Cypress Engineering

7171 Highway 6 North, Suite 102
Houston, Texas 77095
(281) 797-3420 office
(281) 859-1881 fax

June 29, 2010

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

RE: Report of Groundwater Remediation Activities
Transwestern Pipeline Company
Thoreau Compressor Station
McKinley County, New Mexico
Case # GW-080

Dear Glenn,

The enclosed Report of 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 Robinson

George Robinson
President/Principal Engineer

xc w/attachment:

Patrick Antonio	NNEPA
Brandon Powell	NMOCD Aztec District Office
Richard Spell	Transwestern Pipeline Company
Larry Campbell	Transwestern Pipeline Company
Charlie Allen	Transwestern Pipeline Company

Report of Groundwater Remediation Activities

Transwestern Pipeline Company
Thoreau Compressor Station
McKinley County, New Mexico

CASE # GW-080

Submitted to:
New Mexico Oil Conservation Division

February 28, 2010

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

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

TABLE OF CONTENTS

LIST OF FIGURES

Figure

LIST OF TABLES

Table

LIST OF APPENDICES

1. Introduction

The last report of groundwater remediation activities covered activities completed through December 2008. This report presents a summary of monitoring and remediation activities completed between January 2009 through December 2009.

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 August 04, 2009.

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.

In the course of each sample event, groundwater samples were collected from selected monitoring wells at the site. Groundwater samples were delivered to a laboratory for analysis by EPA Method 8021B for benzene, toluene, ethylbenzene, and xylenes (BTEX), and PCB by EPA Method 8082 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 an appendix to this report.

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 August 2009 sampling event is included as Figure 3. The apparent direction of groundwater flow is consistent with water table elevation maps previously developed for this site.

Hydrographs for monitor wells 5-03B and 5-23B are included as Figures 6 and 7, respectively. The water table elevation continues to decline as it has since 1993.

2.2.2 Lateral Extent of Phase Separated Hydrocarbon

The lateral extent of PSH is currently defined by the periodic occurrence of PSH at the water table in wells MW 5-34B, MW 5-02C and SVE-3, and the absence of PSH in all other wells. On August 04, 2009, 0.01 feet of accumulated PSH was measured in well MW 5-34B, a sheen of PSH was indicated in well MW 5-02C after purging 0.75 gallons of water, and there was no indication of PSH in well SVE-3.

2.2.3 Condition of Affected Groundwater

The primary constituents of concern are benzene and PCBs. The distribution of benzene in groundwater is presented in Figure 4. In general, the concentration of benzene in groundwater has shown a downward trend across the site, particularly at the perimeter of the contaminant plume. Elevated concentrations of benzene persist near the center of the plume.

The detection of low concentrations of PCBs has continued for samples collected from monitoring wells 5-6C, and 5-59. PCBs have not been detected in samples collected from well 5-1C since May 21, 2003. PCBs have not been detected in samples collected from well 5-60 located just 20 feet west of well 5-6C. In addition, PCBs have not been detected in samples collected from well 5-17B located 100 feet downgradient of well 5-6C.

3. Status of Remediation Activities

3.1 Remediation Activities Completed through December 2009

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

1) Operation of the SVE system is limited to the warmer weather months because condensed water collecting in the SVE conveyance lines during cold weather make the system ineffective. The SVE system was restarted on May 8, 2009 and shut-down on October 20, 2009. A copy of the routine operation and maintenance reports for the SVE system are included in an appendix to this report.
2) Six vapor samples were collected from the SVE system since the last report. A summary of the laboratory results is presented in Table 8. Laboratory results for SVE system air samples indicate that the SVE system is removing natural gas condensate from the ground at an estimated rate of 13 gallons equivalent per month.

3.2 Remediation Activities Planned for 2010

The SVE system will be operated from May through October 2010.

4. Planned Modifications

4.1 Planned Modifications to the Routine Groundwater Sampling Plan

The sampling analysis plan (SAP) has been modified from the previous year's SAP. Annual sampling will continue in accordance with the SAP presented in Table 6.

Four monitoring wells have been removed from the SAP. Well MW-48 has been removed from the SAP because there is no longer sufficient water in the well for collection of a sample. Three wells (wells MW-1C, MW-17B, and MW-60B) have been removed from the SAP because these are clean wells and are not useful for monitoring contaminant concentrations within the contaminant plume.

Two monitoring wells have been added to the SAP. Well SVE-3 has been added to provide a sampling point near the center of the contaminant plume in the vicinity of well MW-48. Well

MW-35B has been added to provide a sampling point near the upgradient portion of the contaminant plume.

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.

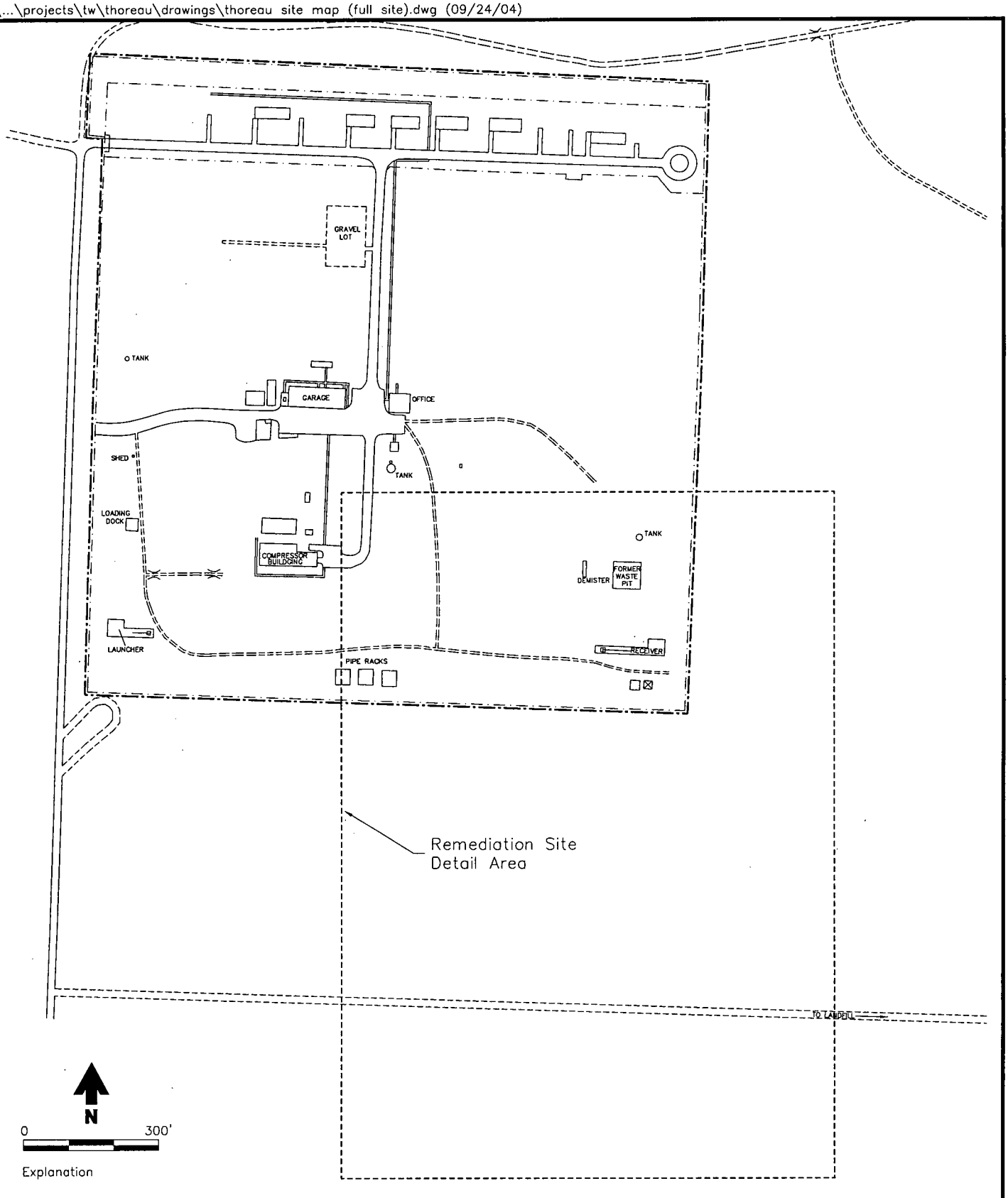
4.2.2 Operational Modifications to the System

There are no planned operational modifications to the remediation system.

4.3 Planned Reporting Frequency

Reporting will continue to be done on an annual basis.

f:\...\projects\tw\thoreau\drawings\thoreau site map (full site).dwg (09/24/04)



Explanation

- Chainlink Fence
- Compressor Station Boundary
- Gravel Road

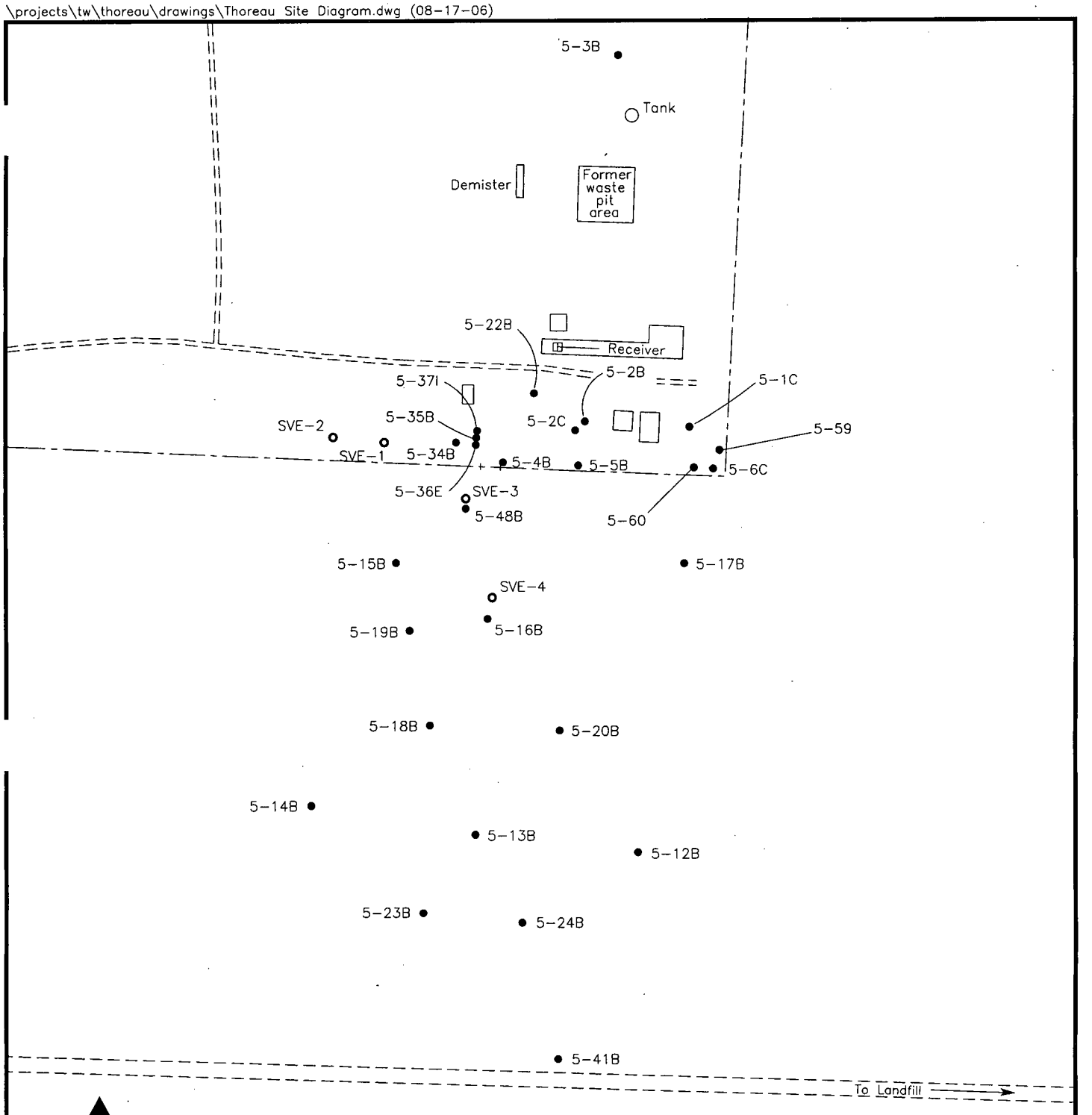
THOREAU COMPRESSOR STATION

Facility Site Map

Figure 1

CYPRESS ENGINEERING SERVICES, INC.

\projects\tw\thoreau\drawings\Thoreau Site Diagram.dwg (08-17-06)



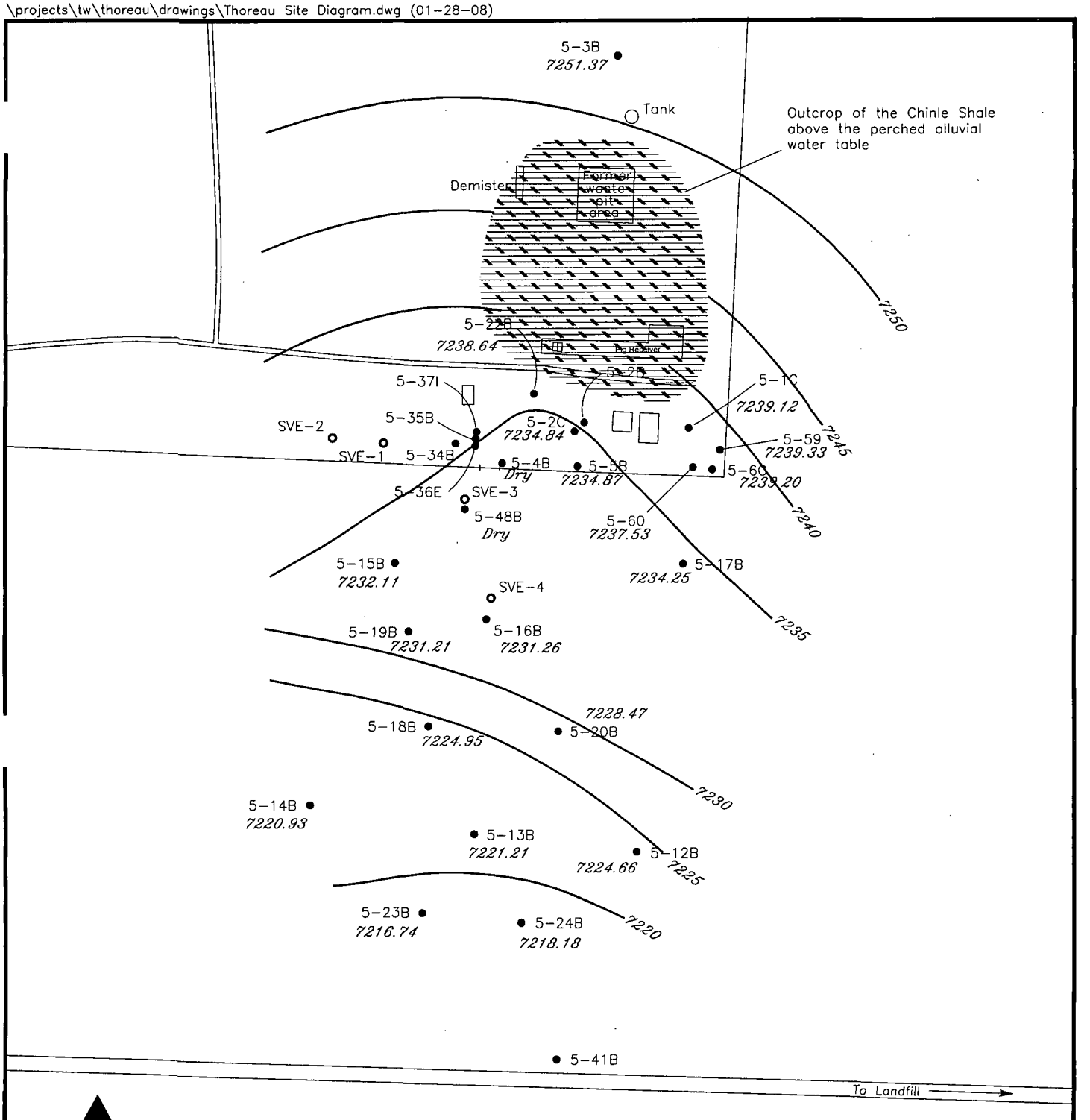
THOREAU COMPRESSOR STATION

Monitor Well & SVE Well Locations

Figure 2

CYPRESS ENGINEERING SERVICES, INC.

\projects\tw\thoreau\drawings\Thoreau Site Diagram.dwg (01-28-08)



THOREAU COMPRESSOR STATION

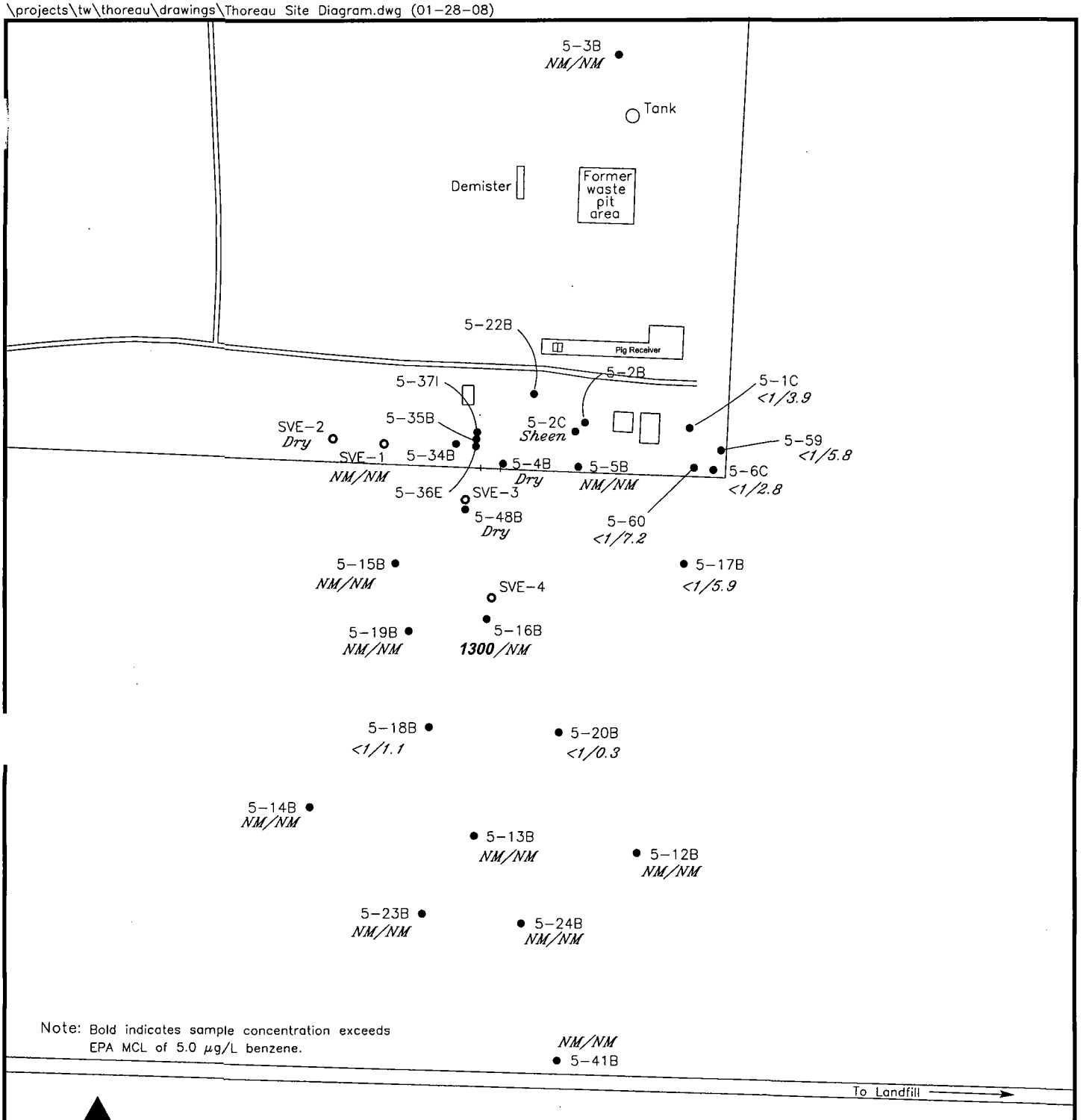
Ground Water Surface Elevation in the Perched Alluvial Aquifer

August 2009

Figure 3

CYPRESS ENGINEERING SERVICES, INC.

\projects\tw\thoreau\drawings\Thoreau Site Diagram.dwg (01-28-08)



Note: Bold indicates sample concentration exceeds EPA MCL of 5.0 µg/L benzene.

Explanation

- Monitor well
- Soil vapor extraction well
- 0.7/1.36 — Benzene (µg/L)/dissolved oxygen (mg/L) concentrations
- NM — Not measured
- Compressor station boundary

THOREAU COMPRESSOR STATION

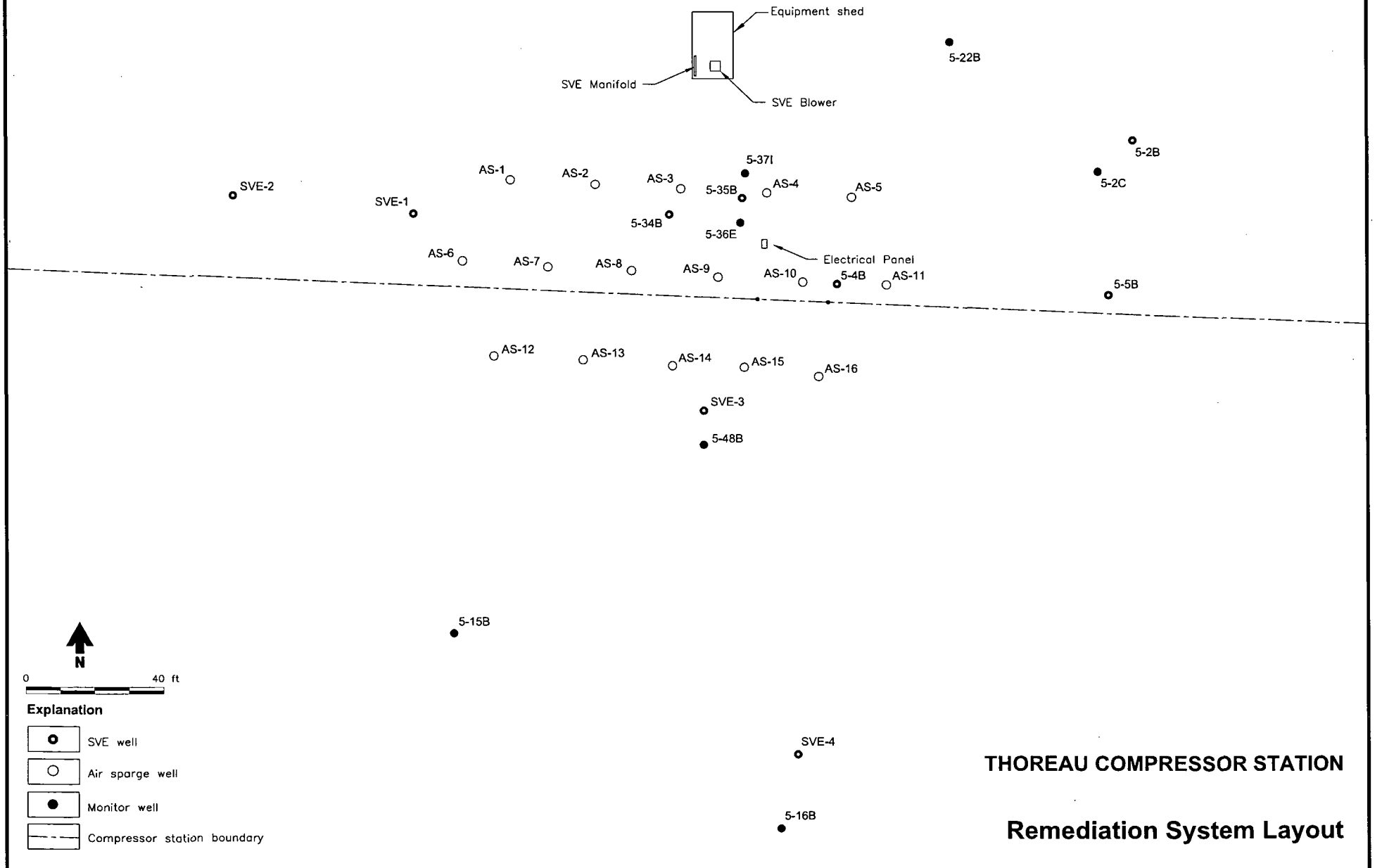
Benzene and Dissolved Oxygen Concentrations in the Perched Alluvial Aquifer

August 2009

Figure 4

CYPRESS ENGINEERING SERVICES, INC.

f:\...\projec horeau\drawings\thoreau remediation system layout.dwg (09/24/04)



THOREAU COMPRESSOR STATION

Remediation System Layout

Figure 5

CYPRESS ENGINEERING SERVICES, INC.

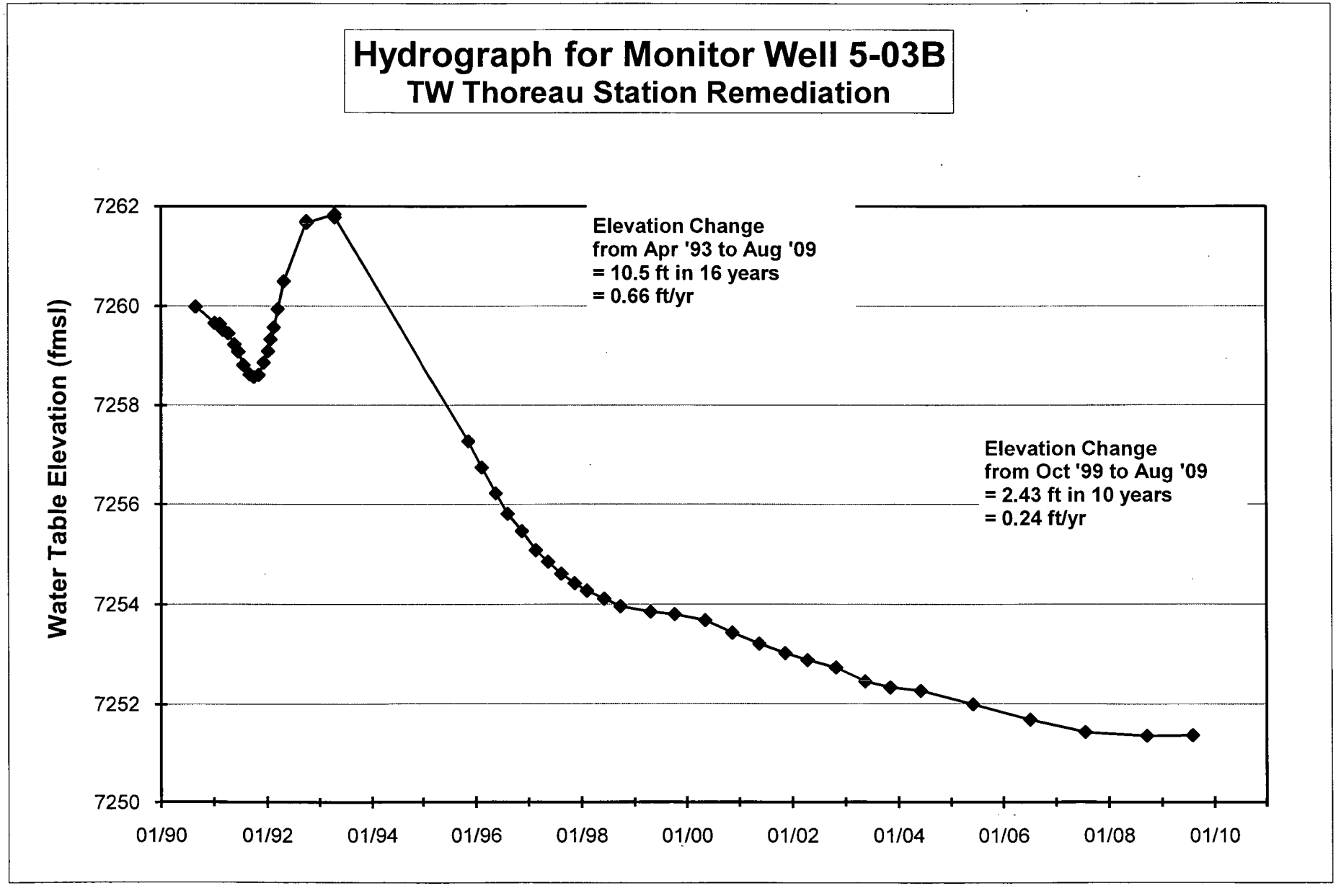

Hydrograph for Monitor Well 5-03B
TW Thoreau Station Remediation
Water Table Elevation (fmsl)
7262
7260
7258
7256
7254
7252
7250
01/90
01/92
01/94
01/96
01/98
01/00
01/02
01/04
01/06
01/08
01/10
Elevation Change
from Apr '93 to Aug '09
= 10.5 ft in 16 years
= 0.66 ft/yr
Elevation Change
from Oct '99 to Aug '09
= 2.43 ft in 10 years
= 0.24 ft/yr

Figure 6

Hydrograph for Monitor Well 5-23B
TW Thoreau Station Remediation

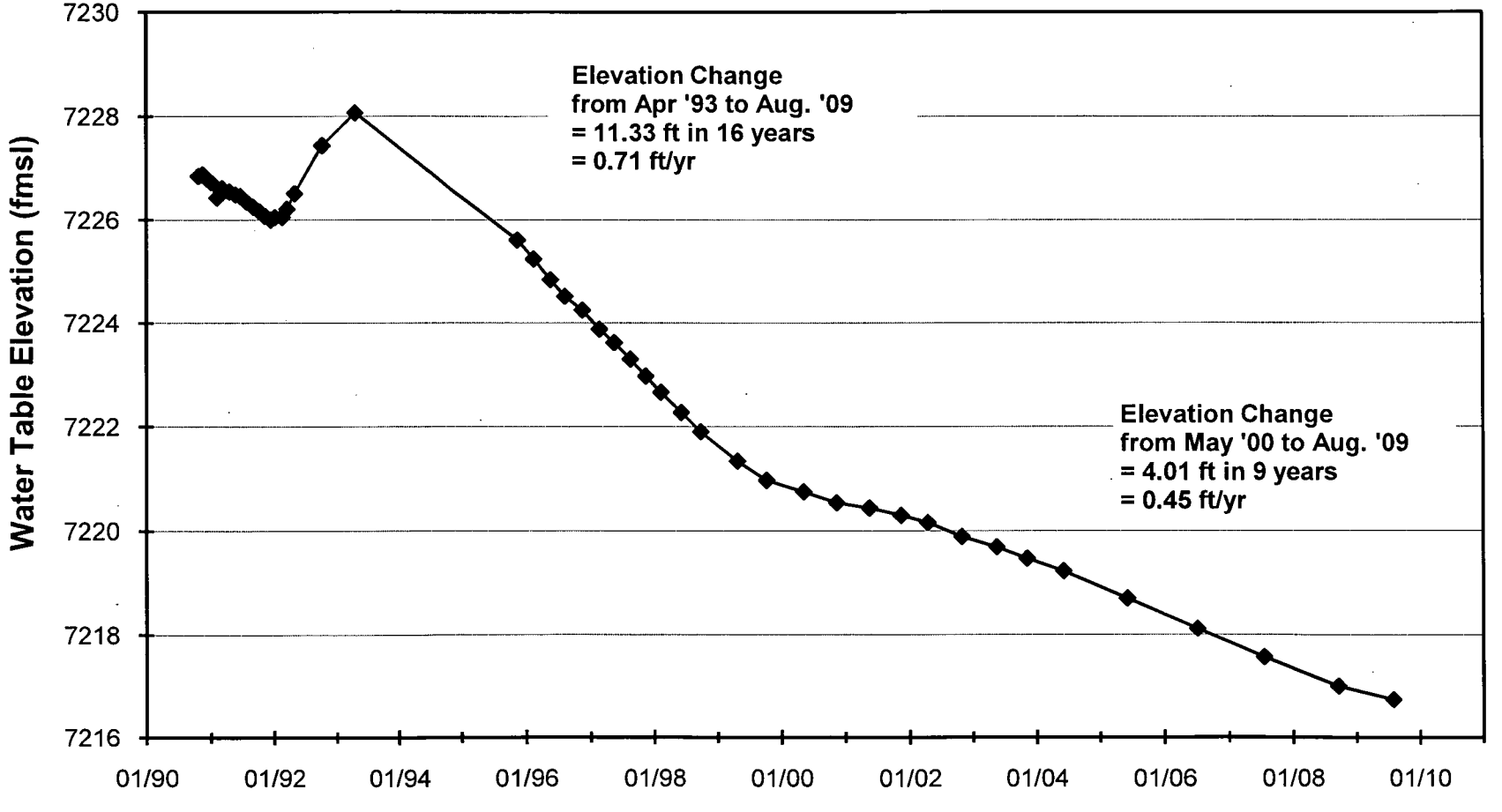


Figure 7

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-01B	7,290.53	08/29/90	44.69	7245.84
		01/08/91	44.82	7245.71
		01/09/92	45.61	7244.92
		04/19/93	42.96	7247.57
		11/14/95	46.16	7244.37
		02/15/96	46.64	7243.89
		02/24/97	48.31	7242.22
		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
		05/21/01	51.85	7240.26
		04/17/02	52.05	7240.06
		05/21/03	52.25	7239.86
		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
5-02B	7,292.06	08/29/90	47.60	7244.46
		01/11/91	47.88	7244.18
		01/09/92	48.58	7243.48
		04/19/93	45.38	7246.68
		11/14/95	49.32	7242.74
		02/15/96	49.84	7242.22
		02/24/97	TP	--
	7,293.24 (w/SVE ext)	02/10/98	NM	--
	PSH @ 55.70	10/11/99	55.75	7237.53
		05/10/00	55.08	7238.16
	PSH @ 56.03	05/21/01	56.33	7237.14
	PSH @ 56.27	04/17/02	56.33	7236.96
		05/21/03	56.07	7237.17
		06/07/04	56.86	7236.38
		06/08/05	56.85	7236.39
		07/10/06	56.92	7236.32
		07/25/07	56.90	7236.34
		09/22/08	56.66	7236.58
		08/04/09	55.85	7237.39
5-02C	7,291.82	02/10/98	53.15	7238.67
		04/27/99	54.05	7237.77
		02/28/00	54.26	7237.56
		05/21/01	55.01	7236.81
		04/17/02	55.37	7236.45
		05/21/03	55.81	7236.01
		06/07/04	56.36	7235.46
		06/08/05	56.68	7235.14
	PSH @ 57.47	07/10/06	57.74	7234.29
	Sheen	07/25/07	57.07	7234.75
	Sheen	09/22/08	56.50	7235.32
	Sheen	08/04/09	56.98	7234.84

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-03B	7,303.76	08/29/90	43.77	7259.99
		01/07/91	44.10	7259.66
		01/09/92	44.67	7259.09
		04/19/93	41.92	7261.84
		11/14/95	46.49	7257.27
		02/15/96	47.02	7256.74
		02/24/97	48.68	7255.08
		02/10/98	49.49	7254.27
		04/27/99	49.91	7253.85
		05/10/00	50.08	7253.68
		05/21/01	50.55	7253.21
		04/17/02	50.88	7252.88
		05/20/03	51.31	7252.45
		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
5-04B	7,292.39	08/29/90	48.35	7244.04
		01/11/91	48.42	7243.97
		01/09/92	49.23	7243.16
		04/19/93	45.77	7246.62
		11/14/95	50.21	7242.18
		02/15/96	50.82	7241.57
		02/24/97	NM	--
	7292.72 (w/SVE ext)	02/10/98	54.70	7238.02
		10/11/99	55.95	7236.77
		05/10/00	55.53	7237.19
		05/21/01	56.65	7236.07
		04/17/02	57.10	7235.62
		05/21/03	57.57	7235.15
		06/07/04	58.55	7234.17
		06/08/05	58.56	7234.16
		07/10/06	58.78	7233.94
		07/25/07	58.78	7233.94
		09/22/08	dry	--
		08/04/09	dry	--
5 05B	7,290.83	08/29/90	47.50	7243.33
		01/10/91	47.14	7243.69
		01/09/92	47.87	7242.96
		04/19/93	44.76	7246.07
		11/14/95	48.59	7242.24
		02/15/96	49.12	7241.71
		02/24/97	51.14	7239.69
	7292.02 (w/SVE ext)	02/10/98	53.51	7238.51
		10/11/99	55.02	7237.00
		05/10/00	54.61	7237.41
		05/21/01	55.38	7236.64
		04/17/02	55.76	7236.26
		05/21/03	56.27	7235.75
		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

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-06B	7,289.30	08/29/90	43.47	7245.83
		01/08/91	43.42	7245.88
		01/09/92	44.16	7245.14
		04/19/93	41.94	7247.36
		11/14/95	44.64	7244.66
		02/15/96	44.99	7244.31
		02/24/97	46.30	7243.00
		11/16/97	47.01	7242.29
5-06C	7,291.46	02/10/98	49.31	7242.15
		04/27/99	50.03	7241.43
		02/28/00	50.18	7241.28
		05/21/01	50.62	7240.84
		04/17/02	50.93	7240.53
		05/21/03	51.19	7240.27
		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
5-12B	7,279.61	08/14/90	48.85	7230.76
		01/09/91	48.96	7230.65
		01/07/92	49.49	7230.12
		04/19/93	47.45	7232.16
		11/14/95	49.71	7229.90
		02/15/96	50.02	7229.59
		02/24/97	51.24	7228.37
		02/10/98	52.28	7227.33
		04/27/99	53.11	7226.50
		05/10/00	53.36	7226.25
		05/21/01	53.14	7226.47
		04/17/02	53.68	7225.93
		05/20/03	54.00	7225.61
		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

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-13B	7,282.43	08/14/90	52.43	7230.00
		01/09/91	52.82	7229.61
		01/08/92	53.58	7228.85
		04/19/93	51.08	7231.35
		11/14/95	53.85	7228.58
		02/15/96	54.18	7228.25
		02/24/97	55.37	7227.06
		02/10/98	56.36	7226.07
		04/27/99	57.31	7225.12
		05/10/00	57.90	7224.53
		05/21/01	58.31	7224.12
		04/17/02	58.60	7223.83
		05/20/03	59.08	7223.35
		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
5-14B	7,285.76	08/14/90	55.14	7230.62
		01/09/91	55.12	7230.64
		01/06/92	55.74	7230.02
		04/19/93	53.25	7232.51
		11/14/95	56.25	7229.51
		02/15/96	56.62	7229.14
		02/24/97	58.01	7227.75
		02/10/98	59.08	7226.68
		04/27/99	60.17	7225.59
		05/10/00	60.56	7225.20
		05/21/01	60.77	7224.99
		04/17/02	61.19	7224.57
		05/20/03	61.84	7223.92
		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
5-15B	7,292.92	08/14/90	49.86	7243.06
	(Recorded DTW=51.10?)	01/10/91	50.10	7242.82
		01/07/92	50.57	7242.35
		04/19/93	47.41	7245.51
		11/14/95	51.84	7241.08
		02/15/96	52.42	7240.50
		02/24/97	54.48	7238.44
		02/10/98	55.70	7237.22
		04/27/99	56.55	7236.37
		02/28/00	56.60	7236.32
		05/21/01	57.03	7235.89
		04/17/02	57.56	7235.36
		05/21/03	58.05	7234.87
		06/07/04	58.73	7234.19
		06/08/05	59.35	7233.57
		07/10/06	59.99	7232.93
		07/25/07	61.65	7231.27
		09/22/08	60.77	7232.15
		08/04/09	60.81	7232.11

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-16B	7,288.82	08/14/90	47.21	7241.61
		01/10/91	47.60	7241.22
		01/08/92	48.11	7240.71
		04/19/93	45.61	7243.21
		11/14/95	48.88	7239.94
		02/15/96	49.33	7239.49
		02/24/97	51.08	7237.74
		02/10/98	52.16	7236.66
		04/27/99	53.02	7235.80
		02/28/00	53.21	7235.61
		05/21/01	53.71	7235.11
		04/17/02	54.11	7234.71
		05/21/03	54.65	7234.17
		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
5-17B	7,284.75	08/14/90	40.79	7243.96
		01/10/91	40.96	7243.79
		01/07/92	41.60	7243.15
		04/19/93	39.40	7245.35
		11/14/95	42.06	7242.69
		02/15/96	42.46	7242.29
		02/24/97	44.14	7240.61
		02/10/98	45.30	7239.45
		04/27/99	46.36	7238.39
		05/10/00	46.57	7238.18
		05/21/01	47.34	7237.41
		04/17/02	47.70	7237.05
		05/20/03	48.22	7236.53
		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
5-18B	7,286.41	08/14/90	51.67	7234.74
		11/15/90	51.60	7234.81
		01/04/91	51.66	7234.75
		01/08/92	52.40	7234.01
		04/19/93	49.68	7236.73
		11/14/95	53.04	7233.37
		02/15/96	53.49	7232.92
		02/24/97	55.03	7231.38
		02/10/98	55.94	7230.47
		04/27/99	56.81	7229.60
		05/10/00	57.18	7229.23
		05/21/01	57.47	7228.94
		04/17/02	57.85	7228.56
		05/20/03	58.40	7228.01
		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

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-19B	7,290.52	08/14/90	49.44	7241.08
		01/10/91	49.86	7240.66
		01/08/92	50.36	7240.16
		04/19/93	47.73	7242.79
		11/14/95	51.30	7239.22
		02/15/96	51.75	7238.77
		02/24/97	53.44	7237.08
		02/10/98	54.49	7236.03
		04/27/99	55.26	7235.26
		02/28/00	55.33	7235.19
		05/21/01	55.74	7234.78
		04/17/02	56.11	7234.41
		05/20/03	56.60	7233.92
		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
5-20B	7,284.60	08/14/90	48.50	7236.10
		01/09/91	48.70	7235.90
		01/08/92	49.36	7235.24
		04/19/93	47.26	7237.34
		11/14/95	49.63	7234.97
		02/15/96	50.03	7234.57
		02/24/97	51.28	7233.32
		02/10/98	52.46	7232.14
		04/27/99	53.30	7231.30
		05/10/00	53.23	7231.37
		05/21/01	53.62	7230.98
		04/17/02	53.78	7230.82
		05/20/03	54.17	7230.43
		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
5-22B	7,292.74	10/25/90	48.08	7244.66
		01/10/91	48.33	7244.41
		01/10/92	49.00	7243.74
		04/19/93	45.34	7247.40
		11/14/95	NM	--
		02/15/96	NM	--
		02/27/97	52.95	7239.79
		02/10/98	53.86	7238.88
		04/27/99	54.00	7238.74
		05/10/00	53.60	7239.14
		05/21/01	54.20	7238.54
		04/17/02	54.04	7238.70
		05/21/03	54.23	7238.51
		06/07/04	54.21	7238.53
		06/08/05	53.90	7238.84
		07/10/06	54.03	7238.71
		07/25/07	53.83	7238.91
		09/22/08	53.69	7239.05
		08/04/09	54.10	7238.64

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-23B	7,282.63	10/25/90	55.78	7226.85
		01/03/91	55.90	7226.73
		01/07/92	56.58	7226.05
		04/19/93	54.56	7228.07
		11/14/95	57.02	7225.61
		02/15/96	57.39	7225.24
		02/24/97	58.75	7223.88
		02/10/98	59.97	7222.66
		04/27/99	61.29	7221.34
		05/10/00	61.88	7220.75
		05/21/01	62.19	7220.44
		04/17/02	62.47	7220.16
		05/20/03	62.94	7219.69
		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
5-24B	7,279.18	10/25/90	53.64	7225.54
		01/03/91	53.76	7225.42
		01/07/92	54.40	7224.78
		04/19/93	52.33	7226.85
		11/14/95	54.62	7224.56
		02/15/96	54.96	7224.22
		02/24/97	56.26	7222.92
		02/10/98	57.32	7221.86
		04/27/99	58.56	7220.62
		05/10/00	59.04	7220.14
		05/21/01	59.29	7219.89
		04/17/02	59.45	7219.73
		05/20/03	59.79	7219.39
		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
5-34B	7,294.71	05/12/92	48.62	7246.09
		04/19/93	46.98	7247.73
		11/14/95	52.33	7242.38
		02/16/96	NM	--
		02/24/97	NM	--
	PSH @ 58.54	10/11/99	58.56	7236.17
	PSH @ 57.33	05/10/00	57.35	7236.46
	PSH @ 58.78	05/21/01	58.83	7235.92
	PSH @ 59.09	04/17/02	59.86	7235.44
	PSH @ 59.48	05/21/03	60.72	7234.93
	PSH @ 60.32	06/07/04	61.38	7234.14
	?	06/08/05	61.26	---
	PSH @ 61.02	07/10/06	61.56	7233.56
	PSH @ 62.44	07/25/07	62.97	7232.14
	PSH @ 61.35	09/22/08	61.40	7233.35
	PSH @ 61.05	08/04/09	61.06	7233.43

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
5-35B	7,296.11	05/05/92	50.55	7245.56
		04/19/93	48.79	7247.32
		11/14/95	NM	--
		02/15/96	NM	--
	sheen	05/19/97	56.21	7240.67
	7295.33 (w/SVE ext) PSH not measured	02/10/98	55.79	7239.54
	PSH @ 57.15	10/11/99	57.16	7238.18
		05/10/00	56.68	7238.65
		05/21/01	57.51	7237.82
		04/17/02	57.96	7237.37
		05/21/03	58.31	7237.02
		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
5-41B	7,279.73	10/06/92	61.03	7218.70
		04/19/93	60.38	7219.35
		11/14/95	61.90	7217.83
		02/15/96	62.26	7217.47
		02/24/97	63.97	7215.76
		02/10/98	NM	--
		05/10/00	NM	--
		11/14/00	NM	--
5-47B	7,268.35	10/06/92	62.71	7205.64
		04/19/93	62.18	7206.17
		11/14/95	62.77	7205.58
		02/15/96	63.27	7205.08
		02/24/97	TP	--
		08/18/97	66.03	7202.32
5-48B	7,292.64	10/06/92	46.80	7245.84
		04/19/93	46.52	7246.12
		11/14/95	51.00	7241.64
		02/15/96	51.60	7241.04
		02/24/97	53.76	7238.88
		09/29/98	55.67	7236.97
		04/27/99	55.93	7236.71
		02/28/00	56.19	7236.45
		05/21/01	56.57	7236.07
		04/17/02	57.05	7235.59
		05/21/03	57.54	7235.10
		06/07/04	58.23	7234.41
		06/08/05	58.86	7233.78
		07/10/06	59.44	7233.20
	(TD = 59.87)	07/25/07	59.84	7232.80
		09/22/08	dry	--
		08/04/09	dry	--
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
		02/24/97	62.20	7195.60
		08/18/97	62.82	7194.98

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
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
		02/24/97	68.42	7210.96
		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
		05/21/03	50.38	7240.44
		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
5-60	7,290.83	11/16/01	52.01	7238.82
		04/17/02	52.07	7238.76
		05/21/03	52.33	7238.50
		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
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
		11/16/01	59.83	7237.05
		04/17/02	60.01	7236.87
		05/21/03	60.54	7236.34
		06/07/04	61.16	7235.72
		06/08/05	61.46	7235.42
		07/10/06	61.51	7235.37
		07/25/07	61.51	7235.37
		09/22/08	61.52	7235.36
		08/04/09	Dry	--
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
		11/16/01	60.14	7237.54
		04/17/02	60.28	7237.40
		05/21/03	60.83	7236.85
		06/07/04	61.49	7236.19
		06/08/05	61.67	7236.01
		07/10/06	dry	--
		07/25/07	dry	--
		09/22/08	dry	--
		08/04/09	dry	--

Table 1. Summary of Groundwater Level Data
Thoreau Compressor Station No. 5

Well ID	Measuring Point Elevation (fmsl)	Date	Depth to Ground Water (ft below MP)	Ground Water Elevation (fmsl)
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
		05/21/03	58.49	7235.19
		06/07/04	59.15	7234.53
		06/08/05	60.42	7233.26
	PSH @ 60.05	07/10/06	60.71	7233.47
	PSH @ 60.51	07/25/07	60.52	7233.52
		09/22/08	58.31	7234.05
		08/04/09	60.08	7233.62
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
		05/21/03	55.48	7234.35
		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	60.53	7229.30
		08/04/09	58.36	7231.47
5-37I	7,296.31	10/11/99	58.90	7237.41
		05/10/00	58.46	7237.85
		11/16/01	59.46	7236.85
		04/17/02	59.64	7236.67
		05/21/03	59.94	7236.37
		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
5-36E	7,296.56	10/11/99	60.76	7235.80
		05/10/00	59.76	7236.80
		11/16/01	61.31	7235.25
		04/17/02	61.51	7235.05
		05/21/03	61.46	7235.10
		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

MP = Measuring point
fmsl = Feet above mean sea level
NM = Not measured
TP = Tagged top of pump

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	---
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
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

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
5-06B	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
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
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

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
5-15B	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
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
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

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
5-19B	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
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
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
5-37I	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

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
5-41B	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
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
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

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
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	---

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
5-02B	05/89	ER	1800	2000	< 200	NA
	03/90	ER	2300	3800	< 250	2400
	01/91	EH	600	730	110	940
	01/09/92	ER	360	710	52	480
	04/22/93	ATI-A	120	< 0.5	11	38
	12/09/94	HEAL	2100	2600	220	1800
	11/21/95	HEAL	740	2900	160	1100
	02/22/96	HEAL	260	1000	62	600
	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

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
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
	01/08/92	ER	150	< 25	< 25	570
	11/20/95	HEAL	< 0.5	< 0.5	0.6	2.0
	02/21/96	HEAL	1.0	0.7	< 0.5	< 0.5
	02/26/97	HEAL	1.5	5.9	< 0.5	2.5
	02/11/98	HEAL	0.9	1.5	< 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
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
	04/28/99	OAL	200	170	45	620
	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
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
5-19B	08/90	AS	190	3.5	5.8	44
	01/91	EH	150	< 0.30	0.60	15
	01/08/92	ER	240	< 5.0	< 5.0	9.0
	11/20/95	HEAL	< 0.5	< 0.5	< 0.5	< 0.5
	02/21/96	HEAL	0.9	0.8	< 0.5	< 0.5
	02/27/97	HEAL	1.3	1	< 0.5	0.7
	02/11/98	HEAL	2.3	1.8	0.8	0.7
	04/28/99	OAL	43	< 1	1	3
	05/12/00	OAL	16	< 2	3	4
	05/24/01	Analysys	< 1	< 1	1.17	< 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
5-20B	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
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
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
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

Well ID	Date	Lab	BTEX Concentration (ug/L)			
			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

† 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	1016/1242	1016/1221
5-01C	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	--	< 0.5	< 0.5	< 0.5	**13.5**	--
	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	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**2.6**
	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	--	--
5-06C	05/13/00	OAL	**7.2**	< 0.5	< 0.5	**266**	< 0.5	< 0.5	< 0.5	--	--
Dup (5-99)	05/13/00	OAL	**6.6**	< 0.5	< 0.5	**263**	< 0.5	< 0.5	< 0.5	--	--
	11/17/00	NCA	< 0.5	< 1.0	< 0.5	**5.23**	< 0.5	< 0.5	< 0.5	--	--
Dup (5-99)	11/17/00	NCA	**4.45**	< 0.5	< 0.5	**5.17**	< 0.5	< 0.5	< 0.5	--	--
	05/22/01	Analysys	--	< 0.5	< 0.5	--	< 0.5	< 0.5	< 0.5	**3.1**	--
Dup (5-99)	05/22/01	Analysys	--	< 0.5	< 0.5	--	< 0.5	< 0.5	< 0.5	**5.81**	--
	11/18/01	Analysys	--	< 0.5	< 0.5	--	< 0.5	< 0.5	< 0.5	**43.7**	--
Dup (5-66)	11/18/01	Analysys	--	< 0.5	< 0.5	--	< 0.5	< 0.5	< 0.5	**40.5**	--
	04/20/02	NCA	< 10.0	**150**	< 0.5	< 10.0	< 10.0	< 10.0	< 10.0	--	--
Dup (5-66)	04/20/02	NCA	< 10.0	**168**	< 0.5	< 10.0	< 10.0	< 10.0	< 10.0	--	--
	10/30/02	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**41**
	05/21/03	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**5.8**
	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	--	--
Dup (5-61)	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	--	--
Dup (5-61)	09/23/08	HEAL	**1.3**	< 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	--	--
Dup (5-61B)	08/04/09	HEAL	**1.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--
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	--	--

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	1016/1242	1016/1221
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	--	< 0.5	< 0.5	< 0.5	**30.7**	--
	04/20/02	NCA	< 10.0	**78.6**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	--	--
	10/30/02	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**19**
Dup (5-66)	10/30/02	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**19**
	05/21/03	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**14**
Dup (5-66)	05/21/03	HEAL	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	**14**
	11/11/03	HEAL	**11**	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--
Dup (5-66)	11/11/03	HEAL	**9.7**	< 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	--	--
Dup (5-66)	06/08/04	HEAL	**11**	< 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	--	--
Dup (5-61)	06/09/05	HEAL	**3.3**	< 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	--	--
Dup (5-61)	07/11/06	HEAL	**3.3**	< 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	--	--
Dup (5-61B)	09/23/08	HEAL	**1.3**	< 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	--	--
5-60	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	OAL	NA	---	NA	1000	50	1900	100	320	100	2900	200
	5-98	OAL	NA	---	NA	960	50	1800	100	300	100	2600	200
10/14/99	5-06C	OAL	14/300	1061/1221	5.0/10	<1	1	<2	2	<2	2	<4	4
	5-99	OAL	14/290	1061/1221	5.0/10	NA	NA	NA	NA	NA	NA	NA	NA
05/12/00	5-16B	OAL	NA	---	NA	600	5	290	10	92	10	360	20
	5-98	OAL	NA	---	NA	510	10	200	20	70	20	270	40
05/13/00	5-06C	OAL	7.2/266	1061/1221	5.0/10	1	1	<2	2	<2	2	<4	4
	5-99	OAL	6.6/263	1061/1221	5.0/10	NA	NA	NA	NA	NA	NA	NA	NA
11/17/00	5-02C	NCA	NA	---	NA	671	0.500	1000	0.500	372	0.500	3820	20.0
	5-98	NCA	NA	---	NA	623	0.500	972	0.500	358	0.500	3730	20.0
11/17/00	5-06C	NCA	<0.5/5.23	1016/1242	0.500	<0.500	0.500	<0.500	0.500	<0.500	0.500	<1	1.00
	5-99	NCA	4.45/5.17	1016/1242	0.500/0.500	NA	0.500	NA	0.500	NA	0.500	NA	1.00
05/22/01	5-06C	Analysys	3.1	1016/1242	1	<1	0.500	<1	0.500	<1	0.500	<2	1.00
	5-99	Analysys	5.81	1016/1242	1	NA	NA	NA	NA	NA	NA	NA	NA
05/24/01	5-16B	Analysys	NA	---	NA	1240	100	487	100	174	100	1105	100
	5-98	Analysys	NA	---	NA	1220	100	466	100	181	100	1184	100
11/17/01	5-02C	Analysys	NA	---	NA	587	100	15.2	100	365	100	3622	100
	5-65	Analysys	NA	---	NA	577	100	15.6	100	401	100	3890	100
11/18/01	5-06C	Analysys	43.7	1016/1242	0.5	1.19	1	<1	1	<1	1	<2	2
	5-66	Analysys	40.5	1016/1242	0.5	NA	NA	NA	NA	NA	NA	NA	NA
04/20/02	5-02C	HEAL	NA	---	NA	450	10	ND	10	300	10	3100	10
	5-65	HEAL	NA	---	NA	450	10	ND	10	300	10	3200	10
04/20/02	5-06C	HEAL	150	1221	1.00	1.1	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
	5-66	HEAL	168	1221	20.0	NA	NA	NA	NA	NA	NA	NA	NA
10/30/02	5-59	HEAL	19	1016/1221	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
	5-66	HEAL	19	1016/1221	1.0	NA	NA	NA	NA	NA	NA	NA	NA
10/31/02	5-02C	HEAL	NA	---	NA	330	5.0	ND	5.0	230	5.0	2000	5.0
	5-65	HEAL	NA	---	NA	350	20	3.2	2.5	230	20	2200	20
05/22/03	5-02C	HEAL	NA	---	NA	290	10	ND	10	200	10	800	10
	5-67	HEAL	NA	---	NA	290	10	ND	10	190	10	780	10
05/22/03	5-59	HEAL	14	1016/1221	1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5
	5-66	HEAL	14	1016/1221	1.0	NA	NA	NA	NA	NA	NA	NA	NA
11/11/03	5-02C	HEAL	NA	---	NA	450	2.5	ND	2.5	240	2.5	770	2.5
	5-66	HEAL	NA	---	NA	490	2.5	ND	2.5	240	2.5	770	2.5
11/11/03	5-59	HEAL	11	1016	1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5
	5-66	HEAL	9.7	1016	1.0	NA	NA	NA	NA	NA	NA	NA	NA
06/08/04	5-02C	HEAL	NA	---	NA	270	25	28	25	160	25	1000	25
	5-66	HEAL	NA	---	NA	280	5	28	5	170	5	1100	5
06/08/04	5-59	HEAL	10	1016	1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5
	5-61	HEAL	11	1016	1.0	NA	NA	NA	NA	NA	NA	NA	NA
06/08/05	5-16B	HEAL	NA	---	NA	1400	5	< 5	5	160	5	520	5
	5-68B	HEAL	NA	---	NA	1900	5	< 5	5	200	5	920	5
07/10/06	5-16B	HEAL	NA	---	NA	1600	20	< 20	20	150	20	380	60
	5-61	HEAL	NA	---	NA	1400	20	< 20	20	140	20	420	60
07/11/06	5-59	HEAL	3.4	1016	1.0	ND	1.0	ND	1.0	ND	1.0	ND	3.0
	5-61	HEAL	3.3	1016	1.0	NA	NA	NA	NA	NA	NA	NA	NA
07/25/07	5-06C	HEAL	1.1	1248	1.00	<1	1	<1	1	<1	1	<2	2
	5-61	HEAL	1.1	1248	1.00	NA	NA	NA	NA	NA	NA	NA	NA
07/25/07	5-16B	HEAL	NA	---	NA	1700	20	< 20	20	170	20	590	40
	5-61	HEAL	NA	---	NA	1500	20	< 20	20	150	20	380	40
09/23/08	5-06C	HEAL	<1/<5	---	1.0/5.0	<1	1	<1	1	<1	1	<2	2
	5-61	HEAL	1.3	1016	1.0	NA	NA	NA	NA	NA	NA	NA	NA
09/23/08	5-16B	HEAL	NA	---	NA	1900	20	< 20	20	180	20	600	10
	5-61	HEAL	NA	---	NA	1700	20	< 20	20	190	20	680	10
08/04/09	5-6C	HEAL	1.3	1016	1.0	<1	1	<1	1	<1	1	<2	2
	5-61	HEAL	1.7	1016	1.0	NA	NA	NA	NA	NA	NA	NA	NA
08/04/09	5-16B	HEAL	NA	---	NA	1300	50	< 5	5	150	5	590	10
	5-61	HEAL	NA	---	NA	1300	50	< 5	5	120	5	500	10

† 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

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
5-02B	none	---	---	not enough water to collect a sample
5-02C	BTEX	300	---	replacement for 02B; intermittent PSH
5-03B	none	<0.5	---	clean upgradient well
5-04B	none	---	---	dry
5-05B	none	2.5	---	clean perimeter well
5-06C	BTEX & PCBs	<1	1.7	has tested positive for PCBs
5-12B	none	<0.5	---	clean downgradient well
5-13B	none	<0.5	---	clean downgradient well
5-14B	none	<0.5	---	clean downgradient well
5-15B	none	<0.5	---	clean perimeter well
5-16B	BTEX	1300	---	impacted well
5-17B	none	<1	<1	clean downgradient well
5-18B	BTEX	<1	---	clean downgradient well
5-19B	none	<0.5	---	clean perimeter well
5-20B	BTEX	<1	---	clean downgradient well
5-22B	none	---	---	not enough water to collect a sample
5-23B	none	<0.5	---	clean downgradient well
5-24B	none	<0.5	---	clean downgradient well
5-34B	none	---	---	remediation system well
5-35B	BTEX	---	---	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
5-59	BTEX & PCBs	<1	<1	has tested positive for PCBs
5-60	none	<1	<1	clean perimeter well
SVE-1	none	<0.5	---	dry
SVE-2	none	---	---	dry
SVE-3	BTEX	---	---	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	03/31/93	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)	(%)									
SVE-1	11/22/96	1,400	0.0	0.7	46.7	39.7	4.9	0.1	0.0	0.0	0.0	0.0
5-04B	11/22/96	210	0.0	2.0	8.2	35.3	43.0	9.8	1.2	0.3	0.2	0.0
5-34B	11/22/96	3,000	0.0	6.4	18.3	59.4	14.9	1.0	0.0	0.0	0.0	0.0
5-35B	11/22/96	120	0.0	12.9	28.2	32.5	16.7	7.8	1.7	0.2	0.0	0.0
SVE-1	08/21/97	47	0.1	0.2	0.6	4.2	14.8	30.6	23.9	16.6	8.9	0.1
5-02B	08/21/97	490	1.4	13.5	34.0	41.7	7.1	1.3	0.6	0.4	0.0	0.0
5-04B	08/21/97	530	0.0	0.1	1.6	9.0	39.8	38.1	8.2	2.8	0.4	0.0
5-05B	08/21/97	44	0.1	0.2	0.6	4.2	14.2	31.4	23.9	16.5	8.8	0.1
5-34B	08/21/97	7,700	0.2	1.4	6.5	26.6	23.8	26.7	11.3	3.0	0.5	0.0
SVE-1	11/24/97	19	0.4	0.7	1.2	2.3	10.4	22.6	23.2	27.7	11.1	0.4
SVE-3	11/24/97	900	0.0	3.5	9.2	16.9	25.4	27.9	11.1	5.1	0.9	0.0
SVE-4	11/24/97	590	0.0	2.2	11.8	27.9	30.6	15.8	6.7	4.2	0.8	0.0
5-02B	11/24/97	10	0.0	5.0	13.1	14.6	15.5	15.2	21.8	11.1	3.7	0.0
5-04B	11/24/97	290	0.0	1.9	3.4	8.8	35.2	32.7	11.3	4.9	1.8	0.0
5-05B	11/24/97	6.7	0.0	0.0	0.6	3.1	19.9	22.9	28.0	15.6	9.6	0.3
5-34B	11/24/97	4,400	0.0	1.0	4.6	23.5	38.9	24.9	1.8	1.9	1.3	2.1
5-35B	11/24/97	1,600	0.0	0.1	1.0	7.1	16.6	28.6	31.6	12.8	2.2	0.0
SVE-1	01/07/98	130	0.0	0.1	0.3	0.8	12.2	30.2	32.2	17.7	6.5	0.0
SVE-3	01/07/98	720	0.1	6.6	12.0	14.5	18.9	19.1	17.7	8.4	2.7	0.0
SVE-4	01/07/98	710	0.1	3.1	9.7	16.5	26.9	19.8	15.5	6.4	2.0	0.0
5-02B	01/07/98	250	0.1	14.3	37.7	27.6	8.0	2.4	4.4	3.6	1.9	0.0
5-04B	01/07/98	44	0.0	0.0	0.2	0.9	8.1	32.1	33.9	17.4	7.4	0.0
5-05B	01/07/98	69	0.0	0.1	0.2	0.4	6.1	21.1	34.9	25.5	11.7	0.0
5-34B	01/07/98	7,100	0.1	2.0	5.7	21.5	38.6	22.0	8.3	1.7	0.1	0.0
5-35B	01/07/98	1,800	0.0	0.2	1.0	3.7	26.8	36.3	22.1	8.3	1.6	0.0
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

All air samples analyzed by Hall Laboratory of Albuquerque, NM

O & M REPORTS

Operation and Maintenance Activities for May 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
5/8/2009	Justin Jayne Elizabeth Bastien	▪ Measured fluid levels in 5-2C, 5-34B, SVE-3 ▪ Set Soakease absorbent sock in 5-2C, 5-34B, SVE-3 ▪ Power up SVE system ▪ Checked SVE filter ▪ Checked gauges and recorded measurements at 12:06 ▪ Checked moisture in knockout pot; appears to be empty ▪ Green tank is empty ▪ No vacuum on SVE-4, or 5-2B, secured loose fittings ▪ Verified vacuum on all extraction wells	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	81.0	36	38	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.03 5-34B: 61.73 SVE-3: 60.83
5/15/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:05 and recorded all measurements ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	77.4	36	38	Not Measured	Not Measured

Operation and Maintenance Activities for May 2008
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
5/22/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:25 and recorded all measurements ▪ Shut down system to check air filter: filter needs replacement, left in system until another can be ordered. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	53.6 Tout= 51.3	37	40	Not Measured	Not Measured
5/29/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:52 and recorded all measurements ▪ Collected air exhaust sample at 11:00, [Thoreau-20090529] ▪ Shut down system ▪ Measured fluid levels and placed Soakease absorbent sock in 5-2C, 5-34B, SVE-3 ▪ Checked SVE filter, left in until replacement arrives. ▪ Restarted system and recorded gauge measurements at 12:11 ▪ Checked moisture in knockout pot; appears to be empty.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	75.2 Tout= 65.3 61.7 Tout= 50.7	36 34	38 36	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.28 5-34B: 61.02 SVE-3: 60.24

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

Operation and Maintenance Activities for June 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
6/4/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:48 and recorded all measurements ▪ Shut down system to check air filter: air filter replaced. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	79.9	36	38	Not Measured	Not Measured
6/11/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:36 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	66.0 Tout= 58.6	36	38	Not Measured	Not Measured

Operation and Maintenance Activities for June 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
6/19/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:52 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ Fluid detected in knockout pot, ~5.5 gallons emptied.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	79.3 Tout= 64.6	36	38	Not Measured	Not Measured
6/26/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:30 and recorded all measurements ▪ Collected air exhaust sample at 10:33, [Thoreau-20090626] ▪ Shut down system ▪ Measured fluid levels and placed Soakease absorbent sock in 5-2C, 5-34B, SVE-3 ▪ Checked SVE air filter, filter: OK. ▪ Restarted system and recorded gauge measurements at 12:23 ▪ Checked moisture in knockout pot; appears to be empty.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	79.0 Tout= 68.0 80.6 Tout= 70.3	36 36	38 38	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.25 5-34B: 60.92 SVE-3: 60.25

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

Operation and Maintenance Activities for July 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
7/8/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:46 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	81.9	36	38	Not Measured	Not Measured
7/16/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:44 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	88.7	36	39	Not Measured	Not Measured

Operation and Maintenance Activities for July 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
7/23/2009	Celestine Ngam	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:25 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	87.1	36	40	Not Measured	Not Measured
7/31/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:48 and recorded all measurements ▪ Collected air exhaust sample at 10:50, [Thoreau-20090731] ▪ Shut down system ▪ Measured fluid levels ▪ Removed Soakease absorbent sock in 5-2C, 5-34B, SVE-3. Did not place new sorbent socks. ▪ Checked SVE air filter, filter: OK. ▪ Restarted system and recorded gauge measurements at 11:52 ▪ Checked moisture in knockout pot; appears to be empty.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	84.0 82.8	36 36	39 39	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.31 5-34B: 61.08 SVE-3: 60.24

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

Operation and Maintenance Activities for August 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
8/6/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 13:12 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	81.1	36	39	Not Measured	Not Measured
8/14/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:50 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	75.6	36	40	Not Measured	Not Measured

Operation and Maintenance Activities for August 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
8/20/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:05 and recorded all measurements ▪ Collected air exhaust sample at 11:10, [Thoreau-20090820] ▪ Shut down system ▪ Measured fluid levels ▪ Placed Soakease absorbent sock in wells 5-2C, 5-34B, and SVE-3. ▪ Checked SVE air filter, filter: OK. ▪ Restarted system and recorded gauge measurements at 12:20 ▪ Checked moisture in knockout pot; appears to be empty.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	91.9 94.1	36 36	40 40	5-2C: 57.05 5-34B: 61.06 SVE-3: ND	5-2C: 57.07 5-34B: 61.10 SVE-3: 60.00
8/28/2009	Celestine Ngam	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:11 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	89.8	36	40	Not Measured	Not Measured

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

Operation and Maintenance Activities for September 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
9/4/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 13:12 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	76.8	36	40	Not Measured	Not Measured
9/11/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections. ▪ All manifold valves full open ▪ Checked gauges at 10:50 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	68.5 Tout= 14.4	36	40	Not Measured	Not Measured
9/17/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:55 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ No fluid detected in knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	68.0 Tout= 56.1	37	39	Not Measured	Not Measured

Operation and Maintenance Activities for September 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
9/25/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:55 and recorded all measurements ▪ Collected air exhaust sample at 11:05, [Thoreau-20090820] ▪ Shut down system ▪ Measured fluid levels ▪ Removed used Soakease absorbent sock in wells 5-2C, 5-34B, and SVE-3. Did not place new sorbent socks. ▪ Checked SVE air filter, filter: OK. ▪ Restarted system and recorded gauge measurements at 12:18 ▪ Fluid detected in knockout pot, approximately 6 gallons emptied.	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	75.2 77.7	36 36	39 39	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.27 5-34B: 61.14 SVE-3: 60.15

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

Operation and Maintenance Activities for October 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
10/1/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:18 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ Emptied 2.5 gallons of fluid from knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	61.3	36	39	Not Measured	Not Measured
10/9/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 11:10 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ Emptied 13 gallons of fluid from knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	64.4	36	39	Not Measured	Not Measured
10/14/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:55 and recorded all measurements ▪ Shut down system to check air filter: air filter OK. ▪ Emptied 7 gallons of fluid from knockout pot	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	70.9	36	39	Not Measured	Not Measured

Operation and Maintenance Activities for October 2009
Thoreau Compressor Station #5, McKinley County, NM

Date of Visit	DBS&A Employee	Task Description	Wells Online	Temp (°F)	Pressure In (in H_2O)	Pressure Out (in H_2O)	Depth to PSH (ft btoc)	Depth to Water (ft btoc)
10/20/2009	Elizabeth Bastien	▪ Verified vacuum on all extraction wells and integrity of connections ▪ All manifold valves full open ▪ Checked gauges at 10:55 and recorded all measurements ▪ Collected air exhaust sample at 11:20, [Thoreau-20091020] ▪ Shut down system for winter ▪ Measured fluid levels ▪ Removed used Soakease absorbent sock in wells 5-2C, 5-34B, and SVE-3. Did not place new sorbent socks. ▪ Checked SVE air filter, filter: OK. ▪ Fluid detected in knockout pot, approximately 6 gallons emptied. ▪ Coordinated with Transwestern Pipeline staff to dispose of used absorbent socks	5-2B 5-5B 5-34B 5-36E SVE-3 SVE-4	65.5	36	40	5-2C: ND 5-34B: ND SVE-3: ND	5-2C: 57.10 5-34B: 61.07 SVE-3: 59.90

Notes: ft btoc = feet below top of casing, PSH = phase-separated hydrocarbons, ND = Not Detected

SVE Air Samples

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, June 08, 2009

George Robinson
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: Thoreau O & M

Order No.: 0905541

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/29/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jun-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau-20090529
Lab Order:	0905541	**Collection Date:**	5/29/2009 11:00:00 AM
Project:	Thoreau O & M	**Date Received:**	5/29/2009
Lab ID:	0905541-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	160	50.0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C05-C6	12.9	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C06-C7	26.3	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C07-C8	36.9	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C08-C9	13.1	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C09-C10	8.70	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C10-C11	1.30	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C11-C12	0.700	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C12-C14	0.100	0		µg/L	10	6/3/2009 3:01:33 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	10	6/3/2009 3:01:33 PM
Surr: BFB	81.8	76.8-150		%REC	10	6/3/2009 3:01:33 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: Thoreau O & M **Work Order:** 0905541

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R33943**	Analysis Date:		6/3/2009 8:50:42 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R33943**	Analysis Date:		6/3/2009 5:33:42 PM
Gasoline Range Organics (GRO)	0.5806	mg/L	0.050	116	80	115			S
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R33943**	Analysis Date:		6/3/2009 6:04:11 PM
Gasoline Range Organics (GRO)	0.5688	mg/L	0.050	114	80	115	2.05	8.39	

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name CYP | Date Received: 5/29/2009

Work Order Number 0905541 | Received by: AT

Checklist completed by: _____ 5/29/09 | Sample ID labels checked by: AT

Signature | Date | Initials

Matrix: | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?		*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Cypress Engineering

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Thoreau O+M

Project #: ES09.0081.00

Project Manager: Bob Marley

Sampler: Elizabeth Bastien

On Ice: ☐ Yes ☐ No

Sample Temperature:

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. 0905541	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1) 5/29/09	EDB (Method 504.1)	8310 (PNA or PAH)	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)
5/29/09	11:00	air	Thoreau-20090529	Tevlar	NA	-1			X	X											

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/29/09	1435	Elizabeth Bastien		5/29/09	1435
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Please send copy to George Robinson and Bob Marley. Report HCR

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

COVER LETTER

Wednesday, July 01, 2009

Bob Marley
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: Cypress-Thoreau O+M

Order No.: 0906576

Dear Bob Marlev:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/26/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *01-Jul-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau-20090626
Lab Order:	0906576	**Collection Date:**	6/26/2009 10:33:00 AM
Project:	Cypress-Thoreau O+M	**Date Received:**	6/26/2009
Lab ID:	0906576-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	145	25.0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C05-C6	8.80	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C06-C7	26.1	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C07-C8	39.3	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C08-C9	15.0	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C09-C10	8.20	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C10-C11	1.60	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C11-C12	0.500	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C12-C14	0.500	0		µg/L	5	6/30/2009 2:50:26 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	5	6/30/2009 2:50:26 PM
Surr: BFB	91.5	76.8-150		%REC	5	6/30/2009 2:50:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: Cypress-Thoreau O+M **Work Order:** 090657(

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R34318**	Analysis Date:	6/30/2009 9:19:27 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R34318**	Analysis Date:	6/30/2009 8:26:26 PM	
Gasoline Range Organics (GRO)	0.5048	mg/L	0.050	101	80	115			

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Name CYP | Date Received: 6/26/2009

Order Number 0906576 | Received by: TLS

Checklist completed by: _____ 6/26/09 | Sample ID labels checked by: _____

Signature | Date | Initials

Matrix: | Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
- Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
- pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

Container/Temp Blank temperature? *<6° C Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

ective Action _____

_____

_____

Chain-of-Custody Record

Client: Cypress Engineering

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name: Cypress-Thoreau O+M

Project #: ES09.0081.00

Project Manager: Bob Marley

Sampler: Elizabeth Bastien

On Ice: ☐ Yes ☐ No

Sample Temperature: _____

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. 0906516	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
6/26/09	10:53	air	Thoreau-20090626	Tevlar	NA	1			X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/26/09	2:35	Elizabeth Bastien		6/26/09	1435
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Send George Robinson + Bob Marley a copy of results
Report HCR

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, August 07, 2009

Bob Marley
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: Cypress Thoreau

Order No.: 0907588

Dear Bob Marlev:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/31/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau 20090731
Lab Order:	0907588	**Collection Date:**	7/31/2009 10:50:00 AM
Project:	Cypress Thoreau	**Date Received:**	7/31/2009
Lab ID:	0907588-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	129	5.00		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C05-C6	8.30	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C06-C7	26.7	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C07-C8	36.7	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C08-C9	17.7	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C09-C10	6.90	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C10-C11	2.10	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C11-C12	1.20	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C12-C14	0.400	0		µg/L	1	8/6/2009 2:18:39 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	1	8/6/2009 2:18:39 PM
Surr: BFB	127	76.8-150		%REC	1	8/6/2009 2:18:39 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: Cypress Thoreau **Work Order:** 0907588

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R34800**		Analysis Date:		8/5/2009 11:42:41 AM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID: **R34800**		Analysis Date:		8/5/2009 9:17:13 PM
Gasoline Range Organics (GRO)	28.07	mg/Kg	5.0	112	64.4	133			
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R34800**		Analysis Date:		8/5/2009 11:42:41 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID: **R34800**		Analysis Date:		8/5/2009 9:17:13 PM
Gasoline Range Organics (GRO)	0.5614	mg/L	0.050	112	80	115			
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R34820**		Analysis Date:		8/6/2009 9:16:45 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID: **R34820**		Analysis Date:		8/6/2009 6:20:02 PM
Gasoline Range Organics (GRO)	0.5218	mg/L	0.050	104	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID: **R34820**		Analysis Date:		8/6/2009 6:50:41 PM
Gasoline Range Organics (GRO)	0.5268	mg/L	0.050	105	80	115	0.954	8.39	

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **CYP** Date Received: **7/31/2009**

Work Order Number **0907588** Received by: **TLS**

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ 7/31/09
Signature Date

Matrix: Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☑	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

Container/Temp Blank temperature? *<6° C Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Cypress

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Cypress Thoreau

Project #: E509.0081.00

Project Manager: Bob Marley

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature:

HEAL No. 0907588

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		BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
7/31/09	1000	air	Thoreau 20090731	Tevlar	—	-1			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/31/09	2020	Elizabeth Bastien		7/31/09	1420
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Please send copy to George Robinson + Bob Marley
Report HCR

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, August 26, 2009

George Robinson
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: Thoreau Station #5

Order No.: 0908347

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/20/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *26-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau-20090820
Lab Order:	0908347	**Collection Date:**	8/20/2009 11:10:00 AM
Project:	Thoreau Station #5	**Date Received:**	8/20/2009
Lab ID:	0908347-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	155	10.0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C05-C6	12.0	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C06-C7	28.4	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C07-C8	34.1	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C08-C9	15.9	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C09-C10	6.40	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C10-C11	1.90	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C11-C12	0.900	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C12-C14	0.400	0		µg/L	2	8/25/2009 11:34:24 AM
% GRO Hydrocarbons: C14+	ND	0		µg/L	2	8/25/2009 11:34:24 AM
Surr: BFB	105	76.8-150		%REC	2	8/25/2009 11:34:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: Thoreau Station #5 **Work Order:** 0908347

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R35033**	Analysis Date:		8/25/2009 9:00:16 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: b 16		*MBLK*				Batch ID:	**R35033**	Analysis Date:		8/25/2009 4:29:53 PM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R35033**	Analysis Date:		8/26/2009 4:10:57 AM	
Gasoline Range Organics (GRO)	0.4636	mg/L	0.050	0.5	0	92.7	80	115			
Sample ID: 2.5UG GRO LCS-II		*LCS*				Batch ID:	**R35033**	Analysis Date:		8/26/2009 4:41:23 AM	
Gasoline Range Organics (GRO)	0.5176	mg/L	0.050	0.5	0	104	80	115			

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name CYP | Date Received: 8/20/2009

Work Order Number 0908347 | Received by: ARS

Checklist completed by: _____ 8/20/09 | Sample ID labels checked by: AS

Signature | Date | Initials

Matrix: | Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
r - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
..er - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

Container/Temp Blank temperature? *<6° C Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

rrective Action _____

_____

_____

Chain-of-Custody Record

Client: Cypress

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
Cypress Thoreau

Project #:
ES09,0081.00

Project Manager:

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature:

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. 0908341	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
8/20/09	11:10	Air	Thoreau-20090820	Tevlar	—	1			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/20/09	2:45	Elizabeth Baxter		8/20/09	14:45
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Please send copy to George Robinson and Bob Marley Report.

If necess ...ples submitted to Hall Environmental may be subcontracted to other accredited laboratorie... ...erves as notice of this possibility. Any sub-contracted data will be clearly notated on the an... ...port.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, October 01, 2009

George Robinson
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: CypressThoreau

Order No.: 0909532

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 9/25/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *01-Oct-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau-20090925
Lab Order:	0909532	**Collection Date:**	9/25/2009 11:05:00 AM
Project:	CypressThoreau	**Date Received:**	9/25/2009
Lab ID:	0909532-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	163	10.0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C05-C6	8.70	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C06-C7	34.1	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C07-C8	35.4	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C08-C9	14.4	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C09-C10	5.40	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C10-C11	1.30	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C11-C12	0.500	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C12-C14	0.200	0		µg/L	2	9/30/2009 1:50:05 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	2	9/30/2009 1:50:05 PM
Surr: BFB	104	76.8-150		%REC	2	9/30/2009 1:50:05 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

t: Cypress Engineering
ct: CypressThoreau **Work Order:** 0909532

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID: **R35526**		Analysis Date: 9/30/2009 9:15:02 AM			
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID: **R35526**		Analysis Date: 9/30/2009 11:47:31 AM			
Gasoline Range Organics (GRO)	0.5316	mg/L	0.050	0.5	0	106	80	115			

iers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name CYP | Date Received: 9/25/2009

Work Order Number 0909532 | Received by: TLS

Checklist completed by: _____ 09/25/09 (Signature / Date) | Sample ID labels checked by: _____ (Initials)

Matrix: | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	<2 >12 unless noted below.
Container/Temp Blank temperature?		<6° C Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Cypress

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush

Project Name: Cypress Thoreau

Project #: ES09.0081.00

Project Manager: Bob Marley

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature:

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.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
~~9/25/09~~																					
9/25/09	11:05	air	Thoreau-20090925	Tevlar	—	0909532-1			X												

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/25/09	3:00	Elizabeth Bastin		9/25/09	1550
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
Please send copy to George Robinson and Robert Marley Report HCR

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, October 23, 2009

George Robinson
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

TEL: (281) 797-3420
FAX (281) 859-1881

RE: CypressThoreau

Order No.: 0910376

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/20/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *23-Oct-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Thoreau-20091020
Lab Order:	0910376	**Collection Date:**	10/20/2009 11:20:00 AM
Project:	CypressThoreau	**Date Received:**	10/20/2009
Lab ID:	0910376-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	164	25.0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C05-C6	8.30	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C06-C7	27.3	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C07-C8	41.3	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C08-C9	14.9	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C09-C10	6.90	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C10-C11	0.900	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C11-C12	0.300	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C12-C14	0.100	0		µg/L	5	10/22/2009 12:39:26 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	5	10/22/2009 12:39:26 PM
Surr: BFB	96.4	76.8-150		%REC	5	10/22/2009 12:39:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: CypressThoreau **Work Order:** 091037

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID: **R35861**		Analysis Date:	10/22/2009 9:39:24 AM		
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID: **R35861**		Analysis Date:	10/22/2009 7:26:18 PM		
Gasoline Range Organics (GRO)	0.4994	mg/L	0.050	0.5	0	99.9	80	115			

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Name **CYP** Date Received: ***10/20/2009***

Order Number **0910376** Received by: ARS

Sample ID labels checked by: _____ Initials

Checklist completed by: _____ 10/20/09
Signature Date

Matrix: Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
- Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Number of preserved bottles checked for pH: _____

<2 >12 unless noted below.

Container/Temp Blank temperature? *<6° C Aceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

rective Action _____

_____

_____

Chain-of-Custody Record

Client: Cypress

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☐ Rush _____

Project Name:
Cypress Thoreau

Project #:
ES09.0081.00

Project Manager:
Bob Marley

Sampler:

On Ice: ☐ Yes ☐ No

Sample Temperature:

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 0910346	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
10/20/09	11:20	Air	Thoreau-20091020	Tevlar	—	1			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/20/09	3:15	Elizabeth Bastien			
Date:	Time:	Relinquished by:	Received by:	Date	Time
				10/20/09	15:15

Remarks:
Please send copy to George Robinson and Robert Marley

Report HCR

If necess ...ples submitted to Hall Environmental may be subcontracted to other accredited laboratories. ...erves as notice of this possibility. Any sub-contracted data will be clearly notated on the ...

Groundwater Samples

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, August 17, 2009

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 Sta 5

Order No.: 0908073

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 10 sample(s) on 8/6/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	5-59
Lab Order:	0908073	**Collection Date:**	8/4/2009 6:40:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 12:29:21 PM
Surr: Decachlorobiphenyl	64.8	23.9-124		%REC	1	8/11/2009 12:29:21 PM
Surr: Tetrachloro-m-xylene	56.8	28.1-139		%REC	1	8/11/2009 12:29:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/13/2009 1:13:16 PM
Toluene	ND	1.0		µg/L	1	8/13/2009 1:13:16 PM
Ethylbenzene	ND	1.0		µg/L	1	8/13/2009 1:13:16 PM
Xylenes, Total	ND	2.0		µg/L	1	8/13/2009 1:13:16 PM
Surr: 4-Bromofluorobenzene	83.0	65.9-130		%REC	1	8/13/2009 1:13:16 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

JENT:	Cypress Engineering	**Client Sample ID:**	5-60
Lab Order:	0908073	**Collection Date:**	8/4/2009 7:10:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 1:19:53 PM
Surr: Decachlorobiphenyl	78.8	23.9-124		%REC	1	8/11/2009 1:19:53 PM
Surr: Tetrachloro-m-xylene	65.2	28.1-139		%REC	1	8/11/2009 1:19:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/13/2009 1:43:37 PM
Toluene	ND	1.0		µg/L	1	8/13/2009 1:43:37 PM
Ethylbenzene	ND	1.0		µg/L	1	8/13/2009 1:43:37 PM
Xylenes, Total	ND	2.0		µg/L	1	8/13/2009 1:43:37 PM
Surr: 4-Bromofluorobenzene	93.5	65.9-130		%REC	1	8/13/2009 1:43:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	5-16B
Lab Order:	0908073	**Collection Date:**	8/4/2009 5:00:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1300	50		µg/L	50	8/13/2009 2:14:05 PM
Toluene	ND	5.0		µg/L	5	8/13/2009 2:44:41 PM
Ethylbenzene	150	5.0		µg/L	5	8/13/2009 2:44:41 PM
Xylenes, Total	590	10		µg/L	5	8/13/2009 2:44:41 PM
Surr: 4-Bromofluorobenzene	110	65.9-130		%REC	5	8/13/2009 2:44:41 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

ENT:	Cypress Engineering	**Client Sample ID:**	5-61B
Lab Order:	0908073	**Collection Date:**	8/4/2009 12:00:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	1.7	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 2:09:22 PM
Surr: Decachlorobiphenyl	66.8	23.9-124		%REC	1	8/11/2009 2:09:22 PM
Surr: Tetrachloro-m-xylene	62.0	28.1-139		%REC	1	8/11/2009 2:09:22 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1300	50		µg/L	50	8/14/2009 3:48:52 PM
Toluene	ND	5.0		µg/L	5	8/13/2009 4:16:32 PM
Ethylbenzene	120	5.0		µg/L	5	8/13/2009 4:16:32 PM
Xylenes, Total	500	10		µg/L	5	8/13/2009 4:16:32 PM
Surr: 4-Bromofluorobenzene	95.9	65.9-130		%REC	5	8/13/2009 4:16:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	5-20B
Lab Order:	0908073	**Collection Date:**	8/4/2009 2:55:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/14/2009 4:19:19 PM
Toluene	ND	1.0		µg/L	1	8/14/2009 4:19:19 PM
Ethylbenzene	ND	1.0		µg/L	1	8/14/2009 4:19:19 PM
Xylenes, Total	ND	2.0		µg/L	1	8/14/2009 4:19:19 PM
Surr: 4-Bromofluorobenzene	95.6	65.9-130		%REC	1	8/14/2009 4:19:19 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

IENT:	Cypress Engineering	**Client Sample ID:**	5-18B
Lab Order:	0908073	**Collection Date:**	8/4/2009 3:50:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/13/2009 5:48:02 PM
Toluene	ND	1.0		µg/L	1	8/13/2009 5:48:02 PM
Ethylbenzene	ND	1.0		µg/L	1	8/13/2009 5:48:02 PM
Xylenes, Total	ND	2.0		µg/L	1	8/13/2009 5:48:02 PM
Surr: 4-Bromofluorobenzene	81.6	65.9-130		%REC	1	8/13/2009 5:48:02 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	5-17B
Lab Order:	0908073	**Collection Date:**	8/4/2009 4:45:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 2:57:21 PM
Surr: Decachlorobiphenyl	75.2	23.9-124		%REC	1	8/11/2009 2:57:21 PM
Surr: Tetrachloro-m-xylene	64.8	28.1-139		%REC	1	8/11/2009 2:57:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/13/2009 11:53:53 PM
Toluene	ND	1.0		µg/L	1	8/13/2009 11:53:53 PM
Ethylbenzene	ND	1.0		µg/L	1	8/13/2009 11:53:53 PM
Xylenes, Total	ND	2.0		µg/L	1	8/13/2009 11:53:53 PM
Surr: 4-Bromofluorobenzene	74.2	65.9-130		%REC	1	8/13/2009 11:53:53 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

IENT:	Cypress Engineering	**Client Sample ID:**	5-01C
Lab Order:	0908073	**Collection Date:**	8/4/2009 5:35:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 3:46:50 PM
Surr: Decachlorobiphenyl	58.8	23.9-124		%REC	1	8/11/2009 3:46:50 PM
Surr: Tetrachloro-m-xylene	54.4	28.1-139		%REC	1	8/11/2009 3:46:50 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/14/2009 12:24:18 AM
Toluene	ND	1.0		µg/L	1	8/14/2009 12:24:18 AM
Ethylbenzene	ND	1.0		µg/L	1	8/14/2009 12:24:18 AM
Xylenes, Total	ND	2.0		µg/L	1	8/14/2009 12:24:18 AM
Surr: 4-Bromofluorobenzene	85.8	65.9-130		%REC	1	8/14/2009 12:24:18 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	5-06C
Lab Order:	0908073	**Collection Date:**	8/4/2009 6:20:00 PM
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: **JMP**
Aroclor 1016	1.3	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1221	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1232	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1242	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1248	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1254	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Aroclor 1260	ND	1.0		µg/L	1	8/11/2009 4:36:21 PM
Surr: Decachlorobiphenyl	54.4	23.9-124		%REC	1	8/11/2009 4:36:21 PM
Surr: Tetrachloro-m-xylene	48.4	28.1-139		%REC	1	8/11/2009 4:36:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/14/2009 12:54:50 AM
Toluene	ND	1.0		µg/L	1	8/14/2009 12:54:50 AM
Ethylbenzene	ND	1.0		µg/L	1	8/14/2009 12:54:50 AM
Xylenes, Total	ND	2.0		µg/L	1	8/14/2009 12:54:50 AM
Surr: 4-Bromofluorobenzene	80.5	65.9-130		%REC	1	8/14/2009 12:54:50 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *17-Aug-09*

CLIENT:	Cypress Engineering	**Client Sample ID:**	Trip Blank
Lab Order:	0908073	**Collection Date:**	
Project:	Transwestern Pipeline Company Thoreau Sta 5	**Date Received:**	8/6/2009
Lab ID:	0908073-10	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	8/14/2009 1:25:24 AM
Toluene	ND	1.0		µg/L	1	8/14/2009 1:25:24 AM
Ethylbenzene	ND	1.0		µg/L	1	8/14/2009 1:25:24 AM
Xylenes, Total	ND	2.0		µg/L	1	8/14/2009 1:25:24 AM
Surr: 4-Bromofluorobenzene	82.0	65.9-130		%REC	1	8/14/2009 1:25:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

lient: Cypress Engineering
roject: Transwestern Pipeline Company Thoreau Sta 5 **Work Order:** 0908073

nalyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ethod: EPA Method 8021B: Volatiles											
mple ID: 0908073-01A MSD		*MSD*				Batch ID: **R34904**		Analysis Date:		8/14/2009 5:59:42 AM	
enzene	18.45	µg/L	1.0	20	0	92.3	85.9	113	1.43	27	
oluene	18.06	µg/L	1.0	20	0	90.3	86.4	113	2.89	19	
hylbenzene	18.06	µg/L	1.0	20	0.152	89.5	83.5	118	2.82	10	
ylenes, Total	53.11	µg/L	2.0	60	0	88.5	83.4	122	3.42	13	
mple ID: 5ML RB		*MBLK*				Batch ID: **R34904**		Analysis Date:		8/13/2009 9:08:54 AM	
enzene	ND	µg/L	1.0								
oluene	ND	µg/L	1.0								
hylbenzene	ND	µg/L	1.0								
ylenes, Total	ND	µg/L	2.0								
mple ID: 75NG BTEX CCV		*MBLK*				Batch ID: **R34925**		Analysis Date:		8/14/2009 10:48:16 AM	
enzene	14.25	µg/L	1.0								
oluene	14.03	µg/L	1.0								
hylbenzene	13.84	µg/L	1.0								
ylenes, Total	41.61	µg/L	2.0								
ample ID: 5ML RB		*MBLK*				Batch ID: **R34925**		Analysis Date:		8/14/2009 9:47:03 AM	
enzene	ND	µg/L	1.0								
oluene	ND	µg/L	1.0								
thylbenzene	ND	µg/L	1.0								
ylenes, Total	ND	µg/L	2.0								
ample ID: 100NG BTEX LCS		*LCS*				Batch ID: **R34904**		Analysis Date:		8/13/2009 9:21:48 PM	
enzene	19.09	µg/L	1.0	20	0	95.5	85.9	113			
oluene	19.45	µg/L	1.0	20	0.136	96.6	86.4	113			
thylbenzene	18.97	µg/L	1.0	20	0.166	94.0	83.5	118			
ylenes, Total	55.66	µg/L	2.0	60	0	92.8	83.4	122			
ample ID: 100NG BTEX LCS		*LCS*				Batch ID: **R34925**		Analysis Date:		8/14/2009 9:24:50 PM	
enzene	18.96	µg/L	1.0	20	0	94.8	85.9	113			
oluene	18.98	µg/L	1.0	20	0	94.9	86.4	113			
thylbenzene	18.73	µg/L	1.0	20	0.13	93.0	83.5	118			
ylenes, Total	56.00	µg/L	2.0	60	0	93.3	83.4	122			
ample ID: 0908073-01A MS		*MS*				Batch ID: **R34904**		Analysis Date:		8/14/2009 5:29:13 AM	
enzene	18.72	µg/L	1.0	20	0	93.6	85.9	113			
oluene	17.54	µg/L	1.0	20	0	87.7	86.4	113			
thylbenzene	17.56	µg/L	1.0	20	0.152	87.0	83.5	118			
ylenes, Total	51.32	µg/L	2.0	60	0	85.5	83.4	122			

Qualifiers:

E	Estimated value	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	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

er Cypress Engineering

)j Transwestern Pipeline Company Thoreau Sta 5 **Work Order:** 0908073

ıalyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
thod: **EPA Method 8082: PCB's**											
mple ID: **MB-19813**		*MBLK*				Batch ID:	**19813**	Analysis Date:		8/11/2009 9:11:19 AM	
clor 1016	ND	µg/L	1.0								
clor 1221	ND	µg/L	1.0								
clor 1232	ND	µg/L	1.0								
clor 1242	ND	µg/L	1.0								
clor 1248	ND	µg/L	1.0								
clor 1254	ND	µg/L	1.0								
clor 1260	ND	µg/L	1.0								
mple ID: **LCS-19813**		*LCS*				Batch ID:	**19813**	Analysis Date:		8/11/2009 10:01:10 AM	
clor 1016	3.338	µg/L	1.0	5	0	66.8	27.4	132			
clor 1260	3.822	µg/L	1.0	5	0	76.4	33.6	97.7			
mple ID: **LCSD-19813**		*LCSD*				Batch ID:	**19813**	Analysis Date:		8/11/2009 10:50:42 AM	
clor 1016	3.966	µg/L	1.0	5	0	79.3	27.4	132	17.2	45.7	
clor 1260	4.526	µg/L	1.0	5	0	90.5	33.6	97.7	16.9	30	

Qualifiers:

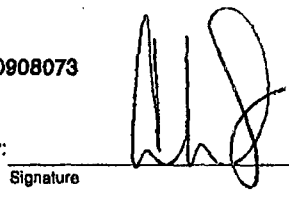
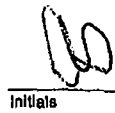
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **CYP** Date Received: **8/6/2009**

Work Order Number **0908073** Received by: ARS

Checklist completed by:  8/6/09 Sample ID labels checked by: 

Signature Date Initials

Matrix: Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**5.5°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Cypress Engineering Services

Mailing Address: 7171 Hwy 6 North, Ste 102, Houston, TX 77095

Phone #: 281 797 3421

email or Fax#: 281 859 1881

QA/QC Package:
- [x] Standard
- [ ] Level 4 (Full Validation)
- [ ] Other
- [ ] EDD (Type)

Turn-Around Time:
- [x] Standard
- [ ] Rush

Project Name: Transwestern Pipeline Company Thoreau Stas

Project #: TWP Thoreau

Project Manager: George Robinson

Sampler: Sanay Sharp

On Ice: [x] Yes [ ] No

Sample Temperature: 3.5

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. 0908023	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
8/4/09	1840	W	5-59	3/40ml	HCl	1	X															
	1840	W	5-59	1/1L	0	2 1									X							
	1910	W	5-60	3/40ml	HCl	3 2	X															
	1910	W	5-60	1/1L	0	4 2									X							
	1700	W	5-16B	3/40ml	HCl	3	X															
	1200	W	5-61B	3/40ml	HCl	4	X															
	1455	W	5-20B	3/40ml	HCl	5	X															
	1550	W	5-18B	3/40ml	HCl	6	X															
	1645	W	5-17B	3/40ml	HCl	7	X															
	1645	W	5-17B	1/1L	0	7									X							
	1735	W	5-01C	3/40ml	HCl	8	X															
	1735	W	5-01C	1/1L	0	8									X							

Date	Time	Relinquished by:	Received by:	Date	Time
8/5/09	0700			8/6/09	9:20
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.

Chain-of-Custody Record

Client: CYPRESS ENGINEERING SERVICES
7171 HWY 6 NORTH, STE 102
Mailing Address: HOUSTON, TX 77095

Phone #: 281.797.3421
email or Fax#: 281.859.1881

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: TRANSWESTERN PIPELINE COMPANY THOREAU STA 5
Project #: TWP THOREAU
Project Manager: GEORGE ROBINSON
Sampler: SANDY SHARP
On Ice: ☒ Yes ☐ No
Sample Temperature: 5.5

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. 0908613	BTEX + ~~MTBE + TMB~~'s (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
8/4/09	1820	W	5-06C	3/40ml	ACL	9	X											
"	1820	W	5-06C	1/1L	"	9									X			
"	1200	W	5-61B	1/1L	"	10									X			
			TRIP BLANK	2/40ml	ACL	10	X											

Date: 8/5/09 Time: 7:00 Relinquished by:
Date: Time: Relinquished by:

Received by: Date: 8/6/09 Time: 9:20
Received by: Date: Time:

Remarks:

if nece: mples submitted to Hall Environmental may be subcontracted to other accredited laboratori serves as notice of this possibility. Any sub-contracted data will be clearly notated on the a eport.