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REPORTS

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2001

OIL CONSERVATION DIV.

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elpaso Field Services

CERTIFIED MAIL 7001 1940 0003 1553 8735

June 28, 2002

Mr. William E. Freeman
Navajo Environmental Protection Agency
P. O. Box 1999
Shiprock, New Mexico 87420

RE: Bisti Flare Pit #1 Annual Report

Dear Mr. Freeman:

El Paso Field Services (EPFS) hereby submits the annual report for the Bisti Flare Pit #1. The annual report details all work in 2001.

Should you have any questions or comments regarding the enclosed report, please feel free to contact me at (505) 599-2124.

Sincerely,

Scott T. Pope, P.G.
Senior Environmental Scientist

Attachments: as stated

c.c. Mr. James Walker; USEPA, Farmington - w / enclosures; **Certified Mail # 7001 1940 0003 1553 8742**
Mr. Denny Foust; NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0003 1553 8728**
Mr. Bill Olson; NMOCD, Santa Fe – w / enclosures; **Certified Mail # 7001 1940 0003 1553 8711**
NNEPA – File

ANNUAL REPORT
BISTI FLARE PIT #1
SAN JUAN COUNTY, NEW MEXICO

RECEIVED
JUL 05 2003
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared for:

El Paso Field Services

Prepared by:

RJS Consulting, Inc.

July 2002

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1.0 INTRODUCTION

1.1 PURPOSE OF REPORT

At the request of El Paso Field Services (EPFS) and under subcontract to Montgomery Watson Harza (MWH), RJS Consulting, Inc. (RJS) has prepared the following annual report for the Bisti Flare Pit #1 Meter Code LD-267 site. Hydrologic Consultants, Inc. of Colorado (HCI) produced an annual report in March 2000 for the site that summarized all of the previous work that had occurred and provided recommendations for remediation of the pit and ground water. GeoAnalysis, Inc. issued the annual report for 2001 (GeoAnalysis, Inc., 2001). The GeoAnalysis report summarized work that included well installation, water-quality sampling, the excavation and removal of approximately 6,000 cubic yards of hydrocarbon-impacted soil. The current annual report will not duplicate the background discussion of the site, and the reader is directed to those reports for summaries of all activities that occurred at the site up to the date of this report. The current annual report will describe activities that occurred at the site from June 1, 2001 until May 31, 2002. For ease of reference, Figure 1 shows the location of the Bisti Flare Pit. Figure 2 shows the locations of the former flare pit and the monitoring wells.

1.2 SUMMARY OF ACTIVITIES

Since the production of the last annual report the following activities have occurred at the site:

- Water sampling of select wells in October 2001 and April 2002
- Measurement of water levels in select wells in October 2001 and April 2002

A description and results of each of these activities are provided in this report.

2.0 SITE INVESTIGATIONS

2.1 WATER-QUALITY SAMPLING

Based upon the analysis of water-quality trends that was presented in the 2000 and 2001 Annual Reports (HCI, 2000 and GeoAnalysis, 2001) a number of monitoring wells was selected for sampling on a semi-annual basis. These wells are located north, east, southeast, and south of the pit for the purpose of monitoring water-quality trends away from the pit. The goal is to monitor wells that may have relatively high concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX) close to the former pit and wells that are located on the edge of the estimated extent of BTEX in ground water. The wells selected for monitoring included: PZ-16, PZ-21, PZ-22, PZ-26, PZ-29, PZ-32, PZ-33, and PZ-36 (Figure 2). Water samples were collected from these wells on October 9, 2001 and on April 17, 2002. These time periods were selected as they represent perched ground-water elevations at the end of winter prior to irrigation on adjacent agricultural land, and at the end of the summer coinciding with the end of irrigation. The samples are analyzed for BTEX, nitrates, and sulfates. The results of the analyses are tabulated in Table 1 and the data packages are contained in Appendix A.

2.2 WATER-LEVEL MEASUREMENTS

Water levels were measured in October 2001 and April 2002 in the following wells: PZ-9, PZ-16, PZ-21, PZ-22, PZ-23, PZ-26, PZ-29, PZ-33, PZ-35, and PZ-36. Again, these time periods were selected for water-level measurements as they represent perched ground-water elevations at the end of winter and at the end of summer. Figures 3 and 4 are the potentiometric surface maps for perched ground water for October 2001 and April 2002, respectively. Table 2 lists the water-level measurements for the wells.

3.0 RESULTS OF DATA COLLECTION

3.1 WATER-QUALITY ANALYSES

As discussed earlier, select wells have been sampled since October 2001. Table 1 lists the wells and the analytical results for the various sampling events. Appendix B contains graphs of the BTEX concentrations measured in two wells. The other wells that have been monitored either have low or non-detectable concentrations of BTEX, or have elevated concentrations where trends are not obvious. The exception is well PZ-36, where total BTEX concentrations appear to have declined over the three sampling events from approximately 40,000 µg/L (May 2001) total BTEX to approximately 17,000 µg/L in April 2002. Figure 5 shows the distribution of total BTEX detected in each well for the sampling that occurred in October 2001. No attempt was made to contour the data, as the data points are sparse and there is an isolated area of elevated total BTEX.

Based upon a visual observation of the trends of total BTEX it appears that concentrations are decreasing in PZ-21, remaining generally low in PZ-22, and remaining elevated in MW-29. The waters from wells PZ-16, PZ-23, and PZ-26 were non-detectable for total BTEX. Samples from wells PZ-32, PZ-33, and PZ-34 have only low levels of BTEX (less than 10 µg/L).

It is expected that concentrations will generally decline because the major source of BTEX, the former pit, has been removed. Table 1 also provides information on the analyses for nitrate and sulfate. In general, the perched water-bearing zone contains low to non-detectable concentrations of nitrate and elevated concentrations of sulfate. The nitrates that are found in several of the wells are probably due to the treatment fluids that were injected in the late 1990s. The elevated concentrations of nitrates are generally detected in wells that contain low concentrations of hydrocarbons. Elevated concentrations (in the range of 4,000 to 5,000 mg/L) of sulfate are generally associated with low concentrations (a few parts per billion or non-

detectable) of hydrocarbons. In areas where the sulfate concentrations are low (600 mg/L or less), the hydrocarbon concentrations are elevated. The sulfate will facilitate the degradation of the hydrocarbons as the sulfate is used as an electron acceptor for anaerobic biodegradation of BTEX, and the observations noted above support this hypothesis.

A simple calculation was made to estimate the amount of total BTEX in perched ground water at the site and to relate this calculation to total petroleum hydrocarbons (TPH). This calculation assumes that the area of elevated concentrations of total BTEX extend from the vicinity of PZ-9 (in April 2001, this well contained approximately 13,000 µg/L of total BTEX) to the southern property line; a distance of about 160 feet from PZ-9. The width of elevated total BTEX concentrations was assumed to extend from the edge of the former flare pit to a distance of 40 feet to the east. This distance is slightly east of well PZ-36, a well that contains elevated concentrations of total BTEX. The thickness of the saturated zone was assumed to be two feet. This assumption is based upon observations of saturated thicknesses in the former excavation and on measured thicknesses of water in the monitoring wells. In reviewing the geologic logs for select wells, it was noted that the screened intervals in the wells extended into a silty-clay and clay unit. The thickness of perched water that collects in the well may not be reflective of the actual thickness of water in the more permeable geologic materials, as the borehole within the clay unit will act as a sump. Lastly, the porosity of the geologic materials was assumed to be 0.25. The average concentration of total BTEX in the volume of perched ground water was assumed to be 25,000 µg/L.

Based upon the assumptions provided above, the calculated mass of total BTEX is about five (5) pounds. Assuming that the total BTEX is approximately 10 percent (a value based upon the fraction found in gasoline, similar type hydrocarbons were discharged to the former pit) of the total TPH fraction that may be present at the site, the total TPH is estimated to be about 50 pounds. The total amount of TPH that was estimated to be in the bottom of the former pit was 32,000 pounds (GeoAnalysis, 2001). This value is probably a low estimate given the extent of TPH that was noted during the soil removal action. Assuming the lower value (32,000 pounds), the remaining amount of TPH is about 0.2 percent of the original TPH. In essence, the soil

removal action removed 99.98 percent of the TPH that was originally present at the site. Even if the perched ground-water concentration was doubled, tripled, or even quadrupled (an unreasonable assumption), the amount of TPH or total BTEX is insignificant in comparison to the original amount of TPH and total BTEX that was at the site. A logical conclusion is that the soil removal action was highly effective in removing TPH and total BTEX from the site.

3.2 WATER LEVELS AND PERCHED GROUND-WATER FLOW DIRECTIONS

Table 2 is a listing of the water levels for the monitoring wells at the site. Appendix C contains the hydrographs for the various monitoring wells. As shown in Appendix C almost all of the water levels have declined significantly since the injection of the treatment fluids ceased in 1998 and reduced recharge due to the ongoing drought.

Figures 3 and 4 are water-level maps for October 2001 and April 2002, respectively. The general perched ground-water flow direction is to the east. This assumed flow direction is opposite to the general ground-water flow direction that is to the west and northwest towards the West Fork Gallegos Canyon (Figure 1). This difference in flow direction is reflective of the fact that the ground water monitored by the site wells is perched and is not influenced by the regional flow system. The water-level data show that the former pit is no longer acting as a source of recharge and that flow direction is governed by the topography of the top of the silty clay or silty sand deposits that were observed in the excavation and boreholes. These geologic units serve as the base of the perched ground-water system.

4.0 SUMMARY AND RECOMMENDATIONS

RJS Consulting, Inc. and EPFS are of the opinion that the Bisti Site should be closed without further remediation. The rationales for this opinion are summarized in the following bulleted items.

- Field observations from the excavation and boreholes show that the ground water encountered at the site is perched.
- The perched ground water is hydraulically isolated from water-bearing zones that are beneath the perched ground water. Information provided in the last annual report (GeoAnalysis, 2001) indicates that there is at least 60 feet of unsaturated materials beneath the perched zone.
- The perched ground water is at least 10 feet below land surface, resulting in a very low risk for dermal or inhalation contact with the perched ground water.
- EPFS will have control of the site for the foreseeable future; thus, the perched ground water will not be contacted, as EPFS will implement de facto institutional controls on the use of the property. No well drilling or contact with the perched ground water will be allowed without EPFS' permission.
- The perched ground water is contained within geologic materials that are of low hydraulic conductivity and transmissivity. Migration of chemicals of concern is limited. Also, active remediation options are limited because of the low hydraulic conductivity and transmissivity.
- There is a very low threat to the environment because of the amount of residual hydrocarbons remaining at the site. Estimates of residual total BTEX indicate that about five (5) pounds exist at the site. Assuming that total BTEX is approximately 10 percent of the TPH present at the site, residual TPH is estimated to be about 50 pounds. This mass of TPH is about 0.2 percent of the original TPH that was present at the site. Doubling or tripling the calculated amount of TPH or total BTEX still leads to the conclusion that there are insignificant masses of total BTEX and TPH at the site.
- It is also concluded that the excavation of over 6,000 cubic yards of hydrocarbon-impacted soil was efficient in removing the vast majority of BTEX and TPH masses.

In summary, it is recommended that no additional remediation occur at the site, as it is unwarranted given the small mass and isolated nature of the remaining BTEX and TPH. In addition, further remediation is unlikely to significantly reduce the mass of TPH and BTEX due to low hydraulic conductivity and transmissivity. It is recommended that water quality continue

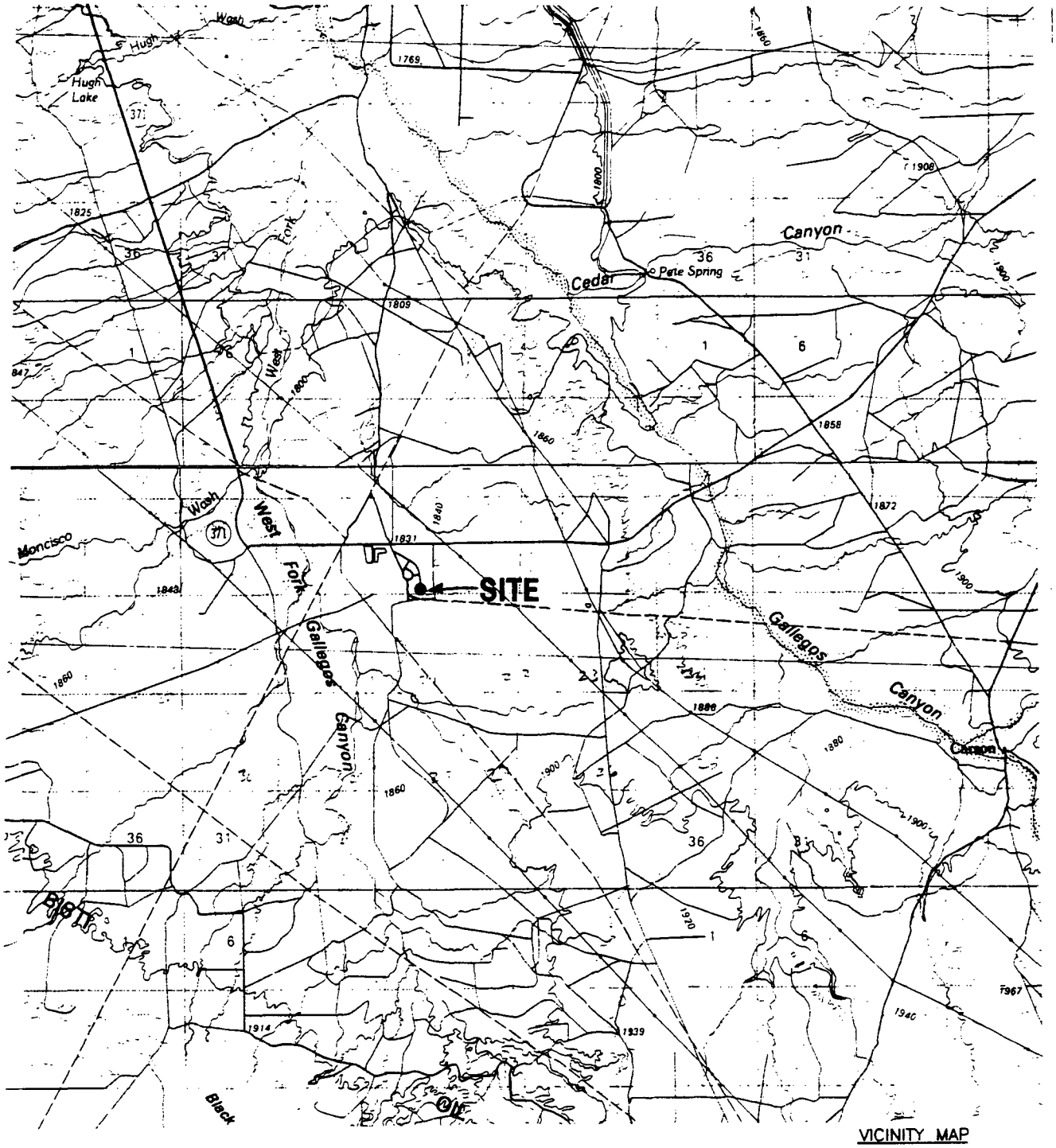
to be monitored in select wells (PZ-9, PZ-10, PZ-21, PZ-35 and PZ-36) for three years to assess whether migration of BTEX is occurring. Water levels should be measured in the wells that are sampled for water quality and the other existing wells. Given that perched ground-water conditions do not change significantly over a year, nor are the hydrocarbons migrating to any significant extent, it is recommended that samples and water levels only be collected once per year, preferably in April; which corresponds to the low-water period. Because the site presents a low risk, negotiations with regulatory agencies are recommended to be initiated so that final closure criteria, based upon risk, can be determined.

5.0 REFERENCES

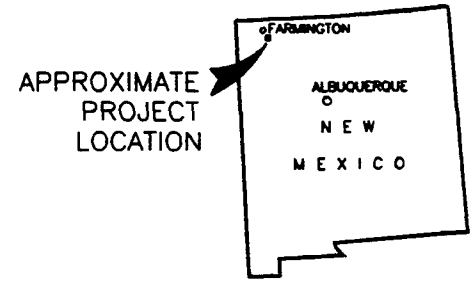
GeoAnalysis, Inc., 2001, Annual Report Bisti Flare Pit #1, San Juan County, New Mexico, 8p.

Hydrologic Consultants, Inc. of Colorado, 2000, Annual Report Bisti Flare Pit #1, San Juan County, New Mexico, 15p.

FIGURES



VICINITY MAP



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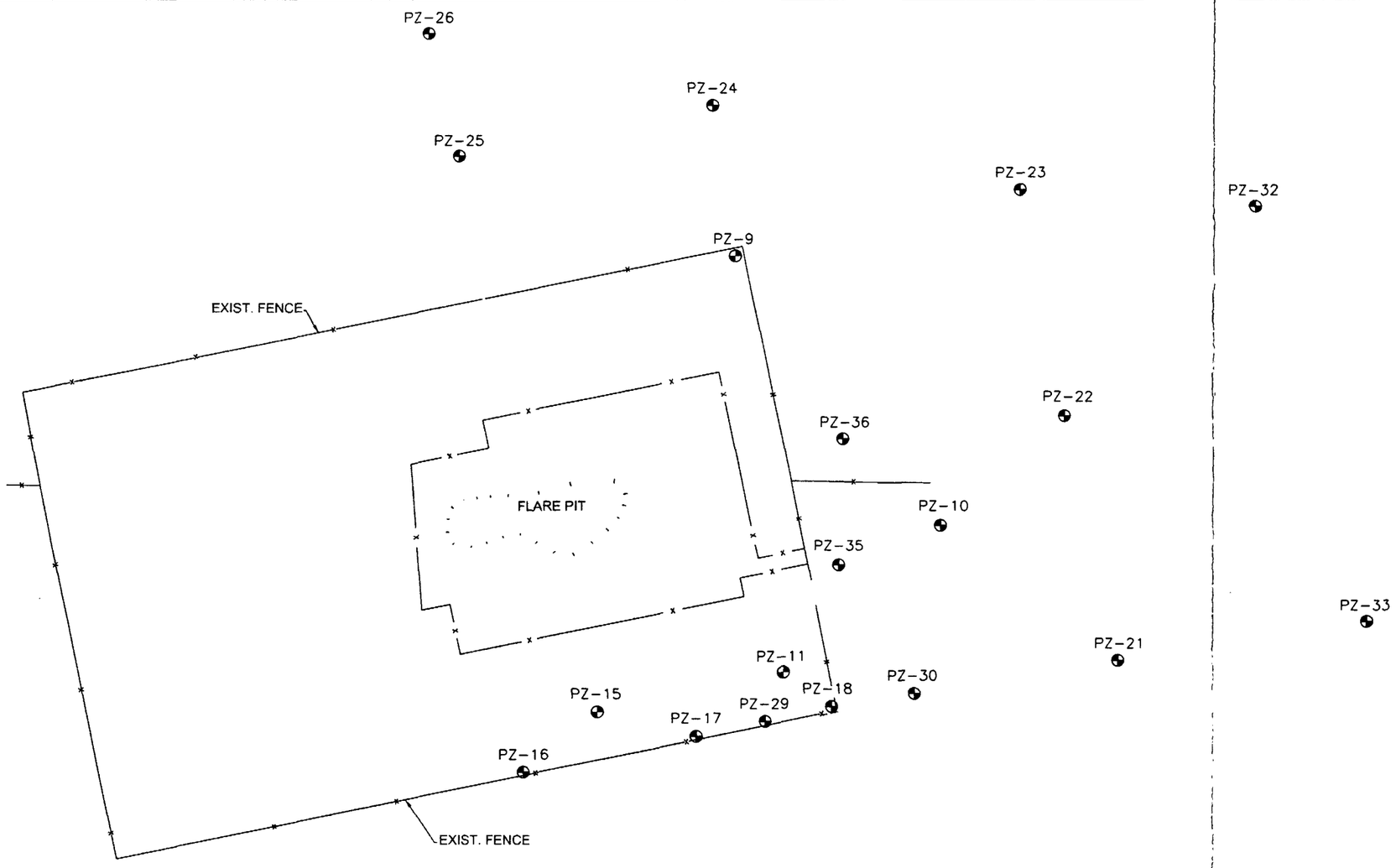
EL PASO FIELD SERVICES

Drawing: Fig1_site	Bisti Gathering Systen - San Juan County, New Mexico	Figure
Drawn By: RJS	**Site Location**	1
Date: 07-01		



EL PASO FIELD SERVICES

Legend

PZ-29 Monitoring Well Location

N

0 40 ft 80 ft

1 Inch is approximately equal to 40 feet

Bisti Gathering System
San Juan County, New Mexico

Drawing Name: WELL-LOCATION.dwg	Locations of Monitoring Wells	Figure 2
Drawn By: RJS		
Date: 06-01		

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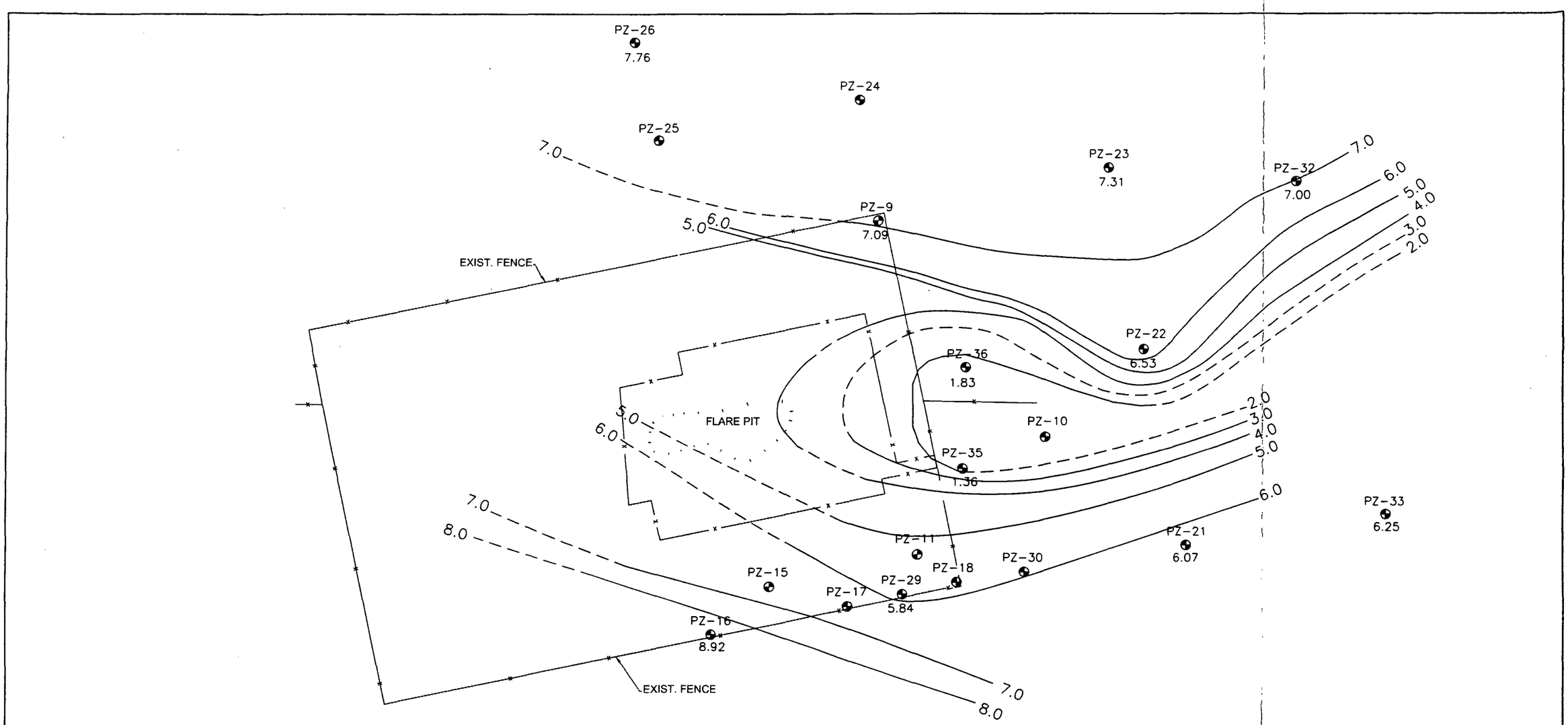

EL PASO FIELD SERVICES

Legend

PZ-29
5.84

Measured Water Level (ft above 6,000 ft-msl)
Well Location

Water Level Contour (ft above 6,000 ft-msl)
(dashed where inferred)

0 40 ft 80 ft

1 inch is approximately equal to 40 feet

Bisti Gathering System
San Juan County, New Mexico

Drawing Name: WL-OCT-2001.dwg	Measured Water Levels with Associated Contours from October 2001	Figure 3
Drawn By: RJS		
Date: 06-01		

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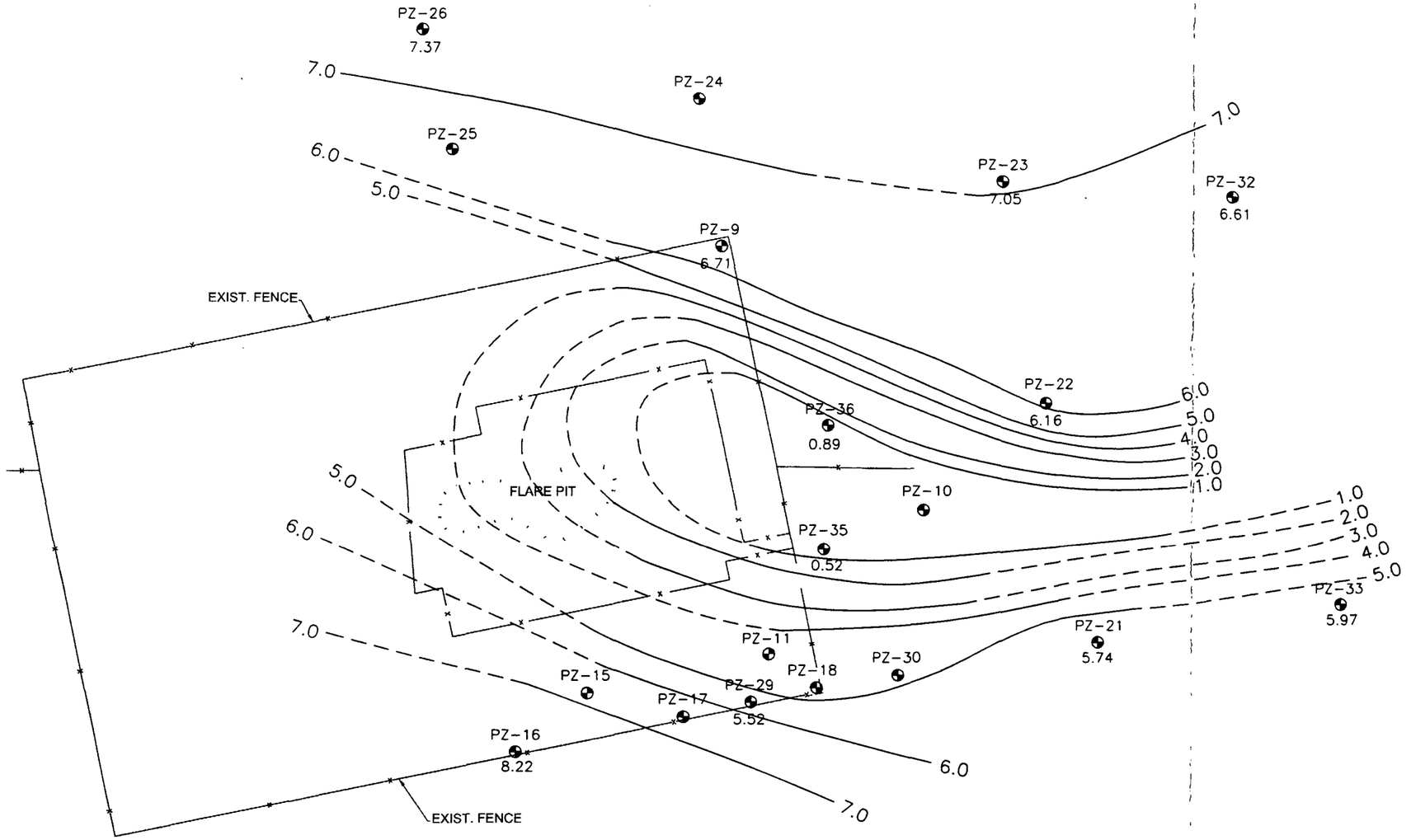

EL PASO FIELD SERVICES

Legend

PZ-29
5.52
Measured Water Level (ft above 6,000 ft-msl)
Well Location

Water Level Contour (ft above 6,000 ft-msl)
(dashed where inferred)

0 40 ft 80 ft
1 inch is approximately equal to 40 feet

Bisti Gathering System
San Juan County, New Mexico

Drawing Name: WL-APRIL-2002.dwg	Measured Water Levels with Associated Contours from April 2002	Figure 4
Drawn By: RJS		
Date: 06-01		

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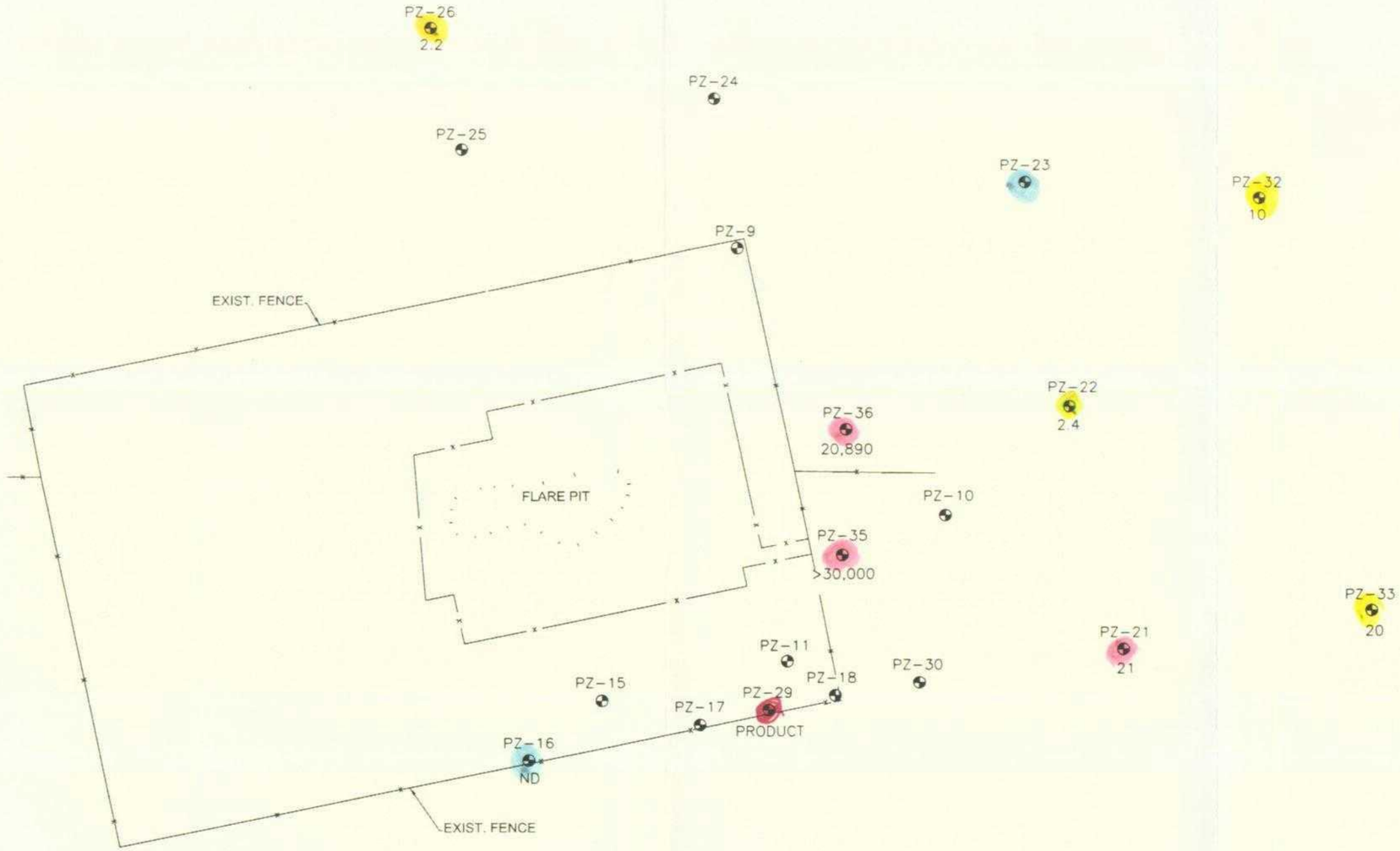

EL PASO FIELD SERVICES

Legend

PZ-33
20

Measured Total BTEX Concentration (ug/L)

0 40 ft 80 ft

1 inch is approximately equal to 40 feet

Bisti Gathering System
San Juan County, New Mexico

Drawing Name: BTEX-OCT-2001.dwg	Total BTEX Concentrations (ppb)	Figure 5
Drawn By: RJS		
Date: 06-01		

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TABLES

Table 1. Water Quality Analyses

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
10/7/1996	PZ-8	18000	10700	550	3600	32850	ND	20.6
6/16/1997	PZ-8	20400	13000	462	4040	37902	NM	NM
7/16/1997	PZ-8	20800	9660	536	3640	34636	ND	ND
8/18/1997	PZ-8	20400	15300	502	4260	40462	NM	NM
9/19/1997	PZ-8	20300	13700	546	4310	38856	ND	2.9
10/16/1997	PZ-8	22300	15200	572	4700	42772	NM	NM
11/17/1997	PZ-8	22100	15100	519	4280	41999	NM	NM
12/16/1997	PZ-8	23000	16100	555	4680	44335	NM	NM
1/19/1998	PZ-8	19100	14600	470	4140	38310	ND	1.1
3/3/1998	PZ-8	21900	14600	563	4850	41913	NM	NM
4/1/1998	PZ-8	21900	16100	550	4780	43330	NM	NM
5/7/1998	PZ-8	23900	15900	561	5010	45371	NM	NM
6/2/1998	PZ-8	22500	16000	548	4840	43888	NM	NM
7/6/1998	PZ-8	22500	16200	493	4610	43803	ND	ND
10/9/1998	PZ-8	20800	14300	402	3650	39152	NM	NM
3/23/1999	PZ-8	21000	15000	470	4570	41040	NM	NM
10/19/1999	PZ-8	23000	16000	380	4600	43980	NM	NM
3/15/2000	PZ-8	27000	16000	520	5400	48920	ND	ND
10/25/2000	PZ-8	15000	6900	650	17	22567	ND	41

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
10/7/1996	PZ-9	11900	15700	400	5500	33500	ND	32
6/16/1997	PZ-9	8610	10500	193	5310	24613	NM	NM
7/16/1997	PZ-9	8620	11000	250	5900	25770	ND	ND
8/18/1997	PZ-9	9710	11000	183	4980	25873	NM	NM
9/19/1997	PZ-9	8580	9420	1	5570	23571	ND	ND
10/16/1997	PZ-9	9970	11700	156	6220	28046	NM	NM
11/17/1997	PZ-9	8960	10100	41	3740	22841	NM	NM
12/16/1997	PZ-9	7890	8100	33.6	2520	18544	NM	NM
1/19/1998	PZ-9	4170	6490	22.1	2240	12922	ND	0.7
3/3/1998	PZ-9	8200	8760	103	3020	20083	NM	NM
4/1/1998	PZ-9	9860	11600	160	4150	25770	NM	NM
5/7/1998	PZ-9	10800	13600	185	4340	28925	NM	NM
6/2/1998	PZ-9	10200	12500	224	4290	27214	NM	NM
7/6/1998	PZ-9	9710	11400	188	4080	25378	ND	ND
10/9/1998	PZ-9	8980	9740	120	4170	23010	NM	NM
3/23/1999	PZ-9	4530	4940	42.6	2340	11853	NM	NM
10/19/1999	PZ-9	3200	4300	310	2900	10710	NM	NM
3/15/2000	PZ-9	8300	7300	330	3400	19330	ND	ND
10/25/2000	PZ-9	2500	3300	150	2000	7950	ND	17
4/9/2001	PZ-9	6000	4700	150	1800	12650	0.34	ND

NM - Not Measured
ND - Not Detected

BTEX constituent concentrations reported in micrograms per liter (ppb)
Sulfate and nitrate concentrations reported in milligrams per liter (ppm)

Table 1. Water Quality Analyses

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
6/18/1997	PZ-16	1	1	1	3	6	52.7	450
7/16/1997	PZ-16	1	1	1	3	6	37.6	437
8/18/1997	PZ-16	1	1	1	3	6	NM	NM
9/19/1997	PZ-16	1	1	1	3	6	42.6	456
10/16/1997	PZ-16	1	1	1	3	6	NM	NM
11/17/1997	PZ-16	1	1	1	3	6	NM	NM
12/16/1997	PZ-16	1	1	1	3	6	NM	NM
1/19/1998	PZ-16	1	1	1	3	6	52	440
3/3/1998	PZ-16	1	1	1	3	6	NM	NM
4/1/1998	PZ-16	1	1	1	3	6	NM	NM
5/7/1998	PZ-16	1	1	1	3	6	NM	NM
6/2/1998	PZ-16	1	1	1	3	6	NM	NM
7/6/1998	PZ-16	1	1	1	3	6	52.9	449
10/9/1998	PZ-16	1	1	1	3	6	NM	NM
3/23/1999	PZ-16	1	1	1	3	6	NM	NM
10/19/1999	PZ-16	0.5	0.5	0.5	0.5	2	NM	NM
3/15/2000	PZ-16	ND	ND	ND	ND	ND	57	550
10/25/2000	PZ-16	0.8	0.7	ND	0.7	ND	2	1960
4/9/2001	PZ-16	ND	ND	ND	ND	ND	57	430
10/9/2001	PZ-16	<0.5	<0.5	<0.5	<0.5	<2.0	57	640
4/17/2002	PZ-16	<0.5	<0.5	<0.5	<0.5	<2.0	54	1900

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
4/21/1997	PZ-21	1	1	1	3	6	22.3	3780
6/16/1997	PZ-21	1	1	1	3	6	NM	NM
7/15/1997	PZ-21	1	1	1	3	6	27.5	4420
8/18/1997	PZ-21	1	1	1	3	6	NM	NM
9/19/1997	PZ-21	1	1	1	3	6	25.3	4270
10/16/1997	PZ-21	1	1	1	3	6	NM	NM
11/17/1997	PZ-21	1.34	1	1	3	6	NM	NM
12/16/1997	PZ-21	3.39	1	1	3	8	NM	NM
1/19/1998	PZ-21	5.04	1	1	3	10	21.2	4332
3/3/1998	PZ-21	9.06	1	1	3	14	NM	NM
4/1/1998	PZ-21	11.3	1	1	3	16	NM	NM
5/7/1998	PZ-21	15.4	1	1	3	20	NM	NM
6/2/1998	PZ-21	21	1	1	3	26	NM	NM
7/6/1998	PZ-21	20.7	1	1	3	26	15.9	4674
10/9/1998	PZ-21	49.4	1	1	3	54	NM	NM
3/23/1999	PZ-21	34.1	1	1	3	39	NM	NM
10/19/1999	PZ-21	48	1.9	0.5	2.6	53	NM	NM
3/15/2000	PZ-21	39	ND	ND	ND	39	0.6	5400
10/25/2000	PZ-21	55	0.7	ND	0.6	56	0.2	76.7
4/9/2001	PZ-21	49	ND	ND	1.4	50	0.68	5160
10/9/2001	PZ-21	19	0.5	0.5	0.5	20.5	0.27	5700

NM - Not Measured
ND - Not Detected

BTEX constituent concentrations reported in micrograms per liter (ppb)
Sulfate and nitrate concentrations reported in milligrams per liter (ppm)

Table 1. Water Quality Analyses

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
4/23/1997	PZ-22	361	1	4.11	28.4	408	ND	4040
5/20/1997	PZ-22	156	1	1.12	13.1	171	NM	NM
5/30/1997	PZ-22	180	1	3.05	27.7	212	NM	NM
6/15/1997	PZ-22	374	1.34	4.25	26.1	406	NM	NM
7/15/1997	PZ-22	299	2	3.24	33.9	338	ND	4570
8/18/1997	PZ-22	152	1	1.82	30.9	186	NM	NM
9/19/1997	PZ-22	105	1.19	2.66	56	165	ND	4780
10/16/1997	PZ-22	80.3	0.62	6.03	54	141	NM	NM
11/17/1997	PZ-22	120	1	1.88	12.5	135	NM	NM
12/16/1997	PZ-22	168	1	1.71	10.6	181	NM	NM
1/19/1998	PZ-22	79.7	1	1	7.96	90	ND	4410
3/3/1998	PZ-22	65.8	1	1	3.9	72	NM	NM
4/1/1998	PZ-22	56	1	1	3	61	NM	NM
5/7/1998	PZ-22	35.4	1	1	3	40	NM	NM
6/2/1998	PZ-22	24.1	1	1	3	29	NM	NM
7/6/1998	PZ-22	61.5	1	1	3	67	2.4	4396
10/9/1998	PZ-22	1	1	1	3	6	NM	NM
3/23/1999	PZ-22	1	1	1	3	6	NM	NM
10/19/1999	PZ-22	1.9	0.5	0.5	4.2	7	NM	NM
3/15/2000	PZ-22	ND	ND	ND	ND	ND	20	3800
10/25/2000	PZ-22	0.6	0.7	ND	0.5	1.8	1.2	67
4/9/2001	PZ-22	0.7	ND	ND	ND	0.7	5.4	3840
10/9/2001	PZ-22	0.9	0.5	0.5	0.5	2.4	9.1	5200
4/17/2002	PZ-22	5	5	5	5	20	7.4	5800

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
4/23/1997	PZ-23	1	1	1	3	6	1.2	167
5/20/1997	PZ-23	1	1	1	3	6	37.4	4740
6/15/1997	PZ-23	1	1	1	3	6	NM	NM
7/15/1997	PZ-23	1	1	1	3	6	37.3	4450
8/18/1997	PZ-23	1	1	1	3	6	NM	NM
9/19/1997	PZ-23	1	1	1	3	6	42.6	4080
10/16/1997	PZ-23	1	1	1	3	6	NM	NM
11/17/1997	PZ-23	1	1	1	3	6	NM	NM
12/16/1997	PZ-23	1	1	1	3	6	NM	NM
1/19/1998	PZ-23	1	1	1	3	6	41	3888
3/3/1998	PZ-23	1	1	1	3	6	NM	NM
4/1/1998	PZ-23	1	1	1	3	6	NM	NM
5/7/1998	PZ-23	1	1	1	3	6	NM	NM
6/2/1998	PZ-23	1	1	1	3.29	6	NM	NM
7/6/1998	PZ-23	1	1	1	3	6	44.9	3640
10/9/1998	PZ-23	1	1	1	3	6	NM	NM
3/23/1999	PZ-23	1	1	1	3	6	NM	NM
10/19/1999	PZ-23	0.9	0.5	0.5	2.6	5	NM	NM
3/15/2000	PZ-23	ND	ND	ND	ND	ND	34	3700
10/25/2000	PZ-23	ND	ND	ND	ND	ND	8.4	162
4/9/2001	PZ-23	ND	ND	ND	ND	ND	38	3220

NM - Not Measured
ND - Not Detected

BTEX constituent concentrations reported in micrograms per liter (ppb)
Sulfate and nitrate concentrations reported in milligrams per liter (ppm)

Table 1. Water Quality Analyses

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
4/21/1997	PZ-26	1	1	1	3	6	55.8	5190
6/15/1997	PZ-26	1	1	1	3	6	NM	NM
7/15/1997	PZ-26	1	1	1	3	6	127	4690
8/18/1997	PZ-26	1	1	1	3	6	NM	NM
9/19/1997	PZ-26	1	1	1	3	6	137	4770
10/16/1997	PZ-26	1	1	1	3	6	NM	NM
11/17/1997	PZ-26	1	1	1	3	6	NM	NM
12/16/1997	PZ-26	1	1	1	3	6	NM	NM
1/19/1998	PZ-26	1	1	1	3	6	160	4804
3/3/1998	PZ-26	1	1	1	3	6	NM	NM
4/1/1998	PZ-26	1	1	1	3	6	NM	NM
5/7/1998	PZ-26	1	1	1	3	6	NM	NM
6/2/1998	PZ-26	1	1	1	3	6	NM	NM
7/6/1998	PZ-26	1	1	1	3	6	228	4629
10/9/1998	PZ-26	1	1	1	3	6	NM	NM
3/23/1999	PZ-26	1	1	1	3	6	NM	NM
10/19/1999	PZ-26	<0.5	<0.5	<0.5	<0.5	<2.0	NM	NM
3/15/2000	PZ-26	1.6	2.8	ND	3.1	7.5	120	5200
10/25/2000	PZ-26	ND	ND	ND	ND	ND	2.2	124
4/9/2001	PZ-26	ND	ND	ND	ND	ND	62	4400
10/9/2001	PZ-26	0.6	0.6	0.5	0.5	2.2	62	5700
4/17/2002	PZ-26	0.5	0.5	0.5	1	2.5	57	1700

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
5/20/1997	PZ-29	8790	4600	318	2560	16268	ND	188
6/16/1997	PZ-29	11900	6630	335	2820	21685	NM	NM
7/16/1997	PZ-29	9630	7620	210	2940	20400	ND	34
8/18/1997	PZ-29	15300	14600	429	4780	35109	NM	NM
9/19/1997	PZ-29	13500	13100	396	4760	31756	ND	9.8
10/16/1997	PZ-29	14800	14800	554	5040	35194	NM	NM
11/17/1997	PZ-29	14700	14800	497	4680	34677	NM	NM
12/16/1997	PZ-29	16100	15400	550	5170	37220	NM	NM
1/19/1998	PZ-29	14700	13800	515	4670	33685	ND	ND
3/3/1998	PZ-29	15200	14000	468	5020	34688	NM	NM
4/1/1998	PZ-29	15100	13300	485	4930	33815	NM	NM
5/7/1998	PZ-29	15600	13500	460	4820	34380	NM	NM
6/2/1998	PZ-29	14900	14100	484	4780	34264	NM	NM
7/6/1998	PZ-29	14900	12700	484	4830	32914	ND	ND
10/9/1998	PZ-29	13300	10800	508	4530	29138	NM	NM
3/23/1999	PZ-29	11000	6980	454	4000	22434	NM	NM
10/19/1999	PZ-29	7500	2400	440	2600	12940	NM	NM
3/15/2000	PZ-29	15000	9200	700	5700	30600	ND	15
10/25/2000	PZ-29	5000	2300	350	1800	9450	0.05	322
4/9/2001	PZ-29	8200	2300	330	2200	13030	ND	6.3
10/9/2001	PZ-29	Had Product No Sample Taken						

NM - Not Measured
ND - Not Detected

BTEX constituent concentrations reported in micrograms per liter (ppb)
Sulfate and nitrate concentrations reported in milligrams per liter (ppm)

Table 1. Water Quality Analyses

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
12/7/2000	PZ-32	2	1.1	1.4	3.5	8	10	4000
4/9/2001	PZ-32	1.3	0.5	0.5	2.4	5	12	3020
10/9/2001	PZ-32	2.5	2.5	2.5	2.5	10	11	4300
12/6/2001	PZ-32	2	1.1	1.4	3.5	8	4.6	4000
4/17/2002	PZ-32	2	0.5	0.5	1	4	9.7	3400

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
12/7/2000	PZ-33	ND	ND	ND	ND	ND	18	4200
4/9/2001	PZ-33	ND	ND	ND	ND	ND	13	5510
10/9/2001	PZ-33	5	5	5	5	20	5.7	5400
12/7/2001	PZ-33	0.5	0.5	0.5	0.5	2	18	4200
4/17/2002	PZ-33	1.7	0.5	0.5	1	3.7	2	5600

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
12/7/2000	PZ-34	7.6	ND	ND	ND	8	NM	NM

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
5/1/2001	PZ-35	19000	12000	800	6500	38300	0.34	100
4/17/2002	PZ-35	21000	11000	670	4600	37270	0.31	23

Date Sampled	Well #	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	Total Nitrate	Sulfate
5/1/2001	PZ-36	18000	16000	630	5300	39930	0.23	540
10/9/2001	PZ-36	14000	2200	590	4100	20890	0.18	56
4/17/2002	PZ-36	14000	150	440	2400	16990	0.19	140

NM - Not Measured
ND - Not Detected

BTEX constituent concentrations reported in micrograms per liter (ppb)
Sulfate and nitrate concentrations reported in milligrams per liter (ppm)

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-04	06/15/97	1118	6018.06	7.16	7.16	0.00	6010.90
PZ-04	07/15/97	NM	6018.06	7.91	7.91	0.00	6010.15
PZ-04	08/18/97	NM	6018.06	7.23	7.23	0.00	6010.83
PZ-04	09/19/97	1734	6018.06	7.15	7.15	0.00	6010.91
PZ-04	10/16/97	1421	6018.06	7.58	7.58	0.00	6010.48
PZ-04	11/17/97	1450	6018.06	8.31	8.31	0.00	6009.75
PZ-04	12/16/97	1515	6018.06	8.60	8.60	0.00	6009.46
PZ-04	01/19/98	1715	6018.06	8.65	8.65	0.00	6009.41
PZ-04	03/03/98	1715	6018.06	8.89	8.89	0.00	6009.17
PZ-04	04/01/98	1456	6018.06	8.91	8.91	0.00	6009.15
PZ-04	05/07/98	1532	6018.06	8.92	8.92	0.00	6009.14
PZ-04	06/02/98	NM	6018.06	8.97	8.97	NM	6009.09
PZ-04	07/06/98	NM	6018.06	8.97	8.97	NM	6009.09
PZ-O4	10/09/98	NM	6018.06	NM	NM	NM	NM
PZ-04	03/23/99	NM	6018.06	9.38	9.38	NM	6008.68
PZ-04	03/16/01	NM	6018.06	10.55	10.55	0.00	6007.51

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-05	05/03/97	NM	6023.65	15.65	15.65	0.00	6008.00
PZ-05	06/15/97	NM	6023.65	15.34	15.34	0.00	6008.31
PZ-05	07/15/97	1122	6023.65	15.32	15.32	0.00	6008.33
PZ-05	08/18/97	NM	6023.65	15.15	15.15	0.00	6008.50
PZ-05	09/19/97	1744	6023.65	14.97	14.97	0.00	6008.68
PZ-05	10/16/97	1430	6023.65	14.97	14.97	0.00	6008.68
PZ-05	11/17/97	1350	6023.65	15.11	15.11	0.00	6008.54
PZ-05	12/16/97	1417	6023.65	15.20	15.20	0.00	6008.45
PZ-05	01/19/98	1610	6023.65	15.18	15.18	0.00	6008.47
PZ-05	03/03/98	1600	6023.65	15.21	15.21	0.00	6008.44
PZ-05	04/01/98	1410	6023.65	15.18	15.18	0.00	6008.47
PZ-05	05/07/98	1440	6023.65	15.17	15.17	0.00	6008.48
PZ-05	06/02/98	1515	6023.65	15.30	15.30	0.00	6008.35
PZ-05	07/06/98	1222	6023.65	15.42	15.42	NM	6008.23
PZ-05	10/09/98	NM	6023.65	NM	NM	NM	NM
PZ-05	03/23/99	NM	6023.65	15.71	15.71	NM	6007.94
PZ-05	03/16/01	NM	6023.65	16.3	16.3	NM	6007.35

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-08	05/03/97	11:16	6022	14.15	14.15	0.00	6007.85
PZ-08	06/15/97	NM	6022	13.97	13.97	0.00	6008.03
PZ-08	07/15/97	1124	6022	13.86	13.86	0.00	6008.14
PZ-08	08/18/97	NM	6022	13.66	13.66	0.00	6008.34
PZ-08	09/19/97	1751	6022	13.47	13.47	0.00	6008.53
PZ-08	10/16/97	1438	6022	13.54	13.54	0.00	6008.46
PZ-08	11/17/97	1400	6022	13.53	13.53	0.00	6008.47
PZ-08	12/16/97	1422	6022	13.57	13.57	0.00	6008.43
PZ-08	01/19/98	1615	6022	13.39	13.39	0.00	6008.61
PZ-08	03/03/98	1604	6022	13.38	13.38	0.00	6008.62
PZ-08	04/01/98	1415	6022	13.37	13.37	0.00	6008.63
PZ-08	05/07/98	1447	6022	13.38	13.38	0.00	6008.62
PZ-08	06/02/98	1518	6022	13.44	13.44	NM	6008.56
PZ-08	07/06/98	1227	6022	13.50	13.50	NM	6008.50
PZ-08	10/09/98	NM	6022	NM	NM	NM	NM
PZ-08	03/23/99	NM	6022	13.85	13.85	NM	6008.15
PZ-08	10/19/99	NM	6022	13.99	13.99	NM	6008.01
PZ-08	03/14/00	NM	6022	14.15	14.15	NM	6007.85
PZ-08	10/25/00	NM	6022	14.06	14.16	NM	6007.84
PZ-08	12/07/00	NM	6022	14.26	14.26	NM	6007.74
PZ-08	03/16/01	NM	6022	14.35	14.35	NM	6007.65

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-09	05/03/97	11:13	6021.51	13.88	13.88	0.00	6007.63
PZ-09	06/15/97	NM	6021.51	13.66	13.66	0.00	6007.85
PZ-09	07/15/97	1126	6021.51	13.61	13.61	0.00	6007.90
PZ-09	08/18/97	NM	6021.51	13.43	13.43	0.00	6008.08
PZ-09	09/19/97	1802	6021.51	13.29	13.29	0.00	6008.22
PZ-09	10/16/97	1445	6021.51	13.38	13.38	0.00	6008.13
PZ-09	11/17/97	1405	6021.51	13.34	13.34	0.00	6008.17
PZ-09	12/16/97	1427	6021.51	13.37	13.37	0.00	6008.14
PZ-09	01/19/98	1625	6021.51	13.23	13.23	0.00	6008.28
PZ-09	03/03/98	1610	6021.51	13.25	13.25	0.00	6008.26
PZ-09	04/01/98	1420	6021.51	13.27	13.27	0.00	6008.24
PZ-09	05/07/98	1453	6021.51	13.37	13.37	0.00	6008.14
PZ-09	06/02/98	1521	6021.51	13.45	13.45	NM	6008.06
PZ-09	07/06/98	1232	6021.51	13.50	13.50	NM	6008.01
PZ-09	10/09/98	NM	6021.51	NM	NM	NM	NM
PZ-09	03/23/99	NM	6021.51	13.72	13.72	NM	6007.79
PZ-09	10/19/99	NM	6021.51	13.81	13.81	NM	6007.70
PZ-09	03/14/00	NM	6021.51	13.98	13.98	NM	6007.53
PZ-09	10/25/00	1311	6021.51	13.9	13.9	NM	6007.61
PZ-09	12/07/00	NM	6021.51	14	14	NM	6007.51
PZ-09	03/16/01	NM	6021.51	14.14	14.14	NM	6007.37

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-10	05/03/97	NM	NM	DRY	DRY	NM	DRY
PZ-10	06/15/97	NM	6025.40	18.19	18.19	0.00	6007.21
PZ-10	07/15/97	1049	6025.40	18.20	18.20	0.00	6007.20
PZ-10	08/18/97	NM	6025.40	18.02	18.02	0.00	6007.38
PZ-10	09/19/97	1657	6025.40	17.90	17.90	0.00	6007.50
PZ-10	10/16/97	1331	6025.40	18.50	18.50	0.00	6006.90
PZ-10	11/17/97	1245	6025.40	18.05	18.05	0.00	6007.35
PZ-10	12/16/97	1340	6025.40	18.07	18.07	0.00	6007.33
PZ-10	01/19/98	1520	6025.40	17.97	17.97	0.00	6007.43
PZ-10	03/03/98	1505	6025.40	17.98	17.98	0.00	6007.42
PZ-10	04/01/98	1330	6025.40	18.01	18.01	0.00	6007.39
PZ-10	05/07/98	1402	6025.40	18.16	18.16	0.00	6007.24
PZ-10	06/02/98	1445	6025.40	18.21	18.21	NM	6007.19
PZ-10	07/06/98	1125	6025.40	18.30	18.30	NM	6007.10
PZ-10	10/09/98	NM	6025.40	NM	NM	NM	NM
PZ-10	03/23/99	NM	6025.40	18.45	18.45	NM	6006.95
PZ-10	12/07/00	NM	6025.40	18.59	18.59	NM	6006.81
PZ-10	03/16/01	NM	6025.40	18.62	18.62	NM	6006.78

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-11	05/03/97	11:28	6023.94	16.84	16.84	0.00	6007.10
PZ-11	06/15/97	NM	6023.94	16.74	16.74	0.00	6007.20
PZ-11	07/15/97	1106	6023.94	16.69	16.69	0.00	6007.25
PZ-11	08/18/97	NM	6023.94	16.51	16.51	0.00	6007.43
PZ-11	09/19/97	1810	6023.94	16.39	16.39	0.00	6007.55
PZ-11	10/16/97	1455	6023.94	16.43	16.43	0.00	6007.51
PZ-11	11/17/97	1415	6023.94	16.48	16.48	0.00	6007.46
PZ-11	12/16/97	1435	6023.94	16.58	16.58	0.00	6007.36
PZ-11	01/19/98	1650	6023.94	16.53	16.53	0.00	6007.41
PZ-11	03/03/98	1615	6023.94	16.54	16.54	0.00	6007.40
PZ-11	04/01/98	1425	6023.94	16.51	16.51	#REF!	6007.43
PZ-11	05/07/98	1500	6023.94	16.57	16.57	0.00	6007.37
PZ-11	06/02/98	1525	6023.94	16.65	16.65	NM	6007.29
PZ-11	07/06/98	1255	6023.94	16.75	16.75	NM	6007.19
PZ-11	10/09/98	NM	6023.94	NM	NM	NM	NM
PZ-11	03/23/99	NM	6023.94	17.03	17.03	NM	6006.91
PZ-11	03/16/01	NM	6023.94	17.54	17.54	NM	6006.4

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO (feet)	WATER DEPTH TO (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF (feet)
PZ-15	05/03/97	11:40	6024.87	17.54	17.54	0.00	6007.33
PZ-15	06/15/97	NM	6024.87	17.27	17.27	0.00	6007.60
PZ-15	07/15/97	1058	6024.87	17.14	17.14	0.00	6007.73
PZ-15	08/18/97	NM	6024.87	16.82	16.82	0.00	6008.05
PZ-15	09/19/97	1817	6024.87	16.62	16.63	0.01	6008.24
PZ-15	10/16/97	1504	6024.87	16.70	16.71	0.01	6008.16
PZ-15	11/17/97	1454	6024.87	16.80	16.81	0.01	6008.06
PZ-15	12/16/97	1520	6024.87	16.92	16.92	0.00	6007.95
PZ-15	01/19/98	1720	6024.87	16.89	16.89	0.00	6007.98
PZ-15	03/03/98	1717	6024.87	16.89	16.89	0.00	6007.98
PZ-15	04/01/98	1502	6024.87	16.82	16.82	0.00	6008.05
PZ-15	05/07/98	1537	6024.87	16.83	16.83	0.00	6008.04
PZ-15	06/02/98	1548	6024.87	16.95	16.95	NM	6007.92
PZ-15	07/0698	1310	6024.87	17.10	17.10	NM	6007.77
PZ-15	10/09/98	NM	6024.87	NM	NM	NM	NM
PZ-15	03/23/99	NM	6024.87	17.52	17.52	NM	6007.35
PZ-15	03/16/01	NM	6024.87	18.17	18.17	NM	6006.70

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-16	08/18/97	NM	6024.59	14.24	14.24	0.00	6010.35
PZ-16	09/19/97	1826	6024.59	14.22	14.22	0.00	6010.37
PZ-16	10/16/97	1257	6024.59	14.60	14.60	0.00	6009.99
PZ-16	11/17/97	1215	6024.59	14.84	14.84	0.00	6009.75
PZ-16	12/16/97	1315	6024.59	15.18	15.18	0.00	6009.41
PZ-16	01/19/98	1455	6024.59	15.43	15.43	0.00	6009.16
PZ-16	03/03/98	1435	6024.59	15.80	15.80	0.00	6008.79
PZ-16	04/01/98	1302	6024.59	15.90	15.90	0.00	6008.69
PZ-16	05/07/98	1335	6024.59	15.99	15.99	0.00	6008.60
PZ-16	06/02/98	1312	6024.59	16.01	16.01	0.00	6008.58
PZ-16	07/06/98	1055	6024.59	15.98	15.98	0.00	6008.61
PZ-16	10/09/98	NM	6024.59	NM	NM	NM	NM
PZ-16	03/23/99	NM	6024.59	15.46	15.46	NM	6009.13
PZ-16	10/19/99	NM	6024.59	14.85	14.85	NM	6009.74
PZ-16	3/14/2000	NM	6024.59	15.89	15.89	NM	6008.7
PZ-16	10/25/00	NM	6024.59	15.62	15.62	NM	6008.97
PZ-16	12/7/2000	NM	6024.59	15.95	15.95	NM	6008.64
PZ-16	3/16/2001	NM	6024.59	16.07	16.07	NM	6008.52

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-17	06/15/97	NM	6023.72	16.47	16.47	0.00	6007.25
PZ-17	07/15/97	1100	6023.72	16.37	16.37	0.00	6007.35
PZ-17	08/18/97	NM	6023.72	16.18	16.18	0.00	6007.54
PZ-17	09/19/97	1725	6023.72	16.08	16.08	0.00	6007.64
PZ-17	10/16/97	1512	6023.72	16.10	16.10	0.00	6007.62
PZ-17	11/17/97	1420	6023.72	16.15	16.15	0.00	6007.57
PZ-17	12/16/97	1440	6023.72	16.23	16.23	0.00	6007.49
PZ-17	01/19/98	1635	6023.72	16.32	16.32	0.00	6007.40
PZ-17	03/03/98	1620	6023.72	16.30	16.30	0.00	6007.42
PZ-17	04/01/98	1430	6023.72	16.25	16.25	0.00	6007.47
PZ-17	05/07/98	1505	6023.72	16.24	16.24	0.00	6007.48
PZ-17	06/02/98	1530	6023.72	16.34	16.34	NM	6007.38
PZ-17	07/06/98	1237	6023.72	16.43	16.43	NM	6007.29
PZ-17	10/09/98	NM	6023.72	NM	NM	NM	NM
PZ-17	03/23/99	NM	6023.72	16.74	16.74	NM	6006.98
PZ-17	12/07/00	NM	6023.72	17.20	17.20	NM	6006.52
PZ-17	03/16/01	NM	6023.72	17.28	17.28	NM	6006.44

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-18	06/15/97	NM	6024.33	17.29	17.29	0.00	6007.04
PZ-18	07/15/97	1104	6024.33	17.28	17.28	0.00	6007.05
PZ-18	08/18/97	NM	6024.33	17.14	17.14	0.00	6007.19
PZ-18	09/19/97	1832	6024.33	17.07	17.07	0.00	6007.26
PZ-18	10/16/97	1520	6024.33	17.13	17.13	0.00	6007.20
PZ-18	11/17/97	1425	6024.33	17.15	17.15	0.00	6007.18
PZ-18	12/16/97	1446	6024.33	17.22	17.22	0.00	6007.11
PZ-18	01/19/98	1645	6024.33	17.19	17.19	0.00	6007.14
PZ-18	03/03/98	1625	6024.33	17.19	17.19	0.00	6007.14
PZ-18	04/01/98	1437	6024.33	17.17	17.17	0.00	6007.16
PZ-18	05/07/98	1515	6024.33	17.27	17.27	0.00	6007.06
PZ-18	06/02/98	1540	6024.33	17.32	17.32	NM	6007.01
PZ-18	07/06/98	1250	6024.33	17.40	17.40	NM	6006.93
PZ-18	10/09/98	NM	6024.33	NM	NM	NM	NM
PZ-18	03/23/99	NM	6024.33	17.65	17.65	NM	6006.68
PZ-18	12/07/00	NM	6024.33	18.14	18.14	NM	6006.19
PZ-18	03/16/01	NM	6024.33	18.17	18.17	NM	6006.16

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-19	06/15/97	NM	6024.19	16.80	16.80	0.00	6007.39
PZ-19	07/15/97	1114	6024.19	16.74	16.74	0.00	6007.45
PZ-19	08/18/97	NM	6024.19	16.56	16.56	0.00	6007.63
PZ-19	09/19/97	1840	6024.19	16.44	16.44	0.00	6007.75
PZ-19	10/16/97	1530	6024.19	16.44	16.44	0.00	6007.75
PZ-19	11/17/97	1436	6024.19	16.48	16.48	0.00	6007.71
PZ-19	12/16/97	1453	6024.19	16.58	16.58	0.00	6007.61
PZ-19	01/19/98	1652	6024.19	16.58	16.58	0.00	6007.61
PZ-19	03/03/98	1632	6024.19	16.61	16.61	0.00	6007.58
PZ-19	04/01/98	1442	6024.19	16.55	16.55	0.00	6007.64
PZ-19	05/07/98	1522	6024.19	16.58	16.58	0.00	6007.61
PZ-19	06/02/98	1542	6024.19	16.67	16.67	NM	6007.52
PZ-19	07/06/98	1300	6024.19	16.78	16.78	NM	6007.41
PZ-19	10/09/98	NM	6024.19	NM	NM	NM	NM
PZ-19	03/23/99	NM	6024.19	17.09	17.09	NM	6007.1
PZ-19	03/16/01	NM	6024.19	17.34	17.73	1.24	6006.46

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-20	06/15/97	NM	6023.95	15.84	15.84	0.00	6008.11
PZ-20	07/15/97	1112	6023.95	15.79	15.79	0.00	6008.16
PZ-20	08/18/97	NM	6023.95	15.60	15.60	0.00	6008.35
PZ-20	09/19/97	1847	6023.95	15.49	15.49	0.00	6008.46
PZ-20	10/16/97	1535	6023.95	15.50	15.50	0.00	6008.45
PZ-20	11/17/97	1440	6023.95	15.67	15.67	0.00	6008.28
PZ-20	12/16/97	1500	6023.95	15.82	15.82	0.00	6008.13
PZ-20	01/19/98	1700	6023.95	15.85	15.85	0.00	6008.10
PZ-20	03/03/98	1638	6023.95	15.86	15.86	0.00	6008.09
PZ-20	04/01/98	1448	6023.95	15.78	15.78	0.00	6008.17
PZ-20	05/07/98	1527	6023.95	15.78	15.78	0.00	6008.17
PZ-20	06/02/98	1545	6023.95	15.93	15.93	0.00	6008.02
PZ-20	07/06/98	1305	6023.95	16.05	16.05	NM	6007.9
PZ-20	10/09/98	NM	6023.95	NM	NM	NM	NM
PZ-20	03/23/99	NM	6023.95	16.41	16.41	NM	6007.54
PZ-20	03/16/01	NM	6023.95	17.1	17.1	NM	6006.85

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-21	06/15/97	NM	6028.60	21.55	21.55	0.00	6007.05
PZ-21	07/15/97	1043	6028.60	21.68	21.68	0.00	6006.92
PZ-21	08/18/97	NM	6028.60	21.55	21.55	0.00	6007.05
PZ-21	09/19/97	1652	6028.60	21.44	21.44	0.00	6007.16
PZ-21	10/16/97	1337	6028.60	21.59	21.59	0.00	6007.01
PZ-21	11/17/97	1250	6028.60	21.58	21.58	0.00	6007.02
PZ-21	12/16/97	1352	6028.60	21.60	21.60	0.00	6007.00
PZ-21	01/19/98	1553	6028.60	21.40	21.40	0.00	6007.20
PZ-21	03/03/98	1515	6028.60	21.50	21.50	0.00	6007.10
PZ-21	04/01/98	1342	6028.60	21.57	21.57	0.00	6007.03
PZ-21	05/07/98	1415	6028.60	21.71	21.71	0.00	6006.89
PZ-21	06/02/98	1455	6028.60	21.72	21.72	0.00	6006.88
PZ-21	07/06/98	1135	6028.60	21.82	21.82	0.00	6006.78
PZ-21	10/09/98	NM	6028.60	NM	NM	NM	NM
PZ-21	03/23/99	NM	6028.60	21.89	21.89	0.00	6006.71
PZ-21	10/19/99	NM	6028.60	22.09	22.09	0.00	6006.51
PZ-21	03/14/00	NM	6028.60	22.12	22.12	0.00	6006.48
PZ-21	10/25/00	1019	6028.60	22.31	22.31	0.00	6006.29
PZ-21	12/07/00	NM	6028.60	22.41	22.41	0.00	6006.19
PZ-21	03/16/01	NM	6028.60	22.37	22.37	0.00	6006.23

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-22	07/15/97	1320	6027.13	19.78	19.78	0.00	6007.35
PZ-22	08/18/97	NM	6027.13	19.72	19.72	0.00	6007.41
PZ-22	09/19/97	1713	6027.13	19.57	19.57	0.00	6007.56
PZ-22	10/16/97	1355	6027.13	19.74	19.74	0.00	6007.39
PZ-22	11/17/97	1301	6027.13	19.71	19.71	0.00	6007.42
PZ-22	12/16/97	1358	6027.13	19.73	19.73	0.00	6007.40
PZ-22	01/19/98	1540	6027.13	19.48	19.48	0.00	6007.65
PZ-22	03/03/98	1544	6027.13	19.58	19.58	0.00	6007.55
PZ-22	04/01/98	1348	6027.13	19.68	19.68	0.00	6007.45
PZ-22	05/07/98	1420	6027.13	19.83	19.83	0.00	6007.30
PZ-22	06/02/98	1458	6027.13	19.84	19.84	0.00	6007.29
PZ-22	07/06/98	1140	6027.13	19.97	19.97	0.00	6007.16
PZ-22	10/09/98	NM	6027.13	NM	NM	NM	NM
PZ-22	03/23/99	NM	6027.13	19.98	19.98	0.00	6007.15
PZ-22	10/19/99	NM	6027.13	20.18	20.18	0.00	6006.95
PZ-22	03/14/00	NM	6027.13	20.22	20.22	0.00	6006.91
PZ-22	10/25/00	NM	6027.13	20.29	20.29	0.00	6006.84
PZ-22	12/07/00	NM	6027.13	20.75	20.75	0.00	6006.38
PZ-22	03/16/01	NM	6027.13	24.02	24.02	0.00	6003.11

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-23	07/15/97	1102	6024.71	16.74	16.74	0.00	6007.97
PZ-23	08/18/97	NM	6024.71	16.65	16.65	0.00	6008.06
PZ-23	09/19/97	1500	6024.71	16.58	16.58	0.00	6008.13
PZ-23	10/16/97	1324	6024.71	16.59	16.59	0.00	6008.12
PZ-23	11/17/97	1235	6024.71	16.55	16.55	0.00	6008.16
PZ-23	12/16/97	1332	6024.71	16.55	16.55	0.00	6008.16
PZ-23	01/19/98	1512	6024.71	16.54	16.54	0.00	6008.17
PZ-23	03/03/98	1500	6024.71	16.57	16.57	0.00	6008.14
PZ-23	04/01/98	1324	6024.71	16.58	16.58	0.00	6008.13
PZ-23	05/07/98	1355	6024.71	16.64	16.64	0.00	6008.07
PZ-23	06/02/98	1438	6024.71	16.70	16.70	0.00	6008.01
PZ-23	07/06/98	111	6024.71	16.75	16.75	0.00	6007.96
PZ-23	10/09/98	NM	6024.71	NM	NM	NM	NM
PZ-23	03/23/99	NM	6024.71	16.85	16.85	NM	6007.86
PZ-23	10/19/99	NM	6024.71	16.85	16.85	NM	6007.86
PZ-23	03/14/00	NM	6024.71	17.09	17.09	NM	6007.62
PZ-23	10/25/00	9:38	6024.71	17.03	17.03	NM	6007.68
PZ-23	12/07/00	NM	6024.71	17.10	17.10	NM	6007.61
PZ-23	03/16/01	NM	6024.71	17.26	17.26	NM	6007.45

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-24	08/18/97	NM	6023.01	14.75	14.75	0.00	6008.26
PZ-24	09/19/97	1541	6023.01	14.61	14.61	0.00	6008.40
PZ-24	10/16/97	1407	6023.01	14.68	14.68	0.00	6008.33
PZ-24	11/17/97	1335	6023.01	14.63	14.63	0.00	6008.38
PZ-24	12/16/97	1405	6023.01	14.71	14.71	0.00	6008.30
PZ-24	01/19/98	1550	6023.01	14.48	14.48	0.00	6008.53
PZ-24	03/03/98	1550	6023.01	14.59	14.59	0.00	6008.42
PZ-24	04/01/98	1355	6023.01	14.65	14.65	0.00	6008.36
PZ-24	05/07/98	1425	6023.01	14.75	14.75	0.00	6008.26
PZ-24	06/02/98	1500	6023.01	14.79	14.79	0.00	6008.22
PZ-24	07/06/98	1147	6023.01	14.89	14.89	0.00	6008.12
PZ-24	10/09/98	NM	6023.01	NM	NM	NM	NM
PZ-24	03/23/99	NM	6023.01	14.91	14.91	NM	6008.1

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-25	08/18/97	NM	6021.35	12.92	12.92	0.00	6008.43
PZ-25	09/19/97	1548	6021.35	12.79	12.79	0.00	6008.56
PZ-25	10/16/97	1411	6021.35	12.85	12.85	0.00	6008.50
PZ-25	11/17/97	1345	6021.35	12.82	12.82	0.00	6008.53
PZ-25	12/16/97	1410	6021.35	12.86	12.86	0.00	6008.49
PZ-25	01/19/98	1557	6021.35	12.70	12.70	0.00	6008.65
PZ-25	03/03/98	1554	6021.35	12.73	12.73	0.00	6008.62
PZ-25	04/01/98	1400	6021.35	12.76	12.76	0.00	6008.59
PZ-25	05/07/98	1431	6021.35	12.86	12.86	0.00	6008.49
PZ-25	06/02/98	1505	6021.35	12.91	12.91	NM	6008.44
PZ-25	07/06/98	1152	6021.35	13.02	13.02	NM	6008.33
PZ-25	10/09/98	NM	6021.35	NM	NM	NM	NM
PZ-25	03/23/99	NM	6021.35	13.11	13.11	NM	6008.24
PZ-25	03/16/01	NM	6021.35	13.5	13.5	NM	6007.85

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-26	06/15/97	NM	6021.00	12.57	12.57	0.00	6008.43
PZ-26	07/15/97	1028	6021.00	12.56	12.56	0.00	6008.44
PZ-26	08/18/97	NM	6021.00	12.48	12.48	0.00	6008.52
PZ-26	09/19/97	1535	6021.00	12.38	12.38	0.00	6008.62
PZ-26	10/16/97	1311	6021.00	12.40	12.40	0.00	6008.60
PZ-26	11/17/97	1225	6021.00	12.36	12.36	0.00	6008.64
PZ-26	12/16/97	1322	6021.00	12.37	12.37	0.00	6008.63
PZ-26	01/19/98	1500	6021.00	12.33	12.33	0.00	6008.67
PZ-26	03/03/98	1442	6021.00	12.40	12.40	0.00	6008.60
PZ-26	04/01/98	1310	6021.00	12.42	12.42	0.00	6008.58
PZ-26	05/07/98	1342	6021.00	12.50	12.50	0.00	6008.50
PZ-26	6/2/1998	1315	6021.00	12.55	12.55	0.00	6008.45
PZ-26	07/06/98	1104	6021.00	12.62	12.62	0.00	6008.38
PZ-26	10/09/98	NM	6021.00	NM	NM	NM	NM
PZ-26	03/23/99	NM	6021.00	12.67	12.67	0.00	6008.33
PZ-26	10/19/99	NM	6021.00	12.71	12.71	0.00	6008.29
PZ-26	10/25/00	10:53	6021.00	12.8	12.8	0.00	6008.20
PZ-26	12/07/00	NM	6021.00	12.85	12.85	0.00	6008.15
PZ-26	03/16/01	NM	6021.00	13.08	13.08	0.00	6007.92

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-29	08/18/97	NM	6023.85	16.54	16.54	0.00	6007.31
PZ-29	09/19/97	1852	6023.85	16.45	16.45	0.00	6007.40
PZ-29	10/16/97	1544	6023.85	16.49	16.49	0.00	6007.36
PZ-29	11/17/97	1444	6023.85	16.53	16.53	0.00	6007.32
PZ-29	12/16/97	1509	6023.85	16.60	16.60	0.00	6007.25
PZ-29	01/19/98	1705	6023.85	16.64	16.64	0.00	6007.21
PZ-29	03/03/98	1643	6023.85	16.62	16.62	0.00	6007.23
PZ-29	04/01/98	1453	6023.85	16.58	16.58	0.00	6007.27
PZ-29	05/07/98	1510	6023.85	16.62	16.62	0.00	6007.23
PZ-29	06/02/98	1535	6023.85	16.70	16.70	0.00	6007.15
PZ-29	07/06/98	1244	6023.85	16.79	16.79	0.00	6007.06
PZ-29	10/09/98	NM	6023.85	NM	NM	NM	NM
PZ-29	03/23/99	NM	6023.85	17.09	17.09	0.00	6006.76
PZ-29	10/19/99	NM	6023.85	17.24	17.24	0.00	6006.61
PZ-29	03/14/00	NM	6023.85	17.37	17.37	0.00	6006.48
PZ-29	10/25/00	12:40	6023.85	17.54	17.54	0.00	6006.31
PZ-29	12/07/00	NM	6023.85	17.58	17.58	0.00	6006.27
PZ-29	03/16/01	NM	6023.85	17.66	17.66	0.00	6006.19

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-30	08/18/97	NM	6027.24	20.11	20.11	0.00	6007.13
PZ-30	09/19/97	1707	6027.24	20.03	20.03	0.00	6007.21
PZ-30	10/16/97	1344	6027.24	20.12	20.12	0.00	6007.12
PZ-30	11/17/97	1255	6027.24	20.13	20.13	0.00	6007.11
PZ-30	12/16/97	1345	6027.24	20.18	20.18	0.00	6007.06
PZ-30	01/19/98	1527	6027.24	20.15	20.15	0.00	6007.09
PZ-30	03/03/98	1510	6027.24	20.15	20.15	0.00	6007.09
PZ-30	04/01/98	1335	6027.24	20.13	20.13	0.00	6007.11
PZ-30	05/07/98	1407	6027.24	20.27	20.27	0.00	6006.97
PZ-30	06/02/98	1450	6027.24	20.31	20.31	0.00	6006.93
PZ-30	07/06/98	1130	6027.24	20.37	20.37	0.00	6006.87
PZ-30	10/09/98	NM	6027.24	NM	NM	NM	NM
PZ-30	03/23/99	NM	6027.24	20.58	20.58	0.00	6006.66
PZ-30	12/07/00	NM	6027.24	21.05	21.05	0.00	6006.19
PZ-30	03/16/01	NM	6027.24	21.1	21.1	0.00	6006.14

NM - Not Measured

Table 2. Ground-Water Elevation Data

WELL #	DATE	TIME	TOP OF PIPE ELEVATION	AIR/OIL DEPTH TO TOP OF GW OR FREE PRODUCT (feet)	WATER DEPTH TO GROUND WATER (feet)	PRODUCT THICKNESS (feet)	WATER LEVEL ELEVATION OF GROUND WATER (feet)
PZ-31	08/18/97	NM	6023.65	15.30	15.30	0.00	6008.35
PZ-31	09/19/97	1524	6023.65	15.22	15.22	0.00	6008.43
PZ-31	10/16/97	1355	6023.65	15.22	15.22	0.00	6008.43
PZ-31	11/17/97	1230	6023.65	15.16	15.16	0.00	6008.49
PZ-31	12/16/97	1327	6023.65	15.18	15.18	0.00	6008.47
PZ-31	01/19/98	1505	6023.65	15.13	15.13	0.00	6008.52
PZ-31	03/03/98	1450	6023.65	15.23	15.23	0.00	6008.42
PZ-31	04/01/98	1316	6023.65	15.26	15.26	0.00	6008.39
PZ-31	05/07/98	1350	6023.65	15.33	15.33	0.00	6008.32
PZ-31	06/02/98	1435	6023.65	15.37	15.37	0.00	6008.28
PZ-31	07/06/98	1111	6023.65	15.42	15.42	0.00	6008.23
PZ-31	10/09/98	NM	6023.65	NM	NM	NM	NM
PZ-31	03/23/99	NM	6023.65	15.45	15.45	0.00	6008.20
PZ-31	10/19/99	NM	6023.65	15.45	15.45	0.00	6008.20
PZ-31	03/16/01	Broken					
PZ-32	12/07/00	NM	6025.42	18.5	18.5	NM	6006.92
PZ-32	03/16/01	NM	6025.42	18.29	18.29	NM	6007.13
PZ-33	12/07/00	NM	6030.38	23.9	23.9	NM	6006.48
PZ-33	03/16/01	NM	6030.38	23.95	23.95	NM	6006.43
PZ-34	12/07/00	NM	6025.19	19.4	19.4	NM	6005.79
PZ-35	05/01/01	9:55	6025.79	25.17	25.17	NM	6000.62
PZ-36	5/1/2001	9:20	6025.78	24.71	24.71	NM	6001.07
MW-6	05/03/97	10:41	6020.67	9.88	9.88	0.00	6010.79
MW-6	08/18/97	NM	6020.67	9.62	9.62	0.00	6011.05
MW-6	09/19/97	NM	6020.67	9.49	9.49	0.00	6011.18
MW-6	10/16/97	NM	6020.67	9.35	9.35	0.00	6011.32
MW-6	11/17/97	NM	6020.67	9.76	9.76	0.00	6010.91
MW-6	12/16/97	NM	6020.67	10.20	10.20	0.00	6010.47
MW-6	01/19/98	NM	6020.67	10.38	10.38	0.00	6010.29
MW-6	03/03/98	NM	6020.67	10.80	10.80	0.00	6009.87
MW-6	04/01/98		6020.67	11.02	11.02	0.00	6009.65
MW-6	05/07/98		6020.67	11.23	11.23	0.00	6009.44

NM - Not Measured

APPENDIX A

Water-Quality Analyses

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **204084**
May 01, 2002

AMEC EARTH & ENVIRONMENTAL
2060 AFTON PLACE
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS GW PROJECT
Project Number 1517000121

Attention: LISA WINN/SCOTT POPE

On 04/19/02 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

All other analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: AMEC EARTH & ENVIRONMENTAL	PINNACLE ID	: 204084
PROJECT #	: 1517000121	DATE RECEIVED	: 04/19/02
PROJECT NAME	: EPFS GW PROJECT	REPORT DATE	: 05/01/02

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
204084 - 01	BIS-0204-PZ33	AQUEOUS	04/17/02
204084 - 02	BIS-0204-PZ35	AQUEOUS	04/17/02
204084 - 03	BIS-0204-PZ36	AQUEOUS	04/17/02
204084 - 04	BIS-0204-PZ32	AQUEOUS	04/17/02
204084 - 05	BIS-0204-PZ22	AQUEOUS	04/17/02
204084 - 06	BIS-0204-PZ26	AQUEOUS	04/17/02
204084 - 07	BIS-0204-PZ16	AQUEOUS	04/17/02
204084 - 08	TRIP BLANK	AQUEOUS	04/16/02

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : AMEC EARTH & ENVIRONMENTAL
PROJECT # : 1517000121
PROJECT NAME : EPFS GW PROJECT

PINNACLE I.D.: 204084

SAMPLE ID #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	BIS-0204-PZ33	AQUEOUS	04/17/02	NA	04/21/02	1
02	BIS-0204-PZ35	AQUEOUS	04/17/02	NA	04/22/02	1000
03	BIS-0204-PZ36	AQUEOUS	04/17/02	NA	04/22/02	100

PARAMETER	DET. LIMIT	UNITS	BIS-0204-PZ33	BIS-0204-PZ35	BIS-0204-PZ36
BENZENE	0.5	**UG/L**	**1.7**	**21000**	**14000**
TOLUENE	0.5	**UG/L**	< 0.5	**11000**	**150**
ETHYLBENZENE	0.5	**UG/L**	< 0.5	**670**	**440**
TOTAL XYLENES	1.0	**UG/L**	< 1.0	**4600**	**2400**

SURROGATE:

BROMOFLUOROBENZENE (%)		118	100	87
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : AMEC EARTH & ENVIRONMENTAL PINNACLE I.D.: 204084
PROJECT # : 1517000121
PROJECT NAME : EPFS GW PROJECT

SAMPLE ID #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	BIS-0204-PZ32	AQUEOUS	04/17/02	NA	04/22/02	1
05	BIS-0204-PZ22	AQUEOUS	04/17/02	NA	04/22/02	10
0	BIS-0204-PZ26	AQUEOUS	04/17/02	NA	04/22/02	1

PARAMETER	DET. LIMIT	UNITS	BIS-0204-PZ32	BIS-0204-PZ22	BIS-0204-PZ26
BENZENE	0.5	**UG/L**	**2.0**	< 5.0	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 5.0	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 5.0	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 10	< 1.0
SURROGATE:					
BROMOFLUOROBENZENE (%)			106	108	104
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : AMEC EARTH & ENVIRONMENTAL PINNACLE I.D.: 204084
PROJECT # : 1517000121
PROJECT NAME : EPFS GW PROJECT

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	BIS-0204-PZ16	AQUEOUS	04/17/02	NA	04/22/02	1
08	TRIP BLANK	AQUEOUS	04/16/02	NA	04/22/02	1

PARAMETER	DET. LIMIT	UNITS	BIS-0204-PZ16	TRIP BLANK
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0
SURROGATE:				
BROMOFLUOROBENZENE (%)			103	97
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204084
BLANK I. D.	: 042102	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/21/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS GW PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
SURROGATE:		
BROMOFLUOROBENZENE (%)		107
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
NA

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204084
BLANK I. D.	: 042202	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/22/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS GW PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
SURROGATE:		
BROMOFLUOROBENZENE (%)		107
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204084
BATCH #	: 042102	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/21/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS GW PROJECT	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	23.0	115	23.3	117	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.3	97	19.7	99	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.2	101	20.7	104	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	67.9	113	69.6	116	2	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204084
BATCH #	: 042202	DATE EXRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/22/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS GW PROJECT	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	23.2	116	23.0	115	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.3	97	19.2	96	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.1	101	20.0	100	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	67.0	112	66.6	111	1	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\%\text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Phone (505) 344-3777
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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204084
MS/MSD #	: 204084-06	DATE EXRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/22/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS GW PROJECT	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	23.8	119	22.2	111	7	(80 - 120)	20
TOLUENE	<0.5	20.0	20.3	102	18.8	94	8	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.1	106	19.8	99	6	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	71.2	119	66.5	111	7	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C2-04521
Received: 20 APR 02
Reported: 30 APR 02

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 204084,AMEC-EPFS GW PROJECT
Sampled By: Client
Code: 091820430

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
04521-1	BIS-0204-PZ33|204084-01	04-17-02/15:48
04521-2	BIS-0204-PZ35|204084-02	04-17-02/16:00
04521-3	BIS-0204-PZ36|204084-03	04-17-02/16:11
04521-4	BIS-0204-PZ32|204084-04	04-17-02/16:20
04521-5	BIS-0204-PZ22|204084-05	04-17-02/16:32

PARAMETER	04521-1	04521-2	04521-3	04521-4	04521-5
Nitrate + Nitrite-N (353.2), mg/l	2.0	0.31	0.19	9.7	7.4
Dilution Factor	1	1	1	2	2
Analysis Date	04.23.02	04.23.02	04.23.02	04.23.02	04.23.02
Batch ID	N3W22C	N3W22C	N3W22C	N3W22C	N3W22C
Analyst	WG	WG	WG	WG	WG
Sulfate as SO4 (375.4), mg/l	5600	23	140	3400	5800
Dilution Factor	200	1	5	100	200
Analysis Date	04.22.02	04.22.02	04.22.02	04.22.02	04.22.02
Batch ID	SEW031	SEW031	SEW031	SEW031	SEW031
Analyst	BH	BH	BH	BH	BH

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C2-04521
Received: 20 APR 02
Reported: 30 APR 02

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 204084,AMEC-EPFS GW PROJECT
Sampled By: Client
Code: 091820430

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
04521-6	BIS-0204-PZ26|204084-06	04-17-02/16:45
04521-7	BIS-0204-PZ16|204084-07	04-17-02/16:55

PARAMETER	04521-6	04521-7
Nitrate + Nitrite-N (353.2), mg/l	57	54
Dilution Factor	25	25
Analysis Date	04.23.02	04.23.02
Batch ID	N3W22C	N3W22C
Analyst	WG	WG
Sulfate as SO4 (375.4), mg/l	1700	1900
Dilution Factor	100	100
Analysis Date	04.22.02	04.22.02
Batch ID	SEW031	SEW031
Analyst	BH	BH

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C2-04521
Received: 20 APR 02
Reported: 30 APR 02

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 204084,AMEC-EPFS GW PROJECT
Sampled By: Client
Code: 091820430

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
04521-8	Method Blank	
04521-9	Lab Control Standard % Recovery	
04521-10	Matrix Spike % Recovery	
04521-11	Matrix Spike Duplicate % Recovery	

PARAMETER	04521-8	04521-9	04521-10	04521-11
Nitrate + Nitrite-N (353.2), mg/l	<0.10	94 %	89 %	89 %
Dilution Factor	1	---	---	---
Analysis Date	04.23.02	---	---	---
Batch ID	N3W22C	N3W22C	N3W22C	N3W22C
Analyst	WG	---	---	---
Sulfate as SO4 (375.4), mg/l	<5.0	95 %	110 %	117 %
Dilution Factor	1	---	---	---
Analysis Date	04.22.02	---	---	---
Batch ID	SEW031	SEW031	SEW031	SEW031
Analyst	BH	---	---	---

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
See the Project Sample Inspection Form (PSIF) to determine if a sample was received that did not meet EPA requirements for sample collection, preservation, or holding time.

Amy Bradley Sor
Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

STL Pensacola Data Qualifiers for Final Report

B	The analyte was detected in the associated method blank and in the client's sample.
C	The compound has been quantitated against a one point calibration.
D	Recovery is not calculable due to dilution.
E	Estimated value because the analyte concentration exceeds the upper calibration range of the instrument or method.
I	Estimated value because the analyte concentration is less than the lower calibration range of the instrument but is at the method detection limit or greater than the method detection limit.
H	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit.
J1	A sample surrogate or an LCS target compound recovered above the upper control limit (UCL). Compounds qualified with a J1 may be biased high.
J2	A sample surrogate or an LCS target compound recovered outside the lower control limit (LCL). Compounds qualified with a J2 may be biased low.
M1	A matrix effect was present.
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers).
R1	Internal standard area exceeds the acceptance criteria
R2	Calibration verification exceeds the acceptance criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not included in the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The analyte was not detected at or above the MDL or the RL, whichever is entered next to the "U" value.
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160.700(7); Table 7 Data Qualifier Codes. FL DEP Rule 62-160.670(1)(h) states that laboratories shall include the analytical result for each analysis with applicable data qualifiers. FL DEP Rule 62-160.700(7), Table 7 lists the FL DEP data qualifiers. FL DEP Rule 62-160.700(3), Table 3 lists the Florida sites which require data qualifiers.

AFCEE QAPP Projects

Refer to AFCEE QAPP for appropriate data qualifiers (AFCEE QAPP Version will be specified by client for the project).

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

CLP and CLP-like Projects

Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers. CLP SOW to be followed must be specified to client.

3355 McLemore Drive • Pensacola, FL 32514 • Tel: 850 474 1001 • Fax: 850 478 2671 • www.stl-inc.com

STL Pensacola is a part of Severn Trent Laboratories, Inc.

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/02

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/03

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental), expires 02/20/03

California Department of Health Services, NELAP Laboratory ID No. 01128CA (Hazardous Waste and Wastewater), expires 03/31/02

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/03

Florida DOH, NELAP Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/02

Florida DEP/DOH CompQAP # 980156

Kansas Department of Health & Environment, NELAP Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/02

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/02.

Louisiana DEQ, LELAP, NELAP Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental, expires 6/30/02)

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/02

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater), expires 06/30/02

Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/02

New Hampshire DES ELAP, NELAP Laboratory ID No. 250501 (Wastewater), expires 08/16/02

New Jersey DEP&E, NELAP Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/02.

New York State Department of Health, NELAP Laboratory ID No. 11503 (WW and Solids/Hazardous Waste), expires 03/31/02

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/01. Extension granted

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida), expires 06/30/02

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/02

Pennsylvania Department of Environmental Resources, NELAP Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/02

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/02

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/02

Washington Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater), expires 09/14/02

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/02.

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704, expires April 1, 2004. Participant in AIHA sponsored Laboratory PAT Rounds

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

Naval Facilities Engineering Services Center (NFESC), expires July 5, 2002.

United States Army Corps. of Engineers (USACE), MRD, expires July 5, 2002.

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

certlist\condcert.lst revised 03/06/2002

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C204521 Date Received: 4.20.02

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+	(Yes)	No*	N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A *(Can)*
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No	(N/A)
5.	Did samples require splitting or compositing♦? Req By: PM Client Other♦	Yes*	(No)						
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		12.	If sent, were matrix spike bottles returned?	(Yes)	No*	N/A
7.	Were all sample containers received intact?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials: JK) PSIF	(Yes)	No*	N/A

Airbill Number(s): (1Z 878 168 44 3/3 776 543)
(1Z 878 168 44 4352 2950)

Shipped By: UPS

Cooler Number(s): 2 CLIENT

Shipping Charges: N/A

Cooler Weight(s): (47# (2) 26#

Cooler Temp(s) (°C): (2°C (2) 3°C
(CCICE)
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

MULTIPLE COOLER / MULTIPLE PROJECTS

8. 4oz PLASTIC FOR NO3 HAS A PH OF 6 WHICH IS OUT OF COMPLIANCE

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JK **Date:** 4.20.02 **Logged By:** JK **Date:** 4.20.02

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O_2, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. — **Interlab Chain of Custody** — Date: 4/19/02 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

C204521

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
BIS-0204-PZ33/204084-01	4/17/02	1548	AQ	
- -PZ35/204084-02		1600		
- -PZ36/204084-03		1611		
- -PZ32/204084-04		1620		
- -PZ22/204084-05		1632		
- -PZ26/204084-06		1645		
- -PZ16/204084-07		1655		

SAMPLE ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry: TAL NO3, SO4		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
BIS-0204-PZ33/204084-01								X																
- -PZ35/204084-02								X																
- -PZ36/204084-03								X																
- -PZ32/204084-04								X																
- -PZ22/204084-05								X																
- -PZ26/204084-06								X																
- -PZ16/204084-07								X																

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	204084	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	AMEC	Chain of Custody Seals		ESL - OR	
QC LEVEL:	STD. IV	Received Intact?		STL - CT	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ	
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MARION	
				ATEL - MELMORE	
DUE DATE:	5/3	COMMENTS:		BARRINGER	
RUSH SURCHARGE:	—			ENVIRO TEST LABS	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES / NO			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2
Signature: Francine Tenorio Time: 1700	Signature: Time:
Printed Name: Francine Tenorio Date: 4/19/02	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Time: 1030	Signature: Time:
Printed Name: F. Cobarrubias Date: 4-20-02	Printed Name: Date:
Company STL-PNS	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-18-02 PAGE: 1 OF 1

PLI Accession #: 204084

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA WINN

COMPANY: AMEC EARTH & ENVIRONMENTAL
ADDRESS: 2060 AFTON PLACE
FARMINGTON, NM 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: SCOTT POPE
COMPANY: EL PASO FIELD SERVICES
ADDRESS: 614 REILLY AVE.
FARMINGTON ~~ALBUQUERQUE~~, NM 87401

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
BIS-0204-PZ33	4-17-02	1548	H_2O	01
BIS-0204-PZ35	4-17-02	1600	H_2O	02
BIS-0204-PZ36	4-17-02	1611	H_2O	03
BIS-0204-PZ32	4-17-02	1620	H_2O	04
BIS-0204-PZ22	4-17-02	1632	H_2O	05
BIS-0204-PZ26	4-17-02	1645	H_2O	06
BIS-0204-PZ16	4-17-02	1655	H_2O	07
TRIP BLANK	4-16-02	1020	H_2O	08

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	TOTAL NITRATES	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	SULFATES	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER CONTAINERS
		X			X						X																4
		X			X						X																4
		X			X						X																4
		X			X						X																4
		X			X						X																4
		X			X						X																4
		X			X						X																4
					X																						1

PROJECT INFORMATION	
PROJ. NO.:	1517000121
PROJ. NAME:	EPFS GW PROJECT
P.O. NO.:	
SHIPPED VIA:	GREYHOUND

SAMPLE RECEIPT	
NO. CONTAINERS	29
CUSTODY SEALS	Y/N (NA)
RECEIVED INTACT	Y/N
BLUE ICE/ICE	Y/N

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

Ice Present

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Robert Thompson Time: 1337	Signature: Time:
Printed Name: ROBERT THOMPSON Date: 4-18-02	Printed Name: Date:
Company: AMEC	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time: 0945
Printed Name: Date:	Printed Name: Date: 4/19/02
Company:	Pinnacle Laboratories Inc.

☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-9 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.46' TOR
Initial Depth to Water (feet) 14.80' TOR
Height of Water Column in Well (feet) .66'
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	0.66'	.11	.11 x 3
Gravel Pack			
Drilling Fluids			
Total			.33

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other	

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					

Comments DRY WELL. COULD NOT COLLECT ANY WATER FROM WELL. NO SAMPLE.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer J Winn Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-16 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 157000121

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 0 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 23.04' TOR
Initial Depth to Water (feet) 16.37' TOR
Height of Water Column in Well (feet) 6.67'
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	6.67	1.09	1.09 x 3
Gravel Pack			
Drilling Fluids			
Total			3.27

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other	

Methods of Development

Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☒ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-17-02	1439		X				0	0			12.7	7.92	2490		CLEAR
4-17-02	1445		X				1	1			12.2	7.48	4621		CLEAR

Comments WELL BAILED DRY AT 1 GAL. NOT ENOUGH WATER FOR DO READING. SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1655.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer RWinn Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number P2-21

Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN CO.

Development Criteria

☒ ~~3~~ 6 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 25.58' TOR
Initial Depth to Water (feet) 22.86' TOR
Height of Water Column in Well (feet) 2.72'
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	2.72'	.44	.44 x 3
Gravel Pack			
Drilling Fluids			
Total			1.32

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
4-17-02	1130		X				0	0			13.7	6.96	8.27		DRY WELL

Comments REMOVED ENOUGH WATER FOR ONE SET OF WATER QUALITY READINGS. WELL DRY. NOT SAMPLED.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer L Winn Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number P2-22 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 23.05' TOR
Initial Depth to Water (feet) 20.97' TOR
Height of Water Column in Well (feet) 2.08
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	2.08	.34	.34 x3
Gravel Pack			
Drilling Fluids			
Total			1.02

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other	

Methods of Development

Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☒ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other _____

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-17-02	1325		X				0	0			14.2	6.51	8.02		LIGHT BROWN

Comments WELL BAILED DRY AT .5 GAL. NOT ENOUGH WATER TO RECORD DO READING. SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1632.

Developer's Signature(s) Pat Thompson Date 4-17-02 Reviewer [signature] Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number P2-23 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 1517000121

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 18.01' TOR
Initial Depth to Water (feet) 17.66' TOR
Height of Water Column in Well (feet) .35
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	.35	.06	.06 x 3
Gravel Pack			
Drilling Fluids			
Total			.18

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63

☐ Other _____

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					

Comments DRY WELL. COULD NOT COLLECT ANY WATER FROM WELL. NO SAMPLE.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer [illegible] Date 4/25/02

L:\forms\MW Dvlpmnt 2.dot 11/29/01

☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number P2-26 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 18.03' TOR
Initial Depth to Water (feet) 13.63' TOR
Height of Water Column in Well (feet) 4.40'
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	4.40'	.72	.72 x 3
Gravel Pack			
Drilling Fluids			
Total			2.16

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
4-17-02	1339		X				0	0			12.8	7.27	8.96		CLEAR
4-17-02	1343		X				1	1			12.5	7.30	8.83		CLOUDY
4-17-02	1347		X				1.5	2.5			12.5	7.36	8.80	5.28	CLOUDY

Comments SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1645.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer L Winn Date 4/25/02

L:\forms\MW Dvlpmnt 2.dot 11/29/01

☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-29 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 20.57' TOR
Initial Depth to Water (feet) 18.33' TOR
Height of Water Column in Well (feet) 2.24
Diameter (inches): Well 2" Gravel Pack ____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	2.24	.37	.37 x 3
Gravel Pack			
Drilling Fluids			
Total			1.11

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63

☐ Other _____

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-17-02	1425		X				0	0			14.5	6.87	7.44		CLEAR

Comments REMOVED ENOUGH WATER FOR ONE SET OF WATER QUALITY READINGS. WELL DRY. NOT SAMPLED.

Developer's Signature(s) Pat Thompson Date 4-17-02 Reviewer [illegible] Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number P2-32 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 22.93' TOR
Initial Depth to Water (feet) 18.81' TOR
Height of Water Column in Well (feet) 4.12
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	4.12	.67	.67 x 3
Gravel Pack			
Drilling Fluids			
Total			2.01

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-17-02	1230		X				0	0			13.1	7.28	5.82		CLOUDY
4-17-02	1234		X				1	1			12.9	7.22	5.85		CLOUDY
4-17-02	1240		X				1	2			12.7	7.20	5.99	5.30	CLOUDY

Comments SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1620.

Developer's Signature(s) Robert Champion Date 4-17-02 Reviewer [signature] Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-33 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN CO.

Development Criteria

☒ (3) to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 32.62' TOR
Initial Depth to Water (feet) 24.41' TOR
Height of Water Column in Well (feet) 8.21'
Diameter (inches): Well 2" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	8.21	1.34	1.34 x 3
Gravel Pack			
Drilling Fluids			
Total			4.02

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
4-17-02	1040		X				0	0			13.8	6.95	8.85		CLEAR
4-17-02	1045		X				1	1			13.3	7.01	8.93		LIGHT BROWN
4-17-02	1050		X				1	2			13.0	7.04	8.80		LIGHT BROWN
4-17-02	1055		X				1	3			13.1	7.02	8.96		LIGHT BROWN
4-17-02	1100		X				1	4			13.1	7.03	8.93	7.40	LIGHT BROWN

Comments SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1548.

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewer L Winn Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-35 Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 151700012I

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ ~~3~~ to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 27.82' TOR
Initial Depth to Water (feet) 25.27' TOR
Height of Water Column in Well (feet) 2.55'
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	2.55'	.42	.42 x 3
Gravel Pack			
Drilling Fluids			
Total			1.26

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other	

Water Disposal KUTZ SEPARATOR

Water Rem

Need to have Amec stop sampling well w/Product

Date	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
	Increment	Cumulative	Increment	Cumulative					

Comments PRODUCT MEASURED AT 25.22'. WATER MEASURED AT 25.27'. NO WATER QUALITY READINGS RECORDED DUE TO PRODUCT IN WELL. SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1600

Developer's Signature(s) Robert Thompson Date 4-17-02 Reviewed L Winn Date 4/25/02

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☐ Development
☒ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number PZ-36

Page 1 of 1

Project Name EPFS GW PROJECT Project Manager LISA WINN Project No. 157000121

Client Company EL PASO FIELD SERVICES

Site Name BISTI FLARE PIT #1 Site Address RURAL SAN JUAN COUNTY

Development Criteria

☒ ③ to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 28.13' TOR
Initial Depth to Water (feet) 24.89' TOR
Height of Water Column in Well (feet) 3.24'
Diameter (inches): Well 2" Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	3.24	.53	.53 x 3
Gravel Pack			
Drilling Fluids			
Total			1.59

Instruments

	Serial No. (If applicable)
☒ pH Meter	YSI 63
☒ DO Monitor	YSI 95
☒ Conductivity Meter	YSI 63
☒ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-17-02	1210		X				0	0			15.4	6.69	6.84		BLACK
4-17-02	1215		X				1	1			14.5	6.70	6.79		BLACK

Comments WELL BAILED DRY AT 1.5 GAL. NOT ENOUGH WATER FOR DO READING. SAMPLED FOR BTEX, TOTAL NITRATES AND SULFATES AT 1611.

Developer's Signature(s) Pat Thompson Date 4-17-02 Reviewer [signature] Date 4/25/02

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U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTICE OF INSPECTION

Address (EPA Regional Office)	Inspection Contractor	Firm To Be Inspected
Region 9 Environmental Inspection Agency 75 Hawthorne Street (WTR-9) San Francisco, CA 94105	NMEPA/UIC P.O. Box 1999 Shiprock NM 87420	El Paso Field Services 614 Reilly Ave Farmington NM 87401

Date	4/17/02	Notice of inspection is hereby given according to Section 1445(b) of the Safe Drinking Water Act (42 U.S.C. §300 f et seg.).
Hour	9:30 A.M.	

Reason For Inspection The following monitoring wells ground water were

For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable permit or rule.

sampled on Robert Thompson with AMEC for El Paso Field Services. This was a semi-annual sampling at Bisti Flare Pit: PZ-9, PZ-16, PZ-21, PZ-22, PZ-23, PZ-26, PZ-29, PZ-32, PZ-33, PZ-35, PZ-36. Total wells sampled = 11.

Note PZ-21 was dry.
PZ 35 had some free product.
PZ-23 was dry.
PZ-9 was dry
PZ-29 was dry

Section 1445(b) of the SDWA (42 U.S.C. §300 j-4 (b) is quoted on the reverse of this form.

Receipt of this Notice of Inspection is hereby acknowledged.

Firm Representative	Date	Inspector
[illegible signature]	4/17/02	[illegible signature]

USEPA - Region White) *NEPA-GPCP (Yellow)* *perator (Pink)*

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-18-02 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA WINN

COMPANY: AMEC EARTH & ENVIRONMENTAL
ADDRESS: 2060 AFTON PLACE
FARMINGTON, NM 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: SCOTT PUPE
COMPANY: EL PASO FIELD SERVICES
ADDRESS: 614 REILLY AVE.
FARMINGTON ~~ALBUQUERQUE~~, NM 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	TOTAL NITRATES	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	SULFATES	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
BIS-0204-PZ33	4-17-02	1548	H_2O				X			X						X																4
BIS-0204-PZ35	4-17-02	1600	H_2O				X			X						X																4
BIS-0204-PZ36	4-17-02	1611	H_2O				X			X						X																4
BIS-0204-PZ32	4-17-02	1620	H_2O				X			X						X																4
BIS-0204-PZ22	4-17-02	1632	H_2O				X			X						X																4
BIS-0204-PZ26	4-17-02	1645	H_2O				X			X						X																4
BIS-0204-PZ16	4-17-02	1655	H_2O				X			X						X																4
TRIP BLANK	4-16-02	1020	H_2O							X																						1

PROJECT INFORMATION

PROJ. NO.: 151700121
PROJ. NAME: EPFS GW PROJECT
P.O. NO.:
SHIPPED VIA: GREYHOUND

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1337	Signature: Time:
Printed Name: Date: 4-18-02 ROBERT THOMPSON	Printed Name: Date:
Company: AMEC	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Pinnacle Laboratories Inc.

Well Development and Purging Data

Golden Environmental Management (GEM)

Project No. C169

Task No.

Well No 02-09

Development ☐

Purging ☑

Page 1 of 1

Site Name/Identification B, ST. Flare pit #1(LD06) Site Address San Juan Co.

Client/Project Name El paso Field Services EPFS Remediation project Project Manager Lisa winn

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal

☐ Stabilization of Indicator Parameters

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 15.41

Initial Depth to Water (feet) 14.49

Height of Water Column in Well (feet)

Diameter (inches): Well 2" Gravel Pack

Instruments — Serial No. (if applicable)

☑ PH Meter — Hydac

☐ DO Monitor

☑ Conductivity Meter — Hydac

☑ Temperature Meter — Hydac

☐ Other

Methods of Development

Pump

☐ Centrifugal

☐ Submersible

☐ Peristaltic

Bailer

☑ Bottom Valve

☐ Double Check Valve

☐ Stainless-steel Kemmerer

☐ Other

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Water Disposal

Kutz Seperator Bloomfield NM

Sampling Activities

Type of Container plastic/VOA No. of Containers 4

Parameters Sampled For Nitrates, Sulfates, BTex

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1601		X			15.44	.10	.10			16.1	7.15	5200		Clear yellow tint septic odor

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .10 gal Bailed well Dry. Did NOT Recover Enough water to collect Samples, Dry well

Developer's Signature (s) [signature] Date 10-9-01 Reviewer [signature] Date 10/2/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **104046**
June 07, 2001

PHILIP SERVICE CORPORATION
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 04/10/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Supporting analytical data is attached in Appendix A. For futher discussion see attached letter dated June 7, 2001.

Primary Sulfate data was submitted by Environmental Services Laboratory, Inc. Portland, OR.

EPA method 8021 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

Nitrate analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

Additional supporting information is provided by ATEL, Tucson, AZ and Severn Trent Laboratories, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP SERVICE CORPORATION	PINNACLE ID	: 104046
PROJECT #	: 62800107	DATE RECEIVED	: 04/10/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 06/07/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
104046 - 01	267-0104-MW 9	AQUEOUS	04/09/01
104046 - 02	267-0104-MW 16	AQUEOUS	04/09/01
104046 - 03	267-0104-MW 21	AQUEOUS	04/09/01
104046 - 04	267-0104-MW 22	AQUEOUS	04/09/01
104046 - 05	267-0104-MW 23	AQUEOUS	04/09/01
104046 - 06	267-0104-MW 26	AQUEOUS	04/09/01
104046 - 07	267-0104-MW 29	AQUEOUS	04/09/01
104046 - 08	267-0104-MW 32	AQUEOUS	04/09/01
104046 - 09	267-0104-MW 33	AQUEOUS	04/09/01
104046 - 10	TRIP BLANK	AQUEOUS	03/12/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 104046
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	267-0104-MW 9	AQUEOUS	04/09/01	NA	04/12/01	5
02	267-0104-MW 16	AQUEOUS	04/09/01	NA	04/12/01	1
03	267-0104-MW 21	AQUEOUS	04/09/01	NA	04/12/01	1

PARAMETER	DET. LIMIT	UNITS	267-0104-MW 9	267-0104-MW 16	267-0104-MW 21
BENZENE	0.5	**UG/L**	**6000(D100)**	< 0.5	**49**
TOLUENE	0.5	**UG/L**	**4700(D100)**	< 0.5	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**150**	< 0.5	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**1800**	< 0.5	**1.4**
SURROGATE:					
BROMOFLUOROBENZENE (%)			109	98	141*
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
(D100) = 100x dilution analyzed on 4/12/01.
* = High surrogate recovery due to matrix interference.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021 MODIFIED
:LIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 104046
'ROJECT # : 62800107
'ROJECT NAME : EPFS QUARTERLY SAMPLING

:AMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
4	267-0104-MW 22	AQUEOUS	04/09/01	NA	04/12/01	1
5	267-0104-MW 23	AQUEOUS	04/09/01	NA	04/12/01	1
6	267-0104-MW 26	AQUEOUS	04/09/01	NA	04/12/01	1

:AMETER	DET. LIMIT	UNITS	267-0104-MW 22	267-0104-MW 23	267-0104-MW 26
:ENZENE	0.5	**UG/L**	**0.7**	< 0.5	< 0.5
OLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
T YLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
OTAL XYLENES	0.5	UG/L	< 0.5	< 0.5	< 0.5
U ROGATE:					
ROMOFLUOROBENZENE (%)			99	97	97
U ROGATE LIMITS	(80 - 120)				

H MIST NOTES:
/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 104046
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
7	267-0104-MW 29	AQUEOUS	04/09/01	NA	04/12/01	40
8	267-0104-MW 32	AQUEOUS	04/09/01	NA	04/12/01	1
9	267-0104-MW 33	AQUEOUS	04/09/01	NA	04/12/01	1

PARAMETER	DET. LIMIT	UNITS	267-0104-MW 29	267-0104-MW 32	267-0104-MW 33
BENZENE	0.5	**UG/L**	**8200(D100)**	**1.3**	< 0.5
TOLUENE	0.5	**UG/L**	**2300**	**0.5**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**330**	**0.5**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**2200**	**2.4**	< 0.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	140*	107
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D100) = 100x dilution analyzed on 4/12/01.
* = High surrogate recovery due to matrix interference.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 104046
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TRIP BLANK	AQUEOUS	03/12/01	NA	04/12/01	1

PARAMETER	DET. LIMIT	UNITS	TRIP BLANK
BENZENE	0.5	UG/L	< 0.5
TOLUENE	0.5	UG/L	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 99
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 104046
BLANK I. D.	: 041201	DATE EXTRACTED	: NA
CLIENT	: PHILIP SERVICE CORPORATION	DATE ANALYZED	: 04/12/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		102
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

E[illegible]	: EPA 8021 MODIFIED		
IS[illegible]SD #	: 104046-06	PINNACLE I.D.	: 104046
LIENT	: PHILIP SERVICE CORPORATION	DATE EXTRACTED	: NA
RO[illegible]JECT #	: 62800107	DATE ANALYZED	: 04/06/01
R[illegible]JECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

A[illegible]AMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
E[illegible]ZENE	<0.5	20.0	19.5	98	18.9	95	3	(80 - 120)	20
OLUENE	<0.5	20.0	19.7	99	19.3	97	2	(80 - 120)	20
TH[illegible]LBENZENE	<0.5	20.0	20.6	103	20.2	101	2	(80 - 120)	20
OTAL XYLENES	<0.5	60.0	56.0	93	55.1	92	2	(80 - 120)	20

H[illegible]MIST NOTES:
'A[illegible]

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-04280
Received: 11 APR 01
Reported: 24 APR 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104046, PHIL-EPFS QUARTERLY SAMPLING
Sampled By: Client
Code: 100910424

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
04280-1	267-0104-MW9/104046-01	04-09-01/16:43
04280-2	267-0104-MW16/104046-02	04-09-01/16:13
04280-3	267-0104-MW21/104046-03	04-09-01/17:30
04280-4	267-0104-MW22/104046-04	04-09-01/17:20
04280-5	267-0104-MW23/104046-05	04-09-01/17:03

PARAMETER	04280-1	04280-2	04280-3	04280-4	04280-5
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)					
Nitrate + Nitrite-N, mg/l	0.34	57	0.68	5.4	38
Nitrate-N, mg/l	0.34	57	0.68	5.4	38
Nitrite-N, mg/l	<0.1	<0.1	<0.1	<0.1	<0.1
Dilution Factor	1	20	1	5	10
Prep Date	04.11.01	04.11.01	04.11.01	04.11.01	04.11.01
Analysis Date	04.17.01	04.17.01	04.17.01	04.17.01	04.17.01
Batch ID	N3W22A	N3W22A	N3W22A	N3W22A	N3W22A
Prep Method	N/A	N/A	N/A	N/A	N/A
Analyst	CR	CR	CR	CR	CR
Sulfate as SO4 (375.4), mg/l	<5.0	430	960	2900	2800
Dilution Factor	1	20	25	100	100
Prep Date	04.20.01	04.20.01	04.20.01	04.20.01	04.20.01
Analysis Date	04.20.01	04.20.01	04.20.01	04.20.01	04.20.01
Batch ID	SEW044	SEW044	SEW044	SEW044	SEW044
Prep Method	N/A	N/A	N/A	N/A	N/A
Analyst	BE	BE	BE	BE	BE

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-04280
Received: 11 APR 01
Reported: 24 APR 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104046, PHIL-EPFS QUARTERLY SAMPLING
Sampled By: Client
Code: 100910424

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
04280-6	267-0104-MW26/104046-06	04-09-01/11:47
04280-7	267-0104-MW29/104046-07	04-09-01/15:50
04280-8	267-0104-MW32/104046-08	04-09-01/13:34
04280-9	267-0104-MW33/104046-09	04-09-01/14:30

PARAMETER	04280-6	04280-7	04280-8	04280-9
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)				
Nitrate + Nitrite-N, mg/l	62	<0.1	12	13
Nitrate-N, mg/l	62	<0.1	10	13
Nitrite-N, mg/l	<0.1	<0.1	1.8	<0.1
Dilution Factor	20	1	5	5
Prep Date	04.11.01	04.11.01	04.11.01	04.11.01
Analysis Date	04.17.01	04.17.01	04.17.01	04.17.01
Batch ID	N3W22A	N3W22A	N3W22A	N3W22A
Prep Method	N/A	N/A	N/A	N/A
Analyst	CR	CR	CR	CR
Sulfate as SO4 (375.4), mg/l	3700	31	2600	3800
Dilution Factor	100	1	100	100
Prep Date	04.20.01	04.20.01	04.20.01	04.20.01
Analysis Date	04.20.01	04.20.01	04.20.01	04.20.01
Batch ID	SEW044	SEW044	SEW044	SEW044
Prep Method	N/A	N/A	N/A	N/A
Analyst	BE	BE	BE	BE

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-04280
Received: 11 APR 01
Reported: 24 APR 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104046, PHIL-EPFS QUARTERLY SAMPLING
Sampled By: Client
Code: 100910424

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
04280-10	Method Blank	
04280-11	Lab Control Standard % Recovery	
04280-12	Matrix Spike % Recovery	
04280-13	Matrix Spike Duplicate % Recovery	

PARAMETER	04280-10	04280-11	04280-12	04280-13
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)				
Nitrate + Nitrite-N, mg/l	<0.1	103 %	91 %	92 %
Nitrate-N, mg/l	N/A	N/A	N/A	N/A
Nitrite-N, mg/l	<0.1	100 %	95 %	100 %
Dilution Factor	1	1	1	1
Prep Date	04.11.01	04.11.01	04.11.01	04.11.01
Analysis Date	04.17.01	04.17.01	04.17.01	04.17.01
Batch ID	N3W22A	N3W22A	N3W22A	N3W22A
Prep Method	N/A	N/A	N/A	N/A
Analyst	CR	CR	CR	CR
Sulfate as SO4 (375.4), mg/l	<5.0	91 %	58 %	71 %
Dilution Factor	1	1	25	25
Prep Date	04.20.01	04.20.01	04.20.01	04.20.01
Analysis Date	04.20.01	04.20.01	04.20.01	04.20.01
Batch ID	SEW044	SEW044	SEW044	SEW044
Prep Method	N/A	N/A	N/A	N/A
Analyst	BE	BE	BE	BE

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

3355 McLemore Drive • Pensacola, FL 32514 • Tel: 850 474 1001 • Fax: 850 478 2671 • www.stl-inc.com

STL PENSACOLA

STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater b Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C104280 Date Received: 4.11.01

1.	Was there a Chain of Custody?	(Yes)	No♣		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+	(Yes)	No♣	N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No♣		9.	Is there sufficient volume for analysis requested?	(Yes)	No♣	N/A *(Can)*
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No♣	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No♣	
4.	Were all samples properly labeled and identified?	(Yes)	No♣		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes♣	No	(N/A)
5.	Did samples require splitting or compositing♦? Req By: PM Client Other♦	Yes♣	(No)		12.	If sent, were matrix spike bottles returned?	Yes	No♣	(N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No♣		13.	Was Project Manager notified of problems? (initials:_____)	Yes	No♣	(N/A)
7.	Were all sample containers received intact?	(Yes)	No♣						

Airbill Number(s): 1Z 878 168 01 4358 9971

Shipped By: UPS

Cooler Number(s): client

Shipping Charges: N/A

Cooler Weight(s): 19#

Cooler Temp(s) (°C): 2°

(CCK1)
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

no temperature blank

Out of Control Events and Inspection Comments:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: DMH **Date:** 4.11.01 **Logged By:** MK **Date:** 4/11/01

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O_2, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. — Interlab Chain of Custody

Date: 4/10 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

WATCH HOLD TIMES!!

C104280

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry: NNO3, SO4	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
267-0104-MW9/104046-01	4/9	1643	AQ	1								X															
- -MW16/104046-02		1613		2								X															
- -MW21/104046-03		1730		3								X															
- -MW22/104046-04		1720		4								X															
- -MW23/104046-05		1703		5								X															
- -MW26/104046-06		1147		6								X															
- -MW29/104046-07		1550		7								X															
- -MW32/104046-08		1334		8								X															
↓ - ↓ -MW33/104046-09	↓	1430	↓	9								X															

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	104046	Total Number of Containers	
PROJ. NAME:	PHIL	Chain of Custody Seals	
QC LEVEL:	(STD) IV	Received Intact?	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:	

SAMPLES SENT TO:	
PENSACOLA - STL-FL	X
ESL - OR	
STL - CT	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
BARRINGER	
ENVIRO TEST LABS	
WCAS	
WOHL	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1745	Signature: Time:
Printed Name: Francine Tenorio Date: 4/10/01	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Time: 0950	Signature: Time:
Printed Name: Danielle Howard Date: 4-11-01	Printed Name: Date:
Company STL-PNS	Company

DUE DATE: 4/24
RUSH SURCHARGE: —
CLIENT DISCOUNT: —
SPECIAL CERTIFICATION REQUIRED: YES (NO)

COMMENTS:

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

May 02, 2001

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107
TEL: 505-344-3777
FAX (505) 344-4413

RE: 104046/PHIL Order No.: 0104046

Dear Jacinta A. Tenorio,

Environmental Services Laboratory received 8 samples on 4/12/01 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Sulfate (EPA 375.4)

There were no analytical problems encountered, and all data met laboratory QC criteria, unless noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the Laboratory.
The following checked data sections are included in this report, and numbered to indicate total pages within each report section.

__Base Sample Report __Method Blank Report __Sample Duplicate Report
__Matrix Spike/Matrix Spike Duplicate Report __Laboratory Control Spike/Spike Duplicate Report __Continuing Calibration Verification Report __Initial Calibration Verification Report

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Nichole Karl

Nichole Karl Technical Review
Project Manager

Environmental Services Laboratory

Date: *02-May-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	267-0104-MW16/104046-02
Lab Order:	0104046	**Tag Number:**	
Project:	104046/PHIL	**Collection Date:**	4/9/01
Lab ID:	0104046-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE		**EPA 375.4**				Analyst: **gvs**
Sulfate	536	125		mg/L	25	4/16/01

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *02-May-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	267-0104-MW21/104046-03
Lab Order:	0104046	**Tag Number:**	
Project:	104046/PHIL	**Collection Date:**	4/9/01
Lab ID:	0104046-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE		**EPA 375.4**				Analyst: **gvs**
Sulfate	5,160	1,250		mg/L	250	4/16/01

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Environmental Services Laboratory

Date: *02-May-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	267-0104-MW22/104046-04
Lab Order:	0104046	**Tag Number:**	
Project:	104046/PHIL	**Collection Date:**	4/9/01
Lab ID:	0104046-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE		**EPA 375.4**				Analyst: **gvs**
Sulfate	3,840	1,250		mg/L	250	4/16/01

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *02-May-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	267-0104-MW23/104046-05
Lab Order:	0104046	**Tag Number:**	
Project:	104046/PHIL	**Collection Date:**	4/9/01
Lab ID:	0104046-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE		**EPA 375.4**				Analyst: **gvs**
Sulfate	3,220	1,250		mg/L	250	4/16/01

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *02-May-01*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	267-0104-MW24/104046-06
Lab Order:	0104046	**Tag Number:**	
Project:	104046/PHIL	**Collection Date:**	4/9/01
Lab ID:	0104046-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE		**EPA 375.4**				Analyst: **gvs**
Sulfate	4,400	1,250		mg/L	250	4/16/01

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

mental Services Laboratory

Date: *02-May-01*

Pinnacle Laboratories
0104046
104046/PHIL
0104046-06A

Client Sample ID: 267-0104-MW29/104046-07
Tag Number:
Collection Date: 4/9/01
Matrix: AQUEOUS

	Result	Limit	Qual	Units	DF	Date Analyzed
	EPA 375.4					Analyst: **gvs**
	6.30	5.00		mg/L	1	4/16/01

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

104046

Chain of Custody Record

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2590

Project Name EPFS quarterly Sampling
Project Number 62800107 Phase . Task 0301
Samplers C. Maez
Laboratory Name Pinnacle
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	BTEX 8021	NITRATES	SULFATES	Lab ID #	Comments
267-0104-MW 9	4-9-01	1643	H_2O	4	x	x	x	01	Bisti Flare pit #1 (LD 267)
267-0104-MW 16	4-9-01	1613	H_2O	5	x	x	x	02	" "
267-0104-MW 21	4-9-01	1730	H_2O	5	x	x	x	03	" "
267-0104-MW 22	4-9-01	1720	H_2O	5	x	x	x	04	" "
267-0104-MW 23	4-9-01	1703	H_2O	5	x	x	x	05	" "
267-0104-MW 26	4-9-01	1147	H_2O	5	x	x	x	06	" "
267-0104-MW 29	4-9-01	1550	H_2O	5	x	x	x	07	" "
267-0104-MW 32	4-9-01	1334	H_2O	5	x	x	x	08	" "
267-0104-MW 33	4-9-01	1430	H_2O	5	x	x	x	09	" "
TRip BLank	3-12-01	1510	H_2O	1	x			10	

Relinquished by:

Signature	Date	Time
Chris Maez	4-10-01	0930

Received By:

Signature	Date	Time
Francine Jaime	4/10/01	1530

Samples Iced: ☑ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☑ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) H_2SO_4
- ☐ Other (Specify)

Carrier: Greyhound
Airbill No. GLI 10691 9920

Shipping and Lab Notes:

Could NOT Get Duplicate 267-0104-~~MW~~ MW 9 Not enough water in well. Please send more Trip Blanks

Rec'd @ 4.4°c

PE-176 4/95

APPENDIX A

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-05092
Received: 03 MAY 01
Reported: 14 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104046, PHIL/EPFS QUARTERLY SAMPLING
Sampled By: Client
Code: 145210514

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
05092-1	267-0104-MW21-A/104046-03	04-09-01/17:30
05092-2	267-0104-MW21-B/104046-03	04-09-01/17:30

PARAMETER	05092-1	05092-2
Sulfate as SO4 (375.4), mg/l	1100	1200
Dilution Factor	50	50
Prep Date	05.04.01	05.04.01
Analysis Date	05.04.01	05.04.01
Batch ID	SEW051	SEW051
Analyst	BE	BE

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-05092
Received: 03 MAY 01
Reported: 14 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104046, PHIL/EPFS QUARTERLY SAMPLING
Sampled By: Client
Code: 145210514

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
05092-3	Method Blank	
05092-4	Lab Control Standard % Recovery	
05092-5	Matrix Spike % Recovery	
05092-6	Matrix Spike Duplicate % Recovery	

PARAMETER	05092-3	05092-4	05092-5	05092-6
Sulfate as SO4 (375.4), mg/l	<5.0	99 %	113 %	115 %
Dilution Factor	1	---	---	---
Prep Date	05.04.01	---	---	---
Analysis Date	05.04.01	---	---	---
Batch ID	SEW051	---	---	---
Analyst	BE	---	---	---

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

3355 McLemore Drive • Pensacola, FL 32514 • Tel: 850 474 1001 • Fax: 850 478 2671 • www.stl-inc.com

STL Pensacola is a part of Severn Trent Laboratories, Inc.

STL PENSACOLA

STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 01128CA (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C105092 Date Received: 5/3/01

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+	Yes No* (N/A)
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes) No* N/A *(Can)*
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes) No*
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes* No (N/A)
5.	Did samples require splitting or compositing♦? Req By: PM Client Other♦	Yes*	(No)		12.	If sent, were matrix spike bottles returned?	Yes No* (N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials:_____)	Yes No* (N/A)
7.	Were all sample containers received intact?	(Yes)	No*				

Airbill Number(s): 1Z878168014335 5382
1Z878168014394 4996

Shipped By: UPS

Cooler Number(s):	Client	Chart
	5°c	4°c
Cooler Weight(s):	67#	29#

Shipping Charges: N/A

Cooler Temp(s) (°C): 5°c, 4°c
CCK4
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

Multiple project / cooler shipment
Watch Hold Times!

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS) ☞

Inspected By: MHS **Date:** 5/3/01 **Logged By:** LLK **Date:** 03-MAY-01

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O_2, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. **Interlab Chain of Custody** Date: 5/2 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

Need verbals ASAP!!

C105092

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry: SO4		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
267-0104-MW21-A	4/9	1730	AQ									X																
1040046-03																												
267-0104-MW21-B	4/9	1730	AQ									X																
1040046-03																												

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISED BY: 1	RELINQUISED BY: 2
PROJECT #:	1040046	Total Number of Containers		PENSACOLA - STL-FL	X	Signature: Francine Tarivio Time: 1700	Signature: Time:
PROJ. NAME:	PHIL	Chain of Custody Seals		ESL - OR		Printed Name: Francine Tarivio Date: 5/2/01	Printed Name: Date:
QC LEVEL:	STD IV	Received Intact?		STL - CT		Pinnacle Laboratories, Inc.	Company
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ		RECEIVED BY: 1	RECEIVED BY: 2
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MARION		Signature: Mark Swafford Time: 0945	Signature: Time:
DUE DATE:	5/16 or ASAP	COMMENTS:		ATEL - MELMORE		Printed Name: Mark Swafford Date: 5/3/01	Printed Name: Date:
RUSH SURCHARGE:				BARRINGER		Company STL PMS	Company
CLIENT DISCOUNT:				ENVIRO TEST LABS			
SPECIAL CERTIFICATION REQUIRED:	YES NO			WCAS			
				WOHL			

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**

Attn: Mitch Rubenstein **FAX:** (505) 344-4413

Our Lab #: 050401012 **Your Sample ID:** 267-0104-MW9/104046-01

Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined

Matrix: Water **Client Project #:** **PO#:** 104046

Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 4:43 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	7	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *29-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein **Phone:** (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401013 **Your Sample ID:** 267-0104-MW16/104046-02
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 4:13 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	464	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein **Phone:** (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401014 **Your Sample ID:** 267-0104-MW21/104046-03
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 5:30 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	5100	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mostue

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein **Phone:** (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401015 **Your Sample ID:** 267-0104-MW21DUP/104046-03
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 5:30 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	5350	mg/L	5/16/01	JMN	2973

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein **Phone:** (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401016 **Your Sample ID:** 267-0104-MW22/104046-04
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 5:20 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	4790	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein **Phone:** (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401017 **Your Sample ID:** 267-0104-MW23/104046-05
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 5:03 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	3790	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL
Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608
Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-
Attn: Mitch Rubenstein

Report Date: *17-May-01*
Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401018 **Your Sample ID:** 267-0104-MW26/104046-06
Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 104046
Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 11:47 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	4560	mg/L	5/15/01	JMN	2972

End of Report

Report Approved By: R Mostue

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**

Attn: Mitch Rubenstein **FAX:** (505) 344-4413

Our Lab #: 050401019 **Your Sample ID:** 267-0104-MW29/104046-07

Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined

Matrix: Water **Client Project #:** **PO#:** 104046

Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 3:50 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	43	mg/L	5/16/01	JMN	2973

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *17-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**

Attn: Mitch Rubenstein **FAX:** (505) 344-4413

Our Lab #: 050401020 **Your Sample ID:** 267-0104-MW32/104046-08

Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined

Matrix: Water **Client Project #:** **PO#:** 104046

Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 1:34 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	3630	mg/L	5/16/01	JMN	2973

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein

Report Date: *29-May-01*

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 050401021
Your Sample ID: 267-0104-MW33/104046-09
Date Logged-In: 5/4/01
Sample Source: Other/Undefined
Matrix: Water
Client Project #:
PO#: 104046
Project #: PHIL
Date Submitted to Lab: 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 2:30 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	4460	mg/L	5/18/01	JMN	2973

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *29-May-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**

Attn: Mitch Rubenstein **FAX:** (505) 344-4413

Our Lab #: 050401022 **Your Sample ID:** 267-0104-MW33DUP/104046-09

Date Logged-In: 5/4/01 **Sample Source:** Other/Undefined

Matrix: Water **Client Project #:** **PO#:** 104046

Project #: PHIL **Date Submitted to Lab:** 5/4/2001

- COLLECTION INFORMATION -

Date/Time/By: 4/9/01 2:30 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SO4-IC	300.0	Sulfate, SO4	4610	mg/L	5/18/01	JMN	2973

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 5/29/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2972	050301022D	SO4	D	68	mg/L	0	2 %D			20
2972	050301022S	SO4	S	96	mg/L	25	106 %R: *		0	
2973	050401019D	SO4	D	43	mg/L	0	1 %D			20
2973	050401019S	SO4	S	97	mg/L	50	107 %R: *		0	
2972	Blank	SO4	B	0	mg/L	0				
2973	Blank	SO4	B	0	mg/L	0				
2972	Calib Check	SO4	K	2	mg/L	2.5	97 %R: *		0	
2972	Calib Check	SO4	K	2	mg/L	2.5	98 %R: *		0	
2973	Calib Check	SO4	K	2	mg/L	2.5	98 %R: *		0	
2973	Calib Check	SO4	K	2	mg/L	2.5	98 %R: *		0	
2972	Calib Check	SO4	K	3	mg/L	2.5	100 %R: *		0	
2973	Calib Check	SO4	K	3	mg/L	2.5	100 %R: *		0	

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

Pinnacle Laboratories, Inc. 10600 — Interlab Chain of Custody — Date: 5/3 Page: 1 of 2

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

WATCH HOLD TIMES!
NEED QC!!

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry:	504 by IC	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
2167-0104-MW9/104046-01	4/9	1643	AQ	050401	1-	12							X															
-MW16/104046-02		1613			-	13							X															
-MW21/104046-03		1730			-	14							X															
-MW21DUP/104046-03		1730			-	15							X															
-MW22/104046-04		1720			-	16							X															
-MW23/104046-05		1703			-	17							X															
-MW26/104046-06		1147			-	18							X															
-MW29/104046-07		1550			-	19							X															
-MW32/104046-08		1334			-	20							X															
-MW33/104046-09		1430			-	21							X															

DUE DATE
MAY 17 2001 ~~MAY 17 2001~~
MAY 15 2001

PROJECT INFORMATION	SAMPLE RECEIPT	SAMPLES SENT TO:
PROJECT #: 104046	Total Number of Containers	PENSACOLA - STL-FL
PROJ. NAME: PHIL	Chain of Custody Seals	ESL - OR
QC LEVEL: ~~STD~~ IV	Received Intact?	STL - CT
QC REQUIRED: ~~MS~~ MSD BLANK	Received Good Cond./Cold	ATEL - AZ X
TAT: ~~STANDARD~~ RUSH!!	LAB NUMBER:	ATEL - MARION
		ATEL - MELMORE
DUE DATE: 5/15 OR ASAP	COMMENTS:	BARRINGER
RUSH SURCHARGE: —		ENVIRO TEST LABS
CLIENT DISCOUNT:		WCAS
SPECIAL CERTIFICATION REQUIRED: YES (NO)		WOHL

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tanno Time: 1700	Signature: Lani V. Lockett Time: 1200
Printed Name: Francine Tanno Date: 5/3/01	Printed Name: LANI V LOCKETT Date: 5/4
Pinnacle Laboratories, Inc.	Company ATEL
RECEIVED BY: 1	**RECEIVED BY: 2**
Signature: Lani V. Lockett Time: 1000	Signature: Time:
Printed Name: LANI V. LOCKETT Date: 5/4/01	Printed Name: Date:
Company ATEL	Company

Pinnacle Laboratories, Inc. Tuesday

Interlab Chain of Custody

Date: 5/4 Page: 2 of 2

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry:	504 by IC	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
267-0104-MW33DUP/104046	04 4/9	1430	AQ	D50401-22									X															

DUE DATE
MAY 17 2001 LKL
MAY 15 2001

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	104046	Total Number of Containers		PENSACOLA - STL-FL	
PROJ. NAME:	PHIL	Chain of Custody Seals		ESL - OR	
QC LEVEL:	(STD) IV	Received Intact?		STL - CT	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ	X
TAT:	(STANDARD) RUSH!!	LAB NUMBER:		ATEL - MARION	
				ATEL - MELMORE	
DUE DATE:	5/15 OR ASAP	COMMENTS:		BARRINGER	
RUSH SURCHARGE:	—			ENVIRO TEST LABS	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES (NO)			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Torres Time: 1700	Signature: Lani V. Lockett Time: 1700
Printed Name: Francine Torres Date: 5/3/01	Printed Name: LANI V. LOCKETT Date: 5/4
Pinnacle Laboratories, Inc.	Company ATEL
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Lani V. Lockett Time: 1800	Signature: Time:
Printed Name: Lani V. Lockett Date: 5/4	Printed Name: Date:
Company ATEL	Company

Analytical Results for El Paso

Monitoring Well	Benzene	Tolune	Ethylbenzene	Xylenes	NO3-NO2	SO4
3/15/2000						
8	27000	16000	520	5400	ND	ND
9	8300	7300	330	3400	ND	ND
16	ND	ND	ND	ND	57	550
21	39	ND	ND	ND	0.6	5400
22	ND	ND	ND	ND	20	3800
23	ND	ND	ND	ND	34	3700
26	1.6	2.8	ND	3.1	120	5200
29	15000	9200	700	5700	ND	15
10/25/2000						
8	15000	6900	650	17	ND	41
9	2500	3300	150	2000	ND	17
16	0.8	0.7	ND	0.7	2	1960
21	55	0.7	ND	0.6	0.2	76.7
22	0.6	0.7	ND	0.5	1.2	67
23	ND	ND	ND	ND	8.4	162
26	ND	ND	ND	ND	2.2	124
29	5000	2300	350	1800	0.05	322
12/7/2000						
32	2	1.1	1.4	3.5	10	4000
33	ND	ND	ND	ND	18	4200
34	7.6	ND	ND	ND	13	2900

003059, 003060, 003061, 003066, 003062, 003063, 003064, 003065

010104

012037

To: Mitch
(505) 344-4413

From: Scott Pope
EPFS

ENVIRONMENTAL

Well Number [redacted] DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS quarterly Sampling

Client Company El paso Field Services

Site Name Bisti Flare pit (LD 267)

R Thompson

Project No. 62800107

Phase.Task No. 0301

Rural San Juan Co.

Development Criteria

10 3 to 5 Casing Volumes of Water Removal

☐ Stabilization of Indicator Parameters

☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

		22.92	
		18.42	
		4.5	
		2"	
	4.5	0.73x3	2.19
			2.19

Instruments

	Serial No. (if applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Water Disposal

kJ2 Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)				Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1311		X				.5	.5		12.9	7.12	5860		cloudy no odor
	1313		X				.5	1		12.8	6.96	5700		" "
	1315		X				.5	1.5		12.6	6.92	5670		" "
	1317		X				.5	2		12.4	6.96	5690		" "
	1319		X				.5	2.5		12.7	6.93	5820	1.5	no Change

Circle the date and line that the development criteria are met.

Comments SAmpled 1334 for NITrates, sulfates, BTEX

Developer's Signature(s) [signature]

Date 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94

F:\NEWFORM\PE_A0101.DOT 1/31/96

[redacted] Well Number [redacted] [redacted] DEVELOPMENT AND PURGING DATA

ENVIRONMENTAL

Serial No. WDPD-

Project Name EPFS quarterly Sampling

[illegible] R Thompson

Project No. 62800107

Client Company EL paso Field Services

Phase.Task No. 0301

Site Name Bisti Flare pit (LD 267)

[illegible] Rural San Juan CO.

Development Criteria

☒ (3) to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other

[illegible] 32.61
[illegible] 24.02
[illegible] 8.59
[illegible] 2"

[illegible]	[illegible]	[illegible]	[illegible]
Well [illegible]	8.59	1.40X3	4.2
[illegible]			
[illegible]			
[illegible]			4.2

Instruments — Serial No. (if applicable)

☒ pH Meter — Hydac
☐ DO Monitor
☒ Conductivity Meter — Hydac
☒ Temperature Meter — Hydac
☐ Other

Methods of Development

Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic
☐ Other

Bailer
☒ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

Water Disposal: LLTZ Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	[illegible]	[illegible]	[illegible]	[illegible]	Temperature	pH	Conductivity (µmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1405		X				1	1			15.3	7.02	7550		Cloudy no odor
	1408		X				1	2			14	7.14	7520		" "
	1412		X				1	3			13.4	7.17	7620		" "
	1416		X				1	4			13.6	7.21	7760		" "
	1419		X				1	5			12.9	7.22	7800	2.5	no change

Circle the date and time that the development criteria are met.

Comments SAmpled for BTEX, NITRATES, Sulfates, 1430

Developer's Signature(s) [signature] Date 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/94

[redacted] ENVIRONMENTAL [redacted] Well Number [redacted] [redacted] WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name EPFS quarterly Sampling — R. Thompson — Project No. 62800107

Client Company El paso Field Services — Phase.Task No. 0301

Site Name Bisti Flare pit (LD 267) — Rural San Juan Co.

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

[illegible] 15.44
[illegible] 14.81
[illegible] 0.63
[illegible]
[illegible] 2"

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0.63	0.10X3	.30
[illegible]			
[illegible]			
Total			.30

Instruments — Serial No. (if applicable)

☑ pH Meter — Hydac
☐ DO Monitor
☑ Conductivity Meter — Hydac
☑ Temperature Meter — Hydac
☐ Other

Methods of Development

Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic
☐ Other

Bailer
☑ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

Water Disposal kutz Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	[illegible]	[illegible]	[illegible]	[illegible]	Temperature	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	0957						.10	.10			9.9	7.17	3.680		Cloudy, yellow Septic Odor

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .10 gal Bailed well Dry Could not get water level Bailer in Bottom of well obstructing probe Let Recover got water Level Sampled for NITRATE Sulfates BTEX 1643

Developer's Signature(s) [signature] Date 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

WELL DEVELOPMENT AND PURGING DATA

ENVIRONMENTAL — Well Number [redacted] — Serial No. WDPD-

Project Name EPFS Quarterly Sampling — [redacted] R. Thompson — Project No. 62900,07

Client Company El paso Field services — Phase.Task No. 0301

Site Name BiSTi Flare pit (LO267) — [redacted] Rural San Juan CO

Development Criteria
- ☑ 3 to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

[redacted] Initial Depth to Water 23.03
Initial Depth to Well Bottom 16.27
Height of Water Column in Well 6.76
Diameter of Well 2"

[redacted]	Height of Water Column in Well	1 Well Volume	Gallons to be Removed
[redacted]	6.76	1.10x3	3.30
[redacted]			3.30

Instruments — Serial No. (If applicable)
- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Water Disposal: Kutz Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	[redacted]	[redacted]	Temperature (°F)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1100		X				.75	.75	11.4	7.29	2430		clear no odor
	1103		X				.75	1.50	12	6.80	2970	3.5	no Change

Circle the date and time that the development criteria are met.

Comments: AFTer Bailing Approximately 1.75 gal Bailed well Dry LET Recover collected Samples BTex, NITRATES, Sulfates 1613

Developer's Signature(s): [redacted] 4-9-01 — Reviewer RT Date 4/9/01

[redacted] IT AND PURGING DATA

PHILIP ENVIRONMENTAL

Well Number PZ-2[illegible]

Serial No. WDPD-

Page 1 of 1

Project Name EPFS quarterly Sampling   [illegible] R. Thompson   Project No. C2800107

Client Company EL Paso Field Services   Phase.Task No. 0301

Site Name Bisti Flare pit (LD 262)   [illegible] Rural San Juan CO.

Development Criteria
- ☑ ③ to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

[illegible] 25.57
[illegible] 22.43
[illegible] 3.14
[illegible] 2"

[illegible]	3.14	0.51X3	1.53
[illegible]			1.53

Instruments / Serial No. (If applicable)
- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal: Lutz Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (1)	Water Volume Removed (2)			Temperature	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1451		x				.25	.28			12.6	7.27	7480	7c	Cloudy no odor
	1453		x				.25	.50			12.6	7.14	7810		" "
	1456		x				.25	.75			12.3	7.13	7680	3.5	no change

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .75 gal Bailed well Dry Sampled for BTex, NITRATES Sulfates 1230

Developer's Signature(s) Chris A. M[illegible]   [illegible] 4-9-01   Reviewer RT Date 4/9/01

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[redacted] ENVIRONMENTAL Well Number [redacted] [redacted]

Serial No. WDPD-

Page 1 of 1

Project Name GpFS quarterly Sampling [illegible] R. Thompson Project No. 62800107

Client Company El paso Field Services Phase.Task No. 0301

Site Name Bisti Flare pit (LD 262) [illegible] Rural San Juan CO.

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

[illegible] 23.03
[illegible] 20.55
[illegible] 2.48
[illegible] 2"

[illegible]	2.48	0.40X3	1.2
[illegible]			1.2

Instruments — Serial No. (If applicable)

☑ pH Meter — Hydac
☐ DO Monitor
☑ Conductivity Meter — Hydac
☑ Temperature Meter — Hydac
☐ Other

Water Disposal: Kutz Seperator Bloomfield N.M.

Methods of Development

Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic

Bailer
☑ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

☐ Other

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	[illegible]	[illegible]	[illegible]	Temperature [illegible]	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1248		X				.25	.25		14.2	7.09	7230		Clo-dy no odor
	1249		X				.25	.50		13.5	7.16	7250		" "
	1252		X				.25	.75		13.2	7.26	7270	2.5	no Change

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .82.5 gal Bailed well Dry LeT Recover Sampled for BTEX NITRATES Sulfates 1720

Developer's Signature(s) [signature] Date 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

[redacted] ENVIRONMENTAL [redacted] Well Number pc-25 [redacted] EV [redacted] DPI [redacted] NT [redacted] D [redacted] RGI [redacted] DATA

Serial No. WDPD-

Page 1 of 1

Project Name EpFS quarterly Sampling

[illegible] R. Thompson

Project No. 62800107

Client Company EL paso Field Services

Phase.Task No. 0301

Site Name Bisti Flare pit (LD 267)

[illegible] Rural San Juan CO.

Development Criteria
- ☑ (3) to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other ______

[illegible] 19.00
[illegible] 17.29
[illegible] 0.71
[illegible]
[illegible] 2"

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0.71	0.11 x 3	33
[illegible]			
[illegible]			.33

Instruments / Serial No. (if applicable)
- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other ______

Water Disposal: Kutz Seperator Bloomfield N.M.

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic
- ☐ Other ______

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water [illegible]	[illegible]	[illegible]	[illegible]	Temperature [illegible]	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-9-01	1230		X				.10	.10			16.2	7.46	C420	5.5	Clo-ty no odor

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .10 gal Bailed well Dry Let Recover Sampled for BTEX NITRATES Sulfates 1703

Developer's Signature(s) [signature] [illegible] 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

[redacted] Well Number [redacted]

[redacted] ...OPMENT AND PURGING DATA

ENVIRONMENTAL

Serial No. WDPD-

Page 1 of 1

Project No. 62800107

Phase.Task No. 0301

Project Name EPFS quarterly sampling — R Thompson

Client Company El Paso Field Services

Site Name BiSTi Flare piT (LD 267) — Rural San Juan CO.

Development Criteria

- ☒ (3) to 5 Casing Volumes of Water Removal
- ☒ Stabilization of Indicator Parameters
- ☐ Other

Initial Depth of Well (feet): 18.01
Initial Depth to Water (feet): 13.16
Height of Water in Well (feet): 4.85
Diameter of Well: 2"

	Height (ft)	Gallons	Total
Well	4.85	0.79X3	2.37
Total			2.37

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic
- ☐ Other

Bailer
- ☒ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

Instruments

Instrument	Serial No. (If applicable)
☒ pH Meter	Hydac
☐ DO Monitor	
☒ Conductivity Meter	Hydac
☒ Temperature Meter	Hydac
☐ Other	

Water Disposal: Kutz Separator Bloomfield IVM

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Removed: Interval	Water Removed: Cumulative			Temperature	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
4-9-01	1120		X				.5	.5			11.1	6.85	7800		Cloudy no odor
	1124		X				.5	1			11.4	7.12	7920		" "
	1126		X				.5	1.5			11.1	7.23	7960		" "
	1129		X				.5	2			11.2	7.26	7930		" "
	1131		X				.5	2.5			11.1	7.28	7820	5.5	no Change

Circle the date and time that the development criteria are met.

Comments: Collected Samples 1147 NITRATES, SulfATES, BTEX

Developer's Signature(s) [signature] Date 4-9-01 Reviewer RT Date 4/9/01

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

[redacted] ENVIRONMENTAL

Well Number PZ-2[illegible]

Serial No. WDPD-

[redacted] EV[redacted]OPM[redacted]NT [redacted]D P[redacted]RG[redacted] DA[redacted]

Project Name EPFS quarterly Sampling

[illegible] R. Thompson

Project No 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name Dist. Flare pit #1 (LD267)

[illegible] Rural San Juan Co.

Development Criteria

- ☐ (3) to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

[illegible] 20.55

[illegible] 17.77

[illegible] 2.78

[illegible] 2"

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2.78	0.45	1.35

Instruments — Serial No. (if applicable)

- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal: K-TZ Seperator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	[illegible]	[illegible]	[illegible]	[illegible]	Temperature	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
4-9-01	10.19		x				.25	.25			10.8	7.68	6430		clear yellow tint septic odor
	1022		x				.25	.50			11.2	7.67	6570	.5	no change

Circle the date and time that the development criteria are met.

Comments: AFTer Bailing Approximately .5 gal Bailed well Dry Let Recover Sampled for NITRATES Sulfates BTEX 1550

Developer's Signature(s) [signature] [illegible] 4-9-01 Reviewer RT Date 4/9/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **105013**
May 22, 2001

PHILIP SERVICE CORPORATION
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS BISTI FLARE PIT #1
Project Number 62800433

Attention: ROBERT THOMPSON/SCOTT POPE

On 05/02/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

All other analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP SERVICE CORPORATION	PINNACLE ID	: 105013
PROJECT #	: 62800433	DATE RECEIVED	: 05/02/01
PROJECT NAME	: EPFS BISTI FLARE PIT #1	REPORT DATE	: 05/22/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
105013 - 01	BIS-0501-P236	AQUEOUS	05/01/01
105013 - 02	BIS-0501-P235	AQUEOUS	05/01/01
105013 - 03	TRIP BLANK	AQUEOUS	04/16/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 105013
PROJECT # : 62800433
PROJECT NAME : EPFS BISTI FLARE PIT #1

SAMPLE ID #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	BIS-0501-P236	AQUEOUS	05/01/01	NA	05/03/01	20
0	BIS-0501-P235	AQUEOUS	05/01/01	NA	05/03/01	50
0	TRIP BLANK	AQUEOUS	04/16/01	NA	05/03/01	1

PARAMETER	DET. LIMIT	UNITS	BIS-0501-P236	BIS-0501-P235	TRIP BLANK
BENZENE	0.5	**UG/L**	**18000(D200)**	**19000(D200)**	< 0.5
TOLUENE	0.5	**UG/L**	**16000(D200)**	**12000(D200)**	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**630**	**800**	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**5300**	**6500**	< 0.5

SURROGATE:
BROMOFLUOROBENZENE (%) 101 115 95
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
(D200) = 200X dilution analyzed on 5/3/01.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

'E T	: EPA 8021 MODIFIED	PINNACLE I.D.	: 105013
L NK I. D.	: 050301	DATE EXTRACTED	: NA
:LIENT	: PHILIP SERVICE CORPORATION	DATE ANALYZED	: 05/03/01
'P JECT #	: 62800433	SAMPLE MATRIX	: AQUEOUS
'P JECT NAME	: EPFS BISTI FLARE PIT #1		

'ARAMETER	UNITS	
E ZENE	UG/L	<0.5
'OLUENE	UG/L	<0.5
:THYLBENZENE	UG/L	<0.5
'O AL XYLENES	UG/L	<0.5

URROGATE:		
B OMOFLUOROBENZENE (%)		98
URROGATE LIMITS:	(80 - 120)	

:HEMIST NOTES:

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

EST	: EPA 8021 MODIFIED		
IS/MSD #	: 050301	PINNACLE I.D.	: 105013
LIENT	: PHILIP SERVICE CORPORATION	DATE EXTRACTED	: NA
ROJECT #	: 62800433	DATE ANALYZED	: 05/03/01
ROJECT NAME	: EPFS BISTI FLARE PIT #1	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

AMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ZENE	<0.5	20.0	19.5	98	17.8	89	9	(80 - 120)	20
OLUENE	<0.5	20.0	20.0	100	18.3	92	9	(80 - 120)	20
YLBENZENE	<0.5	20.0	20.8	104	19.0	95	9	(80 - 120)	20
AL XYLENES	<0.5	60.0	61.8	103	56.8	95	8	(80 - 120)	20

EMIST NOTES:
/A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-05094
Received: 03 MAY 01
Reported: 15 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 105013, PHIL-EPFS BISTI FLARE PIT #1
Sampled By: Client
Code: 075610515

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
05094-1	BIS-05010-P236/105013-01	05-01-01/10:35
05094-2	BIS-05010-P235/105013-02	05-01-01/11:00

PARAMETER	05094-1	05094-2
Sulfate as SO4 (375.4), mg/l	540	100
Dilution Factor	25	5
Prep Date	05.04.01	05.04.01
Analysis Date	05.04.01	05.04.01
Batch ID	SEW051	SEW051
Analyst	BE	BE
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	0.23	0.34
Nitrate-N, mg/l	0.23R4	0.34R4
Nitrite-N, mg/l	<0.1R4	<0.1R4
Dilution Factor	1	1
Prep Date	05.03.01	05.03.01
Analysis Date	05.04.01	05.04.01
Batch ID	N3W25A	N3W25A
Analyst	CR	CR

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-05094
Received: 03 MAY 01
Reported: 15 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 105013, PHIL-EPFS BISTI FLARE PIT #1
Sampled By: Client
Code: 075610515

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
05094-3	Method Blank	
05094-4	Lab Control Standard % Recovery	

PARAMETER	05094-3	05094-4
Sulfate as SO4 (375.4), mg/l	<5.0	99 %
Dilution Factor	1	---
Prep Date	05.04.01	---
Analysis Date	05.04.01	---
Batch ID	SEW051	---
Analyst	BE	---
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	<0.1	100 %
Nitrite-N, mg/l	<0.1	100 %
Dilution Factor	1	---
Prep Date	05.03.01	---
Analysis Date	05.04.01	---
Batch ID	N3W25A	---
Analyst	CR	---

SEVERN TRENT SERVICES

STL Pensacola
LOG NO: C1-05094
Received: 03 MAY 01
Reported: 15 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 105013, PHIL-EPFS BISTI FLARE PIT #1
Sampled By: Client
Code: 075610515

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
05094-5	Matrix Spike % Recovery	
05094-6	Matrix Spike Duplicate % Recovery	

PARAMETER	05094-5	05094-6
Sulfate as SO4 (375.4), mg/l	113 %	115 %
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	89 %	92 %
Nitrite-N, mg/l	105 %	105 %

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

3355 McLemore Drive • Pensacola, FL 32514 • Tel: 850 474 1001 • Fax: 850 478 2671 • www.stl-inc.com

STL PENSACOLA

STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 01128CA (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewate and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C105094 Date Received: 5/3/01

1.	Was there a Chain of Custody?	(Yes)	No+			
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No+			
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No+	N/A		
4.	Were all samples properly labeled and identified?	(Yes)	No+			
5.	Did samples require splitting or compositing♦? Req By: PM Client Other♦	Yes+	(No)			
6.	Were samples received in proper containers for analysis requested?	(Yes)	No+			
7.	Were all sample containers received intact?	(Yes)	No+			
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*	(Yes)	No+	N/A		
9.	Is there sufficient volume for analysis requested?	(Yes)	No+	N/A *(Can)*		
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No+			
11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes+	No	(N/A)		
12.	If sent, were matrix spike bottles returned?	Yes	No+	(N/A)		
13.	Was Project Manager notified of problems? (initials:_____)	Yes	No+	(N/A)		

Airbill Number(s): 127878168014335 5382
127878168014394 40996

Shipped By: UPS

Cooler Number(s): Client Chart

Shipping Charges: N/A

Cooler Weight(s): 67# 29#

Cooler Temp(s) (°C): 5°C, 4°C
CCK4
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

Multiple project / cooler shipment

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: MHS **Date:** 5/3/01 **Logged By:** LLK **Date:** 03-MAY-01

+ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O_2, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

+ *All preservatives for the State of North Caroline, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. **Interlab Chain of Custody** Date: 5/2 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

C105094

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
BIS-0501-P236 | 105013-01	5/1	1035	AQ	
BIS-0501-P235 | 105013-02	↓	1100	↓	

ANALYSIS REQUEST

Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry:	Total NO3, SO4	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
								X															
								X															

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	105013	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	PHIL	Chain of Custody Seals		ESL - OR	
QC LEVEL:	~~STD~~ IV	Received Intact?		STL - CT	
~~QC REQUIRED:~~	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:		ATEL - MARION	
				ATEL - MELMORE	
DUE DATE:	5/16	COMMENTS:		BARRINGER	
RUSH SURCHARGE:	—			ENVIRO TEST LABS	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED: YES	(NO)			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Trivino Time: 1700	Signature: Time:
Printed Name: Francine Trivino Date: 5/2/01	Printed Name: Date:
Company: Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Mark Swafford Time: 0945	Signature: Time:
Printed Name: Mark Swafford Date: 5/3/01	Printed Name: Date:
Company: STLPNS	Company

105013

Chain of Custody Record

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2527

Project Name EPFS BISTI FLARE PIT #1
Project Number 62800433 Phase . Task 35 .
Samplers R. THOMPSON
Laboratory Name PINNACLE LABS.
Location ALBUQUERQUE, NM

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	NITRATES (TOTAL)	SULFATES	Lab ID#	Comments
BIS-0501-P236	5/1/01	1035	H_2O	4	x	x	x	01	
BIS-0501-P235	5/1/01	1100	H_2O	4	x	x	x	02	
TRIP BLANK	~~4~~/16/01	1650	H_2O	1	x			03	

RT 5/1/01

RT 5/1/01

Relinquished by:

Signature	Date	Time
Robert Thompson	5/1/01	1525

Received By:

Signature	Date	Time
Francine Jaramillo	5/2/01	0905

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☒ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☒ Other (Specify) $HgCl_2$
- ☐ Other (Specify) _____

Carrier: GREYHOUND LINES
Airbill No. GLI 1606919590

Shipping and Lab Notes: BILL SCOTT POPE W/ EPFS DIRECTLY. SEND LAB RESULTS TO SCOTT POPE OF EPFS AND ROBERT THOMPSON W/ PSL.

Rec'd @ 4.2°C

PE-176 4/95

PHILIP ENVIRONMENTAL

Well Number P2-36

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS BISTI FLARE PIT #1 Project Manager R. THOMPSON Project No. 62800433

Client Company EL PASO FIELD SERVICES Phase.Task No. 35

Site Name BISTI FLARE PIT #1 Site Address BEHIND CHACO PLANT

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 28.14' TOR
Initial Depth to Water (feet) 24.71' TOR
Height of Water Column in Well (feet) 3.43
Diameter (inches): Well 2 Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	3.43	.56	.56 x 3
Gravel Pack			
Drilling Fluids			
Total			1.68

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other	

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
5/1/01	0920		X				0	0			18.7	6.83	5970		CLOUDY
5/1/01	0930		X				1	1			17.8	7.03	5940		LIGHT BROWN-SILTY
5/1/01	0940		X				1	2			19.1	7.25	6140		LIGHT BROWN-SILTY

Circle the date and time that the development criteria are met.

Comments WELL BAILED DRY AT APPROX. 3 GAL. SAMPLED AT 1035.

Developer's Signature(s) Robert Champson Date 5/1/01 Reviewer Date

PHILIP ENVIRONMENTAL

Well Number P2-35

☒ Development ☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS BISTI FLARE PIT #1 | Project Manager R. THOMPSON | Project No. 62800433

Client Company EL PASO FIELD SERVICES | Phase.Task No. 55

Site Name BISTI FLARE PIT #1 | Site Address BEHIND CHACO PLANT

Development Criteria

☒ 3 to 5 Casing Volumes of Water Removal
☒ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 27.82' TOR
Initial Depth to Water (feet) 25.17' TOR
Height of Water Column in Well (feet) 2.65'
Diameter (inches): Well 2 Gravel Pack ____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	2.65'	.43	.43 x 3
Gravel Pack			
Drilling Fluids			
Total			1.29

Instruments

	Serial No. (if applicable)
☒ pH Meter	HYDAC
☐ DO Monitor	
☒ Conductivity Meter	HYDAC
☒ Temperature Meter	HYDAC
☐ Other _____	

Water Disposal

KUTZ SEPARATOR

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/l)	Comments
5/1/01	955		X				0	0			20.7	7.24	3660		LIGHT BROWN - PRODUCT
5/1/01	1005		X				1	1			21.5	7.30	6830		LIGHT BROWN - SILTY

Circle the date and time that the development criteria are met.

Comments PRODUCT READING - 25.15' TOR. BAILED DRY AT APPROX. 2.5 GAL. SAMPLED AT 1100

Developer's Signature(s) Robert Thompson Date 5/1/01 Reviewer _____ Date _____

Form A0101 Rev. 10/6/94 F:\NEWFORM\PE_A0101.DOT 1/31/96

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **110052**
November 07, 2001

GOLDEN ENVIRONMENTAL MNGT.
906 SAN JUAN BLVD.
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY AVE
FARMINGTON, NM 87401

Project Name EPFS REMEDIATION PROJECT
Project Number 6169

Attention: LISA WINN/SCOTT POPE

On 10/10/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

The nitrate and sulfate samples were split by Pinnacle and analyzed by traditional wet chemisty technique (STL-FL) and ion chromatography (ATEL),

While both analytes are in experimental agreement, the sulfate data has a wide error that would be expected from the intereference from the matrices. Both sets of data are submitted and will be charged for only one set.

EPA method 8021 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

Wet Chemistry analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

Ion Chromatography analyses were performed by ATEL, Tucson, AZ.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	PINNACLE ID	: 110052
PROJECT #	: 6169	DATE RECEIVED	: 10/10/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	REPORT DATE	: 11/07/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
110052 - 01	267-0110-PZ 16	AQUEOUS	10/09/01
110052 - 02	267-0110-PZ 21	AQUEOUS	10/09/01
110052 - 03	267-0110-PZ 22	AQUEOUS	10/09/01
110052 - 04	267-0110-PZ 26	AQUEOUS	10/09/01
110052 - 05	267-0110-PZ 32	AQUEOUS	10/09/01
110052 - 06	267-0110-PZ 33	AQUEOUS	10/09/01
110052 - 07	267-0110-PZ 36	AQUEOUS	10/09/01
110052 - 08	267-0110-PZ 83	AQUEOUS	10/09/01
110052 - 09	TRIP BLANK	AQUEOUS	10/05/01

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 110052
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJECT

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR	
01	267-0110-pz 16	AQUEOUS	10/09/01	NA	10/18/01	1	
02	267-0110-pz 21	AQUEOUS	10/09/01	NA	10/15/01	10	*
03	267-0110-pz 22	AQUEOUS	10/09/01	NA	10/18/01	1	

PARAMETER	DET. LIMIT	UNITS	267-0110-pz 16	267-0110-pz 21	267-0110-pz 22
BENZENE	0.5	**UG/L**	< 0.5	**19**	**0.9**
TOLUENE	0.5	UG/L	< 0.5	< 5.0	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 5.0	< 0.5
TOTAL XYLENES	0.5	UG/L	< 0.5	< 5.0	< 0.5
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 25.0	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	105	117
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
Dilution due to matrix interference.

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 110052
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJECT

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR	
04	267-0110-pz 26	AQUEOUS	10/09/01	NA	10/18/01	1	
05	267-0110-pz 32	AQUEOUS	10/09/01	NA	10/18/01	5	*
06	267-0110-pz 33	AQUEOUS	10/09/01	NA	10/16/01	10	*

PARAMETER	DET. LIMIT	UNITS	267-0110-pz 26	267-0110-pz 32	267-0110-pz 33
BENZENE	0.5	**UG/L**	**0.6**	< 2.5	< 5.0
TOLUENE	0.5	**UG/L**	**0.6**	< 2.5	< 5.0
ETHYLBENZENE	0.5	UG/L	< 0.5	< 2.5	< 5.0
TOTAL XYLENES	0.5	UG/L	< 0.5	< 2.5	< 5.0
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 12.5	< 25.0
SURROGATE:					
BROMOFLUOROBENZENE (%)			103	109	116
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
Dilution due to matrix interference.

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 110052
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJECT

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR	
07	267-0110-pz 36	AQUEOUS	10/09/01	NA	10/16/01	100	
08	267-0110-pz 83	AQUEOUS	10/09/01	NA	10/16/01	10	*
09	TRIP BLANK	AQUEOUS	10/05/01	NA	10/16/01	1	

PARAMETER	DET. LIMIT	UNITS	267-0110-pz 36	267-0110-pz 83	TRIP BLANK
BENZENE	0.5	**UG/L**	**14000**	< 5.0	< 0.5
TOLUENE	0.5	**UG/L**	**2200**	< 5.0	< 0.5
ETHYLBENZENE	0.5	**UG/L**	**590**	< 5.0	< 0.5
TOTAL XYLENES	0.5	**UG/L**	**4100**	< 5.0	< 0.5
METHYL-t-BUTYL ETHER	2.5	UG/L	< 250	< 25.0	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			97	113	96
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
Dilution due to matrix interference.

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 110052
BLANK I. D.	: 101501	DATE EXTRACTED	: N/A
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 10/15/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
1,3,5-TRIMETHYLBENZENE	UG/L	<0.5
1,2,4-TRIMETHYLBENZENE	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		99
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 110052
BLANK I. D.	: 101601	DATE EXTRACTED	: N/A
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 10/16/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
1,3,5-TRIMETHYLBENZENE	UG/L	<0.5
1,2,4-TRIMETHYLBENZENE	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 110052
BLANK I. D.	: 101801	DATE EXTRACTED	: N/A
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 10/18/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
1,3,5-TRIMETHYLBENZENE	UG/L	<0.5
1,2,4-TRIMETHYLBENZENE	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 110064-02	PINNACLE I.D.	: 110052
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE EXTRACTED	: N/A
PROJECT #	: 6169	DATE ANALYZED	: 10/16/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.2	96	19.7	99	3	(80 - 120)	20
TOLUENE	<0.5	20.0	19.0	95	20.0	100	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	18.6	93	19.6	98	5	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	55.2	92	58.9	98	6	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-10270
Received: 11 OCT 01
Reported: 25 OCT 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 110052-GEM,EPFS REMEDIATION PROJECT
Sampled By: Client
Code: 090811025

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
10270-1	267-0110-PZ16/110052-01	10-09-01/16:50
10270-2	267-0110-PZ21/110052-02	10-09-01/16:34
10270-3	267-0110-PZ22/110052-03	10-09-01/16:20
10270-4	267-0110-PZ26/110052-04	10-09-01/15:50
10270-5	267-0110-PZ32/110052-05	10-09-01/13:22

PARAMETER	10270-1	10270-2	10270-3	10270-4	10270-5
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)					
Nitrate + Nitrite-N, mg/l	57	0.27	9.3	62	13
Nitrate-N, mg/l	57R4	0.27R4	9.1R4	62R4	11R4
Nitrite-N, mg/l	<0.10R4	<0.10R4	0.24R4	<0.10R4	1.7R4
Dilution Factor	20	1	2	20	4,5
Prep Date	10.12.01	10.12.01	10.12.01	10.12.01	10.12.01
Analysis Date	10.16.01	10.16.01	10.16.01	10.16.01	10.16.01
Batch ID	N3W63C	N3W63C	N3W63C	N3W63C	N3W63C
Prep Method	4500NO2B	4500NO2B	4500NO2B	4500NO2B	4500NO2B
Analyst	CR	CR	CR	CR	CR
Sulfate as SO4 (375.4), mg/l	640	5700	5200	5700	4300
Dilution Factor	25	200	200	200	2000
Analysis Date	10.15.01	10.15.01	10.15.01	10.15.01	10.15.01
Batch ID	SEW133	SEW133	SEW133	SEW133	SEW133
Analyst	BE	BE	BE	BE	BE

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-10270
Received: 11 OCT 01
Reported: 25 OCT 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 110052-GEM,EPFS REMEDIATION PROJECT
Sampled By: Client
Code: 090811025

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
10270-6	267-0110-PZ33/110052-06	10-09-01/14:09
10270-7	267-0110-PZ36/110052-07	10-09-01/12:05
10270-8	267-0110-PZ83/110052-08	10-09-01/14:09

PARAMETER	10270-6	10270-7	10270-8
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)			
Nitrate + Nitrite-N, mg/l	6.2	0.18	6.0
Nitrate-N, mg/l	5.7R4	0.18R4	5.5R4
Nitrite-N, mg/l	0.48R4	<0.10R4	0.46R4
Dilution Factor	2	1	2
Prep Date	10.12.01	10.12.01	10.12.01
Analysis Date	10.16.01	10.16.01	10.16.01
Batch ID	N3W63C	N3W63C	N3W63C
Prep Method	4500NO2B	4500NO2B	4500NO2B
Analyst	CR	CR	CR
Sulfate as SO4 (375.4), mg/l	5400	56	6000
Dilution Factor	200	4	200
Analysis Date	10.15.01	10.15.01	10.15.01
Batch ID	SEW133	SEW133	SEW133
Analyst	BE	BE	BE

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-10270
Received: 11 OCT 01
Reported: 25 OCT 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 110052-GEM,EPFS REMEDIATION PROJECT
Sampled By: Client
Code: 090811025

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
10270-9	Method Blank	
10270-10	Lab Control Standard % Recovery	

PARAMETER	10270-9	10270-10			
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)					
Nitrate + Nitrite-N, mg/l	<0.10	105 %			
Nitrite-N, mg/l	<0.10	95 %			
Dilution Factor	1	---			
Prep Date	10.12.01	---			
Analysis Date	10.16.01	---			
Batch ID	N3W63C	N3W63C			
Prep Method	4500NO2B	---			
Analyst	CR	---			
Sulfate as SO4 (375.4), mg/l	<5.0	92 %			
Dilution Factor	1	---			
Analysis Date	10.15.01	---			
Batch ID	SEW133	SEW133			
Analyst	BE	---			

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-10270
Received: 11 OCT 01
Reported: 25 OCT 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 110052-GEM,EPFS REMEDIATION PROJECT
Sampled By: Client
Code: 090811025

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
10270-11	Matrix Spike % Recovery	
10270-12	Matrix Spike Duplicate % Recovery	

PARAMETER	10270-11	10270-12
Nitrate-Nitrite, Nitrogen (353.2/354.1/4500-NO3)		
Nitrate + Nitrite-N, mg/l	106 %	107 %
Nitrite-N, mg/l	105 %	105 %
Batch ID	N3W63C	N3W63C
Sulfate as SO4 (375.4), mg/l	129 %	129 %
Batch ID	SEW133	SEW133

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
See the Project Sample Inspection Form (PSIF) to determine if a sample was received that did not meet EPA requirements for sample collection, preservation, or holding time.

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES
STL Pensacola

Data Qualifiers for Final Report

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL Pensacola RL and ≥ the STL Pensacola MDL; therefore, the quantitation is estimation.
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The quantitation may be an estimation.
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The analyte was analyzed for but not detected (at or above the RL or the MDL, whichever is entered next to the "U" value. Value for result will never be below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

Revised 06/19/01

STL PENSACOLA
State Certifications

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/02

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/12/02

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental), expires 02/07/02

State of California, Department of Health Services, Laboratory ID No. 01128CA (Hazardous Waste and Wastewater), expires 03/31/02

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/01

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL) Extension granted

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/02

Florida DEP/DOH CompQAP # 980156

Florida, Radioactive Materials License No. G0733-1, no expiration date assigned

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/01

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water), expires 12/31/01

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water), expires 12/31/01

Louisiana Department of Environmental Quality, LELAP, Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental, expires 6/30/02)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/02

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Wastewater), expires 06/30/02

State of Michigan, Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/02

New Hampshire DES ELAP, Laboratory ID No. 250501 (Wastewater), expires 08/16/02

State of New Jersey, Department of Env. Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waster), expires 06/30/01

New York State, Department of Health, Laboratory ID No. 11503 (WW and Solids/Hazardous Waste), expires 03/31/02

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/01

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida), expires 06/30/02

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/02

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water), expires 12/01/01

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/02

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/02

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater), expires 09/14/01

West Virginia Division of Env., Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater Reciprocity FL), expires 12/31/01

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704, expires 04/01/04

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT SERVICES

Lab Order #: C110270 Date Received: 10-11-01

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*	(Yes) No* N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes) No* N/A *(Can)*
3.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes) No*
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes* No (N/A)
5.	Did samples require splitting or compositing♦? Req By: PM Client Other♦	Yes*	(No)				
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		12.	If sent, were matrix spike bottles returned?	Yes No* (N/A)
7.	Were all sample containers received intact?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials:_____)	Yes No* (N/A)

Airbill Number(s): 1Z 878 168 01
4337 0641

Shipped By: UPS

Cooler Number(s): client

Shipping Charges:

Cooler Weight(s): 20#

Cooler Temp(s) (°C): 2°
(CCK6)
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS) ☞

Inspected By: DMH **Date:** 10.11.01 **Logged By:** LLK **Date:** 11-OCT-01

♣ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytic department will flag immediate hold time samples(pH, Dissolved O_2, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All preservatives for the State of North Caroline, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).*

Pinnacle Laboratories, Inc. — Interlab Chain of Custody

Date: 10/10 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

C110270

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry: SO4, Total NO3		Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
267-0110-PZ16/110052-01	10/9	1650	AQ									X																
- - 21/110052-02		1634										X																
- - 22/110052-03		1620										X																
- - 26/110052-04		1550										X																
- - 32/110052-05		1322										X																
- - 33/110052-06		1409										X																
- - 36/110052-07		1205										X																
↓ - ↓ - 83/110052-08	↓	1409	↓									X																

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	110052	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	GEM	Chain of Custody Seals		ESL - OR	
QC LEVEL:	(STD.) IV	Received Intact?		STL - CT	
QC REQUIRED:	(STANDARD) MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:		ATEL - MARION	
				ATEL - MELMORE	
DUE DATE:	10/24	COMMENTS:		BARRINGER	
RUSH SURCHARGE:	—			ENVIRO TEST LABS	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES (NO)			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2
Signature: Francine Tanio Time: 1700	Signature: Time:
Printed Name: Francine Tanio Date: 10/10/01	Printed Name: Date:
Company: Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2**
Signature: Davette Howard Time: 0940	Signature: Time:
Printed Name: Davette Howard Date: 10-11-01	Printed Name: Date:
Company STL-PNS	Company

ATEL
Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Attn: Mitch Rubenstein

Report Date: *30-Oct-01*

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Our Lab #: 102501014
Your Sample ID: 267-0110-PZ16/110052-01
Date Logged-In: 10/25/01
Sample Source: Other/Undefined
Matrix: Water
Client Project #:
PO#: 110052/102514
Project #: GEM
Date Submitted to Lab: 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 4:50 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	60.3	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	442	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mostue

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *30-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501015 **Your Sample ID:** 267-0110-PZ21/110052-02
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 4:34 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	< 1.00	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	5050	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *30-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501016 **Your Sample ID:** 267-0110-PZ22/110052-03
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 4:20 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	10.0	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	4230	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *31-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501017 **Your Sample ID:** 267-0110-PZ26/110052-04
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 3:50 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	64.6	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	4390	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *30-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501018 **Your Sample ID:** 267-0110-PZ32/110052-05
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 1:22 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	12.9	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	2980	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *30-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501019 **Your Sample ID:** 267-0110-PZ33/110052-06
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 2:09 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	6.36	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	4890	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *31-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**
FAX: (505) 344-4413

Attn: Mitch Rubenstein

Our Lab #: 102501020 **Your Sample ID:** 267-0110-PZ36/110052-07
Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** 110052/102514
Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 12:05 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	< 1.00	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	84	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: T0608 **Report Date:** *30-Oct-01*

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107-

Phone: (505) 344-3777 **Ext:**

Attn: Mitch Rubenstein **FAX:** (505) 344-4413

Our Lab #: 102501021 **Your Sample ID:** 267-0110-PZ83/110052-08

Date Logged-In: 10/25/01 **Sample Source:** Other/Undefined

Matrix: Water **Client Project #:** **PO#:** 110052/102514

Project #: GEM **Date Submitted to Lab:** 10/25/2001

- COLLECTION INFORMATION -

Date/Time/By: 10/9/01 2:09 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NO3-IC	300.0	Nitrate (as N)	6.08	mg/L	10/29/01	JMN	3158
SO4-IC	300.0	Sulfate, SO4	4830	mg/L	10/26/01	JMN	3155

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

ATEL

Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 0/30/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1			-- QC Calculations -- QC2		Lower Limit	Upper Limit
3155	102501014D	SO4	D	462	mg/L	0	4	%D					20
3158	102501014M	NO3	M	116	mg/L	50	110	%R:	*	1	%RPD	0	
3158	102501014S	NO3	S	116	mg/L	50	112	%R:	*			0	
3155	102501014S	SO4	S	695	mg/L	250	101	%R:	*			0	
3158	Blank	NO3	B	0.00	mg/L	0							
3155	Blank	SO4	B	0	mg/L	0							
3158	Calib Check	NO3	K	1.03	mg/L	1	103	%R:	*			0	
3158	Calib Check	NO3	K	1.06	mg/L	1	106	%R:	*			0	
3155	Calib Check	SO4	K	2	mg/L	2.5	99	%R:	*			0	
3155	Calib Check	SO4	K	2	mg/L	2.5	100	%R:	*			0	
3155	Calib Check	SO4	K	3	mg/L	2.5	100	%R:	*			0	

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

Pinnacle Laboratories, Inc. — **Interlab Chain of Custody** — Date: 10/24 Page: 1 of 1

Network Project Manager: Jacinta A. Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

T0608

Need Report ASAP!
attn: *please invoice account* **T0608** and
PINNACLE requires the following QC for all studies: BLANK, SPIKE & DUPLICATE.
Thank you

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	RCRA TCLP METALS	Metals-13 PP List	Metals-TAL (23 METALS)		TOX	TOC	Gen Chemistry:	NO3 by IC, SO4 by IC	Oil and Grease	Volatile Organics GC/MS (8260)	BOD	COD	PESTICIDES/PCB (608/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8240 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	URANIUM (ICP-MS)	RADIUM 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
267-0110-PZ16/110052-01	10/9	1650	AQ	102521	-14								X															
- - 21/110052-02		1634			-15								XX															
- - 22/110052-03		1620			-16								XX															
- - 26/110052-04		1550			-17								X															
- - 32/110052-05		1322			-18								X							DUE DATE								
- - 33/110052-06		1404			-19								XX							NOV 06 2001								
- - 36/110052-07		1205			-20								XX															
↓ ↓ ↓ 83/110052-08	↓	1409	↓		-21								X															

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	110052/102514	Total Number of Containers		PENSACOLA - STL-FL	
PROJ. NAME:	GEM	Chain of Custody Seals		ESL - OR	
QC LEVEL:	(STD.) IV	Received Intact?		STL - CT	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ	X
TAT:	(STANDARD) RUSH!!	LAB NUMBER:		ATEL - MARION	
				ATEL - MELMORE	
DUE DATE:	11/7	COMMENTS:		BARRINGER	
RUSH SURCHARGE:	—			ENVIRO TEST LABS	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED: YES (NO)				WOHL	

RELINQUISED BY: 1	RELINQUISED BY: 2
Signature: Francine Tenorio Time: 1700	Signature: Time:
Printed Name: Francine Tenorio Date: 10/24/01	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1	**RECEIVED BY: 2**
Signature: Time: 1000	Signature: Time:
Printed Name: LANI LOCKETT Date: 10/25	Printed Name: Date:
Company ATEL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 10-10-01 PAGE: 1 OF 1

PLI Accession #: 110052

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Lisa Linn

COMPANY: Golden Environmental Management
ADDRESS: 906 San Juan BLVD suite D
Farmington N.M. 87401
PHONE: (505) 566-9116
FAX: (505) 566-9120

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 604 Reilly AVE
Farmington N.M. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	Total NITRATES (M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	Total Sulfates	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER CONTAINERS
267-0110-pz 16	10-9-01	1650	H_2O	01			X		X						X															4
267-0110-pz 21	10-9-01	1634	H_2O	02			X		X						X															4
267-0110-pz 22	10-9-01	1620	H_2O	03			X		X						X															4
267-0110-pz 26	10-9-01	1550	H_2O	04			X		X						X															4
267-0110-pz 32	10-9-01	1322	H_2O	05			X		X						X															4
267-0110-pz 33	10-9-01	1409	H_2O	06			X		X						X															4
267-0110-pz 36	10-9-01	1205	H_2O	07			X		X						X															4
267-0110-pz 83	10-9-01	1409	H_2O	08			X		X						X															4
Trip Blank	10-5-01	1445	H_2O	09					X																					1

PROJECT INFORMATION

PROJ. NO.: 6169
PROJ. NAME: EPFS Remediation project
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS:	33
CUSTODY SEALS:	Y / N (NA)
RECEIVED INTACT:	Y / N
BLUE ICE / ICE	3.5° C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

Bisti Flare pit (LD267)

RELINQUISHED BY: 1.

Signature: Time: 0930
Printed Name: Chris Mac Date: 10-10-01
Company:
See reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1635
Printed Name: Date: 10/10/01
Pinnacle Laboratories Inc.

DISTRIBUTION: White - PLI, Canary - Originator

Well Development and Purging Data

Project No. C169 | Development ☐ | Purging ☑ | Page 1 of 1

Task No.

Well No. PZ 16 | Site Name/Identification Bisti Flare pit #1 (LD267) | Site Address Rural San Juan CO.

Client/Project Name El paso Field Services EPFS Remediation project | Project Manager Clint Winn

Development Criteria
- ☑ 3 to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
- Initial Depth of Well (feet) 23.03
- Initial Depth to Water (feet) 15.67
- Height of Water Column in Well (feet) 7.36
- Diameter (inches): Well 2" Gravel Pack

Instruments | Serial No. (if applicable)
- ☑ PH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	7.36	1.20X3	3.6
Gravel Pack			
Drilling Fluids			
Total			3.6

Water Disposal 11
hauled to Seperator Bloomfield NM.

Sampling Activities
Type of Container Plastic/VOA | No. of Containers 4
Parameters Sampled For VOA's, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1514		X				.75	.25			17.7	2.47	3160		Clear/ no odor
	1517		X				.25	1.5			17	2.34	4080		No Change
	1656		X			22.20	.5	2			—	—	—	5.58	

Circle the date and time that the development criteria are met.

Comments After Bailing Approximately 2 gal Bailed well Dry Let Recover Sampled for BTEX 1650

Developer's Signature (s) Chris A. McMurray | Date 10-9-01 | Reviewer [illegible] | Date 11/12/01

Well Development and Purging Data

Project No. 6169 | Development ☐ | Purging ☑ | Page 1 of 1

Task No.

Well No. PZ 21 | Site Name/Identification BIST Flare pit #1 (LD267) | Site Address Rural San Juan CO

Client/Project Name El paso Field Services EPFS Remediation project | Project Manager Lisa Winn

Development Criteria
- ☑ 3 to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
- Initial Depth of Well (feet) 25.57
- Initial Depth to Water (feet) 22.53
- Height of Water Column in Well (feet) 3.04
- Diameter (inches): Well 2" Gravel Pack

Instruments | Serial No. (if applicable)
- ☑ PH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	3.04	0.49 x 3	1.47
Gravel Pack			
Drilling Fluids			
Total			1.47

Water Disposal
KUTZ seperator Bloomfield NM

Sampling Activities
Type of Container plastic/VOA | No. of Containers 4
Parameters Sampled For NITRATES, SULFATES, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1434		X				.25	.25			16.3	6.89	9440		Cloudy no odor
	1437		X			25.19	.25	.50			16.2	6.80	9320		no change
	1644													2.90	

Circle the date and time that the development criteria are met.

Comments Bailed Approximately .5 gal Bailed well Dry Let Recover Sampled for BTEX 1634

Developer's Signature (s) Chris A. May | Date 10-9-01 | Reviewer [signature] | Date 10/12/01

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☑
Well No. PZ 22 Site Name/Identification Bisti Flare pit #1 (LD262) Site Address Rural San Juan CO.
Client/Project Name El paso Field Services EPFS Remediation project Project Manager Lisa Winn

Page 1 of 1

Development Criteria
☐ 3 to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 23.03
Initial Depth to Water (feet) 20.60
Height of Water Column in Well (feet) 2.43
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	2.43	0.39x3	1.17
Gravel Pack			
Drilling Fluids			
Total			1.17

Instruments / **Serial No. (if applicable)**
☑ PH Meter — Hydac
☐ DO Monitor
☑ Conductivity Meter — Hydac
☑ Temperature Meter — Hydac
☐ Other

Methods of Development
Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☑ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other

Water Disposal
Kurz Seperator Bloomfield N.M.

Sampling Activities
Type of Container Plastic/VOA No. of Containers 4
Parameters Sampled For Nitrates, Sulfates, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1227		X				.25	.25			16.9	6.73	8740		Clear no odor
	1230		X				.25	.50			16.4	6.74	8790		Cloudy no odor
	1231		X				.25	.25			16.1	6.76	8820		" "
	1235		X			21.87	.25	1			15.9	6.77	8850		No Change
	1619													0.70	

Circle the date and time that the development criteria are met.

Comments After Bailing approximately 1 gal Bailed well Dry Let Recover Sampled for BTEX 1620

Developer's Signature (s) Chris. May Date 10-9-01 Reviewer L Winn Date 10/12/01

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☑
Well No. P2 23 Site Name/Identification BisTi Flare pit #1 (L0267) Site Address Rural San Juan Co.
Client/Project Name El paso Field Services EpFS Remediation project Project Manager Lisa Winn

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 18.00
Initial Depth to Water (feet) 17.40
Height of Water Column in Well (feet) .60
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	.60	0.09X3	.27
Gravel Pack			
Drilling Fluids			
Total			.27

Instruments

	Serial No. (if applicable)
☑ PH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development

Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic

Bailer
☑ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

☐ Other

Water Disposal

Knit Separator Bloomfield NM.

Sampling Activities

Type of Container Plastic/VOA No. of Containers
Parameters Sampled For NITRATES SULFATES BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1246		X			17.86	.5	.5			16.7	2.10	7640		Slight septic odor Clear/yellow tint

Circle the date and time that the development criteria are met.

Comments After Bailing approximately .5 gal NEVER Recovered enough to collect Sample Dry well

Developer's Signature (s) Brian A. May Date 10-9-01 Reviewer L Winn Date 10/12/01

GEM Golden Environmental Management

Well Development and Purging Data

Project No. 6169
Task No.
Well No. D2 26

Development ☐
Purging ☑

Site Name/Identification BST. Flare pit #1 LD267 Site Address Rural San Juan Co.

Client/Project Name El paso Field Services EPFS Remediation project
Project Manager Lisa Winn

Development Criteria
③ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 18.01
Initial Depth to Water (feet) 13.24
Height of Water Column in Well (feet) 4.77
Diameter (inches): Well ____ Gravel Pack ____

Item	Water Volume in Well Cubic Feet	Water Volume in Well Gallons	Gallons to be Removed
Well Casing	4.77	0.77x3	2.31
Gravel Pack			
Drilling Fluids			
Total			2.31

Instruments
Instrument	Serial No. (if applicable)
☑ PH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development
Pump
☐ Centrifugal
☐ Submersible
☐ Peristaltic

Bailer
☑ Bottom Valve
☐ Double Check Valve
☐ Stainless-steel Kemmerer

☐ Other

Water Disposal
Kutz Separator Bloomfield N.M.

Sampling Activities
Type of Container plastic, VOA No. of Containers 4
Parameters Sampled For NITRATES, Sulfates, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1533		X				.5				17.6	7.02	10090		Clear, no odor
	1536		X				.5				17.2	7.03	10320		Cloudy, no odor
	1537		X				.5				16.9	7.03	10300		Clear, no odor
	1539		X								16.6	7.03	10230		
	1542		X			14.66					16.2	7.05	10110	5.10	no change

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1550

Developer's Signature (s) [signature] Date 10-9-01 Reviewer [signature] Date 10/12/01

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☒
Well No. P2 29 Site Name/Identification BST Flare pit #1 (LD267) Site Address Rural San Juan CO
Client/Project Name El paso Field Services EPFS Remediation project Project Manager Lisa Winn

Page 1 of 1

Development Criteria
- ☒ 3 to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 20.55
Initial Depth to Water (feet) 18.01
Height of Water Column in Well (feet)
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments (Serial No. (if applicable))
- ☒ PH Meter — Hydac
- ☐ DO Monitor
- ☒ Conductivity Meter — Hydac
- ☒ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☒ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal
Enviro Seperator Bloomfield NM

Sampling Activities
Type of Container plastic/VOA No. of Containers
Parameters Sampled For NITRATES, BTEX, Sulfates

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01															

Circle the date and time that the development criteria are met.

Comments Product At 18 FT did not Sample Removed approximately 2 ounces product

Developer's Signature (s) Chris Mac Date 10-9-01 Reviewer [signature] Date 10/12/01

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☑
Well No. PZ 32 Site Name/Identification BIST Flare pit #1 (10267) Site Address Rural San Juan CO.

Client/Project Name El paso Field Services EPFS Remediation project Project Manager Lisa Winn

Development Criteria
- ☐ 3 to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 22,92
Initial Depth to Water (feet) 18,42
Height of Water Column in Well (feet) 4.5
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	4.5	0.73X3	2.19
Gravel Pack			
Drilling Fluids			
Total			2.19

Instruments
	Serial No. (if applicable)
☑ PH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development
Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal
Kutz Seperator Bloomfield N.M.

Sampling Activities
Type of Container Plastic/VOA No. of Containers 4
Parameters Sampled For NITRATES, Sulfates, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10/9/01	1303		X				.5				16.2	7.01	6810		Cloudy / no odor
	1305		X				.5				16.4	6.98	6620		" "
	1306		X				.5				16.4	6.94	6650		" "
	1309		X				.5				16.6	6.90	6690		" "
	1311		X			20.35	.5				16.5	6.94	6760	0.37	no change

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1322

Developer's Signature (s) Date 10/9/01 Reviewer Date 10/12/01

Well Development and Purging Data

Project No. G169 | Development ☐ | Purging ☑

Page 1 of 1

Task No. ______

Well No. PZ 33

Site Name/Identification BST Flare pit #1 (LD267) Site Address Rural San Juan CO

Client/Project Name El paso Field Services EPFS Remediation project | Project Manager Lisa winn

Development Criteria
- (3) to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other ______

Water Volume Calculation
- Initial Depth of Well (feet) 32.61
- Initial Depth to Water (feet) 24.13
- Height of Water Column in Well (feet) 8.48
- Diameter (inches): Well 2" Gravel Pack ______

Instruments — Serial No. (if applicable)
- ☑ PH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other — "

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other ______

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	8.48	1.38 X 3	4.14
Gravel Pack			
Drilling Fluids			
Total			

Water Disposal
Kutz Seperator Bloomfield N.M

Sampling Activities
Type of Container plastic/VOA No. of Containers 8
Parameters Sampled For NITRATES, Sulfates, BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1347		X				1	1			16.9	6.90	9300		Cloudy / no odor
	1349		X				1	2			16.3	6.86	9530		" "
	1352		X				1	3			16	6.86	9440		" "
	1355		X				1	4			15.7	6.85	9540		" "
	1358		X			27.21	1	5			15.5	6.86	9570		no Change

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1409 20th Sample Collected Duplicate PZ 83

Developer's Signature (s) [signature] Date 10-9-01 Reviewer [signature] Date 10/12/01

Well Development and Purging Data

Project No. 6169 | Development ☐ | Purging ☑ | Page 1 of 1

Task No.

Well No. P2 35 | Site Name/Identification Bisti Flare pit #(1026?) | Site Address Rural San Juan CO

Client/Project Name El paso Field Services EPFS Remediation project | Project Manager Lisa Winn

Development Criteria

- ☐ 3 to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation

Initial Depth of Well (feet)
Initial Depth to Water (feet) 24.43
Height of Water Column in Well (feet)
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments

	Serial No. (if applicable)
☑ PH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal

Knit Separator Bloomfield N.M.

Sampling Activities

Type of Container: No. of Containers:
Parameters Sampled For: Btex

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01															

Circle the date and time that the development criteria are met.

Comments product 24.21 Did NOT Sample well H+D Free phase product Bailed off Approx. 3 025 of product.

Developer's Signature (s) Christ Mary Date 10-9-01 Reviewer L Winn Date 10/12/01

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☑
Well No. P2-3C Site Name/Identification BIST Flare pit #1 (L0262) Site Address Rural San Juan CO
Client/Project Name El paso Field Services EPFS Remediation project Project Manager Lisa Winn

Page 1 of 1

Development Criteria
- ☑ 3 to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 28.13
Initial Depth to Water (feet) 23.95
Height of Water Column in Well (feet) 4.18
Diameter (inches): Well 2" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	4.18	0.68x3	2.04
Gravel Pack			
Drilling Fluids			
Total			2.04

Instruments
Instruments	Serial No. (if applicable)
☑ PH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development
Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal
Kutz Seperator Bloomfield N.M.

Sampling Activities
Type of Container Plastic/VOA No. of Containers 4
Parameters Sampled For NITRates Sulfates BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-9-01	1145		X				.5				17.6	6.22	7610		Sl product odor sheen
	1147		X				.5				17	6.39	7480		" "
	1149		X				.5				16.6	6.44	7460		" "
	1152		X				.5				16.4	6.44	7470		" "
	1155		X			26.51	.5				16.1	6.41	7480	0.75	no Change

Circle the date and time that the development criteria are met.

Comments Samples for BTEX 1205

Developer's Signature (s) [signature] Date 10-9-01 Reviewer [signature] Date 10/12/01

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 10-10-01 PAGE: 1 OF 1

PL Accession #:

PROJECT MANAGER: Lisa Linn

COMPANY: Golden Environmental Management
ADDRESS: 906 San Juan Blvd Suite D
Farmington N.M. 87401
PHONE: (505) 566-9116
FAX: (505) 566-9120

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 604 Reilly Ave
Farmington N.M. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	Total NITRATES	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	Total Sulfates	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
267-0110-pz 16	10-9-01	1650	H_2O				X			X						X															
267-0110-pz 21	10-9-01	1634	H_2O				X			X						X															
267-0110-pz 22	10-9-01	1620	H_2O				X			X						X															
267-0110-pz 26	10-9-01	1550	H_2O				X			X						X															
267-0110-pz 32	10-9-01	1322	H_2O				X			X						X															
267-0110-pz 33	10-9-01	1409	H_2O				X			X						X															
267-0110-pz 36	10-9-01	1205	H_2O				X			X						X															
267-0110-pz 83	10-9-01	1409	H_2O				X			X						X															
Trip Blank	10-5-01	1445	H_2O							X																					

PROJECT INFORMATION
PROJ. NO.: 6169
PROJ. NAME: EPFS Remediation project
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT
NO. CONTAINERS
CUSTODY SEALS Y/N/NA
RECEIVED INTACT
BLUE ICE/ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS
(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑
CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER
METHANOL PRESERVATION ☐
COMMENTS: FIXED FEE ☐
Bisti Flare pit (LD267)

RELINQUISHED BY: 1.
Signature: [signature] Time: 0930
Printed Name: Chris Mncl Date: 10-10-01
Company:
See reverse side (Force Majeure)

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time:
Printed Name: Date:
Pinnacle Laboratories Inc.

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

APPENDIX B

Water-Quality Graphs

Figure B-1. Bisti Flare Pit #1
PZ Well #21

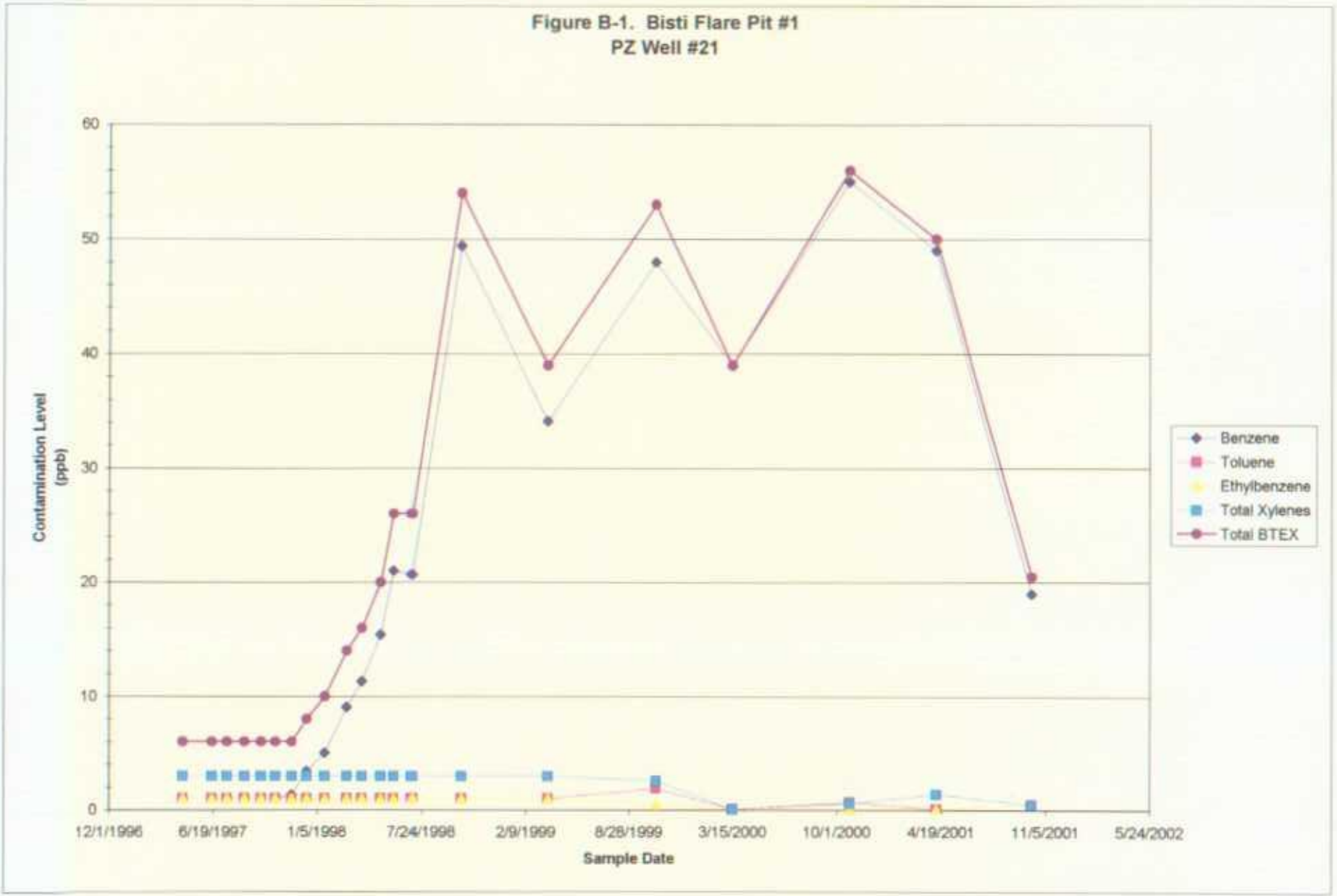
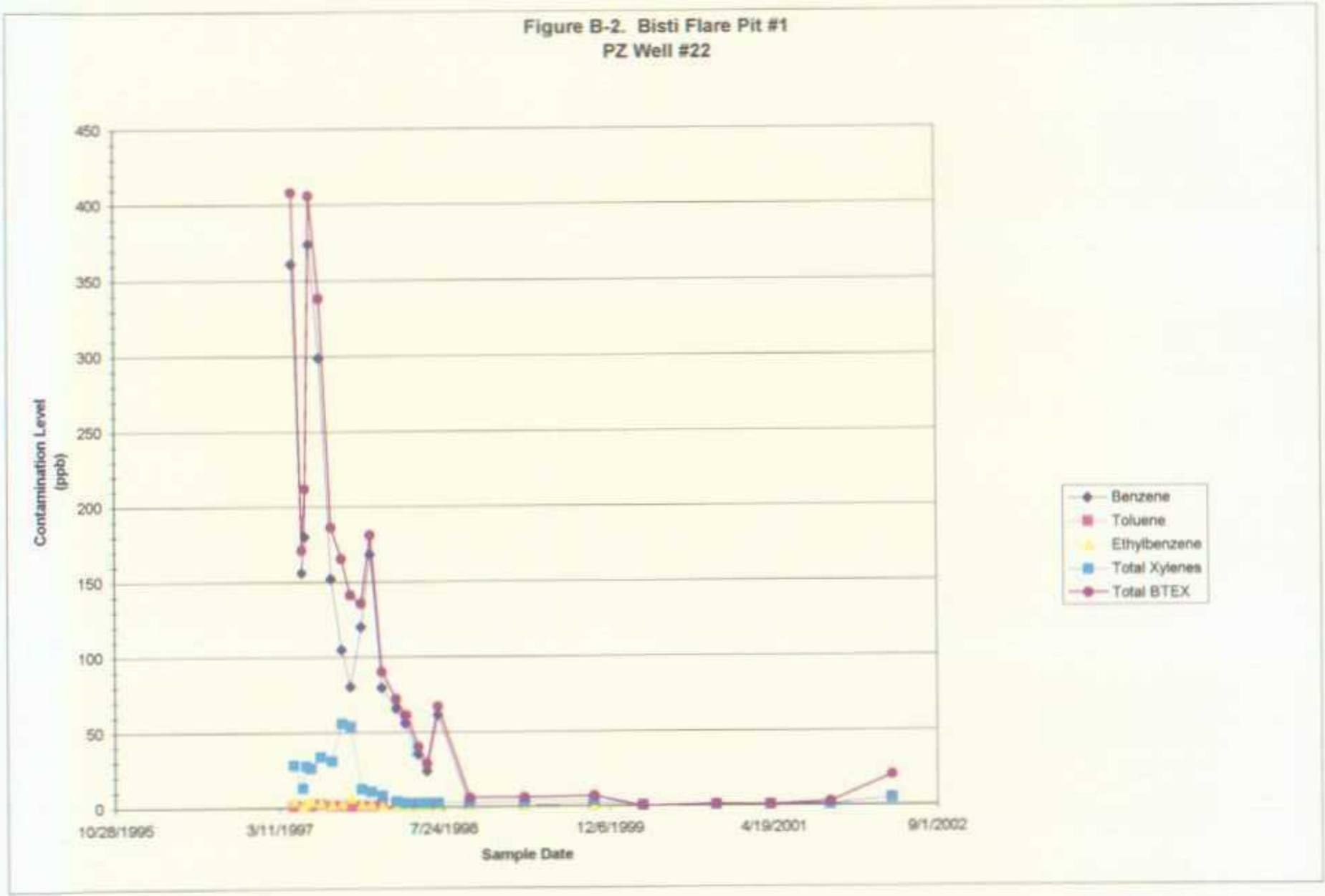
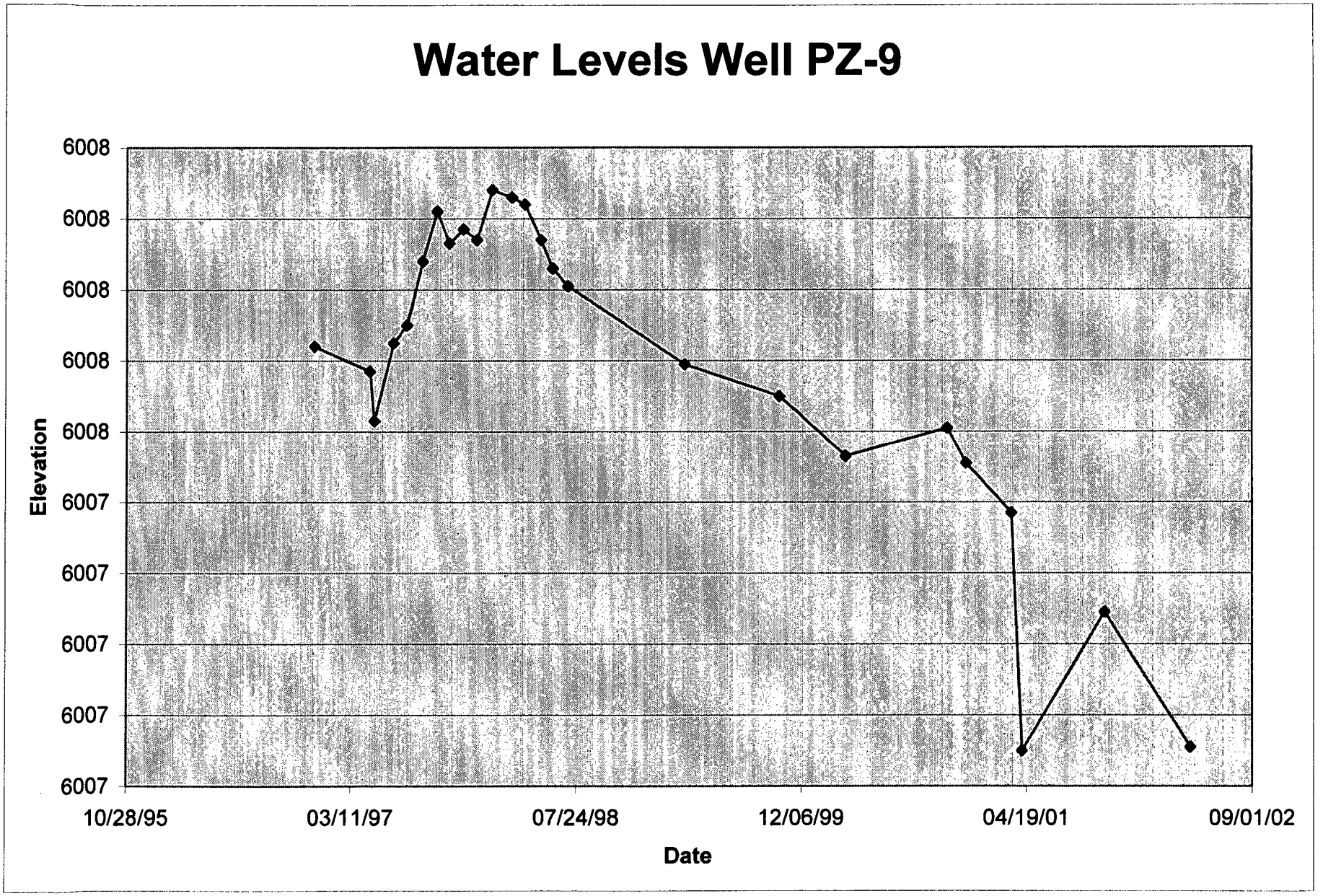


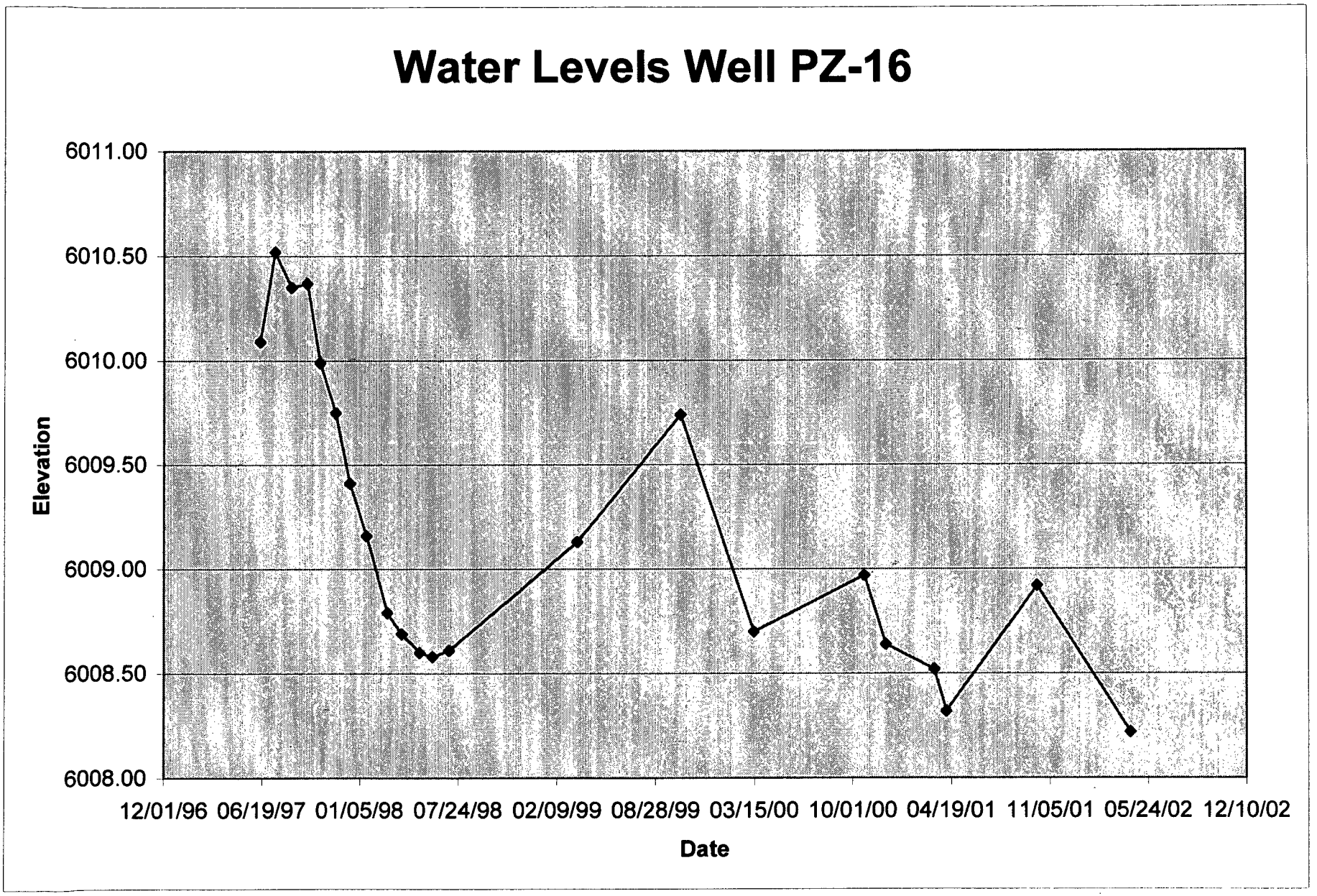
Figure B-2. Bisti Flare Pit #1
PZ Well #22

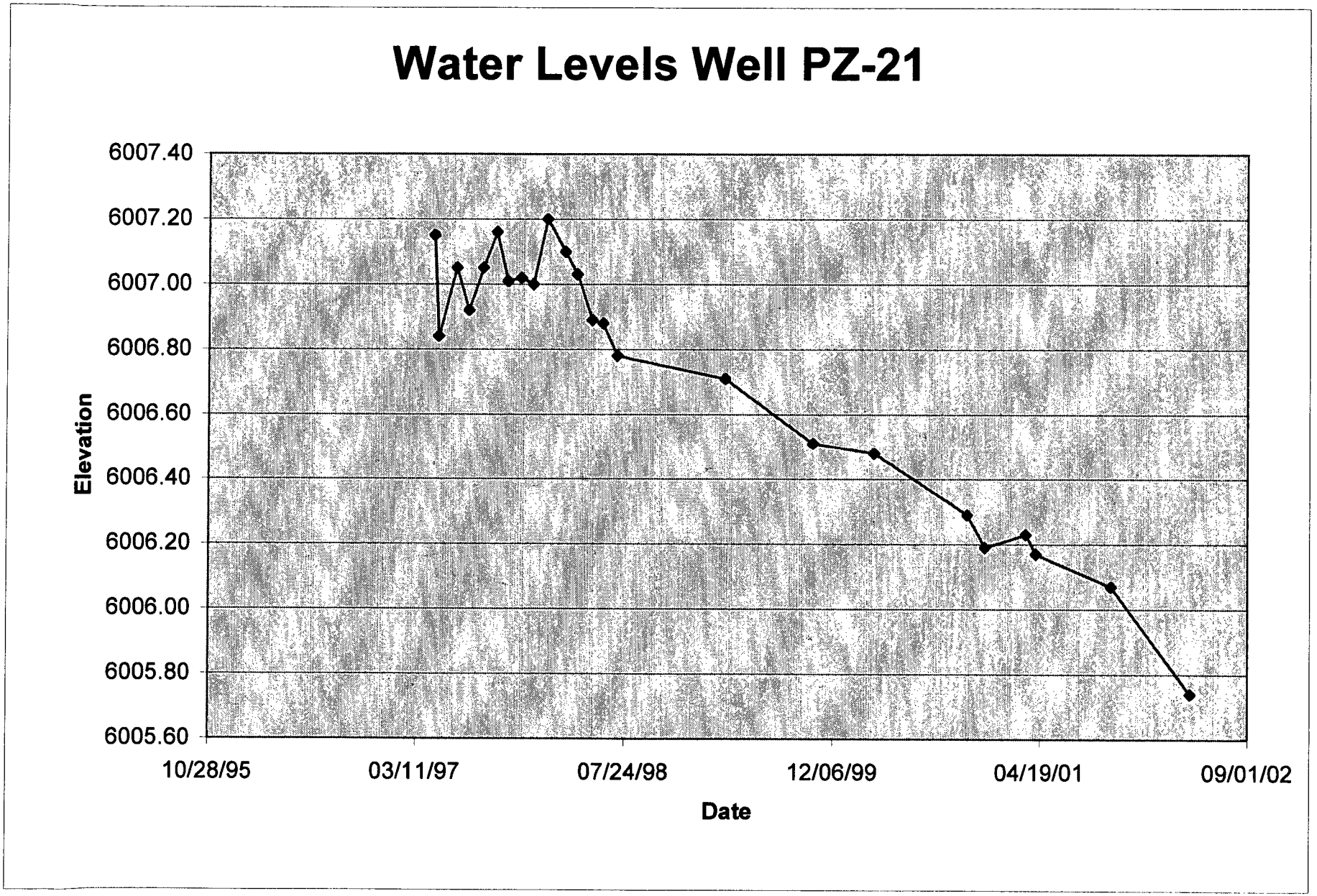


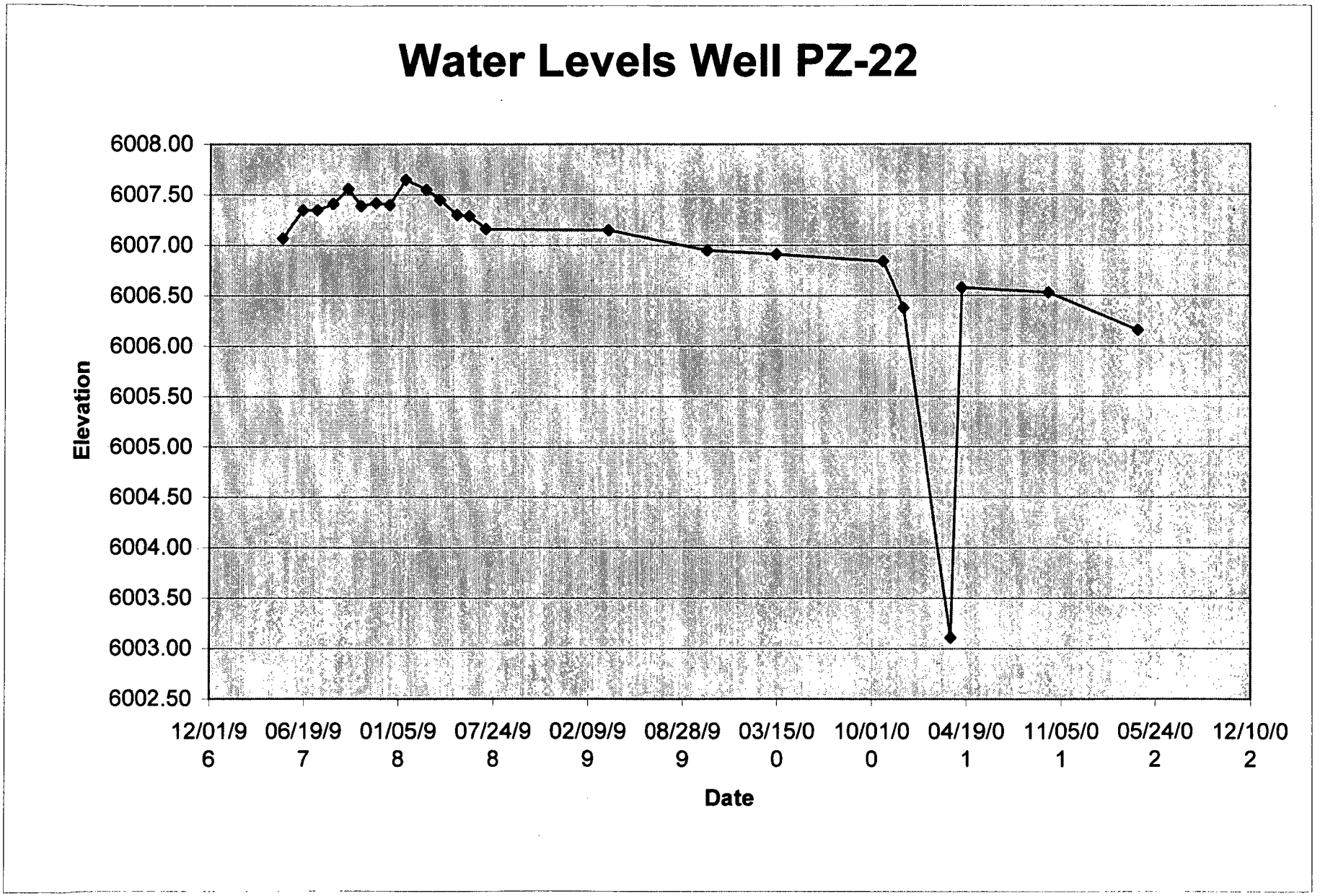
APPENDIX C

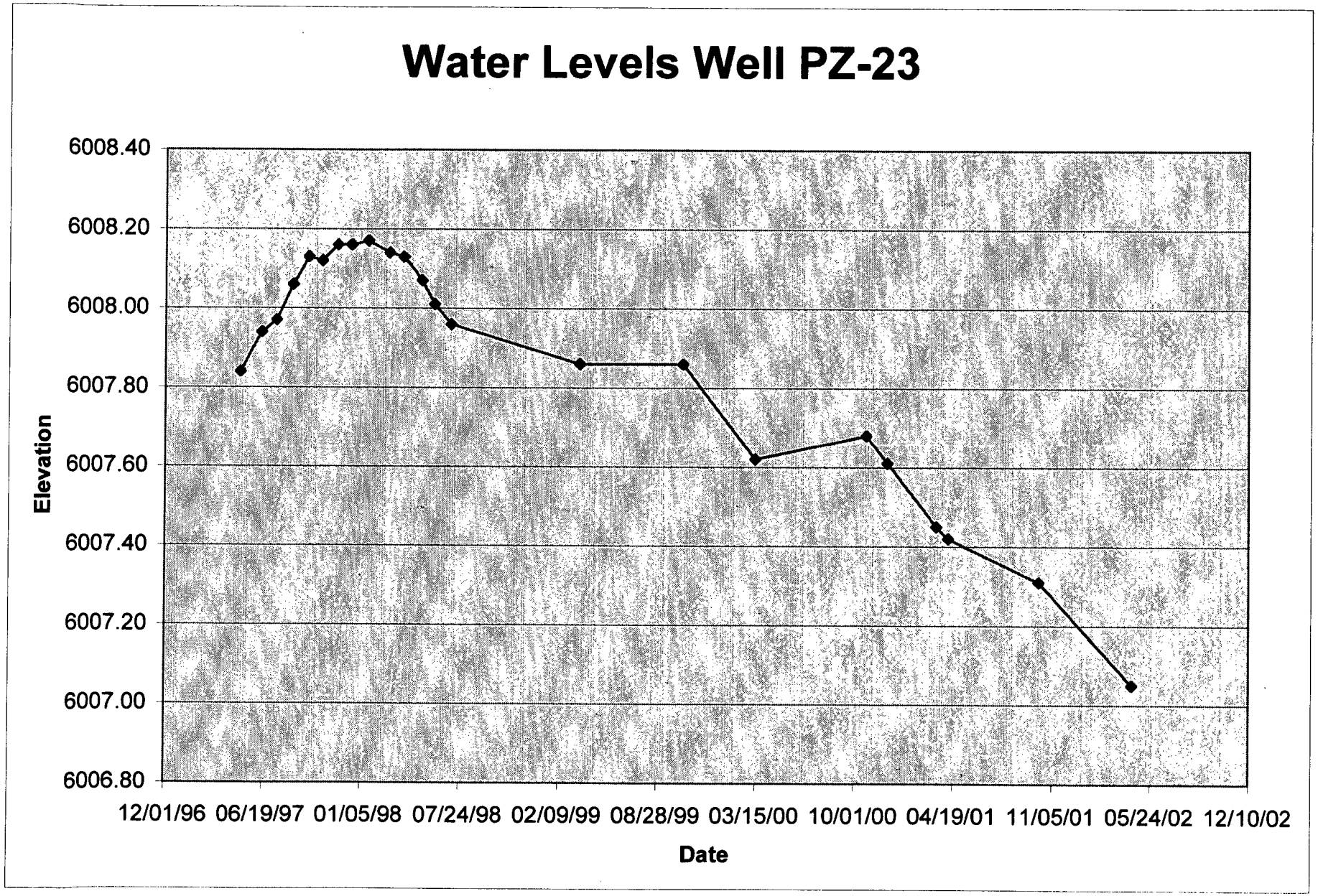
Water-Level Graphs

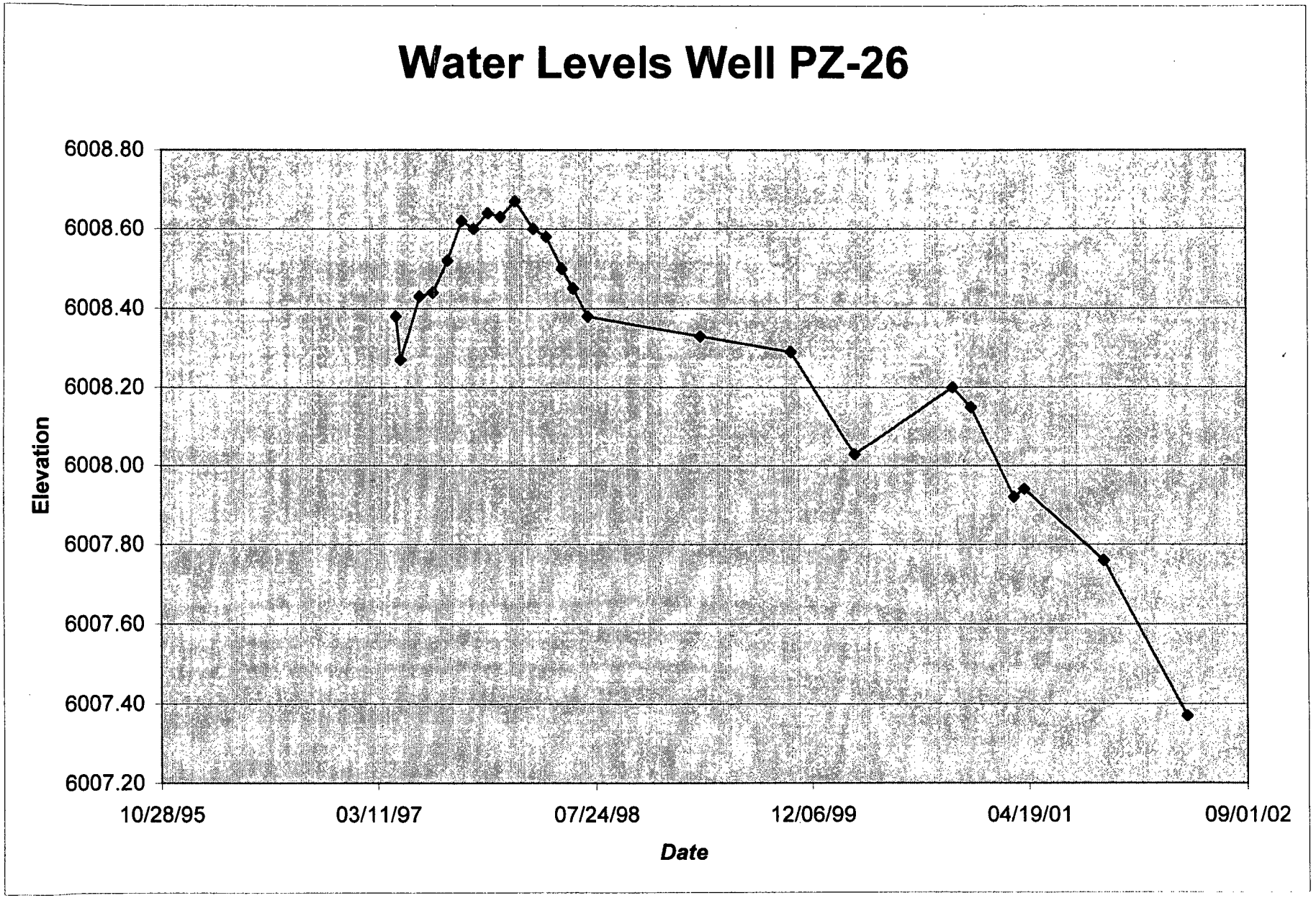

Water Levels Well PZ-9
Elevation
6008
6008
6008
6008
6007
6007
6007
6007
10/28/95
03/11/97
07/24/98
12/06/99
04/19/01
09/01/02
Date

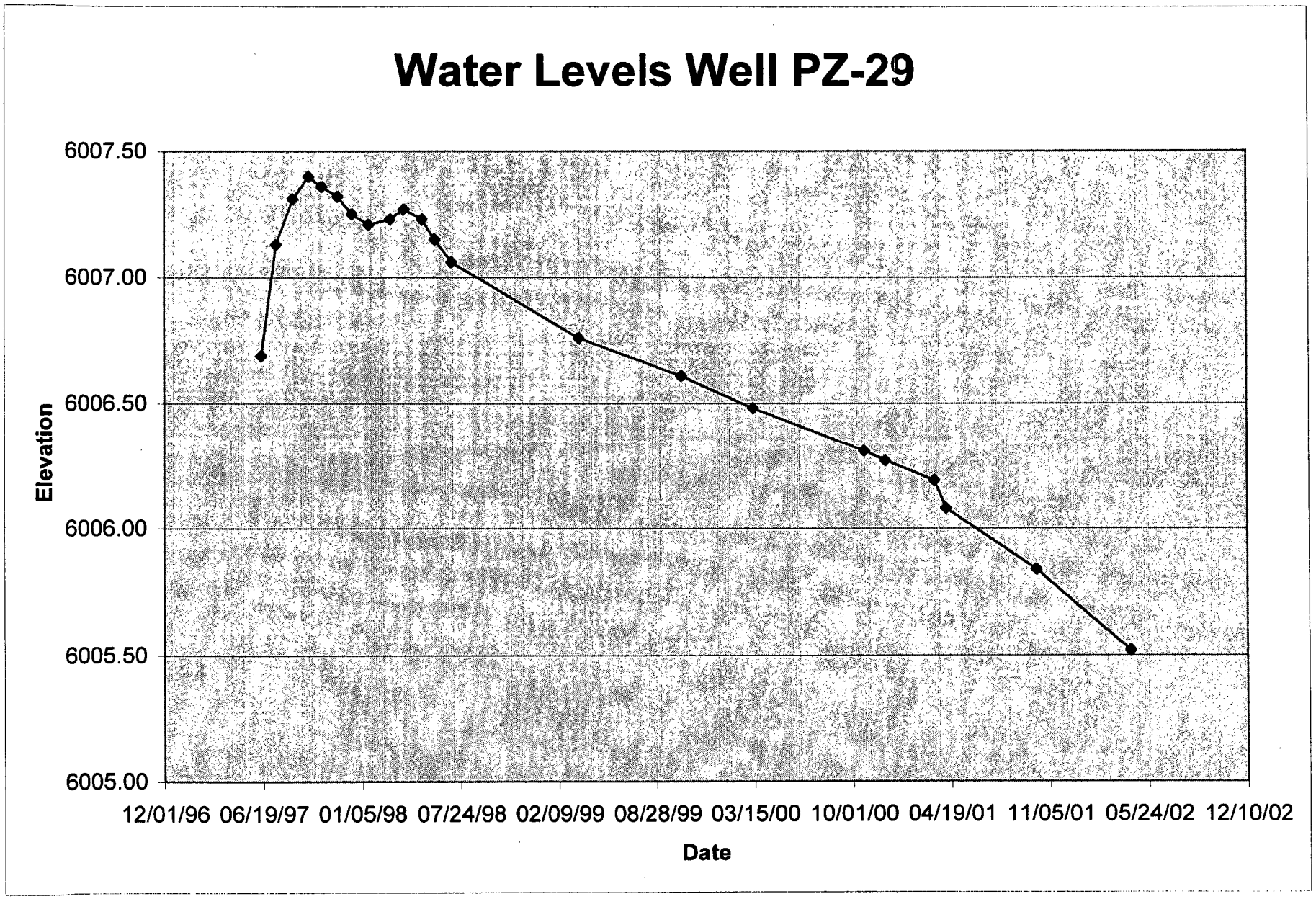

Water Levels Well PZ-16
6011.00
6010.50
6010.00
6009.50
6009.00
6008.50
6008.00
Elevation
12/01/96
06/19/97
01/05/98
07/24/98
02/09/99
08/28/99
03/15/00
10/01/00
04/19/01
11/05/01
05/24/02
12/10/02
Date

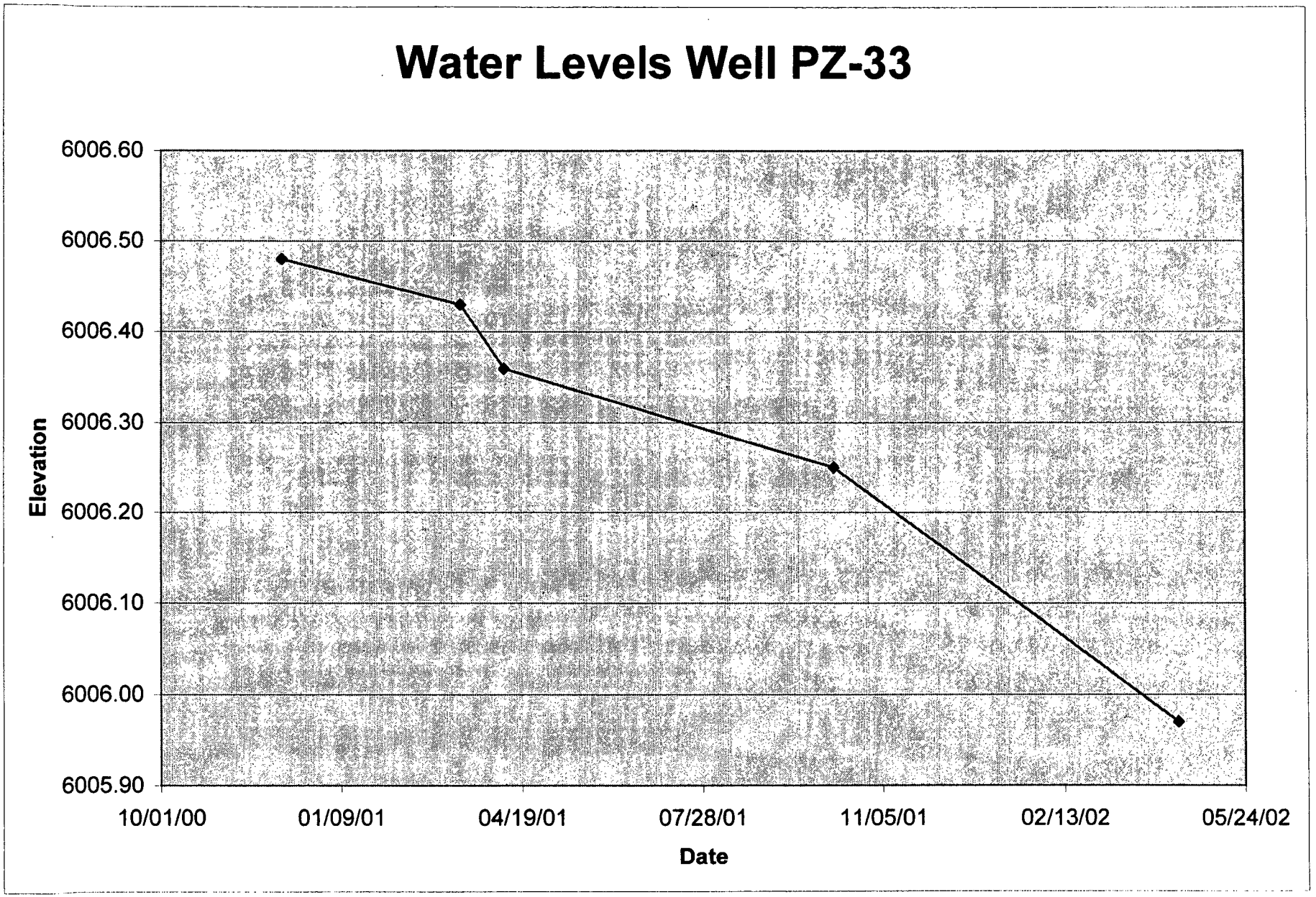

Water Levels Well PZ-21
6007.40
6007.20
6007.00
6006.80
6006.60
6006.40
6006.20
6006.00
6005.80
6005.60
Elevation
10/28/95
03/11/97
07/24/98
12/06/99
04/19/01
09/01/02
Date

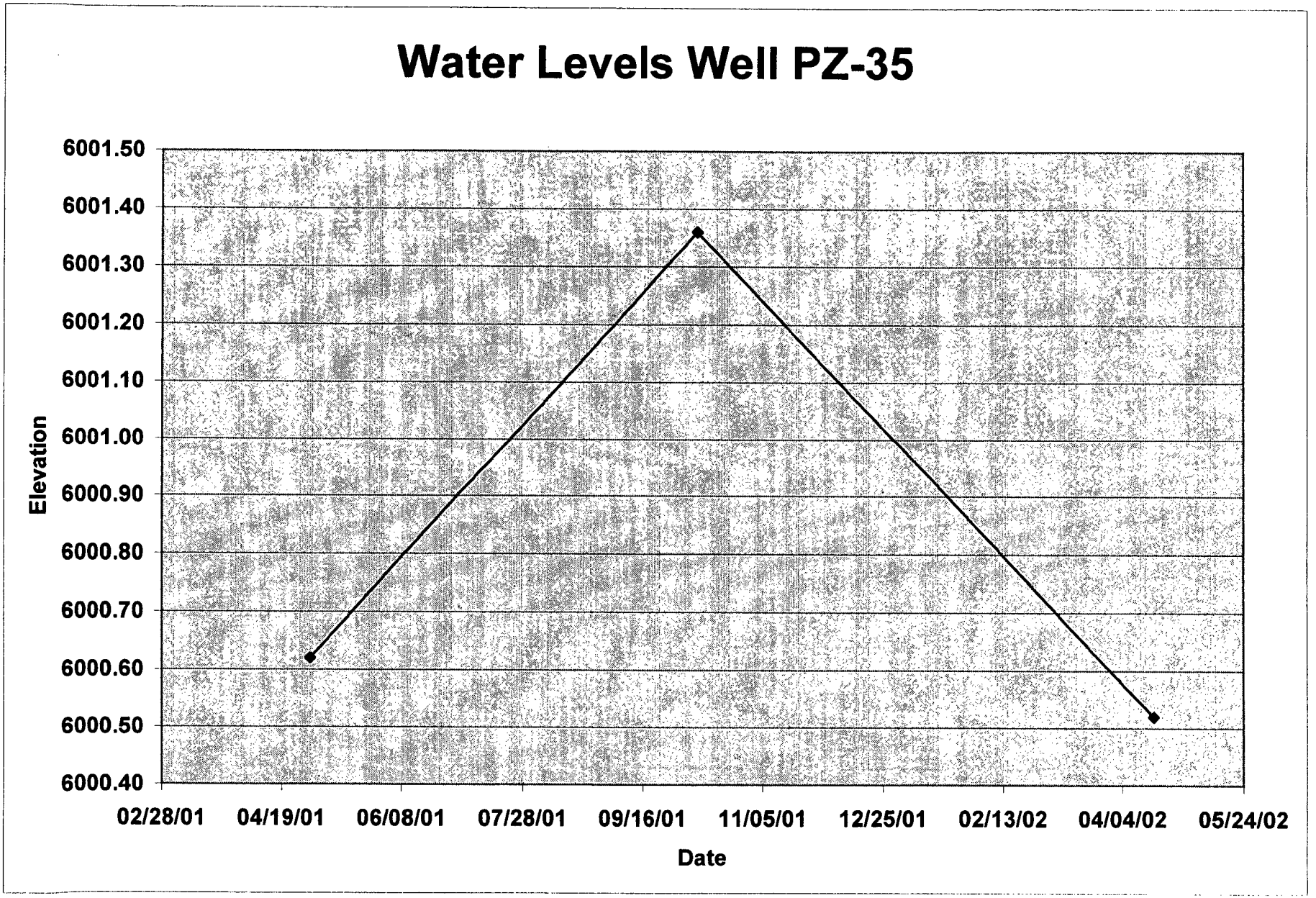

Water Levels Well PZ-22
6008.00
6007.50
6007.00
6006.50
6006.00
6005.50
6005.00
6004.50
6004.00
6003.50
6003.00
6002.50
Elevation
12/01/96
06/19/97
01/05/98
07/24/98
02/09/99
08/28/99
03/15/00
10/01/00
04/19/01
11/05/01
05/24/02
12/10/02
Date


Water Levels Well PZ-23
6008.40
6008.20
6008.00
6007.80
6007.60
6007.40
6007.20
6007.00
6006.80
Elevation
12/01/96
06/19/97
01/05/98
07/24/98
02/09/99
08/28/99
03/15/00
10/01/00
04/19/01
11/05/01
05/24/02
12/10/02
Date


Water Levels Well PZ-26
6008.80
6008.60
6008.40
6008.20
6008.00
6007.80
6007.60
6007.40
6007.20
Elevation
10/28/95
03/11/97
07/24/98
12/06/99
04/19/01
09/01/02
Date


Water Levels Well PZ-29
6007.50
6007.00
6006.50
6006.00
6005.50
6005.00
Elevation
12/01/96
06/19/97
01/05/98
07/24/98
02/09/99
08/28/99
03/15/00
10/01/00
04/19/01
11/05/01
05/24/02
12/10/02
Date


Water Levels Well PZ-33
6006.60
6006.50
6006.40
6006.30
6006.20
6006.10
6006.00
6005.90
Elevation
10/01/00
01/09/01
04/19/01
07/28/01
11/05/01
02/13/02
05/24/02
Date


Water Levels Well PZ-35
Elevation
6001.50
6001.40
6001.30
6001.20
6001.10
6001.00
6000.90
6000.80
6000.70
6000.60
6000.50
6000.40
02/28/01
04/19/01
06/08/01
07/28/01
09/16/01
11/05/01
12/25/01
02/13/02
04/04/02
05/24/02
Date