GW - 109

ANNUAL MONITORING REPORT

2/6/2009

Cypress Engineering

7171 Highway 6 North, Suite 102
Houston, Texas 77095-2422
(281) 797-3420 office
(281) 859-1881 fax

RECEIVED
2009 FEB 23 AM 9 25

February 6, 2009

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 - WT-1 Station Dehy Area
Lea County, New Mexico
Case # GW-109

Dear Glenn,

The enclosed Report of Groundwater Remediation Activities is submitted for your review and files.

If you have any questions or comments regarding this report, please contact me at (281) 797-3421 or Larry Campbell at (505) 625-8022.

Sincerely,

George Robinson

George C. Robinson, PE
President/Principal Engineer

xc w/attachment:	Mike Crump	Transwestern Pipeline Company
	Larry Campbell	Transwestern Pipeline Company
	Larry Johnson	NMOCD Hobbs District Office

Report of 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

February 6, 2009

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

CONTENTS

Section		Page
1.	Groundwater Monitoring Activities	1
1.1	Semi-Annual Groundwater Sampling Events	1
1.2	Results/Conclusions from Groundwater Sampling Events	1
1.2.1	Occurrence and Direction of Groundwater Flow	1
1.2.2	Lateral Extent of Phase Separated Hydrocarbon	1
1.2.3	Condition of Affected Groundwater	1
2.	Status of Remediation Activities	1
2.1	Remediation Activities Completed through December 2008	1
2.2	Remediation Activities Planned for January 2009 through December 2009	2
3.	Proposed Modifications	2
3.1	Modifications to the Routine Groundwater Sampling Plan	2
3.2	Reporting Frequency	2

LIST OF FIGURES

Figure

1 Facility Site Map

2 Site Diagram – Dehydration Area

3 Groundwater Elevations, December 10, 2008

4 Distribution of PSH, December 10, 2008

5 Distribution of BTEX Compounds in Groundwater, December 11, 2008

LIST OF TABLES

Table

1 Summary of Groundwater Surface Elevations

2 Summary of Groundwater Surface Elevations at SVE Wells

3 Summary of Groundwater Analyses

4 Summary of SVE Emissions at Individual Extraction Points

5 Summary of Completion Details for Soil Borings Completed as Wells

6 Monitor Well Sampling Locations, Frequency, and Sample Analysis Plan

LIST OF APPENDICES

A Laboratory Reports

1. Groundwater Monitoring Activities

1.1 Semi-Annual Groundwater Sampling Events

Two semi-annual groundwater-sampling events have been completed since the last report of remediation activities. These events were completed on May 30, 2008 and December 10, 2008.

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 is presented in Table 1. Similar measurements obtained from the SVE wells are presented in Table 2.

Groundwater samples were collected from selected monitoring wells at the site. 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 parameters is presented in Table 3. A copy of the laboratory results for each of the sampling events is included as an appendix to this report.

1.2 Results/Conclusions from Groundwater Sampling Events

1.2.1 Occurrence and Direction of Groundwater Flow

A water table elevation map based on measurements obtained in the course of the December 10, 2008 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.

1.2.2 Lateral Extent of Phase Separated Hydrocarbon

The lateral extent of PSH is presently defined by the occurrence of PSH at the water table in monitor well MW-10 and wells SVE-11, SVE-12, and SVE-14. Based on the information currently available, the volume and lateral extent of PSH in the area appears to be relatively limited. A figure indicating the estimated area with PSH present at the water table is included as Figure 4.

1.2.3 Condition of Affected Groundwater

The condition of affected groundwater has not changed significantly from previous sampling events as evidenced by the information presented in Table 3 and Figure 5. The three monitor wells downgradient of the release area 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.

2. Status of Remediation Activities

2.1 Remediation Activities Completed through December 2008

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

1) Two groundwater-sampling events were completed.

2) 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, therefore, the system was shut-down during the winter months. The SVE system is scheduled to restart in April 2009.

2.2 Remediation Activities Planned for January 2009 through December 2009

The SVE system is scheduled to operate from April 2009 through October 2009.

3. Proposed Modifications

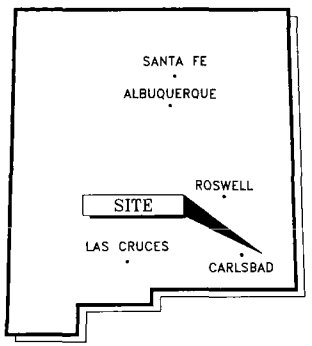
3.1 Modifications to the Routine Groundwater Sampling Plan

Groundwater monitoring at the site has been ongoing for about 14 years (since November 1994). An extensive volume of monitoring data has been generated during this timeframe. Groundwater monitoring has demonstrated that the distribution of benzene in groundwater has remained relatively unchanged over the last eight years or more. In light of this, the routine groundwater sampling plan is being revised from semiannual to annual sampling events. The revised sample analysis plan is summarized in Table 6.

3.2 Reporting Frequency

Annual reporting will continue with the next scheduled report being submitted to the OCD by February 28, 2010.

f:/.../projects/tw/[illegible]hy/drawings/wt-1 facility diagram.dwg (2/8/05)



STATE OF NEW MEXICO

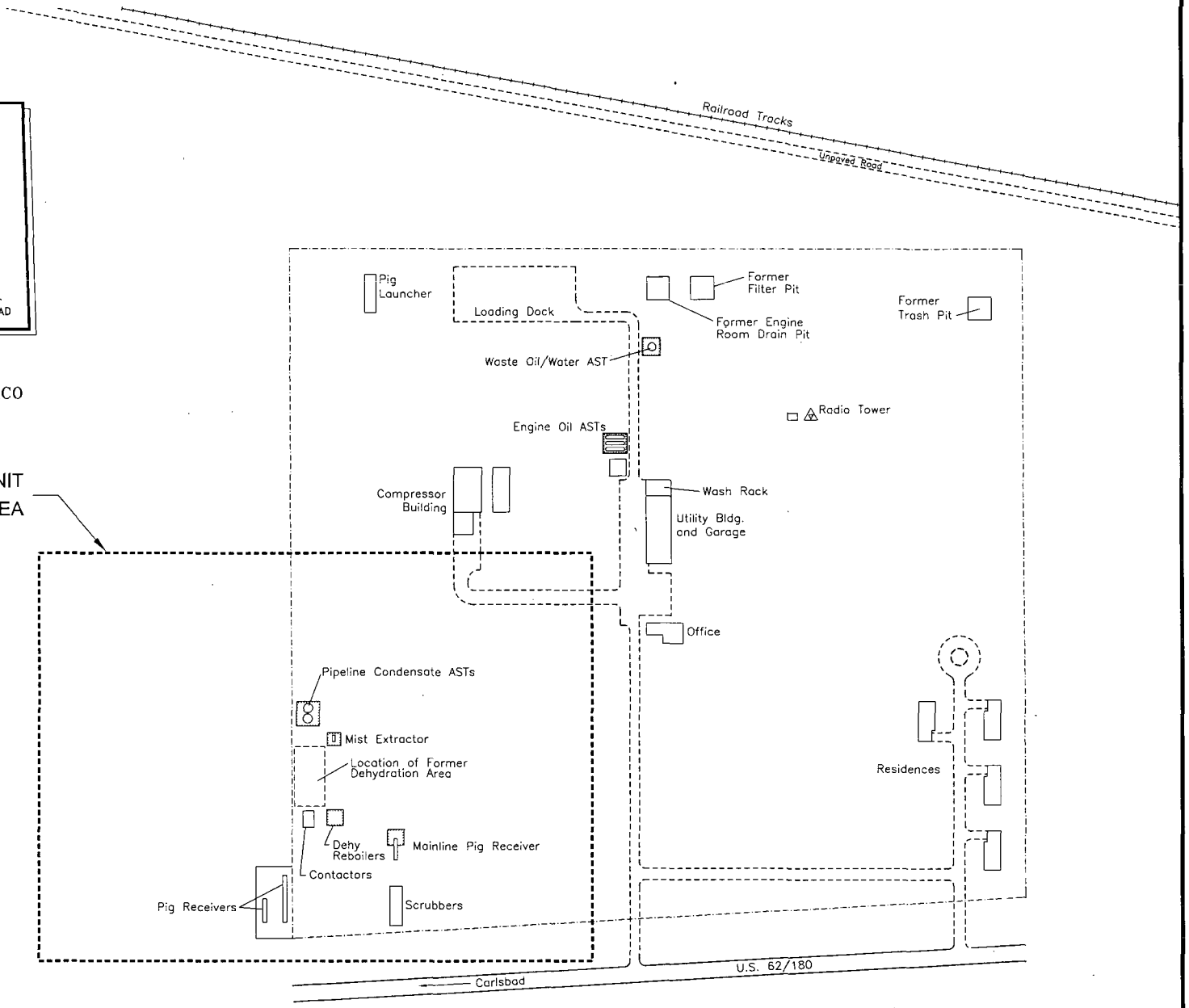
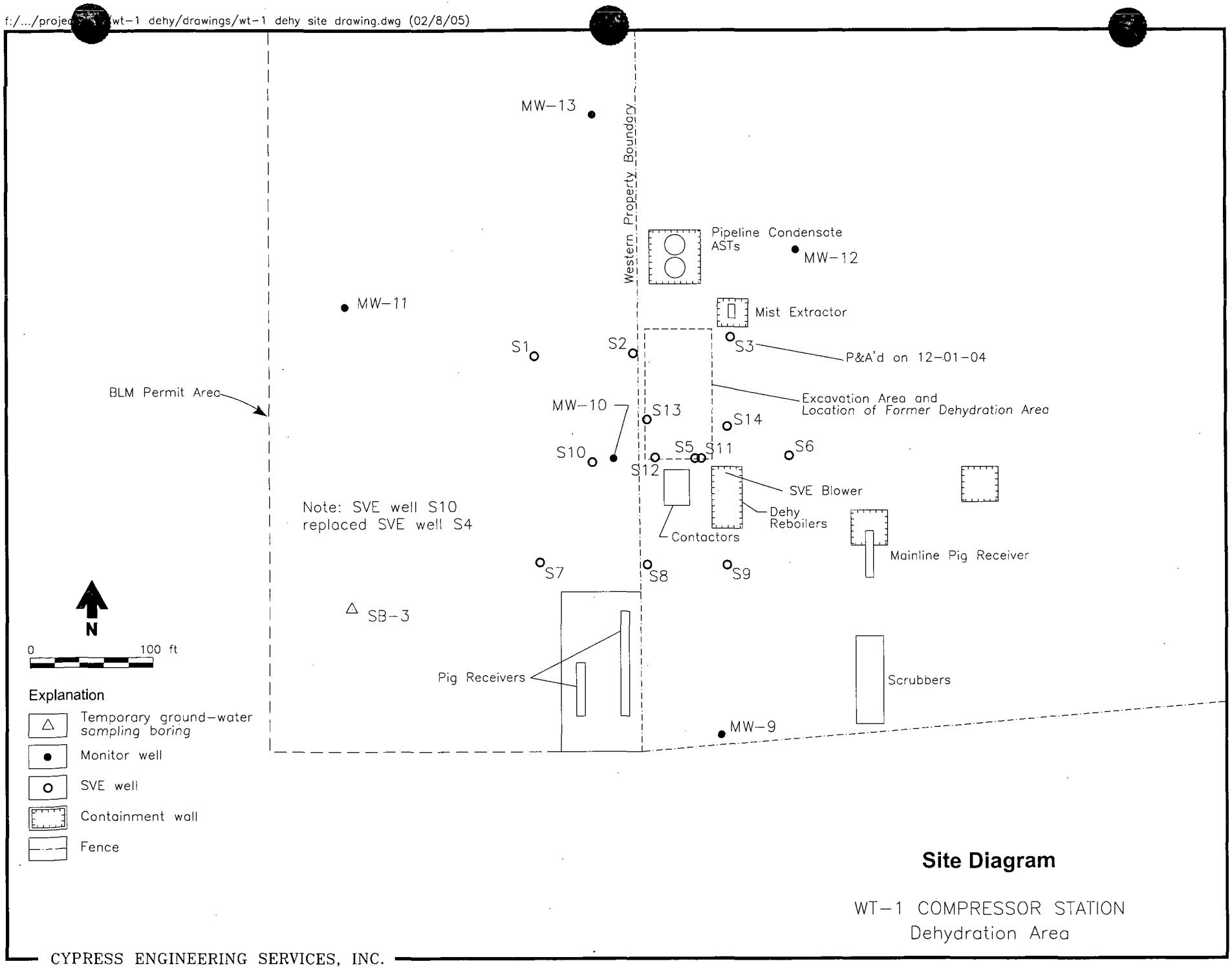


FIGURE 1

Facility Site Map

WT-1 COMPRESSOR STATION
TRANSWESTERN PIPELINE COMPANY

CYPRESS ENGINEERING SERVICES, INC.



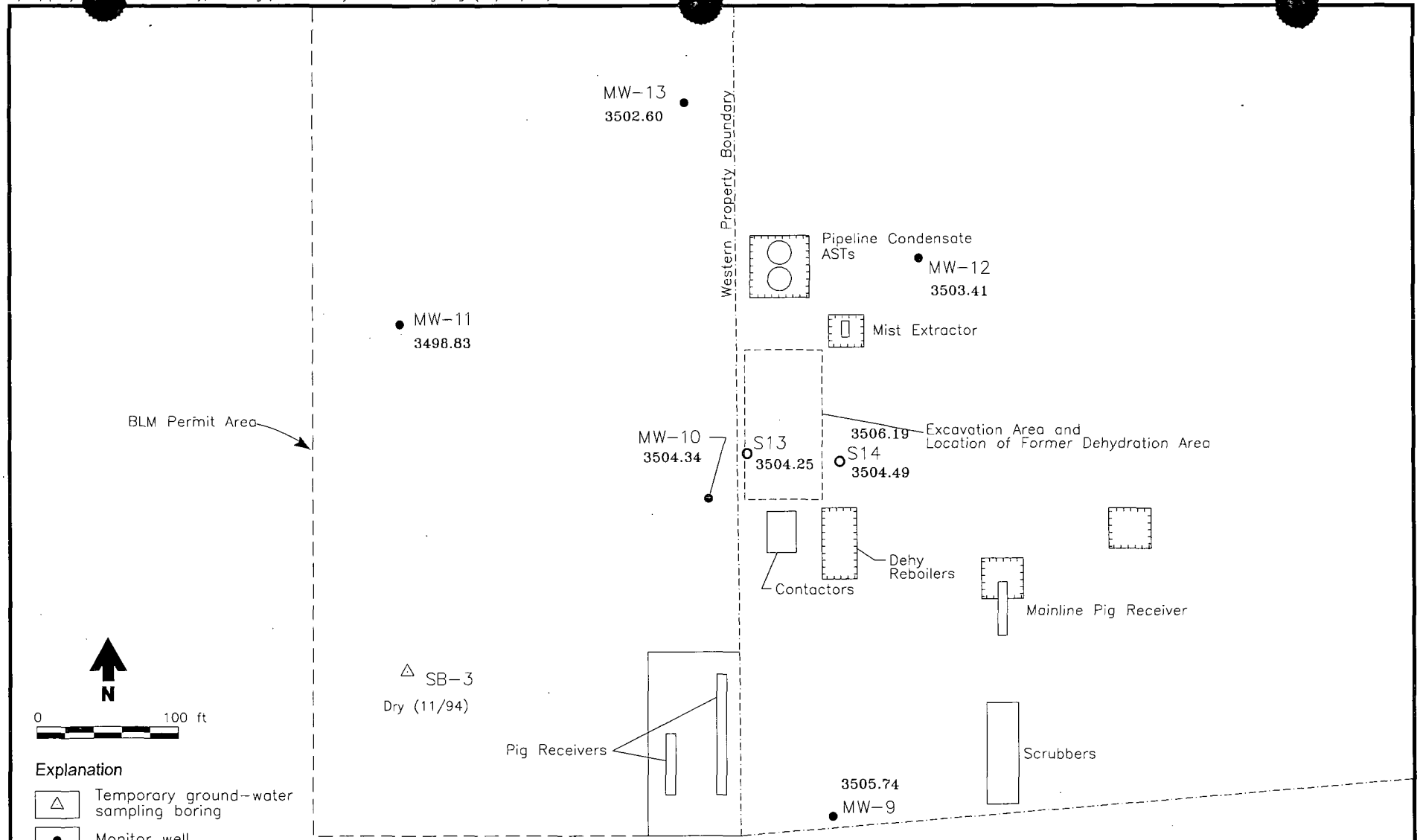
Site Diagram

WT-1 COMPRESSOR STATION
Dehydration Area

Figure 2

CYPRESS ENGINEERING SERVICES, INC.

f:/.../proje[illegible]/wt-1 dehy/drawings/wt-1 dehy site drawing.dwg (03/12/08)



Groundwater Elevations

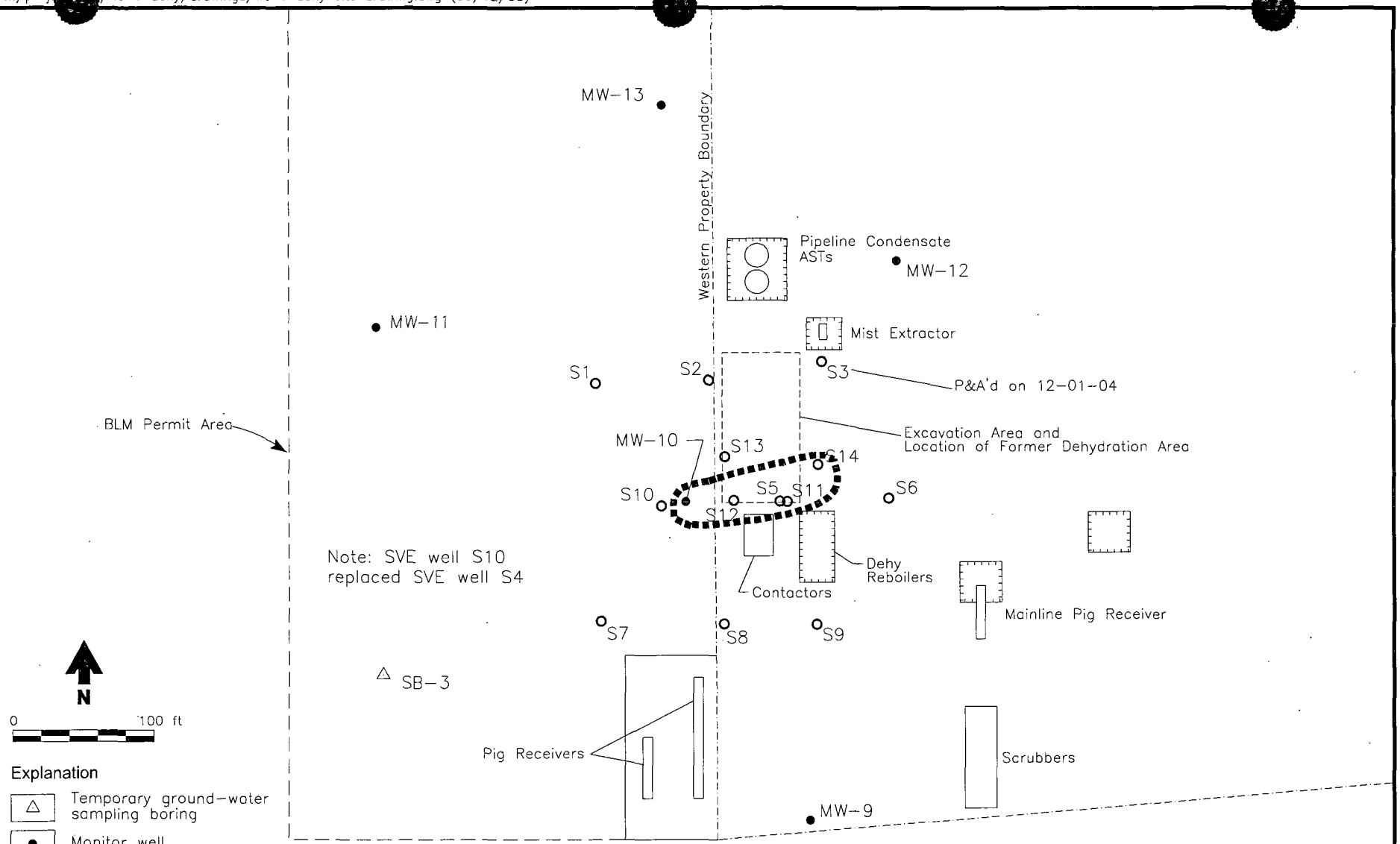
December 10, 2008

WT-1 COMPRESSOR STATION
Dehydration Area

CYPRESS ENGINEERING SERVICES, INC.

Figure 3

f:/.../proj/wt-1 dehy/drawings/wt-1 dehy site drawing.dwg (03/12/08)



Distribution of PSH

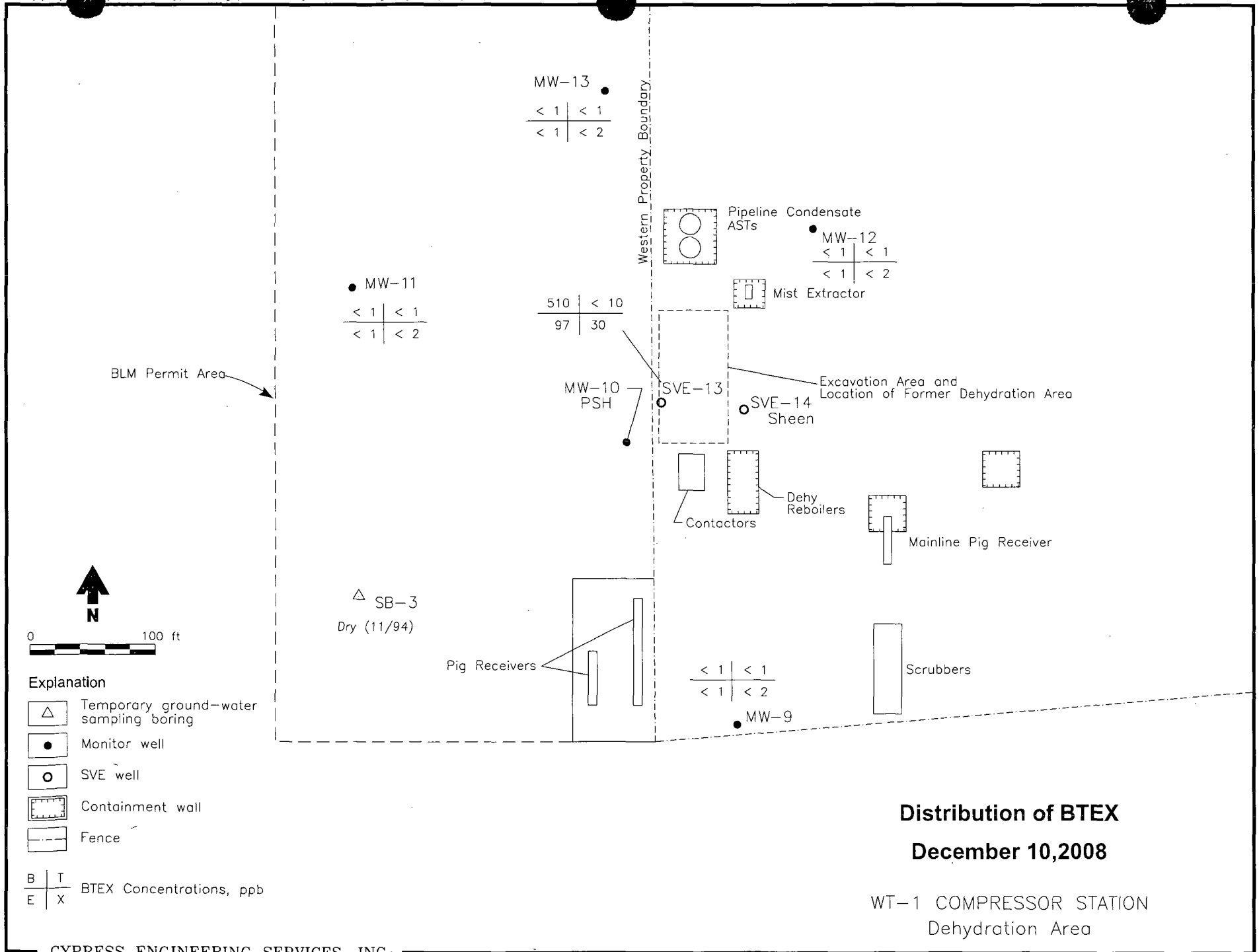
December 10, 2008

WT-1 COMPRESSOR STATION
Dehydration Area

Figure 4

CYPRESS ENGINEERING SERVICES, INC.

f:/.../proj[redacted]/wt-1 dehy/drawings/wt-1 dehy site drawing.dwg (03/12/08)



Distribution of BTEX

December 10,2008

WT-1 COMPRESSOR STATION
Dehydration Area

Figure 5

CYPRESS ENGINEERING SERVICES, INC.

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

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
	04/20/00		(a)	55.19	(a)	3498.26
	05/11/00		(a)	54.14	(a)	3499.31
	05/25/00		53.66	53.98	0.32	3500.59
	06/08/00		(a)	58.24	(a)	3495.21
	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

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

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

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

NOTES:
PSH - Phase separated hydrocarbon
Corrections to ground water surface elevation for presence of hydrocarbon is calculated assuming a specific gravity of
(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, Houston, TX 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
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

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-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

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
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

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
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

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

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

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

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

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

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

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

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

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

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

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 other samples were collected after purging 3 casin
(d) Dup MW-17 - Blind duplicate sample collected and labeled as MW-17.

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

SVE Well	Date	Gasoline Range VOCs		< C5	C5-C6	C6-C7	C7-C8	C8-C9	C9-C10	C10-C11	C11-C12	C12-C14	C14+
		(ug/L)	(ppmv) [c]	(%)									
Combined Flow													
(Core Lab)	02/10/97		6,240										
	03/20/97	6,600	1,639	0.0	2.7	29.3	32.1	23.2	9.2	3.0	0.4	0.1	0.0
(Core Lab)	03/20/97		1,740										
	08/06/97	5,000	1,242	0.3	4.0	21.2	34.8	25.3	10.2	3.5	0.7	0.0	0.0
	12/30/97	7,300	1,813	0.0	2.4	13.6	35.0	29.0	16.9	2.6	0.4	0.1	0.0
	08/05/98	6,500	1,615	0.0	1.3	15.4	32.2	30.5	13.7	5.2	1.3	0.4	0.0
	08/12/98	5,300	1,317	0.0	1.5	8.9	30.9	30.5	22.5	4.7	0.9	0.1	0.0
(dup)	08/12/98	5,000	1,242	0.1	1.5	8.8	31.8	32.9	18.0	5.0	1.4	0.4	0.1
	04/13/99	6,800	1,689	0.0	1.2	8.0	28.5	32.7	23.6	3.9	1.8	0.3	0.0
	12/07/99	4,800	1,192	0.1	6.2	17.6	31.8	28.8	10.0	4.2	0.9	0.2	0.2
(dup)	12/07/99	4,900	1,217	0.1	6.2	17.5	32.3	28.6	9.7	4.2	1.1	0.3	0.0
	05/22/00(d)	3,700	919	0.0	3.8	13.4	35.0	28.7	12.4	4.7	0.8	0.6	0.6
(dup)	05/22/00(d)	6,300	1,565	0.0	3.2	12.1	34.1	31.5	11.4	5.4	1.6	0.6	0.1
	06/15/00(d)	3,000	745	0.1	3.9	16.6	37.7	29.8	8.6	2.1	0.6	0.1	0.5
(dup)	06/15/00(d)	3,700	919	0.1	3.3	15.4	32.6	29.8	10.9	5.8	1.6	0.4	0.1
	08/21/00(d)	3,900	969	0.0	2.9	12.2	28.7	30.0	15.4	7.9	2.4	0.5	0.0
	06/10/02(d)	3,630	902	0.0	1.3	8.3	27.1	30.8	24.6	4.8	2.6	0.5	0.0
(dup)	06/10/02(d)	3,440	854	0.0	1.4	8.4	27.9	31.6	24.3	4.2	2.1	0.1	0.0
	08/09/02(d)	551	137	0.0	4.3	18.9	31.5	23.8	10.3	3.5	2.2	2.9	2.6
(dup)	08/09/02(d)	543	135	0.0	4.6	20.6	34.0	25.1	10.3	3.2	1.5	0.3	0.4
	05/02/03(d)	3,450	857	0.3	3.3	14.6	29.3	19.8	24.4	5.4	2.8	0.1	0.0
(dup)	05/02/03(d)	2,740	681	0.3	3.4	15.3	30.3	20.0	23.4	4.8	2.4	0.1	0.0
	07/25/03(d)	665	165	0.0	2.8	17.2	28.3	34.4	15.4	1.7	0.2	0.0	0.0
(dup)	07/25/03(d)	1,550	385	0.0	2.0	11.7	23.6	36.4	21.1	4.2	1.0	0.0	0.0
	08/21/03(d)	2,590	643	0.0	4.7	20.1	16.0	26.0	25.8	6.1	1.2	0.1	0.0
	04/20/04(d)	2,750	683	0.5	3.4	13.8	21.4	38.3	15.7	5.9	0.9	0.1	0.0
(dup)	04/20/04(d)	2,740	681	0.6	3.7	15.1	23.6	31.3	17.7	6.5	1.1	0.3	0.1
	08/30/04(d)	2,590	643	2.7	5.2	15.9	29.3	24.5	15.3	5.9	1.2	0.0	0.0
(dup)	08/30/04(d)	2,110	524	0.7	3.1	13.2	29.8	27.1	17.5	6.7	1.5	0.3	0.1
	08/08/05(d)	2,060	512	0.8	2.8	11.8	25.3	27.7	20.3	7.5	2.8	1.0	0.0
(dup)	08/08/05(d)	2,440	606	0.8	2.6	11.2	26.1	28.8	21.8	6.3	2.0	0.4	0.0
	11/14/05(d)	1,620	402	0.8	3.6	10.9	30.8	27.0	16.1	7.5	2.9	0.4	0.0
(dup)	11/14/05(d)	1,830	455	0.7	3.2	10.0	29.4	27.4	17.3	8.1	3.2	0.7	0.0
	09/18/06(e)	1,250	311	1.7	4.2	15.1	29.2	27.0	15.6	6.0	1.2	0.0	0.0
(dup)	09/18/06(e)	1,300	323	1.8	4.4	15.7	29.9	27.4	14.7	5.4	0.7	0.0	0.0
	07/01/08(f)	1,400	348	0.8	2.9	8.3	21.6	28.9	22.7	13.1	1.7	0.0	0.0
(dup)	07/01/08(f)	1,370	340	0.7	2.9	8.2	20.8	26.8	25.4	13.2	2.0	0.0	0.0

Notes:
(a) All air samples analyzed by Hall Laboratory of Albuquerque, NM
(b) PID = Photoionization detector
(c) Conversion Factor:
$P = 0.88$ atm, $MW = 110$ g/mole, $R = 0.08205$ L*atm/(K*mole), $T = 293$oK
C ppmv = C ug/L * ((R * T)/(MW*P))
C ppmv = C ug/L * 0.2484
(d) Total Flow analysis included wells SVE-11, 12, 13, 14 & MW-10
(e) Total Flow analysis included wells SVE-6, 11, 12, 14 & MW-10

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	510	
SVE-14	BTEX	na	contains PSH intermittently

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

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 11, 2008

Sandra Sharp
Cypress Engineering
7171 Highway 6 North
Suite 102
Houston, TX 770952422

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

RE: TWP WT-1 Station DEHY GW 2008

Order No.: 0806051

Dear Sandra Sharp:

Hall Environmental Analysis Laboratory, Inc. received 6 sample(s) on 6/4/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Jun-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY Area GW Sampling
Lab Order: 0806051

Lab ID: 0806051-01 **Collection Date:** 5/30/2008 2:40:00 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	6/9/2008 4:36:05 PM
Toluene	ND	1.0		µg/L	1	6/9/2008 4:36:05 PM
Ethylbenzene	ND	1.0		µg/L	1	6/9/2008 4:36:05 PM
Xylenes, Total	ND	2.0		µg/L	1	6/9/2008 4:36:05 PM
Surr: 4-Bromofluorobenzene	92.0	68.9-122		%REC	1	6/9/2008 4:36:05 PM

Lab ID: 0806051-02 **Collection Date:** 5/30/2008 3:12:00 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	6/9/2008 5:06:15 PM
Toluene	ND	1.0		µg/L	1	6/9/2008 5:06:15 PM
Ethylbenzene	ND	1.0		µg/L	1	6/9/2008 5:06:15 PM
Xylenes, Total	ND	2.0		µg/L	1	6/9/2008 5:06:15 PM
Surr: 4-Bromofluorobenzene	90.9	68.9-122		%REC	1	6/9/2008 5:06:15 PM

Lab ID: 0806051-03 **Collection Date:** 5/30/2008 3:30:00 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	6/9/2008 5:36:21 PM
Toluene	ND	1.0		µg/L	1	6/9/2008 5:36:21 PM
Ethylbenzene	ND	1.0		µg/L	1	6/9/2008 5:36:21 PM
Xylenes, Total	ND	2.0		µg/L	1	6/9/2008 5:36:21 PM
Surr: 4-Bromofluorobenzene	93.3	68.9-122		%REC	1	6/9/2008 5:36:21 PM

Lab ID: 0806051-04 **Collection Date:** 5/30/2008 3:35:00 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	6/9/2008 6:06:32 PM
Toluene	ND	1.0		µg/L	1	6/9/2008 6:06:32 PM
Ethylbenzene	ND	1.0		µg/L	1	6/9/2008 6:06:32 PM
Xylenes, Total	ND	2.0		µg/L	1	6/9/2008 6:06:32 PM
Surr: 4-Bromofluorobenzene	99.0	68.9-122		%REC	1	6/9/2008 6:06:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	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: *11-Jun-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY Area GW Sampling
Lab Order: 0806051

Lab ID: 0806051-05 **Collection Date:** 5/30/2008 4:15:00 PM
Client Sample ID: SVE-13 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	280	10		µg/L	10	6/9/2008 6:39:16 PM
Toluene	2.8	1.0		µg/L	1	6/10/2008 12:07:05 PM
Ethylbenzene	33	1.0		µg/L	1	6/10/2008 12:07:05 PM
Xylenes, Total	75	2.0		µg/L	1	6/10/2008 12:07:05 PM
Surr: 4-Bromofluorobenzene	111	68.9-122		%REC	1	6/10/2008 12:07:05 PM

Lab ID: 0806051-06 **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	6/9/2008 7:09:21 PM
Toluene	ND	1.0		µg/L	1	6/9/2008 7:09:21 PM
Ethylbenzene	ND	1.0		µg/L	1	6/9/2008 7:09:21 PM
Xylenes, Total	ND	2.0		µg/L	1	6/9/2008 7:09:21 PM
Surr: 4-Bromofluorobenzene	92.9	68.9-122		%REC	1	6/9/2008 7:09:21 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	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: TWP WT-1 Station DEHY Area GW Sampling **Work Order:** 0806051

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: 0806051-01A MSD		*MSD*			Batch ID:	**R28852**	Analysis Date:		6/9/2008 8:09:42 PM
Benzene	17.55	µg/L	1.0	87.7	85.9	113	0.148	27	
Toluene	18.00	µg/L	1.0	90.0	86.4	113	0.620	19	
Ethylbenzene	18.06	µg/L	1.0	90.3	83.5	118	0.530	10	
Xylenes, Total	54.08	µg/L	2.0	90.1	83.4	122	0.248	13	
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R28852**	Analysis Date:		6/9/2008 12:34:56 PM
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: 5ML RB		*MBLK*			Batch ID:	**R28877**	Analysis Date:		6/10/2008 9:36:14 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:	**R28852**	Analysis Date:		6/9/2008 9:39:56 PM
Benzene	18.32	µg/L	1.0	91.6	85.9	113			
Toluene	18.15	µg/L	1.0	90.7	86.4	113			
Ethylbenzene	18.24	µg/L	1.0	91.2	83.5	118			
Xylenes, Total	54.60	µg/L	2.0	91.0	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R28877**	Analysis Date:		6/10/2008 6:50:34 PM
Benzene	18.63	µg/L	1.0	93.2	85.9	113			
Toluene	18.61	µg/L	1.0	93.0	86.4	113			
Ethylbenzene	18.57	µg/L	1.0	92.8	83.5	118			
Xylenes, Total	55.89	µg/L	2.0	93.1	83.4	122			
Sample ID: 0806051-01A MS		*MS*			Batch ID:	**R28852**	Analysis Date:		6/9/2008 7:39:36 PM
Benzene	17.57	µg/L	1.0	87.9	85.9	113			
Toluene	18.11	µg/L	1.0	90.6	86.4	113			
Ethylbenzene	18.16	µg/L	1.0	90.8	83.5	118			
Xylenes, Total	53.95	µg/L	2.0	89.9	83.4	122			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name CYP | Date Received: 6/4/2008

Work Order Number 0806051 | Received by: TLS

Checklist completed by: Tonya Shomin (Signature) 6/4/08 (Date) | Sample ID labels checked by: AB (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 ☐		
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 ☑	
Container/Temp Blank temperature?	3°	*<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
Attn: George Robinson, PE.
Address: 7171 Highway 6 North, Suite 102, Houston TX 77095
Phone #: 281-797-3420
email or Fax#: 281-797-1881
QA/QC Package: George.Robinson@cypressinc.us
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: Twp WT-1 Station Derby Area GW Sampling 2008
Project #: Monitor Well Sampling Twp WT-1 Derby Area 2008
Project Manager: Sandy Sharp
Sampler: CM Barnhill, JR
On Ice: ☒ 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

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0806051	Analysis Request: BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	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)
5/30/08	1440	MW-12	3x40mL Vials	HCl	1	X											N
5/30/08	1512	MW-9	3x40mL Vials	HCl	2	X											N
5/30/08	1530	MW-11	↓	↓	3	X											N
05/30/08	1535	MW-13			4	X											N
5/30/08	1615	SVE-13			5	X											N
		Trip Blank	2x40mL Vials	HCl	6												

Date: 6/03/08 Time: 1400 Relinquished by:
Received by: 6/4/08 910
Date: Time: Relinquished by:
Received by:

Remarks: Any questions please call Sandy Sharp @ 281-797-3421

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

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, December 19, 2008

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 Station DEHY

Order No.: 0812271

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 6 sample(s) on 12/15/2008 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: *19-Dec-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY
Lab Order: 0812271

Lab ID: 0812271-01 **Collection Date:** 12/11/2008 11:00:00 AM
Client Sample ID: MW-12 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	12/17/2008 12:43:38 PM
Toluene	ND	1.0		µg/L	1	12/17/2008 12:43:38 PM
Ethylbenzene	ND	1.0		µg/L	1	12/17/2008 12:43:38 PM
Xylenes, Total	ND	2.0		µg/L	1	12/17/2008 12:43:38 PM
Surr: 4-Bromofluorobenzene	82.1	65.9-130		%REC	1	12/17/2008 12:43:38 PM

Lab ID: 0812271-02 **Collection Date:** 12/11/2008 11:30:00 AM
Client Sample ID: MW-9 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	12/17/2008 2:25:48 AM
Toluene	ND	1.0		µg/L	1	12/17/2008 2:25:48 AM
Ethylbenzene	ND	1.0		µg/L	1	12/17/2008 2:25:48 AM
Xylenes, Total	ND	2.0		µg/L	1	12/17/2008 2:25:48 AM
Surr: 4-Bromofluorobenzene	95.8	65.9-130		%REC	1	12/17/2008 2:25:48 AM

Lab ID: 0812271-03 **Collection Date:** 12/11/2008 2:20:00 PM
Client Sample ID: MW-11 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	12/17/2008 2:56:03 AM
Toluene	ND	1.0		µg/L	1	12/17/2008 2:56:03 AM
Ethylbenzene	ND	1.0		µg/L	1	12/17/2008 2:56:03 AM
Xylenes, Total	ND	2.0		µg/L	1	12/17/2008 2:56:03 AM
Surr: 4-Bromofluorobenzene	87.5	65.9-130		%REC	1	12/17/2008 2:56:03 AM

Lab ID: 0812271-04 **Collection Date:** 12/11/2008 1:30:00 PM
Client Sample ID: SVE-13 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	510	10		µg/L	10	12/17/2008 3:28:55 AM
Toluene	ND	10		µg/L	10	12/17/2008 3:28:55 AM
Ethylbenzene	97	10		µg/L	10	12/17/2008 3:28:55 AM
Xylenes, Total	30	20		µg/L	10	12/17/2008 3:28:55 AM
Surr: 4-Bromofluorobenzene	96.4	65.9-130		%REC	10	12/17/2008 3:28:55 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY
Lab Order: 0812271

Lab ID: 0812271-05 **Collection Date:** 12/11/2008 2:30:00 PM
Client Sample ID: MW-13 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	12/17/2008 3:59:09 AM
Toluene	ND	1.0		µg/L	1	12/17/2008 3:59:09 AM
Ethylbenzene	ND	1.0		µg/L	1	12/17/2008 3:59:09 AM
Xylenes, Total	ND	2.0		µg/L	1	12/17/2008 3:59:09 AM
Surr: 4-Bromofluorobenzene	91.5	65.9-130		%REC	1	12/17/2008 3:59:09 AM

Lab ID: 0812271-06 **Collection Date:**
Client Sample ID: TRIP BLANK **Matrix:** TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	12/17/2008 4:29:36 AM
Toluene	ND	1.0		µg/L	1	12/17/2008 4:29:36 AM
Ethylbenzene	ND	1.0		µg/L	1	12/17/2008 4:29:36 AM
Xylenes, Total	ND	2.0		µg/L	1	12/17/2008 4:29:36 AM
Surr: 4-Bromofluorobenzene	86.4	65.9-130		%REC	1	12/17/2008 4:29:36 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: TWP WT-1 Station DEHY **Work Order:** 0812271

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R31647**	Analysis Date:	12/16/2008 10:41:58 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:	**R31647**	Analysis Date:	12/16/2008 9:21:40 PM	
Benzene	21.29	µg/L	1.0	106	85.9	113			
Toluene	21.46	µg/L	1.0	107	86.4	113			
Ethylbenzene	21.10	µg/L	1.0	106	83.5	118			
Xylenes, Total	63.66	µg/L	2.0	106	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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

[redacted]t Name CYP

Date Received: 12/15/2008

Work Order Number 0812271

Received by: AT

Checklist completed by: [signature] Signature 10/15/08 Date

Sample ID labels checked by: [initials] 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 ☐		
[redacted] - 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 ☑	
Container/Temp Blank temperature?	2°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

[redacted]ctive Action _____

Chain-of-Custody Record

Client: Cypress Engineering Services
7171 Hwy 6 North, Ste 102
Mailing Address: Houston TX 77095
Phone #: 281.797.3420
email or Fax#: 281.859.1881
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Transwestern Pipeline Co WT-1 Deahy
Project #: TWP WT-1 Deahy
Project Manager: George Robinson
Sampler: Sean Shaw
On Ice: ☒ YES ☐ NO
Sample Temperature: 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. 0812211	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)
12/4/08	1100	W	MW-12	3/40ml	HCl	1	X															
	1130	W	MW-9			2	X															
	1410	W	MW-11			3	X															
	1330	W	SVE-13			4	X															
	1430	W	MW-13			5	X															
	—	W	Trip Blank	2/40ml		6	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/4/08	1000			12/13/08	1150
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, July 08, 2008

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 Station DEHY

Order No.: 0807053

Dear George Robinson:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 7/3/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

Hall Environmental Analysis Laboratory, Inc. **Date:** *08-Jul-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY
Lab Order: 0807053

CASE NARRATIVE

Analytical Comments for METHOD 8015GRO_A, SAMPLE 0807053-01A: Elevated surrogate due to matrix interference. Analytical Comments for METHOD 8015GRO_A, SAMPLE 0807053-02A: Elevated surrogate due to matrix interference.

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jul-08*

CLIENT: Cypress Engineering
Project: TWP WT-1 Station DEHY
Lab Order: 0807053

Lab ID: 0807053-01 **Collection Date:** 7/1/2008 12:45:00 PM
Client Sample ID: SVE TOTAL **Matrix:** AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1400	10.0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: <C5	0.800	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C05-C6	2.90	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C06-C7	8.30	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C07-C8	21.6	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C08-C9	28.9	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C09-C10	22.7	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C10-C11	13.1	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C11-C12	1.70	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C12-C14	ND	0		µg/L	2	7/3/2008 12:13:31 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	2	7/3/2008 12:13:31 PM
Surr: BFB	507	76.8-150	S	%REC	2	7/3/2008 12:13:31 PM

Lab ID: 0807053-02 **Collection Date:** 7/1/2008 12:50:00 PM
Client Sample ID: SVE NORTH **Matrix:** AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1370	10.0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: <C5	0.700	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C05-C6	2.90	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C06-C7	8.20	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C07-C8	20.8	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C08-C9	26.8	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C09-C10	25.4	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C10-C11	13.2	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C11-C12	2.00	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C12-C14	ND	0		µg/L	2	7/3/2008 12:43:44 PM
% GRO Hydrocarbons: C14+	ND	0		µg/L	2	7/3/2008 12:43:44 PM
Surr: BFB	563	76.8-150	S	%REC	2	7/3/2008 12:43:44 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	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: TWP WT-1 Station DEHY **Work Order:** 0807053

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID: **R29201**		Analysis Date:	7/3/2008 9:12:18 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID: **R29201**		Analysis Date:	7/3/2008 7:50:59 PM	
Gasoline Range Organics (GRO)	0.4760	mg/L	0.050	95.2	80	115			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name CYP | Date Received: 7/3/2008

Work Order Number 0807053 | Received by: TLS

Checklist completed by: Signature | 7/3/08 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 ☐		
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 ☑	

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 SERVICES
Address: 7011 HWY 6 NORTH STE 102 HOUSTON TX 77095
Phone #: 281.797.3425
email or Fax#: 281.859.1887
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush
Project Name: TRANSWESTERN PIPELINE CO WT-1 DEHY
Project #: TWP-WT-1 DEHY
Project Manager: GEORGE ROBINSON
Sampler: Sandy 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

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0807053	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	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)
7/1/08	1245	SVE TOTAL	1 LITER TEDLAR	∅	1			X													
7/1/08	1250	SVE NORTH	"	"	2			X													

Date	Time	Relinquished by:	Received by:	Remarks:
7/2/08	1700		7/3/08 0825	
Date:	Time:	Relinquished by:	Received by:	

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.