AP - 102

2012 AGWMR

03/29/2013

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May 12, 2013

Mr. Glenn von Gonten
Environmental Bureau
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Report of 2012 Groundwater Remediation Activities
Transwestern Pipeline Company
Thoreau Compressor Station
McKinley County, New Mexico
Case # AP-102 (Formerly GW-080)

Dear Glenn,

The enclosed Report of 2012 Groundwater Remediation Activities is submitted for your review and files. This report presents a summary of groundwater monitoring and remediation activities completed since the last report of remediation activities.

If you have any questions or comments regarding this report, please contact me at (281) 797-3420.

Sincerely,

George C. Robinson, PE
President/Principal Engineer

xc w/attachment:

Patrick Antonio	NNEPA
Brandon Powell	NMOCD Aztec District Office
Stacy Boultinghouse	Transwestern (San Antonio TX)
Larry Campbell	Transwestern (Roswell NM)

Report of 2012 Groundwater Remediation Activities

Transwestern Pipeline Company, LLC
Thoreau Station Remediation Site
McKinley County, New Mexico

CASE # AP-102 (Formerly GW-080)

Submitted to:
New Mexico Oil Conservation Division

May 1, 2013

Prepared For:
Transwestern Pipeline Company, LLC
6381 North Main Street
Roswell, NM 88201

Prepared by:
Cypress Engineering Services, Inc.
7171 Highway 6 North, Suite 102
Houston, Texas 77095

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1. Introduction

The last report of groundwater remediation activities covered activities completed through December 2011. This report presents a summary of monitoring and remediation activities completed during calendar year 2012.

2. Groundwater Monitoring Activities

2.1 Groundwater Sampling Events

One annual sampling event was completed since the last report of remediation activities. This event was completed on June 12, 2012. The laboratory reported quality control issues with the PCB analysis for samples collected on June 12, 2012; as a result, additional samples were collected for PCB analysis from wells 5-6C and 5-59 on July 10, 2012.

Prior to sampling, the depth to water, and the depth to hydrocarbon where phase-separated hydrocarbon (PSH) was present, was determined for each monitoring well. The measured depth to water and the corresponding water table elevation for each monitoring well are presented in Table 1.

Groundwater samples were collected from selected monitoring wells at the site and delivered to a laboratory for analysis by EPA Method 8021B for benzene, toluene, ethylbenzene, and xylenes (BTEX), and by EPA Method 8082 for Polychlorinated Biphenyls (PCBs) in accordance with the sampling analysis plan.

A summary of field measured groundwater quality parameters (pH, temperature, electrical conductivity, and dissolved oxygen) obtained in the course of sampling is presented in Table 2. An updated summary of analytical results for BTEX and PCB compounds is presented in Tables 3 and 4, respectively. An updated summary of the quality assurance program results is presented in Table 5.

A copy of the laboratory report for the annual groundwater sampling event is included in Appendix F.

2.2 Results/Conclusions from Groundwater Sampling Events

2.2.1 Occurrence and Direction of Groundwater Flow

A water table elevation map based on measurements obtained in the course of the June 12, 2012 sampling event is included as Figure 3. The apparent direction of groundwater flow is toward the south and is consistent with water table elevation maps previously developed for this site. Hydrographs for selected monitor wells with no accumulated PSH in the well casing are presented in Appendix A.

The water table elevation of the shallow water zone has declined significantly since 1993. This is shown graphically in a hydrograph for monitor wells 5-03B, 5-35B, 5-16B, and 5-24B, included in Appendix A. These four wells are located generally down the centerline (from upgradient to downgradient) of the shallow perched water zone. In addition, individual hydrographs are provided for monitor wells 5-03B, 5-16B, and 5-34B, also included in Appendix A. The

saturated screen depth for each well is also indicated in the hydrographs for individual wells. The saturated screen depth is defined as the height of water above the bottom of the well screen. Well 5-03B is located about 400 feet north-northeast (upgradient) of the hydrocarbon release area; the saturated screen depth has declined 10.2 feet over the last 19 years (from 13.7 feet in April 1993 to 3.5 feet in June 2012). Well 5-34B is located in the immediate vicinity of the release area; the saturated screen depth has declined 13.9 feet over the last 19 years (from 16.1 feet in April 1993 to 2.2 feet in June 2012). Well 5-16B is located about 200 feet south-southeast (downgradient) of the release area; the saturated screen depth has declined 11.6 feet over the last 19 years (from 19.8 feet in April 1993 to 8.2 feet in June 2012).

The decline in the water table elevation is due primarily to two factors: 1) a significant reduction in water use at the facility (including lawn irrigation and discharges to septic systems); and 2) the repair of several water leaks in water distribution lines. Both of these factors occurred between about 1985 and 1993. As a result, since 1993, the water table of the perched zone has been declining toward a more natural state.

2.2.2 Lateral Extent of Phase Separated Hydrocarbon

The occurrence of Phase-Separated Hydrocarbon (PSH) at the site has been very limited. It is currently defined by the presence of PSH (detectible sheen) in wells 5-2C and 5-34B and the absence of PSH in all other wells, see Figure 4. Measured depth to PSH, depth to water, and accumulated PSH thickness versus time for wells 5-02C and 5-34B are presented in Appendix B.

2.2.3 Condition of Affected Groundwater – BTEX Constituents

The primary constituents of concern in affected groundwater are Benzene and PCBs. The lateral distribution of Benzene in groundwater is presented in Figure 5; both the current lateral extent and the historic maximum lateral extent are indicated. Concentration history plots for selected monitoring wells are included in Appendix C.

Groundwater monitoring results indicate that remediation efforts and natural processes, in particular the biodegradation of Benzene, have substantially reduced the area affected by dissolved phase Benzene in groundwater. Presently, affected groundwater extends no more than about 250 feet south of the Transwestern property line; whereas in 1992, affected groundwater extended as much as 900 feet south of the property line. Likewise, the estimated area affected with dissolved phase Benzene declined from a historic maximum extent of approximately 4.4 acres to the present extent of approximately 0.9 acres; a reduction in area of about 80%.

While the lateral extent of Benzene has been substantially reduced, the concentration of Benzene within the immediate release area has remained elevated in wells 5-35B, 5-48B/SVE-3, and 5-16B. This is a result of the decline in the water table. Within the immediate release area, residual PSH is trapped in the finer grained sediments in the transition zone between the surface alluvium and the top of the Chinle Shale at a depth of about 60 feet. As the water table has declined, there is less of a dilution effect from water that was introduced into the perched zone from facility operations.

2.2.4 Condition of Affected Groundwater – PCBs

Low concentrations of PCBs were detected for samples collected from monitoring wells 5-06C, and 5-59 during the June 2012 sampling event. Initially, the laboratory reported quality control

issues with the PCB analysis for samples collected on June 12, 2012. The quality control problem was identified as an error in the post-processing of the raw gas chromatograph (GC) data. The laboratory reprocessed the data and PCB concentrations were reporded as 3.1 ug/L in well 5-06C and 2.6 ug/L in well 5-59. Due to uncertainty of the data quality from the June 2012 results, additional samples were collected for PCB analysis on July 10, 2012. Laboratory results for PCBs for the July 2012 re-samples were reported as 1.2 ug/L in well 5-06C and 1.0 ug/L in well 5-59. The location of wells sampled for PCBs in groundwater is presented in Figure 6. A concentration history plot for PCBs in groundwater is presented in Appendix D.

The detection of low concentrations of PCBs has persisted for samples collected from monitoring wells 5-06C and 5-59; exceptions were for samples collected in September 2008 and September 2011 when sample results indicated non-detect for PCBs. PCBs had not been detected in samples collected from well 5-01C since May 21, 2003. PCBs had not been detected in samples collected from well 5-60 located just 20 feet west of well 5-06C. In addition, PCBs had not been detected in samples collected from well 5-17B located 100 feet downgradient of well 5-06C. Prior to around May 2003, the concentration of PCBs measured in groundwater samples was somewhat erratic. During the period since May 2003, the concentration of PCBs has been relatively low (maximum of 11 ug/L) and considerably more stabilized.

3. Status of Remediation Activities

3.1 Remediation Activities Completed through December 2012

The following remediation activities have been completed since the last report of groundwater remediation activities:

1) One annual groundwater sampling event was completed in June 2012. Selected wells were resampled for PCB analysis in July 2012.

2) Presently, there are no ongoing active remediation activities at the site. The SVE system is still operational, but did not operate during 2012. SVE system monitoring results from prior years had indicated that the VOC content in extracted vapor had declined from an initial concentration of about 1800 ug/L in 1998 to a concentration of about 160 ug/L in 2010 (a 90% reduction in VOC content). A summary of SVE system monitoring results is presented in Table 8; and, a concentration history plot for SVE system sample results is presented in Appendix E. During 2010, the estimated equivalent total liquid recovery rate was about 13 gallons per month; this is based on the average VOC content measured in 2010 of 160 ug/L and the system design extraction rate of 200 scfm. During 2010, the SVE system was configured to utilize five wells for extraction of hydrocarbon laden vapors, see Figure 7. The low effective recovery rate indicates that operation of the SVE system is no longer an effective means for continued remediation at the site. Based on this conclusion, Transwestern did not operate the SVE system during 2012.

3.2 Remediation Activities Planned for 2013

There are no planned active remediation activities other than continued groundwater monitoring. As previously mentioned in section 3.1 above, the existing SVE system is operational, but has been shut down since November 2010 due to its limited effectiveness.

3.3 Other Activities Planned for 2013/2014

Transwestern intends to complete an evaluation of the perched water zone to determine if the zone is by definition an "aquifer" and if the remaining water is by definition "ground water". The Navajo Nation Safe Drinking Water Act defines "aquifer" as follows: "aquifer means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring." Similarly, New Mexico regulation defines "ground water" as follows: "ground water means interstitial water which occurs in saturated earth material and which is capable of entering a well in sufficient amounts to be utilized as a water supply." The quantity of water in the perched water zone has declined substantially since monitoring of shallow groundwater began in 1989. It is suspected that much of the water found in the perched water zone originated from fresh water losses from facility operation. Water losses would have been from water uses such as irrigation of lawns and domestic water discharge to septic systems and also from leaks in the water supply system. Water losses would have declined as residential use of the property declined and leaks in the water supply system were repaired.

4. Planned Modifications and Reporting

4.1 Planned Modifications to the Routine Groundwater Sampling Plan

There are no planned changes to the sampling analysis plan (SAP). Annual sampling will continue in accordance with the SAP presented in Table 6.

4.2 Planned Modifications to the Remediation System

4.2.1 Physical Modifications to the System

There are no planned physical modifications to the remediation system.

4.2.2 Operational Modifications to the System

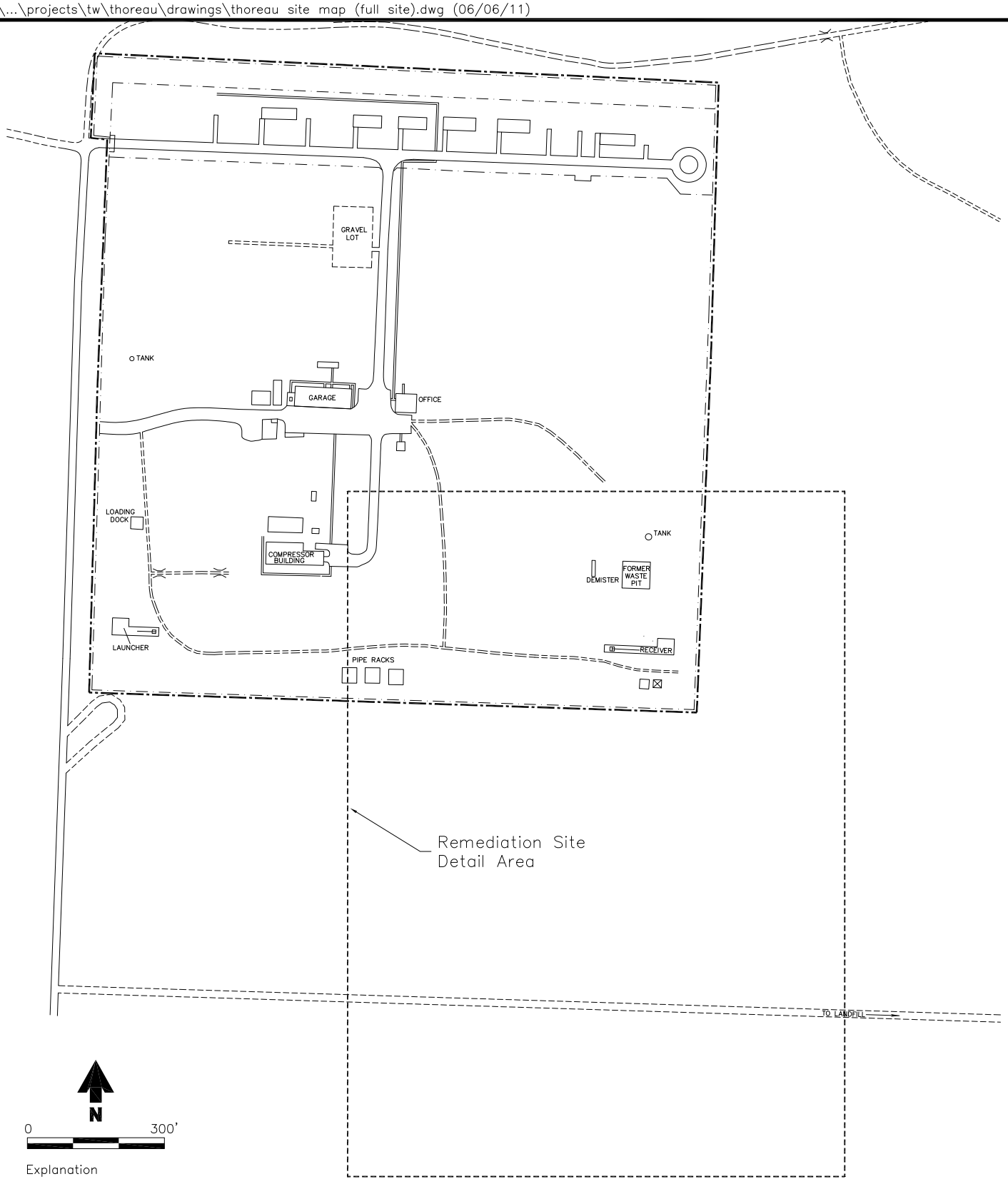
Transwestern does not intend to operate the SVE system during 2013. Subsequent to the 2013 annual sampling event, Transwestern will again evaluate the need for continued active remediation measures, such as restarting the SVE system, and will present any changes in planned operation of the system in the next annual report of groundwater remediation activities.

4.3 Reporting Frequency

Reporting of groundwater monitoring and remediation activities will continue on an annual basis.

FIGURES

f:\...\projects\tw\thoreau\drawings\thoreau site map (full site).dwg (06/06/11)



Explanation

Chainlink Fence

Compressor Station Boundary

Gravel Road

THOREAU COMPRESSOR STATION

Facility Site Map

Figure 1

CYPRESS ENGINEERING SERVICES, INC.

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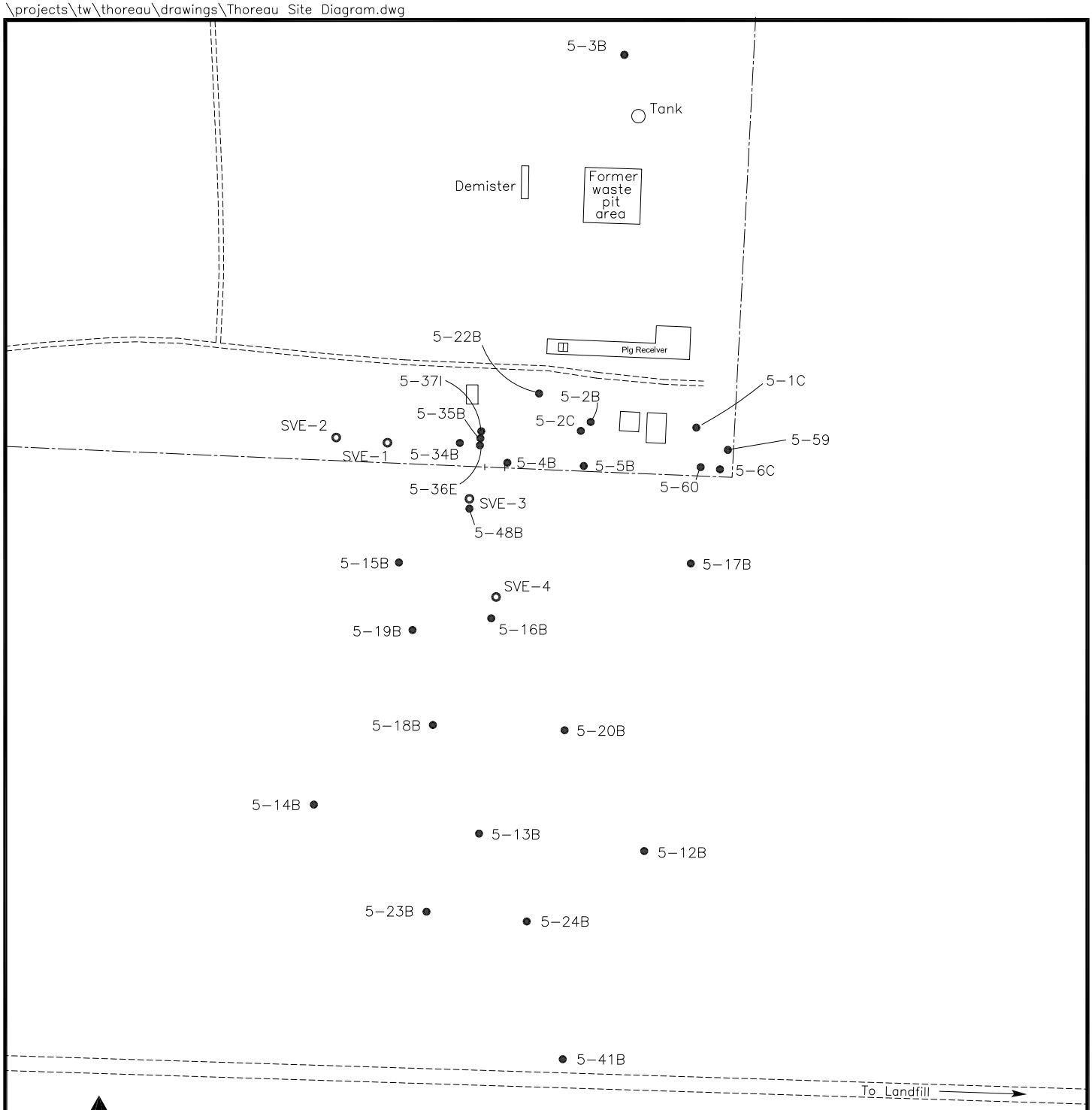

Explanation

- Monitor well
- Soil vapor extraction well
- Compressor station boundary

THOREAU COMPRESSOR STATION

Monitor Well & SVE Well Locations

Figure 2

CYPRESS ENGINEERING SERVICES, INC.

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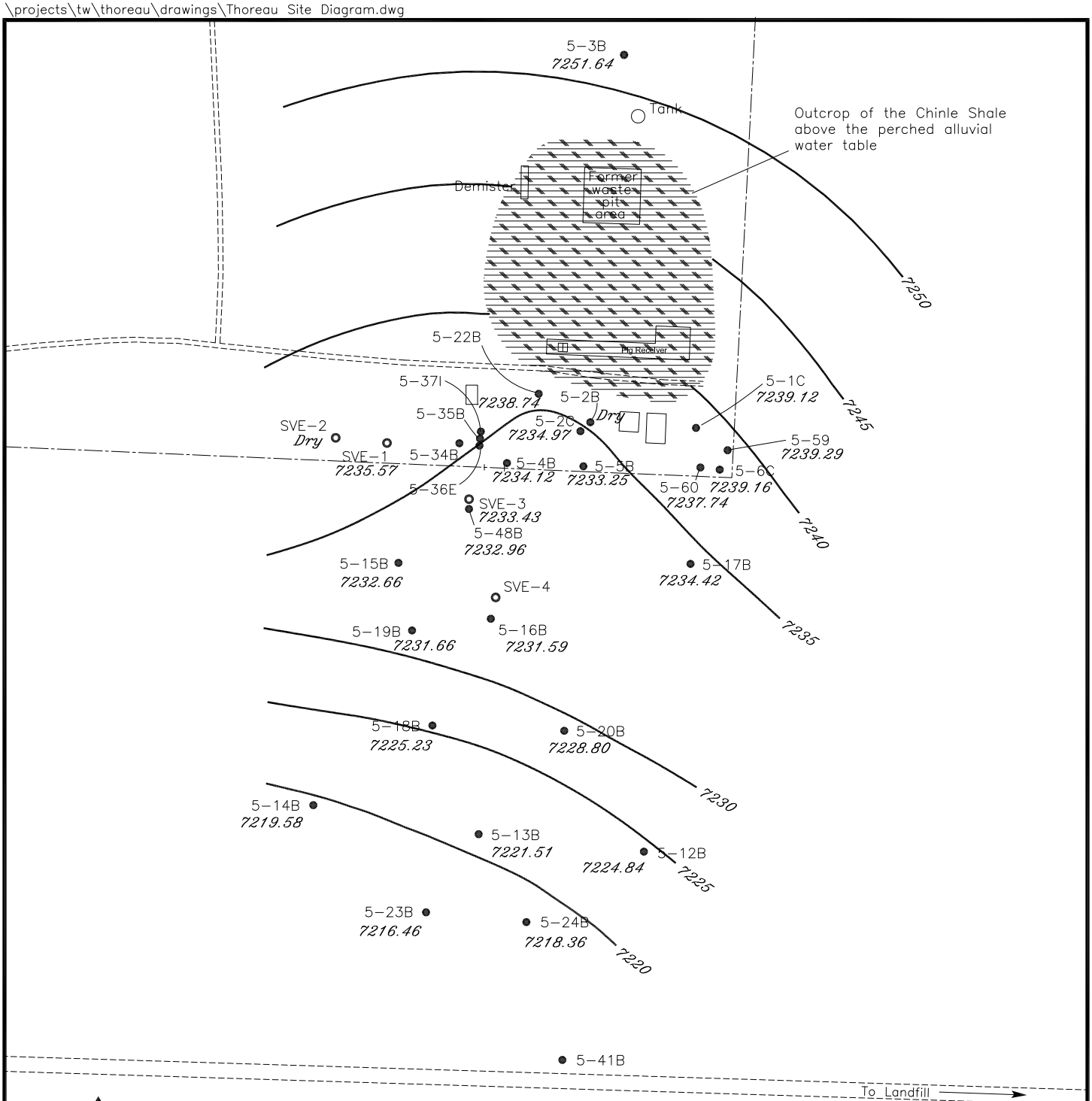

Explanation

- • Monitor well
- o Soil vapor extraction well
- 7221.86 Ground Water Surface Elevation (fmsl)
- NM Not measured
- Compressor station boundary

THOREAU COMPRESSOR STATION

Ground Water Surface Elevation in the Perched Alluvial Aquifer

June 2012

Figure 3

CYPRESS ENGINEERING SERVICES, INC.

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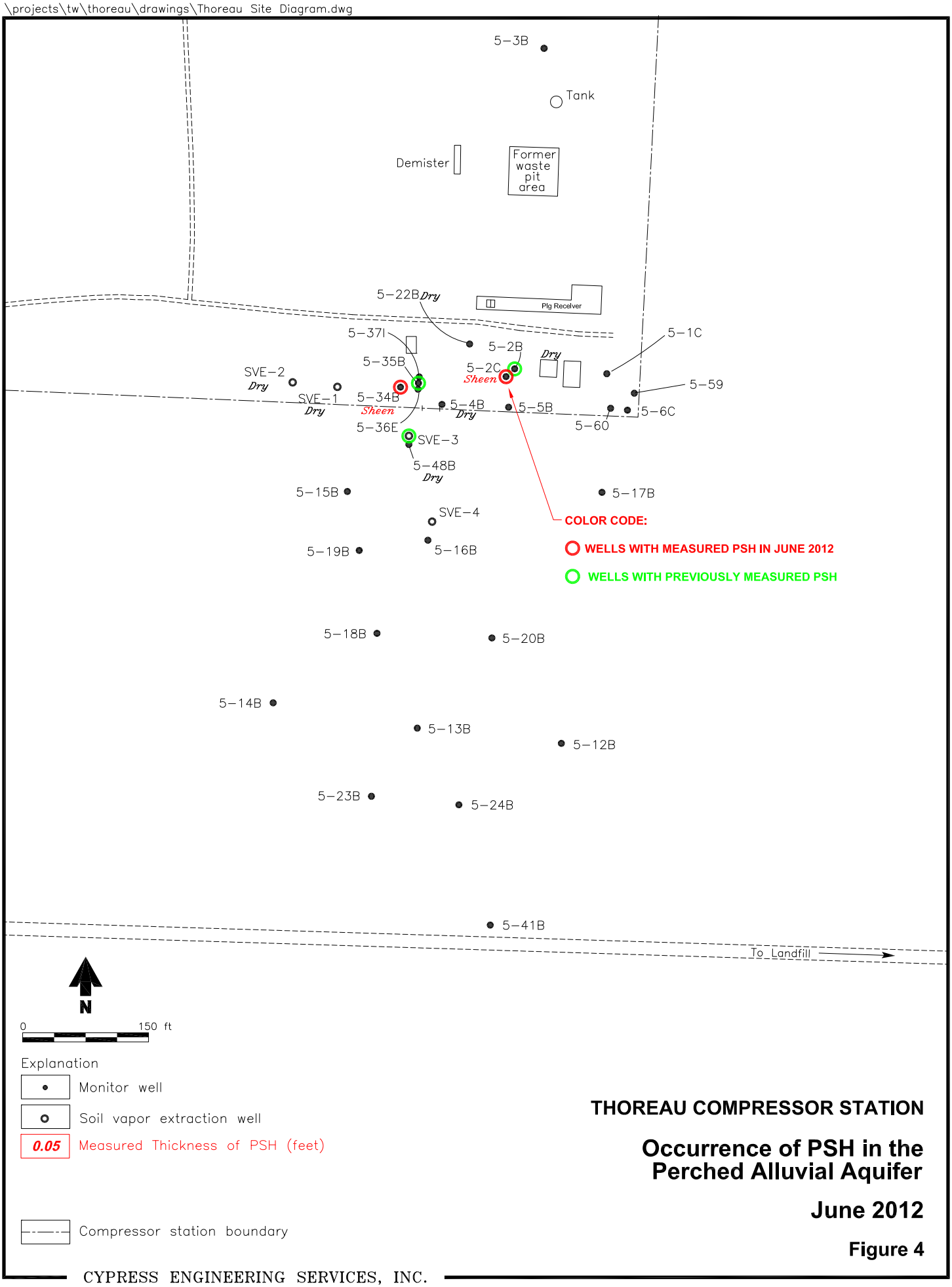

THOREAU COMPRESSOR STATION

Occurrence of PSH in the Perched Alluvial Aquifer

June 2012

Figure 4

CYPRESS ENGINEERING SERVICES, INC.

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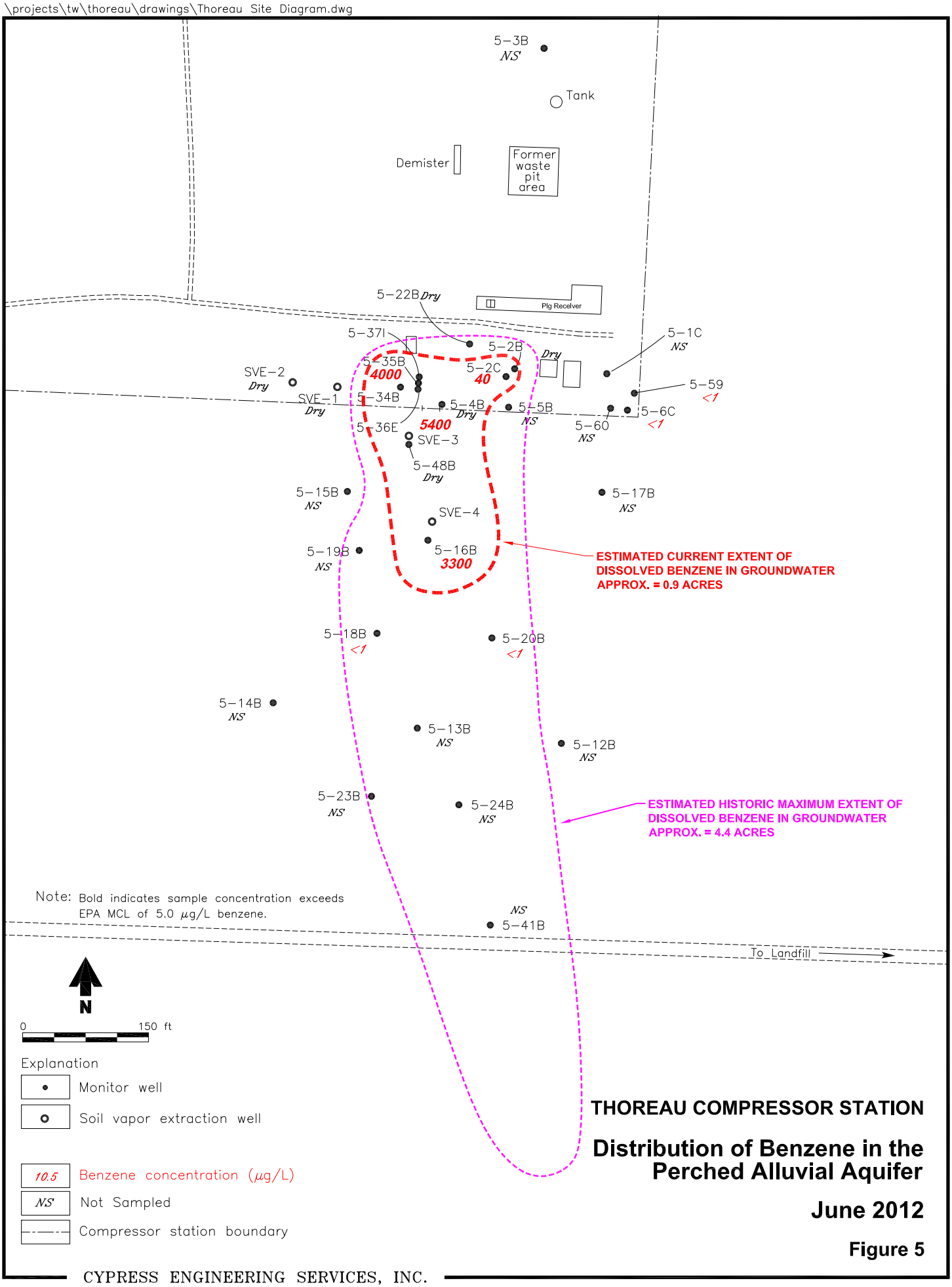

THOREAU COMPRESSOR STATION

Distribution of Benzene in the Perched Alluvial Aquifer

June 2012

Figure 5

CYPRESS ENGINEERING SERVICES, INC.

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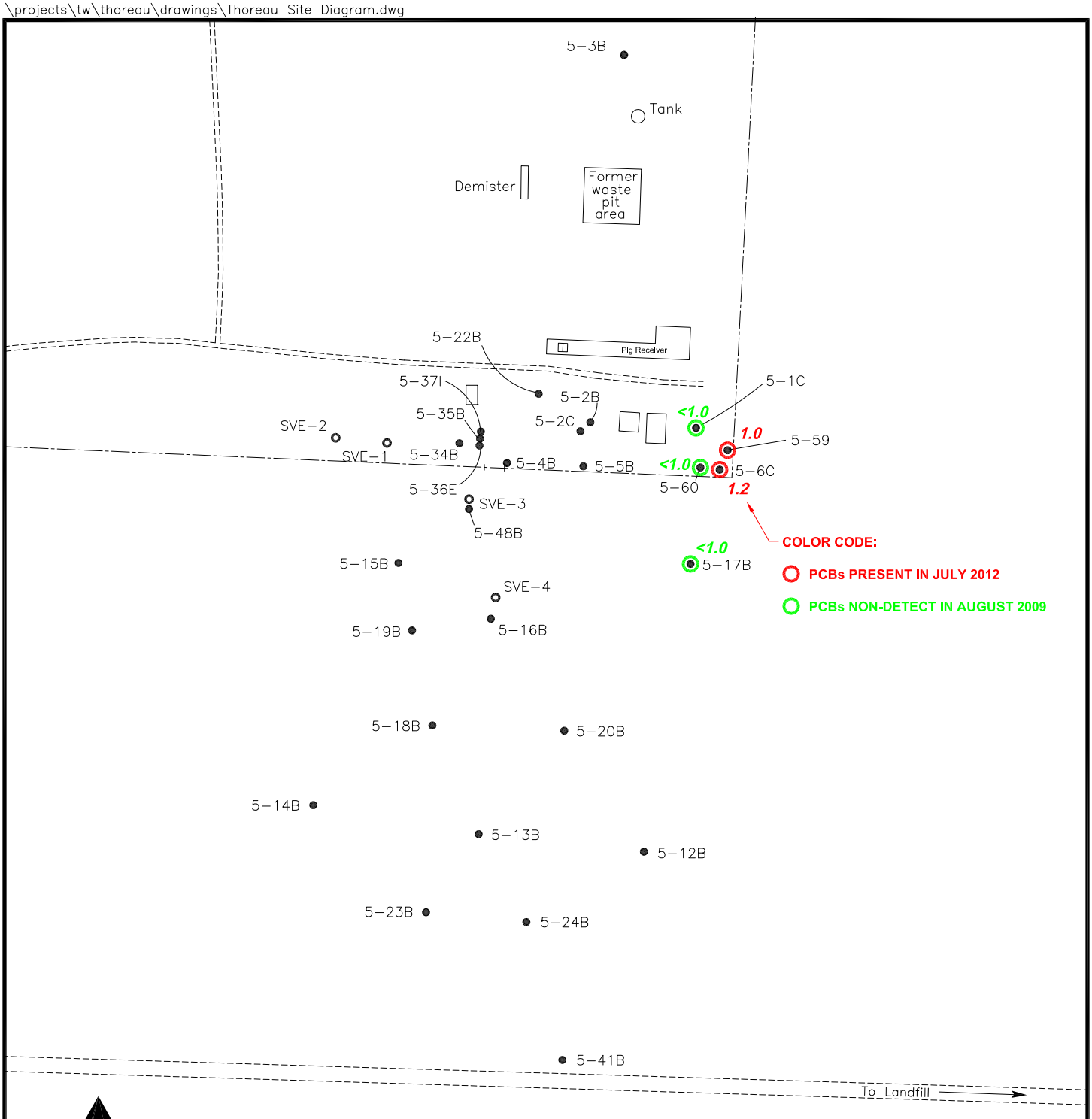

THOREAU COMPRESSOR STATION

Distribution of PCBs in the Perched Alluvial Aquifer

July 2012

Figure 6

CYPRESS ENGINEERING SERVICES, INC.

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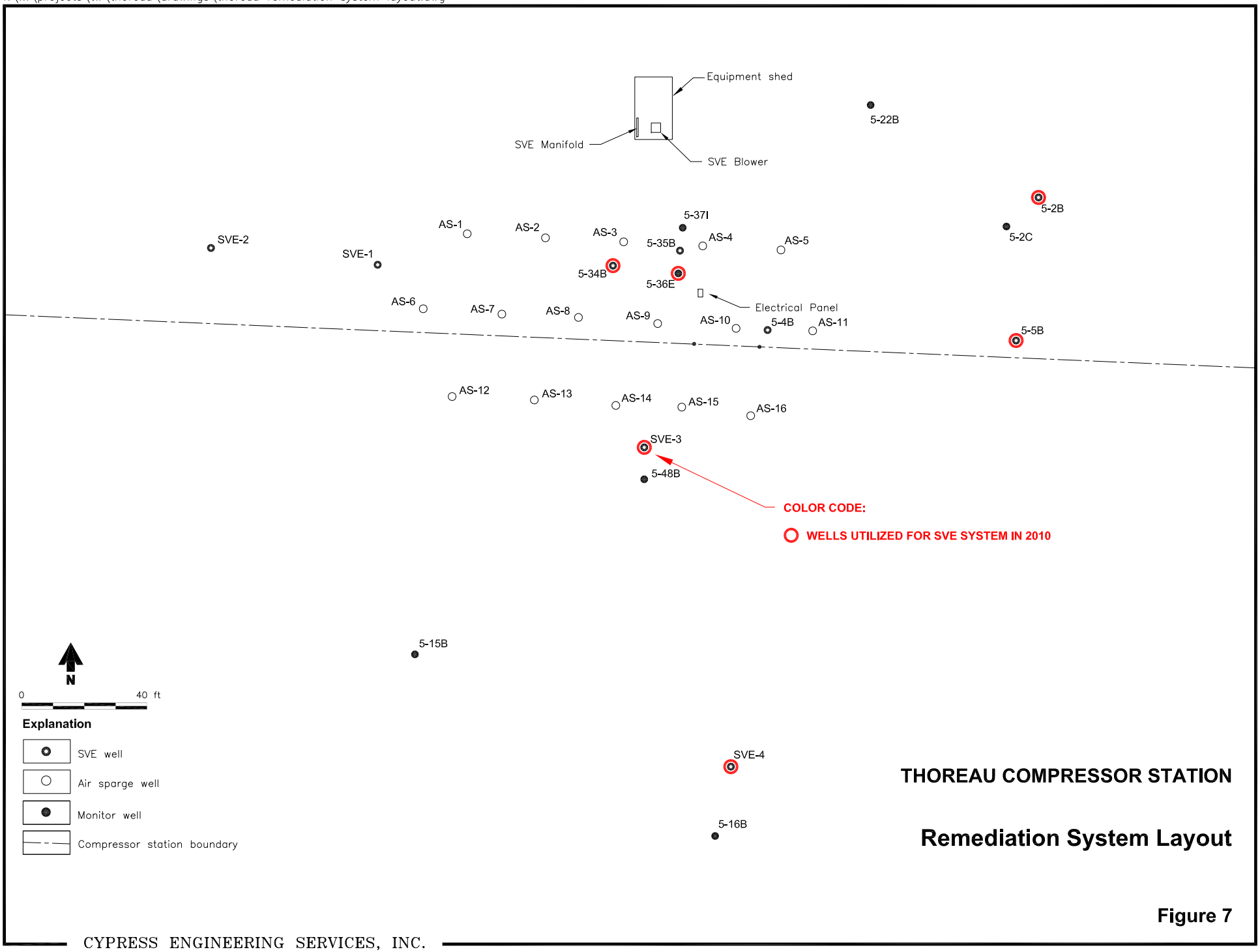


THOREAU COMPRESSOR STATION

Remediation System Layout

Figure 7

CYPRESS ENGINEERING SERVICES, INC.

TABLES

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-01B	7,290.53	08/29/90	---	44.69	---	7245.84
		11/08/90	---	44.70	---	7245.83
		01/08/91	---	44.82	---	7245.71
		02/05/91	---	44.86	---	7245.67
		03/05/91	---	44.91	---	7245.62
		04/10/91	---	44.94	---	7245.59
		05/21/91	---	45.08	---	7245.45
		06/18/91	---	45.15	---	7245.38
		07/23/91	---	45.28	---	7245.25
		09/04/91	---	45.38	---	7245.15
		10/02/91	---	45.52	---	7245.01
		11/06/91	---	45.63	---	7244.90
		12/10/91	---	45.64	---	7244.89
		01/09/92	---	45.61	---	7244.92
		01/27/92	---	45.53	---	7245.00
		02/20/92	---	45.39	---	7245.14
		03/18/92	---	45.18	---	7245.35
		04/29/92	---	44.78	---	7245.75
		10/06/92	---	43.71	---	7246.82
		10/14/92	---	43.67	---	7246.86
		04/19/93	---	42.96	---	7247.57
		11/14/95	---	46.16	---	7244.37
		02/15/96	---	46.64	---	7243.89
		05/21/96	---	47.32	---	7243.21
		11/18/96	---	47.91	---	7242.62
		02/24/97	---	48.31	---	7242.22
		05/19/97	---	48.57	---	7241.96
		08/18/97	---	48.77	---	7241.76
		11/16/97	---	49.03	---	7241.50
5-01C	7,292.11	02/10/98	---	TP	---	---
		04/27/99	---	TP	---	---
		05/10/00	---	51.45	---	7240.66
		11/14/00	---	51.73	---	7240.38
		05/21/01	---	51.85	---	7240.26
		11/16/01	---	52.00	---	7240.11
		04/17/02	---	52.05	---	7240.06
		10/30/02	---	52.23	---	7239.88
		05/21/03	---	52.25	---	7239.86
		11/10/03	---	52.43	---	7239.68
		06/07/04	---	52.53	---	7239.58
		06/08/05	---	52.63	---	7239.48
		07/10/06	---	52.85	---	7239.26
		07/25/07	---	52.93	---	7239.18
		09/22/08	---	53.06	---	7239.05
		08/04/09	---	52.99	---	7239.12
		05/18/10	---	52.99	---	7239.12
		09/25/11	---	52.79	---	7239.32
		06/12/12	---	52.99	---	7239.12

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-02B	7,292.06	08/29/90	---	47.60	---	7244.46
		11/08/90	---	47.72	---	7244.34
		01/11/91	---	47.88	---	7244.18
		02/12/91	---	47.90	---	7244.16
		03/05/91	---	47.93	---	7244.13
		04/11/91	---	47.92	---	7244.14
		05/20/91	---	48.14	---	7243.92
		06/18/91	---	48.23	---	7243.83
		07/24/91	---	48.36	---	7243.70
		09/05/91	---	48.55	---	7243.51
		10/03/91	---	48.62	---	7243.44
		11/05/91	---	48.73	---	7243.33
		12/12/91	---	48.68	---	7243.38
		01/09/92	---	48.58	---	7243.48
		01/28/92	---	48.48	---	7243.58
		02/20/92	---	48.27	---	7243.79
		03/19/92	---	47.98	---	7243.79
		04/29/92	---	47.38	---	7244.68
		10/06/92	---	46.09	---	7245.97
		10/14/92	---	46.07	---	7245.99
		04/19/93	---	45.38	---	7246.68
		04/22/93	---	45.36	---	7246.70
		11/14/95	---	49.32	---	7242.74
		02/15/96	---	49.84	---	7242.22
		05/21/96	---	50.47	---	7241.59
		11/21/96	---	51.66	---	7240.40
		02/24/97	---	TP	---	---
	7,293.24 (a)	02/10/98	---	NM	---	---
		10/11/99	55.70	55.75	0.05	7237.53
		05/10/00	---	55.08	---	7238.16
		11/14/00	---	56.09	---	7237.28
		05/21/01	56.03	56.33	0.30	7237.14
		11/16/01	---	56.36	---	7236.94
		04/17/02	56.27	56.33	0.06	7236.96
		10/30/02	---	56.53	---	7236.91
		05/21/03	---	56.07	---	7237.17
		11/10/03	---	56.89	---	7236.35
		06/07/04	---	dry	---	dry
		06/08/05	---	dry	---	dry
		07/10/06	---	dry	---	dry
		07/25/07	---	dry	---	dry
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	56.36	---	7236.88
		06/12/12	---	dry	---	dry

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-02C	7,291.82	02/10/98	---	53.15	---	7238.67
		06/08/98	---	53.36	---	7238.46
		09/29/98	---	53.88	---	7237.94
		04/27/99	---	54.05	---	7237.77
		08/03/99	---	54.40	---	7237.42
		08/27/99	---	54.47	---	7237.35
		10/11/99	---	54.58	---	7237.24
		02/28/00	---	54.26	---	7237.56
		05/10/00	---	54.07	---	7237.75
		11/14/00	---	54.81	---	7237.01
		05/21/01	---	55.01	---	7236.81
		11/16/01	---	55.25	---	7236.57
		04/17/02	---	55.37	---	7236.45
		10/30/02	---	55.57	---	7236.25
		05/21/03	---	55.81	---	7236.01
		11/10/03	---	56.07	---	7235.75
		06/07/04	---	56.36	---	7235.46
		06/08/05	---	56.68	---	7235.14
		07/10/06	57.47	57.74	0.27	7234.29
		07/25/07	sheen	57.07	sheen	7234.75
		09/22/08	sheen	56.50	sheen	7235.32
		08/04/09	sheen	56.98	sheen	7234.84
		05/18/10	57.25	57.30	0.05	7234.56
		09/25/11	---	56.19	---	7235.63
		06/12/12	sheen	56.77	sheen	7235.05
		07/10/12	sheen	56.85	sheen	7234.97

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-03B	7,303.76	08/29/90	---	43.77	---	7259.99
		01/07/91	---	44.10	---	7259.66
		02/12/91	---	44.12	---	7259.64
		03/05/91	---	44.24	---	7259.52
		04/10/91	---	44.31	---	7259.45
		05/21/91	---	44.53	---	7259.23
		06/18/91	---	44.68	---	7259.08
		07/23/91	---	44.95	---	7258.81
		09/04/91	---	45.14	---	7258.62
		10/02/91	---	45.19	---	7258.57
		11/05/91	---	45.15	---	7258.61
		12/10/91	---	44.90	---	7258.86
		01/09/92	---	44.67	---	7259.09
		01/27/92	---	44.43	---	7259.33
		02/19/92	---	44.19	---	7259.57
		03/17/92	---	43.82	---	7259.94
		04/28/92	---	43.26	---	7260.50
		10/06/92	---	42.06	---	7261.70
		10/07/92	---	42.09	---	7261.67
		04/19/93	---	41.92	---	7261.84
		04/20/93	---	41.98	---	7261.78
		11/14/95	---	46.49	---	7257.27
		02/15/96	---	47.02	---	7256.74
		05/21/96	---	47.54	---	7256.22
		08/12/96	---	47.95	---	7255.81
		11/18/96	---	48.30	---	7255.46
		02/24/97	---	48.68	---	7255.08
		05/19/97	---	48.91	---	7254.85
		08/18/97	---	49.15	---	7254.61
		11/16/97	---	49.34	---	7254.42
		02/10/98	---	49.49	---	7254.27
		06/08/98	---	49.65	---	7254.11
		09/29/98	---	49.80	---	7253.96
		04/27/99	---	49.91	---	7253.85
		10/11/99	---	49.96	---	7253.80
		05/10/00	---	50.08	---	7253.68
		11/14/00	---	50.33	---	7253.43
		05/21/01	---	50.55	---	7253.21
		11/16/01	---	50.74	---	7253.02
		04/17/02	---	50.88	---	7252.88
		10/30/02	---	51.03	---	7252.73
		05/20/03	---	51.31	---	7252.45
		11/10/03	---	51.43	---	7252.33
		06/07/04	---	51.50	---	7252.26
		06/08/05	---	51.77	---	7251.99
		07/10/06	---	52.08	---	7251.68
		07/25/07	---	52.33	---	7251.43
		09/22/08	---	52.40	---	7251.36
		08/04/09	---	52.39	---	7251.37
		05/18/10	---	52.46	---	7251.30
		09/25/11	---	52.13	---	7251.63
		06/12/12	---	52.12	---	7251.64

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-04B	7,292.39	08/29/90	---	48.35	---	7244.04
		11/08/90	---	48.42	---	7243.97
		01/11/91	---	48.42	---	7243.97
		01/31/91	---	48.94	---	7243.45
		03/04/91	---	48.68	---	7243.71
		04/12/91	---	48.79	---	7243.60
		05/21/91	---	49.90	---	7242.49
		06/17/91	---	49.00	---	7243.39
		07/24/91	---	49.15	---	7243.24
		09/04/91	---	49.34	---	7243.05
		10/03/91	---	49.44	---	7242.95
		11/05/91	---	49.50	---	7242.89
		12/12/91	---	48.40	---	7243.99
		01/09/92	---	49.23	---	7243.16
		01/28/92	---	49.11	---	7243.28
		02/19/92	---	48.91	---	7243.48
		03/18/92	---	47.22	---	7245.17
		04/28/92	---	46.65	---	7245.74
		10/06/92	---	46.36	---	7246.03
		10/13/92	---	46.35	---	7246.04
		04/19/93	---	45.77	---	7246.62
		04/21/93	---	45.79	---	7246.60
		11/14/95	---	50.21	---	7242.18
		02/15/96	---	50.82	---	7241.57
	7,292.72 (a)	02/10/98	---	54.70	---	7238.02
		10/11/99	---	55.95	---	7236.77
		05/10/00	---	55.53	---	7237.19
		11/14/00	---	56.48	---	7236.24
		05/21/01	---	56.65	---	7236.07
		11/16/01	---	56.91	---	7235.81
		04/17/02	---	57.10	---	7235.62
		10/30/02	---	57.21	---	7235.51
		05/21/03	---	57.57	---	7235.15
		11/10/03	---	57.81	---	7234.91
		06/07/04	---	58.55	---	7234.17
		06/08/05	---	58.56	---	7234.16
		07/10/06	---	dry	---	dry
		07/25/07	---	dry	---	dry
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	58.19	---	7234.53
		06/12/12	---	58.60	---	7234.12

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5 05B	7,290.83	08/29/90	---	47.50	---	7243.33
		11/08/90	---	47.25	---	7243.58
		01/10/91	---	47.14	---	7243.69
		02/05/91	---	47.20	---	7243.63
		03/05/91	---	47.20	---	7243.63
		04/18/91	---	47.34	---	7243.49
		05/21/91	---	47.44	---	7243.39
		06/18/91	---	47.52	---	7243.31
		07/24/91	---	47.69	---	7243.14
		09/05/91	---	47.83	---	7243.00
		10/02/91	---	47.54	---	7243.29
		11/04/91	---	48.02	---	7242.81
		12/10/91	---	47.94	---	7242.89
		01/09/92	---	47.87	---	7242.96
		01/27/92	---	47.74	---	7243.09
		02/19/92	---	47.58	---	7243.25
		03/17/92	---	47.43	---	7243.40
		04/28/92	---	46.61	---	7244.22
		10/06/92	---	45.39	---	7245.44
		10/12/92	---	45.37	---	7245.46
		04/19/93	---	44.76	---	7246.07
		04/21/93	---	44.75	---	7246.08
		11/14/95	---	48.59	---	7242.24
		02/15/96	---	49.12	---	7241.71
		05/21/96	---	49.71	---	7241.12
		08/12/96	---	50.22	---	7240.61
		11/18/96	---	50.65	---	7240.18
		02/24/97	---	51.14	---	7239.69
	7,292.02 (a)	02/10/98	---	53.51	---	7238.51
		10/11/99	---	55.02	---	7237.00
		05/10/00	---	54.61	---	7237.41
		11/14/00	---	55.23	---	7236.79
		05/21/01	---	55.38	---	7236.64
		11/16/01	---	55.61	---	7236.41
		04/17/02	---	55.76	---	7236.26
		10/30/02	---	56.01	---	7236.01
		05/21/03	---	56.27	---	7235.75
		11/10/03	---	56.53	---	7235.49
		06/07/04	---	56.85	---	7235.17
		06/08/05	---	57.29	---	7234.73
		07/10/06	---	57.74	---	7234.28
		07/25/07	---	57.96	---	7234.06
		09/22/08	---	57.85	---	7234.17
		08/04/09	---	57.15	---	7234.87
		05/18/10	---	58.31	---	7233.71
		09/25/11	---	57.38	---	7234.64
		06/12/12	---	58.77	---	7233.25

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-06B	7,289.30	08/29/90	---	43.47	---	7245.83
		11/08/90	---	43.24	---	7246.06
		01/08/91	---	43.42	---	7245.88
		02/12/91	---	43.50	---	7245.80
		03/05/91	---	43.50	---	7245.80
		04/18/91	---	43.61	---	7245.69
		05/21/91	---	43.66	---	7245.64
		06/18/91	---	43.74	---	7245.56
		07/23/91	---	43.83	---	7245.47
		09/05/91	---	44.00	---	7245.30
		10/03/91	---	44.06	---	7245.24
		11/05/91	---	44.16	---	7245.14
		12/10/91	---	44.17	---	7245.13
		01/09/92	---	44.16	---	7245.14
		01/27/92	---	44.08	---	7245.22
		02/20/92	---	43.94	---	7245.36
		03/18/92	---	43.76	---	7245.54
		04/29/92	---	43.43	---	7245.87
		10/06/92	---	42.52	---	7246.78
		10/14/92	---	42.49	---	7246.81
		04/19/93	---	41.94	---	7247.36
		11/14/95	---	44.64	---	7244.66
		02/15/96	---	44.99	---	7244.31
		05/21/96	---	45.41	---	7243.89
		08/12/96	---	45.65	---	7243.65
		11/18/96	---	45.92	---	7243.38
		02/24/97	---	46.30	---	7243.00
		05/19/97	---	46.54	---	7242.76
		08/18/97	---	46.73	---	7242.57
		11/16/97	---	47.01	---	7242.29
5-06C	7,291.46	02/10/98	---	49.31	---	7242.15
		06/08/98	---	49.52	---	7241.94
		09/29/98	---	49.78	---	7241.68
		04/27/99	---	50.03	---	7241.43
		08/03/99	---	50.15	---	7241.31
		08/27/99	---	50.23	---	7241.23
		10/11/99	---	50.05	---	7241.41
		02/28/00	---	50.18	---	7241.28
		05/10/00	---	50.18	---	7241.28
		11/14/00	---	50.47	---	7240.99
		05/21/01	---	50.62	---	7240.84
		11/16/01	---	49.81	---	7241.65
		04/17/02	---	50.93	---	7240.53
		10/30/02	---	51.11	---	7240.35
		05/21/03	---	51.19	---	7240.27
		11/10/03	---	51.37	---	7240.09
		06/07/04	---	51.45	---	7240.01
		06/08/05	---	51.61	---	7239.85
		07/10/06	---	51.90	---	7239.56
		07/25/07	---	52.09	---	7239.37
		09/22/08	---	52.26	---	7239.20
		08/04/09	---	52.26	---	7239.20
		05/18/10	---	52.16	---	7239.30
		09/25/11	---	52.16	---	7239.30
		06/12/12	---	52.28	---	7239.18
		07/10/12	---	52.30	---	7239.16

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-12B	7,279.61	08/14/90	---	48.85	---	7230.76
		11/15/90	---	48.92	---	7230.69
		01/09/91	---	48.96	---	7230.65
		02/13/91	---	49.00	---	7230.61
		03/07/91	---	49.00	---	7230.61
		04/12/91	---	49.05	---	7230.56
		05/22/91	---	49.12	---	7230.49
		06/19/91	---	49.20	---	7230.41
		07/25/91	---	49.27	---	7230.34
		09/16/91	---	49.37	---	7230.24
		10/09/91	---	49.43	---	7230.18
		01/07/92	---	49.49	---	7230.12
		04/30/92	---	49.07	---	7230.54
		10/06/92	---	48.27	---	7231.34
		10/08/92	---	48.28	---	7231.34
		04/19/93	---	47.45	---	7232.16
		11/14/95	---	49.71	---	7229.90
		02/15/96	---	50.02	---	7229.59
		05/21/96	---	50.31	---	7229.30
		08/12/96	---	50.61	---	7229.00
		11/18/96	---	50.89	---	7228.72
		02/24/97	---	51.24	---	7228.37
		05/19/97	---	51.49	---	7228.12
		08/18/97	---	51.78	---	7227.83
		11/16/97	---	52.07	---	7227.54
		02/10/98	---	52.28	---	7227.33
		06/08/98	---	52.51	---	7227.10
		09/29/98	---	52.78	---	7226.83
		04/27/99	---	53.11	---	7226.50
		10/11/99	---	53.37	---	7226.24
		05/10/00	---	53.36	---	7226.25
		05/21/01	---	53.14	---	7226.47
		11/16/01	---	53.77	---	7225.84
		04/17/02	---	53.68	---	7225.93
		10/30/02	---	53.89	---	7225.72
		05/20/03	---	54.00	---	7225.61
		11/10/03	---	54.09	---	7225.52
		06/07/04	---	54.15	---	7225.46
		06/08/05	---	54.41	---	7225.20
		07/10/06	---	54.60	---	7225.01
		07/25/07	---	54.79	---	7224.82
		09/22/08	---	54.90	---	7224.71
		08/04/09	---	54.95	---	7224.66
		05/18/10	---	54.94	---	7224.67
		09/25/11	---	54.83	---	7224.78
		06/12/12	---	54.77	---	7224.84

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-13B	7,282.43	08/14/90	---	52.43	---	7230.00
		11/15/90	---	52.76	---	7229.67
		01/09/91	---	52.82	---	7229.61
		02/07/91	---	52.89	---	7229.54
		03/07/91	---	52.92	---	7229.51
		04/12/91	---	53.00	---	7229.43
		05/22/91	---	53.06	---	7229.37
		06/19/91	---	53.15	---	7229.28
		07/26/91	---	53.26	---	7229.17
		09/16/91	---	53.36	---	7229.07
		10/10/91	---	53.42	---	7229.01
		01/08/92	---	53.58	---	7228.85
		05/01/92	---	52.88	---	7229.55
		10/06/92	---	51.80	---	7230.63
		10/13/92	---	51.78	---	7230.65
		04/19/93	---	51.08	---	7231.35
		11/14/95	---	53.85	---	7228.58
		02/15/96	---	54.18	---	7228.25
		05/21/96	---	54.52	---	7227.91
		08/12/96	---	54.81	---	7227.62
		11/18/96	---	55.05	---	7227.38
		02/24/97	---	55.37	---	7227.06
		05/19/97	---	55.60	---	7226.83
		08/18/97	---	55.87	---	7226.56
		11/16/97	---	56.13	---	7226.30
		02/10/98	---	56.36	---	7226.07
		06/08/98	---	56.63	---	7225.80
		09/29/98	---	56.90	---	7225.53
		04/27/99	---	57.31	---	7225.12
		10/11/99	---	57.75	---	7224.68
		05/10/00	---	57.90	---	7224.53
		11/14/00	---	58.18	---	7224.25
		05/21/01	---	58.31	---	7224.12
		11/16/01	---	58.47	---	7223.96
		04/17/02	---	58.60	---	7223.83
		10/30/02	---	58.90	---	7223.53
		05/20/03	---	59.08	---	7223.35
		11/10/03	---	59.28	---	7223.15
		06/07/04	---	59.49	---	7222.94
		06/08/05	---	59.50	---	7222.93
		07/10/06	---	60.40	---	7222.03
		07/25/07	---	60.79	---	7221.64
		09/22/08	---	61.14	---	7221.29
		08/04/09	---	61.22	---	7221.21
		05/18/10	---	61.29	---	7221.14
		09/25/11	---	61.19	---	7221.24
		06/12/12	---	60.92	---	7221.51

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-14B	7,285.76	08/14/90	---	55.14	---	7230.62
		11/14/90	---	55.02	---	7230.74
		01/09/91	---	55.12	---	7230.64
		02/07/91	---	55.19	---	7230.57
		03/07/91	---	55.21	---	7230.55
		04/12/91	---	55.64	---	7230.12
		05/22/91	---	55.36	---	7230.40
		06/19/91	---	55.38	---	7230.38
		07/25/91	---	55.54	---	7230.22
		09/16/91	---	55.63	---	7230.13
		10/09/91	---	55.72	---	7230.04
		01/06/92	---	55.74	---	7230.02
		04/30/92	---	55.02	---	7230.74
		10/06/92	---	53.94	---	7231.82
		10/08/92	---	53.93	---	7231.83
		04/19/93	---	53.25	---	7232.51
		11/14/95	---	56.25	---	7229.51
		02/15/96	---	56.62	---	7229.14
		05/21/96	---	57.02	---	7228.74
		08/12/96	---	57.33	---	7228.43
		11/18/96	---	57.64	---	7228.12
		02/24/97	---	58.01	---	7227.75
		05/19/97	---	58.27	---	7227.49
		08/18/97	---	58.56	---	7227.20
		11/16/97	---	58.86	---	7226.90
		02/10/98	---	59.08	---	7226.68
		06/08/98	---	59.41	---	7226.35
		09/29/98	---	59.69	---	7226.07
		04/27/99	---	60.17	---	7225.59
		10/11/99	---	60.43	---	7225.33
		05/10/00	---	60.56	---	7225.20
		11/14/00	---	60.71	---	7225.05
		05/21/01	---	60.77	---	7224.99
		11/16/01	---	60.98	---	7224.78
		04/17/02	---	61.19	---	7224.57
		10/30/02	---	61.55	---	7224.21
		05/20/03	---	61.84	---	7223.92
		11/10/03	---	62.11	---	7223.65
		06/07/04	---	62.36	---	7223.40
		06/08/05	---	62.92	---	7222.84
		07/10/06	---	63.48	---	7222.28
		07/25/07	---	63.95	---	7221.81
		09/22/08	---	64.50	---	7221.26
		08/04/09	---	64.83	---	7220.93
		05/18/10	---	65.15	---	7220.61
		09/25/11	---	65.66	---	7220.10
		06/12/12	---	66.18	---	7219.58

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-15B	7,292.92	08/14/90	---	49.86	---	7243.06
		11/14/90	---	49.98	---	7242.94
		01/10/91	---	50.10	---	7242.82
		02/07/91	---	50.16	---	7242.76
		03/06/91	---	50.17	---	7242.75
		04/10/91	---	50.25	---	7242.67
		05/23/91	---	50.45	---	7242.47
		06/19/91	---	50.54	---	7242.38
		07/25/91	---	50.70	---	7242.22
		09/16/91	---	50.92	---	7242.00
		10/09/91	---	50.95	---	7241.97
		01/07/92	---	50.57	---	7242.35
		04/30/92	---	48.74	---	7244.18
		10/06/92	---	47.75	---	7245.17
		10/08/92	---	47.74	---	7245.18
		04/19/93	---	47.41	---	7245.51
		11/14/95	---	51.84	---	7241.08
		02/15/96	---	52.42	---	7240.50
		05/21/96	---	53.04	---	7239.88
		08/12/96	---	53.52	---	7239.40
		11/18/96	---	53.99	---	7238.93
		02/24/97	---	54.48	---	7238.44
		05/19/97	---	54.60	---	7238.32
		08/18/97	---	55.18	---	7237.74
		11/16/97	---	55.48	---	7237.44
		02/10/98	---	55.70	---	7237.22
		06/08/98	---	56.00	---	7236.92
		09/29/98	---	56.35	---	7236.57
		04/27/99	---	56.55	---	7236.37
		08/03/99	---	57.02	---	7235.90
		08/27/99	---	57.10	---	7235.82
		10/11/99	---	56.98	---	7235.94
		02/28/00	---	56.60	---	7236.32
		05/10/00	---	56.63	---	7236.29
		11/14/00	---	56.78	---	7236.14
		05/21/01	---	57.03	---	7235.89
		11/16/01	---	57.28	---	7235.64
		04/17/02	---	57.56	---	7235.36
		10/30/02	---	57.74	---	7235.18
		05/21/03	---	58.05	---	7234.87
		11/10/03	---	58.36	---	7234.56
		06/07/04	---	58.73	---	7234.19
		06/08/05	---	59.35	---	7233.57
		07/10/06	---	59.99	---	7232.93
		07/25/07	---	60.65	---	7232.27
		09/22/08	---	60.77	---	7232.15
		08/04/09	---	60.81	---	7232.11
		05/18/10	---	60.91	---	7232.01
		09/25/11	---	60.36	---	7232.56
		06/12/12	---	60.26	---	7232.66

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-16B	7,288.82	08/14/90	---	47.21	---	7241.61
		11/14/90	---	47.46	---	7241.36
		01/10/91	---	47.60	---	7241.22
		02/06/91	---	47.62	---	7241.20
		03/06/91	---	47.63	---	7241.19
		04/09/91	---	47.73	---	7241.09
		05/23/91	---	47.87	---	7240.95
		06/18/91	---	47.91	---	7240.91
		07/26/91	---	48.04	---	7240.78
		09/03/91	---	48.17	---	7240.65
		10/11/91	---	48.30	---	7240.52
		11/12/91	---	48.34	---	7240.48
		12/12/91	---	48.22	---	7240.60
		01/08/92	---	48.11	---	7240.71
		02/20/92	---	47.76	---	7241.06
		03/18/92	---	47.43	---	7241.39
		04/29/92	---	46.89	---	7241.93
		10/06/92	---	45.97	---	7242.85
		10/13/92	---	45.95	---	7242.87
		04/19/93	---	45.61	---	7243.21
		04/20/93	---	45.62	---	7243.20
		11/14/95	---	48.88	---	7239.94
		02/15/96	---	49.33	---	7239.49
		05/21/96	---	50.11	---	7238.71
		08/12/96	---	50.41	---	7238.41
		11/18/96	---	50.74	---	7238.08
		02/24/97	---	51.08	---	7237.74
		05/19/97	---	51.35	---	7237.47
		08/18/97	---	51.67	---	7237.15
		11/16/97	---	52.02	---	7236.80
		02/10/98	---	52.16	---	7236.66
		06/08/98	---	52.42	---	7236.40
		09/29/98	---	52.86	---	7235.96
		04/27/99	---	53.02	---	7235.80
		10/11/99	---	53.66	---	7235.16
		05/10/00	---	53.50	---	7235.32
		11/14/00	---	53.52	---	7235.30
		05/21/01	---	53.71	---	7235.11
		11/16/01	---	53.93	---	7234.89
		04/17/02	---	54.11	---	7234.71
		10/30/02	---	54.34	---	7234.48
		05/21/03	---	54.65	---	7234.17
		11/10/03	---	54.94	---	7233.88
		06/07/04	---	55.32	---	7233.50
		06/08/05	---	55.94	---	7232.88
		07/10/06	---	56.57	---	7232.25
		07/25/07	---	57.11	---	7231.71
		09/22/08	---	57.50	---	7231.32
		08/04/09	---	57.56	---	7231.26
		05/18/10	---	57.73	---	7231.09
		09/25/11	---	57.27	---	7231.55
		06/12/12	---	57.23	---	7231.59

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-17B	7,284.75	08/14/90	---	40.79	---	7243.96
		11/15/90	---	40.83	---	7243.92
		01/10/91	---	40.96	---	7243.79
		02/08/91	---	40.99	---	7243.76
		03/06/91	---	41.01	---	7243.74
		04/11/91	---	41.06	---	7243.69
		05/22/91	---	41.14	---	7243.61
		06/18/91	---	41.23	---	7243.52
		07/25/91	---	41.34	---	7243.41
		09/16/91	---	41.50	---	7243.25
		10/09/91	---	41.60	---	7243.15
		01/07/92	---	41.60	---	7243.15
		02/19/92	---	41.46	---	7243.29
		03/17/92	---	41.21	---	7243.54
		04/28/92	---	40.84	---	7243.91
		10/06/92	---	39.97	---	7244.78
		10/07/92	---	39.97	---	7244.78
		04/19/93	---	39.40	---	7245.35
		11/14/95	---	42.06	---	7242.69
		02/15/96	---	42.46	---	7242.29
		05/21/96	---	42.94	---	7241.81
		08/12/96	---	43.33	---	7241.42
		11/18/96	---	43.72	---	7241.03
		02/24/97	---	44.14	---	7240.61
		05/19/97	---	44.44	---	7240.31
		08/18/97	---	44.76	---	7239.99
		11/16/97	---	45.07	---	7239.68
		02/10/98	---	45.30	---	7239.45
		06/08/98	---	45.58	---	7239.17
		09/29/98	---	45.97	---	7238.78
		04/27/99	---	46.36	---	7238.39
		10/11/99	---	46.78	---	7237.97
		05/10/00	---	46.57	---	7238.18
		11/14/00	---	47.19	---	7237.56
		05/21/01	---	47.34	---	7237.41
		11/16/01	---	47.58	---	7237.17
		04/17/02	---	47.70	---	7237.05
		10/30/02	---	48.04	---	7236.71
		05/20/03	---	48.22	---	7236.53
		11/10/03	---	48.51	---	7236.24
		06/07/04	---	48.69	---	7236.06
		06/08/05	---	48.73	---	7236.02
		07/10/06	---	49.71	---	7235.04
		07/25/07	---	49.99	---	7234.76
		09/22/08	---	50.06	---	7234.69
		08/04/09	---	50.50	---	7234.25
		05/18/10	---	50.82	---	7233.93
		09/25/11	---	50.44	---	7234.31
		06/12/12	---	50.33	---	7234.42

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-18B	7,286.41	08/14/90	---	51.67	---	7234.74
		08/24/90	---	51.68	---	7234.73
		11/15/90	---	51.60	---	7234.81
		01/04/91	---	51.66	---	7234.75
		02/13/91	---	51.76	---	7234.65
		03/06/91	---	51.79	---	7234.62
		04/16/91	---	51.90	---	7234.51
		06/19/91	---	52.05	---	7234.36
		07/26/91	---	52.21	---	7234.20
		09/16/91	---	52.35	---	7234.06
		10/11/91	---	52.41	---	7234.00
		01/08/92	---	52.40	---	7234.01
		05/01/92	---	51.38	---	7235.03
		10/06/92	---	50.24	---	7236.17
		10/13/92	---	50.22	---	7236.19
		04/19/93	---	49.68	---	7236.73
		04/22/93	---	49.70	---	7236.71
		11/14/95	---	53.04	---	7233.37
		02/15/96	---	53.49	---	7232.92
		05/21/96	---	53.94	---	7232.47
		08/12/96	---	54.31	---	7232.10
		11/18/96	---	54.64	---	7231.77
		02/24/97	---	55.03	---	7231.38
		05/19/97	---	55.25	---	7231.16
		08/18/97	---	55.51	---	7230.90
		11/16/97	---	55.75	---	7230.66
		02/10/98	---	55.94	---	7230.47
		06/08/98	---	56.18	---	7230.23
		09/29/98	---	56.43	---	7229.98
		04/27/99	---	56.81	---	7229.60
		10/11/99	---	57.26	---	7229.15
		05/10/00	---	57.18	---	7229.23
		11/14/00	---	57.38	---	7229.03
		05/21/01	---	57.47	---	7228.94
		11/16/01	---	57.87	---	7228.54
		04/17/02	---	57.85	---	7228.56
		10/30/02	---	58.16	---	7228.25
		05/20/03	---	58.40	---	7228.01
		11/10/03	---	58.71	---	7227.70
		06/07/04	---	59.03	---	7227.38
		06/08/05	---	59.65	---	7226.76
		07/10/06	---	60.29	---	7226.12
		07/25/07	---	60.82	---	7225.59
		09/22/08	---	61.28	---	7225.13
		08/04/09	---	61.46	---	7224.95
		05/18/10	---	61.61	---	7224.80
		09/25/11	---	61.38	---	7225.03
		06/12/12	---	61.18	---	7225.23

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-19B	7,290.52	08/14/90	---	49.44	---	7241.08
		11/14/90	---	49.76	---	7240.76
		01/10/91	---	49.86	---	7240.66
		02/07/91	---	49.90	---	7240.62
		03/06/91	---	49.92	---	7240.60
		04/09/91	---	50.02	---	7240.50
		05/23/91	---	50.92	---	7239.60
		06/19/91	---	50.23	---	7240.29
		07/26/91	---	50.37	---	7240.15
		09/16/91	---	50.55	---	7239.97
		10/10/91	---	50.60	---	7239.92
		01/08/92	---	50.36	---	7240.16
		02/20/92	---	50.04	---	7240.48
		03/19/92	---	49.60	---	7240.92
		04/29/92	---	48.97	---	7241.55
		10/06/92	---	48.05	---	7242.47
		10/13/92	---	48.04	---	7242.48
		04/19/93	---	47.73	---	7242.79
		11/14/95	---	51.30	---	7239.22
		02/15/96	---	51.75	---	7238.77
		05/21/96	---	52.26	---	7238.26
		08/12/96	---	52.66	---	7237.86
		11/18/96	---	53.02	---	7237.50
		02/24/97	---	53.44	---	7237.08
		05/19/97	---	53.73	---	7236.79
		11/16/97	---	54.29	---	7236.23
		02/10/98	---	54.49	---	7236.03
		06/08/98	---	54.74	---	7235.78
		09/29/98	---	55.05	---	7235.47
		04/27/99	---	55.26	---	7235.26
		08/03/99	---	55.78	---	7234.74
		08/27/99	---	55.87	---	7234.65
		10/11/99	---	55.73	---	7234.79
		02/28/00	---	55.33	---	7235.19
		05/10/00	---	55.39	---	7235.13
		11/14/00	---	55.51	---	7235.01
		05/21/01	---	55.74	---	7234.78
		11/16/01	---	55.96	---	7234.56
		04/17/02	---	56.11	---	7234.41
		10/30/02	---	56.36	---	7234.16
		05/20/03	---	56.60	---	7233.92
		11/10/03	---	56.88	---	7233.64
		06/07/04	---	57.24	---	7233.28
		06/08/05	---	57.84	---	7232.68
		07/10/06	---	58.43	---	7232.09
		07/25/07	---	58.89	---	7231.63
		09/22/08	---	59.24	---	7231.28
		08/04/09	---	59.31	---	7231.21
		05/18/10	---	59.42	---	7231.10
		09/25/11	---	58.95	---	7231.57
		06/12/12	---	58.86	---	7231.66

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-20B	7,284.60	08/14/90	---	48.50	---	7236.10
		01/09/91	---	48.70	---	7235.90
		02/07/91	---	48.79	---	7235.81
		03/07/91	---	48.80	---	7235.80
		04/16/91	---	48.88	---	7235.72
		05/20/91	---	48.92	---	7235.68
		06/19/91	---	49.02	---	7235.58
		07/26/91	---	49.13	---	7235.47
		09/16/91	---	49.25	---	7235.35
		10/10/91	---	49.32	---	7235.28
		01/08/92	---	49.36	---	7235.24
		05/01/92	---	48.48	---	7236.12
		10/06/92	---	47.61	---	7236.99
		10/12/92	---	47.58	---	7237.02
		04/19/93	---	47.26	---	7237.34
		04/21/93	---	47.31	---	7237.29
		11/14/95	---	49.63	---	7234.97
		02/15/96	---	50.03	---	7234.57
		05/21/96	---	50.39	---	7234.21
		08/12/96	---	50.66	---	7233.94
		11/18/96	---	50.99	---	7233.61
		02/24/97	---	51.28	---	7233.32
		05/19/97	---	51.54	---	7233.06
		08/18/97	---	51.88	---	7232.72
		11/16/97	---	52.21	---	7232.39
		02/10/98	---	52.46	---	7232.14
		06/08/98	---	52.62	---	7231.98
		09/29/98	---	52.95	---	7231.65
		04/27/99	---	53.30	---	7231.30
		10/11/99	---	53.78	---	7230.82
		05/10/00	---	53.23	---	7231.37
		11/14/00	---	53.53	---	7231.07
		05/21/01	---	53.62	---	7230.98
		11/16/01	---	53.73	---	7230.87
		04/17/02	---	53.78	---	7230.82
		10/30/02	---	54.04	---	7230.56
		05/20/03	---	54.17	---	7230.43
		11/10/03	---	54.29	---	7230.31
		06/07/04	---	54.45	---	7230.15
		06/08/05	---	54.50	---	7230.10
		07/10/06	---	55.33	---	7229.27
		07/25/07	---	55.74	---	7228.86
		09/22/08	---	56.02	---	7228.58
		08/04/09	---	56.13	---	7228.47
		05/18/10	---	56.15	---	7228.45
		09/25/11	---	55.82	---	7228.78
		06/12/12	---	55.80	---	7228.80

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-22B	7,292.74	10/25/90	---	48.08	---	7244.66
		11/15/90	---	48.08	---	7244.66
		01/10/91	---	48.33	---	7244.41
		02/04/91	---	48.38	---	7244.36
		03/06/91	---	48.42	---	7244.32
		04/11/91	---	48.49	---	7244.25
		05/21/91	---	48.65	---	7244.09
		06/17/91	---	48.76	---	7243.98
		07/24/91	---	49.24	---	7243.50
		09/04/91	---	49.06	---	7243.68
		10/03/91	---	49.19	---	7243.55
		11/04/91	---	49.26	---	7243.48
		12/12/91	---	49.15	---	7243.59
		01/10/92	---	49.00	---	7243.74
		01/28/92	---	48.84	---	7243.90
		02/19/92	---	48.67	---	7244.07
		03/18/92	---	48.24	---	7244.50
		04/28/92	---	47.46	---	7245.28
		10/06/92	---	45.97	---	7246.77
		10/08/92	---	45.98	---	7246.76
		04/19/93	---	45.34	---	7247.40
		05/21/96	---	51.25	---	7241.49
		08/12/96	---	51.91	---	7240.83
		02/27/97	---	52.95	---	7239.79
		05/19/97	---	53.13	---	7239.61
		08/18/97	---	53.51	---	7239.23
		11/16/97	---	53.79	---	7238.95
		09/08/98	---	54.05	---	7238.69
		09/29/98	---	54.16	---	7238.58
		04/27/99	---	dry	---	dry
		10/11/99	---	dry	---	dry
		05/10/00	---	dry	---	dry
		11/14/00	---	dry	---	dry
		05/21/01	---	dry	---	dry
		11/16/01	---	dry	---	dry
		04/17/02	---	dry	---	dry
		10/30/02	---	dry	---	dry
		05/21/03	---	dry	---	dry
		11/10/03	---	dry	---	dry
		06/07/04	---	dry	---	dry
		06/08/05	---	dry	---	dry
		07/10/06	---	dry	---	dry
		07/25/07	---	dry	---	dry
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	53.48	---	7239.26
		06/12/12	---	54.00	---	7238.74

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-23B	7,282.63	10/25/90	---	55.78	---	7226.85
		11/15/90	---	55.75	---	7226.88
		01/03/91	---	55.90	---	7226.73
		02/07/91	---	56.20	---	7226.43
		03/07/91	---	56.02	---	7226.61
		04/16/91	---	56.08	---	7226.55
		05/22/91	---	56.14	---	7226.49
		06/19/91	---	56.17	---	7226.46
		07/25/91	---	56.28	---	7226.35
		09/03/91	---	56.38	---	7226.25
		10/09/91	---	56.47	---	7226.16
		11/11/91	---	56.56	---	7226.07
		12/13/91	---	56.63	---	7226.00
		01/07/92	---	56.58	---	7226.05
		02/18/92	---	56.58	---	7226.05
		03/17/92	---	56.42	---	7226.21
		04/30/92	---	56.12	---	7226.51
		10/06/92	---	55.19	---	7227.44
		10/09/92	---	55.19	---	7227.44
		04/19/93	---	54.56	---	7228.07
		11/14/95	---	57.02	---	7225.61
		02/15/96	---	57.39	---	7225.24
		05/21/96	---	57.79	---	7224.84
		08/12/96	---	58.11	---	7224.52
		11/18/96	---	58.38	---	7224.25
		02/24/97	---	58.75	---	7223.88
		05/19/97	---	59.01	---	7223.62
		08/18/97	---	59.33	---	7223.30
		11/16/97	---	59.66	---	7222.97
		02/10/98	---	59.97	---	7222.66
		06/08/98	---	60.36	---	7222.27
		09/29/98	---	60.73	---	7221.90
		04/27/99	---	61.29	---	7221.34
		10/11/99	---	61.66	---	7220.97
		05/10/00	---	61.88	---	7220.75
		11/14/00	---	62.09	---	7220.54
		05/21/01	---	62.19	---	7220.44
		11/16/01	---	62.33	---	7220.30
		04/17/02	---	62.47	---	7220.16
		10/30/02	---	62.74	---	7219.89
		05/20/03	---	62.94	---	7219.69
		11/10/03	---	63.16	---	7219.47
		06/07/04	---	63.40	---	7219.23
		06/08/05	---	63.93	---	7218.70
		07/10/06	---	64.52	---	7218.11
		07/25/07	---	65.07	---	7217.56
		09/22/08	---	65.63	---	7217.00
		08/04/09	---	65.89	---	7216.74
		05/18/10	---	66.11	---	7216.52
		09/25/11	---	66.23	---	7216.40
		06/12/12	---	66.17	---	7216.46

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-24B	7,279.18	10/25/90	---	53.64	---	7225.54
		11/15/90	---	53.72	---	7225.46
		01/03/91	---	53.76	---	7225.42
		01/09/91	---	53.78	---	7225.40
		02/07/91	---	53.86	---	7225.32
		03/07/91	---	53.86	---	7225.32
		04/16/91	---	53.94	---	7225.24
		05/22/91	---	54.00	---	7225.18
		07/26/91	---	54.15	---	7225.03
		09/03/91	---	54.21	---	7224.97
		10/10/91	---	54.30	---	7224.88
		11/11/91	---	54.38	---	7224.80
		12/13/91	---	54.43	---	7224.75
		01/07/92	---	54.40	---	7224.78
		02/18/92	---	54.40	---	7224.78
		03/17/92	---	54.25	---	7224.93
		04/30/92	---	53.98	---	7225.20
		10/06/92	---	53.06	---	7226.12
		10/13/92	---	53.02	---	7226.16
		04/19/93	---	52.33	---	7226.85
		04/21/93	---	52.33	---	7226.85
		11/14/95	---	54.62	---	7224.56
		02/15/96	---	54.96	---	7224.22
		05/21/96	---	55.38	---	7223.80
		08/12/96	---	55.66	---	7223.52
		11/18/96	---	55.93	---	7223.25
		02/24/97	---	56.26	---	7222.92
		05/19/97	---	56.50	---	7222.68
		08/18/97	---	56.78	---	7222.40
		11/16/97	---	57.07	---	7222.11
		02/10/98	---	57.32	---	7221.86
		06/08/98	---	57.69	---	7221.49
		09/29/98	---	58.03	---	7221.15
		04/27/99	---	58.56	---	7220.62
		10/11/99	---	58.89	---	7220.29
		05/10/00	---	59.04	---	7220.14
		11/14/00	---	59.22	---	7219.96
		05/21/01	---	59.29	---	7219.89
		11/16/01	---	59.38	---	7219.80
		04/17/02	---	59.45	---	7219.73
		10/30/02	---	59.66	---	7219.52
		05/20/03	---	59.79	---	7219.39
		11/10/03	---	59.93	---	7219.25
		06/07/04	---	60.07	---	7219.11
		06/08/05	---	60.41	---	7218.77
		07/10/06	---	60.68	---	7218.50
		07/25/07	---	60.85	---	7218.33
		09/22/08	---	60.96	---	7218.22
		08/04/09	---	61.00	---	7218.18
		05/18/10	---	61.00	---	7218.18
		09/25/11	---	60.89	---	7218.29
		06/12/12	---	60.82	---	7218.36

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-34B	7,294.71	05/12/92	---	48.62	---	7246.09
		05/13/92	---	48.60	---	7246.11
		05/14/92	---	48.58	---	7246.13
		06/19/92	---	48.18	---	7246.53
		07/28/92	---	47.88	---	7246.83
		04/19/93	---	46.98	---	7247.73
		11/14/95	---	52.33	---	7242.38
		10/11/99	58.54	58.56	0.02	7236.17
		05/10/00	57.33	57.35	0.02	7237.38
		11/14/00	---	57.61	---	7237.10
		05/21/01	58.78	58.83	0.05	7235.92
		11/16/01	---	59.26	---	7235.45
		04/17/02	59.09	59.86	0.77	7235.44
		10/30/02	---	60.10	---	7234.61
		05/21/03	59.48	60.72	1.24	7234.93
		11/10/03	---	61.31	---	7233.40
		06/07/04	60.32	61.38	1.06	7234.14
		06/08/05	---	61.26	---	7233.45
		08/05/05	---	61.33	---	7233.38
		07/10/06	61.02	61.56	0.54	7233.56
		07/25/07	62.44	62.97	0.53	7232.14
		09/22/08	61.35	61.40	0.05	7233.35
		08/04/09	61.05	61.06	0.01	7233.66
		05/18/10	61.73	61.78	0.05	7232.97
		09/25/11	---	60.61	---	7234.10
		06/12/12	sheen	60.89	sheen	7233.82
5-35B	7,296.11	05/05/92	---	50.55	---	7245.56
		05/14/92	---	50.32	---	7245.79
		05/30/92	---	50.14	---	7245.97
		06/19/92	---	49.94	---	7246.17
		06/29/92	---	49.81	---	7246.30
		07/24/92	---	49.61	---	7246.50
		08/07/92	---	49.51	---	7246.60
		08/31/92	---	49.35	---	7246.76
		09/15/92	---	49.29	---	7246.82
		09/29/92	---	49.26	---	7246.85
		10/14/92	---	49.20	---	7246.91
		04/19/93	---	48.79	---	7247.32
		04/22/93	---	48.73	---	7247.38
		05/19/97	sheen	56.21	sheen	7240.67
		08/18/97	---	56.41	---	7240.47
	7,295.33 (a)	02/10/98	---	55.79	---	7239.54
		10/11/99	57.15	57.16	0.01	7238.18
		05/10/00	---	56.68	---	7238.65
		11/14/00	---	57.30	---	7238.03
		05/21/01	---	57.51	---	7237.82
		11/16/01	---	57.75	---	7237.58
		04/17/02	---	57.96	---	7237.37
		10/30/02	---	57.97	---	7237.36
		05/21/03	---	58.31	---	7237.02
		11/10/03	---	58.43	---	7236.90
		06/07/04	---	58.69	---	7236.64
		06/08/05	---	58.89	---	7236.44
		07/10/06	---	58.99	---	7236.34
		07/25/07	---	58.97	---	7236.36
		09/22/08	---	58.43	---	7236.90
		08/04/09	---	58.60	---	7236.73
		05/18/10	---	58.72	---	7236.61
		09/25/11	---	57.71	---	7237.62
		06/12/12	---	58.23	---	7237.10

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-41B	7,279.73	10/06/92	---	61.03	---	7218.70
		10/09/92	---	60.99	---	7218.74
		04/19/93	---	60.38	---	7219.35
		04/20/93	---	60.40	---	7219.33
		11/14/95	---	61.90	---	7217.83
		02/15/96	---	62.26	---	7217.47
		05/21/96	---	62.72	---	7217.01
		08/12/96	---	63.12	---	7216.61
		11/18/96	---	63.52	---	7216.21
		02/24/97	---	63.97	---	7215.76
		05/19/97	---	64.36	---	7215.37
		08/18/97	---	64.72	---	7215.01
5-47B	7,268.35	10/06/92	---	62.71	---	7205.64
		10/07/92	---	62.71	---	7205.64
		04/19/93	---	62.18	---	7206.17
		04/20/93	---	62.20	---	7206.15
		11/14/95	---	62.77	---	7205.58
		02/15/96	---	63.27	---	7205.08
		05/21/96	---	63.83	---	7204.52
		08/12/96	---	64.31	---	7204.04
		11/18/96	---	64.75	---	7203.60
		02/24/97	---	TP	---	---
		05/19/97	---	65.39	---	7202.96
		08/18/97	---	66.03	---	7202.32
5-48B	7,292.64	10/06/92	---	46.80	---	7245.84
		10/12/92	---	46.96	---	7245.68
		04/19/93	---	46.52	---	7246.12
		04/21/93	---	46.51	---	7246.13
		11/14/95	---	51.00	---	7241.64
		02/15/96	---	51.60	---	7241.04
		05/21/96	---	52.22	---	7240.42
		08/12/96	---	52.75	---	7239.89
		11/18/96	---	53.24	---	7239.40
		02/24/97	---	53.76	---	7238.88
		05/19/97	---	54.11	---	7238.53
		08/18/97	---	54.49	---	7238.15
		11/16/97	---	54.78	---	7237.86
		09/29/98	---	55.67	---	7236.97
		04/27/99	---	55.93	---	7236.71
		08/03/99	---	56.32	---	7236.32
		08/27/99	---	56.41	---	7236.23
		10/11/99	---	56.44	---	7236.20
		02/28/00	---	56.19	---	7236.45
		05/10/00	---	56.08	---	7236.56
		11/14/00	---	56.35	---	7236.29
		05/21/01	---	56.57	---	7236.07
		11/16/01	---	56.82	---	7235.82
		04/17/02	---	57.05	---	7235.59
		10/30/02	---	57.22	---	7235.42
		05/21/03	---	57.54	---	7235.10
		11/10/03	---	57.82	---	7234.82
		06/07/04	---	58.23	---	7234.41
		06/08/05	---	58.86	---	7233.78
		07/10/06	---	59.44	---	7233.20
		07/25/07	---	59.84	---	7232.80
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	59.65	---	7232.99
		06/12/12	---	59.68	---	7232.96

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
5-57B	7,257.80	04/19/93	---	59.97	---	7197.83
		11/14/95	---	60.21	---	7197.59
		02/15/96	---	60.58	---	7197.22
		05/21/96	---	61.03	---	7196.77
		08/12/96	---	61.44	---	7196.36
		11/18/96	---	61.80	---	7196.00
		02/24/97	---	62.20	---	7195.60
		05/19/97	---	62.51	---	7195.29
		08/18/97	---	62.82	---	7194.98
5-58B	7,279.38	04/19/93	---	64.09	---	7215.29
		11/14/95	---	65.55	---	7213.83
		02/15/96	---	66.16	---	7213.22
		05/21/96	---	66.83	---	7212.55
		08/12/96	---	67.37	---	7212.01
		11/18/96	---	67.86	---	7211.52
		02/24/97	---	68.42	---	7210.96
		05/19/97	---	68.82	---	7210.56
		08/18/97	---	69.21	---	7210.17
5-59	7,290.82	11/16/01	---	49.97	---	7240.85
		04/17/02	---	50.07	---	7240.75
		10/30/02	---	50.29	---	7240.53
		05/21/03	---	50.38	---	7240.44
		11/10/03	---	50.57	---	7240.25
		06/07/04	---	50.66	---	7240.16
		06/08/05	---	50.84	---	7239.98
		07/10/06	---	51.12	---	7239.70
		07/25/07	---	51.32	---	7239.50
		09/22/08	---	51.50	---	7239.32
		08/04/09	---	51.49	---	7239.33
		05/18/10	---	51.42	---	7239.40
		09/25/11	---	51.40	---	7239.42
		06/12/12	---	51.51	---	7239.31
		07/10/12	---	51.53		7239.29
5-60	7,290.83	11/16/01	---	52.01	---	7238.82
		04/17/02	---	52.07	---	7238.76
		10/30/02	---	52.27	---	7238.56
		05/21/03	---	52.33	---	7238.50
		11/10/03	---	52.51	---	7238.32
		06/07/04	---	52.60	---	7238.23
		06/08/05	---	52.75	---	7238.08
		07/10/06	---	52.97	---	7237.86
		07/25/07	---	53.10	---	7237.73
		09/22/08	---	53.26	---	7237.57
		08/04/09	---	53.30	---	7237.53
		05/18/10	---	53.17	---	7237.66
		09/25/11	---	52.83	---	7238.00
		06/12/12	---	53.09	---	7237.74

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
SVE-1	7,296.88	02/10/98	---	58.35	---	7238.53
		10/11/99	---	59.28	---	7237.60
		05/10/00	---	58.78	---	7238.10
		11/14/00	---	59.07	---	7237.81
		11/16/01	---	59.83	---	7237.05
		04/17/02	---	60.01	---	7236.87
		10/30/02	---	60.20	---	7236.68
		05/21/03	---	60.54	---	7236.34
		11/10/03	---	60.84	---	7236.04
		06/07/04	---	61.16	---	7235.72
		06/08/05	---	61.46	---	7235.42
		07/10/06	---	dry	---	dry
		07/25/07	---	dry	---	dry
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	61.39	---	7235.49
		06/12/12	---	61.31	---	7235.57
SVE-2	7,297.68	02/10/98	---	58.85	---	7238.83
		10/11/99	---	59.57	---	7238.11
		05/10/00	---	58.99	---	7238.69
		11/14/00	---	59.29	---	7238.39
		11/16/01	---	60.14	---	7237.54
		04/17/02	---	60.28	---	7237.40
		10/30/02	---	60.49	---	7237.19
		05/21/03	---	60.83	---	7236.85
		11/10/03	---	61.18	---	7236.50
		06/07/04	---	61.49	---	7236.19
		06/08/05	---	61.67	---	7236.01
		07/10/06	---	dry	---	dry
		07/25/07	---	dry	---	dry
		09/22/08	---	dry	---	dry
		08/04/09	---	dry	---	dry
		05/18/10	---	dry	---	dry
		09/25/11	---	61.57	---	7236.11
		06/12/12	---	dry	---	dry
SVE-3	7,293.68	02/10/98	---	56.24	---	7237.44
		10/11/99	---	57.42	---	7236.26
		11/16/01	---	57.81	---	7235.87
		04/17/02	---	58.01	---	7235.67
		10/30/02	---	58.18	---	7235.50
		05/21/03	---	58.49	---	7235.19
		11/10/03	---	58.76	---	7234.92
		06/07/04	---	59.15	---	7234.53
		06/08/05	---	60.42	---	7233.26
		07/10/06	60.05	60.71	0.66	7233.47
		07/25/07	60.51	60.52	0.01	7233.17
		09/22/08	---	60.53	---	7233.15
		08/04/09	---	60.08	---	7233.60
		05/18/10	---	60.91	---	7232.77
		09/25/11	---	60.13	---	7233.55
		06/12/12	---	60.25	---	7233.43

Table 1. Summary of Groundwater Level Data
Thoreau Station Remediation Site

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to PSH (ft below MP)	Depth to Ground Water (ft below MP)	PSH Thickness (ft)	Ground Water Elevation (fmsl)
SVE-4	7,289.83	02/10/98	---	52.91	---	7236.92
		10/11/99	---	54.48	---	7235.35
		11/16/01	---	54.75	---	7235.08
		04/17/02	---	54.94	---	7234.89
		10/30/02	---	55.19	---	7234.64
		05/21/03	---	55.48	---	7234.35
		11/10/03	---	55.75	---	7234.08
		06/07/04	---	56.14	---	7233.69
		06/08/05	---	56.79	---	7233.04
		07/10/06	---	57.45	---	7232.38
		07/25/07	---	57.94	---	7231.89
		09/22/08	---	58.31	---	7231.52
		08/04/09	---	58.36	---	7231.47
		05/18/10	---	58.57	---	7231.26
		09/25/11	---	58.10	---	7231.73
		06/12/12	---	58.03	---	7231.80
5-37I	7,296.31	10/11/99	---	58.90	---	7237.41
		05/10/00	---	58.46	---	7237.85
		11/14/00	---	58.99	---	7237.32
		11/16/01	---	59.46	---	7236.85
		04/17/02	---	59.64	---	7236.67
		10/30/02	---	59.71	---	7236.60
		05/21/03	---	59.94	---	7236.37
		11/10/03	---	60.14	---	7236.17
		06/07/04	---	60.33	---	7235.98
		06/08/05	---	60.37	---	7235.94
		07/10/06	---	60.47	---	7235.84
		07/25/07	---	60.45	---	7235.86
		09/22/08	---	59.93	---	7236.38
		08/04/09	---	60.28	---	7236.03
		05/18/10	---	60.18	---	7236.13
		09/25/11	---	59.15	---	7237.16
		06/12/12	---	59.71	---	7236.60
5-36E	7,296.56	10/11/99	---	60.76	---	7235.80
		05/10/00	---	59.76	---	7236.80
		11/14/00	---	59.25	---	7237.31
		11/16/01	---	61.31	---	7235.25
		04/17/02	---	61.51	---	7235.05
		10/30/02	---	61.59	---	7234.97
		05/21/03	---	61.46	---	7235.10
		11/10/03	---	61.86	---	7234.70
		06/07/04	---	62.30	---	7234.26
		06/08/05	---	62.62	---	7233.94
		07/10/06	---	62.83	---	7233.73
		07/25/07	---	62.93	---	7233.63
		09/22/08	---	62.46	---	7234.10
		08/04/09	---	61.84	---	7234.72
		05/18/10	---	63.11	---	7233.45
		09/25/11	---	61.82	---	7234.74
		06/12/12	---	62.25	---	7234.31

MP = Measuring point
fmsl = Feet above mean sea level
NM = Not measured
TP = Tagged top of pump
(a) Measuring point elevation adjusted for addition of SVE extraction point tee at surface.

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-01B	11/21/95	3.8	7.37	12.8	1314	Muddy, no odor
	02/21/96	7.5	7.40	11.9	960	Turbid, no odor
	02/27/97	4.57	7.49	7.7	820	Turbid
	08/20/97	NM	7.29	14.7	1312	Turbid, no odor
5-01C	11/23/97	5.5	7.59	14.9	1252	Clear
	02/12/98	3.4	7.86	11.3	1137	Clear
	04/29/99	--/2.8	7.67	13.1	1262	Clear
	05/12/00	0.0/1.2	7.57	12.8	1390	Clear
	05/22/01	2.6/2.6	7.48	14.0	1510	Clear
	04/20/02	3.2	7.50	14.5	1494	Clear
	05/21/03	3.5	7.43	15.7	1571	Clear
	06/07/04	2.7	7.43	14.5	1637	Clear
	06/08/05	---	7.39	14.1	1658	---
	07/11/06	3.3	7.28	13.4	1318	Clear
	07/25/07	3.3	7.61	13.4	1300	Clear
	09/23/08	3.0	7.88	13.0	1310	Clear
	08/04/09	3.9	7.08	14.2	1718	Cloudy
5-02B	11/21/95	2.1	6.89	14.5	920	Slightly cloudy, HC odor
	02/22/96	4.0	7.14	11.9	1010	Colorless, suspended black silt, HC odor
	02/28/97	2.17	7.20	9.6	990	Clear
5-02C	11/24/97	3.0	7.24	12.5	1439	Turbid, Reddish
	02/11/98	0.9	7.24	10.1	1397	Clear
	04/28/99	--/0.8	7.10	13.4	1756	Clear, Strong HC odor
	05/13/00	0.9	7.11	13.4	1821	Clear, strong odor
	05/24/01	2.6/1.6	7.11	15.8	1800	Clear, odor
	04/20/02	1.5	7.15	15.0	1829	Cloudy, sweet odor
	05/22/03	1.2	7.10	16.4	1833	Cloudy, odor
	06/08/04	1.3	7.04	15.9	1934	Clear
	06/09/05	---	7.04	14.3	1984	---
	09/25/11	--	--	--	--	sheen, odor, very turbid, bailing down
	07/10/12	--	--	--	--	sheen, odor, very turbid, bailing down
5-03B	11/15/95	8.0	7.59	14.0	860	Clear, no odor
	05/20/96	7.0b	8.26	13.4	1282	Turbid
	02/24/97	5.74/7.0	7.77	10.2	980	Turbid
	02/10/98	8.17	7.36	12.5	1000	Turbid
	04/27/99	8.6	7.72	13.8	1357	Redish silt, Turbid
	05/11/00	7.6/7.5	7.78	13.1	1311	Redish turbid
	05/22/01	8.5/8.0	7.79	14.1	1314	Redish turbid
	04/18/02	8.2	7.81	14.9	1347	Red sand, turbid
	05/20/03	8.1	7.74	16.0	1415	Red sand, turbid
	06/07/04	2.7	7.65	14.2	1450	Red sand, turbid
5-04B	11/17/95	NM	7.15	14.6	1097	Clear, moderate HC odor
	11/17/00	1.9	7.57	12.1	1851	Bailed dry @ 0.3 gals, turbid
	05/22/01	2.7/2.6	7.54	16.1	1994	Bailed dry @ 0.3 gals, turbid
	04/19/02	4.8	7.48	17.0	1974	Turbid, Bailed dry @ 0.15 gal
	05/21/03	7.1	7.52	18.5	1966	Clear, Bailed dry @ 0.08 gal
	11/10/03	8.9	7.85	14.9	1669	Muddy, Bailed dry @ 0.07 gal

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-05B	11/17/95	2.9	7.04	13.0	1350	Clear, moderate HC odor
	05/22/96	1.4	7.36	13.8	1419	Clear, no odor
	02/25/97	2.86	7.46	8.2	890	Cloudy, HC odor
	10/13/99	7.1	7.42	13.2	1512	Clear
	05/11/00	2.2/2.4	7.38	13.3	1565	Cloudy
	05/22/01	2.5	7.37	14.4	1578	Cloudy, bailing down
	04/18/02	0.8	7.41	17.9	1444	Turbid (muddy water)
	05/21/03	1.0	7.29	15.8	1515	Turbid (muddy water)
	06/08/04	1.0	7.21	13.9	1555	Cloudy
5-06B	11/21/95	3.2	7.51	14.0	880	Slightly cloudy, no HC odor
	02/22/96	7.2	7.71	12.6	880	Clear, slight HC ordor
	02/28/97	1.11	7.78	11.7	895	Clear
	08/20/97	2.7/2.2	7.62	14.2	1140	Clear
5-06C	11/23/97	0.5/0.8	7.67	14.3	1181	Turbid
	02/12/98	0.0	7.75	11.9	1072	Clear
	04/29/99	--/1.0	7.55	12.8	1135	Clear
	05/13/00	0.4/0.6	7.65	13.2	1178	Clear
	05/22/01	0.9	7.61	13.9	1252	Turbid
	04/20/02	1.4	7.64	14.4	1256	Clear
	05/21/03	1.7	7.47	15.2	1432	Cloudy
	06/07/04	1.4	7.43	14.4	1441	Turbid
	06/09/05	---	7.34	12.7	1560	---
	07/11/06	2.0	7.42	13.7	1145	Clear
	07/25/07	3.0	7.57	13.0	1094	Clear
	09/23/08	3.1	7.88	13.2	1115	Clear
	08/04/09	2.8	7.06	13.4	1461	Clear
	05/18/10	2.9	6.83	12.6	1538	Clear
	09/25/11	6.9	7.24	13.8	1351	Cloudy
	06/12/12	3.6	7.00	13.3	1469	Clear
	07/10/12	3.7	7.15	13.2	1455	Clear
5-12B	11/16/95	6.5	7.38	13.9	900	Clear, no odor
	05/24/96	8.0	7.44	15.0	870	Clear
	02/26/97	4.78/6.5	7.58	11.8	895	Clear
	02/11/98	6.2 /7.0	7.70	11.3	1114	Clear
	04/27/99	7.8	7.70	12.8	1240	Clear
	05/11/00	6.7	7.83	14.4	1248	Clear
	05/23/01	6.7	7.78	15.2	1251	Clear
	04/19/02	7.4	8.04	15.1	1241	Clear
	05/20/03	8.6	8.00	15.8	1242	Clear
	06/08/04	3.9	8.03	16.3	1323	Clear
5-13B	11/20/95	4.3	7.59	13.9	800	Clear, HC odor
	02/21/96	4.2	7.67	13.8	840	Clear, HC odor
	02/26/97	1.51	7.53	11.9	850	Clear
	02/11/98	1.3/1.0	7.81	11.0	1077	Clear, Odor
	04/27/99	--	7.54	12.8	1223	Clear, HC odor
	05/11/00	0.1/0.8	7.50	13.2	1274	Clear
	05/23/01	2.3	7.47	14.1	1296	Clear
	04/19/02	1.9	7.49	15.2	1267	Cloudy
	05/20/03	1.9	7.44	15.5	1263	Clear
	06/08/04	1.5	7.95	16.4	1330	Clear

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-14B	11/16/95	8.0	8.03	14.6	1056	Very slightly cloudy
	05/21/96	9.8a	8.01	13.9	1011	Clear
	02/26/97	--/6.5	7.87	10.5	931	Clear, no odor
	02/10/98	8.12	6.91	10.2	630	Clear
	04/27/99	7.5/6.5	7.79	13.3	1058	Turbid
	05/11/00	7.3	7.85	13.0	1014	Clear
	05/24/01	8.1	7.86	14.3	1027	Clear
	04/19/02	6.9	7.86	15.5	1148	Turbid
	05/22/03	7.2	7.79	16.1	1168	Cloudy
	06/08/04	3.4	7.82	16.2	1246	Red Cloudy
5-15B	11/16/95	6.9	7.98	12.5	982	Clear, no odor
	05/22/96	4.9	7.67	13.0	710	Clear
	02/26/97	--/6.8	7.82	11.4	977	Clear, no odor
	02/11/98	6.22/7.0	7.39	13.1	720	Slightly Turbid
	04/28/99	--/7.0	7.73	13.0	1022	Cloudy
	05/12/00	8.1	7.65	13.1	1008	Clear
	05/24/01	6.4	7.77	14.6	1049	Clear
	04/19/02	6.0	7.79	15.6	1116	Clear
	05/22/03	5.2	7.73	17.0	1150	Clear
	06/08/04	3.1	7.69	15.2	1159	Cloudy
5-16B	11/20/95	2.4	7.50	13.0	800	Clear, strong HC odor
	02/21/96	3.5	7.58	13.8	840	Clear, HC odor
	02/27/97	2.31	7.52	12.0	1131	Clear, strong HC odor
	02/11/98	2.78	7.16	11.6	840	Clear, HC odor, film/sheen
	04/28/99	--	--	--	--	Clear w/sheen, turns blk, PSH odor
	05/12/00	--	--	--	--	Clear w/blk particulates, sheen, strong odor
	05/24/01	--	--	--	--	Clear w/blk particulates, sheen, strong odor
	04/20/02	--	--	--	--	Clear w/blk suspended solids, sheen
	05/22/03	--	--	--	--	Clear w/blk suspended solids, sheen
	06/08/04	1.47	7.76	15.60	544	Brackish, strong odor
	06/08/05	---	7.67	15.30	1566	Strong odor
	07/10/06	--	--	--	--	Clear w/blk suspended solids, sheen
	07/25/07	--	--	--	--	Clear w/blk suspended solids, sheen
	09/23/08	--	--	--	--	Clear w/blk suspended solids, sheen
	08/04/09	--	--	--	--	Clear w/blk suspended solids, sheen
	05/18/10	--	--	--	--	Clear w/blk suspended solids, sheen,odor
	09/25/11	--	--	--	--	bailed down, turbid, odor, sheen, blk
	06/12/12	--	--	--	--	bailed down, turbid, odor, sheen, blk
5-17B	11/20/95	7.4	7.65	13.4	1525	Clear, no odor
	05/22/96	6.4	7.44	12.5	1005	Clear
	02/27/97	4.57	7.64	11.6	930	Clear
	02/11/98	NM	7.25	10.2	910	Clear
	04/28/99	--/7.8	7.69	13.7	1344	Clear
	05/12/00	8.2	7.76	12.9	1363	Clear
	05/23/01	9.2/8.0	7.73	14.6	1405	Clear
	04/19/02	8.4	7.80	14.8	1401	Clear
	05/22/03	8.6	7.71	15.7	1383	Clear
	06/08/04	3.3	7.44	14.9	1529	Clear
	06/08/05	---	7.36	13.9	1816	---
	07/10/06	3.2	7.25	13.1	1597	Clear
	07/25/07	4.7	7.48	13.6	1557	Clear
	09/23/08	5.6	7.83	13.1	1583	Clear
	08/04/09	5.9	7.02	13.7	2005	Clear

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-18B	11/17/95	1.4	7.68	14.0	720	Clear, HC odor
	02/21/96	5.6	7.76	12.2	760	Clear, HC odor
	02/27/97	1.29	7.78	11.7	988	Clear, HC odor
	02/11/98	2.28	7.33	12.8	790	Clear, HC odor
	04/28/99	--/1.4	7.53	12.7	1144	Clear, HC odor
	05/12/00	2.4	7.54	13.4	1198	Clear, Odor
	05/24/01	3.8	7.51	15.7	1264	Clear
	04/20/02	2.0	7.61	14.5	1124	Clear
	05/22/03	1.6	7.52	15.6	1117	Clear, Odor
	06/08/04	1.8	7.43	16.5	1171	---
	06/08/05	---	7.52	14.7	1198	---
	07/10/06	3.0	7.39	13.9	964	Clear
	07/25/07	1.3	7.59	14.8	962	Clear
	09/23/08	2.9	7.91	14.5	989	Clear
	08/04/09	1.1	7.04	15.2	1233	Clear w/susp. solids, Bailed down
	05/18/10	1.7	6.78	13.2	1341	Turbid, bailing down
	09/25/11	2.1	7.10	13.5	1389	Turbid
	06/12/12	2.1	6.97	13.5	1362	Turbid
5-19B	11/20/95	2.00	7.68	13.0	700	Clear, slight HC odor
	02/21/96	4.4	7.81	12.7	730	Clear, HC odor
	02/27/97	1.9/1.8	7.83	10.2	951	Clear, HC odor
	02/11/98	2.26	7.47	12.0	710	Clear, HC odor
	04/28/99	--/0.4	7.89	12.7	982	Clear, HC odor
	05/12/00	0.6/0.8	7.89	13.0	986	Clear, slight odor
	05/24/01	1.8/1.6	7.93	14.9	1007	Clear
	04/19/02	0.7	8.00	15.1	1038	Clear
	05/22/03	1.0	7.88	16.2	1094	Clear
	06/08/04	1.5	7.87	15.0	1147	Cloudy
5-20B	11/17/95	2.9	7.16	13.7	1200	Clear, slight HC odor
	05/22/96	1.8	7.18	14.4	1120	Clear
	02/27/97	1.51	7.21	11.1	1120	Slightly Cloudy
	02/11/98	0.00	7.35	10.9	1369	Clear
	04/28/99	--/0.8	7.30	13.4	1362	Clear
	05/12/00	0.5/0.6	7.25	12.7	1325	Clear, slight odor
	05/24/01	1.1/0.8	7.48	14.4	1290	Clear, slight odor
	04/19/02	0.7	7.49	14.9	1275	Clear
	05/22/03	0.5	7.42	15.7	1306	Clear
	06/08/04	1.6	7.41	13.9	1332	Clear
	06/08/05	---	7.43	15.0	1347	---
	07/10/06	1.3	7.46	13.5	1030	Clear
	07/25/07	1.3	7.55	14.3	1028	Clear
	09/23/08	1.9	7.88	13.6	1032	Clear
	08/04/09	0.3	6.99	14.1	1335	Clear
	05/18/10	2.1	6.99	12.9	1419	Clear
	09/25/11	1.9	7.17	13.3	1401	Turbid
	06/12/12	1.6	7.03	13.4	1390	Clear
5-22B	11/15/95	6.4	7.70	12.9	990	Clear, no odor
	02/22/96	6.6	7.47	12.3	1030	Turbid, very light brown, no odor
	02/27/97	3.53	7.39	10.0	1180	Turbid, HC odor
	11/18/97	--/1.8	7.80	13.6	1740	Turbid, slight odor

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-23B	11/16/95	3.8	7.31	13.3	800	Clear, no odor
	05/22/96	2.6	7.66	13.0	1077	Clear
	02/26/97	--/3.4	7.73	11.8	1018	Clear, no odor (3.4 DO is low range of Hach)
	02/10/98	1.0	7.77	10.7	928	Clear
	04/27/99	2.6/2.0	7.72	12.9	1015	Clear
	05/11/00	1.5/1.8	7.77	13.0	1035	Clear
	05/23/01	2.1	7.72	14.0	1084	Clear
	04/19/02	1.5	7.72	15.0	1103	Clear
	05/20/03	1.2	7.71	15.6	1112	Clear
	06/08/04	1.6	7.63	14.3	1131	Clear
5-24B	11/17/95	1.7	7.33	13.2	1050	Slight cloudy, HC odor
	05/21/96	3.5	7.41	13.9	1050	Clear
	02/26/97	--/1.4	7.42	11.6	1468	Clear, slight odor
	02/10/98	3.2/3.0	7.44	11.2	1392	Slightly turbid
	04/27/99	9.7/8.0	7.37	14.1	1501	Slightly Cloudy
	05/11/00	4.8	7.43	13.5	1454	Cloudy
	05/23/01	2.9	7.52	15.0	1475	Turbid, redish color
	04/19/02	2.2	7.56	15.0	1426	Very turbid, red sand
	05/20/03	1.3	7.51	15.4	1397	Turbid
	06/08/04	2.8	7.68	15.4	1428	Turbid
5-35B	05/18/10	1.6	6.48	15.1	1834	Black, odor, flim like sheen
	09/25/11	1.5	6.96	17.5	1554	Black, odor, sups. solids
	06/12/12	1.7	6.84	15.8	1643	Turbid, odor, light sheen
5-37I	08/15/96	1.67	8.48	17.2	1382	Turbid, green cloudy color, strong HC odor
	11/22/96	NM	7.70	14.9	1080	Greenish black, strong HC odor
5-41B	11/16/95	2.00	7.28	14.5	940	Clear, no odor
	05/21/96	1.82	7.41	15.8	920	Clear
	02/25/97	1.65	7.43	12.5	930	Clear
	08/18/97	--/2.2	7.55	14.1	1285	Clear
5-47B	11/15/95	2.50	7.83	13.0	900	Slightly cloudy, no odor
	05/21/96	4.70	7.54	14.6	1080	Clear
	02/26/97	2.20	7.71	11.0	1000	Clear
	08/18/97	--/4.0	7.68	16.3	1470	Clear
5-48B	11/20/95	1.40	7.60	13.7	1035	Clear, strong HC odor
	02/21/96	3.60	7.54	14.0	750	Very slightly cloudy, HC odor
	02/27/97	2.40	7.61	11.8	950	Clear, strong HC odor
	02/12/98	2.23	7.44	14.8	810	Clear, HC odor
	04/28/99	--	7.47	15.4	1261	Clear w/blk flec's, strong HC odor, sheen
	05/12/00	--	--	--	--	Blk, turbid, odor, sheen streamers
	05/22/01	--	--	--	--	Blk, turbid, odor, sheen streamers
	04/20/02	0.9	7.54	15.7	1524	Turbid, odor
	05/21/03	--	--	--	--	Blk, suspended solids, turbid, odor, sheen
	06/07/04	0.9	7.51	16.2	1550	Black
	06/09/05	---	7.31	15.5	1530	Black, brackish
5-57B	11/15/95	4.60	7.59	13.1	880	Brown muddy
	05/20/96	3.10	8.75	13.2	1212	Slightly turbid
	02/25/97	--/3.4	7.71	10.6	1191	Light amber, no odor
	08/18/97	0.7/2.6	7.69	14.4	1071	Slightly turbid

Table 2. Summary of Field Measured Parameters
Thoreau Compressor Station No. 5

Well ID	Date	Dissolved Oxygen (mg/L) Meter/Hach	pH	Temperature °C	Electrical Conductivity (μmhos)	Remarks
5-58B	11/16/95	8.10	7.47	14.8	740	Cloudy brown, no odor
	05/20/96	6.70	8.71	13.2	1073	Slightly turbid
	02/25/97	7.0b	7.69	11.4	1073	Light amber, no odor
	08/18/97	5.8/6.5	7.68	15.2	964	Slightly turbid
5-59	11/18/01	6.2	7.50	14.5	1430	Turbid, bailed down
	04/20/02	6.7	7.60	14.1	1431	Turbid, bailed down
	05/21/03	5.9	7.40	15.3	1519	Turbid, bailed down
	06/08/04	3.2	7.38	12.8	1495	Turbid, bailed down
	06/09/05	---	7.37	14.2	1453	---
	07/10/06	6.7	7.42	13.3	1112	Turbid, bailed down
	07/25/07	5.5	7.33	14.1	1124	Turbid, bailed down
	09/23/08	6.0	7.84	12.9	1143	Turbid, bailed down
	08/04/09	5.8	7.13	14.3	1501	Clear, bailed down
	05/18/10	6.5	6.62	12.9	1555	Turbid, bailed down
	09/25/11	8.0	7.06	13.6	1546	Cloudy, bailed down
	06/12/12	7.0	6.87	13.6	1573	Turbid, red, bailed down
	07/10/12	6.2	7.22	14.8	1543	Turbid, red, bailed down
5-60	11/18/01	6.5	7.67	14.5	1296	Very turbid, bailed down
	04/20/02	6.6	7.74	14.1	1291	Very turbid, bailed down
	05/21/03	7.7	7.63	15.6	1297	Very turbid, bailed down
	06/07/04	3.1	7.60	13.9	1415	Cloudy, bailed down
	06/09/05	---	7.65	12.5	1428	---
	07/10/06	7.4	7.40	13.3	1095	Turbid, bailed down
	07/25/07	6.9	7.50	13.6	1059	Turbid, bailed down
	09/23/08	6.8	7.87	12.9	1034	Turbid, bailed down
	08/04/09	7.2	7.23	14.1	1362	Turbid, bailed down
SVE-1	05/11/00	7.8	7.90	13.5	992	Red turbid
	11/18/01	8.3	7.90	15.6	1016	Turbid
	04/18/02	8.3	7.96	15.7	1017	Turbid, bailing down
	05/21/03	8.5	7.80	17.7	1009	Clear
	06/07/04	2.1	7.98	21.7	1062	---
SVE-3	05/18/10	--	--	--	--	Sheen, odor, bailed down, turbid
	09/25/11	--	--	--	--	Sheen, odor, bailed down, turbid, blk
	06/12/12	--	--	--	--	Sheen, odor, bailed down, turbid, blk

HC = Hydrocarbon
NM = Not measured
(a) Value above theoretical dissolved oxygen concentration for this altitude; therefore, measurement is suspect.

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-01B	12/89	ER	< 5.0	6.3	< 5.0	NA
	03/90	ER	< 5.0	< 5.0	< 5.0	25
	01/91	EH	< 1.0	< 1.0	< 1.0	4.8
	01/09/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	12/13/94	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	06/27/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/22/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/28/97	HEAL	0.6	< 0.5	< 0.5	< 0.5
	08/21/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
5-01C	11/23/97	HEAL	1.4	< 0.5	< 0.5	< 0.5
	01/08/98	HEAL	2.0	< 0.5	< 0.5	< 0.5
	04/29/99	OAL	< 1	< 1	< 1	< 1
Pulled pump	05/12/00	OAL	< 1	< 2	< 2	< 4
	05/22/01	Analysys	< 1	< 1	< 1	< 2
	04/20/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/07/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/11/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-02B	05/89	ER	1800	2000	< 200	NA
	08/89	ER	2500	4700	< 500	NA
	11/89	ER	1800	3100	250	NA
	03/90	ER	2300	3800	< 250	2400
	06/90	ER	1900	3100	< 250	2300
	08/90	AS	1400	2300	180	1700
	11/90	EH	1500	2400	230	1900
	01/91	EH	600	730	110	940
	02/91	EH	460	580	75	600
	03/91	EH	2400	3300	290	2600
	04/91	EH	830	1200	110	920
	05/91	EH	830	1200	150	1300
	06/91	EH	5.1	7.0	0.57	4.7
	07/91	EH	400	600	49	420
	09/91	EH	510	750	57	530
	10/91	ER	290	450	37	310
	11/91	ER	740	1200	97	950
	12/91	ER	330	580	31	320
	01/09/92	ER	360	710	52	480
	01/28/92	ER	420	810	64	560
	02/20/92	ER	890	1600	140	1200
	03/19/92	ATI-P	910	2100	170	1700
	04/29/92	ATI-P	1700	3800	240	2200
	10/14/92	ATI-P	800	700	74	640
	04/22/93	ATI-A	120	< 0.5	11	38
	12/09/94	HEAL	2100	2600	220	1800
	06/26/95	HEAL	1200	2700	130	1200
	10/06/95	HEAL	490	1600	66	640
	11/21/95	HEAL	740	2900	160	1100
	02/22/96	HEAL	260	1000	62	600
	05/21/96	HEAL	380	120	1300	1100
	08/14/96	HEAL	420	1200	100	880
	11/21/96	HEAL	660	1300	150	1600
	02/28/97	HEAL	260	500	90	680
5-02C	11/23/97	HEAL	26	2.7	9.1	2.7
	02/11/98	HEAL	110	7.0	33	8.3
	04/28/99	OAL	1500	4400	260	2500
	05/13/00	OAL	980	3400	340	3500
	05/24/01	Analysys	446	60	340	3406
	04/20/02	HEAL	450	< 10	300	3100
	05/22/03	HEAL	290	< 10	200	800
	06/08/04	HEAL	270	28	160	1000
	06/09/05	HEAL	300	< 10	190	1700
	09/25/11	HEAL	27	< 10	91	220
	07/10/12	HEAL	40	12	130	730

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-03B	05/89	ER	< 5.0	< 5.0	< 5.0	NA
	04/90	ER	< 5.0	< 5.0	< 5.0	< 5.0
	01/91	EH	< 0.30	< 0.30	< 0.30	< 0.60
	01/09/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	12/09/94	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	11/15/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/24/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/10/98	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/22/01	Analysys	< 1	< 1	< 1	< 2
	04/18/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/20/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/07/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
5-04B	10/89	ER	< 25	< 25	< 25	NA
	01/90	ER	21	< 5.0	< 5.0	NA
	01/91	EH	22	1.6	0.75	5.6
	01/10/92	ER	53	< 1.2	3.7	44
	04/21/93	ATI-A	170	130	26	280
	12/12/94	HEAL	12	2.2	3.4	3.3
	11/17/95	HEAL	9.9	1.1	0.6	< 0.5
	02/20/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/14/00	OAL	3	< 2	< 2	< 4
	05/22/01	Analysys	1.72	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	11/11/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
5-05B	10/89	ER	< 5.0	< 5.0	8.7	NA
	04/90	ER	< 5.0	< 5.0	< 5.0	< 5.0
	01/91	EH	< 0.50	< 0.50	< 0.50	0.56
	01/09/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	04/21/93	ATI-A	38	< 0.5	2.4	3
	12/12/94	HEAL	150	33	16	47
	11/17/95	HEAL	5.0	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	1.0	< 0.5	< 0.5	< 0.5
	02/25/97	HEAL	3.0	1.4	< 0.5	0.6
	10/14/99	OAL	< 1	< 2	< 2	< 4
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/22/01	Analysys	1.61	< 1	< 1	< 2
	04/18/02	HEAL	5.2	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	2.1	0.92	1.0	2.6
	06/08/04	HEAL	2.5	< 0.50	0.51	1.3

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-06B	10/89	ER	15	< 5.0	< 5.0	NA
	01/90	ER	< 5.0	< 5.0	8.3	NA
	01/91	EH	< 1.0	< 1.0	< 1.0	31
	01/09/92	ER	2.3	< 0.50	< 0.50	< 0.50
	12/14/94	HEAL	4.3	< 0.50	< 0.50	0.7
	11/21/95	HEAL	6.2	< 0.5	< 0.5	< 0.5
	02/22/96	HEAL	4.3	< 0.5	< 0.5	< 0.5
	02/28/97	HEAL	0.9	< 5.0	< 5.0	< 0.5
	08/20/97	HEAL	0.7	< 5.0	< 5.0	< 0.5
5-06C	11/23/97	HEAL	1.4	0.6	< 5.0	11
	12/08/98	HEAL	1.0	< 0.5	< 0.5	5.7
	04/29/99	OAL	< 1	< 1	< 1	< 1
	05/13/00	OAL	1	< 2	< 2	< 4
	05/22/01	Analysys	< 1	< 1	< 1	< 2
	04/20/02	HEAL	1.1	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/07/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/09/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/11/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	05/18/10	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/25/11	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	06/12/12	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
5-12B	08/90	AS	< 1	< 1	< 1	< 1
	01/91	EH	1.5	4.7	0.79	3.8
	01/07/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/26/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/11/98	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/23/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/20/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-13B	08/90	AS	54	13	< 1	330
	11/90	EH	61	< 10	< 10	480
	01/91	EH	180	17	< 5.0	310
	02/91	EH	270	25	< 10	460
	03/91	EH	240	< 50	< 50	480
	04/91	EH	430	< 0.50	< 0.50	620
	05/91	EH	290	< 10	< 10	450
	06/91	EH	330	0.53	< 0.50	600
	07/91	EH	97	0.72	< 0.50	760
	10/91	ER	71	< 5.0	< 5.0	510
	01/08/92	ER	150	< 25	< 25	570
	05/01/92	ATI-P	76	8.0	< 0.5	67
	10/13/92	ATI-P	88	8.7	< 0.5	1.5
	10/05/95	HEAL	0.6	2.5	0.5	1.9
	11/20/95	HEAL	< 0.5	< 0.5	0.6	2.0
	02/21/96	HEAL	1.0	0.7	< 0.5	< 0.5
	05/21/96	HEAL	0.7	< 0.5	< 0.5	0.8
	08/13/96	HEAL	1	5.4	< 0.5	< 0.5
	11/21/96	HEAL	1.2	6.1	< 0.5	< 0.5
	02/26/97	HEAL	1.5	5.9	< 0.5	2.5
	05/21/97	HEAL	1.1	4.3	< 0.5	0.7
	08/19/97	HEAL	1.2	2.9	< 0.5	0.6
	11/18/97	HEAL	1.3	2	< 0.5	< 0.5
	02/11/98	HEAL	0.9	1.5	< 0.5	< 0.5
	06/09/98	HEAL	0.8	0.7	< 0.5	< 0.5
	09/30/98	HEAL	< 0.5	1.5	< 0.5	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	10/12/99	OAL	< 1	< 2	< 2	< 4
	05/11/00	OAL	< 1	< 2	< 2	< 4
	11/16/00	NCA	< 0.500	< 0.500	< 0.500	< 1.00
	05/23/01	Analysys	< 1	< 1	< 1	< 2
	11/17/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	10/31/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/20/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	11/11/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-14B	08/90	AS	< 1	< 1	< 1	< 1
	01/91	EH	< 0.50	< 0.50	< 0.50	< 1.0
	01/06/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	2.6	1.5	< 0.5
	02/26/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/10/98	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/24/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
5-15B	08/90	AS	< 1	< 1	< 1	< 1
	01/91	EH	< 0.30	< 0.30	< 0.30	1.0
	01/07/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/26/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/11/98	HEAL	1.5	< 0.5	1.0	1.2
	04/28/99	OAL	< 1	< 1	< 1	< 1
	05/12/00	OAL	< 1	< 2	< 2	< 4
	05/24/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-16B	08/90	AS	19	25	50	320
	01/91	EH	< 0.30	< 0.30	< 0.30	< 0.60
	01/08/92	ER	200	500	410	3000
	04/20/93	ATI-A	6.5	< 0.5	14	51
	11/20/95	HEAL	970	7100	430	3100
	02/21/96	HEAL	1700	6900	340	3600
	02/27/97	HEAL	250	1100	190	2000
	02/11/98	HEAL	41	360	90	660
	06/10/98	HEAL	23	210	56	590
	10/01/98	HEAL	140	190	66	590
	04/28/99	OAL	200	170	45	620
	10/13/99	OAL	610	630	79	600
	12/05/99	OAL	720	390	130	570
	05/12/00	OAL	600	290	92	360
	05/24/01	Analysys	1240	487	174	1105
	04/20/02	HEAL	1800	660	230	1400
	05/22/03	HEAL	1300	130	180	950
	06/08/04	HEAL	890	< 5	110	260
	06/08/05	HEAL	1400	< 5	160	520
	07/10/06	HEAL	1600	< 20	150	380
	07/25/07	HEAL	1700	< 20	170	590
	09/23/08	HEAL	1900	< 5	180	600
	08/04/09	HEAL	1300	< 5	150	590
	05/18/10	HEAL	3800	11	340	2200
	09/25/11	HEAL	4400	< 20	350	2600
	06/12/12	HEAL	3300	< 50	230	1600
5-17B	08/90	AS	< 1	< 1	< 1	< 1
	01/91	EH	< 0.50	< 0.50	< 0.50	< 0.50
	01/08/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	11/20/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/27/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/11/98	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	04/28/99	OAL	< 1	< 1	< 1	< 1
	05/12/00	OAL	< 1	< 2	< 2	< 4
	05/23/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/10/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-18B	08/90	AS	1100	14	< 1	220
	01/91	EH	1300	< 25	< 25	170
	01/08/92	ER	1100	< 25	< 25	88
	04/22/93	ATI-A	360	< 0.5	0.5	2.6
	11/17/95	HEAL	240	24	22	53
	02/21/96	HEAL	290	54	37	110
	02/27/97	HEAL	9.4	5.2	64	1.5
	02/11/98	HEAL	0.9	6.4	120	1.1
	04/28/99	OAL	2	< 1	< 1	2.0
	05/12/00	OAL	10	< 2	12	14
	05/24/01	Analysys	2.92	< 1	< 1	< 2
	04/20/02	HEAL	0.55	< 0.50	0.72	0.89
	05/22/03	HEAL	< 0.50	5.9	< 0.50	2.5
	06/08/04	HEAL	< 0.50	< 0.50	0.91	1.2
	06/08/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/10/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	05/18/10	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/25/11	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	06/12/12	HEAL	< 1.0	< 1.0	< 1.0	< 2.0

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-19B	08/90	AS	190	3.5	5.8	44
	11/90	EH	180	11	< 10	< 20
	01/91	EH	150	< 0.30	0.60	15
	02/91	EH	200	5.8	< 2.5	14
	03/91	EH	200	30	180	880
	04/91	EH	290	< 25	210	880
	05/91	EH	240	< 0.50	0.71	21
	06/91	EH	290	7.5	2.2	22
	07/91	EH	240	< 0.50	0.58	14
	10/91	ER	140	< 2.5	< 2.5	12
	01/08/92	ER	240	< 5.0	< 5.0	9.0
	02/20/92	ER	150	< 2.5	< 2.5	4.2
	03/19/92	ATI-P	140	< 0.5	< 0.5	5.9
	04/29/92	ATI-P	190	< 0.5	< 0.5	4.3
	10/13/92	ATI-P	130	< 0.5	< 0.5	4.4
	10/05/95	HEAL	1.0	0.7	< 0.5	< 0.5
	11/20/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/21/96	HEAL	0.9	0.8	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	08/14/96	HEAL	0.7	0.6	< 0.5	< 0.5
	11/21/96	HEAL	0.9	0.6	< 0.5	< 0.5
	02/27/97	HEAL	1.3	1	< 0.5	0.7
	05/21/97	HEAL	1.2	1	< 0.5	< 0.5
	08/20/97	HEAL	1.7	1.3	0.6	< 0.5
	11/17/97	HEAL	2.5	2.0	0.9	0.7
	02/11/98	HEAL	2.3	1.8	0.8	0.7
	06/10/98	HEAL	1.5	1.4	1.5	0.6
	10/01/98	HEAL	7.4	3.9	1.6	2.9
	04/28/99	OAL	43	< 1	1	3
	10/12/99	OAL	13	< 2	< 2	< 4
	05/12/00	OAL	16	< 2	3	4
	11/17/00	NCA	1.03	< 0.500	1.88	< 1.00
	05/24/01	Analysys	< 1	< 1	1.17	< 2
	11/17/01	Analysys	< 1	< 1	< 1	<2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	10/31/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	11/11/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-20B	08/90	AS	58	8.0	< 1	51
	01/91	EH	93	14	< 1.0	23
	01/08/92	ER	31	< 1.2	< 1.2	6.7
	04/21/93	ATI-A	14	< 0.5	6.1	10
	11/17/95	HEAL	12	2.3	< 0.5	2.6
	05/21/96	HEAL	1.7	1.3	0.8	< 0.5
	02/27/97	HEAL	12	1.3	1.8	3.3
	02/11/98	HEAL	< 0.5	1.3	2.3	0.5
	04/28/99	OAL	< 1	< 1	1	< 1
	05/12/00	OAL	1	< 2	2	< 4
	05/24/01	Analysys	3.28	< 1	< 1	< 2
	04/19/02	HEAL	0.86	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	1.0	0.91	< 0.50	< 0.50
	06/08/04	HEAL	1.1	< 0.50	< 0.50	< 0.50
	06/08/05	HEAL	1.0	0.53	< 0.50	< 0.50
	07/12/06	HEAL	1.3	< 1	< 1	< 3
	07/25/07	HEAL	< 1	< 1	< 1	< 2
	09/23/08	HEAL	< 1	< 1	< 1	< 2
	08/04/09	HEAL	< 1	< 1	< 1	< 2
	05/18/10	HEAL	< 1	< 1	< 1	< 2
	09/25/11	HEAL	< 1	< 1	< 1	< 2
	06/12/12	HEAL	< 1	< 1	< 1	< 2
5-22B	10/90	AS	< 1	< 1	< 1	< 1
	01/91	EH	< 0.50	< 0.50	< 0.50	< 0.50
	01/10/92	ER	< 0.50	< 0.50	< 0.50	< 0.50
	12/12/94	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	11/15/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/27/97	HEAL	5.6	9.3	< 0.5	65
	11/18/97	HEAL	3.8	2.3	< 0.5	0.6
5-23B	10/90	AS	5.3	< 1	< 1	< 1
	01/91	EH	3.0	< 0.50	< 0.50	< 0.60
	01/07/92	ER	0.65	< 0.50	< 0.50	< 0.50
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/22/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/26/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/10/98	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/23/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/20/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-24B	10/90	AS	63	< 1	2.0	1.6
	01/91	EH	40	0.55	0.74	< 1.0
	01/07/92	ER	120	< 2.5	< 2.5	< 2.5
	04/21/93	ATI-P	< 0.5	< 0.5	0.7	1.4
	11/17/95	HEAL	1.2	0.8	0.5	1.0
	05/21/96	HEAL	< 0.5	0.9	< 0.5	0.7
	02/26/97	HEAL	0.9	0.6	1	1.8
	02/10/98	HEAL	0.5	< 0.5	0.7	< 0.5
	04/27/99	OAL	< 1	< 1	< 1	< 1
	05/11/00	OAL	< 1	< 2	< 2	< 4
	05/23/01	Analysys	< 1	< 1	< 1	< 2
	04/19/02	HEAL	< 0.50	< 0.50	< 0.50	0.59
	05/20/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
5-34B	01/07/92	ER	120	< 2.5	< 2.5	< 2.5
	04/21/93	ATI-A	< 0.5	< 0.5	0.7	1.4
	12/13/94	HEAL	4700	13,000	460	5,900
5-35B	04/22/93	ATI-A	360	1400	130	1700
	05/18/10	HEAL	5700	< 100	310	1900
	09/25/11	HEAL	3700	< 100	170	900
	06/12/12	HEAL	4000	< 100	190	1200
5-36E	12/14/94	HEAL	620	2700	230	3300
5-37I	02/22/96	HEAL	640	520	24	990
	08/15/96	HEAL	310	54	14	430
	11/22/96	HEAL	440	140	20	520
5-41B	10/09/92	ATI-P	47	3.9	0.7	1.0
	04/20/93	ATI-A	1.4	< 0.5	2.5	2.1
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/25/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	08/18/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
5-47B	10/07/92	ATI-P	1.0	< 0.5	< 0.5	< 0.5
	04/20/93	ATI-A	2.9	< 0.5	< 0.5	< 0.5
	11/15/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/26/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	08/18/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
5-48B	10/12/92	ATI-P	380	1100	84	840
	04/21/93	ATI-A	99	390	34	360
	11/20/95	HEAL	820	1700	390	2600
	02/21/96	HEAL	690	1100	550	3300
	02/27/97	HEAL	1100	10000	430	4700
	02/11/98	HEAL	2100	8000	460	4600
	04/28/99	OAL	1700	4400	140	3100
	05/12/00	OAL	1400	680	270	2200
	05/22/01	Analysys	683	194	28.8	1703
	04/20/02	HEAL	1100	23	190	1700
	05/21/03	HEAL	2100	< 50	320	2700
	06/07/04	HEAL	3400	38	420	3200
	06/09/05	HEAL	2500	< 25	200	1500
5-57B	04/19/93	ATI-A	< 0.5	< 0.5	< 0.5	< 0.5
	11/15/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/25/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	08/18/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
5-58B	04/19/93	ATI-A	< 0.5	< 0.5	< 0.5	< 0.5
	11/16/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	05/21/96	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/25/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	08/18/97	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
5-59	07/28/01	Analysys	< 1	< 1	< 1	< 2
	11/19/01	Analysys	< 1	< 1	< 1	< 2
	04/20/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/09/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/11/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	05/18/10	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/25/11	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	06/12/12	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
5-60	11/18/01	Analysys	< 1	< 1	< 1	< 2
	04/20/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/21/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/09/05	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	07/11/06	HEAL	< 1.0	< 1.0	< 1.0	< 3.0
	07/25/07	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	09/23/08	HEAL	< 1.0	< 1.0	< 1.0	< 2.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 2.0

Table 3. Summary of Analytical Results for BTEX Compounds
Thoreau Compressor Station No. 5

			BTEX Concentration (ug/L)			
Well ID	Date	Lab	Benzene	Toluene	Ethyl-benzene	Total Xylenes
SVE-1	05/11/00	OAL	< 1	< 2	< 2	< 4
	11/18/01	Analysys	<1	<1	<1	<2
	04/18/02	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	05/22/03	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
	06/08/04	HEAL	< 0.50	< 0.50	< 0.50	< 0.50
SVE-3	05/18/10	HEAL	6300	< 50	430	3900
	09/25/11	HEAL	6300	< 100	380	3300
	06/12/12	HEAL	5400	< 100	240	3500
† Lab Designations						
ABB = ASEA Brown Boveri						
AEN = American Environmental Network, Inc. (Albuquerque)						
AS = Assaigai Laboratories (Albuquerque)						
ATI-A = Analytical Technologies, Inc. (Albuquerque)						
ATI-P = Analytical Technologies, Inc. (Phoenix)						
ER = Enseco (Rocky Mountain Analytical)						
EH = Enseco (Houston)						
HEAL = Hall Environmental Analysis Laboratory (Albuquerque)						
OAL = Oregon Analytical Laboratory (Portland, OR)						
NCA = North Creek Analytical (Portland, OR)						
Analysys = Analysys Inc. (Austin, TX)						
NA = Not Analyzed						

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-01B	08/89	ER	**2.1**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/89	ER	< 1.0	< 1.0	< 1.0	**2.0**	< 1.0	< 1.0	< 1.0
	03/90	ER	< 1.0	**94**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/90	ER	< 1.0	< 1.0	< 1.0	**11**	< 1.0	< 1.0	< 1.0
	08/90	AS	< 1.0	< 1.0	< 1.0	**2.0**	< 1.0	< 1.0	< 1.0
	11/90	EH	< 1.0	< 1.0	< 1.0	**5.5**	< 1.0	< 1.0	< 1.0
	01/91	EH	< 1.0	< 1.0	< 1.0	**28**	< 1.0	< 1.0	< 1.0
	02/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	03/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/91	ER	< 1.0	**210**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/91	ER	< 1.0	**76**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/91	ER	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	01/09/92	ER	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	01/27/92	ER	< 1.0	**67**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/20/92	ER	< 1.0	**82**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	03/18/92	ATI-P	< 1.0	**54**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/29/92	ATI-P	< 1.0	**71**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/14/92	ATI-P	< 1.0	**82**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/13/94	ATI-P	**4.9**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/27/95	NET	< 1.0	< 1.0	< 1.0	**4.18**	< 1.0	< 1.0	< 1.0
	10/06/95	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/21/95	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/22/96	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/17/96	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/17/96	PA	< 1.0	**0.93**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/24/96	NET	< 1.0	**34**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/15/96	NET	< 1.0	**14.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/22/96	EPIC	< 1.0	**15.6**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/28/97	EPIC	< 1.0	**15.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/22/97	EPIC	< 1.0	**11.9**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/21/97	EPIC	< 1.0	**18.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-01C	11/23/97	EPIC	< 1.0	**79.7**	< 1.0	**49.0**	< 1.0	< 1.0	< 1.0
	01/08/98	HEAL	< 1.0	**38**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/12/98	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/11/98	HEAL	< 1.0	**38**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/02/98	HEAL	< 1.0	**10**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/29/99	OAL	**3.8**	**9.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/14/99	OAL	**4.9**	**3.5**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/12/00	OAL	**2.7**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/17/00	NCA	< 0.5	< 1.0	< 0.5	**1.9**	< 0.5	< 0.5	< 0.5
	05/22/01	Analysys	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/19/01	Analysys	--	< 0.5	< 0.5	**13.5**	< 0.5	< 0.5	< 0.5
	04/20/02	NCA	< 0.5	**1.37**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/30/02	HEAL	**1.5**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/21/03	HEAL	--	**2.6**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/10/03	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/07/04	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/08/05	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/11/06	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/25/07	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/23/08	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-06B	10/89	ER	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/89	ER	< 1.0	**180**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	01/90	ER	< 1.0	**100**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/90	ER	< 1.0	**170**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/90	ER	< 1.0	< 1.0	< 1.0	**39**	< 1.0	< 1.0	< 1.0
	08/90	AS	< 1.0	< 1.0	< 1.0	**1.1**	< 1.0	< 1.0	< 1.0
	11/90	EH	< 1.0	< 1.0	< 1.0	**65**	< 1.0	< 1.0	< 1.0
	01/91	EH	< 1.0	< 1.0	< 1.0	**39**	< 1.0	< 1.0	< 1.0
	02/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	03/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/91	EH	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/91	ER	< 1.0	**250**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/91	ER	< 1.0	**140**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/91	ATI	< 1.0	**210**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/91	ER	< 1.0	**270**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	01/09/92	ER	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	01/27/92	ER	< 1.0	**190**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/20/92	ER	< 1.0	**200**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	03/18/92	ATI-P	< 1.0	**140**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/29/92	ATI-P	< 1.0	**150**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	10/14/92	ATI-P	< 1.0	**280**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	12/14/94	NET	**88**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/27/95	NET	< 1.0	< 1.0	< 1.0	**26.3**	< 1.0	< 1.0	< 1.0
	10/06/95	NET	< 1.0	< 1.0	< 1.0	**30.1**	< 1.0	< 1.0	< 1.0
	11/21/95	NET	< 1.0	< 1.0	< 1.0	**44.4**	< 1.0	< 1.0	< 1.0
	02/22/96	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	04/17/96	NET	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/23/96	NET	< 1.0	**78**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/15/96	NET	< 1.0	**166.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
(split sample)	08/15/96	AEN	< 1.0	**260**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/22/96	EPIC	< 1.0	**42.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	02/28/97	EPIC	< 1.0	**48.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/22/97	EPIC	< 1.0	**7.29**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/20/97	EPIC	< 1.0	**16.5**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-06C	11/23/97	EPIC	< 0.5	**160**	< 0.5	**114**	< 0.5	< 0.5	< 0.5
	12/09/97	HEAL	< 0.5	< 0.5	**65**	< 0.5	< 0.5	< 0.5	< 0.5
	01/08/98	HEAL	< 0.5	**220**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	02/12/98	HEAL	< 0.5	**320**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	06/11/98	HEAL	< 0.5	**180**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/02/98	HEAL	< 0.5	**29**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	04/29/99	OAL	**7.1**	**320**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/14/99	OAL	**14**	**300**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	05/13/00	OAL	**7.2**	< 0.5	< 0.5	**266**	< 0.5	< 0.5	< 0.5
	11/17/00	NCA	< 0.5	< 1.0	< 0.5	**5.23**	< 0.5	< 0.5	< 0.5
	05/22/01	Analysys	--	< 0.5	< 0.5	**3.1**	< 0.5	< 0.5	< 0.5
	11/18/01	Analysys	--	< 0.5	< 0.5	**43.7**	< 0.5	< 0.5	< 0.5
	04/20/02	NCA	< 10.0	**150**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	10/30/02	HEAL	--	**41**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/21/03	HEAL	--	**5.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/10/03	HEAL	**1.7**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/07/04	HEAL	**2.8**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/09/05	HEAL	**2.2**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/11/06	HEAL	**1.5**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/25/07	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	**1.1**	< 1.0	< 1.0
	09/23/08	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/04/09	HEAL	**1.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/18/10	HEAL	**4.9**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/25/11	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/12/12	HEAL	< 1.0	< 1.0	< 1.0	**3.1**	< 1.0	< 1.0	< 1.0
	07/10/12	HEAL	< 1.0	< 1.0	< 1.0	**1.2**	< 1.0	< 1.0	< 1.0

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-17B	05/12/00	OAL	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/17/00	NCA	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	05/23/01	Analysys	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/17/01	Analysys	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	04/19/02	NCA	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/31/02	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/22/03	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/11/03	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/08/04	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/08/05	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/10/06	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/25/07	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/23/08	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
5-59	07/28/01	Analysys	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/19/01	Analysys	--	< 0.5	< 0.5	**30.7**	< 0.5	< 0.5	< 0.5
	04/20/02	NCA	< 10.0	**78.6**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
	10/30/02	HEAL	--	**19**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/21/03	HEAL	--	**14**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/11/03	HEAL	**11**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/08/04	HEAL	**10**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/09/05	HEAL	**4.6**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/11/06	HEAL	**3.4**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/25/07	HEAL	**1.8**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/23/08	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/18/10	HEAL	**1.3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/25/11	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/12/12	HEAL	< 1.0	< 1.0	< 1.0	**2.6**	< 1.0	< 1.0	< 1.0
	07/10/12	HEAL	< 1.0	< 1.0	< 1.0	**1.0**	< 1.0	< 1.0	< 1.0

Table 4. Summary of Analytical Results for PCB Compounds
Thoreau Compressor Station No. 5

Well ID	Date	Lab †	PCB Concentration by Aroclor (µg/L)						
			1016	1221	1232	1242	1248	1254	1260
5-60	11/18/01	Analysys	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	04/20/02	NCA	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/31/02	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	05/22/03	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	11/11/03	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/08/04	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	06/09/05	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/11/06	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/25/07	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	09/23/08	HEAL	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	08/04/09	HEAL	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Notes:
† Lab Designations
OAL = Oregon Analytical Laboratory (Portland, OR)
NCA = North Creek Analytical (Portland, OR)
Analysys = Analysys Inc. (Austin, TX)
HEAL = Hall Environmental Analysis Laboratory (Albuquerque, NM)
†† Total PCB for purpose of this summary table and plotting is the sum of all measured Aroclor concentrations. Values reported as Non Detect are reported as zero.

Table 5. Summary of Quality Assurance Program Results
Thoreau Compressor Station No. 5

			PCBs			Benzene		Toluene		Ethylbenzene		Xylene(s)	
Date	Well ID Replicate ID	Lab	Result	Aroclor	RL	Result	RL	Result	RL	Result	RL	Result	RL
05/22/91	5-17B	EH	ND	---	0.50	ND	0.50	ND	0.50	ND	0.50	ND	1.0
	91-5-22-5-17BI	EH	ND	---	0.50	ND	0.50	ND	0.50	ND	0.50	ND	1.0
05/22/91	5-24B	EH	ND	---	0.50	4.3	0.50	ND	0.50	ND	0.50	1.3	1.0
	91-5-22-5-24BI	EH	ND	---	0.50	130	5.0	ND	0.50	ND	0.50	9.4	1.0
07/24/91	5-02B	EH	ND	---	0.50	830	250	1200	250	150	25	1300	50
	9107245-2BR	EH	ND	---	0.50	680	50	1000	50	73	50	670	100
10/03/91	5-04B	ER	ND	---	0.50	180	5.0	ND	5.0	7.8	5.0	48	5.0
	9110035-4R	ER	ND	---	0.50	86	2.5	2.5	2.5	6.5	2.5	40	2.5
10/11/91	5-18B	ER	NA	---	NA	1200	25	ND	25	ND	25	130	25
	91110115 18BR	ER	NA	---	NA	1200	25	ND	25	ND	25	110	25
11/05/91	5-06B	ER	140	1221	100	1.4	0.50	ND	0.50	ND	0.50	6.0	0.50
	6-99	ER	ND	---	1.0	1.8	0.50	ND	0.50	ND	0.50	14	0.50
12/10/91	5-06B	ER	270	1221	100	ND	0.50	ND	0.50	ND	0.50	5.0	0.50
	9112105-99	ER	170	1221	100	ND	0.50	ND	0.50	ND	0.50	5.4	0.50
01/09/92	5-01B	ER	ND	---	1.0	ND	0.50	ND	0.50	ND	0.50	ND	0.50
	5-99	ER	ND	---	1.0	ND	0.50	ND	0.50	ND	0.50	ND	0.50
01/27/92	5-06B	ER	190	1221	100	1.3	0.50	ND	0.50	ND	0.50	2.6	0.50
	9201275-99	ER	250	1221	100	3.0	0.50	ND	0.50	ND	0.50	13	0.50
02/20/92	5-01B	ER	82	1221	10	ND	0.50	ND	0.50	ND	0.50	5.2	0.50
	5-99	ER	87	1221	10	ND	0.50	ND	0.50	ND	0.50	6.7	0.50
03/18/92	5-01B	ATI	54	1221	2.5	ND	0.50	ND	0.50	ND	0.50	3.3	0.50
	5-99	ATI	65	1221	2.5	ND	0.50	ND	0.50	ND	0.50	3.9	0.50
04/29/92	5-06B	ATI	150	1221	0.50	1.4	0.50	ND	0.50	ND	0.50	3.6	0.50
	5-99	ATI	150	1221	0.50	1.3	0.50	ND	0.50	ND	0.50	2.0	0.50
10/14/92	5-06B	ATI	280	1221	5.0	1.0	0.50	ND	0.50	ND	0.50	2.8	0.50
	5-99	ATI	270	1221	5.0	1.0	0.50	ND	0.50	ND	0.50	2.6	0.50
12/14/94	5-06B	HEAL	NA	---	NA	4.3	0.50	ND	0.50	ND	0.50	0.7	0.50
	5-99	HEAL	NA	---	NA	3.2	0.50	ND	0.50	ND	0.50	ND	0.50
10/06/95	5-48B	HEAL	NA	---	NA	550	12.5	940	12.5	290	12.5	1900	12.5
	5-99	HEAL	NA	---	NA	730	20	1000	20	290	20	2300	20
11/21/95	5-02B	HEAL	NA	---	NA	740	0.50	2900	0.50	160	0.50	1100	0.50
	5-98	HEAL	NA	---	NA	670	0.50	2000	0.50	120	0.50	990	0.50
11/21/95	5-06B	HEAL/NET	44.4	1242	0.50	6.2	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	37.8	1242	0.50	NA	NA	NA	NA	NA	NA	NA	NA
02/21/96	5-48B	HEAL	NA	---	NA	690	0.50	1100	0.50	550	0.50	3300	0.50
	5-98	HEAL	NA	---	NA	580	0.50	1200	0.50	540	0.50	3100	0.50
02/22/96	5-01B	HEAL/NET	<0.065	---	0.065	4.3	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	<0.065	---	0.065	NA	NA	NA	NA	NA	NA	NA	NA
05/23/96	5-02B	HEAL	NA	---	NA	380	0.50	120	0.50	1300	0.50	1100	0.50
	5-98	HEAL	NA	---	NA	520	0.50	160	0.50	1600	0.50	1200	0.50
05/23/96	5-06B	HEAL/NET	78	---	0.065	1.2	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	<0.065	---	0.065	NA	NA	NA	NA	NA	NA	NA	NA
08/14/96	5-01B	HEAL/NET	14.2	1221	NA	<0.5	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	5.61	1221	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/14/96	5-48B	HEAL	NA	---	NA	770	0.50	7600	0.50	340	0.50	3900	0.50
	5-98	HEAL	NA	---	NA	630	0.50	7900	0.50	300	0.50	3600	0.50
11/21/96	5-48B	HEAL	NA	---	NA	960	0.50	8500	0.50	330	0.50	3900	0.50
	5-98	HEAL	NA	---	NA	970	0.50	8600	0.50	330	0.50	4000	0.50
11/22/96	5-06B	HEAL/NET	42.8	1221	0.065	0.9	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	34.1	1221	0.065	NA	NA	NA	NA	NA	NA	NA	NA
02/28/97	5-02B	HEAL	NA	---	NA	260	0.50	500	0.50	90	0.50	680	0.50
	5-98	HEAL	NA	---	NA	290	0.50	510	0.50	91	0.50	690	0.50
02/28/97	5-06B	HEAL/NET	48.2	1221	0.065	0.9	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL/NET	49.7	1221	0.065	0.8	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
05/22/97	5-06B	HEAL/NET	7.29	1221	0.065	0.7	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99B	HEAL/NET	5.18	1221	0.065	NA	NA	NA	NA	NA	NA	NA	NA
05/22/97	5-18B	HEAL	NA	---	NA	<0.5	0.50	4.7	0.50	88	0.50	0.8	0.50
	5-98	HEAL	NA	---	NA	<0.5	0.50	4.3	0.50	89	0.50	0.8	0.50
08/20/97	5-06B	HEAL/EPIC	16.5	1221	0.65	0.7	0.50	<0.5	0.50	<0.5	0.50	<0.5	0.50
	5-99B	HEAL/EPIC	8.1	1221	0.065	NA	NA	NA	NA	NA	NA	NA	NA
08/20/97	5-16B	HEAL	NA	---	NA	130	0.50	820	0.50	120	0.50	1300	0.50
	5-98	HEAL	NA	---	NA	130	0.50	790	0.50	120	0.50	1200	0.50
11/19/97	5-48B	HEAL	NA	---	NA	1400	0.50	6900	0.50	330	0.50	3900	0.50
	5-98	HEAL	NA	---	NA	1600	0.50	7300	0.50	330	0.50	4100	0.50
02/11/98	5-16B	HEAL	NA	---	NA	41	0.50	360	0.50	90	0.50	660	0.50
	5-98	HEAL	NA	---	NA	45	0.50	350	0.50	91	0.50	650	0.50
02/12/98	5-06C	HEAL	320	1221	5.0	2.2	0.50	1.4	0.50	<0.5	0.50	1.3	0.50
	5-99	HEAL	280	1221	5.0	NA	NA	NA	NA	NA	NA	NA	NA
06/11/98	5-06C	HEAL	180	1221	5.0	1.2	0.50	0.6	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL	190	1221	5.0	NA	NA	NA	NA	NA	NA	NA	NA
06/11/98	5-48B	HEAL	NA	---	NA	2100	0.50	8000	0.50	200	0.50	3800	0.50
	5-98	HEAL	NA	---	NA	2000	0.50	7900	0.50	210	0.50	3800	0.50
10/01/98	5-02C	HEAL	NA	---	NA	1300	0.50	3500	0.50	230	0.50	1800	0.50
	5-98	HEAL	NA	---	NA	1300	0.50	3400	0.50	230	0.50	1800	0.50
10/01/98	5-06C	HEAL	29	1221	5.0	1.5	0.50	1.3	0.50	<0.5	0.50	<0.5	0.50
	5-99	HEAL	33	1221	5.0	NA	NA	NA	NA	NA	NA	NA	NA
04/28/99	5-02C	OAL	NA	---	NA	1500	1	4400	1	260	1	2500	1
	5-98	OAL	NA	---	NA	1500	1	4400	1	250	1	2400	1
04/28/99	5-06C	OAL	7.1/320	1061/1221	1.5/1.0	<1	1	<1	1	<1	1	<1	1
	5-99	OAL	6.3/280	1061/1221	0.5/1.0	NA	NA	NA	NA	NA	NA	NA	NA

Table 5. Summary of Quality Assurance Program Results
Thoreau Compressor Station No. 5

			PCBs			Benzene		Toluene		Ethylbenzene		Xylene(s)	
Date	Well ID Replicate ID	Lab	Result	Aroclor	RL	Result	RL	Result	RL	Result	RL	Result	RL
10/12/99	5-48B 5-98	OAL OAL	NA NA	--- ---	NA NA	1000 960	50 50	1900 1800	100 100	320 300	100 100	2900 2600	200 200
10/14/99	5-06C 5-99	OAL OAL	14/300 14/290	1061/1221 1061/1221	5.0/10 5.0/10	<1 NA	1 NA	<2 NA	2 NA	<2 NA	2 NA	<4 NA	4 NA
05/12/00	5-16B 5-98	OAL OAL	NA NA	--- ---	NA NA	600 510	5 10	290 200	10 20	92 70	10 20	360 270	20 40
05/13/00	5-06C 5-99	OAL OAL	7.2/266 6.6/263	1061/1221 1061/1221	5.0/10 5.0/10	1 NA	1 NA	<2 NA	2 NA	<2 NA	2 NA	<4 NA	4 NA
11/17/00	5-02C 5-98	NCA NCA	NA NA	--- ---	NA NA	671 623	0.500 0.500	1000 972	0.500 0.500	372 358	0.500 0.500	3820 3730	20.0 20.0
11/17/00	5-06C 5-99	NCA NCA	<0.5/5.23 4.45/5.17	1016/1242 1016/1242	0.500 0.500/0.500	<0.500 NA	0.500 0.500	<0.500 NA	0.500 0.500	<0.500 NA	0.500 0.500	<1 NA	1.00 1.00
05/22/01	5-06C 5-99	Analysys Analysys	3.1 5.81	1016/1242 1016/1242	1 1	<1 NA	0.500 NA	<1 NA	0.500 NA	<1 NA	0.500 NA	<2 NA	1.00 NA
05/24/01	5-16B 5-98	Analysys Analysys	NA NA	--- ---	NA NA	1240 1220	100 100	487 466	100 100	174 181	100 100	1105 1184	100 100
11/17/01	5-02C 5-65	Analysys Analysys	NA NA	--- ---	NA NA	587 577	100 100	15.2 15.6	100 100	365 401	100 100	3622 3890	100 100
11/18/01	5-06C 5-66	Analysys Analysys	43.7 40.5	1016/1242 1016/1242	0.5 0.5	1.19 NA	1 NA	<1 NA	1 NA	<1 NA	1 NA	<2 NA	2 NA
04/20/02	5-02C 5-65	HEAL HEAL	NA NA	--- ---	NA NA	450 450	10 10	ND ND	10 10	300 300	10 10	3100 3200	10 10
04/20/02	5-06C 5-66	HEAL HEAL	150 168	1221 1221	1.00 20.0	1.1 NA	0.50 NA	<0.50 NA	0.50 NA	<0.50 NA	0.50 NA	<0.50 NA	0.50 NA
10/30/02	5-59 5-66	HEAL HEAL	19 19	1016/1221 1016/1221	1.0 1.0	ND NA	1.0 NA	ND NA	1.0 NA	ND NA	1.0 NA	ND NA	1.0 NA
10/31/02	5-02C 5-65	HEAL HEAL	NA NA	--- ---	NA NA	330 350	5.0 20	ND 3.2	5.0 2.5	230 230	5.0 20	2000 2200	5.0 20
05/22/03	5-02C 5-67	HEAL HEAL	NA NA	--- ---	NA NA	290 290	10 10	ND ND	10 10	200 190	10 10	800 780	10 10
05/22/03	5-59 5-66	HEAL HEAL	14 14	1016/1221 1016/1221	1.0 1.0	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA
11/11/03	5-02C 5-66	HEAL HEAL	NA NA	--- ---	NA NA	450 490	2.5 2.5	ND ND	2.5 2.5	240 240	2.5 2.5	770 770	2.5 2.5
11/11/03	5-59 5-66	HEAL HEAL	11 9.7	1016 1016	1.0 1.0	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA
06/08/04	5-02C 5-66	HEAL HEAL	NA NA	--- ---	NA NA	270 280	25 5	28 28	25 5	160 170	25 5	1000 1100	25 5
06/08/04	5-59 5-61	HEAL HEAL	10 11	1016 1016	1.0 1.0	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA	ND NA	0.5 NA
06/08/05	5-16B 5-68B	HEAL HEAL	NA NA	--- ---	NA NA	1400 1900	5 5	< 5 < 5	5 5	160 200	5 5	520 920	5 5
07/10/06	5-16B 5-61	HEAL HEAL	NA NA	--- ---	NA NA	1600 1400	20 20	< 20 < 20	20 20	150 140	20 20	380 420	60 60
07/11/06	5-59 5-61	HEAL HEAL	3.4 3.3	1016 1016	1.0 1.0	ND NA	1.0 NA	ND NA	1.0 NA	ND NA	1.0 NA	ND NA	3.0 NA
07/25/07	5-06C 5-61	HEAL HEAL	1.1 1.1	1248 1248	1.00 1.00	<1 NA	1 NA	<1 NA	1 NA	<1 NA	1 NA	<2 NA	2 NA
07/25/07	5-16B 5-61	HEAL HEAL	NA NA	--- ---	NA NA	1700 1500	20 20	< 20 < 20	20 20	170 150	20 20	590 380	40 40
09/23/08	5-06C 5-61	HEAL HEAL	ND 1.3	1016 1016	1.0 1.0	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	2.0 ---
09/23/08	5-16B 5-61	HEAL HEAL	--- ---	--- ---	--- ---	1900 1700	20 20	ND ND	20 20	180 190	20 20	600 680	10 10
08/04/09	5-6C 5-61	HEAL HEAL	1.3 1.7	1016 1016	1.0 1.0	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	2.0 ---
08/04/09	5-16B 5-61	HEAL HEAL	--- ---	--- ---	--- ---	1300 1300	50 50	ND ND	5.0 5.0	150 120	5.0 5.0	590 500	10 10
05/18/10	5-6C 5-61	HEAL HEAL	4.9 2.0	1016 1016	1.0 1.0	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	2.0 ---
05/18/10	SVE-3 5-61	HEAL HEAL	--- ---	--- ---	--- ---	6300 6300	100 100	ND 17	50 10	430 490	50 10	3900 3500	100 200
09/25/11	5-6C 5-61	HEAL HEAL	ND ND	--- ---	1.0 1.0	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	1.0 ---	ND ---	2.0 ---
09/25/11	5-16B 5-61	HEAL HEAL	--- ---	--- ---	--- ---	4400 4600	50 50	ND ND	20 20	350 350	20 20	2600 2600	40 40
06/12/12	5-16B 5-61	HEAL HEAL	--- ---	--- ---	--- ---	3300 4400	50 50	ND ND	50 50	230 340	50 50	1600 2500	100 100
06/12/12	5-6C 5-6D	HEAL HEAL	3.1 4.0	1242 1242	1.0 1.0	ND ND	1.0 1.0	ND ND	1.0 1.0	ND ND	1.0 1.0	ND ND	2.0 2.0

Table 5. Summary of Quality Assurance Program Results
Thoreau Compressor Station No. 5

			PCBs			Benzene		Toluene		Ethylbenzene		Xylene(s)	
Date	Well ID Replicate ID	Lab	Result	Aroclor	RL	Result	RL	Result	RL	Result	RL	Result	RL
07/10/12	5-6C 5-6D	HEAL HEAL	1.2 1.3	1242 1242	1.0 1.0	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---

† Lab Designations
ATI-A = Analytical Technologies, Inc. (Albuquerque)
ATI-P = Analytical Technologies, Inc. (Phoenix)
ER = Enseco (Rocky Mountain Analytical)
EH = Enseco (Houston)
HEAL = Hall Environmental Analysis Laboratory (Albuquerque)
NET - National Environmental Testing, INC.
OAL - Oregon Analytical Laboratory
NA = Not Analyzed or Not Applicable

Table 6. Monitor Well Sampling Locations, Frequency, and Sample Analysis Plan
Thoreau Compressor Station No. 5

Well ID	Analytical Requirements for Annual Event	Benzene (ppb) Last Sample Event	PCBs (ppb) Last Sample Event	Comments
5-01C	none	<1*	<1*	clean upgradient well * Result from 8/4/09 sample event
5-02B	none	---	---	not enough water to collect a sample
5-02C	BTEX	40	---	replacement for 02B; intermittent PSH
5-03B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-04B	none	---	---	dry
5-05B	none	2.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-06C	BTEX & PCBs	<1	1.2	has tested positive for PCBs
5-12B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-13B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-14B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-15B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-16B	BTEX	3300	---	impacted well
5-17B	none	<1*	<1*	clean upgradient well * Result from 8/4/09 sample event
5-18B	BTEX	<1	---	clean downgradient well
5-19B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-20B	BTEX	<1	---	clean downgradient well
5-22B	none	---	---	not enough water to collect a sample
5-23B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-24B	none	<0.5*	---	clean upgradient well * Result from 6/8/04 sample event
5-34B	none	---	---	remediation system well
5-35B	BTEX	4000	---	recently added well to SAP
5-36E	none	---	---	pilot test well not suitable for sampling
5-37I	none	---	---	pilot test well not suitable for sampling
5-41B	none	---	---	clean downgradient well
5-48B	none	2500*	---	dry * Result from 6/9/05 sample event
5-59	BTEX & PCBs	<1	1.0	has tested positive for PCBs
5-60	none	<1*	<1*	clean upgradient well * Result from 8/4/09 sample event
SVE-1	none	<0.5*	---	dry * Result from 6/8/04 sample event
SVE-2	none	---	---	dry
SVE-3	BTEX	5400	---	recently added well to SAP
SVE-4	none	---	---	remediation system well

Notes:
1) BTEX - BTEX Compounds by either EPA Method 8021B or EPA Method 8260
2) PCBs - Polychlorinated Biphenyls by EPA Method 8082

Table 7. Summary of Completion Details for Soil Borings Completed as Wells
Thoreau Compressor Station No. 5

Well	Source[a]	Date of Completion	Measuring Point Elevation (ft)	Northing (ft)	Easting (ft)	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
5 01C	Layne Christensen/CES	11/17/97	7,292.11 (c)	52.73	-35.22	55.0	na	stick up	2	44.5-54.5	42.5
5-02B	na	05/12/89	7,292.06 (b)	58.60	-145.02	55.5	56.69	flush mount	2	37.5-51.0	ns
5 02C	Layne Christensen/CES	11/15/97	7,291.82 (c)	49.32	-155.28	58.5	62.10	flush mount	2	42.0-57.0	40
5-03B	na	05/11/89	7,303.76 (b)	440.30	-109.97	58.0	55.60	flush mount	2	41.0-54.5	na
5-04B	Western Tech./DBS	09/16/89	7,292.39 (b)	15.05	-231.56	58.8	58.08	flush mount	2	38.7-57.2	36.9
5-05B	Western Tech./DBS	09/19/89	7,290.83 (b)	12.86	-152.20	59.5	62.02	flush mount	2	39.5-58.0	37.5
5 06C	Layne Christensen/CES	11/18/97	7,291.46 (c)	9.38	-10.62	62.5	na	stick up	2	47.0-62.0	44.9
5-12B	Stewart Brothers/DBS	06/28/90	7,279.61 (b)	-387.48	-89.37	65.0	na	flush mount	2	45.0-65.0	41.4
5-13B	Stewart Brothers/DBS	06/28/90	7,282.43 (b)	-369.35	-261.04	69.4	na	flush mount	2	49.3-69.4	45.0
5-14B	Stewart Brothers/DBS	06/27/90	7,285.76 (b)	-357.23	-441.25	72.3	na	flush mount	2	42.3-72.3	48.4
5-15B	Stewart Brothers/DBS	06/29/90	7,292.92 (b)	-87.47	-344.34	65.6	na	flush mount	2	45.6-65.6	41.5
5-16B	Western Tech./DBS	07/05/90	7,288.82 (b)	-145.56	-248.38	64.6	65.4	flush mount	2	34.6-64.6	33.5
5-17B	Western Tech./DBS	07/03/90	7,284.75 (b)	-88.53	-40.96	63.9	64.2	flush mount	2	33.9-63.9	31.2
5-18B	Western Tech./DBS	07/09/90	7,286.41 (b)	-256.43	-309.06	69.9	na	flush mount	2	49.9-69.9	43.4
5-19B	Western Tech./DBS	07/10/90	7,290.52 (b)	-157.69	-330.24	63.3	65.05	flush mount	2	43.3-63.3	37.5
5-20B	Western Tech./DBS	07/11/90	7,284.60 (b)	-261.92	-172.12	64.0	na	flush mount	2	33.9-63.9	28.3
5-22B	Stewart Brothers/DBS	09/13/90	7,292.74 (b)	88.16	-198.69	55.8	54.9	flush mount	2	45.8-55.8	42.2
5-23B	Stewart Brothers/DBS	09/21/90	7,282.63 (b)	-450.52	-315.67	80.1	na	flush mount	2	50.1-80.1	42.7
5-24B	Stewart Brothers/DBS	09/25/90	7,279.18 (b)	-460.67	-211.48	75.5	na	flush mount	2	45.5-75.5	36.5
5-34B	Ward Drilling Co./DBS	03/31/92	7,294.71 (b)	25.97	-306.80	65.7	63.10	flush mount	4	34.0-64.0	33.0
5-35B	Ward Drilling Co./DBS	04/05/92	7,296.11 (b)	37.30	-289.09	70.0	62.21	stick up	4	31.3-61.3	28.4
5-36E	Ward Drilling Co./DBS	04/09/92	7,296.56 (b)	30.28	-287.13	67.5	68.51	stick up	4	47.7-62.3	43.4
5-37I	Ward Drilling Co./DBS	04/16/92	7,296.31 (b)	44.48	-290.76	72.5	61.72	stick up	4	52.1-59.8	51.4
5-41B	Stewart Brothers/DBS	07/24/92	7,279.73 (b)	-603.88	-174.07	77.0	na	flush mount	2	55.0-72.0	53.0
5-47B	Stewart Brothers/DBS	08/04/92	7,268.35 (b)	-862.86	-104.00	80.0	na	abandoned	2	59.5-76.5	57.5
5-48B	Stewart Brothers/DBS	08/05/92	7,292.64 (b)	-34.33	-271.94	63.7	59.68	flush mount	2	43.0-60.0	41.0
5-57B	Stewart Brothers/DBS	03/04/93	7,257.80	-1014.77	-109.30	76.2	na	abandoned	2	60.0-75.0	57.9
5-58B	Stewart Brothers/DBS	03/03/93	7,279.38	-682.60	-340.89	78.1	na	abandoned	2	61.2-76.2	58.9
5-59	Rodgers & Co.	07/27/01	7290.82 (d)	29.53	-2.43	56.0	55.23	stick up	4	41.0-56.0	38.0
5-60	Rodgers & Co.	07/27/01	7290.83 (d)	11.62	-30.66	56.0	57.41	stick up	4	41.0-56.0	38.0
SVE-1	Techna/DBS	03/29/96	7,296.88 (c)	37.08	-356.25	60.0	61.55	flush mount	2	35.0-60.0	33.3
SVE-2	Techna/DBS	03/29/96	7,297.68 (c)	42.46	-409.54	61.0	61.59	flush mount	2	35.0-60.0	33.6
SVE-3	Layne Christensen/CES	11/16/1997	7,293.68 (c)	-21.30	-271.04	65.0	65.54	flush mount	2	44.0 - 64.0	41.9
SVE-4	Layne Christensen/CES	11/16/1997	7,289.83 (c)	-123.39	-243.36	62.5	62.03	flush mount	2	42.0 - 62.0	40.0
AS-1	Techna/DBS	03/29/96	na	46.99	-327.63	60.5	na	flush mount	2	56.0-58.5	54.8
AS-2	Techna/DBS	03/27/96	na	45.70	-302.63	61.0	na	flush mount	2	57.5-60.0	56.5
AS-3	Techna/DBS	03/27/96	na	44.41	-277.63	59.5	na	flush mount	2	57.0-59.5	56.0
AS-4	Techna/DBS	03/27/96	na	43.11	-252.35	60.3	na	flush mount	2	57.8-60.3	55.6
AS-5	Techna/DBS	03/27/96	na	41.82	-227.35	58.0	na	flush mount	2	55.5-58.0	54.1
AS-6	Techna/DBS	03/29/96	7,295.62 (c)	23.02	-341.69	59.0	57.57	flush mount	2	56.5-59.0	55.0
AS-7	Techna/DBS	03/27/96	7,295.72 (c)	21.31	-316.55	60.0	59.29	flush mount	2	57.0-59.5	55.5
AS-8	Techna/DBS	03/27/96	7,294.45 (c)	20.25	-292.07	61.0	62.18	flush mount	2	58.5-61.0	57.2
AS-9	Techna/DBS	03/27/96	7,293.76 (c)	18.29	-266.75	59.8	59.31	flush mount	2	57.1-59.6	54.0
AS-10	Techna/DBS	03/27/96	7,293.90 (c)	16.75	-241.70	60.3	61.31	flush mount	2	57.8-60.3	56.4
AS-11	Techna/DBS	03/27/96	7,293.05 (c)	15.96	-217.21	60.0	60.69	flush mount	2	57.0-59.5	55.4
AS-12	Layne Christensen/CES	11/21/1997	7,295.22 (c)	-5.04	-332.45	64.5	65.93	flush mount	2	62.0 - 64.0	59.0
AS-13	Layne Christensen/CES	11/21/1997	7,294.58 (c)	-6.15	-306.17	68.0	68.37	flush mount	2	65.5 - 67.5	62.0
AS-14	Layne Christensen/CES	11/20/1997	7,293.98 (c)	-7.89	-280.13	64.5	64.46	flush mount	2	62.0 - 64.0	58.0
AS-15	Layne Christensen/CES	11/20/1997	7,293.40 (c)	-8.43	-259.05	64.0	62.82	flush mount	2	61.5 - 63.5	58.0
AS-16	Layne Christensen/CES	11/19/1997	7,293.27 (c)	-11.17	-237.02	65.0	64.96	flush mount	2	62.0 - 64.0	57.0

NOTES:
na - Information not available
(a) Driller/Consultant
(b) Survey done by Bob Martinez 8/92
(c) Survey done by Cypress Engineering 1/98
(d) Survey done by Cypress Engineering 9/08

Table 8. Summary of SVE System Monitoring Results
Thoreau Compressor Station No. 5

Sample Source	Date	Gasoline Range VOCs	< C5	C5-C6	C6-C7	C7-C8	C8-C9	C9-C10	C10-C11	C11-C12	C12-C14	C14+
		(ug/L)	(%)									
Average	11/22/96	1183	---	---	---	---	---	---	---	---	---	---
Average	08/21/97	1762	---	---	---	---	---	---	---	---	---	---
Average	11/24/97	977	---	---	---	---	---	---	---	---	---	---
Average	01/07/98	1353	---	---	---	---	---	---	---	---	---	---
Total Flow	08/21/02	298	0.0	11.1	12.4	22.3	15.7	22.8	10.5	5.0	0.2	0.0
Total Flow	06/19/03	381	0.0	6.1	16.8	23.7	13.1	17.2	11.7	8.5	2.9	0.0
Total Flow	07/30/03	218	0.0	7.6	23.5	23.7	15.8	14.0	9.5	5.4	0.5	0.0
Total Flow	09/03/03	312	0.0	7.3	18.2	21.0	12.6	18.6	12.8	7.0	2.5	0.0
Total Flow	10/03/03	293	1.5	7.5	19.0	19.5	12.8	15.0	14.7	7.3	2.7	0.0
Total Flow	10/30/03	268	2.6	4.6	16.5	30.8	13.1	12.2	13.6	5.7	0.9	0.0
Total Flow	05/11/04	322	0.2	16.4	27.8	22.8	14.1	10.1	5.9	1.2	1.2	0.3
Total Flow	06/16/04	241	6.7	14.0	25.5	27.2	12.8	7.7	4.8	1.2	0.1	0.0
Total Flow	07/13/04	367	2.4	9.4	19.6	22.1	11.8	11.1	13.1	7.7	2.8	0.0
Total Flow	08/10/04	291	4.0	10.3	22.9	25.3	12.8	9.5	9.4	4.3	1.3	0.2
Total Flow	09/14/04	276	0.9	9.2	21.9	26.2	13.4	10.4	10.6	5.7	1.7	0.0
Total Flow	10/13/04	262	1.1	8.5	20.8	24.0	13.3	10.3	11.7	7.1	3.2	0.0
Total Flow	05/27/05	346	7.4	13.9	22.1	26.2	11.8	6.8	5.8	3.7	2.1	0.2
Total Flow	06/24/05	415	2.1	14.7	23.0	23.4	12.7	8.0	8.4	4.9	2.7	0.1
Total Flow	07/28/05	296	4.1	10.2	23.0	26.0	13.6	8.3	7.7	5.0	2.1	0.0
Total Flow	09/07/05	302	3.5	9.3	21.2	29.3	14.2	8.0	6.9	5.4	2.2	0.0
Total Flow	10/07/05	241	3.9	10.0	22.3	31.6	14.6	8.7	5.7	2.8	0.4	0.0
Total Flow	05/31/06	218	10.4	13.2	24.5	26.7	12.4	6.1	5.5	1.2	0.0	0.0
Total Flow	06/28/06	139	8.5	12.2	23.3	27.9	12.8	5.1	6.4	1.6	1.8	0.4
Total Flow	07/26/06	162	7.6	12.9	24.8	27.3	14.2	6.5	5.0	1.4	0.3	0.0
Total Flow	08/23/06	177	6.7	11.7	24.5	27.4	14.5	8.5	4.5	1.8	0.4	0.0
Total Flow	09/25/06	152	6.8	12.2	25.8	28.4	14.9	6.1	4.3	1.3	0.2	0.0
Total Flow	05/25/07	104	3.0	10.2	17.6	32.9	14.4	10.1	7.1	3.8	0.9	0.0
Total Flow	07/13/07	190	--	6.1	50.5	24.3	8.2	9.9	0.6	0.4	0.0	0.0
Total Flow	08/24/07	158	2.3	14.5	25.4	36.6	9.3	5.1	6.0	0.8	0.0	0.0
Total Flow	09/21/07	148	2.3	9.9	31.7	33.5	12.0	5.6	3.5	1.3	0.2	0.0
Total Flow	10/25/07	140	5.3	6.0	20.5	33.1	20.4	8.1	4.8	1.6	0.2	0.0
Total Flow	06/09/08	133	3.3	12.9	23.0	31.7	16.8	6.5	4.3	1.2	0.3	0.0
Total Flow	07/11/08	108	6.4	12.2	23.3	31.8	15.7	5.9	3.5	1.1	0.1	0.0
Total Flow	08/04/08	104	3.1	12.3	23.9	32.2	16.3	6.5	4.6	0.8	0.3	0.0
Total Flow	09/05/08	161	--	9.7	24.1	34.2	16.3	10.6	3.1	1.7	0.3	0.0
Total Flow	10/03/08	121	5.9	11.3	25.7	33.5	14.2	4.2	4.9	0.2	0.1	0.0
Total Flow	10/22/08	121	5.2	10.5	24.9	33.4	12.2	8.8	4.5	0.5	0.0	0.0
Total Flow	05/29/09	160	--	12.9	26.3	36.9	13.1	8.7	1.3	0.7	0.1	0.0
Total Flow	06/26/09	145	--	8.8	26.1	39.3	15.0	8.2	1.6	0.5	0.5	0.0
Total Flow	07/31/09	129	--	8.3	26.7	36.7	17.7	6.9	2.1	1.2	0.4	0.0
Total Flow	08/20/09	155	--	12.0	28.4	34.1	15.9	6.4	1.9	0.9	0.4	0.0
Total Flow	09/25/09	163	--	8.7	34.1	35.4	14.4	5.4	1.3	0.5	0.2	0.0
Total Flow	10/20/09	164	--	8.3	27.3	41.3	14.9	6.9	0.9	0.3	0.1	0.0
Total Flow	06/04/10	119	--	9.2	29.1	34.4	14.6	8.1	2.6	1.4	0.5	0.1
Total Flow	07/02/10	185	0.0	14.2	29.0	31.5	13.5	10.0	1.3	0.3	0.2	0.0
Total Flow	08/06/10	296	--	13.1	22.2	37.1	10.4	15.8	0.7	0.2	0.3	0.2
Total Flow	09/09/10	103	--	12.8	29.3	35.1	16.3	5.0	0.9	0.4	0.2	0.0
Total Flow	10/12/10	160	--	6.0	26.3	33.1	15.2	14.8	2.7	1.2	0.7	0.0
Total Flow	11/01/10	89	--	7.8	30.2	30.8	17.1	8.2	2.9	1.9	1.1	0.0

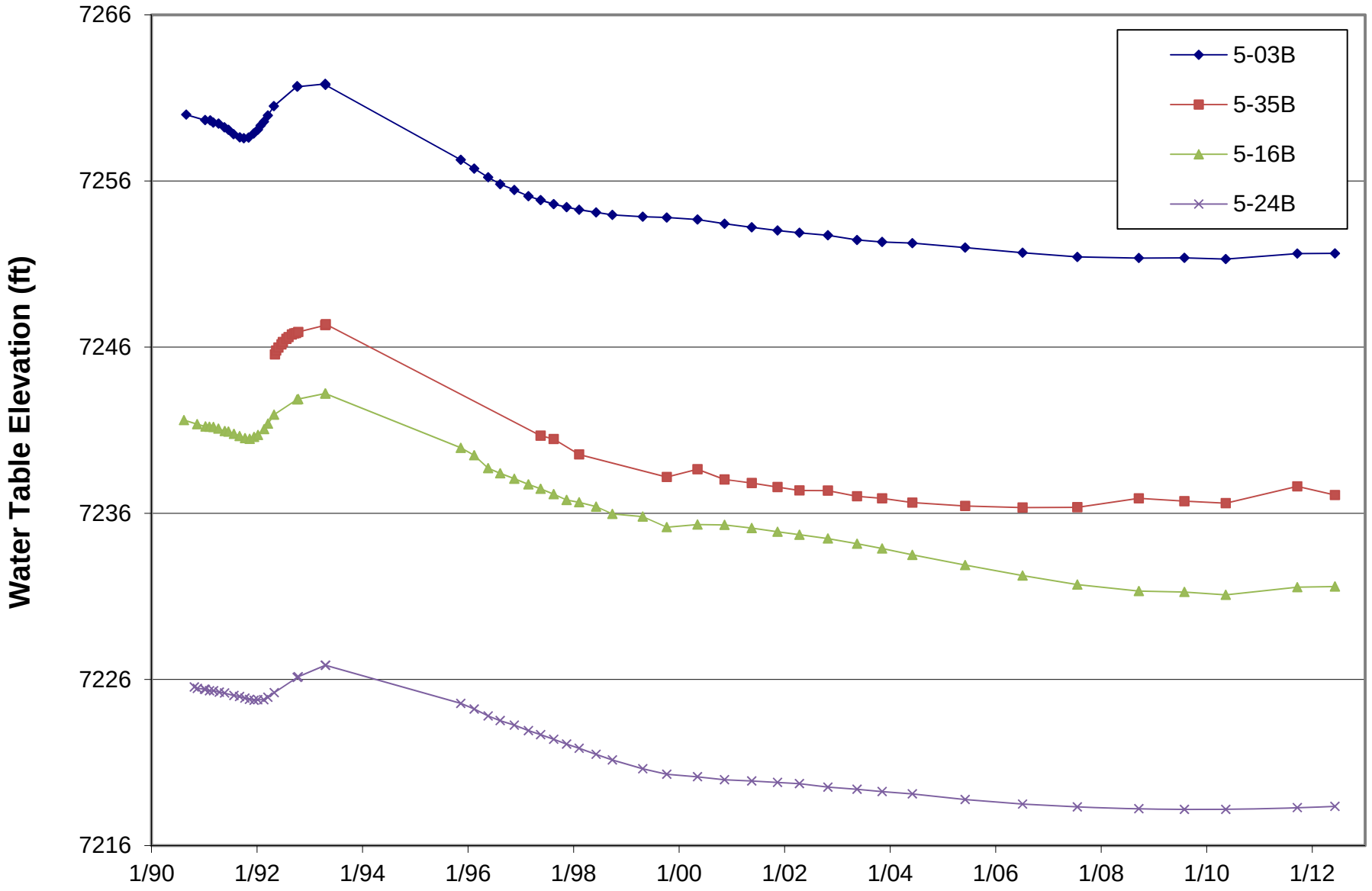
All air samples analyzed by Hall Laboratory of Albuquerque, NM

APPENDICES

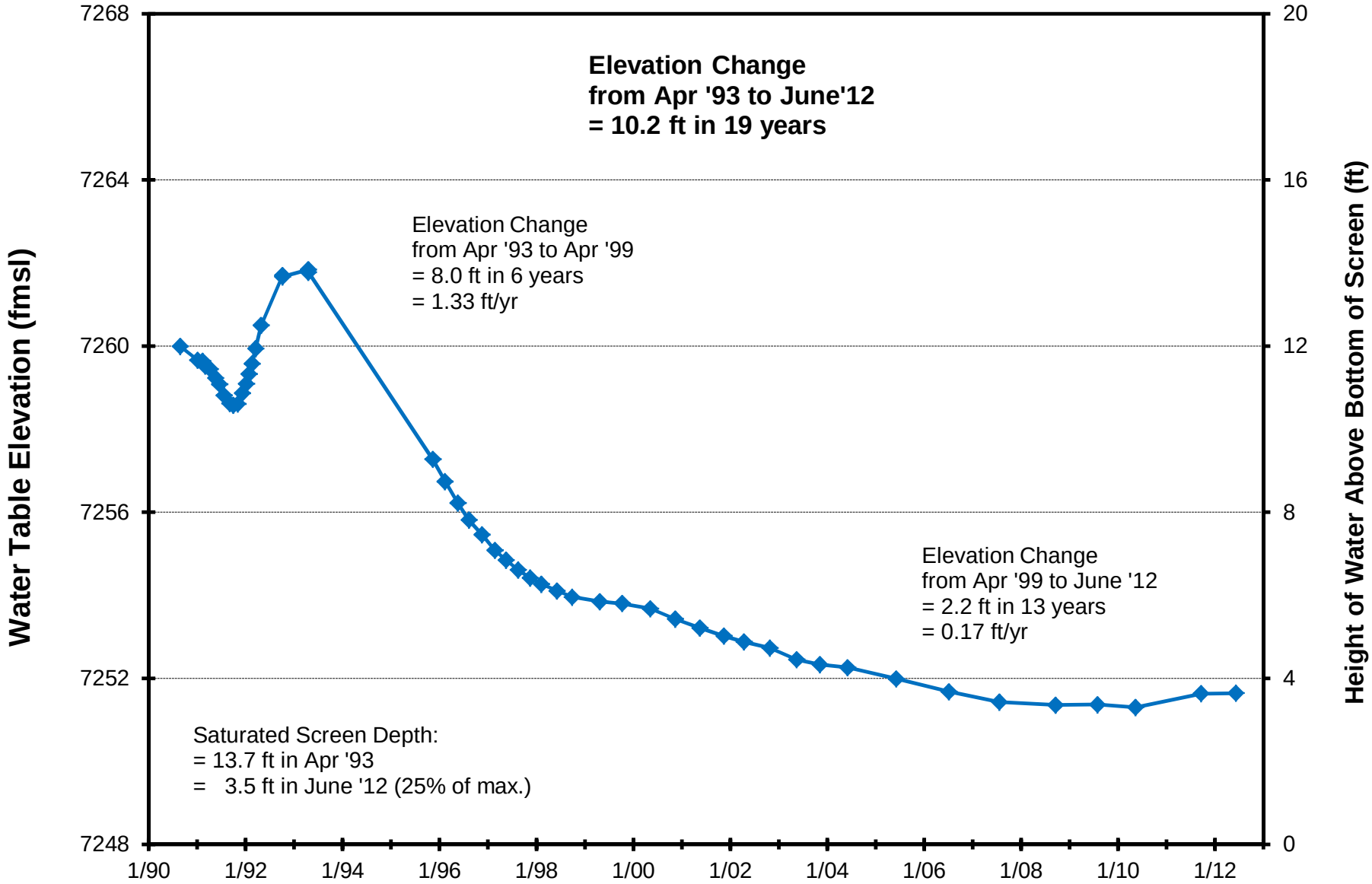
APPENDIX A

Hydrographs for Selected Monitoring Wells with No Accumulated PSH

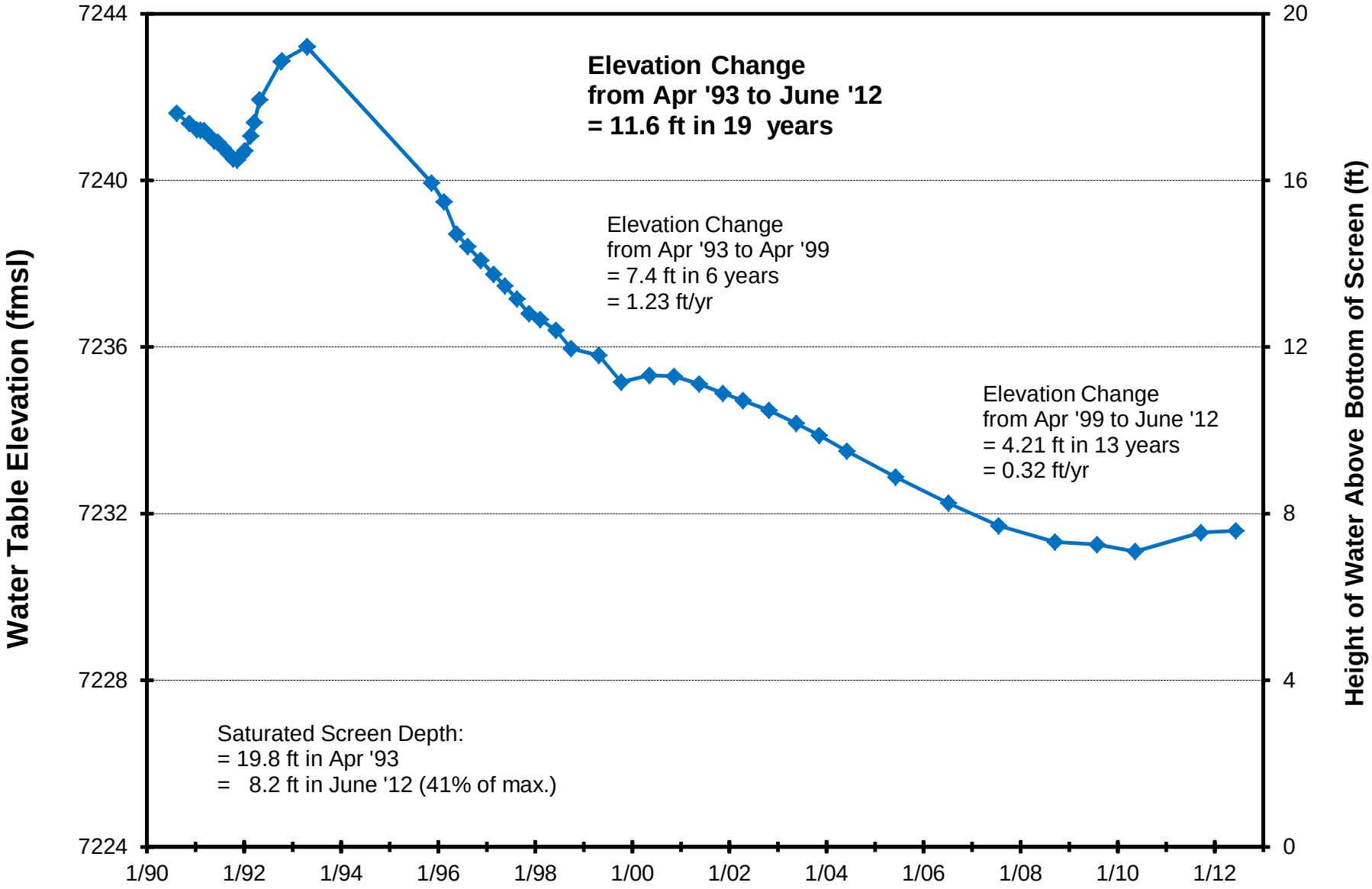
Hydrograph for Selected Monitor Wells with No Accumulated PSH
Thoreau Station Remediation Site



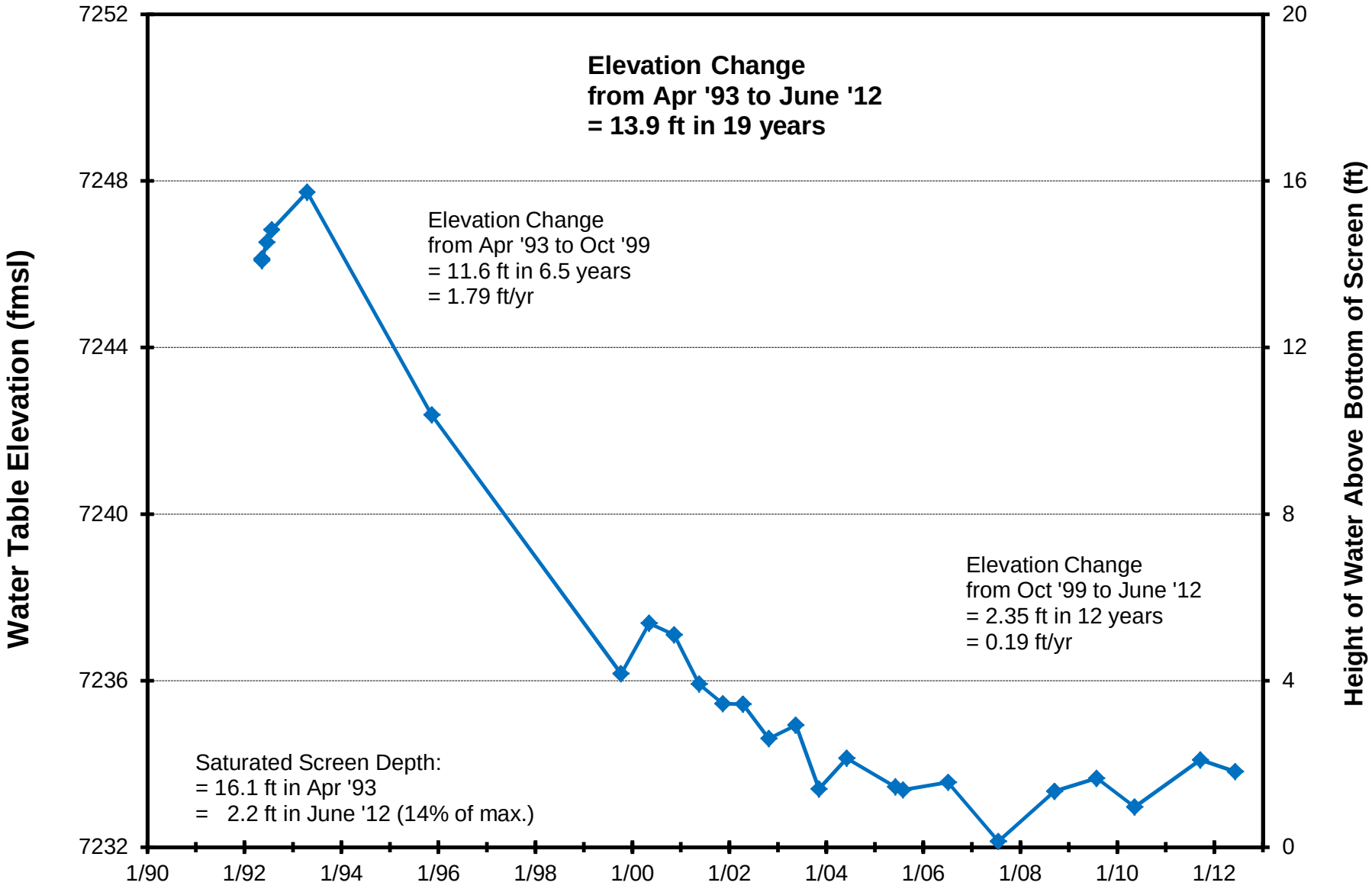
Hydrograph for Monitor Well 5-03B
Thoreau Station Remediation Site



Hydrograph for Monitor Well 5-16B
Thoreau Station Remediation Site



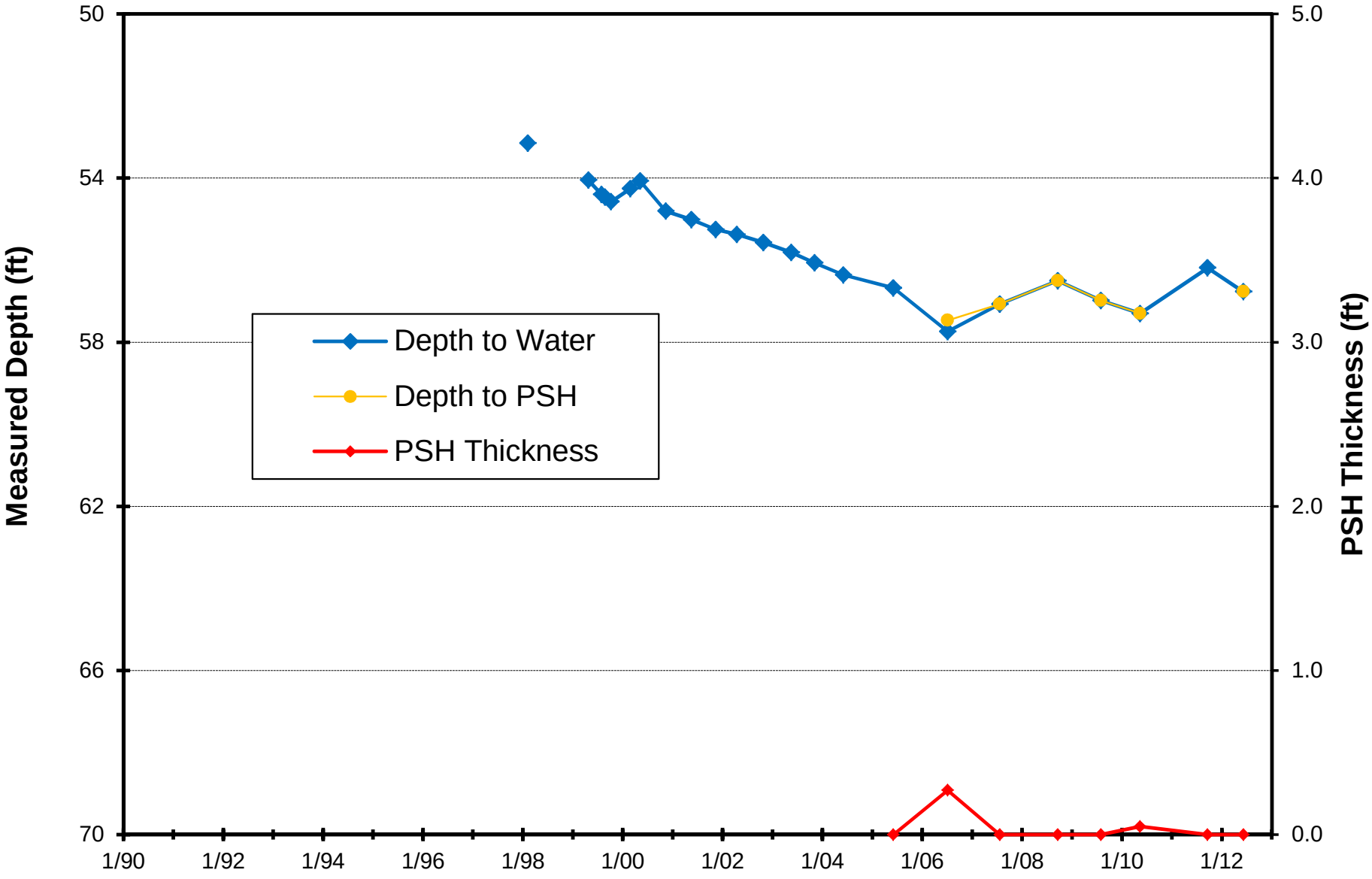
Hydrograph for Monitor Well 5-34B
Thoreau Station Remediation Site



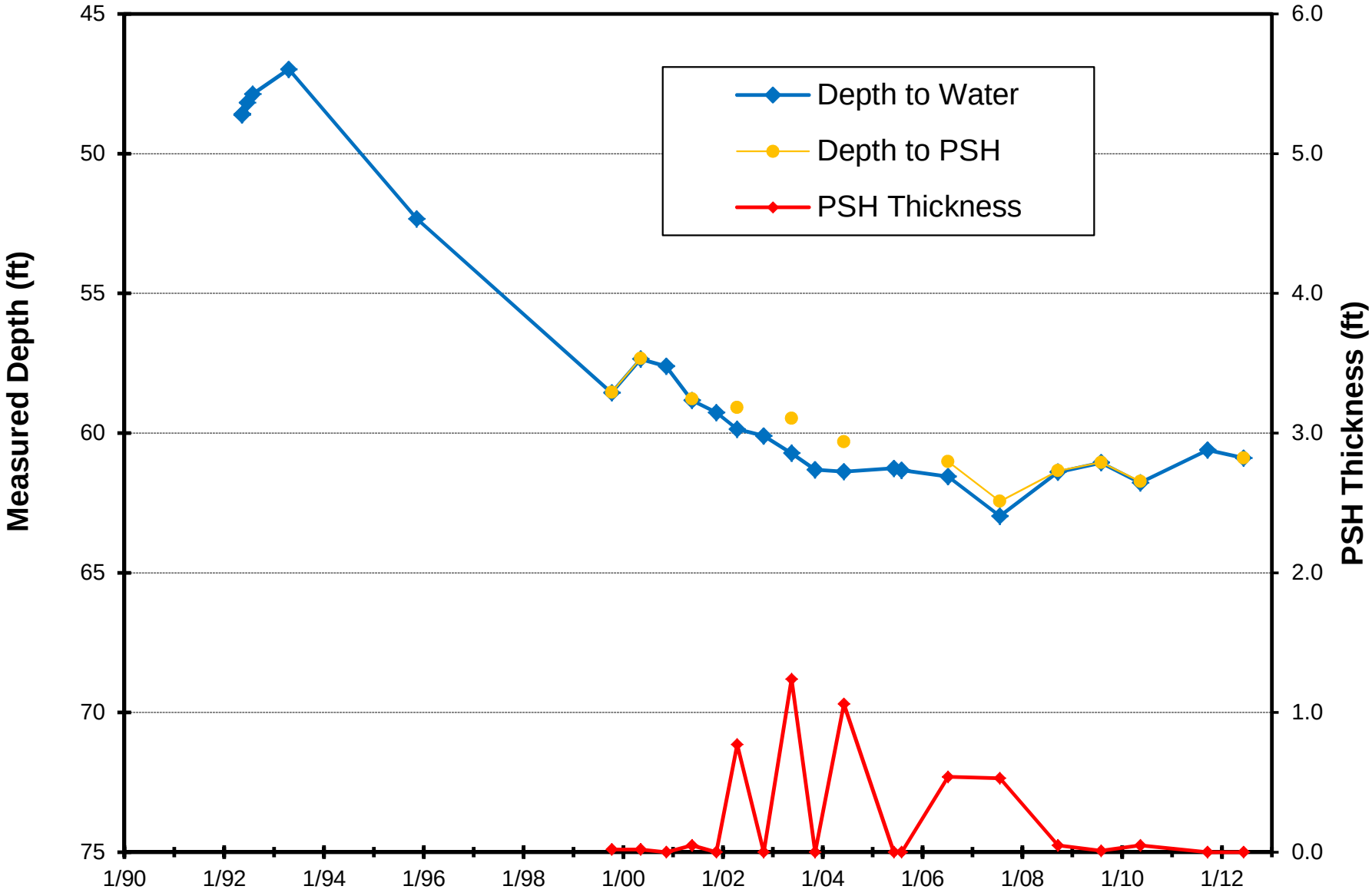
APPENDIX B

Measured Depth to Water & PSH Plots

Measured Depth to Water and PSH for Monitor Well 5-02C
Thoreau Station Remediation Site

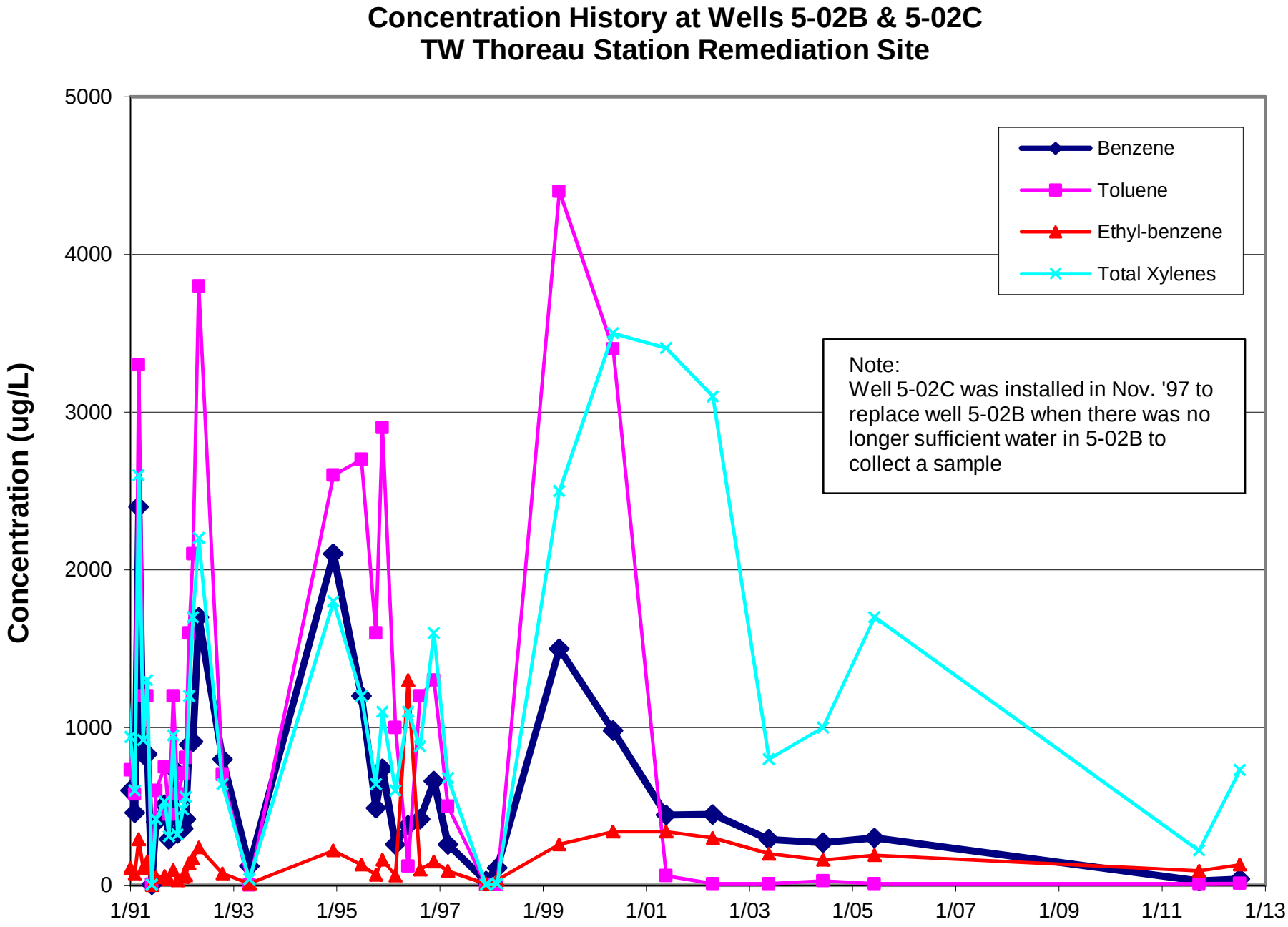


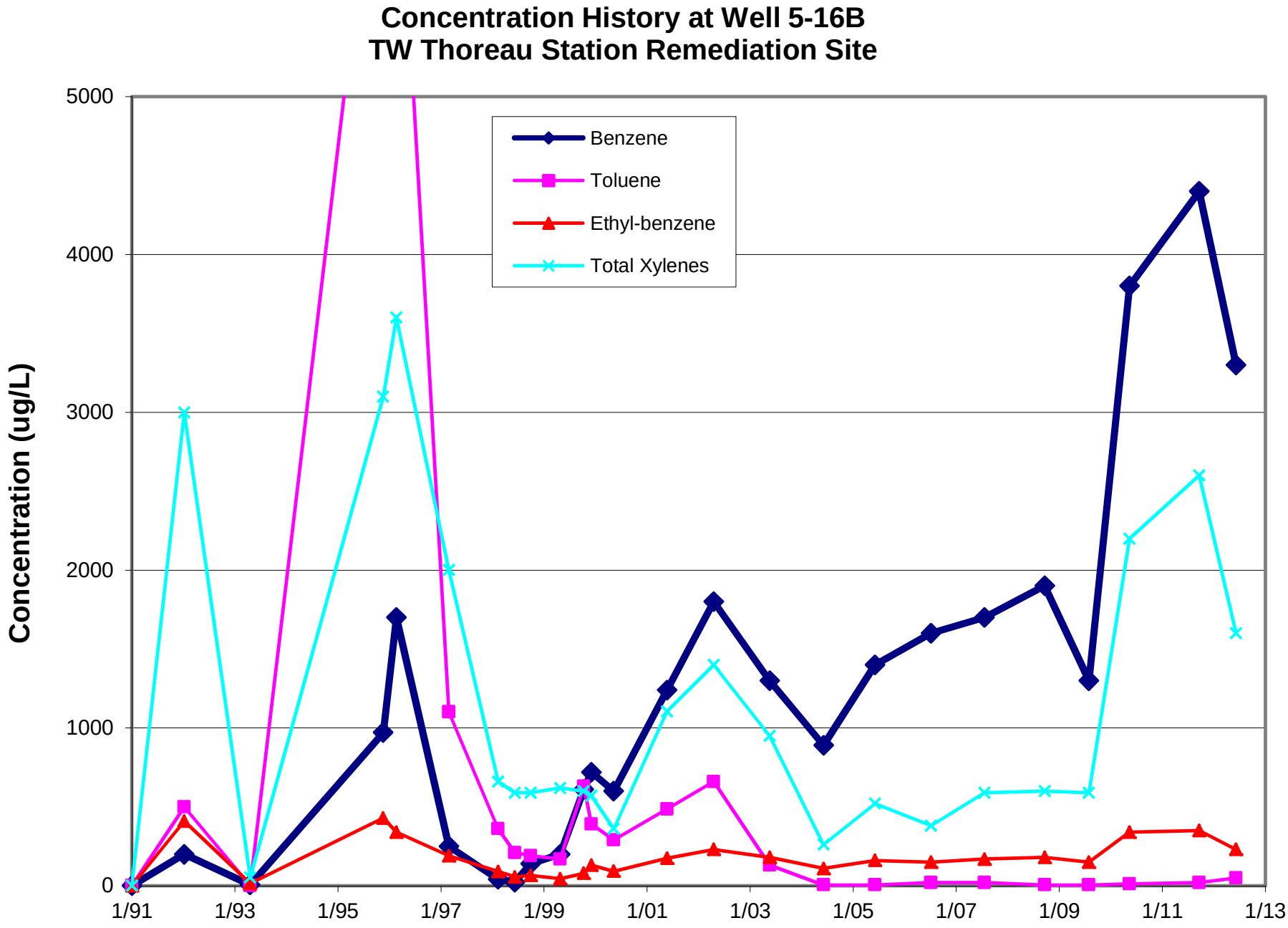
Measured Depth to Water and PSH for Monitor Well 5-34B
Thoreau Station Remediation Site

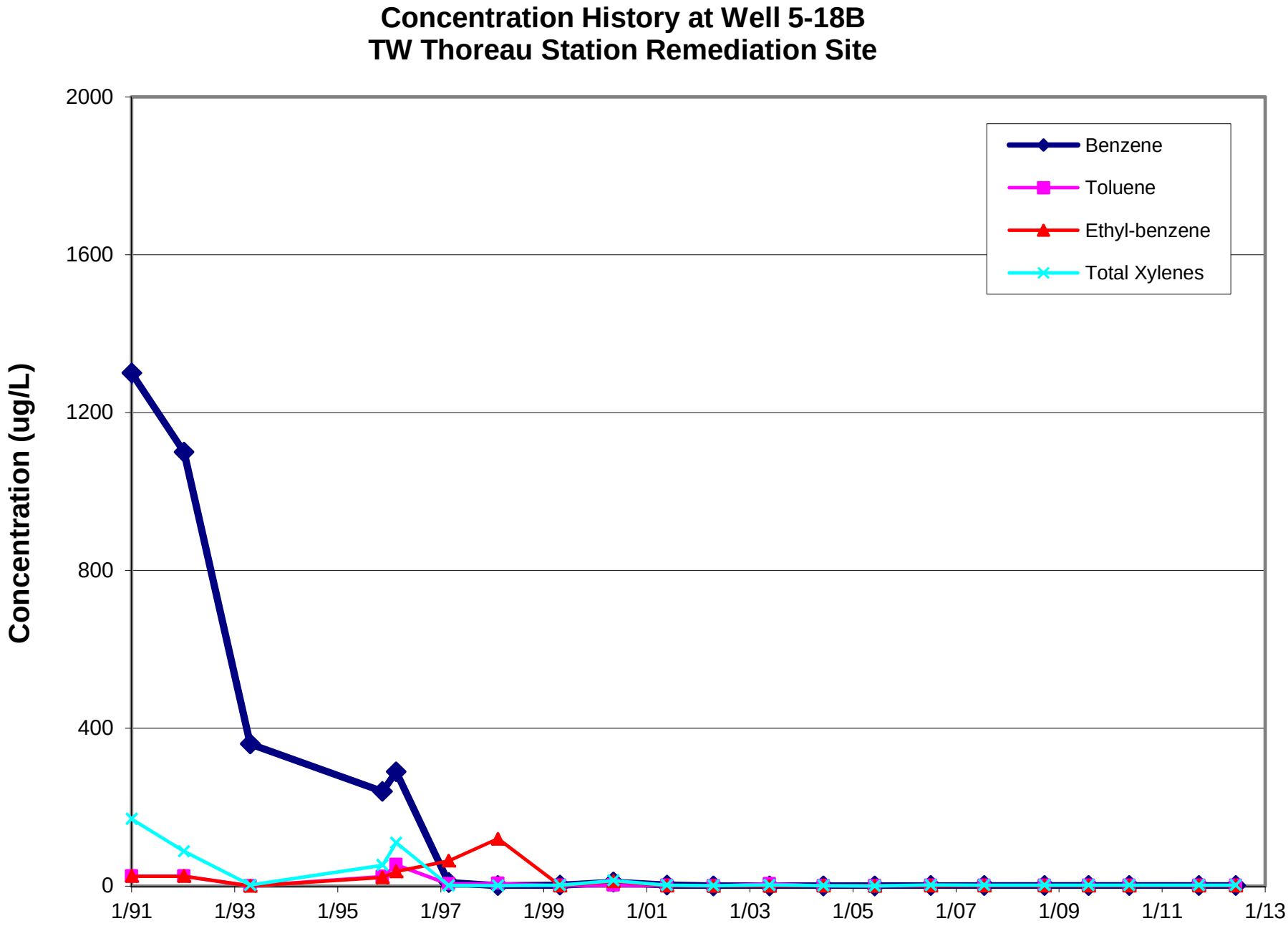


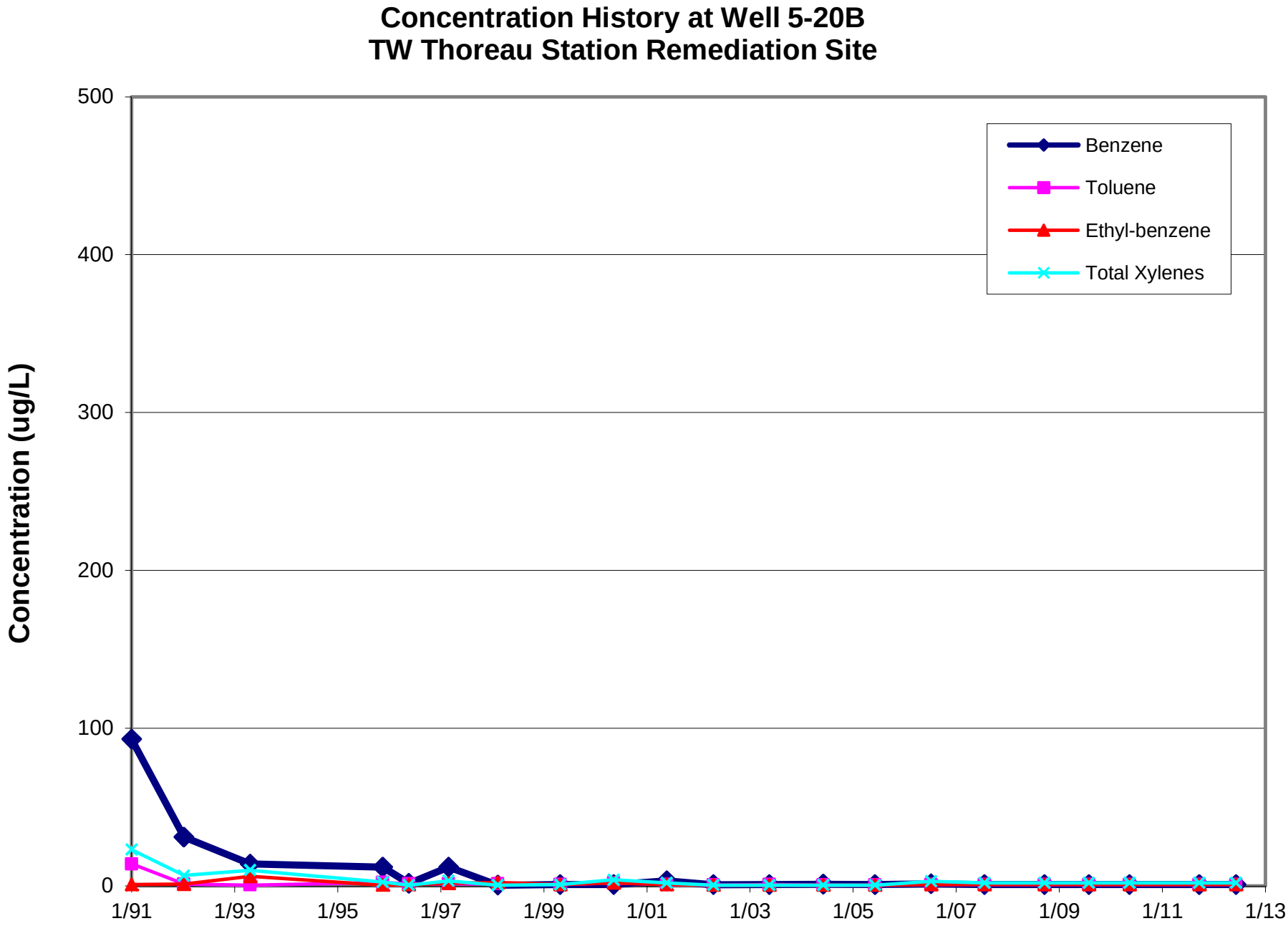
APPENDIX C

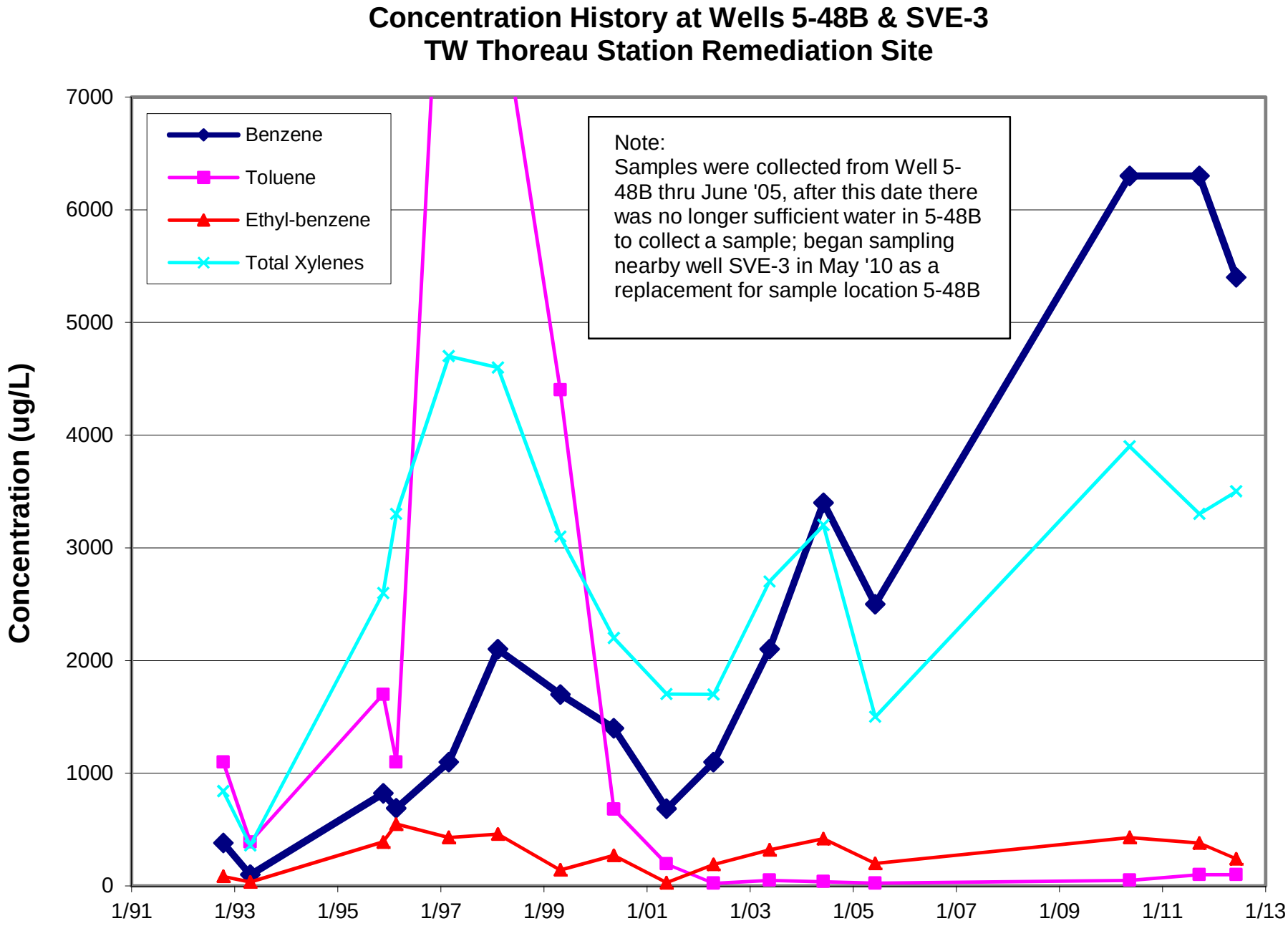
Concentration History Plots for BTEX Constituents

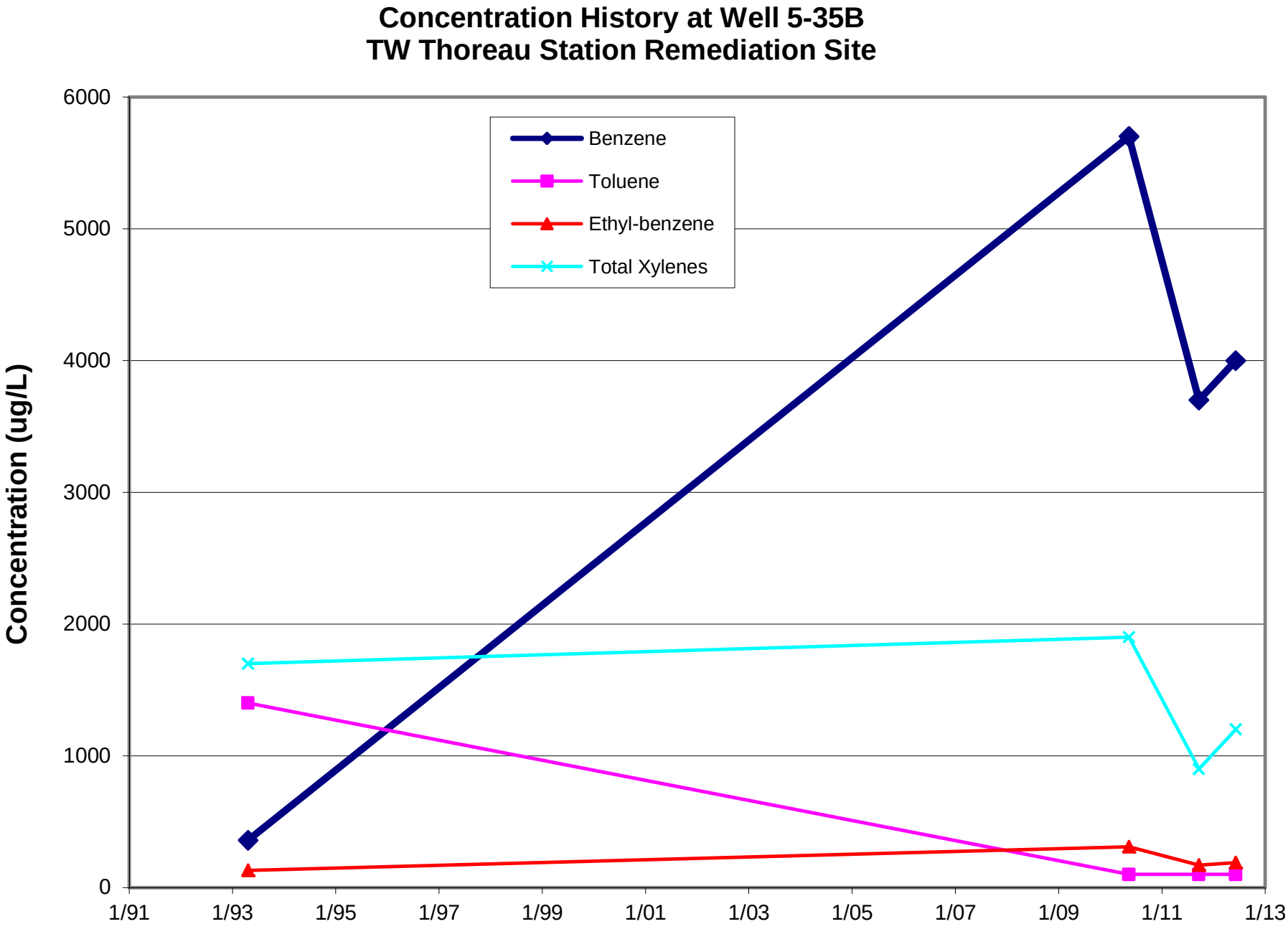

Concentration History at Wells 5-02B & 5-02C
TW Thoreau Station Remediation Site
Concentration (ug/L)
5000
4000
3000
2000
1000
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes
Note:
Well 5-02C was installed in Nov. '97 to replace well 5-02B when there was no longer sufficient water in 5-02B to collect a sample


Concentration History at Well 5-16B
TW Thoreau Station Remediation Site
Concentration (ug/L)
5000
4000
3000
2000
1000
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes


Concentration History at Well 5-18B
TW Thoreau Station Remediation Site
Concentration (ug/L)
2000
1600
1200
800
400
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes


Concentration History at Well 5-20B
TW Thoreau Station Remediation Site
Concentration (ug/L)
500
400
300
200
100
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes

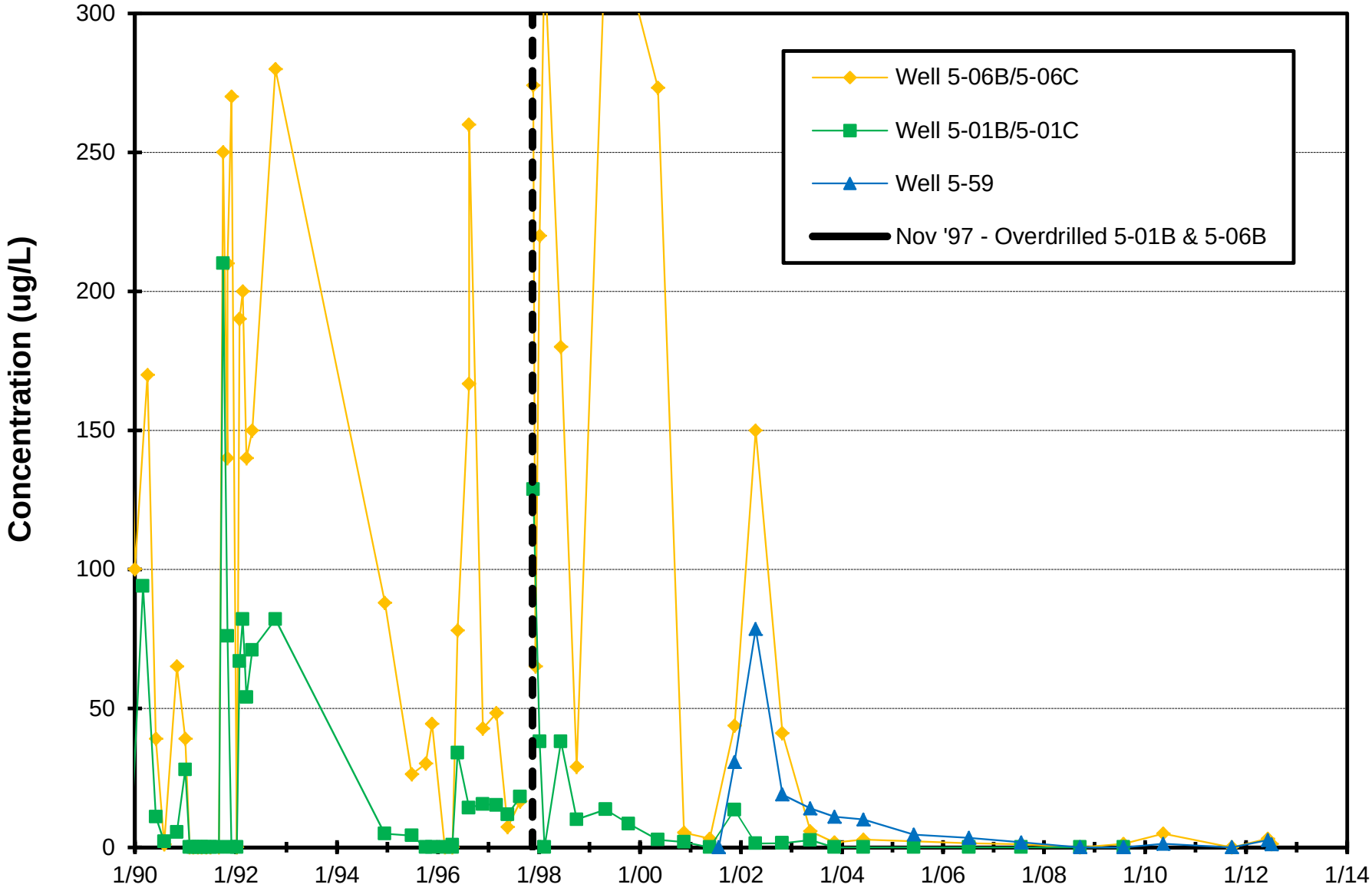

Concentration History at Wells 5-48B & SVE-3
TW Thoreau Station Remediation Site
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes
Note:
Samples were collected from Well 5-48B thru June '05, after this date there was no longer sufficient water in 5-48B to collect a sample; began sampling nearby well SVE-3 in May '10 as a replacement for sample location 5-48B


Concentration History at Well 5-35B
TW Thoreau Station Remediation Site
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
1/91
1/93
1/95
1/97
1/99
1/01
1/03
1/05
1/07
1/09
1/11
1/13
Benzene
Toluene
Ethyl-benzene
Total Xylenes

APPENDIX D

Concentration History Plot for PCBs

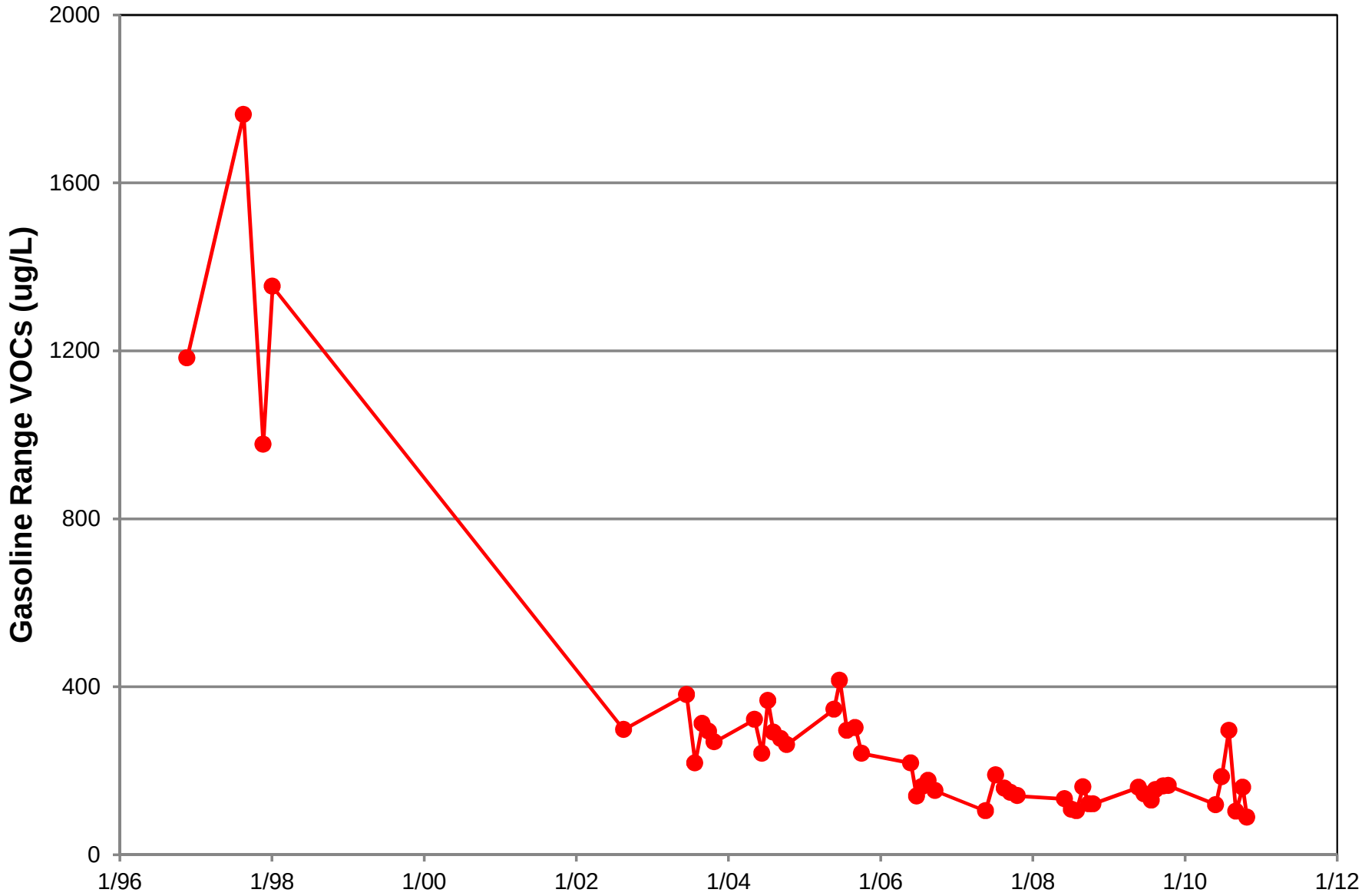
Concentration History for PCBs in Groundwater
Thoreau Station Remediation Site



APPENDIX E

Concentration History Plot for SVE System Monitoring

Concentration History for SVE System Vapor Samples
Thoreau Station Remediation Site



APPENDIX F

Laboratory Report
for Groundwater Samples

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 06, 2012

George Robinson

Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422
TEL: (281) 797-3420
FAX (281) 859-1881

RE: Transwestern Pipeline Co Thoreau OrderNo.: 1206601

Dear George Robinson:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/14/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued June 22, 2012.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative

WO#: **1206601**
Date: **7/6/2012**

CLIENT: Cypress Engineering
Project: Transwestern Pipeline Co Thoreau

Analytical notes regarding EPA Method 8082:
The "Filtered H2O" sample was rerun, past the 7 day holding time to confirm that all PCBs were less than 1.0ppb.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-16B
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 5:00:00 PM
Lab ID: 1206601-001
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3300	50		µg/L	50	6/19/2012 4:13:01 PM
Toluene	ND	50		µg/L	50	6/19/2012 4:13:01 PM
Ethylbenzene	230	50		µg/L	50	6/19/2012 4:13:01 PM
Xylenes, Total	1600	100		µg/L	50	6/19/2012 4:13:01 PM
Surr: 4-Bromofluorobenzene	87.8	55-140		%REC	50	6/19/2012 4:13:01 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-61
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 3:20:00 PM
Lab ID: 1206601-002
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	4400	50		µg/L	50	6/19/2012 5:45:10 PM
Toluene	ND	50		µg/L	50	6/19/2012 5:45:10 PM
Ethylbenzene	340	50		µg/L	50	6/19/2012 5:45:10 PM
Xylenes, Total	2500	100		µg/L	50	6/19/2012 5:45:10 PM
Surr: 4-Bromofluorobenzene	110	55-140		%REC	50	6/19/2012 5:45:10 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: SVE-3
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 5:10:00 PM
Lab ID: 1206601-003
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	5400	100		µg/L	100	6/19/2012 6:15:59 PM
Toluene	ND	100		µg/L	100	6/19/2012 6:15:59 PM
Ethylbenzene	240	100		µg/L	100	6/19/2012 6:15:59 PM
Xylenes, Total	3500	200		µg/L	100	6/19/2012 6:15:59 PM
Surr: 4-Bromofluorobenzene	87.8	55-140		%REC	100	6/19/2012 6:15:59 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-35B
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 5:20:00 PM
Lab ID: 1206601-004
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	4000	100		µg/L	100	6/19/2012 6:46:31 PM
Toluene	ND	100		µg/L	100	6/19/2012 6:46:31 PM
Ethylbenzene	190	100		µg/L	100	6/19/2012 6:46:31 PM
Xylenes, Total	1200	200		µg/L	100	6/19/2012 6:46:31 PM
Surr: 4-Bromofluorobenzene	108	55-140		%REC	100	6/19/2012 6:46:31 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-59
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 6:30:00 PM
Lab ID: 1206601-005
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1221	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1232	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1242	2.6	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1248	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1254	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Aroclor 1260	ND	1.0		µg/L	1	6/19/2012 10:37:03 AM
Surr: Decachlorobiphenyl	75.6	23.9-124		%REC	1	6/19/2012 10:37:03 AM
Surr: Tetrachloro-m-xylene	42.4	28.1-139		%REC	1	6/19/2012 10:37:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/19/2012 7:47:48 PM
Toluene	ND	1.0		µg/L	1	6/19/2012 7:47:48 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2012 7:47:48 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2012 7:47:48 PM
Surr: 4-Bromofluorobenzene	94.6	55-140		%REC	1	6/19/2012 7:47:48 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-18B
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 4:10:00 PM
Lab ID: 1206601-006
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/19/2012 8:18:15 PM
Toluene	ND	1.0		µg/L	1	6/19/2012 8:18:15 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2012 8:18:15 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2012 8:18:15 PM
Surr: 4-Bromofluorobenzene	89.3	55-140		%REC	1	6/19/2012 8:18:15 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-20B
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 4:50:00 PM
Lab ID: 1206601-007
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/19/2012 8:48:52 PM
Toluene	ND	1.0		µg/L	1	6/19/2012 8:48:52 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2012 8:48:52 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2012 8:48:52 PM
Surr: 4-Bromofluorobenzene	83.1	55-140		%REC	1	6/19/2012 8:48:52 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-06C
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 6:15:00 PM
Lab ID: 1206601-008
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1221	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1232	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1242	3.1	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1248	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1254	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Aroclor 1260	ND	1.0		µg/L	1	6/19/2012 11:22:28 AM
Surr: Decachlorobiphenyl	64.0	23.9-124		%REC	1	6/19/2012 11:22:28 AM
Surr: Tetrachloro-m-xylene	36.4	28.1-139		%REC	1	6/19/2012 11:22:28 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/20/2012 12:22:56 AM
Toluene	ND	1.0		µg/L	1	6/20/2012 12:22:56 AM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2012 12:22:56 AM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2012 12:22:56 AM
Surr: 4-Bromofluorobenzene	87.2	55-140		%REC	1	6/20/2012 12:22:56 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-06D
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 6:25:00 PM
Lab ID: 1206601-009
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1221	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1232	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1242	4.0	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1248	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1254	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Aroclor 1260	ND	1.0		µg/L	1	6/19/2012 12:09:17 PM
Surr: Decachlorobiphenyl	99.2	23.9-124		%REC	1	6/19/2012 12:09:17 PM
Surr: Tetrachloro-m-xylene	52.8	28.1-139		%REC	1	6/19/2012 12:09:17 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/21/2012 3:55:54 PM
Toluene	ND	1.0		µg/L	1	6/21/2012 3:55:54 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2012 3:55:54 PM
Xylenes, Total	ND	2.0		µg/L	1	6/21/2012 3:55:54 PM
Surr: 4-Bromofluorobenzene	91.4	55-140		%REC	1	6/21/2012 3:55:54 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: Trip Blank
Project: Transwestern Pipeline Co Thoreau
Collection Date:
Lab ID: 1206601-010
Matrix: TRIP BLANK
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/20/2012 1:54:23 AM
Toluene	ND	1.0		µg/L	1	6/20/2012 1:54:23 AM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2012 1:54:23 AM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2012 1:54:23 AM
Surr: 4-Bromofluorobenzene	88.2	55-140		%REC	1	6/20/2012 1:54:23 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: Filtered H2O
Project: Transwestern Pipeline Co Thoreau
Collection Date: 6/12/2012 9:00:00 PM
Lab ID: 1206601-011
Matrix: AQUEOUS
Received Date: 6/14/2012 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1221	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1232	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1242	ND	10		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1248	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1254	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Aroclor 1260	ND	1.0		µg/L	1	6/19/2012 12:55:02 PM
Surr: Decachlorobiphenyl	94.4	23.9-124		%REC	1	6/19/2012 12:55:02 PM
Surr: Tetrachloro-m-xylene	38.4	28.1-139		%REC	1	6/19/2012 12:55:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/20/2012 2:24:58 AM
Toluene	ND	1.0		µg/L	1	6/20/2012 2:24:58 AM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2012 2:24:58 AM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2012 2:24:58 AM
Surr: 4-Bromofluorobenzene	71.7	55-140		%REC	1	6/20/2012 2:24:58 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206601**

06-Jul-12

Client: Cypress Engineering

Project: Transwestern Pipeline Co Thoreau

Sample ID	**100NG BTEX LCS**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID: **R3557**		RunNo: **3557**					
Prep Date:		Analysis Date: **6/19/2012**		SeqNo: **100411**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	21	1.0	20.00	0	103	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		94.6	55	140			

Sample ID	**1206601-001AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**5-16B**	Batch ID: **R3557**		RunNo: **3557**					
Prep Date:		Analysis Date: **6/19/2012**		SeqNo: **100418**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4100	50	1000	3320	81.0	70.1	118			
Toluene	1000	50	1000	11.40	101	72.3	117			
Ethylbenzene	1200	50	1000	233.3	100	73.5	117			
Xylenes, Total	4500	100	3000	1601	97.2	73.1	119			
Surr: 4-Bromofluorobenzene	1200		1000		115	55	140			

Sample ID	**1206601-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**5-16B**	Batch ID: **R3557**		RunNo: **3557**					
Prep Date:		Analysis Date: **6/19/2012**		SeqNo: **100419**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4100	50	1000	3320	79.2	70.1	118	0.437	16.4	
Toluene	1000	50	1000	11.40	101	72.3	117	0.745	13.9	
Ethylbenzene	1200	50	1000	233.3	98.7	73.5	117	1.31	13.5	
Xylenes, Total	4500	100	3000	1601	96.8	73.1	119	0.282	12.9	
Surr: 4-Bromofluorobenzene	1000		1000		102	55	140	0	0	

Sample ID	**5ML RB**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID: **R3557**		RunNo: **3557**					
Prep Date:		Analysis Date: **6/19/2012**		SeqNo: **101465**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		93.5	55	140			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206601**

06-Jul-12

Client: Cypress Engineering

Project: Transwestern Pipeline Co Thoreau

Sample ID **MB-2429**	SampType: **MBLK**	TestCode: **EPA Method 8082: PCB's**
Client ID: **PBW**	Batch ID: **2429**	RunNo: **3515**
Prep Date: **6/18/2012**	Analysis Date: **6/19/2012**	SeqNo: **98988** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	1.0								
Aroclor 1221	ND	1.0								
Aroclor 1232	ND	1.0								
Aroclor 1242	ND	1.0								
Aroclor 1248	ND	1.0								
Aroclor 1254	ND	1.0								
Aroclor 1260	ND	1.0								
Surr: Decachlorobiphenyl	1.6		2.500		64.4	23.9	124			
Surr: Tetrachloro-m-xylene	0.91		2.500		36.4	28.1	139			

Sample ID **LCS-2429**	SampType: **LCS**	TestCode: **EPA Method 8082: PCB's**
Client ID: **LCSW**	Batch ID: **2429**	RunNo: **3515**
Prep Date: **6/18/2012**	Analysis Date: **6/19/2012**	SeqNo: **98989** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.5	1.0	5.000	0	49.4	36.2	105			
Aroclor 1260	4.1	1.0	5.000	0	81.6	36.7	108			
Surr: Decachlorobiphenyl	1.9		2.500		77.2	23.9	124			
Surr: Tetrachloro-m-xylene	1.0		2.500		40.4	28.1	139			

Sample ID **LCSD-2429**	SampType: **LCSD**	TestCode: **EPA Method 8082: PCB's**
Client ID: **LCSS02**	Batch ID: **2429**	RunNo: **3515**
Prep Date: **6/18/2012**	Analysis Date: **6/19/2012**	SeqNo: **98990** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.2	1.0	5.000	0	43.8	36.2	105	12.0	20	
Aroclor 1260	3.9	1.0	5.000	0	77.6	36.7	108	4.92	20	
Surr: Decachlorobiphenyl	1.9		2.500		75.6	23.9	124	0	0	
Surr: Tetrachloro-m-xylene	0.97		2.500		38.8	28.1	139	0	0	

Sample ID **MB-2566**	SampType: **MBLK**	TestCode: **EPA Method 8082: PCB's**
Client ID: **PBW**	Batch ID: **2566**	RunNo: **3696**
Prep Date: **6/26/2012**	Analysis Date: **6/27/2012**	SeqNo: **104409** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	1.8		2.500		72.4	23.9	124			
Surr: Tetrachloro-m-xylene	0.86		2.500		34.4	28.1	139			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206601**

06-Jul-12

Client: Cypress Engineering

Project: Transwestern Pipeline Co Thoreau

Sample ID **LCS-2566** SampType: **LCS** TestCode: **EPA Method 8082: PCB's**

Client ID: **LCSW** Batch ID: **2566** RunNo: **3696**

Prep Date: **6/26/2012** Analysis Date: **6/27/2012** SeqNo: **104411** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	2.3		2.500		92.4	23.9	124			
Surr: Tetrachloro-m-xylene	0.92		2.500		36.8	28.1	139			

Sample ID **LCSD-2566** SampType: **LCSD** TestCode: **EPA Method 8082: PCB's**

Client ID: **LCSS02** Batch ID: **2566** RunNo: **3696**

Prep Date: **6/26/2012** Analysis Date: **6/27/2012** SeqNo: **104702** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	2.3		2.500		90.8	23.9	124	0	0	
Surr: Tetrachloro-m-xylene	0.92		2.500		36.8	28.1	139	0	0	

Sample ID **MB-2636** SampType: **MBLK** TestCode: **EPA Method 8082: PCB's**

Client ID: **PBW** Batch ID: **2636** RunNo: **3813**

Prep Date: **6/29/2012** Analysis Date: **7/3/2012** SeqNo: **109327** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	1.5		2.500		60.0	23.9	124			
Surr: Tetrachloro-m-xylene	0.76		2.500		30.4	28.1	139			

Sample ID **LCS-2636** SampType: **LCS** TestCode: **EPA Method 8082: PCB's**

Client ID: **LCSW** Batch ID: **2636** RunNo: **3813**

Prep Date: **6/29/2012** Analysis Date: **7/3/2012** SeqNo: **109329** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	1.7		2.500		69.6	23.9	124			
Surr: Tetrachloro-m-xylene	0.73		2.500		29.2	28.1	139			

Sample ID **LCSD-2636** SampType: **LCSD** TestCode: **EPA Method 8082: PCB's**

Client ID: **LCSS02** Batch ID: **2636** RunNo: **3813**

Prep Date: **6/29/2012** Analysis Date: **7/3/2012** SeqNo: **109331** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	1.8		2.500		70.0	23.9	124	0	0	
Surr: Tetrachloro-m-xylene	0.72		2.500		28.8	28.1	139	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: CYP Work Order Number: 1206601

Received by/date: LM 06/14/12

Logged By: **Michelle Garcia** 6/14/2012 10:30:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 6/14/2012 1:56:43 PM Michelle Garcia

Reviewed By: 06/15/12

Chain of Custody

1.	Were seals intact?	Yes		No	Not Present	✔
2.	Is Chain of Custody complete?	Yes	✔	No	Not Present	
3.	How was the sample delivered?	FedEx				

Log In

4.	Coolers are present? (see 19. for cooler specific information)	Yes	✔	No	NA	
5.	Was an attempt made to cool the samples?	Yes	✔	No	NA	
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes	✔	No	NA	
7.	Sample(s) in proper container(s)?	Yes	✔	No		
8.	Sufficient sample volume for indicated test(s)?	Yes	✔	No		
9.	Are samples (except VOA and ONG) properly preserved?	Yes	✔	No		
10.	Was preservative added to bottles?	Yes		No ✔	NA	
11.	VOA vials have zero headspace?	Yes		No	No VOA Vials	✔
12.	Were any sample containers received broken?	Yes		No ✔		
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	✔	No	# of preserved bottles checked for pH:	
14.	Are matrices correctly identified on Chain of Custody?	Yes	✔	No	(<2 or >12 unless noted)	
15.	Is it clear what analyses were requested?	Yes	✔	No	Adjusted?	
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	✔	No	Checked by:	

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes		No	NA	✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks: poured from 1L amber into 3 HCl voas for -009 to run proper analysis. 06/15/12

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

Chain-of-Custody Record

Client: CYPRESS ENGINEERING SERVICES
7171 Hwy 6 North Ste 102
Mailing Address: Houston, TX 77095

Phone #: 281.797.3420
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: TRANSWESTERN PIPELINE CO THOREAU
Project #: TNP THOREAU
Project Manager: GEORGE ROBINSON
Sampler: SANDY STARK
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1206601	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
12/12	1700	WATER	5-16B	3/40 ml	HCl	-001	X														
	1520		5-61	"	"	-002	X														
	1710		SVE-3	"	"	-003	X														
	1720		5-35B	"	"	-004	X														
	1830		5-59	3/40 ml 1L	HCl	-005	X								X						
	1610		~~5-02B~~ 5-18B	3/40 ml	HCl	-006	X														
	1650		5-20B	"	"	-007	X														
	1815		5-06C	3/40 ml 1/1L	HCl	-008	X								X						
	1825		5-06D	1/1L		-009	X								X						
			TRIP BLANK	2/40 ml	HCl	-010	X														
			~~FIELD BLANK~~				X								X						
12/12	2100		FILTERED PURGE H2O	3/40 ml 1/1L	HCl	-011	X								X						

Date: 12/13/12 Time: 1950 Relinquished by: [signature] Received by: [signature] Date Time: 12/14/12 1030
Date: Time: Relinquished by: Received by: Date Time:

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 19, 2012

George Robinson

Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422
TEL: (281) 797-3420
FAX (281) 859-1881

RE: Transwestern Pipeline Company Thoreau OrderNo.: 1207364

Dear George Robinson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/10/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1207364**
Date Reported: **7/19/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-59
Project: Transwestern Pipeline Company Thoreau
Collection Date: 7/10/2012 2:00:00 PM
Lab ID: 1207364-001
Matrix: AQUEOUS
Received Date: 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1221	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1232	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1242	1.0	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1248	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1254	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Aroclor 1260	ND	1.0		µg/L	1	7/17/2012 10:54:13 AM
Surr: Decachlorobiphenyl	56.4	23.9-124		%REC	1	7/17/2012 10:54:13 AM
Surr: Tetrachloro-m-xylene	54.8	28.1-139		%REC	1	7/17/2012 10:54:13 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-06C
Project: Transwestern Pipeline Company Thoreau
Collection Date: 7/10/2012 1:40:00 PM
Lab ID: 1207364-002 **Matrix:** AQUEOUS **Received Date:** 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1221	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1232	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1242	1.2	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1248	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1254	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Aroclor 1260	ND	1.0		µg/L	1	7/17/2012 11:39:24 AM
Surr: Decachlorobiphenyl	59.2	23.9-124		%REC	1	7/17/2012 11:39:24 AM
Surr: Tetrachloro-m-xylene	54.4	28.1-139		%REC	1	7/17/2012 11:39:24 AM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-06D
Project: Transwestern Pipeline Company Thoreau
Collection Date: 7/10/2012 12:35:00 PM
Lab ID: 1207364-003 **Matrix:** AQUEOUS **Received Date:** 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1221	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1232	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1242	1.3	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1248	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1254	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Aroclor 1260	ND	1.0		µg/L	1	7/17/2012 12:24:34 PM
Surr: Decachlorobiphenyl	87.6	23.9-124		%REC	1	7/17/2012 12:24:34 PM
Surr: Tetrachloro-m-xylene	80.0	28.1-139		%REC	1	7/17/2012 12:24:34 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: 5-02C
Project: Transwestern Pipeline Company Thoreau
Collection Date: 7/10/2012 1:05:00 PM
Lab ID: 1207364-004 **Matrix:** AQUEOUS **Received Date:** 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	40	5.0		µg/L	5	7/13/2012 10:43:14 PM
Toluene	12	5.0		µg/L	5	7/13/2012 10:43:14 PM
Ethylbenzene	130	5.0		µg/L	5	7/13/2012 10:43:14 PM
Xylenes, Total	730	10		µg/L	5	7/13/2012 10:43:14 PM
Surr: 4-Bromofluorobenzene	102	55-140		%REC	5	7/13/2012 10:43:14 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: Filtered Purge H2O
Project: Transwestern Pipeline Company Thoreau
Collection Date: 7/10/2012 11:55:00 AM
Lab ID: 1207364-005 **Matrix:** AQUEOUS **Received Date:** 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **SCC**
Aroclor 1016	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1221	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1232	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1242	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1248	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1254	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Aroclor 1260	ND	1.0		µg/L	1	7/17/2012 2:03:27 PM
Surr: Decachlorobiphenyl	79.6	23.9-124		%REC	1	7/17/2012 2:03:27 PM
Surr: Tetrachloro-m-xylene	80.4	28.1-139		%REC	1	7/17/2012 2:03:27 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Cypress Engineering
Client Sample ID: TRIP BLANK
Project: Transwestern Pipeline Company Thoreau
Collection Date:
Lab ID: 1207364-006
Matrix: TRIP BLANK
Received Date: 7/10/2012 4:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	7/13/2012 11:13:29 PM
Toluene	ND	1.0		µg/L	1	7/13/2012 11:13:29 PM
Ethylbenzene	ND	1.0		µg/L	1	7/13/2012 11:13:29 PM
Xylenes, Total	ND	2.0		µg/L	1	7/13/2012 11:13:29 PM
Surr: 4-Bromofluorobenzene	85.4	55-140		%REC	1	7/13/2012 11:13:29 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207364**

19-Jul-12

Client: Cypress Engineering

Project: Transwestern Pipeline Company Thoreau

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R4044**	RunNo: **4044**
Prep Date:	Analysis Date: **7/13/2012**	SeqNo: **115534** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		88.8	55	140			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R4044**	RunNo: **4044**
Prep Date:	Analysis Date: **7/13/2012**	SeqNo: **115540** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	80	120			
Toluene	22	1.0	20.00	0	109	80	120			
Ethylbenzene	21	1.0	20.00	0	107	80	120			
Xylenes, Total	66	2.0	60.00	0	110	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		106	55	140			

Sample ID **1207538-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R4044**	RunNo: **4044**
Prep Date:	Analysis Date: **7/13/2012**	SeqNo: **115592** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	55	5.0	100.0	4.320	51.0	70.1	118			S
Toluene	60	5.0	100.0	8.790	51.2	72.3	117			S
Ethylbenzene	52	5.0	100.0	1.530	50.7	73.5	117			S
Xylenes, Total	160	10	300.0	5.680	52.8	73.1	119			S
Surr: 4-Bromofluorobenzene	85		100.0		84.7	55	140			

Sample ID **1207538-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R4044**	RunNo: **4044**
Prep Date:	Analysis Date: **7/13/2012**	SeqNo: **115593** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	96	5.0	100.0	4.320	92.0	70.1	118	54.2	16.4	R
Toluene	100	5.0	100.0	8.790	95.1	72.3	117	53.5	13.9	R
Ethylbenzene	95	5.0	100.0	1.530	93.9	73.5	117	58.5	13.5	R
Xylenes, Total	290	10	300.0	5.680	96.2	73.1	119	56.8	12.9	R
Surr: 4-Bromofluorobenzene	100		100.0		101	55	140	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1207364**

19-Jul-12

Client: Cypress Engineering

Project: Transwestern Pipeline Company Thoreau

Sample ID **MB-2796**	SampType: **MBLK**	TestCode: **EPA Method 8082: PCB's**
Client ID: **PBW**	Batch ID: **2796**	RunNo: **4065**
Prep Date: **7/12/2012**	Analysis Date: **7/17/2012**	SeqNo: **116571** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	ND	1.0								
Aroclor 1221	ND	1.0								
Aroclor 1232	ND	1.0								
Aroclor 1242	ND	1.0								
Aroclor 1248	ND	1.0								
Aroclor 1254	ND	1.0								
Aroclor 1260	ND	1.0								
Surr: Decachlorobiphenyl	1.9		2.500		76.4	23.9	124			
Surr: Tetrachloro-m-xylene	1.7		2.500		68.0	28.1	139			

Sample ID **LCS-2796**	SampType: **LCS**	TestCode: **EPA Method 8082: PCB's**
Client ID: **LCSW**	Batch ID: **2796**	RunNo: **4065**
Prep Date: **7/12/2012**	Analysis Date: **7/17/2012**	SeqNo: **116750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.5	1.0	5.000	0	49.2	36.2	105			
Aroclor 1260	3.4	1.0	5.000	0	67.5	36.7	108			
Surr: Decachlorobiphenyl	1.6		2.500		65.6	23.9	124			
Surr: Tetrachloro-m-xylene	1.5		2.500		58.8	28.1	139			

Sample ID **LCSD-2796**	SampType: **LCSD**	TestCode: **EPA Method 8082: PCB's**
Client ID: **LCSS02**	Batch ID: **2796**	RunNo: **4065**
Prep Date: **7/12/2012**	Analysis Date: **7/17/2012**	SeqNo: **117187** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.0	1.0	5.000	0	41.0	36.2	105	18.2	20	
Aroclor 1260	3.2	1.0	5.000	0	64.4	36.7	108	4.79	20	
Surr: Decachlorobiphenyl	1.8		2.500		74.0	23.9	124	0	0	
Surr: Tetrachloro-m-xylene	1.6		2.500		65.2	28.1	139	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: CYP AF- Work Order Number: 1207364

Received by/date: 07/10/12

Logged By: **Ashley Gallegos** **7/10/2012 4:50:00 PM**

Completed By: **Ashley Gallegos** **7/10/2012 5:26:35 PM**

Reviewed By: IO 07/11/12

Chain of Custody

1. Were seals intact?	Yes	No	Not Present ✔	
2. Is Chain of Custody complete?	Yes ✔	No	Not Present	
3. How was the sample delivered?	Client			

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ✔	No	NA	
5. Was an attempt made to cool the samples?	Yes ✔	No	NA	
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA	
7. Sample(s) in proper container(s)?	Yes ✔	No		
8. Sufficient sample volume for indicated test(s)?	Yes ✔	No		
9. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No		
10. Was preservative added to bottles?	Yes	No ✔	NA	
11. VOA vials have zero headspace?	Yes	No	No VOA Vials ✔	
12. Were any sample containers received broken?	Yes	No ✔		
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH:	
14. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	(<2 or >12 unless noted)	
15. Is it clear what analyses were requested?	Yes ✔	No	Adjusted?	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:	

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good	Not Present			

Chain-of-Custody Record

Client: CYPRESS ENGINEERING SERVICES
471 Hwy 6 North, Ste 102
Mailing Address: Houston, TX 77095

Phone #: 281.797.3420
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: TRANSWESTERN PIPELINE COMPANY THOREAU
Project #: TWP THOREAU
Project Manager: GEORGE ROBINSON
Sampler: SANDY SHAAP
On Ice: ☒ Yes ☐ No
Sample Temperature: 5.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1207364	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
7/10/12	1400	H2O	5-59	2x1L	None	-001									X							
"	1340		5-06C	2x1L	None	-002									X							
"	1235		5-06D	1x1L	None	-003									X							
~~7/10/12~~	~~1305~~		~~5-02C~~	~~2x1L~~	~~None~~																	
7/10/12	1305		5-02C	3/40ml	HCl	-004	X															
"	1155		Filtered Purge H2O	2/1L	None	-005									X							
—	—	H2O	Trip Blank	2/40ml	HCl	-006	X															

Date	Time	Relinquished by:	Received by:	Date	Time
7/10/12	1650			7/10/12	1650
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.