AP - 001

ANNUAL MONITORING REPORT

YEAR(S): 1997

1999 ANNUAL GROUNDWATER MONITORING REPORT
FORMER BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
TERRACON PROJECT NO. 66997611
February 24, 2000

Prepared for:

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Prepared by:

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February 24, 2000

Mr. Roger Martin
Huntsman Polymers Corporation
P.O. Box 3986
Odessa, Texas 79760

Re: 1999 Annual Groundwater Monitoring Report
Former Brickland Refinery Site
Sunland Park, New Mexico
Terracon Project No. 66997611

Dear Mr. Martin:

Terracon has completed the two 1999 semi-annual monitoring events for the above-referenced site. The two monitoring events were completed in general compliance with the services outlined in Terracon's Task Order No. 2 (Terracon Proposal No. P6699-033E) dated April 27, 1999, authorized by Mr. Roger Martin on April 30, 1999.

This 1999 Annual Groundwater Monitoring Report is based on results of field activities conducted by Terracon on June 1-4, 1999 and December 13-14, 1999, and contains monitoring methods, observations, conclusions, and recommendations made relative to the site. Please read the report carefully for details.

We appreciate the opportunity to be of service to you on this project and look forward to working with you in the future. If there are questions concerning the report or if we may be of further assistance, please call.

Sincerely,
TERRACON

Linda K. Riggins
Staff Geologist

Mary E. Wells, P.E.
Manager, Las Cruces Office

Terracon

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FORMER BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
TERRACON PROJECT NO. 66997611
February 24, 2000

1.0 EXECUTIVE SUMMARY

This 1999 Annual Groundwater Monitoring Report documents the results of two semi-annual groundwater monitoring operations conducted by Terracon at the former Brickand Refinery Site in Sunland Park, New Mexico. The semi-annual groundwater monitoring operations were conducted in June 1999 and December 1999. The report also contains the historical groundwater elevation and analytical data since the beginning of the project in July 1993. In addition, the report includes results of the free product recovery system that was installed on December 23, 1998. This monitoring and sampling program was conducted in accordance with the Groundwater Monitoring Plan and Stage 2 Abatement Plan as approved by Mr. Bill Olson of the New Mexico Oil Conservation Division (NMOCD) in his letter dated December 23, 1998.

This annual report includes the following elements required by the approved Groundwater Monitoring Plan and Stage 2 Abatement Plan:

- A description of the monitoring activities that occurred during the year, with corresponding conclusions and recommendations.
- Summary tables of the past and present laboratory analytical results of groundwater and surface water sampling.
- Plots of concentrations versus time for contaminants of concern for monitoring points MW-6S and MW-9S.
- Copies of laboratory analytical reports for the past year.
- Plots of water table elevation versus time for each groundwater monitoring well.
- Groundwater surface contour maps for the two semi-annual monitoring events based on groundwater elevations from the monitoring wells. Free-phase product thickness measurements are noted on the contour maps.
- Hydrocarbon concentration maps for the two semi-annual monitoring events.

The semi-annual monitoring includes the following items as required by the Groundwater Monitoring Plan and Stage 2 Abatement Plan as approved by the NMOCD.

- Depth to groundwater measurements for the ten on-site monitoring wells and eight off-site monitoring wells. Water levels are not measured in the thirty-eight well points because they were specifically designed to detect free-phase product at discreet depth and the screen intervals do not correlate with the monitoring well screens.

- Free-phase product thickness measurements in the monitoring wells and well points, and a summary of the free-phase recovery system performance.

- Laboratory analytical testing results of groundwater samples collected from monitoring wells MW-3S, MW-3D, MW-6s, MW-6D, and MW-9S. In addition, two surface water samples from the Rio Grande River are collected for laboratory analysis: one from the upstream end of the site, and one from the downstream end of the site near MW-6S. Samples collected in June were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by Method 8021, polynuclear aromatic hydrocarbons (PAH) by Method 8270C/625, and for priority pollutant metals (various methods). Samples collected in December were analyzed for BTEX by EPA Method 8021.

Conclusions relevant to groundwater conditions and the remediation performance at the Brickand Refinery are presented below.

- The BTEX concentrations in the sampled monitoring wells and upstream and downstream river samples remained below the laboratory detection limits with the exception of monitoring wells MW-3S, MW-6S and MW-9S. The BTEX concentrations were below New Mexico Water Quality Control Commission (NMWQCC) standards (see Table 3).

- PAH levels in the sampled monitoring points were below laboratory detection limits with the exception of monitoring well MW-6S. Although the concentration of bis (2-chloroisopropyl) ether was above laboratory detection limits, it was below NMWQCC standards (see Table 4).

- The results for the analyses of metals for the June 1999 monitoring event indicate that no constituent exceeded the NMWQCC standards. This was also the case in 1998. Based on the results of these metal analyses for the 1998 and 1999 annual sampling events, the groundwater in the site area does not appear to be adversely affected or impacted by dissolved metals (see Table 5).

- Measurable thicknesses of free-phase product were detected in monitoring well MW-10 and well points WP-01, WP-25, WP-26S, and WP-27D during the June 1999 monitoring event and varied from 0.01 feet in WP-01 to 1.92 feet in WP-26S. Product thickness measurements were detected in MW-07, MW-14, WP-26S, and WP-27D during the December 1999 monitoring event and varied from 0.01 feet in MW-17 to 1.50 feet in WP-26S (see Table 6).

- Since the installation of the Xitech product recovery system in December 1998, a total of approximately 45 gallons of free-phase product has been removed from monitoring well MW-10.

- Construction of the soil cap system was completed on June 26, 1999.

The following recommendations are suggested for the remediation system and monitoring operations at the Brickand Refinery.

- Continue free product recovery operations since the present system has been effective in recovering free product from MW-10.

- Continue the sampling and monitoring program on a semi-annual basis. The next sampling event is scheduled for June 2000.

- Since the groundwater does not appear to be adversely impacted by PAH or dissolved metals, as evidenced throughout seven years of monitoring, analysis of PAH and dissolved metals may be an unnecessary expense. With the possible exception of selenium and silver, further analysis of PAH and dissolved metals could be discontinued. In 1996 these two metals were detected above NMWQCC standards in MW 6D, and selenium was above the standard in MW9S. In 1997 selenium was detected in four wells and silver in one well (both below NMWQCC standards). Neither of these two metals was detected in 1998 and 1999.

- Though MW-15 is not currently sampled as part of the semi-annual monitoring program, a sample collected at this well and analyzed for BTEX constituents may provide useful additional data pertaining to the detection of these compounds in well MW-9S. The four of the constituents were detected in MW-9S in June of 1998, three were detected in December of 1998, three in June of 1999, and one in December of 1999.

- Well points that have never contained measurable or trace amounts of free-phase product could be removed from the monitoring plan. These well points include the following: WP-2, WP-3, WP-7, WP-26D, WP-30, WP-31, and WP-32. The other well points should be maintained for semi-annual monitoring.

2.0 PROCEDURES

Prior to sampling, the ten on-site monitoring wells and eight off-site monitoring wells were gauged for depth to groundwater using a KECK oil/water interface meter. Immediately prior to collecting groundwater samples during the June 3, 1999 and December 14, 1999 sampling events, each monitoring well was purged of a minimum of three well casing volumes of water using clean, decontaminated PVC bailers and sampled using dedicated bailers. Only the downgradient off-site monitoring wells (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S) were sampled as they are being used to monitor the potential exposure pathway for contaminants of concern to reach the Rio Grande River. A total of 150 gallons and 151 gallons of water were purged from the sampled monitoring wells during the June 3, 1999 and December 14, 1999 monitoring events, respectively. Groundwater samples were collected in duplicate for each well after purging. Groundwater parameters, including pH, conductivity, and temperature were measured during purging using a Hydac Model 910 pH/conductivity meter.

During each sampling event, the first set of water samples were transferred into air-tight, septum-sealed, 40-ml glass VOA sample vials with zero head space and preserved with hydrochloric acid for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021. A duplicate sample of MW-6S and River Upstream were collected during the June and December monitoring events, respectively. During the June 1999 sampling event, a second set of water samples was transferred into appropriately preserved containers for analysis of polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270C/625. Also during the June semi-annual sampling event, a third set of water samples were filtered and transferred into appropriately preserved containers for analysis of priority pollutant metals using various EPA Methods. The water samples were placed in an ice-filled cooler immediately after collection and shipped to Trace Analysis, Inc. in El Paso, Texas for laboratory analysis. Chain-of-custody (COC) forms documenting sample identification numbers, collection times, and delivery times to the laboratories were completed for each set of samples. A summary of the purging and sampling methods is provided in Table 1 below.

Table 1
Well Sampling and Purging Methods

Well No.	1999 Sample Date	Purge Method	Sampling Method	Purge Volume	Laboratory Analytes
MW-3S	6/3/99	Hand Bailer	Dedicated bailer	15 gallons	BTEX, PAH, and Metals
	12/14/99	Hand Bailer	Dedicated bailer	8 gallons*	BTEX only
MW-3D	6/3/99	Hand Bailer	Dedicated bailer	50 gallons	BTEX, PAH, and Metals
	12/14/99	Hand Bailer	Dedicated bailer	60 gallons	BTEX only
MW-6S	6/3/99	Hand Bailer	Dedicated bailer	10 gallons	BTEX, PAH, and Metals
	12/14/99	Hand Bailer	Dedicated bailer	8 gallons*	BTEX only
MW-6D	6/3/99	Hand Bailer	Dedicated bailer	50 gallons	BTEX, PAH, and Metals
	12/14/99	Hand Bailer	Dedicated bailer	60 gallons	BTEX only
MW-9S	6/3/99	Hand Bailer	Dedicated bailer	25 gallons	BTEX, PAH, and Metals
	12/14/99	Hand Bailer	Dedicated bailer	15 gallons	BTEX only
River Upstream	6/2/99	NA	Glass Jar	NA	BTEX, PAH, and Metals
	12/14/99	NA	Glass Jar	NA	BTEX only
River Downstream	6/2/99	NA	Glass Jar	NA	BTEX, PAH, and Metals
	12/14/99	NA	Glass Jar	NA	BTEX only
Total volume purged during semi-annual monitoring event in June 1999:					150 gallons
Total volume purged during annual monitoring event in December 1999:					151 gallons
Total volume purged during semi-annual and annual monitoring events:					**301 gallons**

* Monitoring well purged dry during annual sampling event.

3.0 GROUNDWATER ELEVATIONS, HYDRAULIC GRADIENT AND FLOW DIRECTION

Historical groundwater elevations for the monitoring wells are provided in Table 2. Water levels are not listed for the well points because the well points were specifically designed to detect free-phase product at discrete depth and the screen intervals do not correlate with the monitoring well

screens. Groundwater elevation contour maps for the June 1-3, 1999 and December 13, 1999 monitoring events are depicted in Figure 1a and 1b, respectively.

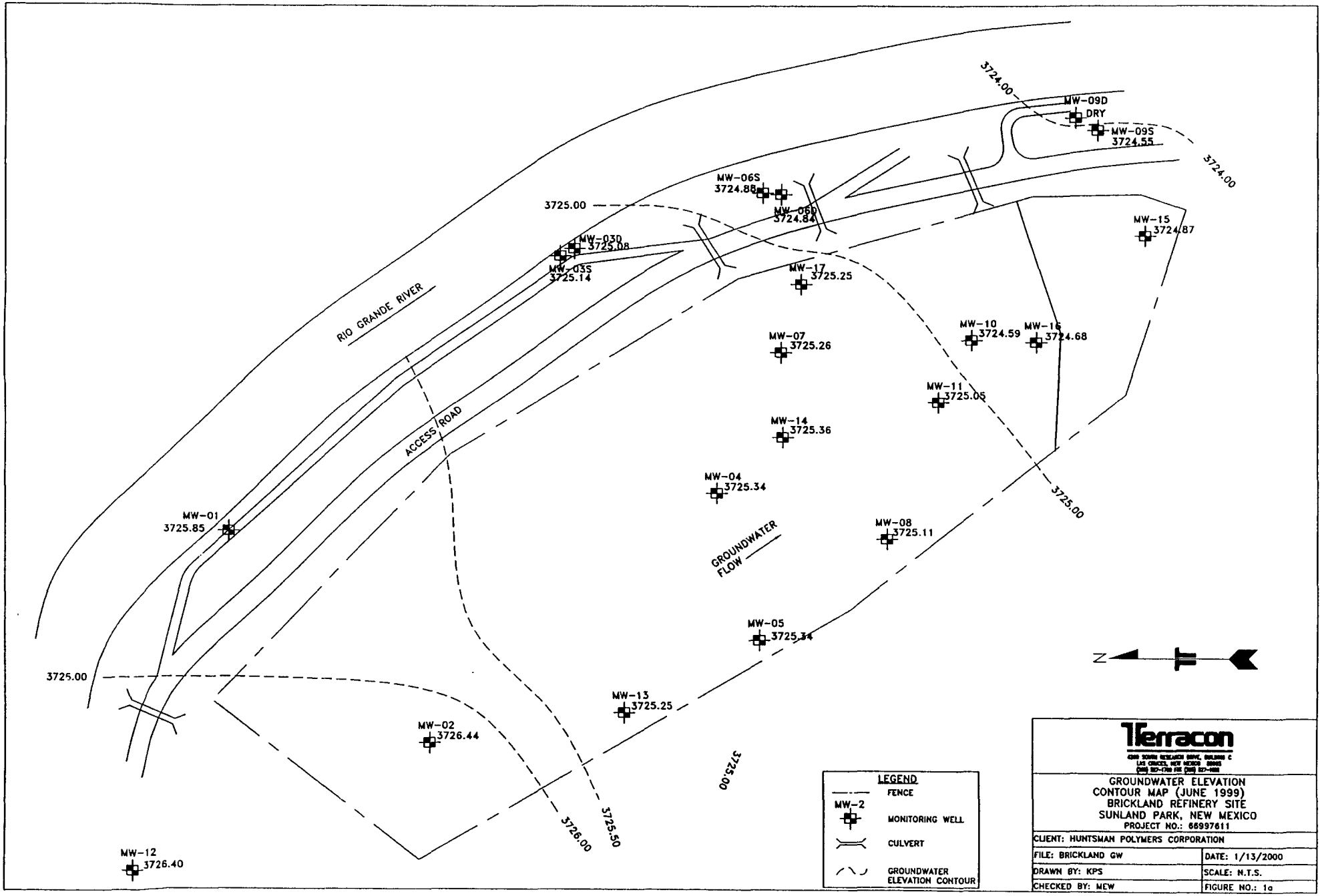
The hydraulic gradient beneath the former Brickland Refinery is relatively flat. The hydraulic gradient in June 1999 was approximately 0.015 feet per foot and groundwater flow direction appeared to be to or in the direction of the Rio Grande River. The hydraulic gradient in December 1999 was approximately 0.021 feet per foot and groundwater flow direction appeared to be similar to the June flow direction.

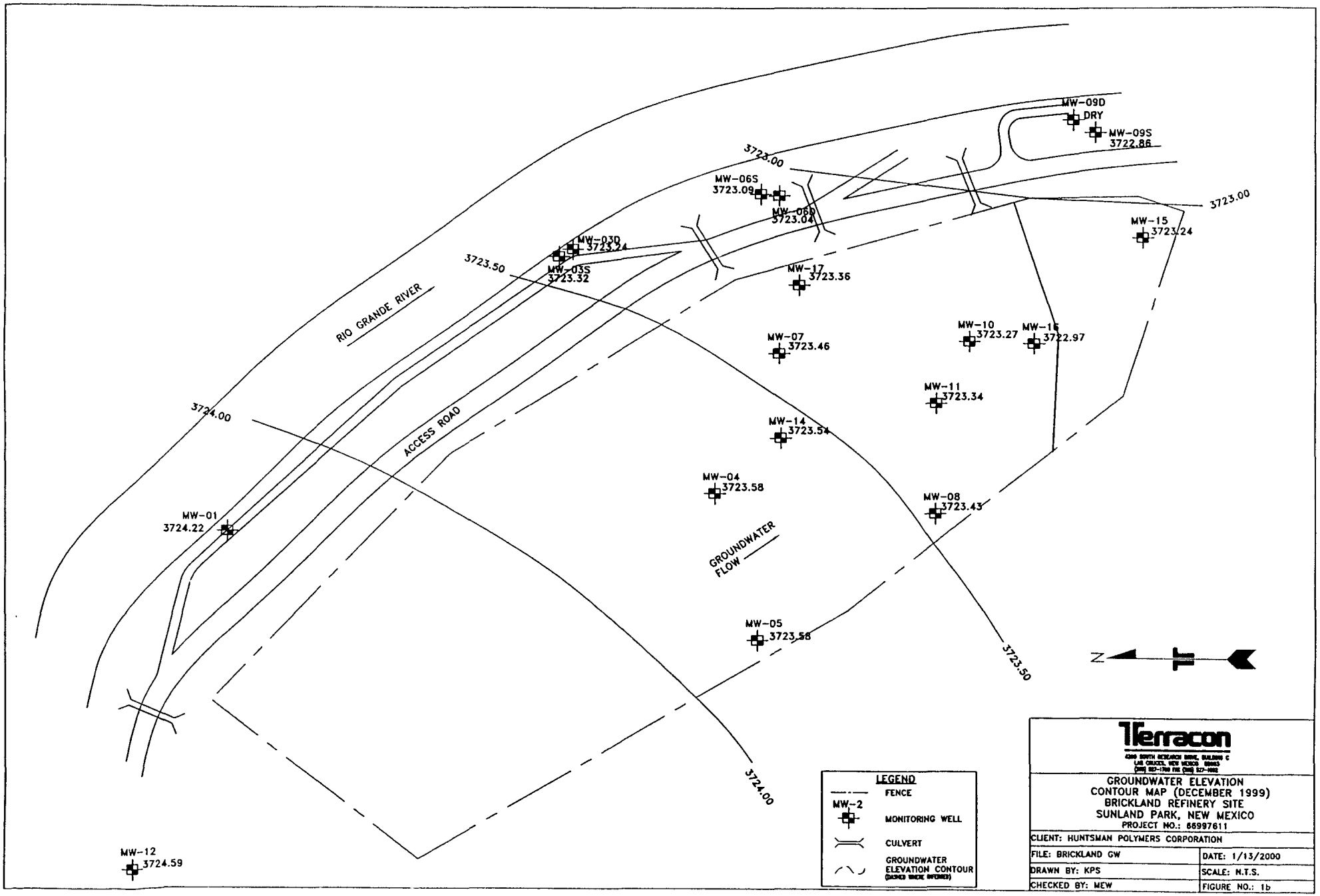
Hydrographs depicting the groundwater elevations versus time (1993 to present) for each water level monitoring well are presented in Appendix A. Groundwater levels in the monitoring wells typically correspond to the stage of the Rio Grande River bordering the site. Due to seasonal fluctuations in the river, water levels in the monitoring wells vary 2-3 feet over the course of a year. Water level data for June 1999 and December 1999 shows a pronounced decline between the two monitoring events. Groundwater elevations in June 1999 correlate well with the higher levels measured during the summer months of previous years. Similarly, the groundwater elevations in December 1999 correlate well with the lower levels measured during the winter months of previous years. Gage heights versus time (1993 to present) of the Rio Grande at Courchesne Bridge near the site are included in Appendix A.

Table 2
Brickland Refinery
Monitoring Well Groundwater Elevations

Well ID	Jul. 93	12/8/93	3/25/94	7/12/94	9/28/94	12/13/94	3/28/95	6/21/95	9/25/95	6/20/96	12/22/96	6/27/97	1/8/98	6/24/98	12/21/98	6/1/99	36507.00
MW-1	3725.78	3724.30	3725.27	3726.54	3725.37	3724.35	NM	3726.66	NM	3725.72	3724.03	3726.31	3724.13	3725.71	3724.18	3725.85	3724.22
MW-2	NM	NM	3726.39	3726.54	3725.89	3723.97	NM	3726.81	NM	3726.56	3724.67	3726.72	3724.77	3728.47	3724.80	3726.44	Plugged 6/99
MW-3S	3725.29	3723.27	3725.20	3725.87	3724.50	3723.44	3725.35	3725.68	3724.98	3725.08	3723.10	3724.54*	3723.20	3724.58	3723.23	3725.14	3723.32
MW-3D	3725.22	3723.30	3725.10	3725.78	3724.42	3723.35	3725.26	3725.75	3724.97	3725.00	3723.01	3725.46	3721.05	3725.14	3723.23	3725.08	3723.24
MW-4	3725.21	3723.59	3725.36	3725.56	3724.68	3723.64	3725.56	3725.66	3725.40	3725.25	3723.31	3724.68	3723.44	3725.24	3723.47	3725.34	3723.58
MW-5	3725.11	3723.59	3725.30	3725.88	3724.70	3723.65	3725.40	3725.86	3725.39	3725.37	3722.93	3724.17	3723.48	3724.38	3723.49	3725.34	3723.58
MW-6S	3725.08	3723.78	3724.85	3725.55	3724.20	3723.03	3725.05	3725.53	3724.63	3724.83	3722.80	3725.29	3722.90	3724.97	3722.97	3724.88	3723.09
MW-6D	3725.00	3723.75	3724.82	3725.57	3724.22	3723.00	3725.02	3725.48	3724.57	3724.75	3722.72	3725.25	3720.81	3724.9	3722.97	3724.84	3723.04
MW-7	3725.16	3723.72	3725.16	3725.89	3724.46	3723.16	3725.36	3725.32	3725.23	NM	3723.16	3725.12	3723.26	3725.31	3723.30	3725.26	3723.46
MW-8	3725.10	3723.42	3725.12	3725.77	3724.49	3723.45	3725.42	3725.74	3724.33	3725.29	3723.13	3724.21	3722.31	3725.27	3723.31	3725.11	3723.43
MW-9S	3724.84	3723.52	3724.56	3725.29	3723.91	3722.81	3724.81	3725.21	3725.52	3724.49	3722.51	3724.84	3722.62	3725.79	3722.63	3724.55	3722.86
MW-10	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MW-11	3724.91	3722.90	3725.10	3725.75	P	3723.40	3725.35	3725.86	3724.98	3725.20	3723.10	3724.39	3723.15	3725.20	3723.23	3725.05	3723.34
MW-12	3726.09	3724.91	3726.45	3727.05	3725.70	3723.65	NM	3727.15	3726.39	NM	3724.37	3726.34	NM	3726.48	3724.59	3726.40	3724.59
MW-13	3725.22	NM	NM	3725.82	3724.71	3724.44	NM	3726.05	NM	3725.30	3723.27	3725.56	3723.55	3725.34	3723.58	3725.25	Plugged 6/99
MW-14	NM	NM	NM	3726.03	3724.61	3723.58	3725.56	3726.01	3725.31	NM	3723.25	3725.07	3723.35	3725.38	3723.40	3725.36	3723.54
MW-15	NM	NM	NM	3725.62	3724.28	3723.19	3724.97	3725.58	3724.87	NM	3721.90	3723.52	3722.99	3728.60	3722.87	3724.87	3723.24
MW-16	NM	NM	NM	3725.43	3724.06	3722.93	3724.88	3725.44	3724.54	3724.65	3722.63	3723.59	3722.75	3725.02	3722.79	3724.68	3722.97
MW-17	NM	NM	NM	3725.90	3724.46	3723.36	3725.38	3726.82	3726.05	NM	3723.07	3724.95	D	3725.09	3723.22	3725.25	3723.36

Notes: NM = Not measured
P = Product observed.
* Remeasured in July.
D = Well Dry.


3724.00
MW-09D
DRY
MW-09S
3724.55
3724.00
MW-06S
3724.88
MW-06D
3724.84
3725.00
MW-15
3724.87
MW-03D
3725.08
MW-03S
3725.14
MW-17
3725.25
RIO GRANDE RIVER
MW-10
3724.59
MW-16
3724.68
MW-07
3725.26
MW-11
3725.05
ACCESS ROAD
MW-14
3725.36
MW-04
3725.34
3725.00
MW-01
3725.85
GROUNDWATER FLOW
MW-08
3725.11
MW-05
3725.34
N
3725.00
MW-13
3725.25
MW-02
3726.44
3725.00
3725.50
3726.00
MW-12
3726.40
LEGEND
FENCE
MW-2
MONITORING WELL
CULVERT
GROUNDWATER ELEVATION CONTOUR
Terracon
GROUNDWATER ELEVATION CONTOUR MAP (JUNE 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 66997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/13/2000
DRAWN BY: KPS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 1a


MW-09D
DRY
MW-09S
3722.86
3723.00
MW-06S
3723.09
MW-06D
3723.04
3723.00
MW-15
3723.24
MW-03D
3723.24
MW-03S
3723.32
3723.50
MW-17
3723.36
RIO GRANDE RIVER
MW-07
3723.46
MW-10
3723.27
MW-16
3722.97
MW-11
3723.34
3724.00
ACCESS ROAD
MW-14
3723.54
MW-04
3723.58
MW-08
3723.43
MW-01
3724.22
GROUNDWATER FLOW
MW-05
3723.58
3723.50
3724.00
MW-12
3724.59
N
LEGEND
FENCE
MW-2
MONITORING WELL
CULVERT
GROUNDWATER ELEVATION CONTOUR
(DASHED WHERE INFERRED)
Terracon
GROUNDWATER ELEVATION
CONTOUR MAP (DECEMBER 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 86997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/13/2000
DRAWN BY: KPS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 1b

4.0 GROUNDWATER QUALITY CONDITIONS

4.1 Distribution of Hydrocarbons in Groundwater

A historical listing of benzene, toluene, ethylbenzene and xylenes (BTEX) concentrations for offsite monitoring wells MW-3S, MW-3D, MW6S, MW-6D, and MW-9S is summarized in Table 3. Historical analytical results for polynuclear aromatic hydrocarbons (PAH) for the same monitoring wells are listed in Table 4. These tables list BTEX and PAH concentrations for the period from December 1993 to December 1999. BTEX and PAH concentrations for sampling events prior to December 1993 are included in previously submitted reports.

Hydrocarbon concentration maps depicting the BTEX concentrations for the two 1999 sampling events are presented in Figure 2a (June 3, 1999) and Figure 2b (December 14, 1999). PAH concentration maps were not constructed because the PAH levels in the sampled monitoring wells for each monitoring event were below laboratory detection limits and/or well below NMWQCC standards. BTEX concentrations in groundwater versus time for monitoring wells MW-6S and MW-9S, respectively, are depicted in Figures 3a and 3b.

BTEX concentrations in the sampled monitoring wells and upstream and downstream river samples remained below the laboratory detection limits with the exception of monitoring wells MW-3S, MW-6S, and MW-9S. Trace levels of BTEX constituents were recorded in these three monitoring wells during the June 1999 sampling event. However, concentrations were below NMWQCC standards.

4.2 Distribution of Priority Pollutant Metals in Groundwater

Historical groundwater sample analytical results for Priority Pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) are presented in Table 5. The NMWQCC standards are also listed in the tables for comparison. Constituents with concentrations above the NMWQCC standards are highlighted in boldface type. Since the groundwater does not appear to be adversely impacted by PAH or dissolved metals, as evidenced throughout seven years of monitoring, analysis of PAH and dissolved metals may be an unnecessary expense. Further analysis of PAH and dissolved metals should be discontinued with the possible exception of selenium and silver. In 1996 these two metals were detected above NMWQCC standards in MW 6D, and selenium was above the standard in MW9S. In 1997 selenium was detected in four wells and silver in one well (both below NMWQCC standards). Neither of these two metals was detected in 1998 and 1999. The laboratory reports and Chain of Custody (COC) documentation are included in Appendix B.

The results of the analyses for metals for the 1999 semi-annual and annual monitoring events indicate that no metal constituent exceeded the NMWQCC standards.

Table 3
Brickland Refinery
BTEX Concentrations in Monitoring Wells and River Surface Water Samples, December 1993 through December 1999

MW-3S

Parameter	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94	03/28/95	06/21/95	09/26/95	6/21/96	12/23/96	7/11/97	1/8/98	6/25/98	12/21/98	6/3/99	12/14/99
Benzene	ND	ND	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Xylenes	ND	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND

MW-3D

Parameter	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95	06/21/95	09/26/95	6/21/96	12/23/96	6/26/97	1/8/98	6/25/98	12/21/98	6/3/99	12/14/99
Benzene	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND

MW-6S

Parameter	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94	03/28/95	06/21/95	9/25/95	6/21/96	12/23/96	6/26/97	1/8/98	6/25/98	12/22/98	6/3/99	12/14/99
Benzene	71	74	110	4.8	59	110	NS	180	330	50	130	14	130	ND	4.3, 6.4	ND
Toluene	ND	ND	ND	2.8	ND	7	NS	120	160	ND	ND	ND	ND	ND	2.2, 2.2	ND
Ethyl Benzene	52	12	30	34	ND	32	NS	ND	ND	ND	15	ND	40	ND	3.3, 4.1	ND
Xylenes	ND	7.6	88	16	ND	43	NS	30	90	ND	ND	ND	ND	ND	ND, 2.2	ND

Parameter	WQCC Std.	Detection I imit
Benzene	10	1.0 µg/L
Toluene	750	1.0 µg/L
Ethyl Benzene	750	1.0 µg/L
Xylenes	620	1.0 µg/L

Notes
NA = Not available
ND = Not detected
NS = Not sampled
µg/L = Micrograms per liter

Parameter	MW-6S 6/3/99	Riv-Up 12/14/99
Benzene	6.4	ND
Toluene	2.2	ND
Ethyl Benzene	4.1	ND
Xylenes	2.2	ND

Table 3 (cont.)
Brickland Refinery
BTEX Concentrations in Monitoring Wells and River Surface Water Samples, December 1993 through December 1999

MW-6D

Parameter	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95	06/21/95	9/25/95	6/21/96	12/23/96	6/26/97	1/8/98	6/25/98	12/22/98	6/3/99	12/14/99
Benzene	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND, ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND, ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND, ND	ND	ND	ND
Xylenes	ND	1.6	ND	ND	ND	ND	ND	ND,ND	ND	ND	ND	ND	ND, ND	ND	ND	ND

MW-9S

Parameter	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94	03/28/95	06/21/95	09/26/95	6/21/96	12/23/96	6/26/97	1/8/98	6/25/98	12/22/98	6/3/99	12/14/99
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	1.9	ND, ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	2.7	2.7, ND	2.2	ND
Ethyl Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND,ND	1.5	4.5, ND	2.5	ND
Xylenes	ND	ND	0.6	ND	ND	0.6	ND	ND	ND	ND	ND	ND,ND	6.6	6.7, ND	24	8

River - Upstream

Parameter	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94	03/28/95	06/21/95	09/26/95	6/21/96	12/23/96	7/11/97	1/8/98	6/25/98	12/23/98	6/2/99	12/14/99
Benzene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND

River - Downstream

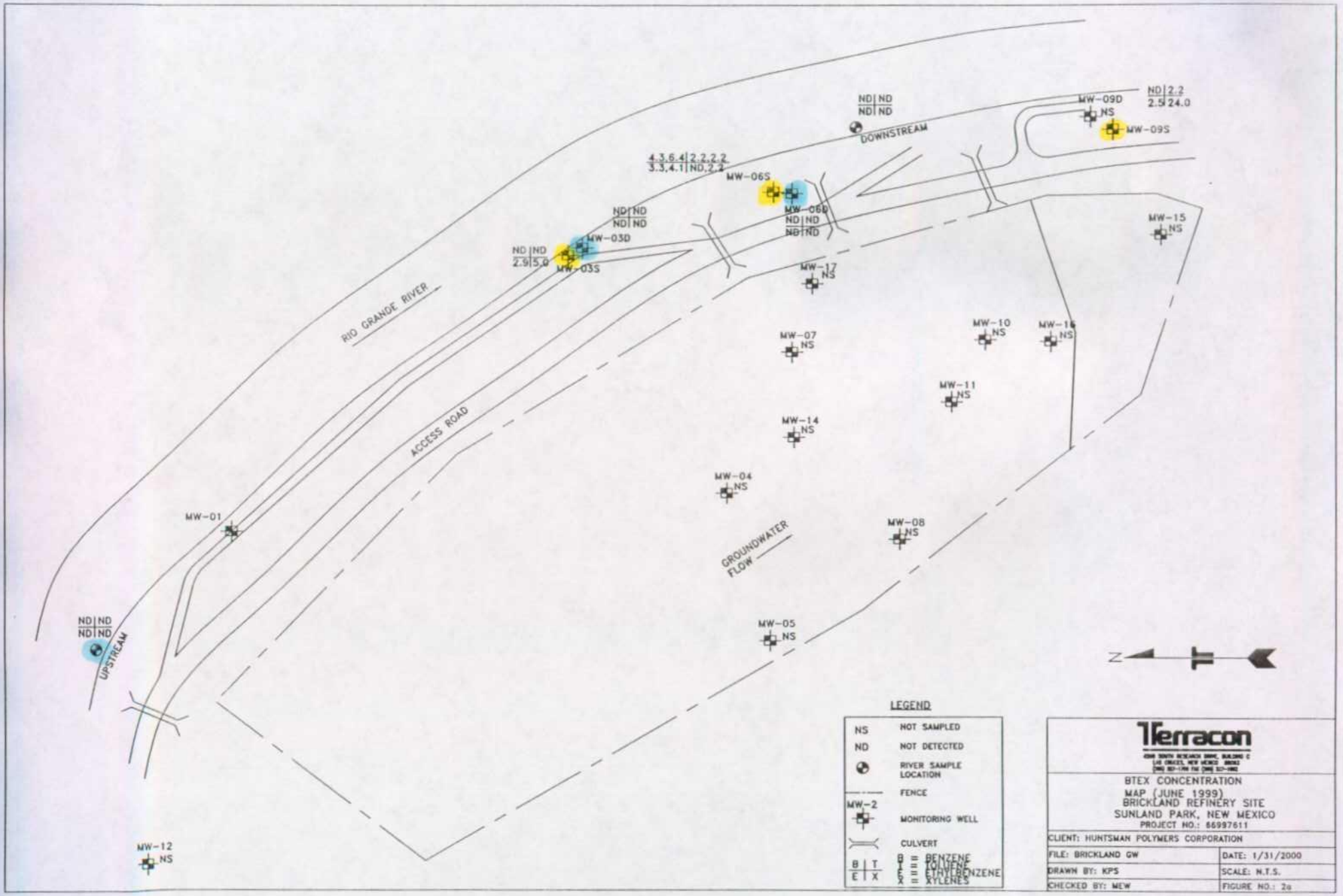
Parameter	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94	03/28/95	06/21/95	09/26/95	6/21/96	12/23/96	6/26/97	1/8/98	6/25/98	12/22/98	6/2/99	12/14/99
Benzene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND

Parameter	WQCC Std.	Detection Limit
Benzene	10	1.0 µg/L
Toluene	750	1.0 µg/L
Ethyl Benzene	750	1.0 µg/L
Xylenes	620	1.0 µg/L

Notes
NA Not available
ND Not detected
NS Not sampled
µg/L = Micrograms per liter

Parameter	MW-6S 6/3/99	Riv-Up 12/14/99
Benzene	6.4	ND
Toluene	2.2	ND
Ethyl Benzene	4.1	ND
Xylenes	2.2	ND

Duplicate samples analyzed by Trace Analysis Inc.


ND | ND
ND | ND
DOWNSTREAM
MW-09D
NS
MW-09S
ND | 2.2
2.5 | 24.0
4.3,6.4 | 2.2,2.2
3.3,4.1 | ND,2.2
MW-06S
MW-06D
ND | ND
ND | ND
MW-15
NS
ND | ND
ND | ND
MW-03D
ND | ND
2.9 | 5.0
MW-03S
MW-17
NS
RIO GRANDE RIVER
MW-10
NS
MW-16
NS
MW-07
NS
MW-11
NS
ACCESS ROAD
MW-14
NS
MW-04
NS
MW-01
GROUNDWATER FLOW
MW-08
NS
MW-05
NS
ND | ND
ND | ND
UPSTREAM
MW-12
NS
N
LEGEND
NS NOT SAMPLED
ND NOT DETECTED
RIVER SAMPLE LOCATION
FENCE
MW-2 MONITORING WELL
CULVERT
B | T
E | X
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = XYLENES
Terracon
BTEX CONCENTRATION MAP (JUNE 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 86997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/31/2000
DRAWN BY: KPS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 2a

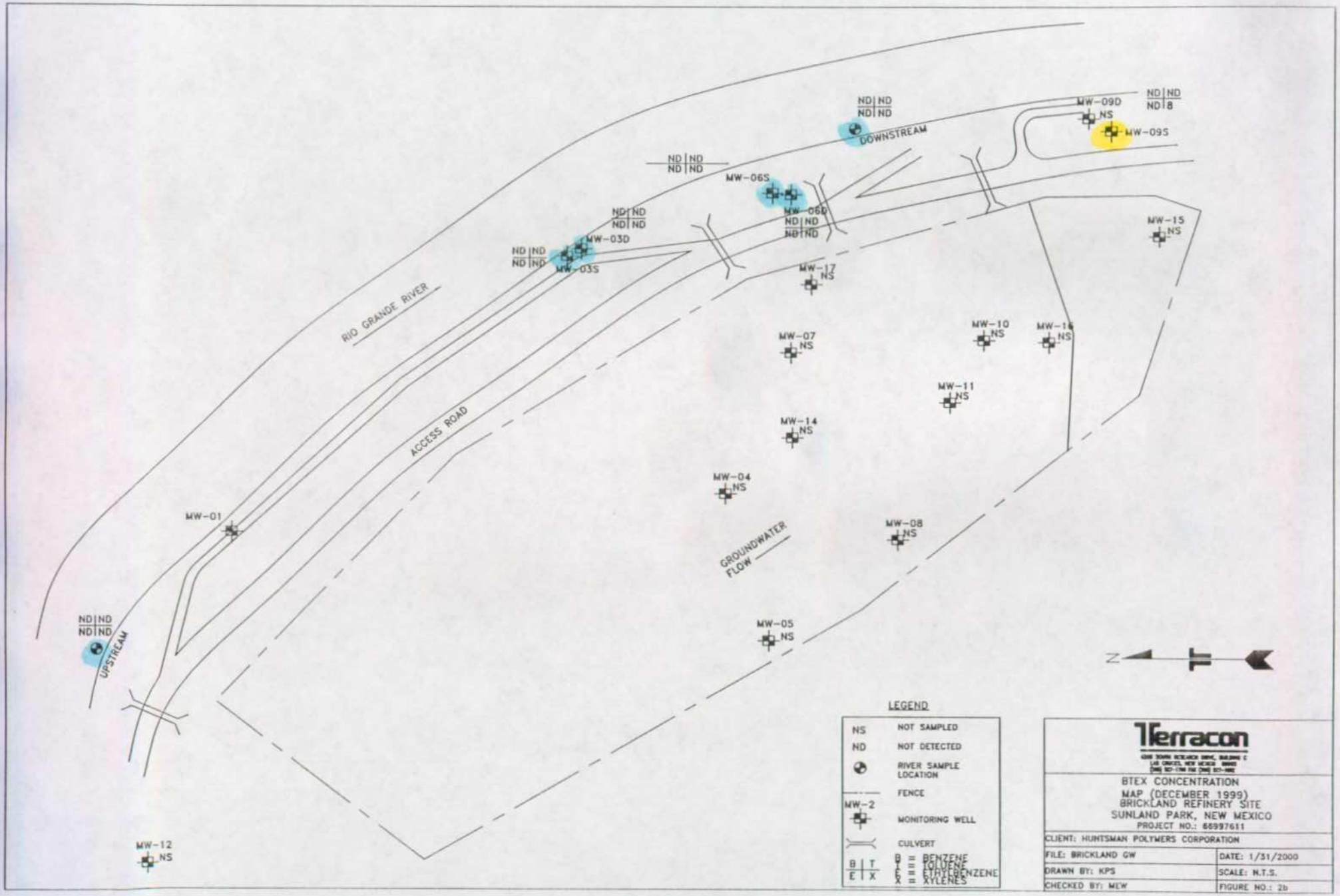
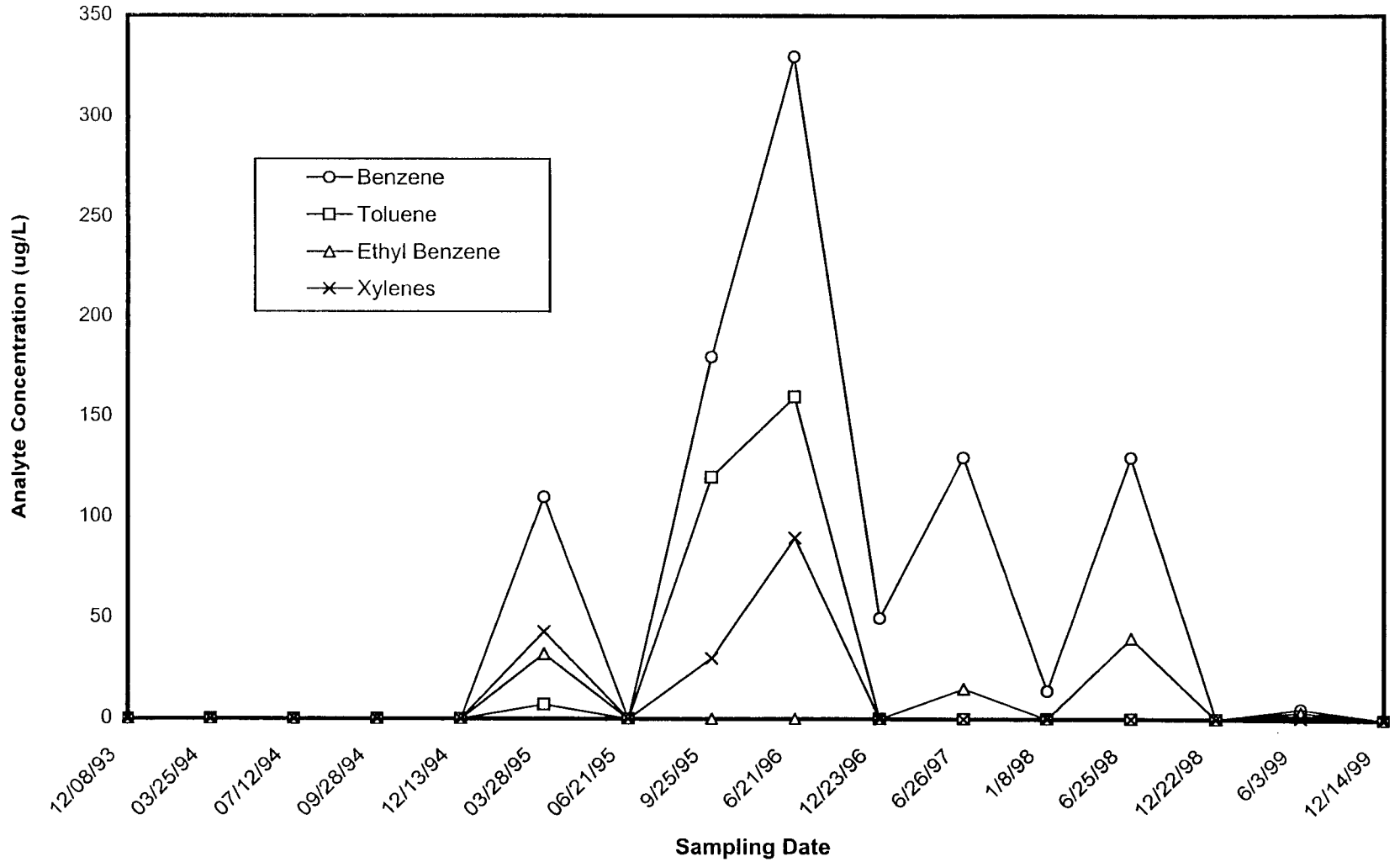
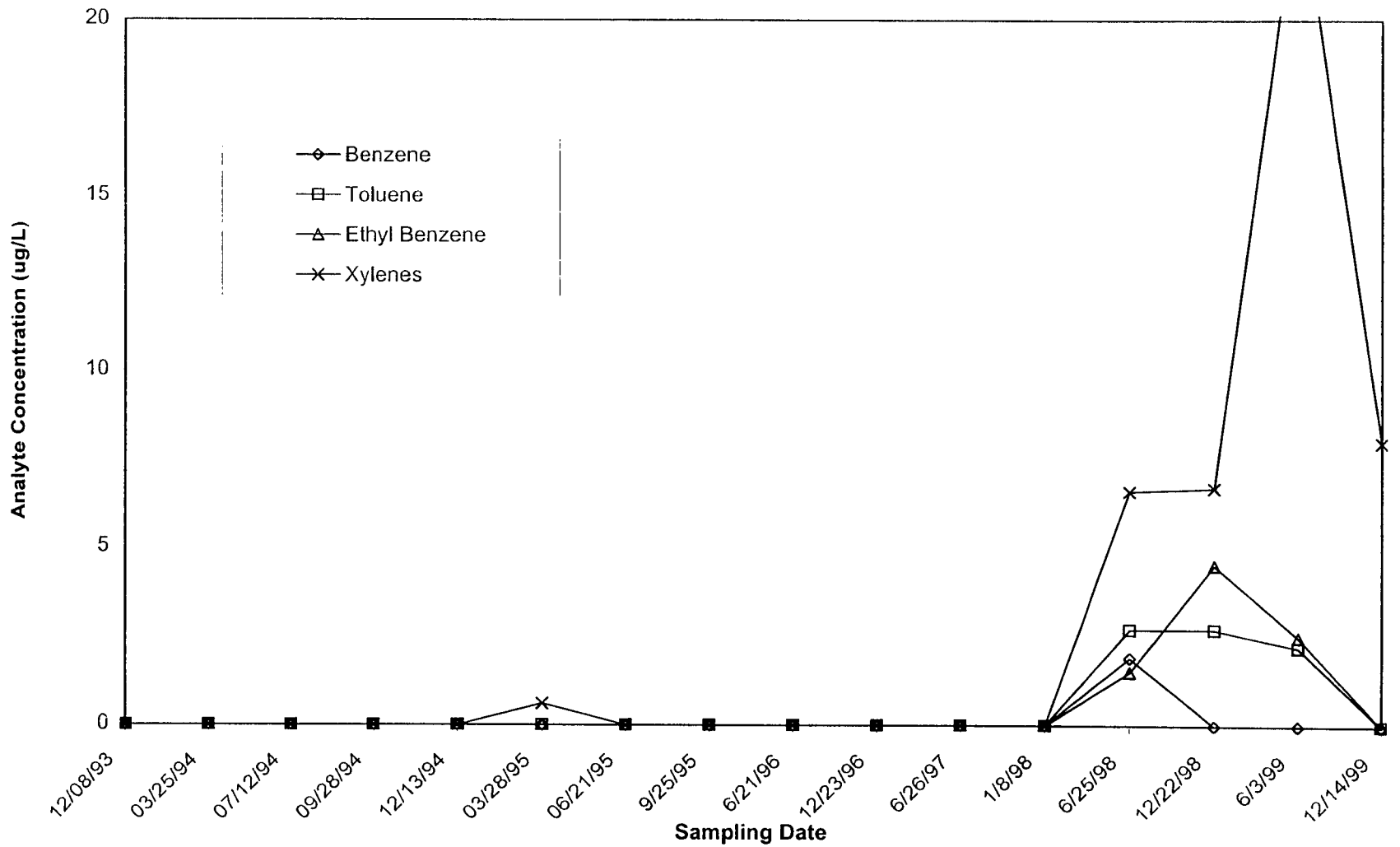

ND | ND
ND | ND
DOWNSTREAM
MW-09D
NS
MW-09S
ND | ND
ND | 8
MW-06S
MW-06D
ND | ND
ND | ND
MW-03D
MW-03S
MW-15
NS
MW-17
NS
RIO GRANDE RIVER
MW-07
NS
MW-10
NS
MW-16
NS
ACCESS ROAD
MW-11
NS
MW-14
NS
MW-04
NS
MW-01
GROUNDWATER FLOW
MW-08
NS
MW-05
NS
UPSTREAM
MW-12
NS
N
LEGEND
NS NOT SAMPLED
ND NOT DETECTED
RIVER SAMPLE LOCATION
FENCE
MW-2 MONITORING WELL
CULVERT
B | T
E | X
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = XYLENES
Terracon
BTEX CONCENTRATION
MAP (DECEMBER 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 66997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/31/2000
DRAWN BY: KPS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 2b

Figure 3a
Brickland Refinery
MW-6S BTEX Concentrations Over Time



Annual 99 Well data (MW-6S BTEX)

FIGURE 3b
BRICKLAND REFINERY
MW-9S BTEX Concentrations Over Time



Annual 99 Well data (MW-9S BTEX)

Table 4
Brickland Refinery
Total PAH Concentrations in Monitoring Wells and River Surface Water Samples
(December 1993 to June 1999)

Well ID	12/8/93	3/25/94	7/12/94	9/28/94	12/13/94	3/28/95	6/21/95	6/21/96	6/26/97	6/25/98	6/3/99
MW-3S	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-3D	ND	ND	ND	ND	ND	ND	ND	ND	ND, ND	ND	ND
MW-6S	ND	ND	ND	ND	ND	ND	15, 10	ND	ND	ND	22, 32
MW-6D	ND	-	ND	ND	ND	ND	ND	ND, ND	ND	ND, ND	ND
MW-9S	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Riv-Up	---	---	---	---	---	---	---	ND	ND	ND	ND
Riv-Down	---	---	---	---	---	---	---	ND	ND	ND	ND

Notes:
Results in Micrograms per Liter (µg/L)
ND indicates constituent was not detected
--- Indicates water sample was not analyzed for polynuclear aromatic hydrocarbons (PAH).

Table 5
Brickland Refinery
Metal Analytical Results for Monitoring Well and River Surface Water Samples

Well ID	Sample Date	Sb	As	Be	Cd	Cr	Cu	Pb	Hg	Ni	Se	Ag	Th	Zn
MW-3S	6/21/96	ND	0.020	ND	0.0021	0.023	ND	ND	ND	ND	0.050	ND	ND	ND
	6/26/97	ND	0.010	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	0.013
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/3/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.340
MW-3D	6/21/96	ND	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/26/97	ND	0.010	ND	0.0019	ND	ND	ND	ND	0.007	ND	ND	ND	ND
	6/26/97	0.010	0.020	ND	0.0024	ND	ND	ND	ND	0.016	ND	0.009	ND	0.006
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	0.006	ND	ND	ND	ND
	6/3/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6S	6/21/96	ND	0.020	ND	ND	ND	ND	0.003	ND	ND	0.020	ND	ND	ND
	6/26/97	0.010	0.070	ND	0.0015	ND	0.008	ND	ND	ND	0.020	ND	ND	0.008
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/3/99	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, ND	ND, 0.12
MW-6D	6/21/96	ND	ND	0.002	ND	0.031	ND	ND	ND	ND	**0.120**	**0.056**	ND	ND
	6/21/96	0.010	0.020	0.003	0.0044	ND	ND	ND	ND	0.008	ND	0.007	0.014	ND
	6/26/97	0.010	0.010	ND	0.0020	ND	0.006	ND	ND	0.025	ND	ND	ND	ND
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	0.015	ND	ND	ND	ND
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND
	6/3/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.053
MW-9S	6/21/96	0.020	ND	ND	0.0007	ND	0.044	ND	ND	ND	**0.070**	ND	0.040	ND
	6/26/97	0.020	0.020	ND	ND	ND	ND	ND	ND	ND	0.030	ND	ND	ND
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/6/98	ND	NA	NA	0.001	ND	0.006	ND	ND	ND	ND	ND	NA	ND
	6/3/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
River-Upstream	6/21/96	ND	ND	ND	ND	ND	ND	0.007	ND	ND	ND	ND	ND	0.013
	6/26/97	ND	ND	ND	ND	ND	0.010	ND	ND	ND	0.010	ND	ND	0.009
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/2/99	ND	ND	ND	ND	ND	0.280	ND	ND	ND	ND	ND	ND	0.170
River-Downstream	6/21/96	ND	ND	ND	ND	0.008	ND	0.005	ND	ND	ND	ND	ND	0.006
	6/26/97	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/25/98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/2/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.110
NMWQCC Std.		5.0	0.1	1.0	0.0100	0.050	1.0	1.0	0.0020	0.2	0.05	0.05	NS	10.0
Laboratory Detection Limit		0.010	0.010	0.001	0.0005	0.005	0.005	0.003	0.0002	0.005	0.010	0.005	0.01	0.005

mg/L = Milligrams per liter
Concentrations listed in **boldface** type indicate levels exceed New Mexico Water Quality Control Commission (NMWQCC) standards.
NA indicates sample was not analyzed for this constituent.
ND indicates concentration was below the laboratory detection limit.
NS indicates no NMWQCC standard established for this constituent.

5.0 FREE-PHASE PRODUCT AND REMEDIATION SYSTEM PERFORMANCE

Free-phase product thickness was measured in each monitoring well and well point with a KECK oil/water interface meter. The historical product thickness measurements for each monitoring point are listed in Table 6. A Free-Phase Hydrocarbon Thickness map for the June 1999 and December 1999 monitoring events are depicted in Figures 4a and 4b, respectively. Monitoring points with measurable thicknesses of free-phase product during the June 1999 and December 1999 monitoring events are summarized below.

Free-Phase Product Thickness		
Well ID	**6/4/99**	**12/14/99**
MW-10	0.14	0.00
MW-17	0.00	0.01
WP-1	0.01	0.00
WP-25	0.70	0.00
WP-26S	1.82	1.55
WP-27S	0.13	0.00
WP-27D	0.00	0.35

Due to the continued presence of free-phase product, concentrated near the south portion of the site, a product recovery system was installed at monitoring well MW-10 as recommended in the approved Stage 2 Abatement Plan. Installation of the Xitech product recovery system was completed on December 23, 1998. The product recovery system consists of the following components:

- Xitech Model ADJ 1000 Smart Skimmer with polyethylene tubing
- Xitech Model 2500 ES Electronic Timer powered by a 12-volt battery with solar panel
- 80-gallon fiberglass-reinforced plastic (FRP) tank for product recovery containment with automatic shutoff sensor
- One K-size (220 cubic feet) bottle of nitrogen gas with regulator to supply
- The components listed above are mounted on a metal stand
- The components listed above are contained within a 300-gallon capacity corrugated galvanized steel stock tank for secondary containment
- The Xitech recovery system and monitoring well MW-10 are enclosed within a 10-foot long by 10-foot wide by 8-foot tall chainlink fence. The top foot of the fence has 3 strands of barbed wire. Access is provided through a 5-foot wide locked gate.
- The components listed above are situated on a 6-inch layer of gravel.

A schematic drawing and specifications of the installed Xitech product recovery system is provided in Appendix C. The system does not contain any below-grade lines; therefore no pressurized integrity testing is required. Currently, the control box is set to pump for 10 minutes once per day. Site visits are conducted at approximately bi-weekly intervals to monitor system performance, replace the bottled nitrogen supply when necessary, perform maintenance to system components, and to check for any vandalism.

5.1 Removal and off-site destruction of free-phase product and contaminated groundwater

As of December 23, 1999, a total of approximately 45 gallons of free-phase product had been removed from monitoring well MW-10 (see chart below). Terracon coordinated and subcontracted with Rinchem Company Incorporated (Rinchem) for the removal and off-site destruction of the free-phase product and contaminated groundwater. Rinchem sampled the product and contaminated groundwater and analyzed samples in order to generate a waste profile for each waste of each monitoring event. Rinchem provided new closed top 55-gallon drums for containing free-phase product and purged groundwater. Rinchem used the waste profiles to prepare waste manifests for the transportation, storage and destruction of each waste. Rinchem was to submit waste manifests to Huntsman for signature. Terracon field personnel were present on-site to provide site entry and coordinate and document off-site removal of each waste by Rinchem during the June 1999 monitoring event. For the December 1999 monitoring event Terracon field personnel stored the purged groundwater in a 325-gallon polyethylene tank. This tank was transported from the site to Rinchem Co. in Chaparral, New Mexico, for sampling and off-site destruction of the contaminated groundwater.

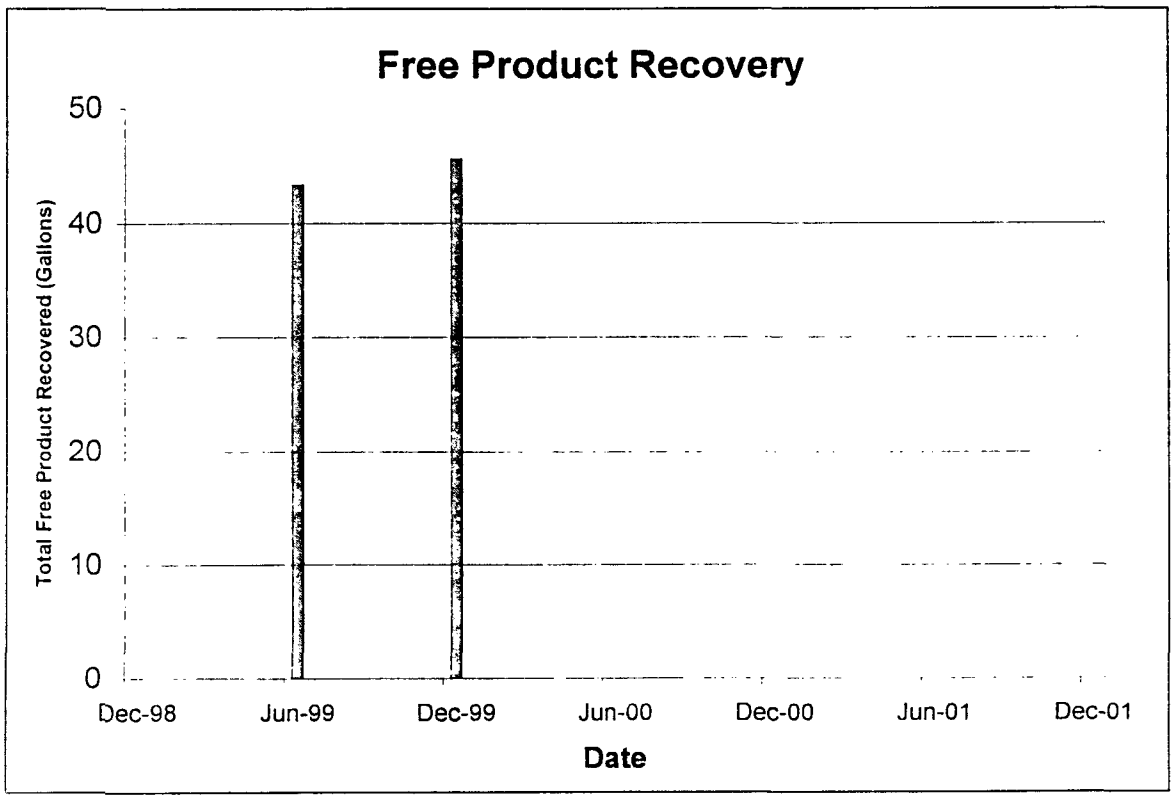


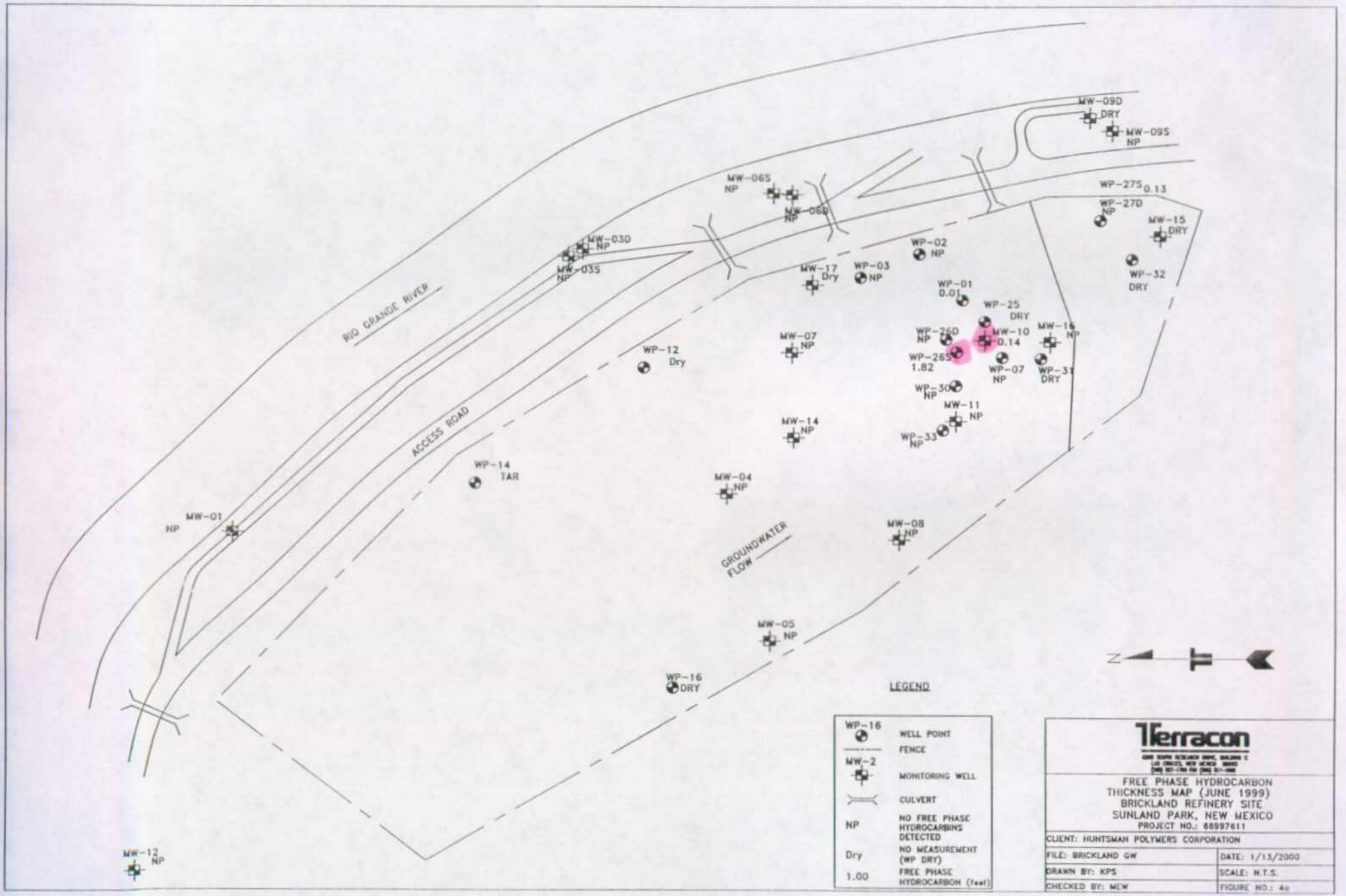
Table 6
Brickland Refinery
Free-Phase Hydrocarbon Thickness Measurements (feet)

Well ID	Sept. 93	Dec. 93	Mar. 94	Jul. 94	Sept. 94	Dec. 94	Mar. 95	Dec. 95	Jun. 96	Dec. 96	Jul. 97	Jan. 98	Jun. 98	Dec. 98	Jun. 99	Dec. 99
MW-1	NM	NM	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-2	NM	NM	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM
MW-3S	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00
MW-3D	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-4	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
MW-5	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-6S	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00
MW-6D	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00
MW-7	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-8	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-9S	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-10	5.42	3.58	NM	3.45	2.40	2.46	NM	2.29	2.3	2.14	2.01	2.26	2.21	2.50	0.14	0.00
MW-11	NM	NM	0.00	0.00	0.05	NM	NM	0.16	0	<0.01	<0.01	<0.01	0.00	0.00	0.00	0.00
MW-12	NM	NM	0.00	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	NM	0.00	0.00	0.00	0.00
MW-13	NM	NM	NM	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NM
MW-14	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-15	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-16	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Dry	0.00
MW-17	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	NM	0.00	0.00	Dry	0.00	0.00	0.00	0.00
WP-1	NM	NM	NM	0.00	0.00	0.00	NM	0.16	NM	<0.01	0.00	Dry	0.00	0.74	0.01	0.00
WP-2	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-3	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-4	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-5	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-6	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	<0.01	0.00	0.00	0.00	NM
WP-7	NM	NM	NM	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-8	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-9	0.01	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-10	NM	NM	NM	0.00	0.20	Dry	NM	0.00	NM	Dry	0.00	Dry	0.00	Dry	0.00	NM
WP-11	0.01	NM	NM	0.00	Dry	Dry	NM	NM	NM	Dry	0.00	Dry	0.00	Dry	0.00	NM
WP-12	NM	NM	NM	0.00	Dry	NM	NM	0.00	NM	Dry	0.00	Dry	0.00	Dry	Dry	NM
WP-13	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	Dry	0.00	Dry	0.00	Dry	0.00	NM

Table 6
Brickland Refinery
Free-Phase Hydrocarbon Thickness Measurements (feet)

Well ID	Sept. 93	Dec. 93	Mar. 94	Jul. 94	Sept. 94	Dec. 94	Mar. 95	Dec. 95	Jun. 96	Dec. 96	Jul. 97	Jan. 98	Jun. 98	Dec. 98	Jun. 99	Dec. 99
WP-14	NM	NM	NM	0.00	Tar	NM	NM	0.14	NM	Tar	Tar	Tar	Tar	Tar	Tar	Tar
WP-15	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.20	Dry	0.00	0.00	0.00	NM
WP-16	NM	NM	NM	0.00	NM	NM	NM	0.00	NM	Dry	Dry	Dry	0.00	Dry	Dry	NM
WP-17	NM	NM	NM	0.00	Dry	Dry	NM	0.00	NM	Dry	0.12	Dry	0.00	Dry	Dry	NM
WP-18	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	<0.01	<0.01	Dry	0.00	0.00	0.00	NM
WP-19	NM	0.01	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-20	NM	NM	NM	0.00	NM	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-21	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	Dry	0.06	Dry	0.00	Dry	0.00	NM
WP-22	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	NM	NM	NM	0.00	NM	NM	NM
WP-23	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	NM	NM	NM	0.00	NM	0.00	NM
WP-24	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-25	0.05	0.05	NM	0.22	NM	0.20	NM	1.56	NM	NM	NM	<0.01	0.00	1.05	0.70	Dry
WP-26S	NM	0.12	NM	2.20	2.59	1.53	NM	0.00	NM	0.00	1.29	Tar	0.00	0.39	1.82	1.55
WP-26D	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-27S	NM	NM	NM	0.00	0.00	0.00	NM	NM	NM	0.00	0.00	0.00	0.00	0.07	0.13	0.00
WP-27D	NM	NM	NM	0.11	0.45	0.49	NM	NM	NM	0.48	0.44	1.18	0.00	0.00	0.00	NM
WP-28	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	Dry	0.00	Dry	0.00	NM
WP-29	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	<0.01	0.00	0.00	0.00	0.00	0.00
WP-30	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-31	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WP-32	NM	NM	NM	Dry	Dry	Dry	NM	Dry	NM	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WP-33	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	<0.01	<0.01	0.00	0.00	0.00	0.00	0.00
WP-34	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-35	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	0.00	0.00	NM
WP-36	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.00	0.00	0.00	0.00	Dry	0.00	NM
WP-37	NM	NM	NM	0.00	0.00	0.00	NM	0.00	NM	0.04	0.17	0.00	0.00	0.00	0.00	NM

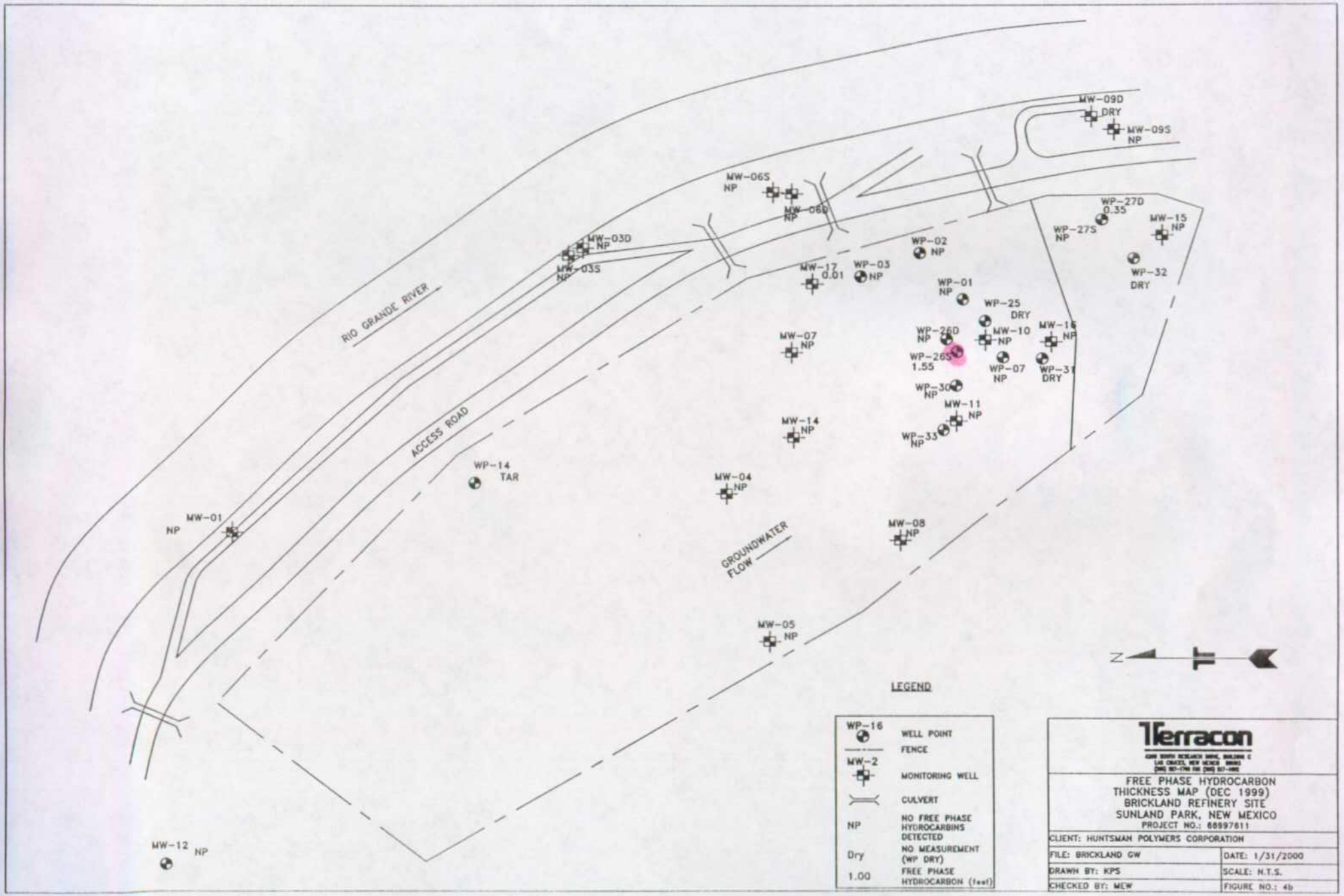
Notes:
NM = Monitoring point was not measured
Dry = Monitoring point was dry
Tar = Thickness measurement not obtainable because of presence of thick tar-like substance in well point.



Terracon

FREE PHASE HYDROCARBON
THICKNESS MAP (JUNE 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 66997611

CLIENT: HUNTSMAN POLYMERS CORPORATION	
FILE: BRICKLAND GW	DATE: 1/13/2000
DRAWN BY: KPS	SCALE: N.T.S.
CHECKED BY: MEW	FIGURE NO.: 4a


MW-09D
DRY
MW-09S
NP
MW-06S
NP
MW-06D
NP
MW-03D
NP
MW-03S
NP
WP-27D
0.35
WP-27S
NP
MW-15
NP
WP-02
NP
WP-32
DRY
MW-17
0.01
WP-03
NP
WP-01
NP
WP-25
DRY
WP-26D
NP
MW-10
NP
MW-16
NP
MW-07
NP
WP-26S
1.55
WP-07
NP
WP-31
DRY
WP-30
NP
MW-11
NP
MW-14
NP
WP-33
NP
RIO GRANDE RIVER
ACCESS ROAD
WP-14
TAR
MW-04
NP
MW-01
NP
MW-08
NP
GROUNDWATER
FLOW
MW-05
NP
MW-12
NP
N
LEGEND
WP-16
WELL POINT
FENCE
MW-2
MONITORING WELL
CULVERT
NP
NO FREE PHASE HYDROCARBINS DETECTED
Dry
NO MEASUREMENT (WP DRY)
1.00
FREE PHASE HYDROCARBON (feet)
Terracon
FREE PHASE HYDROCARBON
THICKNESS MAP (DEC 1999)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 66997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/31/2000
DRAWN BY: KPS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 4b

6.0 SOIL CAP

An engineered fill soil cap was installed to cover soils at the site that contain quantities of lead above regulatory action levels. The soil cap system was completed on June 26, 1999, by Indian Environmental Services.

7.0 CONCLUSIONS

Conclusions relevant to groundwater conditions and the remediation performance at the Brickand Refinery are presented below.

- BTEX concentrations in the sampled monitoring wells and upstream and downstream river samples remained below the laboratory detection limits with the exception of monitoring wells MW-3S, MW-6S and MW-9S. The BTEXconcentrations were below NMWQCC standards.

- PAH levels in the sampled monitoring points were below laboratory detection limits with the exception of monitoring well MW-6S. Although the concentration of bis (2-chloroisopropyl) ether in monitoring well MW-6S was above laboratory detection limits, it was below NMWQCC standards.

- The results for the analyses of metals for the June 1999 monitoring event indicate that no constituent exceeded the NMWQCC standards. This was also the case in 1998. Based on the results of these metal analyses for the 1998 and 1999 annual sampling events, the groundwater in the site area does not appear to be adversely affected or impacted by dissolved metals.

- Measurable thicknesses of free-phase product were detected in monitoring well MW-10 and well points WP-01, WP-25, WP-26S, and WP-27D during the June 1999 monitoring event and varied from 0.01 feet in WP-01 to 1.92 feet in WP-26S. Product thickness measurements were detected in MW-07, MW-14, WP-26S, and WP-27D during the December 1999 monitoring event and varied from 0.01 feet in MW-17 to 1.50 feet in WP-26S.

- Since the installation of the Xitech product recovery system in December 1998, a total of approximately 45 gallons of free-phase product has been removed from monitoring well MW-10.

8.0 RECOMMENDATIONS

The following recommendations are proposed for the remediation system and monitoring operations at the Brickand Refinery.

- Continue free product recovery operations since the present system has been effective in recovering free product from MW-10.

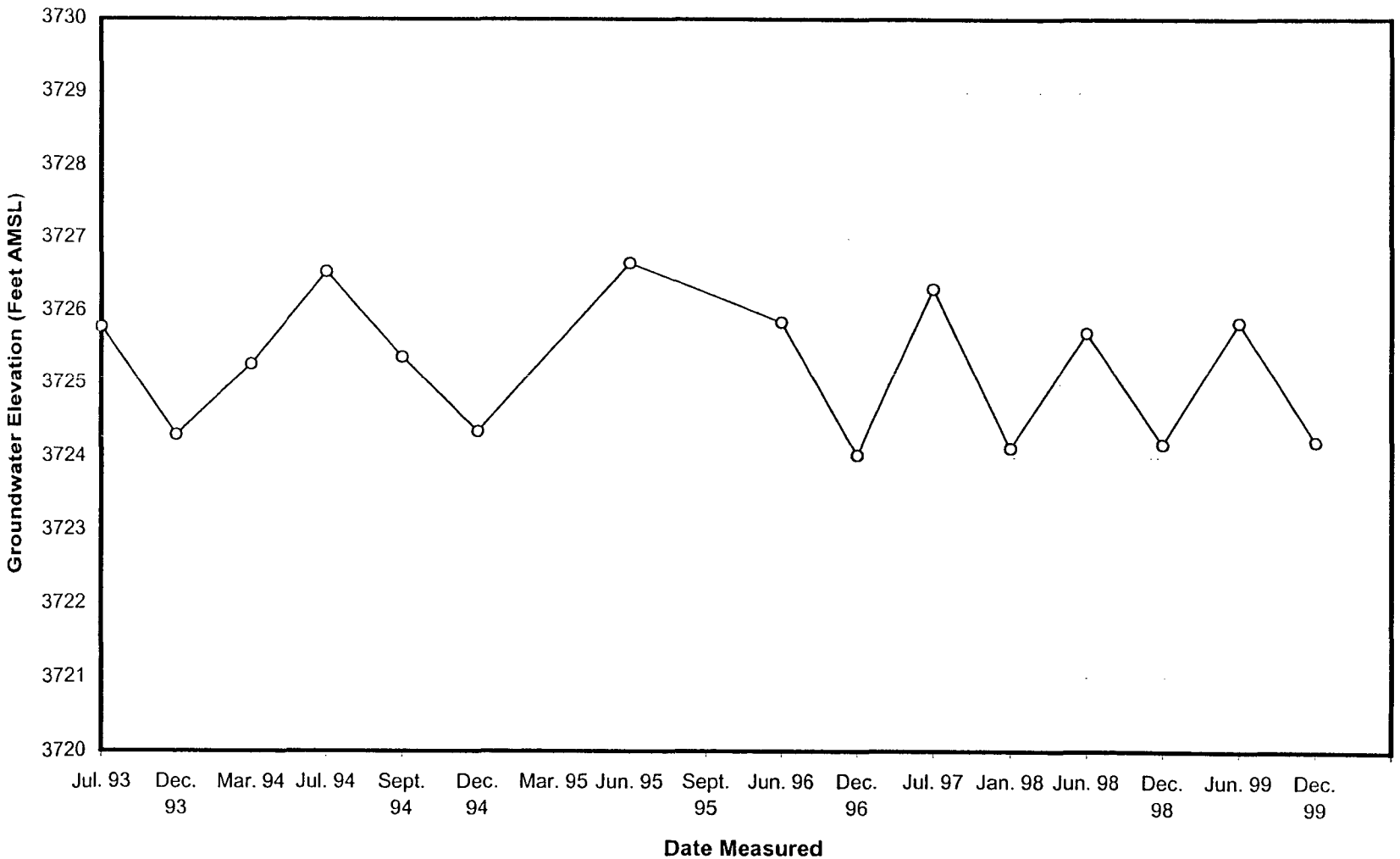
- Continue the sampling and monitoring program on a semi-annual basis. The next sampling event is scheduled during June 2000.

- Since the groundwater does not appear to be adversely impacted by PAH or dissolved metals, as evidenced throughout seven years of monitoring, analysis of PAH and dissolved metals may be an unnecessary expense. With the possible exception of selenium and silver, further analysis of PAH and dissolved metals could be discontinued. In 1996 these two metals were detected above NMWQCC standards in MW 6D, and selenium was above the standard in MW9S. In 1997 selenium was detected in four wells and silver in one well (both below NMWQCC standards). Neither of these two metals was detected in 1998 and 1999.

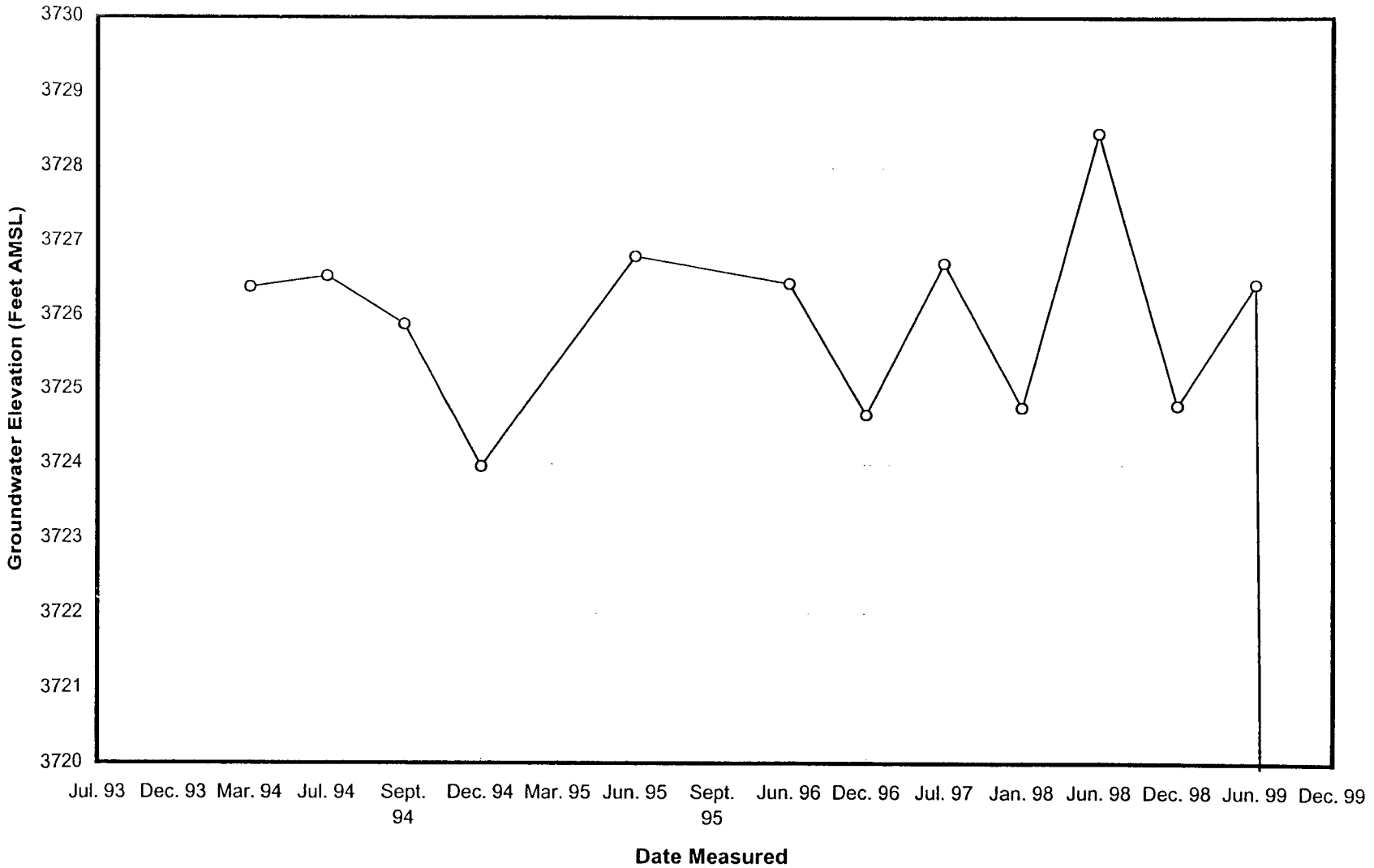
- Though MW-15 is not currently sampled as part of the semi-annual monitoring program, a sample collected at this well and analyzed for BTEX constituents may provide useful additional data pertaining to the detection of these compounds in well MW-9S. In MW-9S, the four of the constituents were detected in June of 1998, three were detected in December of 1998, three in June of 1999, and one in December of 1999.

- Well points that have never contained measurable or trace amounts of free-phase product could be removed from the monitoring plan. These well points include the following: WP-2, WP-3, WP-7, WP-26D, WP-30, WP-31, and WP-32. The other well points should be maintained for semi-annual monitoring.

Brickland Refinery
MW-1 Groundwater Elevation Over Time



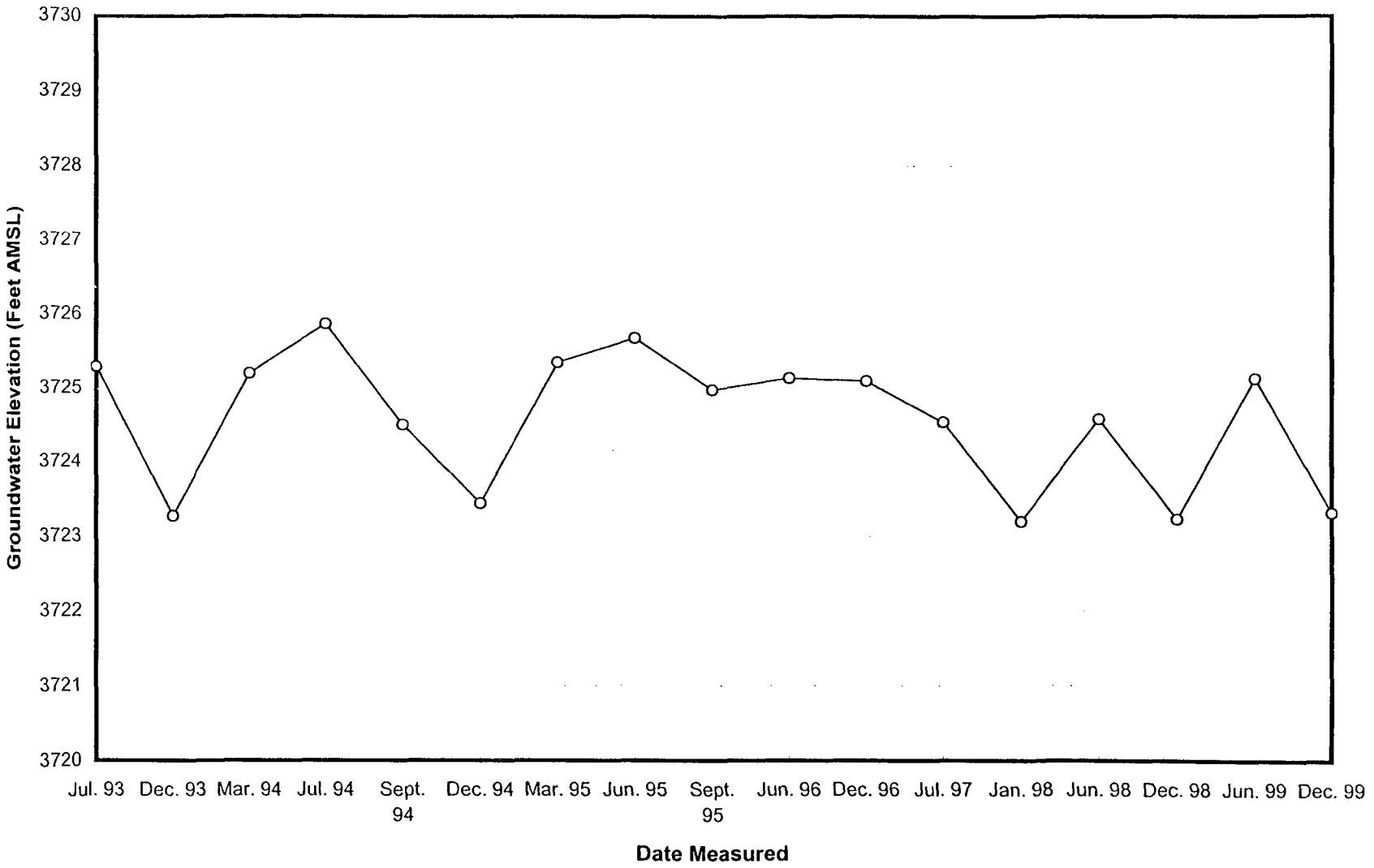
Brickland Refinery
MW-2 Groundwater Elevation Over Time



Well Plugged 6/4/99

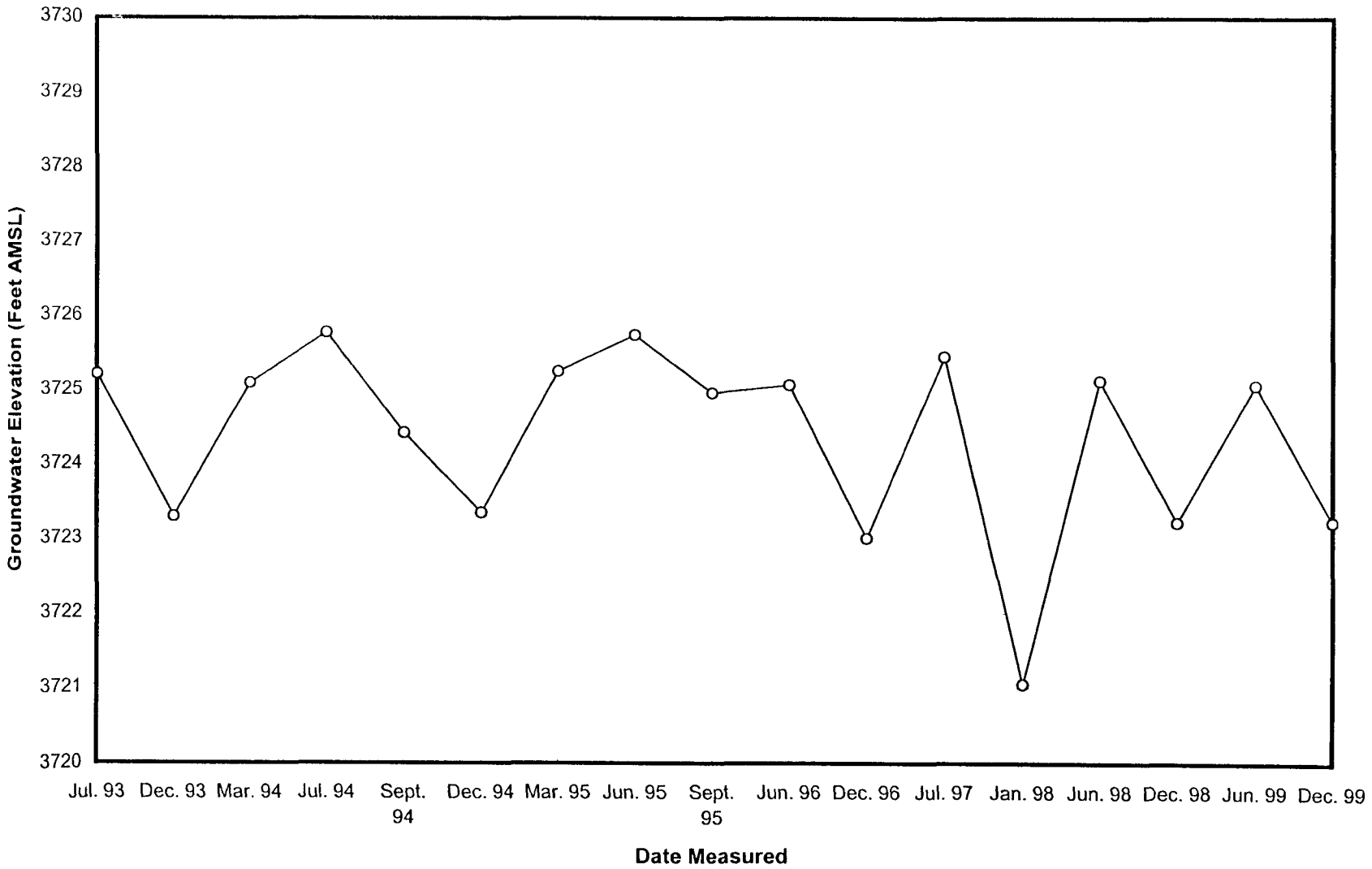
Annual 99 Well data:MW-2 WL

Brickland Refinery
MW-3S Groundwater Elevation Over Time



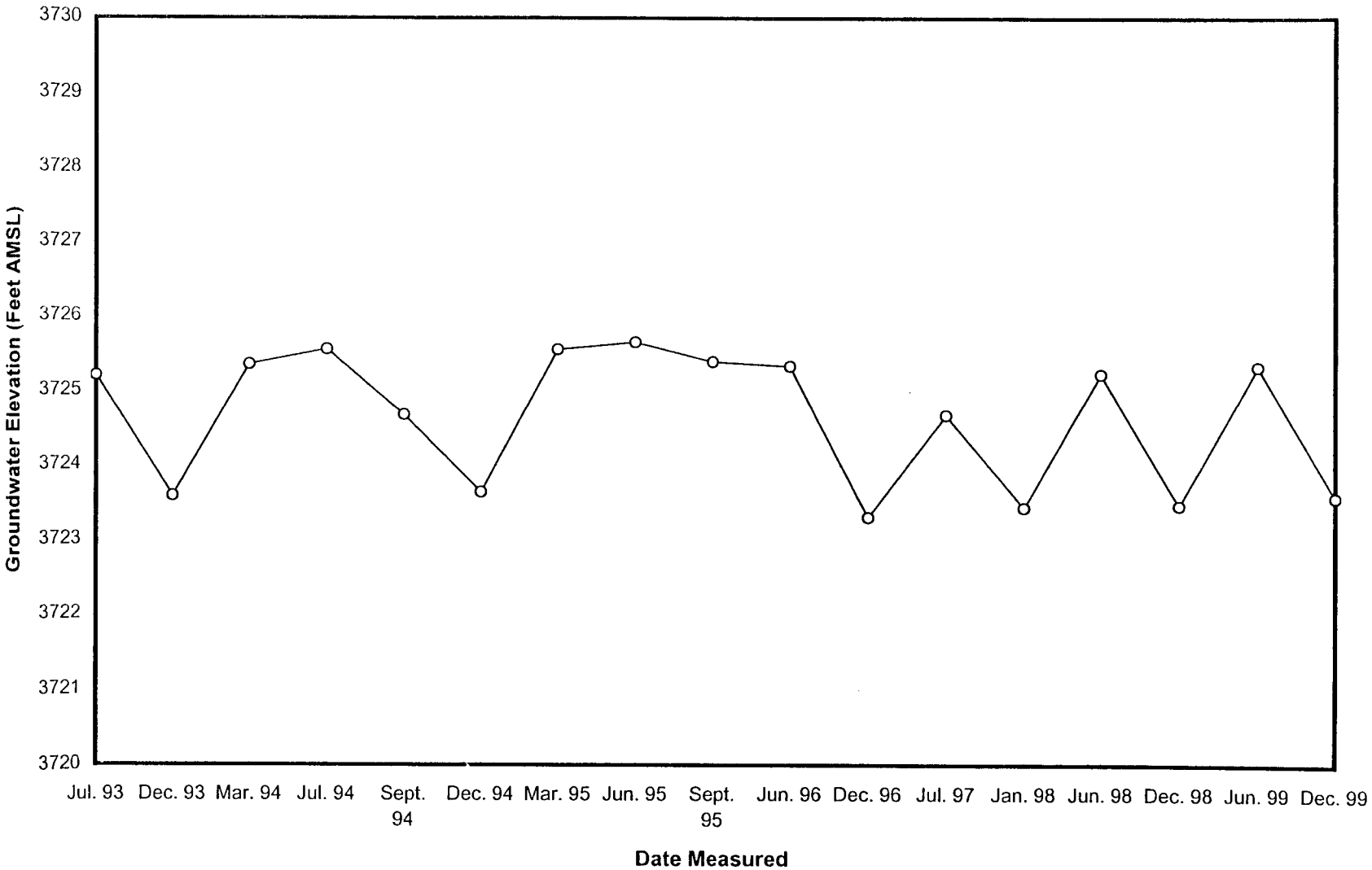
Annual 99 Well data:MW-3S WL

Brickland Refinery
MW-3D Groundwater Elevation Over Time



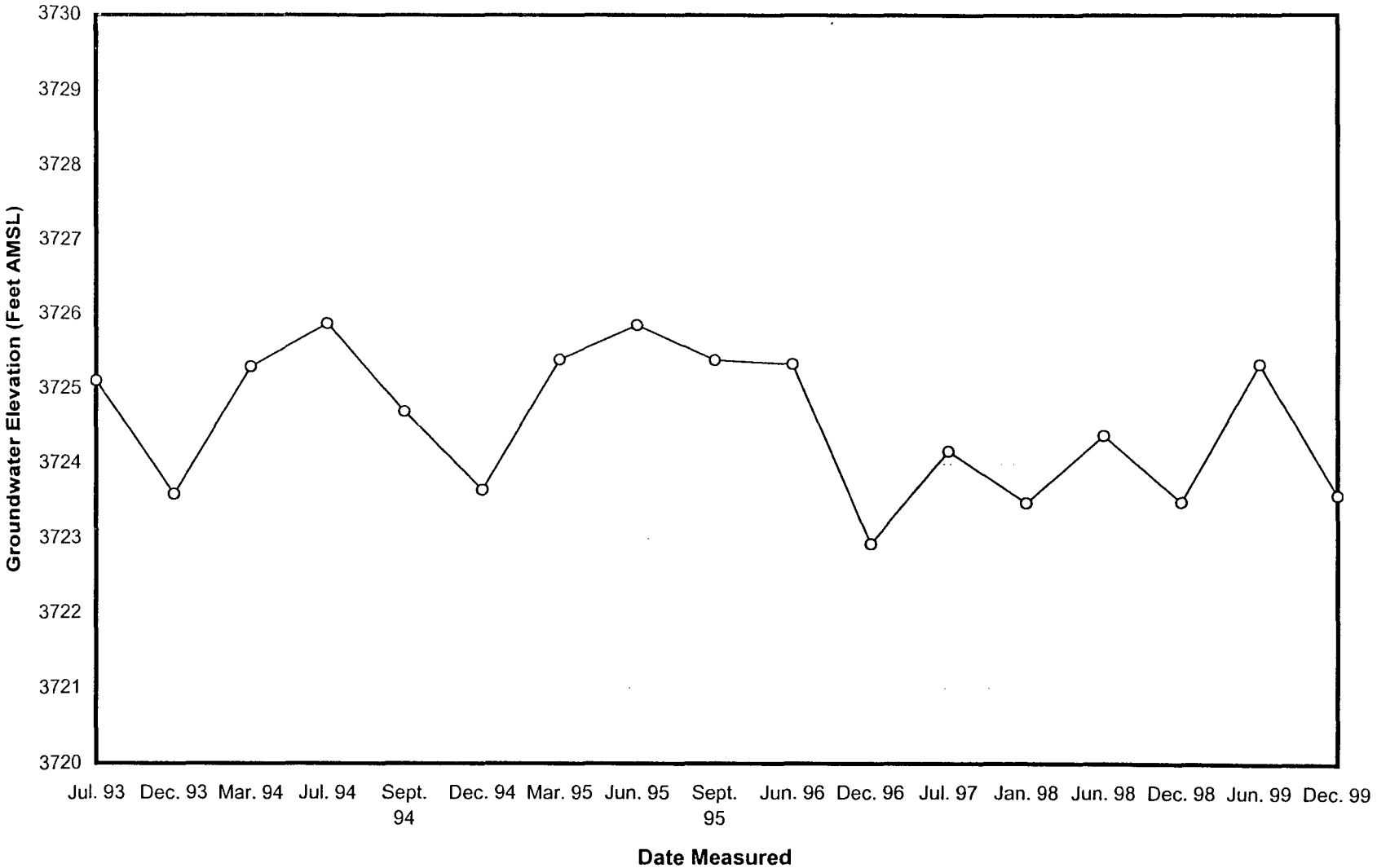
Annual 99 Well data:MW-3D WL

Brickland Refinery
MW-4 Groundwater Elevation Over Time



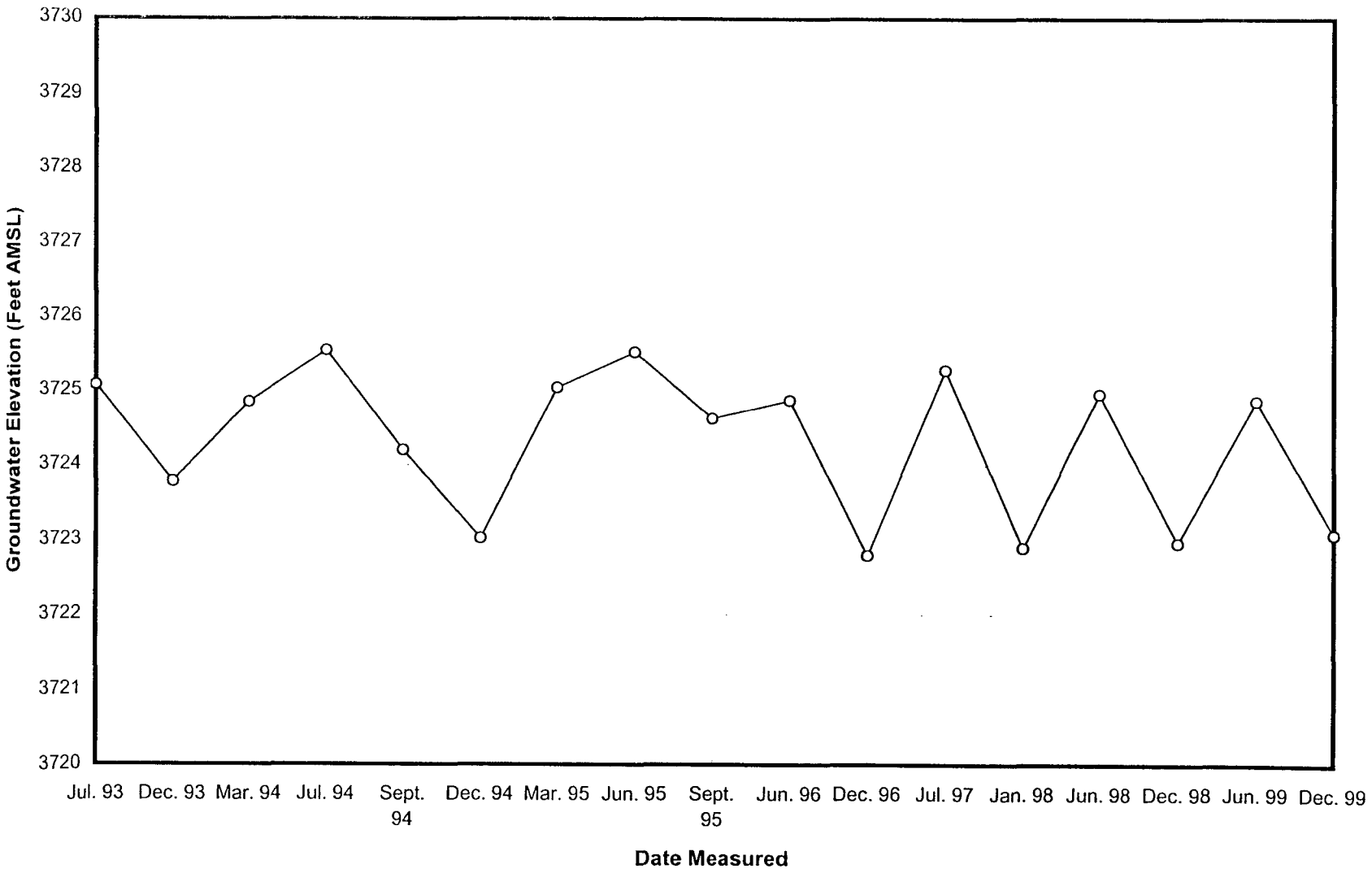
Annual 99 Well data:MW-4 WL

Brickland Refinery
MW-5 Groundwater Elevation Over Time



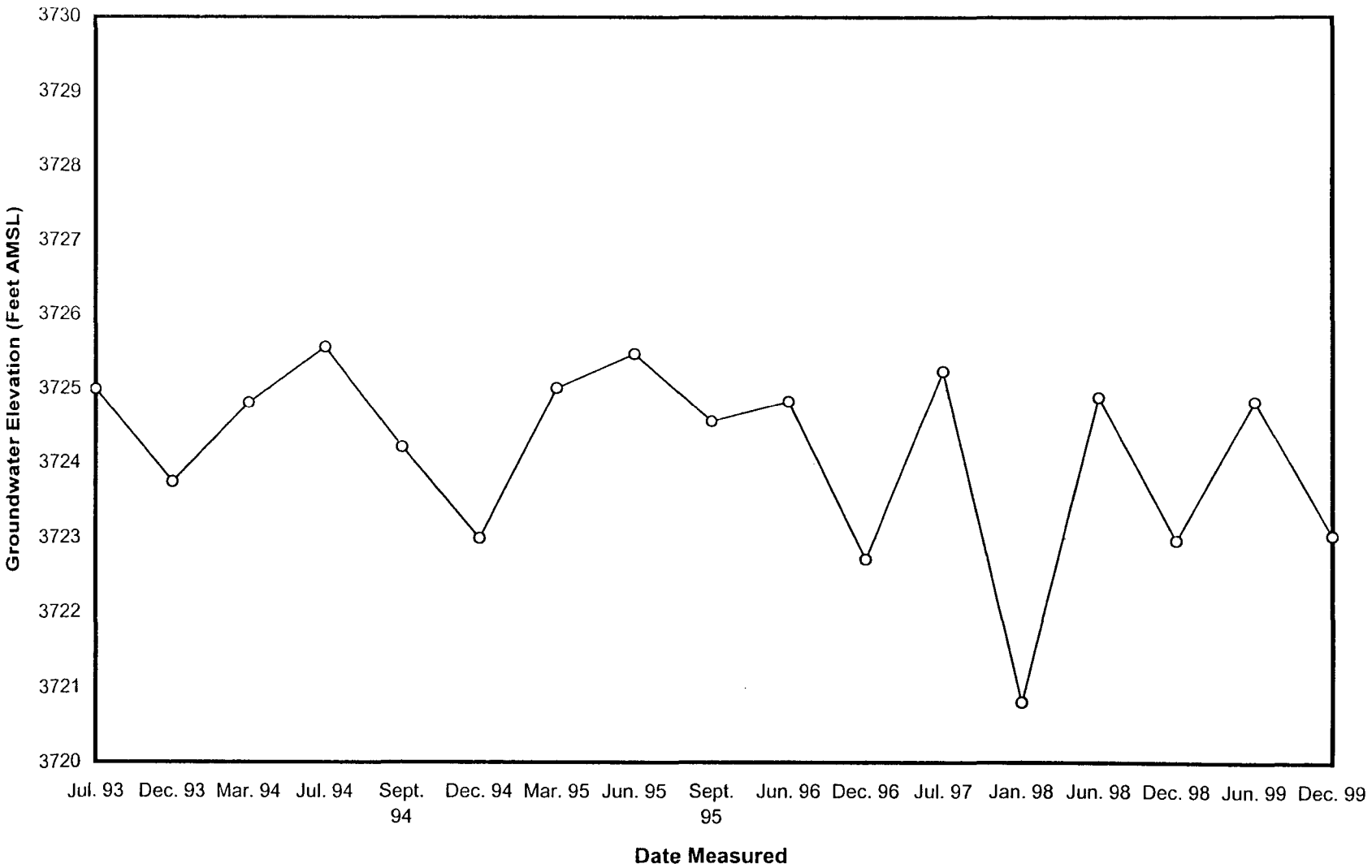
Annual 99 Well data:MW-5 WL

Brickland Refinery
MW-6S Groundwater Elevation Over Time



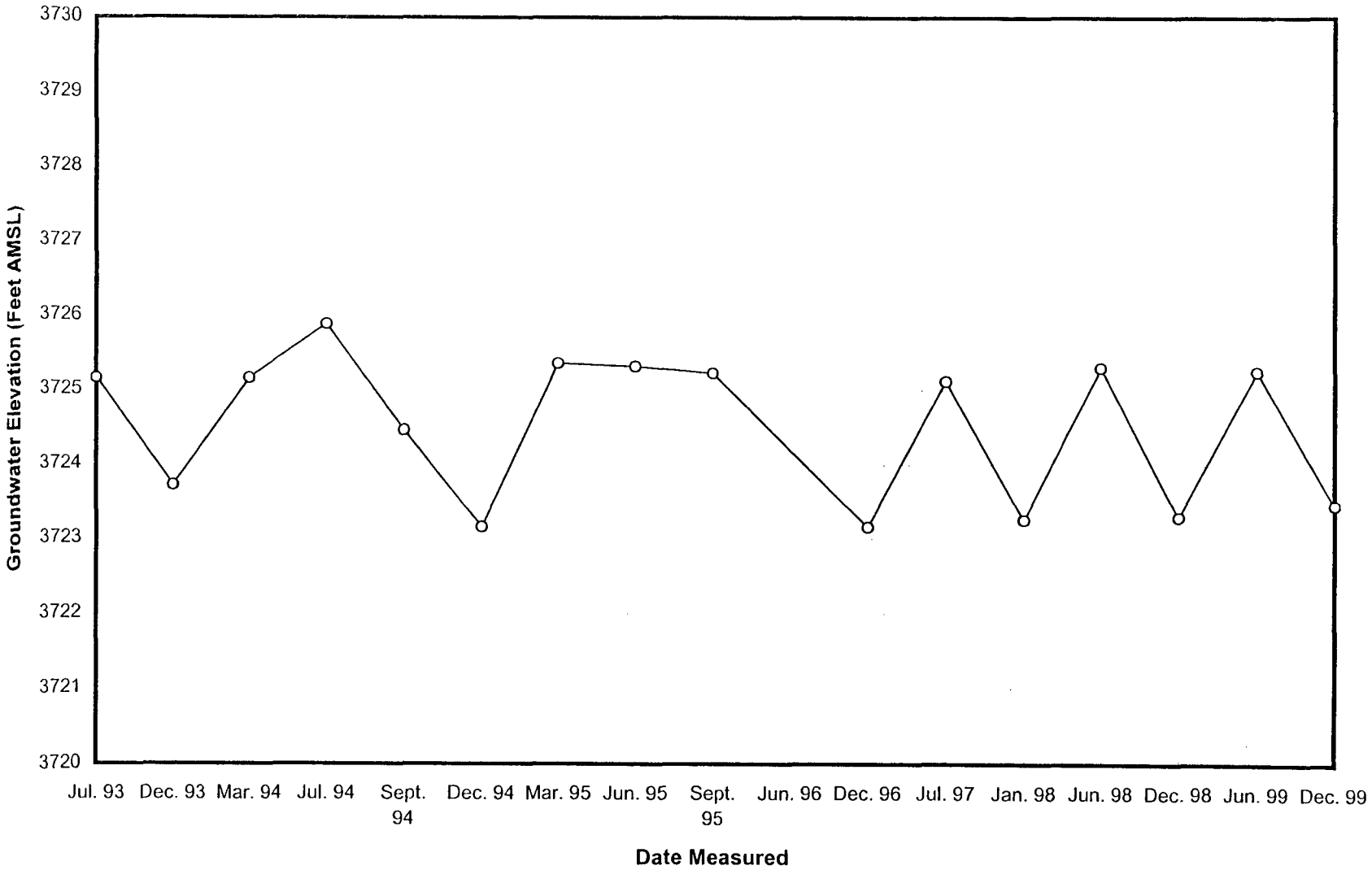
Annual 99 Well data:MW-6S WL

Brickland Refinery
MW-6D Groundwater Elevation Over Time



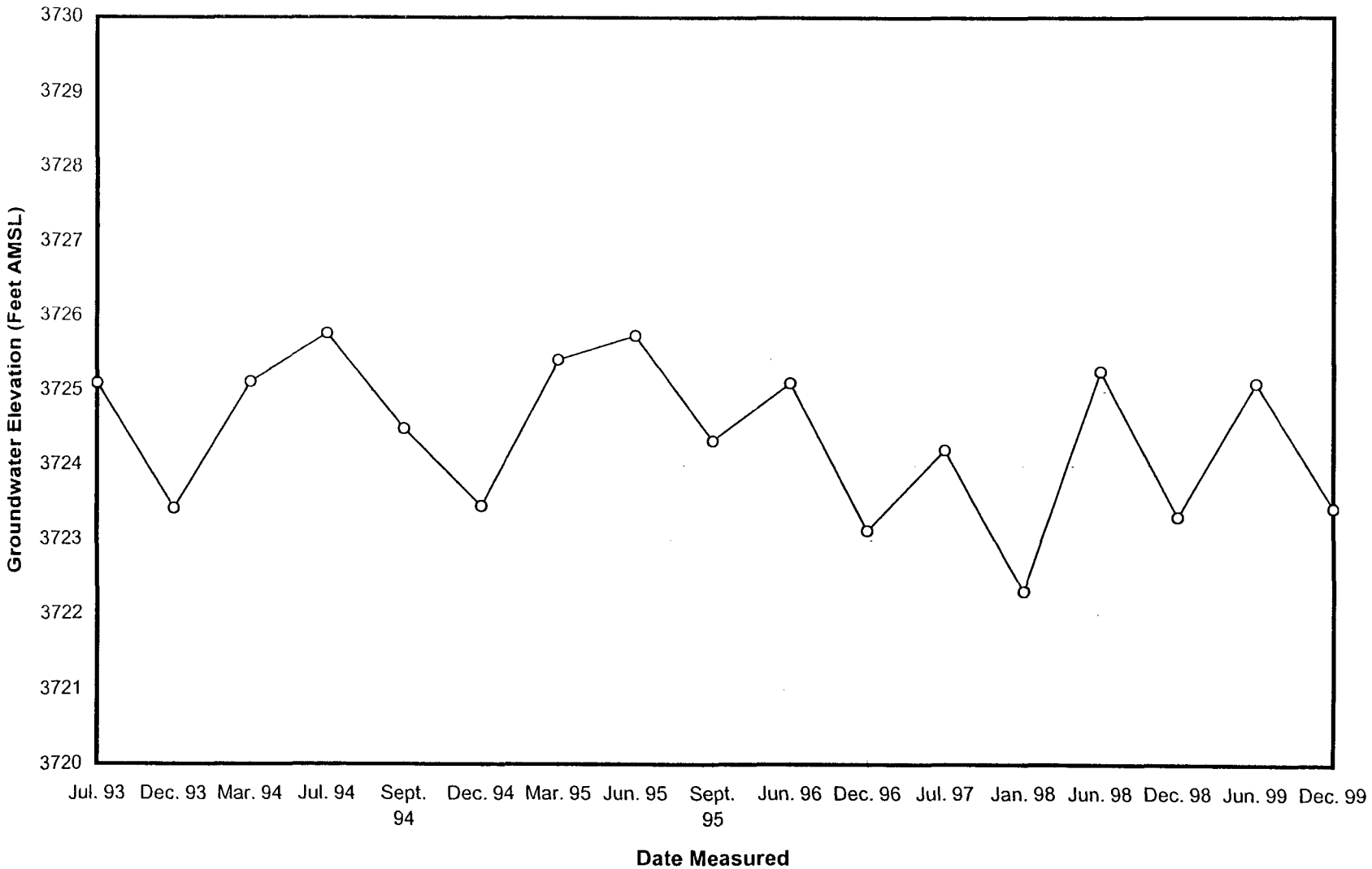
Annual 99 Well data:MW-6D WL

Brickland Refinery
MW-7 Groundwater Elevation Over Time



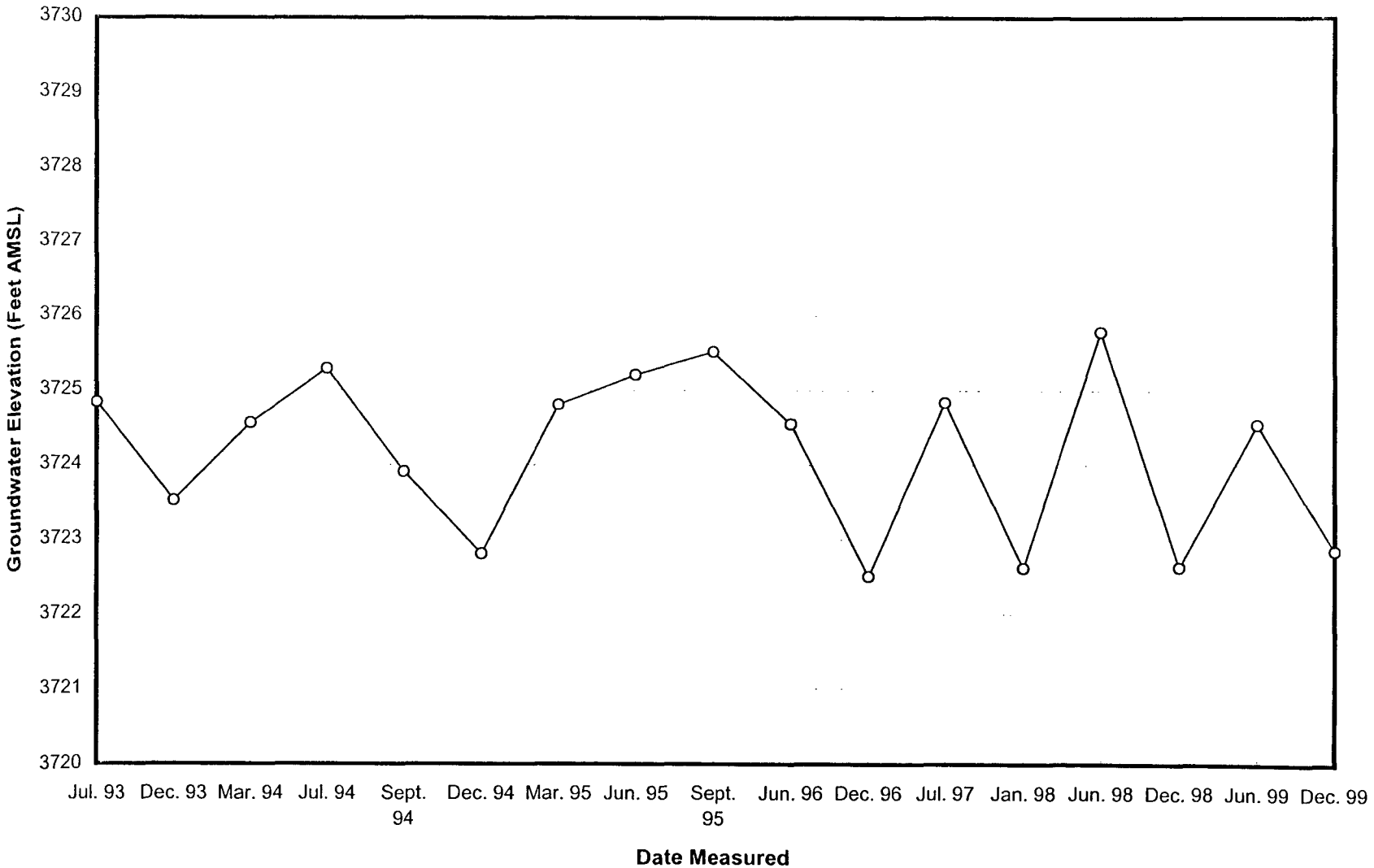
Annual 99 Well data:MW-7 WL

Brickland Refinery
MW-8 Groundwater Elevation Over Time



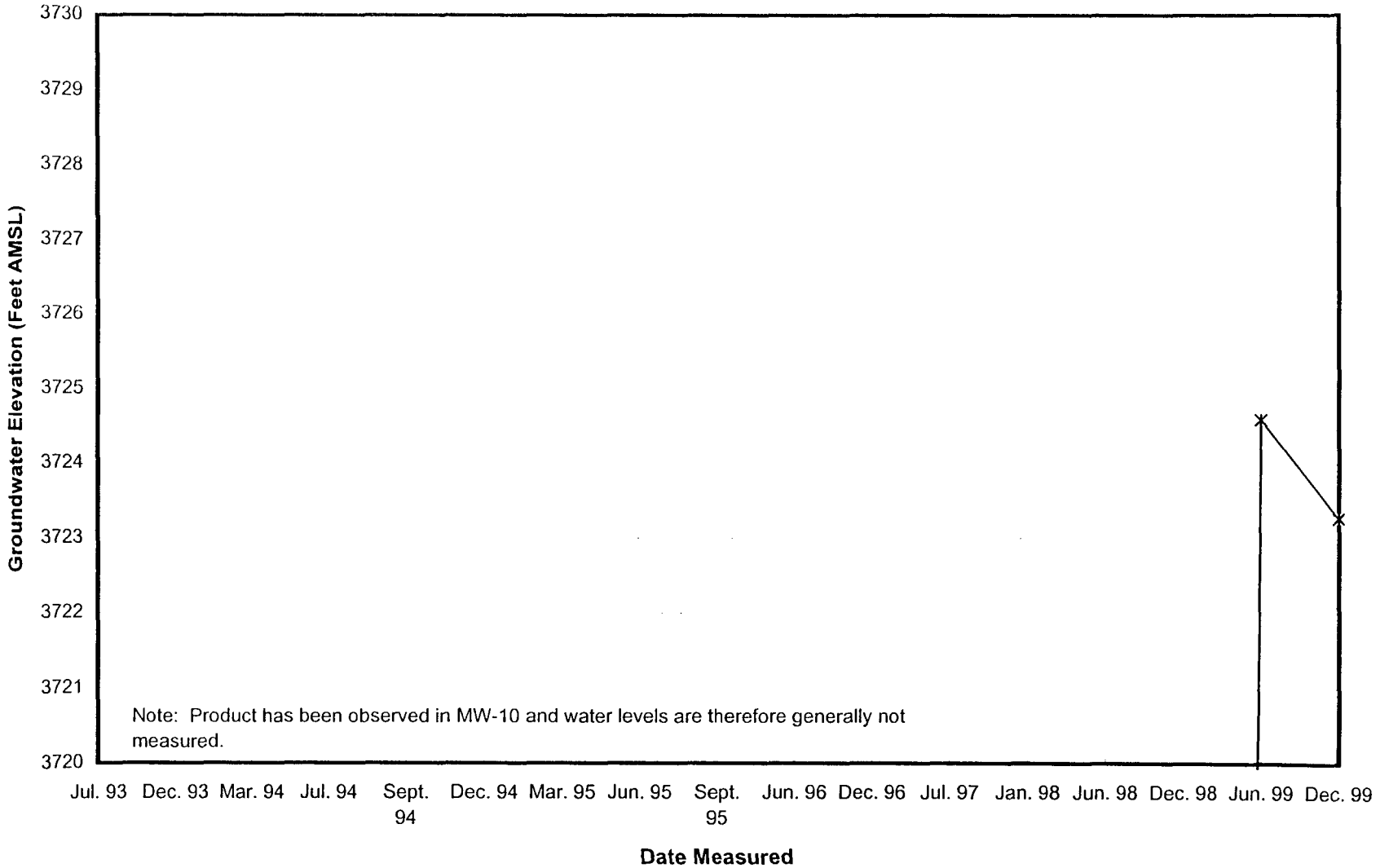
Annual 99 Well data:MW-8 WL

Brickland Refinery
MW-9S Groundwater Elevation Over Time



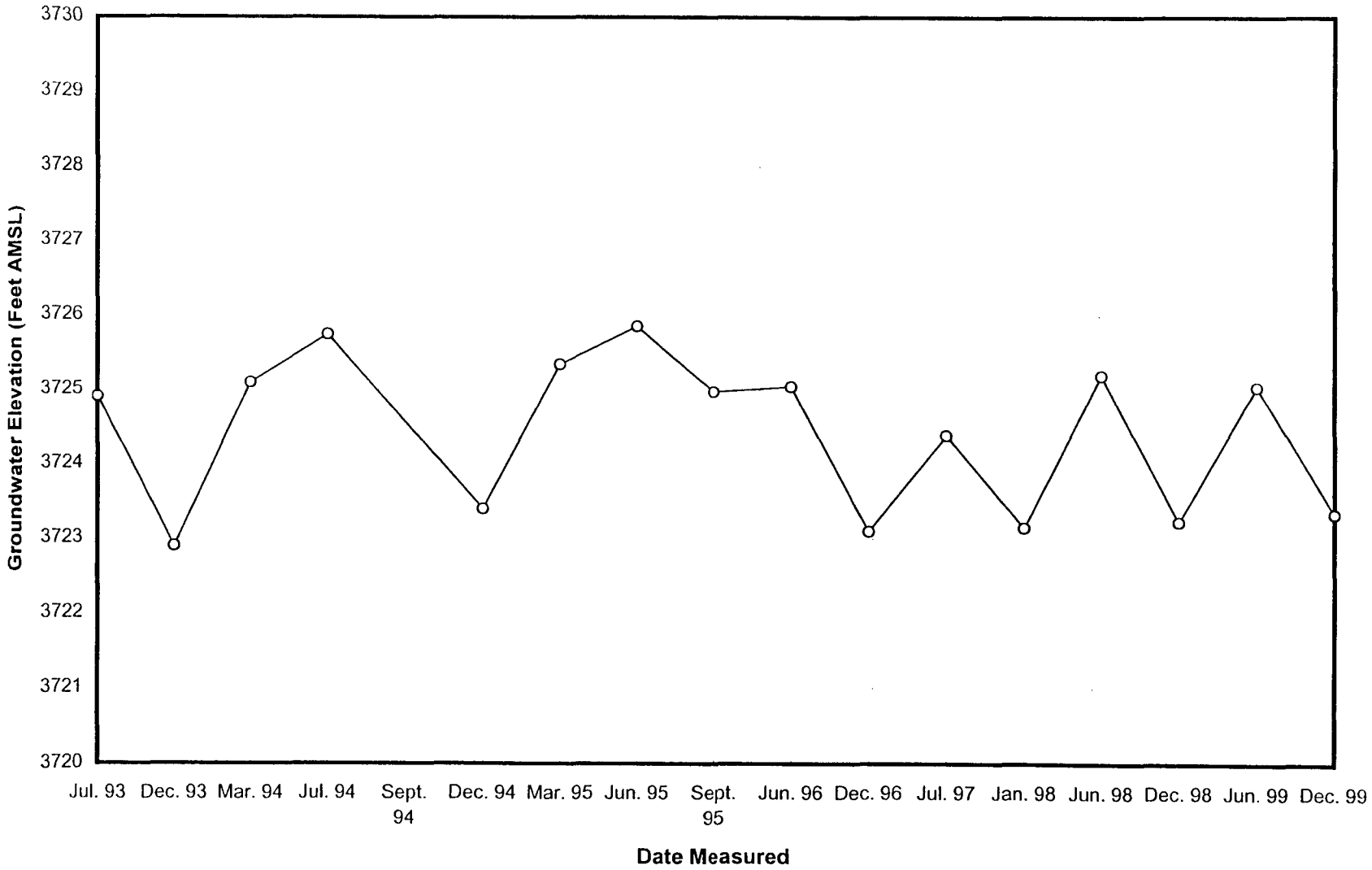
Annual 99 Well data:MW-9S WL

Brickland Refinery
MW-10 Groundwater Elevation Over Time



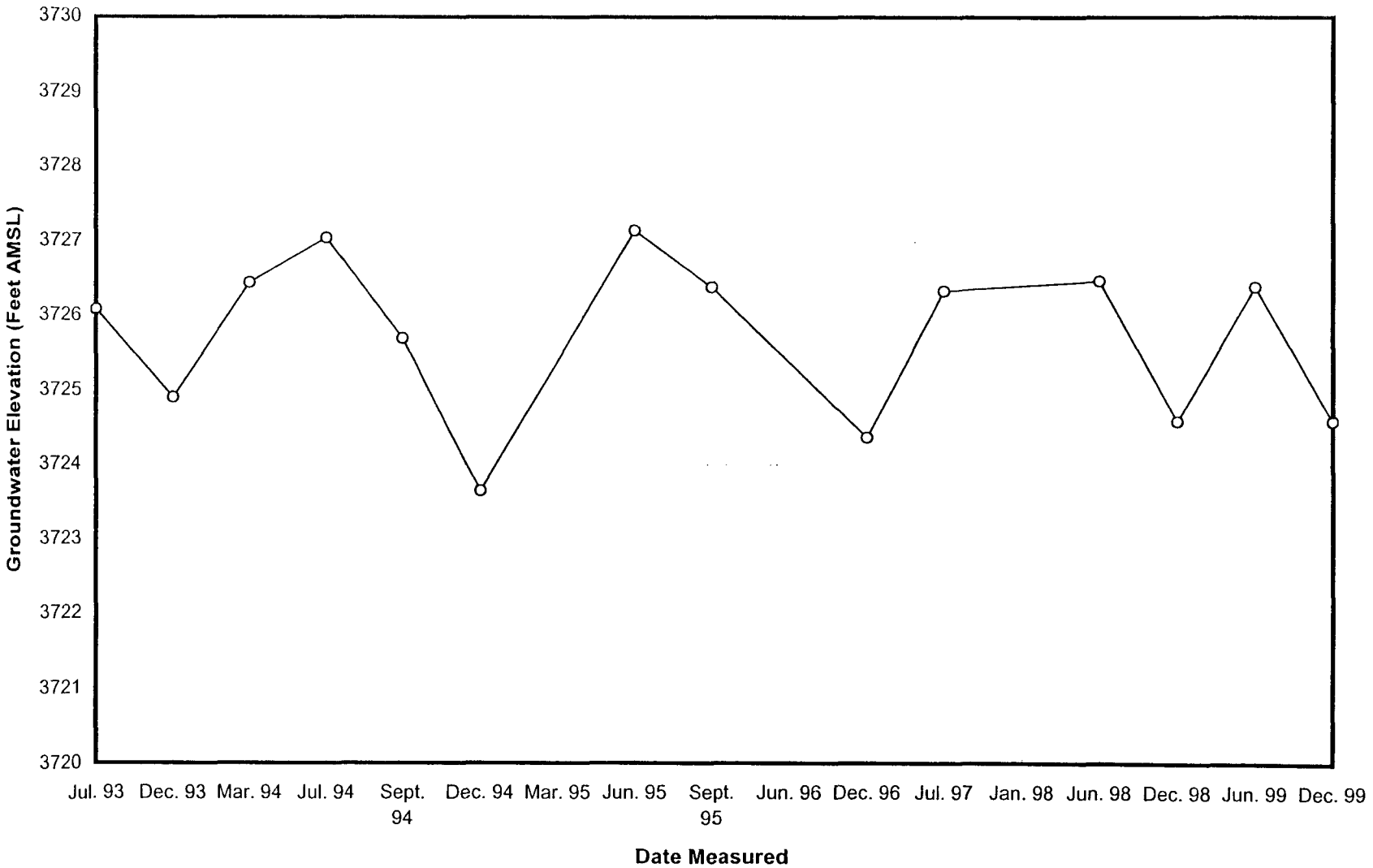
Annual 99 Well data:MW-10

Brickland Refinery
MW-11 Groundwater Elevation Over Time



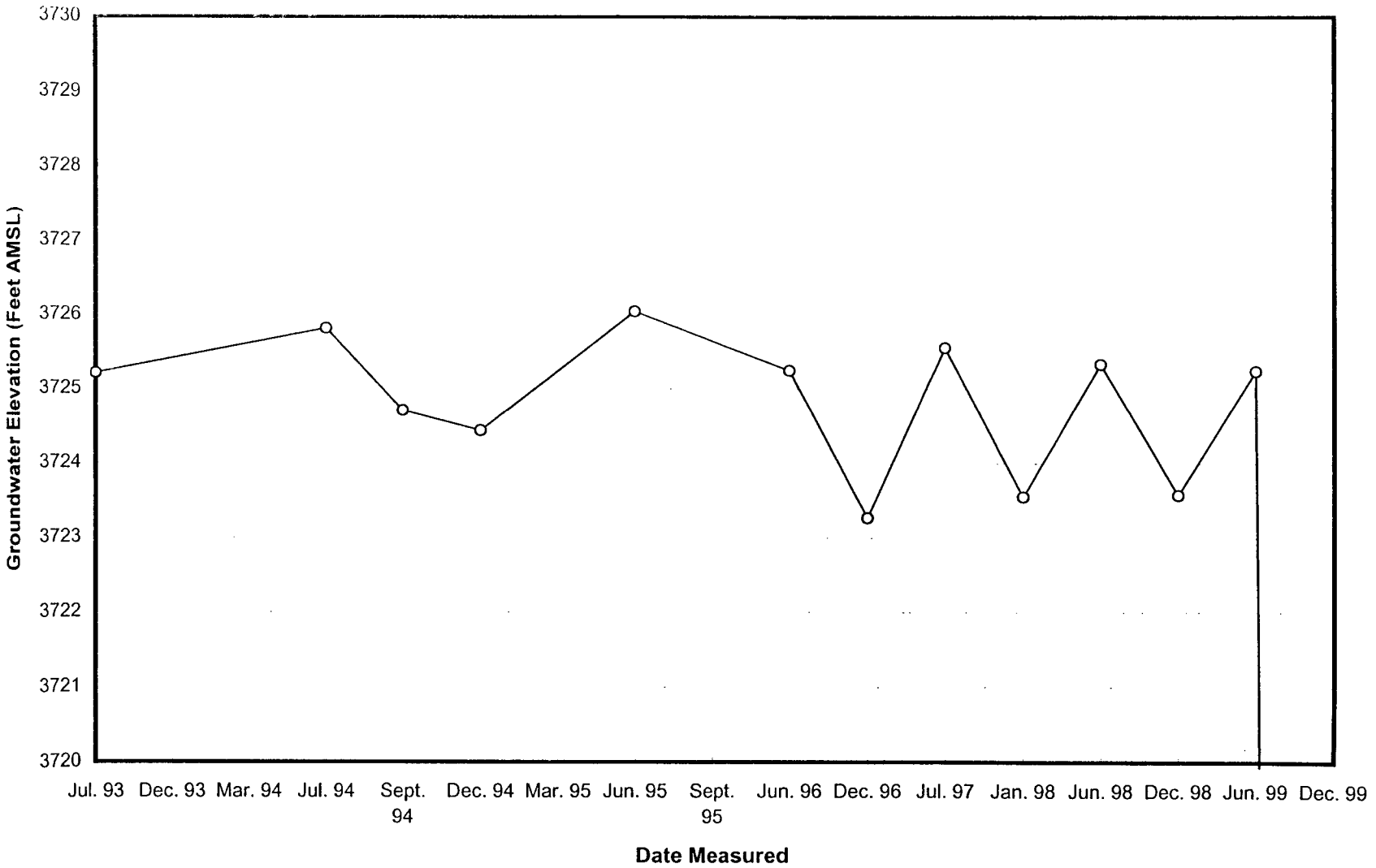
Annual 99 Well data:MW-11 WL

Brickland Refinery
MW-12 Groundwater Elevation Over Time



Annual 99 Well data:MW-12 WL

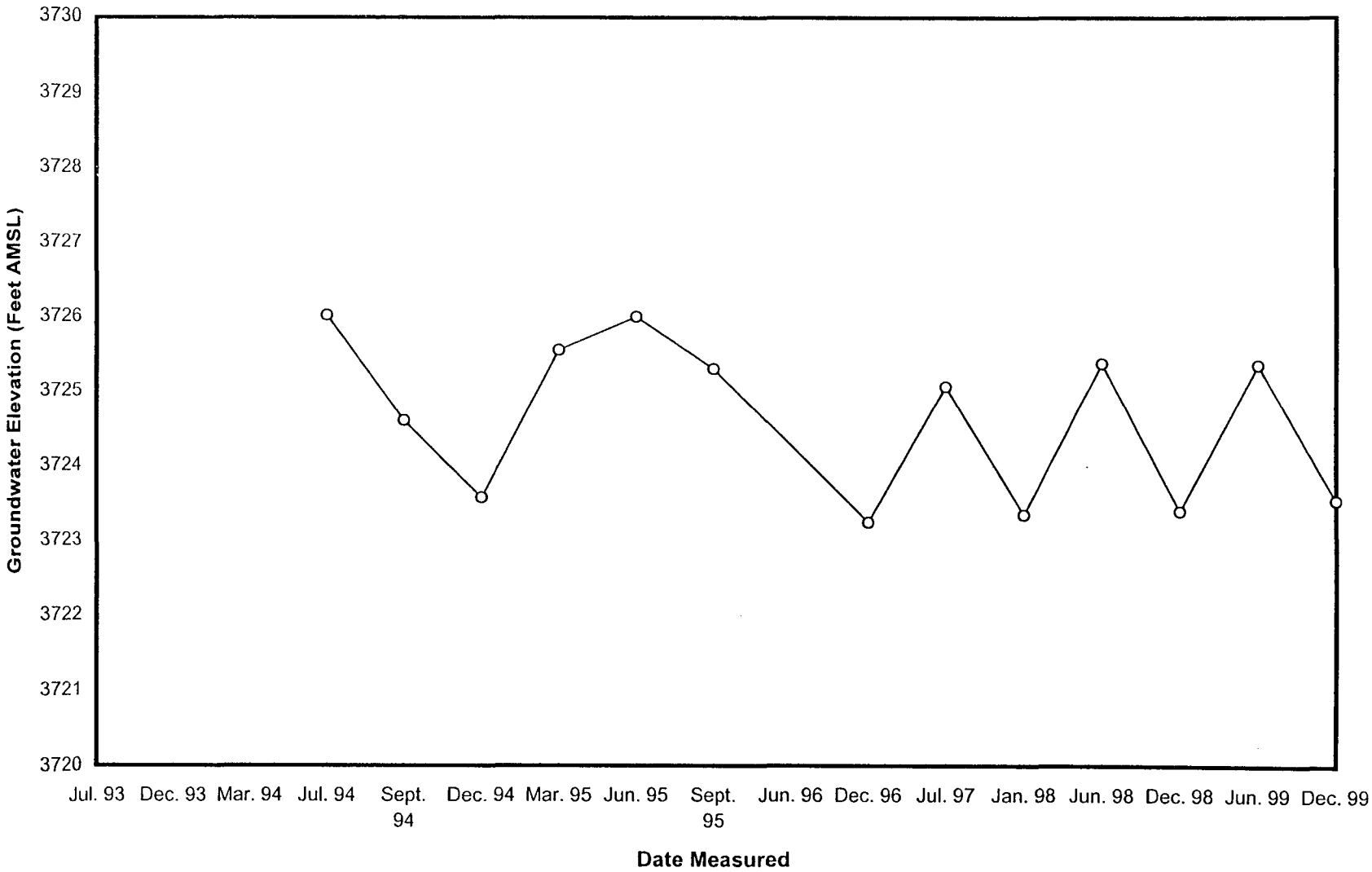
Brickland Refinery
MW-13 Groundwater Elevation Over Time



Well Plugged 6/4/99

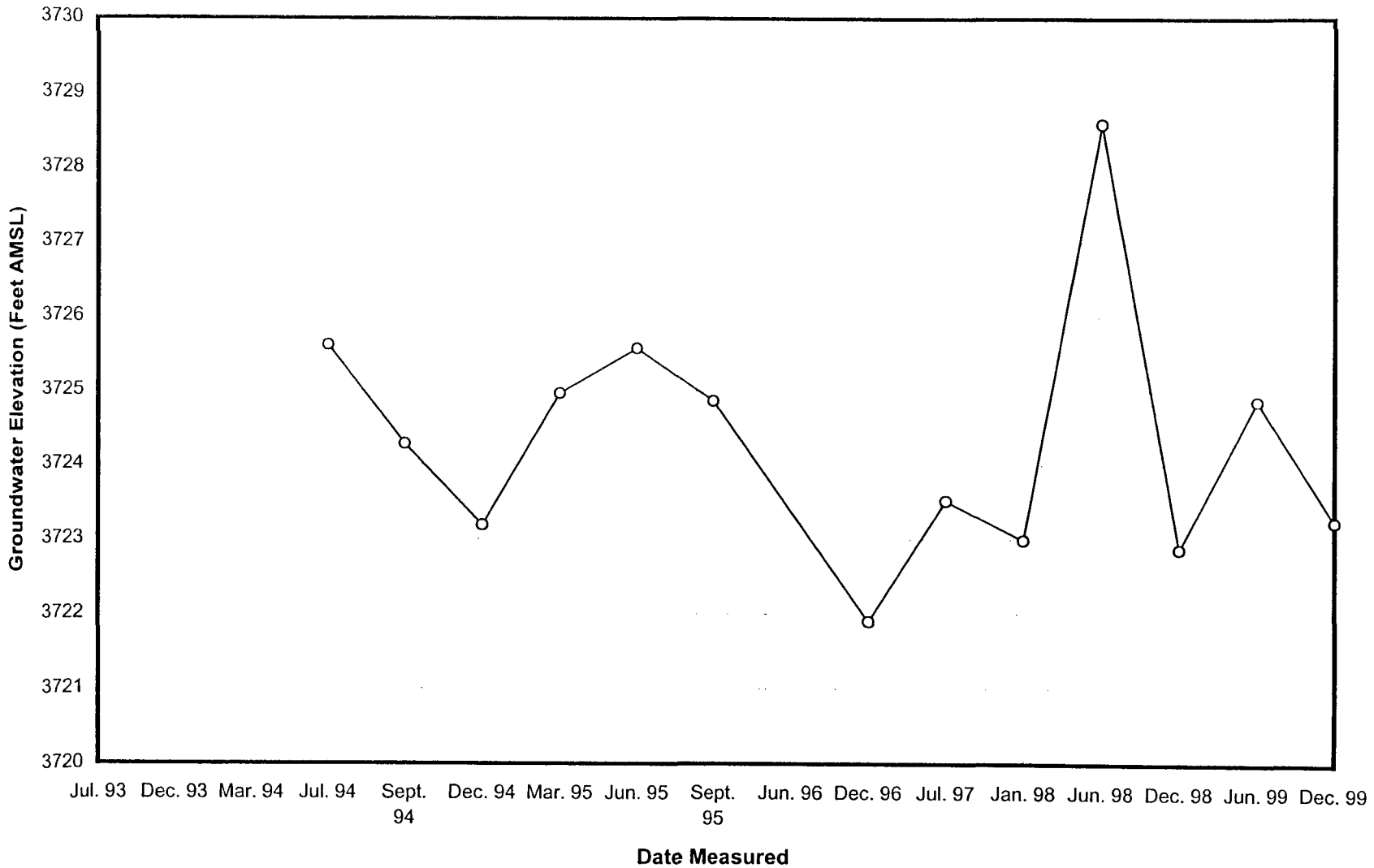
Annual 99 Well data:MW-13 WL

Brickland Refinery
MW-14 Groundwater Elevation Over Time



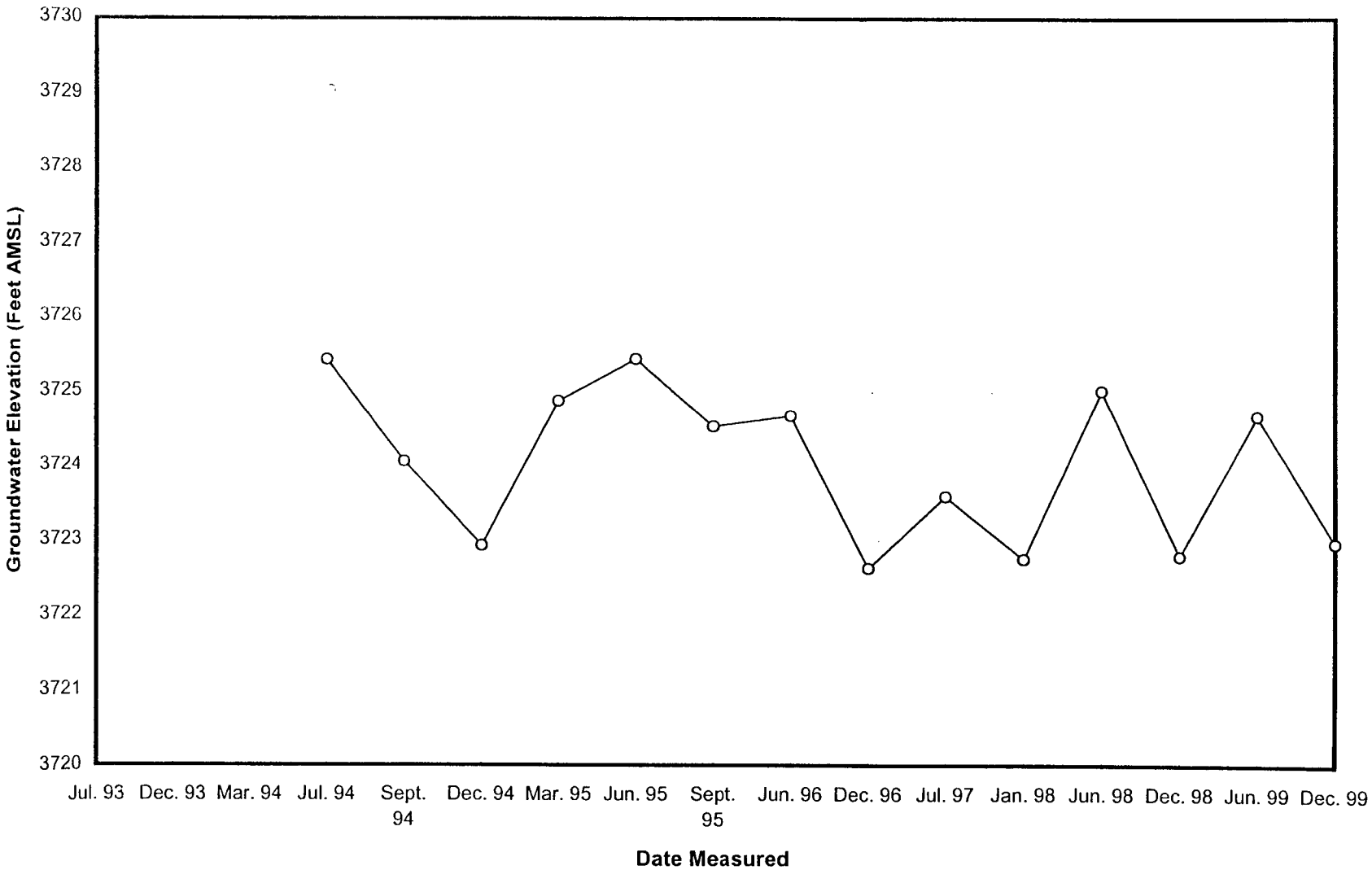
Annual 99 Well data:MW-14 WL

Brickland Refinery
MW-15 Groundwater Elevation Over Time



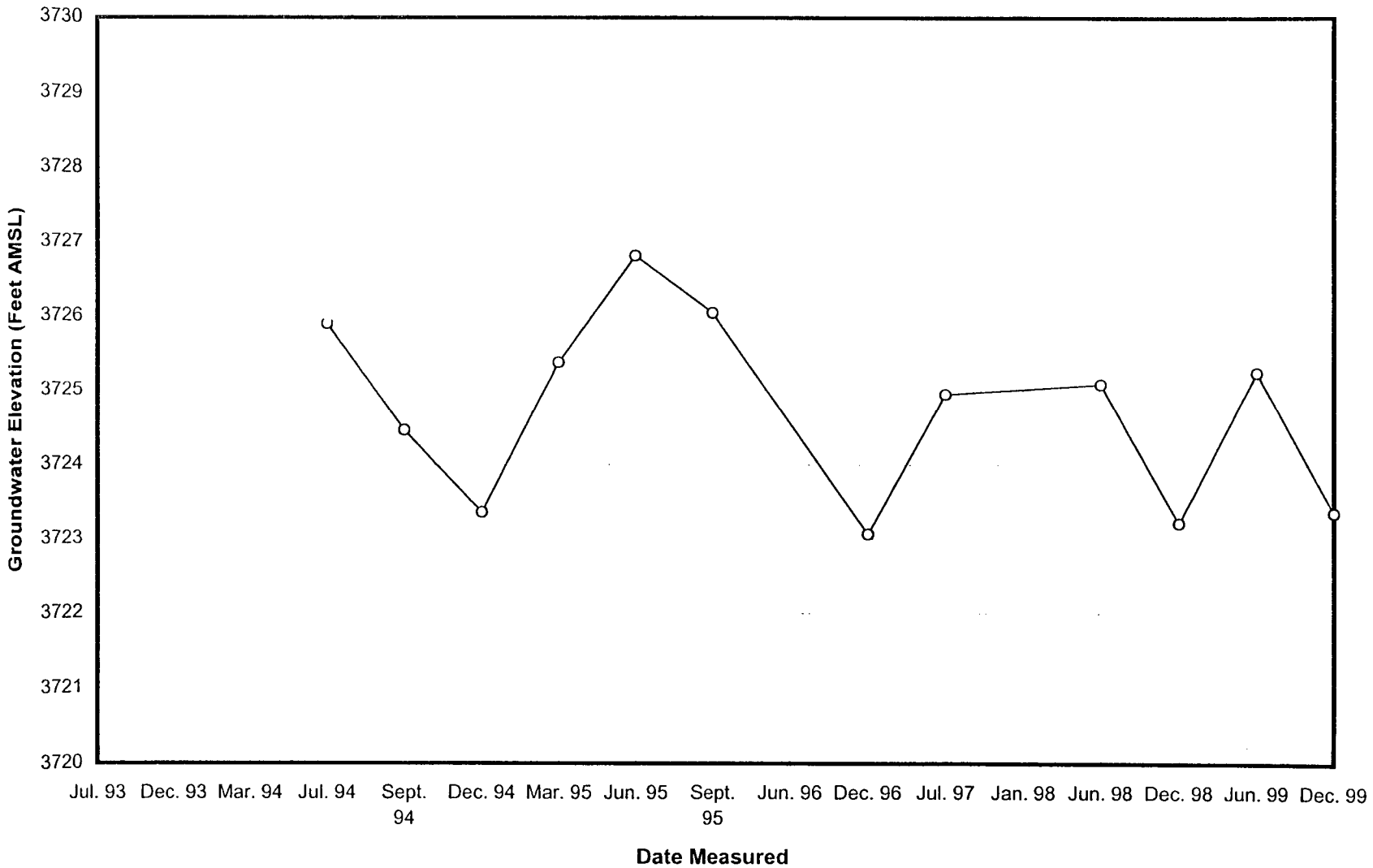
Annual 99 Well data:MW-15 WL

Brickland Refinery
MW-16 Groundwater Elevation Over Time



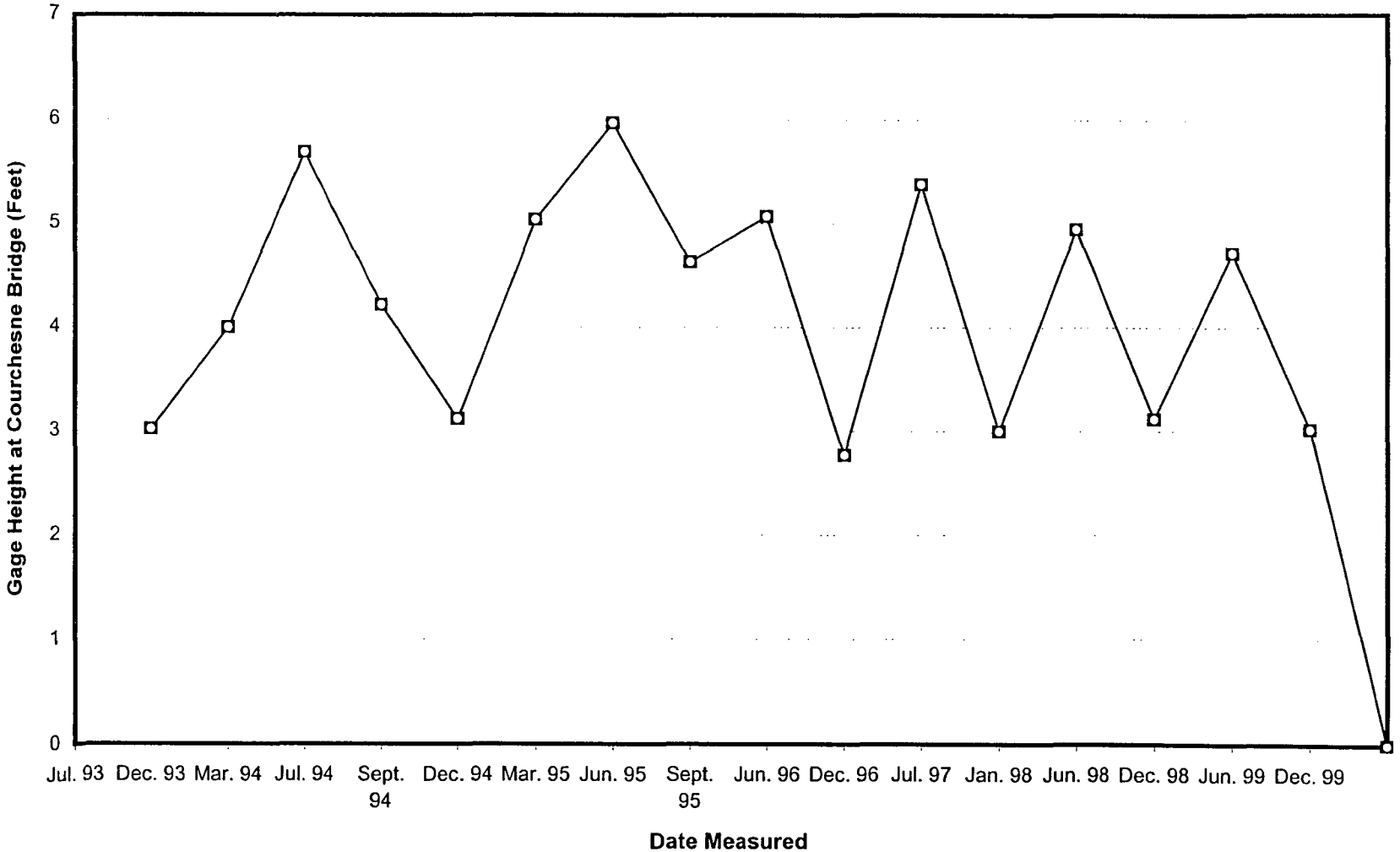
Annual 99 Well data:MW-16 WL

Brickland Refinery
MW-17 Groundwater Elevation Over Time



Annual 99 Well data:MW-17 WL

Brickland Refinery
Rio Grande River Stage Over Time



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7725 Dakota Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES NM 88003

SAMPLE NO.: 992621
INVOICE NO.: 22104227
REPORT DATE: 06-22-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906021511
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

(1) Copy to Client

MANAGING DIRECTOR

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES NM 88003

SAMPLE NO.: 992621
INVOICE NO.: 22104227
REPORT DATE: 06-22-99
REVIEWED BY:

DATA TABLE (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene .....:	99.0	82-121
4-Bromoflurobenzene .....:	98.2	70-130

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E Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 8800

SAMPLE NO. : 992622
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906021511
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

REMARKS -

Matrix spike and matrix spike duplicate are out of acceptance criteria range for the following parameters: Silver, Copper, Zinc & Selenium.
CORRECTED CERTIFICATE - Corrected method for Chromium.

Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	0.28	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir

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4725 Ripley Avenue, Suite A | El Paso, Texas 79922 | 888•588•3443 | 915•585•3443 | FAX 915•585•4944
E Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 8800

SAMPLE NO. : 992622
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:

DATA TABLE (Continue)

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc	0.17	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

(1) Copy to Client

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6925 Richmond Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO.: 992623
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906021511
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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Karen Costa
MANAGING DIRECTOR

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992623
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992623
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992623
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
2-Fluorophenol	20.5	1- 97
Phenol-d5	14.0	1- 99
Nitrobenzene-d5	38.3	1-118
2-Fluorobiphenyl	39.4	1-112
2,4,6-Tribromophenol	41.2	1-121
Terphenyl-d14	50.1	40-135

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CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO.: 992624
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906021611
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Cotta
MANAGING DIRECTOR

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992624
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene	101.0	82-121
4-Bromoflurobenzene	98.7	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 8800

SAMPLE NO. : 992625
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : 9906021611
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

REMARKS -

CORRECTED CERTIFICATE - Corrected method for Chromium.

Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
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SAMPLE NO. : 992625
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:

DATA TABLE (Continue)

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Zinc .....:	0.11	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium .....:	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992626
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906021611
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-02-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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MANAGING DIRECTOR

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CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992626
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992626
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992626
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	52.5	1- 97
Phenol-d5	38.9	1- 99
Nitrobenzene-d5	107.0	1-118
2-Fluorobiphenyl	105.0	1-112
2,4,6-Tribromophenol	120.0	1-121
Terphenyl-d14	132.0	40-135

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992627
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031004
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Sample pH was approximately 3. Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	2.2	ug/L	1.0
Ethylbenzene	2.5	ug/L	1.0
Total Xylenes	24.	ug/L	1.0

Karen Costa

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992627
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene	102.0	82-121
4-Bromoflurobenzene	96.8	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 8800

SAMPLE NO. : 992628
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : 9906031004
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

REMARKS -

CORRECTED CERTIFICATE - Corrected method for Chromium.

Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir

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E Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 8800

SAMPLE NO. : 992628
INVOICE NO.: 22104227
REPORT DATE: 07-13-99
REVIEWED BY:

DATA TABLE (Continue)

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Zinc .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium .....:	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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CLIENT TERACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992629
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031004
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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ANALYTICAL REPORT

CLIENT TERACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO.: 992629
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992629
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992629
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY: VL

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	35.2	1- 97
Phenol-d5	26.9	1- 99
Nitrobenzene-d5	66.6	1-118
2-Fluorobiphenyl	71.4	1-112
2,4,6-Tribromophenol	95.6	1-121
Terphenyl-d14	97.3	40-135

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992630
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : 9906031050
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Sample contained headspace. Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Costa

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992630
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	98.9	82-121
4-Bromoflurobenzene .....:	97.3	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992631
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : 9906031130
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Sample pH was approximately 5. Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	4.3	ug/L	1.0
Toluene	2.2	ug/L	1.0
Ethylbenzene	3.3	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992631
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	95.0	82-121
4-Bromoflurobenzene .....:	97.8	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992632
INVOICE NO.: 22104227
REPORT DATE: 06-18-99
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : 9906031130
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

Metals - Liquid ICP

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony .....:	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium .....:	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury .....:	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead .....:	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel .....:	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver .....:	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium .....:	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc .....:	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium .....:	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992633
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY: V
PAGE : 1 OF 4

CLIENT SAMPLE ID : 9906031130
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

REMARKS -

Surrogate Terphenyl-d14 is out of acceptance range.

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	22.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.

Karen Cotti
MANAGING DIRECTOR

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CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992633
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992633
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992633
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	13.1	1- 97
Phenol-d5	13.3	1- 99
Nitrobenzene-d5	51.9	1-118
2-Fluorobiphenyl	49.8	1-112
2,4,6-Tribromophenol	35.9	1-121
Terphenyl-d14	25.0	40-135

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES NM 88003

SAMPLE NO.: 992634
INVOICE NO.: 22104227
REPORT DATE: 06-22-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031135
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Sample pH was approximately 7. Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	6.4	ug/L	1.0
Toluene	2.2	ug/L	1.0
Ethylbenzene	4.1	ug/L	1.0
Total Xylenes	2.2	ug/L	1.0

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MANAGING DIRECTOR

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES NM 88003

SAMPLE NO. : 992634
INVOICE NO.: 22104227
REPORT DATE: 06-22-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene	101.0	82-121
4-Bromoflurobenzene	96.6	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992635
INVOICE NO.: 22104227
REPORT DATE: 06-18-99
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : 9906031135
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

Metals - Liquid ICP

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc	0.12	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992636
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031135
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	32.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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Karen Cook
MANAGING DIRECTOR

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LAS CRUCES, NM 88003

SAMPLE NO. : 992636
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992636
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992636
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	33.6	1- 97
Phenol-d5	28.7	1- 99
Nitrobenzene-d5	68.5	1-118
2-Fluorobiphenyl	66.3	1-112
2,4,6-Tribromophenol	87.7	1-121
Terphenyl-d14	64.2	40-135

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992637
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031230
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	2.9	ug/L	1.0
Total Xylenes	5.0	ug/L	1.0

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992637
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	101.0	82-121
4-Bromoflurobenzene .....:	109.0	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992638
INVOICE NO.: 22104227
REPORT DATE: 06-18-99
REVIEWED BY: L
PAGE : 1 OF 1

CLIENT SAMPLE ID : 9906031230
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

Metals - Liquid ICP

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc	0.34	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO.: 992639
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031230
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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Karen Costa
MANAGING DIRECTOR

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992639
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992639
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992639
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
2-Fluorophenol	37.1	1- 97
Phenol-d5	26.4	1- 99
Nitrobenzene-d5	68.2	1-118
2-Fluorobiphenyl	73.5	1-112
2,4,6-Tribromophenol	95.9	1-121
Terphenyl-d14	97.2	40-135

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992640
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : 9906031450
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Costa
MANAGING DIRECTOR

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992640
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene .....:	102.0	82-121
4-Bromoflurobenzene .....:	103.0	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992641
INVOICE NO.: 22104227
REPORT DATE: 06-18-99
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : 9906031450
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

Metals - Liquid ICP

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc	0.053	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992642
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031450
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

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MANAGING DIRECTOR

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CLIENT TERRACON
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LAS CRUCES, NM 88003

SAMPLE NO. : 992642
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992642
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY: V

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992642
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
2-Fluorophenol	35.6	1- 97
Phenol-d5	27.8	1- 99
Nitrobenzene-d5	68.3	1-118
2-Fluorobiphenyl	69.6	1-112
2,4,6-Tribromophenol	89.5	1-121
Terphenyl-d14	97.2	40-135

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992643
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031550
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: A. Donohue

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --
ANALYSIS DATE .: 06-08-99

REMARKS -

Method blank BFB surrogate out of acceptance. TFT surrogate acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Cost
MANAGING DIRECTOR

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CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992643
INVOICE NO.: 22104227
REPORT DATE: 06-10-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene	103.0	82-121
4-Bromoflurobenzene	105.0	70-130

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992644
INVOICE NO.: 22104227
REPORT DATE: 06-18-99
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : 9906031550
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: --

Metals - Liquid ICP

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Antimony	<0.05	mg/L	0.05	06-16-99	3005A/200.7	N. Munir
Total Arsenic	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Cadmium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Chromium	<0.10	mg/L	0.10	06-08-99	3010A/3111B	N. Munir
Total Copper	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Mercury	<0.001	mg/L	0.001	06-10-99	SW-7470	N. Munir
Total Lead	<0.15	mg/L	0.15	06-15-99	3010A/200.7	N. Munir
Total Nickel	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Selenium	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Silver	<0.002	mg/L	0.002	06-09-99	3113B	N. Munir
Total Thallium	<0.05	mg/L	0.05	06-16-99	3010A/200.7	N. Munir
Total Zinc	<0.05	mg/L	0.05	06-15-99	3010A/200.7	N. Munir
Total Beryllium	<0.02	mg/L	0.02	06-15-99	3010A/200.7	N. Munir

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ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992645
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

CLIENT SAMPLE ID : 9906031450
SAMPLE TYPE .....: water
SAMPLED BY .....: G.C
SUBMITTED BY ....: G.C
SAMPLE SOURCE ...: 66997611
ANALYST .....: S. Ortiz

AUTHORIZED BY : G. Contaldo
CLIENT P.O. : --
SAMPLE DATE ...: 06-03-99
SUBMITTAL DATE : 06-03-99
EXTRACTION DATE: 06-09-99
ANALYSIS DATE .: 06-10-99

8270C Semivolatile - Waters

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Pyridine	<20.	ug/L	20.
N-Nitrosodimethylamine	<20.	ug/L	20.
2-Picoline	<20.	ug/L	20.
Methyl methanesulfonate	<20.	ug/L	20.
Ethyl methanesulfonate	<20.	ug/L	20.
Phenol	<50.	ug/L	50.
Aniline	<50.	ug/L	50.
bis(2-Chloroethyl)ether	<20.	ug/L	20.
2-Chlorophenol	<20.	ug/L	20.
1,3-Dichlorobenzene	<10.	ug/L	10.
1,4-Dichlorobenzene	<10.	ug/L	10.
Benzyl alcohol	<20.	ug/L	20.
1,2-Dichlorobenzene	<10.	ug/L	10.
2-Methylphenol	<20.	ug/L	20.
bis(2-chloroisopropyl)ether	<10.	ug/L	10.
4-Methylphenol	<20.	ug/L	20.
n-Nitrosodi-n-propylamine	<20.	ug/L	20.
Hexachloroethane	<20.	ug/L	20.
Acetophenone	<20.	ug/L	20.
Nitrobenzene	<10.	ug/L	10.
N-Nitrosopiperidine	<20.	ug/L	20.
Isophorone	<20.	ug/L	20.
2-Nitrophenol	<50.	ug/L	50.
2,4-Dimethylphenol	<50.	ug/L	50.
bis(2-Chloroethoxy)methane	<10.	ug/L	10.
2,4-Dichlorophenol	<50.	ug/L	50.
1,2,4-Trichlorobenzene	<10.	ug/L	10.
Benzoic Acid	<50.	ug/L	50.
Naphthalene	<10.	ug/L	10.
a-,a-Dimethylphenethylamine	<50.	ug/L	50.

(1) Copy to Client

Karen Cont

MANAGING DIRECTOR

TRACEANALYSIS, INC.

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1725 Ripley Avenue, Suite A E. Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992645
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
4-Chloroaniline	<50.	ug/L	50.
2,6-Dichlorophenol	<50.	ug/L	50.
Hexachlorobutadiene	<50.	ug/L	50.
N-Nitroso-di-n-butylamine	<50.	ug/L	50.
4-Chloro-3-methylphenol	<50.	ug/L	50.
2-Methylnaphthalene	<10.	ug/L	10.
1-Methylnaphthalene	<10.	ug/L	10.
1,2,4,5-Tetrachlorobenzene	<20.	ug/L	20.
Hexachlorocyclopentadiene	<50.	ug/L	50.
2,4,6-Trichlorophenol	<50.	ug/L	50.
2,4,5-Trichlorophenol	<25.	ug/L	25.
2-Chloronaphthalene	<10.	ug/L	10.
1-Chloronaphthalene	<10.	ug/L	10.
2-Nitroaniline	<50.	ug/L	50.
Dimethylphthalate	<10.	ug/L	10.
Acenaphthylene	<10.	ug/L	10.
2,6-Dinitrotoluene	<10.	ug/L	10.
3-Nitroaniline	<10.	ug/L	10.
Acenaphthene	<10.	ug/L	10.
2,4-Dinitrophenol	<50.	ug/L	50.
Dibenzofuran	<10.	ug/L	10.
Pentachlorobenzene	<10.	ug/L	10.
4-Nitrophenol	<50.	ug/L	50.
2,4-Dinitrotoluene	<10.	ug/L	10.
1-Naphthylamine	<10.	ug/L	10.
2,3,4,6-Tetrachlorophenol	<10.	ug/L	10.
2-Naphthylamine	<10.	ug/L	10.
Fluorene	<10.	ug/L	10.
4-Chlorophenyl-phenylether	<10.	ug/L	10.
Diethylphthalate	<10.	ug/L	10.
4-Nitroaniline	<20.	ug/L	20.
Diphenylhydrazine	<10.	ug/L	10.
4,6-Dinitro-2-methylphenol	<50.	ug/L	50.
Diphenylamine	<10.	ug/L	10.
4-Bromophenyl-phenylether	<10.	ug/L	10.
Phenacetin	<10.	ug/L	10.
Hexachlorobenzene	<10.	ug/L	10.
4-Aminobiphenyl	<10.	ug/L	10.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992645
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Pentachlorophenol	<50.	ug/L	50.
Anthracene	<10.	ug/L	10.
Pentachloronitrobenzene	<10.	ug/L	10.
Pronamide	<10.	ug/L	10.
Phenanthrene	<10.	ug/L	10.
Di-n-butylphthalate	<10.	ug/L	10.
Fluoranthene	<10.	ug/L	10.
Benzidine	<10.	ug/L	10.
Pyrene	<10.	ug/L	10.
p-Dimethylaminoazobenzene	<10.	ug/L	10.
Butylbenzylphthalate	<10.	ug/L	10.
Benz[a]anthracene	<10.	ug/L	10.
3,3-Dichlorobenzidine	<10.	ug/L	10.
Chrysene	<10.	ug/L	10.
bis(2-Ethylhexyl)phthalate	<10.	ug/L	10.
Di-n-octylphthalate	<10.	ug/L	10.
Benzo[b&k]fluoranthene	<10.	ug/L	10.
7,12-Dimethylbenz(a)anthracene	<10.	ug/L	10.
Benzo[a]pyrene	<10.	ug/L	10.
3-Methylcholanthrene	<10.	ug/L	10.
Dibenzo(a,j)acridine	<10.	ug/L	10.
Indeno[1,2,3-cd]pyrene	<10.	ug/L	10.
Dibenz[a,h]anthracene	<10.	ug/L	10.
Benzo[g,h,i]perylene	<10.	ug/L	10.

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
P.O. BOX 5067
LAS CRUCES, NM 88003

SAMPLE NO. : 992645
INVOICE NO.: 22104227
REPORT DATE: 06-16-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol .....:	41.0	1- 97
Phenol-d5 .....:	30.1	1- 99
Nitrobenzene-d5 .....:	72.5	1-118
2-Fluorobiphenyl .....:	73.5	1-112
2,4,6-Tribromophenol .....:	83.9	1-121
Terphenyl-d14 .....:	113.0	40-135

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: TERRACON
Phone #: (505) 527-1700
Address: (Street, City, Zip) P.O. BOX 5067 LAS CRUCES, NM 88003
Fax #: (505) 527-1092
Contact Person: GREG CONTALDO
Invoice to: (if different from above) HUNTSMAN POLYMERS CORP. PO BOX 3486 ODESSA, TX 79760
ATTN: BRENDA RHODES - 228
Project #: 66997611
Project Name: BRICKLAND
Project Location: SUNLAND PARK, NM
Sampler Signature: Greg Contaldo

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
2621	990602 1511	3 5	40 ml	X				X		X		06/02/99	1511
2622	990602 1511	1	1 l	X					X	X		"	"
2623	990602 1511	1	1 l	X						X		"	"
2624	990602 1611	3	40 ml	X				X		X		06/02/99	1611
2625	990602 1611	1	1 l	X					X	X		06/02/99	1611
2626	990602 1611	1	1 l	X						X		"	"
2627	990603 1004	3	40 ml	X				X		X		06/03/99	1004
2628	990603 1004	1	1 l	X					X	X		"	"
2629	990603 1004	1	1 l	X						X		"	"
2630	990603 1050	3	40 ml	X				X		X		06/03/99	1050
2631										X	5C		

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270D/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	PRIORITY POLLUTANT METALS	Turn Around Time if different from standard	Hold
	X		8d	X							X				X		
											X						
	X																
															X		
											X						
	X																
															X		
											X						
	X																

Relinquished by: Greg Contaldo Date: 6/3/99 Time: 5:17
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: 6/3/99 Time: 17:17

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 5 °C
Log-in Review

REMARKS: HARDCOPY TO HUNTSMAN
FAX results to Greg Contaldo
#2630 - air bubbles present

Carrier #

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

mpany Name: TERRACON
Phone #: (505) 527-1706
dress: (Street, City, Zip) P.O. BOX 5067 LAS CRUCES, NM 88003
Fax #: (505) 527-1092
ntact Person: GREG CONTALDO
oice to: (different from above) HUNTSMAN POLYMERS Corp.
oject #: 66997611
Project Name: BRICKLAND
oject Location: SUNLAND PARK, NM
Sampler Signature: Greg Contaldo

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
2631	9906031130	3	40ml	X				X		X		06/03/99	11:30
2632	9906031130	1	1l	X					X	X		"	"
2633	9906031130	1	1l	X						X		"	"
2634	9906031135	3	40ml	X				X		X		6/3/99	11:35
2635	9906031135	1	1l	X					X	X		"	"
2636	9906031135	1	1l	X						X		"	"
2637	9906031230	3	40ml	X				X		X		"	12:30
2638	9906031230	1	1l	X					X	X		"	12:30
2639	9906031230	1	1l	X						X		"	12:30

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Priority Pollutant Metals			Turn Around Time if different from standard	Hold
	X										X				X				
															X				
	X										X								
															X				
											X								
	X														X				
											X								
											X								

Relinquished by: Greg Contaldo Date: 6/3/99 Time: 5:17
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: 6/3/99 Time: 17:17

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 5 °C
Log-in Review

REMARKS:

Carrier #

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: TERRACON
Phone #: (505) 527-1700
Address: (Street, City, Zip) P.O. Box 5067 Las Cruces, NM 88003
Fax #: (505) 527-1092
Contact Person: GREG CONTRERAS
Invoice to: (if different from above) HUNTSMAN POLYMERS CORP.
Project #: 66997611
Project Name: BRICKLAND
Project Location: SUNLAND PARK, NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
82640	9906031450	3	40ml	X				X		X		6/3/99	1450
2641	9906031450	1	1l	X					X	X		"	"
2642	9906031450	1	1l	X						X		"	"
2643	9906031550	3	40ml	X				X		X		"	
2644	9906031550	1	1l	X					X	X		"	
2645	9906031550	1	1l	X						X		"	

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	priority pollutant metals			Turn Around Time if different from standard	Hold
	X										X				X				
															X				
	X																		

Relinquished by: Date: Time: 6/3/99 5:17
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time: 6/3/99 17:17

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LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 8 °C
Log-in Review

REMARKS:

Carrier #

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: TERRACON
Phone #: (505) 527-1700
Address: (Street, City, Zip) P.O. Box 5067 Las Cruces, NM 88003
Fax #: (505) 527-1092
Contact Person: GREG CONTALDO
Invoice to: (If different from above) HUNTSMAN Polymers Corp.
Project #: 66997611
Project Name: BRICKLAND
Project Location: SUNLAND PARK, NM
Sampler Signature: Greg Contaldo

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
982640	9906031450	3	40ml	X				X		X		6/3/99	1450
2641	9906031450	1	1l	X					X	X		"	"
2642	9906031450	1	1l	X						X		"	"
2643	9906031550	3	40ml	X				X		X		"	
2644	9906031550	1	1l	X					X	X		"	
2645	9906031550	1	1l	X						X		"	

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/606	BOD, TSS, pH	Specify Analytical Method				Turn Around Time if different from standard	Hold
	X														X					
															X					
											X									
	X																			
															X					
											X									

Relinquished by: Greg Contaldo Date: 6/3/99 Time: 5:17
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: L L Date: 6/3/99 Time: 17:17

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 8 C °
Log-in Review

REMARKS:

Carrier #

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E-Mail: lab@traceanalysis.com

REPORT SUMMARY

December 28, 1999

CLIENT: **TERRACON**
4200 SOUTH RESEARCH DRIVE
LAS CRUCES, NM 88003

SAMPLE DATE: 12-14-99

PROJECT ID: 66997611; Huntsman Groundwater Monitoring

ANALYSES REQUESTED: BTEX

TEMPERATURE UPON RECEIPT: -1° Celsius
Temperature acceptance range for most analysis is 2 – 6 degrees Celsius.

Benzene was out of acceptance criteria by <0.1% in the closing Continuing Calibration Verification standard associated with samples 'MW-03D', 'MW-03S', 'River Upstream', 'River Up S Duplicate', and 'River Downstream'.

Laboratory analyses were performed on samples utilizing procedures published in Standards Methods for the Examination of Water and Wastewater, 18th Edition 1992; EPA Test Methods for Evaluating Solid Waste 3rd Edition, through December 1996 revisions; or EPA Methods for the Chemical Analysis of Water and Wastes[EPA-600/4-79-020], March 1983, and the latest promulgated updates. This is an integral part of the report and must be included with all copies.

Karen M. Costa
Technical Director

TRACE ANALYSIS, INC.

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ANALYTICAL REPORT

CLIENT TERRACON
4200 SOUTH RESEARCH DR
LAS CRUCES, NM 88003

SAMPLE NO.: 995467
INVOICE NO.: 22104968
REPORT DATE: 12-28-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : MW-9S
SAMPLE TYPE .....: water
SAMPLED BY .....: F.S.
SUBMITTED BY ....: F.S.
SAMPLE SOURCE ...: Huntsman Groundwater
ANALYST .....: F.Martinez

AUTHORIZED BY : F.S.
CLIENT P.O. : --
SAMPLE DATE ...: 12-14-99
SUBMITTAL DATE : 12-15-99
EXTRACTION DATE: --
ANALYSIS DATE .: 12-24-99

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	8.0	ug/L	1.0

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 SOUTH RESEARCH DR
LAS CRUCES, NM 88003

SAMPLE NO.: 995467
INVOICE NO.: 22104968
REPORT DATE: 12-28-99
REVIEWED BY:

DATA TABLE (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	84.9	80-118
4-Bromoflurobenzene .....:	87.5	46-138

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TRACE ANALYSIS, INC.

ANALYTICAL REPORT

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CLIENT TERRACON
4200 S. RESEARCH DR. STE.C
LAS CRUCES, NM 88003

SAMPLE NO.: 995468
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : MW-06D
SAMPLE TYPE .....: water
SAMPLED BY .....: F.S.
SUBMITTED BY ....: F.S.
SAMPLE SOURCE ...: Huntsman Groundwater
ANALYST .....: F.Martinez

AUTHORIZED BY : F. Small
CLIENT P.O. : --
SAMPLE DATE ...: 12-14-99
SUBMITTAL DATE : 12-15-99
EXTRACTION DATE: --
ANALYSIS DATE .: 12-18-99

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 S. RESEARCH DR. STE.C
LAS CRUCES, NM 88003

SAMPLE NO.: 995468
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:

DATA TABLE (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene	95.2	80-118
4-Bromoflurobenzene	96.9	46-138

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TRACE ANALYSIS, INC.
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4171 N. Mesa, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 SOUTH RESEARCH DR
LAS CRUCES, NM 88003

SAMPLE NO.: 995469
INVOICE NO.: 22104968
REPORT DATE: 12-28-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID	: MW-06S	AUTHORIZED BY	: F.S.
SAMPLE TYPE	: water	CLIENT P.O.	: --
SAMPLED BY	: F.S.	SAMPLE DATE	: 12-14-99
SUBMITTED BY	: F.S.	SUBMITTAL DATE	: 12-15-99
SAMPLE SOURCE	: Huntsman Groundwater	EXTRACTION DATE	: --
ANALYST	: F.Martinez	ANALYSIS DATE	: 12-24-99

REMARKS -

Surrogate a,a,a-TFT did not meet acceptance criteria.
Surrogate 4-BFB was acceptable.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	5.0
Toluene	<1.0	ug/L	5.0
Ethylbenzene	<1.0	ug/L	5.0
Total Xylenes	<1.0	ug/L	5.0

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E-Mail: ab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 SOUTH RESEARCH DR
LAS CRUCES, NM 88003

SAMPLE NO.: 995469
INVOICE NO.: 22104968
REPORT DATE: 12-28-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene ..... :	13.3	80-118
4-Bromoflurobenzene ..... :	90.1	46-138

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE C
LAS CRUCES, NM 88003

SAMPLE NO.: 995470
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : MW-03D
SAMPLE TYPE .....: water
SAMPLED BY .....: F.S.
SUBMITTED BY ....: F.S.
SAMPLE SOURCE ...: Huntsman Groundwater
ANALYST .....: F.Martinez

AUTHORIZED BY : F. Small
CLIENT P.O. : --
SAMPLE DATE ...: 12-14-99
SUBMITTAL DATE : 12-15-99
EXTRACTION DATE: --
ANALYSIS DATE .: 12-18-99

REMARKS -

Benzene out of acceptance criteria in the closing Continuing Calibration Verification standard by <0.1%.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Costa
MANAGING DIRECTOR

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 S. RESEARCH DR. STE C
LAS CRUCES, NM 88003

SAMPLE NO.: 995470
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	91.0	80-118
4-Bromoflurobenzene .....:	93.9	46-138

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE. C
LAS CRUCES, NM 88003

SAMPLE NO.: 995471
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID	: MW-03S	AUTHORIZED BY	: F. Small
SAMPLE TYPE .....:	water	CLIENT P.O.	: --
SAMPLED BY .....:	F.S.	SAMPLE DATE ...:	12-14-99
SUBMITTED BY ....:	F.S.	SUBMITTAL DATE :	12-15-99
SAMPLE SOURCE ...:	Huntsman Groundwater	EXTRACTION DATE:	--
ANALYST .....:	F.Martinez	ANALYSIS DATE .:	12-18-99

REMARKS -

Benzene out of acceptance criteria in the closing Continuing Calibration Verification standard by <0.1%.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<1.0	ug/L	1.0
Toluene .....:	<1.0	ug/L	1.0
Ethylbenzene .....:	<1.0	ug/L	1.0
Total Xylenes .....:	<1.0	ug/L	1.0

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Kirun Costy
MANAGING DIRECTOR

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 S. RESEARCH DR. STE G
LAS CRUCES, NM 88003

SAMPLE NO.: 995471
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:

DATA TABLE (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene	92.7	80-118
4-Bromoflurobenzene	95.1	46-138

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE G
LAS CRUCES, NM 88003

SAMPLE NO.: 995472
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID	: River Upstream	AUTHORIZED BY	: F. Small
SAMPLE TYPE	: water	CLIENT P.O.	: --
SAMPLED BY	: F.S.	SAMPLE DATE	: 12-14-99
SUBMITTED BY	: F.S.	SUBMITTAL DATE	: 12-15-99
SAMPLE SOURCE	: Huntsman Groundwater	EXTRACTION DATE	: --
ANALYST	: F.Martinez	ANALYSIS DATE	: 12-18-99

REMARKS -

Benzene out of acceptance criteria in the closing Continuing Calibration Verification standard by <0.1%.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 S. RESEARCH DR. STE G
LAS CRUCES, NM 88003

SAMPLE NO.: 995472
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 2 OF 2

DATA TABLE (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene ..... :	93.4	80-118
4-Bromoflurobenzene ..... :	96.2	46-138

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE.C
LAS CRUCES, NM 88003

SAMPLE NO.: 995473
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID	: River Ups Duplicate	AUTHORIZED BY	: F. Small
SAMPLE TYPE	: water	CLIENT P.O.	: --
SAMPLED BY	: F.S.	SAMPLE DATE ...	: 12-14-99
SUBMITTED BY	: F.S.	SUBMITTAL DATE	: 12-15-99
SAMPLE SOURCE ...	: Huntsman Groundwater	EXTRACTION DATE	: --
ANALYST	: F.Martinez	ANALYSIS DATE .	: 12-18-99

REMARKS -

Benzene out of acceptance criteria in the closing Continuing Calibration Verification standard by <0.1%.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Cobb
MANAGING DIRECTOR

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

CLIENT TERRACON
4200 S. RESEARCH DR. STE C
LAS CRUCES, NM 88003

SAMPLE NO.: 995473
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:

DATA TABLE (Cont.)

Surrogate Information -	Percent Recovery	Range
aaa Trifluorotoluene ..... :	92.9	80-118
4-Bromoflurobenzene ..... :	95.5	46-138

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE.C
LAS CRUCES, NM 88003

SAMPLE NO.: 995474
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : River Downstream	AUTHORIZED BY : F. Small
SAMPLE TYPE .....: water	CLIENT P.O. : --
SAMPLED BY .....: F.S.	SAMPLE DATE ...: 12-14-99
SUBMITTED BY ....: F.S.	SUBMITTAL DATE : 12-15-99
SAMPLE SOURCE ...: Huntsman Groundwater	EXTRACTION DATE: --
ANALYST .....: F.Martinez	ANALYSIS DATE .: 12-18-99

REMARKS -

Benzene out of acceptance criteria in the closing Continuing Calibration Verification standard by <0.1%.

Petroleum Contaminants by 8021B

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<1.0	ug/L	1.0
Toluene	<1.0	ug/L	1.0
Ethylbenzene	<1.0	ug/L	1.0
Total Xylenes	<1.0	ug/L	1.0

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Karen Cook
LABORATORY DIRECTOR

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E-Mail: lab@traceanalysis.com

ANALYTICAL REPORT

CLIENT TERRACON
4200 S. RESEARCH DR. STE G
LAS CRUCES, NM 88003

SAMPLE NO.: 995474
INVOICE NO.: 22104968
REPORT DATE: 12-21-99
REVIEWED BY:
PAGE : 2 OF 2

DATA TABLE (Cont.)

Surrogate Information -

	Percent Recovery	Range
aaa Trifluorotoluene .....:	93.2	80-118
4-Bromoflurobenzene .....:	95.9	46-138

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1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: TERRACON
Phone #: (505) 527-1700
Address: (Street, City, Zip) 4200 S. RESEARCH Dr., "C", LAS CRUCES NM 88003
Fax #: (505) 527-1092
Contact Person: FRED V. SMALL
Invoice to: (if different from above) SAME AS ABOVE
Project #: 66997611
Project Name: HUNTSMAN GROUNDWATER MONITORING
Project Location: ON BRICKLAND OIL REFINERY
Sampler Signature: Fred V. Small

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
15467	MW-9S	3	40ml/3	X				X		X		12-14	11:15a
5468	MW-06D	3	40ml/3	X				X		X		12-14	12:03p
5469	MW-06S	3	40ml/3	X				X		X		12-14	3:24pm
5470	MW-03D	3	40ml/3	X				X		X		12-14	4:02p
5471	MW-03S	3	40ml/3	X				X		X		12-14	4:15pm
5472	RIVER UPSTREAM	2	40ml/2	X				X		X		12-14	4:35pm
5473	RIVER UPS. DUPLICATE	2	" "	X				X		X		12-14	4:35pm
5474	RIVER DOWNSTREAM	2	" "	X				X		X		12-14	4:57p

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH					Turn Around Time if different from standard	Hold
	X																			
	X																			
	X																			
	X																			
	X																			
	X																			
	X																			
	X																			

Relinquished by: FRED V. SMALL Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Amanda Nie Date: 12/16/14 Time: 11:35

LAB USE
Log-in Review:

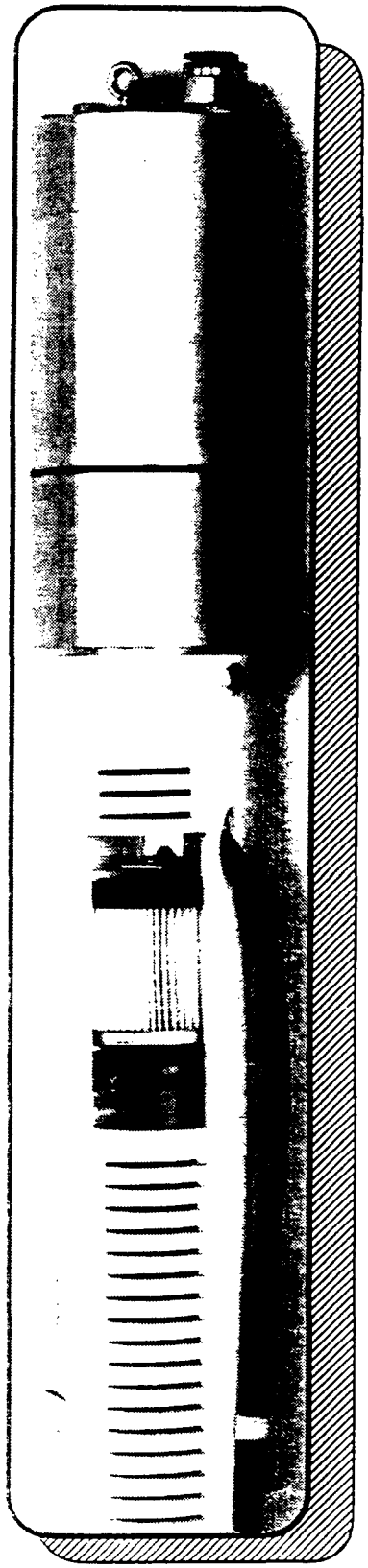
REMARKS:

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Carrier # walk in

4" LNAPL Recovery Skimmer

The ADJ1000 Skimmer removes product ONLY down to a sheen, operates on bottled gas, is intrinsically safe, and can be installed in less than 1 hour. The ADJ1000 requires no above ground controls to operate. Requires a 4" well diameter, has 30 inches of float travel, uses a dual entry hydrophobic filter, pumps over 25 GPH, and consumes less than .5 CFM of air. The Optional Xitech Programmable Site Managers provide intermittent pumping control for the ADJ1000 Skimmer, continuous electronic monitoring of the high level tank shutoff sensor, displays total run time of system, and operate on a 12DC/120AC/220AC power sources.

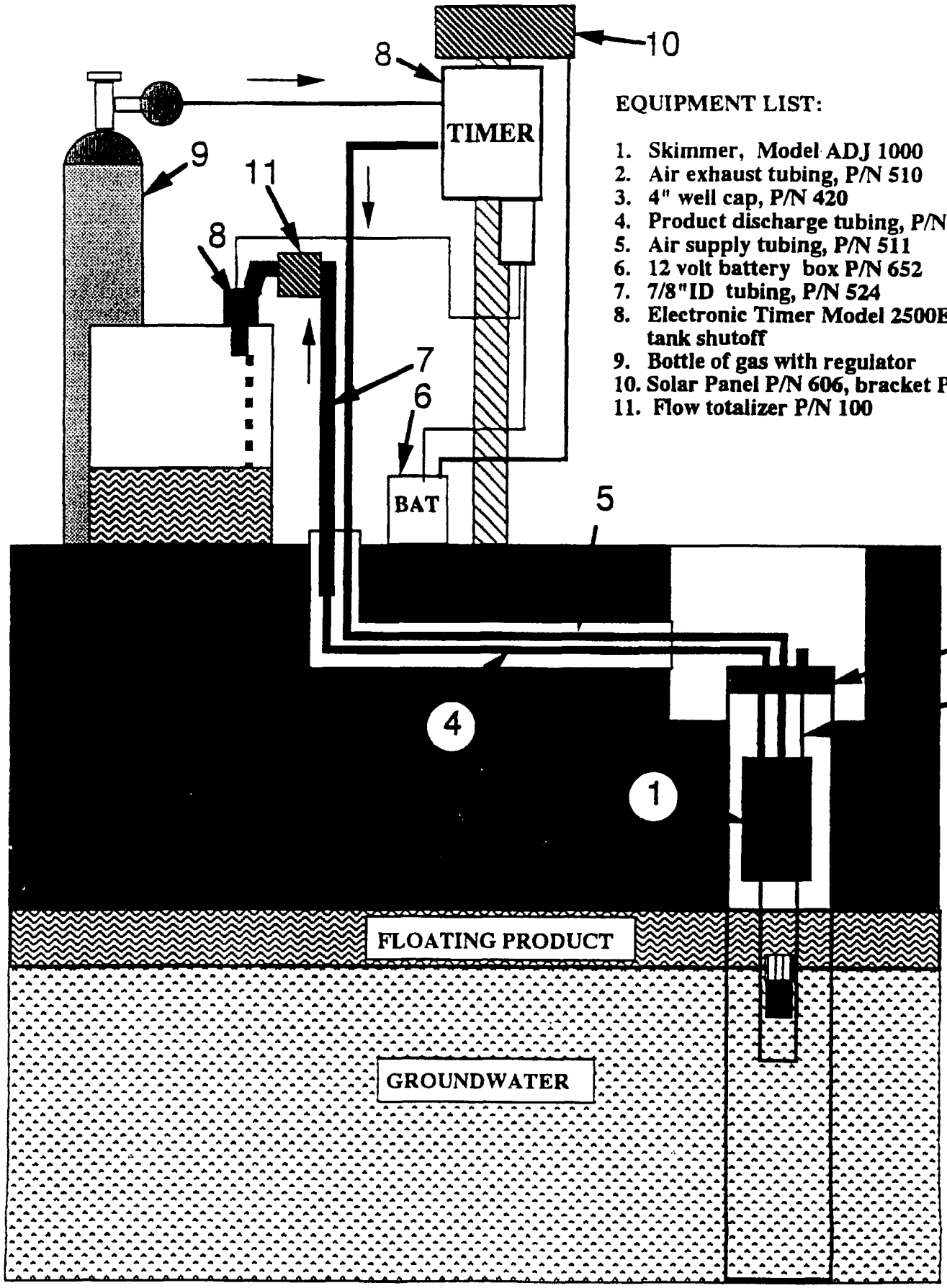


Specifications

Pumping range from 5-25 GPH
Skimmer float travel: 30 inches
Operating pressure range: 35-125 PSIG
Maximum operating well depth: 200 feet
Max air requirements: .5 CFM@125 PSIG
Air quality requirements: 5-10 Microns
Size: 3-1/2" DIA. X 48" L
Weight: 11 LBS
Materials : PVC, SST, Viton, Buna, Al
Order No. **ADJ1000**

U.S. Patent# 5,326,458

XITECH LNAPL RECOVERY SYSTEM
Without the use of AC Power



EQUIPMENT LIST:

1. Skimmer, Model ADJ 1000
2. Air exhaust tubing, P/N 510
3. 4" well cap, P/N 420
4. Product discharge tubing, P/N 511
5. Air supply tubing, P/N 511
6. 12 volt battery box P/N 652
7. 7/8"ID tubing, P/N 524
8. Electronic Timer Model 2500ES with tank shutoff
9. Bottle of gas with regulator
10. Solar Panel P/N 606, bracket P/N 613
11. Flow totalizer P/N 100

2500ES Electronic Timer with Tank Shut-off

Without the use of AC power

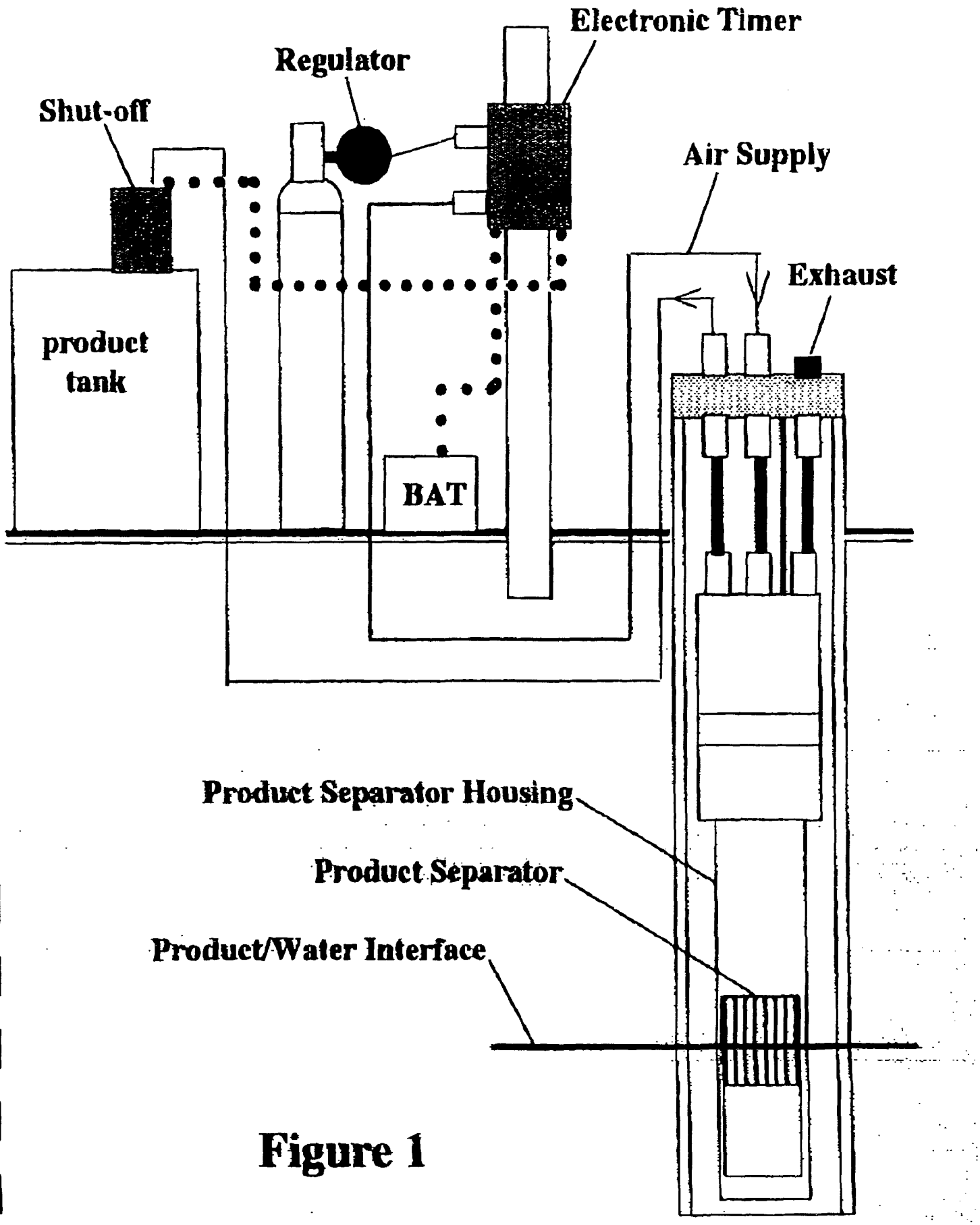


Figure 1

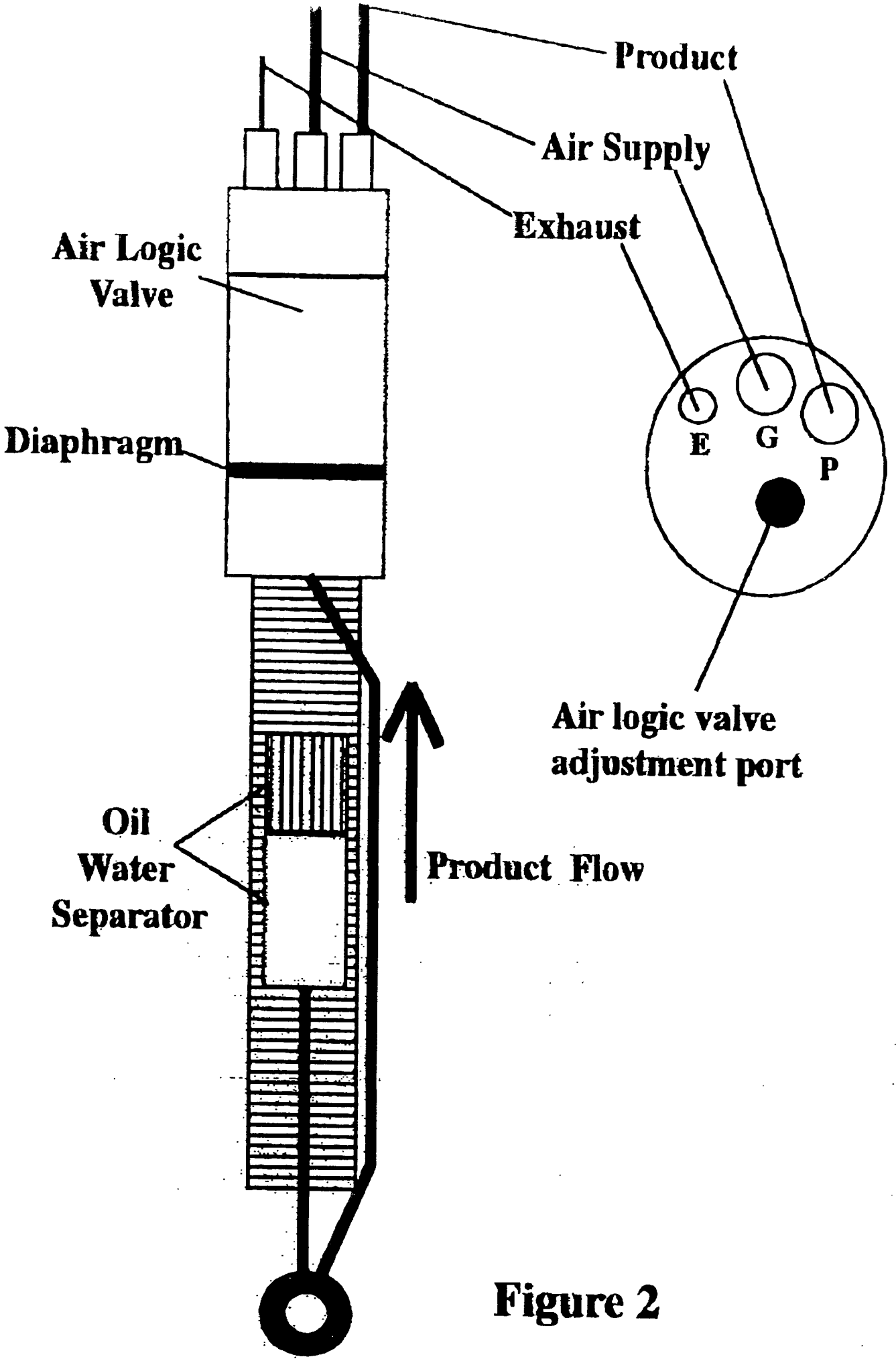

Product
Air Supply
Exhaust
Air Logic Valve
Diaphragm
E
G
P
Air logic valve adjustment port
Oil Water Separator
Product Flow

Figure 2

2500ES Electronic Timer

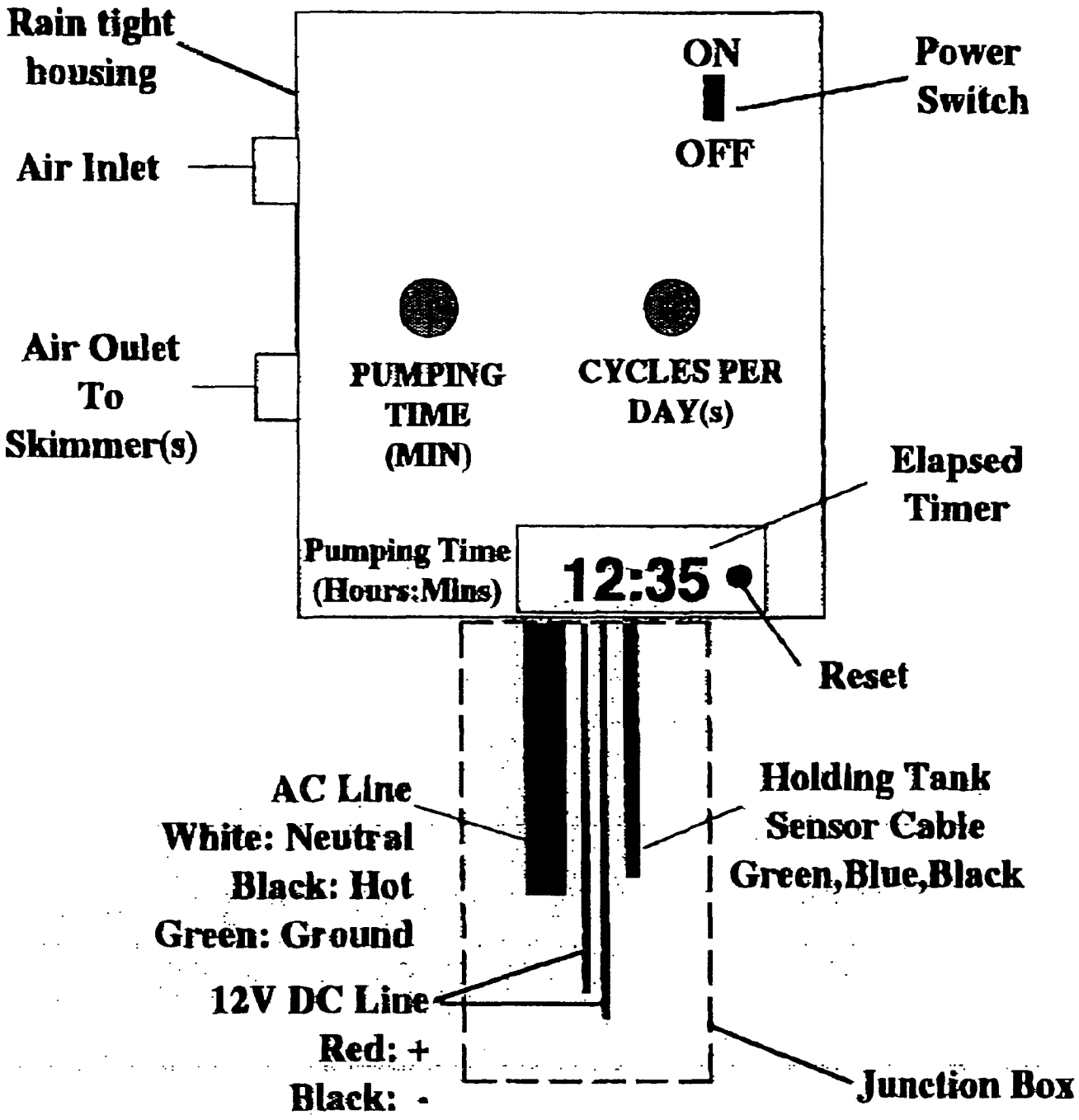


Figure 3