84	0.49	443.66
OCT 05	66.7	2.42	ND (1)	443.34
MAY 06	63.0	ND (1)	ND (1)	442.59
SEP06	97	2.4	0.43	442.98
MAY 07	120	1.6	0.42	442.36
SEPT 07	57	1.7	0.42	443.33
JUN 08	96	1.8	0.34	442.75
OCT 08	71	2.2	0.51	443.07
MAY 09	NA	1.1	ND(1)	443.15
SEPT 09	90	4.1	0.51	443.12
JUNE 10	NA	3	0.52	442.15
AUG 10	NA	3.1	0.51	443.08
OCT 10	130	3.2	0.52	442.58
FEB 11	NA	2.6	0.42	442.20
JUNE 11	NA	2.8	0.48	443.08
SEPT 11	77	4.0	0.58	NM
MAY 12	NM	2.9	0.61	443.22
AUG 12	80	ND(0.2)	0.69	443.24
AUG 13	NA	ND(0.62)	ND(0.62)	443.33
OCT 14	ND(300)	4.6	0.58	444.04
AUG 15	NA	4.5	ND(0.5)	443.76

System shut off

APPROXIMATE GROUNDWATER FLOW DIRECTION

AP-10018 (17, 7-17)

	DRO	BENZENE	PCE	TCE	CIS 1,2 DCE	VC	WATER ELEVATIONS
MAY 09	NA	ND(1)	1.4	0.23	ND(1)	ND(1)	443.03
SEPT 09	4,100*	0.16	26	2	0.41	ND(1)	443.05
NOV 09	NA	0.20	23	2	0.32	ND(1)	442.53
FEB 10	NA	0.12	23	1.6	0.35	ND(1)	441.38
JUNE 10	NA	0.16	13	2.1	0.63	ND(1)	441.94
AUG 10	NA	0.15	19	3.1	0.64	ND(1)	442.97
OCT 10	71,000	0.24	27	3.7	0.55	ND(1)	442.49
FEB 11	NA	0.42	17	7.4	1.8	ND(1)	442.06
JUNE 11	NA	0.1	8	5	3.7	ND(1)	442.91
SEPT 11	1,700+	0.12	3.6	6.1	7.3	ND(1)	443.55
MAY 12	NM	0.39	0.5	3.1	7.6	ND(1)	443.13
AUG 12	1,200	0.11	0.7	4.5	7.7	ND(1)	443.10
AUG 13	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	443.21
OCT 14	347	ND(0.2)	2.2	3.11	6.08	ND(1)	443.96
AUG 15	NA	ND(0.2)	2.35	1.32	5.16	ND(1)	443.66

ISCR Injection 1

ISCR Injection 2

AP-8914R (16.5, 6.5-16.5)

	DRO	PCE	TCE	CIS 1,2 DCE	VC	WATER ELEVATIONS
SEP 03	644	48.5	0.41	-	-	444.31
MAY 04	182	42.6	0.58	-	-	443.90
SEP 04	156	58.7	0.60	-	-	443.27
MAY 05	210	21.6	0.62	ND(1)	ND(1)	443.72
OCT 05	125	44.8	0.41	ND(1)	ND(1)	443.46
MAY 06	164	29	ND (1)	ND (1)	ND (1)	442.70
SEP 06	170	41	0.48	ND(1)	ND(1)	443.09
MAY 07	130	30	0.41	ND(1)	ND(1)	442.47
SEPT 07	200	35	0.40	ND(1)	ND(1)	442.59

JUN 08 WELL DESTROYED. COULD NOT COLLECT SAMPLE. WELL WAS REINSTALLED IN OCTOBER 2008.

OCT 08	520	26	0.50	0.11	NA	
MAY 09	NA	36	ND (1)	ND (1)	NA	
SEPT 09	8,600*	170	1.2	ND(0.5)	443.04	
NOV 09	NA	98	1.6	0.5	442.49	
FEB 10	NA	14	1.8	51	441.62	
JUNE 10	NA	11	2	10	441.97	
AUG 10	NA	18	3.4	15	442.99	
OCT 10	42,000	14	3.6	69	442.49	
FEB 11	NA	2.6	ND (0.5)	40	442.10	
JUNE 11	NA	3.6	1.9	42	443.01	
SEPT 11	2,500+	4.1	2.9	76	443.58	
MAY 12	NM	0.89	4.2	59	443.14	
AUG 12	6,800	0.19	4.7	68	443.11	
AUG 13	NA	ND(0.62)	ND(0.62)	ND(0.62)	443.30	
OCT 14	586	ND(0.5)	3.09	54.8	444.00	
AUG 15	NA	ND(0.5)	1.50	27.9	443.70	

System shut off

ISCR Injection 1

ISCR Injection 2

AP-10017 (17, 7-17)

	DRO	BENZENE	PCE	TCE	CIS 1,2 DCE	VC	WATER ELEVATIONS
MAY 09	NA	ND(1)	ND(1)	ND(1)	0.11	ND(1)	443.04
SEPT 09	570	0.060	0.81	0.31	0.49	ND(1)	443.09
NOV 09	NA	0.040	0.62	0.32	0.49	ND(1)	442.52
FEB 10	NA	0.050	0.48	0.36	0.6	ND(1)	441.56
JUNE 10	NA	0.080	0.73	0.30	0.83	ND(1)	442.01
AUG 10	NA	ND(0.5)	0.69	0.34	0.75	ND(1)	443.04
OCT 10	720	0.06	0.97	0.33	0.51	ND(1)	442.54
FEB 11	NA	0.19	0.52	0.28	0.69	ND(1)	442.14
JUNE 11	NA	ND(0.5)	0.7	0.26	0.52	ND(1)	443.06
SEPT 11	52+	0.07	0.85	0.31	0.59	ND(1)	443.55
MAY 12	NA	0.32	0.44	0.26	0.76	ND(1)	443.19
AUG 12	580	ND(0.1)	1.1	0.30	0.70	ND(1)	443.18
AUG 13	NA	ND(0.24)	ND (0.62)	ND(0.62)	ND(0.62)	ND(1)	443.29
OCT 14	424	ND(0.2)	1.95	ND(0.5)	ND(0.5)	ND(1)	444.01
AUG 15	NA	ND(0.2)	1.3	ND(0.5)	ND(0.5)	ND(1)	443.82

AP-6806 (20.5, 2.1-14.5)

	DRO	WATER ELEVATIONS
SEPT 94	4,200	443.48
OCT 96	9,200	—
JAN 97	14,000	—
JUL 97-	4,300	—
OCT 97	1,900	—
JAN 98	6,100	—
JUN 98	1,500	—
AUG 98	14,000	—
OCT 98	8,470	—
FEB 99	3,690	441.36
MAY 99	2,730	441.63
OCT 99	1,530	441.95
APR 00	12,800	441.86
JUL 00	1,830	442.65
SEP 00	6,860	442.89
NOV 00	2,100	442.69
SEP 01	2,460	442.07
JUN 02	2,000	439.99
SEP 02	1,900	442.79
SEP 03	14,800	443.78
MAY 04	6,750	443.41
SEP 04	3,910	443.22
MAY 05	2,340	443.21
OCT 05	7,010	442.64
MAY 06	6,950	442.10
OCT 06	2,700	442.48
MAY 07	1,500	441.79
SEPT 07	1,900	442.61
JUN 08	3,900	442.12
OCT 08	16,000	442.38
MAY 09	8,200	442.57
JUNE 10	2,000	441.59
JUNE 11	9,300	442.51
MAY 15	2,700	442.68

System shut off

AP-10015 (18, 8-18)

	DRO	BENZENE	PCE	TCE	CIS 1,2 DCE	VC	WATER ELEVATIONS
MAY 09	NA	ND(1)	1	0.11	ND(1)		444.53
SEPT 09	1,300	0.080	7.1	0.68	0.32		443.00
NOV 09	NA	0.070	7.2	1.1	0.34		442.52
FEB 10	NA	0.060	3.6	2.6	0.52		443.28
JUNE 10	NA	0.090	0.68	1.6	1.0		443.80
AUG 10	NA	0.070	0.98	2.4	0.73		444.82
OCT 10	1,400	0.080	0.36	3.6	1.8		442.46
FEB 11	NA	0.21	ND(0.5)	2.1	2.6		442.02
JUNE 11	NA	ND(0.5)	0.24	1.5	1.5		442.97
SEPT 11	140+	0.06	1.1	1.8	1.9		443.48
MAY 12	NM	0.11	ND(0.2)	0.92	1.6		443.03
AUG 12	850	NA	3.6	3.5	2.1		443.10
AUG 13	NA	ND(0.24)	ND(0.62)	2.02	ND(0.62)		443.16
OCT 14	947	ND(0.2)	6.7	4.17	1.05		443.88
AUG 15	NA	ND(0.2)	8.1	3.8	1.59		443.66

ISCR Injection 1

ISCR Injection 2

AP-10016 (17, 7-17)

	DRO	BENZENE	PCE	TCE	CIS 1,2 DCE	VC	WATER ELEVATIONS
MAY 09	NA	ND(1)	0.26	ND(1)	ND(1)		443.04
SEPT 09	1,500*	0.070	8.7	0.41	0.23		443.04
NOV 09	NA	0.080	6.8	0.64	0.31		442.53
FEB 10	NA	0.080	4.5	0.73	0.38		441.45
JUNE 10	NA	0.11	2.6	0.63	0.53		441.93
AUG 10	NA	0.080	2	0.66	0.54		442.93
OCT 10	1,800	0.090	4	1.2	0.43		442.47
FEB 11	NA	0.22	2.8	0.51	0.43		442.04
JUNE 11	NA	0.06	1.6	0.51	0.48		442.97
SEPT 11	120+	ND(0.5)	14	1.3	0.28		443.42
MAY 12	NM	0.22	2.4	0.51	0.60		443.04
AUG 12	1,900	0.08	5.3	1.7	0.57		443.08
AUG 13	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)		443.10
OCT 14	2,120	ND(0.2)	17.8	2.0	ND(0.5)		443.81
AUG 15	NA	ND(0.2)	7.2	1.5	ND(0.5)		443.60

MP-4 (14.1, NI)

	DRO	WATER ELEVATIONS
JUL 97	9,200	—
OCT 97	5,000	—
JAN 98	7,200	—
JUN 98	5,500	—
AUG 98	4,900	—
OCT 98	2,450	—
FEB 99	2,690	442.21
MAY 99	5,570	442.65
JUN 02	3,200	444.15
SEP 02	220	444.50
SEP 03	7,780	444.65
MAY 04	1,300	444.08
SEP 04	4,860	443.46
MAY 05	4,050	443.73
OCT 05	5,960	443.62
MAY 06	3,050	443.89
SEP 06	6,260	443.35
MAY 07	2,300	442.96
SEPT 07	3,500	443.41
JUN 08	4,200	442.97
OCT 08	6,200	443.21
MAY 09	5,300	443.29
JUNE 10	2,400	443.28
JUNE 11	8,000	443.29
MAY 15	3,540	445.08

PROBE B (18.7, 5-15)

	DRO	PCE	TCE	BENZENE	WATER ELEVATIONS
MAY 07	64	0.091	0.23	0.22	NA
SEPT 07	150	0.19	0.21	0.13	NA
JUNE 08	68	ND(1)	0.10	ND(1)	NA
OCT 08	1,400	ND(1)	0.15	0.18	NA
SEPT 09	1,000	0.090	0.14	0.09	NA
JUNE 11	NA	ND(0.5)	0.14	0.09	442.88
SEPT 11	4,500	ND(0.5)	ND(0.5)	0.07	443.46
OCT 11	NA	ND(0.5)	ND(0.5)	0.09	442.53
MAY 12	NA	ND(0.2)	0.13	0.22	443.01
AUG 12	2,200	ND(0.2)	ND(0.1)	0.08	442.98
AUG 13	299	ND(0.62)	ND(0.62)	ND(0.24)	443.13
OCT 14	2,320	ND(0.5)	ND(0.5)	ND(0.2)	443.87
AUG 15	613	ND(0.5)	ND(0.5)	ND(0.2)	443.59

PI-3 (19.9, NI)

	DRO	WATER ELEVATIONS
SEP 00	1,920	NA
NOV 00	2,680	NA
MAY 01	12,100	NA
SEP 01	2,790	NA
SEP 03	5,940	NA
MAY 04	3,790	NA
SEP 04	11,000	NA
MAY 05	3,180	NA
OCT 05	2,950	NA
MAY 06	1,440	NA
OCT 06	1,500	NA
MAY 07	860	NA
SEPT 07	1,500	NA
JUNE 08	1,700	NA
OCT 08	3,100	NA
MAY 09	2,700	442.55
JUNE 10	990	441.90
JUNE 11	2,700	442.83
MAY 15	4,090	442.83

POS (14.25, NI)

	DRO	PCE	TCE	BENZENE	WATER ELEVATIONS
JUL 94	280	51	3.8	7.5	
SEP 00	ND (429)	36.4	2.9	1.33	PROBE IS TOO SMALL FOR WATER LEVEL INDICATOR
DEC 01	110	12	2.1	0.84	
JUN 02	ND (170)	41	4.4	ND (2)	
SEP 02	100	55	5.5	1.3	
OCT 05	232	22.9	3.47	ND (0.4)	
MAY 06	196	5.9	1.38	ND (0.4)	
OCT 06	170	22	3.9	0.13	
MAY 07	90	6.4	1.4	0.19	
SEPT 07	110	21	3.5	0.11	
JUNE 08	130	6.2	1.2	0.11	
OCT 08	240	8.6	4.0	0.30	
SEPT 09	220	14	2.5	0.22	
NOV 09	NA	5.3	1.5	0.32	
FEB 10	NA	1.6	1.2	0.32	
JUNE 10	NA	1	0.69	0.39	
OCT 10	140	4	3.1	0.28	
JUNE 11	NA	1.7	0.97	0.09	
SEPT 11	120	6.6	3.8	0.11	
OCT 11	NA	7.9	3.6	0.11	
MAY 12	NM	1.1	1.3	0.28	
AUG 12	83	3.8	4.2	0.10	
AUG 13	ND(0.39)	ND(0.62)	ND(0.62)	ND(0.24)	
OCT 14	228	7.3	4.63	ND(0.2)	
AUG 15	199	8.56	4.5	ND(0.2)	

AP-8916 (15, 5-15)

	DRO	PCE	TCE	BENZENE	WATER ELEVATIONS
SEP 03	1,360	25	1.62	ND (0.4)	444.42
MAY 04	422	10.6	0.75	0.28	444.00
SEP 04	551	10.6	ND (1)	ND (0.4)	443.45
MAY 05	474	14.5	0.860	ND (0.4)	443.70
OCT 05	594	8.03	1.74	0.22	443.57
MAY 06	651	2.32	ND (1)	ND (0.4)	442.82
OCT 06	1,200	4.7	0.81	ND (1)	443.26
MAY 07	300	2.6	ND (5)	ND (5)	442.48
SEPT 07	260	7.5	1.2	ND (1)	443.52
JUNE 08	1,400	4.1	0.80	ND (1)	442.87
OCT 08	790	3.3	1.6	ND (1)	443.14
SEPT 09	870	6.3	1.8	ND (1)	443.17
NOV 09	NA	1.7	ND(0.5)	ND (1)	442.66
FEB 10	NA	2	ND(0.86)	ND (0.5)	441.76
JUNE 10	NA	1.9	0.52	0.34	442.25
OCT 10	1,000	4	1.50	0.59	442.64
JUNE 11	NA	9.2	1.2	ND (0.5)	443.22
SEPT 11	170	6.1	0.65	0.09	443.73
OCT 11	NA	4.7	0.77	0.46	442.89
MAY 12	NM	2.7	0.81	ND(0.7)	443.34
AUG 12	10,000	5.7	ND(0.1)	0.28	443.34
AUG 13	1,530	2.18	ND(0.62)	ND(0.24)	443.45
OCT 14	630	6.2	ND(0.5)	ND(0.2)	442.10
AUG 15	499	1.4	ND(0.5)	ND(0.2)	441.97

AP-5826 (19.2, 4.5-14.5)

	DRO	WATER ELEVATIONS
SEP 94	670	
MAY 97	NA	443.20
OCT 97	NA	442.87
OCT 98	NA	443.33
JUN 99	NA	
SEP 99	NA	443.13
JUN 00	1,160	443.95
SEP 00	9,250	444.34
NOV 00	1,380	443.65
MAY 01	12,900	443.45
SEP 01	568	443.74
SEP 02	5,900	442.96
SEP 03	2,340	444.88
MAY 04	779	444.12
SEP 04	870	443.55
MAY 05	1,290	443.82
OCT 05	1,050	443.32
MAY 06	7,370	442.65
OCT 06	1,100	443.46
MAY 07	1,200	442.68
SEPT 07	560	443.92
JUN 08	2,700	443.09
OCT 08	1,900	443.35
MAY 09	1,600	443.47
JUNE 10	3,900	442.50
JUNE 11	1,600	444.47
MAY 15	1,010	445.19

AP-7346 (14, 4-14)

	DRO	BENZENE	WATER ELEVATIONS
JUN 98	15,600	7.2	—
JUL 98	200	ND (1)	—
SEP 98	170	ND (1)	—
JUL 99	66	0.061	—
SEP 02	R	R	444.51
SEP 03	199	ND (0.4)	445.20
SEP 04	170	ND (0.4)	443.86
OCT 05	127	ND (0.4)	443.89
MAY 06	137	ND (0.4)	443.12
OCT 06	120	ND (1)	443.68
MAY 07	88	ND (1)	442.83
SEPT 07	89	ND (1)	442.61
JUN 08	110	ND (1)	443.22
OCT 08	82	0.10	443.57
MAY 09	100	ND (1)	444.01
JUNE 10	89	0.080	442.83
JUNE 11	66	0.07	443.56
AUG 12	62	ND(0.1)	443.92
MAY 13	ND(410)	ND(0.24)	442.50
OCT 14	ND(300)	ND(0.2)	444.78
MAY 15	ND(313)	ND(0.2)	444.35

AP-7348 (13.5, 6-16)

	DRO	PCE	TCE	WATER ELEVATIONS
JUN 98	1,500	0.70	0.41	443.04
SEP 98	1,300	0.80	0.64	442.53
JUN 99	1,360	0.78	0.64	443.28
SEP 99	1,800	0.90	0.74	443.80
JUN 00	1,800	0.90	0.74	444.82
SEP 00	1,400	0.80	0.36	442.46
MAY 01	1,400	0.80	0.36	442.02
SEP 02	1,400	0.80	0.36	442.97
SEP 03	1,400	0.80	0.36	443.48
MAY 04	1,400	0.80	0.36	443.03
SEP 04	1,400	0.80	0.36	443.10
MAY 05	1,400	0.80	0.36	443.08
OCT 05	1,400	0.80	0.36	443.10
MAY 06	1,400	0.80	0.36	443.81
SEP 06	1,400	0.80	0.36	443.60
MAY 07	1,400	0.80	0.36	443.76
SEPT 07	1,400	0.80	0.36	443.39
JUN 08	1,400	0.80	0.36	442.81
OCT 08	1,400	0.80	0.36	443.13
MAY 09	1,400	0.80	0.36	443.21
SEPT 09	1,400	0.80	0.36	443.18
JUNE 10	1,400	0.80	0.36	443.14
AUG 10	1,400	0.80	0.36	443.15
OCT 10	1,400	0.80	0.36	442.65
FEB 11	1,400	0.80	0.36	442.21
JUNE 11	1,400	0.80	0.36	443.15
SEPT 11	1,400	0.80	0.36	443.63
MAY 12	1,400	0.80	0.36	443.18
AUG 12	1,400	0.80	0.36	443.17
AUG 13	1,400	0.80	0.36	443.28
OCT 14	1,400	0.80	0.36	443.98
AUG 15	1,400	0.80	0.36	443.75

SUPPLY WELL (100+, NI)

	DRO	BENZENE
APR 98	ND (260)	ND (0.5)
JUL 98	80	ND (0.5)
SEP 98	60	ND (0.5)
APR 99	ND (45)	ND (0.4)
MAY 99	57	ND (0.4)
AUG 99	ND (100)	ND (0.4)
NOV 01	ND (495)	ND (0.5)
SEP 02	ND (170)	ND (2)
JUL 03	92.5	ND (0.4)
AUG 03	204	ND (0.4)
SEP 03	177	ND (0.4)
OCT 03	ND (316)	ND (0.4)
NOV 03	85.0	ND (0.4)
DEC 03	ND (333)	ND (0.4)
FEB 04	ND (319)	ND (0.4)
MAR 04	70.4	ND (0.4)
JUN 04	ND (323)	ND (0.4)
AUG 04	128	ND (0.4)
NOV 04	ND (323)	ND (0.4)
DEC 04	66.2	ND (0.4)
JAN 05	ND (316)	ND (0.4)
MAR 05	ND (319)	ND (0.4)
MAY 05	95.1	ND (0.4)
JUL 05	ND (300)	ND (0.4)
SEPT 05	ND (300)	ND (0.4)
MAR 06	ND (313)	ND (0.4)
MAY 06	ND (300)	ND (0.4)
JUL 06	ND (341)	ND (0.4)
AUG 06	ND (316)	ND (0.4)
MAY 07	33	ND (1)
SEPT 07	27	ND (1)
JUN 08	30	ND (1)
OCT 08	30	0.19
MAY 09	28	ND (1)
JUNE 10	29	0.070
JUNE 11	17	ND (0.5)
AUG 12	21	ND (0.1)
MAY 13	630	ND (0.24)
MAY 15	ND(300)	ND (0.2)

AP-7348 (13.5, 6-16)

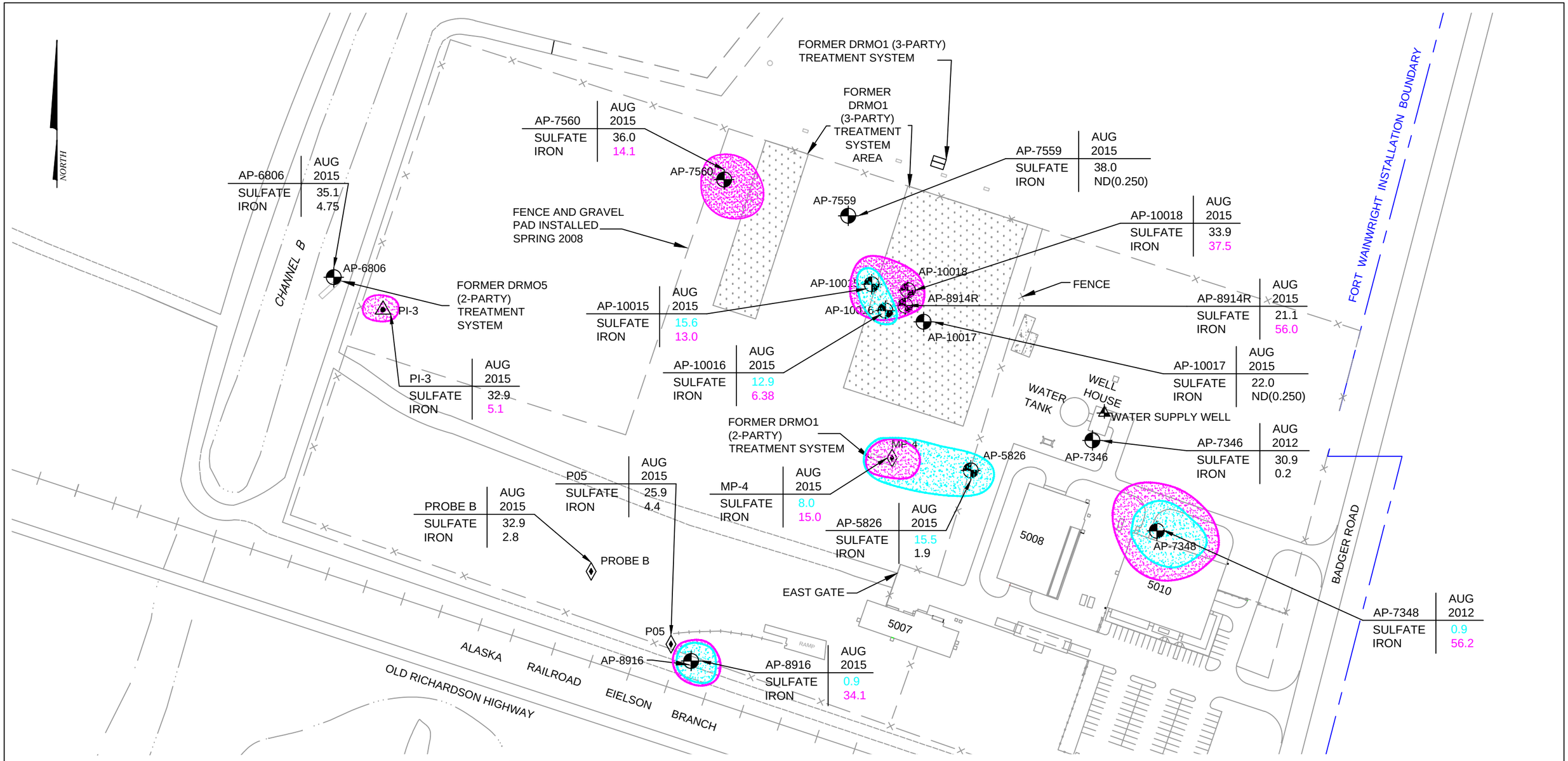
	DRO	PCE	TCE	WATER ELEVATIONS
JUN 98	1,500	0.70	0.41	443.04
SEP 98	1,300	0.80	0.64	442.53
JUN 99	1,360	0.78	0.64	443.28
SEP 99	1,800	0.90	0.74	443.80
JUN 00	1,800	0.90	0.74	444.82
SEP 00	1,400	0.80	0.36	442.46
MAY 01	1,400	0.80	0.36	442.02
SEP 02	1,400	0.80	0.36	442.97
SEP 03	1,400	0.80	0.36	443.48
MAY 04	1,400	0.80	0.36	443.03
SEP 04	1,400	0.80	0.36	443.10
MAY 05	1,400	0.80	0.36	443.08
OCT 05	1,400	0.80	0.36	443.10
MAY 06	1,400	0.80	0.36	443.81
SEP 06	1,400	0.80	0.36	443.60
MAY 07	1,400	0.80	0.36	443.76
SEPT 07	1,400	0.80	0.36	443.39
JUN 08	1,400	0.80	0.36	442.81
OCT 08	1,400	0.80	0.36	443.13
MAY 09	1,400	0.80	0.36	443.21
SEPT 09	1,400	0.80	0.36	443.18
JUNE 10	1,400	0.80	0.36	443.14
AUG 10	1,400	0.80	0.36	443.15
OCT 10	1,400	0.80	0.36	442.65
FEB 11	1,400	0.80	0.36	442.21
JUNE 11	1,400	0.80	0.36	443.15
SEPT 11	1,400	0.80	0.36	443.63
MAY 12	1,400	0.80	0.36	443.18
AUG 12	1,400	0.80	0.36	443.17
AUG 13	1,400	0.80	0.36	443.28
OCT 14	1,400	0.80	0.36	443.98
AUG 15	1,400	0.80	0.36	443.75

AP-7348 (13.5, 6-16)

	DRO	PCE	TCE	WATER ELEVATIONS
JUN 98	1,500	0.70	0.41	443.04
SEP 98	1,300	0.80	0.64	442.53
JUN 99	1,360	0.78	0.64	443.28
SEP 99	1,800	0.90	0.74	443.80
JUN 00	1,800	0.90	0.74	444.82
SEP 00	1,400	0.80	0.36	442.46
MAY 01	1,400	0.80	0.36	442.02
SEP 02	1,400	0.80	0.36	442.97
SEP 03	1,400	0.80	0.36	443.48
MAY 04	1,400	0.80	0.36	443.03
SEP 04	1,400	0.80	0.36	443.10
MAY 05	1,400	0.80	0.36	443.08
OCT 05	1,400	0.80	0.36	443.10
MAY 06	1,400	0.80	0.36	443.81
SEP 06	1,400	0.80	0.36	443.60
MAY 07	1,400	0.80	0.36	443.76
SEPT 07	1,400	0.80	0.36	443.39
JUN 08	1,400	0.80	0.36	442.81
OCT 08	1,400	0.80	0.36	443.13
MAY 09	1,400	0.80	0.36	443.21
SEPT 09	1,400	0.80	0.36	443.18
JUNE 10	1,400	0.80	0.36	443.14
AUG 10	1,400	0.80	0.36	443.15
OCT 10	1,400	0.80	0.36	442.65
FEB 11	1,400	0.80	0.36	442.21
JUNE 11	1,400	0.80	0.36	443.15
SEPT 11	1,400	0.80	0.36	443.63
MAY 12	1,400	0.80	0.36	443.18
AUG 12	1,400	0.80	0.36	443.17
AUG 13	1,400	0.80	0.36	443.28
OCT 14	1,400	0.80	0.36	443.98
AUG 15	1,400	0.80	0.36	443.75

AP-7348 (13.5, 6-16)

	DRO	PCE	TCE	WATER ELEVATIONS



NOTES:

1. GROUNDWATER GEOCHEMISTRY BASED ON 2015 MONITORING RESULTS. WITH THE EXCEPTION OF GROUNDWATER GEOCHEMISTRY IN THE VICINITY OF AP-7348 AND AP-7346. GEOCHEMISTRY FROM 2012 USED IN THIS AREA.
2. DATA REPORTED IN MILLIGRAMS PER LITER (MG/L)

LEGEND:

AP-8916	MONITORING WELL LOCATION AND NUMBER
PROBE B	GROUNDWATER PROBE LOCATION AND NUMBER
WATER SUPPLY WELL	WATER WELL LOCATION
LOD	LIMIT OF DETECTION
MG/L	MILLIGRAMS PER LITER
ND	NOT DETECTED. LIMIT OF DETECTION (LOD) IN PARENTHESIS

0 150 300
Scale in Feet

KEY:

SULFATE REDUCING = SULFATE <20 MG/L

FERRIC IRON REDUCING = IRON >5 MG/L

FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Approximate Regions of Reduced Groundwater Geochemistry

2015 Monitoring Report
Operable Unit 2
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	3-2	6/16

FIGURE 3-2

Table 3-2 - 2011 - 2015 Groundwater Sample Results
DRMO1 (3-Party) Sub-Area

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)	Diesel Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS													**1,500[1]**	**5**	**5**	**5**	**2**	**7**	**70**	**70**
AP-10017	Upgradient	11FW2A05WG	2/23/2011	442.14	-27.3	0.72	6.6	0.443	NA	NA	196	4.83	NA	0.19 J,B	0.28 J	0.52	ND(0.5)	ND(0.5)	0.69	0.14 J
		11FW2A12WG	6/2/2011	443.06	28.8	0.9	6.5	0.414	0.0234	19	182	3.79	NA	ND(0.50)	0.26 J	0.7	ND(0.5)	ND(0.5)	0.52	0.09 J
		11FW2A23WG[3]	9/21/2011	443.55	-0.3	1.74	6.5	0.416	0.0329 J	28.3	186	4.46	52 J,B	0.070 J	0.31 J	0.85	ND(0.5)	ND(0.5)	0.59	0.10 J
		12FW2A06WG	5/30/2012	443.19	91.7	0.36	6.6	0.422	0.027	22.8	171	2.96	NA	0.32 J	0.26 J	0.44 J	ND(0.1)	ND(0.2)	0.76	0.16 J
		12FW2A07WG	8/21/2012	443.18	220.7	0.19	6.8	0.449	0.01	26.7	181	3.72	580 J,ML	ND(0.10)	0.30 J	1.1	ND(0.1)	ND(0.2)	0.70	0.18 J
		13FW2A07WG	8/27/2013	443.29	79.9	0.19	6.4	0.399	ND(0.62)	24.8	148	4.12	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU212WG	10/9/2014	444.01	41.3	0.35	6.4	0.396	ND(0.25)	27.5	154	5.38	424 J	ND(0.2)	ND(0.5)	2.0	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
		15FWOU224WG	8/24/2015	443.82	15.6	0.20	6.2	0.362	ND(0.25)	22.0	152	4.4	NA	ND(0.2)	ND(0.5)	1.3	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
AP-8914R	Source Area	11FW2A04WG	2/23/2011	442.10	-67.1	0.62	6.2	1.446	NA	NA	523	327	NA	0.29 J,B	ND(0.5)	2.6	ND(0.5)	0.73	40	0.23 J
		11FW2A14WG	6/2/2011	443.01	-14.3	0.7	6.2	1.258	104	0.51	452	259	NA	0.13 J	1.9	3.6	ND(0.5)	0.69	42 J	0.24 J
		11FW2A24WG[3]	9/21/2011	443.58	-86.9	2.01	6.4	1.367	134 J	2	598	249	**2,500**	0.09 J	2.9	4.1	0.33 J	1.0	**76**	0.33 J
		12FW2A04WG	5/30/2012	443.14	-84.7	0.28	6.6	1.467	112 QL	0.45 QL	552	128	NA	0.32 J	4.2	0.89	0.35 J	0.6	59	0.7
		12FW2A09WG	8/21/2012	443.11	-92.6	0.19	6.8	1.431	97.4 QL	2.01 Q	658	98.1	**6,800**	0.09 J	4.7	0.17 J	0.33 J	0.55	67	0.9
		12FW2A10WG[2]							99.1 QL	0.59 Q	638	104	**5,900**	0.10 J	4.7	0.19 J	0.34 J	0.56	68	0.98
		13FW2A01WG	8/26/2013	443.3	-105.3	0.20	6.1	0.958	86.2	4.1	371 Q	16.4	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		13FW2A02WG[2]							86.4	4.13	245 Q	17.1	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU207WG	10/9/2014	444.0	-52.2	0.24	6.3	1.006	74.2	3.35	428	31.6	586 J	ND(0.2)	3.09	ND(0.5)	0.48 J	ND(0.5)	54.8	1.98
		15FWOU223WG	8/24/2015	443.7	-86.8	0.17	6.2	0.581	56.0	21.1	193	10.3	NA	ND (0.2)	1.50	ND(0.5)	ND(0.5)	ND(0.5)	27.9	3.65
AP-10016		11FW2A02WG	2/23/2011	442.04	-62.3	0.73	6.6	0.479	9.03	5.2	231	6.80	NA	0.22 J,B	0.51	2.8	ND(0.5)	ND(0.5)	0.42 J	0.24 J
		11FW2A03WG[2]							NA	NA	NA	NA	NA	0.22 J,B	0.50	2.3	ND(0.5)	ND(0.5)	0.43 J	0.23 J
		11FW2A13WG	6/2/2011	442.97	-1.7	0.86	6.6	0.45	8.82	4.6	208	5.30	NA	0.06 J	0.51	1.6	ND(0.5)	ND(0.5)	0.48 J	0.2 J
		11FW2A21WG[3]	9/21/2011	443.42	-17.0	1.88	6.4	0.443	4.35 J	17.7	208	6.09	120	ND(0.5)	1.30	**14.0**	ND(0.5)	ND(0.5)	0.28 J	0.1J
		12FW2A03WG	5/30/2012	443.04	-35.4	0.25	6.6	0.467	5.88	6.6	199	5.55	NA	0.22 J	0.51	2.4	ND(0.1)	ND(0.2)	0.60	0.24 J
		12FW2A08WG	8/21/2012	443.08	18.4	1.25	6.7	0.489	4.55	12.9	2430	6.00	**1,900**	0.08 J	1.70	**5.3**	ND(0.1)	ND(0.2)	0.57	0.33 J
		13FW2A08WG	8/27/2013	443.10	-75.4	0.15	6.7	0.458	8.90	10.9	180	7.32	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU206WG	10/9/2014	443.81	46.9	0.16	6.3	0.515	0.463J	46.9	207	9.81	**2,120**	ND(0.2)	2.0	**17.8**	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
		15FWOU220WG	8/24/2015	443.60	-35.1	0.48	5.7	0.453	6.38	12.9	200	11.5	NA	ND (0.2)	1.5	**7.2**	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)

Table 3-2 - 2011 - 2015 Groundwater Sample Results
DRMO1 (3-Party) Sub-Area

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)	Diesel Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS													**1,500[1]**	**5**	**5**	**5**	**2**	**7**	**70**	**70**
AP-10018	Source Area	11FW2A06WG	2/23/2011	442.06	-52.5	0.76	6.0	2.127	NA	NA	627	ND(0.50) QL	NA	0.42 J,B	**7.40**	**17**	ND(0.5)	ND(0.50)	1.80	0.49 J
		11FW2A10WG	6/2/2011	442.91	-48.3	0.67	6.2	1.018	168	0.20 J,Q	318	187	NA	0.1 J	5.0	**8.0**	ND(0.5)	0.1 J	3.7	0.83
		11FW2A11WG[2]							170	0.58	303	188	NA	0.1 J	5.0	**8.4**	ND(0.5)	0.09 J	3.7	0.85
		11FW2A22WG[3]	9/21/2011	443.55	-99.9	1.87	6.4	1.040	170 J	0.7	401	163	**1,700**	0.12 J	**6.10**	3.6	0.11 J	0.15 J	7.3	1.7
		12FW2A05WG	5/30/2012	443.13	-87.4	0.36	6.6	0.830	84.50	2.2	283	12.4	NA	0.39 J	3.10	0.5	0.21 J	0.1 J	7.6	4.8
		12FW2A12WG	8/21/2012	443.10	-96.1	0.28	6.8	0.848	79.70	2.1	33.1 B	19.0	1,200	0.11 J	4.50	0.7	0.17 J	ND(0.2)	7.7	6.6
		13FW2A06WG	8/27/2013	443.21	-106.7	0.15	6.6	0.701	55.60	7.33	243	7.12	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	6.97
		14FWOU213WG	10/9/2014	443.96	-72.1	0.10	6.5	0.775	49.50	39.20	262	10.5	347 J	ND(0.2)	3.11	2.17	ND(0.5)	ND(0.5)	6.08	10.1
		15FWOU222WG	8/24/2015	443.66	-136.8	0.16	6.4	0.565	37.50	33.90	203	7.68	NA	ND (0.2)	1.32	2.35	ND (0.5)	ND (0.5)	5.16	10.8
AP-7559	Downgradient	11FW2A07WG	2/23/2011	442.20	-3.6	1.13	6.6	0.454	NA	NA	205	3.92	NA	0.51 B	0.42 J	2.60	ND(0.5)	ND(0.5)	0.24 J	ND(0.50)
		11FW2A08WG	6/1/2011	443.08	138	1.53	6.6	0.415	0.0048	25.4	181	3.26	NA	ND(0.50)	0.48 J	2.8	ND(0.5)	ND(0.5)	0.27 J	0.08 J
		11FW2A15WG	9/20/2011	443.60	7.2	1.33	6.5	0.404	0.0041 J	29.7	180	4.08	77 J	ND(0.5)	0.58	4.0	ND(0.5)	ND(0.5)	0.36 J	0.09 J
		12FW2A01WG	5/30/2012	443.22	318.6	0.31	6.4	0.447	0.025	29.6	175	2.26	NA	0.17 J	0.61	2.9	ND(0.1)	ND(0.2)	0.46 J	0.16 J
		12FW2A13WG	8/21/2012	443.24	42.8	0.83	6.9	0.459	0.004	31.5	187	2.32	80 J	ND(0.10)	0.69	ND(0.20)	ND(0.1)	ND(0.2)	0.43 J	0.14 J
		13FW2A03WG	8/26/2013	443.33	66.2	0.27	6.2	0.419	ND(1)	29	155	2.66	NA	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU214WG	10/9/2014	444.04	46	0.24	6.4	0.524	ND(0.25)	47	211	5	ND(300)	ND(0.2)	0.58 J	4.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
		15FWOU219WG	8/21/2015	443.76	60.5	1.49	6.2	0.476	ND (0.25)	38	196	4.4	NA	ND (0.2)	ND (0.5)	4.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
AP-7560		11FW2A16WG	9/21/2011	443.40	-58.9	1.59	6.3	0.458	19.2 J	21.5	205	20.6	**9,600**	0.06 J	2.0	2.8	ND(0.5)	ND(0.5)	0.44 J	0.75
		12FW2A15WG	8/21/2012	443.02	-27.7	0.48	6.4	0.381	15.2	6.19	197	22.5	**7,900**	ND(0.10)	1.2	2.2	ND(0.1)	ND(0.2)	0.30 J	0.43 J
		13FW2A04WG	8/26/2013	443.12	-62.9	0.26	6.0	0.298	15.2	8.66	108	25.7	**7,560**	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU208WG	10/9/2014	443.83	29.7	0.46	6.0	0.387	19.2 J+	1.33	159	47	**5,150**	ND(0.2)	ND(0.5)	1.05	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
		14FWOU209WG							20.4	1.04	157	48.7	**5,190**	ND(0.2)	ND(0.5)	1.04	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
		15TFTOU225WG	8/24/2015	443.67	-80.7	1.03	6.2	0.534	13.8	36.40	208	13.9	**4,320**	ND (0.2)	2.51	4.26	ND (0.5)	ND (0.5)	1.14	1.11
		15TFTOU226WG[2]							14.1	36.00	213	15.4	**3,880**	ND (0.2)	3.14	3.95	ND (0.5)	ND (0.5)	1.01	1.36

Table 3-2 - 2011 - 2015 Groundwater Sample Results
DRMO1 (3-Party) Sub-Area

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)	Diesel Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS													**1,500[1]**	**5**	**5**	**5**	**2**	**7**	**70**	**70**
AP-10015	Downgradient	11FW2A01WG	2/23/2011	442.02	-125.1	0.64	6.6	0.635	NA	NA	269	25.3	NA	0.21 J,B	2.10	ND(0.50)	ND(0.5)	ND(0.5)	2.6	0.68
		11FW2A09WG	6/2/2011	442.97	-74.0	1.06	6.6	0.572	29.20	0.20 J	244	15.2	NA	ND(0.50)	1.50	0.24 J	ND(0.5)	ND(0.5)	1.5	0.6
		11FW2A17WG[3]	9/20/2011	443.48	-102.2	1.14	6.6	0.531	24.1 J	10.8	255	7.59	140	0.06 J	1.80	1.10	ND(0.5)	ND(0.5)	1.9	1.00
		12FW2A02WG	5/30/2012	443.03	-44.1	0.15	6.7	0.529	17.40	8.6	222	4.67	NA	0.11 J	0.92	ND(0.20)	ND(0.1)	ND(0.2)	1.6	1.10
		12FW2A11WG	8/21/2012	443.10	-33.9	0.88	6.7	0.622	16.50	26.4	30.2 B	6.00	850 J	0.08 J	3.50	3.60	ND(0.1)	ND(0.2)	2.1	1.70
		13FW2A05WG	8/27/2013	443.16	-60.4	0.21	5.9	0.538	19.90	13.4	203	5.88	NA	ND(0.24)	2.02	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU205WG	10/9/2014	443.88	40.4	0.22	6.3	0.529	10.20	51.9	206	8.05	947	ND(0.2)	4.17	**6.29**	ND(0.5)	ND(0.5)	1.05	1.45
		15FWOU221WG	8/24/2015	443.66	-87.4	0.20	6.3	0.473	13.00	15.6	195	8.94	NA	ND (0.2)	1.38	0.81 J	ND (0.5)	ND (0.5)	1.59	2.54

Notes

Analytes exceeding remedial action goals (RAGs) established in the Record of Decision (ROD) or ADEC groundwater cleanup levels (from Table C of 18 AAC 75) are in bold type and gray shading.

DRO analysis in AP-10015, AP-10016, AP-10017, AP-10018, and AP-8914R in September 2011 included the silica gel cleanup method.

[1] Cleanup goal listed is an ADEC cleanup level and is not listed in the OU2 ROD.

[2] Sample is a Field Duplicate of the sample immediately above.

[3] The DRO results for 11FW2A17WG, 11FW2A21WG, 11FW2A22WG, 11FW2A22WG, 11FW2A23WG,11FW2A24WG represent the result following silica gel cleanup.

Acronyms/Abbreviations

btoc - below top of casing
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligrams per liter
mS/cm - micro Siemens per centimeter
msl - mean seal level
mV - millivolts
NA - not analyzed or not applicable
ROD - Record of Decision

Data Qualifiers

ND - Not detected at the detection limit (LOD in parentheses; LOQ in parentheses for data prior to 2012.)
B - Result is qualified as a potential high estimate due to contamination present in a blank sample
J - Result is estimated due to a QC issue or because it is less than the LOQ. If result is biased low or high, it is specified as "J-" and "J+", respectively (for 2014 data or older).
Q - Result is estimated due to a QC failure (pre-2014 data only). If direction of bias is known, it is further indicated with a "L" (low) or "H" (high).
M - Result is biased due to matrix interference (pre-2014 data only). If direction of bias is known, it is further indicated with a "L" (low) or "H" (high).

Table 3-3 - 2011 - 2015 Groundwater Sample Results
DRMO4 (3-Party) Sub-Area

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)	Diesel Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS													**1,500[1]**	**5**	**5**	**5**	**2**	**7**	**70**	**70**
AP-8916	Upgradient	11FW2C02WG	6/3/2011	443.22	61.0	1.02	6.4	0.538	6.0	17.3	243	4.3	NA	ND(0.5)	1.2 QH	**9.2 QH**	ND(0.5)	ND(0.5)	0.2 J,QH	ND(0.5)
		11FW2C04WG	9/20/2011	443.73	28.7	2.37	5.6	0.453	1.92 J	22.2	206	3.9	170 J	0.09 J	0.65	**6.1**	ND(0.5)	ND(0.5)	0.23 J	ND(0.5)
		11FW2C05WG[2]							1.76 J	22.5	217	3.5	200 J	0.08 J	0.68	**6.2**	ND(0.5)	ND(0.5)	0.24 J	ND(0.5)
		11FW2C08WG	10/27/2011	442.89	-94.5	0.59	5.8	1.233	80.6	8.9	493	720	NA	0.46 J,QH	0.77 QH	4.7 QH	ND(0.5)	ND(0.5)	ND(0.50)	ND(0.5)
		11FW2C09WG[2]							73.2 QL	8.6	466	619	NA	0.43 J,QH	0.67 QH	4.4 QH	ND(0.5)	ND(0.5)	ND(0.50)	ND(0.5)
		12FW2C03WG	5/31/2012	443.34	-55.3	0.26	6.1	1.056	108	0.38 J	293	261	NA	ND(0.7)	0.75 Q	2.7 J,ML,Q	ND(0.1)	ND(0.2)	0.26 J,Q	ND(0.2)
		12FW2C04WG[2]							110	0.5	304	264	NA	ND(0.49)	0.81 Q	2.3 J,Q	ND(0.1)	ND(0.2)	0.26 J,Q	ND(0.2)
		12FW2C07WG	8/22/2012	443.34	-98.7	0.13	6.1	1.010	125	0.6	307	207	**10,000**	0.26 J,QH	ND(0.1)	**5.1 QH**	ND(0.1)	ND(0.2)	0.26 J,QH	ND(0.2)
		12FW2C08WG[2]							126	0.5	307	198	**9,600**	0.28 J,QH	ND(0.1)	**5.7 QH**	ND(0.1)	ND(0.2)	0.27 J,QH	ND(0.2)
		13FW2C03WG	8/27/2013	443.45	-102.9	0.19	6.6	0.560	42.5	0.4	170	29.2	1,360	ND(0.24)	ND(0.62)	ND(0.62) Q	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		13FW2C04WG[2]							39.3	0.4	169	27.9	**1,530**	ND(0.24)	ND(0.62)	2.18 Q	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU215WG	10/9/2014	442.10	21.9	0.74	6.6	0.761	20.1	5.8	206	8.05	630	ND(0.2)	ND(0.5)	**6.7**	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		15FWOU216WG	8/21/2015	441.97	-48.3	0.24	5.4	0.529	34.1	0.9	213	11.1	499 B	ND (0.2)	ND (0.5)	1.4	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
PO5	Source Area	11FW2C03WG	6/6/2011	NM	5.0	5.73	6.3	0.422	5.0	24.6	165	3.1	NA	0.09 J	0.97	1.7	ND(0.5)	ND(0.5)	0.28 J	ND(0.5)
		11FW2C06WG	9/20/2011	NM	-56.9	1.55	6.6	0.434	5.1	30.3	181	3.8	120 J	0.11 J	3.8	**6.6**	ND(0.5)	ND(0.5)	0.49 J	0.07 J
		11FW2C10WG	10/27/2011	NM	-76.1	0.19	6.8	0.433	5.1	37.4	205	3.8	NA	0.11J	3.6	**7.9**	ND(0.5)	ND(0.5)	0.40 J	ND(0.5)
		12FW2C02WG	5/31/2012	NM	-63.9	0.21	6.8	0.432	4.5	23.4	158	2.3	NA	0.28 J	1.3	1.1	ND(0.1)	ND(0.2)	0.38 J	0.13 J
		12FW2C06WG	8/22/2012	NM	-74.5	0.15	6.8	0.468	4.9	26.4	227	2.6	83 J	0.10 J	4.2	3.8	ND(0.1)	ND(0.2)	0.51	0.26 J
		13FW2C02WG	8/27/2013	NM	-76.4	0.74	6.8	0.421	4.7	25.1	156	2.8	ND(0.39)	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU211WG	10/9/2014	NM	16.5	4.7	6.5	0.501	5.1	28.4	213	4.7	228 J	ND(0.2)	4.63	**7.28**	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		15FWOU217WG	8/21/2015	NM	-60.1	1.71	6.5	0.446	4.4	25.9	186	3.8	199 J,B	ND (0.2)	4.5	**8.56**	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)

Table 3-3 - 2011 - 2015 Groundwater Sample Results
DRMO4 (3-Party) Sub-Area

Well Number	Relative Location	Sample Number	Date	Water Elevation (feet NGVD29)	ORP (mV)	Dissolved Oxygen (mg/L)	pH	Conductivity (mS/cm)	Dissolved Iron (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Total Organic Carbon (mg/L)	Diesel Range Organics (µg/L)	ROD Chemicals of Concern (µg/L)						
														Benzene	Trichloro-ethene (TCE)	Tetrachloro-ethene (PCE)	Vinyl Chloride	1,1-Dichloro-ethene	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene
ROD CLEANUP LEVELS													**1,500[1]**	**5**	**5**	**5**	**2**	**7**	**70**	**70**
Probe B	Downgradient	11FW2C01WG	6/3/2011	442.78	111.8	1.02	6.3	0.569	4.6	29.2	267	3.6	NA	0.09 J	0.11 J	ND(0.5)	ND(0.5)	ND(0.5)	0.19 J	0.08 J
		11FW2C07WG	9/20/2011	443.46	-15.0	2.29	6.4	0.609	1.8 J	36.5	312	16.5	**4500**	0.07 J	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.13 J	ND(0.5)
		11FW2C11WG	10/27/2011	442.53	19.5	0.47	6.6	0.534	2.9	34.0	264	7.4	NA	0.090 J	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.21 J	0.070 J
		12FW2C01WG	5/31/2012	443.01	-13.6	0.33	6.4	0.716	4.6	40.2	330	3.8	NA	0.22 J	0.13 J	ND(0.2)	ND(0.1)	ND(0.2)	0.14 J	ND(0.2)
		12FW2C05WG	8/22/2012	442.98	-7.0	0.26	6.5	0.733	2.5	40.0	387	11.0	**2,200**	0.08 J	ND(0.1)	ND(0.2)	ND(0.1)	ND(0.2)	0.17 J	ND(0.2)
		13FW2C01WG	8/26/2013	443.13	-34.6	0.26	6.3	0.545	3.2	30.0	213	3.3	299 J	ND(0.24)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)	ND(0.62)
		14FWOU210WG	10/9/2014	443.87	30.3	0.5	6.5	0.903	5.5	67.6	442	19.3	**2,320**	ND(0.2)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
		15FWOU218WG	8/21/2015	443.59	-21.3	0.25	6.3	0.616	2.8	32.9	266	6.6	613 J,B	ND (0.2)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)

Notes

Analytes exceeding remedial action goals (RAG) established in the Record of Decision (ROD) or ADEC groundwater cleanup levels (from Table C of 18 AAC 75) are in bold type and gray shading.

[1] Cleanup goal listed is an ADEC cleanup level and is not listed in the OU2 ROD.

[2] Sample is a Field Duplicate of the sample immediately above.

Acronyms/Abbreviations

btoc - below top of casing
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligrams per liter
mS/cm - milliSiemens per cemtimeter
msl - mean seal level
mV - millivolts
NA - not analyzed or not applicable
NM - not measured
ROD - Record of Decision

Data Qualifiers

ND - Not detected at the detection limit (LOD in parentheses; LOQ in parentheses for data prior to 2012.)
B - Result is qualified as a potential high estimate due to contamination present in a blank sample
J - Result is estimated due to a QC issue or because it is less than the LOQ. If result is biased low or high, it is specified as "J-" and "J+", respectively (for 2014 data and later).
Q - Result is estimated due to a QC failure (pre-2014 data only). If direction of bias is known, it is further indicated with a "L" (low) or "H" (high).
M - Result is biased due to matrix interference (pre-2014 data only). If direction of bias is known, it is further indicated with a "L" (low) or "H" (high).

Table 1-1. Summary of DRMO Yard Subareas

Subarea	Regulatory Authority	Location within DRMO Yard	Current (2015) Contaminants of Concern above RAGs	Remediation Status
DRMO1	OU2 ROD (3-Party)	Central and northwest (extending northwest)	PCE, DRO[1]	OU2 AS/SVE Treatment System (1997–2005) ISCR Treatability Study (2009, 2010)
	2-Party		DRO	DRMO1 AS/SVE Treatment System (1996-2003)
DRMO2 (Former Building 5001)	2-Party	Eastern quarter	DRO	None
DRMO3	2-Party	South central	None	None
DRMO4	OU2 ROD (3-Party)	Southwest	PCE	ISCR Treatability Study (2009, 2011)
DRMO5	2-Party	Central west (across Channel B)	DRO	DRMO5 AS/SVE Treatment System (1996-2003)

[1] The contaminants of concern for DRMO 3-Party sites were based on contaminants with federal and state maximum contaminant levels (MCLs). DRO does not have a MCL and the ROD states that natural attenuation will be relied on to attain Alaska Water Quality Standards (AWQS) after the MCLs are achieved through active remediation.

AS/SVE – air sparging/soil vapor extraction; ISCR – in-situ chemical reduction; RAG – remedial action goal

Table 2-1. Summary of the 2015 OU2 Groundwater Monitoring Program

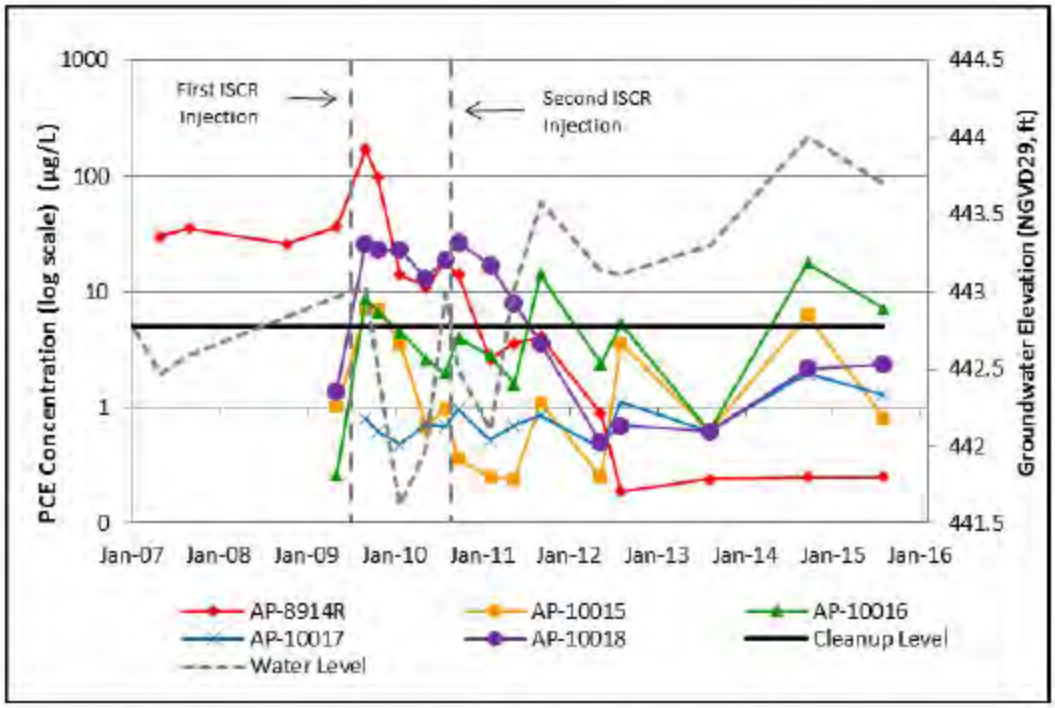
OU2 Site	Subarea/ Site	Number of Wells/Probes	Contaminant Analyses[1]	NA Analyses[3]	Monitoring Frequency/Sample Collected in 2015
DRMO1 (3-Party)	DRMO1	7	DRO[2], VOC	Iron, sulfate, TOC, alkalinity	Annual/Yes
DRMO4 (3-Party)	DRMO4	3	DRO, VOC		Annual/Yes
DRMO1 (2-Party)	DRMO1	2	DRO	Iron, sulfate	Five Year/Yes
DRMO5 (2-Party)	DRMO5	2			Five Year/Yes
Building 5010 (2-Party)	DRMO2	2	DRO, VOC	–	Annual/Yes
Water Supply Well (2-Party)	DRMO1	1	GRO, DRO, VOC, SVOC	–	Annual/Yes
Former Building 1168 (3-Party)	Leach Well	3	GRO, DRO, VOC	Iron, sulfate	Annual/Yes

NA – Natural Attenuation SVOC – semi-volatile organic compounds

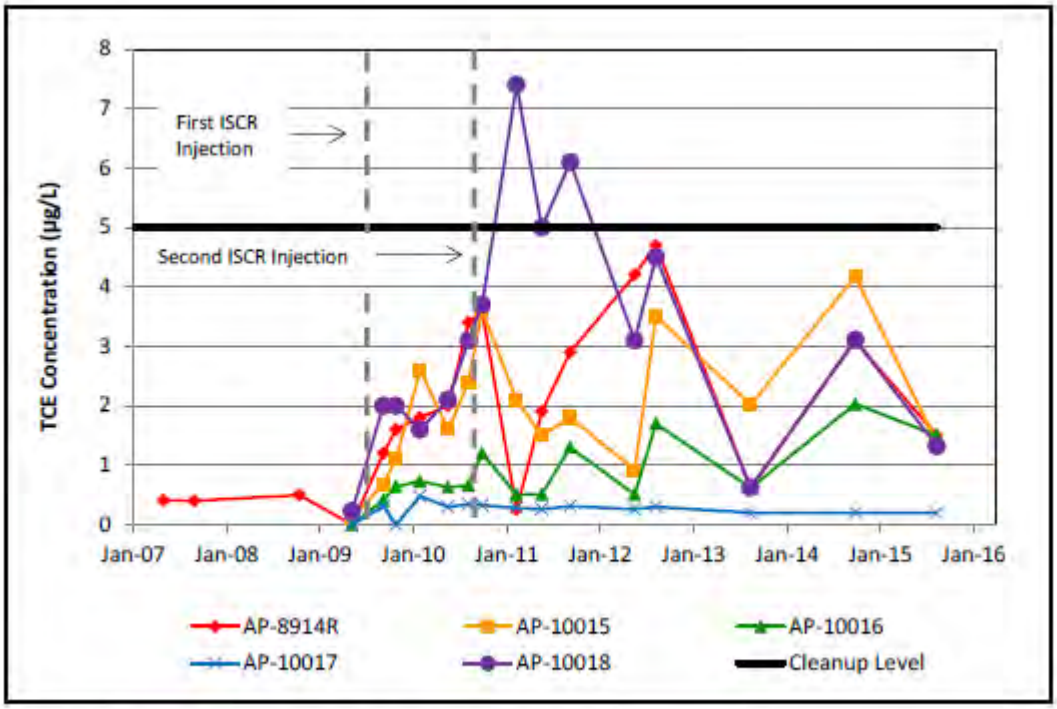
[1] Contaminant analyses were conducted by the following methods: VOC (8260B), SVOC (8270D), GRO (AK101), and DRO (AK102)

[2] Only one well (AP-7560) in the DRMO1 (3-Party) area is analyzed for DRO

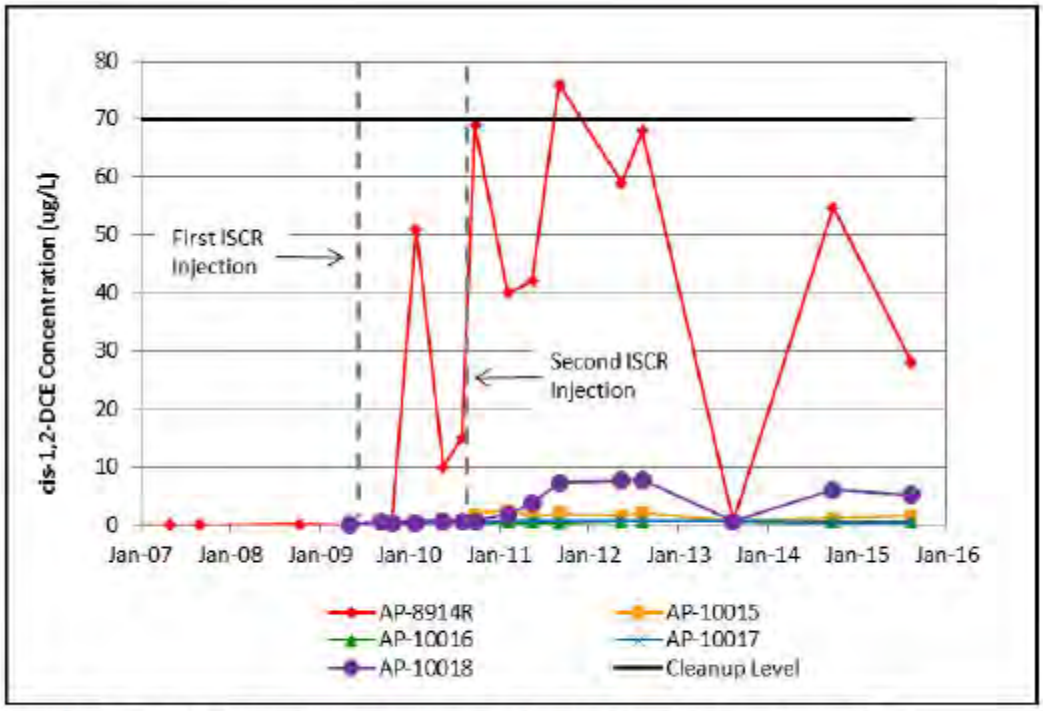
[3] Natural attenuation analyses were conducted by the following methods: iron (6020A), sulfate (300.0), total organic carbon (TOC) (9060A), and alkalinity (2320B)



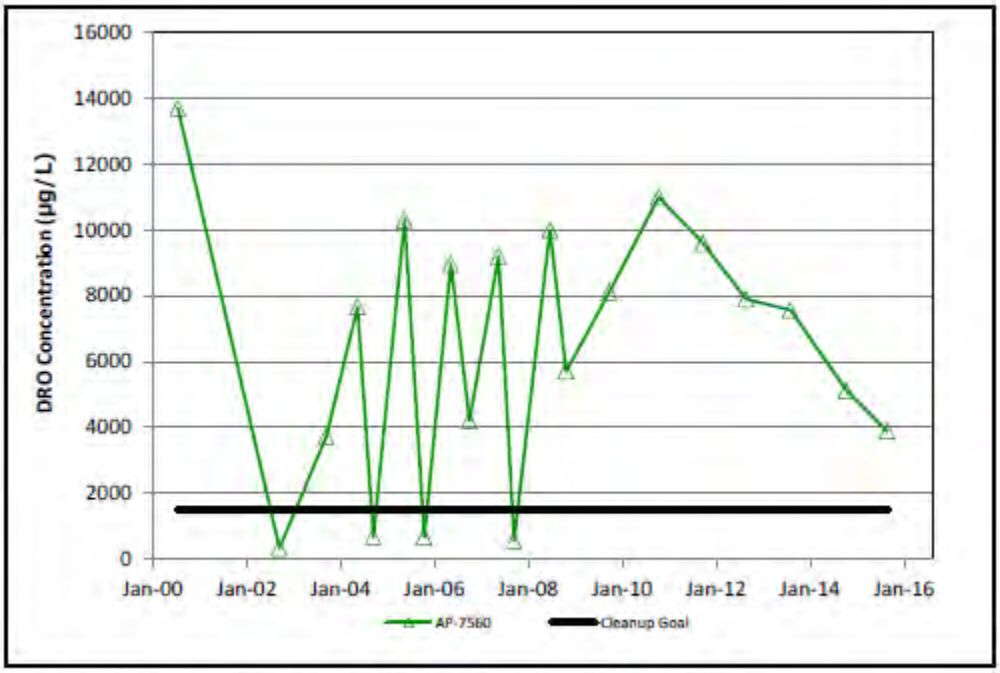
Graph 3-1. PCE Concentrations in the DRMO1 ISCR Treatment Area



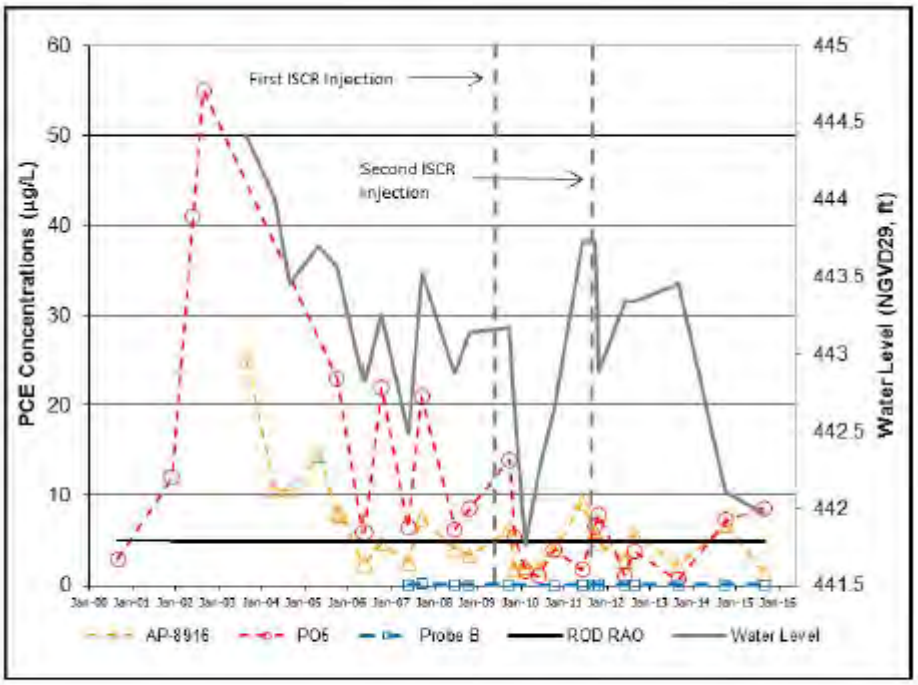
Graph 3-2. TCE Concentrations in the DRMO1 ISCR Treatment Area



Graph 3-3. cis-1,2-DCE Concentrations in the DRMO1 ISCR Treatment Area



Graph 3-4. DRO Concentration in Groundwater in AP-7560



Graph 3-5. PCE Concentration in DRMO4 Wells

Table 3-4. Mann-Kendall Trend Analysis for DRMO1 (3-Party) Wells

Well	Relative Location to Injection Area	Contaminants of Concern	
		PCE	TCE
AP-10017	Upgradient	Increasing[1]	Increasing[1]
AP-8914R	Within treatability study area	**Decreasing[2]**	Increasing[1]
AP-10016		**No Trend[3]**	Increasing[1]
AP-10018		**Decreasing[5]**	**Stable[1,4]**
AP-10015	Downgradient of treatability study area	**No Trend**	No Trend
AP-7559		Stable	No Trend
AP-7560		No Trend	Potentially Decreasing[1]

Trends in **bold type** exceeded the RAG during the time period used in the LTMO analysis (2009-2015).
[1] Indicates Linear Regression trend was used instead of the Mann-Kendall trend since there was a higher confidence in the trend.
[2] PCE exceeded the RAG in 2009 and 2010, but was less than the RAG between 2011 and 2015.
[3] PCE was above the RAG in 2015.
[4] TCE exceeded the RAG between February and September 2011, but has remained below the RAG since May 2012.
[5] PCE exceeded the RAG between 2009 and June 2011, but has remained below the RAG since September 2011.

Table 3-5. Mann-Kendall Trend Analysis for DRMO4 (3-Party) Wells

Well	Relative Location to Injection Area	Contaminants of Concern	
		TCE	PCE
AP-8916	Within 2011 injection area	Potentially Decreasing	**Stable[1]**
PO5	Within 2009 injection area	Potentially Increasing	**No Trend**
Probe B	Downgradient	Stable[2]	Stable[2]

Trends in **bold type** exceeded the RAG during the time period used in the LTMO analysis (2009-2015).

[1] The trend is based on Linear Regression since it was determined with greater confidence than the Mann-Kendall trend.

[2] Trend based on trace and/or non-detect results.

MAROS Summary 1—DRMO1 Statistical Trend Analysis Summary

MAROS Statistical Trend Analysis Summary

Project: DRMO1 3-Party
Location: Fort Wainwright
User Name: FES
State: Alaska

Time Period: 9/1/2009 to 8/24/2015
Consolidation Period: No Time Consolidation
Consolidation Type: Median
Duplicate Consolidation: Average
ND Values: Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
DIESEL COMPONENTS								
AP-10015	T	4	4	9.2E-01	1.1E+00	No	S	S
AP-10016	S	4	4	1.3E+00	1.7E+00	No	NT	S
AP-10017	S	4	4	4.9E-01	5.9E-01	No	S	S
AP-10018	S	4	4	2.0E+01	2.9E+00	No	NT	NT
AP-7559	T	4	4	9.5E-02	8.5E-02	No	S	S
AP-7560	T	7	7	6.9E+00	7.9E+00	No	D	S
AP-9914	S	4	4	1.5E+01	7.7E+00	No	NT	NT
TETRACHLOROETHYLENE(PCE)								
AP-10015	T	14	11	2.4E-03	9.0E-04	No	NT	NT
AP-10016	S	14	13	5.7E-03	4.3E-03	No	S	NT
AP-10017	S	14	13	8.3E-04	7.2E-04	No	NT	I
AP-10018	S	14	13	1.2E-02	1.1E-02	No	D	D
AP-7559	T	12	10	3.0E-03	3.1E-03	No	S	S
AP-7560	T	7	6	2.0E-03	1.8E-03	No	NT	S
AP-9914	S	14	11	2.4E-02	3.9E-03	No	D	D
TRICHLOROETHYLENE (TCE)								
AP-10015	T	14	14	2.0E-03	1.7E-03	No	NT	NT
AP-10016	S	14	13	9.2E-04	6.5E-04	No	PI	I
AP-10017	S	14	11	3.5E-04	3.2E-04	No	NT	I
AP-10018	S	14	13	3.3E-03	3.1E-03	No	NT	S
AP-7559	T	12	10	5.4E-04	5.2E-04	No	NT	NT
AP-7560	T	7	4	9.4E-04	9.0E-04	No	S	PD
AP-9914	S	14	12	2.4E-03	2.0E-03	No	NT	I

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Version 2.2, 2006, AFCEE Friday, October 30, 2015 Page 1 of 1

MAROS Summary 2—DRMO1 Spatial Moment Analysis Summary

MAROS Spatial Moment Analysis Summary

Project: DRMO1 3-Party
Location: Fort Wainwright
User Name: FES
State: Alaska

	0th Moment	1st Moment (Center of Mass)			2nd Moment (Spread)		
Effective Date	Estimated Mass (Kg)	Xc (ft)	Yc (ft)	Source Distance (ft)	Sigma XX (sq ft)	Sigma YY (sq ft)	Number of Wells
DIESEL COMPONENTS							
9/21/2009	1.7E+00	1,394,818	3,954,947	121	2,922	1,998	7
10/11/2010	3.3E+00	1,394,846	3,954,929	97	3,362	2,112	7
9/20/2011	5.3E-01	1,394,804	3,954,963	142	2,432	1,706	7
8/31/2012	1.3E+00	1,394,812	3,954,950	126	2,674	1,944	7
8/27/2013	0.0E+00						1
10/9/2014	0.0E+00						1
8/24/2015	0.0E+00						1
TETRACHLOROETHYLENE(PCE)							
9/21/2009	9.2E-03	1,394,843	3,954,934	93	3,040	2,142	7
11/9/2009	0.0E+00						5
2/11/2010	0.0E+00						5
6/1/2010	1.1E-03	1,394,883	3,954,910	48	425	876	6
8/20/2010	1.5E-03	1,394,883	3,954,910	48	416	842	6
10/11/2010	2.4E-03	1,394,837	3,954,941	102	3,259	2,176	7
2/23/2011	8.8E-04	1,394,879	3,954,916	56	387	813	6
6/1/2011	6.2E-04	1,394,882	3,954,912	50	454	906	6
9/20/2011	3.1E-03	1,394,810	3,954,958	133	2,504	1,765	7
5/30/2012	3.0E-04	1,394,879	3,954,913	54	346	913	6
8/31/2012	2.0E-03	1,394,797	3,954,965	148	1,589	1,209	7
8/27/2013	5.6E-04	1,394,807	3,954,963	139	2,481	1,670	7
10/9/2014	4.0E-03	1,394,805	3,954,962	140	2,070	1,365	7
8/24/2015	2.0E-03	1,394,799	3,954,968	149	1,894	1,288	7
TRICHLOROETHYLENE (TCE)							
9/21/2009	8.4E-04	1,394,813	3,954,959	132	2,679	1,729	7
11/9/2009	0.0E+00						5
2/11/2010	0.0E+00						5
6/1/2010	4.3E-04	1,394,880	3,954,913	52	340	801	6
8/20/2010	6.0E-04	1,394,881	3,954,911	50	341	789	6
10/11/2010	1.8E-03	1,394,819	3,954,963	123	2,770	1,819	7
2/23/2011	3.5E-04	1,394,878	3,954,918	58	358	744	6
6/1/2011	5.2E-04	1,394,879	3,954,915	54	341	760	6
9/20/2011	1.8E-03	1,394,816	3,954,956	127	2,694	1,740	7
5/30/2012	4.7E-04	1,394,882	3,954,910	49	372	812	6
8/31/2012	2.1E-03	1,394,819	3,954,963	123	2,752	1,814	7
8/27/2013	9.0E-04	1,394,805	3,954,965	142	2,259	1,510	7
10/9/2014	1.7E-03	1,394,823	3,954,949	118	2,808	1,861	7
8/24/2015	1.0E-03	1,394,817	3,954,954	126	2,738	1,858	7

MAROS Version 2.2, 2006, AFCEE Friday, October 30, 2015 Page 1 of 2

MAROS Summary 2 cont'd—DRMO1 Spatial Moment Analysis Summary

Project: DRMO1 3-Party
Location: Fort Wainwright

User Name: FES
State: Alaska

Moment Type	Constituent	Coefficient of Variation	Mann-Kendall S Statistic	Confidence in Trend	Moment Trend
Zeroth Moment: Mass					
	DIESEL COMPONENTS	1.26	-14	97.5%	D
	TETRACHLOROETHYLENE(PCE)	1.11	16	79.1%	NT
	TRICHLOROETHYLENE (TCE)	0.78	38	97.9%	I
1st Moment: Distance to Source					
	DIESEL COMPONENTS	0.19	2	62.5%	NT
	TETRACHLOROETHYLENE(PCE)	0.45	40	99.7%	I
	TRICHLOROETHYLENE (TCE)	0.40	12	77.0%	NT
2nd Moment: Sigma XX					
	DIESEL COMPONENTS	0.14	-2	62.5%	S
	TETRACHLOROETHYLENE(PCE)	0.71	0	47.3%	S
	TRICHLOROETHYLENE (TCE)	0.71	28	96.9%	I
2nd Moment: Sigma YY					
	DIESEL COMPONENTS	0.09	-2	62.5%	S
	TETRACHLOROETHYLENE(PCE)	0.38	8	68.1%	NT
	TRICHLOROETHYLENE (TCE)	0.38	24	94.2%	PI

Note: The following assumptions were applied for the calculation of the Zeroth Moment:

Porosity: 0.25 **Saturated Thickness:** [illegible]

Mann-Kendall Trend test performed on all sample events for each constituent. Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-Due to insufficient Data (< 4 sampling events).

Note: The Sigma XX and Sigma YY components are estimated using the given field coordinate system and then rotated to align with the estimated groundwater flow direction. Moments are not calculated for sample events with less than 6 wells.

MAROS Summary 10 —DRMO4 Statistical Trend Analysis Summary

MAROS Statistical Trend Analysis Summary

Project: DRMO4 3-Party
Location: Fort Wainwright
User Name: FES
State: Alaska

Time Period: 9/1/2009 to 8/24/2015
Consolidation Period: No Time Consolidation
Consolidation Type: Median
Duplicate Consolidation: Average
ND Values: 1/2 Detection Limit
J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
TETRACHLOROETHYLENE(PCE)								
AP-9916	S	13	13	4.2E-03	4.0E-03	No	NT	S
PO-5	S	13	12	4.8E-03	4.0E-03	No	NT	S
Probe B	T	10	2	2.2E-04	2.5E-04	No	PI	I
TRICHLOROETHYLENE (TCE)								
AP-9916	S	13	7	6.8E-04	5.2E-04	No	PD	PD
PO-5	S	13	12	2.6E-03	3.1E-03	No	PI	NT
Probe B	T	10	4	2.0E-04	2.5E-04	No	PI	I

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Version 2.2, 2006, AFCEE Tuesday, November 03, 2015 Page 1 of 1

OU-3 Remedial Area 1B Birch Hill Tank Farm

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NOTE:
BIRCH HILL TREATMENT SYSTEMS ARE IDENTIFIED WITH BLUE TEXT IN THE TEXT BOXES.

SOURCE:
AEROMAP U.S. APRIL 27, 2007

FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Birch Hill Tank Farm Site Map

2014 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	2-1	6/15

FIGURE 2-1

Groundwater Contours in the Bedrock Aquifer - November 2014

Groundwater Contours in the Alluvial Aquifer - November 2014

NOTES:

1. Coordinate System - Projection: WGS84 UTM, Zone 6N, US Survey, Feet

2. Groundwater flow direction depicted for the bedrock aquifer is generalized and based upon groundwater contours. Groundwater follows bedrock fractures and may vary across the site.

3. Groundwater flow direction depicted for the alluvial aquifer is based on groundwater contours and channels around blocks of permafrost. Recent development of the property west of the post boundary may result in thawing permafrost which could alter groundwater flow.

SOURCES:

1. Groundwater Contours were created with Surfer v.9.

2. Aerial Imagery Provided By: 2012 Fort Wainwright .SID

LEGEND:

AP-7598 425.69 — Monitoring Well, Groundwater Elevation in NAVD88, Feet

625 — Groundwater Elevation Contour - Measured November 3rd, 2014

Groundwater Flow Direction

Fort Wainwright Post Boundary

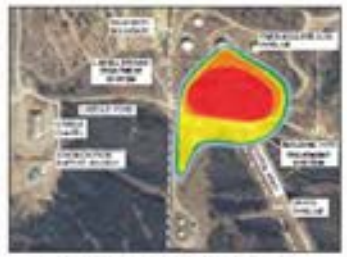
Approximate Location of Permafrost - Provided by CRREL, 2010

Fairbanks Environmental Services 3538 International Street Fairbanks, AK 99701	Alaska District U.S. Army Corps of Engineers Anchorage, AK

2014 Groundwater Contours Birch Hill Tank Farm
2014 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

Contract: W911KB-12-D-0001	Figure: 2-2	Date: 6/15

Prior to Treatment Alluvial Aquifer

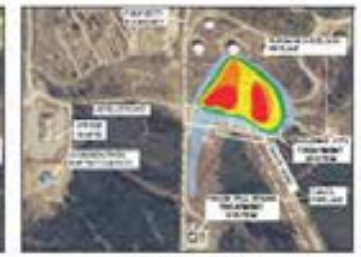


Prior to Treatment Bedrock Aquifer

1998 Alluvial Aquifer

1998 Bedrock Aquifer

1999 Alluvial Aquifer



1999 Bedrock Aquifer

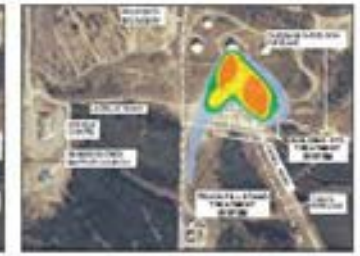
2000 Alluvial Aquifer

2000 Bedrock Aquifer

2001 Alluvial Aquifer

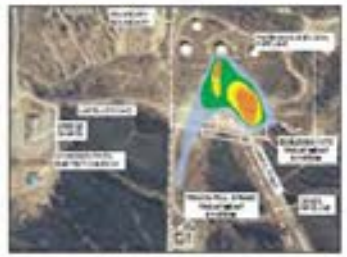
2001 Bedrock Aquifer

2002 Alluvial Aquifer



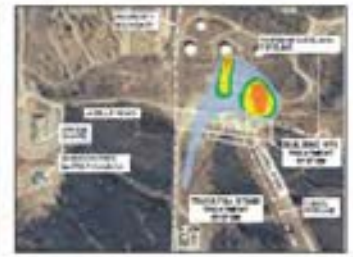
2002 Bedrock Aquifer

2003 Alluvial Aquifer



2003 Bedrock Aquifer

2005 Alluvial Aquifer



2005 Bedrock Aquifer

2007 Alluvial Aquifer

2007 Bedrock Aquifer

2011 Alluvial Aquifer

2011 Bedrock Aquifer

2013 Alluvial Aquifer

2013 Bedrock Aquifer

2014 Alluvial Aquifer

2014 Bedrock Aquifer

Estimated Extent of Benzene and Free Product at the Birch Hill Tank Farm

2014 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

Prior to Treatment Alluvial Aquifer

Prior to Treatment Bedrock Aquifer

2000 Alluvial Aquifer

2000 Bedrock Aquifer

2001 Alluvial Aquifer

2001 Bedrock Aquifer

2002 Alluvial Aquifer

2002 Bedrock Aquifer

2003 Alluvial Aquifer

2003 Bedrock Aquifer

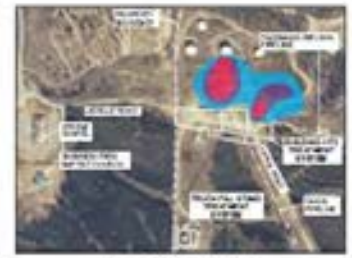
2004 Alluvial Aquifer

2004 Bedrock Aquifer

2005 Alluvial Aquifer

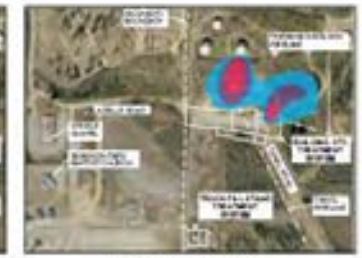
2005 Bedrock Aquifer

2006 Alluvial Aquifer



2006 Bedrock Aquifer

2008 Alluvial Aquifer



2008 Bedrock Aquifer

2011 Alluvial Aquifer

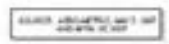
2011 Bedrock Aquifer

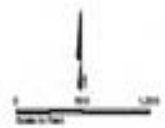
2013 Alluvial Aquifer

2013 Bedrock Aquifer

2014 Alluvial Aquifer

2014 Bedrock Aquifer





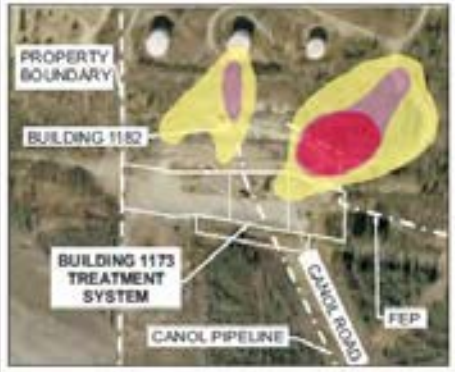
Estimated Extent of DCA at the Birch Hill Tank Farm

2014 Monitoring Report

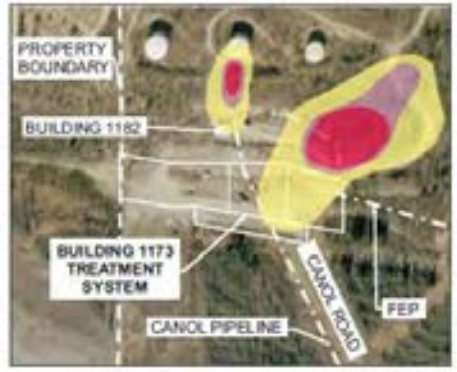
Operable Unit 3

Fort Wainwright, Alaska

W911KB-12-D-0001 | 2-7 | 6/15

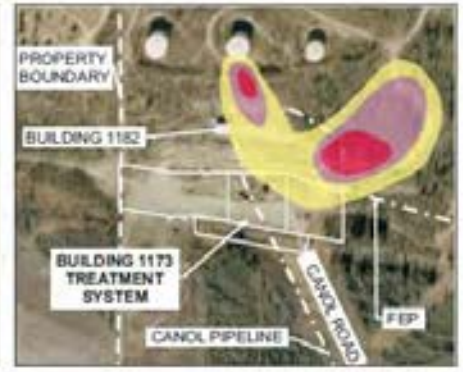


EDB Plume 2000

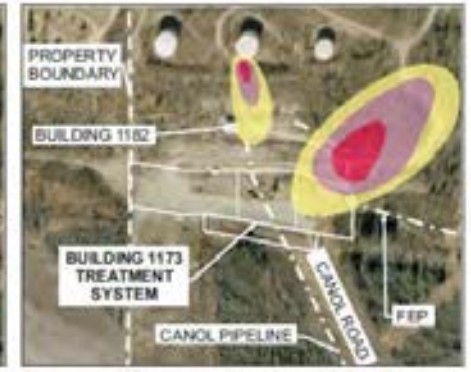


EDB Plume 2001

EDB Plume 2002



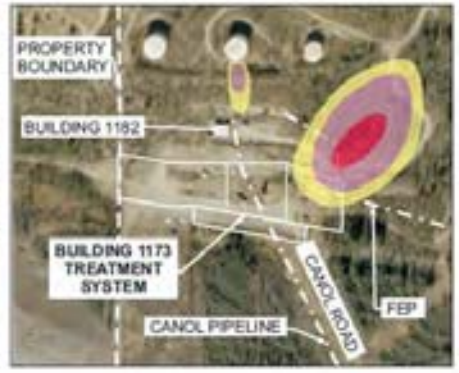
EDB Plume 2003



EDB Plume 2004

EDB Plume 2006

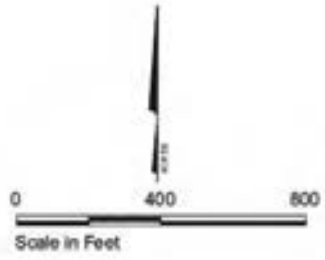
EDB Plume 2008



EDB Plume 2009

EDB Plume 2012

EDB Plume 2014



LEGEND:

µg/L MICROGRAMS PER LITER

FEP FAIRBANKS EIELSON PIPELINE

APPROXIMATE EXTENT OF EDB PLUME ABOVE REMEDIAL ACTION GOALS OF 0.05 µg/L

APPROXIMATE EXTENT OF EDB PLUME WITH CONCENTRATIONS ABOVE 10 µg/L

APPROXIMATE EXTENT OF EDB PLUME WITH CONCENTRATIONS ABOVE 100 µg/L

NOTES:

1. HIGHEST YEARLY CONCENTRATIONS SHOWN ON MAP.
2. PREVIOUS YEARS CONTAMINANT PLUMES MODIFIED BASED ON NEW MONITORING WELL POINTS AND REEVALUATION OF PAST DATA.
3. PLUMES REPRESENT THE MAXIMUM CONCENTRATIONS WITHIN THE BEDROCK AQUIFERS.
4. DRAWINGS ARE CONCEPTUAL AND ARE BASED ON EVALUATION OF AVAILABLE INFORMATION.
5. EDB HAS NOT EXCEEDED THE CLEANUP GOAL IN ANY WELL IN THE ALLUVIAL AQUIFER SINCE 2005.
6. METHOD 504.1 ANALYSIS FOR EDB REPLACED METHOD 8260 ANALYSIS IN 2000. MAP PLUMES REFLECT 504.1 SAMPLES ONLY.
7. PLUME MAPS FOR 2005, 2007, 2010, 2011 AND 2013 ARE NOT SHOWN DUE TO MAP SPACE LIMITATIONS. HOWEVER, ONLY MINOR CHANGES IN PLUME SHAPE WERE OBSERVED IN THESE MAPS.

SOURCE: AERO-METRIC, MAY 7, 1997

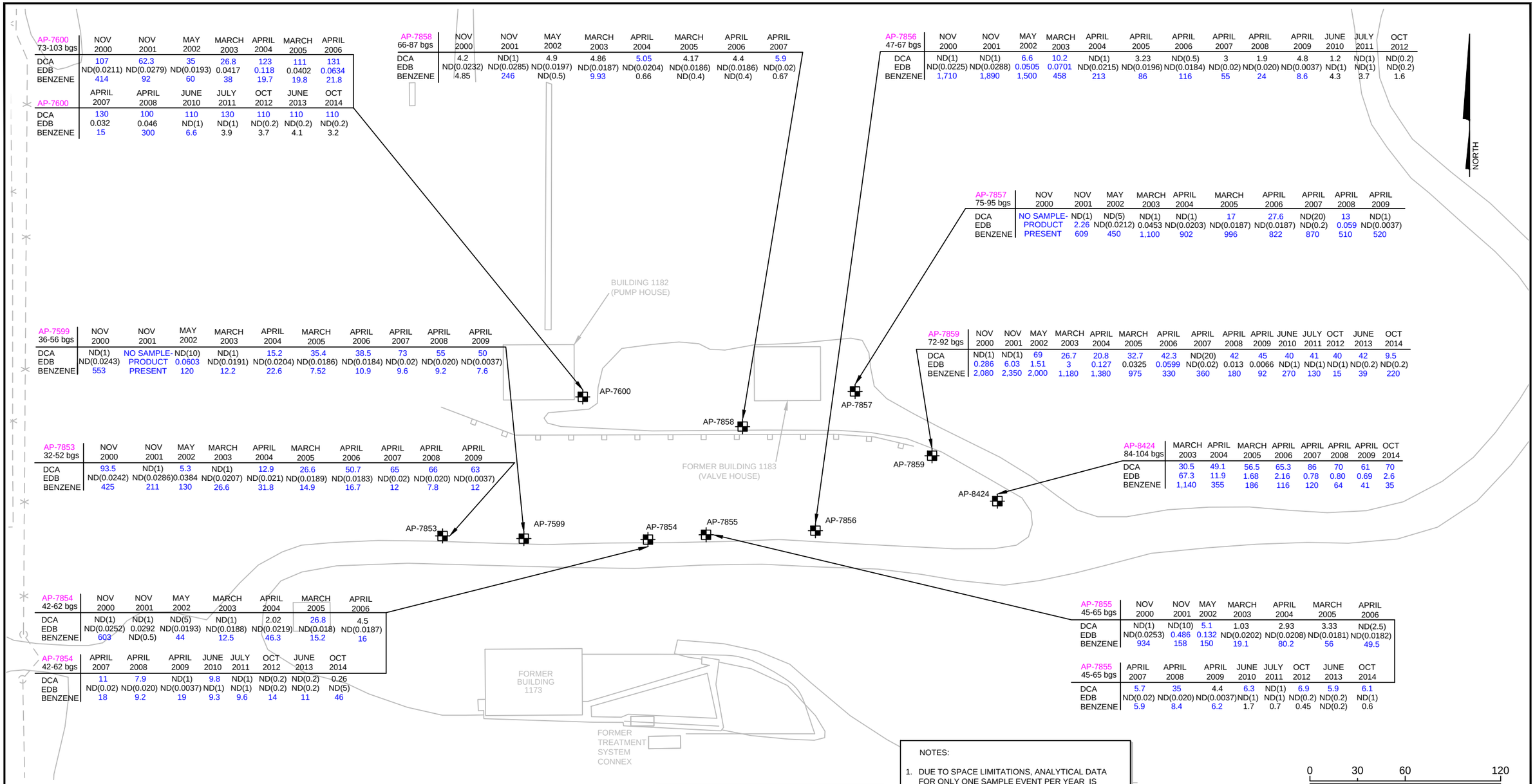
FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Estimated Extent of EDB in the Bedrock Aquifer

2014 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

CONTRACT	FIGURE	DATE
W911KB-12-D-0001	2-8	6/15



AP-7600 73-103 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006
DCA	107	62.3	35	26.8	123	111	131
EDB	ND(0.0211)	ND(0.0279)	ND(0.0193)	0.0417	0.118	0.0402	0.0634
BENZENE	414	92	60	38	19.7	19.8	21.8

AP-7600	APRIL 2007	APRIL 2008	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	130	100	110	130	110	110	110
EDB	0.032	0.046	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	15	300	6.6	3.9	3.7	4.1	3.2

AP-7858 66-87 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007
DCA	4.2	ND(1)	4.9	4.86	5.05	4.17	4.4	5.9
EDB	ND(0.0232)	ND(0.0285)	ND(0.0197)	ND(0.0187)	ND(0.0204)	ND(0.0186)	ND(0.0186)	ND(0.02)
BENZENE	4.85	246	ND(0.5)	9.93	0.66	ND(0.4)	ND(0.4)	0.67

AP-7856 47-67 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012
DCA	ND(1)	ND(1)	6.6	10.2	ND(1)	3.23	ND(0.5)	3	1.9	4.8	1.2	ND(1)	ND(0.2)
EDB	ND(0.0225)	ND(0.0288)	0.0505	0.0701	ND(0.0215)	ND(0.0196)	ND(0.0184)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(1)	ND(1)	ND(0.2)
BENZENE	1,710	1,890	1,500	458	213	86	116	55	24	8.6	4.3	3.7	1.6

AP-7857 75-95 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009
DCA	NO SAMPLE-	ND(1)	ND(5)	ND(1)	ND(1)	17	27.6	ND(20)	13	ND(1)
EDB	PRODUCT	2.26	ND(0.0212)	0.0453	ND(0.0203)	ND(0.0187)	ND(0.0187)	ND(0.2)	0.059	ND(0.0037)
BENZENE	PRESENT	609	450	1,100	902	996	822	870	510	520

AP-7599 36-56 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009
DCA	ND(1)	NO SAMPLE-	ND(10)	ND(1)	15.2	35.4	38.5	73	55	50
EDB	ND(0.0243)	PRODUCT	0.0603	ND(0.0191)	ND(0.0204)	ND(0.0186)	ND(0.0184)	ND(0.02)	ND(0.020)	ND(0.0037)
BENZENE	553	PRESENT	120	12.2	22.6	7.52	10.9	9.6	9.2	7.6

AP-7859 72-92 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	ND(1)	69	26.7	20.8	32.7	42.3	ND(20)	42	45	40	41	40	42	9.5
EDB	0.286	6.03	1.51	3	0.127	0.0325	0.0599	ND(0.02)	0.013	0.0066	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)
BENZENE	2,080	2,350	2,000	1,180	1,380	975	330	360	180	92	270	130	15	39	220

AP-7853 32-52 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009
DCA	93.5	ND(1)	5.3	ND(1)	12.9	26.6	50.7	65	66	63
EDB	ND(0.0242)	ND(0.0286)	0.0384	ND(0.0207)	ND(0.021)	ND(0.0189)	ND(0.0183)	ND(0.02)	ND(0.020)	ND(0.0037)
BENZENE	425	211	130	26.6	31.8	14.9	16.7	12	7.8	12

AP-8424 84-104 bgs	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	OCT 2014
DCA	30.5	49.1	56.5	65.3	86	70	61	70
EDB	67.3	11.9	1.68	2.16	0.78	0.80	0.69	2.6
BENZENE	1,140	355	186	116	120	64	41	35

AP-7854 42-62 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006
DCA	ND(1)	ND(1)	ND(5)	ND(1)	2.02	26.8	4.5
EDB	ND(0.0252)	0.0292	ND(0.0193)	ND(0.0188)	ND(0.0219)	ND(0.018)	ND(0.0187)
BENZENE	603	ND(0.5)	44	12.5	46.3	15.2	16

AP-7854 42-62 bgs	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	11	7.9	ND(1)	9.8	ND(1)	ND(0.2)	ND(0.2)	0.26
EDB	ND(0.02)	ND(0.020)	ND(0.0037)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(5)
BENZENE	18	9.2	19	9.3	9.6	14	11	46

AP-7855 45-65 bgs	NOV 2000	NOV 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006
DCA	ND(1)	ND(10)	5.1	1.03	2.93	3.33	ND(2.5)
EDB	ND(0.0253)	0.486	0.132	ND(0.0202)	ND(0.0208)	ND(0.0181)	ND(0.0182)
BENZENE	934	158	150	19.1	80.2	56	49.5

AP-7855 45-65 bgs	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	5.7	35	4.4	6.3	ND(1)	6.9	5.9	6.1
EDB	ND(0.02)	ND(0.020)	ND(0.0037)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(1)
BENZENE	5.9	8.4	6.2	1.7	0.7	0.45	ND(0.2)	0.6

MONITORING WELL KEY:

MONITORING WELL COMPLETED IN BEDROCK

SCREENED INTERVAL DEPTH IN FEET bgs

AP-7854 42-62 bgs	NOV 2000	NOV 2001	MAY 2002
DCA	ND(1)	ND(1)	ND(5)
EDB	ND(0.0252)	0.0292	ND(0.0193)
BENZENE	603	ND(0.5)	44

SEE LEGEND FOR ABBREVIATIONS.

CONCENTRATIONS EXCEEDING APPLICABLE STANDARD SHOWN IN BLUE

CONCENTRATIONS IN MICROGRAMS PER LITER (μg/L)

REMEDIAL ACTION GOALS IN μg/L

5	DCA
0.05	EDB
5	BENZENE

LEGEND:

AP-7599 EXTRACTION WELL COMPLETED IN BEDROCK

bgs	BELOW GROUND SURFACE
DCA	1,2-DICHLOROETHANE
EDB	1,2-DIBROMOETHANE
LOD	LIMIT OF DETECTION
LOQ	LIMIT OF QUANTITATION
ND	DETECTION LIMIT (LOD IN PARENTHESE FOR DATA PRIOR TO 2012; LOD IN PARENTHESES FOR DATA STARTING IN 2012)

NOTES:

1. DUE TO SPACE LIMITATIONS, ANALYTICAL DATA FOR ONLY ONE SAMPLE EVENT PER YEAR IS SHOWN. SPRING / SUMMER DATA IS SHOWN OVER FALL / WINTER DATA BECAUSE CONCENTRATIONS ARE GENERALLY HIGHER.
2. MONITORING WELL AP-7858 IS INOPERABLE.
3. DATA FLAGS (QUALIFIERS) ARE NOT SHOWN ON MAP DUE TO SPACE LIMITATIONS.
4. STARTING IN 2010, THE HIGHEST CONCENTRATION BETWEEN PRIMARY AND DUPLICATE SAMPLES IS SHOWN FOR WELLS WHERE DUPLICATE SAMPLES WERE COLLECTED.
5. THE FORMER BUILDING 1173 TREATMENT SYSTEM WAS DECOMMISSIONED IN 2012.

0 30 60 120

SCALE IN FEET

FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Groundwater Concentrations in the Birch Hill Product Recovery Extraction Wells

2014 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	2-3	6/15

AP-7598
113-133 bgs

	AUG-SEPT 1998	NOV-DEC 1998	MAR-APR 1999	SEPT-OCT 1999	JULY 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	MAY 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	1,000	915	ND(10)	1,200	1,160	1,120	ND(50)	781	498	783	1,880	ND(100)	1,100	1,800	1,400	580	660	1,200	340
EDB	100	ND(10)	134	234	74.4	261	2.91	27.4	16.1	12.6	34.6	14	4.7	25	0.36	3.7	1.8	0.35	8.9
BENZENE	5,650	4,000	6,620	6,410	7,080	7,850	4,480	5,050	3,500	4,920	5,030	7,800	7,800	7,000	14,000	3,600	3,300	7,200	3,000
TOLUENE	885	788	1,060	1,190	1,270	2,610	274	773	683	943	3,550	2,900	2,900	5,800	6,400	880	420	3,000	650
EBZ	284	182	306	323	344	501	189	236	167	231	812	420	470	630	660	270	140	320	170
WATER ELEV.	426.72	426.12	425.90	426.44	427.75	426.69	425.94	425.36	427.12	425.54	425.91	425.66	425.29	425.65	425.49	426.38	426.85	426.06	431.02

AP-7816
20-35 bgs

	NOV 1999	OCT 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	ND(7)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	0.66	0.83	1.3			0.06
EDB	ND(0.002)	ND(0.0219)	ND(0.033)	ND(0.0205)	ND(0.02)	ND(0.0208)	ND(0.015)	ND(0.0192)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(1)	ND(0.2)	NOT	NOT
BENZENE	ND(1)	ND(1)	3.55	1.68	1.3	ND(0.5)	ND(1)	0.44	0.42	0.36	0.35	0.53	0.53	0.61	SAMPLED	SAMPLED
TOLUENE	1.52	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.23	ND(1)	0.18	ND(1)	ND(1)	ND(0.4)	ND(0.2)	DUE TO	DUE TO
EBZ	1.33	4.03	2.1	5.22	2.06	ND(0.5)	ND(1)	ND(1)	6	13	8.8	9.3	9.5	4.5	PRODUCT	PRODUCT
WATER ELEV.	NM	428.25	426.00	425.42	426.07	425.84	424.87	425.13	424.86	424.75	424.95	425.05	426.11	426.25	425.55	429.40			

AP-7525
60-80 bgs

	MAY-JUNE 1998	AUG-SEPT 1998	NOV-DEC 1998	MAR-APR 1999	SEPT-OCT 1999	OCT 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	16.9		29.4	28.3	ND(2.5)	ND(50)	23.4	8.60	17.1	26.5	29.3	36.1	26	28	28	21	32	21	16	14
EDB	ND(10)	ND(10)	ND(5)	ND(0.002)	0.327	ND(0.0203)	ND(0.0339)	ND(0.0202)	ND(0.019)	ND(0.0206)	ND(0.0188)	ND(0.0213)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	22.9	12.2	ND(5)	1.95	2.75	ND(0.5)	ND(5)	9.2	1.28	1.46	ND(0.4)	ND(0.4)	0.52	ND(1)	0.82	0.68	1.9	0.63	ND(0.2)	1.8
TOLUENE	ND(10)	ND(10)	ND(5)	ND(1)	ND(2.5)	ND(50)	ND(5)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	0.12	ND(1)	0.13	ND(1)	0.21	0.26	ND(0.4)	0.31
EBZ	160	104	28.6	19.2	71.7	ND(50)	16.3	183	17	19.1	17.2	9	12	9.5	8.7	4.7	6.3	6.5	25	3.5
WATER ELEV.	425.10	425.68	425.94	425.51	425.84	428.43	426.19	425.52	425.20	426.19	425.11	425.33	425.14	424.87	425.25	425.30	426.30	426.23	426.01	430.31

AP-7530
27-47 bgs

	AUG-SEPT 1998	NOV-DEC 1998	JUNE 1999	SEPT-OCT 1999	OCT 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	ND(10)	ND(100)	92.9	64.8	78	ND(100)	ND(100)	ND(50)	11.3	29.1	55.9	64	73	69	82	67	67	67	42
EDB	ND(10)	ND(100)	0.141	0.139	ND(0.0210)	ND(0.0353)	0.0275	ND(0.0206)	ND(0.0259)	ND(0.0198)	ND(0.0197)	ND(0.0202)	ND(0.020)	ND(1)	ND(1)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	66.8	948	291	168	277	203	161	48	37.7	12.3	15.8	18	10	12	5.2	5.2	5.4	4.4	3.3	
TOLUENE	181	795	283	131	ND(50)	ND(100)	ND(100)	ND(50)	3.58	3.56	4.33	15	2.9	3.4	1.1	0.88	0.54	ND(0.4)	0.34	
EBZ	640	1,130	660	551	276	366	506	392	222	128	192	330	160	240	90	97	93	26	59	
WATER ELEV.	425.95	421.60	425.71	426.31	428.79	426.44	423.55	423.74	425.69	426.44	425.06	424.84	424.82	424.92	424.97	428.51	426.24	425.62	430.73	

AP-7595
29-38 bgs

	AUG-SEPT 1998	NOV-DEC 1998	SEPT-OCT 1999	JUNE 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	ND(5)	ND(2.5)	ND(5)	ND(5)	ND(2)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(100)	ND(1)	ND(1)	ND(0.2)		ND(0.8)	ND(0.2)	ND(0.2)	
EDB	ND(1)	ND(50)	ND(0.002)	ND(0.0233)	ND(0.0319)	ND(0.0213)	ND(0.0201)	ND(0.0216)	ND(0.0197)	ND(0.0192)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.01)	0.031	0.043	0.039	0.036	0.027	
BENZENE	117	12.6	3.5	ND(10)	ND(5)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(100)	0.33	ND(1)	0.21	0.16	0.22	0.16	0.11	
TOLUENE	26.5	10.5	ND(2.5)	ND(10)	ND(5)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.098	0.21	0.16	0.29	0.16	ND(0.4)	0.38	
EBZ	397	213	72.8	ND(10)	14.1	163	24.6	22.1	33.4	8.5	39	8.6	13	29	0.68	1.3				
WATER ELEV.	426.09	426.47	425.53	427.24	425.96	425.34	425.74	425.69	424.60	424.97	424.79	424.45	424.86	424.87			426.35	425.48	430.39	

AP-10226MW
28-38 bgs

	JULY 1997	JULY 1998	OCT MARCH 1998	SEPT 1999	MARCH 2000	APRIL 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA	ND(10)	180	237	ND(10)	307	247	ND(5)	ND(1)	32.7	60.9	75.7	51.3	ND(100)	110	100	140	ND(4)	190	230	260	150
EDB	ND(10)	NA	ND(1)	ND(10)	1.67	0.26	0.238	0.0763	0.132	0.265	ND(0.0192)	0.0319	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.01)	0.031	0.043	0.039	0.036	0.027
BENZENE	5,300	4,660	5,100	4,840	3,960	3,880	3,090	1,570	1,290	1,850	1,650	950	1,200	1,500	680	1,300	1,400	2,600	2,300	2,300	1,400
TOLUENE	3,200	180	3.5	1,060	1,170	961	588	211	265	514	341	294	250	360	450	860	440	6.1	ND(0.4)	5.5	2.8
EBZ	1,700	1,020	980	720	620	471	304	416	654	516	573	470	730	540	1,300	600	81	36	63	26	
DRO																			10,000	NA	
WATER ELEV.	425.96	424.93	426.52	425.27	425.45	425.02	425.94	426.34	426.00	425.84	424.90	425.19	424.98	424.77	425.06	425.24	426.34	425.38	424.54	424.67	429.17

AP-6071
15.3-30.65 bgs

	SEPT 1999	MARCH 2000	APRIL 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	SPRING 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	
EDB	ND(0.002)	ND(0.0213)	ND(0.0309)	ND(0.0205)	ND(0.0206)	ND(0.0204)	ND(0.0188)	ND(0.0199)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	WELL WAS
BENZENE	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	0.093	0.99	ND(1)	ND(1)	ND(0.2)	ND(0.2)	DESTROYED
TOLUENE	1.99	ND(1)	1.43	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.12	0.59	0.29	ND(1)	ND(1)	ND(0.4)	ND(0.4)	BY ROAD
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.53	0.15	ND(1)	ND(1)	ND(0.2)	ND(0.2)	REALIGNMENT
WATER ELEV.	425.58	NM	425.53	424.70	425.63	426.05	424.62	424.85	425.16	424.38	424.66	424.74	425.89	426.14	425.23	EQUIPMENT IN
																SPRING 2014

AP-7732
55-65 bgs

	MAR-APR 1999	SEPT-OCT 1999	OCT 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	
EDB	NA	ND(0.002)	ND(0.022)	ND(0.0334)	ND(0.0191)	ND(0.0196)	ND(0.0268)	ND(0.0182)	ND(0.0194)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(1)
BENZENE	ND(1)	1.4	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
TOLUENE	ND(1)	4.68	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.15	ND(1)	0.18	0.18
WATER ELEV.	NM	425.88	428.34	426.13	425.27	425.93	425.64	424.83	424.74	424.77	424.53	424.96	424.77	424.53

AP-7846
56-66 bgs

	NOV 1999	JULY 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	3.31	ND(0.5)	0.47	0.40	ND(1)	0.45	ND(1)	0.62	ND(0.2)	0.78
EDB	ND(0.002)	ND(0.0225)	ND(0.0317)	ND(0.0202)	ND(0.0203)	ND(0.0241)	ND(0.0192)	ND(0.0197)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	6.83	2.07	1.91	2.84	6.06	4.77	4.85	4.7	4.5	3.7	2.5	0.92	0.32	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	1.02	2.64	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(1)	0.23	0.10	0.15	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.18	ND(1)	0.14	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
WATER ELEV.	425.42	427.11	425.58	425.39	425.40	425.41	424.46	424.67	424.41	424.19	424.58	424.93	425.88	426.07	425.51	429.75

AP-7598
50-60 bgs

	AUG-SEPT 1998	NOV-DEC 1998	JUNE 1999	SEPT-OCT 1999	JUNE 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	3.08	2.92	3.35	3.3	4.6	3.72	4.34	3.6	3.38	2.59	2.45		1.8	1.5	1.8	1.5	1.3	1.3	1.2
EDB	ND(1)	ND(1)	ND(0.002)	ND(0.002)	ND(0.0192)	ND(0.0335)	ND(0.0201)	ND(0.0209)	ND(0.0207)	ND(0.0182)	ND(0.0193)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.01)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.16	0.084	0.14	0.11	ND(1)	ND(0.4)	0.57	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
DRO																	360	560	350	
WATER ELEV.	426.03	425.78	424.94	425.33	426.99	425.31	425.32	425.27	425.02	424.37	424.52	424.52	424.52	424.26	423.80	425.00	426.02	426.06	426.06	429.68

AP-9959
56-66 bgs

	NOV 2008	FEB 2009	JUNE 2010	JUNE 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	2.10	1.2	0.78	0.72	0.91	0.72	0.62
EDB	ND(0.020)	ND(0.020)	ND(0.01)	ND(0.02)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
TOLUENE	0.14	0.13	0.18	ND(1)	ND(0.4)	ND(0.4)	0.07
EBZ	ND(1)	0.18	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
DRO					260	390	220
WATER ELEV.	426.70	425.11	425.52	426.55	426.64	426.48	430.22

AP-9957
75-85 bgs

	NOV 2008	APRIL 2009	JUNE 2010	JUNE 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	0.59	0.53	0.71	ND(1)	0.84	0.63	0.73
EDB	ND(0.020)	ND(0.020)	ND(0.037)	ND(0.01)	ND(0.02)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	0.080	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	0.20	0.32	0.19	ND(1)	ND(0.4)	0.21	0.11
EBZ	0.079	0.076	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
DRO					180	300	180
WATER ELEV.	426.56	424.01	424.77	425.68	425.87	425.68	429.79

MONITORING WELL KEY:

MONITORING WELL COMPLETED IN BEDROCK

SCREENED INTERVAL DEPTH IN FEET bgs

SEE LEGEND FOR ABBREVIATIONS.

AP-7846
56-66 bgs

	MARCH 2005	AUG 2005	APRIL 2006
DCA	ND(0.5)	ND(0.5)	ND(0.5)
EDB	ND(0.0192)	ND(0.0198)	ND(0.0197)
BENZENE	4.85	0.29	4.7
TOLUENE	ND(1)	ND(1)	ND(1)
EBZ	ND(1)	0.52	ND(1)
WATER ELEVATIONS	424.46	428.05	424.67

CONCENTRATIONS EXCEEDING APPLICABLE STANDARD SHOWN IN BLUE

CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)

ELEVATIONS IN FEET MEAN SEA LEVEL (NGVD '29 DATUM)

MULTILEVEL WELL KEY:

MULTILEVEL WELL COMPLETED IN BEDROCK AQUIFER

AP-8783

TOC 552.92

TOP OF CASING

PORT 6 ELEV. 422.62

PACKER

PORT 5 ELEV. 402.12

PORT 4 ELEV. 387.62

PORT 3 ELEV. 369.12

SAMPLE PORT

PORT NUMBER

PORT 2 ELEV. 321.62

PORT 1 ELEV. 312.12

ELEVATIONS IN FEET MEAN SEA LEVEL (NGVD '29 DATUM)

NOTES:

1. DUE TO SPACE LIMITATIONS, ANALYTICAL DATA FOR ONLY ONE SAMPLE EVENT PER YEAR BETWEEN 2000 AND 2012 IS SHOWN. SPRING / SUMMER DATA IS SHOWN OVER FALL / WINTER DATA BECAUSE CONCENTRATIONS ARE GENERALLY HIGHER.
2. DATA FLAGS (QUALIFIERS) ARE NOT SHOWN ON MAP DUE TO SPACE LIMITATIONS.
3. 1173 MP-1 WAS REPLACED IN NOVEMBER 2011. THE NEW AP NUMBER IS SHOWN WITH THE OLD WELL NUMBER BELOW IN PARENTHESIS.
4. STARTING IN 2010, THE HIGHEST CONCENTRATION BETWEEN PRIMARY AND DUPLICATE SAMPLES IS SHOWN FOR WELLS WHERE DUPLICATE SAMPLES WERE COLLECTED.
5. RESULTS FOR BIRCH HILL PRODUCT RECOVERY EXTRACTION WELLS ARE SHOWN ON FIGURE 2-3.
6. THE FORMER BUILDING 1173, TRUCK FILL STAND, AND THAW CHANNEL TREATMENT SYSTEMS WERE DECOMMISSIONED IN 2012.

LEGEND:

AP-8891 — MULTILEVEL WELL COMPLETED IN BEDROCK

AP-7594 — MONITORING WELL COMPLETED IN BEDROCK

1173-MP1 — MONITORING PROBE COMPLETED IN BEDROCK

bgs — BELOW GROUND SURFACE
DCA — 1,2-DICHLOROETHANE
DRO — DIESEL RANGE ORGANICS
EDB — 1,2-DIBROMOETHANE
EBZ — ETHYLBENZENE
LOD — LIMIT OF DETECTION
LOQ — LIMIT OF QUANTITATION
NA — ANALYSIS NOT PERFORMED
ND — DETECTION LIMIT (LOD IN PARENTHESE FOR DATA PRIOR TO 2012; LOD IN PARENTHESES FOR DATA STARTING IN 2012)
NM — NOT MEASURED

AP-7673
95-110 bgs

	MAR-APR 1999	SEPT-OCT 1999	OCT 2001	MARCH 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	2.49	2.05	1.9	1.34	2.17	2.17	1.11	ND(0.5)	0.69	0.32	0.76	0.63	ND(1)	ND(0.2)	ND(0.2)	0.14
EDB	0.378	0.123	0.137	0.127	0.163	0.11	ND(0.0185)	0.0462	0.014	ND(0.020)	0.016	0.034	0.0046	0.034	ND(0.0099)	ND(0.004)
BENZENE	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	0.31	ND(1)	ND(1)	0.95	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.7	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
WATER ELEV.	NM	425.25	429.92	428.65	429.49	429.33	428.45	428.55	428.37	428.06	428.53	427.92	428.38	428.97	427.94	431.69

AP-7594
68-83 bgs

	AUG-SEPT 1998	NOV-DEC 1998	MAR-APR 1999	SEPT-OCT 1999	JUNE 2000	AUG 2001	MAY 2002	MARCH 2003	APRIL 2004	MAY 2005	MARCH 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	32.1	ND(1)	24.5	33.4	29.6	28.4	24.7	27.8	21.3	22.5	ND(12.5)	22	16	14	18	15	12	14	11
EDB	542	506	607	460	310	228	704	311	343	352	330	190	170	200	150	150	160	94	
BENZENE	27.1	24.4	15	17.5	12.3	17.4	9.43	13.4	12	1.91	ND(10)	2.8	0.81	2.3	3.5	2.4	1.7	2.9	0.59
TOLUENE	ND(1)	ND(1)	1.06	ND(1)	4.48	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(25)	0.12	ND(1)	0.10	ND(0.4)	0.19	ND(0.4)	0.19	ND(0.4)
EBZ	ND(1)	ND(1)	2.79	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(25)	0.3	ND(1)	0.15	0.19	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
WATER ELEV.	427.94	426.60	427.63	426.92	428.45	428.47	427.34	427.87	428.88	427.25	427.45	427.01	426.87	427.31	426.91	427.49	427.87	426.88	431.07

AP-7597
22-32 bgs

	AUG-SEPT 1998	NOV-DEC 1998	MAR-APR 1999	SEPT-OCT 1999	JUNE 2000	AUG 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(0.002)	ND(1)	ND(0.0196)	ND(0.0297)	ND(0.0202)	ND(0.0199)	ND(0.0244)	ND(0.0182)	ND(0.0188)	ND(0.02)	ND(0.020)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
EDB	6.77	35.5	29.3	4.43	12.5	30.4	23.1	18.6	37.7	3	0.37	3.1	1.5	4.9	0.84	0.65	1.5	0.73	ND(0.1)
BENZENE	1.43	ND(1)	ND(1)	2.76	7.03	ND(1)	ND(1)	ND(1)	0.1	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(0.1)
EBZ	39.8	35.3	11.8	8.89	11.8	16.2	7.88	13.3	26.0	3.2	0.52	4.1	1.5	7.0	3.3	2.5	3.3	2.6	0.57
WATER ELEV.	429.34	426.92	425.86	426.15	427.12	426.86	425.59	426.28	426.17	425.21	425.45	425.20	424.95	425.25	425.45	426.46	426.53	425.87	430.61

AP-7528
84-104 bgs

	MAY-JUNE 1998	AUG-SEPT 1998	NOV-DEC 1998	SEPT-OCT 1999	JUNE 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MAY 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2012	JULY 2013	
DCA	ND(10)	ND(1)		ND(10)	113	ND(10)	ND(100)	ND(10)	52.2	4.2	50.2	85.1	ND(100)	54	58	43	44	51	NOT
EDB	523	480		591	43.6	564	286	877	97.5	97.9	62.1	68	19	5.8	3.2	0.38	SAMPLED		
BENZENE	1,920	4,430		5,070	2,300	3,360	1,740	4,070	1,600	1,530	2,620	367	2,100	1,700	590	3,000	DUE TO		
TOLUENE	524	592		2,240	222	80.1	ND(100)	38.8	88.4	68.7	12.8	12.2	11	8	14	11	POOR		
EBZ	395	338		1,230	328	112	614	319	295	393	335	180	250	200	250	350	RECHARGE		
WATER ELEV.	NM	425.98		426.58	426.24	427.34	427.99	425.47	424.17	428.69	425.15	425.73	425.24	424.66	425.03	424.79			

AP-8424
OCT 2014

DCA 70
EDB 2.6
BENZENE 35
TOLUENE 0.37
EDZ 2.1
WATER ELEV. NA

AP-7813 COULD NOT BE SAMPLED IN 2014 BECAUSE THE EXTRACTION PUMP WAS FOUND STUCK AT THE BOTTOM OF THE WELL. AP-8424 WAS SAMPLED INSTEAD OF AP-7813.

AP-7813
75-90 bgs

	NOV 2000	NOV 2001	SEPT 2002	MAR 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	SEPT 2012	JUNE 2013
DCA	198	ND(1)	133	100	67.8	85.4	96.2	94	66	76	91	74	91	83
EDB	85.2	95.5	33.6	57.4	2.29	0.197	1.27	0.67	1.2	1.1	0.22	0.29	0.41	0.49
BENZENE	2,140	1,940	1,450	1,620	467	284	209	190	120	110	72	36	34	33
TOLUENE	845	122	59.8	56.8	2.80	2.88	1.73	1.9	4.9	2.5	0.48	0.98	1.7	0.85
EDZ	350	101	129	123	31.2	21.1	19.4	14	13	12	7.1	5.3	5.7	3.7
WATER ELEV.	NA	NA	NA	NA	425.87	425.22	425.90

AP-10234MW (11.5-21.5 bgs)

	APRIL 1997	AUG 1997	APRIL 1998	OCT 1998	MARCH 1999	SEPT 1999	MARCH 2000	APRIL 2001	APRIL 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	NOV 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.2	2.4	2.8	1.8	2.6	NA	4.8	4.5	3.9	3.0	
EDB	NA	NA	NA	NA	ND(1)	ND(1)	ND(0.0029)	ND(0.0029)	ND(0.019)	ND(0.0197)	ND(0.0202)	ND(0.0194)	ND(0.0194)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.01)	ND(1)
BENZENE	400	140		1.1	2.84	ND(1)	ND(1)	1.01	0.9	ND(0.4)	ND(0.4)	0.59	0.34	0.24	0.12	0.33	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.4)	0.08
TOLUENE	57	20	ND(1)	ND(1)	1.09	1.05	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.23	0.14	0.33	ND(1)	ND(1)	NA	ND(0.4)	ND(0.4)	ND(0.4)	0.07
EBZ	20	185	2.7	ND(1)	43.6	18.2	ND(1)	20.2	4.01	2.78	2.64	ND(1)	0.39	0.47	0.25	0.37	0.13	ND(1)	NA	0.22	0.26	ND(0.4)	0.11
DRO																	2,800	1,600	1,200	1,800	2,000	1,400	1,200
GRO																	240	130	880	850	650	NA	830
WATER ELEV.	423.26	424.96	424.29	426.27	424.75	425.51	424.61	425.49	424.41	425.56	425.61	424.50	424.81	424.75	424.57	424.62	425.03	426.06	426.71	426.49	425.9	425.82	430.49

AP-10227MW (16-26 bgs)

	OCT 1998	SEPT 1999	DEC 1999	MARCH 2000	APRIL 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	1.22	3	3.4	1.2	6.3	2.5	NA	15	23	17	3.1
EDB	ND(1)	ND(0.008)	ND(0.008)	ND(0.0271)	ND(0.0271)	ND(0.0293)	ND(0.0195)	ND(0.0203)	ND(0.0211)	ND(0.0187)	ND(0.0184)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.01)	ND(1)
BENZENE	37.5	4.07	6.73	1.04	43.6	3.54	ND(0.4)	ND(0.4)	1.84	1.29	1.2	0.87	0.82	0.42	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)	0.45
TOLUENE	433	2.57	2.19	ND(1)	15.1	ND(1)	ND(1)	ND(1)	0.43	0.41	0.17	0.56	ND(1)	0.23	NA	0.33	ND(0.4)	ND(0.4)	ND(0.4)	0.12
EBZ	278	69.3	178	ND(1)	118	368	11.6	21.4	21.3	47.3	40	76	32	38	7.1	NA	53	9.9	9.0	1.9
DRO														13,000	22,000	6,700	3,200	3,300	3,100	6,000
GRO														610	400	2,800	1,400	960	NA	910
WATER ELEV.	423.44	422.82	NM	421.92	422.82	424.69	425.79	425.39	424.72	424.93	424.72	424.60	424.72	424.94	426.19	426.81	426.54	425.88	425.84	430.61

AP-8583 (15-25 bgs)

	OCT 1998	MARCH 1999	NOV 1999	JUNE 2000	APRIL 2001	APRIL 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(1)	ND(1)	0.17	0.35	0.66	NA	1.5	ND(0.2)	1.7	
EDB	ND(1)	ND(1)	ND(0.002)	ND(0.002)	ND(0.0319)	ND(0.0205)	ND(0.0219)	ND(0.0204)	ND(0.0192)	ND(0.0191)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	0.47	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	0.14	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)	
TOLUENE	66	1.4	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.13	0.12	0.26	ND(1)	ND(1)	NA	ND(0.4)	1.5	0.07	
EBZ	231	88.8	ND(1)	17.8	16.7	6.05	6.19	6.11	ND(1)	1.8	0.57	0.11	0.72	0.56	ND(1)	NA	0.33	0.34	0.05	
DRO														1,300	340	490	450	1,500	390	
GRO														190	170	63	NA	NA	NA	
WATER ELEV.	426.35	424.73	425.47	426.95	425.51	424.48	425.52	425.31	424.50	424.82	424.70	424.50	424.36	425.05	426.05	427.17	426.32	425.77	430.39	

1173-MP4 (25-33 bgs)

	OCT 1998	SEPT 1999	DEC 1999	MAR 2000	APR 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2011	SEPT 2012
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	0.25	0.20	0.73	1.6	ND(1)	NA	WELL WAS
EDB	ND(1)	ND(0.002)	ND(0.002)	ND(0.0219)	ND(0.0213)	ND(0.0296)	ND(0.0185)	ND(0.0209)	ND(0.0185)	ND(0.0187)	ND(0.0187)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	DECOMMISSIONED
BENZENE	39	ND(1)	ND(1)	19.4	ND(1)	0.73	ND(0.4)	0.75	0.54	0.96	1.5	2.1	0.89	0.084	ND(1)	NA	DUE TO BEING
TOLUENE	1.4	2.67	ND(1)	5.03	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.35	0.18	0.76	ND(1)	ND(1)	NA	BROKEN OFF BELOW
EBZ	70	1.17	2.49	6.06	1.14	15.7	ND(1)	ND(1)	ND(1)	0.84	0.67	0.65	0.43	ND(1)	ND(1)	NA	GROUND
DRO														1,800	1,000	1,600	
GRO														150	110	51	
WATER ELEV.	427.27	426.82	426.30	NM	426.76	NM	NM	425.49	424.49	425.02	424.75	424.57	424.66	424.72	425.77	426.72	

AP-10231MW (GWP-200A) (16-26 bgs)

	SEPT 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA		ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	0.22	0.25	NOT	NA	0.6	1.3	0.49	1.4
EDB		ND(0.0198)	ND(0.0198)	ND(0.02)	ND(0.0194)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	SAMPLED	NA	ND(0.2)	ND(0.2)	ND(0.0099)	ND(0.20)
BENZENE		ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	0.12	0.11	DUE TO	NA	ND(0.2)	ND(0.2)	ND(0.2)	0.07
TOLUENE		ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.16	0.31	POOR	NA	ND(0.4)	ND(0.4)	ND(0.4)	0.09
EBZ		ND(1)	ND(1)	ND(1)	ND(1)	0.23	0.14	0.17	0.19	RECHARGE	NA	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.1)
DRO		NM							3,200	1,900	3,100	2,100	1,300		
GRO									34		NA	NA	NA		
WATER ELEV.		426.22	426.64	424.96	425.24	425.11	425.88	425.12	425.23		427.03	426.80	426.03	426.08	430.79

STEESE CHAPEL (32-42 bgs)

	MAY 1998	DEC 1998	APRIL 1999	OCT 1999	APRIL 2000	MARCH 2001	MAY 2002	AUG 2003	APRIL 2004	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	ND(1)	2.44	2.74	2.65	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.3	1.8	1.3	1.4
EDB	ND(1)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.0203)	ND(0.0314)	ND(0.0217)	ND(0.0192)	ND(0.0217)	ND(1)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.2)	ND(0.2)	ND(0.1)
DRO										110	170	200	NA
GRO										42	NA	NA	NA
WATER ELEV.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

AP-10233 (9.5-19.5 bgs)

	JUNE 1996	APRIL 1997	APRIL 1998	OCT 1998	MARCH 1999	MARCH 2000	APRIL 2001	APRIL 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	NOV 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA	12	ND(1)	2.9	4.9	4.03	3.21	2.28	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	1.1	1.4	2.0	3.0	4.0	NA	3.3	3.6	2.7	0.15
EDB	ND(1)	ND(1)	NA	ND(1)	ND(0.002)	ND(0.0201)	ND(0.0339)	ND(0.0189)	ND(0.0195)	ND(0.0211)	ND(0.0196)	ND(0.0197)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.0099)	ND(0.2)
BENZENE	280	450	29	8.1	4.94	2.77	2.7	1.6	1.48	0.56	ND(0.4)	ND(0.4)	ND(1)	ND(1)	0.15	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)	0.09
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.22	0.13	0.29	ND(1)	ND(1)	NA	ND(0.4)	ND(0.4)	ND(0.1)
EBZ	4	ND(1)	ND(1)	ND(1)	9.63	1.51	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.25	0.14	0.17	0.22	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
DRO																2,200	1,300	1,200	1,100	1,100	810	180
GRO																200	180	120	NA	NA	NA	NA
WATER ELEV.	427.80	424.99	428.27	426.55	425.54	424.55	425.42	424.31	425.50	425.32	424.39	424.53	424.32	424.07	424.05	424.45	425.46	426.64	426.43	426.02	425.80	430.44

AP-10232MW (8.5-18.5 bgs)

	JUNE 1996	APRIL 1997	APRIL 1998	OCT 1998	MARCH 1999	MARCH 2000	APRIL 2001	APRIL 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	SEPT 2012	JUNE 2013	SEPT 2013	OCT 2014
DCA	12	3.3	3.3	1.4	1.85	1.53	1.29	ND(1)	1.18	ND(1)	ND(0.5)	ND(0.5)	0.33	0.23	0.34	ND(1)	ND(1)	NA	0.17	0.62	ND(0.15)	
EDB	ND(1)	ND(1)	NA	ND(1)	ND(0.002)	ND(0.0203)	ND(0.0319)	ND(0.0191)	ND(0.0210)	ND(0.0211)	ND(0.02)	ND(0.0187)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)	
BENZENE	63	ND(1)	ND(1)	ND(1)	1.39	8.25	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	ND(1)	ND(1)	0.10	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	1.08	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA	ND(0.4)	ND(0.4)	ND(0.4)	0.09
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	1.08	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.1)
DRO																440	340	100	130	310	160	
GRO																ND(50)	6.4	9.6	NA	NA	NA	
WATER ELEV.	427.52	424.97	426.50	424.59	425.56	424.46	425.30	NM	424.69	424.97	424.18	424.30	424.21	423.87	423.87	424.22	428.21	426.48	426.48	426.09	430.20	

AP-7845 (41-46 bgs)

	NOV 1999	APRIL 2000	MARCH 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	10.6	7.02	2.64	4.07	2.34	1.69	1.36	1.28	1.3	1.3	1.3	2.5	2.3	NA	1.9	2.6	1.6
EDB	ND(0.002)	ND(0.023)	ND(0.0311)	ND(0.0205)	ND(0.0197)	ND(0.0215)	ND(0.0191)	ND(0.0296)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	1.28	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	0.11	ND(1)	ND(1)	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	1.44	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.18	0.19	0.22	0.13	1.5	NA	ND(0.4)	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.11	0.13	0.093	0.095	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
DRO												1,900	1,000	520	630	800	430
GRO												58	60	51	NA	NA	NA
WATER ELEV.	423.55	422.64	425.24	425.24	425.19	425.03	424.45	424.64	424.55	424.20	424.38	424.89	426.14	426.66	425.83	425.76	429.66

AP-10228MW (13-23 bgs)

	MAY 1997	OCT 1997	MAY 1998	OCT 1998	MAR 1999	SEPT 1999	MARCH 2000	APRIL 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	0.21	NA	0.29	ND(0.2)	0.16
EDB	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.002)	ND(0.0215)	ND(0.0306)	ND(0.0202)	ND(0.0193)	ND(0.0214)	ND(0.0197)	ND(0.0192)	ND(0.0218)	ND(0.0202)	ND(0.020)	0.023	ND(0.010)	ND(1)	NA	ND(0.2)
BENZENE	3,560	31.9	5.1	ND(1)	21.5	ND(1)	5.43	3	5.28	ND(0.4)	1.45	2.54	1.9	4.2	4.2	5.7	1.3	NA	3.0	0.47	0.78	
TOLUENE	20	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.75	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.46	0.17	0.33	ND(1)	0.61	NA	ND(0.4)	0.74	0.17	
EBZ	40	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5.7	0.11	0.63	0.091	0.40	NA	0.24	ND(0.2)	0.25	
DRO															15,000	8,800	1,900	2,200	5,100	3,600	12,000	
GRO															46	38	14	18	NA	NA	NA	
WATER ELEV.	425.09	425.02	423.96	426.01	NM	425.50	424.33	425.21	424.97	425.23	425.02	424.36	424.03	424.42	424.20	424.37	424.87	426.10	426.42	426.26	425.97	429.97

AP-10230MW (13-23 bgs)

	AUG 1997	OCT 1997	JULY 1998	OCT 1998	MAR 1999	SEP 1999	MARCH 2000	APRIL 2001	MAY 2002	MARCH 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	JUNE 2013	OCT 2014
DCA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	0.21	NA	0.22	
EDB	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.002)	ND(0.0215)	ND(0.0306)	ND(0.0202)	ND(0.0193)	ND(0.0214)	ND(0.0197)	ND(0.0197)	0.01	ND(0.020)	ND(0.020)	ND(0.010)	ND(1)	NA	
BENZENE	5,330	4,680	204	25.2	119	4.57	ND(1)	5.7	1.3	NA	0.69	1.53	2.72	4.2	1.7	1.1	1.1	0.64	NA	ND(0.2)	2.1	
TOLUENE	1,320	720	12	7.4	2.73	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.29	0.48	0.43	ND(1)	0.48	NA	0.66	0.32	
EBZ	120	161	43	5	22.1	14.6	ND(1)	ND(1)	4.87	10.3	3.3	3.66	3.27	3.29	0.11	10	3.1	6.4	3.9	NA	0.31	0.44
DRO																	5,600	10,000	17,000	38,000	10,000	44,000
GRO																	120	100	75	230	NA	NA
WATER ELEV.	425.05	424.86	NM	426.17	NM	425.33	424.32	425.22	424.96	425.20	425.00	424.38	424.51	424.41	424.16	424.37	424.81	426.13	421.01	425.67	430.01	

AP-10232MW (GWP-33) (13.5-23.5 bgs)

	JUNE 1996	APRIL 1997	APRIL 1998	OCT 1998	MAR 1999	SEPT 1999	MARCH 2000	APRIL 2001	MAY 2002	SEPT 2002	MARCH 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	NOV 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)	
EDB	NA	ND(1)	ND(1)	ND(1)	ND(0.002)	ND(0.0095)	ND(0.0363)	ND(0.0217)	ND(0.0214)	ND(0.0140)	ND(0.0184)	ND(0.0191)	ND(0.0197)	ND(0.02)	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)	
BENZENE	1,290	ND(1)	2.09	ND(1)	2.09	2.09	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.4)	ND(0.4)	0.52	1.3	1.4	0.86	1.4	0.63	NA	ND(0.2)	ND(0.2)	
TOLUENE	5.5	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.16	0.15	0.27	0.091	ND(1)	NA	ND(0.4)	ND(0.4)	ND(0.1)	
EBZ	40	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.24	0.26	0.18	ND(1)	0.26	NA	ND(0.4)	
DRO																0.11	ND(1)	3,300	6,300	2,700	1,200	950	
GRO																		ND(50)	ND(50)	16	9.5	NA	
WATER ELEV.	NM	NM	423.61	NM	423.61	423.61	NM	424.31	424.30	427.90	424.51	424.40	423.96	423.76	423.60	423.34	423.48	424.06	425.47	425.42	426.27		

C-12 (25-30 bgs)

	JUNE 1998	DEC 1998	APRIL 1999	OCT 1999	APRIL 2000	MAR 2001	MAY 2002	AUG 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2006
DCA	12.6	10.2	10.4	6.28	9.84	2.66	1.60	2.12	ND(1)	ND(0.5)	1.44	
EDB	ND(1)	ND(1)	ND(0.002)	ND(0.002)	ND(0.0219)	ND(0.0300)	ND(0.0205)	ND(0.0213)	ND(0.0193)	ND(0.0191)	ND(0.0197)	
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	
WATER ELEV.	424.18	425.44	424.33	425.29	424.24	425.21	425.24	427.67	425.15	424.57	424.73	

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AP-9958 (30-40 bgs)

	NOV 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	0.58	ND(1)	ND(1)	ND(1)	NA	0.34	0.41	0.26
EDB	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	0.11	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	0.15	0.44	0.12	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
EBZ	0.064	0.073	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
DRO			450	ND(240)	140	190	310	200
GRO				ND(50)	8.6	8.1	NA	NA
WATER ELEV.	426.72	421.45	424.82	425.79	426.84	425.95	425.73	429.51

AP-9956 (49-59 bgs)

	NOV 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	2.0	0.81	1.5	1.1	NA	1.1	1.2	1.3
EDB	ND(0.020)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	0.12	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	0.28	0.18	0.12	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
EBZ	0.094	ND(1)	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
DRO			750	160	230	300	420	170
GRO			34	24	18	NA	NA	NA
WATER ELEV.	426.57	424.27	424.77	425.80	426.78	425.89	425.72	429.36

UAF-ML7 (52-62 bgs)

	MAY 1998	AUG 1998	JUNE 1999	OCT 1999	MAY 2002	AUG 2003	APRIL 2004	MARCH 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JULY 2011	OCT 2011	SEPT 2012	JUNE 2013	OCT 2014
DCA	4.56	4.63	3.85	3.93	3.51	3.08	2.88	2.91	2.92	2.7	2.4	2.2	2.6	2.1	NA	1.6	1.9	2.0
EDB	ND(1)	ND(1)	ND(0.002)	ND(0.002)	ND(0.0205)	ND(0.0203)	ND(0.0218)	ND(0.0229)	ND(0.0213)	ND(0.0195)	ND(0.022)	ND(0.023)	ND(0.0037)	ND(0.010)	ND(1)	NA	ND(0.2)	ND(0.2)
BENZENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	0.13	ND(1)	ND(1)	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.28	0.12	0.23	0.094	ND(1)	NA	ND(0.4)	0.21	0.19
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.094	ND(1)	0.062	ND(1)	ND(1)	NA	ND(0.2)	ND(0.2)	ND(0.1)
DRO													640	290	140	210	310	NA
GRO													21	17	14	NA	NA	NA
WATER ELEV.	424.10	427.07	424.82	425.31	423.77	427.68	425.30	424.24	423.45	425.06	424.12	432.70	424.82	426.14	426.79	425.92	425.77	429.24

AP-7844 (41-46 bgs)

| | NOV 1999 | APRIL 2000 | MARCH 2001 | MAY 2002 | MARCH 2003 | APRIL 2004 | MARCH 2005 | APRIL 2006 | APRIL 2007 | APRIL 2008 | APR

Table 5-10 - Groundwater Sample Results in Bedrock Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
						Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS					**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Wells Upgradient and East of the Birch Hill Product Recovery System												
AP-7596	07FWBH16WG	4/16/2007	425.66	NA		**7,800**	**2,900**	420	78 J	43 J	ND(100)	**14**
	07FWBH60WG	9/11/2007	426.67	NA		**6,200**	**2,500**	480	120	33	**870**	**9.74**
	08FWBH23WG	4/23/2008	425.29	NA		**7800 Q**	**2900 Q**	470 Q	120 Q	33 Q	**1100 Q**	**4.7**
	08FWBH60WG	9/30/2008	428.96	NA		**4,100**	**1,300**	290	87	26	**640**	**3.1**
	09FWBH35WG	5/1/2009	425.65	NA		**7,000 QL**	**5,800 QL**	630 QL	120 QL	30 QL	**1,800 QL**	**25 QL,QH**
	10FWBH27WG	6/28/2010	425.49	NA	NA	**14,000 Q**	**6,400 Q**	660 Q	140 Q	40 Q	**1,400 Q**	**0.36 Q**
	11FW3BH30WG	7/5/2011	426.38	NA	NA	**3,600 Q**	880 Q	270 Q	60 Q	21 Q	**580 Q**	**3.7 Q**
	12FW3BHB28WG	9/27/2012	426.85	NA	NA	**3,300 Q**	420 Q	140 Q,QH	43 Q,QH	28 Q,QH	**660 Q**	**1.6 Q**
	13FW3BHB13WG	6/4/2013	426.06	NA	NA	**7,200 QH**	**3,000 QH**	320 QH	86 QH	ND(8)	**1,200 QH**	**0.35**
	14FWOU317WG	10/15/2014	431.02	0.66	NA	**3,000**	650	170	40	12 J	**340**	**8.9**
AP-7852	10FWBH22WG	6/29/2010	438.14	NA	NA	0.56 J	0.14 J, B	ND(1)	ND(1)	ND(1)	1.2	**56 J, QL**
	11FW3BH58WG	7/8/2011	437.82	0.39	NA	0.52 J	0.33 J	ND(1)	ND(1)	ND(1)	1.9	**45**
	11FW3BH59WG[2]	7/8/2011	437.82	0.39	NA	0.47 J	0.31 J	ND(1)	ND(1)	ND(1)	1.8	**50**
	12FW3BHB22WG	9/24/2012	437.28	0.86	NA	0.47 J	0.17 J	ND(0.2)	ND(0.2)	ND(0.4)	0.95 J	**82**
	13FW3BHB18WG	6/4/2013	437.52	1.16	NA	0.45 J	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	**85**
	13FW3BHB49WG	9/9/2013	437.57	0.4	190 J	0.35 J	0.19 J	ND(0.2)	ND(0.2)	ND(0.4)	3.6	**58**
	14FWOU310WG	10/14/2014	438.45	1.2	NA	0.5	0.17 J	ND(0.1)	ND(0.2)	ND(0.2)	1.1	**58**
AP-7594	10FWBH18WG	6/28/2010	426.91	NA	NA	3.2 Q	0.092 J, B, Q	0.15 J, Q	0.15 J, Q	ND(1) Q	**18 Q**	**200 QL, Q**
	10FWBH19WG[2]	6/28/2010	426.91	NA	NA	3.5 Q	ND(1) Q	0.19 J, Q	0.16 J, Q	ND(1) Q	**18 Q**	**200 QL, Q**
	11FW3BH15WG	7/2/2011	427.49	0.94	NA	2.2	ND(1)	ND(1)	ND(1)	ND(1)	**15**	**160**
	11FW3BH16WG[2]	7/2/2011	427.49	0.94	NA	2.4	ND(1)	ND(1)	ND(1)	ND(1)	**14**	**170**
	12FW3BHB21WG	9/24/2012	427.87	3.98	NA	1.7	0.19 J	ND(0.2)	ND(0.2)	ND(0.4)	**12**	**150**
	13FW3BHB08WG	6/3/2013	426.88	0.66	NA	2.9	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	**14**	**160**
	14FWOU304WG	10/13/2014	431.31	0.33	NA	0.59	0.19 J	ND(0.1)	ND(0.2)	ND(0.2)	**11**	**94**
AP-7673	09FWBH05WG	4/10/2009	428.50	NA		0.95 J	ND(1)	1.7	1.5	0.86 J	0.76 J	0.016 J
	10FWBH20WG	6/28/2010	427.91	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.63 J	0.034
	11FW3BH17WG	7/2/2011	428.36	4.07	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.0046 J
	12FW3BHB23WG	9/26/2012	428.97	3.73	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	0.034
	13FW3BHB04WG	6/3/2013	427.94	3.85	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.0099)
	14FWOU306WG	10/14/2014	431.78	3.46	NA	ND(0.1)	0.12 J	ND(0.1)	ND(0.2)	ND(0.2)	0.13 J	ND(0.004)
	14FWOU307WG[2]	10/14/2014	431.78	3.46	NA	ND(0.1)	0.14 J	ND(0.1)	ND(0.2)	ND(0.2)	0.14 J	ND(0.004)

Table 5-10 - Groundwater Sample Results in Bedrock Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
						Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS					**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Wells within the Birch Hill Product Recovery System Treatment Area												
AP-7854	10FWBH33WG	6/29/2010	Extraction wells converted to monitoring wells. Wells have not been surveyed.	0.70	NA	**9.3**	0.54 J, B	95	48	40	**9.7**	ND(1)
	10FWBH34WG[2]	6/29/2010		0.70	NA	**9.1**	0.41 J, B	91	47	40	**9.8**	ND(1)
	11FW3BH62WG	7/11/2011		0.78	NA	**9.6**	0.23 J	160	38	41	ND(1)	ND(1)
	12FW3BHB44WG	10/1/2012		6.42	NA	**14 QH**	1.1 QH	190 QH	38 QH	46 QH	ND(0.2) QH	ND(0.2) QH
	13FW3BHB27WG	6/5/2013		0.29	NA	**11 QH**	0.29 J,QH	160 J,QH	25 QH	48 QH	ND(0.2)	ND(0.2)
	14FWOU305WG	10/13/2014		0.07	NA	**46**	0.47 J	140	35	19	0.26 J	ND(5.0)
AP-7855	10FWBH35WG	6/29/2010		0.82	NA	1.7	0.45 J, B	23	29	17	**6.3**	ND(1)
	11FW3BH61WG	7/11/2011		1.28	NA	0.7 J	ND(1)	16	6.6	4.6	ND(1)	ND(1)
	12FW3BHB43WG	10/1/2012		0.21	NA	0.45 J	ND(0.4)	5.1	11	6.7	**6.9**	ND(0.2)
	13FW3BHB21WG	6/5/2013		0.39	NA	ND(0.2)	ND(0.4)	0.9 J	1.6	ND(0.4)	**5.9**	ND(0.2)
	14FWOU366WG	10/18/2014		0.63	NA	0.6	ND(0.1)	6.2	2.4	1.4 J	**6.1**	ND(1.0)
AP-7856	10FWBH36WG	6/29/2010		0.78	NA	4.3	0.37 J, B	26	2.2	1.4	1.2	ND(0.02)
	11FW3BH64WG	7/11/2011		0.78	NA	3.4	ND(1)	5.8	ND(1) Q	0.63 J	1.1 Q	ND(1)
	11FW3BH65WG[2]	7/11/2011		0.78	NA	3.7	ND(1)	6.1	0.69 J	0.72 J	ND(1)	ND(1)
	12FW3BHB42WG	10/1/2012		0.17	NA	1.6 ML	0.34 J	6.6	0.87 J,ML	ND(0.2)	ND(0.2)	ND(0.2)
AP-7859	10FWBH32WG	6/29/2010	Extraction well converted to monitoring well. Well has not been surveyed.	0.55	NA	**270**	13	360	69	51	**40**	ND(1)
	11FW3BH55WG	7/7/2011		0.72	NA	**130 QH**	6.2 QH	130 QH	30 QH	25 QH	**41 QH**	ND(1)
	12FW3BHB41WG	10/1/2012		0.34	NA	**15**	3.2	51	18	20	**40**	ND(1)
	13FW3BHB05WG	6/4/2013		0.19	NA	**39 QH**	5.7 QH	88 QH	32 QH	26 QH	**42 QH**	ND(0.2)
	14FWOU367WG	10/18/2014		0.43	NA	**220 J+**	7.2 J+	130 J+	45 J+	43 J+	**9.5 J+**	ND(0.2)
AP-7600	10FWBH31WG	6/29/2010		0.70	NA	**6.6**	0.24 J, B	27	20	7	**130**	ND(1)
	11FW3BH54WG	7/7/2011		1.16	NA	3.9	ND(1)	21	13	3.9	**110**	ND(1)
	12FW3BHB40WG	10/1/2012		1.00	NA	3.7 QL	ND(0.4) QL	4.4 QL	5.8 QL	0.57 J,B,QL	**110 QL**	ND(0.2) QL
	13FW3BHB25WG	6/5/2013		0.28	NA	3.7	ND(0.4)	3.3	4.7	ND(0.4)	**110**	ND(0.2)
	13FW3BHB26WG[2]	6/5/2013		0.28	NA	4.1	ND(0.4)	3.6	4.4	ND(0.4)	**110**	ND(0.2)
	14FWOU363WG	10/17/2014		0.51	NA	3.2	0.14 J	2.6 J	11	3.5	**110**	ND(0.2)
AP-7525	10FWBH13WG	6/27/2010	425.26	1.52	NA	0.69 J	ND(1)	4.7	1	2.4	**22**	ND(1)
	10FWBH14WG[2]	6/27/2010	425.26	1.52	NA	0.66 J, QH	ND(1)	5.9 QH	1.1 QH	3 QH	**23**	ND(1)
	11FW3BH56WG	7/7/2011	426.30	2.12	NA	1.9 QH	0.21 J, QH	6.3 QH	1 QH	5.1 QH	**21 QH**	ND(1)
	12FW3BHB39WG	10/1/2012	426.23	2.53	NA	0.63 J	0.26 J	6.5	0.86 J	4.3	**16**	ND(0.2)
	13FW3BHB01WG	6/3/2013	426.01	0.23	NA	ND(0.2)	ND(0.4)	25 QH	1.1 QH	9.7 QH	**14 MH,QH**	ND(0.2)
	14FWOU301WG	10/13/2014	430.68	0.11	NA	1.8 J-	0.31 J,J-	3.9 J-	0.74 J,J-	7.9 J-	**8.8 J-**	ND(0.2) J-
AP-7848	WELL NOT SAMPLED IN 2010 DUE TO PRESENCE OF NAPL											
	11FW3BH60WG	7/8/2011	431.11	0.07	NA	**1,200**	120	**1,100**	220	170	ND(5)	ND(5)
	12FW3BHB38WG	10/1/2012	0.51	3.35	NA	**1,000**	21	**960**	170	130	ND(0.8)	ND(0.8)
	WELL NOT SAMPLED IN 2013/2014 DUE TO PRESENCE OF NAPL											

Table 5-10 - Groundwater Sample Results in Bedrock Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
						Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS					**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
AP-7813	10FWBH24WG	6/30/2010	425.88	0.77	NA	**72**	0.48 J, B	7.1	26	17	**91**	**0.22**
	11FW3BH63WG	7/11/2011	426.87	0.8	NA	**36**	0.98 J	5.3	21	12	**74**	**0.29**
	12FW3BHB24WG	9/26/2012	427.17	0.12	NA	**29 QH**	1.3 QH	4.4 QH	19 QH	9.3 QH	**91**	**0.41 Q**
	12FW3BHB25WG[2]	9/26/2012	427.17	0.12	NA	**34 QH**	1.7 QH	5.7 QH	20 QH	10 QH	**87**	**0.35 Q**
	13FW3BHB14WG	6/4/2013	426.15	0.1	NA	**33 QH**	0.85 J,QH	3.7 QH	17 QH	11 QH	**83 QH**	**0.49**
	13FW3BHB15WG[2]	6/4/2013	426.15	0.1	NA	**29 QH**	0.81 J,QH	3.7 QH	17 QH	12 QH	**81 QH**	**0.49**
	Well not sampled in 2014 due to an obstrucion in the well. AP-8424 was sampled as a replacement.											
AP-8424	14FWOU302WG	10/13/2014	431.06	0.18	NA	**35 J**	0.36 J	2.1	4.3	4	**68 J**	**2.1**
	14FWOU303WG[2]	10/13/2014	431.06	0.18	NA	**33**	0.37	1.9	4.1	3.7	**70**	**2.6**
AP-7530	10FWBH26WG	6/30/2010	427.37	1.21	NA	**5.2**	1.1 B	90	140	75	**82**	ND(1)
	11FW3BH39WG	7/7/2011	428.51	2.16	NA	**5.2**	0.88 J	97	110	54	**67**	ND(4)
	12FW3BHB37WG	10/1/2012	426.24	2.08	NA	**5.4 Q,QH**	0.54 J,Q,QH	93 Q,QH	93 Q,QH	46 Q,QH	**67 QH**	ND(0.2)
	13FW3BHB16WG	6/4/2013	425.62	0.19	NA	4.4 QH	ND(0.4)	26 QH	27 QH	50 QH	**26 QH**	ND(0.2)
	14FWOU312WG	10/14/2014	432.73	0.47	NA	3.3 J	0.34 J	59 J	90 J	42 J	**42 J**	ND(1.0) J
Wells at the Base of Birch Hill												
AP-7595	10FWBH21WG	6/28/2010	424.87	NA	NA	0.21 J,Q	0.16 J,B,Q	29 Q	66 Q	60 Q	ND(0.2) Q	ND(0.01) Q
	WELL NOT SAMPLED IN 2011 DUE TO PRESENCE OF NAPL											
	12FW3BHB27WG	9/27/2012	426.35	0.17	NA	ND(0.8)	ND(1.6)	2.3 J	12	14	ND(0.8)	ND(0.0097)
	13FW3BHB02WG	6/3/2013	425.48	0.15	NA	ND(0.2)	ND(0.4)	0.65 J	4.8	11	ND(0.2)	ND(0.0098)
	13FW3BHB03WG[2]	6/3/2013	425.48	0.15	NA	ND(0.2)	ND(0.4)	0.68 J	5	10	ND(0.2)	ND(0.0098)
	14FWOU311WG	10/14/2014	430.48	0.85	NA	ND(0.1)	0.38 J	1.3	3.1	3.2	ND(0.2)	ND(0.004)
AP-7597	10FWBH10WG	6/25/2010	425.45	NA	NA	0.84 J,QL,Q	ND(1) QL,Q	3.3 QL,Q	3.2 QL,Q	ND(1) QL,Q	3.1 QL,Q	ND(1) QL,Q
	11FW3BH28WG	7/6/2011	426.46	6.09	NA	0.65 J	ND(1)	7	9.7	7.8	3.5	ND(1)
	12FW3BHB36WG	10/1/2012	426.53	1.86	NA	1.5	ND(0.4)	3.3	3.3	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3BHB12WG	6/4/2013	425.87	2.03	NA	0.73 J	ND(0.4)	1.4	4.2	4.3	ND(0.2)	ND(0.2)
	14FWOU364WG	10/17/2014	430.64	0.23	NA	ND(0.1)	ND(0.1)	0.57	3.9	ND(0.2)	1.5	ND(0.2)
	14FWOU365WG[2]	10/17/2014	430.64	0.23	NA	ND(0.1)	ND(0.1)	0.55	3.8	ND(0.2)	1.5	ND(0.2)
AP-10226MW[1] (1173 MP-1)	10FWBH30WG	6/28/2010	425.24	3.78	NA	**3,300 QL**	860 QL	**1,300 QL**	810 QL	150 QL	**140 QL**	ND(0.01) QL
	11FW3BH66WG	7/11/2011	426.34	1.35	NA	**1,400**	440	600	420	130	ND(4)	0.031
	12FW3BHB26WG	9/27/2012	425.38	0.17	NA	**2,600**	6.1 J	81	39	16	**190**	0.043
	13FW3BHB17WG	6/4/2013	424.54	0.25	NA	**2,300**	ND(4)	36	4.5 J	7.7 J	**230**	0.039 QL
	13FW3BHB45WG	9/9/2013	424.67	0.18	**10,000**	**2,300**	5.5 B	63	30	14	**260**	0.036 QH
	13FW3BHB46WG[2]	9/9/2013	424.67	0.18	**10,000**	**2,200**	5.1 B	59	28	14	**230**	0.035 QH
	14FWOU314WG	10/14/2014	429.40	0.26	NA	**1,800**	2.8	26	13	4.8 J	**150**	0.027

Table 5-10 - Groundwater Sample Results in Bedrock Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
						Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS					**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
AP-8422	10FWBH29WG	6/28/2010	425.27	6.19	NA	**190**	50	160	170	78	**49**	ND(1)
	11FW3BH57WG	7/7/2011	426.42	0.25	NA	**73**	6.2	65	67	34	**53**	ND(1)
	12FW3BHB34WG	10/1/2012	426.37	3.28	NA	**88**	6.0	73	74	34	**44**	ND(0.2)
	12FW3BHB35WG[2]	10/1/2012	426.37	3.28	NA	**83**	6.4	70	74	37	**47**	ND(0.2)
	13FW3BHB28WG	6/5/2013	425.72	0.23	NA	**85**	3.9 J	56	53	37	**56**	ND(0.8)
	13FW3BHB47WG	9/9/2013	425.87	0.12	**5,800**	**140**	3.8 B	64	73	34	**55**	ND(0.0099)
	14FWOU368WG	10/18/2014	430.52	0.3	NA	**49**	3.2	36	60	34	**41**	ND(1.0)
AP-7816	09FWBH14WG	4/13/2009	424.95	0.41		0.35 J,B	0.18 J	8.8	28	22	ND(1)	ND(1)
	10FWBH11WG	6/25/2010	425.05	0.19	NA	0.53 J, QL	ND(1) QL	1.9 QL	7.1 QL	5.3 QL	0.66 J,QL	ND(1) QL
	11FW3BH11WG	7/1/2011	426.11	0.69	NA	2.3	ND(1)	9.3	10	6.6	0.83 J	ND(1)
	12FW3BHB33WG	9/28/2012	426.25	0.22	NA	0.61 J	ND(0.4)	2.5	14	13	1.3	ND(0.2)
	WELL NOT SAMPLED IN 2013 DUE TO PRESENCE OF NAPL											
	14FWOU369WG	10/18/2014	429.41	0.16	NA	0.94	0.07 J,B	4.5	20	19	0.56	ND(1.0)
AP-6071	10FWBH01WG	6/25/2010	425.03	1.74	NA	0.99 J	ND(1)	0.15 J, B	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH33WG	7/7/2011	425.89	1.24	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	12FW3BHB32WG	9/28/2012	426.14	0.58	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3BHB09WG	6/4/2013	425.23	7.55	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	Well was destroyed by heavy equipment during Lazelle Road realignment.											
Wells Along CANOL, in the Thaw Channel, or Off-Post												
AP-6560	10FWBH15WG	6/27/2010	424.97	0.62	NA	0.13 J	ND(1)	0.066 J,B	0.063 J	ND(1)	1.1	ND(1)
	11FW3BH13WG	7/1/2011	425.89	1.31	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.2	ND(1)
	12FW3BHB01WG	9/24/2012	426.08	0.31	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.2	ND(0.2)
	13FW3BHB23WG	6/5/2013	425.59	0.4	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.2	ND(0.2)
	14FWOU362WG	10/17/2014	429.98	0.42	NA	ND(0.1)	0.06 J	ND(0.1)	ND(0.2)	ND(0.2)	0.31 J	ND(0.2)
AP-9181	10FWBH16WG	6/27/2010	424.94	0.85	NA	0.22 J	0.78 J	0.41 J	4.2	1.9	1	ND(1)
	11FW3BH12WG	7/1/2011	425.85	1.81	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(1)
	12FW3BHB31WG	9/27/2012	426.10	0.91	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.1	ND(0.2)
	13FW3BHB24WG	6/5/2013	425.62	0.45	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.90 J	ND(0.2)
	14FWOU361WG	10/17/2014	430.05	0.35	NA	ND(0.1)	0.07 J	ND(0.1)	ND(0.2)	ND(0.2)	1.2	ND(0.2)
AP-7730	11FW3BH14WG	7/1/2011	425.32	1.22	NA	0.54 J	ND(1)	ND(1)	ND(1)	ND(1)	1.1	ND(0.02)
	12FW3BHB02WG	9/24/2012	426.09	0.1	NA	0.54 J	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.010)
	12FW3BHB03WG[2]	9/24/2012	426.09	0.1	NA	0.53 J	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.0097)
	13FW3BHB10WG	6/4/2013	425.52	1.93	NA	0.60 J	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.5	ND(0.0099)
	14FWOU313WG	10/14/2014	430.02	0.31	NA	0.52	0.14 J	ND(0.1)	0.12 J	ND(0.2)	1.6	ND(0.004)
AP-7846	10FWBH12WG	6/25/2010	424.93	0.47	NA	0.92 J	ND(1)	ND(1)	ND(1)	ND(1)	0.45 J	ND(1)
	11FW3BH02WG	6/29/2011	425.88	2.83	NA	0.32 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	12FW3BHB29WG	9/27/2012	426.07	0.54	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.62 J	ND(0.2)
	13FW3BHB11WG	6/4/2013	425.51	1.39	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU332WG	10/15/2014	429.92	0.4	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	0.78	ND(0.2)

Table 5-10- Groundwater Sample Results in Bedrock Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
						Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS					**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
AP-7598	10FWTH12WG	6/22/2010	425.00	0.49	NA	ND(1)	0.11 J	ND(1)	0.13 J	ND(1)	1.8	ND(0.01) QL
	11FW3BH25WG	7/5/2011	426.02	0.98	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.5	ND(1)
	12FW3BHB04WG	9/24/2012	426.06	0.23	360	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.2)
	13FW3BHB41WG	6/10/2013	425.77	0.39	560	ND(0.2)	0.57 J	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.2)
	14FWOU347WG	10/15/2014	429.88	0.56	350 J-	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	1.2	ND(0.2)
AP-9957	10FWTH04WG	2/10/2010	424.48	1.41	NA	ND(1)	ND(1)	0.15 J	ND(1)	ND(1)	0.62 J	ND(0.02)
	10FWTH08WG	6/22/2010	424.77	0.18	NA	ND(1)	0.12 J, Q	ND(1)	0.060 J	ND(1)	ND(1) Q	ND(0.01) QL
	10FWTH13WG[2]	6/22/2010	424.77	0.18	NA	ND(1)	0.19 J	ND(1)	ND(1)	ND(1)	0.71 J	ND(0.01) QL
	10FWTH30WG	8/17/2010	425.28	0.11	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.61 J	ND(0.10)
	10FWTH35WG	11/9/2010	424.89	0.65	NA	ND(1)	ND(1)	0.11 J,QH	ND(1)	ND(1)	0.76 J, QH	ND(0.021)
	11FW3BH06WG	6/30/2011	425.68	0.86	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.02)
	11FW3BH08WG[2]	6/30/2011	425.68	0.86	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.02)
	12FW3BHB06WG	9/25/2012	425.87	0.19	180 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.84 J	ND(0.2)
	12FW3BHB07WG[2]	9/25/2012	425.87	0.19	180 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.83 J	ND(0.2)
	13FW3BHB42WG	6/11/2013	425.68	1.70	300	ND(0.2)	0.21 J	ND(0.2)	ND(0.2)	ND(0.4)	0.63 J	ND(0.2)
	14FWOU346WG	10/15/2014	429.80	0.44	180 J,J-	ND(0.1)	0.11 J	ND(0.1)	ND(0.2)	ND(0.2)	0.73 J	ND(0.2)
AP-9959	10FWTH02WG	2/10/2010	425.31	0.88	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.75 J	ND(0.02)
	10FWTH03WG[2]	2/10/2010	425.31	0.88	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.72 J	ND(0.02)
	10FWTH07WG	6/22/2010	425.52	0.28	NA	ND(1)	0.18 J	ND(1)	ND(1)	ND(1)	0.78 J	ND(0.01) QL
	10FWTH27WG	8/17/2010	426.25	0.11	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.81 J	ND(0.02)
	10FWTH28WG[2]	8/17/2010	426.25	0.11	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.75 J	ND(0.019)
	10FWTH33WG	11/9/2010	425.69	0.61	NA	ND(1)	ND(1) B,QH	ND(1)	ND(1)	ND(1)	0.61 J,QH	ND(0.20)
	11FW3BH04WG	6/30/2011	426.55	1.26	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.72 J	ND(0.02)
	12FW3BHB05WG	9/25/2012	426.64	0.29	260	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.91 J	ND(0.2)
	13FW3BHB43WG	6/11/2013	426.48	1.51	390	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.72 J	ND(0.2)
	13FW3BHB44WG[2]	6/11/2013	426.48	1.51	370	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.69 J	ND(0.2)
	14FWOU341WG	10/15/2014	430.25	0.33	220 J,J-	ND(0.1)	0.06 J	ND(0.1)	ND(0.2)	ND(0.2)	0.62	ND(0.2)
	14FWOU342WG[2]	10/15/2014	430.25	0.33	200 J,J-	ND(0.1)	0.07 J	ND(0.1)	ND(0.2)	ND(0.2)	0.60	ND(0.2)

Bold results represent concentrations in excess of remedial action goals

[1] Replacement wells installed in November 2011. Wells that were replaced are shown in parentheses.

[2] Denotes sample is a field duplicate of preceding row.

[3] 1,2-Dibromoethane results were generated from either Method 8260 or Method 504.1. Results from Method 504.1 were used when available.

ND - not detected at the detection limit (LOQ in parentheses for data prior to 2012. LOD in parentheses for data staring in 2012.)

DRO - diesel range organics
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligram per liter
msl - mean sea level
NA - not analyzed
NM - not measured
ROD - Record of Decision

Table 5-11 - Groundwater Sampling Results in Multi-Level Monitoring Wells (Bedrock)
Birch Hill Tank Farm

Probe/Well Number	Port Number	Port Elevation (feet msl)	Sample Number	Date	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
									Benzene	Toluene	Ethyl benzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloroethane ethane	1,2-Dibromoethane[2]
CLEANUP LEVELS								**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Wells on Birch Hill															
AP-8783	Port 5	399.9	08FWBH22WG	4/23/2008	2.01	0	7.7		ND(1)	0.13 J,B	0.13 J	ND(1)	0.14 J	ND(1)	0.012 J
			08FWBH48WG	9/25/2008	0.89	0	10.8		ND(1)	0.10 J,B	ND(1)	ND(1)	ND(1)	ND(1)	0.015 J
			09FWBH27WG	4/15/2009	0.30	0	23.1		0.35 J	0.43 J	0.13 J	ND(1)	ND(1)	ND(1)	0.0065 J
			13FW3BHB06WG	6/4/2013	0.45	NA	NA		ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.0099)
			14FWOU316WG	10/15/2014	0.39	NA	NA		ND(0.1)	0.09 J	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.15)	0.016
	Port 6	420.4	08FWBH49WG	9/25/2008	2.06	31	0		**420 QH**	22 QH	15 QH	100 QH	8.3 QH	**300 QH**	**0.91 QH**
			09FWBH28WG	4/15/2009	1.19	26.8	31.1		**3,400 QL**	**2,700 QL**	340	160	ND(1)	**690**	0.031
			10FWBH28WG	6/28/2010	1.21	21.6	<8.0	NA	**300 Q**	5.5 Q	8.6 Q	110 Q	9.3 Q	**230 Q**	**0.19 Q**
			11FW3BH31WG	7/5/2011	0.94	NA	NA	NA	**3,300**	210	170	100	12 J	**610**	**0.061**
			12FW3BHB08WG	9/24/2012	0.40	NA	NA	NA	**3,300**	510	160	76	10 J	**520**	ND(0.0097)
			13FW3BHB07WG	6/4/2013	0.78	NA	NA	NA	**4,000 QH**	530 QH	220 QH	80 QH	12 QH	**720 QH**	**0.45**
			14FWOU315WG	10/15/2014	0.51	NA	NA	NA	**1,500**	170	38	22	2.7 J	**210**	**0.43**
Wells on Birch Hill															
AP-8890	Port 5		13FW3BHB19WG	6/5/2013	1.18	NA	NA	NA	ND(0.2)	0.24 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.0099)
			14FWOU308WG	10/14/2014	1.52	NA	NA	NA	ND(0.1)	0.24 J	ND(0.1)	ND(0.2)	ND(0.2)	0.09 J	ND(0.004)
	Port 6	423.00	07FWBH50WG	9/10/2007	5.29	0	4.2		ND(1)	0.12 J	ND(1)	ND(1)	ND(1)	**27**	**22**
			08FWBH21WG	4/23/2008	NM	0	5		ND(1)	ND(1)	0.15 J	0.087 J	0.16 J	**31**	**11**
			08FWBH47WG	9/25/2008	NM	0	8.6		1	0.22 J,B	3	2.8	2	**21**	**14**
			09FWBH26WG	4/15/2009	NM	0	42		ND(1)	0.37 J	ND(1)	ND(1)	ND(1)	**27**	**15**
			10FWBH17WG	6/27/2010	3.02	<0.45	10.8	NA	0.17 J,Q	1.0 Q	0.15 J,Q	ND(1) Q	ND(1) Q	**33 Q**	**14 Q**
			11FW3BH29WG	7/6/2011	0.94	NA	NA	NA	ND(1) Q	ND(1) Q	ND(1) Q	ND(1) Q	ND(1) Q	**31 Q**	**12 Q**
			12FW3BHB09WG	9/24/2012	3.74	NA	NA	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	**32**	**9.4**
			13FW3BHB20WG	6/5/2013	3.78	NA	NA	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	**31**	**11**
			14FWOU309WG	10/14/2014	3.33	NA	NA	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	**23**	**4.1**
Wells at the Base of Birch Hill															
AP-8784	Port 1	303.00	10FWBH02WG	6/25/2010	0.12	<0.45	33.7	NA	0.46 J	ND(1)	0.11 J,B	ND(1)	ND(1)	2.6	ND(1)
			11FW3BH47WG	7/7/2011	2.31	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(1)
			12FW3BHB15WG	9/25/2012	0.14	NA	NA	ND(67)	ND(0.2)	0.17 J	ND(0.2)	ND(0.2)	ND(0.4)	1.9	ND(0.2)
			13FW3BHB30WG	6/6/2013	0.14	NA	NA	ND(67)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.5	ND(0.2)
			14FWOU349WG	10/16/2014	0.27	NA	NA	43 J,J-,B	ND(0.1)	0.14 J	ND(0.1)	ND(0.2)	ND(0.2)	2.3	ND(0.2)
	Port 2	312.50	10FWBH03WG	6/25/2010	0.10	<0.45	32.1	NA	ND(1)	ND(1)	0.072 J,B	ND(1)	ND(1)	3.7	ND(1)
			11FW3BH48WG	7/7/2011	3.94	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	3.4	ND(1)
			12FW3BHB06WG	9/25/2012	0.83	NA	NA	ND(68)	ND(0.2)	0.36 J	0.17 J	ND(0.2)	ND(0.4)	2.6	ND(0.2)
			13FW3BHB31WG	6/5/2013	0.21	NA	NA	74 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	2.9	ND(0.2)
			14FWOU350WG	10/16/2014	0.39	NA	NA	42 J,J-,B	ND(0.1)	0.17 J	ND(0.1)	ND(0.2)	ND(0.2)	3.1	ND(0.2)
	Port 3	325.00	10FWBH04WG	6/25/2010	0.23	<0.45	30.6	NA	0.21 J	ND(1)	0.12 J, B	ND(1)	ND(1)	3.3	ND(1)
			11FW3BH49WG	7/7/2011	0.81	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	3.4	ND(1)
			12FW3BHB17WG	9/25/2012	0.41	NA	NA	ND(70)	ND(0.2)	ND(0.4)	0.22 J	ND(0.2)	ND(0.4)	3.9	ND(0.2)
			13FW3BHB32WG	6/5/2013	0.40	NA	NA	41 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	3.1	ND(0.2)
			14FWOU351WG	10/16/2014	0.27	NA	NA	38 J,J-,B	ND(0.1)	0.09 J	ND(0.1)	ND(0.2)	ND(0.2)	3.6	ND(0.2)
	Port 4	337.50	10FWBH05WG	6/25/2010	0.48	<0.45	31.2	NA	0.080 J, QL	ND(1) QL	0.069 J,B,QL	0.058 J,QL	ND(1) QL	2.3 QL	ND(1) QL
			11FW3BH50WG	7/7/2011	6.39	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.5	ND(1)
			12FW3BHB18WG	9/25/2012	0.92	NA	NA	ND(68)	ND(0.2)	ND(0.4)	0.19 J	ND(0.2)	ND(0.4)	2.4	ND(0.2)
			13FW3BHB33WG	6/5/2013	0.58	NA	NA	35 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	3.4	ND(0.2)
			14FWOU352WG	10/16/2014	0.95	NA	NA	51 J,J-,B	0.08 J	0.06 J	ND(0.1)	ND(0.2)	ND(0.2)	3.4	ND(0.2)
	Port 5	352.00	10FWBH06WG	6/25/2010	0.18	<0.45	27.9	NA	0.14 J	ND(1)	0.11 J, B	ND(1)	ND(1)	4	ND(1)
			11FW3BH51WG	7/7/2011	2.08	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	4.1	ND(1)
			12FW3BHB19WG	9/25/2012	0.29	NA	NA	ND(68)	ND(0.2)	ND(0.4)	0.22 J	ND(0.2)	ND(0.4)	3.8	ND(0.2)
			13FW3BHB34WG	6/5/2013	0.16	NA	NA	59 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	3.9	ND(0.2)
			14FWOU353WG	10/16/2014	0.30	NA	NA	47 J,J-,B	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	4.9	ND(0.2)

Table 5-11 - Groundwater Sampling Results in Multi-Level Monitoring Wells (Bedrock)
Birch Hill Tank Farm

Probe/Well Number	Port Number	Port Elevation (feet msl)	Sample Number	Date	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	ROD Contaminants of Concern (µg/L)						
									Benzene	Toluene	Ethyl benzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloroethane ethane	1,2-Dibromoethane[2]
CLEANUP LEVELS								**1,500**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
AP-8784 (Continued)	Port 6	369.50	10FWBH07WG	6/25/2010	0.03	9.7	25	NA	0.53 J,QL	ND(1) QL	0.11 J,B,QL	0.094 J,QL	ND(1) QL	3.6 QL	ND(1) QL
			10FWBH08WG[1]	6/25/2010	0.03	NA	NA	NA	0.59 J	ND(1)	0.1 J, B	ND(1)	ND(1)	3.7	ND(1)
			11FW3BH52WG	7/7/2011	9.33	NA	NA	NA	0.31 J	ND(1)	ND(1)	ND(1)	ND(1)	3.8	ND(1)
			11FW3BH53WG[1]	7/7/2011	9.33	NA	NA	NA	0.31 J	ND(1)	ND(1)	ND(1)	ND(1)	3.9	ND(1)
			12FW3BHB20WG	9/25/2012	0.85	NA	NA	ND(69)	0.21 J	ND(0.4)	0.22 J	ND(0.2)	ND(0.4)	3.5	ND(0.2)
			13FW3BHB35WG	6/5/2013	0.50	NA	NA	82 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	4	ND(0.2)
			14FWOU354WG	10/16/2014	0.19	NA	NA	43 J,J-,B	0.07 J	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	4.7	ND(0.2)
Wells at the Thaw Channel															
AP-8891	Port 1	312.50	10FWTH20WG	6/24/2010	0.20	NA	NA	NA	1.9	0.19 J	0.079 J	ND(1)	ND(1)	ND(1)	ND(0.01) QL
			11FW3BH40WG	7/6/2011	0.36	NA	NA	NA	1.3	0.22 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
			12FW3BHB10WG	9/24/2012	0.21	NA	NA	500	1.5	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
			14FWOU355WG	10/16/2014	0.18	NA	NA	360 J,J-	0.97	0.07 J	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.2)
	Port 2	318.00	10FWTH21WG	6/24/2010	0.25	NA	NA	NA	1.8	ND(1)	0.088 J	0.11 J	ND(1)	ND(1)	ND(0.01) QL
			11FW3BH41WG	7/6/2011	0.95	NA	NA	NA	1.5	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
			13FW3BHB36WG	6/10/2013	0.25	NA	NA	570 J-	1.4	0.21 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	Port 3	326.50	10FWTH22WG	6/24/2010	0.21	NA	NA	NA	0.53 J	0.13 J	0.25 J	0.074 J	ND(1)	ND(1)	ND(0.01) QL
			11FW3BH42WG	7/6/2011	0.19	NA	NA	NA	0.44 J	0.38 J	0.23 J	ND(1)	ND(1)	ND(1)	ND(1)
			12FW3BHB11WG	9/24/2012	0.39	NA	NA	290	0.30 J	ND(0.4)	0.17 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
			13FW3BHB37WG	6/10/2013	0.12	NA	NA	420	0.22 J	0.38 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
			14FWOU356WG	10/16/2014	0.19	NA	NA	140 J,J-	0.07 J	0.06 J	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.2)
	Port 4	337.00	10FWTH23WG	6/24/2010	0.30	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.01) QL
			11FW3BH43WG	7/6/2011	0.16	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
			12FW3BHB12WG	9/24/2012	0.45	NA	NA	70 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
			13FW3BHB38WG	6/10/2013	0.14	NA	NA	130 J	ND(0.2)	0.21 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
			14FWOU357WG	10/16/2014	0.20	NA	NA	57 J,J-	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.2)
	Port 5	347.50	10FWTH24WG	6/24/2010	0.17	NA	NA	NA	0.067 J, B	ND(1)	ND(1)	ND(1)	ND(1)	0.26 J	ND(0.01) QL
			11FW3BH44WG	7/6/2011	4.62	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
			12FW3BHB13WG	9/24/2012	0.28	NA	NA	150 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.35 J	ND(0.2)
			13FW3BHB39WG	6/10/2013	0.08	NA	NA	250	ND(0.2)	0.23 J	ND(0.2)	ND(0.2)	ND(0.4)	0.36 J	ND(0.2)
			14FWOU258WG	10/16/2014	0.13	NA	NA	93 J,J-	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	0.14 J	ND(0.2)
	Port 6	374.00	10FWTH25WG	6/24/2010	0.32	NA	NA	NA	ND(1)	0.10 J	ND(1)	0.098 J	0.054 J	2	ND(0.01) QL
			11FW3BH45WG	7/6/2011	0.24	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.8	ND(1)
			11FW3BH46WG[1]	7/6/2011	0.24	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.8	ND(1)
			12FW3BHB14WG	9/24/2012	0.44	NA	NA	680	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.6	ND(0.2)
			13FW3BHB40WG	6/10/2013	0.11	NA	NA	980	ND(0.2)	0.18 J	ND(0.2)	ND(0.2)	ND(0.4)	2.2	ND(0.2)
			14FWOU359WG	10/16/2014	0.09	NA	NA	510 J,J-	ND(0.1)	ND(0.1)	ND(0.1)	0.07 J	ND(0.2)	1.8	ND(0.2)

Bold results represent concentrations in excess of remedial action goals
[1] Denotes sample is a field duplicate of preceding row.
[2] 1,2-Dibromoethane results were generated from either Method 8260 or Method 504.1. Results from Method 504.1 were used when available.

DRO - diesel range organics
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligram per liter
msl - mean sea level
NA - not analyzed
NM - not measured
ROD - Record of Decision

Data Qualifiers
B - analyte was detected in blank sample at similar concentration
J - result is estimated because it is less than the LOQ or due to a QC failure
J- or J+ - result is estimated with a high (+) or low (-) bias due to a QC failure (data starting in 2014)
ML or MH - result is estimated with a high (H) or low (L) bias due to matrix interference (data prior to 2014)
ND - not detected at the detection limit (LOQ in parentheses for data prior to 2012. LOD in parentheses for data staring in 2012.)
Q - result is estimated and biased (H-high/L-low) due to quality control failure (data prior to 2014)

Table 5-12 - Groundwater Sample Results in Alluvial Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO	GRO	ROD Contaminants of Concern (µg/L)						
									Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS							**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Building 1173 (Base of Birch Hill)															
AP-10227MW[1] (AP-7603)	10FWA03WG	6/24/2010	424.94	1.35	10	230 J	**13,000**	610	0.42 J	ND(1)	38 J, MH	32 J, MH	9.4	**6.3**	ND(0.01)
	11FW3BH35WG	7/6/2011	426.19	0.62	18	70	**22,000**	400	ND(1)	0.23 J	7.1	5	4.3	2.5	ND(1)
	11FW3BH86WG	11/14/2011	426.81	0.54	2.8	6.7	**6,700**	**2,800**	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA13WG	9/27/2012	426.54	0.47	13	6.1	**3,200**	1,400	ND(0.2)	0.33 J,QH	53 QH	190 ML,QH	110 ML,QH	**15 QH**	ND(0.2) QH
	13FW3BHA03WG	6/10/2013	425.88	0.2	10	3.8 J	**3,300**	950	ND(0.2)	ND(0.4)	11	140	85	**23**	ND(0.2)
	13FW3BHA04WG[2]	6/10/2013	425.88	0.2	10	3.7 J	**3,200**	960	ND(0.2)	ND(0.4)	9.9	130	83	**23**	ND(0.2)
	13FW3BHA23WG	9/5/2013	425.84	0.23	NM	NM	**3,100**	NA	ND(0.2)	ND(0.4)	9	120	77	**17**	ND(0.010)
	14FWOU321WG	10/13/2014	430.61	0.38	19.1 J-	423	**6,000**	910	0.45 J	0.12 J	1.9 J	34	23	3.1	ND(1.0)
AP-10231MW[1] (GWP-2002A)	WELL NOT SAMPLED IN JUNE 2011 DUE TO POOR RECHARCGE														
	11FW3BH85WG	11/14/2011	427.03	0.38	0.084	3.2 ML	**3,200 ML**	84	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA21WG	9/27/2012	426.8	0.21	27	430	**1,900**	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.6 J	ND(0.2)
	13FW3BHA01WG	6/10/2013	426.03	0.2	30	380	**2,800**	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.2	ND(0.2)
	13FW3BHA02WG[2]	6/10/2013	426.03	0.2	28	380	**3,100**	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.2)
	13FW3BHA22WG	9/5/2013	426.08	0.26	NM	NM	**2,100**	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.49 J	ND(0.0099)
	14FWOU322WG	10/13/2014	430.79	0.23	6.6	404	1,300	NA	0.07 J	0.09 J	ND(0.1)	0.13 J	0.09 J	1.4	ND(0.20)
AP-6583	10FWA01WG	6/23/2010	425.05	0.77	NA	NA	1,300	190 B	ND(1)	ND(1)	0.56 J	3.3	0.16 J	0.35 J	ND(0.01) QL
	11FW3BH10WG	6/30/2011	426.05	2.57	14.0	150.0	340	170	ND(1)	ND(1)	ND(1)	1.4	1.4	0.66 J	ND(1)
	11FW3BH81WG	10/7/2011	427.17	0.78	NA	NA	490	63	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA20WG	9/29/2012	426.32	0.19	2.2	130.0	450	NA	ND(0.2)	ND(0.4)	0.33 J	2.0	ND(0.4)	1.5	ND(0.2)
	13FW3BHA06WG	6/11/2013	425.77	0.45	6.6	120.0	**1,500**	NA	ND(0.2)	1.5	0.34 J	1.3	1.4	ND(0.2)	ND(0.2)
	14FWOU323WG	10/13/2014	430.39	0.23	1.8	167.0	390 J	NA	ND(0.1)	0.07 J	0.05 J	0.43 J	ND(0.2)	1.7	ND(0.2)
AP-10234MW[1] (GWP-45)	10FWA02WG	6/23/2010	425.03	0.75	NA	NA	**2,800**	240 B	ND(1)	ND(1)	0.13 J, B	0.93 J	ND(1)	3.8	ND(0.01) QL
	11FW3BH07WG	6/30/2011	426.06	4.03	3.6	120.0	**1,600**	130	ND(1)	ND(1)	ND(1)	0.5 J	0.36 J	2.8	ND(1)
	11FW3BH87WG	11/14/2011	426.71	0.40	0.9	1.2	1,200	880	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA14WG	9/27/2012	426.49	0.16	16.0	44.0	**1,800**	840	ND(0.2)	ND(0.4)	0.17 J	1.3	ND(0.4)	4.8	ND(0.2)
	12FW3BHA15WG[2]	9/27/2012	426.49	0.16	15.0	42.0	**1,800**	850	ND(0.2)	ND(0.4)	0.22 J, B	1.4	ND(0.4)	4.7	ND(0.2)
	13FW3BHA05WG	6/10/2013	425.90	0.19	15.0	46.0	**2,000**	650	ND(0.2)	ND(0.4)	0.26 J	0.57 J	ND(0.4)	4.5	ND(0.2)
	13FW3BHA24WG	9/5/2013	425.82	0.25	NM	NM	1,400	NM	ND(0.4)	ND(0.8)	ND(0.4)	0.87 J	1.2 J	3.9	ND(0.010)
	14FWOU324WG	10/13/2014	430.49	0.11	10.8	80.3	1,200	620	0.07 J	0.08 J	0.11 J	0.8 J	ND(0.2)	3	ND(0.2) QH
	14FWOU325WG	10/13/2014	430.49	0.11	10.3	79.4	1,200	630	0.08 J	0.07 J	0.09 J,J-	0.78 J	ND(0.2)	2.9	ND(0.2) J-
AP-10233MW[1] (GWP-34)	10FWA05WG	6/24/2010	424.45	1.3	NA	NA	**2,100**	200	ND(1)	ND(1)	0.22 J, B	0.28 J	ND(1)	2.8	ND(0.01)
	10FWA06WG[2]	6/24/2010	424.45	1.3	NA	NA	**2,200**	200 B	ND(1)	ND(1)	0.22 J, B	0.25 J	ND(1)	3	ND(0.01)
	11FW3BH09WG	6/30/2011	425.46	5.57	28.0	81.0	1,300	190	ND(1)	ND(1)	ND(1)	0.28 J	ND(1)	4	ND(1)
	11FW3BH88WG	11/14/2011	426.64	0.24	0.2	1.2	1,200	170	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA17WG	9/27/2012	426.43	0.16	21.0	100.0	1,100	NA	ND(0.2)	ND(0.4)	ND(0.2)	0.22 J	ND(0.4)	3.3	ND(0.2)
	13FW3BHA20WG	6/12/2013	426.02	0.72	17.0	93.0	1,100	NA	ND(0.2)	ND(0.4)	ND(0.2)	0.29 J	ND(0.4)	3.6	ND(0.2)
	13FW3BHA25WG	9/5/2013	425.8	0.23	NM	NM	810	NM	ND(0.2)	ND(0.4)	ND(0.2)	0.28 J	ND(0.4)	2.7	ND(0.0099)
	14FWOU326WG	10/13/2014	430.44	3.01	0.0119 J,B	190.0	180 J	NM	ND(0.1)	ND(0.1)	ND(0.1)	0.07 J	ND(0.2)	0.15 J	ND(0.2)
AP-10232MW[1] (GWP-33)	10FWA07WG	6/24/2010	424.22	6.46	NA	NA	440	ND(50)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.01)
	11FW3BH32WG	7/6/2011	428.21	5.37	44.0	140.0	340	6.4 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH89WG	11/15/2011	426.48	2.74	NA	NA	100 J, Q	9.5 J, B	NA	NA	NA	NA	NA	NA	NA
	11FW3BH90WG[2]	11/15/2011	426.48	2.74	NA	NA	61 J	9.6 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA18WG	9/27/2012	426.28	6.89	0.026 J	120	130 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	12FW3BHA19WG[2]	9/27/2012	426.28	6.89	0.022 J	120	130 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.17 J	ND(0.2)
	13FW3BHA21WG	6/12/2013	426.09	0.51	ND(0.03)	120	310	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.62 J	ND(0.2)
	14FWOU327WG	10/14/2014	430.2	3.44	0.004 J,B	89	160 J	NA	ND(0.1)	0.09 J	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.2)

Table 5-12 - Groundwater Sample Results in Alluvial Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO	GRO	ROD Contaminants of Concern (µg/L)						
									Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS							**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Thaw Channel/CANOL Road/Off-Post															
AP-7844	10FWTH11WG	6/22/2010	424.76	0.59	NA	NA	150	43 B	ND(1)	0.091 J	ND(1)	0.094 J	ND(1)	2.3	ND(0.01) QL
	11FW3BH21WG	7/5/2011	426.07	4.79	12.0	100.0	910	49	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH77WG	10/7/2011	426.86	0.44	NA	NA	610	41	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA12WG	9/26/2012	425.78	0.10	10.0	77.0	470	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	2.4	ND(0.2)
	13FW3BHA10WG	6/11/2013	425.66	0.35	11.0	16.0	800	NA	ND(0.2)	0.85 J	ND(0.2)	ND(0.2)	ND(0.4)	2.2	ND(0.2)
	14FWOU331WG	10/15/2014	429.54	0.91	10.1	63.6	NA	NA	ND(0.1)	0.06 J	ND(0.1)	0.07 J	ND(0.2)	2.2	ND(0.2)
AP-7845	10FWTH10WG	6/22/2010	424.89	0.53	NA	NA	**1,900**	58 B	ND(1)	0.13 J	0.095 J	0.17 J	ND(1)	2.5	ND(0.01) QL
	11FW3BH22WG	7/5/2011	426.14	5.96	10.0	97.0	1,000	60	ND(1)	0.84 J, Q	ND(1)	ND(1)	ND(1)	2.3	ND(1)
	11FW3BH23WG[2]	7/5/2011	426.14	5.96	11.0	97.0	1,000	60	ND(1)	1.5	ND(1)	ND(1)	ND(1)	2.3	ND(1)
	11FW3BH76WG	10/7/2011	426.66	0.90	NA	NA	520	51	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA16WG	9/27/2012	425.83	2.17	10.0	81.0	630	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.9	ND(0.2)
	13FW3BHA09WG	6/11/2013	425.76	0.77	11.0	76.0	800	NA	ND(0.2)	1.4	ND(0.2)	0.22 J	ND(0.4)	2.6	ND(0.2)
	14FWOU348WG	10/15/2014	429.66	0.41	9.8	62.1	430 J,J-	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	1.6	ND(0.2)
AP-5782	10FWTH15WG	6/22/2010	424.83	0.48	12	120	**1,800**	52 B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.2	ND(0.01) QL
	11FW3BH27WG	7/5/2011	426.00	1.00	9.5 J	84	490	26 B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH78WG	10/7/2011	426.87	0.74	NA	NA	250	19 J	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA10WG	9/26/2012	425.95	0.22	10.0	77.0	460	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	2.0	ND(0.2)
	13FW3BHA17WG	6/12/2013	425.77	1.65	9.5	66.0	420	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.83 J	ND(0.2)
	14FWOU333WG	10/15/2014	429.76	0.43	7.4	35.1	NA	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	0.56	ND(0.2)
AP-5783	10FWTH14WG	6/22/2010	424.91	1.02	NA	NA	570	ND(50)	ND(1) B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.01) QL
	11FW3BH26WG	7/5/2011	426.02	9.15	0.3	11.0	300	ND(25)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH79WG	10/7/2011	426.94	5.90	NA	NA	39 J	9.5 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA09WG	9/26/2012	426.04	3.06	0.1	9.8	ND(67)	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3BHA18WG	6/12/2013	425.84	7.78	0.091 J	5.4	160 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU334WG	10/15/2014	429.86	1.98	1.09	14.8	NA	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
AP-7952	10FWTH18WG	6/23/2010	424.99	0.37	NA	NA	970	20 J, B	ND(1) B	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(0.01) QL
	10FWTH19WG[2]	6/23/2010	424.99	0.37	NA	NA	970	21 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(0.01) QL
	11FW3BH24WG	7/5/2011	426.16	1.23	9.5	65.0	270	15 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH80WG	10/7/2011	426.99	0.20	NA	NA	97 J	11 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA11WG	9/26/2012	426.08	0.17	9.4	56.0	250	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.81 J	ND(0.2)
	13FW3BHA19WG	6/12/2013	425.91	0.99	9.9	62.0	330	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.61 J	ND(0.2)
	14FWOU335WG	10/15/2014	429.90	0.32	7.3	24.3	NA	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	0.21 J	ND(0.2)
Shannon Park	10FWTH16WG	6/23/2010	424.76	0.19	NA	NA	630	33 J	ND(1) B	0.15 J	ND(1)	ND(1)	ND(1)	1.3	ND(0.01) QL
	11FW3BH36WG	7/6/2011	426.07	0.86	14.0	34.0	420	17 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.73 J	ND(1)
	11FW3BH75WG	10/6/2011	426.80	1.16	NA	NA	220 J	20 J, B	NA	NA	NA	NA	NA	NA	NA
	13FW3BHA15WG	6/12/2013	425.72	0.37	9.0	ND(0.5)	210 J	NA	ND(0.2)	0.25 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU337WG	10/15/2014	429.24	0.42	10.3	1.6	NA	NA	ND(0.1)	0.14 J	ND(0.1)	ND(0.2)	ND(0.2)	0.42 J	ND(0.2)
Steese Chapel	11FW3BH83WG	10/10/2011	NM	NA	6.4	64.0	89 J	ND(25) Q	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.2	ND(1)
	11FW3BH84WG[2]	10/10/2011	NM	NA	6.4	63.0	110 J	42	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.3	ND(1)
	12FW3BHA23WG	9/28/2012	NM	NA	9.1	61.0	170 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.8	ND(0.2)
	13FW3BHA14WG	6/11/2013	NM	NA	10.0	60.0	200 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.3	ND(0.2)
	14FWOU336WG	10/15/2014	NM	NA	8.5	52.7	NA	NA	ND(0.1)	0.09 J	ND(0.1)	ND(0.2)	ND(0.2)	1.4	ND(0.2)
UAF ML7-80'	10FWTH17WG	6/23/2010	424.82	0.35	NA	NA	640	21 J	ND(1) B	0.094 J	ND(1)	0.061 J	ND(1)	2.6	ND(0.01) QL
	11FW3BH37WG	7/6/2011	426.14	1.38	11.0	71.0	250	17 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(1)
	11FW3BH38WG[2]	7/6/2011	426.14		NA	NA	290	15 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.1	ND(1)
	11FW3BH74WG	10/6/2011	426.79	1.74	NA	NA	140 J	14 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA04WG	9/25/2012	425.92	0.17	11.0	59.0	210 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.6	ND(0.2)
	13FW3BHA16WG	6/12/2013	425.77	0.54	12.0	66.0	310	NA	ND(0.2)	0.21 J	ND(0.2)	ND(0.2)	ND(0.4)	1.9	ND(0.2)
	14FWOU338WG	10/15/2014	429.24	0.53	10.1	52.0	NA	NA	ND(0.1)	0.19 J	ND(0.1)	ND(0.2)	ND(0.2)	2	ND(0.2)

Table 5-12 - Groundwater Sample Results in Alluvial Monitoring Wells
Birch Hill Tank Farm

Probe/Well Number	Sample Number	Date	Water Elevation (feet msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO	GRO	ROD Contaminants of Concern (µg/L)						
									Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[3]
CLEANUP LEVELS							**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
AP-9958	10FWTH01WG	2/10/2010	424.57	1.08	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.35 J	ND(0.02)
	10FWTH06WG	6/22/2010	424.82	0.68	NA	NA	450	ND(50)	ND(1)	0.12 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.01) QL
	10FWTH26WG	8/17/2010	425.53	0.43	10.90	0.046	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.37 J	ND(0.01)
	10FWTH31WG	11/9/2010	424.95	0.45	10.70	45.5	NA	NA	ND(1)	0.27 J ,B,QH	ND(1)	ND(1)	ND(1)	0.41 J, QH	ND(0.019)
	10FWTH32WG[2]	11/9/2010	424.95		NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.4 J	ND(0.020)
	11FW3BH03WG	6/30/2011	425.79	0.72	11.00	48	ND(240)	8.6 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH71WG	10/6/2011	426.84	1.85	NA	NA	140 J	8.1 J, B	NA	NA	NA	NA	NA	NA	NA
	11FW3BH72WG[2]	10/6/2011	426.84		NA	NA	130 J	7.3 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA01WG	9/25/2012	425.95	0.16	9.4	46.0	190 J	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	0.34 J	ND(0.2)
	13FW3BHA08WG	6/11/2013	425.73	1.79	9.4	40.0	310	NA	ND(0.2)	ND(0.4)	ND(0.2)	0.48 J	0.19 J	0.41 J	ND(0.2)
	14FWOU343WG	10/15/2014	429.51	0.56	7.8	29.7	200 J,J-	NA	ND(0.1)	0.07 J	ND(0.1)	ND(0.2)	ND(0.2)	0.26 J	ND(0.2)
	14FWOU344WG	10/15/2014	429.51	0.56	7.8	29.7	200 J,J-	NA	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.2)	ND(0.2)	0.25 J	ND(0.2)
AP-9956	10FWTH05WG	2/10/2010	424.51	1.33	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.4	ND(0.02)
	10FWTH09WG	6/22/2010	424.77	0.40	11.00	77	750	34 J, B	ND(1)	0.12 J	ND(1)	ND(1)	ND(1)	1.5	ND(0.01) QL
	10FWTH29WG	8/17/2010	425.42	0.14	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.3	ND(0.010)
	10FWTH34WG	11/9/2010	424.87	0.44	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.4	ND(0.020)
	11FW3BH05WG	6/30/2011	425.80	0.79	10.0	65.0	160 J	24 J, B	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.1	ND(1)
	11FW3BH73WG	10/6/2011	426.78	2.04	NA	NA	230 J	18 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA02WG	9/25/2012	425.89	0.19	10.0	67.0	300	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	1.1	ND(0.2)
	13FW3BHA07WG	6/11/2013	425.72	2.01	9.4	56.0	420	NA	ND(0.2)	0.18 J	ND(0.2)	ND(0.2)	ND(0.4)	1.2	ND(0.2)
	14FWOU345WG	10/15/2014	429.36	0.41	9.9	49.1	170 J,J-	NA	ND(0.1)	0.06 J	ND(0.1)	ND(0.2)	ND(0.2)	1.3	ND(0.2)
Truck Fill Stand															
AP-10228MW[1] (GWP-100)	10FWC01WG	6/23/2010	424.87	0.34	NA	NA	**8,800**	38 J, B	**5.7**	ND(1)	0.091 J, B	0.069 J	ND(1)	ND(1)	ND(0.01) QL
	11FW3BH18WG	7/5/2011	426.10	3.39	2.8	44.0	**1,900**	14 J	1.3	0.61 J	0.4 J	0.19 J	ND(1)	0.21 J	ND(1)
	11FW3BH91WG	11/15/2011	426.42	0.35	0.018 J, B	2.2	**2,200**	18 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA05WG	9/26/2012	426.26	0.36	2.9	24	**5,100**	NA	3.0	ND(0.4)	0.23 J	ND(0.2)	ND(0.4)	0.29 J	ND(0.2)
	12FW3BHA06WG[2]	9/26/2012	426.26	0.36	3	24	**5,100**	NA	2.9	ND(0.4)	0.24 J	ND(0.2)	ND(0.4)	0.28 J	ND(0.2)
	13FW3BHA11WG	6/11/2013	425.97	0.3	2.7	31	**3,600**	NA	0.47 J	0.74 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3BHA12WG[2]	6/11/2013	425.97	0.3	2.8	31	**3,500**	NA	0.42 J	0.72 J	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU328WG	10/14/2014	429.97	0.81	1.13	35.5	**10,000**	NA	0.75	0.15 J	0.19 J	0.07 J	ND(0.2)	0.16 J	**0.13 J**
	14FWOU329WG	10/14/2014	429.97	0.81	1.13	35.5	**12,000**	NA	0.78	0.17J	0.25 J	ND(0.2)	ND(0.2)	0.15 J	**0.13 J**
AP-10230MW[1] (GWP-145)	10FWC02WG	6/23/2010	424.81	11.03	NA	NA	**10,000 QH**	100 B	1.1	ND(1)	6.4	1.7	2.2	ND(1)	ND(0.01) QL
	11FW3BH19WG	7/5/2011	426.13	6.36	8.9	18.0	**17,000 QH**	75	0.64 J	0.48 J	3.9	0.95 J	1.1	ND(1)	ND(1)
	11FW3BH92WG	11/15/2011	421.01	0.48	0.23	38 QH	**38,000 QH**	230	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA07WG	9/26/2012	426.27	0.3	34	13	**30,000**	NA	0.82 J	0.39 J	2.2	1.3	2.2	ND(0.2)	ND(0.2)
	13FW3BHA13WG	6/11/2013	425.67	0.23	16	23	**10,000**	NA	ND(0.2)	0.66 J	0.31 J	0.24 J	0.31 J	ND(0.2)	ND(0.2)
	14FWOU330WG	10/14/2014	430.01	1.37	19.2	22.5	**44000 J+**	NA	2.1	0.32 J,B	0.44 J	1.0 J	2.7	0.22 J	**0.55 J**
AP-10229MW[1] (GWP-121)	10FWC03WG	6/23/2010	424.06	3.69	0.035	55	**6,300**	ND(50)	1.4	ND(1)	0.062 J, B	0.13 J	ND(1)	ND(1)	ND(0.01) QL
	11FW3BH20WG	7/5/2011	425.47	7.71	0.037 J	53	**2,700**	16 J, B	0.63 J	0.26 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11FW3BH93WG	11/15/2011	426.42	0.34	0.0095 J, B	1.2	1,200	9.5 J, B	NA	NA	NA	NA	NA	NA	NA
	12FW3BHA08WG	9/26/2012	426.27	0.34	ND(0.030)	41	950	NA	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)

Bold results represent concentrations in excess of remedial action goals

[1] Replacement wells installed in November 2011. Wells that were replaced are shown in parentheses.

[2] Denotes sample is a field duplicate of preceding row.

[3] 1,2-Dibromoethane results were generated from either Method 8260 or Method 504.1. Results from Method 504.1 were used when available.

DRO - diesel range organics
GRO - gasoline range organics
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligram per liter
msl - mean sea level
NA - not analyzed
NM - not measured
ROD - Record of Decision

Data Qualifiers
B - analyte was detected in blank sample at similar concentration
J - detected between detection limit and LOQ
M - result is estimated and biased (H-high/L-low) due to matrix interference
ND - not detected at the detection limit (LOQ in parentheses for data prior to 2012. LOD in parentheses for data staring in 2012.)
Q - result is estimated and biased (H-high/L-low) due to quality control failure

Table 2-8A - Summary of Mann-Kendall Trend Analysis of BHTF Alluvial Wells[1,2]

Well	DCA						DRO	
	2008	2009	2010	2011	2012	2013	2012	2013
AP-5782	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable
AP-10227MW (AP-7603)	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Stable	Stable
AP-7844	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Stable	No Trend
AP-7845	Potentially Decreasing	Potentially Decreasing	**Stable**	Stable	Stable	No Trend	Stable	Stable
AP-7952	-	-	-	-	-	-	Stable	Stable
AP-9956	-	Stable	Stable	**Decreasing**	Decreasing	Decreasing	Stable	No Trend
AP-10233MW (GWP-34)	Stable	Stable	**No Trend**	No Trend	No Trend	**Potentially Increasing**	Decreasing	Decreasing
AP-10234MW (GWP-45)	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Stable	Stable
AP-6583	-	-	-	-	-	-	Stable	No Trend
UAF ML7	Potentially Decreasing	Decreasing	Decreasing	**No Trend**	**Decreasing**	Decreasing	-	-

[1] Only wells having concentrations exceeding 1/2 the cleanup level during the period of analysis are shown

[2] No alluvial BHTF wells (Truck Fill Stand not included in analysis) had benzene or EDB concentrations exceeding half the cleanup level

- Analyte did not exceed 1/2 the cleanup level during the analysis period

2010 trend change shown in blue

2011 trend change shown in red

2012 trend change shown in orange

2013 trend changes shown in green

Table 2-8B - Summary of Mann-Kendall Trend Analysis of Truck Fill Stand Wells[1,2]

Well	Benzene			DRO		
	2011	2012	2013	2011	2012	2013
AP-10228MW (GWP-100)	Potentially Increasing	**Increasing**		Stable	Stable	
AP-10229MW (GWP-121)	-	-		Increasing	**Decreasing**	
AP-10230MW (GWP-145)	No Trend	No Trend		Stable	**Increasing**	

[1] Only wells having concentrations exceeding 1/2 the cleanup level during the period of analysis are shown

[2] No TFS wells had DCA concentrations exceeding half the cleanup level. EDB was detected above the cleanup level in one sampling event in AP-10230MW. Only intermittent low-level detections are generally observed.

- Analyte did not exceed 1/2 the cleanup level during the analysis period

2010 trend change shown in blue

2011 trend change shown in red

2012 trend change shown in orange

2013 trend changes shown in green

Table 2-9 - Summary of Mann-Kendall Trend Analysis of BHTF Bedrock Wells[1]

Well	DCA				Benzene				EDB			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Wells Upgradient or East of BHPR System												
AP-7596	**Increasing**	**No Trend**	No Trend	No Trend	Increasing	**Potentially Increasing**	**No Trend**	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
AP-7852	-	-	-	No Trend	-	-	-	-	**Increasing**	Increasing	Increasing	Increasing
AP-7594	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	-	-	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Wells within BHPR System Area												
AP-7813	**Potentially Increasing**	**Increasing**	**No Trend**	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Stable	**Decreasing**	Decreasing	Decreasing
AP-7525	No Trend	No Trend	No Trend	No Trend	-	-	-	-	-	-	-	-
AP-7530	Increasing	Increasing	Increasing	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	-	-	-	-
AP-7848	No Trend	No Trend	No Trend	**NS**	Decreasing	**Potentially Decreasing**	**Decreasing**	**NS**	-	-	-	**NS**
AP-7854	No Trend	No Trend	No Trend	No Trend	No Trend	-	-	-	-	-	-	-
AP-7855	**Increasing**	**No Trend**	**Increasing**	Increasing	-	-	-	-	-	-	-	-
AP-7859	**No Trend**	**Potentially Increasing**	**Increasing**	Increasing	Decreasing	Decreasing	Decreasing	Decreasing	-	-	-	-
AP-7600	Stable	**No Trend**	No Trend	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	-	-	-	-
Wells at the Base of Birch Hill												
AP-10226MW (1173-MP1)	**Increasing**	**No Trend**	**Increasing**	Increasing	**Stable**	Stable	**No Trend**	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
AP-8422	Increasing	Increasing	Increasing	Increasing	No Trend	No Trend	No Trend	No Trend	-	-	-	-
AP-7597	**Increasing**	Increasing	-	-	-	-	-	-	-	-	-	-
Wells in the Thaw Channel or Off-Post												
AP-7846	-	-	-	-	-	-	-	-	-	-	-	-

[1] Trends are shown for wells with contaminant concentrations exceeding 1/2 the cleanup level in the last year of the analysis

- Analyte did not exceed 1/2 the cleanup level during the year shown

NA = Not Applicable. The well was not included in the analysis during that time period.

NS = Not Sampled. The well was not sampled due to the presence of free product.

MAROS Statistical Trend Analysis Summary

Project: 2014 BHTF Bedrock

Location: Ft Wainwright

User Name: FES

State: Alaska

Time Period: 8/1/2003 **to** 10/14/2014

Consolidation Period: No Time Consolidation

Consolidation Type: Average

Duplicate Consolidation: Average

ND Values: Specified Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
1,2-DIBROMOETHANE (ETHYLENE DIBROMID								
1173-MP1	T	18	10	6.0E-05	2.9E-05	No	PD	NT
AP-6071	T	15	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7525	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7530	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7594	T	18	18	2.6E-01	2.7E-01	No	D	D
AP-7595	T	16	2	6.8E-06	4.0E-06	No	NT	NT
AP-7596	S	18	18	1.5E-02	9.6E-03	No	D	D
AP-7597	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7598	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7600	T	18	5	4.4E-05	4.0E-06	No	NT	NT
AP-7673	T	17	14	3.8E-05	2.8E-05	No	D	D
AP-7730	T	4	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7813	T	17	17	1.6E-03	6.7E-04	No	D	D
AP-7816	T	17	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7846	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7848	T	17	1	4.2E-06	4.0E-06	No	S	S
AP-7852	T	17	17	5.1E-02	4.8E-02	No	I	I
AP-7854	T	18	2	1.3E-05	4.0E-06	No	NT	D
AP-7855	T	18	3	1.2E-05	4.0E-06	No	NT	D
AP-7856	T	18	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-7859	T	18	10	5.0E-05	9.8E-06	No	D	D
AP-8422	T	16	3	1.9E-05	4.0E-06	No	PD	D
AP-9181	T	13	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-9957	T	13	0	4.0E-06	4.0E-06	Yes	ND	ND
AP-9959	T	13	0	4.0E-06	4.0E-06	Yes	ND	ND
C-1 (AP-6560)	T	13	0	4.0E-06	4.0E-06	Yes	ND	ND
1,2-DICHLOROETHANE								
1173-MP1	T	18	15	8.9E-02	8.6E-02	No	I	NT
AP-6071	T	15	0	2.0E-04	2.0E-04	Yes	ND	ND
AP-7525	T	18	18	1.9E-02	1.7E-02	No	S	S
AP-7530	T	18	17	4.4E-02	5.4E-02	No	I	I
AP-7594	T	18	17	1.7E-02	1.7E-02	No	D	S
AP-7595	T	15	0	2.0E-04	2.0E-04	Yes	ND	ND
AP-7596	S	18	17	8.5E-01	7.1E-01	No	NT	NT

MAROS Statistical Trend Analysis Summary

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
1,2-DICHLOROETHANE								
AP-7597	T	18	9	1.2E-03	5.4E-04	No	I	PI
AP-7598	T	18	18	2.1E-03	2.1E-03	No	D	D
AP-7600	T	18	17	1.0E-01	1.1E-01	No	NT	NT
AP-7673	T	18	13	7.4E-04	5.1E-04	No	D	D
AP-7730	T	4	4	1.4E-03	1.4E-03	No	I	I
AP-7813	T	17	17	7.8E-02	7.6E-02	No	NT	NT
AP-7816	T	18	5	4.1E-04	2.0E-04	No	I	I
AP-7846	T	18	7	3.3E-04	2.0E-04	No	PI	I
AP-7848	T	17	3	9.3E-03	2.0E-04	No	NT	NT
AP-7852	T	17	13	1.1E-03	1.1E-03	No	NT	NT
AP-7854	T	18	10	4.8E-03	1.1E-03	No	NT	PD
AP-7855	T	18	13	5.0E-03	3.5E-03	No	I	NT
AP-7856	T	18	9	4.3E-03	6.5E-04	No	NT	NT
AP-7859	T	18	15	2.8E-02	3.5E-02	No	PI	NT
AP-8422	T	17	17	2.4E-02	2.1E-02	No	I	I
AP-9181	T	13	12	1.0E-03	1.0E-03	No	NT	NT
AP-9957	T	13	11	5.9E-04	6.1E-04	No	NT	NT
AP-9959	T	13	13	8.6E-04	7.2E-04	No	S	PD
C-1 (AP-6560)	T	13	12	9.4E-04	1.1E-03	No	NT	I
BENZENE								
1173-MP1	T	18	18	1.6E+00	1.5E+00	No	NT	I
AP-6071	T	15	2	1.6E-04	1.0E-04	No	NT	NT
AP-7525	T	18	14	1.1E-03	8.7E-04	No	S	S
AP-7530	T	18	18	1.5E-02	1.1E-02	No	D	D
AP-7594	T	18	17	4.4E-03	2.8E-03	No	D	D
AP-7595	T	17	5	1.8E-04	1.0E-04	No	NT	NT
AP-7596	S	18	18	5.7E+00	5.0E+00	No	NT	I
AP-7597	T	18	17	6.3E-03	1.5E-03	No	D	D
AP-7598	T	18	0	1.0E-04	1.0E-04	Yes	ND	ND
AP-7600	T	18	18	3.0E-02	1.5E-02	No	D	D
AP-7673	T	16	2	1.7E-04	1.0E-04	No	NT	NT
AP-7730	T	4	4	5.5E-04	5.4E-04	No	S	S
AP-7813	T	17	17	2.7E-01	1.4E-01	No	D	D
AP-7816	T	18	18	9.4E-04	8.0E-04	No	S	D
AP-7846	T	18	15	3.5E-03	4.5E-03	No	D	D
AP-7848	T	17	17	1.3E+00	1.3E+00	No	D	S
AP-7852	T	17	14	5.1E-04	4.1E-04	No	I	I
AP-7854	T	18	18	2.4E-02	1.8E-02	No	D	D
AP-7855	T	18	17	4.0E-02	1.8E-02	No	D	D
AP-7856	T	18	18	9.8E-02	4.3E-02	No	D	D
AP-7859	T	18	18	6.1E-01	3.6E-01	No	D	D
AP-8422	T	18	17	7.1E-02	7.4E-02	No	NT	NT
AP-9181	T	13	2	1.1E-04	1.0E-04	No	NT	NT
AP-9957	T	13	3	9.8E-05	1.0E-04	No	NT	NT
AP-9959	T	13	1	9.7E-05	1.0E-04	No	NT	NT

MAROS Statistical Trend Analysis Summary

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
BENZENE								
C-1 (AP-6560)	T	13	3	1.0E-04	1.0E-04	No	S	I

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Statistical Trend Analysis Summary

Project: BHTF Alluvial Aquifer

Location: Fort Wainwright

User Name: FES

State: Alaska

Time Period: 3/25/2003 **to** 10/15/2014

Consolidation Period: No Time Consolidation

Consolidation Type: Average

Duplicate Consolidation: Average

ND Values: Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
1,2-DICHLOROETHANE								
AP-5782	T	25	23	1.8E-03	1.9E-03	No	PD	PD
AP-5783	T	19	3	2.2E-04	2.0E-04	No	NT	NT
AP-6583	T	18	6	3.7E-04	2.0E-04	No	NT	I
AP-7603	S	19	12	3.4E-03	1.2E-03	No	I	I
AP-7844	T	25	24	3.1E-03	2.5E-03	No	D	D
AP-7845	T	25	25	1.8E-03	1.7E-03	No	NT	NT
AP-7952	T	19	9	4.9E-04	2.0E-04	No	NT	NT
AP-9956	T	13	13	1.5E-03	1.4E-03	No	D	PD
AP-9958	T	13	9	3.5E-04	3.4E-04	No	S	S
GWP-2002A	T	18	7	3.0E-04	2.0E-04	No	I	I
GWP-33	T	19	11	4.8E-04	2.3E-04	No	S	PD
GWP-34	T	19	14	1.4E-03	1.2E-03	No	NT	NT
GWP-45	T	19	11	1.6E-03	9.0E-04	No	I	I
Shannon Park	T	24	22	1.2E-03	9.1E-04	No	D	D
Steese Chapel	T	7	3	7.6E-04	2.0E-04	No	PI	I
UAF ML7	T	23	23	2.6E-03	2.8E-03	No	D	D
BENZENE								
AP-5782	T	25	2	1.0E-04	1.0E-04	No	S	S
AP-5783	T	19	1	1.0E-04	1.0E-04	No	S	D
AP-6583	T	19	4	1.5E-04	1.0E-04	No	NT	I
AP-7603	S	19	12	5.4E-04	4.2E-04	No	S	S
AP-7844	T	25	2	9.9E-05	1.0E-04	No	S	D
AP-7845	T	25	1	1.0E-04	1.0E-04	No	S	D
AP-7952	T	19	10	5.7E-04	1.0E-04	No	PD	D
AP-9956	T	4	0	2.0E-04	2.0E-04	Yes	ND	ND
AP-9958	T	4	0	2.0E-04	2.0E-04	Yes	ND	ND
GWP-2002A	T	18	4	1.1E-04	1.0E-04	No	NT	D
GWP-33	T	19	1	1.0E-04	1.0E-04	No	S	D
GWP-34	T	19	5	2.8E-04	1.0E-04	No	NT	D
GWP-45	T	19	12	2.7E-04	1.3E-04	No	D	D
Shannon Park	T	24	14	1.3E-03	1.1E-03	No	D	D
Steese Chapel	T	7	0	1.0E-04	1.0E-04	Yes	ND	ND
UAF ML7	T	23	1	1.0E-04	1.0E-04	No	S	D

MAROS Statistical Trend Analysis Summary

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
PHC as DIESEL FUEL								
PHC as DIESEL FUEL								
AP-5782	T	5	5	6.8E-01	4.6E-01	No	S	S
AP-5783	T	5	4	2.6E-01	2.5E-01	No	S	S
AP-6583	T	6	6	6.6E+01	9.0E-01	No	NT	I
AP-7603	S	6	6	9.0E+00	6.3E+00	No	S	PD
AP-7844	T	5	5	5.9E-01	6.1E-01	No	NT	NT
AP-7845	T	6	6	7.2E+01	9.0E-01	No	NT	PI
AP-7952	T	5	5	3.8E-01	2.7E-01	No	S	S
AP-9956	T	6	6	2.9E+01	3.6E-01	No	NT	PI
AP-9958	T	6	5	3.4E+01	2.8E-01	No	NT	PI
GWP-2002A	T	5	5	2.6E+02	3.2E+00	No	NT	NT
GWP-33	T	6	6	2.7E+01	3.3E-01	No	NT	PI
GWP-34	T	6	6	3.1E+01	1.3E+00	No	NT	PI
GWP-45	T	6	6	2.0E+02	1.9E+00	No	NT	PI
Shannon Park	T	5	5	3.4E-01	2.2E-01	No	D	D
Steese Chapel	T	3	3	1.5E-01	1.7E-01	No	N/A	N/A
UAF ML7	T	5	5	3.1E-01	2.5E-01	No	S	S
PHC as GASOLINE								
AP-5782	T	3	3	3.2E-02	2.6E-02	No	N/A	N/A
AP-5783	T	3	1	3.6E-02	5.0E-02	No	N/A	N/A
AP-6583	T	2	2	1.2E-01	1.2E-01	No	N/A	N/A
AP-7603	S	6	6	1.2E+00	9.4E-01	No	NT	NT
AP-7844	T	3	3	4.4E-02	4.3E-02	No	N/A	N/A
AP-7845	T	3	3	5.6E-02	5.8E-02	No	N/A	N/A
AP-7952	T	3	2	2.7E-02	2.0E-02	No	N/A	N/A
AP-9956	T	3	3	2.5E-02	2.4E-02	No	N/A	N/A
AP-9958	T	3	2	4.8E-02	5.0E-02	No	N/A	N/A
GWP-2002A	T	2	2	5.9E-02	5.9E-02	No	N/A	N/A
GWP-33	T	3	2	4.1E-02	5.0E-02	No	N/A	N/A
GWP-34	T	3	3	1.9E-01	1.9E-01	No	N/A	N/A
GWP-45	T	6	6	1.0E+02	7.5E-01	No	NT	I
Shannon Park	T	3	3	2.3E-02	2.0E-02	No	N/A	N/A
Steese Chapel	T	1	0	5.0E-02	5.0E-02	Yes	ND	ND
UAF ML7	T	3	3	1.7E-02	1.7E-02	No	N/A	N/A

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

OU-3 Remedial Area 2 Valve Pits and ROLF

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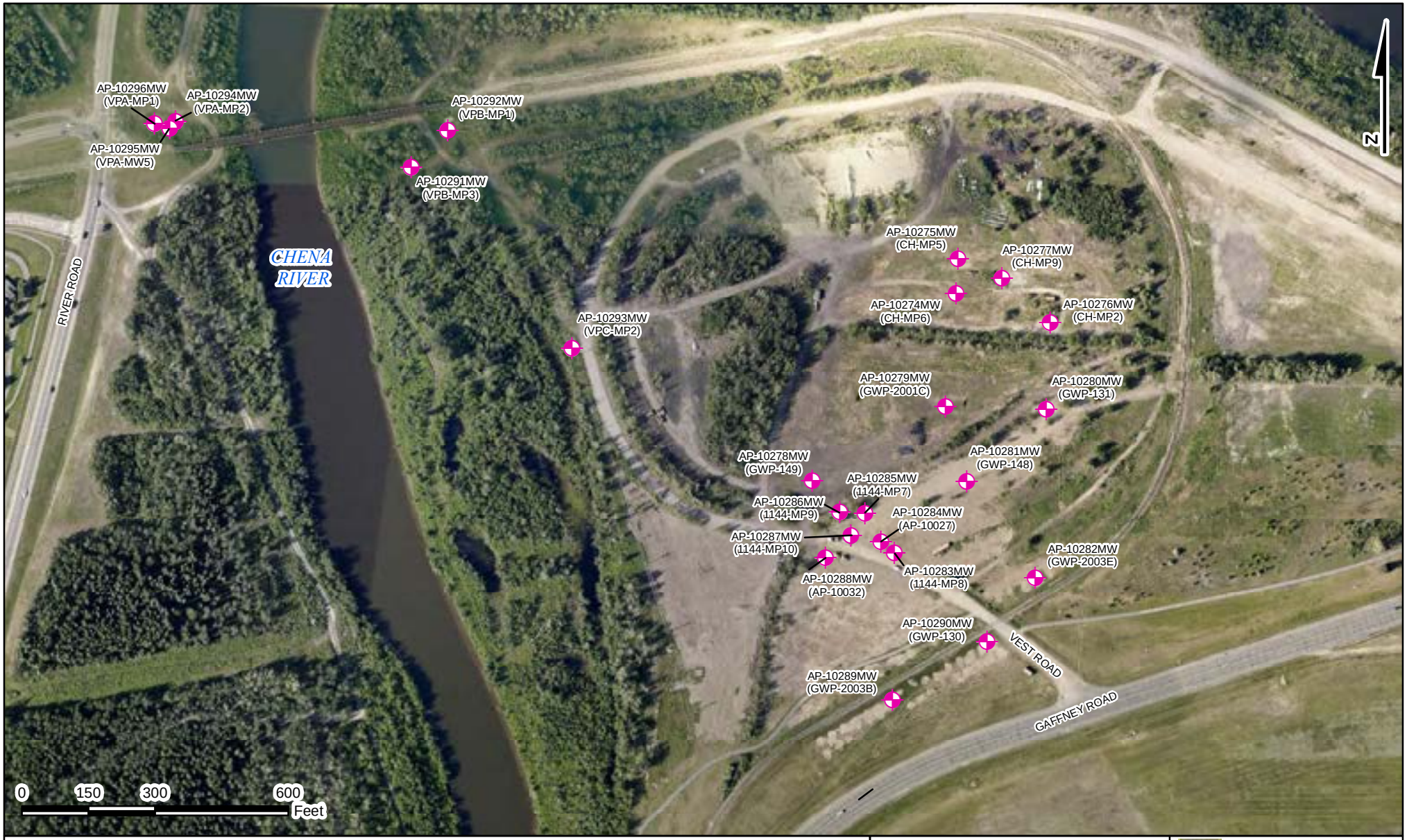


LEGEND:

AP-10289MW (GWP-2003B) — 2015 Replacement Well (Well or Probe Replaced)

NOTES:

1. Replacement wells were installed in March or April 2015. Wells or probes that were replaced were decommissioned.

2. Coordinate System: WGS84 UTM, Zone 6N, US Survey, Meters (Displayed in Feet)

SOURCE:

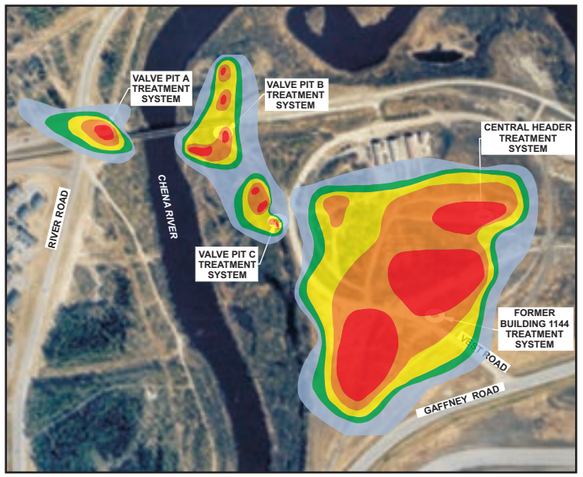
1. Aerial Imagery Provided By: 2012 Fort Wainwright .SID

FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

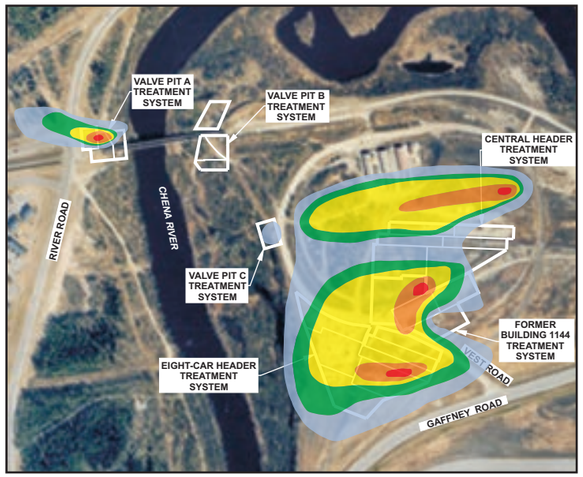
ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

2015 Replacement Well Locations
2015 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

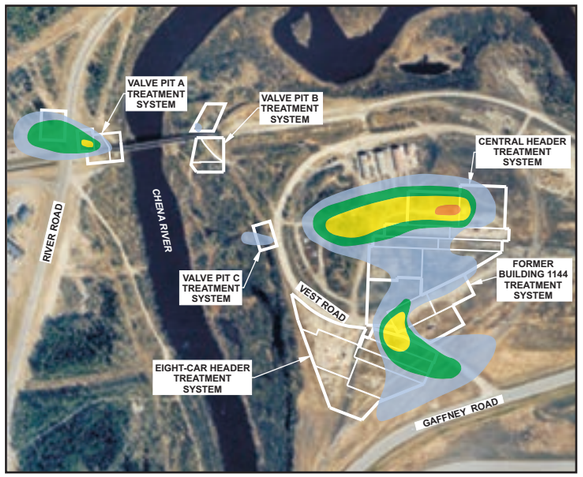
Contract: W911KB-12-D-0001	Figure: 3-1	Date: 4/16



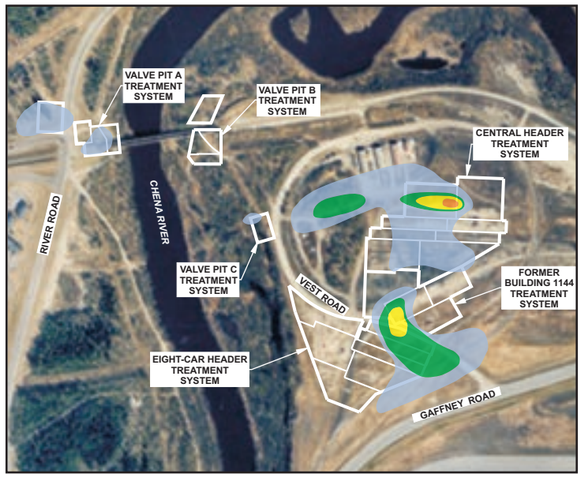
Prior to Treatment 1996-1997



1998



2000



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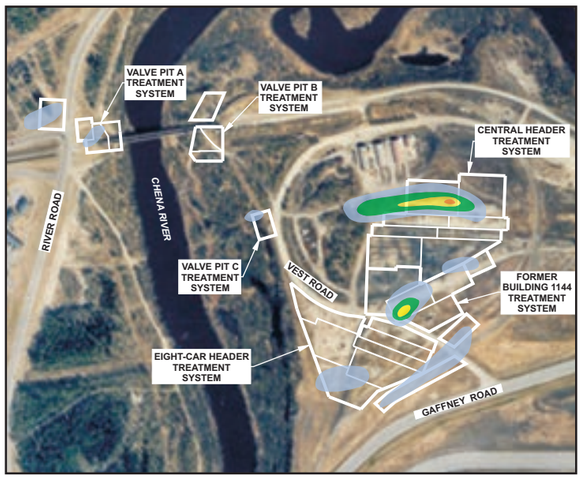
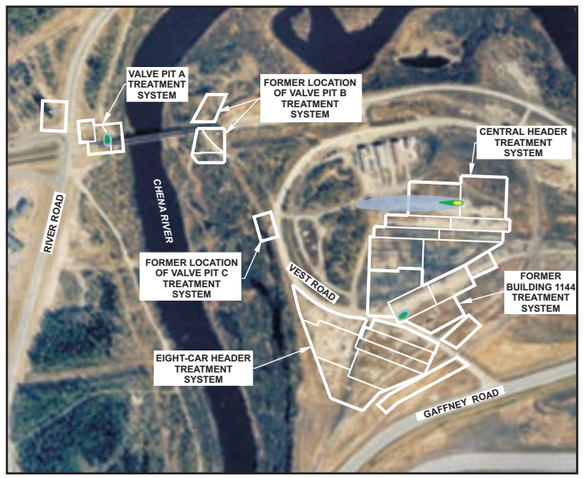
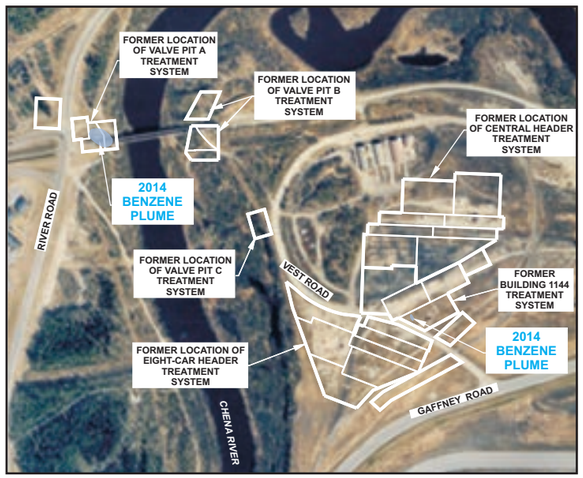


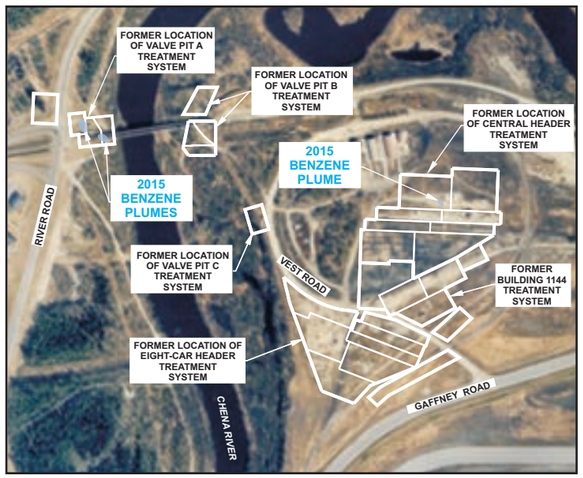
2004



2007



2014



2015

NOTES:

1. HIGHEST YEARLY CONCENTRATIONS SHOWN ON MAP.
2. PREVIOUS YEARS CONTAMINANT PLUMES MODIFIED BASED ON NEW MONITORING WELL POINTS AND REEVALUATION OF PAST DATA.
3. DRAWINGS ARE CONCEPTUAL AND ARE BASED ON EVALUATION OF AVAILABLE INFORMATION.

LEGEND

- μg/L MICROGRAMS PER LITER
- APPROXIMATE EXTENT OF BENZENE PLUME ABOVE REMEDIAL ACTION GOAL OF 5 μg/L
- APPROXIMATE EXTENT OF BENZENE PLUME WITH CONCENTRATIONS ABOVE 50 μg/L
- APPROXIMATE EXTENT OF BENZENE PLUME WITH CONCENTRATIONS ABOVE 100 μg/L
- APPROXIMATE EXTENT OF BENZENE PLUME WITH CONCENTRATIONS ABOVE 1,000 μg/L
- APPROXIMATE EXTENT OF PRODUCT PLUME

NORTH

0 800 1,600

Scale in Feet

FAIRBANKS ENVIRONMENTAL SERVICES
3538 INTERNATIONAL STREET
FAIRBANKS, ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Benzene Plume Reduction at the Railcar Offloading Facility

2015 Monitoring Report
Operable Unit 3
Fort Wainwright, Alaska

CONTRACT:	FIGURE:	DATE:
W911KB-12-D-0001	3-4	4/16

307C FIGURE 3-4

VPA–MP2
12-20 bgs

	OCT 1996	OCT 1997	JULY 1998	OCT 1998	MAR 1999	AUG 1999	MAY 2000	AUG 2000	MAY 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(2)	ND(1)
EDB	ND(1)	NA	ND(10)	ND(1)	ND(1)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)
BENZENE	4,300	200	379	160	36.5	5.9	33.3	36.8	36.7	19.7	69.1	ND(0.5)	13.7
TOLUENE	13,000	1,400	1,695	1,285	372	104	135	237	210	109	254	40.6	289
EBZ	620	45	ND(1)	45	17.6	14	9.57	31.0	19	13.4	11.1	3.04	15.9
DRO													
GRO													
WATER ELEV.	427.29	NM	427.07	428.23	426.44	428.02	428.54	427.83	427.09	428.99	426.46	428.89	426.97

	APRIL 2003	OCT 2003	DEC 2003	MAR 2004	SEPT 2004	APRIL 2005	SEPT 2005	APRIL 2006	SEPT 2006	APRIL 2007
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	ND(1)	0.9	2.2	93.5	165	40.5	11.4	3.7	ND(1)	
TOLUENE	62.8	206	412	598	11.7	143	3.1	0.61	0.52	26
EBZ	6.29	13.2	45.8	74.3	11.8	19.3	1.8	0.49	0.93	5.2
DRO										
GRO										
WATER ELEV.	427.03	427.08	426.35	429.01	426.89	428.13	427.74	427.06	425.17	424.10

	APRIL 2007	AUG 2007	MAY 2008	AUG 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	NOV 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)		ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)		ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(4)	ND(1)	ND(2.0)	ND(2.0)	ND(2)
BENZENE	0.42	0.24	0.13		7.4	2.7	37	24	40	9	3.1	1.9	1.2	16
TOLUENE	0.52	26	9.0		160	5.1	28	35	190	21	32	0.91	3.5	14
EBZ	0.93	5.2	2.7		22	1.9	7.4	7.4	34	8.6	5.8	3.6	5.9	29
DRO					10,000	NA	59,000	16,000	12,000	13,000	22,000	20,000	18,000	12,000
GRO					4,500	NA	1,600	830	2,500	2,300	3,600	600	470	1,300
WATER ELEV.	427.32	430.18			426.17	428.60	427.19	427.66	426.49	429.31	428.39	427.47	430.80	428.11

VPA–MP1
12-20 bgs

	AUG 1996	JULY 1998	OCT 1998	MARCH 1999	AUG 1999	FEB 2000	MAY 2000	MAY 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	3	ND(1)	NA	ND(20)	ND(10)	ND(100)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)
EDB	ND(1)	NA	NA	ND(20)	ND(10.020)	ND(100)	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)
BENZENE	6,200	3,900	1,080	1,230	330	366	7.04	ND(1)	0.58	ND(0.5)	ND(0.5)	ND(0.4)
TOLUENE	16,000	25,800	12,500	16,100	4,720	12,800	148	3.4	7.5	24.2	2.31	ND(1)
EBZ	ND(1)	1,250	423	573	257	320	4.23	1.04	ND(5)	ND(1)	ND(1)	ND(1)
DRO												
GRO												
WATER ELEV.	427.13	426.06	427.27	425.52	427.02	NM	NM	427.26	NM	NM	427.12	426.05

	APRIL 2003	OCT 2003	DEC 2003	MAR 2004	SEPT 2004	APRIL 2005	SEPT 2005	APRIL 2006	SEPT 2006	APRIL 2007
DCA	ND(5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)
EDB	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	129	2.11	ND(1)	0.92	1.92	2.3	0.28	0.22	0.19	0.087
TOLUENE	ND(10)	ND(1)	ND(1)	ND(1)	0.91	0.28	0.21	0.13	0.12	0.18
EBZ	ND(5)	3.43								
DRO										
GRO										
WATER ELEV.	427.03	427.72		427.06	425.88	427.35	426.52	425.78	426.81	425.44

	APRIL 2007	AUG 2007	MAY 2008	AUG 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	NOV 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	0.42	0.15	0.79	ND(1.3)	ND(10)	0.29	2.6	1.2	0.55	140				
EDB	ND(1)	ND(1)	1.7	ND(2.5)	ND(0.48)	0.65	1.4	0.51	0.48					
BENZENE	1.2	ND(1)	0.19	0.087	0.19	ND(1)	ND(0.2)	ND(0.2)	0.21					
TOLUENE	0.43	0.53	ND(1)	ND(10)	ND(1)	0.19	ND(0.2)	ND(0.2)	0.21					
EBZ	12,000	NA	94,000	6,600	8,400	21,000	12,000	14,000	12,000	15,000				
DRO	920	NA	1,100	1,000	670	150	220	990	150	680				
GRO														
WATER ELEV.	427.26	429.16	425.01	427.54	426.12	426.60	425.43	428.18	427.38	426.26	429.24	427.03		

VPA–MP5
13-23 bgs

	AUG 2007	MAY 2008	AUG 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	NOV 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(2)
BENZENE	0.36	21	ND(1)	0.92	2.1	2.5	2.1	2.1	9.6	25	28	13	45	
TOLUENE	0.46	310	0.14	0.56	0.75	3.1	1.5	6.8	64	72	2.1	3.8	2.9	
EBZ	2.6	0.12	0.21	0.31	1	1.7	4.4	4.2	4.8	6	11	6.6	15	
DRO				5,600	NA	31,000	6,300	25,000	14,000	11,000	26,000	10,000	23,000	
GRO				230	NA	430	720	22,000	8,700	2,000	9,800	1,300	1,400	
WATER ELEV.	434.17	432.89	435.30	431.27	428.68	427.20	427.69	426.50	429.17	428.41	427.47	430.81	428.15	

AP–6064
6.5-22 bgs

	JUNE 1996	OCT 1996	APR 1997	OCT 1997	APR 1998	OCT 1998	MAR 1999	AUG 1999	MAY 2000	AUG 2000	MAY 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	ND(20)	ND(1)	ND(1)	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
EDB	ND(20)	ND(1)	ND(1)	NA	NA	NA	NA	ND(1)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
BENZENE	1,300	26	160	2	57.4	ND(1)	21.7	ND(1)	28.8	2.95	184	61.1	14.7	ND(0.5)	ND(0.4)
TOLUENE	3,400	600	280	3	17.5	ND(1)	1.46	2.39	9.23	1.12	149	3.27	1.47	ND(1)	ND(1)
EBZ	480	90	26	16	22.6	4	9.52	3.42	14.7	2.77	9.74	10.3	2.2	ND(1)	ND(1)
DRO															
GRO															
WATER ELEV.	428.53	427.28	426.43	427.03	NM	429.54	426.56	427.98	NM	427.84	427.07	429.02	426.46	428.88	426.95

	OCT 2003	DEC 2003	MAR 2004	SEPT 2004	APRIL 2005	SEPT 2005	APRIL 2006	SEPT 2006	APRIL 2007	SEPT 2007
DCA	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	1.46	2.39	9.23	1.12	149	3.27	1.47	ND(1)	ND(1)	ND(1)
TOLUENE	3.17	6.6	9.52	3.42	14.7	2.77	9.74	10.3	2.2	ND(1)
EBZ	1.2	0.55	140							
DRO										
GRO										
WATER ELEV.	427.98	NM	427.84	427.07	429.02	426.46	428.88	426.95	428.53	427.28

	OCT 2007	MAY 2008	AUG 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	NOV 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(2)
BENZENE	0.39	0.12	1.5	ND(1)	0.61	ND(1)	0.44	0.58	ND(10)	0.35	0.43	0.35	ND(0.4)
TOLUENE	4.4	0.45	3.3	0.16	4.7	0.40	6.1	4.5	7.2	2.0	4.6	9.1	ND(0.2)
EBZ	3.7	4.4	0.45	3.3	0.16	4.7	0.40	6.1	4.5	7.2	2.0	4.6	9.1
DRO													
GRO													
WATER ELEV.	427.47	430.81	428.15										

AP–6084
6.5-22 bgs

	JUNE 1996	OCT 1996	APR 1997	OCT 1997	APR 1998	OCT 1998	MAR 1999	AUG 1999	MAY 2000	AUG 2000	MAY 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	ND(20)	ND(1)	ND(1)	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
EDB	ND(20)	ND(1)	ND(1)	NA	NA	NA	NA	ND(1)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
BENZENE	1,300	26	160	2	57.4	ND(1)	21.7	ND(1)	28.8	2.95	184	61.1	14.7	ND(0.5)	ND(0.4)
TOLUENE	3,400	600	280	3	17.5	ND(1)	1.46	2.39	9.23	1.12	149	3.27	1.47	ND(1)	ND(1)
EBZ	480	90	26	16	22.6	4	9.52	3.42	14.7	2.77	9.74	10.3	2.2	ND(1)	ND(1)
DRO															
GRO															
WATER ELEV.	428.53	427.28	426.43	427.03	NM	429.54	426.56	427.98	NM	427.84	427.07	429.02	426.46	428.88	426.95

	OCT 2003	DEC 2003	MAR 2004	SEPT 2004	APRIL 2005	SEPT 2005	APRIL 2006	SEPT 2006	APRIL 2007	SEPT 2007
DCA	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	1.46	2.39	9.23	1.12	149	3.27	1.47	ND(1)	ND(1)	ND(1)
TOLUENE	3.17	6.6	9.52	3.42	14.7	2.77	9.74	10.3	2.2	ND(1)
EBZ	1.2	0.55	140							
DRO										
GRO										
WATER ELEV.	427.98	NM	427.84	427.07	429.02	426.46	428.88	426.95	428.53	427.28

	OCT 2007	MAY 2008	AUG 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	NOV 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(5)	ND(1)	ND(2.0)	ND(2.0)	ND(2)
BENZENE	0.39	0.12	1.5	ND(1)	0.61	ND(1)	0.44	0.58	ND(10)	0.35	0.43	0.35	ND(0.4)
TOLUENE	4.4	0.45	3.3	0.16	4.7	0.40	6.1	4.5	7.2	2.0	4.6	9.1	ND(0.2)
EBZ	3.7	4.4	0.45	3.3	0.16	4.7	0.40	6.1	4.5	7.2	2.0	4.6	9.1
DRO													
GRO													
WATER ELEV.	427.47	430.81	428.15										

VPB–MP1
10-18 bgs

	JUNE 1996	OCT 1997	APRIL 1998	OCT 1998	MAR 1999	AUG 1999	FEB 2000	MAY 2000	AUG 2000	APRIL 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
EDB	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.002)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	570	1	2.3	ND(1)	ND(1)	ND(1)	1.89	ND(1)	1.17	ND(1)	ND(0.50)	ND(0.5)	ND(0.5)	ND(0.4)
TOLUENE	3,400	12	23.5	ND(1)	ND(1)	ND(1)	7.98	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
EBZ	400	15	10	ND(1)	ND(1)	ND(1)	1.24	ND(1)	10.7	2.03	ND(1)	ND(1)	ND(1)	ND(1)
DRO														
GRO														
WATER ELEV.	428.15	427.92	426.23	NM	426.51	428.03	NM	429.19	428.26	427.14	429.35	426.97	428.69	427.11

	APRIL 2003	OCT 2003	APRIL 2004	OCT 2004	MAR 2005	AUG 2005	APRIL 2006	APRIL 2007	JULY 2007	JULY 2008	JULY 2009	JULY 2010	JULY 2011	JUNE 2012	OCT 2012	MAY 2013	OCT 2014
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.4)	NOT	NOT
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.4)	SAMPLED	SAMPLED
BENZENE	0.4	0.61	0.59	ND(0.4)	1.03	1	1.2	NM	0.39	ND(2)	NM	0.39	DUE	DUE			
TOLUENE	1.3	NM	0.28	0.41	NM	0.32	TO	TO									
EBZ	0.97	0.94	1.3	NM	0.54	0.5	NM	0.44	DAMAGED	DAMAGED							
DRO									6,500	12,000	14,000	15,000	4,200	WELL	WELL		
GRO									450	180	410	330	180				
WATER ELEV.	1.07	1.1	1.2	NM	0.44	DAMAGED	DAMAGED										

VPB–MP3
10-18 bgs

	JUNE 1996	OCT 1997	JULY 1998	OCT 1998	AUG 1999	NOV 1999	MAR 2000	MAY 2000	AUG 2000	APRIL 2001	OCT 2003	MAR 2004	SEPT 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	JULY 2009	JULY 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(20)	ND(1)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	NM	ND(1)	ND(1)	NM	ND(0.4)	ND(2.0)	ND(2.0)	ND(0.15)
EDB	ND(20)	ND(1)	NA	ND(1)	ND(1)	ND(0.196)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(1)	ND(1)	NM	ND(1)	ND(2.0)	ND(2.0)	ND(2)
BENZENE	1,800	2	3	ND(1)	ND(1)	1.5	2.08	2.08	ND(1)	0.46	1.03	1.77	2.04	1.95	2.97	3.1	2.8	NM	2.3	2.0	NM	2.6	1.0	2.0
TOLUENE	5,400	6	10.4	ND(1)	ND(1)	1.69	2.14	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.69	2.47	0.67	0.61	1.1	NM	0.27	ND(1)	NM	0.56	0.23	0.30
EBZ	1,300	19	18	8.9	ND(1)	14.6	2.09	17.4	ND(1)	2.69	4.21	7.14	5.15	5.94	7.69	7.1	9.1	NM	8.2	10	NM	10	3.4	4.8
DRO																		5,500	17,000	7,100	9,000	11,000	2,800	5,800
GRO																		530	580	540	550	660	500	610
WATER ELEV.	428.08	427.22	427.25	428.48	428.48	427.06	426.69	428.54	427.85	427.02	429.59	427.07	426.95	426.78	425.79	427.59	427.10	426.24	427.24	429.17	428.4	427.63	431.19	428.19

VPB–MP6
6-14 bgs

	APR 1997	SEPT 1997	MAR 1999	SEPT 1999	MAR 2000	JUNE 2000	APRIL 2001	OCT 2001	APRIL 2002	OCT 2002	APRIL 2003	MAR 2004	SEPT 2004	APRIL 2005	MAY 2006	APRIL 2007	APRIL 2008	APRIL 2009	JULY 2010
DCA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	NM	ND(1)
EDB	NA	NA	ND(1)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(1)
BENZENE	70	49.3	15.5	11	19.1	1.46	ND(1)	7.03	7.28	0.61	15.5	ND(0.4)	7.37	7.62	5.67	3.71	2.7	3.1	NM	0.25				
TOLUENE	1	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.14	0.46	NM	0.13			
EBZ	1	ND(1)	ND(1)	ND(1)	1.95	ND(1)	ND(1)	ND(1)	6.05	ND(1)	39.8	ND(1)	30.9	20.9	19.7	7.45	7.6	14	NM	0.37				
TAH	72**	49.3	15.5	11	21	1.46	11.7	9.07	13.3	0.61	154	ND	108.9	136.5	84.1	20.9	54.6	92.1	NM	38.0				
TAqH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.775	111.4	141.6	86.5	22.1	57.6	97.0	NM	38.7			
DRO																				4,600	3,100			
GRO																				1,200	400			
WATER ELEV.	426.90	NM	425.65	427.97	426.64	427.46	426.54	427.38	425.66	427.93	426.15	428.43	425.85	428.07	427.45	428.21	428.19	427.65	426.48	427.52				

VPC–MP2
10-18 bgs

	JUNE 1996	OCT 1996	APR 1997	OCT 1997	MAR 1999	SEPT 1999	MAR 2000	AUG 2000	APRIL 2001	OCT 2001	APRIL 2002	OCT 2002	APRIL 2003	OCT 2003	JUNE 2004	OCT 2004	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JULY 2010	JULY 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014
DCA	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(1)	ND(1)	NM	ND(0.4)	ND(2.0)	ND(0.15)	
EDB	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.002)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(1)	ND(1)	NM	ND(0.4)	ND(2.0)	ND(2)	
BENZENE	850	28	ND(1)	18.9	0.94	2.07	1.41	2.28	ND(4)	NM	ND(0.4)	0.25	0.53													
TOLUENE	10,000	88	13	3	ND(1)	1.04	ND(1)	ND(1)	ND(1)	13.2	ND(1)	ND(1)	ND(1)	29.4	ND(4)	NM	ND(0.8)	ND(0.4)	0.47							
EBZ	1,100	17	1.70	4	71.8	3.39	3.05	ND(1)	ND(1)	8.92	36.2	69.7	40.1	46.3	3.1	NM	7.8	1.1	22							
TAH															17.80	NM	24.8	4.40	101.60							
TAqH															19.2	NM	25.9	5.65	115.60							
DRO															2,300	5,500	4,300	1,800	8,700							
GRO															1,400	1,300	1,200	1,000	1,900							
WATER ELEV.	427.76	426.88	426.69	427.39	426.59	427.99	NM	429.88	427.06	427.84	426.62	428.84	427.32	429.74	429.57	428.63	427.87	431.37	428.52							

AP–9042 (GWP–24)
10-5-18.5 bgs

	JULY 1996	APRIL 1998	SEPT 1998	MAR 1999	AUG 1999	MAY 2000	AUG 2000	MAY 2001	AUG 2001	MAR 2002	SEPT 2002	APRIL 2003
DCA	ND(50)	NA	NA	ND(2.5)	ND(5)	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(1)	ND(1)
EDB	ND(50)	NA	NA	ND(2.5)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	270	68	64	10.7	44	5.04	24	1.22	33.4	24.4	ND(0.5)	28.4
TOLUENE	550	2.7	ND(1)	ND(2.5)	ND(5)	2.13	1.46	ND(1)	ND(1)	3.71	ND(1)	2.42
EBZ	440	80	118	42.2	68.2	7.75	63.9	3.54	41.7	26.7	20.9	29.7
DRO												
GRO												
WATER ELEV.	427.70	NM	428.22	426.35	427.81	428.42	427.83	427.00	428.98	426.35	429.01	426.89

	OCT 2003	DEC 2003	MAR 2004	SEPT 2004	APRIL 2005	SEPT 2005	APRIL 2006	SEPT 2006	APRIL 2007	SEPT 2007
DCA	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	1.99	3.3	2.8	5.6	0.74	0.70	1.5	1.5	REMOVED	
TOLUENE	0.86	5.4	0.20	ND(0.25)	ND(1)	ND(1)	ND(1)	ND(1)	FROM	
EBZ	0.49	0.086	0.45	2.5	16	1.2	0.32	0.82	0.82	PROGRAM
DRO					1,500	NA	2,200	240	400	710
GRO					110	NA	380	64	38	46
WATER ELEV.	427.74	427.06	425.17	424.10	425.36					

	APRIL 2008	APRIL 2009	SEPT 2009	JULY 2010	SEPT 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	
BENZENE	0.26	0.16	0.28	ND(1)	0.12	0.38	ND(1)	ND(1)	REMOVED
TOLUENE	0.96	0.63	0.21	0.098	0.089	ND(1)	0.14	ND(1)	FROM
EBZ	0.95	0.14	0.31	0.14	0.17	0.17	0.12	0.29	SAMPLING
DRO							650	NA	820	310	900	200	200	
GRO							93	NA	36	140	140	9	9	
WATER ELEV.	427.32	430.18	427.69	427.06	426.54	426.16	427.32							

AP–9043 (GWP–565)
8.5-18.5 bgs

	JULY 1996	OCT 1997	APRIL 1998	SEPT 1998	MAR 1999	AUG 1999	MAY 2000	AUG 2000	MAY 2001	AUG 2001	MAR 2002	OCT 2002	APRIL 2003
DCA	ND(1)	NA	NA	NA	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(2)	ND(2)	ND(1)	ND(1)
EDB	NA	NA	NA	NA	ND(0.0190)	ND(0.002)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
BENZENE	34	86.5	77	86.5	20.8	42.8	27.3	11.2	13.2	8.11	6.71	1.67	5.11
TOLUENE	3	4.5	1.3	4.5	ND(1)	ND(5)	1

Table 3-1 - Groundwater Sample Field-Screening and Analytical Results
Valve Pits A, B, and C

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)								
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]	TAH[3]	TAqH[3]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**	**10**	**15**
Valve Pit A																			
VPA-MP1	10FWD03WG	7/1/2010	442.23	16.11	426.12	0.39	NA	NA	**34,000**	1,100	0.79 J	1.7	0.53 J	5.9	9.9	ND(1)	ND(1)	NA	NA
	10FWD12WG	9/13/2010	442.23	15.63	426.60	0.43	NA	NA	**6,600 QH**	1,000	ND(1.3)	ND(2.5)	ND(1)	5.6 J	11	ND(1)	ND(1)	NA	NA
	10FWD19WG	11/9/2010	442.23	16.80	425.43	1.28	41.5	8.3	**8,400 QH**	670	ND(10)	ND(10)	ND(10)	4.9 J	7.1 J	ND(10)	ND(20)	NA	NA
	11FW3D05WG	6/28/2011	442.23	14.05	428.18	7.04	8	26	**21,000**	150	0.29 J	0.48 J	ND(1)	0.86 J	1.3	ND(1)	ND(1)	NA	NA
	11FW3D09WG	10/3/2011	442.23	14.85	427.38	2.81	19	50	**12,000**	220	2.6	0.65 J	0.19 J	3.4	5.9	ND(1)	ND(1)	NA	NA
	12FW3D04WG	10/2/2012	442.23	15.97	426.26	1.18	67	13	**14,000**	990	1.2	1.4	ND(0.2)	9.9	16	ND(0.2)	ND(0.2)	NA	NA
	13FW3D04WG	5/28/2013	442.23	12.99	429.24	0.48	9	9.3	**12,000**	150	0.55 J	0.51 J	ND(0.2)	1.5	1.7	ND(0.2)	ND(0.2)	NA	NA
	14FWOU391WG	10/24/2014	442.23	15.20	427.03	0.88	25.5 J-	43.7	**15,000**	680	**140**	0.48 J	0.21 J	8.2	11	ND (0.15)	ND(0.2)	NA	NA
VPA-MP2	10FWD05WG	7/1/2010	442.19	15.00	427.19	0.51	NA	NA	**59,000**	1,600	**37**	28.0	7.4	39	15	ND(1)	ND(1)	NA	NA
	10FWD13WG	9/13/2010	442.19	14.53	427.66	0.22	NA	NA	**16,000 QH**	830	**24**	35.0	7.4	13	6.5	ND(1)	ND(1)	NA	NA
	10FWD20WG	11/9/2010	442.19	15.70	426.49	0.71	NA	NA	**12,000 QH**	**2,500**	**40**	190.0	34	84	53	ND(10)	ND(20)	NA	NA
	11FW3D04WG	6/27/2011	442.19	12.88	429.31	5.33	5.9	98	**13,000**	**2,300**	**9**	21.0	8.6	170	84	ND(4)	ND(4)	NA	NA
	11FW3D10WG	10/3/2011	442.19	13.80	428.39	1.92	7.3	150	**22,000**	**3,600**	3.1	32.0	5.8	220	120	ND(1)	ND(1)	NA	NA
	12FW3D02WG	10/2/2012	442.19	14.72	427.47	1.31	10	32	**20,000**	600	1.9	0.91 J	3.6	27	36	ND(0.2)	ND(0.2)	NA	NA
	13FW3D02WG	5/28/2013	442.19	11.39	430.80	1.24	1.8	27	**18,000**	470	1.2	3.5	5.9	17	12	ND(0.2)	ND(0.2)	NA	NA
	14FWOU394WG	10/24/2014	442.19	14.08	428.11	0.48	11.3 J-	8.6	**12,000**	1,300	**16**	14.0	29	55	32	ND (0.15)	ND(0.2)	NA	NA
AP-6064	10FWD06WG	7/1/2010	444.6	17.45	427.15	0.15	NA	NA	**3,200**	270	**11**	0.91 J, B	10	14	4.8	ND(1)	ND(1)	NA	NA
	10FWD17WG	9/13/2010	444.6	16.95	427.65	0.76	NA	NA	680	120	**7.5**	0.71 J	2.5	2.4	0.84	ND(1)	ND(1)	NA	NA
	10FWD22WG	11/10/2010	444.6	18.10	426.50	0.99	NA	NA	**2,500 QH,Q**	1,000 M	**36**	75	17	34	16	ND(10)	ND(20)	NA	NA
	10FWD23WG[4]	11/10/2010	444.6	18.10	426.50	0.99	NA	NA	**4,800 QH**	1,000	**32**	65	17	34	16	ND(10)	ND(20)	NA	NA
	11FW3D03WG	6/27/2011	444.6	15.27	429.33	4.06	0.13	55	**2,500**	510	3.8	7.1	9.9	17	9.1	ND(1)	ND(1)	NA	NA
	11FW3D12WG	10/3/2011	444.6	16.25	428.35	1.96	0.056 J	67	**2,800**	98	3.6	0.97 J	2.2	3.3	1.7	ND(1)	ND(1)	NA	NA
	12FW3D01WG	10/2/2012	444.6	17.18	427.42	1.51	0.054 J	25	**1,600**	43	3.9	0.28 J	0.6 J	0.83 J	0.45 J	ND(0.2)	ND(0.2)	NA	NA
	13FW3D01WG	5/28/2013	444.6	13.66	430.94	1.67	0.039 J	15	500	36	0.73 J	ND(0.4)	0.34 J	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	NA	NA
	14FWOU396WG	10/24/2014	444.6	16.54	428.06	1.2	0.137	34.3	**4,000**	41 J	**9**	0.48 J	0.41 J	0.92 J	0.20 J	ND (0.15)	ND(0.2)	NA	NA
AP-6065	10FWD07WG	7/1/2010	443.24	16.18	427.06	0.22	NA	NA	930 J	550	0.10 J	0.44 J, B	6.1	39 J	12	ND(1)	ND(1)	**26.3**	**29.9**
	10FWD08WG[4]	7/1/2010	443.24	16.18	427.06	0.22	NA	NA	940	430	ND(1) Q	0.32 J, B, Q	5.5	36	12	ND(1)	ND(1)	**24.9**	**28.42**
	10FWD14WG	9/13/2010	443.24	15.59	427.65	0.19	5.94	3.3	400	440	0.13 J	0.58 J	4.5	26	6.8	ND(1)	ND(1)	NA	NA
	10FWD18WG	11/9/2010	443.24	16.80	426.44	19.25	NA	NA	**1,700 QH**	900	ND(10)	ND(10)	7.2 J, QH	57 QH	25 QH	ND(10)	ND(20)	NA	NA
	11FW3D07WG	6/28/2011	443.24	14.00	429.24	5.78	0.48	51	990	690 QL	ND(2)	0.35 J	2	20	17	ND(2)	ND(2)	**13.2**	14.7
	11FW3D08WG[4]	6/28/2011	443.24	14.00	429.24	5.78	0.54	51	1,000	730 QL	ND(2)	ND(2)	1.9 J	20	18	ND(2)	ND(2)	**13.3**	**15.3**
	11FW3D15WG	10/4/2011	443.24	15.10	428.14	1.89	0.61	31	760	800 J, ML	ND(1)	0.43 J	4.6	40	23	ND(1)	ND(1)	**31.6**	**33.2**
	11FW3D16WG[4]	10/4/2011	443.24	15.10	428.14	1.89	0.6	31	730	810	ND(1)	0.38 J	4.6	40	24	ND(1)	ND(1)	**31.4**	**34.0**
	12FW3D05WG	10/2/2012	443.24	15.80	427.44	0.28	0.076 J	28	1,000	920	ND(0.2)	0.35 J	9.1	56	30	ND(0.2)	ND(0.2)	**37.4**	**41.8**
	12FW3D06WG[4]	10/2/2012	443.24	15.80	427.44	0.28	0.073 J	28	1,000	950	ND(0.2)	0.33 J	8.2	48	27	ND(0.2)	ND(0.2)	**32.8**	**37.3**
	13FW3D05WG	5/29/2013	443.24	11.71	431.53	6.22	0.52 J	11	250	43	ND(0.2)	ND(0.4)	ND(0.2)	0.59 J	0.64 J	ND(0.2)	ND(0.2)	2.00	2.19
	13FW3D06WG[4]	5/29/2013	443.24	11.71	431.53	6.22	0.58 J	11	230 J	56	ND(0.2)	ND(0.4)	ND(0.2)	0.59 J	0.63 J	ND(0.2)	ND(0.2)	2.00	2.19
	14FWOU392WG	10/24/2014	443.24	15.44	427.80	0.33	0.724	11.5	690 J,J-	650	**7.8 J-**	0.28 J	8.8 J,J-	62 J	22	ND (0.15)	ND(0.2)	**42.48**	**43.29**
	14FWOU393WG[4]	10/24/2014	443.24	15.44	427.80	0.33	0.751	10.1	700 J,J-	540	**7.6 J-**	0.30 J	9.3 J,J-	66	23	ND (0.15)	ND(0.2)	**43.9**	**44.46**
AP-9042[1] (GWP-24)	10FWD01WG	6/30/2010	443.12	18.35	424.77	0.15	NA	NA	**2,200**	380 B	**5.6 QH**	0.25 J, B, QH	16 QH	42.0 QH	9.1 QH	ND(1)	ND(1)	NA	NA
	10FWD09WG	9/13/2010	443.12	17.85	425.27	0.47	4.17	10.6	220	64 Q	0.74 J	ND(1)	1.2	2.7	0.23 J, Q	ND(1)	ND(2)	NA	NA
	10FWD10WG[4]	9/13/2010	443.12	17.85	425.27	0.47	NA	NA	240	41 J	0.65 J	ND(1)	0.93 J	2.3	0.16 J	ND(1)	ND(2)	NA	NA
	11FW3D01WG	6/27/2011	443.12	16.40	426.72	7.4	1.3	10	400	38	0.7 J	ND(1)	0.32 J	1.0	ND(1)	ND(1)	ND(1)	NA	NA
	11FW3D13WG	10/4/2011	443.12	17.23	425.89	2.59	5.3	7.7	710	46	1.5	ND(0.4)	0.82 J	3.3	ND(1)	ND(0.2)	ND(0.2)	NA	NA
AP-9043[1] (GWP-56S)	10FWD02WG	7/1/2010	441.68	14.94	426.74	0.29	NA	NA	820 QL	36 J, B	ND(1) QL	0.078 J, B, QL	0.066 J, B, QL	0.46 J, QL	ND(1) QL	ND(1) QL	ND(1) QL	NA	NA
	10FWD11WG	9/13/2010	441.68	14.43	427.25	0.24	NA	NA	310	140 QH	ND(0.13)	ND(0.25)	ND(0.1)	ND(0.12)	ND(0.14)	ND(1)	ND(1)	NA	NA
	11FW3D02WG	6/27/2011	441.68	13.02	428.66	4.14	6	11	900	140	ND(1)	ND(1)	0.25 J	0.76 J	ND(1)	ND(1)	ND(1)	NA	NA
	11FW3D14WG	10/4/2011	441.68	13.72	427.96	3.49	ND(0.1)	37	200 J	9 J, B	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	NA	NA
VPA-MP5	10FWD04WG	7/1/2010	442.52	15.32	427.20	0.53	NA	NA	**31,000**	430	2.5	3.1	1.7	15	12	ND(1)	ND(1)	NA	NA
	10FWD16WG	9/13/2010	442.52	14.83	427.69	0.43	NA	NA	**6,300 QH**	720	2.1	1.5	4.4	28	18	ND(1)	ND(1)	NA	NA
	10FWD21WG	11/10/2010	442.52	16.02	426.50	14.2	NA	NA	**25,000 QH**	**22,000**	2.1 J, QH	6.8 J, QH	4.2 J, QH	69 QH	60 QH	ND(10)	ND(20)	NA	NA
	11FW3D06WG	6/28/2011	442.52	13.35	429.17	4.94	1.8	190	**14,000 QL**	**9,700**	**9.6**	64	4.8 J	40	41	ND(5)	ND(5)	NA	NA
	11FW3D11WG	10/3/2011	442.52	14.11	428.41	1.63	3.2	90	**11,000**	2,000	**25**	72	6	35	38	ND(1)	ND(1)	NA	NA
	12FW3D03WG	10/3/2012	442.52	15.05	427.47	1.1	21	1.5 J	**26,000**	**9,800**	**28**	2.1	11	41	34	ND(0.2)	ND(0.2)	NA	NA
	13FW3D03WG	5/28/2013	442.52	11.71	430.81	0.29	15	0.92 J	**10,000**	1,300	**13**	3.8	6.6	37	33	ND(0.2)	ND(0.2)	NA	NA
	14FWOU395WG	10/24/2014	442.52	14.37	428.15	0.31	19.7 J-	4.9	**23,000**	1,400	**45**	2.9	15	78	53	ND (0.15)	ND(0.2)	NA	NA

Table 5-15 - Groundwater Sample Field-Screening and Analytical Results
Valve Pits A, B, and C

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)								
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]	TAH[3]	TAqH[3]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**	**10**	**15**
Valve Pit B																			
VPB-MP3	10FWE01WG	7/1/2010	437.39	10.15	427.24	0.33	74	110	**17,000**	580 QH	2.3	0.27 J, B	8.2	35	19	ND(1)	ND(1)	NA	NA
	11FW3E03WG	6/29/2011	437.39	8.22	429.17	5.6	51	7.7	**7,100**	540	2.0	ND(1)	10.0	16	6.8	ND(1)	ND(1)	NA	NA
	11FW3E05WG	10/4/2011	437.39	8.99	428.40	0.47	NA	NA	**9,000**	550	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12FW3E02WG	10/2/2012	437.39	9.76	427.63	0.23	58	5.1	**11,000**	660	2.6	0.56 J	10	31	16	ND(0.2) Q	ND(0.2)	NA	NA
	12FW3E03WG[4]	10/2/2012	437.39	9.76	427.63	0.23	58	5.1	**10,000**	640	2.6	0.54 J	9.6	31	16	ND(0.4) Q	ND(0.4)	NA	NA
	13FW3E01WG	5/28/2013	437.39	6.20	431.19	0.4	45	24	**2,800**	500	1	0.23 J	3.4	12	4.2	ND(0.2)	ND(0.2)	NA	NA
	14FWOU398WG	10/24/2014	437.39	9.20	428.19	0.4	64.4	162	**5,800**	610	2	0.30 J	4.8	38	2.7	ND (0.15)	ND(0.2)	NA	NA
VPB-MP1	10FWE03WG	7/1/2010	440.69	NM	NM	0.54	NA	NA	**12,000 Q**	180 Q	0.39 J,Q	0.28 J,B,Q	0.54 J,Q	8 Q	15 Q	ND(1) Q	ND(0.02) Q	NA	NA
	11FW3E02WG	6/28/2011	440.69	NM	NM	1.47	53	11	**14,000**	410 QH	ND(2)	0.41 J	0.5 J	15	40	ND(2)	ND(2)	NA	NA
	11FW3E06WG	10/4/2011	440.69	NM	NM	1.66	NA	NA	**15,000**	330	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12FW3E01WG	10/2/2012	440.69	NM	NM	2.77	37	6.5	**4,200**	180	0.39 J	0.32 J	0.44 J	7.3	6.8	ND(0.4)	ND(0.4)	NA	NA
AP-6018	10FWE02WG	7/1/2010	437.52	10.40	427.12	0.72	NA	NA	**4,100**	500	1.5	0.21 J, B	1.1	9.9	2.5	ND(1)	ND(1)	6.21	7.96
	11FW3E01WG	6/29/2011	437.52	8.46	429.06	0.94	11	9	**1,800**	570 J	0.94 J	0.17 J	0.65 J	11 J	5.6 J ML	ND(1)	ND(1)	3.93	5.35
	11FW3E04WG	10/4/2011	437.52	9.25	428.27	0.57	NA	NA	1,400	650	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12FW3E04WG	10/2/2012	437.52	10.00	427.52	0.18	12 J	4.4 J	**1,600**	890 J	2	ND(0.4)	1.5 J	17	15	ND(0.4)	ND(0.4)	**11.6**	13.9
	13FW3E02WG	5/29/2013	437.52	5.75	431.77	0.23	5.3	14	210 J	180	ND(0.2)	ND(0.4)	ND(0.2)	1.8	1.8	ND(0.2)	ND(0.2)	1.55	2.04
	14FWOU397WG	10/24/2014	437.52	9.49	428.03	0.38	6.8	43.5	930	300	1.7	0.22 J	0.23 J	3.6	2.1	ND (0.15)	ND(0.2)	3.35	3.90
Valve Pit C																			
VPC-MP2	11FW3F01WG	6/28/2011	447.02	17.45	429.57	3.53	14	12	**2,300**	1,400	ND(4)	ND(4)	3.1 J	3.6 J	5.2	2.9 J	ND(4)	**17.8**	**19.2**
	11FW3F03WG	10/4/2011	447.02	18.39	428.63	0.73	NA	NA	**5,500**	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11FW3F04WG[4]	10/4/2011	447.02	18.39	428.63	0.73	NA	NA	**5,500**	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12FW3F01WG	10/2/2012	447.02	19.15	427.87	0.17	18	9.5	**4,300**	1,200	ND(0.4)	ND(0.8)	7.8	18	ND(0.4)	ND(0.4)	ND(0.4)	**24.8**	**25.9**
	13FW3F01WG	5/29/2013	447.02	15.65	431.37	0.17	15	15	**1,800**	1,000	0.25 J	ND(0.4)	1.1	2	0.19 J	ND(0.2)	ND(0.2)	4.40	5.65
	14FWOU399WG	10/24/2014	447.02	18.50	428.52	0.83	20	61.3	**8,700**	1,900	0.53 J+	0.47 J,J+	22 J+	74 J+	9.4 J+	ND (0.15)	ND(0.2)	**101.60**	**115.60**
VPC-MP6	10FWF01WG	7/1/2010	434.37	6.85	427.52	0.29	61	0.48 J	**3,100**	400	0.25 J	0.13 J, B	0.37 J	14	2.7	ND(0.2)	ND(0.2)	**35.8**	**38.7**

Bold results represent concentrations in excess of remedial action goals

[1] Replacement wells installed in September 2004. Wells that were replaced are shown in parentheses.

[2] 1,2-Dibromoethane results were generated from either Method 8260 or Method 504.1. Results from Method 504.1 were used when available.

[3] For TAH and TAqH calculation purposes, the LOD was used for ND results. Prior to 2012, 1/2 the LOQ was used for ND results.

[4] Denotes sample is a field duplicate of preceding row.

DRO - diesel range organics
GRO - gasoline range organics
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
mg/L - milligram per liter
ft BTOC - feet below top of casing

msl - mean sea level
NA - not analyzed
NM - not measured
ROD - Record of Decision
TAH - total aromatic hydrocarbons
TAqH - total aqueous hydrocarbons

Data Qualifiers
B - analyte was detected in blank sample at similar concentration
J - result is estimated because it is less than the LOQ or due to a QC failure
J- or J+ - result is estimated with a high (+) or low (-) bias due to a QC failure (data starting in 2014)
ML or MH - result is estimated with a high (H) or low (L) bias due to matrix interference (data prior to 2014)
ND - detection limit (LOQ in parenthesis for data prior to 2012; LOD in parentheses for data starting in 2012)
QL or QH - result is estimated and biased high (H) or low (L) due to quality control failure (data prior to 2014)

AP-10028* (GWP-80)

10-20 bgs	MAR 1997	OCT 1997	APRIL 1998	OCT 1998	MAR 1999	SEPT 1999	MARCH 2000	MAY 2001	MAY 2002	APRIL 2003
DCA	NA	NA	NA	NA	NA	ND(10)	ND(5)	ND(10)	ND(1)	ND(10)
EDB	NA	NA	NA	NA	NA	ND(0.010)	0.073	ND(0.0194)	ND(0.0329)	ND(0.0194)
BENZENE	900	1,250	815	605	603	197	271	ND(1)	74.3	156
TOLUENE	1,050	40	62.5	33.4	27.4	13.8	199	ND(1)	ND(10)	1.31
EBZ	390	500	305	130	358	138	142	ND(1)	87.9	255
DRO										
GRO										
WATER ELEV.	NM	427.70	426.59	428.89	426.93	428.09	427.20	427.73	430.83	427.78

10-20 bgs	OCT 2003	MAR 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(0.0193)	ND(0.0199)	ND(0.0196)	ND(0.0184)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.010)	ND(0.0049)	NM	ND(0.02)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	58.3	82.8	84	56.5	30.5	19	17	10	8.4	NM	4.2	2.9	4.6	3.6
TOLUENE	ND(1)	1.31	0.550	ND(10)	1.2	0.81	0.34	0.73	0.33	NM	ND(2)	0.42	0.29	0.45
EBZ	94.8	117	51.7	206	9.20	5.5	1.2	2.1	6.2	NM	1.3	0.55	3.8	0.78
DRO								1,200	640	350	390	180	740	400
GRO								1,400	1,400	1,100	1,600	1,200	960	2,200
WATER ELEV.								427.78	429.05	428.85	428.12	428.88	428.93	428.35

AP-10274MW (CH-MP5)**

13-23 bgs	AUG 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	0.40	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(0.010)	ND(0.02)	ND(0.02)	ND(0.010)	0.0049	NM	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	20	ND(1)	0.70	2.1	3.0	NM	0.98	1.7	1.7	7.3
TOLUENE	65	0.12	1.7	66	91	NM	65	1.4	270	0.11
EBZ	17	ND(1)	2.9	31	23	NM	38	1.6	200	0.16
DRO				1,200	640	350	390	180	740	400
GRO				1,400	1,400	1,100	1,500	1,200	120	1,100
WATER ELEV.	433.40	433.16	431.90	427.84	429.21	428.96	428.85	428.00	431.48	428.92

AP-10275MW (CH-MP5)**

13-23 bgs	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(0.01)	ND(0.02)	ND(0.02)	ND(0.010)	ND(0.02)	NM	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	0.24	0.13	0.15	0.17	0.31	NM	ND(0.4)	0.16	0.12	
TOLUENE	ND(1)	ND(1)	0.083	0.15	0.61	NM	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.1)
EBZ			0.20	1.100	550	200	200	310	180	300
DRO				23	97	76	78	13	ND(25)	29
GRO										
WATER ELEV.	432.98	433.25	431.67	427.58	428.99	428.85	428.00	431.48	428.92	428.69

AP-10033* (GWP-2001A)

15-25	SEPT 2001	MAY 2002	APRIL 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(10)	ND(1)	ND(1)	ND(0.5)	ND(25)	ND(100)	ND(1)	ND(1)	ND(1)	ND(2)	ND(10)	ND(1)	ND(0.2)	ND(0.15)	ND(0.75)
EDB	2,690	1,270	45.5	695	683	612	420	1,100	0.25	1.4	1.4	ND(10)	ND(1)	ND(0.2)	ND(0.2)	1.5
BENZENE	14,300	8,620	437	5,070	5,860	4,760	3,800	9,900	6.8	2.3	45	45	79	14	9.6	9.6
TOLUENE	1,220	886	60.5	406	565	567	450	600	1.3	61	120	490	490	460	470	
EBZ									2,000	5,000	1,800	1,300	1,500	940	4,500	
DRO									220	1,600	3,200	11,000	8,800	7,000	9,000	
GRO																
WATER ELEV.	429.48	430.75	430.04	427.89	427.68	427.67	428.42	429.80	427.43	427.94	429.67	428.34	429.11	429.15	428.53	

AP-10277MW (CH-MP6)**

13-23 bgs	AUG 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	0.18	ND(0.15)
EDB	ND(0.01)	ND(0.02)	ND(0.02)	ND(0.010)	ND(0.02)	NM	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	0.34	NM	ND(1)	ND(1)	NM	ND(0.4)	ND(0.2)	0.46	ND(0.15)
TOLUENE	0.22	0.35	0.33	0.47	0.83	NM	ND(0.4)	0.27	1.3	1.0
EBZ	0.13	0.096	0.90	96	140	NM	290	21	300	470
DRO			550	2,200	680	370	300	1,600	20,000	510
GRO			39	850	1,900	2,700	5,000	430	5,100	2,400
WATER ELEV.	434.63	433.43	432.07	428.00	429.35	429.03	428.40	431.68	429.18	428.66

AP-10008 (GWP-88)

10-25 bgs	OCT 1993	OCT 1997	APR 1998	OCT 1998	MAR 1999	DEC 1999	MARCH 2000	MAY 2001	MAY 2002	APRIL 2003
DCA	ND(5)	NA	NA	NA	5.01	6.81	ND(1)	ND(1)	ND(1)	ND(1)
EDB	ND(5)	NA	NA	NA	NA	ND(1)	ND(0.0217)	ND(0.0237)	ND(0.0196)	ND(0.0200)
BENZENE	400	1,050	1,100	518	136	700	358	97	36.4	7.06
TOLUENE	ND(5)	ND(1)	3.3	ND(1)	ND(1)	ND(1)	2.83	ND(1)	ND(1)	ND(1)
EBZ	ND(5)	1.2	5	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
DRO										
GRO										
WATER ELEV.	NM	427.81	420.36	428.81	425.91	NM	NM	427.63	430.85	427.67

10-25 bgs	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	APRIL 2011	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(0.4)	ND(0.4)	ND(0.4)	0.17	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	NM	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
TOLUENE	1.4	1.6	1.4	0.67	0.60	NM	1.3	0.26	NM	ND(0.4)	0.22	0.090	0.58	3.2
EBZ	NA	NA	NA	0.75	0.30	NM	0.30	ND(0.8)	0.25	0.19				
DRO	0.19	0.14	ND(1)	0.077										
GRO														
WATER ELEV.	1,800	720	580	670	860	4,000	870							
	190	250	160	150	180	130	260							
	427.79	429.11	428.85	428.16	431.01	428.95	428.33							

AP-10276MW (CH-MP2)**

10-18 bgs	JUNE 1996	OCT 1998	JUNE 1999	MARCH 2000	MAY 2001	MAY 2002	APRIL 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(10)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(10)	ND(1)	ND(5)	ND(1)	1.31	1.69	0.080	ND(0.0186)	ND(0.0193)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.010)	ND(0.02)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	2,600	8	7.36	ND(1)	0.52	0.59	ND(0.8)	0.36	0.66	0.77	0.090	0.36	0.36	0.65	0.74	NM	ND(0.2)	ND(0.2)	0.043	0.18
TOLUENE	13,000	100	5.35	20.7	ND(1)	ND(1)	ND(1)	0.22	0.098	0.703	0.42									
EBZ	550	6	17.9	43.4	ND(1)	ND(1)	3.43	3.66	11	ND(0.8)	ND(0.2)									
DRO										9,400	190									
GRO																				
WATER ELEV.	429.33	427.31	428.52	427.35	428.01	430.63	428.08	427.96	427.49	428.06	428.36	428.48	427.27	428.21	429.43	429.18	428.71	431.96	429.52	428.82

AP-10278MW (GWP149)**

14-24 bgs	SEPT 1999	DEC 1999	MAR 2000	MAY 2001	MAY 2002	MAY 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.15)	ND(0.15)	
EDB	NA	NA	NA	NA	ND(1)	ND(0.0243)	ND(0.0205)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.2)	ND(0.2)	
BENZENE	ND(1)	ND(1)	7.28	ND(1)	11.1	66.2	ND(0.4)	0.24	ND(0.4)	0.36	ND(1)	ND(0.8)	0.36	0.66	0.77	NM	ND(0.8)	0.26	0.047	0.16
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.61	ND(1)	0.22	0.21	0.16	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	0.090	0.027	0.099
EBZ	ND(1)	ND(1)	1.6	ND(1)	ND(1)	36.6	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	703	0.42	
DRO													7,100	6,300	9,100	7,700	11,000	9,400		
GRO																				
WATER ELEV.	428.35	427.69	427.23	NM	432.00	427.83	427.61	427.22	427.57	427.81	428.76	426.91	427.94	429.21	429.01	428.26	428.90	429.13	428.54	

AP-10285MW (GWP-147)**

13-23 bgs	AUG 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	ND(1)	ND(1)	0.15	0.59	ND(1)	NM	ND(0.8)	0.17	1.1	0.25
TOLUENE	0.093	0.10	0.32	0.30	0.42	NM	ND(1.6)	0.18	0.78	0.15
EBZ	ND(1)	ND(1)	0.11	0.15	ND(1)	NM	ND(0.8)	ND(0.2)	0.41	0.30
DRO			15,000	19,000	7,000	15,000	13,000	4,600	26,000	6,300
GRO			140	140	110	180	150	93	210	120
WATER ELEV.	NA	434.26	431.95	427.99	429.29	429.08	428.18	428.77	429.08	428.61

AP-10029* (GWP-53)

12-22 bgs	JULY 1996	JUNE 1999	MAY 2000	MAY 2001	MAY 2002	APRIL 2003	JUNE 2004	APRIL 2005	JUNE 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	NA	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)	
EDB	NA	ND(10)	ND(1)	ND(1)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	
BENZENE	750	ND(10)	ND(1)	ND(1)	1.08	0.630	ND(0.4)	1.7	0.29	0.21	0.20	1.6	0.30	NM	1.4	0.36	0.25	1.3		
TOLUENE	210	ND(10)	ND(1)	ND(1)	ND(1)	0.47	0.20	0.21	0.16	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.4)	ND(0.4)	0.06	ND(0.10)	
EBZ	510	ND(10)	5.16	1.49	2.09	1.92	ND(1)	0.61	0.38	0.22	ND(1)	0.27	ND(1)	NM	ND(0.2)	ND(0.2)	0.55	0.070		
DRO											1,700	4,200	980	1,600	800	970	610	1,800		
GRO											420	79	52	79	18	41	23	61		
WATER ELEV.	NM	430.21	NM	431.83	427.71	427.62	426.74	430.70	427.55	427.55	426.85	427.99	429.34	429.05	428.22	428.71	428.95	428.75		

AP-10286MW (1144-MP9)**

13-23 bgs	AUG 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	0.17	0.26	0.22	0.56	ND(1)	0.80	0.78	0.71	NM	ND(0.8)	0.45	0.37	0.92			
TOLUENE	0.61	0.81	0.78	0.39	ND(1)	0.22	ND(1)	0.49	NM	ND(1.6)	0.21	1.1	0.64			
EBZ	1.8	1.2	0.64	0.84	ND(1)	0.99	0.71	0.33	NM	ND(0.8)	0.37	0.30	1.6			
DRO				44,000	NA	72,000	34,000	28,000	38,000	21,000	19,000	140,000	15,000			
GRO				1,900	NA	740	2,000	470	530	760	470	1,000	320			
WATER ELEV.	434.99	434.75	436.02	431.97	429.20	427.93	428.38	429.23	428.90	428.14	428.68	429.09	428.64			

AP-10287MW (1144-MP10)**

13-23 bgs	AUG 2007	APRIL 2008	APRIL 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	0.25	0.14	0.84	1.8	0.44	NM	ND(0.8)	0.78	2.9	2.5
TOLUENE	0.19	0.14	0.23	0.24	0.46	NM	ND(1.6)	ND(0.4)	0.5	0.23
EBZ	0.20	0.096	0.29	0.36	ND(1)	NM	ND(0.8)	ND(0.2)	1.1	1.6
DRO				5,100	12,000	4,500	6,600	5,400	5,400	21,000	8,800
GRO				130	260	130	180	270	210	400	430
WATER ELEV.	434.76	434.19		431.87	427.74	429.04	428.84	427.80	428.30	428.64	428.68

AP-10288MW (AP-10032)**

12-22 bgs	AUG 1999	DEC 1999	MAR 2000	MAY 2001	MAY 2002	MAY 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(20)	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	NOT	ND(0.15)	
EDB	ND(0.002)	ND(0.026)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	SAMPLED	ND(0.2)		
BENZENE	110	261	27.9	25.5	3.47	32.5	3.08	2.22	2.03	1.5	0.56	0.93	0.92	ND(1)	NM	0.24	DUE	2.2		
TOLUENE	8.44	3.38	15	ND(1)	ND(1)	ND(1)	0.24	0.48	0.57	0.21	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.4)	TO	2		
EBZ	34	125	11.6	12.9	19.8	70.3	6.73	17.9	18.1	17	7.6	16	14	2.4	NM	1.5	DAMAGED	41		
DRO												22,000	21,000	5,100	6,400	4,400	WELL	22,000		
GRO												420	370	68	92	110		1,700		
WATER ELEV.	428.56	427.64	NM	NM	431.46	427.41	427.01	426.01	426.56	426.92	427.77	424.76	428.00	429.23	429.03	428.08		429.01		

AP-10289MW (GWP-148)**

14-24 bgs	AUG 1999	DEC 1999	MAR 2000	MAY 2001	MAY 2002	MAY 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.15)	ND(0.15)	
EDB	ND(0.02)	ND(0.026)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.8)	ND(0.2)	ND(0.2)	ND(0.2)	
BENZENE	1.29	ND(1)	ND(1)	ND(1)	ND(1)	0.45	0.79	1.31	0.320	ND(1.0)	0.58	0.71	0.81	0.70	0.58	NM	ND(0.8)	ND(0.2)	0.95	0.58
TOLUENE	5.78	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	4.6	0.98	0.52	0.38	0.31	0.68	0.53	0.63	NM	ND(1.6)	ND(0.4)	0.53	0.63	
EBZ	25.4	8.33	8.42	2.14	ND(1.0)	2.53	3.4	3.4	5.9	NM	1.7	2.3	3.1	3.6						
DRO							6.92	8.25	5.40	4	3.4	4.5	4	3.4	4,700	2,400	1,800	1,200		
GRO																				
WATER ELEV.	428.27	427.65	NM	NM	431.94	427.75	427.41	427.07	427.36	427.49	428.43	428.25	427.55	428.21	428.59	427.75	428.28	428.56	428.84	

AP-10290MW (GWP-130)**

10-20 bgs	JUNE 1997	SEPT 1998	OCT 1998	MAR 1999	AUG 1999	JUNE 2000	MAY 2001	MAY 2002	APRIL 2003	APRIL 2004	APRIL 2005	APRIL 2006	JUNE 2007	JUNE 2008	JUNE 2009	JUNE 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)
EDB	NA	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)
BENZENE	110	49	86	53.6	45.3	39.7	57.8	37.4	37.3	39.5	2.49	3.07	1.2	0.23	0.32	0.52	0.91	NM	0.52	ND(0.2)	0.64	0.31
TOLUENE	150	51	42	10.6	60.7	124	75.3	21	ND(1)	ND(1)	0.35	0.15	0.25	0.19	ND(1)	0.21	ND(1)	NM	0.64	0.13		
EBZ	100	40	44	22.1	56.6	49.2	91.9	68.2	74.8	74.5	10.7	36	28	2.8	1.3	22	44	NM	38	50	63	3.5
DRO															4,200	22,000	18,000	25,000	9,900	17,000	29,000	4,400
GRO															210	920	1,800	2,300	2,700	3,600	3,200	730
WATER ELEV.	NM	430.12	NM	427.51	429.44	430.47	428.25	432.27	428.34	428.01	427.79	430.69	428.30	427.95	427.16	428.24	429.57	429.28	428.43	428.84	429.33	428.44

AP-10030* (GWP-57)

11.5-21.5 bgs	JULY 1996	JUNE 2000	MAY 2001	MAY 2002	APRIL 2003	JUNE 2004	APRIL 2005	JUNE 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	NA	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)	
EDB	NA	ND(10)	ND(1)	ND(1)	ND(0.5)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)		
BENZENE	750	ND(10)	ND(1)	ND(1)	1.08	0.630	ND(0.4)	1.7	0.29	0.21	0.20	1.6	0.30	NM	1.4	0.36	0.25	1.3		
TOLUENE	210	ND(10)	ND(1)	ND(1)	ND(1)	0.47	0.20	0.21	0.16	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.4)	ND(0.4)	0.06	ND(0.10)		
EBZ	510	ND(10)	5.16	1.49	2.09	1.92	ND(1)	0.61	0.38	0.22	ND(1)	0.27	ND(1)	NM	ND(0.2)	ND(0.2)	0.55	0.070		
DRO											1,700	4,200	980	1,600	800	970	610	1,800		
GRO											420	79	52	79	18	41	23	61		
WATER ELEV.	NM	430.21	NM	431.83	427.71	427.62	426.74	430.70	427.55	427.55	426.85	427.99	429.34	429.05	428.22	428.71	428.95	428.75		

AP-10291MW (GWP-53)**

12-22 bgs	JULY 1996	MAY 1999	MAY 2000	MAY 2001	MAY 2002	NOV 2002	APRIL 2003	APRIL 2004	APRIL 2005	APRIL 2006	APRIL 2007	APRIL 2008	APRIL 2009	APRIL 2010	JUNE 2011	OCT 2011	OCT 2012	MAY 2013	OCT 2014	APR 2015
DCA	NA	ND(10)	ND(10)	ND(1)	ND(1)	ND(10)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.15)	ND(0.15)	
EDB	NA	ND(10)	ND(10)	ND(1)	1.31	ND(10)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	NM	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	
BENZENE	1,500	41.3	ND(10)	ND(0.5)	0.410	0.79	0.99	3.2	1.9	1.3	1.1	1.1	1.0	NM	0.97	1.2	0.38	1.3		
TOLUENE	12,000	230	41.4	4.71	ND(1)	1.72	3.71	3.5	1.1	1.3	0.53	0.19	0.24	NM	0.23	0.33	0.20	0.18		
EBZ	990	172	159	4.63	ND(10)	2.69	2.61	5.04	8.16	4.5	4	5.1	1.4	1.0	NM	0.95	1.5	0.8	3.4	
DRO												3,100	44,000	23,000	23,000	15,000	14,000	17,000	13,000	
GRO												740	390	330	220	430	350	140	280	
WATER ELEV.	429.05	428.66	NM	431.67	429.00	428.25	427.93	427.55	NM	427.86	427.8	NM	428.25	429.50	429.31	428.43	428.85	429.27	429.06	

AP-10031* (GWP-147)

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Table 5-16 - Groundwater Sample Field-Screening and Analytical Results
Central Header, Former Building 1144, and Eight-Car Header

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)						
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
Central Header																	
AP-10031[1] (GWP-13)	10FWG01WG	6/30/2010	448.58	20.35	428.23	0.49	NA	NA	170	800 QH	0.11 J,B	0.21 J,B	15	2.4	2.3	ND(1)	ND(0.010) QL
	10FWG15WG	9/9/2010	448.58	19.88	428.70	0.57	4.06	18.5	130	1700	ND(1)	ND(1)	0.67 J	0.99 J	ND(1)	ND(1)	ND(0.010)
	11FW3G01WG	6/22/2011	448.58	20.6	427.98	2.37	3.7	6.8	480	1,600	ND(1)	ND(1)	6	3.1	4	ND(1)	ND(0.020)
	11FW3G17WG	10/6/2011	448.58	19.34	429.24	0.89	NA	NA	200 J	1,500	NA	NA	NA	NA	NA	NA	NA
	12FW3G10WG	10/4/2012	448.58	20.06	428.52	0.19	5	15	66 J	1,500	ND(0.2)	ND(0.4)	5.4	0.95 J	0.52 J	ND(0.2)	ND(0.2)
	13FW3G07WG	5/28/2013	448.58	16.73	431.85	0.17	4.6	6.6	64 J	2,100 QH	ND(0.2)	ND(0.4)	0.37 J	3.7	0.84 J	ND(0.2)	ND(0.2)
	14FWOU373WG	10/23/2014	448.58	19.2	429.38	0.11	5.22	57.1	130 J	**3,000**	ND(0.5)	ND(0.5)	62	34	3.9 J	ND(0.75)	ND(1)
CH-MP2	10FWG02WG	6/30/2010	445.11	16.90	428.21	7.78	NA	NA	**11,000**	**2,500 QH**	2.2	4.6	11.0	550 QL	330	ND(1)	0.013 QL
	10FWG03WG[3]	6/30/2010	445.11	16.90	428.21	7.78	NA	NA	**11,000**	**3,000 QH**	2.1	4.8	11.0	510	290	ND(1)	0.01
	10FWG16WG	9/9/2010	445.11	16.46	428.65	0.45	NA	NA	**4,200 QH**	**3,300**	1.9 J	ND(1)	8.6	270	100	ND(1)	0.012
	11FW3G04WG	6/23/2011	445.11	15.68	429.43	6.14	15 J	5.2	**4,700**	1,700	1.9	5.4	8.9	190	130	ND(1)	0.0097 J
	11FW3G18WG	10/6/2011	445.11	15.93	429.18	0.71	NA	NA	**3,600**	**2,300**	NA	NA	NA	NA	NA	NA	NA
	12FW3G01WG	10/3/2012	445.11	16.4	428.71	0.27	35	2.8 J	**3,500**	**4,300**	1.8 J	3.4 J	7.2	270	200	ND(1)	ND(1)
	12FW3G02WG[3]	10/3/2012	445.11	16.4	428.71	0.27	35	2.8 J	**3,400**	**4,300**	2.0 J	3.6 J	7.6	280	210	ND(1)	ND(1)
	13FW3G08WG	5/29/2013	445.11	13.15	431.96	0.42	22	7.3	**1,700**	**2,300**	ND(0.2)	0.64 J,QH	2 QH	64 QH	50 QH	ND(0.2)	ND(0.2)
	13FW3G09WG[3]	5/29/2013	445.11	13.15	431.96	0.42	22	7.3	**1,700**	**2,400**	ND(0.2)	0.71 J,QH	2.2 QH	73 QH	53 QH	ND(0.2)	ND(0.2)
	14FWOU371WG	10/23/2014	445.11	15.59	429.52	1.71	23.1	39.8	**4,200**	1,700	0.43 J	0.96	4.0 J	170 J	110 J	0.16 J	ND(0.2)
	14FWOU372WG[3]	10/23/2014	445.11	15.59	429.52	1.71	25.8	39.4	**4,100**	1,800	0.42 J	1.1	4.5	200	130	0.20 J	ND(0.2)
GWP-2001C	10FWG04WG	6/30/2010	442.64	14.55	428.09	0.33	NA	NA	**15,000**	**2,100 QH**	0.95 J	1.5 B	50	120 QL	61	ND(1) Q	ND(0.010) QL
	10FWG20WG	9/10/2010	442.64	14.07	428.57	0.87	NA	NA	**6,700**	**3,700**	0.88 J	ND(1)	42	97	47	ND(1)	ND(0.010)
	11FW3G06WG	6/23/2011	442.64	13.38	429.26	2.37	21	2.5 J	**7,800**	**2,300**	0.79 J	0.9 J	30	76	31	ND(1)	ND(0.020)
	11FW3G13WG	10/5/2011	442.64	13.42	429.22	3.82	NA	NA	**12,000**	**2,200**	NA	NA	NA	NA	NA	NA	NA
	12FW3G08WG	10/4/2012	442.64	14.22	428.42	0.19	27	ND(0.5)	**9,400**	**3,200**	1.2 J	1.4 J	40	110	52	ND(1)	ND(1)
	13FW3G10WG	5/29/2013	442.64	11.11	431.53	0.23	17	1.7 J	**3,800**	1,900	ND(0.4) QL	0.59 J,QL	24 QL	90 QL	44 QL	ND(0.4) QL	ND(0.4) QL
	14FWOU383WG	10/23/2014	442.64	13.38	429.26	0.28	26.5	8.61	**7,500**	**2,800**	0.55	1.40	37	160	75	0.24 J	ND(0.2)
AP-10033 (GWP-2001A)	10FWG09WG	6/30/2010	448.49	20.55	427.94	1.02	NA	NA	**5,000**	1,600 QH	1.4	2.3	61	42 QL	35	ND(1) Q	0.0095 J,QL
	10FWG18WG	9/9/2010	448.49	19.99	428.50	1.56	NA	NA	**2,100**	**2,200 QL**	0.31 J	0.68 J	9.6	3.9	2.8	ND(1)	ND(0.010)
	11FW3G09WG	6/24/2011	448.49	18.82	429.67	4.1	6.4	11	**1,800**	**2,700**	1.4 J	45	120	28	17	ND(2)	0.0081 J
	11FW3G10WG[3]	6/24/2011	448.49	18.82	429.67	4.1	6.6	12	**1,700**	**3,200**	1.4 J	43	110	28	15	ND(2)	0.0066 J
	11FW3G19WG	10/6/2011	448.49	19.49	429.00	0.7	NA	NA	1,200	**5,200**	NA	NA	NA	NA	NA	NA	NA
	11FW3G20WG[3]	10/6/2011	448.49	19.49	429.00	0.7	NA	NA	1,000	**5,200**	NA	NA	NA	NA	NA	NA	NA
	12FW3G06WG	10/3/2012	448.49	20.15	428.34	0.17	15	1.5	1,300	**11,000**	ND(10)	45 J	490	100	60	ND(10)	ND(10)
	13FW3G01WG	5/23/2013	448.49	19.38	429.11	0.25	18	3.9 J	**1,500**	**9,800**	ND(1)	79 QH	490 QH	130 QH	190 QH	ND(1)	ND(1)
	14FWOU378WG	10/23/2014	448.49	19.34	429.15	0.79	20.9	9.57	940	**7,800**	1.5 J	14	460	110	55	ND(0.75)	ND(1)
AP-10028[1] (GWP-80)	10FWG10WG	6/30/2010	447.38	19.60	427.78	0.31	NA	NA	**9,000**	1,400 QH	**10**	0.73 J,B	2.1	2.8 QL	1.5	ND(1) Q	ND(0.010) QL
	10FWG13WG	9/8/2010	447.38	19.01	428.37	3.56	NA	NA	**3,300**	**2,800**	**8**	0.34 J	0.79 J	1.1	ND(1)	ND(1)	ND(0.010)
	11FW3G02WG	6/22/2011	447.38	18.33	429.05	1.54	11	38	**4,900**	1,400	**6.4**	0.33 J	6.2	4.1	1	ND(1)	ND(0.020)
	11FW3G15WG	10/6/2011	447.38	18.53	428.85	0.49	NA	NA	**4,200**	1,100	NA	NA	NA	NA	NA	NA	NA
	12FW3G09WG	10/4/2012	447.38	19.26	428.12	0.22	10	7.4	**2,400**	1,600 J,QH	4.2 J	ND(2)	1.3 J	2.5 J	1.9 J	ND(1)	ND(1)
	13FW3G02WG	5/23/2013	447.38	18.5	428.88	0.26	11	16	**3,000**	1,200	2.9	0.42 J	0.55 J	1.3 J	4.5	ND(0.4)	ND(0.4)
	14FWOU377WG	10/23/2014	447.38	18.45	428.93	0.55	6.78	130	**3,200**	960	4.6	0.29 J	3.8	2.3	0.49 J,B	ND(0.15)	ND(0.2)
AP-6008	10FWG05WG	6/30/2010	445.76	18.00	427.76	0.28	NA	NA	**1,800**	190	ND(1)	0.10 J,B	0.11 J, B	0.15 J,Q	ND(1)	ND(1) Q	ND(0.010) QL
	10FWG11WG	9/8/2010	445.76	17.42	428.34	0.55	NA	NA	230 Q	400	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.019)
	10FWG12WG[3]	9/8/2010	445.76	17.42	428.34	0.55	NA	NA	320	420	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.019)
	11FW3G08WG	6/23/2011	445.76	16.65	429.11	1.42	22	32	720	250	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.020)
	11FW3G14WG	10/6/2011	445.76	16.91	428.85	0.37	NA	NA	580	160	NA	NA	NA	NA	NA	NA	NA
	12FW3G07WG	10/3/2012	445.76	17.6	428.16	0.18	22	23 MH	670 J,ML	150 J,QH	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3G03WG	5/28/2013	445.76	14.75	431.01	0.17	20	18	860	190	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU385WG	10/23/2014	445.76	16.81	428.95	0.32	15.5	25.4	**4,000**	130	ND(0.1)	0.12 J	ND(0.1)	0.14 J,B	ND(0.2)	ND(0.15)	ND(0.2)

Table 5-16 - Groundwater Sample Field-Screening and Analytical Results
Central Header, Former Building 1144, and Eight-Car Header

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)						
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
CH-MP6	10FWG07WG	6/30/2010	446.31	18.47	427.84	1.09	NA	NA	1,200	860 QH	2.1	66	31	8.3 QL	3.8	ND(1) Q	ND(1) QL
	10FWG17WG	9/9/2010	446.31	17.88	428.43	0.67	NA	NA	230	870 QL	1.2	51	19	6.4	3	0.81 J	ND(0.010)
	11FW3G03WG	6/22/2011	446.31	17.1	429.21	2.44	0.93	34	640	710	3	91	23	6.2	2.8	ND(1)	0.0049 J
	11FW3G16WG	10/6/2011	446.31	17.35	428.96	0.68	NA	NA	350	1,500	NA	NA	NA	NA	NA	NA	NA
	12FW3G04WG	10/3/2012	446.31	18.05	428.26	0.19	2.9	27	390	1,800	0.98 J	65	38	19	9.3	ND(0.4)	ND(0.4)
	13FW3G05WG	5/28/2013	446.31	14.82	431.49	0.18	2.2	24	180 J	120	1.7	1.4	1.6	1.2	0.58 J	ND(0.2)	ND(0.2)
	14FWOU375WG	10/23/2014	446.31	17.27	429.04	0.59	5.57	70.9	740	**3,100**	1.7	270	200	41	15	ND(0.15)	ND(0.2)
CH-MP5	10FWG08WG	6/30/2010	446.45	18.87	427.58	8.11	NA	NA	1,100	22 J,B	ND(1)	0.17 J,B	0.15 J,B	0.11 J	ND(1)	ND(1) Q	ND(0.010) QL
	10FWG14WG	9/8/2010	446.45	18.13	428.32	5.04	NA	NA	190	21 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.010)
	11FW3G05WG	6/23/2011	446.45	17.46	428.99	1.1	2.1	37	550	97	**30**	0.31 J	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.020)
	11FW3G21WG	10/6/2011	446.45	17.6	428.85	0.41	NA	NA	200 J	76	NA	NA	NA	NA	NA	NA	NA
	12FW3G03WG	10/3/2012	446.45	18.45	428.00	0.29	0.62	30	200 J	78 B	**28**	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	13FW3G04WG	5/28/2013	446.45	14.97	431.48	0.19	0.28	30	310	13 J	3.8	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU374WG	10/23/2014	446.45	17.53	428.92	0.44	0.429	40.4	180	ND(25)	ND(0.1)	0.16 J	ND(0.1)	0.26 J,B	0.24 J,B	ND(0.15)	ND(0.2)
CH-MP9	10FWG06WG	6/30/2010	447.68	19.68	428.00	3.47	NA	NA	**2,200**	850 QH	0.22 J,B	0.47 J,B	96	7.7 QL	2.4	ND(1) Q	ND(0.010) QL
	10FWG19WG	9/10/2010	447.68	17.88	429.80	0.67	NA	NA	1,300	**4,200**	ND(1)	ND(1)	310	13	6.9 J	ND(1)	ND(0.010)
	11FW3G07WG	6/23/2011	447.68	18.33	429.35	0.81	4.6	18	680	1,900	0.34 J	0.83 J	140	16	7.9	ND(1)	ND(0.020)
	11FW3G22WG	10/6/2011	447.68	18.65	429.03	0.79	NA	NA	370	**2,700**	NA	NA	NA	NA	NA	NA	NA
	12FW3G05WG	10/3/2012	447.68	19.28	428.40	1.03	6.9	14	300	**5,000**	ND(4)	ND(8)	290	69	32	ND(4)	ND(4)
	13FW3G06WG	5/28/2013	447.68	16	431.68	1.84	1.8	40	**1,600**	430	ND(0.2)	0.27 J	21	2.7	1	ND(0.2)	ND(0.2)
	14FWOU376WG	10/23/2014	447.68	18.5	429.18	1.03	12.8	20	**20,000**	**5,100**	0.46 J	1.3	300	67	26	0.18 J	ND(0.4)
Former Building 1144																	
AP-10027[1] (1144-MP4)	10FWH06WG	6/29/2010	446.56	18.53	428.03	1.1	NA	NA	**25,000**	310	3.1	1.1 B,Q	1.1	7.7	4.4	ND(1)	ND(1)
	10FWH11WG[3]	6/29/2010	446.56	18.53	428.03	1.1	NA	NA	**24,000**	510	3.2	1.6 B	1.2	9.5	5.5	ND(1)	ND(1)
	10FWH21WG	9/13/2010	446.56	18.02	428.54	0.26	NA	NA	**8,700**	490	3.5	0.65 J	1.2	6.2	3.7	ND(1)	ND(2)
	11FW3H04WG	6/21/2011	446.56	17.24	429.32	5.31	12	1 J, Q	**11,000**	230	3.8	3.1	2.6	2.5	1.2	ND(1)	ND(1)
	11FW3H05WG[3]	6/21/2011	446.56	17.24	429.32	5.31	13	0.48 J	**11,000**	210	3.7	2.8	2.3	2.3	1.1	ND(1)	ND(1)
	11FW3H17WG	10/4/2011	446.56	17.48	429.08	0.41	NA	NA	**8,900**	240	NA	NA	NA	NA	NA	NA	NA
	11FW3H18WG[3]	10/4/2011	446.56	17.48	429.08	0.41	NA	NA	**8,000**	230	NA	NA	NA	NA	NA	NA	NA
	12FW3H01WG	10/4/2012	446.56	18.36	428.20	0.86	19	0.23 J,Q	**9,700**	330	2.1 J	ND(1.6)	3.1 J	4.3	2.1 J	ND(0.8)	ND(0.8)
	12FW3H02WG[3]	10/4/2012	446.56	18.36	428.20	0.86	20	ND(0.5)Q	**9,200**	370	2.1 J	ND(1.6)	3.2 J	4.5	2.2 J	ND(0.8)	ND(0.8)
	13FW3H04WG	5/22/2013	446.56	18.86	427.70	0.21	20	ND(0.5)	**19,000**	350	4.7	4	6.5	3.6	1.2	ND(0.2)	ND(0.2)
	13FW3H05WG[3]	5/22/2013	446.56	18.86	427.70	0.21	24	ND(0.5)	**20,000**	330	4.8	4.1	6.7	3.6	1.3	ND(0.2)	ND(0.2)
	SAMPLE WAS NOT COLLECTED AS THE WELL WAS FOUND TO BE BROKEN																
GWP-148	10FWH08WG	6/29/2010	445.45	17.90	427.55	0.39	NA	NA	**8,400**	650 QH	0.70 J	0.53 J, B	3.4	48	47	ND(1)	ND(1)
	10FWH13WG	9/8/2010	445.45	17.44	428.01	0.2	NA	NA	**2,600**	1,300	0.74 J	0.54 J	3	46	52	ND(1)	ND(1)
	11FW3H10WG	6/22/2011	445.45	17.24	428.21	5.31	16	1.1 J	**3,000**	470	0.58 J	0.52 J	1.9	26	34	ND(1)	ND(1)
	11FW3H19WG	10/4/2011	445.45	16.86	428.59	0.39	NA	NA	**4,800**	500	NA	NA	NA	NA	NA	NA	NA
	12FW3H09WG	10/4/2012	445.45	17.7	427.75	0.17	28	ND(0.5)	**4,700**	820	ND(0.8)	ND(1.6)	1.7 J	27	33	ND(0.8)	ND(0.8)
	13FW3H09WG	5/22/2013	445.45	17.17	428.28	0.53	21	1.2 J	**3,400**	580	ND(0.2)	0.38	2.3	32	39	ND(0.2)	ND(0.2)
	14FWOU386WG	10/23/2014	445.45	16.89	428.56	0.37	28.2	0.24	**6,000**	760	0.59	0.53	3.1	60	58	0.10 J	ND(0.2)
AP-10032[1] (GWP-147)	10FWH09WG	6/29/2010	446.7	18.70	428.00	0.21	5.95	66.8	**21,000**	370	0.92 J	0.21 J,B	14	32	12	ND(1)	ND(1)
	10FWH20WG	9/10/2010	446.7	18.27	428.43	0.57	NA	NA	**4,300**	200	0.26 J	ND(0.25)	1.2	3.5	1.7	ND(1)	ND(1)
	11FW3H02WG	6/21/2011	446.7	17.47	429.23	5.2	3.6	29	**5,100**	68	ND(1)	ND(1)	2.4	2.3	0.35 J	ND(1)	ND(1)
	11FW3H12WG	10/3/2011	446.7	17.67	429.03	0.5	NA	NA	**6,400**	92 B	NA	NA	NA	NA	NA	NA	NA
	12FW3H11WG	10/8/2012	446.7	18.62	428.08	0.24	6.3	16	**4,400**	110 B	0.24 J	ND(0.4)	1.5	4.1	2	ND(0.2)	ND(0.2)
	SAMPLE WAS NOT COLLECTED AS THE WELL WAS FOUND TO BE BROKEN																
GWP-149	10FWH05WG	6/29/2010	445.61	17.67	427.94	1.08	NA	NA	**25,000**	100 B	0.36 J	0.14 J,B	0.18 J,B	0.35 J	0.17 J,B	ND(1)	ND(1)
	10FWH11WG	9/8/2010	445.61	17.12	428.49	0.41	NA	NA	**5,100 QH**	120	ND(1)	ND(1)	0.21 J	0.32 J	ND(1)	ND(1)	ND(1)
	11FW3H08WG	6/22/2011	445.61	16.40	429.21	2.13	2.7	9.6	**7,100**	85	ND(1)	ND(1)	ND(1)	0.23 J	ND(1)	ND(1)	ND(1)
	11FW3H21WG	10/4/2011	445.61	16.60	429.01	0.23	NM	NM	**6,300**	61 B	NA	NA	NA	NA	NA	NA	NA
	12GW3H07WG	10/4/2012	445.61	17.35	428.26	0.24	4.9	8.6	**9,100**	75 B	ND(0.8)	ND(1.6)	ND(0.8)	ND(0.8)	ND(1.6)	ND(0.8)	ND(0.8)
	13FW3H10WG	5/23/2013	445.61	16.71	428.90	0.19	6.2	6.9	**7,700**	91	0.36 J	ND(0.4)	ND(0.2)	0.18 J	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU382WG	10/23/2014	445.61	16.48	429.13	0.23	10	3.01	**11,000**	240	0.66	0.22 J	703	7.7	4.8	ND(0.15)	ND(0.2)

Table 5-16 - Groundwater Sample Field-Screening and Analytical Results
Central Header, Former Building 1144, and Eight-Car Header

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)						
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
GWP-131	10FWH07WG	6/29/2010	446.54	18.35	428.19	0.28	NA	NA	1,100	420 QH	ND(1)	0.25 J,B	1.3	20	13	ND(1)	ND(1)
	10FWH12WG	9/8/2010	446.54	17.9	428.64	0.21	NA	NA	500	1,100	ND(1)	ND(1)	1.6 J	22	14	ND(1)	ND(1)
	11FW3H11WG	6/22/2011	446.54	17.13	429.41	2.66	14	37	540	640	ND(1)	0.21 J	1.4	15	12	ND(1)	ND(1)
	11FW3H20WG	10/4/2011	446.54	17.33	429.21	0.19	NM	NM	970	550	NA	NA	NA	NA	NA	NA	NA
	12FW3H08WG	10/4/2012	446.54	18.1	428.44	0.21	14	5.7	510	730	ND(0.2)	0.29 J	0.95 J	14	13	ND(0.2)	ND(0.2)
	13FW3H07WG	5/22/2013	446.54	17.52	429.02	0.23	13	14	460	460	ND(0.2)	0.21 J	0.45 J	5.8	5.6	ND(0.2)	ND(0.2)
	14FWOU384WG	10/23/2014	446.54	17.18	429.36	0.24	36.2	53	1,100	490	0.18 J	0.22 J	1.2	11	3.2	ND(0.15)	ND(0.2)
1144-MP7	10FWH03WG	6/29/2010	446.18	18.19	427.99	1.08	NA	NA	**19,000 QH**	140	0.59 J	0.30 J,B	0.15 J,B	0.40 J	2.6	ND(1)	ND(1)
	10FWH14WG	9/8/2010	446.18	17.7	428.48	0.23	NA	NA	**6,000**	260	0.5 J	0.49 J	0.17 J	0.41 J	6.1	ND(1)	ND(1)
	11FW3H01WG	6/21/2011	446.18	16.89	429.29	1.03	9.1	14	**7,000**	110	ND(1)	0.42 J	ND(1)	0.32 J	2.6	ND(1)	ND(1)
	11FW3H15WG	10/3/2011	446.18	17.1	429.08	0.65	NM	NM	**15,000**	180 QH	NA	NA	NA	NA	NA	NA	NA
	12FW3H04WG	10/4/2012	446.18	18	428.18	1.03	27	6.8	**13,000**	150	ND(0.8)	ND(1.6)	ND(0.8)	ND(0.8)	3.7 J	ND(0.8)	ND(0.8)
	13FW3H02WG	5/22/2013	446.18	17.41	428.77	0.46	14	11	**4,600**	93	0.17 J	0.18 J	ND(0.2)	0.45 J	3.9	ND(0.2)	ND(0.2)
	14FWOU389WG	10/23/2014	446.18	17.1	429.08	0.38	37.9	7.78	**26,000 J+**	210	1.1	0.76	0.41 J	1.5 J	7.9	ND(0.15)	ND(0.2)
1144-MP8	10FWH04WG	6/29/2010	445.72	17.68	428.04	1.53	39	3.6	**69,000**	360	4.4	2.5	0.59 J	16	30	ND(1)	ND(1)
	10FWH16WG	9/9/2010	445.72	17.23	428.49	0.17	NA	NA	**12,000 Q**	640	4.8	3	0.86 J	17	31	ND(1)	ND(2)
	10FWH17WG[3]	9/9/2010	445.72	17.23	428.49	0.17	NA	NA	**37,000**	660	4.8	2.9	0.89 J	17	30	ND(1)	ND(2)
	11FW3H03WG	6/21/2011	445.72	16.37	429.35	0.95	33	0.71 J	**23,000**	340	4.5	2.2	1	18	31	ND(1)	ND(1)
	11FW3H22WG	10/5/2011	445.72	16.55	429.17	2.45	NM	NM	**37,000**	170	NA	NA	NA	NA	NA	NA	NA
	12FW3H03WG	10/4/2012	445.72	17.44	428.28	1.31	59	ND(0.5)	**54,000**	620	3.5 J	ND(2)	ND(2)	23	36	ND(2)	ND(2)
	13FW3H07WG	5/22/2013	445.72	16.87	428.85	0.27	36	ND(0.5)	**16,000**	470	4.4	1.4	1.9	36	49	ND(0.2)	ND(0.2)
	14FWOU379WG	10/23/2014	445.72	16.5	429.22	0.45	85.7	0.35	**78,000 J+**	330	**5.1**	1.6	3	49 J	63 J	ND(0.15)	ND(0.2)
	14FWOU380WG[3]	10/23/2014	445.72	16.5	429.22	0.45	84.8	0.34	**78,000 J+**	330	**5.1**	1.6	2.7	46	60	ND(0.15)	ND(0.2)
1144-MP9	10FWH02WG	6/29/2010	446.82	18.89	427.93	1.27	NA	NA	**72,000 QH**	740 QH	0.80 J	0.22 J,B	0.99 J	12	3.2	ND(1)	ND(1)
	10FWH19WG	9/10/2010	446.82	18.43	428.39	3.42	NA	NA	**34,000**	2,000	0.78 J	ND(1)	0.71 J	7.1	2.3	ND(1)	ND(1)
	11FW3H07WG	6/21/2011	446.82	17.59	429.23	0.71	30	1.8 J	**28,000 QH**	470 QH	0.71 J	0.49 J	0.33 J	2.2	1.2	ND(1)	ND(1)
	11FW3H16WG	10/4/2011	446.82	17.92	428.90	0.87	NM	NM	**38,000**	530 QH	NA	NA	NA	NA	NA	NA	NA
	12FW3H05WG	10/4/2012	446.82	18.68	428.14	1.12	38	0.75 J	**21,000**	760	ND(0.8)	ND(1.6)	ND(0.8)	4.9	1.6 J	ND(0.8)	ND(0.8)
	13FW3H01WG	5/22/2013	446.82	18.14	428.68	1.03	34	ND(0.5)	**19,000**	470	0.45 J, QH	0.21 J,QH	0.37 J,QH	6.6 QH	2.7 QH	ND(0.2)	ND(0.2)
	14FWOU388WG	10/23/2014	446.82	17.73	429.09	1.4	51.3	54.4	**140,000**	1000	0.37 J	1.1	0.30 J	4.1	1.7 J	ND(0.15)	ND(0.2)
1144-MP10	10FWH01WG	6/29/2010	446.25	18.51	427.74	1.01	NA	NA	**12,000 QH**	260	1.8	0.24 J,B	0.36 J, B	2.4	0.35 J,B	ND(1)	ND(1)
	10FWH18WG	9/9/2010	446.25	18	428.25	0.29	NA	NA	**3,800**	420	1	ND(1)	0.31 J	2.1	0.27 J	ND(1)	ND(1)
	11FW3H09WG	6/21/2011	446.25	17.21	429.04	0.98	9.8	11	**4,500**	130	0.44 J	0.46 J	ND(1)	0.74 J	0.87 J	ND(1)	ND(1)
	11FW3H13WG	10/3/2011	446.25	17.41	428.84	0.57	NA	NA	**6,600**	180	NA	NA	NA	NA	NA	NA	NA
	12FW3H06WG	10/4/2012	446.25	18.45	427.80	0.52	17	4.1 J	**5,400**	270	ND(0.8)	ND(1.6)	ND(0.8)	1.3 J	1.1 J	ND(0.8)	ND(0.8)
	13FW3H03WG	5/22/2013	446.25	17.95	428.30	1.28	15	5.4	**5,400**	210	0.78 J	ND(0.4)	ND(0.2)	1.1	0.25 J	ND(0.2)	ND(0.2)
	14FWOU387WG	10/23/2014	446.25	17.61	428.64	0.77	30.9	5.77	**21,000**	400	2.9	0.5	1.1	11	2.9	ND(0.15)	ND(0.2)
GWP-2003E	10FWH10WG	6/29/2010	446.74	18.25	428.49	0.53	NA	NA	**28,000**	510	1.8	0.28 J,B	8.9	20	12	ND(1)	ND(1)
	10FWH15WG	9/9/2010	446.74	17.8	428.94	0.21	17.4	23.4	**14,000**	1,200	1.4	0.34 J	7.1	27	20	ND(1)	ND(1)
	11FW3H06WG	6/21/2011	446.74	16.96	429.78	8.53	15	22	**30,000**	520 QH	0.41 J	0.18 J	3.5	11	17	ND(1)	ND(1)
	11FW3H14WG	10/3/2011	446.74	17.12	429.62	0.6	NA	NA	**50,000**	550 QH	NA	NA	NA	NA	NA	NA	NA
	12FW3H10WG	10/4/2012	446.74	18	428.74	0.16	22	20	**7,700**	1,000	0.69 J	0.17 J	6.1	32	37	ND(0.2)	ND(0.2)
	13FW3H08WG	5/22/2013	446.74	17.5	429.24	0.26	12	27	**53,000 J**	590	0.17 J	ND(0.4)	1.2	4.1	4.2	ND(0.2)	ND(0.2)
	14FWOU381WG	10/23/2014	446.74	17.06	429.68	0.51	7.65	175	**35,000**	320	0.75	0.49 J	4.3	13	9.4	ND(0.15)	ND(0.2)
Eight Car Header																	
GWP-110	10FWI08WG	6/29/2010	445.26	17.00	428.26	0.38	NA	NA	**35,000 QH**	2,200 QH	2.2	53	52	93	60	ND(1)	ND(1)
	11FW3I01WG	6/20/2011	445.26	16.55	428.71	3.38	25	8.4	**19,000**	1,300	1 J	60	21	65	57	ND(4)	ND(4)
	11FW3I15WG	10/3/2011	445.26	15.90	429.36	0.95	NA	NA	**17,000**	1,500	NA	NA	NA	NA	NA	NA	NA
	12FW3I02WG	10/8/2012	445.26	16.73	428.53	0.23	36	2.2 J	**12,000**	**2,700**	1.6 QH	82 QH	52 QH	100 QH	70 QH	ND(0.2)	ND(0.2)
	12FW3I03WG[3]	10/8/2012	445.26	16.73	428.53	0.23	36	2.3 J	**13,000**	**3,200**	1.7 QH	82 QH	51 QH	100 QH	71 QH	ND(0.2)	ND(0.2)
	MONITORING WELL WAS REMOVED FROM THE MONITORING NETWORK BASED ON LTMO ANALYSIS																
GWP-2003B	10FWI07WG	6/29/2010	445.45	17.10	428.35	1.82	NA	NA	**72,000 QH**	2,200 QH	0.35 J,B	1.8 J,B	42	150	85	ND(1)	ND(1)
	11FW3I02WG	6/20/2011	445.45	15.69	429.76	3.06	94	0.65 J	**130,000**	1,900 QH	ND(20)	ND(20)	11 J	47	150	ND(20)	ND(20)
	11FW3I14WG	10/3/2011	445.45	16.04	429.41	0.82	NA	NA	**150,000**	1,900	NA	NA	NA	NA	NA	NA	NA
	12FW3I04WG	10/8/2012	445.45	17.86	427.59	1.32	91	ND(0.5)	**73,000 J**	**4,700**	ND(2)	3.8 J	61	200	140	ND(2)	ND(2)
	13FW3I02WG	5/21/2013	445.45	16.44	429.01	0.2	94	0.94 J	**200,000 J**	**2,200**	ND(2) QL	ND(4) QL	7.4 J,QL	32 QL	120 QL	ND(2) QL	ND(2) QL
	14FWOU3101WG	10/24/2014	445.45	16.02	429.43	1.14	106 J-	79.6	**120,000**	2,100	0.5	4.2	13	97	110	ND(0.33)	ND(0.2)

Table 5-16 - Groundwater Sample Field-Screening and Analytical Results
Central Header, Former Building 1144, and Eight-Car Header

Probe/Well Number	Sample Number	Sample Date	Survey Elevation	Water Level (ft BTOC)	Water Elevation (ft msl)	Dissolved Oxygen (mg/L)	Iron II (mg/L)	Sulfate (mg/L)	DRO (µg/L)	GRO (µg/L)	ROD Contaminants of Concern (µg/L)						
											Benzene	Toluene	Ethylbenzene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	1,2-Dichloro-ethane	1,2-Dibromo-ethane[2]
CLEANUP LEVELS									**1,500**	**2,200**	**5**	**1,000**	**700**	**1,850**	**1,850**	**5**	**0.05**
GWP-130	10FWI06WG	6/28/2010	445.26	17.02	428.24	0.4	NA	NA	**22,000**	920 QH	0.52 J,B	0.19 J,B	22	97	76	ND(1)	ND(1)
	11FW3I03WG	6/20/2011	445.26	15.69	429.57	4.64	21	24	**18,000 QH**	1,800	0.91 J	ND(4)	44	200	240	ND(4)	ND(4)
	11FW3I13WG	10/3/2011	445.26	15.98	429.28	0.42	NA	NA	**25,000**	**2,300**	NA	NA	NA	NA	NA	NA	NA
	12FW3I01WG	10/8/2012	445.26	16.83	428.43	0.49	30	10	**9,900**	**2,700**	0.52 J	0.21 J	38	130	110	ND(0.2)	ND(0.2)
	13FW3I01WG	5/21/2013	445.26	16.42	428.84	0.23	27	16	**17,000**	**3,600**	ND(2)	ND(4)	50	210	180	ND(2)	ND(2)
	14FWOU3100WG	10/24/2014	445.26	15.93	429.33	0.94	45.1 J-	57.5	**29,000**	**3,200**	0.64	0.64	63	290	200	ND(0.46)	MD(4)
AP-6006	10FWI03WG	6/28/2010	444.95	16.85	428.10	0.23	16	1.4	**13,000 J**	280	2.4	0.33 J,B	7.6	11	5.8	ND(1)	ND(1)
	11FW3I05WG	6/20/2011	444.95	15.50	429.45	0.64	16	3.6 J	**5,200**	180	1.4	ND(1)	2.5	1.3	0.45 J	ND(1)	ND(1)
	11FW3I10WG	10/3/2011	444.95	15.80	429.15	0.3	NA	NA	**5,300**	140	NA	NA	NA	NA	NA	NA	NA
	12FW3I06WG	10/8/2012	444.95	16.67	428.28	0.24	37	ND(0.5)	**6,100**	460	1.7	0.38 J	6.2	12	7.5	ND(0.2)	ND(0.2)
	13FW3I07WG	5/22/2013	444.95	16.15	428.80	0.2	44	ND(0.5)	**8,400**	430	1.9	0.25 J	11	13	2.9	ND(0.2)	ND(0.2)
	14FWOU3106WG	10/24/2014	444.95	15.92	429.03	0.47	19.4	ND(0.2) J	**6,300**	180	1.3	0.43 J	2.4	15	8.6	ND(0.15)	ND(0.2)
AP-10030[1] (GWP-57)	10FWI04WG	6/28/2010	446.39	18.40	427.99	0.23	NA	NA	**4,200**	79 B	1.6	0.16 J,B	0.27 J,B	0.72 J	1.6	ND(1)	ND(1)
	11FW3I06WG	6/20/2011	446.39	17.05	429.34	3.33	9.2	19	980	52	0.29 J	ND(1)	ND(1)	0.19 J	ND(1)	ND(1)	ND(1)
	11FW3I07WG[3]	6/20/2011	446.39	17.05	429.34	3.33	9.2	19	910	49	0.30 J	ND(1)	ND(1)	0.17 J	3.7	ND(1)	ND(1)
	11FW3I11WG	10/3/2011	446.39	17.34	429.05	0.59	NA	NA	1,400	79 B,Q	NA	NA	NA	NA	NA	NA	NA
	11FW3I12WG[3]	10/3/2011	446.39	17.34	429.05	0.59	NA	NA	**1,600**	55 B	NA	NA	NA	NA	NA	NA	NA
	12FW3I08WG	10/9/2012	446.39	18.17	428.22	0.36	0.61	26	800 J,ML	18 J,B	1.4	ND(0.4)	ND(0.2)	ND(0.2)	0.38 J	ND(0.2)	ND(0.2)
	13FW3I05WG	5/21/2013	446.39	17.68	428.71	0.16	11	18	970	41	0.36 J	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.2)	ND(0.2)
	14FWOU3105WG	10/24/2014	446.39	17.44	428.95	1.7	3.5	24.5	610 J	23 J	0.25 J	0.06 J	0.55 J	0.92 J	0.91 J	ND(0.15)	ND(0.2)
AP-7538	10FWI05WG	6/28/2010	445.68	17.60	428.08	0.43	NA	NA	**16,000**	170	0.67 J,B	0.75 J,B	2	11	7	ND(1)	ND(1)
	11FW3I08WG	6/21/2011	445.68	16.35	429.33	6.77	31	14	**6,700**	140 ML	0.6 J	ND(1)	ND(1)	8.7	3.7	ND(1)	ND(1)
	11FW3I09WG	10/3/2011	445.68	16.56	429.12	0.67	NA	NA	**18,000**	110	NA	NA	NA	NA	NA	NA	NA
	12FW3I07WG	10/9/2012	445.68	17.37	428.31	0.26	62	1.1 J	**18,000**	360	1.3	0.30 J	4.6	9.7	7.3	ND(0.2)	ND(0.2)
	13FW3I03WG	5/21/2013	445.68	16.90	428.78	0.16	35	8.5	**5,200**	170	2.8	ND(0.8) Q	0.98 J	3.3	1.7 J	ND(0.4) Q	ND(0.4) Q
	13FW3I04WG[3]	5/21/2013	445.68	16.90	428.78	0.16	36	8.6	**4,800**	170	2.8	ND(0.4) Q	0.98 J	3.2	1.6	ND(0.4) Q	ND(0.4) Q
	14FWOU3103WG	10/24/2014	445.68	16.70	428.98	1.29	21.4	156	**16,000**	150	0.55	0.25 J	2.8	20	10	ND(0.15)	ND(0.2)
	14FWOU3104WG[3]	10/24/2014	445.68	16.70	428.98	1.29	22.3	157	**15,000**	160	0.56	0.22 J	3.2	22	11	ND(0.15)	ND(0.2)
AP-10029[1] (GWP-53)	10FWI01WG	6/28/2010	447.05	18.80	428.25	0.19	NA	NA	**44,000**	390	1.1	0.53 J, B	1.3	10	6.7	ND(1)	ND(1)
	10FWI02WG[3]	6/28/2010	447.05	18.80	428.25	0.19	NA	NA	**42,000**	390	1.1	0.52 J, B	1.4	10	6.9	ND(1)	ND(1)
	11FW34I04WG	6/20/2011	447.05	17.55	429.50	0.87	39	1.4 J	**23,000**	330	1.0	0.19 J	1	3.5	2.6	ND(1)	ND(1)
	11FW3I16WG	10/3/2011	447.05	17.74	429.31	0.46	NA	NA	**23,000**	220	NA	NA	NA	NA	NA	NA	NA
	12FW3I05WG	10/8/2012	447.05	18.62	428.43	0.32	35	20	**15,000**	430	0.97 J	0.21 J	0.95 J	4.0	4.4	ND(0.2)	ND(0.2)
	13FW3I06WG	5/22/2013	447.05	18.20	428.85	0.27	30	0.94 J	**14,000**	350	1.2	0.33 J	1.5	1.9	0.26 J	ND(0.2)	ND(0.2)
	14FWOU3102WG	10/24/2014	447.05	17.78	429.27	0.4	7.31 J-	71.7	**17,000**	140	0.38 J	0.20 J	0.8	4.6	3.5	ND(0.15)	ND(0.2)

Bold results represent concentrations in excess of ROD remedial action goals

[1] Replacement wells installed in August 2009. Wells that were replaced are shown in parentheses.

[2] 1,2-Dibromoethane results were generated from either Method 8260 or Method 504.1. Results from Method 504.1 were used when available.

[3] Denotes sample is a field duplicate of preceding row

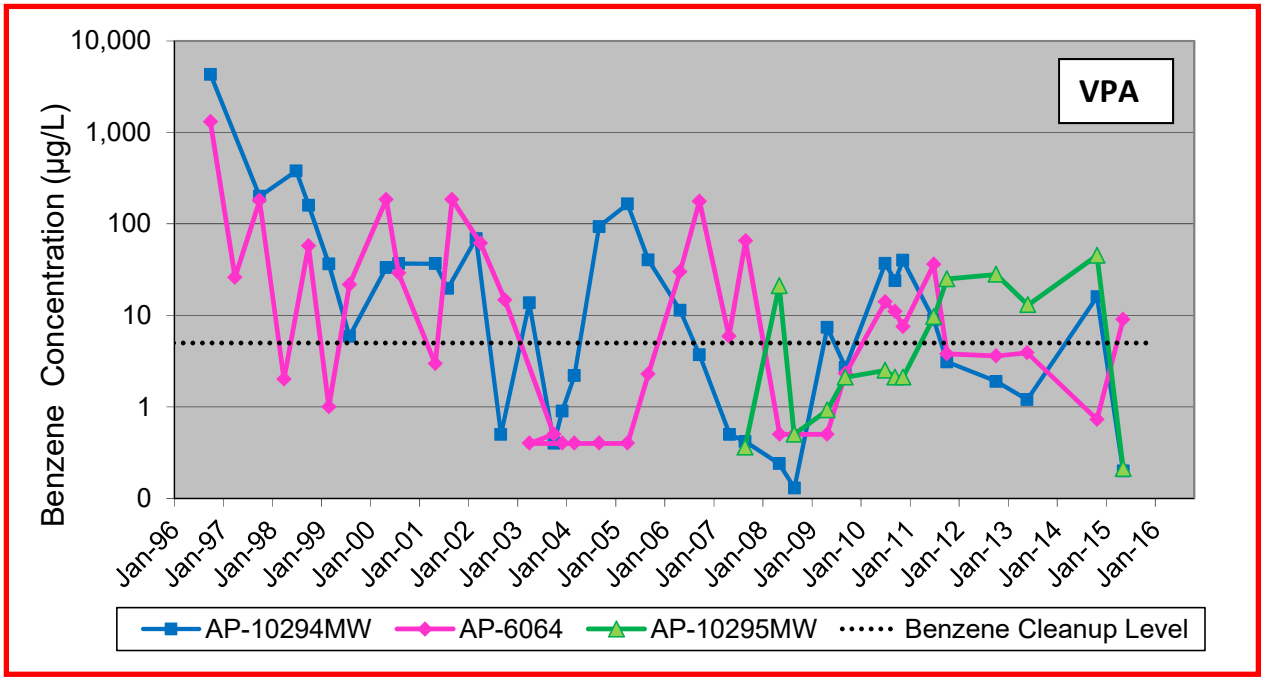
DRO - diesel range organics
GRO - gasoline range organics
LOD - limit of detection
LOQ - limit of quantitation
µg/L - micrograms per liter
ft BTOC - feet below top of casing

mg/L - milligram per liter
msl - mean seal level
NA - not analyzed
NM - not measured
ROD - Record of Decision

Data Qualifiers

B - analyte was detected in blank sample at similar concentration
J - result is estimated because it is less than the LOQ or due to a QC failure
J- or J+ - result is estimated with a high (+) or low (-) bias due to a QC failure (data starting in 2014)
ML or MH - result is estimated with a high (H) or low (L) bias due to matrix interference (data prior to 2014)
ND - detection limit (LOQ in parenthesis for data prior to 2012; LOD in parentheses for data starting in 2012)
QL or QH - result is estimated and biased high (H) or low (L) due to quality control failure (data prior to 2014)

Graph 3-1 – Benzene Concentrations in Valve Pit A Wells



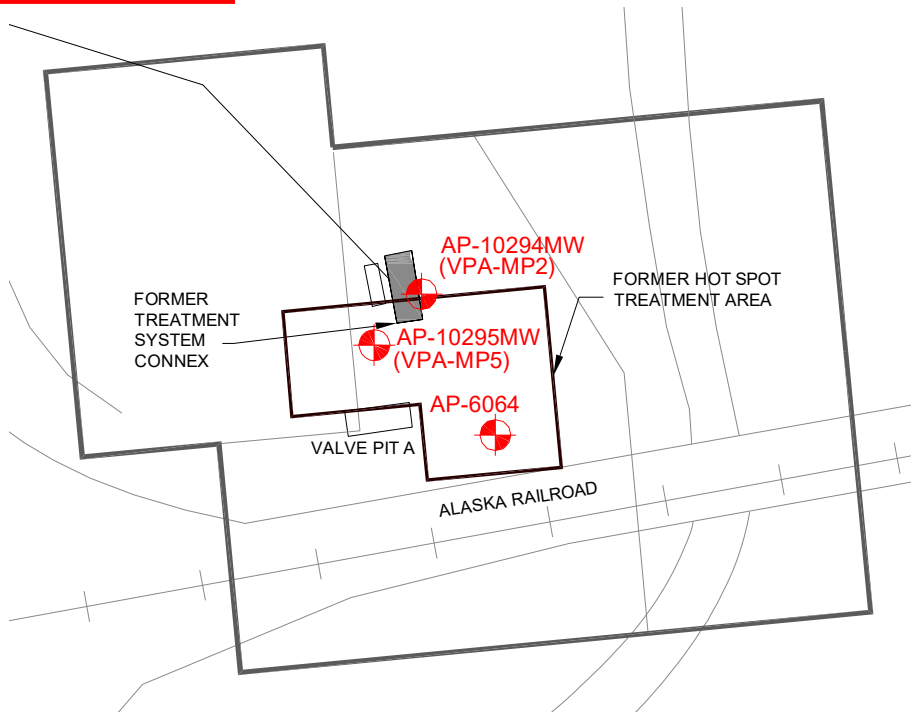


Table 3-3 - Summary of Mann-Kendall Trend Analysis of Central ROLF Wells[1]

Well	ROLF Site	DRO				GRO				Benzene			
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
1144-MP7	Former Building 1144	Stable	Stable	Stable	Stable	-	-	-	-	-	-	-	
1144-MP8[2]		Stable	No Trend	Stable	No Trend	-	-	-	-	-	-	-	Increasing
1144-MP9		Stable	Potentially Decreasing	Decreasing	Stable	-	-	-	-	-	-	-	-
1144-MP10		Stable	No Trend	No Trend	No Trend	-	-	-	-	-	-	-	-
GWP-131		-	-	-	-	-	-	-	-	-	-	-	-
GWP-148		Stable	Stable	Stable	Stable	-		-	-	-		-	-
GWP-149		Stable	Stable	Stable	No Trend	-	-	-	-	-	-	-	-
GWP-2003E		Increasing	No Trend	Potentially Increasing	Potentially Increasing	-		-	-	-		-	-
AP-10027[6]		No Trend	No Trend	No Trend	BROKEN - NOT SAMPLED	-	-	-	BROKEN - NOT SAMPLED	-	-	-	BROKEN - NOT SAMPLED
AP-10032[3]		Stable	Stable	BROKEN - NOT SAMPLED	BROKEN - NOT SAMPLED	-	-	BROKEN - NOT SAMPLED	BROKEN - NOT SAMPLED	-	-	BROKEN - NOT SAMPLED	BROKEN - NOT SAMPLED
CH-MP2	Central Header	Stable	Potentially Decreasing	Decreasing	Decreasing	Stable	No Trend	No Trend	Stable	-	-	-	-
CH-MP5[4]		-	-	-	-	-	-	-	-	No Trend	No Trend	Potentially Increasing	No Trend
CH-MP6[5]		-	-	-	-	-	-	-	Potentially Increasing	-	-	-	-
CH-MP9		Stable	Potentially Decreasing	Stable	No Trend	No Trend	Increasing	No Trend	Potentially Increasing	-	-	-	-
GWP-2001C		No Trend	No Trend	Stable	Stable	No Trend	No Trend	Stable	No Trend	-	-	-	-
AP-6008		Stable	No Trend	No Trend	Potentially Increasing	-	-	-	-	-	-	-	-
AP-10028		Stable	Potentially Decreasing	Decreasing	Decreasing	Stable	Stable	Stable	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
AP-10031		-	-	-	-	Potentially Decreasing	Potentially Decreasing	Stable	Decreasing	-	-	-	-
AP-10033		Stable	Stable	Potentially Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	-	-	-	-
GWP-130	Eight Car Header	No Trend	No Trend	No Trend	No Trend	Increasing	Increasing	Increasing	Increasing	-	-	-	-
GWP-2003B		Increasing	No Trend	Increasing	Potentially Increasing	No Trend	No Trend	No Trend	No Trend	-	-	-	-
AP-10029		No Trend	Stable	Stable	Stable	-	-	-	-	-	-	-	-
AP-10030		Stable	Stable	Stable	Potentially Decreasing	-	-	-	-	-	-	-	-
AP-6006		No Trend	No Trend	No Trend	No Trend	-	-	-	-	-	-	-	-
AP-7538		Stable	Stable	Stable	Stable	-	-	-	-	-	-	-	-

[1] Only wells having concentrations exceeding the cleanup level during the period of analysis are shown

[2] Benzene exceeded the cleanup level in 1144-MP8 for the first time in 2014

[3] AP-10032 was found to be broken in spring 2013 and a sample was not collected from this well

[4] Benzene concentrations increased from non-detect to above cleanup levels in CH-MP5 starting in 2011

[5] GRO concentration increased above the cleanup level in CH-MP6 for the first time in 2014

- Analyte did not exceed the cleanup level during the analysis period

[6] AP-10027 was found to be broken in 2014 and a sample was not collected from this well

2012 trend change shown in orange

2013 trend changes shown in green

2014 trend changes shown in blue

MAROS Statistical Trend Analysis Summary

Project: ROLF 2014

Location: Fort Wainwright

User Name: FES

State: Alaska

Time Period: 4/23/2009 **to** 10/24/2014

Consolidation Period: No Time Consolidation

Consolidation Type: Average

Duplicate Consolidation: Average

ND Values: Detection Limit

J Flag Values : Detection Limit

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
PHC as DIESEL FUEL								
1144-MP10	T	8	8	8.0E+00	5.4E+00	No	NT	NT
1144-MP7	T	8	8	1.3E+01	1.4E+01	No	S	NT
1144-MP8	T	8	8	4.1E+01	3.9E+01	No	NT	NT
1144-MP9	T	8	8	5.0E+01	3.6E+01	No	S	NT
AP-10028	T	9	9	5.0E+00	3.7E+00	No	D	D
AP-10029	S	8	8	2.1E+01	2.0E+01	No	S	NT
AP-10030	T	8	8	1.4E+00	9.8E-01	No	PD	D
AP-10031	T	9	9	2.2E-01	1.7E-01	No	D	D
AP-10033	T	9	9	2.2E+00	1.8E+00	No	D	D
AP-6006	T	7	7	6.5E+00	6.1E+00	No	NT	NT
AP-6008	T	8	8	1.2E+00	7.0E-01	No	PI	PI
AP-7538	T	8	8	1.5E+01	1.6E+01	No	S	S
CH-MP2	T	8	8	5.0E+00	4.2E+00	No	D	PD
CH-MP5	T	8	8	3.8E-01	2.5E-01	No	S	S
CH-MP6	T	8	8	4.8E-01	3.7E-01	No	PD	PD
CH-MP9	T	8	8	3.3E+00	9.9E-01	No	NT	PI
GWP-130	S	7	7	1.8E+01	1.8E+01	No	NT	PI
GWP-131	T	8	8	7.3E-01	6.1E-01	No	S	NT
GWP-148	T	8	8	4.9E+00	4.8E+00	No	S	S
GWP-149	T	9	9	9.9E+00	7.7E+00	No	NT	D
GWP-2001C	T	8	8	8.4E+00	7.7E+00	No	S	S
GWP-2003B	S	8	8	1.0E+02	9.7E+01	No	PI	I
GWP-2003E	S	8	8	2.8E+01	2.9E+01	No	PI	PI
PHC as GASOLINE								
1144-MP10	T	8	8	2.5E-01	2.4E-01	No	NT	NT
1144-MP7	T	8	8	1.6E-01	1.5E-01	No	NT	D
1144-MP8	T	8	8	4.2E-01	3.9E-01	No	S	S
1144-MP9	T	8	8	9.8E-01	7.5E-01	No	S	S
AP-10028	T	8	8	1.5E+00	1.4E+00	No	D	D
AP-10029	S	7	7	3.7E-01	3.5E-01	No	PD	D
AP-10030	T	7	7	1.1E-01	5.2E-02	No	PD	D
AP-10031	T	9	9	1.9E+00	1.6E+00	No	D	D
AP-10033	T	8	8	5.1E+00	4.0E+00	No	I	I
AP-6006	T	7	7	2.9E-01	2.8E-01	No	S	S

MAROS Statistical Trend Analysis Summary

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
PHC as GASOLINE								
AP-6008	T	8	8	2.0E-01	1.7E-01	No	S	S
AP-7538	T	7	7	2.3E-01	1.7E-01	No	S	S
CH-MP2	T	8	8	2.4E+00	2.4E+00	No	S	D
CH-MP5	T	8	6	5.8E-02	5.0E-02	No	S	S
CH-MP6	T	8	8	1.2E+00	8.7E-01	No	PI	NT
CH-MP9	T	8	8	2.5E+00	2.3E+00	No	PI	PI
GWP-130	S	7	7	2.1E+00	2.3E+00	No	I	I
GWP-131	T	8	8	6.6E-01	6.0E-01	No	S	S
GWP-148	T	8	8	7.4E-01	7.1E-01	No	S	S
GWP-149	T	8	8	1.0E-01	8.8E-02	No	NT	PI
GWP-2001C	T	8	8	2.6E+00	2.3E+00	No	NT	NT
GWP-2003B	S	7	7	2.3E+00	2.1E+00	No	NT	NT
GWP-2003E	S	8	8	6.0E-01	5.4E-01	No	NT	NT

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Statistical Trend Analysis Summary

Project: ROLF Benzene 2014

User Name: FES

Location: Fort Wainwright

State: Alaska

Time Period: 6/1/2008 **to** 10/24/2014

Consolidation Period: No Time Consolidation

Consolidation Type: Average

Duplicate Consolidation: Average

ND Values: Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Average Conc. (mg/L)	Median Conc. (mg/L)	All Samples "ND" ?	Mann-Kendall Trend	Linear Regression Trend
BENZENE								
1144-MP8	S	9	9	3.9E-03	4.4E-03	No	I	I
AP-10028	S	9	9	7.3E-03	7.1E-03	No	D	D
AP-6064	T	11	11	8.4E-03	3.9E-03	No	NT	NT
CH-MP5	S	9	4	6.9E-03	1.0E-04	No	NT	NT
VPA-MP2	T	11	11	1.3E-02	7.4E-03	No	NT	NT
VPA-MP5	T	11	10	1.2E-02	2.5E-03	No	I	I

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A); Not Applicable (N/A) - Due to insufficient Data (< 4 sampling events); No Detectable Concentration (NDC)

The Number of Samples and Number of Detects shown above are post-consolidation values.

OU-3 Remedial Area 3 FEP Mileposts 2.7 and 3.0

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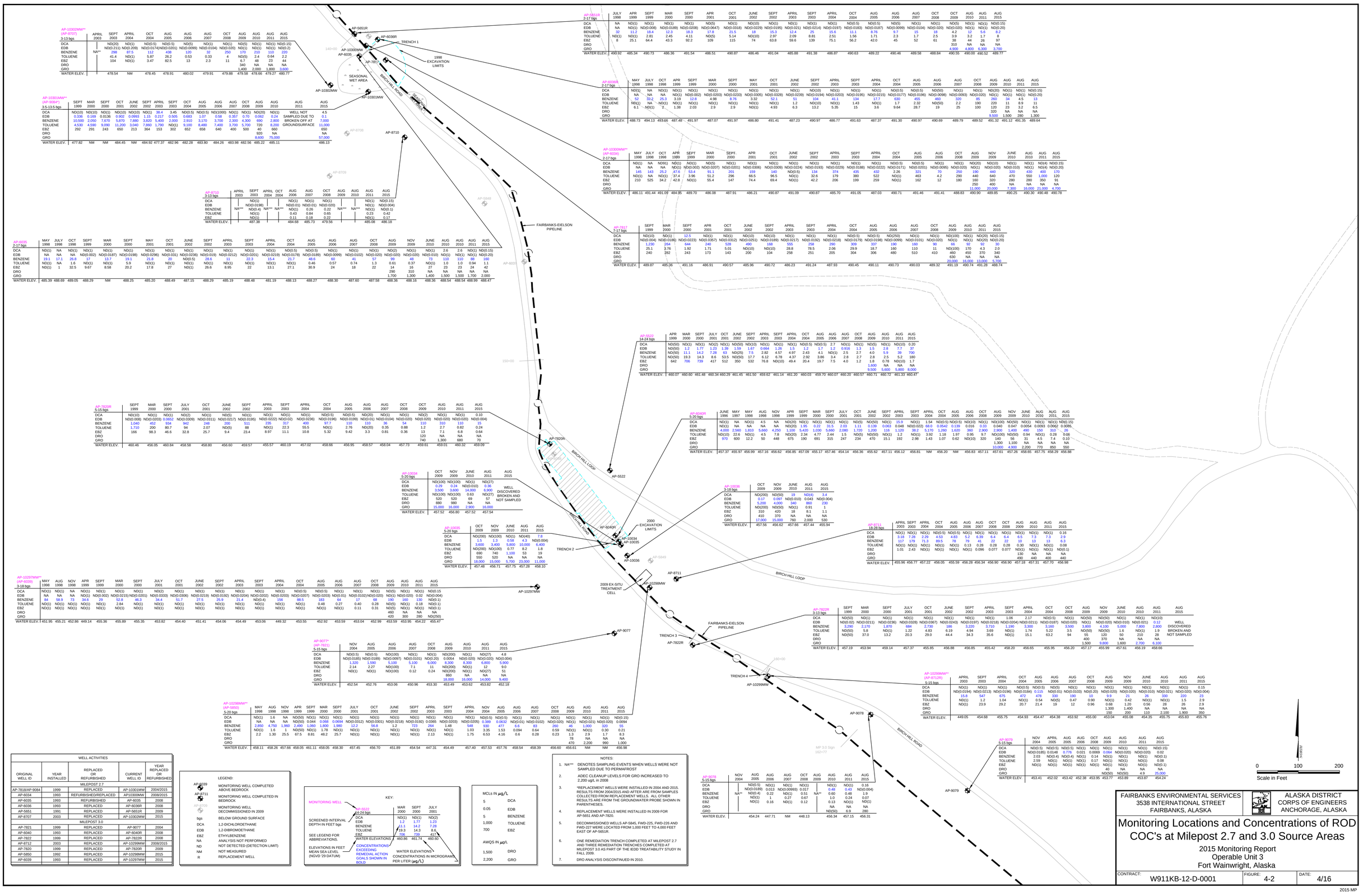

AP-10302MW** (AP-8707)

	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA		ND(20)	ND(1)	ND(0.5)	ND(0.5)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.15)
EDB		ND(0.211)	ND(0.209)	ND(0.0174)	ND(0.0201)	ND(0.0099)	ND(0.0104)	ND(0.020)	ND(1)	ND(1)	ND(1)	ND(0.2)
BENZENE	NA**	298	87.5	112	438	120	32	250	170	210	110	220
TOLUENE		41.4	ND(1)	5.87	26.2	0.53	0.33	4	ND(5)	2.4	0.64	2.2
EBZ		104	ND(1)	3.47	82.5	13	2.3	11	6.7	48	23	44
DRO									340	NA	NA	NA
GRO									1,400	2,000	1,800	3,600
WATER ELEV.		478.54	NM	478.45	478.91	480.02	479.91	479.88	479.58	478.66	479.27	480.77

AP-10301MW** (AP-7695R)

	SEPT 1999	MAR 2000	SEPT 2000	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	WELL NOT	AUG 2011	AUG 2015
DCA	ND(10)	ND(10)	ND(1)	ND(10)	ND(10)	ND(1)	38.4	3.45	ND(0.5)	ND(0.5)	ND(1000)	ND(1)	ND(1)	ND(20)	ND(1)	SAMPLED DUE TO	0.1	
EDB	0.336	0.169	0.0136	0.902	0.0993	1.15	0.217	0.505	0.683	1.07	0.58	0.357	0.70	0.062	0.24	BROKEN OFF AT	7,000	
BENZENE	10,500	2,050	7,670	5,870	7,880	3,820	5,400	2,000	2,910	3,170	3,700	2,300	4,300	690	2,800	GROUNDSURFACE	11,000	
TOLUENE	4,530	4,590	9,090	11,200	3,040	7,860	1,790	ND(1)	9,100	8,480	7,400	3,700	5,700	720	8,200		11,000	
EBZ	292	291	243	650	213	364	153	302	652	658	640	400	500	40	660		650	
DRO														920	NA		NA	
GRO														8,600	75,000		57,000	
WATER ELEV.	477.82	NM	NM	484.45	NM	484.92	477.37	482.96	482.28	483.80	484.26	483.98	482.56	485.22	485.11		486.13	

AP-6035
2-17 bgs

	MAY 1998	JULY 1998	OCT 1998	SEPT 1999	MAR 2000	SEPT 2000	MAY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2010	AUG 2011	AUG 2015
DCA	ND(1)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2.6	2.6	ND(1)	ND(0.15)
EDB	NA	NA	NA	ND(0.002)	ND(0.0187)	ND(0.0196)	ND(0.031)	ND(0.0236)	ND(0.0019)	ND(0.0212)	ND(0.0201)	ND(0.0219)	ND(0.0178)	ND(0.0189)	ND(0.0099)	ND(0.0102)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.010)	ND(1)	ND(1)	ND(1)	ND(0.20)
BENZENE	19.1	17.1	26.8	17	13.7	19.1	21.8	20	ND(0.5)	28.6	11	22.3	15.4	21.7	48.6	60	41	57	99	48	73	110	110	88	160
TOLUENE	ND(1)	NA	1.6	ND(1)	ND(1)	5.9	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.46	0.57	0.74	1.3	0.61	0.37	ND(1)	1.0	1.0	0.94	1.1	
EBZ	ND(1)	1	32.5	9.67	8.58	20.2	17.8	27	ND(1)	26.6	8.95	22	13.1	27.1	30.9	24	18	22	14	16	27	23	23	24	42
DRO																			1,700	1,300	1,400	1,500	1,500	1,700	2,000
GRO																									
WATER ELEV.	485.39	488.69	489.05	488.29	NM	488.25	485.20	488.49	487.15	488.29	485.19	488.48	481.19	488.13	488.27	488.30	487.60	487.58	488.36	488.16	488.36	488.54	488.54	488.99	488.47

AP-8710
3-13 bgs

	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2006	AUG 2007	AUG 2008	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA		ND(1)			ND(1)	ND(1)	ND(1)				ND(1)	ND(0.15)
EDB		ND(0.0198)			ND(0.01)	ND(0.01)	ND(0.020)				ND(1)	ND(0.004)
BENZENE	NA***	ND(0.4)	NA***	NA***	0.26	0.22	NA***	NA***			ND(1)	ND(1.1)
TOLUENE		ND(1)			0.43	0.84	0.65				0.23	0.42
EBZ		ND(1)			0.11	0.18	0.22				ND(1)	0.17
WATER ELEV.		487.38			484.68	485.73	479.56				485.08	486.18

AP-7817
7-17 bgs

	SEPT 1999	MAR 2000	SEPT 2000	APR 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(10)	ND(1)	12.5	ND(1)	ND(1)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(250)	ND(1)	ND(1)	ND(100)	ND(1)	ND(20)	ND(0.15)
EDB	ND(0.004)	ND(0.186)	ND(0.0223)	ND(0.0357)	ND(0.0251)	ND(0.0189)	ND(0.0117)	ND(0.0192)	ND(0.0218)	ND(0.0179)	ND(0.0198)	ND(0.0099)	ND(0.0101)	ND(0.002)	ND(1)	ND(1)	ND(1)	ND(20)	ND(0.20)
BENZENE	1,230	264	644	240	528	490	168	555	258	290	309	337	190	160	90	66	92	92	30
TOLUENE	25.1	3.76	1.92	1.71	5.01	ND(10)	ND(10)	28.8	78.5	2.06	29.9	18.7	160	110	11	ND(100)	170	4.3	2.0
EBZ	240	282	243	173	143	200	104	258	251	205	304	306	480	510	410	460	450	370	340
DRO																630	NA	NA	NA
GRO																20,000	16,000	13,000	5,700
WATER ELEV.	489.87	485.36	491.16	486.91	490.57	485.96	490.72	486.23	491.24	487.93	490.45	490.11	490.73	490.03	489.32	491.19	490.74	491.28	488.74

AP-5522
14-24 bgs

	APR 1999	MAR 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(50)	ND(1)	ND(1)	ND(2)	ND(1)	ND(50)	ND(10)	ND(10)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	2.7	ND(1)	ND(1)	ND(5)	ND(1)	0.20
EDB	ND(50)	1.2	1.77	1.23	1.39	1.59	1.67	0.664	1.26	1.5	1.2	1.7	1.2	0.916	1.3	1.5	2.8	7.7	37
BENZENE	ND(50)	11.1	14.2	7.28	63	ND(25)	7.5	2.82	4.57	4.97	2.43	4.1	ND(1)	2.5	2.7	4.0	5.9	39	700
TOLUENE	ND(50)	19.3	14.3	8.6	53.5	ND(50)	17.7	6.12	6.78	4.37	2.92	3.86	3.4	2.8	2.7	2.8	2.5	5.2	180
EBZ	642	706	739	417	512	350	532	76.8	ND(10)	49.4	20.4	19.7	7.5	4.0	1.2	1.8	0.78	ND(10)	1.7
DRO																1,600	NA	NA	NA
GRO																9,500	5,600	5,800	8,000
WATER ELEV.	460.07	460.60	461.48	460.34	460.29	461.45	461.50	459.62	461.14	461.20	460.03	459.70	460.07	460.20	460.57	460.71	460.72	461.33	460.47

AP-7820R
5-15 bgs

	SEPT 1999	MAR 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(100)	ND(1)	ND(1)	ND(2)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(20)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	0.10
EDB	ND(0.008)	ND(0.0203)	0.0652	ND(0.0309)	ND(0.0311)	ND(0.0217)	ND(0.0195)	ND(0.0222)	ND(0.02)	ND(0.0236)	ND(0.0196)	ND(0.0199)	ND(0.01)	ND(0.0104)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.004)
BENZENE	1,040	452	934	942	248	200	511	235	317	400	97.7	110	110	36	54	110	310	110	15
TOLUENE	1,710	200	80.7	94	2.07	ND(5)	88	ND(1)	22.3	55.5	ND(1)	2.76	ND(20)	0.35	0.88	1.2	2.7	0.82	0.24
EBZ	166	98.3	46.6	32.8	25.7	9.4	23.4	8.97	11.1	10.8	5.32	9.42	3.3	0.81	0.36	13	7.1	6.8	0.64
DRO																120	NA	NA	NA
GRO																740	1,300	680	70
WATER ELEV.	460.46	456.05	460.84	458.58	458.80	456.60	459.57	455.57	460.19	457.02	458.66	456.95	458.57	458.04	457.73	459.61	459.01	460.32	459.09

AP-8040R
5-20 bgs

	JUNE 1996	MAY 1997	MAY 1998	AUG 1998	NOV 1998	APR 1999	SEPT 1999	MAR 2000	AUG 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(1)	NA	ND(1)	4.5	NA	ND(20)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	15.9	ND(1)	1.54	ND(0.5)	ND(0.5)	ND(1)	ND(0.15)
EDB	ND(1)	NA	NA	NA	NA	0.22	ND(1)	0.51	NA**	0.60	0.48	1.9														
BENZENE	4,000	2,560	1,810	5,660	4,250	1,100	5,420	1,030	5,460	2,080	1,720	1,200	116	1,120	38.2	5,170	1,250	1,620	360	2,900	2,900	1,400	490	150	310
TOLUENE	ND(10)	22.6	ND(1)	4.5	7.8	ND(20)	2.34	4.77	2.44	1.5	ND(5)	ND(50)	ND(1)	1.2	ND(1)	3.92	1.18	1.97	0.95	9.7	ND(100)	ND(50)	0.94	ND(1)	0.28
EBZ	970	600	12.2	50	448	675	190	691	315	247	234	470	15.1	192	2.98	1.43	1.07	0.62	ND(10)	320	140	56	31	4.5	7.4
DRO																					1,300	1,100	NA	NA	NA
GRO																					10,000	4,900	2,200	770	850
WATER ELEV.	457.37	455.97	456.99	457.16	456.62	456.85	457.09	455.17	457.46	454.14	456.36	455.62	457.11	456.12	456.81	NM	456.20	NM	456.83	457.11	457.61	457.26	458.65	457.75	458.29

AP-10304MW** (AP-8712R)

	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA		ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.15
EDB		ND(0.0194)	ND(0.0213)	ND(0.0196)	ND(0.0184)	0.115	ND(0.01)	ND(0.0103)	ND(0.20)	ND(0.020)	ND(0.020)	ND(0.010)	ND(0.021)	ND(0.020)	ND(0.004)
BENZENE	15.8	547	675	472	478	330	190	10	9.9	21	26	330	220	23	
TOLUENE	ND(1)	1.2	1.04	ND(1)	0.54	ND(5)	0.47	0.90	ND(1)	0.42	ND(1)	ND(1)	1.5	2.9	
EBZ	ND(1)	23.9	29.2	20.7	21.4	19	12	0.96	0.68	1.20	0.56	28	26	2.9	
DRO									1,300	1,400	NA	NA	NA	NA	
GRO									150	200	110	2,100	1,900	350	
WATER ELEV.	449.05	454.68	455.75	454.93	454.47	454.38	453.92	455.00	453.04	455.08	454.35	455.75	455.83	455.76	

AP-9079
5-15 bgs

	NOV 2004	APRIL 2005	AUG 2005	AUG 2006	OCT 2006	AUG 2007	AUG 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.15)
EDB	ND(0.0185)	0.0148	0.776	0.021	0.0069	0.064	ND(0.020)	ND(0.020)	0.02		
BENZENE	2.03	ND(0.4)	ND(0.5)	ND(1)	0.14	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.1)
TOLUENE	2.59	ND(1)	ND(1)	ND(1)	0.17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.08
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.1)
DRO							40	NA	NA	NA	NA
GRO							ND(50)	ND(50)	4.9	25,000	
WATER ELEV.	453.41	452.02	453.42	452.38	453.95	453.77	453.89	453.87	454.24		

AP-10034
5-20 bgs

	OCT 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA	ND(100)	ND(100)	ND(1)	ND(27)		
EDB	0.29	0.24	ND(0.010)	0.36		WELL
BENZENE	3,500	3,600	14,000	6,900		DISCOVERED
TOLUENE	ND(100)	ND(100)	0.63	ND(27)		BROKEN AND
EBZ	520	520	69	57		NOT SAMPLED
DRO	880	980	NA	NA		
GRO	15,000	16,000	2,900	16,000		
WATER ELEV.	457.52	456.80	457.52	457.54		

AP-10035
5-20 bgs

	OCT 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA	ND(200)	ND(100)	ND(1)	ND(40)	7.8	
EDB	1.5	1.3	0.58	4.5	ND(0.004)	
BENZENE	3,600	3,400	5,800	10,000	6,400	
TOLUENE	ND(200)	ND(100)	0.77	8.2	1.8	
EBZ	690	740	1,100	53	19	
DRO	550	520	NA	NA	NA	
GRO	18,000	15,000	5,700	23,000	11,000	
WATER ELEV.	457.48	456.71	457.75	457.28	458.10	

AP-10036
3-18 bgs

	OCT 2009	NOV 2009	JUNE 2010	AUG 2011	AUG 2015
DCA	ND(200)	ND(50)	19	ND(4)	3.4
EDB	0.17	0.097	ND(0.010)	0.043	ND(0.004)
BENZENE	5,200	4,000	340	860	230
TOLUENE	ND(200)	ND(50)	ND(1)	0.91	1
EBZ	310	420	18	8.1	1.1
DRO	410	370	NA	NA	NA
GRO	17,000	15,000	760	2,000	530
WATER ELEV.	457.56	456.62	457.66	457.44	455.94

AP-8711
18-28 bgs

	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.16
EDB	3.18	7.28	2.29	4.53	4.83	5.2	6.39	6.4	6.5	7.3	7.3	2.9
BENZENE	117	179	71.3	89.5	78	79	41	22	22	10	13	13	6.3
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.13	0.28	0.28	0.28	0.30	ND(1)	ND(1)	0.08
EBZ	1.01	2.43	ND(1)	ND(1)	ND(1)	0.096	0.077	0.077	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.1)
DRO									130	NA	NA	NA	
GRO									490	440	400	440	
WATER ELEV.	455.96	456.77	457.22	456.05	455.59	456.28	456.34	456.90	456.90	457.18	457.31	457.70	456.98

AP-10297MW** (AP-6038)

	MAY 1998	AUG 1998	NOV 1998	APR 1999	SEPT 1999	MAR 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(1)	ND(1)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.15)
EDB	NA	NA	NA	ND(1)	ND(0.002)	ND(0.0215)	ND(0.0201)	ND(0.0333)	ND(0.0306)	ND(0.0219)	ND(0.0192)	ND(0.0204)	ND(0.0202)	ND(0.0203)	ND(0.0207)	ND(0.0203)	ND(0.01)	ND(0.0102)	ND(0.020)	ND(1)	ND(0.020)	0.02	ND(0.004)
BENZENE	84	58.9	73	34.6	29	52.8	46.3	34.4	51.7	27.5	25.6	21.4	ND(0.4)	156	88.5	183	64	17	68	190	160	130	ND(0.1)
TOLUENE	ND(1)	ND(1)	ND(1)	ND(1)	2.84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.48	0.27	0.40	0.28	ND(5)	ND(5)	0.18	ND(0.1)
EBZ	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.11	0.31	ND(5)	ND(1)	ND(1)	ND(0.1)
DRO																				460	NA	NA	NA
GRO																				420	300	280	ND(250)
WATER ELEV.	451.95	455.21	452.86	449.14	455.36	455.89	455.35	453.82	454.40	451.41	454.06	454.49	453.06	449.32	453.55	452.92	453.59	453.04	452.99	453.59	453.95	454.22	455.47

AP-7822R
3-13 bgs

	SEPT 1999	MAR 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2008	AUG 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA	ND(50)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(10)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	
EDB	ND(0.02)	ND(0.0211)	ND(0.0236)	ND(0.0367)	ND(0.0243)	ND(0.0197)	ND(0.0218)	ND(0.0204)	ND(0.0211)	ND(0.0187)	ND(0.0202)	ND(1)	ND(0.020)	ND(0.010)	ND(0.010)	ND(0.021)	0.12	WELL
BENZENE	1,290	2,170	1,870	684	2,730	186	3,220	1,710	1,190	3,300	3,160	3,500	3,800	4,100	5,000	7,800	2,800	DISCOVERED
TOLUENE	ND(50)	5.8	ND(1)	1.22	4.83	6.19	4.94	3.69	ND(1)	1.74	5.22	3.5	ND(50)	ND(50)	1.6	ND(1)	1.9	BROKEN AND
EBZ	37.0	13.2	20.3	29.0	44.4	34.3	35.6	ND(1)	15.1	63.2	94	55	120	50	210	28	NOT SAMPLED	
DRO												400	270	NA	NA	NA		
GRO												1,500	9,800	1,600	2,700	6,100		
WATER ELEV.	457.19	453.94	459.14	457.37	455.85	456.88	456.85	455.42	458.20	456.65	455.95	456.20	457.17	455.99	457.61	456.19	458.66	

AP-9077*
(AP-7821)
5-15 bgs

	NOV 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	AUG 2010	AUG 2011	AUG 2015
DCA	ND(0.5)	ND(0.5)	ND(100)	ND(1)	ND(1)	ND(200)	ND(1)	ND(27)	4.8
EDB	ND(0.0185)	ND(0.0189)	ND(0.0097)	ND(0.0101)	ND(0.20)	0.0054	ND(0.020)	ND(0.020)	ND(0.004)
BENZENE	1,320	1,590	5,190	5,100	6,000	8,300	8,300	6,800	5,900
TOLUENE	2.14	2.27	ND(100)	7.1	11	ND(200)	ND(1)	12	9.0
EBZ	ND(1)	ND(1)	ND(100)	0.12	0.24	ND(200)	ND(1)	ND(27)	51
DRO						860	NA	NA	NA
GRO						18,000	16,000	14,000	9,400
WATER ELEV.	452.54	452.76	453.06	450.96	453.30	453.49	453.62	453.82	452.18

AP-10298MW** (AP-5850)

	MAY 1998	AUG 1998	NOV 1998	APR 1999	SEPT 1999	MAR 2000	SEPT 2000	JULY 2001	OCT 2001	JUNE 2002	SEPT 2002	APRIL 2003	SEPT 2003	APRIL 2004	NOV 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA	ND(1)	1.6	NA	ND(50)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(0.15)
EDB	NA	NA	NA	ND(50)	0.044	0.068	0.0694	ND(0.0312)	ND(0.0301)	ND(0.0218)	ND(0.0192)	0.0365	ND(0.0203)	ND(0.0205)	0.389	0.0632	ND(0.01)	ND(0.0102)	ND(0.020)	ND(1)	ND(0.021)	ND(0.020)	0.0094		
BENZENE	2,850	4,750	1,960	2,490	1,060	1,800	1,980	12.2	56.8	1.2	723	264	1.48	548	930	477	6.6	83	260	46	1,000	320	55		
TOLUENE	ND(1)	1.6	1	ND(50)	ND(1)	1.78	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.03	3.35	1.53	0.094	0.64	0.59	ND(1)	ND(1)	0.30	0.21		
EBZ	2.2	1.30	25.5	67.5	8.81	48.2	25.7	ND(1)	ND(1)	ND(1)	ND(1)	2.13	ND(1)	1.75	6.53	4.16	0.6	0.28	0.23	1.3	2.9	1.7	8.3		
DRO																				78	NA	NA	NA		
GRO																				470	2,200	990	1,000		
WATER ELEV.	458.11	458.26	457.66	458.05	461.11	458.05	458.30	457.45	456.70	451.89	454.54	447.31	454.49	457.40	457.53	457.76	458.54	458.39	456.60	456.61	NM	NM	456.98		

AP-10299MW** (AP-8712R)
5-15 bgs

	APRIL 2003	SEPT 2003	APRIL 2004	OCT 2004	AUG 2005	AUG 2006	AUG 2007	OCT 2008	AUG 2009	NOV 2009	JUNE 2010	AUG 2010	AUG 2011	AUG 2015
DCA		ND(1)	ND(1)	ND(0.5)	ND(0.5)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	0.15
EDB		ND(0.0194)	ND(0.0213)	ND(0.0196)	ND(0.0184)	0.115	ND(0.01)	ND(0.0103)	ND(0.20)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.010)	ND(0.021)	ND(0.020)	ND(0.004)
BENZENE	15.8	547	675	472	478	330	190	10	9.9	21	26	330	220	23	
TOLUENE	ND(1)	1.2	1.04	ND(1)	0.54	ND(5)	0.47	0.90	ND(1)	0.42	ND(1)	ND(1)	1.5	2.9	
EBZ	ND(1)	23.9	29.2	20.7	21.4	19	12	0.96	0.68	1.20	0.56	28	26	2.9	
DRO									1

Table 5-19
2015 Groundwater Analytical Data
Milepost 2.7

				1	3	5	9	11	13	
			Location ID	AP-7817	AP-6036R	AP-10300MW	AP-5651R	AP-10302MW	AP-6035	AP-10301MW
			Collection Date	8/19/2015	8/19/2015	8/19/2015	8/19/2015	8/19/2015	8/19/2015	8/19/2015
			Matirx	WG	WG	WG	WG	WG	WG	WG
			Sample Type	primary	primary	primary/MS/MSD	primary	primary	primary	
Analyte	Method	Units	Cleanup Level1	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier
Gasoline Range Organics (C6-C10)	AK101	UG/L	2,200.00	**5700 [25]**	1300 [25]	**4700 [25]**	**3700 [25]**	**3600 [25]**	2000 [25]	**57000 [250]**
Sulfate	E300.0	MG/L	NE	0.67 [0.1]	8.3 [0.2]	4.8 [0.2]	1.2 [0.2]	2 [0.2]	0.64 [0.1]	3.9 [0.2]
Iron	SW6010C	UG/L	NE	37100 [10.6]	4590 [10.6]	7990 [10.6]	31600 [10.6]	40800 [10.6]	45000 [10.6]	38000 [10.6]
Benzene	SW8260C	UG/L	5.00	**30 [0.5]**	**13 [0.1]**	**170 [1]**	**8.2 [0.1]**	**220 [1]**	**160 [1]**	**7000 [50]**
Toluene	SW8260C	UG/L	1,000.00	2 [0.5] J	11 [0.1]	98 [1]	8 [0.1]	2.2 [0.1]	1.1 [0.1]	**11000 [50]**
Ethylbenzene	SW8260C	UG/L	700.00	340 [0.5]	6.5 [0.1]	87 [1]	97 [1]	44 [0.1]	42 [0.1]	650 [5]
1,2-Dibromoethane	SW8260C	UG/L	0.05	ND [1] U	ND [0.2] U	ND [0.2] U	ND [0.2] U	ND [0.2] U	ND [0.2] U	**0.1 [0.004]**
1,2-Dichloroethane	SW8260C	UG/L	5.00	ND [0.75] U	ND [0.15] U	ND [0.15] U	ND [0.15] U	ND [0.15] U	ND [0.15] U	4.5 [7.5] J
1,2,4-Trimethylbenzene	SW8260C	UG/L	1,850.00	31 [1]	8.1 [0.2]	73 [2]	120 [2]	59 [0.2]	41 [0.2]	420 [10]
1,3,5-Trimethylbenzene	SW8260C	UG/L	1,800.00	12 [1]	3.5 [0.2]	49 [0.2] J	51 [0.2]	23 [0.2]	16 [0.2]	130 [10]

Table 5-19
2015 Groundwater Analytical Data
Milepost 3.0

				1	5	7	9	11	13	15	19	21	23	25	27	29
			Location ID	AP-7820R	AP-5522	AP-9079	AP-9078	AP-10299MW	AP-9077	AP-8711	AP-6040R	AP-10035	AP-10036	AP-10298MW	AP-10297MW	AP-8710
			Collection Date	8/17/2015	8/17/2015	8/17/2015	8/17/2015	8/18/2015	8/17/2015	8/17/2015	8/18/2015	8/18/2015	8/18/2015	8/18/2015	8/18/2015	8/19/2015
			Matirx	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Type													
Analyte	Method	Units	Cleanup Level1	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier	Result [LOD] Qualifier
Gasoline Range Organics (C6-C10)	AK101	UG/L	2,200.00	70 [25] J	**8000 [25]**	25 [25] J	280 [25]	350 [25]	**9400 [250]**	440 [25]	55 [25] J	**11000 [250]**	530 [25]	1000 [25]	ND [25] U	ND [25] U
Sulfate	E300.0	MG/L	NE	2.1 [0.2]	55.9 [0.2]	16.2 [0.2]	43.4 [0.2]	1.5 [0.2]	0.72 [0.1]	43.7 [0.2]	29.6 [0.2]	32.4 [0.2]	1.9 [0.2]	15 [0.2]	0.65 [0.1]	5.7 [0.2]
Iron	SW6010C	UG/L	NE	9930 [10.6]	1580 [10.6]	4.2 [10.6] J	31.5 [10.6]	30800 [10.6]	58900 [10.6]	10.9 [10.6] J	17800 [10.6]	43700 [10.6]	73400 [10.6]	9280 [10.6]	614 [10.6]	32.2 [10.6]
Benzene	SW8260C	UG/L	5.00	**15 [0.1]**	**700 [2.5]**	ND [0.1] U	1.9 [0.1]	**23 [0.1]**	**5900 [20]**	**6 [0.1] J**	**26 [0.1]**	**6400 [20]**	**230 [1]**	**55 [0.1]**	ND [0.1] U	ND [0.1] U
Toluene	SW8260C	UG/L	1,000.00	0.22 [0.1] J	180 [0.25]	0.08 [0.1] J	0.07 [0.1] J	2.9 [0.1]	9 [2] J	0.07 [0.1] J	0.06 [0.1] J	1.8 [2] J	1 [0.1]	0.21 [0.1] J	ND [0.1] U	0.42 [0.1] J
Ethylbenzene	SW8260C	UG/L	700.00	0.64 [0.1]	1.7 [0.25]	ND [0.1] U	ND [0.1] U	2.9 [0.1]	51 [2]	ND [0.1] U	0.1 [0.1] J	19 [2]	1.1 [0.1]	8.3 [0.1]	ND [0.1] U	0.17 [0.1] J
1,2-Dibromoethane	E504.1	UG/L	0.05	ND [0.004] U	**37 [0.4]**	0.02 [0.004]	ND [0.004] U	ND [0.004] U	ND [0.004] U	**2.7 [0.08]**	0.0065 [0.004] J	ND [0.004] U	ND [0.004] U	0.0094 [0.004] J	ND [0.004] U	ND [0.004] U
1,2-Dichloroethane	SW8260C	UG/L	5.00	ND [0.15] U	0.2 [0.38] J	ND [0.15] U	0.16 [0.15] J	0.15 [0.15] J	4.8 [3] J	0.16 [0.15] J	ND [0.15] U	**7.8 [3] J**	3.4 [0.15]	ND [0.15] U	ND [0.15] U	ND [0.15] U
1,2,4-Trimethylbenzene	SW8260C	UG/L	1,850.00	0.18 [0.2] J	14 [0.5]	ND [0.2] U	ND [0.2] U	3.1 [0.2]	ND [4] U	ND [0.2] U	0.3 [0.2] J	ND [4] U	0.39 [0.2] J	7.7 [0.2]	ND [0.2] U	ND [0.2] U
1,3,5-Trimethylbenzene	SW8260C	UG/L	1,800.00	ND [0.2] U	8 [0.5]	ND [0.2] U	ND [0.2] U	0.34 [0.2] J	ND [4] U	ND [0.2] U	ND [0.2] U	ND [4] U	0.12 [0.2] J	6.5 [0.2]	ND [0.2] U	ND [0.2] U

OU-4 Landfill

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