

SUBJECT: HTW - BCT Meeting

November 8, 2004

10:00 a.m.

BRAC Conference Room

Check (✓)	Name	Organization	Phone	E-mail address
	Roman Racca	DTSC	916/255-6407	Rracca@disc.ca.gov
	Stewart Black	DTSC	916/255-3665	sblack@dtsc.ca.gov
	John Chesnutt	U.S. EPA	415/972-3005	Chesnutt.john@epa.gov
	Claire Trombadore	U.S. EPA	415/972-3013	Trombadore.Claire@epa.gov
	Martin Hausladen	U.S. EPA	415/972-3007	Hausladen.martin@epamail.epa.gov
	Grant Himebaugh	RWQCB	805/542-4636	Ghimebau@rb3.swrcb.ca.gov
	Gail Youngblood	Fort Ord BRAC	831/242-7918	gail.youngblood@monterey.army.mil
	George Siller	COE	916/557-7418	George.L.Siller@usacc.army.mil
	Glen Mitchell	COE	916/557-7774 or 831/884-9925 ext. 232	Glen.Mitchell@usace.army.mil
	Peter Kelsall	Shaw E & I, Inc	831/883-5810 ext. 810	Peter.Kelsall@shawgrp.com
	David Eisen	COE	831/393-9692	David.Eisen@usace.army.mil
	Derek Licherman	Fort Ord BRAC	831/242-4873	Derek.Licherman@monterey.army.mil
	Ed Ticken	MACTEC E&C	415/884-3176	ejticken@mactec.com

SUBJECT: HTW - BCT Meeting

November 8, 2004

10:00 a.m.

BRAC Conference Room

**Former Fort Ord
Agency Meeting Agendas
November 2004**

November 8, 2004 at 10:00 a.m.

HTW BCT Meeting

BRAC Conference Room

November 9, 2004 at 10:00 a.m.

MR BCT Meeting

BRAC Conference Room

HTW BCT Meeting
BRAC Conf. Room

Item	Action	Comment
FFA Schedule	Status Update	
Operable Unit Carbon Tetrachloride GW Plume	Status Update	
Operable Unit Carbon Tetrachloride Soil Gas	Status Update	
OU1 Groundwater Remediation	Status Update	
OU2 and 2/12 Treatment Systems	Status Update	
Geotracker	Status Update	
Operable Unit 2 Landfill Gas	Status Update	
Basewide Range Assessment	Status Update	
Site 39 Eco Risk Work	Status Update	
Range 36A Closure Activities	Status Update	
East Garrison Ranges Interim Action	Status Update	
FOST/FOSL/FOSET Issues	Status Update	
Calendar	Update	

MR BCT Meeting
BRAC Conf. Room

Item	Action	Comment
Action Items	Update	
Fieldwork Update	Update	
Fieldwork Variance	Update	
Track 1 Record of Decision	Status Update	
Track 0 Plug-In Approval Memorandums	Presentation	
Track 2 RI/FS Parker Flats	Presentation	
FFA Schedule	Update	

RI Sites, Former Fort Ord DRAFT

Deliverable/Event	Current Deadlines (Previous Deadlines)	Deadline Revision Rationale
Site 39		
Draft Basewide Range Assessment Report	7/04 (12/03)	Extension to comment period on Draft Report
Comments Due	<u>9/04 (2/04)</u> <u>10/04 (9/04)</u>	"
Draft Final Basewide Range Assessment Report	<u>10/04 (3/04)</u> <u>12/04 (10/04)</u>	"
Comments Due	<u>11/04 (4/04)</u> <u>1/05 (11/04)</u>	"
Draft Ecological Risk Assessment for Small Arms Ranges Report	<u>11/04 (6/04)</u> <u>1/05 (11/04)</u>	"
Comments Due	<u>12/04 (8/04)</u> <u>3/05 (12/04)</u>	"
Draft Final Ecological Risk Assessment for Small Arms Ranges Report	<u>1/05 (9/04)</u> <u>4/05 (1/05)</u>	"
Comments Due	<u>2/05 (10/04)</u> <u>5/05 (2/05)</u>	"
Draft Assessment of Soil Treatment Alternatives (Supplemental Feasibility Study)	<u>10/04 (3/04)</u> <u>1/05 (10/04)</u>	"
Comments due	<u>11/04 (5/04)</u> <u>3/05 (11/04)</u>	"
Draft Final Assessment of Soil Treatment Alternatives (Supplemental Feasibility Study)	<u>12/04 (6/04)</u> <u>4/05 (12/04)</u>	"
Comments due	<u>1/05 (7/04)</u> <u>5/05 (1/05)</u>	"
Draft Proposed Plan	<u>3/05 (10/04)</u> <u>4/05 (3/05)</u>	"
Comments due	<u>4/05 (12/04)</u> <u>5/05 (4/05)</u>	"
Draft Final Proposed Plan	<u>5/05 (1/05)</u> <u>6/05 (5/05)</u>	"
Comments due	<u>6/05 (2/05)</u> <u>7/05 (6/05)</u>	"

**RI Sites, Former Fort Ord
DRAFT**

Final Proposed Plan	<u>7/05 (3/05)</u> <u>8/05 (7/05)</u>	"	
Public comment period	<u>8/05 (4/05)</u> <u>9/05 (8/05)</u>	"	
Draft ROD Amendment	<u>9/05 (5/05)</u> <u>10/05 (9/05)</u>	"	
Comments due	<u>10/05 (6/05)</u> <u>11/05 (10/05)</u>	"	
Draft Final ROD Amendment	<u>11/05 (7/05)</u> <u>12/05 (11/05)</u>	"	
Comments due	<u>12/05 (8/05)</u> <u>1/06 (12/05)</u>	"	
Final ROD Amendment	<u>1/06 (9/05)</u> <u>2/06 (1/06)</u>	"	
Draft Remedial Action Work Plan	<u>2/06 (10/05)</u> <u>3/06 (2/06)</u>	"	
Comments due	<u>3/06 (12/05)</u> <u>4/06 (3/06)</u>	"	
Draft Final Remedial Action Work Plan	<u>4/06 (1/06)</u> <u>5/06 (4/06)</u>	"	
Comments due	<u>5/06 (2/06)</u> <u>6/06 (5/06)</u>	"	
Draft Confirmation Report	<u>3/09 (12/08)</u>	"	
Comments due	<u>5/09 (2/09)</u>	"	
Draft Final Confirmation Report	<u>6/09 (3/09)</u>	"	
Comments due	<u>7/09 (4/09)</u>	"	

OU CTP, Former Fort Ord
DRAFT

Deliverable/Event	Current Deadlines (Previous Deadlines)	Deadline Revision Rationale
OU CTP ROD Activities		
Draft RI/FS Work Plan	7/02	
Comments Due	9/02	
Draft Final RI/FS Work Plan	10/02	
Comments Due	11/02	
Draft RI/FS	<u>1/05 (10/04)</u> <u>3/05(1/05)</u>	Additional evaluation of two ongoing pilot studies are required.
Comments Due	<u>3/05 (12/04)</u> <u>5/05 (3/05)</u>	"
Draft Final RI/FS	<u>4/05 (1/05)</u> <u>6/05 (4/05)</u>	"
Comments Due	<u>5/05 (2/05)</u> <u>7/05 (5/05)</u>	"
Draft Proposed Plan	<u>6/05 (3/05)</u> <u>7/05 (6/05)</u>	"
Comments Due	8/05 (5/05)	"
Draft Final Proposed Plan	9/05 (6/05)	"
Comments Due	10/05 (7/05)	"
Final Proposed Plan	11/05 (8/05)	"
Public Comment Period	12/05 (9/05)	"
Draft ROD	1/06 (10/05)	"
Comments Due	3/06 (12/05)	"
Draft Final ROD	4/06 (1/06)	"
Comments Due	5/06 (2/06)	"
Final ROD Signed	6/06 (3/06)	"

Carbon Tetrachloride SVE
Status Review
November 8, 2004

Summary

Objectives for pilot system have been met

- SVE will be shut down today (11/8/04)
- Blower and GAC vessels will be dismantled
- Wells and probes will remain in place

Operating Data

Phase 1 operated 1410 hours

Phase 2 operated 1440 hours through 11/7

Current Monitoring Data

Latest influent concentration = 2.1 ppb on 10/7

- Extrapolated current concentration = approx. 1 ppb (*Figures 1 and 2*)

CT mass removed to date = approx. 0.7 pounds

- 90% removed in Phase 1
- 10% removed in Phase 2
- Running system for one more month at current influent concentration would remove approx. 1% of the mass of CT removed to date

Probes in original design area

- All deep probes <11 ppb, most < 2 ppb (not all sampled recently) (*Figure 5-5*)
- All shallow probes < 1ppb (*Figure 5-7*)

Newer probes on northern edge of capture zone (SGP 63, SGP 65)

- Latest CT at 80ft depth = 22 to 26 ppb on 10/22
- Overall slow decline in Phase 2 because on edge of capture zone (*Figure CT in selected deep probes*). Note: pumping rate was increased 50% in two northern extraction wells on 11/1; increase in vacuum observed at SGP 63, no data yet to show impact on CT concentration
- CT at shallow depth < 2.9 ppb before Phase 2 pumping

Probe to the north on Preston Drive above higher groundwater concentrations was ND for VOCs in soil vapor (*Figure 5-12*)

Review of Project Objectives

From the Work Plan:

Implement a pilot mitigation that will:

- Provide source control for the CT groundwater plume, and
- Alleviate the potential for vapor intrusion into the nearby housing area

At the end of 3 months the effectiveness of the mitigation will be evaluated. If the system is efficiently removing CT, operation will continue at the discretion of the Army until either: a) cleanup levels have been attained, or b) removal of CT is low and continued operation is not cost effective.

Evaluation of current status

Objectives for the original impacted area have been met

- Remaining concentration VOCs above the groundwater are low, deep and will be addressed in the CT RI/FS
- Shallow soil concentrations are very low and are not a significant source for vapor intrusion
- Diminishing marginal returns from continued operation clearly demonstrated

Proposed Actions

1. Shut down SVE today
2. Sample influent and extraction wells before shutdown
3. Sample selected probes after shutdown for post-SVE condition
4. Evaluation report Jan 05
5. Evaluate residual low concentrations in the RI/FS

Figure 1
Influent Carbon Tetrachloride Concentration vs. Time

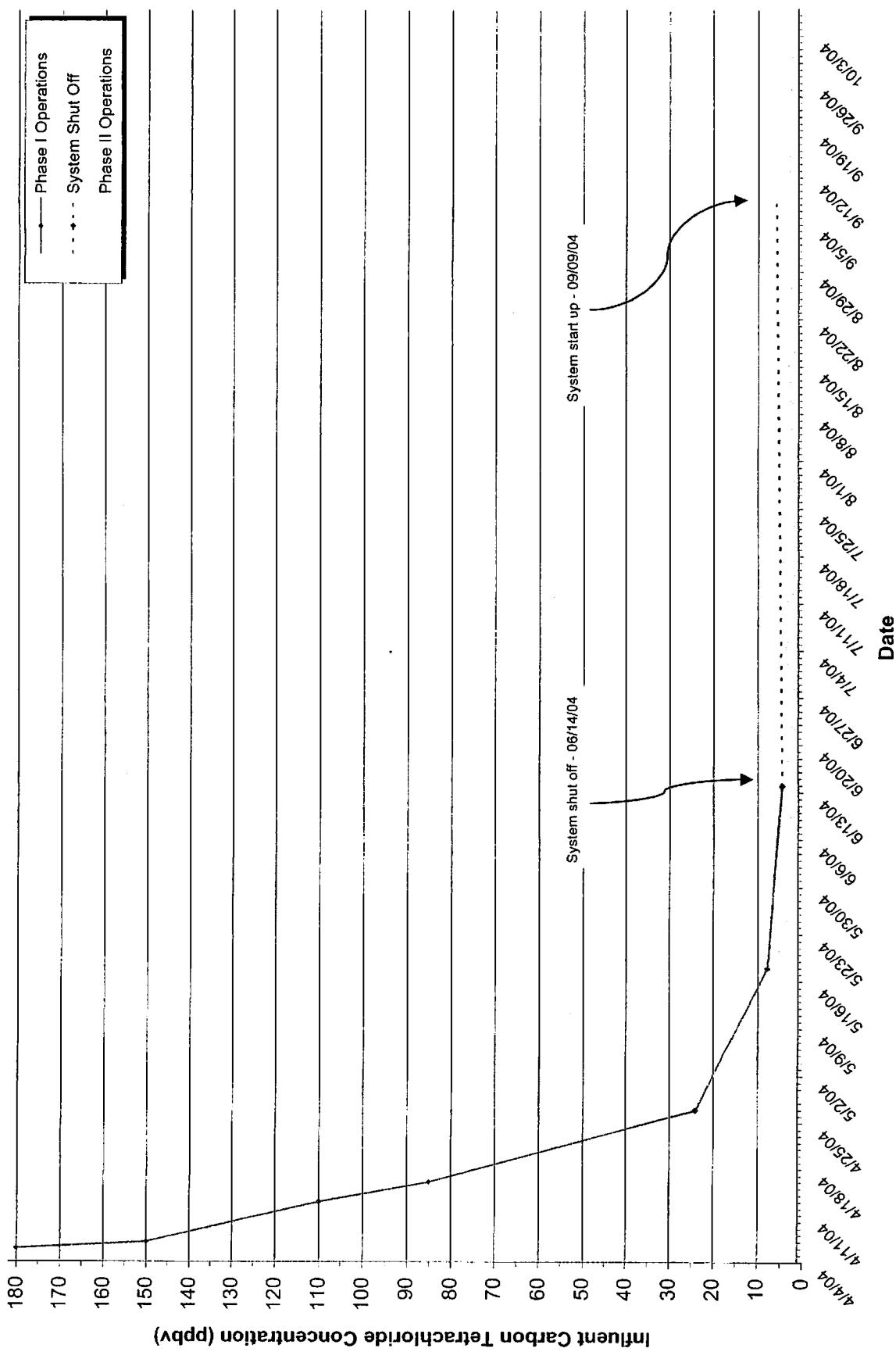
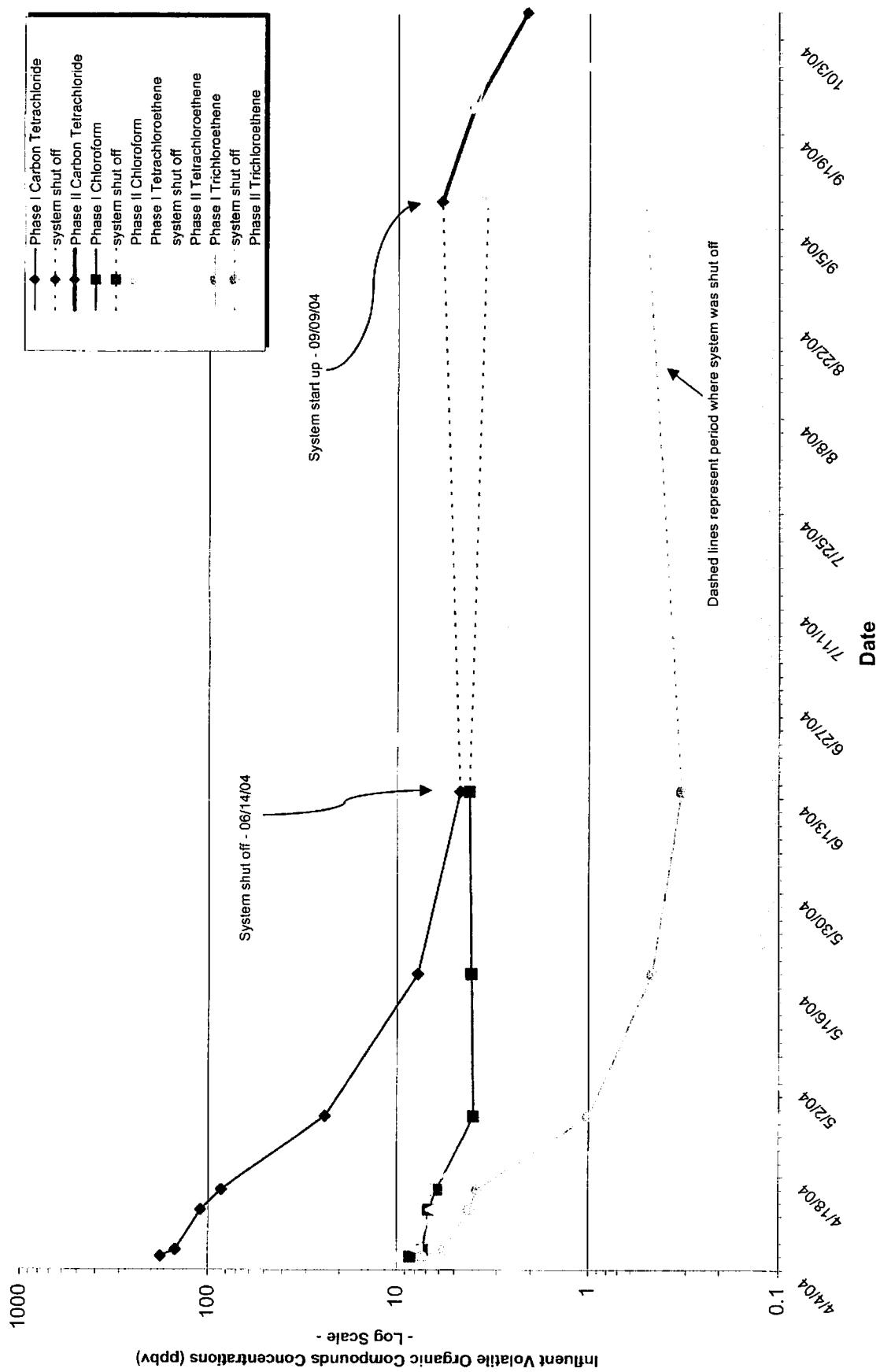
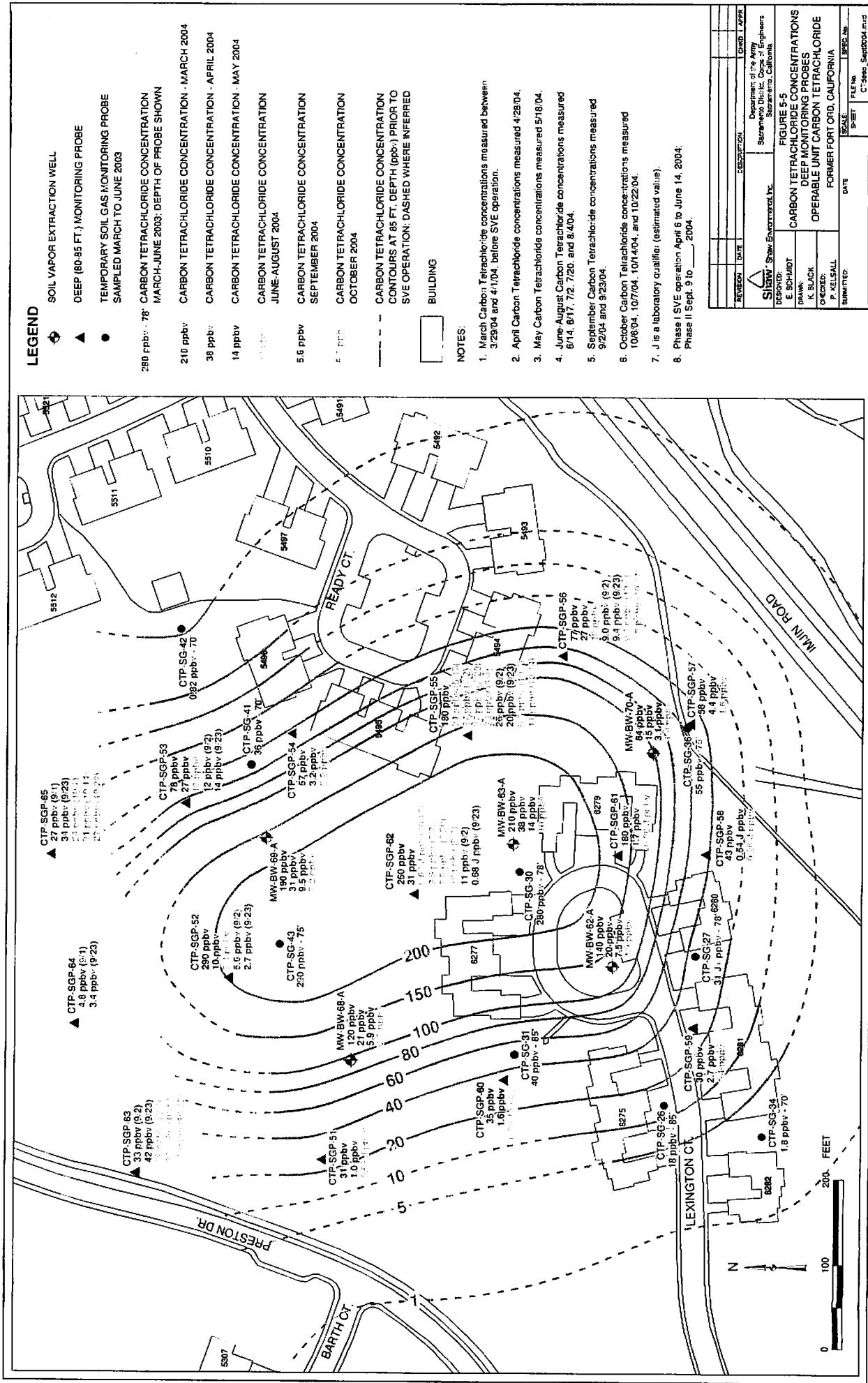
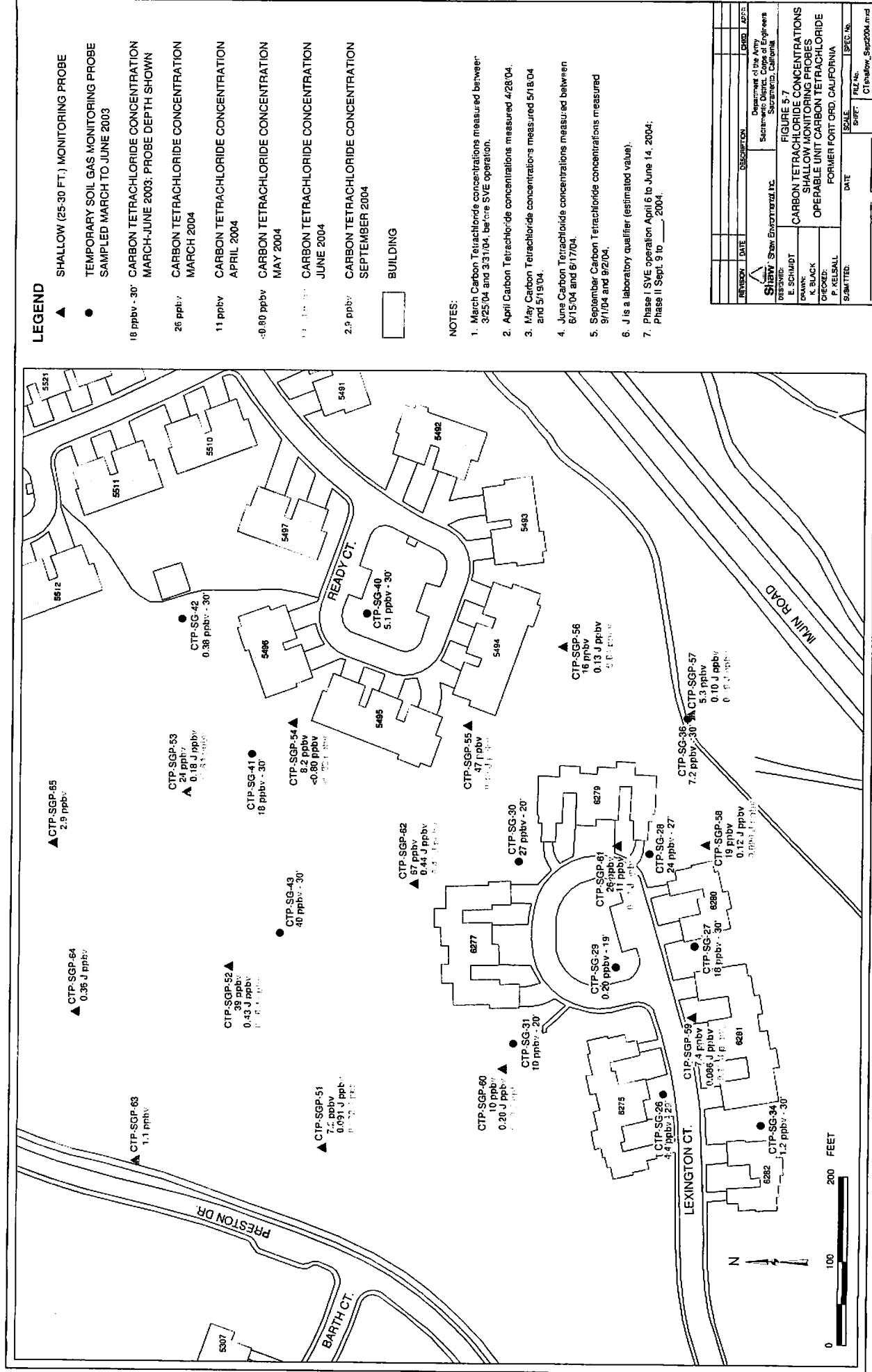
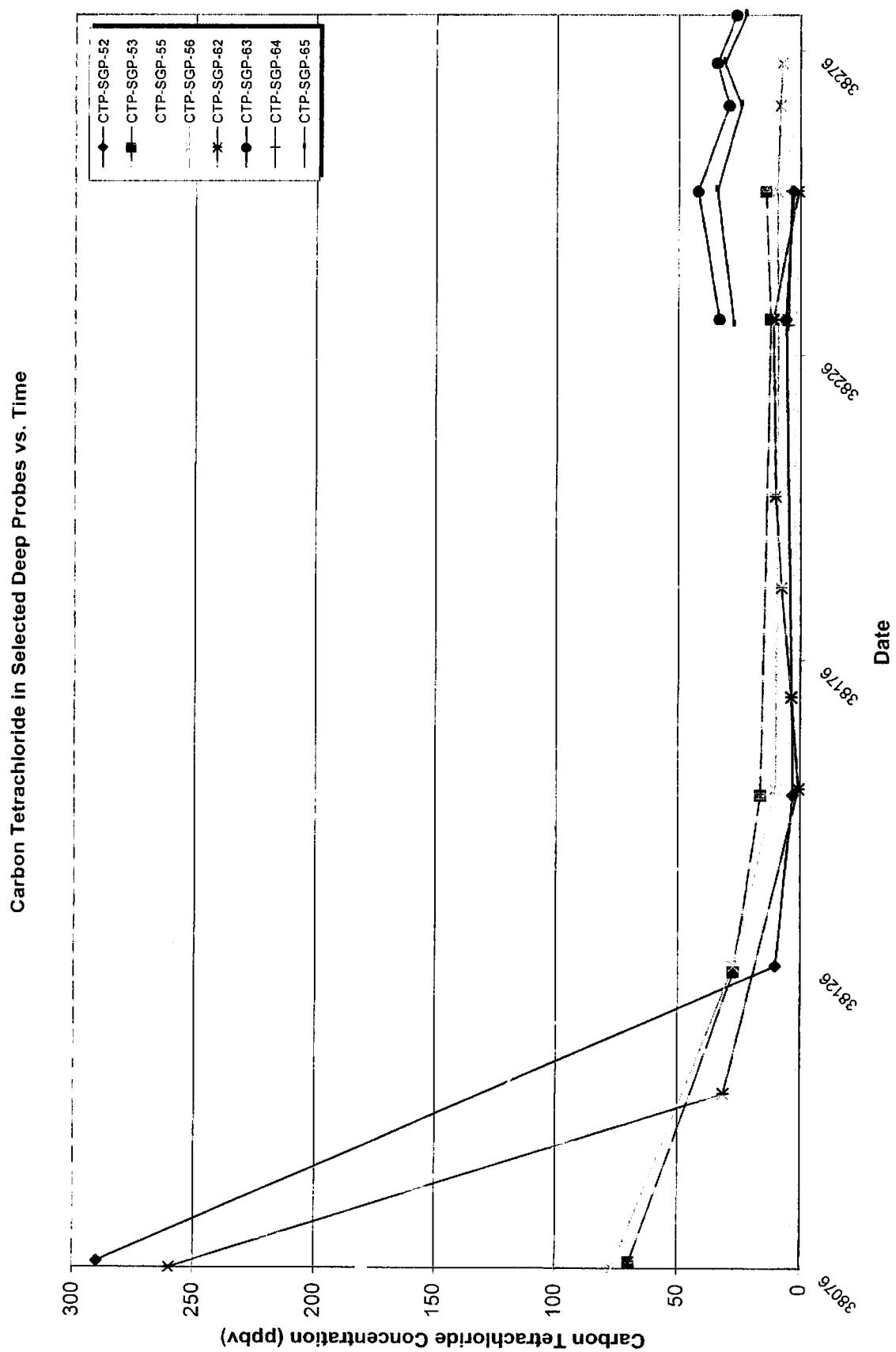


Figure 2
Influent Volatile Organic Compound Concentration vs. Time









LEGEND

- ◆ SOIL VAPOR EXTRACTION WELL
- ▲ DEEP (80-85 FT.) SOIL VAPOR MONITORING PROBE
- <0.79 ppbv SOIL GAS CONCENTRATION (ppbv); MEASURED 9/1/04
- CF Chloroform
- CT Carbon tetrachloride
- TCE Trichloroethene
- PCE Tetrachloroethene
- SOIL GAS CARBON TETRACHLORIDE CONCENTRATION CONTOURS AT 85 FT. DEPTH (ppbv); DASHED WHERE INFERRED
- AQUIFER CARBON TETRACHLORIDE CONCENTRATION CONTOURS (ppbv)
- GROUNDWATER MONITORING WELL
- BUILDING

NOTES:

1. Soil gas concentration contours based on data collected prior to soil vapor extraction.
2. Groundwater concentration contours provided by Macie and based on data collected December 2003.



ITEM/SECTION	DATE	DESIGNER	CHECKED	REVIEWED	APPROVED
FIGURE 1-12 DATA FROM PRESTON DRIVE MONITORING PROBE CARBON TETRACHLORIDE PLUME FORMER FORT ORD, CALIFORNIA		Stew Environmental Inc. P. KELSELL DRAWN K. BLACK CHECKED P. KELSELL			Department of the Army Sacramento District, Corps of Engineers Sacramento, California

SPEC No.

FILE No.

SCALE:

Sheet

1

C/Soil-gw md

Former Fort Ord Groundwater Treatment Systems Operational Data

Project	Category	Status/Update
OU-2	O & M	<p>Stats for the month of October (9-24-04 to 10-22-04) Plant operating at 680 gpm (avg.) Average influent concentration of 8.2 ppb (TCE) 28.315 million gallons treated</p> <p><u>Cumulative Stats:</u> 2.882 billion gallons of water treated</p>
Sites 2/12	O & M	<p>Stats for the month of October (9-24-04 to 10-22-04) Plant operating at 290 gpm (avg.) Average influent concentration of 17.3 ppb (TCE) 11.31 million gallons treated</p> <p><u>Cumulative Stats:</u> 695.325 million gallons of water treated</p>

Operational Issues:

- 1) OU 2 Injection sample, 10/18/2004.
Methylene chloride reported as detected at 0.75 ppb, exceeding the discharge limit of 0.5 ppb.
Probable lab contamination as the influent sample was reported at 0.67 ppb.
Resample submitted to the lab on 10/26/2004 for 48 hour TAT.
Resample MC results reported as 0.48 ppb.
Review of historical MC data indicate that intermittent detections have been reported in the past.
- 2) OU 2 shutdown beginning on 10/27, for approximately 24 hours.
Cause of shutdown not known at this time and the autodialer failed to inform the operator.
2/12 continued to operate without the dilution effect from OU 2.
However, concentrations of COCs in the 10/12/12 injection sample were below discharge limits.
The Army has agreed to make process control changes to the SCADA system preventing the Sites 2/12 GWTP from operating in the event that the OU2 GWTP shutdown.
These process control changes will be implemented sometime this week.

24

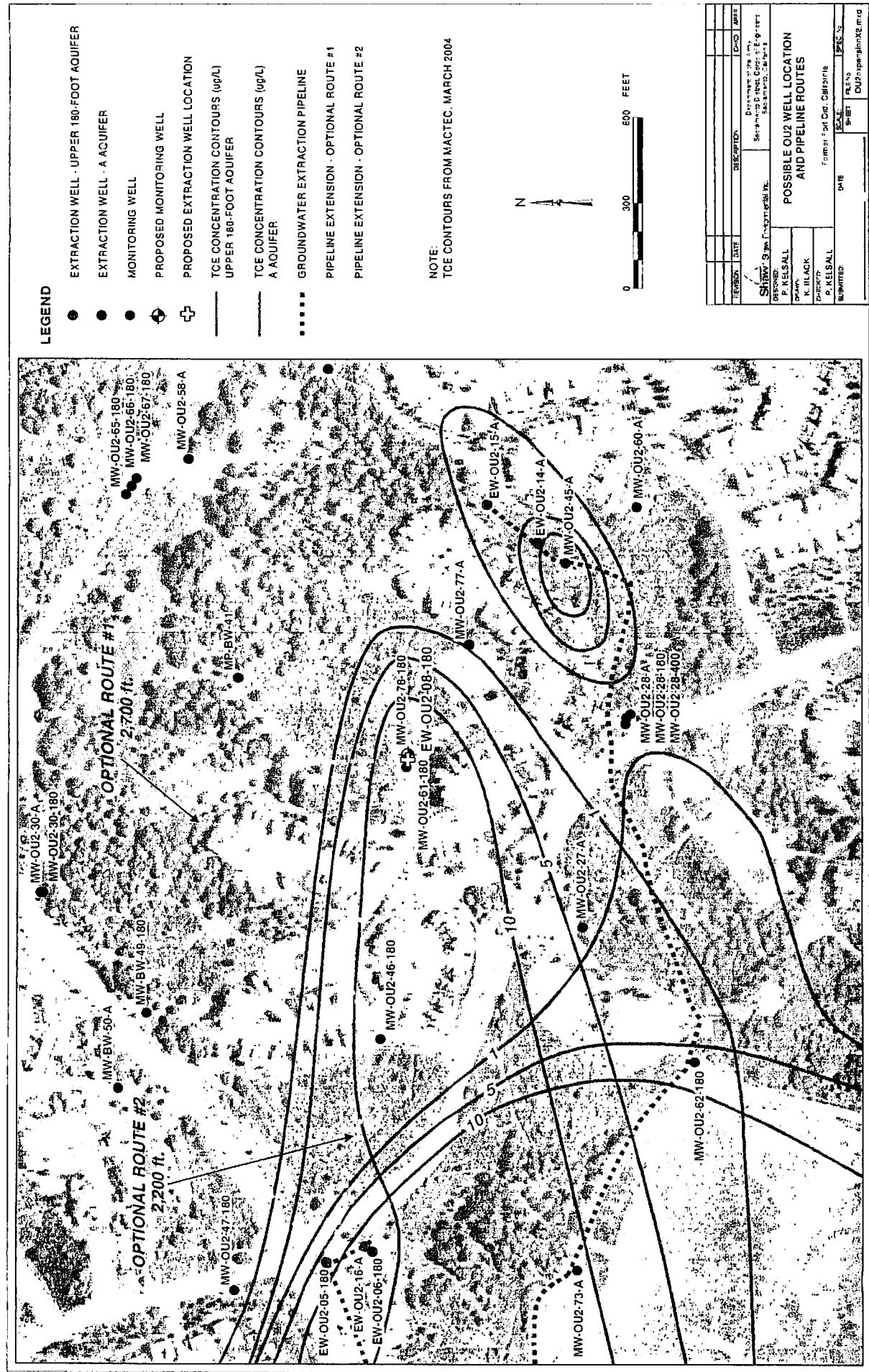


Figure 1.1

Phase 1 and Phase 2 Boring/Wells
Site Map
Operable Unit 1
Former Fort Ord, CA

Legend

Pre-Phase 1 & 2 Well/Piezometer

Pre-Phase 1 & 2 Hydropunch Boring

Phase 1 Well/Piezometer

Phase 2 Boring/Well

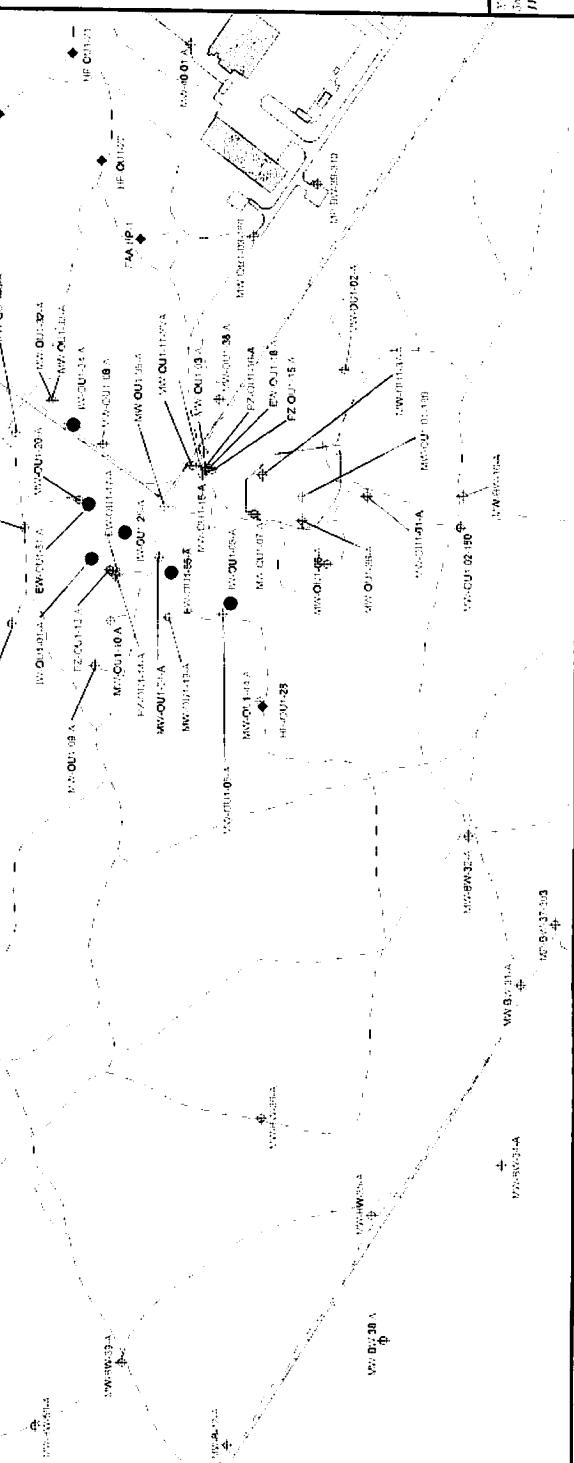
Trail/Unimproved Road

Fence

Phase 2

Phase 1

Pre-Phase 1



HYDRO
Geologic

Verde Environmental Group, Inc.

HDFG, Inc.

2007

Map prepared for U.S. Environmental Protection Agency
Hazardous Substance Control Program

Figure 1.2

Salinas Valley Aquitard (Clay)
Elevation Contour Map
Operable Unit I
Former Fort Ord, CA

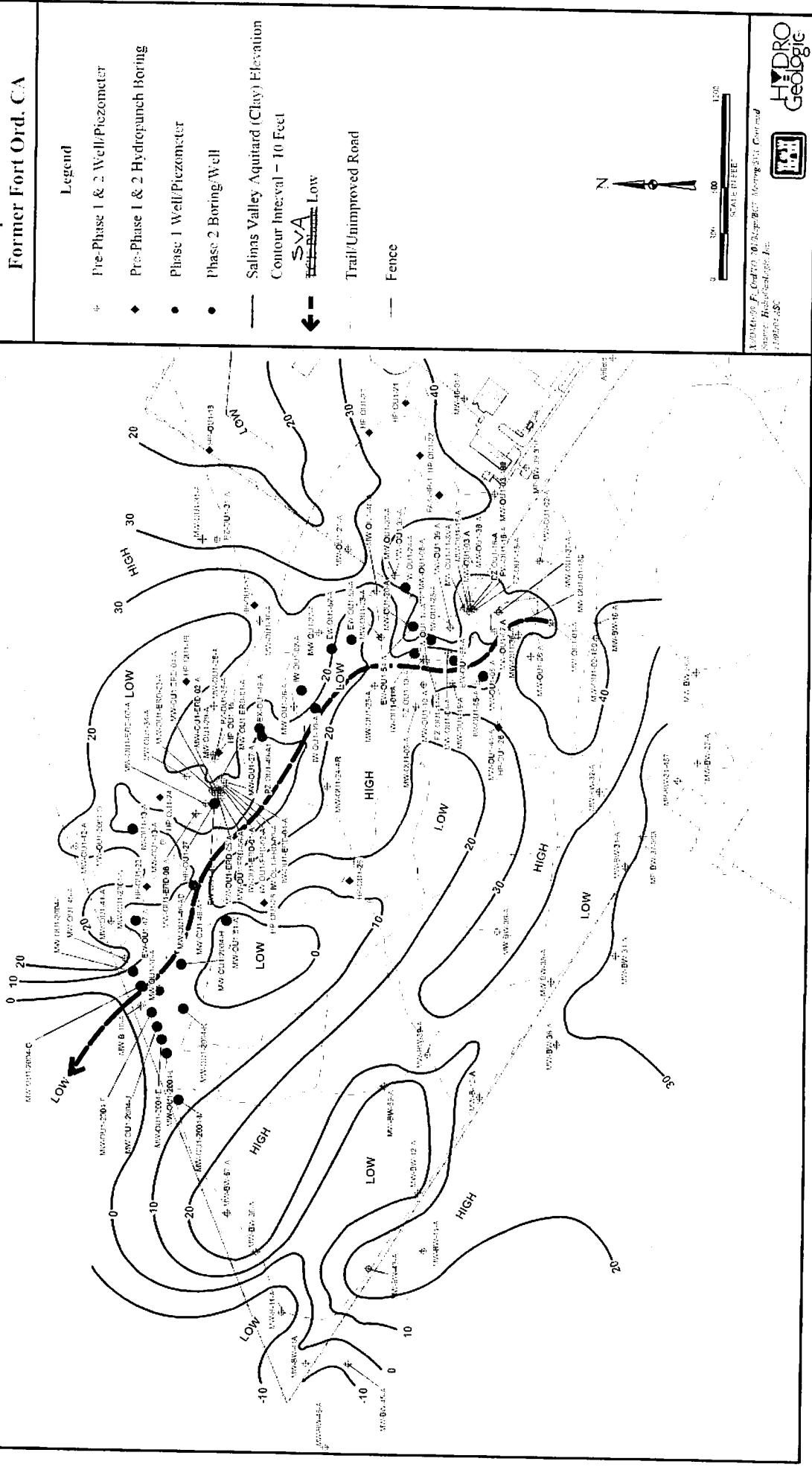
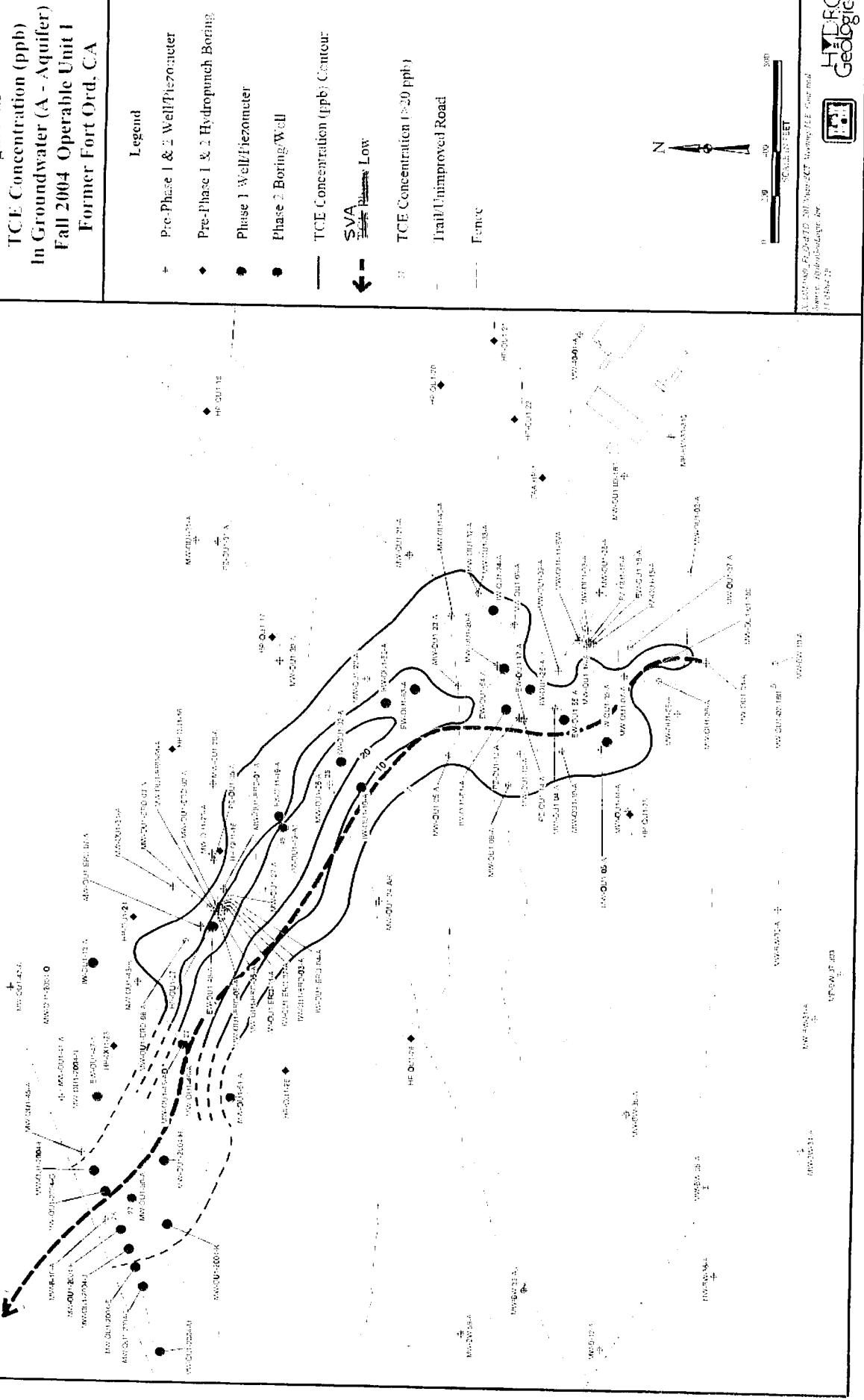


Figure 1.3



Track 0 and Track 1 Document Schedules

Track 1 Record of Decision (ROD)

Document or Activity	Start	Due Date or End Date	Duration	Predecessor
Preliminary Draft ROD	15-Sep	Wednesday, September 15, 2004	NA	Not Applicable
Proposed Plan Meeting	29-Sep	Wednesday, September 29, 2004	1 day	Not Applicable
Draft ROD	29-Sep	Friday, October 29, 2004	30 days	Not Applicable
Public Review and Comment (Proposed Plan)	15-Sep	Monday, November 15, 2004	60 days	Not Applicable
Responsiveness Summary (Proposed Plan)	15-Nov	Monday, November 29, 2004	14 days	Public Review and Comment
Agency Review and Comment (ROD)	29-Nov	Monday, December 13, 2004	14 days	Responsiveness Summary
On-Board Review	20-Dec	Monday, December 20, 2004	1 days	Agency Review and Comment
Final ROD	20-Dec	Monday, January 03, 2005	14 days	On-Board Review
Signature Process	3-Jan	Wednesday, February 02, 2005	30 days	Final ROD

Track 0 Plug-in B Approval Memorandum (AM)

Document or Activity	Start	Due Date or End Date	Duration	Predecessor
Preliminary Draft AM	29-Sep	Friday, October 29, 2004	30 days	Not Applicable
Internal Review and Comment	29-Oct	Friday, November 05, 2004	7 days	Preliminary Draft AM
Draft AM	5-Nov	Friday, November 19, 2004	14 days	Internal Review and Comment
Agency Review and Comment	19-Nov	Monday, December 20, 2004	31 days	Draft AM
On-Board Review	4-Jan	Tuesday, January 04, 2005	1 day	Agency Review and Comment
Final AM	4-Jan	Tuesday, January 18, 2005	14 days	On-Board Review
Public Review and Comment	18-Jan	Thursday, February 17, 2005	30 days	Final AM

FOST 10 - Track 0 and Track 0 Plug-in B Parcels

Document or Activity	Start	Due Date or End Date	Duration	Predecessor
Preliminary Draft FOST	20-Oct	Wednesday, October 27, 2004	7 days	Not Applicable
Internal Review and Comment	27-Oct	Wednesday, November 03, 2004	7 days	Preliminary Draft FOST
Draft FOST	3-Nov	Wednesday, November 17, 2004	14 days	Internal Review and Comment
Army ELD Review and Comment	17-Nov	Wednesday, November 24, 2004	7 days	Draft FOST
2nd Draft FOST	24-Nov	Wednesday, December 01, 2004	7 days	Army ELD Review and Comment
Agency Review and Comment	1-Dec	Friday, December 31, 2004	30 days	Draft FOST
Draft Final FOST	31-Dec	Friday, January 14, 2005	14 days	Agency Review and Comment
Public Review and Comment	14-Jan	Monday, February 14, 2005	31 days	Draft Final FOST
Finalize FOST	14-Feb	Monday, February 28, 2005	14 days	Public Review and Comment
Signature Process	28-Feb	Monday, March 14, 2005	14 days	Finalize FOST

FOST 10 - Track 0 Plug-in C Approval Memorandum (AM)

Document or Activity	Start	Due Date or End Date	Duration	Predecessor
Preliminary Draft AM	29-Sep	Friday, November 12, 2004	44 days	Not Applicable
Internal Review and Comment	12-Nov	Friday, November 19, 2004	7 days	Preliminary Draft AM
Draft AM	19-Nov	Friday, December 03, 2004	14 days	Internal Review and Comment
Agency Review and Comment	3-Dec	Monday, January 03, 2005	31 days	Draft AM
On-Board Review	17-Jan	Monday, January 17, 2005	1 day	Agency Review and Comment
Final AM	17-Jan	Monday, January 31, 2005	14 days	On-Board Review
Public Review and Comment	31-Jan	Wednesday, March 02, 2005	30 days	Final AM

FOST 9 - Track 0 Plug-in C and Track 1 Parcels

Document or Activity	Start	Due Date or End Date	Duration	Predecessor
Preliminary Draft FOST	19-Nov	Friday, November 19, 2004	NA	Preliminary Draft Plug-in C AM
Internal Review and Comment	19-Nov	Friday, November 26, 2004	7 days	Preliminary Draft FOST
Draft FOST	26-Nov	Friday, December 03, 2004	7 days	Internal Review and Comment
Army ELD Review and Comment	3-Dec	Friday, December 10, 2004	7 days	Draft FOST
2nd Draft FOST	10-Dec	Friday, December 17, 2004	7 days	Army ELD Review and Comment
Agency Review and Comment	17-Dec	Monday, January 17, 2005	31 days	Draft FOST
Draft Final FOST	17-Jan	Wednesday, February 02, 2005	16 days	Agency Review and Comment
Public Review and Comment	2-Feb	Friday, March 04, 2005	30 days	Final ROD signed
Finalize FOST	4-Mar	Friday, March 18, 2005	14 days	Public Review and Comment
Signature Process	18-Mar	Friday, April 01, 2005	14 days	Finalize FOST

Table 1
Potential Excavation Volumes by PRG and HQ
Range 28

PRG (mg/kg)	Low		Medium		High		Very High		Total	
	Area (acre)	Volume (cy)								
total habitat	1.5		0.1		0.6		11.6		13.7	
250	0.4 24%	900 46%	0.03 46%	50	0.2 39%	400	2.5 21%	4,700	3.1 22%	6,050
800	0.4 24%	900 46%	0.03 46%	50	0.2 36%	400	1.8 15%	3,600	2.4 17%	4,950
1,860	0.4 23%	900 46%	0.03 46%	50	0.2 35%	400	1.2 10%	2,600	1.7 13%	3,950

Notes

PRG proposed preliminary remediation goal
HQ habitat quality

