AP - 001

ANNUAL MONITORING REPORT

YEAR(S):

2003

2003 ANNUAL GROUNDWATER MONITORING REPORT

FORMER BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO

TERRACON PROJECT NO. 68997611
February 1, 2004

Prepared for:

HUNTSMAN POLYMERS CORPORATION
Odessa, Texas

Prepared by:

TERRACON
Las Cruces, New Mexico

February 1, 2004

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

Re: 2003 Annual Groundwater Monitoring Report
Former Brickland Refinery Site
Sunland Park, New Mexico
Terracon Project No. 68997611

Dear Mr. Martin:

Terracon has completed the two 2003 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. P99-033E) dated April 27, 1999, authorized by Mr. Roger Martin on April 30, 1999 and with the follow-up letter dated September 23, 2002.

This 2003 Annual Groundwater Monitoring Report is based on results of field activities conducted by Terracon in June and December 2003, 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

Prepared by:

Frederick V. Small
Senior Scientist

Reviewed by;

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

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APPENDICES

1.0 EXECUTIVE SUMMARY

This 2003 Annual Groundwater Monitoring Report documents the results of two semi-annual groundwater-monitoring operations conducted by Terracon at the former Brickland Refinery site in Sunland Park, New Mexico. The semi-annual groundwater monitoring operations were conducted in June and December 2003. The report also contains summaries of the historical groundwater elevations and analytical data for the past five years. In addition, the report includes a summary of the free product recovery system. This monitoring and sampling program was conducted in accordance with the Groundwater Monitoring Plan included in Section 3.5 of the Stage 2 Abatement Plan as approved by Mr. Bill Olson of the New Mexico Oil Conservation Division (NMOCD) in his letter dated December 17, 1998.

Since 2003 is an odd year, no sample collection and testing was conducted on four (4) of the on-site wells, MW-4, MW-7, MW-14, and MW-15. Conclusions relevant to groundwater conditions and the remediation performance at the old Brickland Refinery are presented below.

- Results of the June 2003 sampling event indicate that benzene, toluene, and ethylbenzene were not detected in samples collected from the five (5) off-site wells that were monitored during this period (MW-9S, MW-6D, MW-6S, MW-3D, and MW-3S). Trace concentrations of xylenes were detected in MW-6S (see Table 3). Benzene, toluene, ethylbenzene and total xylenes (BTEX) were not detected in the samples collected from the river.

- Results of the December 2003 sampling event indicate BTEX was not detected in any of the samples collected from the five off-site monitoring wells listed above.

- Polynuclear aromatic hydrocarbons (PAH) levels were below laboratory detection limits in the samples collected from the five monitoring wells and the river during the June 2003 sampling event (see Table 4).

- The results for the analyses of the priority pollutant metals for the June 2003 monitoring event indicate that concentrations of boron in the groundwater samples collected from the five monitor wells exceeded the New Mexico Water Quality Control Commission (NMWQCC) levels. Although boron was also detected in the two river samples, the concentrations were below NMWQCC levels. Iron levels exceeded NMWQCC standards in six of the seven samples collected from the wells and the river (the MW-6D sample was below laboratory detection limit). Manganese exceeded NMWQCC standards in the monitoring well samples but not the two river samples. Antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium;

silver, thallium and zinc were not detected in the groundwater and river samples. Minor concentrations of barium were detected in the seven samples collected from the wells and the river but were below NMWQCC standards. Aluminum was detected in both river samples but was below NMWQCC standards (see Table 5). Aluminum was not detected in the groundwater samples.

- Free-phase product was not detected in the monitoring wells during the June 2003 monitoring event. However, one well point (WP-26S), had a free-phase product thickness of 0.35 foot in June 2003, and two other well points, WP-27S and WP-27D had measurable thickness of 0.01 foot and 0.12 foot, respectively, during the June 2003 monitoring event.

- The extraction well MW-10 had a measurable free-phase product thickness of 0.13 foot when checked during the December 2003 monitoring event. Free-phase product levels in two well points WP-26S and WP-27D were 0.60 foot and 0.26 foot, respectively (see Table 6), during the December 2003 monitoring event.

- Since the installation of the Xitech product recovery system in December 1998, an approximate total of 90 gallons of free-phase product has been removed from recovery well MW-10. No significant amount of product was recovered during the 2003 period.

2.0 INTRODUCTION

2.1 Background

The Brickland Refinery Site is located in Sunland Park, New Mexico and herein known as the site. The site consists of approximately 33 acres situated along the west bank of the Rio Grande (see Figure 1). Huntsman (formerly Rexene Corporation) currently owns the site. From 1933 to 1958, the site was operated as a petroleum refinery and was producing both gasoline and jet fuel. The site was closed and the plant dismantled in 1958. Between 1964 and 1989, the site was leased to various parties to service trucks, conduct automobile salvage operations, graze livestock and store used bricks.

Petroleum hydrocarbons from the operation of the facility have been detected in soil and groundwater at the site. The nature and extent of the petroleum hydrocarbons were initially investigated by Eder and further quantified by GCL and BDM. These investigations provided the basis for the Stage 2 Abatement Plan. The Stage 2 Abatement Plan provides the methods for abating contamination of groundwater and soil in compliance with New Mexico Water Quality Control Commission regulations on prevention and abatement of water pollution (20NMAC 6.2, Subpart IV), and New Mexico Oil Conservation Division

requirements to protect public health and the environment with respect to wastes from the refinement of crude oil (§70-2-12.B (22) NMSA 1978).

Terracon has maintained a stand-alone free-phase product recovery system on the site as part of the Stage 2 Abatement Plan. The system was installed in December 1998 and site visits are now being made approximately every four weeks for maintenance of the system and general observation of the site. The site layout and monitoring well and sampling locations are shown on Figure 2.

2.2 Scope of Services

Terracon performed semi-annual groundwater monitoring at the subject site in June and December 2003. The monitoring program was conducted in accordance with the Groundwater Monitoring Plan and Stage 2 Abatement Plan, approved by Mr. Bill Olsen of the NMOCD in his letter dated December 23, 1998. Tasks were conducted in general accordance with applicable NMOCD, New Mexico Environment Department (NMED) and Environmental Protection Agency (EPA) regulations, procedures and guidelines.

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

- Measured depth to groundwater in the ten on-site monitoring wells and eight off-site monitoring wells. The water level is measured but not reported for the fourteen well points since the well points are designed only for the purpose of detecting the presence of free-phase product at the measured depths.

- Measured free-phase product thickness in the eighteen monitoring wells and fourteen well points, and provided a summary of the free-phase recovery system performance.

- Submitted groundwater samples collected from five (5) off-site monitoring wells in June and December 2003 (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S), for laboratory analytical testing. Since 2003 is an odd year, samples were not collected from the four on-site monitor wells (MW-4, MW-7, MW-14, and MW-15) as per the approved Groundwater Monitoring Plan. Analytical testing for the June monitoring event included benzene, toluene, ethlybenzene and total xylenes (BTEX), PAH, and nineteen priority pollutant metals. Samples were analyzed for BTEX for the December monitoring event.

- Submitted two water samples collected from the Rio Grande during each semi-annual sampling event for laboratory analytical testing. One sample was collected from the upstream end of the site, north of MW-1, and the other sample collected from the downstream end of the site, south of MW-9S.

- Coordinated waste disposal with Rhino Environmental Services (Rhino) of El Paso, Texas.

- Prepared field reports for monthly site visits.

- Prepared this Annual Groundwater Monitoring Report, which includes the following elements required by the approved Groundwater Monitoring Plan and Stage 2 Abatement Plan.

    1. A description of the monitoring activities that occurred during the year, with corresponding conclusions and recommendations.

    2. Summary tables of the past and present laboratory analytical results of groundwater and surface water sampling.

    3. Plots of concentrations versus time for contaminants of concern for the groundwater monitoring wells MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S.

    4. Copies of laboratory analytical reports for the sampling activities conducted at the site during the past year.

    5. Plots of water table elevation versus time for the groundwater monitoring wells.

    6. Groundwater surface contour maps for the two 2003 semi-annual monitoring events based on groundwater elevations obtained from the monitoring wells.

    7. BTEX concentration maps for the two 2003 semi-annual monitoring events.

    8. Free-phase hydrocarbon thickness maps for the two 2003 semi-annual monitoring events.

3.0 GROUNDWATER ELEVATION, HYDRAULIC GRADIENT AND FLOW DIRECTION

The hydraulic gradient beneath the former Brickland Refinery in June 2003 was approximately 0.0015 foot per foot and groundwater flow direction is estimated to be S 32^0 E. The hydraulic gradient in December 2003 was calculated to be the same as June hydraulic gradient; however the flow direction was approximately S 22^0 E.

Historical groundwater elevations for the monitoring wells are provided in Table 1. 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 screened intervals do not correlate with the monitoring well screens. Groundwater elevation contour maps for the June 2003 and December 2003 monitoring events are depicted in Figures 3a and 3b, respectively.

Groundwater levels in the monitoring wells are influenced by the stage of the Rio Grande bordering the site. Due to seasonal fluctuations in the river, water levels in the monitoring wells may vary as much as 2 feet over the course of a year. Groundwater elevations in June 2003 correlate well with the higher levels measured during the summer months of previous years. Similarly, the groundwater elevations in December 2003 correlate well with the lower levels measured during the winter months of previous years.

Gage heights for the gage station located on the Rio Grande (near the Courchesne Bridge in west El Paso) in close proximity to the site were obtained from the International Boundary and Water Commission (IBWC). A graphical plot of gage heights versus time (1993 to present) demonstrates that during the summer months the Rio Grande is usually at its highest stage which correlates with the higher groundwater elevations measured during the same periods. The graphical plot of gage heights versus time is presented on Figure 3c included in Appendix A.

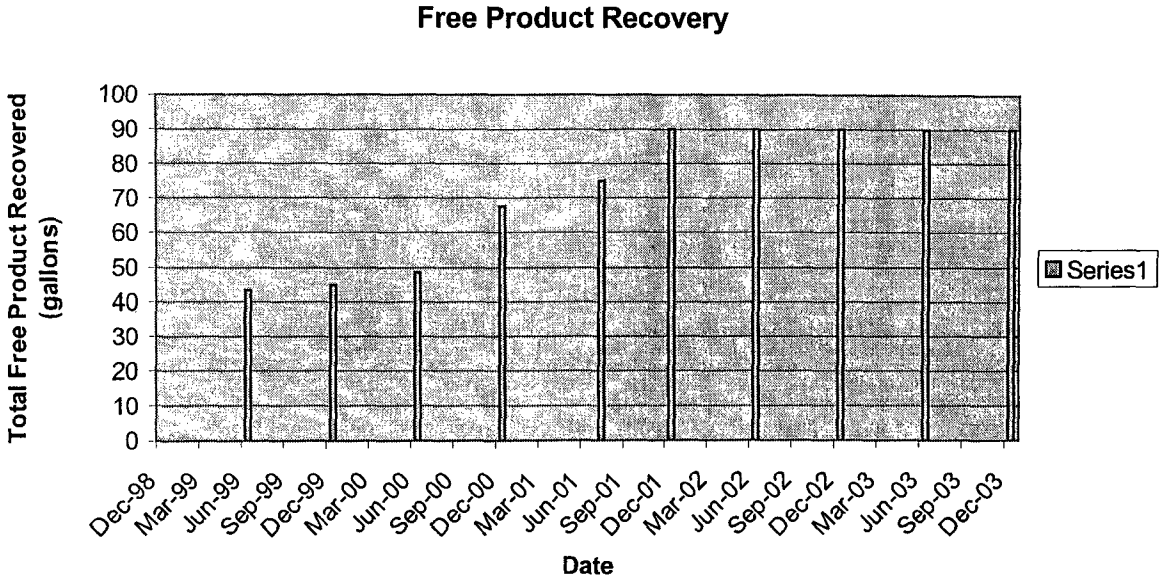
4.0 FREE-PHASE PRODUCT REMOVAL

4.1 Free-Phase Product Thickness

Free-phase product thickness in each monitoring well and well point was measured with a KECK oil/water interface meter. The June and December 2003 and historical product thickness measurements for each monitoring point are listed in Table 6. Free-Phase Hydrocarbon Thickness maps for the June and December 2003 monitoring events are depicted in Figures 6a and 6b, respectively. Monitoring points with measurable thicknesses of free-phase product during the June and December 2003 monitoring events are summarized below. For the first time since the 2000 sampling events, recovery well MW-10 has contained measurable accumulation of free-phase product (0.13 ft). Both monitor well and well point (WP) measurements are consistent with prior assessments.

4.2 Removal and Off-Site Destruction of Free-Phase Product and Contaminated Groundwater

As of December 17, 2003, a total of approximately 90 gallons of free-phase product had been removed from recovery well MW-10 (see chart below). None of this amount was removed during the year 2003.



Additionally, a total of 158 gallons and 155 gallons of water were purged from the sampled monitoring wells during the June and December 2003 monitoring events, respectively. Terracon coordinated and subcontracted with Rhino for the off-site disposal of the contaminated groundwater. The purged groundwater of each monitoring event was stored in a 325-gallon polyethylene tank by Terracon field personnel. The tank was transported from the site to Rhino for off-site disposal via landfarming and bioremediation. No free-phase product from recovery well MW-10 was disposed in 2003. At the time of this report, the free-phase product tank was less than one-half full, therefore off-site destruction has not been initiated.

5.0 SAMPLE COLLECTION AND LABORATORY ANALYTICAL TESTING PROCEDURES

The ten on-site monitoring wells and eight off-site monitoring wells were checked for the presence of free-phase product using a KECK oil/water interface meter. Generally, if any detectable free-phase product was found in the wells, the thickness was measured and no sample would be collected from that well; however, no free-phase product was found in the wells to be sampled. The static water surface elevation in each well was measured and recorded for the wells that did not have detectable free-phase product. The static water surface elevations for the two monitoring periods are shown in Table 2.

Five monitoring wells (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S) were sampled in the June 2003 sampling event. In general, the five wells were sampled by removing approximately three (3) well casing volumes of water from each well using a submersible mini-purger pump with silicon tubing. During purging, the water quality characteristics of temperature, pH and specific conductivity were measured using a Hydac Model 910 pH/temperature/conductivity meter to confirm that these three characteristics had stabilized before the samples were collected. The mini-purger pump was decontaminated between wells by pumping an Alconox-water mixture through the system, then rinsing/pumping clean water through the system twice. Monitoring wells MW-3S and MW-6S were purged dry in the June 2003 monitoring event.

The same five wells (MW-3S, MW-3D, MW-6S, MW-6D and MW-9S) were also sampled during the December monitoring event and monitoring wells MW-6S and MW-3S were also purged dry in the December 2003 event. Of the estimated three well casing volumes (twenty gallons total), only ten and eight gallons were able to be purged from MW-3S during the June and December 2003 monitoring events, respectively. Of the estimated nineteen gallons that were to be purged from monitoring well MW-6S, only eight gallons and seven gallons could be purged during the June and December 2003 monitoring events, respectively. The Groundwater Sampling Data Sheets are provided in the Appendix C.

A total of 158 gallons and 155 gallons of water were purged from the sampled monitoring wells during the June and December 2003 monitoring events, respectively. The purged water was disposed of by Rhino Environmental Services of El Paso, Texas, a licensed waste disposal contractor. Disposal manifests are enclosed in Appendix D.

Groundwater samples were collected from each well after purging. A duplicate sample was collected from MW-9S during the June monitoring event. For the December 2003 event, the duplicate sample was collected from MW-3D. One set of samples was collected in air-tight, septum-sealed, 40-ml glass VOA sample vials with zero head space and preserved with hydrochloric acid (HCl) and refrigeration. These samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021.

During the June 2003 sampling event, a second set of water samples was collected from each sampled well in one-liter amber-colored bottles for analysis for polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270C/625. A third set of water samples was also collected during the June 2003 sampling event, in 500ml bottles containing nitric acid (HNO_3) as preservative for analysis for priority pollutant metals using appropriate EPA Methods.

The water samples were placed in an ice-filled cooler immediately after collection and shipped to NEL in Las Vegas, Nevada for laboratory analysis. Chain-of-custody (C-O-C) forms, documenting sample identification numbers; the required analysis for each sample;

collection times; and delivery times to the laboratories, were completed for each set of samples. A summary of the purging, volume purged from each well, and sampling methods is provided in Table 1. The laboratory results of the analyses of the water samples and C-O-C forms are provided in Appendix C.

6.0 GROUNDWATER ANALYTICAL TEST RESULTS

6.1 Benzene, Toluene, Ethlybenzene and Total Xylenes (BTEX)

A historical listing of BTEX concentrations for five offsite monitoring wells (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S) and four on-site monitoring wells (MW-4, MW-7, MW14, and MW-15) are summarized in Table 3. This table lists BTEX concentrations for the period from December 1999 to December 2003. BTEX concentrations for sampling events prior to December 1999 are included in previously submitted reports.

6.1.1 Analyses

Laboratory results from the June 2003 sampling event indicate that benzene, toluene, and ethylbenzene were not detected the samples submitted for testing. Trace concentrations of xylenes were detected in MW-6S. Xylenes were not detected in the other wells sampled.

Laboratory results for the December 2003 sampling event indicate that hydrocarbons were not detected in the samples collected.

Hydrocarbon concentration maps displaying the benzene concentrations for the two 2003 sampling events are presented in Figure 4a (June 19, 2003) and Figure 4b (December 17, 2003). The relationship between benzene concentrations and static water level for MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S are depicted in Figures 5a through 5e, respectively. The laboratory reports and Chain-of-Custody (C-O-C) documentation are included in Appendix C.

6.1.2 Comparison to Prior Data

In general, of the five off-site wells located on the eastern perimeter of the site (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S), only MW-6S continues to exhibit trace hydrocarbon concentration levels. However, this appears to occur only in the summer months. Trace hydrocarbons (xylenes) were detected in samples collected during the June 2003 semi-annual monitoring event.

6.2 Polynuclear Aromatic Hydrocarbons (PAHs)

Historical analytical results for PAHs for five offsite monitoring wells (MW-3S, MW-3D, MW-6S, MW-6D, and MW-9S) and four on-site monitoring wells (MW-4, MW-7, MW14, and

MW-15) indicate that PAH has not been detected since 1999. Based on the results of the PAH analyses in the June 2003 monitoring event, it appears that groundwater under the site has not been adversely impacted by PAHs. Nor has the surface water in close proximity to the site been impacted by PAHs. As a result, no PAH concentration map was constructed. Historical sample analytical results for PAHs are listed in Table 4. PAH concentrations for sampling events prior to December 1999 are included in previously submitted reports.

6.3 Priority Pollutant Metals

Historical (1999 through 2003) groundwater and surface water (Rio Grande) 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. Seven metals (aluminum, barium, boron, cobalt, iron, manganese, and molybdenum) were added to the list in 2001, since they are regulated metals under NMOCD. The NMWQCC standards are also listed in the tables for comparison.

Constituents with concentrations above the NMWQCC standards in 2003 are highlighted in boldface type. Analytical results for years prior to 1999 are included in previously submitted reports. The results of the analyses for metals for the 2003 semi-annual monitoring event indicate that boron concentrations exceeded NMWQCC standards in the five groundwater samples but not the two river samples. Iron concentrations exceeded NMWQCC standards in the samples except MW-6D. Additionally, manganese levels exceeded NMWQCC standards in the monitoring well samples but not the river samples. Antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium and zinc were not detected in the groundwater and river samples collected. Minor concentrations of barium were detected in the seven samples collected from the wells and the river but were below NMWQCC standards. Aluminum was detected in both river samples but was below NMWQCC standards (see Table 5) and was not detected in the groundwater samples.

7.0 REMEDIATION SYSTEM PERFORMANCE

A product recovery system was installed at recovery 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:

1. Xitech Model ADJ 1000 Smart Skimmer with polyethylene tubing.
2. Xitech Model 2500 ES Electronic Timer powered by a 12-volt battery with solar panel.
3. 80-gallon fiberglass-reinforced plastic (FRP) tank for product recovery containment with automatic shutoff sensor.

4. One K-size (220 cubic feet) bottle of nitrogen gas with regulator to supply.
5. The components listed above are mounted on a metal stand.
6. The components listed above are contained within a 300-gallon capacity corrugated galvanized steel stock tank for secondary containment.
7. 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.
8. 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 D. The system does not contain any below-grade lines; therefore no pressurized integrity testing is required. Site visits are now conducted at monthly intervals to monitor system performance, adjust pump depth or cycle if deemed appropriate, replace the bottled nitrogen supply when necessary, perform maintenance to system components, and to check for any vandalism.

CONCLUSIONS

Since 2003 is an odd year, no sample collection and testing was conducted on four (4) of the on-site wells, MW-4, MW-7, MW-14, and MW-15. Conclusions relevant to groundwater conditions and the remediation performance at the old Brickland Refinery are presented below.

- Results of the June 2003 sampling event indicate that benzene, toluene, and ethylbenzene were not detected in samples collected from the five (5) off-site wells that were monitored during this period (MW-9S, MW-6D, MW-6S, MW-3D, and MW-3S). Trace concentrations of xylenes were detected in MW-6S (see Table 3). Benzene, toluene, ethylbenzene and total xylenes (BTEX) were not detected in the samples collected from the river.

- Results of the December 2003 sampling event indicate BTEX was not detected in any of the samples collected from the five off-site monitoring wells listed above.

- Polynuclear aromatic hydrocarbons (PAH) levels were below laboratory detection limits in the samples collected from the five monitoring wells and the river during the June 2003 sampling event (see Table 4).

- The results for the analyses of the priority pollutant metals for the June 2003 monitoring event indicate that concentrations of boron concentrations in the groundwater samples collected from the five monitor wells exceeded the NMWQCC levels. Although boron

was also detected in the two river samples, the concentrations were below NMWQCC levels. Iron levels exceeded NMWQCC standards in six of the seven samples collected from the wells and the river (the MW-6D sample was below laboratory detection limit). The levels of boron and iron are consistent with concentrations from prior sampling events. Manganese exceeded NMWQCC standards in the monitoring well samples but not the two river samples. Antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium and zinc were not detected in the groundwater and river samples. Minor concentrations of barium were detected in the seven samples collected from the wells and the river but were below NMWQCC standards. Aluminum was detected in both river samples but was below NMWQCC standards (see Table 5). Aluminum was not detected in the groundwater samples.

- Free-phase product was not detected in the monitoring wells during the June 2003 monitoring event. However, one well point (WP-26S), had a free-phase product thickness of 0.35 foot in June 2003, and two other well points, WP-27S and WP-27D had measurable thickness of 0.01 foot and 0.12 foot, respectively, during the June 2003 monitoring event.

- The extraction well MW-10 had a measurable free-phase product thickness of 0.13 foot when checked during the December 2003 monitoring event. Free-phase product levels in two well points WP-26S and WP-27D were 0.60 foot and 0.26 foot, respectively (see Table 6), during the December 2003 monitoring event.

- Since the installation of the Xitech product recovery system in December 1998, an approximate total of 90 gallons of free-phase product and water have been removed from recovery well MW-10. No significant amount of product was recovered during the 2003 period.

8.0 RECOMMENDATIONS

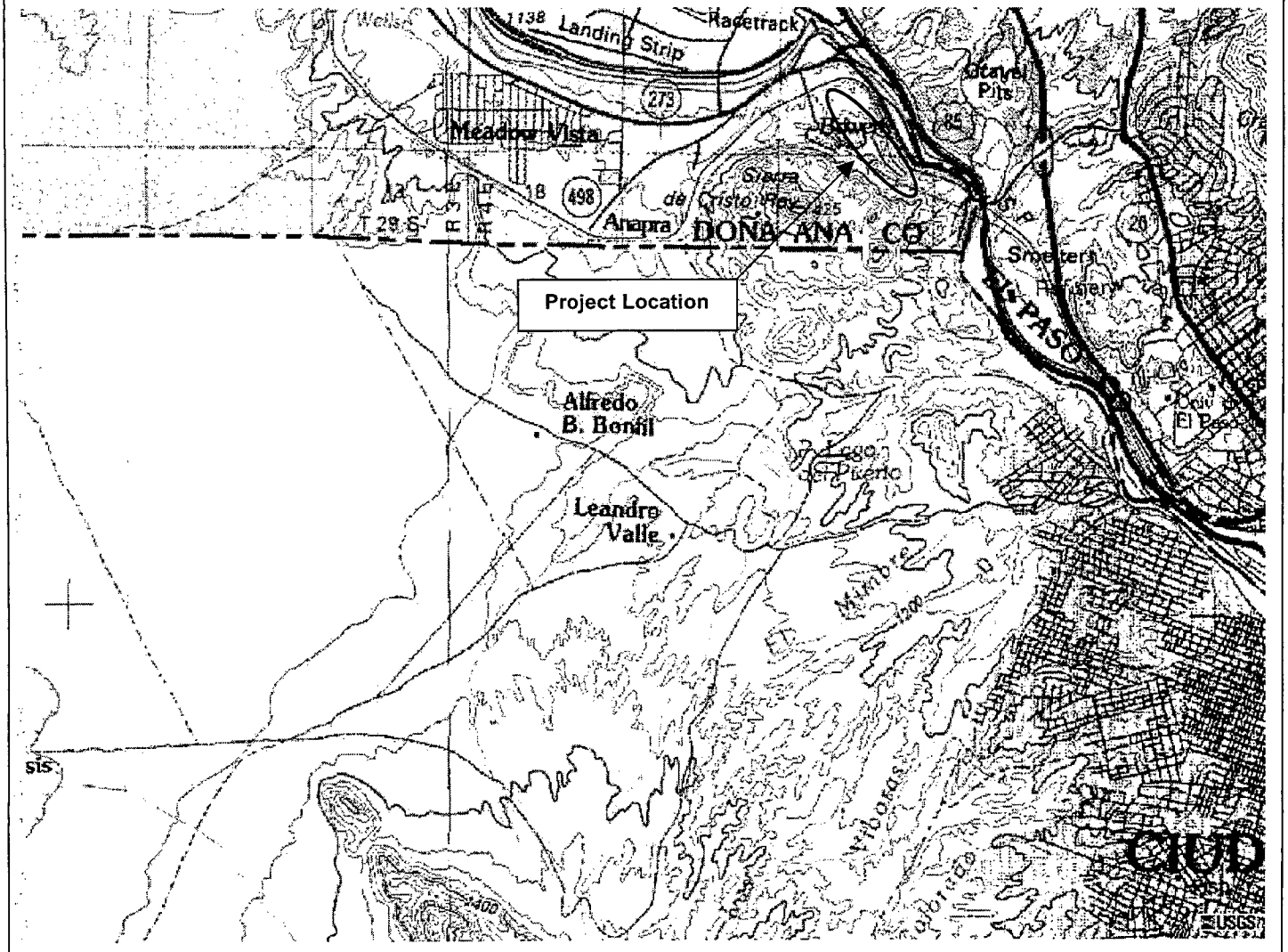
The following recommendations are proposed for the remediation system and monitoring operations at the Brickland Refinery.

- Continue free product recovery operations.

- Continue with the existing sampling and monitoring program on a semi-annual basis. The next sampling event is scheduled for June 2004. Check recovery well, MW-10 for at least one more year to assess if free-phase product is present.

- Since the groundwater does not appear to be adversely impacted by PAH, as evidenced throughout eight years of monitoring, analysis of PAH may be an unnecessary expense.

- Well points that are dry or 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-3, WP-30, WP-31 and WP-32. The other well points should be maintained for semi-annual monitoring.



SOURCE: USGS TOPOGRAPHIC MAP, 7.5-MINUTE SERIES,
"Smeltertown, New Mexico-Texas, 1989".

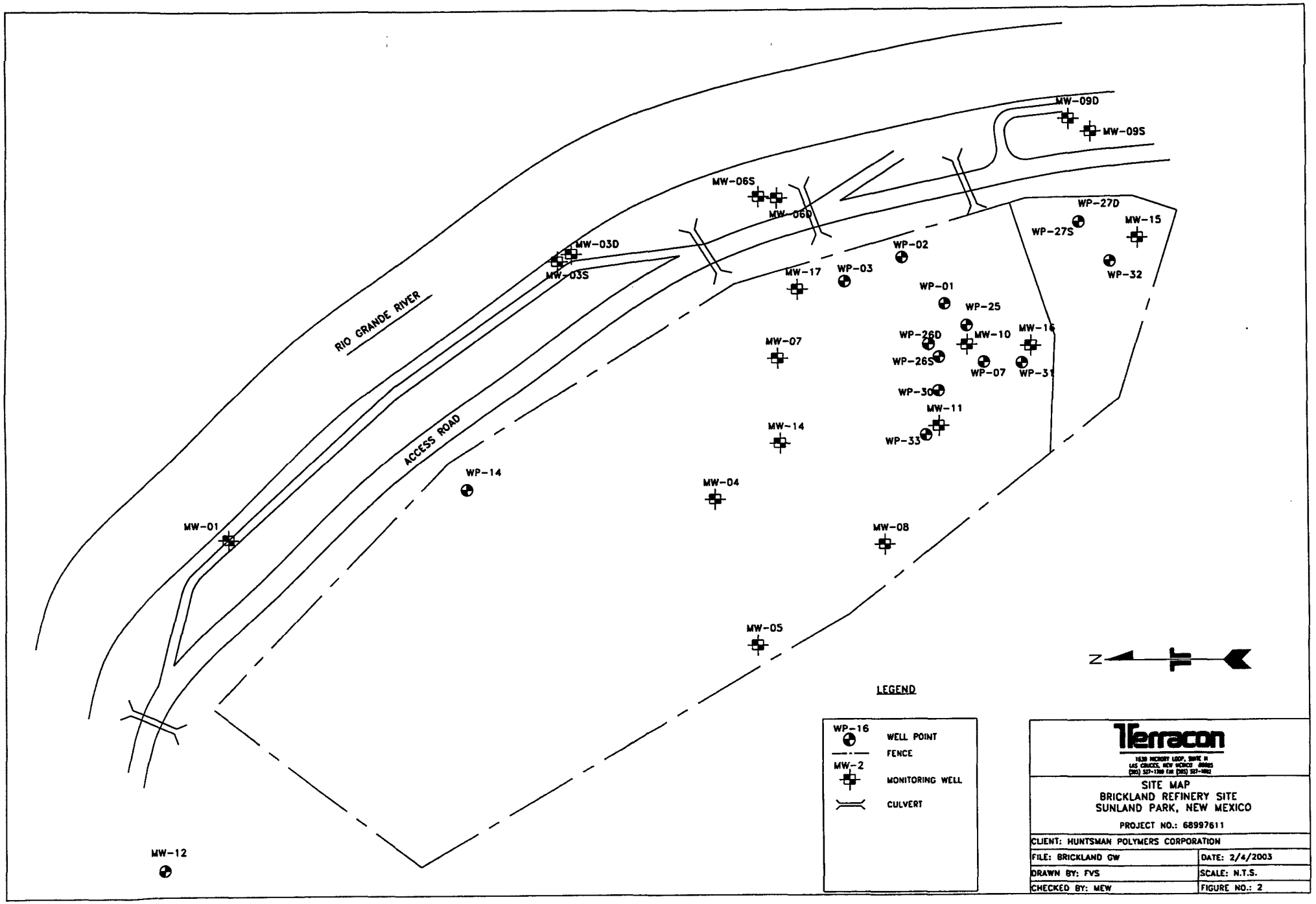
Terracon
1630 Hickory Loop, Suite H
Las Cruces, New Mexico 88005
505.527.1700 Fax: 505.527.1092

SITE TOPOGRAPHIC MAP

Former Brickland Refinery Site
Brickland Road
Sunland Park, New Mexico

Project No. 68997611
Date: February 1, 2004
Scale: 1 in. = 2000 ft. (approx.)

FIGURE 1

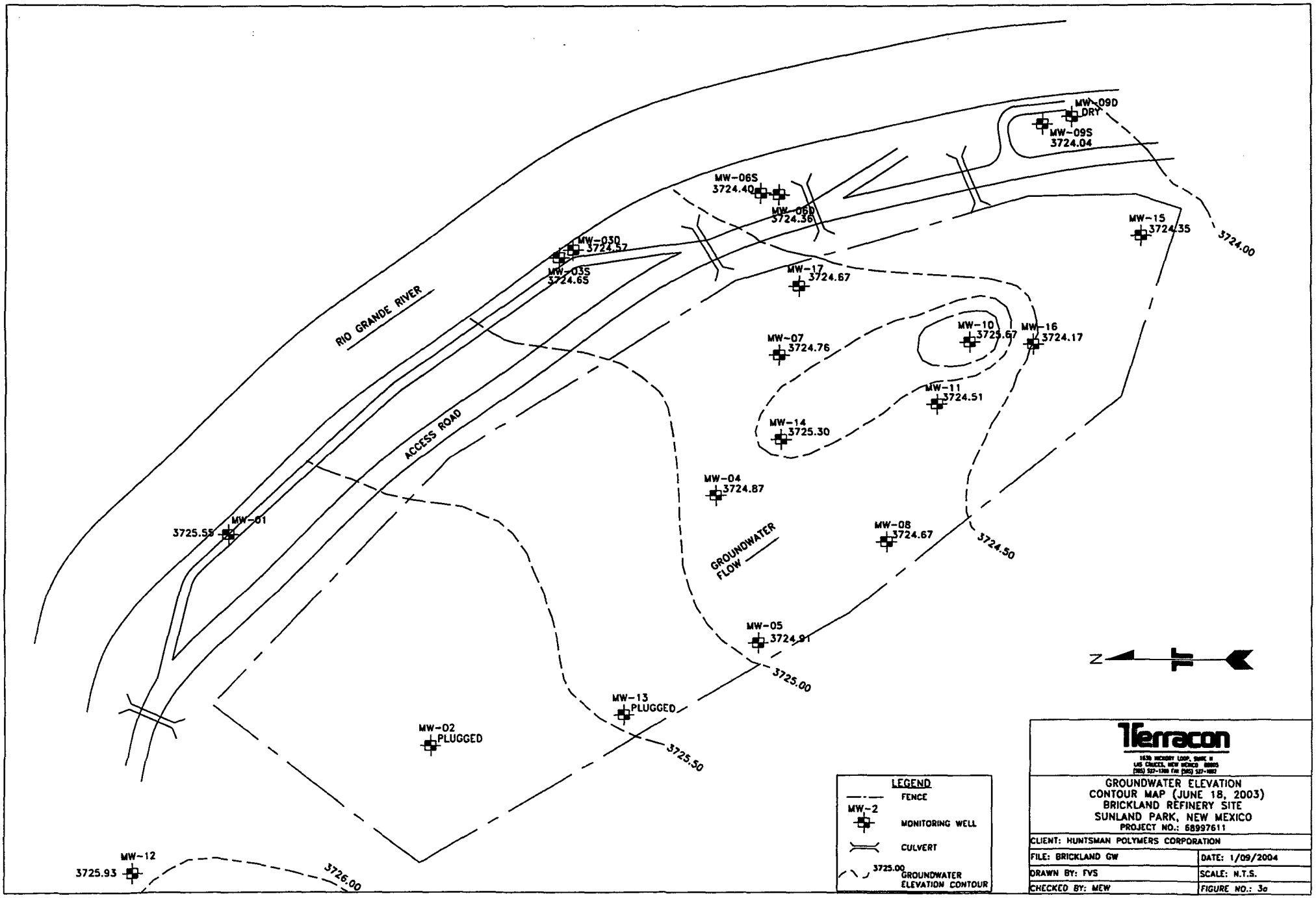


Terracon

SITE MAP
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO

PROJECT NO.: 68997611

CLIENT: HUNTSMAN POLYMERS CORPORATION	
FILE: BRICKLAND GW	DATE: 2/4/2003
DRAWN BY: FVS	SCALE: N.T.S.
CHECKED BY: MEW	FIGURE NO.: 2


MW-09D
DRY
MW-09S
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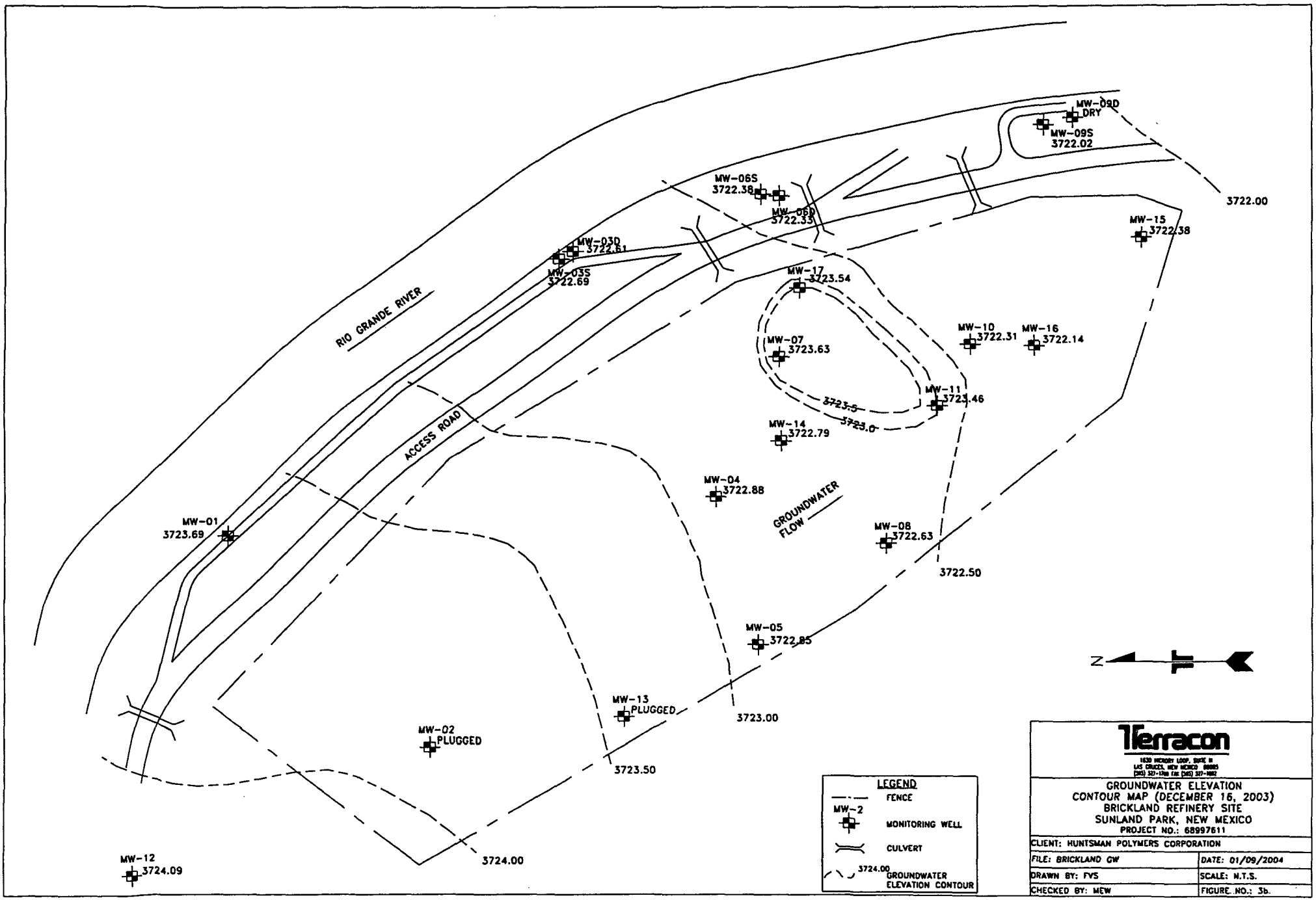
MW-06S
3724.40
MW-06D
3724.36
MW-15
3724.35
3724.00
MW-03D
3724.57
MW-03S
3724.65
MW-17
3724.67
RIO GRANDE RIVER
MW-10
3725.67
MW-16
3724.17
MW-07
3724.76
MW-11
3724.51
ACCESS ROAD
MW-14
3725.30
MW-04
3724.87
3725.55
MW-01
GROUNDWATER
FLOW
MW-08
3724.67
3724.50
MW-05
3724.91
3725.00
MW-13
PLUGGED
MW-02
PLUGGED
3725.50
MW-12
3725.93
3726.00
N
LEGEND
FENCE
MW-2
MONITORING WELL
CULVERT
3725.00
GROUNDWATER
ELEVATION CONTOUR
Terracon
GROUNDWATER ELEVATION
CONTOUR MAP (JUNE 18, 2003)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 68997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 1/09/2004
DRAWN BY: FVS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 3a

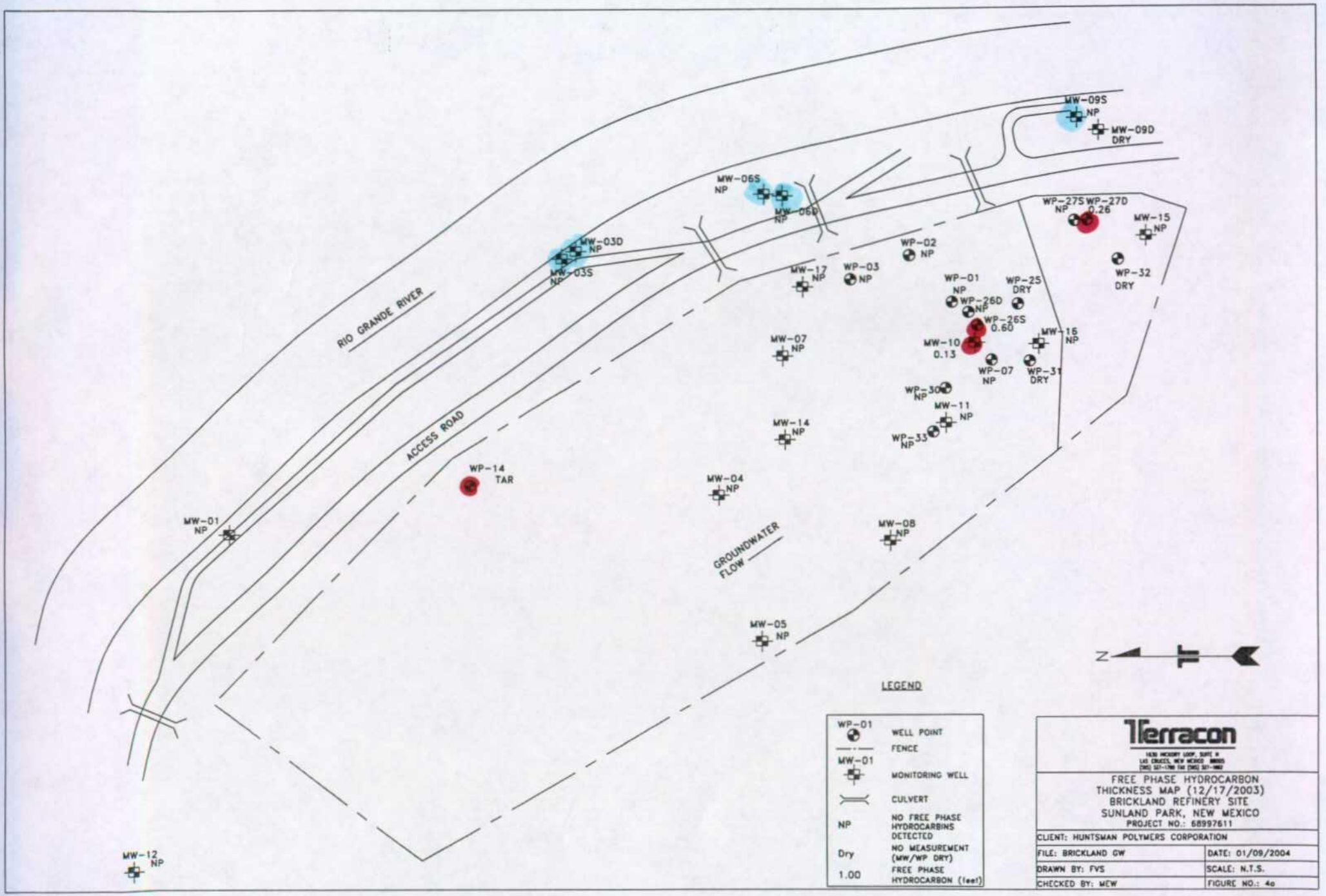


Terracon

1639 McHenry Loop, Suite H
Las Cruces, New Mexico 88005
(505) 527-1788 Fax (505) 527-1982

GROUNDWATER ELEVATION
CONTOUR MAP (DECEMBER 16, 2003)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 68997611

CLIENT: HUNTSMAN POLYMERS CORPORATION	
FILE: BRICKLAND GW	DATE: 01/09/2004
DRAWN BY: FVS	SCALE: N.T.S.
CHECKED BY: MEW	FIGURE NO.: 3b.


MW-09S
NP
MW-09D
DRY
MW-06S
NP
MW-06D
NP
WP-27S
NP
WP-27D
0.26
MW-15
NP
MW-03D
NP
MW-03S
NP
WP-02
NP
WP-32
DRY
RIO GRANDE RIVER
MW-17
NP
WP-03
NP
WP-01
NP
WP-25
DRY
WP-26D
NP
WP-26S
0.60
MW-16
NP
MW-07
NP
MW-10
0.13
WP-07
NP
WP-31
DRY
WP-30
NP
MW-11
NP
MW-14
NP
WP-33
NP
ACCESS ROAD
WP-14
TAR
MW-04
NP
MW-01
NP
MW-08
NP
GROUNDWATER
FLOW
MW-05
NP
N
MW-12
NP
LEGEND
WP-01
WELL POINT
FENCE
MW-01
MONITORING WELL
CULVERT
NP
NO FREE PHASE HYDROCARBINS DETECTED
Dry
NO MEASUREMENT (MW/WP DRY)
1.00
FREE PHASE HYDROCARBON (feet)
Terracon
FREE PHASE HYDROCARBON
THICKNESS MAP (12/17/2003)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 68997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 01/09/2004
DRAWN BY: FVS
SCALE: N.T.S.
CHECKED BY: MEW
FIGURE NO.: 4a

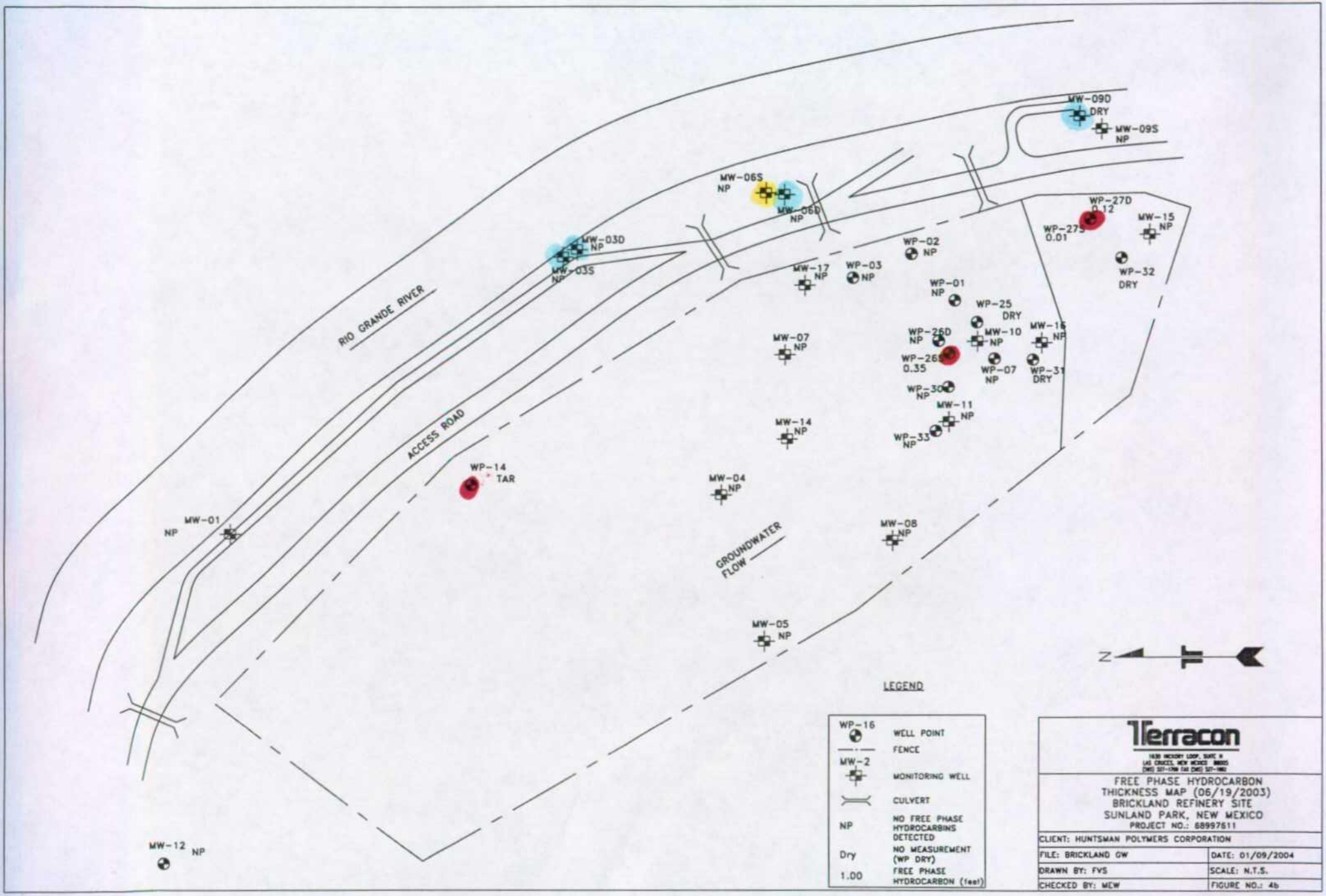

MW-09D
DRY
MW-09S
NP
MW-06S
NP
MW-06D
NP
WP-27D
0.12
WP-27S
0.01
MW-15
NP
MW-03D
NP
MW-03S
NP
WP-02
NP
WP-32
DRY
MW-17
NP
WP-03
NP
WP-01
NP
WP-25
DRY
RIO GRANDE RIVER
WP-26D
NP
MW-10
NP
MW-16
NP
MW-07
NP
WP-26S
0.35
WP-07
NP
WP-31
DRY
WP-30
NP
MW-11
NP
MW-14
NP
WP-33
NP
ACCESS ROAD
WP-14
TAR
MW-04
NP
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 HYDROCARBONS DETECTED
Dry
NO MEASUREMENT (WP DRY)
1.00
FREE PHASE HYDROCARBON (feet)
Terracon
1430 HICKORY LOOP, SUITE H
LAS CRUCES, NEW MEXICO 88005
(505) 527-1799 FAX (505) 527-1661
FREE PHASE HYDROCARBON
THICKNESS MAP (06/19/2003)
BRICKLAND REFINERY SITE
SUNLAND PARK, NEW MEXICO
PROJECT NO.: 68997611
CLIENT: HUNTSMAN POLYMERS CORPORATION
FILE: BRICKLAND GW
DATE: 01/09/2004
DRAWN BY: FVS
SCALE: N.T.S.
CHECKED BY: MCW
FIGURE NO.: 4b

Figure 5-a
Brickland Refinery
Relationship between Benzene Concentration and Static Water Level: MW-3S

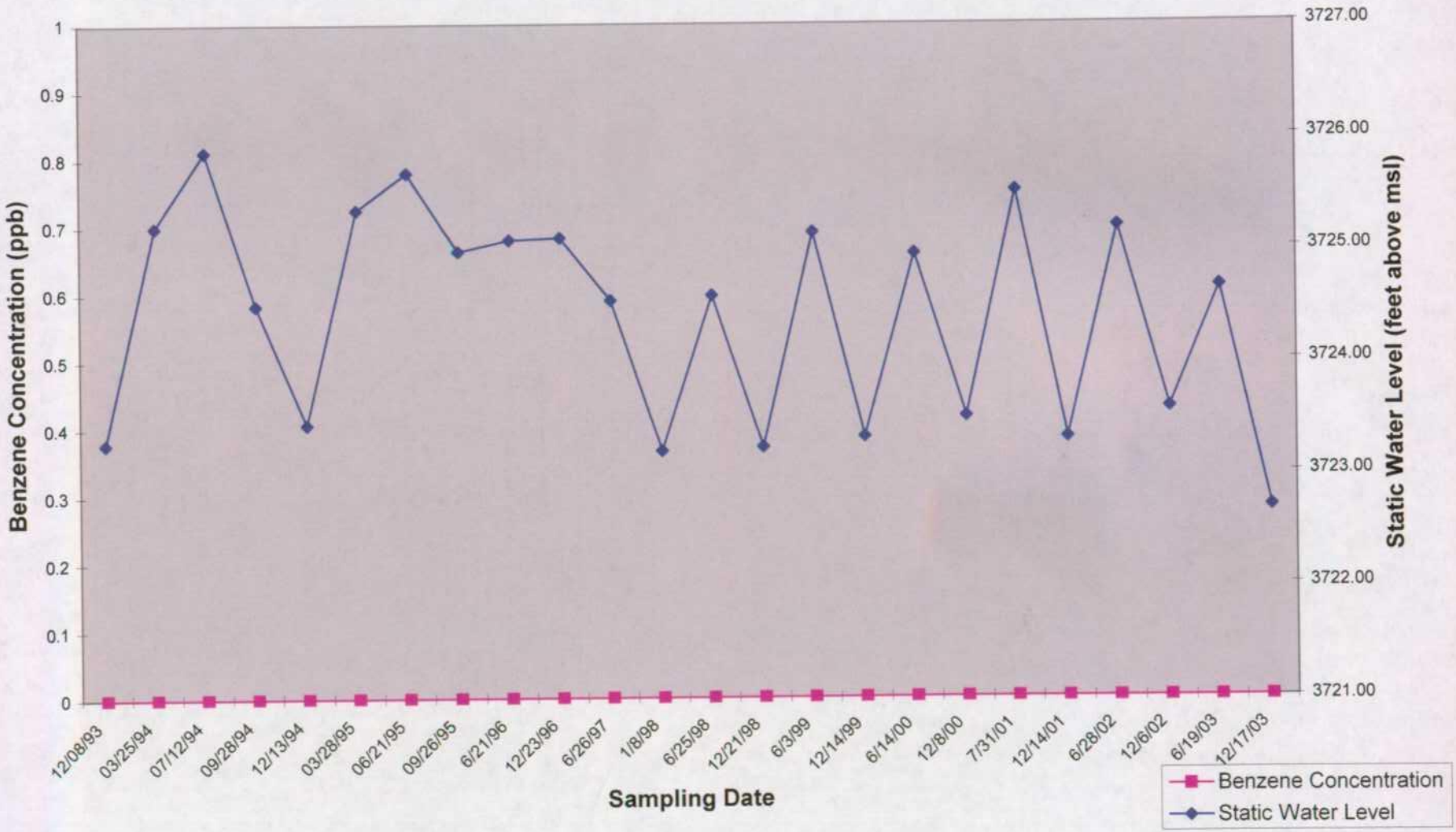


Figure 5-b
Brickland Refinery
Relationship between Benzene Concentration and Static Water Level: MW-3D

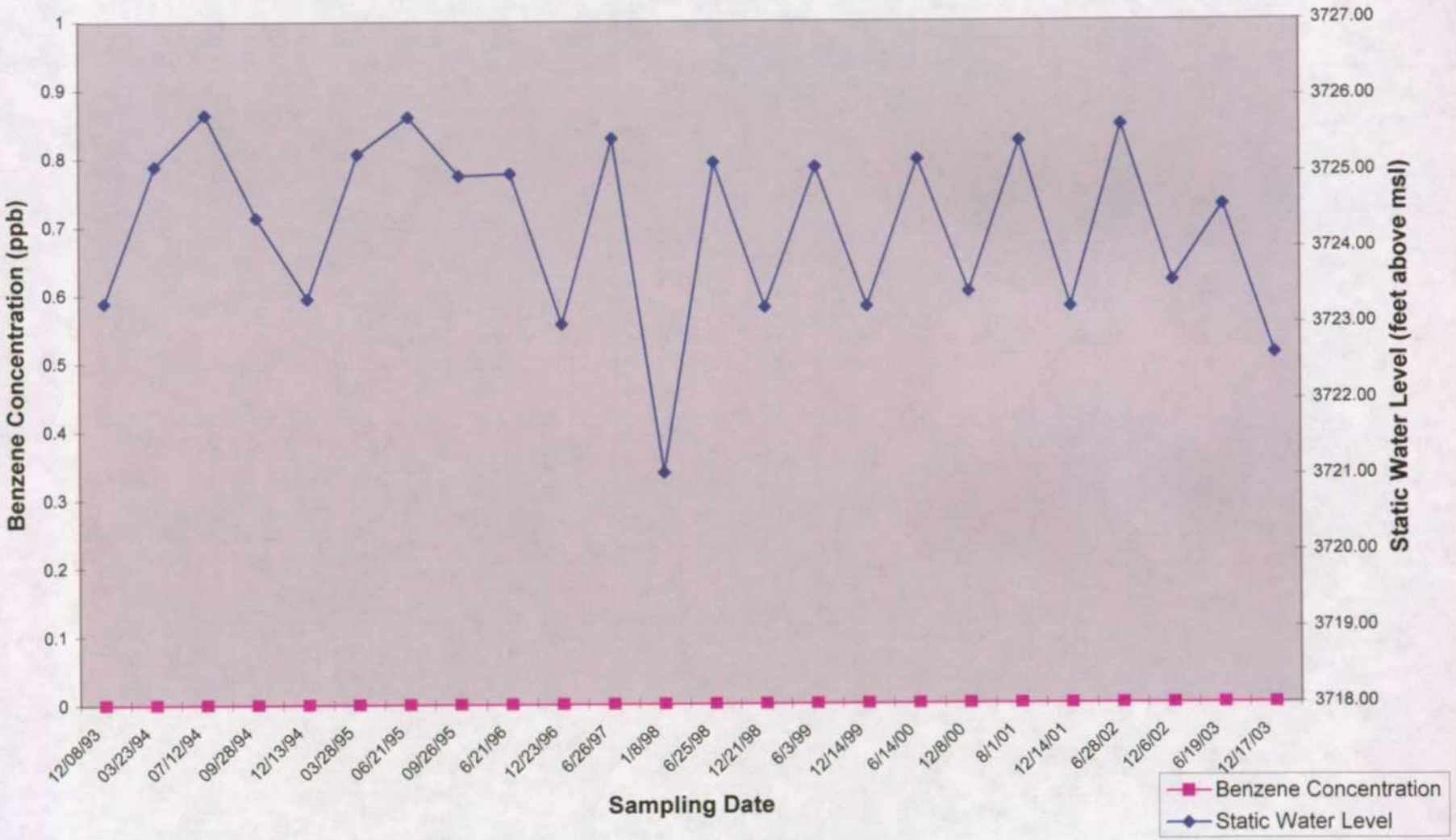


Figure 5-c
Brickland Refinery
Relationship between Benzene Concentration and Static Water Level: MW-6S

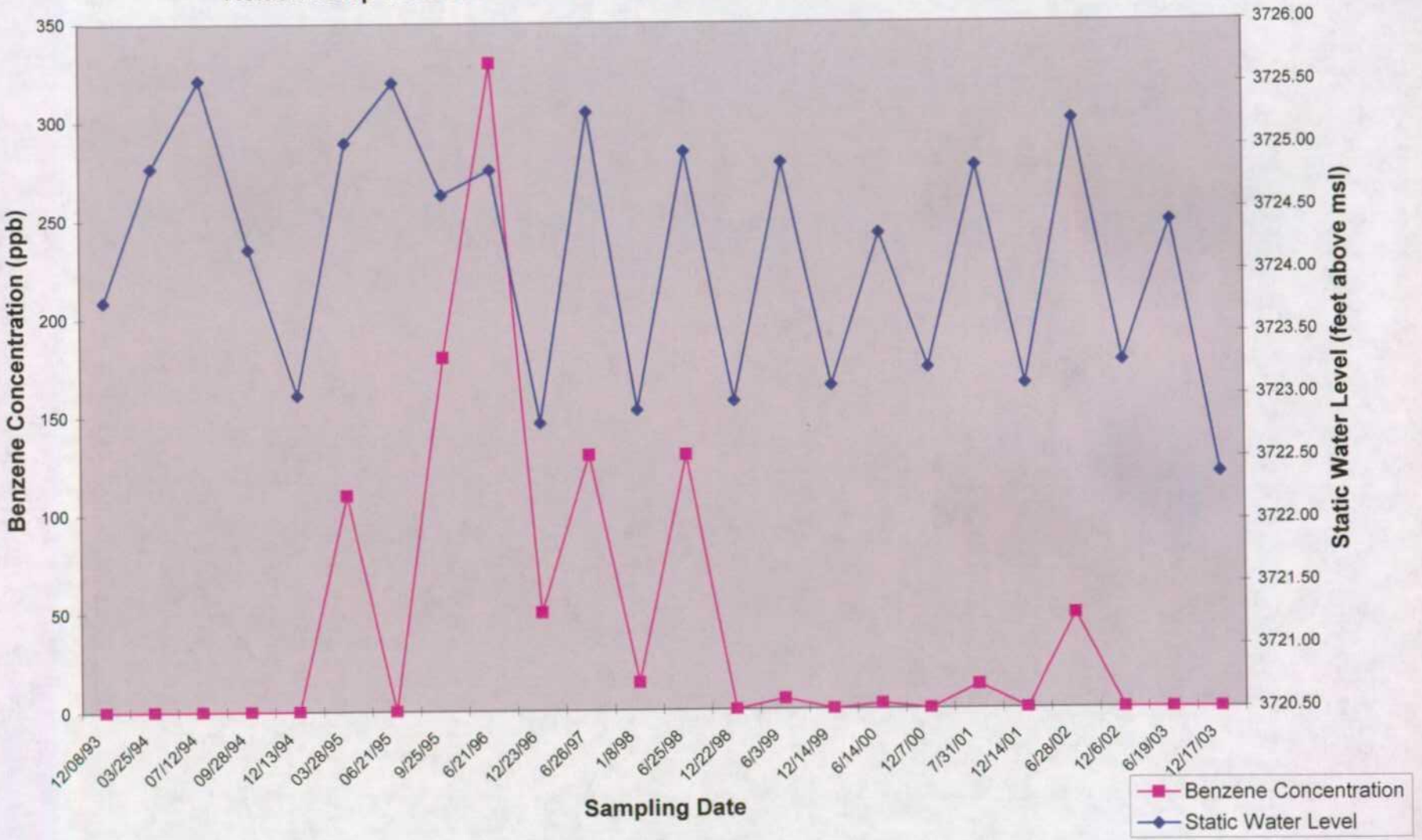


Figure 5-d
Brickland Refinery
Relationship between Benzene Concentration and Static Water Level: MW-6D

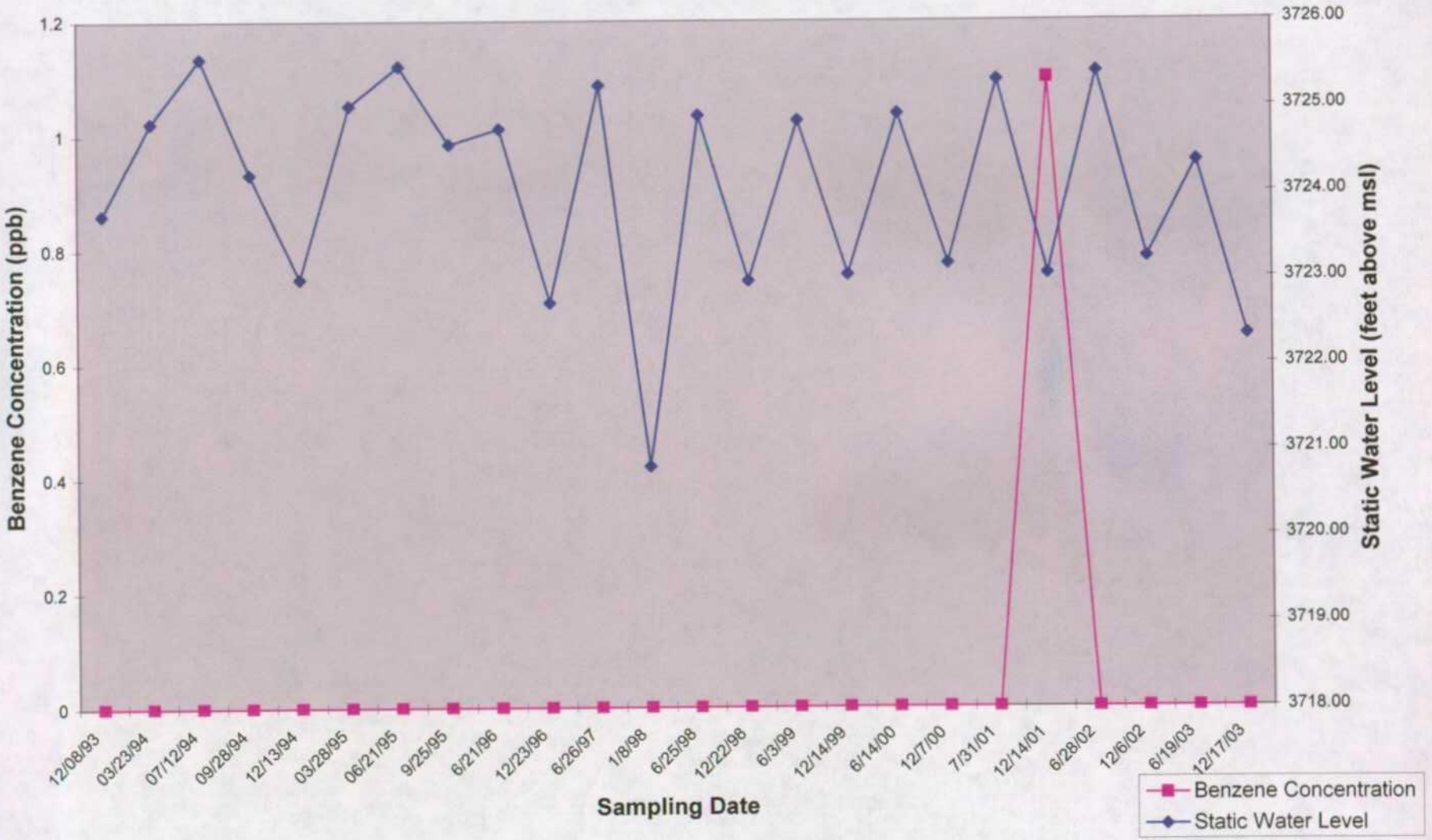


Figure 5-e
Brickland Refinery
Relationship between Benzene Concentration and Static Water Level: MW-9S

Table 1
Brickland Refinery
Well Sampling and Purging Methods

Well No.	2003 Sample Date	Purge Method	Sampling Method	Purge Volume	Laboratory Analytes
MW-3S	6/19/03	Pump	Purge Pump	10 gallons*	BTEX, PAH, and Metals
	12/17/03	Pump	Purge Pump	8 gallons*	BTEX only
MW-3D	6/19/03	Pump	Purge Pump	60 gallons	BTEX, PAH, and Metals
	12/17/03	Pump	Purge Pump	60 gallons	BTEX only
MW-4	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS
MW-6S	6/19/03	Pump	Purge Pump	8 gallons*	BTEX, PAH, and Metals
	12/17/03	Pump	Purge Pump	7 gallons*	BTEX only
MW-6D	6/19/03	Pump	Purge Pump	60 gallons	BTEX, PAH, and Metals
	12/17/03	Pump	Purge Pump	60 gallons	BTEX only
MW-7	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS
MW-9S	6/19/03	Pump	Purge Pump	20 gallons	BTEX, PAH, and Metals
	12/17/03	Pump	Purge Pump	20 gallons	BTEX only
MW-14	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS
MW-15	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS
River Upstream	6/19/03	NA	Teflon Dipper	NA	BTEX, PAH, and Metals
	12/17/03	NA	Teflon Dipper	NA	BTEX only
River Downstream	6/19/03	NA	Teflon Dipper	NA	BTEX, PAH, and Metals
	12/17/03	NA	Teflon Dipper	NA	BTEX only
Total volume purged during semi-annual monitoring event in June 2003:					158 gallons
Total volume purged during annual monitoring event in December 2003:					155 gallons
Total volume purged during semi-annual and annual monitoring events:					313 gallons

* Monitoring well purged dry during sampling event.
NS Not sampled.
NA Not applicable

Table 2
Brickland Refinery
Monitoring Well Groundwater Elevations (Feet above mean sea level)

Well ID	6/1/99	12/14/99	6/12/00	12/5/00	7/24/01	12/12/01	6/26/02	12/6/02	6/18/03	12/16/03
MW-1	3725.85	3724.22	3725.68	3724.41	3726.38	3724.2	3726.54	3724.46	3725.55	3723.69
MW-2	3726.44	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99
MW-3S	3725.14	3723.32	3724.95	3723.5	3725.51	3723.31	3725.19	3723.57	3724.65	3722.69
MW-3D	3725.08	3723.24	3725.18	3723.43	3725.42	3723.23	3725.63	3723.57	3724.57	3722.61
MW-4	3725.34	3723.58	3725.27	3723.79	3726.14	3723.53	3725.89	3723.77	3724.87	3722.88
MW-5	3725.34	3723.58	3725.44	3723.82	3726.08	3723.49	3725.96	3723.75	3724.91	3722.85
MW-6S	3724.88	3723.09	3724.31	3723.23	3724.85	3723.1	3725.22	3723.28	3724.40	3722.38
MW-6D	3724.84	3723.04	3724.92	3723.17	3725.21	3723.05	3725.40	3723.24	3724.36	3722.33
MW-7	3725.26	3723.46	3725.35	3723.63	3726.08	3723.43	3725.28	3723.63	3724.76	3722.69
MW-8	3725.11	3723.43	3725.22	3723.64	3725.53	3723.39	3725.38	3723.60	3724.67	3722.63
MW-9S	3724.55	3722.86	3724.62	3723.04	3725.01	3722.85	3725.05	3723.04	3724.04	3722.02
MW-10	P	P	P	P	3725.45	3723.26	3725.67	3723.40	3725.67	3722.31
MW-11	3725.05	3723.34	3725.04	3723.52	3725.76	3723.34	3725.55	3723.46	3724.51	3721.17
MW-12	3726.40	3724.59	3726.53	3724.73	3726.73	3724.55	3726.87	3724.79	3725.93	3724.09
MW-13	3725.25	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99	Plugged 6/99

Table 2 (Continued)
Brickland Refinery
Monitoring Well Groundwater Elevations (feet above mean sea level)

Well ID	6/1/99	12/14/99	6/12/00	12/5/00	7/24/01	12/12/01	6/26/02	12/6/02	6/18/03	12/16/03
MW-14	3725.36	3723.54	3725.41	3723.73	3726.12	3723.49	3725.89	3723.71	3725.30	3722.79
MW-15	3724.87	3723.24	3724.98	3723.42	3725.52	3723.23	3725.40	3723.38	3724.35	3722.38
MW-16	3724.68	3722.97	3724.80	3723.16	3725.13	3722.97	3724.80	3723.13	3724.17	3722.14
MW-17	3725.25	3723.36	3725.27	3723.5	3725.96	3723.38	3725.71	3723.54	3724.67	3722.61

Notes:

NM = Not measured.
P = Product observed.
Plugged 6/99 = Monitoring well abandoned (in accordance with NMED regulations) prior to soil cap installation in June 1999

Table 3
Brickland Refinery
BTEX Concentrations (µg/L) in Monitoring Wells and River Surface water Samples
June 1999 through December 2003

MW-3S										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Ethyl Benzene	2.9	ND	ND	ND	<1	<1	ND	ND	ND	ND
Xylenes	5	ND	ND	ND	<1	<1	ND	ND	ND	ND

MW-3D										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND,ND
Toluene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND,ND
Ethyl Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND,ND
Xylenes	ND	ND	2	ND	<1	<1	ND	ND	ND	ND,ND

MW-4										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	NS	NS	400	1120,1050	196	54.6	100, 87	NS	**NS	**NS
Toluene	NS	NS	ND	ND, ND	<5*	1.8	ND, ND	NS	**NS	**NS
Ethyl Benzene	NS	NS	1.8	ND, ND	<5*	<1*	ND, ND	NS	**NS	**NS
Xylenes	NS	NS	5.1	34, ND	<5*	<1*	ND, ND	NS	**NS	**NS

Parameter	Detection Limits
Benzene	1.0 µg/L
Toluene	1.0 µg/L
Ethyl Benzene	1.0 µg/L
Xylenes	1.0 µg/L

Notes:

ND = Not detected
NS = Not sampled
µg/L = Micrograms per liter
**NS = Not sampled during the odd years.

* Detection limits for the same analyte may vary due to sample dilution

Table 3 (Continued)
Brickland Refinery
BTEX Concentrations (µg/L) in Monitoring Wells and River Surface water Samples
June 1999 through December 2003

MW-6S										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	4.3, 6.4	ND	2.6	ND	12	<5	48	ND, ND	ND	ND
Toluene	2.2, 2.2	ND	ND, 2.2	ND	14	<5	3.3	ND, ND	ND	ND
Ethyl Benzene	3.3, 4.1	ND	2.1	ND	15	<5	5.8	ND, ND	ND	ND
Xylenes	ND, 2.2	ND	4.1	ND	<5	<5	17	ND, ND	8.7	ND

MW-6D										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	<1	1.1	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Xylenes	ND	ND	1.7	ND	<1	<1	ND	ND	ND	ND

MW-7										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	NS	NS	74, 76	ND	<5	<1	ND	NS	**NS	**NS
Toluene	NS	NS	ND,ND	ND	14	<1	ND	NS	**NS	**NS
Ethyl Benzene	NS	NS	ND, ND	ND	<5	<1	ND	NS	**NS	**NS
Xylenes	NS	NS	2.5, 1.6	ND	<5	<1	ND	NS	**NS	**NS

Parameter	Detection Limits	Notes:	
Benzene	1.0 µg/L	ND = Not detected NS = Not sampled µg/L = Micrograms per liter **NS = Not sampled during the odd years	* Detection limits for the same analyte may vary due to sample dilution
Toluene	1.0 µg/L		
Ethyl Benzene	1.0 µg/L		
Xylenes	1.0 µg/L		

Table 3 (Continued)
Brickland Refinery
BTEX Concentrations (µg/L) in Monitoring Wells and River Surface water Samples
June 1999 through December 2003

MW-9S										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	35	2.9	ND	ND	ND,ND	ND
Toluene	2.2	ND	14	ND	<5	2	ND	ND	ND,ND	ND
Ethyl Benzene	2.5	ND	6.2	ND	<5	<1	ND	ND	ND,ND	ND
Xylenes	24	8	43	ND	<5	1.9	ND	ND	ND,ND	ND

MW-14										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	NS	NS	250	2630	7,7	1.1,2.0	11	NS	**NS	**NS
Toluene	NS	NS	ND	ND	3,3	<1,<1	ND	NS	**NS	**NS
Ethyl Benzene	NS	NS	2.9	ND	<1,<1	<1,<1	ND	NS	**NS	**NS
Xylenes	NS	NS	5	ND	<1,<1	<1,<1	ND	NS	**NS	**NS

MW-15										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	NS	NS	1.9	ND	<5	<5	ND	NS	**NS	**NS
Toluene	NS	NS	ND	ND	<5	<5	ND	NS	**NS	**NS
Ethyl Benzene	NS	NS	ND	ND	<5	<5	ND	NS	**NS	**NS
Xylenes	NS	NS	2.7	ND	<5	<5	ND	NS	**NS	**NS

Parameter	Detection Limits	Notes:	
Benzene	1.0 µg/L	ND = Not detected NS = Not sampled µg/L = Micrograms per liter **NS = Not sampled during the odd years	* Detection limits for the same analyte may vary due to sample dilution
Toluene	1.0 µg/L		
Ethyl Benzene	1.0 µg/L		
Xylenes	1.0 µg/L		

Table 3 (Continued)
Brickland Refinery
BTEX Concentrations (µg/L) in Monitoring Wells and River Surface water Samples
June 1999 through December 2003

River Upstream										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	3	<1	ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	3	<1	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND

River-Downstream										
Parameter	6/3/99	12/14/99	6/14/00	12/8/00	7/31/01	12/14/01	6/28/02	12/6/02	6/19/03	12/17/03
Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	3	<1	ND	ND	ND	ND
Ethyl Benzene	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND

Parameter	Detection Limits	Notes:	
Benzene	1.0 µg/L	ND = Not detected	* Detection limits for the same analyte may vary due to sample dilution
Toluene	1.0 µg/L	NS = Not sampled	
Ethyl Benzene	1.0 µg/L	µg/L = Micrograms per liter	
Xylenes	1.0 µg/L	**NS = Not sampled during the odd years	

Table 4
Brickland Refinery
Total PAH Concentrations for Samples from the River and Monitoring Wells

Well ID	6/3/99	6/14/00	7/27/01	6/27/02	6/19/03
MW-3S	ND	ND	ND	ND	ND
MW-3D	ND	ND	ND	ND	ND
MW-4	NS	ND	ND	ND,ND	*NS
MW-6S	22, 32	ND	ND	ND	ND
MW-6D	ND	ND	ND	ND	ND
MW-7	NS	ND,ND	ND	ND	*NS
MW-9S	ND	ND	ND	ND	ND,ND
MW-14	NS	ND	ND,ND	ND	*NS
MW-15	NS	ND	ND	ND	*NS
River-Upstream	ND	ND	ND	ND	ND
River-Down	ND	ND	ND	ND	ND

Notes:
All Results in Micrograms per Liter (µg/L)
ND indicates constituent was not detected
NS indicates well was not sampled. *NS Not sampled in odd years

Table 5
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

MW-3S							
Parameter	NMWQCC Std.	Reference	6/3/99	6/14/00	7/31/01	6/28/02	6/19/03
Aluminum	5	C	NS	NS	0.733	ND	ND
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	0.008	ND
Barium	1.0	A	NS	NS	<0.100	0.081	0.083
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	0.653	**0.880**	**0.940**
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND	ND	0.047	ND	ND
Iron	1.0	B	NS	NS	2.080	**1.500**	**1.700**
Lead	0.05	A	ND	ND	0.012	ND	ND
Manganese	0.20	B	NS	NS	1.310	**1.700**	**1.700**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	ND
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	0.021	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	0.340	ND	<0.025	ND	ND

MW-3D							
Parameter	NMWQCC Std.	Reference	6/3/99	6/14/00	7/31/01	6/28/02	6/19/03
Aluminum	5	C	NS	NS	0.102	ND	ND
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	ND	ND
Barium	1.0	A	NS	NS	<0.100	0.060	0.063
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	0.941	**1.500**	**1.500**
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND	ND	<0.0125	ND	ND
Iron	1.0	B	NS	NS	2.690	**2.300**	**2.100**
Lead	0.05	A	ND	ND	<0.01	ND	ND
Manganese	0.20	B	NS	NS	3.600	**3.800**	**3.300**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	ND
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	0.024	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	ND	ND	<0.025	ND	ND

Table 5 (Continued)
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

MW-4							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS	0.271	0.36.0.23	*NS
Antimony	NA	NA	NS	ND	<0.025	ND,ND	*NS
Arsenic	0.1	A	NS	ND	<0.05	0.007,ND	*NS
Barium	1.0	A	NS	NS	0.617	0.083, 0.059	*NS
Beryllium	NA	NA	NS	ND	<0.0025	0.005, 0.005	*NS
Boron	0.8	C	NS	NS	0.932	**1.400, 1.400**	*NS
Cadmium	0.0100	A	NS	ND	<0.025	ND,ND	*NS
Chromium	0.050	A	NS	ND	<0.01	0.014,ND	*NS
Cobalt	0.050	Cobalt	NS	NS	<0.025	0.014,ND	*NS
Copper	1.0	B	NS	ND	<0.0125	0.021,ND	*NS
Iron	1.0	B	NS	NS	3.170	**2.900, 3.100**	*NS
Lead	0.05	A	NS	ND	0.018	ND,ND	*NS
Manganese	0.20	B	NS	NS	4.310	**5.800, 5.800**	*NS
Mercury	0.0020	A	NS	ND	<0.0002	NS	*NS
Molybdenum	1.0000	C	NS	NS	<0.050	ND,ND	*NS
Nickel	0.2	C	NS	ND	<0.025	ND,ND	*NS
Selenium	0.05	A	NS	ND	<0.050	0.032, 0.032	*NS
Silver	0.05	A	NS	ND	<0.0125	0.036, ND	*NS
Thallium	NA	NA	NS	ND	<0.050	ND,ND	*NS
Zinc	10.0	B	NS	ND	<0.025	ND,ND	*NS

MW-6S							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS	0.604	0.21	ND
Antimony	NA	NA	ND, ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND, ND	ND	0.066	0.053	ND
Barium	1.0	A	NS	NS	0.763	0.490	0.780
Beryllium	NA	NA	ND, ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	1.000	**1.300**	**1.300**
Cadmium	0.0100	A	ND, ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND, ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND, ND	ND	0.089	0.044	ND
Iron	1.0	B	NS	NS	5.530	**3.900**	**2.100**
Lead	0.05	A	ND, ND	ND	0.017	ND	ND
Manganese	0.20	B	NS	NS	1.340	**1.700**	**3.400**
Mercury	0.0020	A	ND, ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	ND
Nickel	0.2	C	ND, ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND, ND	ND	<0.050	**0.099**	ND
Silver	0.05	A	ND, ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND, ND	ND	<0.050	ND	ND
Zinc	10.0	B	ND, 0.12	ND	<0.025	ND	ND

Table 5 (Continued)
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

MW-6D							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS	<0.200	0.18	ND
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	ND	ND
Barium	1.0	A	NS	NS	<0.100	0.050	0.053
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	0.807	**1.400**	**1.400**
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND	ND	0.231	ND	ND
Iron	1.0	B	NS	NS	0.920	**1.000**	0.900
Lead	0.05	A	ND	ND	<0.017	ND	ND
Manganese	0.20	B	NS	NS	5.360	**5.700**	**5.300**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	ND
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	0.015	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	0.053	ND	<0.025	ND	ND

MW-7							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS,NS	<0.200	0.200	*NS
Antimony	NA	NA	NS	ND,ND	<0.025	ND	*NS
Arsenic	0.1	A	NS	ND,ND	<0.05	0.047	*NS
Barium	1.0	A	NS	NS	0.211	0.210	*NS
Beryllium	NA	NA	NS	ND,ND	<0.0025	ND	*NS
Boron	0.8	C	NS	NS	0.618	**0.750**	*NS
Cadmium	0.0100	A	NS	ND,ND	<0.025	ND	*NS
Chromium	0.050	A	NS	ND,ND	<0.01	ND	*NS
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	*NS
Copper	1.0	B	NS	ND,ND	<0.0125	ND	*NS
Iron	1.0	B	NS	NS	3.020	**2.700**	*NS
Lead	0.05	A	NS	ND,ND	0.022	ND	*NS
Manganese	0.20	B	NS	NS	1.690	**1.400**	*NS
Mercury	0.0020	A	NS	ND,ND	<0.0002	NS	*NS
Molybdenum	1.0000	C	NS	NS	<0.050	0.011	*NS
Nickel	0.2	C	NS	ND,ND	<0.025	ND	*NS
Selenium	0.05	A	NS	ND,ND	<0.05	***0.090***	*NS
Silver	0.05	A	NS	ND,ND	<0.0125	ND	*NS
Thallium	NA	NA	NS	ND,ND	<0.05	ND	*NS
Zinc	10.0	B	NS	ND,ND	0.026	ND	*NS

Table 5 (Continued)
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

MW-9S							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS	8.58	ND	ND
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	0.024	ND
Barium	1.0	A	NS	NS	0.304	0.130	0.130
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	1.000	**1.200**	**1.100**
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	0.080	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND	ND	0.067	ND	ND
Iron	1.0	B	NS	NS	31.700	**6.400**	**6.400**
Lead	0.05	A	ND	ND	0.033	ND	ND
Manganese	0.20	B	NS	NS	3.190	**2.600**	**2.400**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	ND
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	0.036	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	ND	ND	0.088	ND	ND

MW-14							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28702	6/19/03
Aluminum	5	C	NS	NS	3.040	0.200	*NS
Antimony	NA	NA	NS	ND	<0.025	ND	*NS
Arsenic	0.1	A	NS	ND	<0.05	0.010	*NS
Barium	1.0	A	NS	NS	0.780	0.110	*NS
Beryllium	NA	NA	NS	ND	<0.0025	ND	*NS
Boron	0.8	C	NS	NS	1.260	**1.700**	*NS
Cadmium	0.0100	A	NS	ND	<0.025	ND	*NS
Chromium	0.050	A	NS	ND	<0.01	ND	*NS
Cobalt	0.050	Cobalt	NS	NS	0.110	ND	*NS
Copper	1.0	B	NS	ND	<0.0125	ND	*NS
Iron	1.0	B	NS	NS	10.500	**7.300**	*NS
Lead	0.05	A	NS	ND	0.015	ND	*NS
Manganese	0.20	B	NS	NS	<0.0002	**7.200**	*NS
Mercury	0.0020	A	NS	ND	<0.002	NS	*NS
Molybdenum	1.0000	C	NS	NS	<0.050	ND	*NS
Nickel	0.2	C	NS	ND	<0.025	ND	*NS
Selenium	0.05	A	NS	ND	<0.05	0.041	*NS
Silver	0.05	A	NS	ND	<0.0125	ND	*NS
Thallium	NA	NA	NS	ND	<0.05	ND	*NS
Zinc	10.0	B	NS	ND	<0.025	ND	*NS

Table 5 (Continued)
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

MW-15							
Parameter	NMWQCC Std.	Reference	6/3/99	6/13/00	8/2/01	6/28/02	6/19/03
Aluminum	5	C	NS	NS	<0.200	0.24	*NS
Antimony	NA	NA	NS	ND	<0.025	ND	*NS
Arsenic	0.1	A	NS	ND	<0.05	0.014	*NS
Barium	1.0	A	NS	NS	0.158	0.170	*NS
Beryllium	NA	NA	NS	ND	<0.0025	0.006	*NS
Boron	0.8	C	NS	NS	1.000	**1.500**	*NS
Cadmium	0.0100	A	NS	ND	<0.025	ND	*NS
Chromium	0.050	A	NS	ND	<0.01	ND	*NS
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	*NS
Copper	1.0	B	NS	ND	0.020	ND	*NS
Iron	1.0	B	NS	NS	1.860	**2.000**	*NS
Lead	0.05	A	NS	ND	0.012	ND	*NS
Manganese	0.20	B	NS	NS	2.100	**2.300**	*NS
Mercury	0.0020	A	NS	ND	<0.0002	NS	*NS
Molybdenum	1.0000	C	NS	NS	<0.050	ND	*NS
Nickel	0.2	C	NS	ND	<0.025	ND	*NS
Selenium	0.05	A	NS	ND	<0.050	0.038	*NS
Silver	0.05	A	NS	ND	<0.0125	ND	*NS
Thallium	NA	NA	NS	ND	<0.050	ND	*NS
Zinc	10.0	B	NS	ND	<0.025	ND	*NS

River-Upstream							
Parameter	NMWQCC Std.	Reference	6/2/99	6/13/00	8/2101	6/28/02	6/19/03
Aluminum	5	C	NS	NS	17.5	1.2	3.2
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	0.005	ND
Barium	1.0	A	NS	NS	0.155	0.083	0.110
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	0.252	0.190	0.200
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	0.280	ND	0.019	0.015	ND
Iron	1.0	B	NS	NS	9.790	0.850	**2.100**
Lead	0.05	A	ND	ND	0.011	ND	ND
Manganese	0.20	B	NS	NS	0.416	0.180	**0.180**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	0.010	0.012
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	ND	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	1.170	ND	0.050	ND	ND

Table 5 (Continued)
Brickland Refinery
Metal Analytical Results for Monitoring Wells and the River Water Samples

River-Downstream							
Parameter	NMWQCC Std.	Reference	6/2/99	6/13/00	8/2101	6/28/02	6/19/03
Aluminum	5	C	NS	NS	7.8	2.1	3.000
Antimony	NA	NA	ND	ND	<0.025	ND	ND
Arsenic	0.1	A	ND	ND	<0.05	0.006	ND
Barium	1.0	A	NS	NS	0.125	0.094	0.110
Beryllium	NA	NA	ND	ND	<0.0025	ND	ND
Boron	0.8	C	NS	NS	0.190	0.200	0.210
Cadmium	0.0100	A	ND	ND	<0.025	ND	ND
Chromium	0.050	A	ND	ND	<0.01	ND	ND
Cobalt	0.050	Cobalt	NS	NS	<0.025	ND	ND
Copper	1.0	B	ND	ND	0.019	ND	ND
Iron	1.0	B	NS	NS	4.710	**1.800**	**2.100**
Lead	0.05	A	ND	ND	0.012	ND	ND
Manganese	0.20	B	NS	NS	0.261	**0.220**	**0.200**
Mercury	0.0020	A	ND	ND	<0.0002	NS	ND
Molybdenum	1.0000	C	NS	NS	<0.050	ND	0.010
Nickel	0.2	C	ND	ND	<0.025	ND	ND
Selenium	0.05	A	ND	ND	<0.050	ND	ND
Silver	0.05	A	ND	ND	<0.0125	ND	ND
Thallium	NA	NA	ND	ND	<0.050	ND	ND
Zinc	10.0	B	0.110	ND	0.050	ND	ND

Notes:

mg/L = Milligrams per liter

Concentrations listed in **boldface** type during the current year indicate levels exceed New Mexico Water Quality Control Commission (NMWQCC) standards

NS (*NS) indicates sample was not collected/analyzed for this constituent (not collected in odd years).

ND indicates concentration was below laboratory detection limits.

NA indicates no NMWQCC standard established.

A indicates standard is from NMWQCC Regulatory Standards Section 3103A - Human Health Standard

B indicates standard is from NMWQCC Regulatory Standards Section 3103B - Domestic Water Supply

C indicates standard is from NMWQCC Regulatory Standards Section 3103C - Irrigation Use

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

Well ID	Dec. 98	Jun. 99	Dec. 99	Jun. 00	Dec. 00	Jul. 01	Dec. 01	Jun. 02	Dec. 02	Jun. 03	Dec. 03
MW-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-2	0.00	0.00	A	A	A	A	A	A	A	A	A
MW-3S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-3D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-6S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-6D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-9S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-10	2.50	0.14	0.00	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.13
MW-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-13	0.00	0.00	A	A	A	A	A	A	A	A	A
MW-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-16	0.00	Dry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-17	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-1	0.74	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-14	Tar	Tar	Tar	Tar	Tar	Tar	Tar	Tar	Tar	Tar	Tar
WP-25	1.05	0.70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WP-26S	0.39	1.82	1.55	1.70	1.19	1.91	1.45	1.80	0.13	0.35	0.60
WP-26D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-27S	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
WP-27D	0.00	0.13	0.35	0.29	0.45	0.00	0.44	0.01	0.46	0.12	0.26
WP-30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP-31	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.00	0.00	0.00	0.00
WP-32	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WP-33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

A = Plugged and Abandoned
Dry = Monitoring point was dry
Tar = Thickness measurement not obtainable because of presence of thick tar-like substance in well point.

NEL LABORATORIES

Corporate Headquarters
6490 S. McCarran Blvd. # D-30
Reno, NV 89509
Phone: 775.348.2522
Fax: 775.348.2546

Las Vegas Laboratory
4208 Arcata Way, Suite A
Las Vegas, NV 89030
Phone: 702.657.1010
Fax: 702.657.1577

Fred Small
Terracon
1630 Hickory Loop, Suite H
Las Cruces, NM 88005

TEL: (505) 527-1700
FAX: (505) 527-1092

RE Project: **Huntsman** Order No.: **L0306378**

Dear Fred Small:

NEL Laboratories, Las Vegas received 8 samples on 6/22/03 3:48:00 PM for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications unless noted in the Case Narrative.

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

Perneatha Cunningham
Project Manager

8/26/03
Date

Certifications:

Arizona	AZ0518
California	2002
Nevada	NV052

NEL Laboratories, Las Vegas

Sample Receipt Checklist

Client Name TERRAC.007 | Date and Time Receive 6/22/03 3:48:00 PM

Work Order Numbe L0306378 | Received by KMB-LV

Checklist completed by [signature] (Signature) 6/22/03 (Date) | Reviewed by [initials] (Initials) 6/23 (Date)

Matrix | Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b KB

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

NEL LABORATORIES

CHAIN OF CUSTODY

NEL Work Order: L0306518

Public Water System (PWS) Number:

Las Vegas Laboratory
4208 Arcata Way, Ste. A
N Las Vegas, NV 89030
Phone: 702-657-1010
Fax: 702-657-1577

Reno	800-368-5221
Las Vegas	888-368-3282
Phoenix	888-238-2514
Boise	800-200-2952
Sacramento	800-368-5221
Albuquerque	866-360-5726
Denver	888-900-7477

Project Name: Huntsman	Project Number: 6899761l
Purchase Order Number:	Sampled By: Victoria Trujillo / Glen Rhodes
NEL Quote No.: 361	NEL Sales Rep:

Company: Terracon Attention: Fred Small
Address: 1630 Hickory Loop, Suite H
City, State, Zip Code: Las Cruces, New Mexico 88005
Phone Number: 505.527.1700 Fax Number: 505.527.1692
Billing Address: 1630 Hickory Loop, Suite H Expected Due Date: June 30, 2003
Las Cruces, NM 88005
Requested Turnaround: X 5-day ___ 2-day ___ 1-day ___ 6/30 Other

Analysis (See Note #1): BTEX 8021; 8270; 20 Priority Pollutant metals (see attached)

Sampled Time	Sampled Date	Customer Sample Identification	NEL ID	Total # of Containers	Matrix (Box #1)	BTEX 8021	8270	20 Priority Pollutant metals (see attached)	Remarks
12:07	6/19/2003	MW-9S	01	5	AQ	3A	1E	1B	
13:07	6/19/2003	MW-6D	02	5	AQ	3A	1E	1B	
13:29	6/19/2003	MW-6S	03	5	AQ	3A	1E	1B	
16:01	6/19/2003	MW-3D	04	5	AQ	3A	1E	1B	
16:18	6/19/2003	MW-3S	05	5	AQ	3A	1E	1B	
16:30	6/19/2003	River-Up	06	5	AQ	3A	1E	1B	
16:38	6/19/2003	River-Down	07	5	AQ	3A	1E	1B	
		Dup	08	5	AQ	3A	1E	1B	

Note #1: Enter the number of containers submitted for the indicated Analysis followed by the preservation (see Box #2 below).
Eg: 3A = 3 containers with HCl preservation

Custody Seal intact? (Y) N None Temp. 10°C
Condition when received (good)

Box #1 DW - Drinking Water, WW - Waste Water, OL - Oil/Organic Liquid, SD - Solid, AQ - Aqueous, A - Air

Box #2 A. HCl, B. HNO_3, C. H_2SO_4, D. NaOH, E. Ice Only, F Other ___, G. Not Preserved

	Relinquished by (Print)	Signature	Date/Time	Received by (Print)	Signature	Date/Time
1	Victoria Trujillo	Victoria Trujillo	6/20/2003 1600	Via FED EX	—	
2	VIA	FED EX		K Baumann	[signature]	6/22/03 / 1500
3						

ORIGINAL

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

CASE NARRATIVE

Attached are the analytical results for samples in support of the above referenced project.

The samples submitted for this project were not sampled by NEL. Should you have any questions or comments, please feel free to contact our Client Services Department.

Analytical Comments:

SW846 8270B

L1: The associated laboratory control spike recovery and or duplicate was above the laboratory acceptance limits for the indicated compounds. 2-Nitrophenol failed at 111% with an upper limit of 96%. 4-Nitrophenol failed at 57% with an upper limit of 48%, 3,3 Dichlorobenzidine failed at 138% with an upper limit of 124%, Hexachlorocyclopentadiene failed at 63.2% with an upper limit of 63%.

J: The associated laboratory control spike recovery was below the normal laboratory reporting limit for Benzoic acid but recovery was acceptable.

R: RPD failed for Phenol in the LCS/LCSD at 32.7% with a limit of 25%.

For sample L0306378-007 (River down)

S2: The surrogate 2,4,6-Tribromophenol failed laboratory acceptance limits low at 5.3% with a lower limit of 10%. The other 5 surrogate recoveries met laboratory acceptance limits.

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-001
Client Sample ID: MW-9S
Collection Date: 6/19/03 12:07:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	79.6	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 10:56:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 10:56:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 10:56:00 AM
Barium	0.13	0.0050		mg/L	1	6/25/03 10:56:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 10:56:00 AM
Boron	1.1	0.020		mg/L	1	6/25/03 10:56:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 10:56:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 10:56:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 10:56:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 10:56:00 AM
Iron	6.4	0.10		mg/L	1	6/25/03 10:56:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 10:56:00 AM
Manganese	2.4	0.0050		mg/L	1	6/25/03 10:56:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 10:56:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 10:56:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 10:56:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 10:56:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 10:56:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:26:53 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

Qualifiers:

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman

Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: **JRW-L**
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	107	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	92.8	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	61.5	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	92.0	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	96.5	9-132		%REC	1	6/28/03
Surr: Phenol-d6	46.2	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-002
Client Sample ID: MW-6D
Collection Date: 6/19/03 1:07:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	81.5	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 11:00:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:00:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:00:00 AM
Barium	0.053	0.0050		mg/L	1	6/25/03 11:00:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:00:00 AM
Boron	1.4	0.020		mg/L	1	6/25/03 11:00:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:00:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:00:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:00:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:00:00 AM
Iron	0.90	0.10		mg/L	1	6/25/03 11:00:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:00:00 AM
Manganese	5.3	0.0050		mg/L	1	6/25/03 11:00:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 11:00:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:00:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:00:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:00:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:00:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:38:10 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

Qualifiers:

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	*ND*	*5.0*		*µg/L*	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	52.6	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	67.2	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	45.9	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	70.6	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	72.0	9-132		%REC	1	6/28/03
Surr: Phenol-d6	37.0	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-003
Client Sample ID: MW-6S
Collection Date: 6/19/03 1:29:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	8.7	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	77.0	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 11:04:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:04:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:04:00 AM
Barium	0.78	0.0050		mg/L	1	6/25/03 11:04:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:04:00 AM
Boron	1.3	0.020		mg/L	1	6/25/03 11:04:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:04:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:04:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:04:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:04:00 AM
Iron	3.4	0.10		mg/L	1	6/25/03 11:04:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:04:00 AM
Manganese	1.2	0.0050		mg/L	1	6/25/03 11:04:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 11:04:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:04:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:04:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:04:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:04:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:49:17 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: **JRW-L**
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	49.4	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	74.1	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	33.5	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	86.0	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	80.0	9-132		%REC	1	6/28/03
Surr: Phenol-d6	40.7	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-004
Client Sample ID: MW-3D
Collection Date: 6/19/03 4:01:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	79.9	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 11:08:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:08:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:08:00 AM
Barium	0.063	0.0050		mg/L	1	6/25/03 11:08:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:08:00 AM
Boron	1.5	0.020		mg/L	1	6/25/03 11:08:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:08:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:08:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:08:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:08:00 AM
Iron	2.1	0.10		mg/L	1	6/25/03 11:08:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:08:00 AM
Manganese	3.3	0.0050		mg/L	1	6/25/03 11:08:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 11:08:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:08:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:08:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:08:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:08:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:51:59 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	57.7	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	64.8	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	44.5	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	70.1	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	72.6	9-132		%REC	1	6/28/03
Surr: Phenol-d6	34.9	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-005
Client Sample ID: MW-3S
Collection Date: 6/19/03 4:18:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	81.3	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 11:13:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:13:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:13:00 AM
Barium	0.083	0.0050		mg/L	1	6/25/03 11:13:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:13:00 AM
Boron	0.94	0.020		mg/L	1	6/25/03 11:13:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:13:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:13:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:13:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:13:00 AM
Iron	1.7	0.10		mg/L	1	6/25/03 11:13:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:13:00 AM
Manganese	1.7	0.0050		mg/L	1	6/25/03 11:13:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 11:13:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:13:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:13:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:13:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:13:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:54:41 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman

Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	27.4	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	93.0	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	34.2	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	97.0	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	101	9-132		%REC	1	6/28/03
Surr: Phenol-d6	41.5	10-63		%REC	1	6/28/03

Qualifiers:

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-006
Client Sample ID: River Up
Collection Date: 6/19/03 4:30:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	81.5	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	3.2	0.050		mg/L	1	6/25/03 11:26:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:26:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:26:00 AM
Barium	0.11	0.0050		mg/L	1	6/25/03 11:26:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:26:00 AM
Boron	0.20	0.020		mg/L	1	6/25/03 11:26:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:26:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:26:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:26:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:26:00 AM
Iron	2.1	0.10		mg/L	1	6/25/03 11:26:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:26:00 AM
Manganese	0.18	0.0050		mg/L	1	6/25/03 11:26:00 AM
Molybdenum	0.012	0.010		mg/L	1	6/25/03 11:26:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:26:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:26:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:26:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:26:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:57:20 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

Qualifiers:

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman

Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	59.2	10-161		%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	71.5	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	46.0	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	75.1	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	79.9	9-132		%REC	1	6/28/03
Surr: Phenol-d6	37.5	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-007
Client Sample ID: River Down
Collection Date: 6/19/03 4:38:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	80.5	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	3.0	0.050		mg/L	1	6/25/03 11:30:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:30:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:30:00 AM
Barium	0.11	0.0050		mg/L	1	6/25/03 11:30:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:30:00 AM
Boron	0.21	0.020		mg/L	1	6/25/03 11:30:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:30:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:30:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:30:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:30:00 AM
Iron	2.1	0.10		mg/L	1	6/25/03 11:30:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:30:00 AM
Manganese	0.20	0.0050		mg/L	1	6/25/03 11:30:00 AM
Molybdenum	0.010	0.010		mg/L	1	6/25/03 11:30:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:30:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:30:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:30:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:30:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 4:59:55 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/28/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/28/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/28/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/28/03

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman

Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/28/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/28/03
2-Chlorophenol	ND	5.0		µg/L	1	6/28/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/28/03
2-Methylphenol	ND	5.0		µg/L	1	6/28/03
2-Nitroaniline	ND	5.0		µg/L	1	6/28/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/28/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/28/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/28/03
3-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/28/03
4-Chloroaniline	ND	5.0		µg/L	1	6/28/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/28/03
4-Nitroaniline	ND	5.0		µg/L	1	6/28/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/28/03
Acenaphthene	ND	5.0		µg/L	1	6/28/03
Acenaphthylene	ND	5.0		µg/L	1	6/28/03
Aniline	ND	5.0		µg/L	1	6/28/03
Anthracene	ND	5.0		µg/L	1	6/28/03
Azobenzene	ND	5.0		µg/L	1	6/28/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/28/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/28/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/28/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/28/03
Benzoic acid	ND	25	J	µg/L	1	6/28/03
Benzyl alcohol	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/28/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/28/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/28/03
Carbazole	ND	5.0		µg/L	1	6/28/03
Chrysene	ND	5.0		µg/L	1	6/28/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/28/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/28/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/28/03
Dibenzofuran	ND	5.0		µg/L	1	6/28/03
Diethyl phthalate	ND	5.0		µg/L	1	6/28/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/28/03
Fluoranthene	ND	5.0		µg/L	1	6/28/03
Fluorene	ND	5.0		µg/L	1	6/28/03

Qualifiers:

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

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
Hexachlorobenzene	ND	5.0		µg/L	1	6/28/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/28/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/28/03
Hexachloroethane	ND	5.0		µg/L	1	6/28/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/28/03
Isophorone	ND	5.0		µg/L	1	6/28/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/28/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/28/03
Naphthalene	ND	5.0		µg/L	1	6/28/03
Nitrobenzene	ND	5.0		µg/L	1	6/28/03
Pentachlorophenol	ND	5.0		µg/L	1	6/28/03
Phenanthrene	ND	5.0		µg/L	1	6/28/03
Phenol	ND	5.0		µg/L	1	6/28/03
Pyrene	ND	5.0		µg/L	1	6/28/03
Pyridine	ND	5.0		µg/L	1	6/28/03
Surr: 2,4,6-Tribromophenol	5.30	10-161	S2	%REC	1	6/28/03
Surr: 2-Fluorobiphenyl	83.6	16-127		%REC	1	6/28/03
Surr: 2-Fluorophenol	16.5	10-88		%REC	1	6/28/03
Surr: 4-Terphenyl-d14	88.2	16-163		%REC	1	6/28/03
Surr: Nitrobenzene-d5	94.3	9-132		%REC	1	6/28/03
Surr: Phenol-d6	31.3	10-63		%REC	1	6/28/03

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

Lab ID: L0306378-008
Client Sample ID: *DUP*
Collection Date: 6/19/03
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILE AROMATICS		**SW8020A**				Analyst: **MKD-L**
Benzene	ND	2.0		µg/L	1	6/25/03
Ethylbenzene	ND	2.0		µg/L	1	6/25/03
Toluene	ND	2.0		µg/L	1	6/25/03
Total Xylenes	ND	2.0		µg/L	1	6/25/03
Surr: Trifluorotoluene	82.8	60-120		%REC	1	6/25/03
TOTAL METALS BY EPA 6010 (AQ:ICP/OES)		**SW6010B**				Analyst: **VVG-L**
Aluminum	ND	0.050		mg/L	1	6/25/03 11:34:00 AM
Antimony	ND	0.050		mg/L	1	6/25/03 11:34:00 AM
Arsenic	ND	0.050		mg/L	1	6/25/03 11:34:00 AM
Barium	0.13	0.0050		mg/L	1	6/25/03 11:34:00 AM
Beryllium	ND	0.0050		mg/L	1	6/25/03 11:34:00 AM
Boron	1.2	0.020		mg/L	1	6/25/03 11:34:00 AM
Cadmium	ND	0.0050		mg/L	1	6/25/03 11:34:00 AM
Chromium	ND	0.010		mg/L	1	6/25/03 11:34:00 AM
Cobalt	ND	0.010		mg/L	1	6/25/03 11:34:00 AM
Copper	ND	0.010		mg/L	1	6/25/03 11:34:00 AM
Iron	6.3	0.10		mg/L	1	6/25/03 11:34:00 AM
Lead	ND	0.050		mg/L	1	6/25/03 11:34:00 AM
Manganese	2.4	0.0050		mg/L	1	6/25/03 11:34:00 AM
Molybdenum	ND	0.010		mg/L	1	6/25/03 11:34:00 AM
Nickel	ND	0.040		mg/L	1	6/25/03 11:34:00 AM
Selenium	ND	0.050		mg/L	1	6/25/03 11:34:00 AM
Silver	ND	0.010		mg/L	1	6/25/03 11:34:00 AM
Zinc	ND	0.10		mg/L	1	6/25/03 11:34:00 AM
TOTAL METALS BY ICP / MS		**SW6020**				Analyst: **RMD-L**
Thallium	ND	0.0020		mg/L	5	6/26/03 5:02:31 PM
MERCURY, TOTAL		**SW7470**				Analyst: **ATV-L**
Mercury	ND	0.00020		mg/L	1	6/25/03
SEMIVOLATILE ORGANICS		**SW8270C**				Analyst: **JRW-L**
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	6/29/03
1,2-Dichlorobenzene	ND	5.0		µg/L	1	6/29/03
1,3-Dichlorobenzene	ND	5.0		µg/L	1	6/29/03
1,4-Dichlorobenzene	ND	5.0		µg/L	1	6/29/03
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	6/29/03
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	6/29/03
2,4-Dichlorophenol	ND	5.0		µg/L	1	6/29/03
2,4-Dimethylphenol	ND	5.0		µg/L	1	6/29/03
2,4-Dinitrophenol	ND	10		µg/L	1	6/29/03

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

NEL Laboratories, Las Vegas

Date: *25-Aug-03*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0306378

SEMIVOLATILE ORGANICS		SW8270C				Analyst: JRW-L
2,4-Dinitrotoluene	ND	5.0		µg/L	1	6/29/03
2,6-Dinitrotoluene	ND	5.0		µg/L	1	6/29/03
2-Chloronaphthalene	ND	5.0		µg/L	1	6/29/03
2-Chlorophenol	ND	5.0		µg/L	1	6/29/03
2-Methylnaphthalene	ND	5.0		µg/L	1	6/29/03
2-Methylphenol	ND	5.0		µg/L	1	6/29/03
2-Nitroaniline	ND	5.0		µg/L	1	6/29/03
2-Nitrophenol	ND	5.0	L1	µg/L	1	6/29/03
3&4-Methylphenols, Total	ND	5.0		µg/L	1	6/29/03
3,3'-Dichlorobenzidine	ND	5.0	L1	µg/L	1	6/29/03
3-Nitroaniline	ND	5.0		µg/L	1	6/29/03
4,6-Dinitro-2-methylphenol	ND	5.0		µg/L	1	6/29/03
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	6/29/03
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	6/29/03
4-Chloroaniline	ND	5.0		µg/L	1	6/29/03
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	6/29/03
4-Nitroaniline	ND	5.0		µg/L	1	6/29/03
4-Nitrophenol	ND	10	L1	µg/L	1	6/29/03
Acenaphthene	ND	5.0		µg/L	1	6/29/03
Acenaphthylene	ND	5.0		µg/L	1	6/29/03
Aniline	ND	5.0		µg/L	1	6/29/03
Anthracene	ND	5.0		µg/L	1	6/29/03
Azobenzene	ND	5.0		µg/L	1	6/29/03
Benz(a)anthracene	ND	5.0		µg/L	1	6/29/03
Benzo(a)pyrene	ND	5.0		µg/L	1	6/29/03
Benzo(b)fluoranthene	ND	5.0		µg/L	1	6/29/03
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	6/29/03
Benzo(k)fluoranthene	ND	5.0		µg/L	1	6/29/03
Benzoic acid	ND	25	J	µg/L	1	6/29/03
Benzyl alcohol	ND	5.0		µg/L	1	6/29/03
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	6/29/03
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	6/29/03
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	6/29/03
Bis(2-ethylhexyl)phthalate	ND	5.0		µg/L	1	6/29/03
Butyl benzyl phthalate	ND	5.0		µg/L	1	6/29/03
Carbazole	ND	5.0		µg/L	1	6/29/03
Chrysene	ND	5.0		µg/L	1	6/29/03
Di-n-butyl phthalate	ND	5.0		µg/L	1	6/29/03
Di-n-octyl phthalate	ND	5.0		µg/L	1	6/29/03
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	6/29/03
Dibenzofuran	ND	5.0		µg/L	1	6/29/03
Diethyl phthalate	ND	5.0		µg/L	1	6/29/03
Dimethyl phthalate	ND	5.0		µg/L	1	6/29/03
Fluoranthene	ND	5.0		µg/L	1	6/29/03
Fluorene	ND	5.0		µg/L	1	6/29/03

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E - Value above quantitation range

CLIENT: Terracon **Lab Order:** L0306378
Project: Huntsman

SEMIVOLATILE ORGANICS		SW8270C				Analyst: **JRW-L**
Hexachlorobenzene	ND	5.0		µg/L	1	6/29/03
Hexachlorobutadiene	ND	5.0		µg/L	1	6/29/03
Hexachlorocyclopentadiene	ND	5.0	L1	µg/L	1	6/29/03
Hexachloroethane	ND	5.0		µg/L	1	6/29/03
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	6/29/03
Isophorone	ND	5.0		µg/L	1	6/29/03
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	6/29/03
N-Nitrosodimethylamine	ND	5.0		µg/L	1	6/29/03
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	6/29/03
Naphthalene	ND	5.0		µg/L	1	6/29/03
Nitrobenzene	ND	5.0		µg/L	1	6/29/03
Pentachlorophenol	ND	5.0		µg/L	1	6/29/03
Phenanthrene	ND	5.0		µg/L	1	6/29/03
Phenol	ND	5.0		µg/L	1	6/29/03
Pyrene	ND	5.0		µg/L	1	6/29/03
Pyridine	ND	5.0		µg/L	1	6/29/03
Surr: 2,4,6-Tribromophenol	57.9	10-161		%REC	1	6/29/03
Surr: 2-Fluorobiphenyl	55.9	16-127		%REC	1	6/29/03
Surr: 2-Fluorophenol	38.9	10-88		%REC	1	6/29/03
Surr: 4-Terphenyl-d14	66.6	16-163		%REC	1	6/29/03
Surr: Nitrobenzene-d5	68.9	9-132		%REC	1	6/29/03
Surr: Phenol-d6	32.9	10-63		%REC	1	6/29/03

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

NEL LABORATORIES

Las Vegas Laboratory
4208 Arcata Way, Suite A
N. Las Vegas, NV 89030
Phone: 702.657.1010
Fax: 702.657.1577

Wednesday, February 04, 2004

Mary Wells, P.E.
Terracon
1630 Hickory Loop, Suite H
Las Cruces, NM 88005

TEL: 505-527-1700
FAX: 505-527-1092

RE Project: **Huntsman** Order No.: **L0312287**

Dear Mary Wells, P.E.:

NEL Laboratories, Las Vegas received 9 samples on 12/19/03 9:45:00 AM for the analyses presented in the following report.

The case narrative for the project listed above specifies all quality assurance deficiencies associated with the data. Data that is not qualified in the case narrative has met or exceeded the US-EPA or laboratory specifications for the analytical method.

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

Wes Harvey
Laboratory Manager

2-4-04
Date

REVISED

Certifications:

Washington	C325
Idaho	NV052
Nevada	NV052
California	2002

NEL LABORATORIES

Las Vegas Laboratory
4208 Arcata Way, Suite A
N. Las Vegas, NV 89030
Phone: 702.657.1010
Fax: 702.657.1577

CLIENT: Terracon
Project: Huntsman
Lab Order: L0312287

CASE NARRATIVE

Date: *04-Feb-04*

Attached are the analytical results for samples in support of the above referenced project.

The samples submitted for this project were not sampled by NEL. Should you have any questions or comments, please feel free to contact our Client Services Department.

Analytical Comments: None.

REVISED

NEL Laboratories, Las Vegas

Date: *04-Feb-04*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0312287

Lab ID: L0312287-001 **Collection Date:** 12/17/03 11:00:00 AM
Client Sample ID: MW-09S **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/22/03
Ethylbenzene	ND	5.0		µg/L	1	12/22/03
Toluene	ND	5.0		µg/L	1	12/22/03
Total Xylenes	ND	5.0		µg/L	1	12/22/03
Surr: Dibromofluoromethane	102	65.7-146		%REC	1	12/22/03
Surr: Toluene-d8	101	71.7-132		%REC	1	12/22/03
Surr: 4-Bromofluorobenzene	116	74.5-150		%REC	1	12/22/03

Lab ID: L0312287-002 **Collection Date:** 12/17/03 12:25:00 PM
Client Sample ID: MW-06S **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/22/03
Ethylbenzene	ND	5.0		µg/L	1	12/22/03
Toluene	ND	5.0		µg/L	1	12/22/03
Total Xylenes	ND	5.0		µg/L	1	12/22/03
Surr: Dibromofluoromethane	103	65.7-146		%REC	1	12/22/03
Surr: Toluene-d8	101	71.7-132		%REC	1	12/22/03
Surr: 4-Bromofluorobenzene	119	74.5-150		%REC	1	12/22/03

Lab ID: L0312287-003 **Collection Date:** 12/17/03 12:00:00 PM
Client Sample ID: MW-06D **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/22/03
Ethylbenzene	ND	5.0		µg/L	1	12/22/03
Toluene	ND	5.0		µg/L	1	12/22/03
Total Xylenes	ND	5.0		µg/L	1	12/22/03
Surr: Dibromofluoromethane	101	65.7-146		%REC	1	12/22/03
Surr: Toluene-d8	99.8	71.7-132		%REC	1	12/22/03
Surr: 4-Bromofluorobenzene	106	74.5-150		%REC	1	12/22/03

Qualifiers:
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R - RPD outside accepted recovery limits
E - Value above quantitation range

REVISED

NEL Laboratories, Las Vegas

Date: *04-Feb-04*

CLIENT: Terracon
Project: Huntsman
Lab Order: L0312287

Lab ID: L0312287-004
Client Sample ID: MW-03D
Collection Date: 12/17/03 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/22/03
Ethylbenzene	ND	5.0		µg/L	1	12/22/03
Toluene	ND	5.0		µg/L	1	12/22/03
Total Xylenes	ND	5.0		µg/L	1	12/22/03
Surr: Dibromofluoromethane	102	65.7-146		%REC	1	12/22/03
Surr: Toluene-d8	99.8	71.7-132		%REC	1	12/22/03
Surr: 4-Bromofluorobenzene	108	74.5-150		%REC	1	12/22/03

Lab ID: L0312287-005
Client Sample ID: MW-03S
Collection Date: 12/17/03 3:30:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/23/03
Ethylbenzene	ND	5.0		µg/L	1	12/23/03
Toluene	ND	5.0		µg/L	1	12/23/03
Total Xylenes	ND	5.0		µg/L	1	12/23/03
Surr: Dibromofluoromethane	101	65.7-146		%REC	1	12/23/03
Surr: Toluene-d8	100	71.7-132		%REC	1	12/23/03
Surr: 4-Bromofluorobenzene	104	74.5-150		%REC	1	12/23/03

Lab ID: L0312287-006
Client Sample ID: MW-River-Up
Collection Date: 12/17/03 3:45:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**SW8260B**				Analyst: **GHP-L**
Benzene	ND	5.0		µg/L	1	12/23/03
Ethylbenzene	ND	5.0		µg/L	1	12/23/03
Toluene	ND	5.0		µg/L	1	12/23/03
Total Xylenes	ND	5.0		µg/L	1	12/23/03
Surr: Dibromofluoromethane	99.6	65.7-146		%REC	1	12/23/03
Surr: Toluene-d8	101	71.7-132		%REC	1	12/23/03
Surr: 4-Bromofluorobenzene	102	74.5-150		%REC	1	12/23/03

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

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 68997611	
Test Date: 6/19/2003	
Weather: Sunny Clear	
MW # 9S Sampled By: VT/GR	
WATER LEVEL DATA / EVACUATION DATA	
Date: 6/18/2003	Time: 3:09 pm
Measuring Method:	Casing Diameter (d): 4
Interface probe	Volume of Water in Well: 0.1656(9.53)
Measuring Point:	(.041 x dxd x h) 6.25 18.76
Top of pvc	Evacuation Method: pump
Static Water Level: 5.97	Decontamination Procedure:
Total Well Depth: 15.50	alconox +2 rinses
Height of Water Column (h): 9.53	

EVACUATION RECORD						
Time:	11:54	11:57	12:00	12:02		
Vol. Purged (gal):	Initial	10.	5.	5.		
Water Temperature (F):	78.3	74.1	72.6	73.3		
pH (standard units):	7.00	7.05	7.05	7.04		
Specific Conductivity (uS):	15.99	14.01	13.91	13.85		
Turbidity (subjective):	Yellow slight	Yellow	yellow	yel		
Odor (subjective):	slight	slight	slight	sl.		
Dissolved Oxygen:	—					

SAMPLING DATA	
Date: 6/19 Time: 12:07	Samples Filtered: NO
No. of Sample Containers Collected: 5	Method: n/a
Analysis Requested:	
	Samples Preserved: yes
Laboratory: NEL	Method:

note: Duplicate to be taken from this well.

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 108997611	
Test Date: 6/19/2003	
Weather: Sunny, Clear	
MW # 6D✓ Sampled By: YT/GR	

WATER LEVEL DATA / EVACUATION DATA	
Date: 6/18/2003	Time: 3:18 pm
Measuring Method:	Casing Diameter (d): 4
Interface probe	Volume of Water in Well: 0.656(31.74)
Measuring Point:	(.041 x dxd x h) 20.82 162.46
Top of PVC	Evacuation Method: pump
Static Water Level: 6.26	Decontamination Procedure:
Total Well Depth: 38.00	alconox + 2 rinses
Height of Water Column (h): 31.74	

EVACUATION RECORD						
Time:	12:25	12:35	12:51	13:05		
Vol. Purged (gal):	Initial	20✓	20✓	20✓		
Water Temperature (F):	79.6	78.5	79.1	80.2		
pH (standard units):	6.81	7.16	7.19	7.19		
Specific Conductivity (uS):	17.92	19.03	18.94	19.16		
Turbidity (subjective):	N	N	N	N		
Odor (subjective):	N	N	N	N		
Dissolved Oxygen:	—	—	—	—		

SAMPLING DATA	
Date: 13:07 Time:	Samples Filtered:
No. of Sample Containers Collected: 5	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory: WEL	Method:

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, nm	
Job No. 68997611	
Test Date: 6/19/2003	
Weather: Sunny, clear	
MW # 6S Sampled By: VT/GR	
WATER LEVEL DATA / EVACUATION DATA	
Date: 6/18/2003	Time: 3:16 pm
Measuring Method:	Casing Diameter (d): 4
Interface probe	Volume of Water in Well: 0.656(10.75)
Measuring Point:	(.041 x dxd x h) 7.052 21.156
Top of PVC	Evacuation Method: PUMP
Static Water Level: 6.25	Decontamination Procedure:
Total Well Depth: 17.00	alconox + 2 rinses
Height of Water Column (h): 10.75	

EVACUATION RECORD						
Time:	3:17					
Vol. Purged (gal):	Initial	~~10~~ 8	~~5~~	~~5~~		
Water Temperature (F):	78.6	~~83~~ 83				
pH (standard units):	6.88	7.02				
Specific Conductivity (uS):	1221	12.07				
Turbidity (subjective):	~~1221~~ Y	Y				
Odor (subjective):	Y	Y				
Dissolved Oxygen:						

SAMPLING DATA	
Date: 13:29 Time:	Samples Filtered:
No. of Sample Containers Collected: 5	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory: NEL	Method:

note: usually runs dry.

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 683997611	
Test Date: 6/19/2003	
Weather: Sunny, Clear	
MW # 3D✓ Sampled By: VT/GR	
WATER LEVEL DATA / EVACUATION DATA	
Date: 6/18/2003	Time: 3:26pm
Measuring Method:	Casing Diameter (d): 4
Interface probe	Volume of Water in Well: .041(16)(32.07)
Measuring Point:	(.041 x dxd x h) 21.03 63.11
Top of PVC	Evacuation Method: pump
Static Water Level: 5.43	Decontamination Procedure:
Total Well Depth: 37.50	alconox +2 rinses
Height of Water Column (h): 32.07	

EVACUATION RECORD						
Time:	3:21	3:32	3:46	4:00		
Vol. Purged (gal):	Initial	20✓	20	20		
Water Temperature (F):	78.9	75.1	75.9	74.5		
pH (standard units):	6.95	6.97	7.06	7.09		
Specific Conductivity (uS):	17.75	18.52	18.84	18.58		
Turbidity (subjective):	N	N	N	N		
Odor (subjective):	N	N	N	N		
Dissolved Oxygen:	~	~	~			

SAMPLING DATA	
Date: 6/19 Time: 4:01	Samples Filtered:
No. of Sample Containers Collected: 5	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory: NEL	Method:

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 689976011	
Test Date: 6/19/2003	
Weather: Sunny, clear	
MW # 351 Sampled By: VT/GR	
WATER LEVEL DATA / EVACUATION DATA	
Date: 6/18/2003	Time: 3:24pm
Measuring Method:	Casing Diameter (d): 4
Interface probe	Volume of Water in Well: .041 x 16 x 11.15
Measuring Point: Top of PVC	(.041 x dxd x h) 7.31 21.94
	Evacuation Method: pump
Static Water Level: 5.35'	Decontamination Procedure:
Total Well Depth: 16.50'	alconox + 2 Rinses
Height of Water Column (h): 11.15	

EVACUATION RECORD						
Time:	4:10	4:15				
Vol. Purged (gal):	Initial	~~5~~ 10	5	5		
Water Temperature (F):	~~Init~~	74.3				
pH (standard units):	7.21	7.26				
Specific Conductivity (uS):	12.31	10.93				
Turbidity (subjective):	N	N				
Odor (subjective):	N	N				
Dissolved Oxygen:	—					

SAMPLING DATA	
Date: Time: 4:18	Samples Filtered:
No. of Sample Containers Collected:	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory:	Method:

note: usually runs dry.

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 689976011	
Test Date: 6/19/2003	
Weather: Sunny Clear	
~~MW~~ # River-Up Sampled By: VT/GR	
WATER LEVEL DATA / EVACUATION DATA	
Date:	Time:
Measuring Method:	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point:	(.041 x dxd x h)
	Evacuation Method:
Static Water Level:	Decontamination Procedure:
Total Well Depth:	
Height of Water Column (h):	

EVACUATION RECORD						
Time:						
Vol. Purged (gal):	**Initial**					
Water Temperature (F):						
pH (standard units):						
Specific Conductivity (uS):						
Turbidity (subjective):						
Odor (subjective):						
Dissolved Oxygen:						

SAMPLING DATA	
Date: Time: 1630	Samples Filtered:
No. of Sample Containers Collected:	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory:	Method:

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 60899761 1	
Test Date: 6/19/2003	
Weather: Sunny, Clear	
~~MW #~~ River-Down Sampled By: VT / GR	
WATER LEVEL DATA / EVACUATION DATA	
Date:	Time:
Measuring Method:	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point:	(.041 x dxd x h)
	Evacuation Method:
Static Water Level:	Decontamination Procedure:
Total Well Depth:	
Height of Water Column (h):	

EVACUATION RECORD						
Time:						
Vol. Purged (gal):	**Initial**					
Water Temperature (F):						
pH (standard units):						
Specific Conductivity (uS):						
Turbidity (subjective):						
Odor (subjective):						
Dissolved Oxygen:						

SAMPLING DATA	
Date: Time: 1610 38	Samples Filtered:
No. of Sample Containers Collected:	Method:
Analysis Requested:	
	Samples Preserved:
Laboratory:	Method:

HUNTSMAN BI-ANNUAL FIELD NOTES

6-18-03

Well/ Well Point	Time	Depth to Product	Depth to Water	Product Thickness	Comments
WP32	1:30pm		Dry		
mw15	1:33pm		14.27'		
WP27D	1:37pm	12.95'	13.07'	0.12'	
WP27S	1:41pm	12.80	12.81'	0.01'	
WP26D	1:50pm		8.74'		
WP26S	1:52pm	8.36'	8.71'	0.35'	
WP25	1:59pm		Dry		
WP07	2:01pm		11.52'		
WP01	2:05pm		9.01'		
WP02	2:12pm		7.23'		
WP30	2:17pm		11.09'		
MW11	2:20pm		6.89'		
WP33	2:24pm		8.38'		
WP31	2:27pm				Cannot open
mw16	2:28pm		12.61'		
WP03	2:34pm		6.70'		
mw17	2:37pm		7.31'		
mw07	2:42pm	4.19'	4.20'	0.01'	
mw14	2:45pm		5.16'		
mw04	2:50pm		3.99'		
mw05	2:57pm		4.79'		
WP14	2:58pm	5.2' (SPH)			Observed Locations
mw08	3:04pm		4.55'		
mw09D	3:07pm		dry		
mw09S	3:09pm		5.97'		
mw06S	3:16pm		6.25'		
mw06D	3:18pm		6.26'		
mw03S	3:24pm		5.35'		
mw03D	3:26pm		5.43'		
mw01	3:33pm		5.02'		
mw12	3:38pm		4.42'		

HUNTSMAN BI-ANNUAL FIELD NOTES

12/16/2003

Well/ Well Point	Time	Depth to Product	Depth to Water	Product Thickness	Comments
mw-01	2:09		6.88		
mw-12	2:13		6.26		
wp-14	2:25	6.00			tar

HUNTSMAN BI-ANNUAL FIELD NOTES

12/10/2003

Well/ Well Point	Time	Depth to Product	Depth to Water	Product Thickness	Comments
MW-05	10:40		6.85		
MW-08	10:48		6.59		
MW-04	10:58		5.98		
MW-14	11:06		7.67		Sheen
MW-07	11:08		6.27		
MW-17	11:12		9.37		
WP-03	11:20		—		Dry
WP-02	11:24		9.28		
WP-01	11:26		11.10		
MW-15	11:34		10.24		
WP-32	11:38		—		Dry
WP-27S	11:40		14.69		
WP-27D	11:43	14.63	14.89	0.26	
MW-16	11:51	—	14.64		
WP-31	11:54		—		Dry
WP-07	11:58		11.60		Sheen
WP-25	12:00		—		Dry
WP-26S	12:08	9.71	10.31	0.60	
WP-26D	12:10		10.90		
MW-10	12:15	10.10	10.23	0.13	
WP-30	12:18		11.53		
WP-33	12:25		8.94		
MW-11	12:30		10.23		
MW-09S	1:50		7.99		
MW-09D	1:53		—		
MW-06S	1:55		8.27		
MW-06D	1:58		8.29		
MW-03S	2:00		7.31		
MW-03D	2:02		7.39		

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 089976.11	
Test Date: 12/17/2003	
Weather: cool, sunny ~58°	
MW # 09 S	Sampled By: VT/PV

WATER LEVEL DATA / EVACUATION DATA	
Date: 12/16/2003	Time: 1150
Measuring Method: Interface probe	Casing Diameter (d): 4
	Volume of Water in Well:
Measuring Point: top of PVC	(.041 x dxd x h)
	Evacuation Method: pump
Static Water Level: 7.99	Decontamination Procedure:
Total Well Depth: 13.6	alconox + 2 rinses
Height of Water Column (h): 5.51	

EVACUATION RECORD						
Time:	10:45	10:48	10:51	10:56		
Vol. Purged (gal):	Initial	5 -	5 -	5 -		
Water Temperature (F):	54.3	55.9	59.2	59.3		
pH (standard units):	6.74	7.01	7.17	7.10		
Specific Conductivity (uS):	15.13	15.03	14.92	15.22		
Turbidity (subjective):	-	-	-	-		
Odor (subjective):	slight	slight	slight			
Dissolved Oxygen:						

SAMPLING DATA	
Date: 12/17/2003 Time: 11:00 am	Samples Filtered: NO
No. of Sample Containers Collected: 3	Method: N/a
Analysis Requested: 8021 BTEX	
	Samples Preserved: Yes
Laboratory: NEL	Method: HCl, ice

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 689976011	
Test Date: 12/17/2003	
Weather: cool, sunny ~58°	
MW # OW-2 Sampled By: VT/FV	
WATER LEVEL DATA / EVACUATION DATA	
Date: 12/16/2003	Time: 1:58
Measuring Method: Interface Probe	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point: top of PVC	(.041 x dxd x h)
	Evacuation Method: pump
Static Water Level: 8.29	Decontamination Procedure:
Total Well Depth: 38.00	Alconox + 2 Rinses
Height of Water Column (h): 29.71	

EVACUATION RECORD						
Time:	11:23	1:32	11:45	11:59		
Vol. Purged (gal):	Initial	20	20	20		
Water Temperature (F):	57.6	61.2	62.4	62.8		
pH (standard units):	6.48	7.24	7.15	7.30		
Specific Conductivity (uS):	17.48	18.98	18.87	18.99		
Turbidity (subjective):	-	-	-	-		
Odor (subjective):	-	-	-	-		
Dissolved Oxygen:						

SAMPLING DATA	
Date: 12/17/2003 Time: 12:00	Samples Filtered: No
No. of Sample Containers Collected: 3	Method: N/A
Analysis Requested: 8021 BTEX	
	Samples Preserved: Yes
Laboratory: NFL	Method: HCl, Ice

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA						
Job Name: Huntsman						
Job Location: Sunland Park, NM						
Job No. 68997611						
Test Date: 12/17/2003						
Weather: cool, sunny ~58°						
MW # OW3 Sampled By: VT/FV						

WATER LEVEL DATA / EVACUATION DATA	
Date: 12/16/2003	Time: 2:00
Measuring Method: Interface Probe	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point: top of PVC	(.041 x dxd x h)
	Evacuation Method: Pump
Static Water Level: 8.27	Decontamination Procedure:
Total Well Depth: 17.00	alconox + 2 rinses
Height of Water Column (h): 8.73	

EVACUATION RECORD						
Time:	12:07	12:09	12:19			
Vol. Purged (gal):	Initial	5	5.1	5		
Water Temperature (F):	62.6	63.2	63.5			
pH (standard units):	7.16	7.25	7.07			
Specific Conductivity (uS):	10.33	10.34	11.94			
Turbidity (subjective):	-	-				
Odor (subjective):	-	-				
Dissolved Oxygen:						

SAMPLING DATA	
Date: 12/17/2003 Time: 12:25	Samples Filtered: NO
No. of Sample Containers Collected: 3	Method: N/A
Analysis Requested: 8021 BTEX	
	Samples Preserved: Yes
Laboratory: NEL	Method: HCl, Ice

purged dry!

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 689976011	
Test Date: 12/17/2003	
Weather: Cool, Sunny, ~58°	
MW # 030 Sampled By: VT/FV	
WATER LEVEL DATA / EVACUATION DATA	
Date: 12/16/2003	Time: 2:02
Measuring Method: Interface Probe.	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point: top of PVC	(.041 x dxd x h)
	Evacuation Method:
Static Water Level: 7.39	Decontamination Procedure:
Total Well Depth: 37.5	
Height of Water Column (h):	

EVACUATION RECORD						
Time:	2:26	2:34	2:47	3:00		
Vol. Purged (gal):	Initial	20	20	20		
Water Temperature (F):	62.8	60.5	61.8	60.8		
pH (standard units):	6.44	7.19	7.16	7.23		
Specific Conductivity (uS):	16.74	17.48	17.45	17.44		
Turbidity (subjective):	-	-	-	-		
Odor (subjective):	-	-	-	-		
Dissolved Oxygen:						

SAMPLING DATA	
Date: 12/17/2003 Time: 3:00	Samples Filtered: No
No. of Sample Containers Collected: 3	Method: N/A
Analysis Requested: 8021 BTEX	
	Samples Preserved: Yes
Laboratory: NET	Method: HCl, Ice.

Duplicate sample pulled here!

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park, NM	
Job No. 089971011	
Test Date: 12/17/2003	
Weather: cool, sunny ~58°	
MW # 03S Sampled By: VT/PV	
WATER LEVEL DATA / EVACUATION DATA	
Date: 12/16/2003	Time: 2:00
Measuring Method: Interface Probe	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point: top of PVC	(.041 x dxd x h)
	Evacuation Method:
Static Water Level: 7.31	Decontamination Procedure:
Total Well Depth: 16.5	
Height of Water Column (h): 9.19	

EVACUATION RECORD

Time:	3:10	3:13	3:18			
Vol. Purged (gal):	Initial	5	5 3	5		
Water Temperature (F):	61.2	60.8	60.6			
pH (standard units):	7.34	7.44	7.37			
Specific Conductivity (uS):	11.16	799	11.88			
Turbidity (subjective):	-	-	-			
Odor (subjective):	-	-	-			
Dissolved Oxygen:						

SAMPLING DATA	
Date: 12/17/2003 Time: 3:30	Samples Filtered: No
No. of Sample Containers Collected: 3	Method: N/A
Analysis Requested: 8021 BTEX	
	Samples Preserved: yes
Laboratory: NEL	Method: HCl, Ice

-purged dry!

GROUNDWATER SAMPLING DATA SUMMARY

GENERAL DATA	
Job Name: Huntsman	
Job Location: Sunland Park	
Job No. 089976011	
Test Date: 12/17/2003	
Weather:	
MW #	Sampled By:

WATER LEVEL DATA / EVACUATION DATA	
Date:	Time:
Measuring Method:	Casing Diameter (d):
	Volume of Water in Well:
Measuring Point:	(.041 x dxd x h)
	Evacuation Method:
Static Water Level:	Decontamination Procedure:
Total Well Depth:	
Height of Water Column (h):	

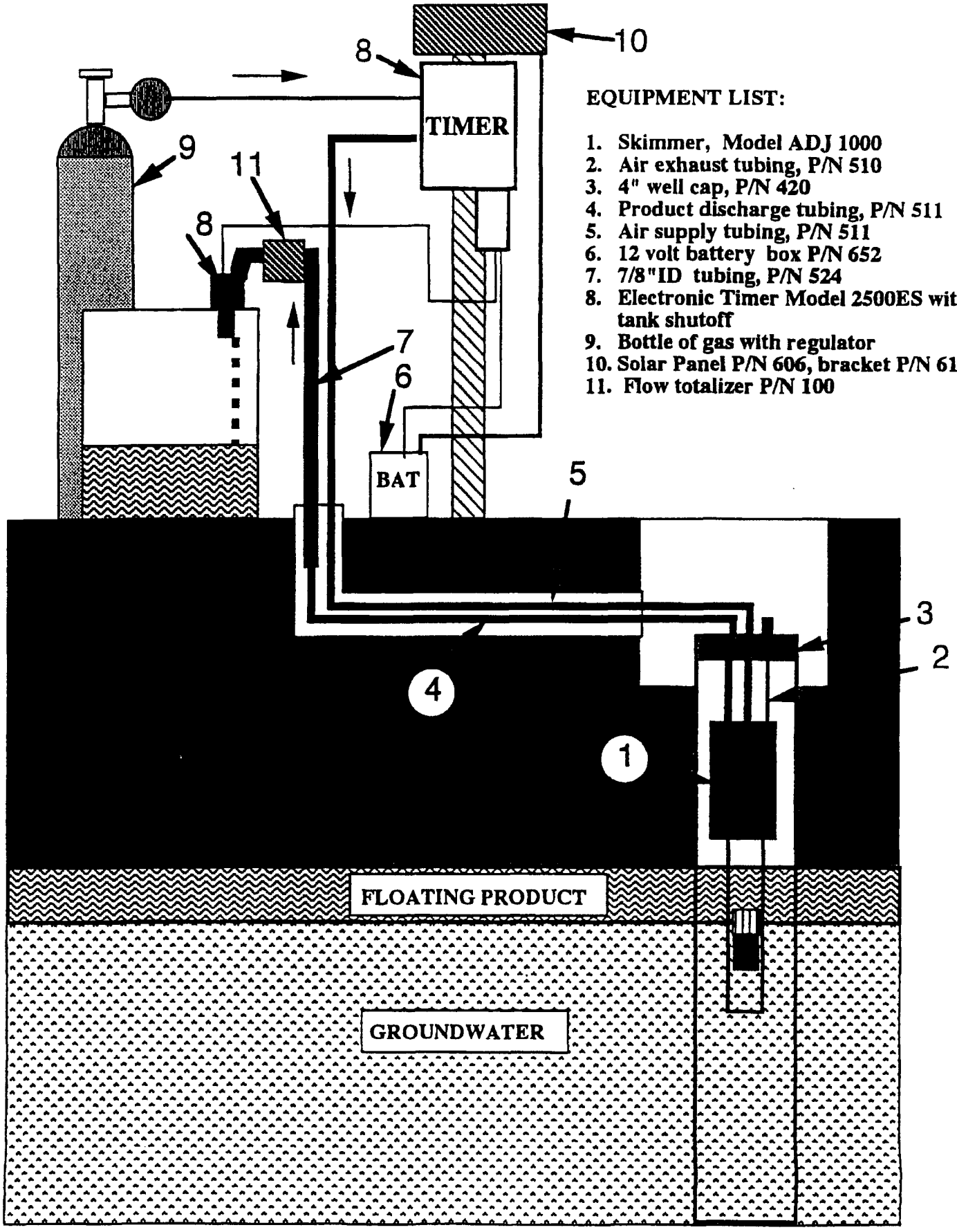
EVACUATION RECORD						
Time:						
Vol. Purged (gal):	**Initial**					
Water Temperature (F):						
pH (standard units):						
Specific Conductivity (uS):						
Turbidity (subjective):						
Odor (subjective):						
Dissolved Oxygen:						

SAMPLING DATA	
Date: Time:	Samples Filtered: ND
No. of Sample Containers Collected: 3 / 3	Method: N/A
Analysis Requested: 8021 BTEX	
	Samples Preserved: Yes
Laboratory: NET	Method: HCl, Ice.

Riser-up 3:45pm

Riser-Down 3:55pm

XITECH LNAPL RECOVERY SYSTEM
Without the use of AC Power

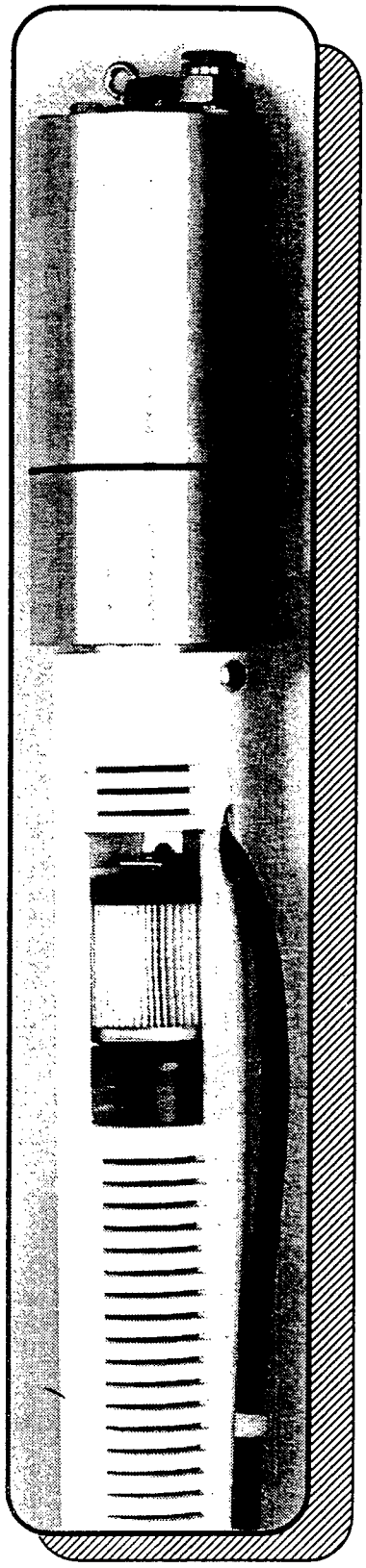


EQUIPMENT LIST:

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

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

2500ES Electronic Timer with Tank Shut-off

Without the use of AC power

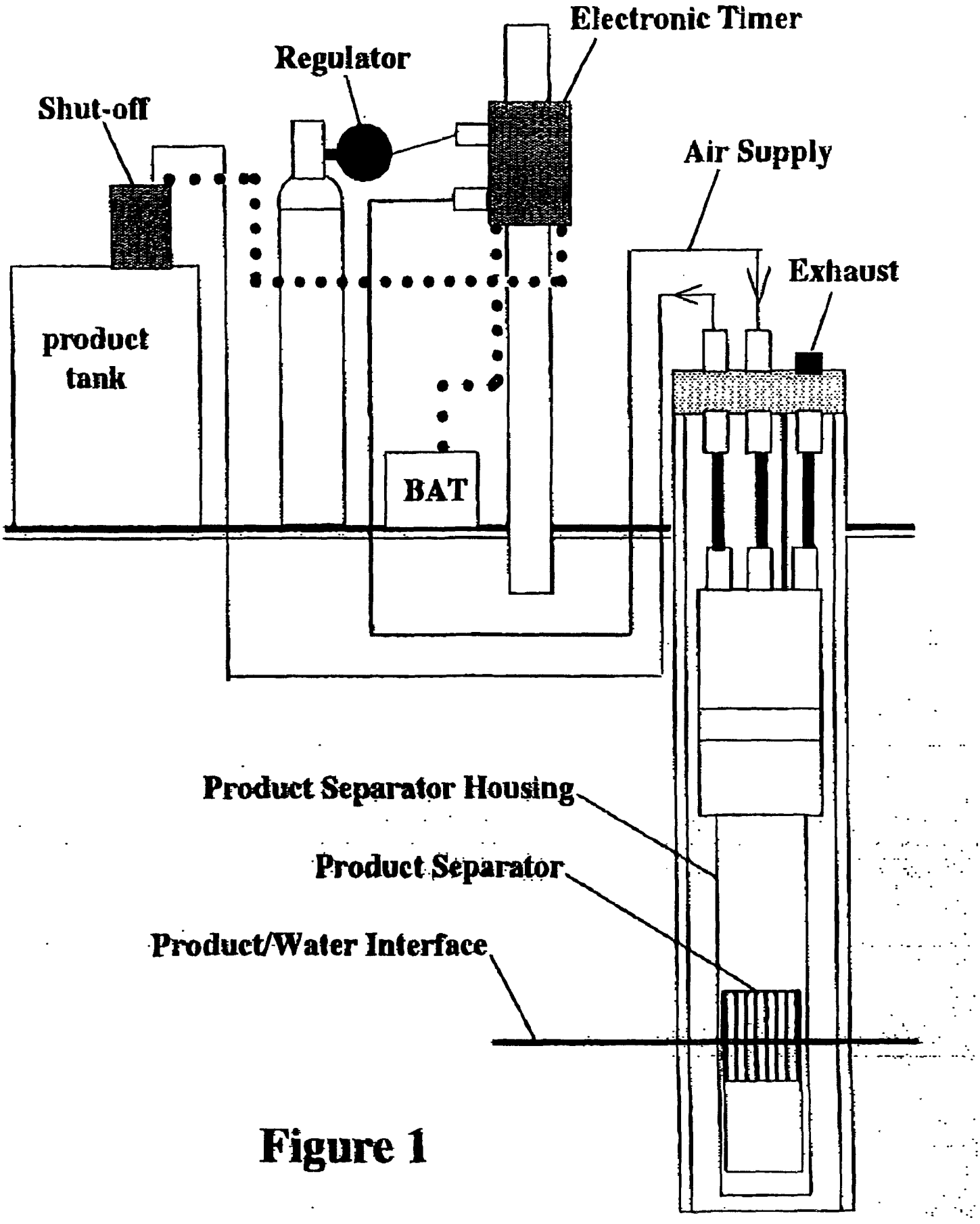


Figure 1

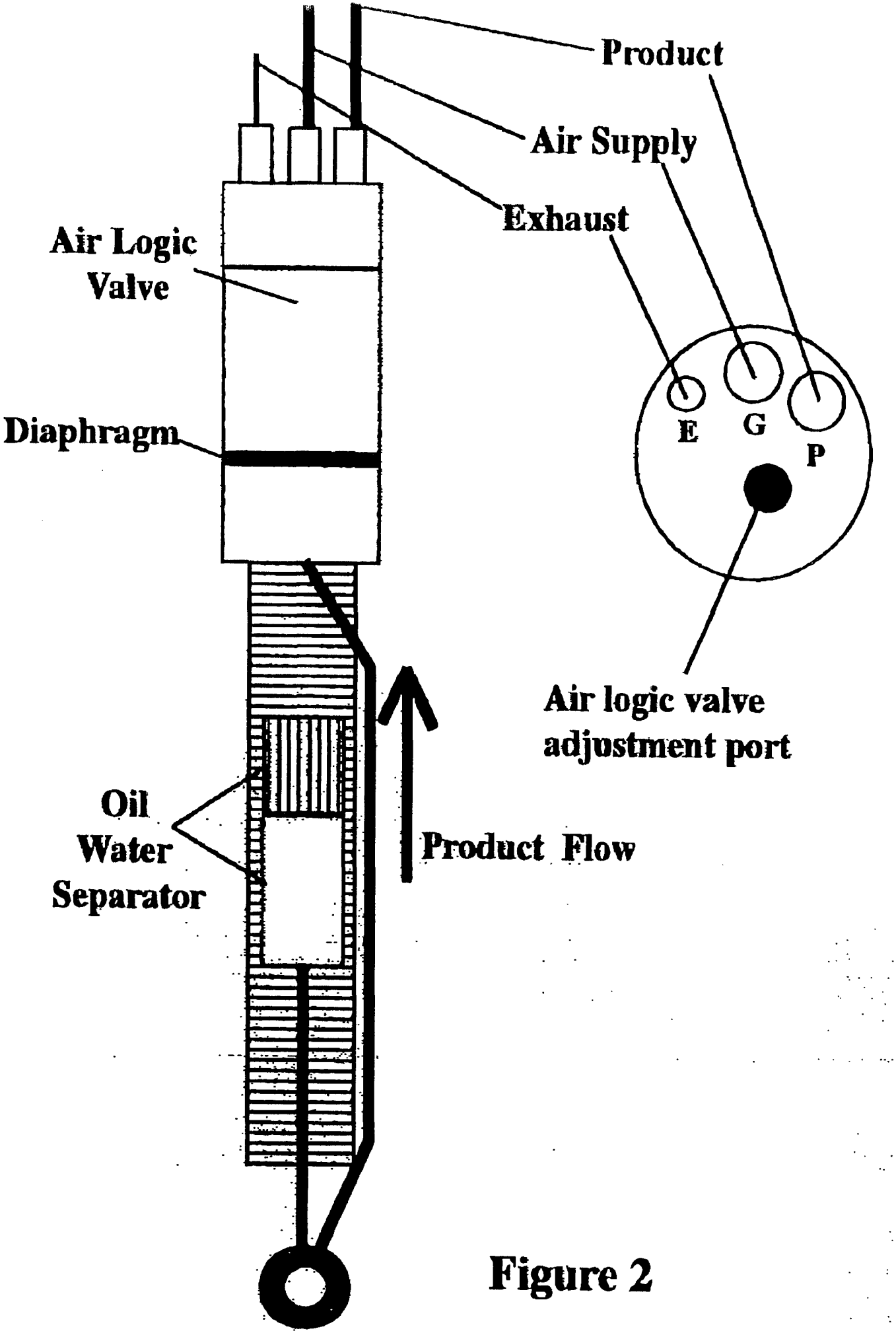

Product
Air Supply
Exhaust
Air Logic Valve
Diaphragm
E
G
P
Air logic valve adjustment port
Oil Water Separator
Product Flow

Figure 2

2500ES Electronic Timer

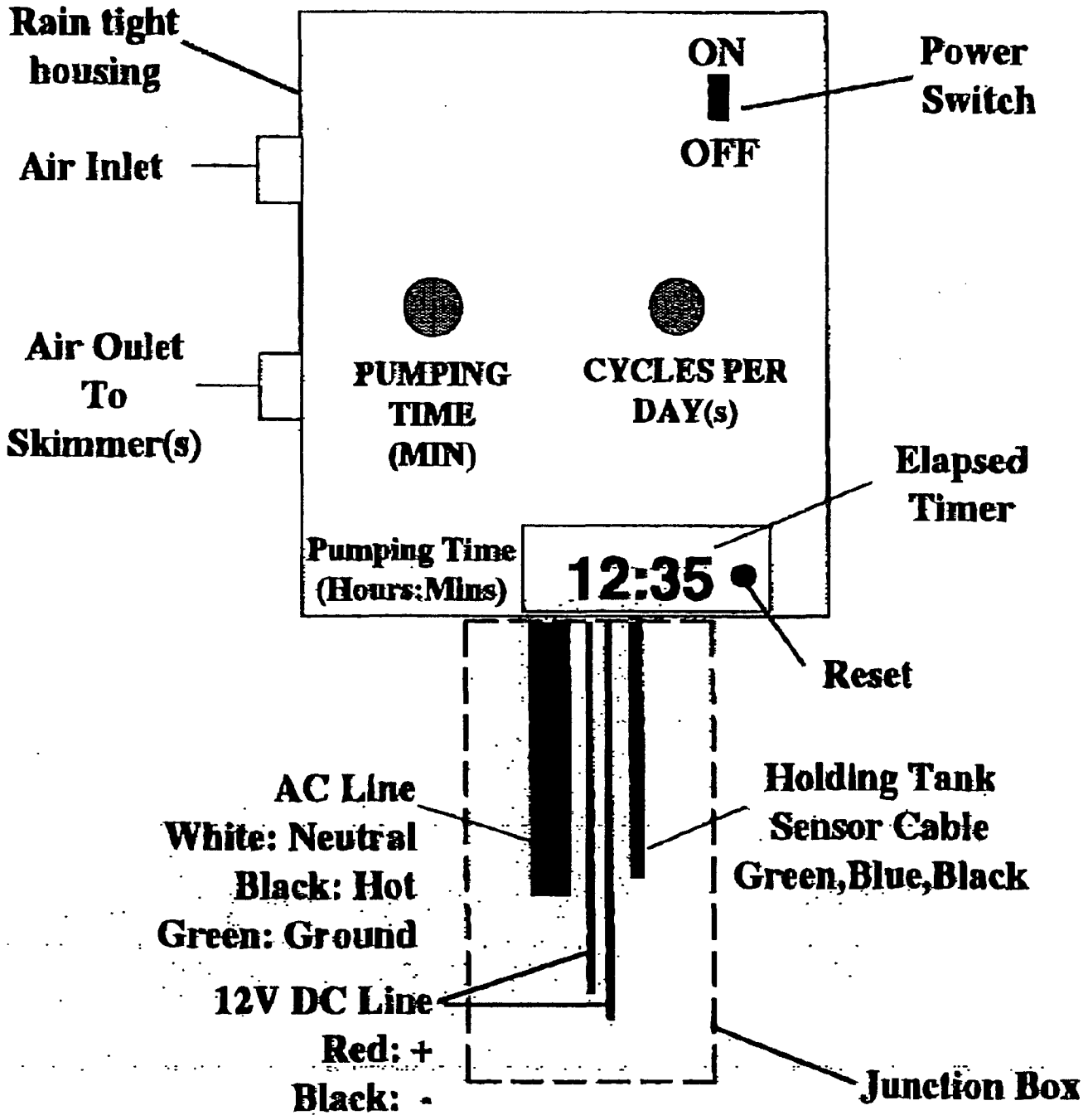


Figure 3

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N/a
Manifest Doc. No. 121201.
2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address: Huntsman Polymer Corporation, 2400 S. Grandview Ave, Odessa, TX 79760 — Former Brickland Refinery, McNutt Rd, Sunland Park, NM

4. Generator's Phone (915) 640-8354

5. Transporter 1 Company Name: TERRACON ~~Rhino Po Box 57190 ABQ NM~~
6. US EPA ID Number: N/a
A. Transporter's Phone: 505.527.1700 ~~505.247.4646~~

7. Transporter 2 Company Name:
8. US EPA ID Number:
B. Transporter's Phone:

9. Designated Facility Name and Site Address: Rhino Environmental, 2 miles North of Newman, Otero County DP1051
10. US EPA ID Number: N/a
C. Facility's Phone: 505.644.0932

11. Waste Shipping Name and Description: Contaminated Ground Water	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Hydrocarbon Impacted Water	1	TANK	160	gal
b. — N/a —				
c. — N/a —				
d. — N/a —				

D. Additional Descriptions for Materials Listed Above: — N/a —

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: Prevent Contact with potable water.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: As Agent for Huntsman Polymers Corp – Victoria Trujillo
Signature: Victoria Trujillo
Month/Day/Year: 10/6/2003

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Terracon – Fred Small
Signature: F Small
Month/Day/Year: 1/6/2003

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month/Day/Year:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Jose Fernandez
Signature: [signature]
Month/Day/Year: 1/6/2003

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

TRANSPORTER #1

12-BLS-C5 Rev. 12/98

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. | 2. Page 1 of

3. Generator's Name and Mailing Address
Huntsman Polymers Corporation
2400 S. Grandview Avenue
Odessa, Texas 79760

Former Brickland Refinery
McNutt Road
Sunland Park, NM

4. Generator's Phone (915) 640-8354

5. Transporter 1 Company Name: TERRACON | 6. US EPA ID Number | A. Transporter's Phone: (505) 527-1700

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
RHINO Environmental
2 Miles North of Newmandd
Otero, County, New Mexico

10. US EPA ID Number: N/A

C. Facility's Phone: 915-842-9911 ~~505.644.0932~~

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
Contaminated Groundwater				
a. Hydrocarbon Impacted Water	1	Tank	160	Gal
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
Suspected Hydrocarbon Contamination

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Water is non-potable. Prevent contact with potable water.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: As Agent for Huntsman Polymers Corp.: Fred Small | Signature: Fred Small | Month 12 | Day 17 | Year 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: FRED V. SMALL | Signature: Fred Small | Month 12 | Day 23 | Year 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space
Line # 5
TERRACON
1630 HICKORY LOOP, SUITE H
LAS CRUCES, NM 88005

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Gerry Rivers | Signature | Month 12 | Day 23 | Year 03

GENERATOR — TRANSPORTER — FACILITY

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Neenah, WI 54957-0368