

**SUBJECT: HTW – BCT Meeting**  
**June 17, 2004**  
**1:00 p.m.**

BRAC Conference Room

Check

(✓)

|    | Name              | Organization    | Phone                                    | E-mail address   |
|----|-------------------|-----------------|--|--|
| ✓✓ | Roman Racca       | DTSC            | 916/255-6407                             | <a href="mailto:Rracca@dtsc.ca.gov">Rracca@dtsc.ca.gov</a>                               |
| ✓✓ | Stewart Black     | DTSC            | 916/255-3665                             | <a href="mailto:sblack@dtsc.ca.gov">sblack@dtsc.ca.gov</a>                               |
|    | John Chesnutt     | U.S. EPA        | 415/972-3005                             | <a href="mailto:Chesnutt.john@epa.gov">Chesnutt.john@epa.gov</a>                         |
| ✓✓ | Claire Trombadore | U.S. EPA        | 415/972-3013                             | <a href="mailto:Trombadore.Claire@epa.gov">Trombadore.Claire@epa.gov</a>                 |
| ✓✓ | Grant Himebaugh   | RWQCB           | 805/542-4636                             | <a href="mailto:Ghimebau@rb3.swrcb.ca.gov">Ghimebau@rb3.swrcb.ca.gov</a>                 |
| ✓  | Gail Youngblood   | Fort Ord BRAC   | 831/242-7918                             | <a href="mailto:gail.youngblood@monterey.army.mil">gail.youngblood@monterey.army.mil</a> |
|    | George Siller     | COE             | 916/557-7418                             | <a href="mailto:George.L.Siller@usace.army.mil">George.L.Siller@usace.army.mil</a>       |
| ✓✓ | Glen Mitchell     | COE             | 916/557-7774 or<br>831/884-9925 ext. 232 | <a href="mailto:Glen.Mitchell@usace.army.mil">Glen.Mitchell@usace.army.mil</a>           |
| ✓✓ | Peter Kelsall     | Shaw E & I, Inc | 831/883-5810 ext. 810                    | <a href="mailto:Peter.Kelsall@shawgrp.com">Peter.Kelsall@shawgrp.com</a>                 |
|    | David Eisen       | COE             | 831/393-9692                             | <a href="mailto:David.Eisen@usace.army.mil">David.Eisen@usace.army.mil</a>               |
| ✓  | Derek Lieberman   | Fort Ord BRAC   | 831/242-4873                             | <a href="mailto:Derek.Lieberman@monterey.army.mil">Derek.Lieberman@monterey.army.mil</a> |
| ✓✓ | Ed Ticken         | MACTEC E&C      | 415/884-3176                             | <a href="mailto:ejticken@mactec.com">ejticken@mactec.com</a>                             |
|    | Carlene Merey     | MACTEC E&C      | 415/884-3276                             | <a href="mailto:cmerey@mactec.com">cmerey@mactec.com</a>                                 |

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|-----------|------------------|--------------------|----------------------|--------------------------------------|
| ✓         | Marc Edwards     | COE                | 831/884-9925 ext 244 | <u>Marc.A.Edwards@usace.army.mil</u> |
| ✓✓        | Michael Taraszki | MACTEC E&C         | 415/884-3325         | <u>mdtarascki@mactec.com</u>         |
| ✓         | John Guenza      | Ahtna              | 707/553-1501         | <u>iguenza@ahtna.gov.com</u>         |
| ✓         | Mark Fislser     | Ahtna              | 831/384-3735         | <u>mfislser@ahtna.gov</u>            |
|           | David Smith      | HydroGeologic, Inc | 916/614-8770         | <u>dsmith@hgl.com</u>                |
| ✓✓        | Bob Parkins      | HydroGeologic, Inc | 916/614-8770         | <u>rbparkins@hgl.com</u>             |
| ✓✓        | Kris Escarda     | DTSC               | 916/255-3651         | <u>kescarda@dtsc.ca.gov</u>          |
| ✓✓        | ROY EVANS        | AGL                |                      |                                      |
| ✓         | CENALD ROBINS    | AHTNA              |                      |                                      |

Former Fort Ord  
Agency Meeting Agendas  
June 2004

June 17, 2004 at 1:00 p.m.  
HTW BCT Meeting  
BRAC Conference Room

June 17, 2004 at 9:00 a.m.  
MR BCT Meeting  
BRAC Conference Room

**HTW BCT Meeting**  
**BRAC Conf. Room**

| <b>Item</b>  | <b>Action</b>        | <b>Comment</b> |
|--|----------------------|----------------|
| <b>Operable Unit Carbon Tetrachloride Plume</b>    | <b>Status Update</b> |                |
| <b>Operable Unit Carbon Tetrachloride Soil Gas</b> | <b>Status Update</b> |                |
| <b>OU1 Groundwater Remediation</b>                 | <b>Status Update</b> |                |
| <b>OU2 and 2/12 Treatment Systems</b>              | <b>Status Update</b> |                |
| <b>Site 39 Eco Risk Work</b>                       | <b>Status Update</b> |                |
| <b>Operable Unit 2 Landfill Gas</b>                | <b>Status Update</b> |                |
| <b>Basewide Range Assessment</b>                   | <b>Status Update</b> |                |
| <b>Range 36A Closure Activities</b>                | <b>Status Update</b> |                |
| <b>East Garrison Ranges Interim Action</b>         | <b>Status Update</b> |                |
| <b>FOST/FOSL/FOSET Issues</b>                      | <b>Status Update</b> |                |
| <b>June Open House</b>                             | <b>Discussion</b>    |                |
| <b>Calendar</b>                                    | <b>Update</b>        |                |

**MR BCT Meeting**  
**BRAC Conf. Room**

| <b>Item</b>                  | <b>Action</b> | <b>Comment</b>   |
|------------------------------|---------------|--|
| <b>Action Items</b>          | <b>Update</b> |  |
| <b>Fieldwork Update</b>      | <b>Update</b> | <b>Status of fieldwork variances<br/>Reports status</b>  |
| <b>Interim Action Update</b> | <b>Update</b> | <b>R43-48 burn report status<br/>Planning for MRS-16</b> |
| <b>Track 0 Plug-in</b>       | <b>Update</b> | <b>East Garrison Area 1 status</b>                       |
| <b>Track 1</b>               | <b>Update</b> |  |
| <b>Track 2</b>               | <b>Update</b> |  |
| <b>FFA Schedule</b>          | <b>Update</b> |  |

**Carbon Tetrachloride Soil Vapor Extraction  
Status Summary  
June 17, 2004**

**Shaw Environmental**

**Summary**

- System shut down 6/14 based on asymptotic influent concentrations and >99% mass recovery; projected from last sampling 5/18
- Current conditions to be confirmed by sampling this week
- System will be left in place until data evaluated
- Additional monitoring planned

**Cumulative Operations Summary**

|  |                             |
|--|-----------------------------|
| Total Available Hours Since Start (04/06/04)       | 1664 (9.9 weeks)            |
| Total Hours of Operation                           | 1366 (8.1 weeks equivalent) |
| Percent Utilization (hours operated / Total hours) | 82%                         |

**Data Plots**

Figure 1 presents concentration of carbon tetrachloride in the influent and extraction wells versus cumulative operating hours (log scale).

Figure 2 shows two exponential curves fitted to the data and extrapolated. Last data collected 5/18/04. Both curves show asymptotic state at 1400 hours. Plots will be revised with data collected 6/14.

Figure 3 shows cumulative mass of carbon tetrachloride removed estimated from the exponential decay presented in Figure 2. Both curves indicate that greater than 99 % of the mass has been removed to date.

Figure 4 shows data from deep (80 to 85 ft) monitoring probes. Contours are pre-SVE operation. Last data collected from selected probes on 5/18 shows significant reductions. All probes are being sampled this week.

Figure 5 shows data from shallow (25 to 30 ft) monitoring probes. Last data collected from selected probes on 5/18 shows significant reductions, all probes below 1 ppb. All probes are being sampled this week.

**Possible additional monitoring**

- Additional probes to confirm CT removed on northern boundary
- Monitor for "rebound" in selected probes while SVE shut down

Figure 1  
 Influent and Extraction Well Carbon Tetrachloride Concentrations vs. Total Cumulative Operation Time

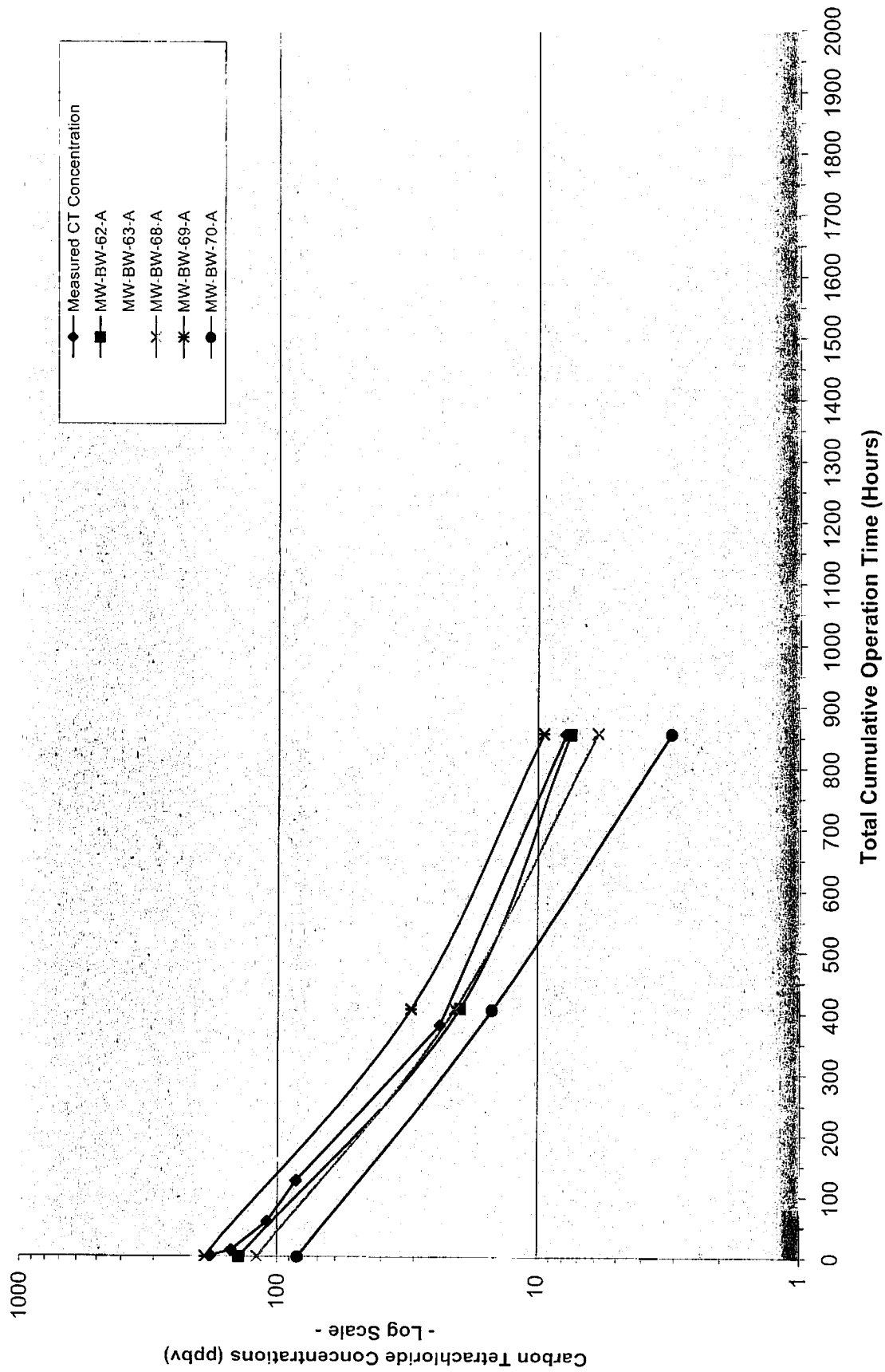


Figure 2  
Exponential Decay Equation Plots and Real Data

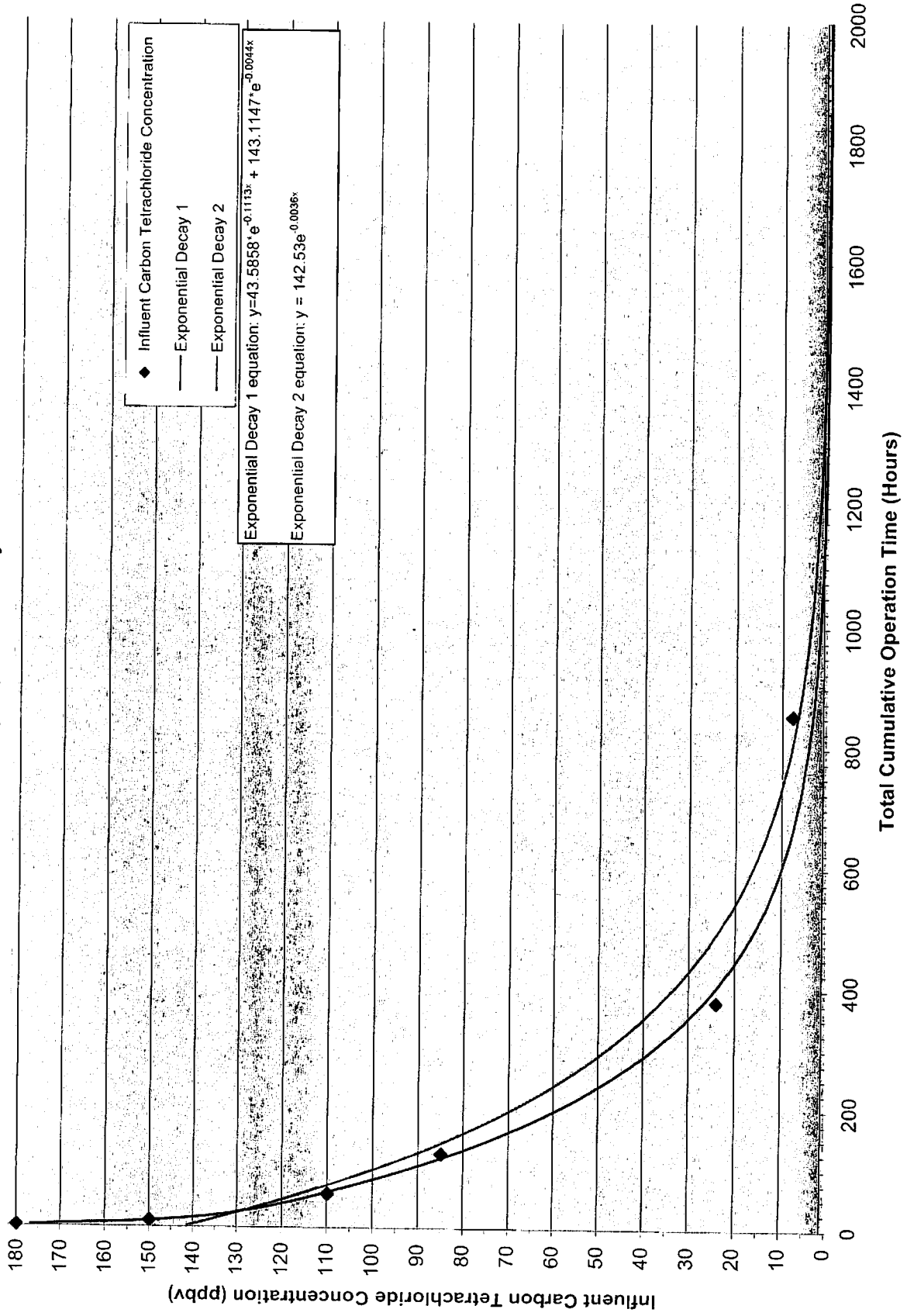
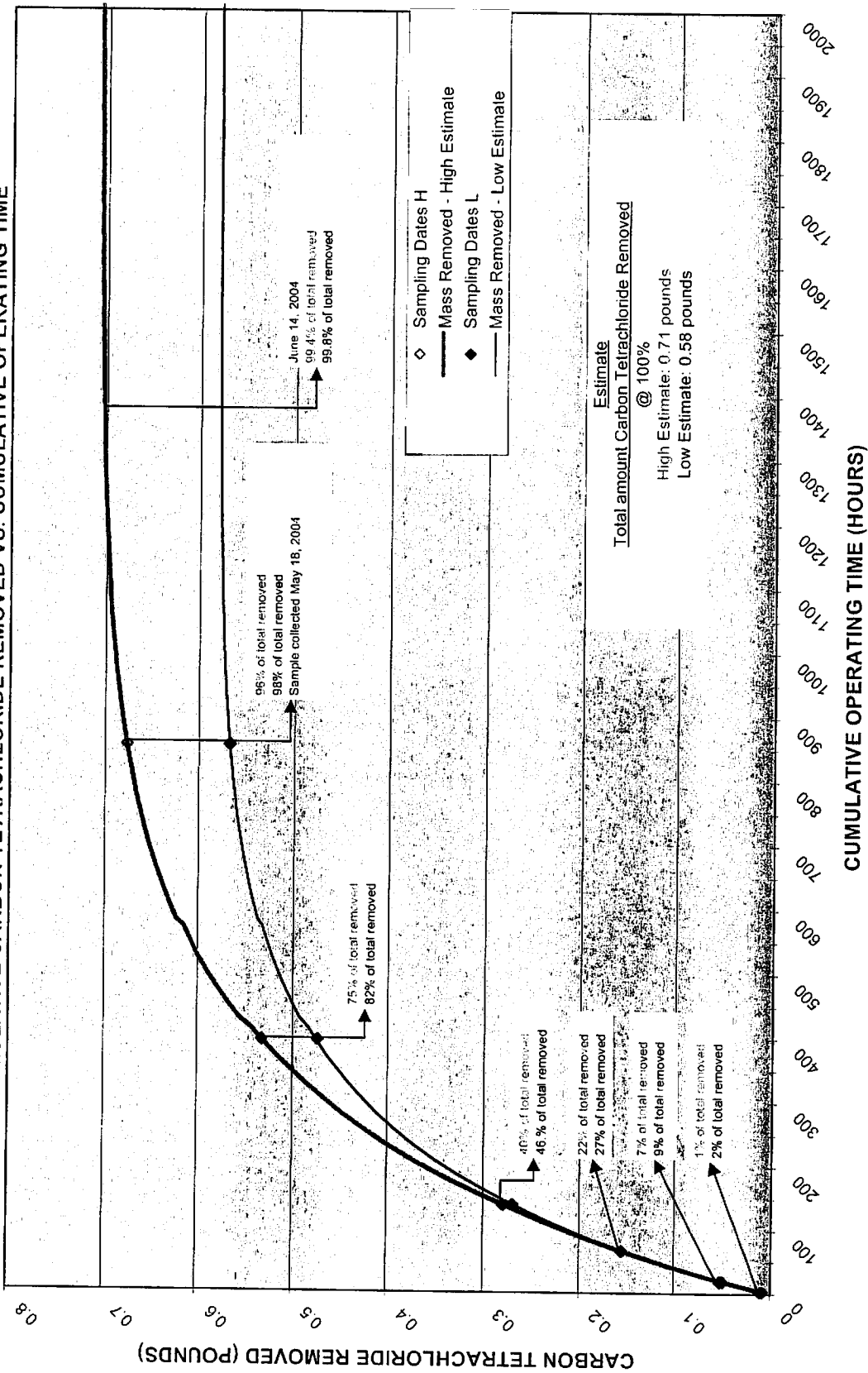




Figure 3  
 CUMULATIVE CARBON TETRACHLORIDE REMOVED VS. CUMULATIVE OPERATING TIME

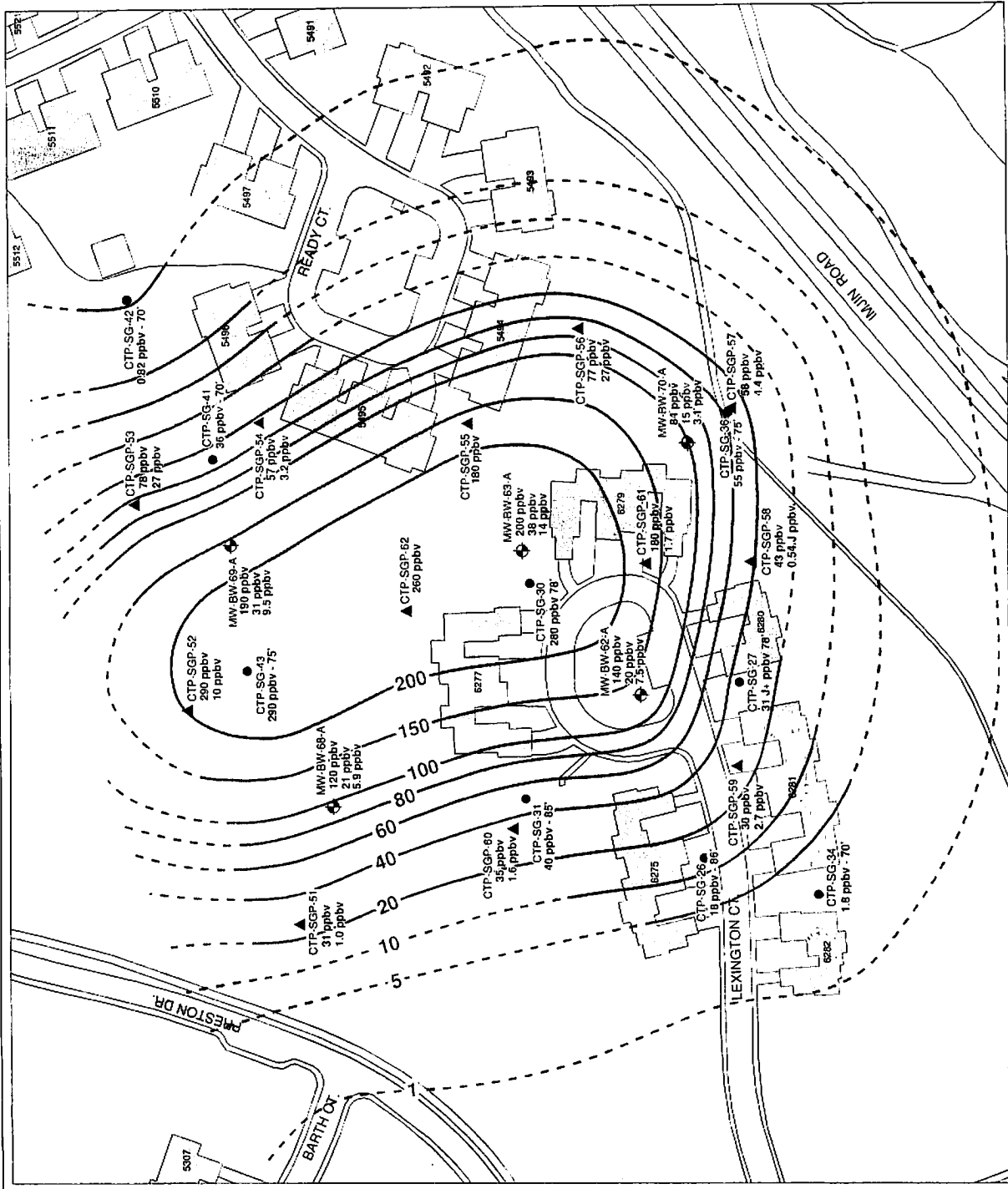
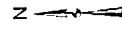


**LEGEND**

- ◆ SOIL VAPOR EXTRACTION WELL
- ▲ DEEP (80-85 FT.) MONITORING PROBE
- TEMPORARY SOIL GAS MONITORING PROBE SAMPLED MARCH TO JUNE 2003
- 280 ppbv - 78' CARBON TETRACHLORIDE CONCENTRATION MARCH, JUNE 2003; DEPTH OF PROBE SHOWN
- 200 ppbv CARBON TETRACHLORIDE CONCENTRATION MARCH 2004
- 38 ppbv CARBON TETRACHLORIDE CONCENTRATION APRIL 2004
- 14 ppbv CARBON TETRACHLORIDE CONCENTRATION MAY 2004
- - - CARBON TETRACHLORIDE CONCENTRATION CONTOURS AT 85 FT. DEPTH (ppbv) PRIOR TO SVE OPERATION; DASHED WHERE INFERRED
- BUILDING

**NOTES:**

1. March Carbon Tetrachloride concentrations measured between 3/29/04 and 4/1/04, before SVE operation.
2. April Carbon Tetrachloride concentrations measured 4/28/04.
3. May Carbon Tetrachloride concentrations measured 5/18/04.
4. J+ is a laboratory qualifier (estimated value).
5. SVE operation started April 6, 2004.



|   |      |             |   |       |
|---|------|-------------|---|-------|
| REVISION  | DATE | DESCRIPTION | BY  | APP'D |
|   |      |             |   |       |
|   |      |             | Designated by the Army<br>Sacramento District, Corps of Engineers<br>Sacramento, California |       |
| <b>Figure 4</b><br><b>CARBON TETRACHLORIDE CONCENTRATIONS</b><br><b>DEEP MONITORING PROBES</b><br><b>OPERABLE UNIT CARBON TETRACHLORIDE</b> |      |             |   |       |
| DESIGNED BY:<br>E. SCHMIDT  |      |             | SCALE: 1" = 100'  |       |
| DRAWN BY:<br>K. BLACK   |      |             | SHEET: 1 OF 1   |       |
| CHECKED BY:<br>P. KELSALL   |      |             | DATE: C-June, 2004, 2003 and  |       |
| SUBMITTED BY:   |      |             | PROJECT:  |       |

**LEGEND**

- ▲ SHALLOW (25-30 FT.) MONITORING PROBE
- TEMPORARY SOIL GAS MONITORING PROBE SAMPLED MARCH TO JUNE 2003
- 18 ppbv · 30' CARBON TETRACHLORIDE CONCENTRATION MARCH-JUNE 2003; PROBE DEPTH SHOWN
- 8.2 ppbv CARBON TETRACHLORIDE CONCENTRATION MARCH 2004
- 11 ppbv CARBON TETRACHLORIDE CONCENTRATION APRIL 2004
- <0.80 ppbv CARBON TETRACHLORIDE CONCENTRATION MAY 2004
- CARBON TETRACHLORIDE CONCENTRATION CONTOURS AT 30 FT. DEPTH (ppbv); PRIOR TO SVE OPERATION
- ▭ BUILDING

**NOTES:**

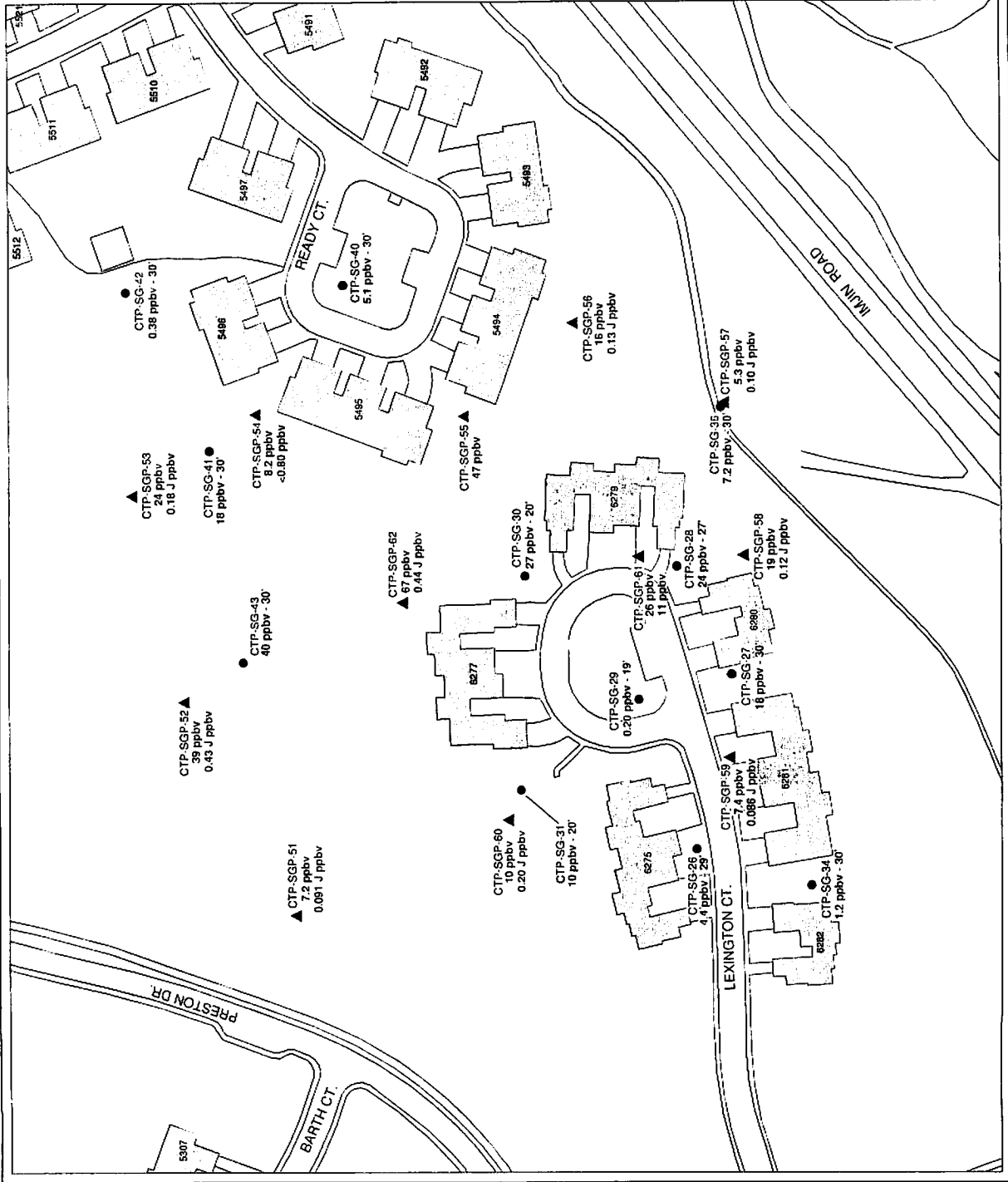
1. March Carbon Tetrachloride concentrations measured between 3/25/04 and 3/31/04, before SVE operation.
2. April Carbon Tetrachloride concentrations measured 4/28/04.
3. May Carbon Tetrachloride concentrations measured 5/18/04 and 5/19/04.
4. J is a laboratory qualifier (estimated value).
5. SVE operation started April 6, 2004.



|          |      |             |
|----------|------|-------------|
| REVISION | DATE | DESCRIPTION |
|          |      |             |
|          |      |             |
|          |      |             |

|   |  |
|---|--|
| SHAW Environmental, Inc.<br>Department of Civil and Environmental Engineering<br>Sacramento, California | Figure 5<br>CARBON TETRACHLORIDE CONCENTRATIONS<br>SHALLOW MONITORING PROBES<br>OPERABLE UNIT CARBON TETRACHLORIDE<br>Former: Fort Ord, California |
| OPERATED BY:<br>E. SCHMIDT<br>DRAWN BY:<br>K. BLACK<br>CHECKED BY:<br>P. KEISALL<br>SUBMITTED BY:       | DATE:  |
| SHEET:  | TOTAL SHEETS:  |
| FILE NAME:  | PROJECT:   |



**BCT Meeting**  
**OU-1 Groundwater Remediation**  
**HydroGeoLogic, Inc.**  
**June 10, 2004**

**Status Update**

- **Planning Documents**

Status of plans submitted for regulatory review on 25 February 2004:

- Draft Sampling and Analysis Plan (SAP) - comments are being addressed
- Draft Site Safety and Health Plan (HSP) – Plan accepted
- Draft Quality Assurance Management Plan (QAMP) – Plan accepted
- Draft Data Management Plan (DMP) – Plan accepted
- Draft O&M Plan Addendum – Plan accepted

Status of plans submitted on 10 February 2004 for internal purposes:

- Draft GFPR Coordination Plan – comments addressed
- Draft Security Emergency Response Contingency Plan – comments are being addressed
- Draft Waste Management and Minimization Plan – comments are being addressed

Natural Resources Management Plan Technical Memorandum: Draft Final Plan – submitted 12 May for review. Review comments being addressed for Final submission in June. Field work for the rare plant survey was conducted during the week of 5 April. The data is being summarized and plotted for use in the Remedial Design.

- **Remedial System Modification**

- The Conceptual System Modification Plan Technical Memorandum (Tech Memo) was submitted to solicit early regulator feedback in order to determine whether or not further regulatory documentation will be required prior to the planning and construction of the modified P&T system. The consensus from the BCT meeting of May 4 was that an Explanation of Significant Differences (ESD) for the proposed treatment concept will not be needed as the proposed system is a “treatment plant extension to improve efficiency and shorten the duration”. HGL will document the background information and conclusion.
- The Draft Remedial System Modification Design Plan (Remedial Design) is nearing completion for submission on/about 16 June. A 60 day review period is scheduled, although an expedited review is encouraged. On site drilling of two new monitoring wells plus two potential operational wells

(extraction and injection) and a piezometer are proposed to start June 16. Drilling permits are being processed and coordination being accomplished with UCNRS/FONR. The two monitoring wells are being placed to better monitor the extent of the migrating plume for data collection. The operating wells will have pump tests done to assist in fine tuning the placement of other wells, determination of potential system extraction rates, and verification of the simulation model.

- **OU-1 GWETS**  
AHTNA continues to perform the weekly O&M visits. Samples of influent, intermediate (between GAC vessels), and effluent process water were collected on 15 April to verify the status of the treatment efficiency. Laboratory analyses indicate 4.9 ppb TCE at Extraction Well 17, 3.2 ppb TCE at the influent port, and "Non Detect" for TCE at the intermediate and effluent ports. A summary report of system performance, gage measurements, and updated volumes of treated water is attached. No problems have been encountered to date.
- **OU-1 LTM**  
The first quarter LTM sampling was performed 24 – 28 March 2004. The results are in and a quarterly report is being written for submission in June.

**FFA Schedule**  
**OU-1**  
**Status Update**

- The Revised OU-1 FFA was accepted at the BCT meeting on 7 April. On 1 June the submission date for the Draft Remedial Design was slipped to 16 June.

**TABLE 2 - OPERATIONAL DATA**

| <b>Date</b>                               | <b>EX-17 Meter Reading</b> | <b>Gallons since previous reading</b> | <b>Average Rate (gpm)</b> | <b>%Uptime</b> |
|---|----------------------------|---------------------------------------|---------------------------|----------------|
| 12/19/2003*                               | 1594750                    | --                                    | --                        | 100            |
| 12/26/2003*                               | 1681520                    | 86,770                                | 8.6                       | 100            |
| 1/14/2004                                 | 1920420                    | 238,900                               | 8.7                       | 100            |
| 1/22/2004                                 | 2020760                    | 100,340                               | 8.7                       | 100            |
| 1/29/2004                                 | 2107940                    | 87,180                                | 8.7                       | 100            |
| 2/5/2004                                  | 2196160                    | 88,220                                | 8.7                       | 100            |
| 2/12/2004                                 | 2283770                    | 87,610                                | 8.7                       | 100            |
| 2/18/2004                                 | 2356280                    | 72,510                                | 8.4                       | 100            |
| 2/28/2004                                 | 2487340                    | 131,060                               | 8.8                       | 100            |
| 3/6/2004                                  | 2574640                    | 87,300                                | 8.7                       | 100            |
| 3/13/2004                                 | 2664480                    | 89,840                                | 9.0                       | 100            |
| 3/20/2004                                 | 2750160                    | 85,680                                | 8.4                       | 100            |
| 3/27/2004                                 | 2838280                    | 88,120                                | 8.7                       | 100            |
| 4/2/2004                                  | 2911460                    | 73,180                                | 8.7                       | 100            |
| 4/9/2004                                  | 2998260                    | 86,800                                | 8.7                       | 100            |
| 4/16/2004                                 | 3087360                    | 89,100                                | 8.7                       | 100            |
| 4/23/2004                                 | 3173100                    | 85,740                                | 8.7                       | 100            |
| 4/30/2004                                 | 3260080                    | 86,980                                | 8.6                       | 100            |
| 5/7/2004                                  | 3347180                    | 87,100                                | 8.7                       | 100            |
| 5/14/2004                                 | 3434990                    | 87,810                                | 8.6                       | 100            |
| 5/21/2004                                 | 3521970                    | 86,980                                | 8.7                       | 100            |
| 5/28/2004                                 | 3609350                    | 87,380                                | 8.7                       | 100            |
| Total Volume Treated since 12/26/04       |                            | 1,927,830                             |                           |                |
| Total Volume Treated since October 1995** |                            | 111,510,830                           |                           |                |

Notes:

\*Final Measurements recorded by AHTNA

\*\*Starting amount of 109.583 million gallons taken from AHTNA's final Bi-Weekly Summary Report dated January 9, 2004

# Former Fort Ord Groundwater Treatment Systems Operational Data

## OU-2

### O & M

Stats for the month of May (5-01-04 to 5-28-04)

Plant operating at 792 gpm (avg.)

Average influent concentration of 9.4 ppb (TCE)

32.047 million gallons treated

### Cumulative Stats:

2.762 billion gallons of water treated

## Sites 2/12

### O & M

Stats for the month of May (5-01-04 to 5-28-04)

Plant operating at 270 gpm (avg.)

Average influent concentration of 9.1 ppb (TCE)

10.84 million gallons treated

### Cumulative Stats:

644.15 million gallons of water treated

1942  
SPECIAL AGENT IN CHARGE

|                          |               |
|--------------------------|---------------|
| NAME                     | WALTER J. ... |
| ADDRESS                  | ...           |
| CITY                     | ...           |
| STATE                    | ...           |
| DATE OF BIRTH            | ...           |
| EDUCATION                | ...           |
| EMPLOYMENT               | ...           |
| CHARACTER OF INFORMATION | ...           |
| DATE OF INFORMATION      | ...           |
| AGENCY                   | ...           |
| REPORTING OFFICER        | ...           |
| STATUS                   | ...           |
| REMARKS                  | ...           |



## Maintenance Items

- Wireless Alarm installation at Sites 2/12 GWTP has been completed.
- Influent Gallery INF-02-180 has been video scanned.
  - Video showed roots in the last 1.5 to 2.0 feet of all the drains.
  - There could be additional growth outside the drains reducing infiltration capacity.
- Leaking OU 2 GAC unit
  - On May 28, 2004, a small leak was observed on the sample port weld in GAC C. The eastern and western extraction well networks were shut down and the northern GAC vessels were isolated.
  - On June 4, 2004, the carbon was removed from the vessel and the GAC unit was inspected, revealing that the weld had corroded. A subcontractor is currently preparing a cost estimate to repair the vessel.
  - The OU 2 GWTP is currently operating at 520 gpm, which is 65
    - 70% of normal operations.

# GWTP O&M

- Annual Evaluation Reports
  - Preliminary Drafts for OU 1, OU 2, and Sites 2/12 will be issued for internal review by June 30.
  - Drafts will go out for agency review by July 15.
  - 2003 Annual Mass Removal Stats
    - Sites 2/12: 44.02 lbs of total COCs removed
    - OU 2: 56.64 lbs of total COCs removed
    - OU 1: 0.19 lbs of total COCs removed.
- Semiannual Groundwater Treatments Systems Evaluation Report will be issued in August.

## **GWTP O&M**

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