SUBJECT: HTW – BCT Meeting
April 14, 2010
1:30 PM - BRAC Conference Room

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HTW BCT Meeting
April 14, 2010 at 1:30 pm

Item	Action	Comment
OU1 Off-Site	Status Update	
OU2 and 2/12 Treatment Systems	Status Update	
Other Groundwater Issues	Status Update	
OUCTP	Status Update	
OU2 Landfill	Status Update	
Site 39 Remediation	Status Update	
OU1 Groundwater Remediation	Status Update	HGL
FFA Schedule	Status Update	
FOST/FOSET Issues	Status Update	
Calendar Update	Update	

HydroGeoLogic, Inc.
Agenda & Notes
Operable Unit 1 On-Post

Fort Ord Base Closure Team Meeting
14 April 2010, 1:30 PM
Monterey, California

1. Groundwater Remediation System Update

Except for a brief 15-minute shutdown on 24 March, the Northwest Treatment System (NWTS) has operated continuously since the last Base Closure Team (BCT) meeting on 23 March 2010. Repairs to the injection pump control program, the pressure gauge diaphragm, and the cracked pipe are expected to begin later this month and be completed by the end of April. Pending completion, the system is operating using only the two lead granular activated carbon (GAC) vessels as agreed upon at last month's BCT meeting.

HydroGeoLogic, Inc. (HGL) temporarily increased pumping from MW-OU1-85-A on 24 March 2010 from approximately 15 gallons per minute (gpm) to 30 gpm in attempt to sustain injection pump operation pending software repairs. Current total pumping is approximately 64 gpm. Under the current operating conditions, approximately 40% of the treated water is returned to the injection well and the Fort Ord Natural Reserve (FONR) infiltration trenches.

Extraction well EW-OU1-60-A was pumping only intermittently after sample collection on 22 March 2010 and has not operated since approximately 24 March.

The treatment system's average flow rate ranged between approximately 60 gpm and 64 gpm since the last BCT meeting. The total volume pumped from startup in 2006 through 05 April 2010 is over 124,000,000 gallons. During this period, the NWTS has removed nearly 4.2 pounds (0.34 gallons) of TCE and 0.38 pounds (0.036 gallons) of cis-1,2-dichloroethene. Performance samples were collected during the week of 22 March 2010 and preliminary results should be available very soon. Thus far in 2010, approximately 0.13 pounds of trichloroethene (TCE) (0.011 gallons) and 0.006 pounds (0.0006 gallons) of cis-1,2-dichloroethene have been removed.

Validated laboratory analytical results from the December performance sampling effort have been received. All reported values were accepted without qualification so there were no changes to the preliminary data previously described. The validated analytical results are included in Table 1. The information in Table 1 was provided during previous BCT meetings and is repeated below (italicized) for convenient reference:

- *TCE exceeded the aquifer cleanup level (ACL) only at the two extraction wells nearest to the original source area (EW-OU1-71-A and MW-OU1-87-A).*
- *TCE concentrations declined by approximately 20% at EW-OU1-71-A, EW-OU1-66-A and MW-OU1-85-A and were stable at MW-OU1-87-A (6.9 microgram per liter [µg/L] versus 6.8 µg/L).*
- *EW-OU1-60-A was not pumping and thus not sampled.*
- *The influent TCE to the treatment plant was stable at 2.3 µg/L and the effluent concentration remained non-detect.*
- *The mid-point sample showed that TCE increased to 0.65 µg/L.* This value exceeds the 0.5 µg/L threshold and a carbon change-out was performed on 08 February 2010.

2. Long-term Monitoring Update

The 2010 first quarter long-term monitoring (LTM) sampling event occurred during the week of 22 – 26 March 2010. The most recent LTM samples, which were taken in September 2009, and the following information (italicized) was provided during the October BCT and summarized herein for convenient reference. Figure 5.3b depicts the September 2009 sampling locations and TCE concentrations.

The maximum TCE concentration reported in both the first quarter 2009 LTM event and the September 2009 LTM sampling event was 10 µg/L at well EW-OU1-53-A. A comparison of the recent data to the March 2009 data showed:

- *TCE concentrations changed by more than 1.0 µg/L at only two wells:*
  - *An increase of 2.9 µg/L (to 9.9 µg/L) at MW-OU1-61-A. This well is screened only in the Channel Fill interval of the A-Aquifer (i.e., the deepest interval, approximately 7 feet thick at this location)*
  - *A decrease of 5.6 µg/L (to 1.0 µg/L) at MW-OU1-50-A. This well is screened throughout the saturated thickness of the A-Aquifer.*
- *TCE concentrations increased at only five wells. In addition to the increase at EW-OU1-61-A described above, TCE concentration rose at wells EW-OU1-52-A, MW-OU1-22-A, IW-OU1-10-A, and EW-OU1-65-A. The magnitude of change ranged from 0.25 µg/L to 0.8 µg/L.*

The TCE concentration contours based on the validated third quarter (September) 2009 LTM analytical results are shown in the attached draft Figure 5.3b.

The replacement sample collection from well MW-OU1-19-A (to replace the failed September sample) was collected in December with the fourth quarter NWTS performance monitoring. The validated laboratory result showed TCE was present at a concentration of 1.7 µg/L (unchanged from the preliminary value reported last month. TCE concentrations at this well have ranged between 2.4 µg/L and 1.5 µg/L since 2005.

A sample was also collected from well MW-OU1-61-A during the fourth quarter NWTS performance monitoring. The validated laboratory result confirmed TCE was present at a concentration of 12 µg/L. Consequently, pumping continued from the boundary extraction wells. TCE concentrations at MW-OU1-61-A well have ranged between 5 µg/L and 13 µg/L since January 2007.

3. Report Submittals

Table 2 summarizes the status of scheduled reports through 2010. The Draft 2009 Annual and Fourth Quarter Groundwater Monitoring Report was submitted during the second week in February. The agencies approved via electronic mail the sampling frequency recommended in the Draft 2009 Annual and Fourth Quarter Groundwater Monitoring Report. These changes, which included shifting three wells from semi-annual to annual schedule, were implemented during the March sampling event. The California Department of Toxic Substance Control indicated that they had no other comments and the Fort Ord Community Advisory Group submitted seven questions.

4. Other

4a) MW-OU1-61-A TCE Concentration Trend

The agencies submitted various questions on 23 February 2010 concerning the NWTS operation and observed TCE concentrations at MW-OU1-60-A. Key questions concerned the following topics:

a. Hydrologic Setting
b. Conceptual Understanding of TCE Trend at MW-OU1-61-A

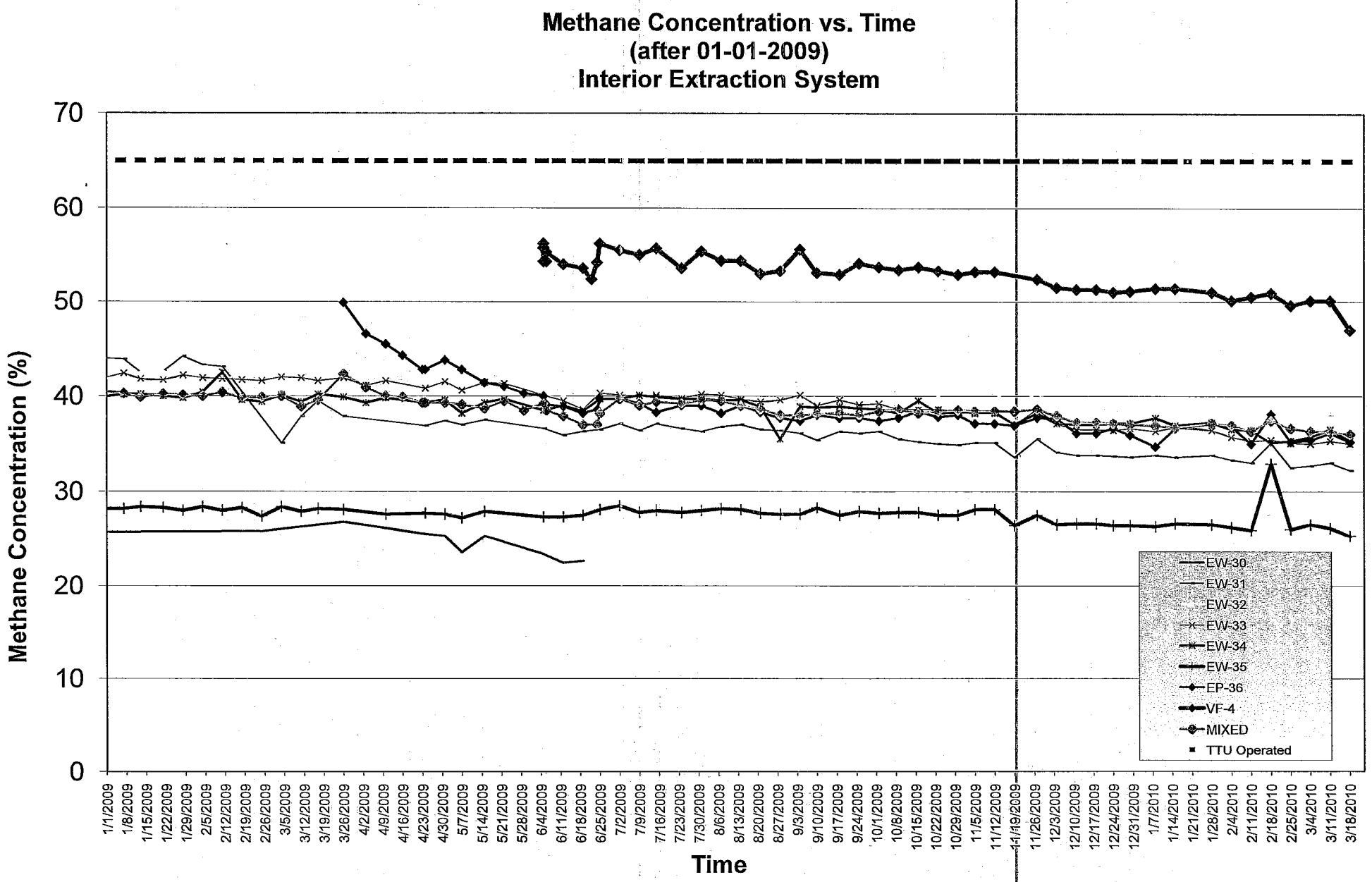
Thermal Treatment Unit
Operation Summary
2007 - 2010

TREATMENT SYSTEM OPERATION SUMMARY	
Treatment System Start Date:	**6/4/2001**
TTU Start Date:	**4/4/2006**
Last Reading Date/Time:	**3/18/2010 17:00**
Historical through 2009 (TTU only):	
Total TTU Hours:	**32,808**
Total TTU Hours Operated:	**14,292**
% TTU Operation:	**43.6%**
Total Pounds of Methane Removed:	**1,802,161**
Total Pounds of VOCs Removed:	**202**
Current Year 2010	
Total Hours:	**2,304**
Total Hours Operated:	**661**
% TTU Operation:	**28.7%**
Total Pounds of Methane Removed:	**58,481**
Cumulative:	
% TTU Operation:	**42.6%**
Total Pounds of Methane Removed:	**1,860,642**

			Total Pounds Removed	Pounds/week
Pounds of Methane Removed (2007)			**540,920**	**10,374**
Pounds of Methane Removed (2008)			**293,169**	**5,622**
Pounds of Methane Removed (2009)			**455,507**	**8,736**
Pounds of Methane Removed (2010)			**58,481**	**4,264**

EXTRACTION SYSTEM (2010)					
Location	**Last Methane (%)**	**Last Flow Rate (scfm)**	**Current Methane Removal Rate (lbs/day)**	**2010 % Operation**	**2010 Methane Removed (Lbs)**
Area E					
EP-36	35.2	25	519.1	33.2	12922.1
Area F					
EW-30	18.3	0	0.0	4.1	40.5
EW-31	32.2	1	19.0	33.2	3809.5
EW-32	37.9	1	22.4	33.2	9137.6
EW-33	35	1	20.6	33.2	9672.1
VF-4	47	1	27.7	33.2	4313.9
Area D					
EW-34	35.3	11	229.0	33.2	15763.0

Notes:
1. TTU shut down from 3/19 thru 4/6 to allow LFG rebound.


Methane Concentration vs. Time
(after 01-01-2009)
Interior Extraction System
Methane Concentration (%)
70
60
50
40
30
20
10
0
Time
1/1/2009
1/8/2009
1/15/2009
1/22/2009
1/29/2009
2/5/2009
2/12/2009
2/19/2009
2/26/2009
3/5/2009
3/12/2009
3/19/2009
3/26/2009
4/2/2009
4/9/2009
4/16/2009
4/23/2009
4/30/2009
5/7/2009
5/14/2009
5/21/2009
5/28/2009
6/4/2009
6/11/2009
6/18/2009
6/25/2009
7/2/2009
7/9/2009
7/16/2009
7/23/2009
7/30/2009
8/6/2009
8/13/2009
8/20/2009
8/27/2009
9/3/2009
9/10/2009
9/17/2009
9/24/2009
10/1/2009
10/8/2009
10/15/2009
10/22/2009
10/29/2009
11/5/2009
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11/19/2009
11/26/2009
12/3/2009
12/10/2009
12/17/2009
12/24/2009
12/31/2009
1/7/2010
1/14/2010
1/21/2010
1/28/2010
2/4/2010
2/11/2010
2/18/2010
2/25/2010
3/4/2010
3/11/2010
3/18/2010
EW-30
EW-31
EW-32
EW-33
EW-34
EW-35
EP-36
VF-4
MIXED
TTU Operated

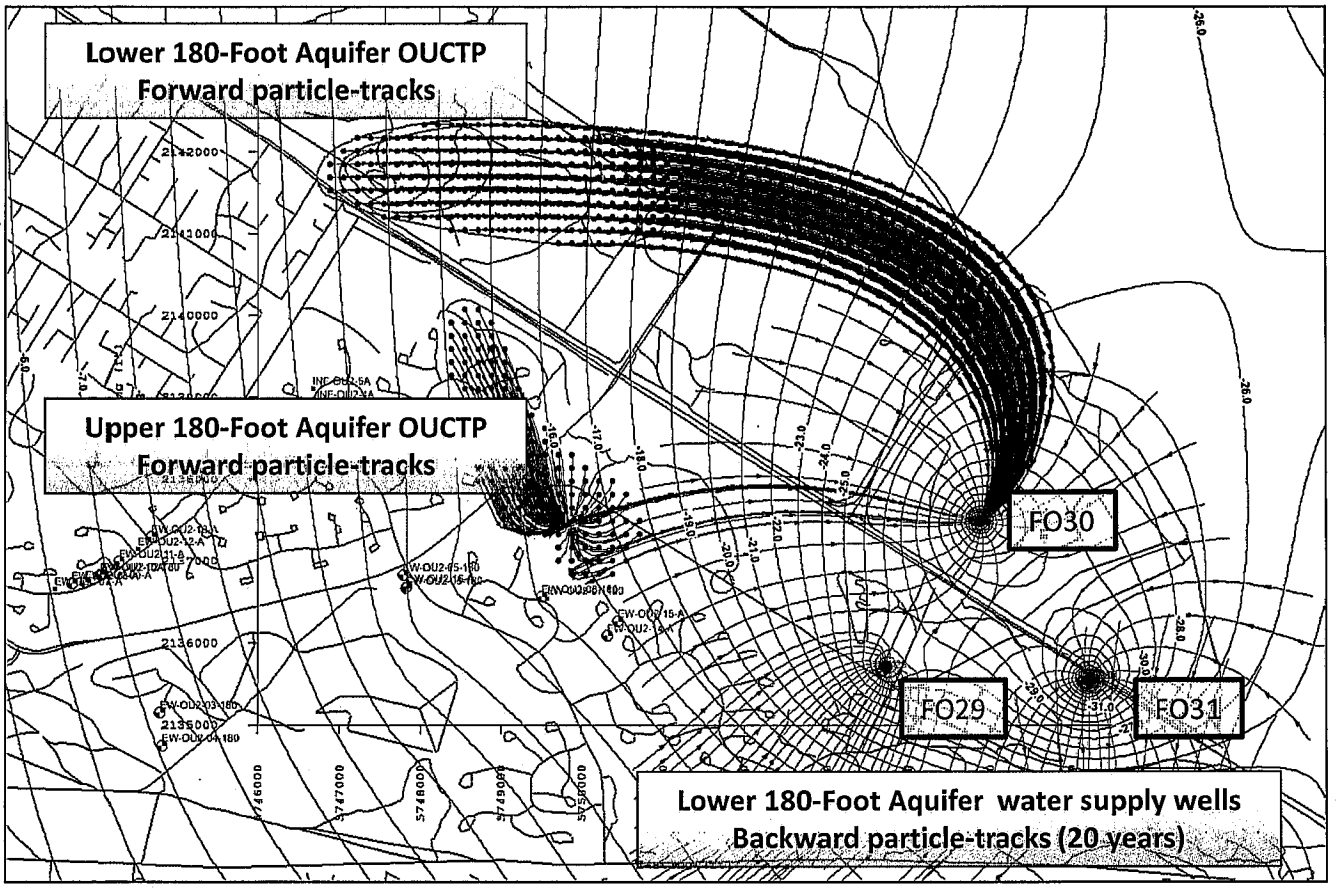


Figure 22 Particle-tracking in the Lower 180-Foot Aquifer for Scenario 1 (with remedy).
Blue lines indicate 1-foot hydraulic head contours ; green lines indicate particle-tracks with 1-year travel time markers

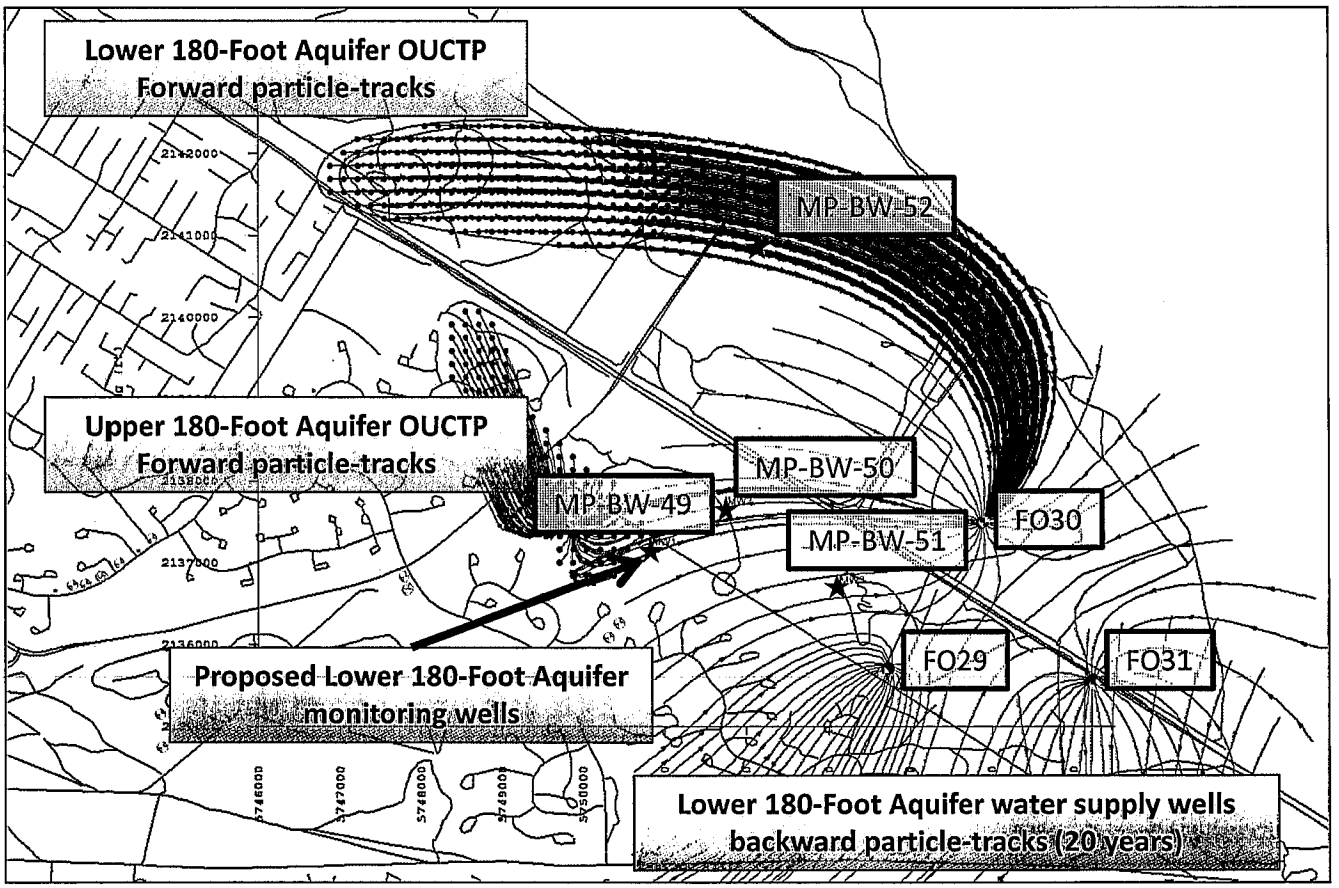
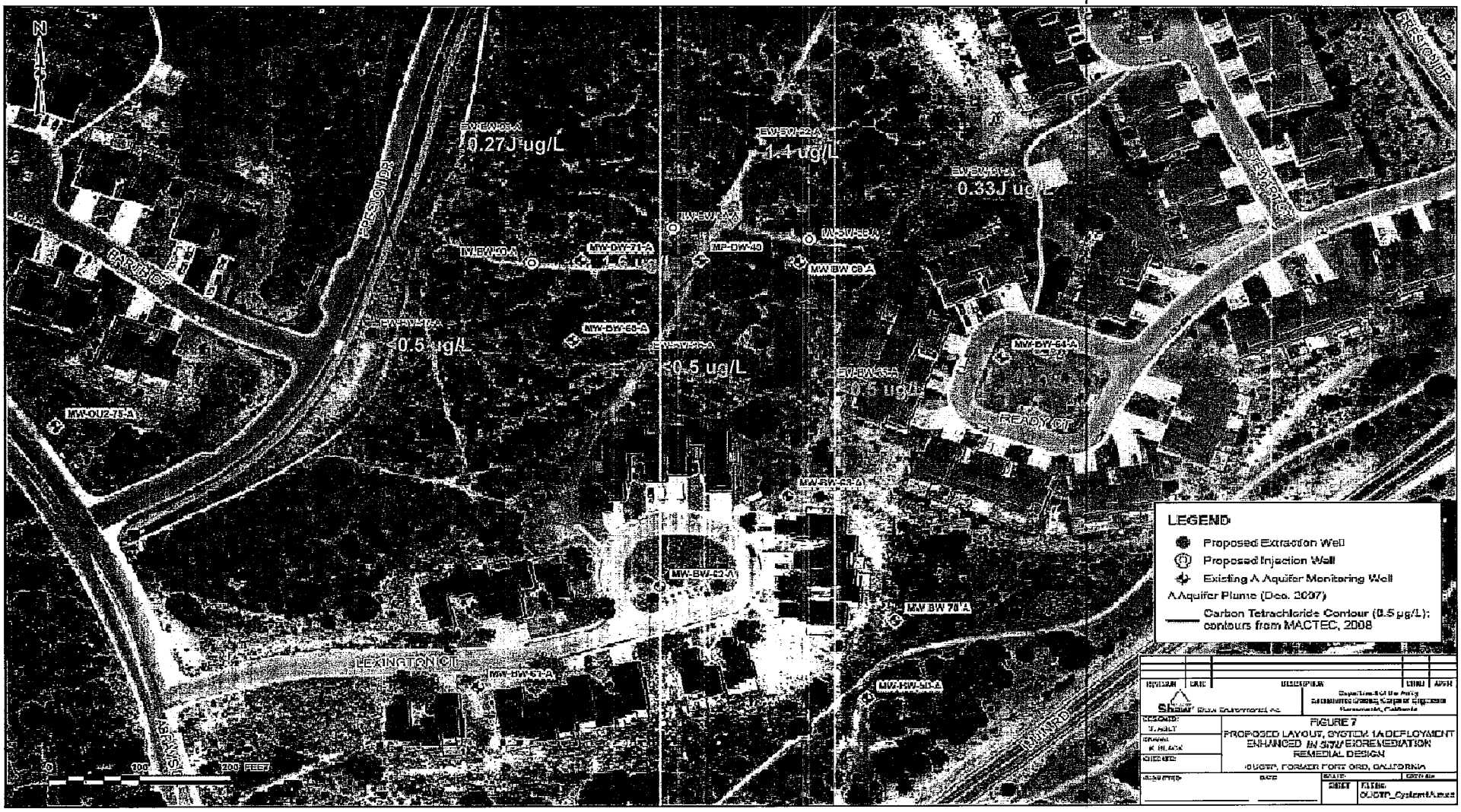


Figure 23 Proposed monitoring wells shown with Scenario 1 (with remedy) 20-year capture zones.
Green lines indicate particle-tracks with 5-year travel time markers



Baseline Sample
Carbon Tetrachloride Detections

Sample ID Well Type Date	Method[a]	MW-BW-71-A monitoring baseline 8/12/2009	MW-BW-71-A monitoring week 0 9/15/2009	MW-BW-71-A monitoring week 1 9/22/2009	MW-BW-71-A monitoring week 2 9/29/2009	MW-BW-71-A monitoring week 3 10/6/2009	MW-BW-71-A monitoring week 4 10/13/2009	MW-BW-71-A monitoring week 5 10/20/2009	MW-BW-71-A monitoring week 7 11/3/2009	MW-BW-71-A monitoring week 8 11/10/2009
well flowrate (operating)		NA	NA	NA	NA	NA	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	44 mg/L	56 mg/L	51 mg/L	58 mg/L	62 mg/L	63 mg/L	58 mg/L	61 mg/L	68 mg/L
pH	meter[c]	6.40	6.72	6.54	6.69	6.45	6.73	6.63	6.54	6.24
dissolved oxygen	meter[c]	8.59 ppm	9.51 ppm	10.15 ppm	10.42 ppm	10.4 ppm	10.01 ppm	10.25 ppm	10.28 ppm	10.54 ppm
oxidation reduction potential	meter[c]	271 mV	156 mV	195 mV	198 mV	245 mV	256 mV	203 mV	236 mV	204 mV
conductivity	meter[c]	40.0 mS/cm	50 mS/cm	42.9 mS/cm	47.2 mS/cm	45.9 mS/cm	51.1 mS/cm	53.3 mS/cm	48.8 mS/cm	49.8 mS/cm
turbidity	meter[c]	21.1 NTU	12 NTU	210 NTU	32 NTU	67 NTU	39 NTU	52 NTU	0 NTU	0 NTU
temperture	meter[c]	18.2 °C	18.4 °C	18 °C	18 °C	17.5 °C	17.4 °C	17.8 °C	17.5 °C	17.6 °C
nitrate	300.0	2670 µg/L		4280 µg/L	4840 µg/L	5910(5890) µg/L	5640 µg/L	4150 µg/L		4870(4880) µg/L
nitrite	300.0	<100 µg/L		<50 µg/L	<100 µg/L	<100(<100) µg/L	<100 µg/L	<100 µg/L		<100(<100) µg/L
sulfate	300.0	51700 µg/L		25600 µg/L	35800 µg/L	32700(33500) µg/L	35600 µg/L	48400 µg/L		30600(30700) µg/L
ortho-phosphate	300.0	<500 µg/L		<500 µg/L						
dissolved iron	6010B	<200 µg/L		<200 µg/L	<200 µg/L	<200(<200) µg/L	<200 µg/L	<200 µg/L		<200 µg/L
manganese	6010B	<10 µg/L		<10 µg/L	<10 µg/L	<10(<10) µg/L	<10 µg/L	<10 µg/L		<10 µg/L
arsenic	6010B	<10 µg/L		<10 µg/L	<10 µg/L	<10(<10) µg/L	<10 µg/L	<10 µg/L		<10 µg/L
methane	RSK 175[d]						<2.0 µg/L			<2.0 µg/L
ethane	RSK 175[d]						<2.0 µg/L			<2.0 µg/L
lactate	300.0M	<100 µg/L			<100 µg/L		<100 µg/L			<100(<100) µg/L
propionate	300.0M	<100 µg/L			<100 µg/L		<100 µg/L			<100(<100) µg/L
acetate	300.0M	<100 µg/L			<100 µg/L		<100 µg/L			<100(<100) µg/L
carbon tetrachloride	8260B	1.6 µg/L	0.52 µg/L	<0.5 µg/L	0.28J µg/L	<0.5(<0.5) µg/L	0.25J µg/L	0.99 µg/L		0.44J µg/L
chloroform	8260B	0.52 µg/L	0.27J µg/L	<0.5 µg/L	0.26J µg/L	0.23J(0.20J) µg/L	0.25J µg/L	0.41J µg/L		0.29J µg/L
dichloromethane	8260B	<5.0 µg/L	<5.0 µg/L	<5.0 µg/L	<5.0 µg/L	<0.5(<0.5) µg/L	<5.0 µg/L	<5.0 µg/L		<5.0 µg/L
chloromethane	8260B	<1.0 µg/L	<1.0 µg/L	<1.0 µg/L	<1.0 µg/L	<0.5(<0.5) µg/L	<1.0 µg/L	<1.0 µg/L		<1.0 µg/L
trichloroethene	8260B	0.46J µg/L	0.21J µg/L		0.27J		0.24J µg/L	0.45J µg/L		
tetrachloroethene	8260B									
acetone	8260B		6.1J µg/L							

Sample ID Well Type Date	Method[a]	MW-BW-71-A monitoring week 9 11/17/2009	MW-BW-71-A monitoring week 11 12/1/2009	MW-BW-71-A monitoring week 12 12/9/2009	MW-BW-71-A monitoring week 13 12/15/2009	MW-BW-71-A monitoring week 14 12/22/2009	MW-BW-71-A monitoring week 15 12/30/2009	MW-BW-71-A monitoring week 17 1/12/2010	MW-BW-71-A monitoring week 19 1/26/2010	MW-BW-71-A monitoring week 21 2/9/2010	MW-BW-71-A monitoring week 26 3/16/2010
well flowrate (operating)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	66 mg/L	63 mg/L	63 mg/L	58 mg/L	61 mg/L	59 mg/L	51 mg/L	51 mg/L	48 mg/L	41 mg/L
pH	meter[c]	6.37	6.45	6.46	6.5	6.4	6.4	6.6	6.45	6.63	6.55
dissolved oxygen	meter[c]	9.77 ppm	10.15 ppm	10.15 ppm	9.48 ppm	8.91 ppm	9.55 ppm	7.8 ppm	8.46 ppm	8.84 ppm	10.13 ppm
oxidation reduction potential	meter[c]	180 mV	222 mV	190 mV	83 mV	206 mV	219 mV	107 mV	242 mV	70 mV	190 mV
conductivity	meter[c]	49.5 mS/cm	53.8 mS/cm	53.9 mS/cm	54.8 mS/cm	53.8 mS/cm	53.7 mS/cm	53.7 mS/cm	50.6 mS/cm	48.6 mS/cm	46.8 mS/cm
turbidity	meter[c]	0 NTU	4 NTU	0 NTU	8 NTU	4 NTU	20 NTU	30 NTU	7 NTU	6 NTU	5 NTU
temperture	meter[c]	17.4 °C	17.5 °C	17.4 °C	17.5 °C	17.5 °C	17.4 °C	17.6 °C	17.7 °C	17.4 °C	18.1 °C
nitrate	300.0				3740 µg/L			2770 µg/L		1890 µg/L	1910 µg/L
nitrite	300.0				<100 µg/L			<100 µg/L		<100 µg/L	<100 µg/L
sulfate	300.0				49000 µg/L			48800 µg/L		49200 µg/L	41800 µg/L
ortho-phosphate	300.0										
dissolved iron	6010B				<200 µg/L			<200 µg/L		<200 µg/L	<200 µg/L
manganese	6010B				<10 µg/L			9.79J µg/L		<10 µg/L	22.5 µg/L
arsenic	6010B				<10 µg/L			<10 µg/L		<10 µg/L	<10 µg/L
methane	RSK 175[d]							<2.0 µg/L			<2.0 µg/L
ethane	RSK 175[d]							<2.0 µg/L			<2.0 µg/L
lactate	300.0M							<100 µg/L			<100 µg/L
propionate	300.0M							<100 µg/L			<100 µg/L
acetate	300.0M							<100 µg/L			<100 µg/L
carbon tetrachloride	8260B				0.9 µg/L			1.3 µg/L		1.8 µg/L	1.4 µg/L
chloroform	8260B				0.41J µg/L			0.46J µg/L		0.48J µg/L	0.43J µg/L
dichloromethane	8260B				<5.0 µg/L			<5.0 µg/L		<5.0 µg/L	<5.0 µg/L
chloromethane	8260B				<1.0 µg/L			<1.0 µg/L		<1.0 µg/L	<1.0 µg/L
trichloroethene	8260B				0.40J µg/L			0.39J µg/L		0.48J µg/L	0.39J µg/L
tetrachloroethene	8260B									0.21J µg/L	
acetone	8260B										

Sample ID Well Type Date	Method[a]	EW-BW-86-A extraction baseline 8/3/2009	EW-BW-86-A extraction week 0 9/15/2009	EW-BW-86-A extraction week 1 9/22/2009	EW-BW-86-A extraction week 2 9/29/2009	EW-BW-86-A extraction week 3 10/6/2009	EW-BW-86-A extraction week 4 10/13/2009	EW-BW-86-A extraction week 5 10/20/2009	EW-BW-86-A extraction week 6 10/28/2009	EW-BW-86-A extraction week 7 11/3/2009
well flowrate (operating)		NA	11.0 gpm	10.7 gpm	10.7 gpm	10.5 gpm	10.5 gpm	10.1 gpm	10.0 gpm	6.8 gpm
alkalinity ($CaCO_3$ total)	HACH[b]	47 mg/L	61 mg/L	51 mg/L	57 mg/L	53 mg/L	52 mg/L	53 mg/L	61 mg/L	61 mg/L
pH	meter[c]	6.32	6.7	6.75	6.58	6.66	6.67	6.61	6.55	6.17
dissolved oxygen	meter[c]	7.84 ppm	10.2 ppm	9.85 ppm	9.68 ppm	9.67 ppm	9.36 ppm	9.74 ppm	8.99 ppm	7.73 ppm
oxidation reduction potential	meter[c]	270 mV	198 mV	188 mV	186 mV	213 mV	254 mV	219 mV	238 mV	264 mV
conductivity	meter[c]	42.4 mS/cm	44 mS/cm	43.9 mS/cm	47.1 mS/cm	45.2 mS/cm	48.3 mS/cm	48.2 mS/cm	47.8 mS/cm	49.7 mS/cm
turbidity	meter[c]	57.2 NTU	3 NTU	0 NTU	0 NTU	0 NTU	0 NTU	0 NTU	0 NTU	0 NTU
temperture	meter[c]	17.8 °C	17.9 °C	17.3 °C	17.4 °C	17.7 °C	17.3 °C	17.4 °C	17.2 °C	17.7 °C
nitrate	300.0	5620 µg/L				4300 µg/L		4360 µg/L		
nitrite	300.0	<100 µg/L				<100 µg/L		<100 µg/L		
sulfate	300.0	33500 µg/L				32800 µg/L		30100 µg/L		
ortho-phosphate	300.0	<500 µg/L								
dissolved iron	6010B	<200 µg/L		<200 µg/L		<200 µg/L		<200 µg/L		
manganese	6010B	12.6 µg/L		<10 µg/L		<10 µg/L		<10 µg/L		
arsenic	6010B	<10 µg/L		<10 µg/L		<10 µg/L		<10 µg/L		
methane	RSK 175[d]									
ethane	RSK 175[d]									
lactate	300.0M	<100 µg/L								
propionate	300.0M	<100 µg/L								
acetate	300.0M	<100 µg/L								
carbon tetrachloride	8260B	<0.5 µg/L				0.20J µg/L		0.24J µg/L		
chloroform	8260B	<0.5 µg/L				<0.5 µg/L		<0.5 µg/L		
dichloromethane	8260B	<0.5 µg/L				<0.5 µg/L		<0.5 µg/L		
chloromethane	8260B	<1.0 µg/L				<1.0 µg/L		<1.0 µg/L		
tetrachloroethene	8260B							0.24J µg/L		
trichloroethene	8260B									
acetone	8260B									
2-butanone	8260B									

Sample ID Well Type Date	Method[a]	EW-BW-86-A extraction week 8 11/10/2009	EW-BW-86-A extraction week 9 11/17/2009	EW-BW-86-A extraction week 13 12/15/2009	EW-BW-86-A extraction week 17 1/12/2010	EW-BW-86-A extraction week 21 2/9/2010
well flowrate (operating)		9.6 gpm	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	75 mg/L	78 mg/L	59 mg/L	51 mg/L	63 mg/L
pH	meter[c]	6.69	6.64	6.43	6.79	6.51
dissolved oxygen	meter[c]	5.65 ppm	6.57 ppm	6.18 ppm	3.88 ppm	7.04 ppm
oxidation reduction potential	meter[c]	100 mV	48 mV	-8 mV	-26 mV	1 mV
conductivity	meter[c]	52.5 mS/cm	53 mS/cm	48.1 mS/cm	46.4 mS/cm	48.3 mS/cm
turbidity	meter[c]	41 NTU	0 NTU	35 NTU	8 NTU	27 NTU
temperture	meter[c]	17.3 °C	17.2 °C	17.4 °C	16.5 °C	17.3 °C
nitrate	300.0	3680 µg/L		4020(3980) µg/L	1960(1960) µg/L	5280(5270) µg/L
nitrite	300.0	<100 µg/L		<100(<100) µg/L	<100(<100) µg/L	<100(<100) µg/L
sulfate	300.0	29200 µg/L		30100(31300) µg/L	39900(40000) µg/L	34500(34500) µg/L
ortho-phosphate	300.0					
dissolved iron	6010B	<200 µg/L		619(650J) µg/L	62.8J µg/L	724 µg/L
manganese	6010B	125 µg/L		181(190) µg/L	18.3 µg/L	65.6 µg/L
arsenic	6010B	<10 µg/L		<10(<10) µg/L	<10 µg/L	<10 µg/L
methane	RSK 175[d]					
ethane	RSK 175[d]					
lactate	300.0M					
propionate	300.0M					
acetate	300.0M					
carbon tetrachloride	8260B	0.24J µg/L		0.20J µg/L	0.55 µg/L	0.35J µg/L
chloroform	8260B	<0.5 µg/L		<0.5 µg/L	0.24J µg/L	0.26J µg/L
dichloromethane	8260B	<0.5 µg/L		<0.5 µg/L	<0.5 µg/L	<0.5 µg/L
chloromethane	8260B	<1.0 µg/L		<1.0 µg/L	<1.0 µg/L	<1.0 µg/L
tetrachloroethene	8260B	0.28J µg/L				0.26J µg/L
trichloroethene	8260B				0.22J µg/L	
acetone	8260B			8.2J µg/L		
2-butanone	8260B			14J µg/L		

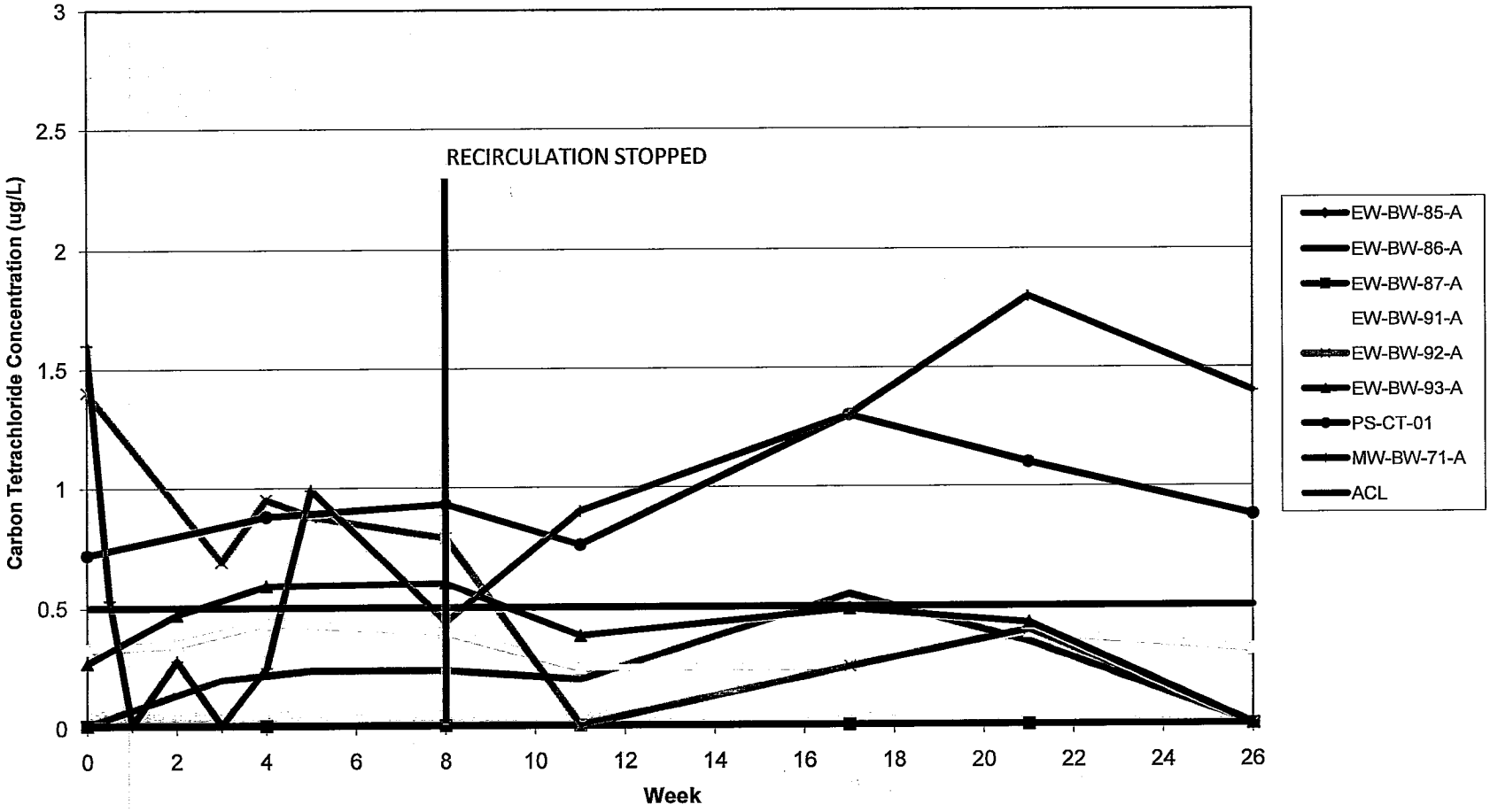
Sample ID Well Type Date	Method[a]	EW-BW-92-A extraction baseline 7/30/2009	EW-BW-92-A extraction week 0 9/15/2009	EW-BW-92-A extraction week 1 9/22/2009	EW-BW-92-A extraction week 2 9/29/2009	EW-BW-92-A extraction week 3 10/6/2009	EW-BW-92-A extraction week 4 10/13/2009	EW-BW-92-A extraction week 5 10/20/2009	EW-BW-92-A extraction week 6 10/28/2009	EW-BW-92-A extraction week 7 11/3/2009
well flowrate (operating)		NA	15.2 gpm	14.9 gpm	14.7 gpm	14.7 gpm	13.7 gpm	11.6 gpm	10.3 gpm	10.4 gpm
alkalinity ($CaCO_3$ total)	HACH[b]	37 mg/L	56 mg/L	47 mg/L	44 mg/L	47 mg/L	45 mg/L	57 mg/L	69 mg/L	81 mg/L
pH	meter[c]	6.55	6.79	6.71	6.59	6.59	6.66	6.63	6.69	6.68
dissolved oxygen	meter[c]	7.84 ppm	10.64 ppm	10.39 ppm	10.26 ppm	10.45 ppm	9.34 ppm	8.84 ppm	6.87 ppm	5.96 ppm
oxidation reduction potential	meter[c]	210 mV	193 mV	185 mV	199 mV	208 mV	246 mV	141 mV	87 mV	27 mV
conductivity	meter[c]	40.3 mS/cm	45 mS/cm	43.8 mS/cm	45.6 mS/cm	43.9 mS/cm	49.7 mS/cm	51.8 mS/cm	54 mS/cm	58.7 mS/cm
turbidity	meter[c]	110 NTU	11 NTU	26 NTU	2 NTU	0 NTU	3 NTU	0 NTU	0 NTU	7 NTU
temperture	meter[c]	17.5 °C	17.3 °C	17.2 °C	17.1 °C	17.1 °C	17.0 °C	17.1 °C	17.1 °C	17.4 °C
nitrate	300.0	2570 µg/L				1990(1980) µg/L	1320 µg/L	1740 µg/L		
nitrite	300.0	<100 µg/L				<100(<100) µg/L	<100 µg/L	<100(<100) µg/L		
sulfate	300.0	45900 µg/L				31300(31300) µg/L	32000 µg/L	33200(33600) µg/L		
ortho-phosphate	300.0	<500 µg/L								
dissolved iron	6010B	<200 µg/L				<200 µg/L	<200 µg/L	<200(<200) µg/L		
manganese	6010B	<10 µg/L				<10 µg/L	47.5 µg/L	200(203) µg/L		
arsenic	6010B	<10 µg/L				<10 µg/L	<10 µg/L	<10(<10) µg/L		
methane	RSK 175[d]	2.0 µg/L								
ethane	RSK 175[d]	<2.0 µg/L								
lactate	300.0M	<100 µg/L								
propionate	300.0M	<100 µg/L								
acetate	300.0M	<100 µg/L								
carbon tetrachloride	8260B	1.4 µg/L				0.69 µg/L	0.95 µg/L	0.88 µg/L		
chloroform	8260B	0.31J µg/L				0.28 µg/L	0.28J µg/L	0.26J µg/L		
dichloromethane	8260B	<0.5 µg/L				<0.5 µg/L	<0.5 µg/L	<0.5 µg/L		
chloromethane	8260B	<1.0 µg/L				<1.0 µg/L	<1.0 µg/L	<1.0 µg/L		
tetrachloroethene	8260B	0.49J µg/L				0.29J µg/L	0.38J µg/L	0.33J µg/L		
trichloroethene	8260B	0.25J µg/L					0.23J µg/L			
methyl tert butyl ether	8260B	0.82J µg/L				0.72J µg/L	0.51J µg/L	0.63J µg/L		
acetone	8260B									
2-butanone	8260B									
carbon disulfide	8260B									

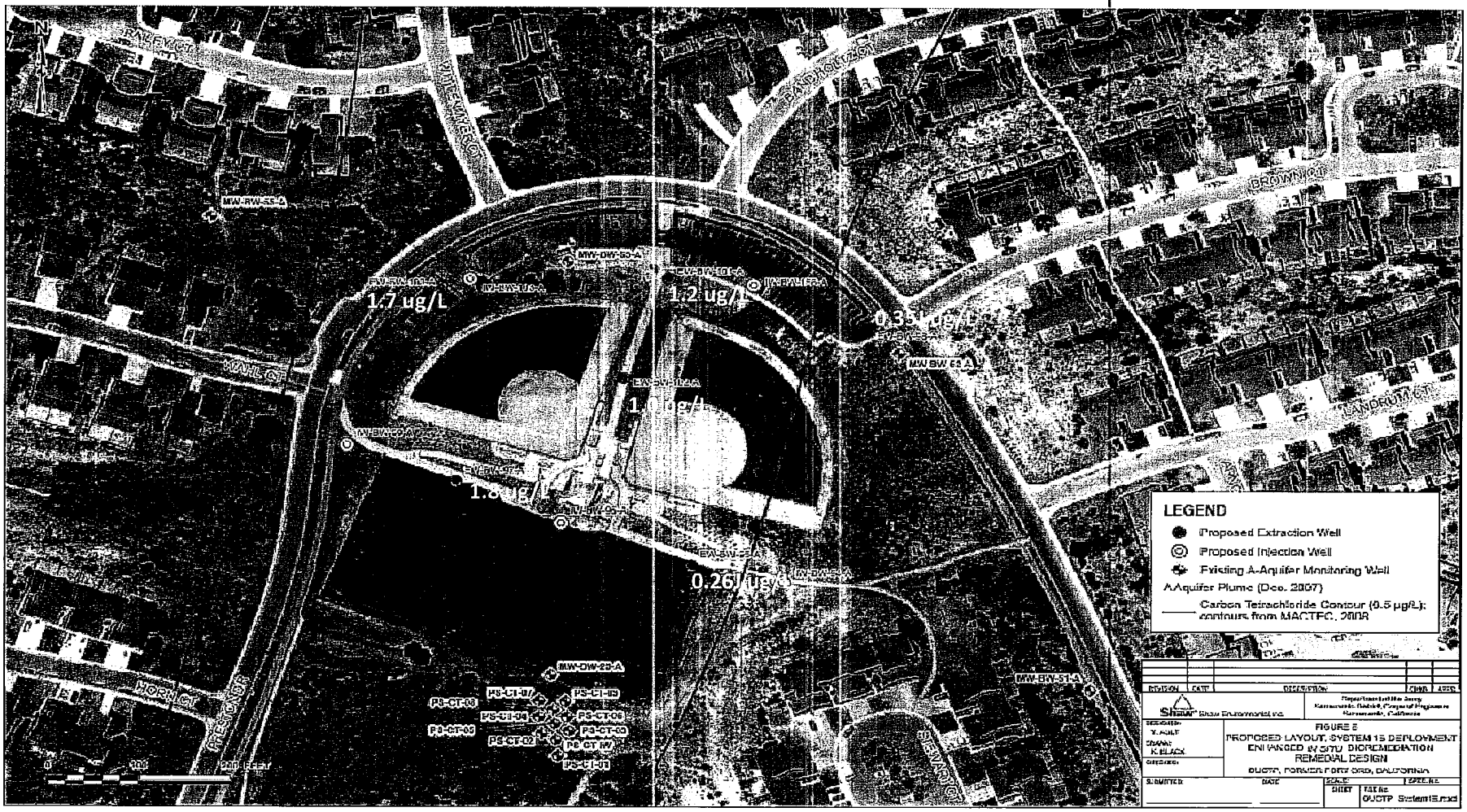
Sample ID Well Type Date	Method[a]	EW-BW-92-A extraction week 8 11/10/2009	EW-BW-92-A extraction week 9 11/17/2009	EW-BW-92-A extraction week 13 12/15/2009	EW-BW-92-A extraction week 17 1/12/2010	EW-BW-92-A extraction week 21 2/9/2010	EW-BW-92-A extraction week 26 3/16/2010
well flowrate (operating)		10.2 gpm	NA	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	94 mg/L	158 mg/L	260 mg/L	285 mg/L	330 mg/L	505 mg/L
pH	meter[c]	6.71	6.62	6.53	6.61	6.58	6.61
dissolved oxygen	meter[c]	5.45 ppm	2.11 ppm	0.81 ppm	0.89 ppm	1.02 ppm	2.01 ppm
oxidation reduction potential	meter[c]	-2 mV	-33 mV	-111 mV	-81 mV	-111 mV	-209 mV
conductivity	meter[c]	64.8 mS/cm	85.3 mS/cm	114 mS/cm	111 mS/cm	115 mS/cm	141 mS/cm
turbidity	meter[c]	0 NTU	0 NTU	93 NTU	19 NTU	18 NTU	170 NTU
temperture	meter[c]	17.3 °C	17.2 °C	17.7 °C	17.8 °C	18.3 °C	19.2 °C
nitrate	300.0	1020 µg/L		300 µg/L	345 µg/L	305 µg/L	<100 µg/L
nitrite	300.0	<100 µg/L		<100 µg/L	<100 µg/L	<100 µg/L	<100 µg/L
sulfate	300.0	30700 µg/L		11000 µg/L	15400 µg/L	16900 µg/L	6870 µg/L
ortho-phosphate	300.0						
dissolved iron	6010B	61.2J µg/L		3310 µg/L	4220 µg/L	6470 µg/L	9240 µg/L
manganese	6010B	839 µg/L		4270 µg/L	4250 µg/L	5100 µg/L	6700 µg/L
arsenic	6010B	<10 µg/L		7.78J µg/L	11.4 µg/L	11.7 µg/L	6.34J µg/L
methane	RSK 175[d]						2400 µg/L
ethane	RSK 175[d]						<2.0 µg/L
lactate	300.0M	<100 µg/L			<100 µg/L		<100 µg/L
propionate	300.0M	17800 µg/L			86900 µg/L		147000 µg/L
acetate	300.0M	18300 µg/L			105000 µg/L		140000 µg/L
carbon tetrachloride	8260B	0.79 µg/L		<0.5 µg/L	0.25J(0.26J) µg/L	0.43J(0.40J) µg/L	<0.5(<0.5) µg/L
chloroform	8260B	0.26J µg/L		<0.5 µg/L	<0.5(<0.5) µg/L	<0.5(<0.5) µg/L	<0.5(<0.5) µg/L
dichloromethane	8260B	<0.5 µg/L		<0.5 µg/L	<0.5(<0.5) µg/L	<0.5(<0.5) µg/L	<5.0(<5.0) µg/L
chloromethane	8260B	<1.0 µg/L		<1.0 µg/L	<1.0(<1.0) µg/L	<1.0(<1.0) µg/L	<1.0(<1.0) µg/L
tetrachloroethene	8260B	0.33J µg/L		0.40J(0.41J) µg/L	0.39J(0.37J) µg/L	0.44J(0.41J) µg/L	0.36J(0.35J) µg/L
trichloroethene	8260B					0.24J(0.22J) µg/L	0.22J(0.22J) µg/L
methyl tert butyl ether	8260B	0.51J µg/L		0.34J(0.32J) µg/L	0.43J(0.42J) µg/L	0.41J(0.36J) µg/L	0.30J(0.29J) µg/L
acetone	8260B	18 µg/L		42(39) µg/L	31(30) µg/L	25(25) µg/L	38(36) µg/L
2-butanone	8260B	14J µg/L		39(35) µg/L	37(35) µg/L	44(43) µg/L	58(56) µg/L
carbon disulfide	8260B			0.69J(0.93J) µg/L	1.5(1.6) µg/L	1.3(1.2) µg/L	0.65J(0.60J) µg/L

Sample ID Well Type Date	Method[a]	EW-BW-93-A extraction baseline 8/4/2009	EW-BW-93-A extraction week 0 9/15/2009	EW-BW-93-A extraction week 1 9/22/2009	EW-BW-93-A extraction week 2 9/29/2009	EW-BW-93-A extraction week 3 10/6/2009	EW-BW-93-A extraction week 4 10/13/2009	EW-BW-93-A extraction week 5 10/20/2009	EW-BW-93-A extraction week 6 10/28/2009	EW-BW-93-A extraction week 7 11/3/2009	EW-BW-93-A extraction week 8 11/10/2009
well flowrate (operating)		NA	17.9 gpm	15.5 gpm	15.4 gpm	15.7 gpm	15.4 gpm	9.7 gpm	9.4 gpm	8.4 gpm	7.9 gpm
alkalinity ($CaCO_3$ total)	HACH[b]	63 mg/L	59 mg/L	61 mg/L	54 mg/L	55 mg/L	55 mg/L	52 mg/L	58 mg/L	67 mg/L	69 mg/L
pH	meter[c]	6.29	6.76	6.66	6.57	6.57	6.6	6.39	6.61	6.6	6.62
dissolved oxygen	meter[c]	7.43 ppm	10.12 ppm	9.91 ppm	9.71 ppm	9.26 ppm	9.26 ppm	9.66 ppm	8.33 ppm	8.33 ppm	7.01 ppm
oxidation reduction potential	meter[c]	263 mV	192 mV	185 mV	200 mV	207 mV	246 mV	215 mV	164 mV	93 mV	77 mV
conductivity	meter[c]	44 mS/cm	45 mS/cm	46.8 mS/cm	47.4 mS/cm	46.7 mS/cm	49.1 mS/cm	49.2 mS/cm	48.5 mS/cm	50 mS/cm	52.8 mS/cm
turbidity	meter[c]	65.3 NTU	5 NTU	0 NTU	0 NTU	0 NTU	5 NTU	0 NTU	0 NTU	0 NTU	0 NTU
temperture	meter[c]	17.3 °C	17.5 °C	17 °C	17.3 °C	17.1 °C	16.8 °C	17.1 °C	17.1 °C	17.3 °C	17 °C
nitrate	300.0	5150 µg/L			4260 µg/L		4450(4450) µg/L				3730 µg/L
nitrite	300.0	<100 µg/L			<100 µg/L		<100(<100) µg/L				<100 µg/L
sulfate	300.0	42000 µg/L			37000 µg/L		35400(35300) µg/L				34500 µg/L
ortho-phosphate	300.0	<500 µg/L									
dissolved iron	6010B	<200 µg/L		<200 µg/L	<200 µg/L						<200 µg/L
manganese	6010B	6.91J µg/L		<10 µg/L	<10 µg/L						135 µg/L
arsenic	6010B	<10 µg/L		<10 µg/L	<10 µg/L						<10 µg/L
methane	RSK 175[d]										
ethane	RSK 175[d]										
lactate	300.0M	<100 µg/L									
propionate	300.0M	<100 µg/L									
acetate	300.0M	<100 µg/L									
carbon tetrachloride	8260B	0.27J µg/L			0.47J µg/L		0.59 µg/L				0.6 µg/L
chloroform	8260B	0.30J µg/L			0.32J µg/L		0.31J µg/L				0.30J µg/L
dichloromethane	8260B	<0.5 µg/L			<0.5 µg/L		<0.5 µg/L				<0.5 µg/L
chloromethane	8260B	<1.0 µg/L			<1.0 µg/L		<1.0 µg/L				<1.0 µg/L
trichloroethene	8260B				0.30J µg/L		0.25J µg/L				0.24J µg/L
acetone	8260B										
2-butanone	8260B										
carbon disulfide	8260B										

Sample ID Well Type Date	Method[a]	EW-BW-93-A extraction week 9 11/17/2009	EW-BW-93-A extraction week 13 12/15/2009	EW-BW-93-A extraction week 17 1/12/2010	EW-BW-93-A extraction week 21 2/9/2010	EW-BW-93-A extraction week 26 3/16/2010
well flowrate (operating)		NA	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	85 mg/L	120 mg/L	181 mg/L	280 mg/L	345 mg/L
pH	meter[c]	6.69	6.56	6.69	6.63	6.62
dissolved oxygen	meter[c]	4.74 ppm	3.41 ppm	2.03 ppm	0.71 ppm	3.21 ppm
oxidation reduction potential	meter[c]	4 mV	-67 mV	-86 mV	-203 mV	-111 mV
conductivity	meter[c]	56 mS/cm	52.1 mS/cm	75.4 mS/cm	110 mS/cm	113 mS/cm
turbidity	meter[c]	0 NTU	27 NTU	12 NTU	3 NTU	10 NTU
temperture	meter[c]	17.1 °C	17 °C	19 °C	17.8 °C	18 °C
nitrate	300.0		2250 µg/L	1250 µg/L	200 µg/L	232 µg/L
nitrite	300.0		<100 µg/L	<100 µg/L	<100 µg/L	<100 µg/L
sulfate	300.0		32000 µg/L	26900 µg/L	10200 µg/L	16300 µg/L
ortho-phosphate	300.0					
dissolved iron	6010B		1270 µg/L	1800 µg/L	2990 µg/L	6170 µg/L
manganese	6010B		762 µg/L	1430 µg/L	4120 µg/L	4110 µg/L
arsenic	6010B		<10 µg/L	7.13J µg/L	6.17J µg/L	14.7 µg/L
methane	RSK 175[d]					
ethane	RSK 175[d]					
lactate	300.0M					<100 µg/L
propionate	300.0M					162000 µg/L
acetate	300.0M					75500 µg/L
carbon tetrachloride	8260B		0.38J µg/L	0.49J µg/L	0.26J µg/L	<0.5 µg/L
chloroform	8260B		0.25J µg/L	0.21J µg/L	0.23J µg/L	<0.5 µg/L
dichloromethane	8260B		<0.5 µg/L	<0.5 µg/L	<0.5 µg/L	<0.5 µg/L
chloromethane	8260B		<1.0 µg/L	<1.0 µg/L	<1.0 µg/L	<1.0) µg/L
trichloroethene	8260B				0.23J µg/L	<0.5 µg/L
acetone	8260B			7.6J µg/L	12 µg/L	20 µg/L
2-butanone	8260B			5.5J µg/L	18J µg/L	27 µg/L
carbon disulfide	8260B			0.26J µg/L	0.71J µg/L	0.39J µg/L

Change in Carbon Tetrachloride Concentration Over Time





Baseline Sample
Carbon Tetrachloride Concentrations

Area 1B OUCTP EISB
System Operation
Preliminary Data Summary

System Start Date: 3/2/2010

Extraction Well	Model Flowrate (gallons per minute)	Total Flow (gallons)	Instantanous Flowrate (gallons per minute)	Date: 3/3/2010 1 day Total Flow (gallons)	Instantanous Flowrate (gallons per minute)	Date: 3/10/2010 8 day Total Flow (gallons)	Instantanous Flowrate (gallons per minute)
EW-BW-95-A	3	2,703	3.1			31,711	2.9
EW-BW-97-A	6	5,365	5.5			61,456	5.4
EW-BW-98-A	7.5	7,020	6.8			72,369	7.2
EW-BW-100-A	7.5	7,102	7.0			78,273	7.2
EW-BW-101-A	6	5,418	5.8			64,817	5.7
EW-BW-102-A	6.5	5,615	6.0			65,597	6.1
Total	36.5	33,223	34.2			374,223	34.5
Total Flow	36.5	32,351	33			369,011	33.5

Injection Well	Model Flowrate (gallons per minute)	Total Flow (gallons)	Instantanous Flowrate (gallons per minute)	Estimated Substrate Injected Day 1 (gallons)	Substrate Injection Rate 3/2 on (gallons per hour)	Total Flow (gallons)	Instantanous Flowrate (gallons per minute)	Estimated Substrate Injected Day 8 (gallons)	Substrate Injection Rate 3/10/2010 (gallons per hour)
IW-BW-94-A	0	0	0			0	0		
P-302				0	0.00			0	0.00
IW-BW-96-A	11	7,711	8.02			100,373	8.41		
P-303				37	9.23			295	9.23
IW-BW-99-A	8.5	6,660	6.82			83,372	7.27		
P-301				28	7.00			228	7.11
IW-BW-103-A	8.5	6,420	6.67			71,056	7.12		
P-305				28	7.04			225	7.04
IW-BW-158-A	8.5	6,034	6			73,056	6.15		
P-304				28	7.09			227	7.09
Total	36.5	26,825	27.5	121		327,857	29.0	975	

Area 1B OUCTP EISB
System Operation
Preliminary Data Summary

System Start Date:

Date:	3/17/2010 15 day		3/24/2010 22 day		3/31/2010 29 day	
Extraction Well	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**
EW-BW-95-A	60,879	2.9	89,679	2.7	118,954	2.9
EW-BW-97-A	117,121	5.4	171,219	5.1	227,599	5.9
EW-BW-98-A	144,965	7.3	218,842	7.0	289,562	7.3
EW-BW-100-A	151,218	7.3	226,391	7.4	299,515	7.2
EW-BW-101-A	129,693	6.5	197,393	6.5	261,967	6.3
EW-BW-102-A	155,516	5.9	186,102	5.9	242,389	5.6
Total	759,392	35.3	1,089,626	34.6	1,439,986	35.2
Total Flow	717,020	34.1	1,060,438	35	1,385,382	28.8

Injection Well	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**	**Estimated Substrate Injected Day 15 (gallons)**	**Substrate Injection Rate 3/17 (gallons per hour)**	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**	**Estimated Substrate Injected Day 22 (gallons)**	**Substrate Injection Rate 3/24 (gallons per hour)**	**Total Flow (gallons)**	**Instantanous Flowrate (gallons per minute)**	**Estimated Substrate Injected Day 29 (gallons)**
IW-BW-94-A	0	0			0				0		
P-302			0	0.00			0	0.00			0
IW-BW-96-A	198,213	8.8			283,188	8.5			361,367	7.2	
P-303			556	9.26			812	9.23			1071
IW-BW-99-A	156,637	7.9			237,273	8.9			319,052	6.8	
P-301			428	7.13			626	7.11			812
IW-BW-103-A	143,827	7.2			215,914	7.3			285,958	5.1	
P-305			424	7.07			622	7.07			817
IW-BW-158-A	144,462	7.3			219,020	7.6			290,095	5.5	
P-304			442	7.36			623	7.08			834
Total	643,139	31.2	1849		955,395	32.3	2683		1,256,472	24.6	3533

System Start Date:

Date: 4/7/2010
36 day

Extraction Well	Total Flow (gallons)	Instantanous Flowrate (gallons per minute)
EW-BW-95-A	147,493	2.7
EW-BW-97-A	287,173	5.9
EW-BW-98-A	364,547	7.2
EW-BW-100-A	369,727	6.3
EW-BW-101-A	323,527	7.0
EW-BW-102-A	300,443	5.6
Total	1,792,910	34.7
Total Flow	1,601,452	18.3

Injection Well	Substrate Injection Rate 3/31 (gallons per hour)	Total Flow (gallons)	Instantanous Flowrate (gallons per minute)	Estimated Substrate Injected Day 29 (gallons)	Substrate Injection Rate 3/31 (gallons per hour)
IW-BW-94-A		0			
P-302	0.00			0	0.00
IW-BW-96-A		406,435	3.9		
P-303	9.23			1329	9.23
IW-BW-99-A		375,202	5.2		
P-301	7.00			1020	7.08
IW-BW-103-A		329,622	2.6		
P-305	7.04			1018	7.07
IW-BW-158-A		328,387	1.8		
P-304	7.19			1031	7.16
Total		1,439,646	13.5	4398	

Sample ID Well Type Date	Method[a]	MW-BW-53-A monitoring baseline 2/4/2010	MW-BW-53-A monitoring Week 0 3/3/2010	MW-BW-53-A monitoring Week 1 3/10/2010	MW-BW-53-A monitoring Week 2 3/17/2010	MW-BW-53-A monitoring Week 3 3/24/2010	MW-BW-53-A monitoring Week 4 3/31/2010	MW-BW-53-A monitoring Week 5 4/7/2010
well flowrate (operating)		NA	NA	NA	NA	NA	NA	NA
alkalinity ($CaCO_3$ total)	HACH[b]	114 mg/L	96 mg/L	110 mg/L	95 mg/L	90 mg/L	95 mg/L	72 mg/L
pH	meter[c]	6.55	6.55	6.50	6.50	6.62	6.54	6.58
dissolved oxygen	meter[c]	9.18 ppm	9.18 ppm	9.2 ppm	9.3 ppm	8.3 ppm	10.17 ppm	11.62 ppm
oxidation reduction potential	meter[c]	230 mV	210 mV	202 mV	142 mV	144 mV	160 mV	127 mV
conductivity	meter[c]	67.6 mS/cm	56.8 mS/cm	63.0 mS/cm	57.1 mS/cm	56.1 mS/cm	56.3 mS/cm	56.3 mS/cm
turbidity	meter[c]	13 NTU	17 NTU	11 NTU	9 NTU	14 NTU	8 NTU	10 NTU
temperture	meter[c]	17.6 °C	17.2 °C	17.9 °C	17.9 °C	18.5 °C	18.5 °C	19.5 °C
nitrate	300.0	5880(5870) µg/L		5670(5680) µg/L		6460(6470) µg/L		µg/L
nitrite	300.0	<100(<100) µg/L		<100(<100) µg/L		<100(<100) µg/L		µg/L
sulfate	300.0	36100(36100) µg/L		27200(27200) µg/L		26300(26200) µg/L		µg/L
ortho-phosphate	300.0							
dissolved iron	6010B	<200 µg/L		<200 µg/L		<200 µg/L		µg/L
manganese	6010B	<10 µg/L		<10 µg/L		<10 µg/L		µg/L
arsenic	6010B	<10 µg/L		<10 µg/L		<10 µg/L		µg/L
methane	RSK 175[d]							
ethane	RSK 175[d]							
lactate	300.0M	<100 µg/L						µg/L
propionate	300.0M	<100 µg/L						µg/L
acetate	300.0M	<100 µg/L						µg/L
carbon tetrachloride	8260B	1.6 µg/L		1.6 µg/L		1.7 µg/L		µg/L
chloroform	8260B	0.39J µg/L		0.30J µg/L		0.26J µg/L		µg/L
dichloromethane	8260B	<5.0 µg/L		<5.0 µg/L		<5.0 µg/L		µg/L
chloromethane	8260B	<1.0 µg/L		<1.0 µg/L		<1.0 µg/L		µg/L
trichloroethene	8260B	0.75 µg/L		0.65 µg/L		0.53 µg/L		
toluene	8260B	0.30J µg/L						

Sample ID Well Type Date	Method[a]	EW-BW-97-A extraction baseline 1/28/2010	EW-BW-97-A extraction Week 0 3/3/2010	EW-BW-97-A extraction Week 1 3/10/2010	EW-BW-97-A extraction Week 2 3/17/2010	EW-BW-97-A extraction Week 3 3/24/2010	EW-BW-97-A extraction Week 4 3/31/2010	EW-BW-97-A extraction Week 5 4/7/2010
well flowrate (operating)		NA	5.5	5.4	5.4	5.1	5.9	5.9
alkalinity ($CaCO_3$ total)	HACH[b]	95 mg/L	75 mg/L	78 mg/L	76 mg/L	71 mg/L	72 mg/L	72 mg/L
pH	meter[c]	6.57	6.51	6.50	6.42	6.57	6.50	6.48
dissolved oxygen	meter[c]	8.77 ppm	9.68 ppm	9.66 ppm	9.55 ppm	7.52 ppm	9.3 ppm	11.21 ppm
oxidation reduction potential	meter[c]	145 mV	185 mV	173 mV	111 mV	136 mV	178 mV	175 mV
conductivity	meter[c]	64.2 mS/cm	61 mS/cm	63.6 mS/cm	62.6 mS/cm	63.5 mS/cm	62.4 mS/cm	61.4 mS/cm
turbidity	meter[c]	63 NTU	9 NTU	13 NTU	25 NTU	27 NTU	20 NTU	19 NTU
temperture	meter[c]	17.4 °C	17.4 °C	17.5 °C	17.5 °C	17.8 °C	17.9 °C	17.9 °C
nitrate	300.0	7330 µg/L					µg/L	
nitrite	300.0	<100 µg/L					µg/L	
sulfate	300.0	37900 µg/L					µg/L	
ortho-phosphate	300.0	<500 µg/L						
dissolved iron	6010B	40.9J µg/L					µg/L	
manganese	6010B	11.8 µg/L					µg/L	
arsenic	6010B	<10 µg/L					µg/L	
methane	RSK 175[d]							
ethane	RSK 175[d]							
lactate	300.0M	<100 µg/L						
propionate	300.0M	<100 µg/L						
acetate	300.0M	<100 µg/L						
carbon tetrachloride	8260B	1.8 µg/L					µg/L	
chloroform	8260B	0.38J µg/L					µg/L	
dichloromethane	8260B	<5.0 µg/L					µg/L	
chloromethane	8260B	<1.0 µg/L					µg/L	
trichloroethene	8260B	0.6 µg/L						
methyl tert-butyl ether	8260B	0.67J µg/L						

	Method[a]							
Sample ID		EW-BW-100-A extraction baseline	EW-BW-100-A extraction Week 0	EW-BW-100-A extraction Week 1	EW-BW-100-A extraction Week 2	EW-BW-100-A extraction Week 3	EW-BW-100-A extraction Week 4	EW-BW-100-A extraction Week 5
Well Type								
Date		1/28/2010	3/3/2010	3/10/2010	3/17/2010	3/24/2010	3/31/2010	4/7/2010
well flowrate (operating)		NA	7.0	7.2	7.3	7.4	7.2	6.3
alkalinity ($CaCO_3$ total)	HACH[b]	75 mg/L	64 mg/L	70 mg/L	68 mg/L	67 mg/L	75 mg/L	85 mg/L
pH	meter[c]	6.46	6.52	6.53	6.51	6.64	6.56	6.64
dissolved oxygen	meter[c]	9.09 ppm	9.05 ppm	9.46 ppm	9.51 ppm	7.56 ppm	8.43 ppm	9.05 ppm
oxidation reduction potential	meter[c]	189 mV	176 mV	179 mV	137 mV	140 mV	67 mV	-26 mV
conductivity	meter[c]	93.5 mS/cm	73.1 mS/cm	71.6 mS/cm	70.5 mS/cm	72 mS/cm	71.4 mS/cm	74.8 mS/cm
turbidity	meter[c]	48 NTU	4 NTU	31 NTU	12 NTU	23 NTU	15 NTU	12 NTU
temperture	meter[c]	17.7 °C	17.6 °C	17.9 °C	17.9 °C	17.9 °C	17.6 °C	18.0 °C
nitrate	300.0	18400(18400) µg/L				12300 µg/L		µg/L
nitrite	300.0	<100(<100) µg/L				<100 µg/L		µg/L
sulfate	300.0	44400(44300) µg/L				33700 µg/L		µg/L
ortho-phosphate	300.0	<500(<500) µg/L						
dissolved iron	6010B	<200 µg/L				<200 µg/L		µg/L
manganese	6010B	6.25J µg/L				<10 µg/L		µg/L
arsenic	6010B	<10 µg/L				<10 µg/L		µg/L
methane	RSK 175[d]	<2.0 µg/L						
ethane	RSK 175[d]	<2.0 µg/L						
lactate	300.0M	<100 µg/L						
propionate	300.0M	<100 µg/L						
acetate	300.0M	<100 µg/L						
carbon tetrachloride	8260B	1.7 µg/L				1.4 µg/L		µg/L
chloroform	8260B	<0.5 µg/L				0.20J µg/L		µg/L
dichloromethane	8260B	<5.0 µg/L				<5.0 µg/L		µg/L
chloromethane	8260B	<1.0 µg/L				<1.0 µg/L		µg/L
acetone	8260B	11 µg/L						
trichloroethene	8260B	0.23J µg/L				0.57 µg/L		

Sample ID Well Type Date	Method[a]	EW-BW-101-A extraction baseline 1/27/2010	EW-BW-101-A extraction Week 0 3/3/2010	EW-BW-101-A extraction Week 1 3/10/2010	EW-BW-101-A extraction Week 2 3/17/2010	EW-BW-101-A extraction Week 3 3/24/2010	EW-BW-101-A extraction Week 4 3/31/2010	EW-BW-101-A extraction Week 5 4/7/2010
well flowrate (operating)		NA	5.8	5.7	6.5	6.5	6.3	7.0
alkalinity ($CaCO_3$ total)	HACH[b]	157 mg/L	108 mg/L	106 mg/L	100 mg/L	94 mg/L	95 mg/L	116 mg/L
pH	meter[c]	6.53	6.46	6.46	6.45	6.55	6.52	6.59
dissolved oxygen	meter[c]	7.91 ppm	8.28 ppm	9.02 ppm	8.44 ppm	7.41 ppm	8.2 ppm	7..98 ppm
oxidation reduction potential	meter[c]	221 mV	185 mV	185 mV	134 mV	158 mV	131 mV	-27 mV
conductivity	meter[c]	64.9 mS/cm	64.5 mS/cm	62.5 mS/cm	60.8 mS/cm	60.6 mS/cm	60.5 mS/cm	69.2 mS/cm
turbidity	meter[c]	32 NTU	26 NTU	31 NTU	47 NTU	110 NTU	88 NTU	12 NTU
temperture	meter[c]	17.6 °C	17.6 °C	17.8 °C	17.9 °C	17.9 °C	17.9 °C	18.2 °C
nitrate	300.0	5280 µg/L					µg/L	
nitrite	300.0	<100 µg/L					µg/L	
sulfate	300.0	36000 µg/L					µg/L	
ortho-phosphate	300.0	<500 µg/L						
dissolved iron	6010B	<200 µg/L					µg/L	
manganese	6010B	5.80J µg/L					µg/L	
arsenic	6010B	<10 µg/L					µg/L	
methane	RSK 175[d]							
ethane	RSK 175[d]							
lactate	300.0M	<100(<100) µg/L						
propionate	300.0M	<100(<100) µg/L						
acetate	300.0M	<100(<100) µg/L						
carbon tetrachloride	8260B	1.2 µg/L					µg/L	
chloroform	8260B	0.21J µg/L					µg/L	
dichloromethane	8260B	<5.0 µg/L					µg/L	
chloromethane	8260B	<1.0 µg/L					µg/L	
trichloroethene	8260B	0.39J µg/L						

JRW BIOREMEDIATION LLC

WILCLEAR®
LACTATE CONCENTRATE

Description

JRW Bioremediation's WILCLEAR® lactate concentrates for bioremediation ($C_3H_5O_3Na$ or $C_3H_5O_3K$) are clear, slightly viscous, miscible liquids designed as inexpensive, self-buffering carbon sources for the promotion of reductive dechlorination. WILCLEAR® lactate concentrate is an FDA affirmed GRAS food grade sodium or potassium salt of fermented lactic acid. WILCLEAR® can also be amended with ACCELERITE™ bioremediation nutrient to increase metabolic kinetics and overall efficiency.

Typical Properties

	Sodium Lactate	Potassium Lactate
WILCLEAR® Lactate, % wt/wt	60 ± 1.2	60 ± 1.2
Assay sodium, % wt/wt	12.3 ± 0.3	-
Assay potassium, % wt/wt	-	18.2 ± 0.4
H_2O, % wt/wt	40 ± 1.2	40 ± 1.2
pH	7.5 ± 1.0	7.5 ± 1.0
Color	Clear to Light Straw	Clear to Light Straw
Iron, ppm	<5	<5
Specific Gravity	1.32-1.34	1.32-1.35
Sulfate	none detected	none detected
Sugars	none detected	none detected
Odor	slight, characteristic	slight, characteristic
Viscosity	± 100cP at Ambient	± 100cP at Ambient

Applications

WILCLEAR® lactate concentrate is used to enhance in-situ microbial activity for the biodegradation of chlorinated solvents and perchlorates, and the reduction and mineralization of certain metals. Technical support for bioremediation applications is provided by JRW staff and through an exclusive agreement with SRP Technologies, developers of Bioavailability Enhancement Technology (B.E.T.™), US Patent 6,783,678 published February 21, 2002, issued August 31, 2004, and US Patent 7,449,114 published May 26, 2005, issued November 11, 2008.

Packaging

606 lb. (275 kg) Polyethylene Drums or 2,899 lb. (1,315 kg) IBC totes.

Storage

Store unopened under dry conditions at ambient temperatures.

Tel: 913.438.5544 • 800.779.5545 • info@jrwbiorem.com • www.jrwbioremediation.com 1/29/09

JRW BIOREMEDIATION LLC

WILCLEAR PLUS™
LACTATE w/ACCELERITE™

Description

JRW Bioremediation's WILCLEAR Plus™ lactate with Accelerite™ is a proprietary mixture of neutral pH fatty acids combined with JRW's Accelerite™ nutrient blend for use in enhanced anaerobic reductive dechlorination. WILCLEAR Plus™ contains 61% fermentable material providing a high fermentable fraction with a minimum amount of water.

Typical Properties

Sodium lactate (wt/wt)	29-35%
Sodium propionate (wt/wt)	0-8%
Sodium acetate (wt/wt)	0-8%
Sodium butyrate (wt/wt)	0-8%
Carbohydrates & fermentable metabolites (wt/wt)	21-25%
H_20 (wt/wt)	30-39%
pH	6-7
Color	Light brown
Specific Gravity	1.3
Solubility in water	Soluble

Applications

WILCLEAR Plus™ is used to enhance in-situ microbial activity for the anaerobic biodegradation of chlorinated solvents and perchlorates, and the reduction and mineralization of certain metals. WILCLEAR Plus™ should be used where site conditions warrant a readily available and highly soluble source of fermentable carbon, microbial nutrients and growth factors, and rapid contaminate degradation.

Packaging

600 lb. (272 kg) Polyethylene drums. 2,850 lbs (1,295kg) IBC Totes

Storage

Store unopened under dry conditions at ambient temperatures.

09/02-09

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JRW BIOREMEDIATION LLC

WILCLEAR PLUS™ LACTATE w/ACCELERITE™

WILCLEAR PLUS™ lactate w/ACCELERITE™ is a blend of neutral pH fatty acids combined with ACCELERITE™ for use in enhanced reductive dechlorination. WILCLEAR PLUS™ contains 61% fermentable material providing a high fermentable fraction with a minimum amount of water.

WILCLEAR PLUS™ lactate w/ACCELERITE™ contains:

- ***29% lactate***
- ***11% other VFA (propionate, butyrate, acetatate)***
- ***21% ACCELERITE™ and other fermentable compounds***
- ***Total fermentable material of 61% is 27% more than sodium lactate.***

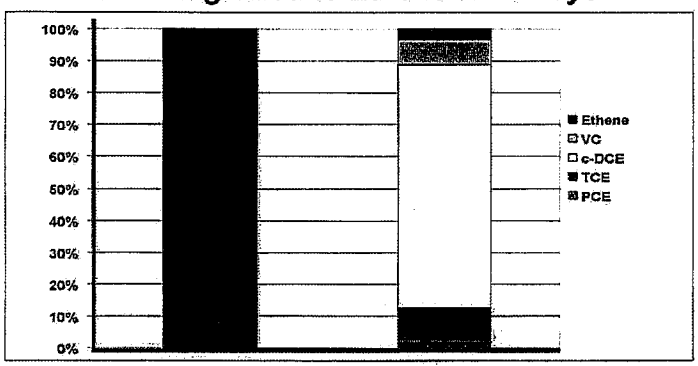
Lactic acid provides carbon for rapid establishment of anaerobic conditions.

Other volatile fatty acids and fermentables provide a range of material to help promote the growth of an assortment of dechlorinating microbial populations.

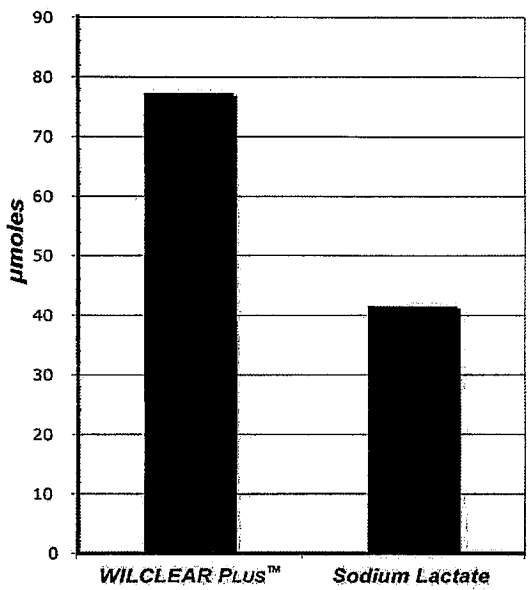
ACCELERITE™ provides growth factors to increase substrate efficiency and kinetics.

Tests show that WILCLEAR PLUS™ promoted the conversion of over 98% of PCE to ethene in 24 days and is greater than 85% more efficient at producing chloride than sodium lactate standard.

PCE Degraded to Ethene in 24 Days



Chloride Produced 25 Days



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Ahtna Engineering

Former Fort Ord Groundwater Treatment Systems Operational Data and Status,

BCT Meeting, April 14, 2010

Table 1: OU2 and Sites 2/12 GWTP Treatment Statistics, as of March 31, 2010.

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (lbs.)
OU2				
March 2010	25,847,870	579	99	2.18
Total since October 1995	4.812 billion			651.19
Sites 2/12				
March 2010	10,038,913	225	99	0.64
Total since June 1999	1.316 billion			423.32

Table 2: OU2 and Sites 2/12 GWTP Calendar of Events, as of March 31, 2010.

Key Events for OU2 and Sites 2/12 for March 2010

There were 26 USAN Notices transmitted to Ahtna March 1-31, 2010. None of these alerts required the personal attention of the Senior GWTP Operator.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 EW-OU2-03-180 pump failure.	**2** EW-12-05-180M pump failure. Power outage at OU2, offline 7 hrs.	**3**	**4** Communications lost to Landfill PLC.	**5**	**6**
7	**8** Replaced cable on Landfill PLC microwave antenna. Power outage at 2/12, offline 1 hr.	**9**	**10**	**11**	**12**	**13**
14	**15** Modified Sites 2/12 antenna direction at ground level to improve communications.	**16** EW-OU2-05-180 pump failure.	**17** Quarterly extraction well sampling event.	**18**	**19**	**20**
21	**22** Further modified Sites 2/12 antenna direction on mast with 65-foot boom to improve communications.	**23**	**24**	**25**	**26**	**27**
28	**29** 2/12 planned shutdown for maintenance, offline 4.5 hrs.	**30**	**31**			

Ahtna Engineering

Table 3: March 2010 - OU2 Analytical Results at TS-OU2-INJ

COC	Discharge Limit (ug/L)‡	Sample Date / Analytical Results
		3/9/10
1,1-DCA	5.0*	**0.10**
1,2-DCA	0.50	ND
1,2-DCP	0.50	ND
Benzene	0.50	ND
Carbon Tetrachloride	0.50	ND
Chloroform	2.0*	ND
cis-1,2-DCE	6.0*	ND
Methylene Chloride	0.50	ND
PCE	0.50	ND
TCE	0.50	ND
Vinyl Chloride	0.10	ND

Table 4: March 2010 - Sites 2/12 Analytical Results at TS-212-INJ

COC	Discharge Limit (ug/L)‡	Sample Date / Analytical Results			
		3/4/10	3/9/10	3/17/10	3/24/10
1,1-DCE	6.0	ND	ND	ND	ND
1,2-DCA	0.50	ND	ND	ND	**0.11**
1,3-DCP †	0.50	ND	ND	ND	ND
Chloroform	2.0	ND	ND	ND	**0.13**
cis-1,2 DCE	6.0	**0.61**	**0.64**	**0.46**	**0.61**
PCE	3.0	ND	ND	ND	ND
TCE	5.0	**0.16**	**0.18**	**0.19**	**0.23**
Vinyl Chloride	0.10	ND	ND	ND	ND

NOTES:

ND The analyte was not detected above MDL.

* Discharge limits for low carbon affinity compounds were increased to the Aquifer Cleanup Level (ACL).

‡ Discharge limits are the ACLs for injection over the plume.

† The reported value is the sum of both cis- and trans-isomers.

Table 5: AES Document Submittals - Status Summary

Document	Submitted	Comments Due
Draft Annual Groundwater Treatment Systems Operation Data Summary Report, January through December 2009, Operable Unit 2 and Sites 2 and 12 Groundwater Remedies, Former Fort Ord, California	March 22, 2010	May 21, 2010

Ahtna Engineering

Table 6: March 2010 OU2 and Sites 2/12 Extraction Well Status (as of March 31)

Well Identification	% On	Avg. gpm	Total Gallons	% of Total	Comments	TCE (µg/L) 1Q 2010
Site 12 Extraction Wells						
EW-12-05-180M	4.6	26.3	1,173,017	11.7	Well offline due to pump failure	Not Sampled
EW-12-06-180M	98.6	79.3	3,539,854	35.3		6.4
EW-12-07-180M	99.2	56.3	2,514,905	25.1		2.6
EW-12-03-180U	0.0	0.0	0	0.0	Well offline due to low concentrations	0.16
EW-12-03-180M	99.0	63.0	2,811,138	28.0		1.2
EW-12-04-180U	0.0	0.0	0	0.0	Well offline due to low concentrations	0.26
EW-12-04-180M	0.0	0.0	0	0.0	Pump removed, sampled with PDBs	Pending
Total 2/12 gallons treated:			*10,038,913*	*100.0*		
OU2 Extraction Wells						
Western Network						
EW-OU2-01-A	0.0	0.0	0	0.0	Well offline due to low concentrations	Not Sampled
EW-OU2-02-A	98.3	51.0	2,276,520	8.8		0.61
EW-OU2-03-A	0.0	0.0	0	0.0	Well offline due to low concentrations, sampled with PDBs	Pending
EW-OU2-04-A	95.6	46.4	2,069,930	8.0		0.95
EW-OU2-05-A	98.0	49.3	2,200,220	8.5		2.6
EW-OU2-06-A	96.1	35.7	1,593,620	6.2		4.2
EW-OU2-01-180	0.0	0.0	0	0.0	No pump in well, sampled with PDBs	Pending
Total gallons extracted:			*8,140,290*	31.5		
Eastern Network						
EW-OU2-07-A	0.0	0.0	0	0.0	Well offline due to low concentrations	0.16
EW-OU2-08-A	81.6	19.1	852,130	3.3		0.60
EW-OU2-09-A	99.9	16.2	721,590	2.8		3.1
EW-OU2-10-A	99.9	14.7	656,890	2.5		4.2
EW-OU2-11-A	0.0	0.0	0	0.0	Pump removed due to biofouling	Not Sampled
EW-OU2-12-A	98.4	16.5	738,460	2.9	Low yield; running at reduced capacity	5.5
EW-OU2-13-A	99.9	29.3	1,306,410	5.1		12.1
EW-OU2-02-180	98.2	53.4	2,383,000	9.2		9.3
Total gallons extracted:			*6,658,480*	25.8		
Shoppette						
EW-OU2-05-180	41.5	40.3	1,797,700	7.0	Well offline due to pump failure	Not Sampled
EW-OU2-06-180	88.0	116	5,163,700	20.0		4.9
EW-OU2-16-A	96.5	15.8	705,400	2.7	High drawdown, operating with new level settings	13.2
Total gallons extracted:			*7,666,800*	29.7		
CSUMB						
EW-OU2-14-A	98.9	25.6	1,143,300	4.4		1.3
EW-OU2-15-A	0.0	0.0	0	0.0	Well offline due to low concentrations	Not Sampled
Total gallons extracted:			*1,143,300*	4.4		
Landfill						
EW-OU2-03-180	0.0	0.0	0	0.0	Well offline due to pump failure	Not Sampled
EW-OU2-04-180	0.0	0.0	0	0.0	Well offline due to low concentrations	0.21
Total gallons extracted:			*0*	*0.0*		
Bunker Hill						
EW-OU2-07-180	0.0	0.0	0	0.0	No pump in well, sampled with PDBs	Pending
EW-OU2-08-180	99.7	50.2	2,239,000	8.7		1.0
Total gallons extracted:			*2,239,000*	*8.7*		
Total OU2 gallons treated:			*25,847,870*	*100.0*		

OPERABLE UNIT 1
OFF-SITE GROUNDWATER EXTRACTION PILOT STUDY

STATUS – April 14, 2010

FIELD WORK

- Well construction complete – December 21, 2007
- Draft Final OU1 Pilot Study Work Plan distributed – April 22, 2008
- Baseline sampling and analysis – June 14, 2008
- System construction completed – July 16, 2008
- Monitoring well (City of Marina) installation – July 28, 2008
- System start-up – August 5, 2008
- Extraction Well EW-OU1-92-A shut off – December 11, 2008
- Field Work Variance (FWV) issued to document system shut-off – February 16, 2009
- Groundwater extraction system shut off and rebound testing initiated – February 17, 2009
- Sampled GAC for waste profiling – March 24, 2009
- System restarted (EW-OU1-93-A operating) – April 7, 2009
- Second rebound study initiated – July 13, 2009 and completed March 22, 2010
- Quarterly sampling of monitoring and extraction wells – March 22, 2010

SCHEDULE

- Planning carbon changeout of lead vessel as part of system mothballing.
- Conduct quarterly monitoring through June 2010.

DATA (Preliminary)

- Preliminary data through March 2010.

PROBLEMS/CHANGES

- Treated groundwater is being discharged to a discharge basin within the MCWD property. An injection well was not installed.
- One monitoring well has been installed in the City of Marina to determine the downgradient extent of the plume.
- Extraction Well EW-OU1-92-A shut off due to concerns of potential impact to OU1 On-Site GWETS plume capture.
- GWETS was shut off and rebound testing initiated because concentrations of TCE in all off-site wells are below Aquifer Cleanup Levels.
- GWETS restarted because TCE concentration in EW-OU1-93-A rebounded to 7.4 µg/L. TCE concentration in all other monitoring wells below detection limit.
- A second round of rebound testing was initiated because concentrations of TCE in all off-site wells are below Aquifer Cleanup Levels.

Summary of Operable Unit 1 Process System
Trichlorethene Analytical Results

Date	Sample Location									
	Extraction Wells				Granular Activated Carbon Beds					
	OU1PS-EW-92		OU1PS-EW-93		OU1PS-INF		OU1PS-BTW		OU1PS-EFF	
August 5, 2008[a]	1.2	µg/L	14[b]	µg/L						
August 11, 2008[a]	3.4	µg/L	8.7[c]	µg/L	5.4	µg/L	<0.5	µg/L	<0.5	µg/L
August 18, 2008[a]	3.7	µg/L	6.1[d]	µg/L	4.7	µg/L	<0.5	µg/L	<0.5	µg/L
August 25, 2008[a]	3.8	µg/L	not operating		3.6	µg/L	<0.5	µg/L	<0.5	µg/L
September 2, 2008[a]	3.3	µg/L	6.8[e]	µg/L	4.7	µg/L	<0.5	µg/L	<0.5	µg/L
September 8, 2008[a]					4.1	µg/L	<0.5	µg/L	<0.5	µg/L
September 15, 2008[a]	2	µg/L	4.9[f]	µg/L	3.5	µg/L	<0.5	µg/L	<0.5	µg/L
September 22, 2008[a]	1.4	µg/L	3.4	µg/L	1.3	µg/L	<0.5	µg/L	<0.5	µg/L
September 29, 2008[a]	1.4	µg/L	3.5	µg/L	1.5	µg/L	<0.5	µg/L	<0.5	µg/L
October 6, 2008[a]	1.4	µg/L	3.7	µg/L	2.5	µg/L	<0.5	µg/L	<0.5	µg/L
October 13, 2008[a]	0.98	µg/L	3.7	µg/L	2.0	µg/L	<0.5	µg/L	<0.5	µg/L
October 20, 2008[a]	0.90	µg/L	2.6	µg/L	1.6	µg/L	<0.5	µg/L	<0.5	µg/L
October 27, 2008	0.68	µg/L	1.9	µg/L	1.2	µg/L	<0.5	µg/L	<0.5	µg/L
November 3, 2008	0.74	µg/L	1.9	µg/L	1.3	µg/L	<0.5	µg/L	<0.5	µg/L
November 10, 2008					1.3	µg/L	<0.5	µg/L	<0.5[g]	µg/L
November 17, 2008					1.1	µg/L	<0.5	µg/L	<0.5	µg/L
November 24, 2008					1.2	µg/L	<0.5	µg/L	<0.5	µg/L
December 1, 2008					1.3	µg/L	<0.5	µg/L	<0.5	µg/L
December 8, 2008	0.62	µg/L	2.1	µg/L	1.3	µg/L	<0.5	µg/L	<0.5	µg/L
December 16, 2008					2.8	µg/L	<0.5	µg/L	<0.5	µg/L
December 22, 2008					2.2	µg/L	<0.5	µg/L	<0.5	µg/L
December 29, 2008					2.2	µg/L	<0.5	µg/L	<0.5	µg/L
January 5, 2009					2.1	µg/L	<0.5	µg/L	<0.5	µg/L
January 12, 2009					2.2	µg/L	<0.5	µg/L	<0.5	µg/L
January 19, 2009					2.1	µg/L	<0.5	µg/L	<0.5	µg/L
January 27, 2009					2.2	µg/L	<0.5	µg/L	<0.5	µg/L
February 3, 2009					2.2	µg/L	<0.5	µg/L	<0.5	µg/L
February 10, 2009					2.0	µg/L	<0.5	µg/L	<0.5	µg/L
February 17, 2009	1.3	µg/L	2.1	µg/L	2.2	µg/L	<0.5	µg/L	<0.5	µg/L
March 16, 2009	1.4	µg/L	7.4[h]	µg/L						
April 14, 2009					4.2	µg/L	<0.5	µg/L	<0.5	µg/L
April 21, 2009					3.0	µg/L	<0.5	µg/L	<0.5	µg/L
April 27, 2009					2.4	µg/L	<0.5	µg/L	<0.5	µg/L
May 5, 2009					2.5	µg/L	<0.5	µg/L	<0.5	µg/L
May 11, 2009[i]					1.9	µg/L	<0.5	µg/L	<0.5	µg/L
May 20, 2009					1.9	µg/L	<0.5	µg/L	<0.5	µg/L
May 26, 2009					1.7	µg/L	<0.5	µg/L	<0.5	µg/L
June 2, 2009					1.6	µg/L	<0.5	µg/L	<0.5	µg/L
June 9, 2009	1.2	µg/L	1.7	µg/L	1.4	µg/L	<0.5	µg/L	<0.5	µg/L
June 17, 2009					1.5	µg/L	<0.5	µg/L	<0.5	µg/L
June 23, 2009					1.5	µg/L	<0.5	µg/L	<0.5	µg/L
June 30, 2009					1.5	µg/L	<0.5	µg/L	<0.5	µg/L
July 7, 2009					1.5	µg/L	<0.5	µg/L	<0.5	µg/L
July 13, 2009			1.5	µg/L	1.4	µg/L	<0.5	µg/L	<0.5	µg/L
July 27, 2009			1.1	µg/L						

Summary of Operable Unit 1 Process System
Trichlorethene Analytical Results

Date	Sample Location									
	Extraction Wells				Granular Activated Carbon Beds					
	OU1PS-EW-92		OU1PS-EW-93		OU1PS-INF		OU1PS-BTW		OU1PS-EFF	
August 10, 2009			**1.0**	µg/L						
August 17, 2009					**3.2**	µg/L	<0.5	µg/L	<0.5	µg/L
August 24, 2009					**1.9**	µg/L	<0.5	µg/L	<0.5	µg/L
August 31, 2009					**1.5**	µg/L	<0.5	µg/L	<0.5	µg/L
September 8, 2009					**1.4**	µg/L	<0.5	µg/L	<0.5	µg/L
September 10, 2009	**0.8**	µg/L	**1.5**	µg/L						
October 8, 2009			**0.68**	µg/L						
November 10, 2009					**0.53**	µg/L	<0.5	µg/L	<0.5	µg/L
November 19, 2009					**0.96**	µg/L	<0.5	µg/L	<0.5	µg/L
November 24, 2009					**2.20**	µg/L	<0.5	µg/L	<0.5	µg/L
December 1, 2009					**1.90**	µg/L	<0.5	µg/L	<0.5	µg/L
December 8, 2009	**0.7**	µg/L	**1.6**	µg/L	**1.40**	µg/L	<0.5	µg/L	<0.5	µg/L
March 22, 2010	**0.41J**	µg/L	**30J(0.32J)**	µg/L						

[a] *Low level detections of benzene, bromoform, chloromethane, disbromochloromethane, isopropylbenzene and/or acetone in several samples.*

[b] *additional compound detected: cis-1,2-dichloroethylene - 0.43J µg/L*

[c] *additional compound detected: cis-1,2-dichloroethylene - 0.31J µg/L*

[d] *additional compound detected: cis-1,2-dichloroethylene - 0.21J µg/L*

[e] *additional compound detected: cis-1,2-dichloroethylene - 0.21J µg/L*

[f] *additional compound detected: cis-1,2-dichloroethylene - 0.26J µg/L*

[g] *additional compound detected: chloromethane - 0.39J µg/L*

[h] *additional compound detected: cis-1,2-dichloroethylene - 0.34J µg/L*

[i] *Low level detections of chloromethane and/or acetone in all samples.*

Detections are shown in bold.

Summary of Operable Unit 1 Off-Site Monitoring Well Analytical Results

Well Identification	Elevation (ft amsl)	TCE[a] March 28-30, 2006 (µg/L)	TCE May 4, 2006 (µg/L)	TCE May 23, 2006 (µg/L)	TCE September 25, 2006 (µg/L)	TCE Feb 2 & 6, 2007 (µg/L)	TCE April 3, 2007 (µg/L)	TCE May 22, 2007 (µg/L)	TCE September 25, 2007 (µg/L)	TCE December 26, 2007 (µg/L)
MW-OU1-75A	35.87		**2.1**	**1.7**	**0.28J**	**<0.5**	**<0.5**	<0.5J	<0.5	**<0.5**
MW-OU1-75A	30.87		**14**	**9.8**	**2.4**	**0.64**	**1.6**	**0.82**	**0.69**	**0.45J**
MW-OU1-75A	25.87	**18.6**	**15**	**9.5**	**2.5**	**0.58**	**1.7**	**0.9**	**0.75**	**0.46J**
MW-OU1-75A	20.87		**17**	**9.5**	**2.6**	**15**	**1.6**	**0.69**	**0.76**	**0.47J**
MW-OU1-75A	15.87		**20**	**25(26)**	**18(18)**	**0.75**	**11**	**12**	**3.1**	**2**
MW-OU1-76A	32.33		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-76A	27.33		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-76A	22.33	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-76A	17.33		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-76A	12.33		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-77A	29.1		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5J[d]	<0.5	**<0.5**
MW-OU1-77A	24.1	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5J	<0.5	**<0.5**
MW-OU1-77A	19.1		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-78A	29.91		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5J	**0.54**	**0.36J**
MW-OU1-78A	24.91	**1.9**	**3.2**	**2.1J-[b]**	**1.4**	**1.5**	**0.85**	**0.6J**	**0.56**	**0.46J**
MW-OU1-78A	19.91		**2.7**	**2.3(2.1)**	**1.1(1.2)**	**1.7**	**0.94**	**0.81J**	**0.91**	**0.47J**
MW-OU1-79A	29.72		**<0.5**	**<0.5J[c]**	<0.5	**<0.5**	**<0.5**	<0.5J	<0.5	**<0.5**
MW-OU1-79A	24.72	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5J	<0.5	**<0.5**
MW-OU1-79A	19.72		**<0.5**	<0.5	**0.59**	**0.67(0.85)**	**3.5(3.6)**	**3.8J(4.0J)**	**2.9(4.5)**	**1.3(1.9)**
MW-OU1-80A	25.32		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-80A	20.32	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-80A	15.32		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-80A	10.32		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-81A	21.39		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-81A	16.39		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-81A	11.39	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-81A	6.39		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5**	<0.5	<0.5	**<0.5**
MW-OU1-81A	1.39		**<0.5**	<0.5	<0.5	**<0.5**	**<0.5(<0.5)**	<0.5	<0.5	**<0.5**
MW-OU1-89A	31.18	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	24.68	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	18.18	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	27.31	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	22.31	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	17.31	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	12.31	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	7.27	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	26.72	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	21.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	16.89	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	11.97	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	7.01	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	18.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-2.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-7.3	NS	NS	NS	NS	NS	NS	NS	NS	NS

[a] *There is no associated descrete depth with the well development samples. These are composites.*

[b] *Data qualified as "J-" is estimated with low bias.*

[c] *Data qualified as "UJ" is estimated non-detect due to quality control outliers.*

[d] *An estimated concentration of carbon disulfide detected in this sample (0.75J).*

[e] *cis-1,2-dichloroethylene also detected at 0.26J µ g/L*

[f] *cis-1,2-dichloroethylene also detected at 0.35J µ g/L*

[g] *tetrachloroethylene also detected at 0.27J µ g/L*

Detections are shown in bold.

ft amsl denotes feet above mean sea level.

µ g/L denotes micrograms per liter.

TCE denotes trichloroethene.

Summary of Operable Unit 1 Off-Site Monitoring Well Analytical Results

Well Identification	Elevation (ft amsl)	TCE February 27, 2008 (µg/L)	TCE July 14, 2008 (µg/L)	TCE September 15, 2008 (µg/L)	TCE December 8, 2008 (µg/L)	TCE March 16, 2009 (µg/L)	TCE April 14, 2009 (µg/L)	TCE May 11, 2009 (µg/L)	TCE June 9, 2009 (µg/L)	TCE June 13, 2009 (µg/L)
MW-OU1-75A	35.87	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	30.87	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	25.87	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	20.87	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	15.87	1.9	1.4	1/1.3	0.21J(0.22J)	<0.5	NS	NS	0.46J(0.49J)	NS
MW-OU1-76A	32.33	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	27.33	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	22.33	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	17.33	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	12.33	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-77A	29.1	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-77A	24.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-77A	19.1	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-78A	29.91	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-78A	24.91	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-78A	19.91	0.37J	0.67	0.56	0.21J	<0.5	0.21J	<0.5	<0.5	NS
MW-OU1-79A	29.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 (<0.5)	<0.5	<0.5	NS
MW-OU1-79A	24.72	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-79A	19.72	3.0(4.1)[e]	10(2.0)[f]	0.22J	<0.5	<0.5	<0.5	<0.5 (<0.5)	<0.5 (<0.5)	NS
MW-OU1-80A	25.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	20.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	15.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	10.32	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-81A	21.39	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-81A	16.39	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	11.39	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	6.39	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	1.39	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-89A	31.18	<0.5[g]	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	24.68	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	18.18	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-90A	27.31	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-90A	22.31	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	17.31	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	12.31	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	7.27	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-91A	26.72	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	<0.5	NS
MW-OU1-91A	21.8	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	16.89	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	11.97	<0.5	<0.5	NS	NS	NS	NS	NS	<0.5	NS
MW-OU1-91A	7.01	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NS
MW-OU1-94A	18.6	NS	NS	0.33J	0.21J	<0.5	0.21J	<0.5	<0.5	NS
MW-OU1-94A	13.5	NS	NS	0.36J	NS	NS	NS	NS	NS	<0.5
MW-OU1-94A	8.3	NS	NS	0.36J	NS	NS	NS	NS	NS	NS
MW-OU1-94A	3.1	NS	NS	0.38J	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-2.1	NS	NS	0.36J	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-7.3	NS	NS	0.47J	<0.5	<0.5	0.21J	<0.5	<0.5	<0.5

Summary of Operable Unit 1 Off-Site Monitoring Well Analytical Results

Well Identification	Elevation (ft amsl)	TCE September 10, 2009 (µg/L)	TCE October 8, 2009 (µg/L)	TCE October 19, 2009 (µg/L)	TCE December 1, 2009 (µg/L)	TCE January 13, 2010 (µg/L)	TCE February 11, 2010 (µg/L)	TCE March 22, 2010 (µg/L)
MW-OU1-75A	35.87	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	30.87	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	25.87	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	20.87	NS	NS	NS	NS	NS	NS	NS
MW-OU1-75A	15.87	**0.53**	NS	NS	**0.47J**	NS	NS	**0.41J**
MW-OU1-76A	32.33	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	27.33	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	22.33	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	17.33	NS	NS	NS	NS	NS	NS	NS
MW-OU1-76A	12.33	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-77A	29.1	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-77A	24.1	NS	NS	NS	NS	NS	NS	NS
MW-OU1-77A	19.1	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-78A	29.91	NS	NS	NS	NS	NS	NS	NS
MW-OU1-78A	24.91	NS	NS	NS	NS	NS	NS	NS
MW-OU1-78A	19.91	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-79A	29.72	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-79A	24.72	NS	NS	NS	NS	NS	NS	NS
MW-OU1-79A	19.72	<0.5 (<0.5)	NS	NS	<0.5 (<0.5)	NS	NS	<0.5
MW-OU1-80A	25.32	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	20.32	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	15.32	NS	NS	NS	NS	NS	NS	NS
MW-OU1-80A	10.32	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-81A	21.39	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-81A	16.39	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	11.39	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	6.39	NS	NS	NS	NS	NS	NS	NS
MW-OU1-81A	1.39	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-89A	31.18	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	24.68	NS	NS	NS	NS	NS	NS	NS
MW-OU1-89A	18.18	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-90A	27.31	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-90A	22.31	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	17.31	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	12.31	NS	NS	NS	NS	NS	NS	NS
MW-OU1-90A	7.27	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-91A	26.72	<0.5	NS	NS	<0.5	NS	NS	<0.5
MW-OU1-91A	21.8	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	16.89	NS	NS	NS	NS	NS	NS	NS
MW-OU1-91A	11.97	<0.5	NS	NS	<0.5	NS	NS	NS
MW-OU1-91A	7.01	NS	NS	NS	NS	NS	NS	<0.5
MW-OU1-94A	18.6	<0.5	<0.5	<0.5	**0.26J**	<0.5	<0.5	<0.5
MW-OU1-94A	13.5	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	8.3	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	3.1	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-2.1	NS	NS	NS	NS	NS	NS	NS
MW-OU1-94A	-7.3	<0.5	<0.5	<0.5	**0.24J**	<0.5	<0.5	<0.5

COMMUNITY LETTERS SENT TO THE ARMY – RESPONSE IN PROGRESS

Administrative Record Number	Title/Subject
IAFS-235B	Comments provided by Fort Ord Environmental Justice Network on the Draft Work Plan, Historical Area 161 Excavation, Inter-Garrison Training Area, Former Fort Ord, California
BW-2532	Letter from Fort Ord Community Advisory Group to recipients re: Former Fort Ord Pesticide Use and the effects on human health as dealt with by the cleanup effort.
IAFS-235E.3	Comments from Mike Weaver [Fort Ord Community Advisory Group] on the Draft Final Work Plan, Historical Area 161 Excavation, Inter-Garrison Training Area, Former Fort Ord, California
OU1-573.3	Comments submitted by Mike Weaver [Fort Ord Community Advisory Group] on the Report of Off-Site Groundwater Extraction Pilot Study and Quarterly Monitoring, Operable Unit 1, April to June 2009 and Annual Summary, Former Fort Ord, California
OUCTP-0040D.3	Comments submitted by Mike Weaver on the Draft Final Interim Remedial Action Completion Report, Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California, Revision 0
OE-0708.6	Comments submitted by the Fort Ord Environmental Justice Network on the Draft MRS-BLM Units 15, 21, 32 and 34 Prescribed Burn Plan, 2010, Former Fort Ord, Monterey, California
OE-0708.3	Comments submitted by Nancy Amadeo [Marina in Motion] on the Draft, MRS-BLM Units 15, 21, 32 and 34 Prescribed Burn Plan, 2010, Former Fort Ord, Monterey, California

Fort Ord Administrative Record
www.FortOrdCleanup.com

Building 4463 Gigling Road
Ord Military Community, CA 93944-5004
Telephone: (831) 393-9186
Email: adminrecord@fortordcleanup.com

Community Outreach Update

April 14, 2010 Soil and Water Cleanup Base Realignment and Closure (BRAC) Cleanup Team Meeting

Actions:

1. Working on responses for Fort Ord Community Advisory Group letters regarding:
    a. Pesticides (BW-2532)
    b. Operable Unit Carbon Tetrachloride Draft Final, Interim Remedial Action Completion Report (OUCTP-0040D.3)
    c. Historical Area 161 / Chemical Materiel (IAFS-235E.3)
    d. Off-Site Groundwater Extraction Pilot Study and Quarterly Monitoring, Operable Unit 1 / Comments on January Community Involvement Workshop (OU1-573.3)
2. Working on response to Fort Ord Environmental Justice Network on comments regarding
    a. Historical Area 161 (IAFS-235B)
3. Proposal for letter/update/fact sheet to be distributed to Monterey Bay Estates II residents. Purpose of notification is to discuss results (non-detect) from monitoring well 94 and overall results of off site OU1 groundwater investigation and cleanup.
4. Working on interactive map for web site (per Fort Ord Environmental Justice Network comments/requests).
5. Working on placing signs and sign enhancements for groundwater and landfill cleanup projects.
6. Provide draft Annual Report (newsletter distributed to 50,000 households) to BCT for review.

Activities:

1. April 13, 2010: Meet with representatives of Fort Ord Reuse Authority, Department of Toxic Substances Control (DTSC), Presidio of Monterey Public Affairs Office, and Fort Ord BRAC field office to review DTSC proposal for video project.
2. April 14, 2010: Community Involvement Workshop format will be revised to include a poster session/ open house. There is a request from Fort Ord Environmental Justice Network to provide a presentation early in the meeting instead of the suggested "Open Forum" time in the second half of the workshop. Ms. Stone has a presentation and has asked that her presentation occur early in the agenda (before the "Open Forum" section of the agenda. Need to discuss with BCT and facilitator.
3. April 15, 2010: Conduct the Technical Review Committee – no significant changes/issues are expected.
4. April 22, 2010: Participate in Earth Day/Farmer's Market event at California State University Monterey Bay.
5. April 24, 2010: Conduct first guided walk inside the Impact Area. As of April 12, 32 people have registered for the event. Ms. Stone raised several concerns about this event. In response, an email that outlined the purpose and tour highlights was sent to Ms. Stone.
6. May 8-9, 2010: Participate in Marina Festival of the Winds with an information booth.

7. May 19, 2010: Conduct munitions and explosives of concern school safety program presentation for Washington Union School.
8. May 28, 2010: Participate in Presidio of Monterey Safety Day (typically attended by over 1,000 active duty personnel) with a munitions and explosives of concern/safety awareness information booth.
9. Week of June 15: Send targeted mailings for prescribed burn program.
10. June 26, 2010: host the semi-annual community open house / bus tour that will emphasize munitions cleanup with a drive around and one stop at the Impact Range.

Site 39 Remedial Action
Status Update
04/14/2010

Ongoing Documents

- Issued Appendix SSWP (FWV) for HAs 39, 40, and 40A combined MEC removal and soil remediation.
- Prepare Appendix SSWP (FWV) for screening at HA 44.

Engineering Activities

Site 39

- Completed placement of additional transects in proposed remediation areas within the Impact Area. Data included in 2009 Annual Biological Report.
- 2009-2010 wetland monitoring ongoing.
- BLM to construct Riso Ridge Road at HA 36 after Agency approval of Technical Memorandum.

OU2 Landfills

- Completed design/grading plan for E/F Hill as borrow source for vegetative cover.

Construction Activities

Site 39

- Surveying, bio clearance, and mowing/limbing
  - Completed HAs 27, 27A, 29, 33, 36, 43, 18, 22, 23, 19, and 26
- Excavation
  - Completed HAs 27, 27A, 29, 33, 36, 43, 23, 22, and 18
  - Continue HA 19
  - Over-excavation at HA 18
- Sampling as needed
  - Completed HAs 27, 27A, 29, 33, 43, 22, 23, 18, and 36
  - Sample at HA 19
  - Sample at HA 18
- QC Seeding
  - Seed placed at HA 36 recovered from within excavation (Step 1)
  - Seed placed at HA 18 recovered from within excavation (Step 1)
  - Three of five seeds placed at HA 19 recovered from stockpile (Steps 1, 4, and 5)
- Implement erosion control measures, as needed
- Road improvements and repairs

OU2 Landfills

- Completed Phase 1 vegetative layer removal
- Hauled and placed soil from HA 27, 27A, 29, 33, 36, 22, 23, 43, 18, and 19
- Implement erosion control measures, as needed
- Completed moving 12,000cy soil into Area E and stockpile base rock

Technical Memorandum

Tech Memos (TM) will present analytical results with the objective of receiving preliminary concurrence from Agencies that remediation is complete and acceptable and re-contouring/ restoration can occur.

- HA 27 – revised TM resubmitted to Agencies for back check on 3/18. Agencies approved revised format.
- HA 22 – draft e-mailed on 4/12.
- HAs 43, 23, and 29 – TM being prepared for Army review
- HAs 33, 36, and 27A – waiting for analytical results for over-excavation and data validation
- HA 18 – need to over-excavate and collect samples, waiting for data validation

Schedule of Field Work
(as of 04/09/2010)

TASK	HISTORICAL AREA	PLANNED (Bank CY)	ACRES	OVEREX (Bank CY)	STOCKPILE ex (Bank CY)	EQUIPMENT	STOCKPILE	Date (Start and End Dates)								Sampling	Tech Memo	Date Completed	
								Surveying	Bio Clearance	Mowing/ Sampling	Site Prep	Excavation	Over-Excavation	Transport to OU2 Landfill		Date	Date	Revegitating	Erosion Control
1	27	120	0.1			Excavator, 1 A35, WT	HA 27A	10/19	10/28	10/28	11/2	11/2 11/4	NA	see 6		11/18	11/19, 3/18, 4/12		
2	27A	1030	0.6			Excavator, 1 A35, WT	onsite	10/19 10/20	10/29	10/28 10/29	11/4	11/4 11/13	NA	see 6		11/19	NA	NA	NA
3	29	2580	1.0			Excavator, 2 A35, 2 WT	onsite	10/21	10/29	11/5, 11/9	11/9 11/12, 11/16	11/17 12/1	NA	see 5		12/2	NA	NA	NA
4	OU2 Landfill Phase 1					OU2 Landfill Clearing and grubbing of 1/3 Area E		10/27	NA	11/9 11/12	12/1	12/2, 12/31, 1/11	NA	NA		NA	NA	NA	NA
5						Transport Soil from HA 29 to LF		NA	NA	NA	NA	NA	NA	12/28 12/31		NA	NA	NA	NA
6	27A		0.2	370		Excavator, 1 A35, WT	onsite	NA	NA	NA	NA	NA	1/4, 1/5	see 7		1/11	NA	NA	NA
7						Transport Soil from HA27A to LF		NA	NA	NA	NA	NA	NA	1/6 1/7		NA	NA	NA	NA
8	29		0.2	330	280	Excavator, 1 A35, WT	onsite	NA	NA	NA	NA	NA	1/6	SP on 2/2		1/12, SP on 2/9	4/19		
9	36 (Explosives)	2750	0.51			Excavator, on-road, loader, WT	direct load	10/22	12/10	12/24	1/11	1/12 2/1	NA	1/12 2/1		2/9	NA	NA	NA
10	27A			100	240	Overex HA 27A, Excavate SP, Transport from HA 27A & 29 to LF		NA	NA	NA	NA	NA	2/2, 3/31	2/2 2/3		2/9, 4/13			
11	43	150	0.1			Excavator, 2 A35, WT	Primary Stockpile	10/20	10/26	NA	2/2	2/8 2/9	NA	see 19		2/9, 2/23	4/19		
12	33 (Explosives)	20	0.01			Backhoe, 12-yd DT, WT	direct load	10/20	12/10	12/24	1/27	1/27	NA	1/27		2/9			
13						Transport Stockpiled Soil from E/F Hill to Area E		NA	NA	NA	NA	2/16 3/4	NA	NA		NA	NA	NA	NA
14						Prepare Primary Stockpile - Austin		NA	12/10	12/21	2/1	NA	NA	NA		NA	NA	NA	NA
15	22	80	0.1			backhoe, 12-yd DT, WT	Primary Stockpile	10/20	10/26	12/22	2/4	2/9 2/10	NA	see 19		2/23	4/12		
16	23	440	0.3			Excavator, 2 A35, WT	Primary Stockpile	10/22 & 10/26	12/10	12/22	2/4	2/10, 2/16-17	NA	see 19		2/23	4/14		
17	18	2730	1.4	20		Excavator, 3 A35, WT	Primary Stockpile	10/26-27, 12/3, 12/8-9,	12/21, 2/4	1/8, 1/11, 2/4,	2/16	2/17 3/4	4/16	see 19		3/4, 3/9, 3/31			
18	36 (Explosives)			40		Backhoe, 12-yd DT	direct load	NA	NA	NA	NA	NA	3/22	3/22		3/22			
19						Transport Soil from Austin SP to LF		NA	NA	NA	NA	NA	NA	3/16 3/23		NA	NA	NA	NA
20	19	26510	13.8			2 Excavators, 6 A35, 3 WT	Primary Stockpile	12/16 2/3	2/8, 3/4	2/16 3/11	3/8 3/16	3/17 6/4		NA		4/13 - 6/4			
21						Transport Soil from Austin SP to LF		NA	NA	NA	NA	NA	NA	3/24 5/27		NA	NA	NA	NA
22	161	20	0.01			backhoe, 12-yd DT, WT	direct load	2/4	2/3	2/3 2/4	2/4	2/19		2/19		2/24	NA		
23	26	24760	13.9			2 Excavators, 6 A35, 3 WT	Primary Stockpile	4/23 5/14	3/3	3/3 3/30	5/31 6/3	6/7 7/29		NA					
24						Transport Soil from Austin SP to LF		NA	NA	NA	NA	NA	NA	6/7 7/29		NA	NA	NA	NA
25	39/40	6520	2.5			2 Excavators, 4 A35, 2 WT	onsite	5/31 6/10	6/14	6/14 6/24	6/21 6/24	6/28 8/20		NA					
26						Transport Soil from 39/40 to LF		NA	NA	NA	NA	NA	NA	6/28 8/20		NA	NA	NA	NA
Total		67740	34.78	860	520														

Notes:

11/17 date completed

11/18
11/23 tentative scheduled start and end dates

Site 39 Remediation
Excavated Volume
(as of 4/8/2010)

Summary						
Historical Area	FS Total Plan (bank cy)	Actual Plan To Date (bank cy)	OX/SP To Date (bank cy)	Total To Date (bank cy)	% Total To Date	Remediation Status
18	2,730	2,730		2,730	100%	complete
18 OVEREX			20	-		
22	80	100		100	100%	complete
23	440	440		440	100%	complete
27	120	120		120	100%	complete
27A	1,030	1,030		1,030	100%	complete
27A OVEREX			470	470		complete
27A STOCKPILE			240	240		
29	2,580	2,580		2,580	100%	complete
29 OVEREX			330	330		complete
29 STOCKPILE			280	280		complete
33	20	20		20	100%	complete
36	2,750	2,580		2,580	100%	complete
36 OVEREX			40	40		complete
43	150	150		150	100%	complete
19	26,510	9,840		9,840	37%	
26	24,760			-	0%	
39/40	6,520			-	0%	
48	140			-	0%	
44	3,340			-	0%	
34	26,270			-	0%	
37	19,430			-	0%	
28	6,920			-	0%	
Total	128,700	19,590	1,380	20,950	16%	

LEGEND

- Proposed Extraction Well
- Existing Extraction Well
- Stubout Location
- Proposed Extraction Well Conveyance Pipeline
- Existing Groundwater Conveyance Pipeline

N

0 200 400 FEET

REVISION	DATE	DESCRIPTION	CHKD	APPR

Shaw Shaw Environmental, Inc.

Department of the Army
Sacramento District, Corps of Engineers
Sacramento, California

DESIGNED: T. AULT
DRAWN: K. BLACK
CHECKED:

FIGURE 13
PROPOSED WELL AND CONVEYANCE ROUTE FOR UPPER 180-FOOT AQUIFER REMEDIAL DESIGN
OUCTP, FORMER FORT ORD, CALIFORNIA

SUBMITTED: DATE

SCALE: SPEC. No.
SHEET FILE No. Proposed_U180_piping.mxd

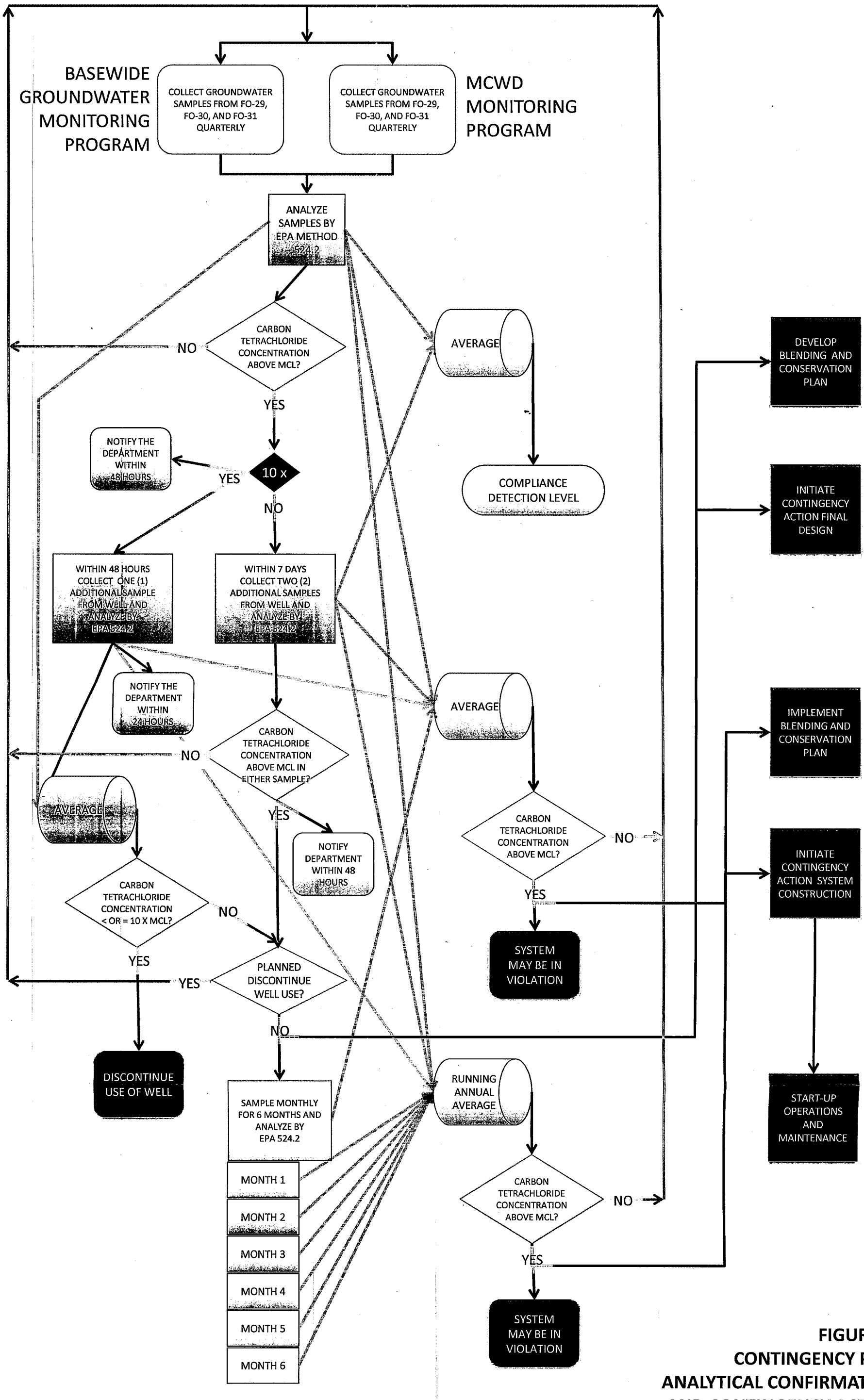
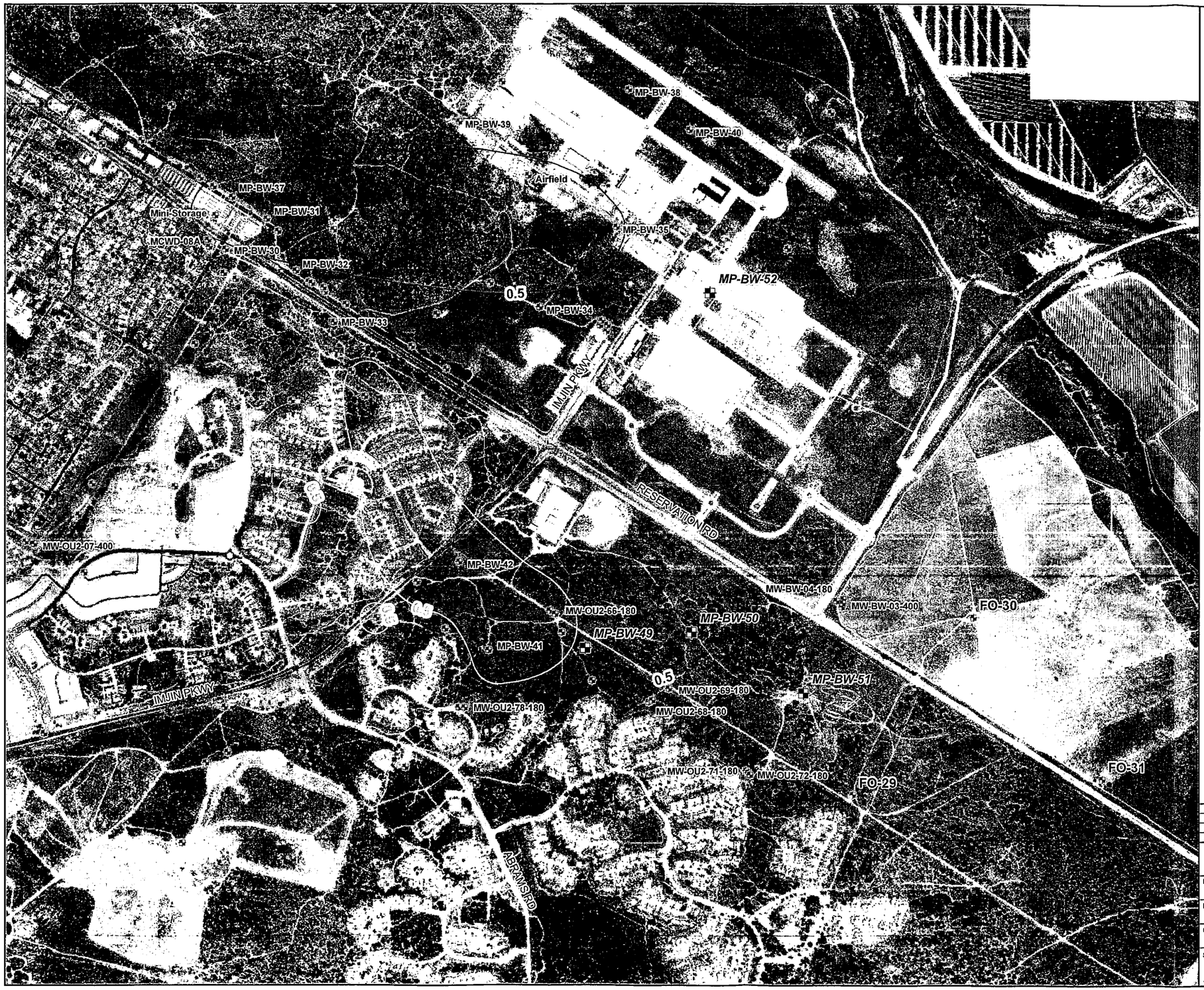


FIGURE 10
CONTINGENCY PLAN
ANALYTICAL CONFIRMATION
AND CONTINGENCY ACTION
FLOW CHART



LEGEND

- Proposed Monitoring Well
- Monitoring Well Screened in Lower 180-foot/400-foot Aquifer
- Monitoring Well Screened in Other Aquifers
- Water Supply Well

Upper 180-ft Aquifer Plume (June 2009)

- Carbon Tetrachloride Contours (0.5 µg/L)

Lower 180-ft Aquifer Plume (June 2009)

- Carbon Tetrachloride Contour (0.5 µg/L)
- Boundary of Former Fort Ord

N

0 1,000 2,000 FEET

REVISION	DATE	DESCRIPTION	CHKD	APPR

Shaw Shaw Environmental, Inc.

Department of the Army
Sacramento District, Corps of Engineers
Sacramento, California

DESIGNED: T. AULT
DRAWN: K. BLACK
CHECKED:

FIGURE 11

PROPOSED MONITORING WELL LOCATIONS
LOWER 180-FOOT/400-FOOT AQUIFERS

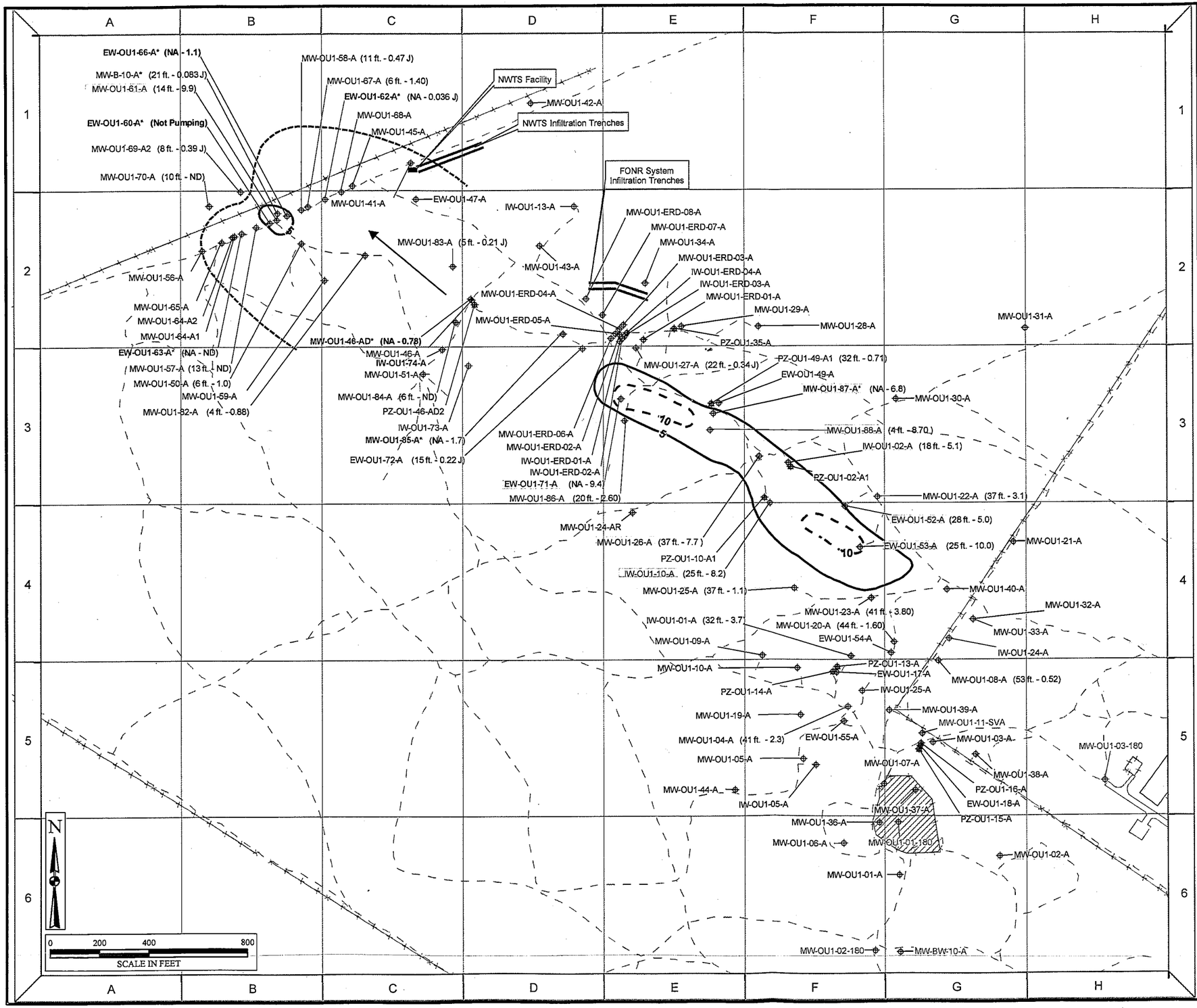
OUCTP, FORMER FOR ORD, CALIFORNIA

SUBMITTED: DATE

SCALE: SPEC. No.

SHEET FILE No. Proposed_L180_wells.mxd

Figure 5.3b
OU-1 FONR
TCE Concentrations in Groundwater
September 2009



Legend

- Monitoring Well
- Extraction Well
  Bold green font indicates active well.
- Injection Well
  Bold green font indicates active well.
- Well Not Sampled
- Piezometer
- MW-OU1-87-A — Locations With September 2009 TCE Concentration At Or Above ACL (5 µg/L)
- —5— TCE Contour (µg/L) Based on September 2009 Data
- Inferred Extent – See Notes Below
- MW-OU1-87-A — Well ID
- (42 ft. - 9.30) — September 2009 TCE Result (µg/L)
- Sample Elevation (feet above mean sea level)
- Trail/Unimproved Road
- Fence
- Treated Water Infiltration Trench
- Estimated Northwest Treatment System Capture Zone
- Former Fire Drill Area
- General Direction of Groundwater Flow

Notes:
Units of TCE concentrations are in ppb
ND = Non-detect
NA = Depth is not applicable - sample is from pumping well
J = Estimated Value
µg/L = Micrograms per liter
Wells shown with an asterisk were not used to develop contour boundaries. Active extraction wells were typically not included because the data is not location-specific. Data from extraction well EW-OU1-71-A was used to infer the 10 µg/L TCE contour (shown as dashed line) because the results at that well (9.4 µg/L) and at nearby wells suggest higher TCE concentrations in that vicinity. The TCE concentration at EW-OU1-53-A was 10 µg/L and nearby well data was less than 10 µg/L. Consequently, the 10 µg/L contour enclosing well EW-OU1-53-A was also dashed because the extent is inferred from recent results. Data from MW-B-10-A was excluded because the well does not fully penetrate the A-Aquifer.
Well names appearing in gray were not included in OU1-Groundwater Monitoring Program.
Wells for which no data are posted were not sampled.

Y:/Fort_Ord/OM9/TO_201/GW_Monitoring_Y6Q3/TCE_in_GW_September_2009.mxd
Source: HGL
12/29/09 TB

HGL HydroGeologic, Inc