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December 15, 2011

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

RE: Report of 2010 Groundwater Remediation Activities
Transwestern Pipeline Company - WT-1 Station Dehy Area
Lea County, New Mexico
Case # GW-109

Dear Glenn,

The enclosed Report of 2010 Groundwater Remediation Activities is submitted for your review and files. Sorry for the delay getting this submitted. We are planning to have the report for 2011 remediation activities submitted to your office by February 28, 2012.

If you have any questions or comments regarding this report, please contact me at (281) 797-3421 or Larry Campbell at (575) 625-8022.

Sincerely,

George Robinson

George C. Robinson, PE
President/Principal Engineer

xc w/attachment:

Richard Spell	Transwestern Pipeline Company
Larry Campbell	Transwestern Pipeline Company
Geoffrey R Leking	NMOCD Hobbs District Office

Report of 2010 Groundwater Remediation Activities

Transwestern Pipeline Company
WT-1 Compressor Station Dehy Area
Lea County, New Mexico

CASE # GW-109

Submitted to:
New Mexico Oil Conservation Division

December 14, 2011

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 77095-2422

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1. Introduction

The last report of groundwater remediation activities covered activities completed through December 2009. This report presents a summary of monitoring and remediation activities completed between January 2010 and December 2010.

2. Groundwater Monitoring Activities

2.1 Groundwater Sampling Events

One annual groundwater sampling event was completed during 2010. This event was completed on June 11, 2010.

Prior to sampling, the depth to water, and the depth to hydrocarbon where phase-separated hydrocarbons (PSH) were 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. Similar measurements obtained from the SVE wells are presented in Table 2.

Groundwater samples were collected from selected monitoring wells in accordance with the sampling analysis plan. Samples were not collected from wells with accumulated PSH in the well casing. Groundwater samples were delivered to a laboratory for analysis for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B. A summary of the laboratory results and field-measured groundwater quality parameters (pH, temperature, electrical conductivity, and dissolved oxygen) are presented in Table 3. A copy of the laboratory results for this sampling event is included in Appendix B.

2.2 Results/Conclusions from Groundwater Sampling Events

2.2.1 Occurrence and Direction of Groundwater Flow

A water table elevation map based on measurements obtained in the course of the June 11, 2010 sampling event is included as Figure 3. The apparent direction of groundwater flow is toward the north and is consistent with water table elevation maps previously developed for this site.

A hydrograph for selected monitoring wells is presented in Figure 6. The hydrograph shows a history of water table elevation change since depth to water measurements were first recorded at the site in 1994. The increase in water table elevation beginning in April 2005 is due to a water leak in the facility's fresh water distribution system that was discovered and repaired in early 2008. The water table elevation at all monitor wells has been declining since then.

2.2.2 Lateral Extent of Phase Separated Hydrocarbon

The lateral extent of PSH is presently defined by the periodic occurrence of PSH at the water table in monitor well MW-10 and wells SVE-5, SVE-11, SVE-12, and SVE-14, and the absence of PSH in all other wells. The volume and lateral extent of PSH in the area appears to be relatively limited. The thickness of accumulated PSH in wells is presented in Tables 1 and 2. The lateral distribution of PSH measured in wells in the course of the June 2010 sampling event is presented in Figure 4. Also indicated in Figure 4 is the estimated maximum extent of PSH

measured in wells at the site. The current lateral extent of PSH covers a considerably smaller area than the estimated maximum extent indicating that the SVE system has effectively reduced the impacted area.

The accumulation of PSH versus time is presented graphically for wells MW-10, SVE-5, SVE-11, and SVE-12 in Figures 7 through 10, respectively. A similar plot for well SVE-14 is not presented simply because accumulated PSH in this well has never been more than 0.01 feet.

The measured accumulation of PSH in wells has been considerably reduced since December 2008. It was suspected that the presence of PSH in wells was more likely associated with the preferential accumulation of PSH in low pressure areas, such as soil vapor extraction wells, and was not likely indicative of PSH present at the water table outside of the immediate vicinity of the well screen. In light of this, a program was initiated in March 2009 to evaluate the re-accumulation rate of PSH in wells. In March and April 2009, accumulated PSH was removed from wells MW-10, SVE-11 and SVE-12 over a period of four weeks. The re-accumulation of PSH was then monitored over the remainder of the year. A similar program was implemented during 2010 to evaluate the re-accumulation of PSH in wells. Results indicate that there is substantially less PSH accumulating in wells than was indicated prior to December 2008. In December 2010, there was no measurable accumulation of PSH in wells MW-10, SVE-5, and SVE-11 and just 0.05 feet measured in well SVE-12. This program has effectively provided a more accurate indication of the amount of mobile PSH near the water table in the affected area. A summary of depth measurements and product removal activities for the PSH removal efforts and subsequent monitoring is presented in Table 7.

2.2.3 Condition of Affected Groundwater

The primary constituent of concern in affected groundwater is benzene. The lateral distribution of benzene in groundwater is presented in Figure 5. The condition of affected groundwater has not changed significantly from previous sampling events as evidenced by the history of sample results presented in Table 3. The three monitor wells located downgradient of the release area (wells MW-11, MW-12, and MW-13) continue to yield groundwater samples that are non-detect for BTEX constituents. Monitor well MW-9, located about 200 feet upgradient of the release area, also yielded samples that are non-detect for BTEX constituents.

The sampling analysis plan for the site calls for the three wells within the immediate affected area to be sampled during routine annual sampling events, wells MW-10, SVE-13, and SVE-14. Over the last several sampling events, samples have not been collected from wells MW-10 and SVE-14 due to the presence of PSH in the well casing. As a result, well SVE-13 is the only well within the affected area that has been sampled over the last few years. A concentration history plot for well SVE-13 is presented in Figure 11.

3. Status of Remediation Activities

3.1 Remediation Activities Completed through December 2010

The following remediation activities were completed since the last report of remediation activities:

1) Operation of the SVE system is limited to the warmer weather months. Condensed water collecting in the SVE conveyance lines during cold weather made the system ineffective. Thus, the SVE system was operated from July 5, 2010 through January 8, 2011.

2) One vapor sample was collected from the SVE system during 2010. A summary of laboratory results for the SVE system is presented in Table 4. A concentration history plot for SVE vapor samples is included as Figure 12. It is apparent from the concentration history plot that the concentration of Volatile Organic Compounds (VOCs) has declined significantly since the remediation system was first placed in-service in June 1996. Laboratory results for SVE system samples also indicate that during 2010, the system was removing VOCs from the subsurface at an estimated rate of 120 gallons equivalent per month. A copy of the laboratory report for this sampling event is included in Appendix A.

3) A small amount of accumulated PSH was removed from wells MW-10, SVE-5, SVE-11, and SVE-12 using a bailer in an effort to evaluate the re-accumulation of PSH in wells. This process was described in Section 2.2.2 of this report.

3.2 Remediation Activities Planned for January 2011 through December 2011

The SVE system is scheduled to operate from May 2011 through October 2011.

The PSH removal efforts completed in 2009 and 2010 are not planned to be repeated in 2011. The purpose for not continuing the bailing process is so that the re-accumulation rate of PSH without intervention can be evaluated over a longer period of time.

4. Proposed Modifications

4.1 Modifications to the Routine Groundwater Sampling Plan

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

4.2 Reporting Frequency

Annual reporting will continue with the next scheduled report being submitted to the OCD by February 28, 2012.

f:/.../projects/tw/wt-1 dehy/drawings/wt-1 facility diagram.dwg (2/8/05)

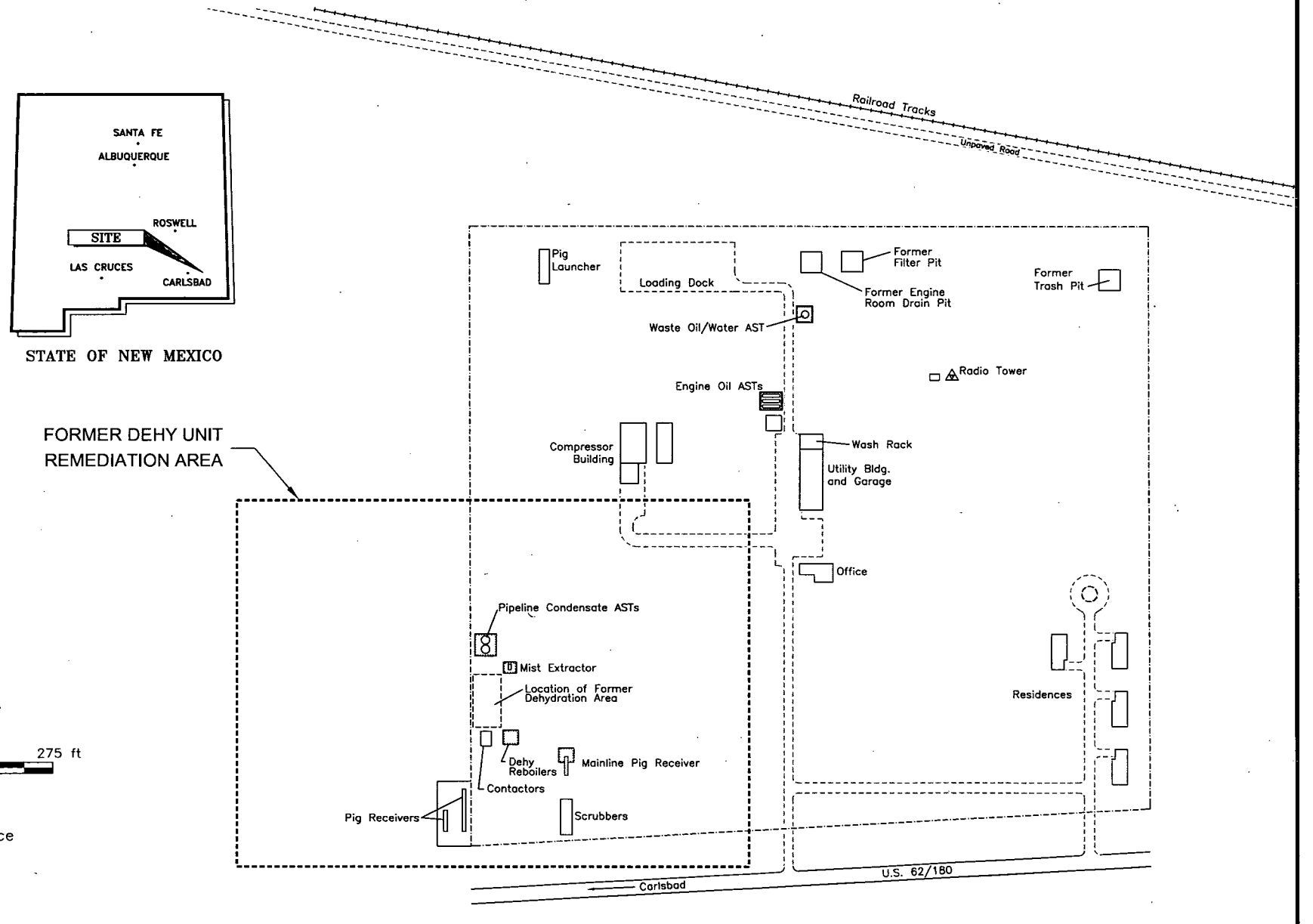

FIGURE 1

Facility Site Map

WT-1 COMPRESSOR STATION
TRANSWESTERN PIPELINE COMPANY

CYPRESS ENGINEERING SERVICES, INC.

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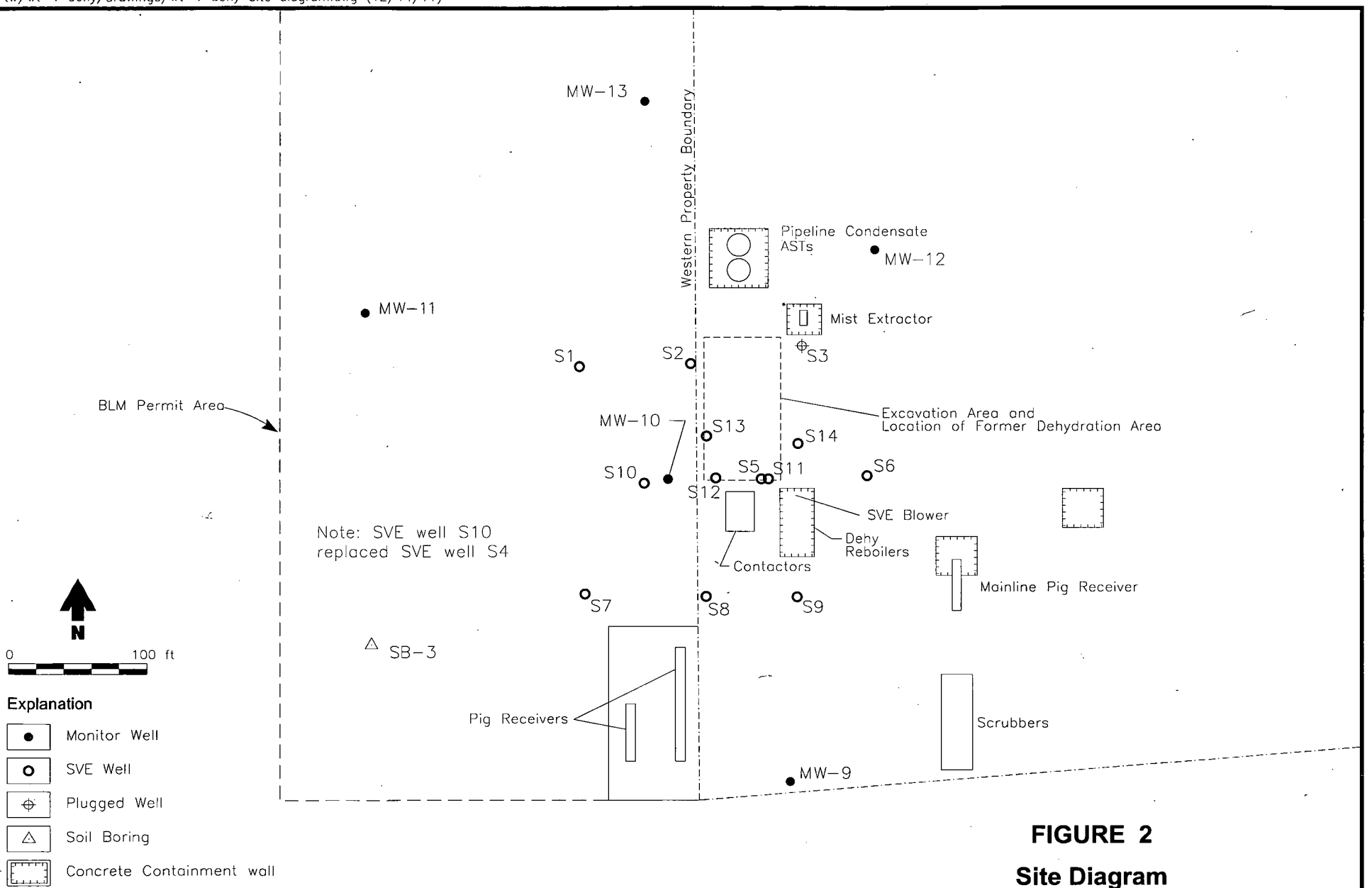

FIGURE 2

Site Diagram

WT-1 COMPRESSOR STATION
Dehydration Area

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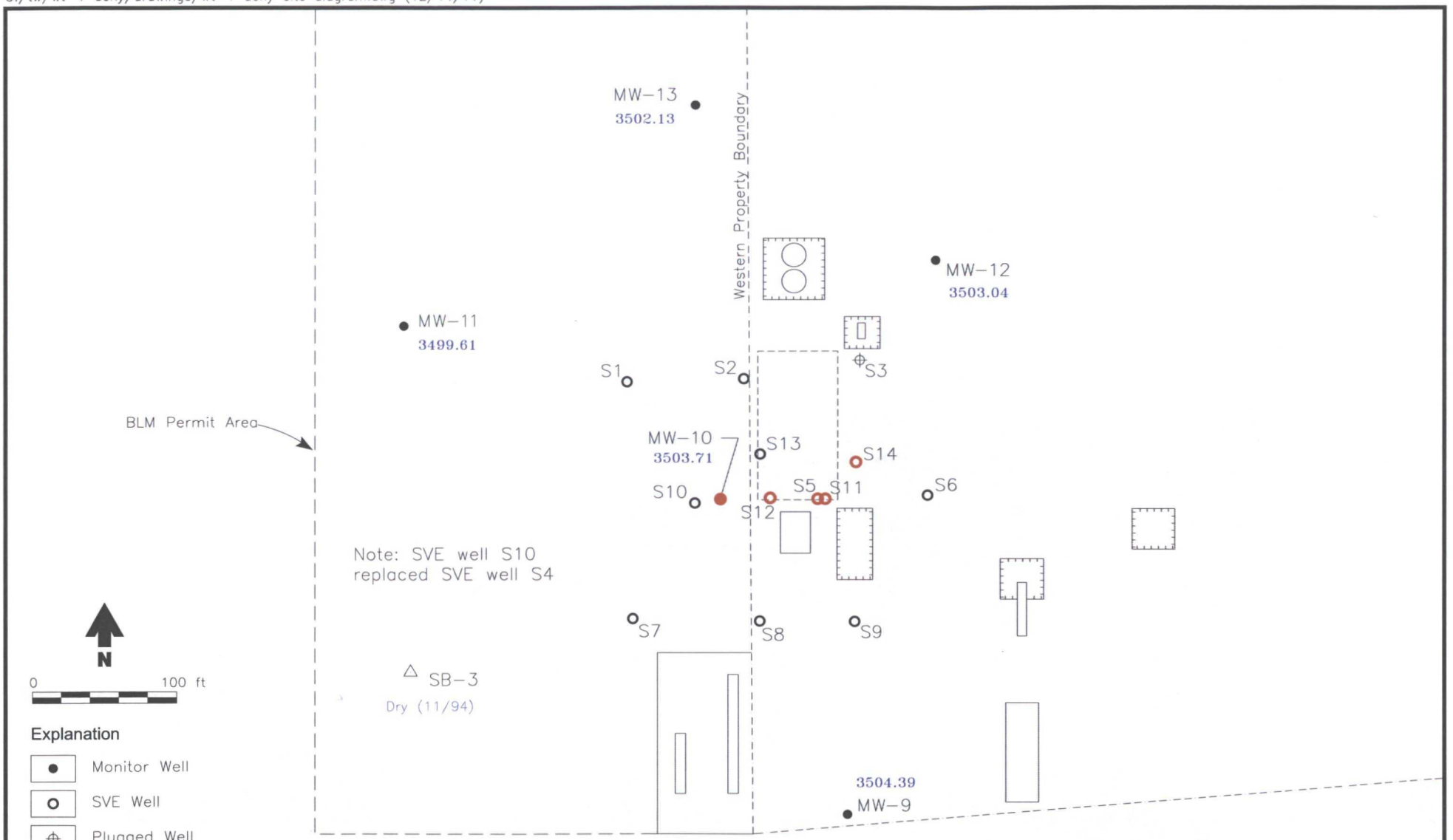

FIGURE 3

Groundwater Elevations

June 11, 2010

WT-1 COMPRESSOR STATION
Dehydration Area

CYPRESS ENGINEERING SERVICES, INC.

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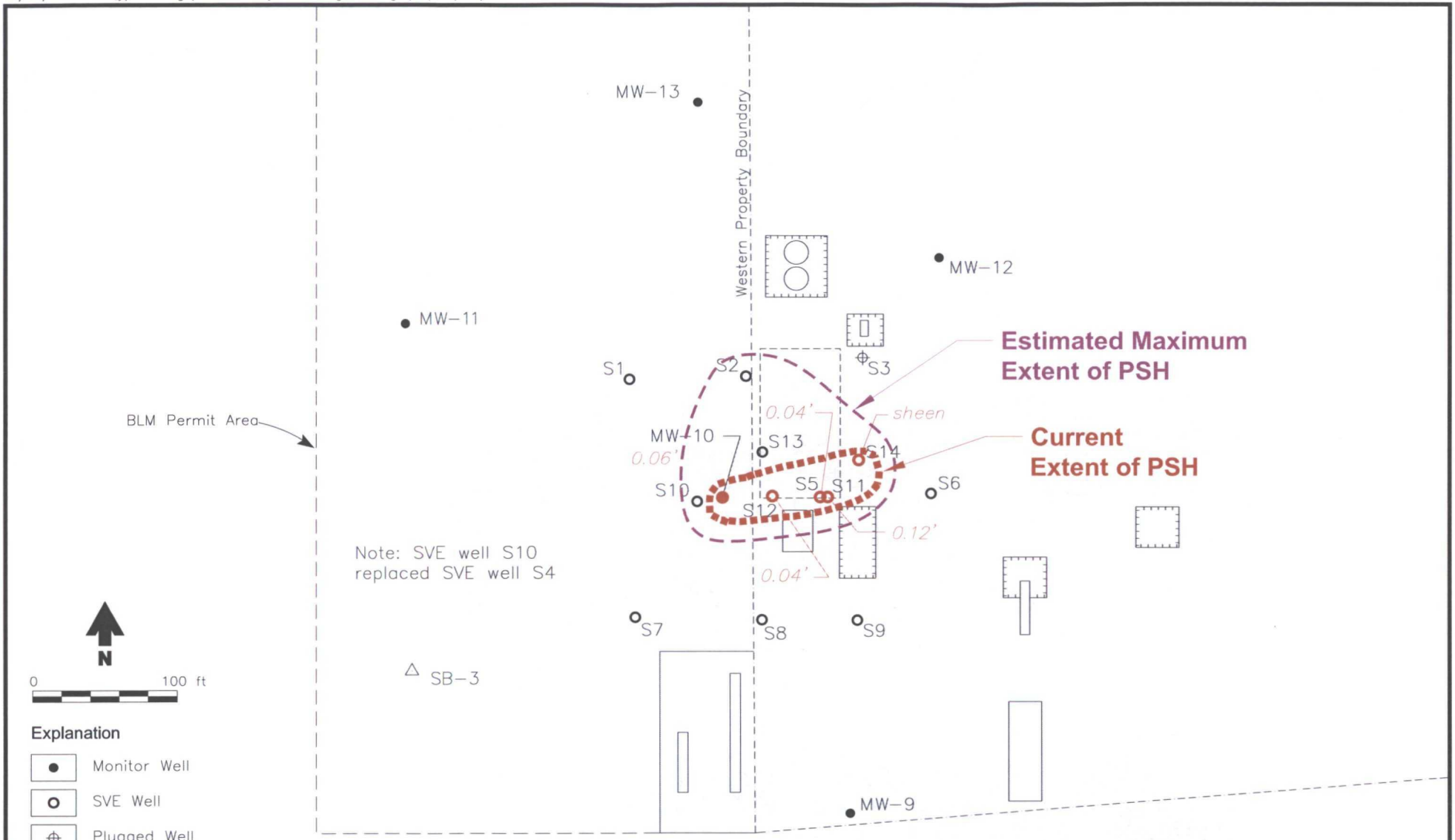


FIGURE 4

Distribution of PSH

June 11, 2010

WT-1 COMPRESSOR STATION
Dehydration Area

O:/tw/wt-1 d...y/drawings/wt-1 dehy site diagram.dwg (12/14/11)

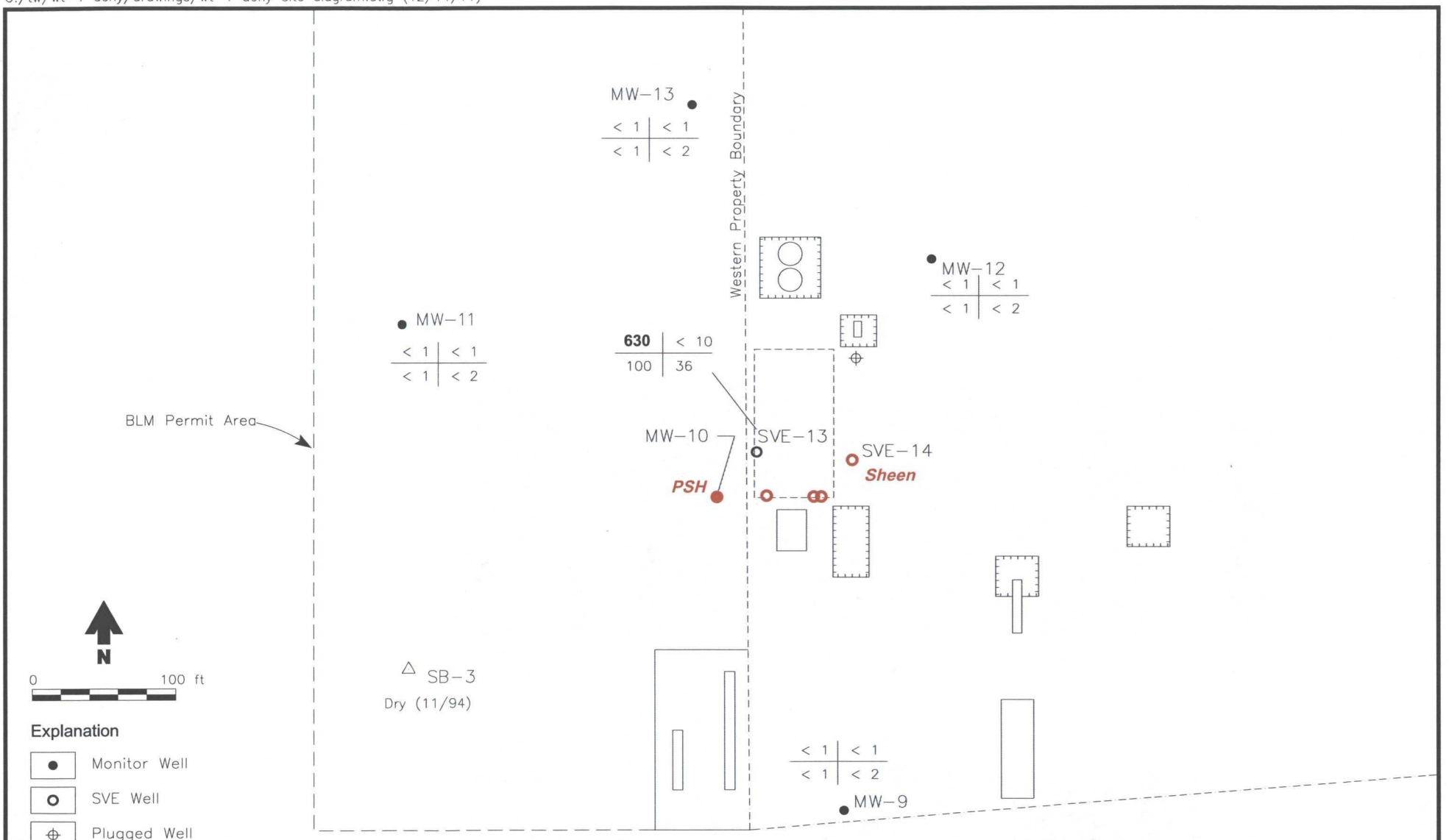


FIGURE 5

Distribution of BTEX

June 11, 2010

WT-1 COMPRESSOR STATION
Dehydration Area

CYPRESS ENGINEERING SERVICES, INC.

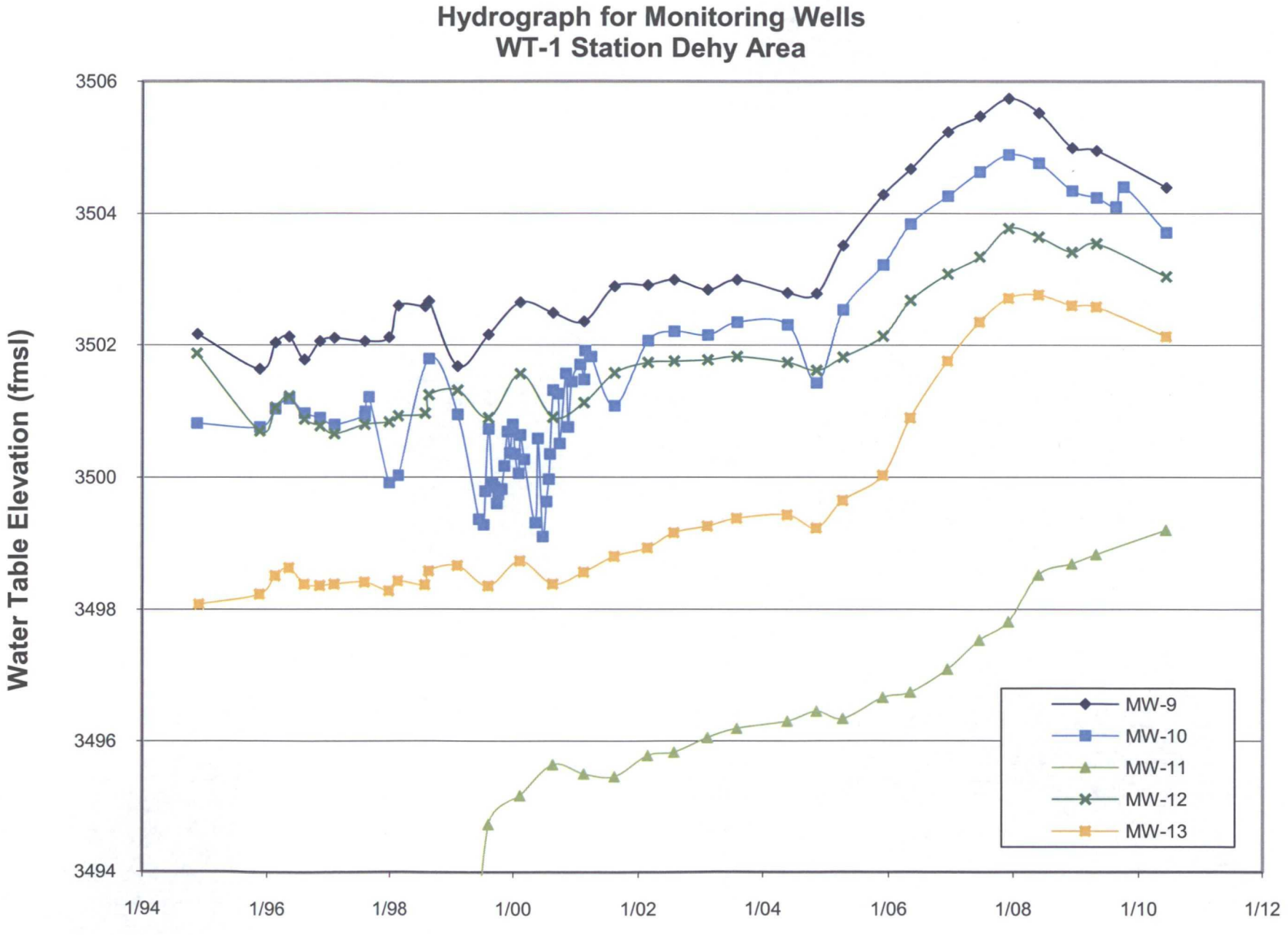

Hydrograph for Monitoring Wells
WT-1 Station Dehy Area
Water Table Elevation (fmsl)
3506
3504
3502
3500
3498
3496
3494
1/94
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12
MW-9
MW-10
MW-11
MW-12
MW-13

Figure 6

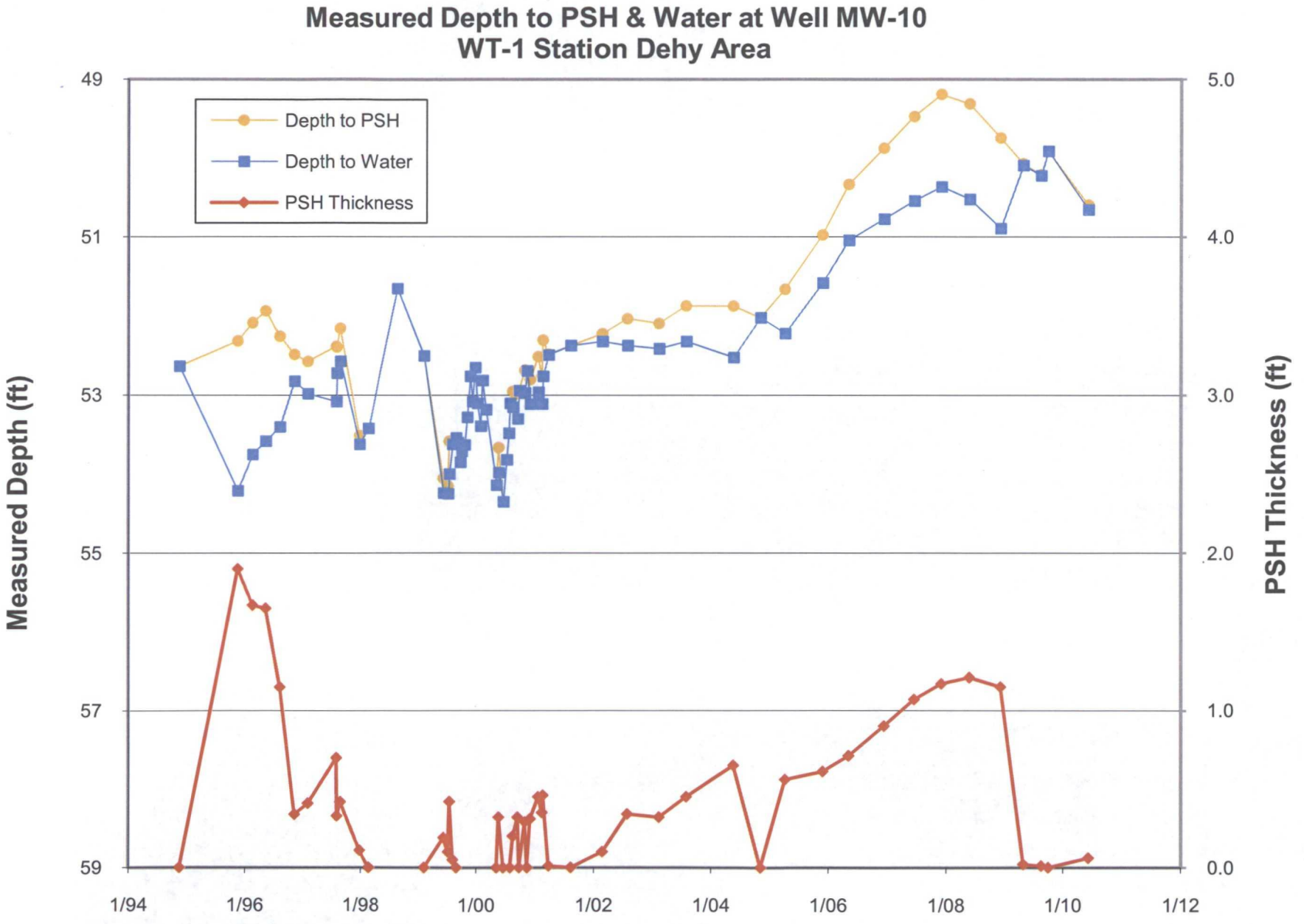

Measured Depth to PSH & Water at Well MW-10
WT-1 Station Dehy Area
Depth to PSH
Depth to Water
PSH Thickness
Measured Depth (ft)
PSH Thickness (ft)
49
51
53
55
57
59
5.0
4.0
3.0
2.0
1.0
0.0
1/94
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12

Figure 7

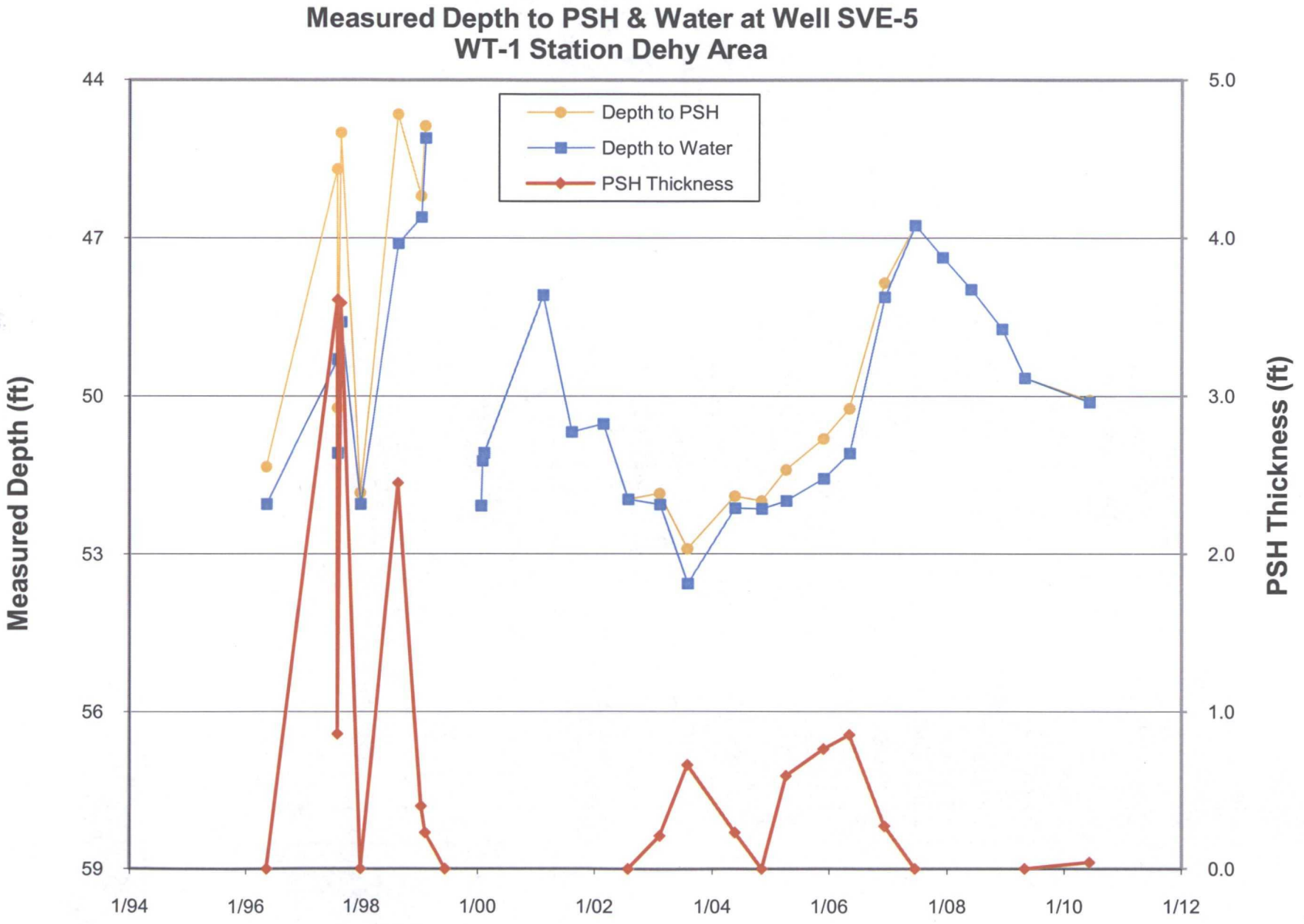

Measured Depth to PSH & Water at Well SVE-5
WT-1 Station Dehy Area
Depth to PSH
Depth to Water
PSH Thickness
Measured Depth (ft)
PSH Thickness (ft)
44
47
50
53
56
59
5.0
4.0
3.0
2.0
1.0
0.0
1/94
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12

Figure 8

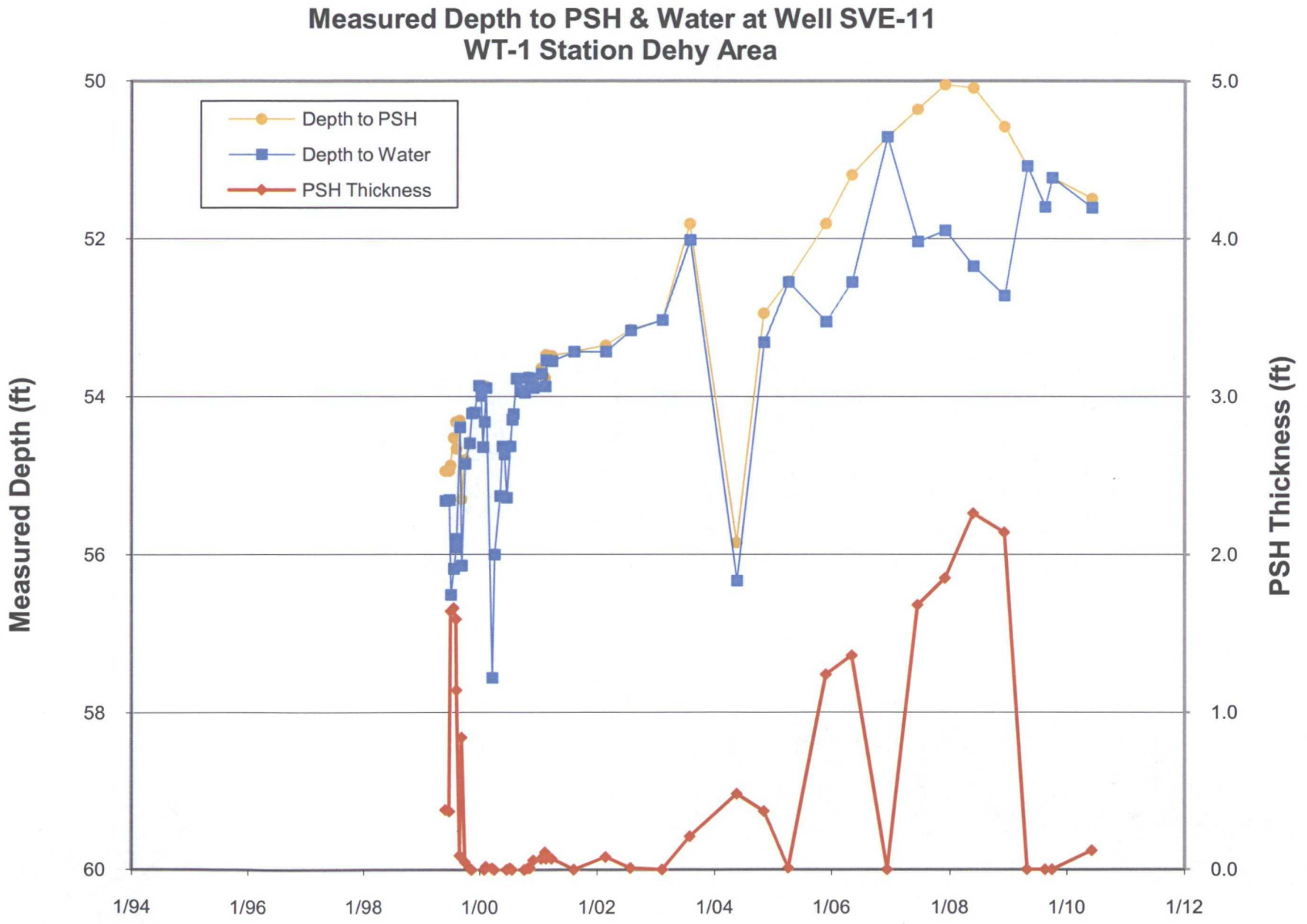

Measured Depth to PSH & Water at Well SVE-11
WT-1 Station Dehy Area
Depth to PSH
Depth to Water
PSH Thickness
Measured Depth (ft)
PSH Thickness (ft)
50
52
54
56
58
60
5.0
4.0
3.0
2.0
1.0
0.0
1/94
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12

Figure 9

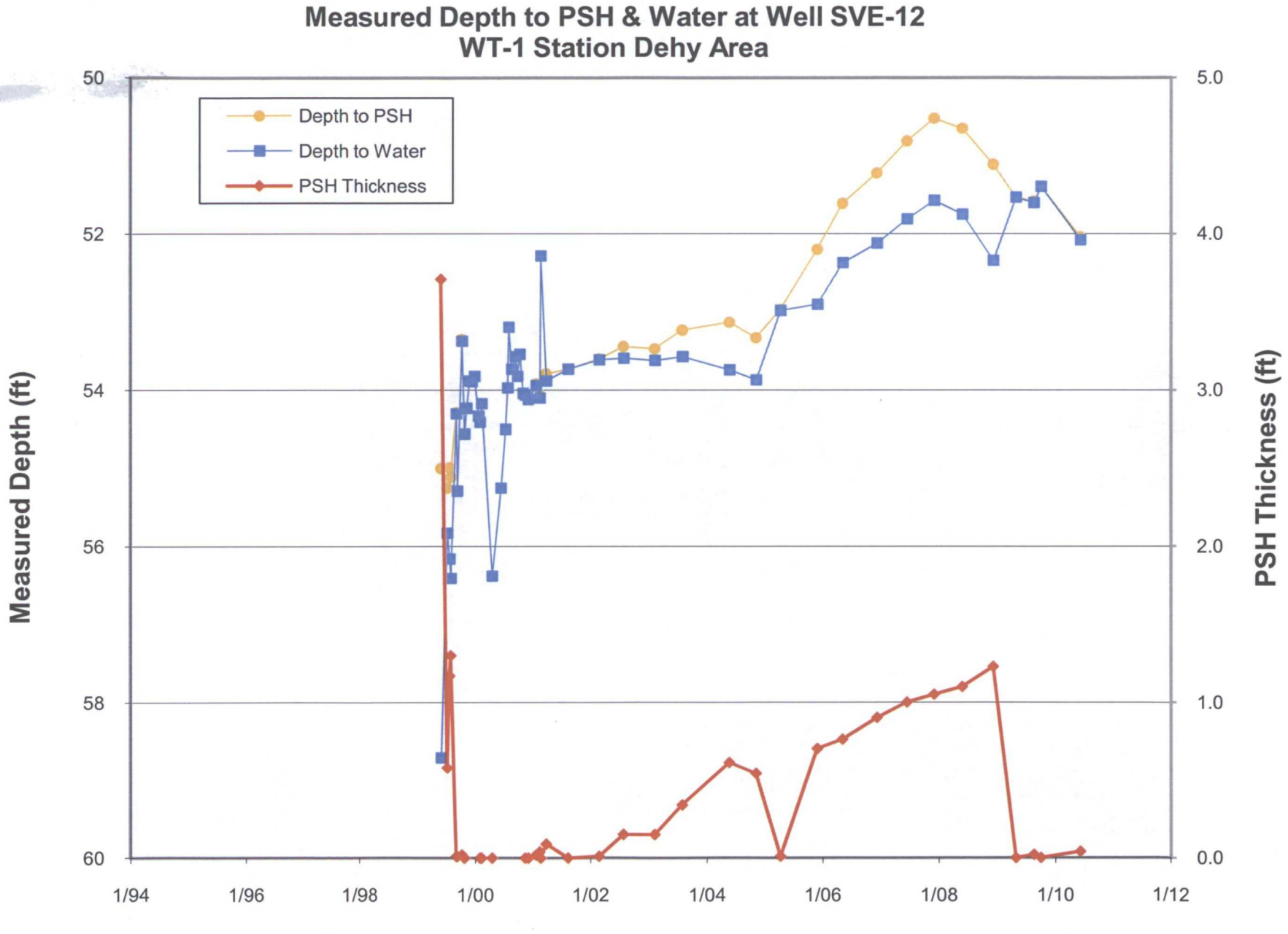

Measured Depth to PSH & Water at Well SVE-12
WT-1 Station Dehy Area
Depth to PSH
Depth to Water
PSH Thickness
Measured Depth (ft)
PSH Thickness (ft)
50
52
54
56
58
60
5.0
4.0
3.0
2.0
1.0
0.0
1/94
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12

Figure 10

Concentration History Plot for Well SVE-13
WT-1 Station Dehy Area

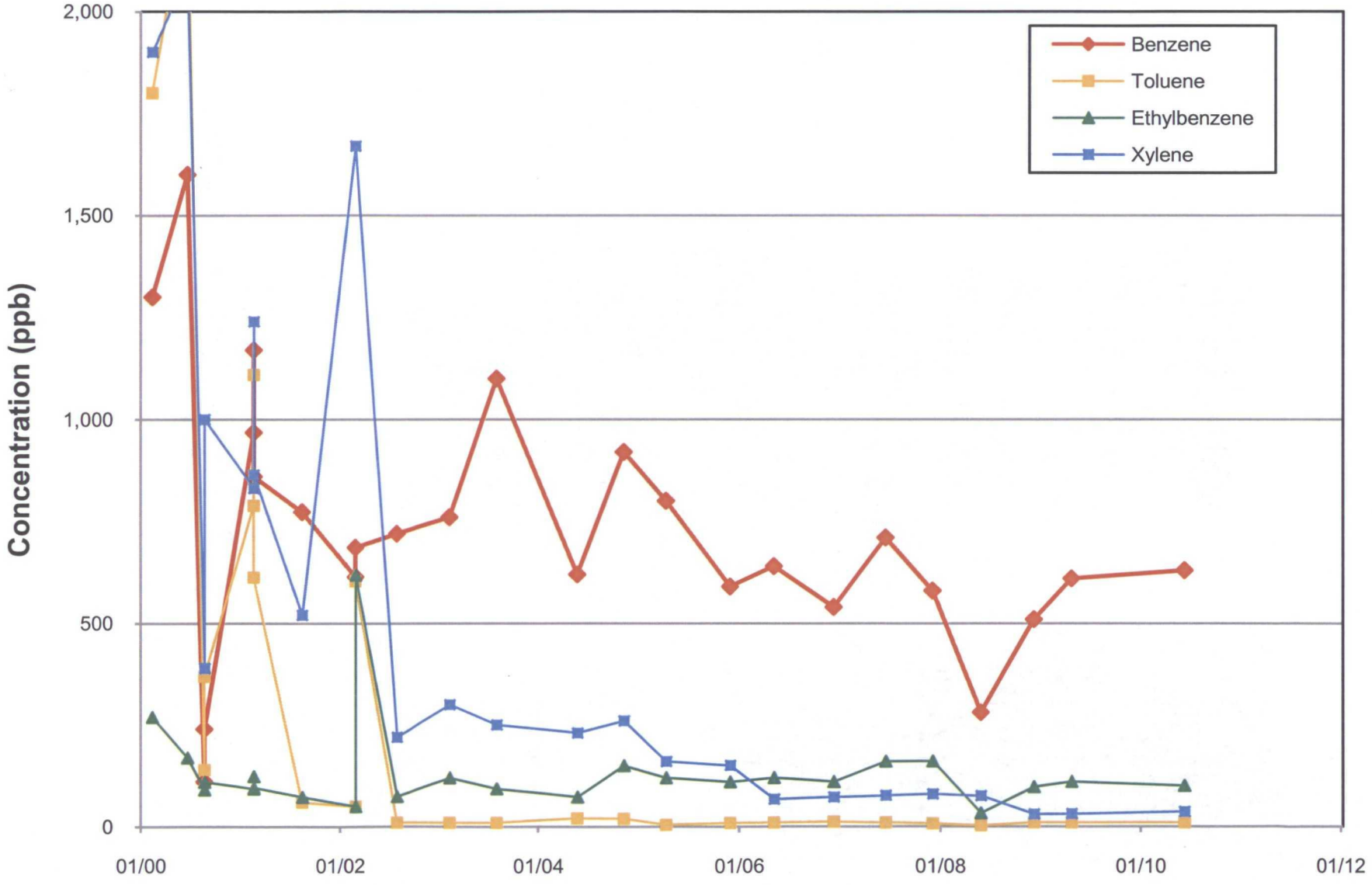


Figure 11

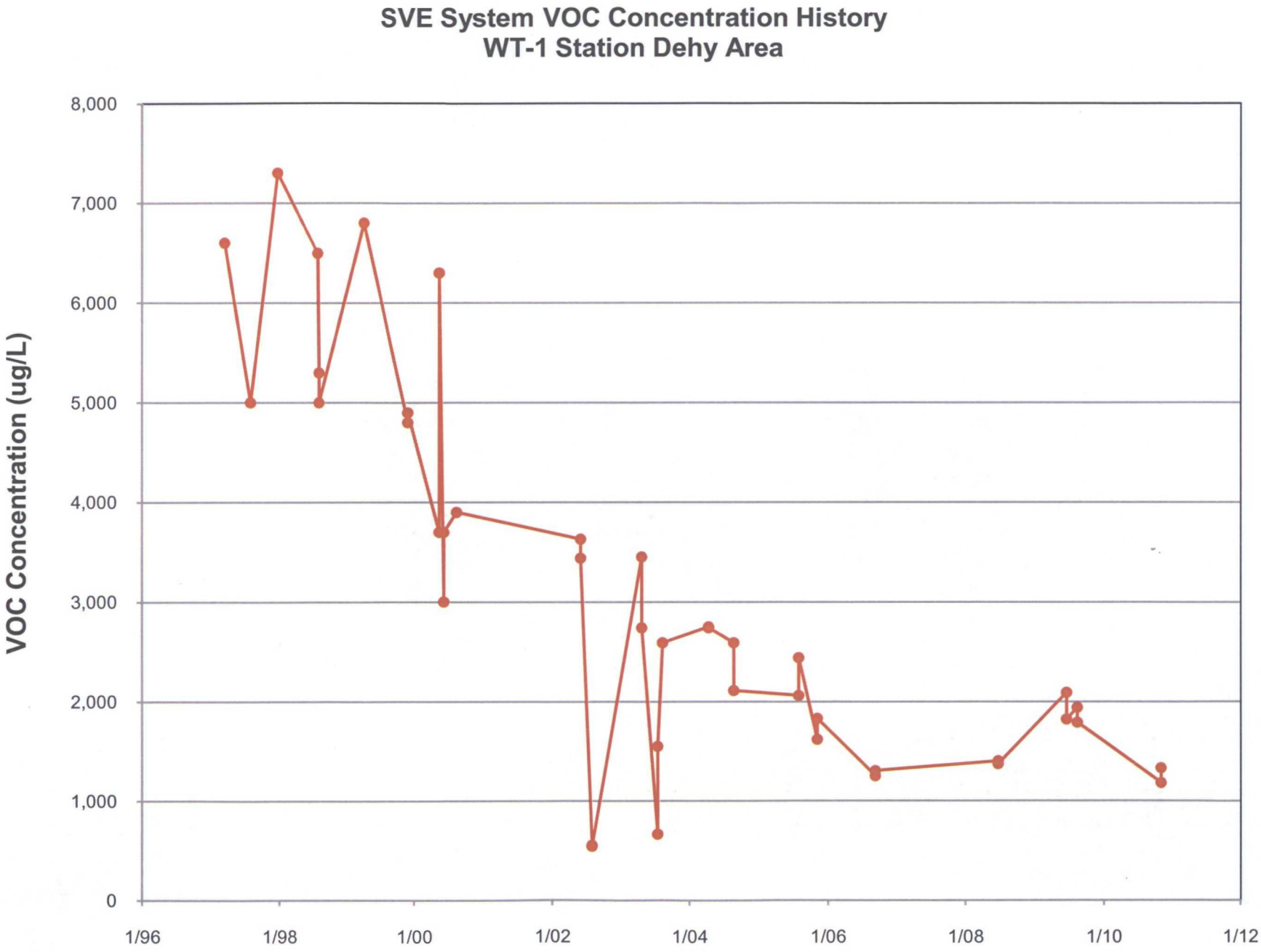

SVE System VOC Concentration History
WT-1 Station Dehy Area
VOC Concentration (ug/L)
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
1/96
1/98
1/00
1/02
1/04
1/06
1/08
1/10
1/12

Figure 12

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-9	11/21/94	3557.31 (b)	(a)	55.14	(a)	3502.17
	11/21/95		(a)	55.67	(a)	3501.64
	02/22/96		(a)	55.27	(a)	3502.04
	05/14/96		(a)	55.18	(a)	3502.13
	08/12/96		(a)	55.53	(a)	3501.78
	11/12/96		(a)	55.25	(a)	3502.06
	02/05/97		(a)	55.20	(a)	3502.11
	08/05/97		(a)	55.25	(a)	3502.06
	12/29/97		(a)	55.19	(a)	3502.12
	02/23/98*		(a)	54.71	(a)	3502.60
	08/05/98*		(a)	54.72	(a)	3502.59
	08/27/98		(a)	54.64	(a)	3502.67
	02/11/99*		(a)	55.63	(a)	3501.68
	08/11/99*		(a)	55.15	(a)	3502.16
	02/13/00*		(a)	54.66	(a)	3502.65
	08/21/00*		(a)	54.82	(a)	3502.49
	02/17/01*		(a)	54.95	(a)	3502.36
	08/15/01		(a)	54.42	(a)	3502.89
	02/27/02*		(a)	54.40	(a)	3502.91
	07/31/02*		(a)	54.32	(a)	3502.99
	02/13/03*		(a)	54.47	(a)	3502.84
	08/04/03*		(a)	54.32	(a)	3502.99
	05/24/04*		(a)	54.52	(a)	3502.79
	11/09/04*		(a)	54.53	(a)	3502.78
	04/11/05*		(a)	53.80	(a)	3503.51
	12/01/05*		(a)	53.03	(a)	3504.28
	05/10/06*		(a)	52.64	(a)	3504.67
	12/14/06*		(a)	52.08	(a)	3505.23
	06/20/07*		(a)	51.84	(a)	3505.47
	12/07/07*		(a)	51.57	(a)	3505.74
	05/30/08*		(a)	51.79	(a)	3505.52
	12/10/08*		(a)	52.32	(a)	3504.99
	05/01/09*		(a)	52.36	(a)	3504.95
	06/11/10*		(a)	52.92	(a)	3504.39

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-10	11/18/94	3553.45 (b)	(a)	52.63	(a)	3500.82
	11/21/95		52.31	54.21	1.90	3500.76
	02/22/96		52.08	53.75	1.67	3501.04
	05/14/96		51.93	53.58	1.65	3501.19
	08/12/96		52.25	53.40	1.15	3500.97
	11/12/96		52.48	52.82	0.34	3500.90
	02/05/97		52.57	52.98	0.41	3500.80
	08/05/97		52.38	53.08	0.70	3500.93
	08/07/97		52.39	52.72	0.33	3500.99
	08/29/97		52.15	52.57	0.42	3501.22
	12/29/97		53.51	53.62	0.11	3499.92
	02/23/98*		(a)	53.42	(a)	3500.03
	08/27/98		(a)	51.65	(a)	3501.80
	02/11/99*		(a)	52.50	(a)	3500.95
	06/15/99		54.05	54.24	0.19	3499.36
	07/13/99		54.15	54.25	0.10	3499.28
	07/22/99		53.58	54.00	0.42	3499.79
	08/11/99*	3554.31 (c)	53.57	53.62	0.05	3500.73
	09/02/99		(a)	53.54	(a)	3499.91
	09/14/99		(a)	53.60	(a)	3499.85
	09/28/99		(a)	53.85	(a)	3499.60
	10/07/99		(a)	53.71	(a)	3499.74
	10/26/99		(a)	53.63	(a)	3499.82
	11/11/99		(a)	53.28	(a)	3500.17
	11/30/99		(a)	52.76	(a)	3500.69
	12/14/99		(a)	53.08	(a)	3500.37
	12/30/99		(a)	52.65	(a)	3500.80
	01/13/00		(a)	53.10	(a)	3500.35
	02/03/00		(a)	53.39	(a)	3500.06
	02/13/00*		(a)	52.81	(a)	3500.64
	03/06/00		(a)	53.18	(a)	3500.27
	05/11/00		(a)	54.14	(a)	3499.31
	05/25/00		53.66	53.98	0.32	3500.59
	06/22/00		(a)	54.35	(a)	3499.10
	07/13/00		(a)	53.82	(a)	3499.63
	07/27/00		(a)	53.48	(a)	3499.97
	08/03/00		(a)	53.10	(a)	3500.35
	08/21/00*		52.95	53.15	0.20	3501.32
	09/19/00		52.98	53.30	0.32	3501.27
	09/28/00		(a)	52.94	(a)	3500.51
	11/03/00		52.68	52.97	0.29	3501.57
	11/16/00		(a)	52.69	(a)	3500.76
	12/06/00		52.80	53.11	0.31	3501.45

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
	01/25/01		52.51	52.96	0.45	3501.71
	02/17/01*		52.76	53.11	0.35	3501.48
	02/23/01		52.30	52.76	0.46	3501.92
	03/30/01		52.48	52.49	0.01	3501.83
	08/15/01		(a)	52.37	(a)	3501.08
	02/27/02*		52.22	52.32	0.10	3502.07
	07/31/02*		52.03	52.37	0.34	3502.21
	02/13/03*		52.09	52.41	0.32	3502.16
	08/04/03*		51.87	52.32	0.45	3502.35
	05/24/04*		51.87	52.52	0.65	3502.31
	11/09/04*		(a)	52.02	sheen	3501.43
	04/11/05*		51.66	52.22	0.56	3502.54
	12/01/05*		50.97	51.58	0.61	3503.22
	05/10/06*		50.33	51.04	0.71	3503.84
	12/14/06*		49.87	50.77	0.90	3504.26
	06/20/07*		49.47	50.54	1.07	3504.63
	12/07/07*		49.19	50.36	1.17	3504.89
	05/30/08*		49.31	50.52	1.21	3504.76
	12/10/08*		49.74	50.89	1.15	3504.34
	05/01/09*		50.07	50.09	0.02	3504.24
	08/22/09*		50.21	50.22	0.01	3504.10
	10/05/09*		49.91	49.91	sheen	3504.40
	06/11/10*		50.59	50.65	0.06	3503.71

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-11	11/21/94	3547.84 (b)	(a)	DRY	(a)	DRY
	11/21/95		(a)	58.10	(a)	3489.74
	02/22/96		(a)	56.70	(a)	3491.14
	05/14/96		(a)	57.33	(a)	3490.51
	08/12/96		(a)	56.96	(a)	3490.88
	11/12/96		(a)	56.66	(a)	3491.18
	02/05/97		(a)	57.09	(a)	3490.75
	08/05/97		(a)	54.93	(a)	3492.91
	12/29/97		(a)	54.53	(a)	3493.31
	02/23/98*		(a)	53.97	(a)	3493.87
	08/05/98*		(a)	54.37	(a)	3493.47
	08/27/98		(a)	57.48	(a)	3490.36
	02/11/99*		(a)	53.11	(a)	3494.73
	08/11/99*		(a)	52.67	(a)	3495.17
	02/13/00*		(a)	52.20	(a)	3495.64
	08/21/00*		(a)	52.34	(a)	3495.50
	02/17/01*		(a)	52.38	(a)	3495.46
	08/15/01		(a)	52.06	(a)	3495.78
	02/27/02*		(a)	52.01	(a)	3495.83
	07/31/02*		(a)	51.79	(a)	3496.05
	02/13/03*		(a)	51.65	(a)	3496.19
	08/04/03*		(a)	51.54	(a)	3496.30
	05/24/04*		(a)	51.39	(a)	3496.45
	11/09/04*		(a)	51.50	(a)	3496.34
	04/11/05*		(a)	51.18	(a)	3496.66
	12/01/05*		(a)	51.10	(a)	3496.74
	05/10/06*		(a)	50.75	(a)	3497.09
	12/14/06*		(a)	50.31	(a)	3497.53
	06/20/07*		(a)	50.03	(a)	3497.81
	12/07/07*		(a)	49.32	(a)	3498.52
	05/30/08*		(a)	49.15	(a)	3498.69
	12/10/08*		(a)	49.01	(a)	3498.83
	05/01/09*		(a)	48.64	(a)	3499.20
	06/11/10*		(a)	48.23	(a)	3499.61

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-12	11/17/94	3551.19 (b)	(a)	49.31	(a)	3501.88
	11/21/95		(a)	50.49	(a)	3500.70
	02/22/96		(a)	50.13	(a)	3501.06
	05/14/96		(a)	49.96	(a)	3501.23
	08/12/96		(a)	50.31	(a)	3500.88
	11/12/96		(a)	50.41	(a)	3500.78
	02/05/97		(a)	50.53	(a)	3500.66
	08/05/97		(a)	50.39	(a)	3500.80
	12/29/97		(a)	50.35	(a)	3500.84
	02/23/98*		(a)	50.26	(a)	3500.93
	08/05/98*		(a)	50.22	(a)	3500.97
	08/27/98		(a)	49.94	(a)	3501.25
	02/11/99*		(a)	49.87	(a)	3501.32
	08/11/99*		(a)	50.29	(a)	3500.90
	02/13/00*		(a)	49.62	(a)	3501.57
	08/21/00*		(a)	50.28	(a)	3500.91
	02/17/01*		(a)	50.06	(a)	3501.13
	08/15/01		(a)	49.61	(a)	3501.58
	02/27/02*		(a)	49.45	(a)	3501.74
	07/31/02*		(a)	49.43	(a)	3501.76
	02/13/03*		(a)	49.41	(a)	3501.78
	08/04/03*		(a)	49.36	(a)	3501.83
	05/24/04*		(a)	49.45	(a)	3501.74
	11/09/04*		(a)	49.57	(a)	3501.62
	04/11/05*		(a)	49.37	(a)	3501.82
	12/01/05*		(a)	49.05	(a)	3502.14
	05/10/06*		(a)	48.51	(a)	3502.68
	12/14/06*		(a)	48.11	(a)	3503.08
	06/20/07*		(a)	47.85	(a)	3503.34
	12/07/07*		(a)	47.42	(a)	3503.77
	05/30/08*		(a)	47.55	(a)	3503.64
	12/10/08*		(a)	47.78	(a)	3503.41
	05/01/09*		(a)	47.65	(a)	3503.54
	06/11/10*		(a)	48.15	(a)	3503.04

Table 1. Summary of Groundwater Surface Elevations
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
MW-13	12/01/94	3547.78 (b)	(a)	49.70	(a)	3498.08
	11/21/95		(a)	49.55	(a)	3498.23
	02/22/96		(a)	49.27	(a)	3498.51
	05/14/96		(a)	49.15	(a)	3498.63
	08/12/96		(a)	49.40	(a)	3498.38
	11/12/96		(a)	49.42	(a)	3498.36
	02/05/97		(a)	49.40	(a)	3498.38
	08/05/97		(a)	49.37	(a)	3498.41
	12/29/97		(a)	49.50	(a)	3498.28
	02/23/98*		(a)	49.35	(a)	3498.43
	08/05/98*		(a)	49.41	(a)	3498.37
	08/27/98		(a)	49.20	(a)	3498.58
	02/11/99*		(a)	49.12	(a)	3498.66
	08/11/99*		(a)	49.43	(a)	3498.35
	02/13/00*		(a)	49.05	(a)	3498.73
	08/21/00*		(a)	49.40	(a)	3498.38
	02/17/01*		(a)	49.22	(a)	3498.56
	08/15/01		(a)	48.98	(a)	3498.80
	02/27/02*		(a)	48.85	(a)	3498.93
	07/31/02*		(a)	48.62	(a)	3499.16
	02/13/03*		(a)	48.52	(a)	3499.26
	08/04/03*		(a)	48.40	(a)	3499.38
	05/24/04*		(a)	48.35	(a)	3499.43
	11/09/04*		(a)	48.55	(a)	3499.23
	04/11/05*		(a)	48.13	(a)	3499.65
	12/01/05*		(a)	47.75	(a)	3500.03
	05/10/06*		(a)	46.88	(a)	3500.90
	12/14/06*		(a)	46.02	(a)	3501.76
	06/20/07*		(a)	45.43	(a)	3502.35
	12/07/07*		(a)	45.07	(a)	3502.71
	05/30/08*		(a)	45.02	(a)	3502.76
	12/10/08*		(a)	45.18	(a)	3502.60
	05/01/09*		(a)	45.20	(a)	3502.58
	06/11/10*		(a)	45.65	(a)	3502.13

NOTES:
PSH - Phase separated hydrocarbon
Corrections to ground water surface elevation for presence of PSH is calculated using a specific gravity of 0.8
(a) Not applicable since no measurable thickness of hydrocarbon is present
(b) Survey by John West Engineering (Hobbs, NM) dated 11/94
(c) Survey by Cypress Engineering dated 08/11/99

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-1	05/14/96	3551.22 (e)	(a)	51.01	(a)	3500.21
	08/06/97		(a)	49.09	(a)	3502.13
	02/11/99*		(a)	51.52	(a)	3499.70
	08/11/99*		(a)	52.17	(a)	3499.05
	02/13/00*		(a)	51.32	(a)	3499.90
	08/21/00*		(a)	51.85	(a)	3499.37
	02/17/01*		(a)	51.55	(a)	3499.67
	08/15/01		(a)	51.17	(a)	3500.05
	02/27/02*		(a)	50.90	(a)	3500.32
	07/31/02*		(a)	50.79	(a)	3500.43
	02/13/03*		(a)	50.71	(a)	3500.51
	08/04/03*		(a)	50.63	(a)	3500.59
	05/24/04*		(a)	50.80	(a)	3500.42
	11/09/04*		(a)	50.73	(a)	3500.49
	04/11/05*		(a)	50.72	(a)	3500.50
	12/01/05*		(a)	50.44	(a)	3500.78
	05/10/06*		(a)	50.05	(a)	3501.17
	12/14/06*		(a)	48.37	(a)	3502.85
	06/20/07*		(a)	49.09	(a)	3502.13
	12/07/07*		(a)	48.57	(a)	3502.65
	05/30/08*		(a)	48.42	(a)	3502.80
	12/10/08*		(a)	48.43	(a)	3502.79
	05/01/09*		(a)	48.24	(a)	3502.98
	06/11/10*		(a)	48.44	(a)	3502.78

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-2	05/14/96	3551.96 (e)	50.63	51.38	0.75	3501.18
	08/06/97		50.95	52.15	1.20	3500.77
	08/07/97		50.93	51.64	0.71	3500.89
	08/29/97		50.75	51.16	0.41	3501.13
	12/29/97		51.02	51.76	0.74	3500.79
	06/26/98		(a)	50.87	(a)	3501.09
	07/13/98		(a)	50.87	(a)	3501.09
	02/11/99*		(a)	50.15	(a)	3501.81
	08/11/99*		(a)	51.26	(a)	3500.70
	02/13/00*		(a)	50.57	(a)	3501.39
	08/21/00*		(a)	50.68	(a)	3501.28
	02/17/01*		(a)	50.55	(a)	3501.41
	08/15/01		(a)	50.07	(a)	3501.89
	07/31/02*		(a)	49.81	(a)	3502.15
	02/13/03*		(a)	49.89	(a)	3502.07
	08/04/03*		(a)	49.68	(a)	3502.28
	05/24/04*		(a)	49.70	(a)	3502.26
	11/09/04*		(a)	49.85	(a)	3502.11
	04/11/05*		(a)	50.31	(a)	3501.65
	12/01/05*		(a)	49.62	(a)	3502.34
	05/10/06*		(a)	48.15	(a)	3503.81
	12/14/06*		(a)	47.82	(a)	3504.14
	06/20/07*		(a)	47.48	(a)	3504.48
	12/07/07*		(a)	47.28	(a)	3504.68
	05/30/08*		(a)	47.40	(a)	3504.56
	12/10/08*		(a)	47.84	(a)	3504.12
	05/01/09*		(a)	47.92	(a)	3504.04
	06/11/10*		(a)	48.56	(a)	3503.40
SVE-3	05/14/96	3552.75 (e)	(a)	50.95	(a)	3501.80
	08/06/97		(a)	47.70	(a)	3505.05
	12/29/97		(a)	51.44	(a)	3501.31
	02/11/99*		(a)	46.45	(a)	3506.30
	08/11/99*		(a)	51.03	(a)	3501.72
	02/13/00*		(a)	51.17	(a)	3501.58
	02/17/01*		(a)	51.08	(a)	3501.67
	08/15/01		(a)	50.87	(a)	3501.88
	02/27/02*		(a)	50.61	(a)	3502.14
	07/31/02*		(a)	50.57	(a)	3502.18
	02/13/03*		(a)	50.56	(a)	3502.19
	08/04/03*		(a)	50.46	(a)	3502.29
	05/24/04*		--	TD@41.00	--	--
	11/09/04*		--	TD@41.00	--	--
	12/01/04	(f)	--	--	--	--

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-4	05/14/96	3553.03 (d)	51.91	53.67	1.76	3500.77
	08/06/97		50.56	52.24	1.68	3502.13
	08/07/97		52.84	53.39	0.55	3500.08
	08/29/97		50.50	51.74	1.24	3502.28
	12/29/97		52.02	53.04	1.02	3500.81
	06/26/98		50.58	52.30	1.72	3502.11
	07/13/98		50.52	52.30	1.78	3502.15
	07/24/98		50.38	51.80	1.42	3502.37
	09/23/98		50.11	51.31	1.20	3502.68
	01/07/99		50.70	51.36	0.66	3502.20
	01/27/99		50.65	51.18	0.53	3502.27
SVE-5	05/14/96	3554.39 (e)	51.34	--	--	(a)
	08/06/97		45.69	49.30	3.61	3507.98
	08/07/97		50.22	51.08	0.86	3504.00
	08/29/97		45.00	48.59	3.59	3508.67
	12/29/97		51.83	--	--	(a)
	08/26/98		44.65	47.10	2.45	3509.25
	01/17/99		46.20	46.60	0.40	3508.11
	02/11/99*		44.87	45.10	0.23	3509.47
	06/15/99		<52.05	<52.05	na	na
	07/15/99		<52.05	<52.05	na	na
	08/13/99		<52.05	<52.05	na	na
	09/14/99		<52.05	<52.05	na	na
	10/07/99		<52.05	<52.05	na	na
	11/16/99		<52.05	<52.05	na	na
	12/16/99		<52.05	<52.05	na	na
	01/25/00		(a)	52.08	(a)	3502.31
	02/03/00		(a)	51.23	(a)	3503.16
	02/13/00*		(a)	51.08	(a)	3503.31
	02/17/01*		(a)	48.08	(a)	3506.31
	08/15/01		(a)	50.68	(a)	3503.71
	02/27/02*		(a)	50.53	(a)	3503.86
	07/31/02*		(a)	51.96	(a)	(a)
	02/13/03*		51.85	52.06	0.21	3502.50
	08/04/03*		52.90	53.56	0.66	3501.36
	05/24/04*		51.90	52.13	0.23	3502.44
	11/09/04*		51.99	to TD @ 52.14	--	--
	04/11/05*		51.40	51.99	0.59	3502.87
	12/01/05*		50.81	51.57	0.76	3503.43
	05/10/06*		50.24	51.09	0.85	3503.98
	12/14/06*		47.85	48.12	0.27	3506.49
	06/20/07*		(a)	46.76	(a)	3507.63
	12/07/07*		(a)	47.37	(a)	3507.02
	05/30/08*		(a)	47.98	(a)	3506.41
	12/10/08*		(a)	48.73	(a)	3505.66
	05/01/09*		(a)	49.66	(a)	3504.73
	06/11/10*		50.08	50.12	0.04	3504.30

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-6	05/14/96	3553.74 (e)	(a)	54.30	(a)	3499.44
	08/06/97		(a)	49.75	(a)	3503.99
	02/11/99*		(a)	52.05	(a)	3501.69
	08/11/99*		(a)	52.59	(a)	3501.15
	02/13/00*		(a)	51.95	(a)	3501.79
	02/17/01*		(a)	51.88	(a)	3501.86
	08/15/01		(a)	51.36	(a)	3502.38
	02/27/02*		(a)	51.22	(a)	3502.52
	07/31/02*		(a)	51.03	(a)	3502.71
	02/13/03*		(a)	51.16	(a)	3502.58
	08/04/03*		(a)	50.88	(a)	3502.86
	05/24/04*		(a)	51.18	(a)	3502.56
	11/09/04*		(a)	50.99	(a)	3502.75
	04/11/05*		(a)	51.82	(a)	3501.92
	12/01/05*		(a)	49.94	(a)	3503.80
	05/10/06*		(a)	49.45	(a)	3504.29
	12/14/06*		(a)	48.88	(a)	3504.86
	06/20/07*		(a)	48.50	(a)	3505.24
	12/07/07*		(a)	48.18	(a)	3505.56
	05/30/08*		(a)	48.32	(a)	3505.42
	12/10/08*		(a)	48.81	(a)	3504.93
	05/01/09*		(a)	48.79	(a)	3504.95
	06/11/10*		(a)	49.31	(a)	3504.43
SVE-7	05/14/96	3553.81 (e)	(a)	53.89	(a)	3499.92
	08/06/97		(a)	51.40	(a)	3502.41
	12/29/97		(a)	54.14	(a)	3499.67
	02/11/99*		(a)	53.65	(a)	3500.16
	08/11/99*		(a)	54.18	(a)	3499.63
	02/13/00*		(a)	53.37	(a)	3500.44
	08/21/00*		(a)	53.98	(a)	3499.83
	02/17/01*		(a)	53.64	(a)	3500.17
	08/15/01		(a)	53.28	(a)	3500.53
	02/27/02*		(a)	52.93	(a)	3500.88
	07/31/02*		(a)	52.87	(a)	3500.94
	02/13/03*		(a)	52.71	(a)	3501.10
	08/04/03*		(a)	52.61	(a)	3501.20
	05/24/04*		(a)	52.63	(a)	3501.18
	11/09/04*		(a)	52.70	(a)	3501.11
	04/11/05*		(a)	52.38	(a)	3501.43
	12/01/05*		(a)	51.85	(a)	3501.96
	05/10/06*		(a)	51.23	(a)	3502.58
	12/14/06*		(a)	50.46	(a)	3503.35
	06/20/07*		(a)	50.04	(a)	3503.77
	12/07/07*		(a)	49.53	(a)	3504.28
	05/30/08*		(a)	49.45	(a)	3504.36
	12/10/08*		(a)	49.71	(a)	3504.10
	05/01/09*		(a)	49.65	(a)	3504.16
	06/11/10*		(a)	50.11	(a)	3503.70

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-8	05/14/96	3555.25 (e)	(a)	53.55	(a)	3501.70
	08/06/97		(a)	51.72	(a)	3503.53
	12/29/97		(a)	54.07	(a)	3501.18
	02/11/99*		(a)	53.06	(a)	3502.19
	08/11/99*		(a)	54.02	(a)	3501.23
	02/13/00*		(a)	53.33	(a)	3501.92
	08/21/00*		(a)	53.57	(a)	3501.68
	02/17/01*		(a)	53.34	(a)	3501.91
	08/15/01		(a)	53.08	(a)	3502.17
	02/27/02*		(a)	52.94	(a)	3502.31
	07/31/02*		(a)	52.83	(a)	3502.42
	02/13/03*		(a)	52.86	(a)	3502.39
	08/04/03*		(a)	52.73	(a)	3502.52
	05/24/04*		(a)	52.74	(a)	3502.51
	11/09/04*		(a)	52.87	(a)	3502.38
	04/11/05*		(a)	52.39	(a)	3502.86
	12/01/05*		(a)	51.60	(a)	3503.65
	05/10/06*		(a)	51.07	(a)	3504.18
	12/14/06*		(a)	50.67	(a)	3504.58
	06/20/07*		(a)	50.18	(a)	3505.07
	12/07/07*		(a)	50.03	(a)	3505.22
	05/30/08*		(a)	50.12	(a)	3505.13
	12/10/08*		(a)	50.58	(a)	3504.67
	05/01/09*		(a)	50.63	(a)	3504.62
	06/11/10*		(a)	52.13	(a)	3503.12
SVE-9	05/14/96	3555.36 (e)	(a)	54.13	(a)	3501.23
	08/06/97		(a)	50.06	(a)	3505.30
	02/11/99*		(a)	50.97	(a)	3504.39
	08/11/99*		(a)	54.39	(a)	3500.97
	02/13/00*		(a)	53.65	(a)	3501.71
	08/21/00*		(a)	54.22	(a)	3501.14
	02/17/01*		(a)	53.57	(a)	3501.79
	08/15/01		(a)	53.14	(a)	3502.22
	02/27/02*		(a)	53.01	(a)	3502.35
	07/31/02*		(a)	52.78	(a)	3502.58
	02/13/03*		(a)	52.88	(a)	3502.48
	08/04/03*		(a)	52.63	(a)	3502.73
	05/24/04*		(a)	52.81	(a)	3502.55
	11/09/04*		(a)	52.78	(a)	3502.58
	04/11/05*		(a)	53.53	(a)	3501.83
	12/01/05*		(a)	51.81	(a)	3503.55
	05/10/06*		(a)	51.10	(a)	3504.26
	12/14/06*		(a)	50.61	(a)	3504.75
	06/20/07*		(a)	50.31	(a)	3505.05
	12/07/07*		(a)	49.91	(a)	3505.45
	05/30/08*		(a)	50.00	(a)	3505.36
	12/10/08*		(a)	50.46	(a)	3504.90
	05/01/09*		(a)	50.48	(a)	3504.88
	06/11/10*		(a)	51.03	(a)	3504.33

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-10	06/04/99	3554.40 (e)	52.86	52.88	0.02	3501.54
	06/29/99		53.25	53.32	0.07	3501.14
	07/08/99		51.63	51.70	0.07	3502.76
	07/27/99		51.23	51.41	0.18	3503.13
	08/11/99*		53.12	53.32	0.20	3501.24
	08/26/99		51.63	51.77	0.14	3502.74
	09/28/99		56.65	56.79	0.14	3497.72
	10/07/99		54.98	55.23	0.25	3499.37
	10/26/99		54.68	54.77	0.09	3499.70
	11/11/99		55.79	55.85	0.06	3498.60
	11/30/99		55.03	55.07	0.04	3499.36
	12/14/99		54.52	54.53	0.01	3499.88
	12/30/99		53.91	53.94	0.03	3500.48
	01/13/00		53.56	53.59	0.03	3500.83
	01/25/00		53.50	53.52	0.02	3500.90
	02/03/00		53.61	53.63	0.02	3500.79
	02/13/00*		53.53	53.58	0.05	3500.86
	03/06/00		54.11	54.12	0.01	3500.29
	03/23/00		(a)	54.95	(a)	3499.45
	04/06/00		54.05	54.07	0.02	3500.35
	04/20/00		54.19	54.20	0.01	3500.21
	05/11/00		54.21	54.22	0.01	3500.19
	05/25/00		(a)	54.21	(a)	3500.19
	06/08/00		(a)	54.18	(a)	3500.22
	06/22/00		(a)	54.18	(a)	3500.22
	07/13/00		(a)	54.19	(a)	3500.21
	07/27/00		(a)	54.19	(a)	3500.21
	08/03/00		54.03	54.04	0.01	3500.37
	08/21/00*		(a)	54.02	(a)	3500.38
	09/14/00		(a)	53.60	(a)	3500.80
	09/28/00		(a)	53.58	(a)	3500.82
	10/12/00		(a)	53.55	(a)	3500.85
	11/03/00		(a)	53.35	(a)	3501.05
	11/16/00		(a)	53.29	(a)	3501.11
	12/06/00		(a)	53.25	sheen	3501.15
	01/25/01		(a)	53.11	(a)	3501.29
	02/17/01*		53.04	53.05	0.01	3501.36
	02/23/01		(a)	53.00	(a)	3501.40
	03/30/01		(a)	52.95	(a)	3501.45
	08/15/01		(a)	56.16	(a)	3498.24
	02/27/02*		(a)	52.70	(a)	3501.70
	07/31/02*		(a)	52.60	(a)	3501.80
	02/13/03*		(a)	52.47	sheen	3501.93
	08/04/03*		(a)	52.30	sheen	3502.10
	05/24/04*		(a)	52.27	(a)	3502.13
	11/09/04*		(a)	52.37	sheen	3502.03
	04/11/05*		(a)	52.06	(a)	3502.34
	12/01/05*		(a)	51.50	(a)	3502.90
	05/10/06*		(a)	50.89	sheen	3503.51
	12/14/06*		(a)	50.53	(a)	3503.87
	06/20/07*		(a)	50.10	sheen	3504.30
	12/07/07*		(a)	49.85	sheen	3504.55
	05/30/08*		(a)	49.82	(a)	3504.58
	12/10/08*		(a)	50.12	(a)	3504.28
	05/01/09*		(a)	50.23	(a)	3504.17
	06/11/10*		(a)	50.71	(a)	3503.69

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-11	06/04/99	3555.33 (e)	54.94	55.32	0.38	3500.31
	06/29/99		54.94	55.31	0.37	3500.32
	07/08/99		54.87	56.51	1.64	3500.13
	07/27/99		54.52	56.18	1.66	3500.48
	08/11/99*		54.32	55.91	1.59	3500.69
	08/13/99		54.66	55.80	1.14	3500.44
	09/02/99		54.30	54.39	0.09	3501.01
	09/14/99		55.30	56.14	0.84	3499.86
	10/05/99		54.80	54.85	0.05	3500.52
	11/02/99		54.58	54.59	0.01	3500.75
	11/16/99		(a)	54.21	(a)	3501.12
	12/02/99		(a)	54.20	(a)	3501.13
	12/30/99		(a)	53.86	(a)	3501.47
	01/13/00		(a)	53.99	(a)	3501.34
	01/25/00		(a)	54.64	(a)	3500.69
	02/03/00		(a)	54.32	(a)	3501.01
	02/13/00*		53.87	53.89	0.02	3501.46
	03/23/00		57.55	57.56	0.01	3497.78
	04/06/00		(a)	56.00	(a)	3499.33
	05/11/00		(a)	55.26	(a)	3500.07
	05/25/00		(a)	54.63	(a)	3500.70
	06/08/00		(a)	54.73	(a)	3500.60
	06/22/00		(a)	55.28	(a)	3500.05
	07/13/00		54.62	54.63	0.01	3500.71
	07/27/00		(a)	54.29	(a)	3501.04
	08/03/00		(a)	54.22	(a)	3501.11
	08/21/00*		(a)	53.77	(a)	3501.56
	09/14/00		(a)	53.92	(a)	3501.41
	09/28/00		(a)	53.92	(a)	3501.41
	10/12/00		(a)	53.95	(a)	3501.38
	11/03/00		53.75	53.76	0.01	3501.58
	11/16/00		53.76	53.77	0.01	3501.57
	12/06/00		53.83	53.89	0.06	3501.49
	01/25/01		53.64	53.71	0.07	3501.68
	02/17/01*		53.76	53.87	0.11	3501.55
	02/23/01		53.47	53.54	0.07	3501.85
	03/30/01		53.48	53.55	0.07	3501.84
	08/15/01		(a)	53.43	(a)	3501.90
	02/27/02*		53.35	53.43	0.08	3501.96
	07/31/02*		53.15	53.16	0.01	3502.18
	02/13/03*		(a)	53.03	sheen	3502.30
	08/04/03*		51.81	52.02	0.21	3503.48
	05/24/04*		55.85	56.33	0.48	3499.38
	11/09/04*		52.94	53.31	0.37	3502.32
	04/11/05*		52.54	52.55	0.01	3502.79
	12/01/05*		51.81	53.05	1.24	3503.27
	05/10/06*		51.19	52.55	1.36	3503.87
	12/14/06*		(a)	50.71	sheen	3504.62
	06/20/07*		50.36	52.04	1.68	3504.63
	12/07/07*		50.05	51.90	1.85	3504.91
	05/30/08*		50.09	52.35	2.26	3504.79
	12/10/08*		50.58	52.72	2.14	3504.32
	05/01/09*		(a)	51.08	(a)	3504.25
	08/22/09*		(a)	51.60	(a)	3503.73
	10/05/09*		51.23	51.23	sheen	3504.10
	06/11/10*		51.49	51.61	0.12	3503.82

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-12	06/04/99	3555.64 (e)	55.00	58.71	3.71	3499.90
	07/13/99		55.25	55.83	0.58	3500.27
	07/27/99		54.99	56.16	1.17	3500.42
	08/03/99		55.11	56.41	1.30	3500.27
	09/07/99		54.29	54.30	0.01	3501.35
	09/14/99		55.28	55.29	0.01	3500.36
	10/12/99		53.35	53.37	0.02	3502.29
	10/28/99		(a)	54.56	(a)	3501.08
	11/11/99		(a)	54.23	(a)	3501.41
	11/30/99		(a)	53.88	(a)	3501.76
	12/14/99		(a)	53.89	(a)	3501.75
	12/30/99		(a)	53.82	(a)	3501.82
	01/25/00		(a)	54.33	(a)	3501.31
	02/03/00		(a)	54.41	(a)	3501.23
	02/13/00*		(a)	54.17	sheen	3501.47
	04/20/00		(a)	56.38	(a)	3499.26
	06/15/00		(a)	55.25	(a)	3500.39
	07/13/00		(a)	54.50	(a)	3501.14
	07/27/00		(a)	53.97	(a)	3501.67
	08/03/00		(a)	53.19	(a)	3502.45
	08/21/00*		(a)	53.73	(a)	3501.91
	09/14/00		(a)	53.57	(a)	3502.07
	09/28/00		(a)	53.82	(a)	3501.82
	10/12/00		(a)	53.54	(a)	3502.10
	11/03/00		(a)	54.04	(a)	3501.60
	11/16/00		(a)	54.06	(a)	3501.58
	12/06/00		(a)	54.12	sheen	3501.52
	01/25/01		53.92	53.94	0.02	3501.72
	02/17/01*		54.06	54.10	0.04	3501.57
	02/23/01		(a)	52.28	(a)	3503.36
	03/30/01		53.79	53.88	0.09	3501.83
	08/15/01		(a)	53.73	(a)	3501.91
	02/27/02*		53.60	53.61	0.01	3502.04
	07/31/02*		53.44	53.59	0.15	3502.17
	02/13/03*		53.47	53.62	0.15	3502.14
	08/04/03*		53.23	53.57	0.34	3502.34
	05/24/04*		53.13	53.74	0.61	3502.39
	11/09/04*		53.33	53.87	0.54	3502.20
	04/11/05*		52.97	52.98	0.01	3502.67
	12/01/05*		52.20	52.90	0.70	3503.30
	05/10/06*		51.61	52.37	0.76	3503.88
	12/14/06*		51.22	52.12	0.90	3504.24
	06/20/07*		50.81	51.81	1.00	3504.63
	12/07/07*		50.52	51.57	1.05	3504.91
	05/30/08*		50.65	51.75	1.10	3504.77
	12/10/08*		51.11	52.34	1.23	3504.28
	05/01/09*		(a)	51.53	(a)	3504.11
	08/22/09*		51.58	51.60	0.02	3504.06
	10/05/09*		(a)	51.39	(a)	3504.25
	06/11/10*		52.04	52.08	0.04	3503.59

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-13	06/04/99	3554.11 (e)	53.73	54.83	1.10	3500.16
	06/24/99		53.65	54.02	0.37	3500.39
	07/15/99		53.97	54.02	0.05	3500.13
	07/27/99		53.28	53.30	0.02	3500.83
	08/11/99*		53.37	53.39	0.02	3500.74
	08/26/99		(a)	53.27	(a)	3500.84
	09/14/99		(a)	53.93	(a)	3500.18
	09/28/99		(a)	53.24	(a)	3500.87
	10/07/99		(a)	53.36	(a)	3500.75
	10/21/99		(a)	53.51	(a)	3500.60
	11/11/99		(a)	53.00	(a)	3501.11
	11/30/99		(a)	52.56	(a)	3501.55
	12/14/99		(a)	52.54	(a)	3501.57
	12/30/99		(a)	52.38	(a)	3501.73
	01/25/00		(a)	54.18	(a)	3499.93
	02/03/00		(a)	52.79	(a)	3501.32
	02/13/00*		(a)	52.60	(a)	3501.51
	03/06/00		(a)	53.45	(a)	3500.66
	03/23/00		(a)	56.07	(a)	3498.04
	04/06/00		(a)	54.76	(a)	3499.35
	05/11/00		(a)	53.54	(a)	3500.57
	05/25/00		(a)	52.68	(a)	3501.43
	06/08/00		(a)	53.16	(a)	3500.95
	06/22/00		(a)	54.22	(a)	3499.89
	07/13/00		(a)	52.91	(a)	3501.20
	07/27/00		(a)	52.67	(a)	3501.44
	08/03/00		(a)	52.48	(a)	3501.63
	08/21/00*		(a)	52.47	(a)	3501.64
	09/14/00		(a)	52.65	(a)	3501.46
	09/28/00		(a)	52.58	(a)	3501.53
	10/12/00		(a)	52.57	(a)	3501.54
	11/03/00		(a)	52.49	(a)	3501.62
	11/16/00		(a)	52.51	(a)	3501.60
	12/06/00		(a)	52.59	(a)	3501.52
	01/25/01		(a)	52.41	(a)	3501.70
	02/17/01*		(a)	52.55	(a)	3501.56
	02/23/01		53.72	53.74	0.02	3500.39
	03/30/01		(a)	52.26	(a)	3501.85
	08/15/01		(a)	52.16	(a)	3501.95
	02/27/02*		(a)	52.14	(a)	3501.97
	07/31/02*		(a)	51.93	(a)	3502.18
	02/13/03*		(a)	52.01	(a)	3502.10
	08/04/03*		(a)	51.81	(a)	3502.30
	05/24/04*		(a)	51.70	(a)	3502.41
	11/09/04*		(a)	50.90	(a)	3503.21
	04/11/05*		(a)	51.49	(a)	3502.62
	12/01/05*		(a)	50.86	(a)	3503.25
	05/10/06*		(a)	49.18	(a)	3504.93
	12/14/06*		(a)	48.76	(a)	3505.35
	06/20/07*		(a)	48.46	(a)	3505.65
	12/07/07*		(a)	48.21	(a)	3505.90
	05/30/08*		(a)	49.38	(a)	3504.73
	12/10/08*		(a)	49.86	(a)	3504.25
	05/01/09*		(a)	49.98	(a)	3504.13
	06/11/10*		(a)	49.11	(a)	3505.00

Table 2. Summary of Groundwater Surface Elevations at SVE Wells
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Top of Casing (ft)	Depth to PSH (ft)	Depth to Water (ft)	PSH (ft)	Surface Elevation (ft)
SVE-14	06/04/99	3554.83 (e)	(a)	54.43	(a)	3500.40
	06/24/99		(a)	52.01	(a)	3502.82
	07/15/99		(a)	52.76	(a)	3502.07
	07/27/99		(a)	52.03	(a)	3502.80
	08/11/99*		(a)	54.13	(a)	3500.70
	08/26/99		(a)	52.40	(a)	3502.43
	09/14/99		(a)	52.61	(a)	3502.22
	09/28/99		(a)	52.36	(a)	3502.47
	10/07/99		(a)	52.14	(a)	3502.69
	10/21/99		(a)	54.37	(a)	3500.46
	11/11/99		(a)	53.09	(a)	3501.74
	11/30/99		(a)	51.51	(a)	3503.32
	12/14/99		(a)	51.16	(a)	3503.67
	12/30/99		(a)	53.32	(a)	3501.51
	01/13/00		(a)	53.51	(a)	3501.32
	01/25/00		(a)	51.42	(a)	3503.41
	02/03/00		(a)	51.28	(a)	3503.55
	02/13/00*		(a)	53.36	(a)	3501.47
	02/17/01*		(a)	53.31	(a)	3501.52
	08/21/00*		(a)	53.37	(a)	3501.46
	02/17/01*		(a)	53.31	(a)	3501.52
	08/15/01		(a)	52.95	(a)	3501.88
	02/27/02*		(a)	52.88	sheen	3501.95
	07/31/02*		(a)	52.67	(a)	3502.16
	02/13/03*		(a)	52.75	sheen	3502.08
	08/04/03*		52.56	52.57	0.01	3502.27
	05/24/04*		(a)	52.51	(a)	3502.32
	11/09/04*		(a)	51.65	(a)	3503.18
	04/11/05*		(a)	49.37	(a)	3505.46
	12/01/05*		51.65	51.66	0.01	3503.18
	05/10/06*		(a)	50.02	(a)	3504.81
	12/14/06*		(a)	49.56	(a)	3505.27
	06/20/07*		(a)	49.08	(a)	3505.75
	12/07/07*		Sheen	48.64	(a)	3506.19
	05/30/08*		Sheen	49.92	(a)	3504.91
	12/10/08*		Sheen	50.34	(a)	3504.49
	05/01/09*		Sheen	50.42	(a)	3504.41
	06/11/10*		Sheen	49.99	(a)	3504.84

Notes:
(a) Not Applicable
(b) No elevation data available
(c) Survey by John West Engineering, Hobbs, NM dated 11/94
(d) Survey by John West Engineering, Hobbs, NM dated 02/22/96
(e) Survey by Cypress Engineering, Houston, TX dated 08/11/99
(f) SVE-3 plugged and abandoned on 12-01-04 by George Friend.

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
MW-9	11/21/94		-	-	-	-	**12**	< 0.5	< 0.5	< 0.5
	11/21/95		-	7.03	19.4	2,890	4	3	< 2	11
	02/22/96		-	6.48	22.2	2,980	**13**	< 2	< 2	< 2
	05/14/96		-	-	-	-	**14**	< 2	< 2	< 2
	08/12/96		-	6.79	27.0	3,090	**14**	< 2	< 2	< 3
	11/12/96		-	6.97	16.6	-	9	< 2	< 2	< 2
	02/05/97		3.0	7.26	16.3	3,900	**13**	< 2	< 2	< 2
	08/05/97		1.8	6.97	20.7	3,580	3	< 2	< 2	< 2
	02/24/98		4.2	7.00	20.3	3,550	**16.3**	< 5	< 5	< 5
	08/05/98		2.2	6.93	22.6	3,910	1.9	< 1	< 1	< 1
	02/12/99		-	-	-	-	6	< 1	< 1	< 1
	08/11/99		3.1	6.9	21.0	3,230	< 2	< 2	< 2	< 2
	02/13/00		-	-	-	-	3.0	< 1	< 1	< 1
	08/21/00	(a)	-	-	-	-	1.5	< 0.5	0.5	0.9
	02/17/01		-	-	-	-	< 0.500	< 0.500	< 0.500	< 0.10
	08/15/01		2.6	7.12	22.5	3,140	2.06	< 1	< 1	< 2
	02/27/02		3.6	6.94	21.9	4,130	6	< 1	< 1	< 1
	08/01/02		3.7	6.80	21.5	3,810	< 0.50	< 0.50	< 0.50	< 0.50
	02/13/03		2.8	6.98	22.7	4,310	0.86	< 0.50	< 0.50	< 0.50
	08/05/03		2.1	6.91	23.3	3,830	0.60	< 0.50	< 0.50	< 0.50
	05/24/04		2.7	7.07	22.9	4,090	< 0.50	< 0.50	< 0.50	< 0.50
	11/09/04*		3.3	6.83	20.6	4,423	< 0.50	< 0.50	< 0.50	< 0.50
	04/11/05		-	-	-	-	< 0.50	< 0.50	< 0.50	< 0.50
	12/01/05		4.6	7.16	19.8	3,977	< 0.50	< 0.50	< 0.50	< 0.50
	05/10/06		6.1	6.98	21.0	4,104	< 1	< 1	< 1	< 3
	12/14/06		5.5	6.95	20.5	4,355	< 1	< 1	< 1	< 3
	06/21/07		5.8	7.18	20.9	4,132	< 1	< 1	< 1	< 2
	12/07/07		4.9	6.90	20.4	3,957	< 1	< 1	< 1	< 2
	05/30/08		4.1	7.38	21.7	4,002	< 1	< 1	< 1	< 2
	12/11/08		4.6	6.95	20.2	3,633	< 1	< 1	< 1	< 2
	04/27/09		5.6	6.48	20.9	4,491	< 1	< 1	< 1	< 2
	06/11/10		6.0	6.29	21.1	4,662	< 1	< 1	< 1	< 2

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date	Field Measured Parameters				BTEX Concentration - (ug/L)			
		DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard		none	6-9	none	none	10	750	750	620
MW-10	11/18/94	-	-	-	-	**9,000**	**16,000**	620	**8,500**
	08/05/98	-	-	-	-	**4,000**	**7,500**	190	**3,100**
	02/12/99	-	-	-	-	**4,300**	**7,700**	340	**3,300**
	11/18/99	-	-	-	-	**3,400**	**5,600**	280	**3,100**
	02/13/00	-	-	-	-	**4,800**	**9,200**	710	**6,200**
	06/20/00	-	-	-	-	**3,700**	**6,600**	380	**3,900**
	08/15/01	-	-	-	-	**4,590**	**454**	429	**4,680**

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
MW-11	11/21/94	(b)	-	-	-	-	-	-	-	-
	11/21/95		-	-	-	-	< 2	< 2	< 2	< 2
	02/22/96		-	7.34	21.9	1,920	< 2	< 2	< 2	< 2
	05/14/96		-	-	-	-	< 2	< 2	< 2	< 2
	08/12/96		-	7.11	25.7	2,050	< 2	< 2	< 2	< 3
	11/11/96		6.0	7.15	19.9	-	< 2	< 2	< 2	< 2
	02/05/97		7.0	7.56	14.8	2,300	< 2	< 2	< 2	< 2
	08/05/97		5.3	7.19	21.2	2,280	< 2	< 2	< 2	< 2
	02/24/98		6.5	7.35	18.8	2,100	< 5	< 5	< 5	< 5
	08/05/98		7.2	7.15	20.4	2,250	< 1	< 1	< 1	< 1
	02/12/99		-	-	-	-	< 1	< 1	< 1	< 1
	08/11/99		8.8	7.42	20.8	1,800	< 2	< 2	< 2	< 2
	02/13/00		6.6	7.83	19.6	2,050	< 1	< 1	< 1	< 1
	08/21/00	(a)	6.7	7.41	21.6	1,720	< 0.5	< 0.5	< 0.5	< 1
	02/17/01		-	-	-	-	< 0.500	< 0.500	< 0.500	< 0.10
	08/15/01		6.0	7.20	20.3	1,932	< 1	< 1	< 1	< 2
	02/27/02		6.3	7.38	21.6	2,020	< 1	< 1	< 1	< 1
	08/01/02		7.9	6.87	23.5	1,700	< 0.50	< 0.50	< 0.50	< 0.50
	02/13/03		6.1	7.41	22.3	1,960	< 0.50	< 0.50	< 0.50	< 0.50
	08/05/03		5.0	7.47	22.7	1,660	< 0.50	< 0.50	< 0.50	< 0.50
	05/24/04		5.1	7.46	21.9	1,780	< 0.50	< 0.50	< 0.50	< 0.50
	11/09/04*		5.8	7.14	20.2	1,775	< 0.50	< 0.50	< 0.50	< 0.50
	04/11/05		-	-	-	-	< 0.50	< 0.50	< 0.50	< 0.50
	12/01/05		5.8	7.46	19.5	1,456	< 0.50	< 0.50	< 0.50	< 0.50
	05/10/06		7.3	7.36	20.1	1,481	< 1	< 1	< 1	< 3
	12/14/06		7.3	7.28	20.0	1,374	< 1	< 1	< 1	< 3
	06/21/07		7.4	6.99	20.3	1,322	< 1	< 1	< 1	< 2
	12/07/07		6.7	7.26	20.0	1,216	< 1	< 1	< 1	< 2
	05/30/08		7.0	6.92	21.1	1,636	< 1	< 1	< 1	< 2
	12/11/08		6.2	7.24	19.4	1,648	< 1	< 1	< 1	< 2
	04/27/09		6.8	6.84	20.3	2,195	< 1	< 1	< 1	< 2
	06/11/10		7.6	6.28	20.9	2,572	< 1	< 1	< 1	< 2

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
MW-12	11/17/94		-	-	-	-	< 0.5	1.9	< 0.5	3.1
	11/21/95		-	6.97	19.2	3,260	< 2	< 2	< 2	< 2
	02/22/96		-	6.71	22.6	3,400	< 2	< 2	< 2	< 2
	05/14/96		-	-	-	-	< 2	< 2	< 2	< 2
	08/12/96		-	6.70	26.8	3,430	< 2	< 2	< 2	< 3
	11/12/96		6.0	7.06	19.3	-	< 2	< 2	< 2	< 2
	02/05/97		7.0	7.23	15.8	3,900	< 2	< 2	< 2	< 2
	08/05/97		4.9	6.85	21.8	3,880	< 2	< 2	< 2	< 2
	02/24/98		6.0	7.06	20.1	3,570	< 5	< 5	< 5	< 5
	08/05/98		5.6	6.96	22.1	3,830	< 1	< 1	< 1	< 1
	02/12/99		-	-	-	-	< 1	< 1	< 1	< 1
	08/11/99		6.7	7.13	20.7	3,770	< 2	< 2	< 2	< 2
	02/13/00		5.4	7.10	20.1	3,780	< 1	< 1	< 1	< 1
	08/21/00	(a)	6.7	7.06	21.1	3,350	< 0.5	0.5	0.8	1.1
	02/17/01		-	-	-	-	< 0.500	< 0.500	< 0.500	< 0.10
	08/15/01		4.5	7.23	20.7	3,690	< 1	< 1	< 1	< 2
	02/27/02		4.6	7.01	22.4	4,030	< 1	< 1	< 1	< 1
	08/01/02		4.3	6.84	21.4	3,580	< 0.50	< 0.50	< 0.50	< 0.50
	02/13/03		4.3	7.04	22.8	3,930	< 0.50	< 0.50	< 0.50	< 0.50
	08/05/03		4.1	7.05	23.4	3,380	< 0.50	< 0.50	< 0.50	< 0.50
	05/24/04		4.1	7.09	22.1	3,540	< 0.50	< 0.50	< 0.50	< 0.50
	11/09/04*		4.2	6.90	20.4	3,547	< 0.50	< 0.50	< 0.50	< 0.50
	04/11/05		-	-	-	-	< 0.50	< 0.50	< 0.50	< 0.50
	12/01/05		3.5	7.09	19.7	3,000	< 0.50	< 0.50	< 0.50	< 0.50
	05/10/06		4.8	6.75	20.5	3,128	< 1	< 1	< 1	< 3
	12/14/06		4.2	7.06	20.0	2,999	< 1	< 1	< 1	< 3
	06/21/07		4.4	7.11	20.4	3,049	< 1	< 1	< 1	< 2
	12/07/07		4.0	6.80	20.0	3,021	< 1	< 1	< 1	< 2
	05/30/08		6.3	6.59	21.8	3,106	< 1	< 1	< 1	< 2
	12/11/08		3.5	6.87	19.5	2,645	< 1	< 1	< 1	< 2
	04/27/09		4.7	6.44	20.5	3,244	< 1	< 1	< 1	< 2
	06/11/10		4.3	6.15	20.9	3,330	< 1	< 1	< 1	< 2

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
MW-13	12/01/94		-	-	-	-	< 0.5	< 0.5	< 0.5	< 0.5
	11/21/95		-	7.63	20.3	1,530	< 2	< 2	< 2	< 2
	02/22/96		-	7.18	24.1	1,880	< 2	< 2	< 2	< 2
	05/14/96		-	-	-	-	< 2	3	< 2	7
	08/12/96		-	7.02	26.7	1,980	< 2	< 2	< 2	< 3
	11/11/96		4.0	7.18	18.8	-	< 2	< 2	< 2	< 2
	02/05/97		7	7.65	17.7	1,900	< 2	< 2	< 2	< 2
	08/05/97		5.2	7.38	21.1	1,830	< 2	< 2	< 2	< 2
	02/24/98		4.5	7.27	19.5	1,703	< 5	< 5	< 5	< 5
	08/05/98		5.5	7.28	20.30	1,840	< 1	< 1	< 1	< 1
	02/12/99		-	-	-	-	< 1	< 1	< 1	< 1
	08/11/99		6.5	7.42	20.6	1,700	< 2	< 2	< 2	< 2
	02/13/00		5.2	7.37	19.3	1,753	< 1	< 1	< 1	< 1
	08/21/00	(a)	6.4	7.57	21.1	1,640	0.4	0.5	2.3	2.9
	02/17/01		-	-	-	-	< 0.500	< 0.500	< 0.500	< 0.10
	08/15/01		4.2	7.42	20.6	1,646	< 1	< 1	< 1	< 2
	02/27/02		4.1	7.33	21.7	1,804	< 1	< 1	< 1	< 1
	08/01/02		4.5	6.90	20.7	1,600	< 0.50	< 0.50	< 0.50	< 0.50
	02/13/03		4.2	7.37	22.3	1,803	< 0.50	< 0.50	< 0.50	< 0.50
	08/05/03		4.6	7.42	22.5	1,620	< 0.50	< 0.50	< 0.50	< 0.50
	05/24/04		4.4	7.43	22.0	1,800	< 0.50	< 0.50	< 0.50	< 0.50
	11/09/04*		4.8	7.11	20.0	1,979	< 0.50	< 0.50	< 0.50	< 0.50
	04/11/05		-	-	-	-	< 0.50	< 0.50	< 0.50	< 0.50
	12/01/05		3.6	7.26	18.8	1,928	< 0.50	< 0.50	< 0.50	< 0.50
	05/10/06		5.2	7.14	20.5	2,427	< 1	< 1	< 1	< 3
	12/14/06		2.0	6.93	19.7	2,710	< 1	< 1	< 1	< 3
	06/21/07		1.9	6.99	20.2	2,921	< 1	< 1	< 1	< 2
	12/07/07		1.5	6.80	19.9	3,130	< 1	< 1	< 1	< 2
	05/30/08		1.6	7.49	20.9	3,424	< 1	< 1	< 1	< 2
	12/11/08		1.0	6.84	19.3	2,994	< 1	< 1	< 1	< 2
	04/27/09		3.5	6.40	20.5	3,758	< 1	< 1	< 1	< 2
	06/11/10		3.4	6.24	20.8	3,771	< 1	< 1	< 1	< 2

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
SVE-13	02/13/00		-	-	-	-	**1,300**	**1,800**	270	**1,900**
	06/20/00		-	-	-	-	**1,600**	**2,300**	170	**2,100**
@ 1 well vol	08/21/00	(a)	-	-	-	-	**110**	140	91	390
	08/21/00	(a)	-	-	-	-	**240**	370	110	**1,000**
@ 1 well vol	02/18/01		-	-	-	-	**968**	**789**	93.2	**831**
	02/18/01		-	-	-	-	**1,170**	**1,110**	124	**1,240**
(Dup MW-17)	02/18/01		-	-	-	-	**860**	613	96.2	**864**
	08/15/01		-	-	-	-	**773**	60.1	73.1	520.3
	02/28/02		-	-	-	-	**614**	< 50	< 50	**1,670**
(Dup MW-24)	02/28/02		-	-	-	-	**686**	604	619	**1,670**
	08/01/02		-	-	-	-	**720**	< 10	74	220
	02/13/03		-	-	-	-	**760**	< 10	120	300
	08/05/03		-	-	-	-	**1,100**	< 10	93	250
	05/24/04		-	-	-	-	**620**	21	73	230
	11/09/04*		-	-	-	-	**920**	< 20	150	260
	04/11/05		-	-	-	-	**800**	4.8	120	160
	12/01/05		-	-	-	-	**590**	9.5	110	150
	05/11/06		-	-	-	-	**640**	< 10	120	67
	12/14/06		-	-	-	-	**540**	12	110	72
	06/21/07		-	-	-	-	**710**	< 10	160	76
	12/07/07		-	-	-	-	**580**	7.5	160	79
	05/30/08		-	-	-	-	**280**	2.8	33	75
	12/11/08		-	-	-	-	**510**	< 10	97	30
	04/27/09		-	-	-	-	**610**	< 10	110	31
	06/11/10		1.3	6.2	22.0	4770	**630**	< 10	100	36

Table 3. Summary of Groundwater Analyses
TW WT-1 Compressor Station Dehy Area

Well	Sampling Date		Field Measured Parameters				BTEX Concentration - (ug/L)			
			DO (mg/L)	pH (Units)	Temp. (C)	Conductivity (us/cm)	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standard			none	6-9	none	none	10	750	750	620
SVE-14	09/08/99		1.2	6.89	22.0	2,460	**1,600**	**1,200**	360	**1,300**
	11/18/99		-	-	-	-	**1,400**	560	400	**970**
	02/13/00		-	-	-	-	**3,000**	**4,200**	510	**3,000**
	06/20/00		-	-	-	-	**1,600**	**2,300**	330	**2,400**
@ 1 well vol	08/21/00	(a)	-	-	-	-	**1,600**	**1,900**	440	**2,430**
	08/21/00	(a)	5.6	7.25	22.8	2830	**2,100**	**2,900**	380	**2,620**
@ 1 well vol	02/18/01		-	-	-	-	**819**	**1,130**	297	**1,900**
	02/18/01		-	-	-	-	**3,740**	**5,910**	344	**3,880**
(Dup MW-18)	02/18/01		-	-	-	-	**2,150**	**3,290**	445	**2,910**
	08/15/01		-	-	-	-	**369**	**1,520**	632	**6,440**
	08/01/02		-	-	-	-	**3,000**	**2,900**	380	**4,100**
	05/24/04		-	-	-	-	**260**	340	260	**1,800**

NOTES:
(a) Trip Blank contained low concentrations of BTEX constituents.
(b) No sample collected due to insufficient volume of water in well.
(c) @ 1 well vol - Sample collected after purging 1 casing volume; all others collected after 3 casing volumes.
(d) Dup MW-17 - Blind duplicate sample collected and labeled as MW-17.

Table 4. Summary of SVE System Vapor Concentration Monitoring
TW WT-1 Compressor Station Dehy Area

	SVE Blower Unit				
Date	Total NMHC C(ug/L)	Flow Rate Q(scfm)	Potential Emissions M(lb/hr)	Estimated M(tons/mo)	Estimated M(gals/mo)
03/20/97	6,600	200	4.9	1.8	594
08/06/97	5,000	200	3.7	1.4	450
12/30/97	7,300	200	5.5	2.0	656
08/05/98	6,500	200	4.9	1.8	585
08/12/98	5,300	200	4.0	1.4	477
08/12/98	5,000	200	3.7	1.4	450
04/13/99	6,800	200	5.1	1.9	612
12/07/99	4,800	200	3.6	1.3	432
12/07/99	4,900	200	3.7	1.3	441
05/22/00	3,700	200	2.8	1.0	333
05/22/00	6,300	200	4.7	1.7	567
06/15/00	3,000	200	2.2	0.8	270
06/15/00	3,700	200	2.8	1.0	333
08/21/00	3,900	200	2.9	1.1	351
06/10/02	3,630	200	2.7	1.0	326
06/10/02	3,440	200	2.6	0.9	309
08/09/02	551	200	0.4	0.2	50
08/09/02	543	200	0.4	0.1	49
05/02/03	3,450	200	2.6	0.9	310
05/02/03	2,740	200	2.1	0.7	246
07/25/03	665	200	0.5	0.2	60
07/25/03	1,550	200	1.2	0.4	139
08/21/03	2,590	200	1.9	0.7	233
04/20/04	2,750	200	2.1	0.8	247
04/20/04	2,740	200	2.1	0.7	246
08/30/04	2,590	200	1.9	0.7	233
08/30/04	2,110	200	1.6	0.6	190
08/08/05	2,060	200	1.5	0.6	185
08/08/05	2,440	200	1.8	0.7	219
11/14/05	1,620	200	1.2	0.4	146
11/14/05	1,830	200	1.4	0.5	165
09/18/06	1,250	200	0.9	0.3	112
09/18/06	1,300	200	1.0	0.4	117
07/01/08	1,400	200	1.0	0.4	126
07/01/08	1,370	200	1.0	0.4	123
06/27/09	2,090	200	1.6	0.6	188
06/27/09	1,820	200	1.4	0.5	164
08/22/09	1,940	200	1.5	0.5	174
08/22/09	1,790	200	1.3	0.5	161
11/12/10	1,180	200	0.9	0.3	106
11/12/10	1,330	200	1.0	0.4	120

Notes:
1) Concentrations based on Hall Lab analysis of SVE system samples
2) A flow rate of 200 scfm was used in the calculation because this is value specified in the NOI application

Table 5. Summary of Completion Details for Soil Borings Completed as Wells
TWP WT-1 Compressor Station Dehy Area

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)
MW-9	Eades Drlg/DBS	11/18/94	3557.31 (b)	-1209.40	-1254.20	60.5	na	Flush Mount	2	44-59	40.5
MW-10	Eades Drlg/DBS	11/17/94	3553.45 (b)	-986.60	-1342.10	62.5	63.57	Flush Mount	2	47.5-62.5	43.5
MW-11	Eades Drlg/DBS	11/21/94	3547.84 (b)	-864.70	-1562.50	65.0	59.78	Flush Mount	2	45-60	38.5
MW-12	Eades Drlg/DBS	11/16/94	3551.19 (b)	-818.40	-1192.90	60.0	60.11	Flush Mount	2	45-60	42.3
MW-13	Eades Drlg/DBS	11/16/94	3547.78 (b)	-708.90	-1359.20	58.0	57.52	Flush Mount	2	43-58	39.5
SVE-1	Eades Drlg/DBS	10/04/95	3551.22 (d)	-903.90	-1406.60	55.0	54.49	Flush Mount	2	35-55	32.9
SVE-2	Eades Drlg/DBS	10/05/95	3551.96 (d)	-901.70	-1325.80	53.0	52.75	Flush Mount	2	33-53	30.8
SVE-3	Eades Drlg/DBS	10/05/95	3552.75 (d)	-888.70	-1245.80	55.0	55.30	Flush Mount	2	35-55	32.6
SVE-3 P&A	CES	12/01/04	--	--	--	--	--	--	--	--	--
SVE-4	Eades Drlg/DBS	10/04/95	3553.03 (c)	-989.20	-1359.10	55.0	na	Flush Mount	2	30-55	27.9
SVE-4 P&A (e)	GPI/CES	05/25/99	--	--	--	--	--	--	--	--	--
SVE-5	Eades Drlg/DBS	10/04/95	3554.39 (d)	-986.40	-1275.10	52.7	52.11	Flush Mount	2	32.7-52.7	30.0
SVE-6	Eades Drlg/DBS	10/05/95	3553.74 (d)	-984.10	-1198.40	55.0	54.29	Flush Mount	2	35-55	32.8
SVE-7	Eades Drlg/DBS	10/04/95	3553.81 (d)	-1071.00	1402.50	58.0	57.68	Flush Mount	2	33-58	31.8
SVE-8	Eades Drlg/DBS	10/05/95	3555.25 (d)	-1072.80	-1314.70	56.5	56.76	Flush Mount	2	36.5-56.5	34.8
SVE-9	Eades Drlg/DBS	10/05/95	3555.36 (d)	-1073.10	-1249.20	56.2	55.90	Flush Mount	2	36.2-56.2	34.2
SVE-10 (e)	GPI/CES	05/25/99	3554.40 (d)	-989.58	-1359.42	66.6	64.46	Flush Mount	4	47.5-62.5	42.7
SVE-11	GPI/CES	05/14/99	3555.33 (d)	-986.39	-1269.94	63.4	63.93	Flush Mount	4	47.5-62.5	44.5
SVE-12	GPI/CES	05/14/99	3555.64 (d)	-985.74	-1307.78	63.5	63.55	Flush Mount	4	47.5-62.5	42.7
SVE-13	GPI/CES	05/10/99	3554.11 (d)	-954.94	-1314.42	64.8	63.21	Flush Mount	4	47.5-62.5	42.3
SVE-14	GPI/CES	05/14/99	3554.83 (d)	-960.46	-1248.58	63.4	63.97	Flush Mount	4	47.5-62.5	43.5

NOTES:
(a) Driller/Consultant
(b) Survey by John West Engineering on 11/94
(c) Survey by John West Engineering on 2/96
(d) Survey by Cypress Engineering on 8/99
(e) SVE-10 is an overdrill of SVE-4
na - Information not available

Table 6. Monitor Well Sampling Locations, Frequency, and Sample Analysis Plan
TW WT-1 Compressor Station Dehy Area

Well ID	Analytical Requirements for Annual Event	Benzene (ppb) Latest Result	Comments
MW-9	BTEX	< 1	
MW-10	BTEX	na	contains PSH
MW-11	BTEX	< 1	clean downgradient well
MW-12	BTEX	< 1	clean downgradient well
MW-13	BTEX	< 1	clean downgradient well
SVE-13	BTEX	630	
SVE-14	BTEX	na	contains PSH intermittently

Notes:
1) na - not available
2) BTEX - BTEX Compounds by EPA Method 8021B

Table 7. Summary for Product Removal Efforts
TW WT-1 Compressor Station Dehy Area

		Initial Measurements			Removal Actions	Post Measurements		
Well	Date	Depth to PSH (ft)	Depth to Water or PSH/Water Interface (ft)	PSH Thickness (ft)	Removal Methods	Depth to PSH (ft)	Depth to Water or PSH/Water Interface (ft)	PSH Thickness (ft)
MW-10	12/10/08	49.74	50.89	1.15				
	03/09/09				Put in Sock Filter			
	03/16/09	51.16	51.31	0.15	Changed Sock Filter			
	03/22/09	--	50.21	--	Changed Sock Filter			
	03/29/09	--	49.95	--	Changed Sock Filter			
	04/08/09				Removed Sock Filter			
	06/11/10	50.59	50.65	0.06	Bailed		50.80	
	06/19/10	--	50.74	--				
	07/05/10	--	50.96	--				
	08/08/10	--	50.60	--				
	10/08/10	--	50.60	--				
	12/03/10	--	50.40	--				
SVE-5	06/11/10	50.08	50.12	0.04	Bailed		51.70	sheen
	06/19/10	50.05	50.05	sheen				
	07/05/10	50.63	50.70	0.07	Bailed		51.40	
	08/08/10	50.09	50.09	sheen				
	10/08/10	50.80	50.85	0.05	Bailed		51.56	
	12/03/10	--	50.56	--				
SVE-11	12/10/08	50.58	52.72	2.14				
	03/09/09				Put in Sock Filter			
	03/16/09	51.13	51.16	0.03	Changed Sock Filter			
	03/22/09	--	51.18	--	Changed Sock Filter			
	03/29/09	--	51.12	--	Changed Sock Filter			
	04/08/09				Removed Sock Filter			
	06/11/10	51.49	51.61	0.12	Bailed		51.88	sheen
	06/19/10	51.48	51.48	sheen				
	07/05/10	51.78	51.82	0.04	Bailed		51.88	
	08/08/10	--	51.60	--				
	10/08/10	--	51.73	--				
	12/03/10	--	51.41	--				
SVE-12	12/10/08	51.11	52.34	1.23				
	03/09/09				Put in Sock Filter			
	03/16/09	--	51.50	--	Changed Sock Filter			
	03/22/09	--	51.55	--	Changed Sock Filter			
	03/29/09	--	51.41	--	Changed Sock Filter			
	04/08/09				Removed Sock Filter			
	06/11/10	52.04	52.08	0.04	Bailed		52.20	sheen
	06/19/10	52.18	52.18	sheen				
	07/05/10	52.35	52.37	0.02	Bailed		52.35	
	08/08/10	50.09	50.09	sheen				
	10/08/10	51.95	52.00	0.05	Bailed		52.05	sheen
	12/03/10	51.70	51.75	0.05	Bailed		51.92	

APPENDIX A

Laboratory Reports for Soil Vapor Samples

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, November 22, 2010

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 WT-1 DEHY

Order No.: 1011657

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 11/16/2010 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.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Nov-10*

CLIENT:	Cypress Engineering	**Client Sample ID:**	SVE North
Lab Order:	1011657	**Collection Date:**	11/12/2010 6:10:00 PM
Project:	Transwestern Pipeline Company WT-1 DEHY	**Date Received:**	11/16/2010
Lab ID:	1011657-01	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1180	100		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C05-C6	2.20	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C06-C7	11.4	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C07-C8	31.3	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C08-C9	29.4	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C09-C10	19.0	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C10-C11	5.50	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C11-C12	1.10	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C12-C14	0.100	0		µg/L	20	11/19/2010 4:38:08 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	20	11/19/2010 4:38:08 PM
Surr: BFB	161	84.5-118	S	%REC	20	11/19/2010 4:38:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Nov-10*

CLIENT:	Cypress Engineering	**Client Sample ID:**	SVE South
Lab Order:	1011657	**Collection Date:**	11/12/2010 6:30:00 PM
Project:	Transwestern Pipeline Company WT-1 DEHY	**Date Received:**	11/16/2010
Lab ID:	1011657-02	**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1330	100		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C05-C6	2.20	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C06-C7	11.1	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C07-C8	30.4	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C08-C9	29.7	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C09-C10	20.0	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C10-C11	5.10	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C11-C12	1.30	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C12-C14	0.200	0		µg/L	20	11/19/2010 5:05:56 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	20	11/19/2010 5:05:56 PM
Surr: BFB	173	84.5-118	S	%REC	20	11/19/2010 5:05:56 PM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Cypress Engineering
Project: Transwestern Pipeline Company WT-1 DEHY **Work Order:** 1011657

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R42259**	Analysis Date:	11/19/2010 8:34:05 AM		
Gasoline Range Organics (GRO)	ND	mg/L	0.050								
Sample ID: 2.5UG GRO LCS		*LCS*				Batch ID:	**R42259**	Analysis Date:	11/19/2010 12:48:50 PM		
Gasoline Range Organics (GRO)	0.5520	mg/L	0.050	0.5	0	110	83.7	124			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Name CYP | Date Received: 11/16/2010

Work Order Number 1011657 | Received by: LNM

Checklist completed by: _____ Signature | 11/16/10 Date | Sample ID labels checked by: _____ 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 ☐	
- 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: _____

_____

_____

_____

_____

ective Action _____

_____

_____

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)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Transwestern Pipeline Company WT-1 Deny
Project #: TWP WT-1 Deny
Project Manager: George Robinson
Sampler: Sammy Sharp
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 1011657	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)	8015 mod GRO				Air Bubbles (Y or N)
11/12/10	1810	AIR	SVE North	1 TEDLAR	0	-1												X				
11/12/10	1830	AIR	SVE South	1 TEDLAR	0	-2												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/15/10	0530				
Date:	Time:	Relinquished by:	Received by:	11/16/10	0900

Remarks: Send Invoice to:
Energy Transfer
Attn: Richard Spell
711 Louisiana, Suite 900
Houston, TX 77002

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.

APPENDIX B

Laboratory Reports for Groundwater Samples

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, June 24, 2010

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

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

RE: TWP WT-1 DEHY

Order No.: 1006480

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 6 sample(s) on 6/15/2010 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.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *24-Jun-10*

CLIENT: Cypress Engineering
Project: TWP WT-1 DEHY
Lab Order: 1006480

Lab ID: 1006480-01 **Collection Date:** 6/11/2010 7:30:00 PM
Client Sample ID: MW-11 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/21/2010 9:31:59 PM
Toluene	ND	1.0		µg/L	1	6/21/2010 9:31:59 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2010 9:31:59 PM
Xylenes, Total	ND	2.0		µg/L	1	6/21/2010 9:31:59 PM
Surr: 4-Bromofluorobenzene	88.9	65.9-130		%REC	1	6/21/2010 9:31:59 PM

Lab ID: 1006480-02 **Collection Date:** 6/11/2010 7:40:00 PM
Client Sample ID: MW-13 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/21/2010 10:01:57 PM
Toluene	ND	1.0		µg/L	1	6/21/2010 10:01:57 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2010 10:01:57 PM
Xylenes, Total	ND	2.0		µg/L	1	6/21/2010 10:01:57 PM
Surr: 4-Bromofluorobenzene	86.0	65.9-130		%REC	1	6/21/2010 10:01:57 PM

Lab ID: 1006480-03 **Collection Date:** 6/11/2010 5:55:00 PM
Client Sample ID: MW-12 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/21/2010 10:32:15 PM
Toluene	ND	1.0		µg/L	1	6/21/2010 10:32:15 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2010 10:32:15 PM
Xylenes, Total	ND	2.0		µg/L	1	6/21/2010 10:32:15 PM
Surr: 4-Bromofluorobenzene	89.0	65.9-130		%REC	1	6/21/2010 10:32:15 PM

Lab ID: 1006480-04 **Collection Date:** 6/11/2010 4:25:00 PM
Client Sample ID: MW-9 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/21/2010 11:02:31 PM
Toluene	ND	1.0		µg/L	1	6/21/2010 11:02:31 PM
Ethylbenzene	ND	1.0		µg/L	1	6/21/2010 11:02:31 PM
Xylenes, Total	ND	2.0		µg/L	1	6/21/2010 11:02:31 PM
Surr: 4-Bromofluorobenzene	79.9	65.9-130		%REC	1	6/21/2010 11:02:31 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
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *24-Jun-10*

CLIENT: Cypress Engineering
Project: TWP WT-1 DEHY
Lab Order: 1006480

Lab ID: 1006480-05
Collection Date: 6/11/2010 5:15:00 PM
Client Sample ID: SVE-13
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	630	10		µg/L	10	6/21/2010 11:32:31 PM
Toluene	ND	10		µg/L	10	6/21/2010 11:32:31 PM
Ethylbenzene	100	10		µg/L	10	6/21/2010 11:32:31 PM
Xylenes, Total	36	20		µg/L	10	6/21/2010 11:32:31 PM
Surr: 4-Bromofluorobenzene	95.4	65.9-130		%REC	10	6/21/2010 11:32:31 PM

Lab ID: 1006480-06
Collection Date:
Client Sample ID: TRIP BLANK
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/22/2010 12:02:50 AM
Toluene	ND	1.0		µg/L	1	6/22/2010 12:02:50 AM
Ethylbenzene	ND	1.0		µg/L	1	6/22/2010 12:02:50 AM
Xylenes, Total	ND	2.0		µg/L	1	6/22/2010 12:02:50 AM
Surr: 4-Bromofluorobenzene	94.7	65.9-130		%REC	1	6/22/2010 12:02:50 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
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

ent: Cypress Engineering
roject: TWP WT-1 DEHY **Work Order:** 1006480

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R39399**	Analysis Date:	6/21/2010 9:47:04 AM		
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	2.0								
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R39399**	Analysis Date:	6/21/2010 11:48:45 AM		
Benzene	20.92	µg/L	1.0	20	0	105	87.9	121			
Toluene	21.32	µg/L	1.0	20	0	107	83	124			
Ethylbenzene	21.16	µg/L	1.0	20	0	106	81.7	122			
Xylenes, Total	64.04	µg/L	2.0	60	0	107	85.6	121			

ualifiers:

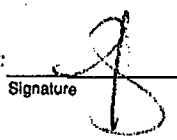
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **CYP** Date Received: **6/15/2010**

Work Order Number **1006480** Received by: **TLS**

Checklist completed by:  Signature 6/15/10 Date

Sample ID labels checked by: TJ Initials

Matrix: Carrier name: Greyhound

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?	**1.2°**	*<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
2121 Hwy 6 North, Steer
Mailing Address: Houston, TX 77095

Phone #: 281 797 3421
email or Fax#: 281 859 1881

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Transwestern Pipeline Company WT-1 Derby

Project #: TWP WT-1 Derby

Project Manager: George Robinson

Sampler: Sandy Stamp

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

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. 1006960	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)
6/14/10	1930	W	MW-11	3/40ml	HCl	1	X														
	1940		MW-13			2	X														
	1755		MW-12			3	X														
	1625		MW-9			4	X														
	1715		SVE-13			5	X														
			~~SVE-14~~																		
—	—		TRIP BLANK			6	X														

Remarks:

Date	Time	Relinquished by:	Received by:	Date	Time
6/14/10	1130			6/15/10	845
Date:	Time:	Relinquished by:	Received by:	Date	Time

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.