GW - 191

MONITORING REPORTS

DATE:

2002 - 1999

KINDER MORGAN INC

July 22, 2002

Mr. Wayne Price
New Mexico Oil Conversation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Former Hobbs Gas Plant – GW-191
2001 Annual Groundwater Monitoring Report
Lea County, New Mexico

Dear Mr. Price:

Enclosed please find the 2001 Annual Groundwater Monitoring Report for the above referenced facility. Please accept our apologies for the delay in submitting this report, as we are aware the due date for future annual reports will be February 1 of each year.

If you have any questions or require additional information, please contact me at (713) 369-9193.

Sincerely,
KINDER MORGAN, INC.

John M. Greer
Manager, Environmental Remediation

cc: Ms. Donna Williams – New Mexico OCD – Hobbs

Eco-logical
Environmental Services Inc.

2001 ANNUAL GROUNDWATER MONITORING REPORT

DISCHARGE PLAN GW-191

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

KINDER MORGAN, INC.
ONE ALLEN CENTER
500 DALLAS STREET, SUITE 1000
HOUSTON, TEXAS 77002

2200 Market Street 79703 • (915) 520-7535 • FAX (915) 520-7737

2001 ANNUAL GROUNDWATER MONITORING REPORT DISCHARGE PLAN GW-191

FORMER HOBBS GAS PLANT HOBBS, NEW MEXICO

DATE PREPARED:
JUNE 20, 2002

ECO-LOGICAL PROJECT NO.
279-512

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:
KINDER MORGAN, INC.

PREPARED BY:
ECO-LOGICAL ENVIRONMENTAL SERVICES, INC.

Shane Estep, Project Manager

Scott Springer, Project Geologist

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1.0 EXECUTIVE SUMMARY

The main objective of the semi-annual groundwater sampling event is to evaluate the concentration and distribution of dissolved phase hydrocarbons, and to monitor any changes from the baseline condition as determined from previous sampling events at the facility. The purpose of this report is to fulfill the requirements of the groundwater monitoring plan approved by the New Mexico Oil Conservation Division (OCD). This report covers the semi-annual groundwater monitoring and sampling events conducted during 2001.

The Abatement Plan was modified in December 1998 and December 2000. Modifications to the plan removed monitor wells MW-2, MW-4 and MW-8 from the requirements of sampling and changed the quarterly sampling to semi-annual sampling.

A total of ten (10) monitor wells are present at the site with eight (8) of the wells being inside the plant property and two (2) located outside the southwestern area of the former plant site.

The plant has not been in operation for over five (5) years. In the summer of 2000 all equipment belonging to Kinder Morgan, Inc (KMI) was removed. The remaining equipment and structures have been sold to Transwestern Pipeline Company.

The latest analytical results showed that benzene levels in monitor well MW-6 continue to be present above the New Mexico Water Quality Control Commission (WQCC) Guideline level of 0.01 parts per million (ppm), at the concentration of 0.02 ppm in January. Monitor well MW-6 was dry during the October sampling event. Analytical data from monitor well MW-7 indicted that it exceeded the guideline level during the October sampling event. Prior to the October sampling event benzene had not been detected in monitor well MW-7.

During the January sampling event all monitor wells located at the site were non-detect for benzene, toluene, ethylbenzene and xylene (BTEX) with the exception of MW-6. Monitor well MW-6 contained benzene at a concentration of 0.02 ppm and MW-5 was dry during this sampling event.

During the October sampling event all monitor wells located at the site were non-detect for BTEX with the exception of MW-3, and MW-7. Monitor well MW-3 contained benzene at a concentration of 0.0059 ppm which is below the WQCC guidelines. Monitor well MW-7 contained benzene at a concentration of 0.0252 ppm which is above the WQCC guidelines. Four (4) monitor wells MW-1, MW-4, MW-5 and MW-6 were dry during this sampling event.

Only one monitor well, MW-9, has historically contained chlorides above the established guidelines (20 NMAC 6.2.3103) of 250 ppm. The chlorides in this monitor well started at 42 ppm in January and have increased to 166 ppm by the September sampling event. Monitor well MW-9 has a history of high and low period of chlorides, therefore the increase in this years concentrations does not indicate an increasing trend in the chloride levels.

2.0 FIELD PROCEDURES AND DATA

The initial task was to detect the static groundwater levels relative to the north side of the top of each monitor well casing and to examine each monitor well for the presence of PSH using an interface probe with a calibrated tape (Table 1). Monitor wells were measured from the least impacted to the most impacted as determined by previous sampling events and field observations. All equipment was properly decontaminated between gauging of monitor wells.

At the time of the January sampling event the depth to the static groundwater surface at the site ranged from 57.84 to 64.45 feet below the ground surface. Monitor well MW-2 has had the same groundwater measurement (2 inches above the total well depth) since the January 2000 monitoring event indicating that water is trapped in the bottom cap and that the actual water level has dropped below the screened interval of the casing. During this sampling event monitor well MW-5 was not sampled due to the lack of water.

At the time of the September sampling event the depth to the static groundwater surface at the site ranged from 58.91 to 66.51 feet below the ground surface. During this sampling event monitor wells MW-1, MW-5 and MW-6 were not sampled due to the lack of water.

After obtaining all measurements, the volume of water in each casing was calculated. These wells were then purged by hand bailing or using a submersible electric pump system that was washed and rinsed before and after each use. The wells were purged until three (3) well volumes were retrieved or until dry. After allowing the wells to recover to within 70 percent of the original depths, samples were collected using a new, single use, one (1) liter bailer.

Groundwater samples were then submitted to TraceAnalysis in Lubbock, Texas for analysis. Based on previous analytical results and as approved by the OCD letter dated December 15, 1998, a minimized analytical schedule was performed. All monitor wells sampled were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA SW846-8021B. Monitor wells MW-7, MW-9 and MW-10 were also analyzed for total chlorides.

Each sample collected for chlorides was placed into one (1) 250 ml plastic jar with no preservative and each sample collected for BTEX was placed into two (2) VOA jars with Teflon lids preserved with hydrochloric acid. Samples were labeled with the sample identification, job name, sample location, sampler name, preservative, and sample date. This information was transferred to a chain-of-custody (COC). After sampling, the jars were placed on ice and maintained at 4° Celsius.

A summary of groundwater analytical results are presented in Tables 13 through 22. Hydrocarbon distribution maps are presented in Figures 5 through 6. Copies of the certified laboratory reports and COC documentation for the monitor period are presented in Sections 4 and 5.

3.0 CHRONOLOGY OF EVENTS

The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995, and noted several deficiencies. The deficiencies, and the related directives, were detailed in a letter issued by OCD on December 6, 1995. The letter was issued under OCD statutory authority and requires that KN Energy undertake and complete certain activities to fulfill OCD requirements. Previous activities undertaken by KN Energy and the substance of activities reflected in this report, are to fulfill the requirements directed by OCD. The following chronology briefly summarizes the relevant activities conducted at the facility:

1994	KN Energy took possession of the plant in 1994 following a merger with American Oil and Gas.
Dec. 6, 1995	OCD directive issued to KN Energy on the initial items requiring action as a result of the Oct. 16, 1995 inspection.
Jan. 26, 1996	KN Energy initial response to OCD directive.
Jan. 30, 1996	Work Plan for soils delineation submitted with the inclusion that one monitor well would be installed if impacted soil was discovered within ten feet of the groundwater.
Mar. 27, 1996	Delineation Work Plan approved by OCD with report due July1, 1996.
June 6, 1996	Soils Delineation Investigation Report filed with scope of work for extended Groundwater Delineation included.
Sept. 26, 1996	Directive received from OCD requiring the full delineation work plan of all contamination at the site including groundwater be submitted for approval.
Oct. 9, 1996	Work Plan for groundwater delineation filed as per the Sept. 26, 1996 OCD directive.
Oct. 15, 1996	Approval of groundwater delineation work plan received from OCD.
Dec. 11, 1996	KN announces impending closure of plant. Eco-logical submits requests for extension of time and change from Discharge Permit to Closure Plan, with the installation of additional monitor wells.
Dec. 17, 1996	OCD approves request for extension of time and the additional monitor wells.
Jan. 14, 1997	Additional groundwater monitoring well installed, and Abatement Plan and Closure Plan Report were submission to OCD as per Dec. 17, 1996 OCD directive.

Feb. 7, 1997	Phone conference held with OCD, Eco-logical and KN personnel to discuss results of report and proposed work plan.
Feb. 25, 1997	After review of Abatement Plan and phone conference, OCD issued a directive stating that the existing monitor wells also be tested for the entire suite of 20 NMAC 6.2.3103 constituents excluding uranium, radioactivity and PCB's, and additional wells be installed to define the points of compliance in the groundwater. An update/amendment report to be submitted by May 25, 1997.
March 13, 1997	Response to Feb. 1997 OCD letter submitted outlining the points to be followed in the extended delineation work plan.
April 1997	Three additional monitor wells installed and a quarterly sampling and monitoring event occurs.
May 10, 1997	Submission of updated Abatement Report filed with OCD as per the February. 25, 1997 directive.
June 26, 1997	OCD approves the updated Abatement Report including reducing the testing to BTEX, Naphthalene, and Chlorides, and that an annual report be submitted by June 1, 1998.
July 1997	Quarterly Sampling and Monitoring Event.
Oct. 1997	Quarterly Sampling and Monitoring Event.
October 1997	Sump, Cryoskid, Flare Pit, and Compressor soils excavated and stock piled prior to remediation pursuant to the approved Stage 1 Abatement Plan and Site Closure Plan dated January 14, 1997.
November 1997	Initial Treatment of excavated soils performed.
January 1998	Quarterly Sampling and Monitoring Event.
March 1998	Submission of Annual Groundwater Sampling Report to the OCD, with a recommendation to stop testing for Naphthalene and discontinue sampling of MW-2, MW-4 and MW-8.
April 3, 1998	Quarterly Sampling and Monitoring Event.
June 25, 1998	Quarterly Sampling and Monitoring Event. Impacted stockpiled soil retreated.

October 2, 1998	Quarterly Sampling and Monitoring Event. Stock piled soil tested below OCD levels.
November 1998	Backfilling of excavations performed.
December 1998	OCD contacted by Eco-logical regarding January 1998 Annual Groundwater Report and Reduced Analyses Plan. OCD approved reduced analyses in letter dated December 15, 1998.
January 1999	Quarterly Sampling and Monitoring Event.
April 1999	Quarterly Sampling and Monitoring Event.
July 1999	Quarterly Sampling and Monitoring Event.
October 1999	Quarterly Sampling and Monitoring Event.
October 1999	K N Energy, Inc. changed name to Kinder Morgan, Inc. (Parent company of American Processing, L.P.)
January 2000	Quarterly Sampling and Monitoring Event.
April 2000	Quarterly Sampling and Monitoring Event.
June 2000	Removal of all KMI Equipment.
July 2000	Quarterly Sampling and Monitoring Event.
October 2000	Quarterly Sampling and Monitoring Event.
Dec. 4, 2000	KMI issued letter to OCD to renew Discharge Plan GW191 and proposes a reduction in groundwater sampling freqency for the year 2001. The selected monitor wells will be sampled the first and third quarters of the year.
January 24, 2001	Sampling and Monitoring Event.
February 2001	2000 Annual Report.
March 23, 2001	OCD issues Discharge Plan Renewal, GW-191
October 18, 2001	Sampling and Monitoring Event.

4.0 CONCLUSIONS

The plant operations have ceased at the site and the sources that may have caused the impacts to the groundwater have been removed. In addition, the removed impacted soils have been remediated to meet WQCC Guideline levels and have been returned to the excavations per the Soils Work Plan approved in January 1996. Two (2) of the ten (10) monitor wells (MW-6 and MW-7) at the Former Hobbs Gas Plant have shown dissolved phase hydrocarbons (benzene) at levels above the OCD Guidelines at different times throughout the year.

- Eighteen (18) groundwater monitoring and sampling events have been conducted at this site.
- Groundwater has dropped an average of 4.9 feet since the first sampling event of October 1996.
- During the year dissolved phase hydrocarbons have been detected above OCD Guidelines in two (2) of the ten (10) monitor wells at the site (MW-6 and MW-7) however, no free-phase hydrocarbons have been observed at the site.
- Only MW-6 has consistently contained concentrations of benzene above the WQCC Guideline level. The highest concentration down-gradient from the source is in monitor well MW-7 at a concentration of 0.0252 ppm. As of the October 2001 sampling event, monitor well MW-6 was dry.
- Soil cleanup objectives of the January 1997 Abatement and Closure plan have been met.

The level of benzene in MW-6 has been above the WQCC Guideline level of 0.01 ppm, but has been consistently declining. Benzene levels in MW-5 have remained below action levels during all of the 1999 and 2000 sampling events, but did not have enough water to sample in 2001. Chloride levels present in MW-9 have decreased to below WQCC levels in the last two sampling events. Based on interviews with American Processing personnel no source of the chloride can be placed on former operations of the plant. The source of the chloride is not known and is **not** believed to be from the plant.

The semi-annual monitoring plan approved by the OCD in March 23, 2001 and the OCD Discharge Plan Renewal will be continued in 2002.

5.0 QUALITY ASSURANCE / QUALITY CONTROL PROCEDURES

Field quality assurance/quality control (QA/QC) measures consisted of equipment decontamination, use of disposable sampling equipment, calibration of field instruments, ensuring that the samples were analyzed within the EPA holding times, documentation of work activities in a bound logbook, and adherence to strict chain-of-custody protocol. The laboratory QA/QC measures were based on guidance published in the most current edition of the EPA Test Methods for Evaluating Solid Waste SW-846.

5.1 Trip Blanks

Trip blanks were analyzed for BTEX to detect potential cross contamination of constituents between aqueous samples during shipment.

5.2 Field Duplicates

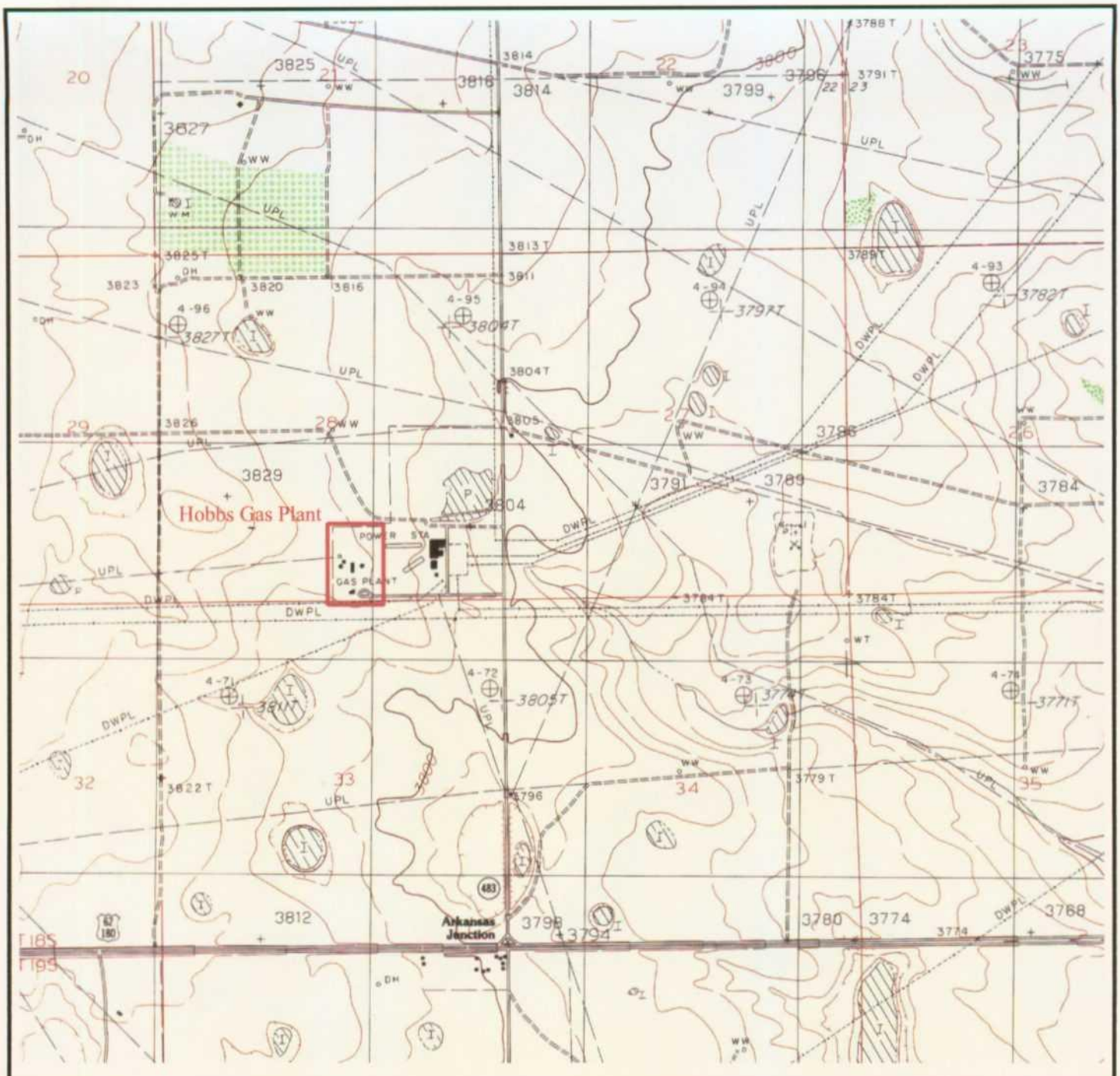
Duplicate sample of monitoring well MW-6 during the January sampling event was collected to provide a check on the precision of the laboratory techniques. Test results of the duplicate sample are within 13% of the original sample for total BTEX.

Sample	Benzene	Toluene	Ethyl benzene	Xylene	BTEX	Test Method
MW-6	0.020	<0.005	<0.005	<0.005	0.020	EPA 8021B
MW-6D	0.023	<0.005	<0.005	<0.005	0.023	EPA 8021B

Reported laboratory quality control parameters do not appear to indicate suspect results. No damaged or compromised containers were noted. No unusual relative percent difference (RPD) results were noted.

5.3 Holding Time Limits

Holding times before extraction and analysis are specified in Test Methods for Evaluating Solid Waste Physical / Chemical Methods, SW-846 by EPA. All laboratory analysis was preformed within specified holding times.



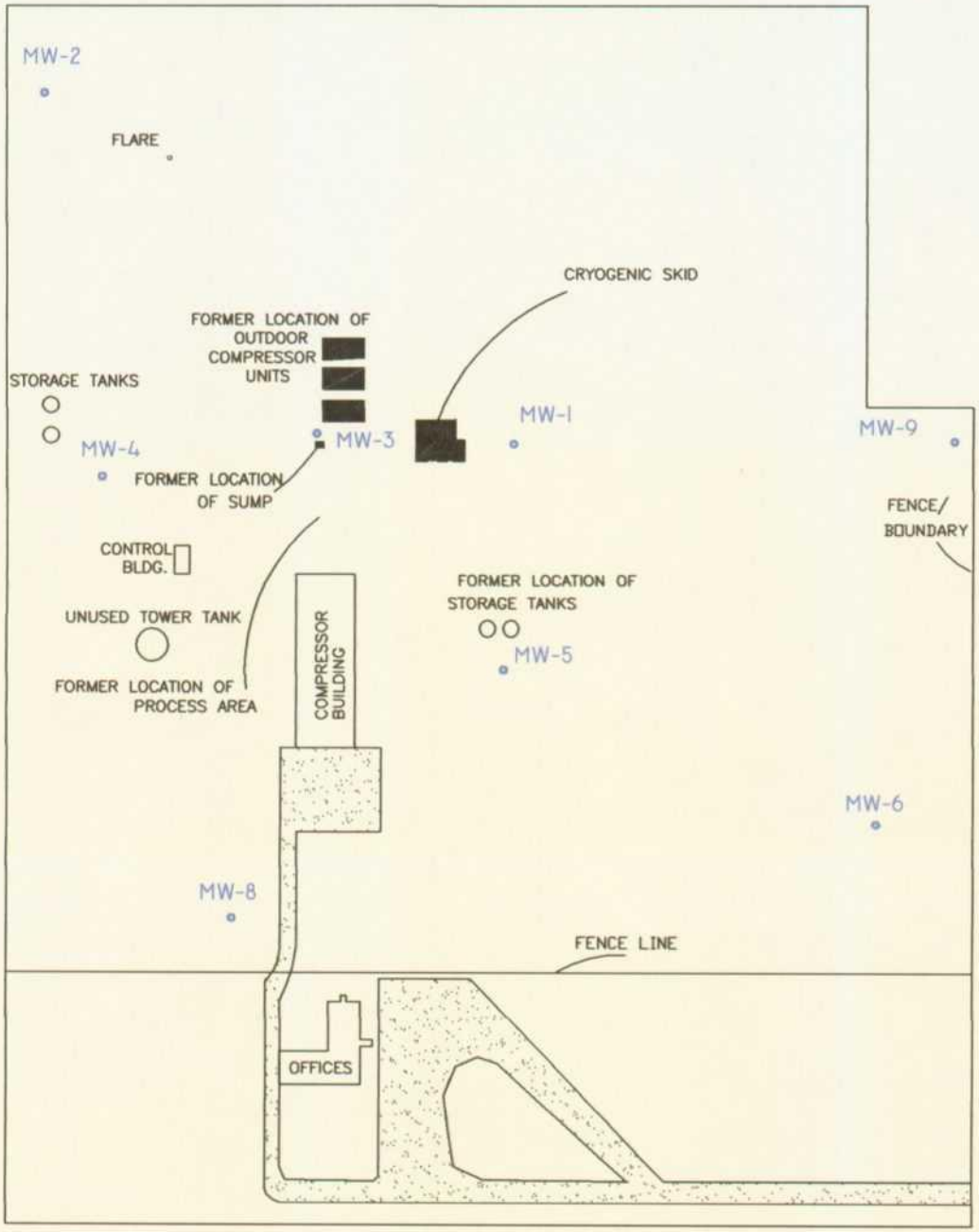
Site Location

SITE COORDINATES: 24.08 ACRES IN SECTION 28, T18S, R36E, LEA COUNTY, NEW MEXICO
Source: Monument North, NM / Lea County, 1985
Project #: 279 / 512 Date: July 8, 1999

FIGURE 1
GENERAL SITE LOCATION MAP
HOBBS NATURAL GAS PLANT
LEA COUNTY, NEW MEXICO

PREPARED BY

Eco-logical
Environmental Services Inc.



SITE MAP - 2001

KINDER MORGAN, INC.- HOBBS GAS PLANT

HOBBS, LEA COUNTY, NEW MEXICO

N

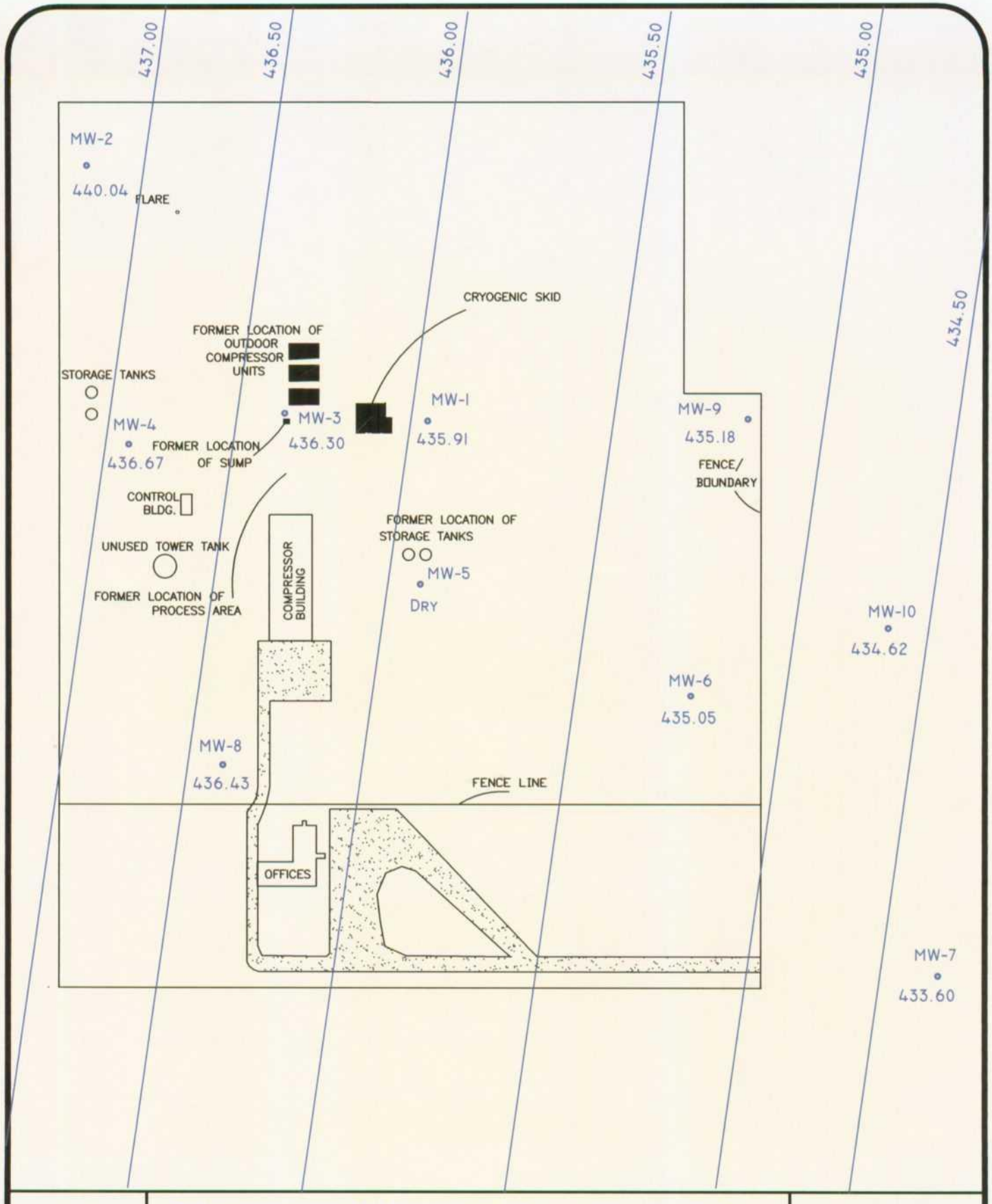
SCALE

0' 50' 100'

○ MONITOR WELLS

Eco-logical Environmental Services Inc.

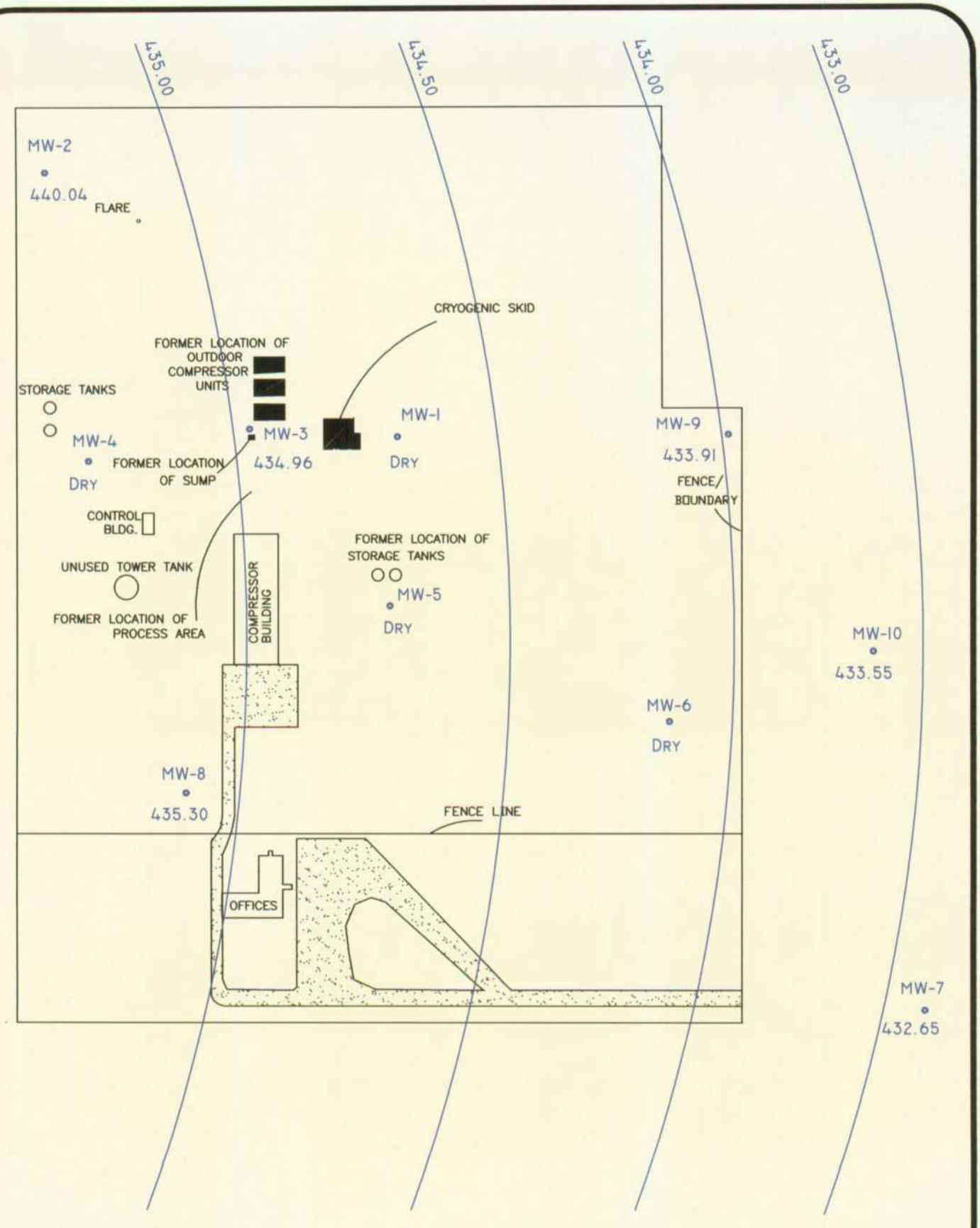
FIGURE 2



GROUNDWATER GRADIENT MAP - JANUARY 2001
KINDER MORGAN, INC.- HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO

Eco-logical Environmental Services Inc.

FIGURE 3



N

SCALE

0' 50' 100'

GROUNDWATER GRADIENT MAP - OCTOBER 2001

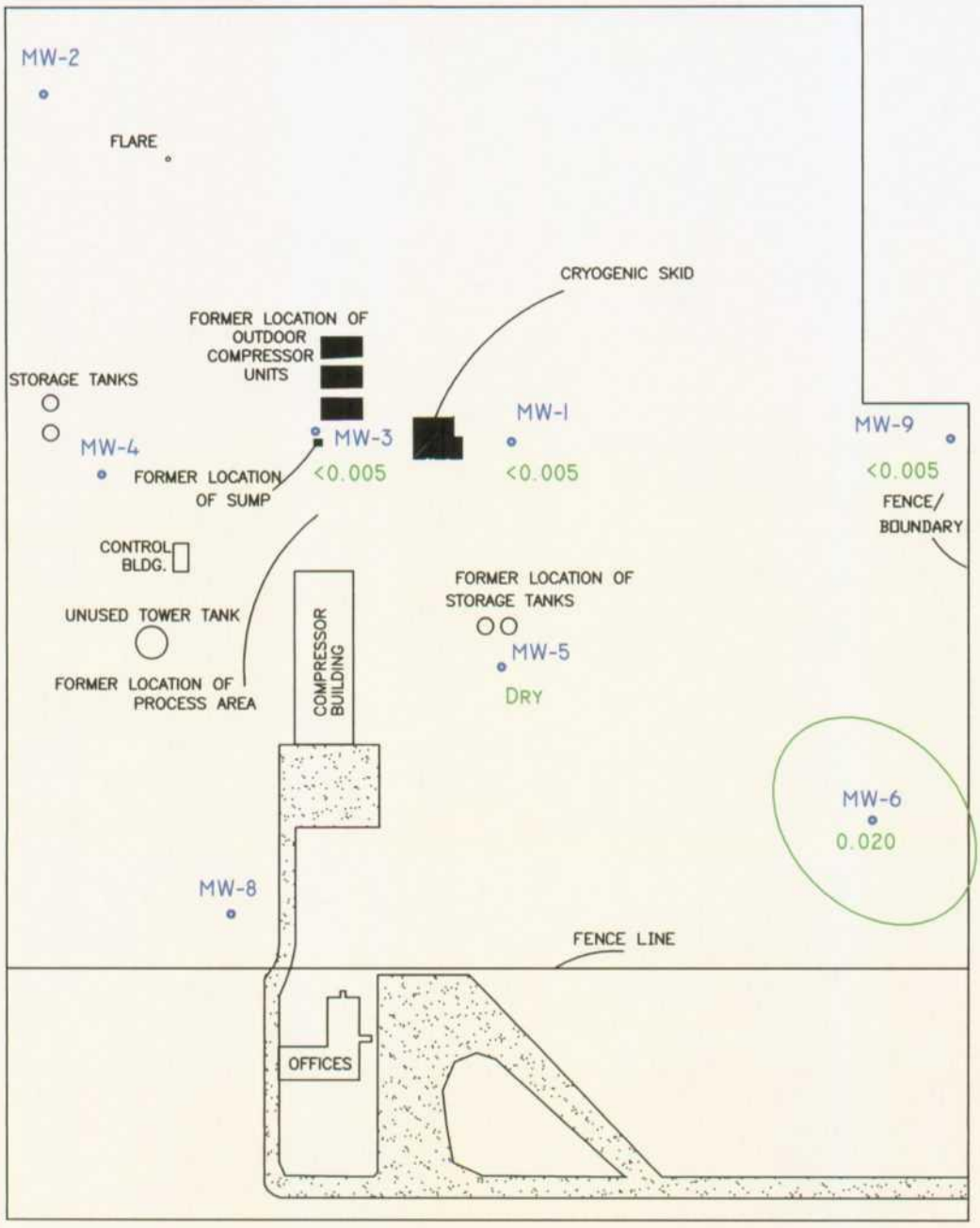
KINDER MORGAN, INC.- HOBBS GAS PLANT

HOBBS, LEA COUNTY, NEW MEXICO

● MONITOR WELLS

Eco-logical Environmental Services Inc.

FIGURE 4



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SCALE

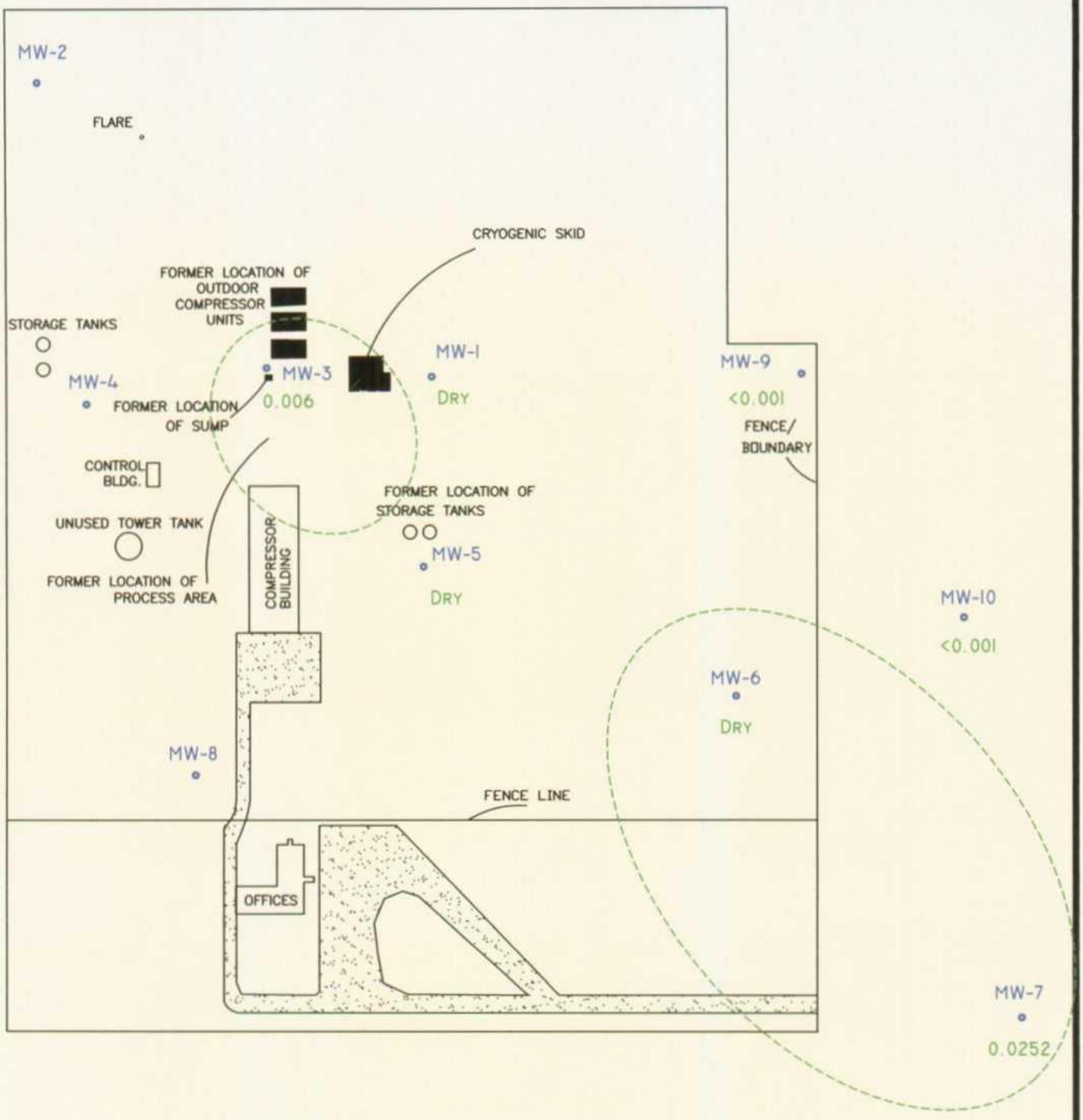
0' 50' 100'

BENZENE ISOGRAD MAP - JANUARY 2001
KINDER MORGAN, INC.- HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO

• MONITOR WELLS

Eco-logical Environmental Services Inc.

FIGURE 5



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SCALE

0' 50' 100'

BENZENE ISOGRAD MAP - OCTOBER 2001
KINDER MORGAN, INC.- HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO

• MONITOR WELLS

Eco-logical Environmental Services Inc.

FIGURE 6

Table 1

January Groundwater / Product Levels

Date	Monitor Well	TOC Elevation Feet	TD Feet	Depth to PSH Feet	Depth to GW Feet	GW Elevation Corrected for PSH Feet
January 24, 2001	MW-1	495.73	59.00	0.00	59.82	435.91
January 24, 2001	MW-2	502.41	62.80	0.00	62.37	440.04
January 24, 2001	MW-3	499.13	64.90	0.00	62.83	436.30
January 24, 2001	MW-4	501.12	63.30	0.00	64.45	436.67
January 24, 2001	MW-5	500.84	65.00	0.00	Dry	Dry
January 24, 2001	MW-6	496.27	62.70	0.00	61.22	435.05
January 24, 2001	MW-7	495.44	69.00	0.00	61.84	433.60
January 24, 2001	MW-8	501.81	70.90	0.00	65.38	436.43
January 24, 2001	MW-9	496.85	67.30	0.00	61.67	435.18
January 24, 2001	MW-10	492.46	66.50	0.00	57.84	434.62

Table 2

December Groundwater / Product Levels

Date	Monitor Well	TOC Elevation Feet	TD Feet	Depth to PSH Feet	Depth to GW Feet	GW Elevation Corrected for PSH Feet
October 18, 2001	MW-1	495.73	59.00	0.00	Dry	Dry
October 18, 2001	MW-2	502.41	62.80	0.00	62.37	440.04
October 18, 2001	MW-3	499.13	64.90	0.00	64.17	434.96
October 18, 2001	MW-4	501.12	63.30	0.00	Dry	Dry
October 18, 2001	MW-5	500.84	65.00	0.00	Dry	Dry
October 18, 2001	MW-6	496.27	62.70	0.00	Dry	Dry
October 18, 2001	MW-7	495.44	69.00	0.00	62.79	432.65
October 18, 2001	MW-8	501.81	70.90	0.00	66.51	435.30
October 18, 2001	MW-9	496.85	67.30	0.00	62.94	433.91
October 18, 2001	MW-10	492.46	66.50	0.00	58.91	433.55

Table 3

Historic Groundwater / Product Levels

Monitor Well #1

Screened Interval - 436.70' to 456.70'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996	495.73	0.00	53.10	0.00	0.00	442.63
October 23, 1996	495.73	0.00	53.34	0.00	0.00	442.39
April 10, 1997	495.73	0.00	54.32	0.00	0.00	441.41
July 7, 1997	495.73	0.00	54.64	0.00	0.00	441.09
October 8, 1997	495.73	0.00	54.98	0.00	0.00	440.75
January 6, 1998	495.73	0.00	55.28	0.00	0.00	440.45
April 3, 1998	495.73	0.00	55.60	0.00	0.00	440.13
June 25, 1998	495.73	0.00	55.87	0.00	0.00	439.86
October 2, 1998	495.73	0.00	56.36	0.00	0.00	439.37
January 5, 1999	495.73	0.00	54.98	0.00	0.00	440.75
April 1, 1999	495.73	0.00	56.89	0.00	0.00	438.84
July 14, 1999	495.73	0.00	57.39	0.00	0.00	438.34
October 22, 1999	495.73	0.00	57.74	0.00	0.00	437.99
January 25, 2000	495.73	0.00	59.00	0.00	0.00	436.73
April 3, 2000	495.73	0.00	58.51	0.00	0.00	437.22
July 17, 2000	495.73	0.00	59.10	0.00	0.00	436.63
October 24, 2000	495.73	0.00	59.45	0.00	0.00	436.28
January 24, 2001	495.73	0.00	59.82	0.00	0.00	435.91
October 18, 2001	495.73	0.00	Dry	0.00	0.00	Dry

Table 4

Historic Groundwater / Product Levels

Monitor Well #2

Screened Interval - 440.00' to 460.00'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996	502.41	0.00	58.33	0.00	0.00	444.08
April 10, 1997	502.41	0.00	59.54	0.00	0.00	442.87
July 7, 1997	502.41	0.00	60.00	0.00	0.00	442.41
October 8, 1997	502.41	0.00	60.39	0.00	0.00	442.02
January 6, 1998	502.41	0.00	60.70	0.00	0.00	441.71
April 3, 1998	502.41	0.00	61.06	0.00	0.00	441.35
June 25, 1998	502.41	0.00	61.37	0.00	0.00	441.04
October 2, 1998	502.41	0.00	61.91	0.00	0.00	440.50
January 5, 1999	502.41	0.00	60.39	0.00	0.00	442.02
April 1, 1999	502.41	0.00	62.28	0.00	0.00	440.13
July 14, 1999	502.41	0.00	62.28	0.00	0.00	440.13
October 22, 1999	502.41	0.00	62.31	0.00	0.00	440.10
January 25, 2000	502.41	0.00	62.34	0.00	0.00	440.07
April 3, 2000	502.41	0.00	62.34	0.00	0.00	440.07
July 17, 2000	502.41	0.00	62.34	0.00	0.00	440.07
October 24, 2000	502.41	0.00	62.37	0.00	0.00	440.04
January 24, 2001	502.41	0.00	62.37	0.00	0.00	440.04
October 18, 2001	502.41	0.00	62.37	0.00	0.00	440.04

Table 5

Historic Groundwater / Product Levels

Monitor Well #3

Screened Interval - 434.20' to 454.23'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996	499.13	0.00	56.28	0.00	0.00	442.85
April 10, 1997	499.13	0.00	57.25	0.00	0.00	441.88
July 7, 1997	499.13	0.00	57.59	0.00	0.00	441.54
October 8, 1997	499.13	0.00	57.92	0.00	0.00	441.21
January 6, 1998	499.13	0.00	58.24	0.00	0.00	440.89
April 3, 1998	499.13	0.00	58.41	0.00	0.00	440.72
June 25, 1998	499.13	0.00	58.84	0.00	0.00	440.29
October 2, 1998	499.13	0.00	59.36	0.00	0.00	439.77
January 5, 1999	499.13	0.00	57.92	0.00	0.00	441.21
April 1, 1999	499.13	0.00	59.89	0.00	0.00	439.24
July 14, 1999	499.13	0.00	60.40	0.00	0.00	438.73
October 22, 1999	499.13	0.00	60.76	0.00	0.00	438.37
January 25, 2000	499.13	0.00	61.21	0.00	0.00	437.92
April 3, 2000	499.13	0.00	61.57	0.00	0.00	437.56
July 17, 2000	499.13	0.00	62.11	0.00	0.00	437.02
October 24, 2000	499.13	0.00	62.48	0.00	0.00	436.65
January 24, 2001	499.13	0.00	62.83	0.00	0.00	436.30
October 18, 2001	499.13	0.00	64.17	0.00	0.00	434.96

Table 6

Historic Groundwater / Product Levels

Monitor Well #4

Screened Interval - 436.67' to 456.67'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996	501.12	0.00	58.12	0.00	0.00	443.00
April 10, 1997	501.12	0.00	58.83	0.00	0.00	442.29
July 7, 1997	501.12	0.00	59.19	0.00	0.00	441.93
October 8, 1997	501.12	0.00	59.56	0.00	0.00	441.56
January 6, 1998	501.12	0.00	59.91	0.00	0.00	441.21
April 3, 1998	501.12	0.00	60.21	0.00	0.00	440.91
June 25, 1998	501.12	0.00	60.48	0.00	0.00	440.64
October 2, 1998	501.12	0.00	60.97	0.00	0.00	440.15
January 5, 1999	501.12	0.00	59.56	0.00	0.00	441.56
April 1, 1999	501.12	0.00	61.57	0.00	0.00	439.55
July 14, 1999	501.12	0.00	62.03	0.00	0.00	439.09
October 22, 1999	501.12	0.00	62.37	0.00	0.00	438.75
January 25, 2000	501.12	0.00	62.82	0.00	0.00	438.30
April 3, 2000	501.12	0.00	63.14	0.00	0.00	437.98
July 17, 2000	501.12	0.00	63.73	0.00	0.00	437.39
October 24, 2000	501.12	0.00	64.10	0.00	0.00	437.02
January 24, 2001	501.12	0.00	64.45	0.00	0.00	436.67
October 18, 2001	501.12	0.00	Dry	0.00	0.00	Dry

Table 7

Historic Groundwater / Product Levels

Monitor Well #5

Screened Interval - 435.92' to 455.92'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996	500.84	0.00	58.96	0.00	0.00	441.88
April 10, 1997	500.84	0.00	59.77	0.00	0.00	441.07
July 7, 1997	500.84	0.00	60.10	0.00	0.00	440.74
October 8, 1997	500.84	0.00	60.31	0.00	0.00	440.53
January 6, 1998	500.84	0.00	60.76	0.00	0.00	440.08
April 3, 1998	500.84	0.00	61.05	0.00	0.00	439.79
June 25, 1998	500.84	0.00	61.05	0.00	0.00	439.79
October 2, 1998	500.84	0.00	61.77	0.00	0.00	439.07
January 5, 1999	500.84	0.00	60.31	0.00	0.00	440.53
April 1, 1999	500.84	0.00	62.24	0.00	0.00	438.60
July 14, 1999	500.84	0.00	62.76	0.00	0.00	438.08
October 22, 1999	500.84	0.00	63.08	0.00	0.00	437.76
January 25, 2000	500.84	0.00	63.51	0.00	0.00	437.33
April 3, 2000	500.84	0.00	63.84	0.00	0.00	437.00
July 17, 2000	500.84	0.00	64.35	0.00	0.00	436.49
October 24, 2000	500.84	0.00	64.68	0.00	0.00	436.16
January 24, 2001	500.84	0.00	Dry	0.00	0.00	Dry
October 18, 2001	500.84	0.00	Dry	0.00	0.00	Dry

Table 8

Historic Groundwater / Product Levels

Monitor Well #6

Screened Interval - 433.60' to 456.60'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996	496.27	0.00	55.53	0.00	0.00	440.74
April 10, 1997	496.27	0.00	56.28	0.00	0.00	439.99
July 7, 1997	496.27	0.00	56.58	0.00	0.00	439.69
October 8, 1997	496.27	0.00	56.68	0.00	0.00	439.59
January 6, 1998	496.27	0.00	57.23	0.00	0.00	439.04
April 3, 1998	496.27	0.00	57.49	0.00	0.00	438.78
June 25, 1998	496.27	0.00	57.49	0.00	0.00	438.78
October 2, 1998	496.27	0.00	57.17	0.00	0.00	439.10
January 5, 1999	496.27	0.00	56.88	0.00	0.00	439.39
April 1, 1999	496.27	0.00	58.52	0.00	0.00	437.75
July 14, 1999	496.27	0.00	59.08	0.00	0.00	437.19
October 22, 1999	496.27	0.00	59.36	0.00	0.00	436.91
January 25, 2000	496.27	0.00	59.77	0.00	0.00	436.50
April 3, 2000	496.27	0.00	60.08	0.00	0.00	436.19
July 17, 2000	496.27	0.00	60.50	0.00	0.00	435.77
October 24, 2000	496.27	0.00	60.86	0.00	0.00	435.41
January 24, 2001	496.27	0.00	61.22	0.00	0.00	435.05
October 18, 2001	496.27	0.00	Dry	0.00	0.00	Dry

Table 9

Historic Groundwater / Product Levels

Monitor Well #7

Screened Interval - 426.40' to 446.40'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996			Not Installed			
April 10, 1997	495.44	0.00	57.28	0.00	0.00	438.16
July 7, 1997	495.44	0.00	57.54	0.00	0.00	437.90
October 8, 1997	495.44	0.00	57.85	0.00	0.00	437.59
January 6, 1998	495.44	0.00	58.17	0.00	0.00	437.27
April 3, 1998	495.44	0.00	58.47	0.00	0.00	436.97
June 25, 1998	495.44	0.00	58.70	0.00	0.00	436.74
October 2, 1998	495.44	0.00	58.99	0.00	0.00	436.45
January 5, 1999	495.44	0.00	57.85	0.00	0.00	437.59
April 1, 1999	495.44	0.00	59.36	0.00	0.00	436.08
July 14, 1999	495.44	0.00	59.84	0.00	0.00	435.60
October 22, 1999	495.44	0.00	60.14	0.00	0.00	435.30
January 25, 2000	495.44	0.00	60.58	0.00	0.00	434.86
April 3, 2000	495.44	0.00	60.83	0.00	0.00	434.61
July 17, 2000	495.44	0.00	61.10	0.00	0.00	434.34
October 24, 2000	495.44	0.00	61.46	0.00	0.00	433.98
January 24, 2001	495.44	0.00	61.84	0.00	0.00	433.60
October 18, 2001	495.44	0.00	62.79	0.00	0.00	432.65

Table 10

Historic Groundwater / Product Levels

Monitor Well #8

Screened Interval - 430.90' to 450.90'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996			Not Installed			
April 10, 1997	501.81	0.00	60.32	0.00	0.00	441.49
July 7, 1997	501.81	0.00	60.67	0.00	0.00	441.14
October 8, 1997	501.81	0.00	61.00	0.00	0.00	440.81
January 6, 1998	501.81	0.00	61.35	0.00	0.00	440.46
April 3, 1998	501.81	0.00	61.61	0.00	0.00	440.20
June 25, 1998	501.81	0.00	61.87	0.00	0.00	439.94
October 2, 1998	501.81	0.00	62.27	0.00	0.00	439.54
January 5, 1999	501.81	0.00	61.00	0.00	0.00	440.81
April 1, 1999	501.81	0.00	62.79	0.00	0.00	439.02
July 14, 1999	501.81	0.00	63.19	0.00	0.00	438.62
October 22, 1999	501.81	0.00	63.51	0.00	0.00	438.30
January 25, 2000	501.81	0.00	63.97	0.00	0.00	437.84
April 3, 2000	501.81	0.00	64.26	0.00	0.00	437.55
July 17, 2000	501.81	0.00	64.68	0.00	0.00	437.13
October 24, 2000	501.81	0.00	65.04	0.00	0.00	436.77
January 24, 2001	501.81	0.00	64.38	0.00	0.00	437.43
October 18, 2001	501.81	0.00	66.51	0.00	0.00	435.30

Table 11

Historic Groundwater / Product Levels

Monitor Well #9

Screened Interval - 429.50' to 449.50'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996			Not Installed			
April 10, 1997	496.85	0.00	56.29	0.00	0.00	440.56
July 7, 1997	496.85	0.00	56.66	0.00	0.00	440.19
October 8, 1997	496.85	0.00	57.00	0.00	0.00	439.85
January 6, 1998	496.85	0.00	57.38	0.00	0.00	439.47
April 3, 1998	496.85	0.00	57.67	0.00	0.00	439.18
June 25, 1998	496.85	0.00	57.95	0.00	0.00	438.90
October 2, 1998	496.85	0.00	58.34	0.00	0.00	438.51
January 5, 1999	496.85	0.00	57.00	0.00	0.00	439.85
April 1, 1999	496.85	0.00	58.73	0.00	0.00	438.12
July 14, 1999	496.85	0.00	59.31	0.00	0.00	437.54
October 22, 1999	496.85	0.00	59.61	0.00	0.00	437.24
January 25, 2000	496.85	0.00	60.07	0.00	0.00	436.78
April 3, 2000	496.85	0.00	60.43	0.00	0.00	436.42
July 17, 2000	496.85	0.00	60.92	0.00	0.00	435.93
October 24, 2000	496.85	0.00	61.30	0.00	0.00	435.55
January 24, 2001	496.85	0.00	61.67	0.00	0.00	435.18
October 18, 2001	496.85	0.00	62.94	0.00	0.00	433.91

Table 12

Historic Groundwater / Product Levels

Monitor Well #10

Screened Interval - 426.00' to 446.00'

Date	TOC Elevation Feet	Depth to PSH Feet	Depth to GW Feet	Product Thickness Feet	Adjusted Thickness Feet	GW Elevation Corrected for PSH Feet
September 17, 1996			Not Installed			
October 23, 1996			Not Installed			
April 10, 1997	492.46	0.00	52.83	0.00	0.00	439.63
July 7, 1997	492.46	0.00	53.09	0.00	0.00	439.37
October 8, 1997	492.46	0.00	53.43	0.00	0.00	439.03
January 6, 1998	492.46	0.00	53.86	0.00	0.00	438.60
April 3, 1998	492.46	0.00	54.17	0.00	0.00	438.29
June 25, 1998	492.46	0.00	54.35	0.00	0.00	438.11
October 2, 1998	492.46	0.00	54.76	0.00	0.00	437.70
January 5, 1999	492.46	0.00	54.43	0.00	0.00	438.03
April 1, 1999	492.46	0.00	55.04	0.00	0.00	437.42
July 14, 1999	492.46	0.00	55.59	0.00	0.00	436.87
October 22, 1999	492.46	0.00	55.94	0.00	0.00	436.52
January 25, 2000	492.46	0.00	56.35	0.00	0.00	436.11
April 3, 2000	492.46	0.00	56.96	0.00	0.00	435.50
July 17, 2000	492.46	0.00	57.02	0.00	0.00	435.44
October 24, 2000	492.46	0.00	57.44	0.00	0.00	435.02
January 24, 2001	492.46	0.00	57.84	0.00	0.00	434.62
October 18, 2001	492.46	0.00	58.91	0.00	0.00	433.55

Table 13

Historic Groundwater Analytical Results (mg/l)

Monitor Well #1

Date	B	T	E	X	Phenol	Naphthalene	Chloride
02/14/96	0.083	<0.001	<0.001	0.008	--	--	--
02/29/96	<0.001	<0.001	<0.001	<0.001	--	--	--
04/20/96	0.305	<0.001	0.002	0.032	<0.001	0.017	--
10/23/96	0.352	<0.001	0.026	0.081	0.025	0.01	--
04/10/97	0.268	<0.001	0.012	0.034	<0.001	0.007	--
07/07/97	0.243	--	--	--	--	0.005	--
10/08/97	0.180	<0.001	0.012	<0.001	--	.003	<10
01/06/98	0.138	<0.001	0.008	<0.001	--	0.002	6.2
04/03/98	0.109	<0.001	0.004	0.006	--	0.003	51
06/25/98	0.071	<0.001	0.002	0.003	--	<0.001	7.3
10/02/98	0.078	<0.005	<0.005	<0.005	--	<0.001	14.0
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.005	<0.005	<0.005	<0.005	--	--	--
07/14/99	<0.005	<0.005	<0.005	<0.005	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	--
10/24/00	0.055	0.036	0.025	0.090	--	--	--
01/24/01	<0.005	<0.005	<0.005	<0.005	--	--	--
10/18/01	Not enough water to sample.						

Shaded areas indicate over OCD Limits

Table 14

Historic Groundwater Analytical Results (mg/l)

Monitor Well #2

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	19
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	96
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	25.0
10/02/98	0.002	<0.001	<0.001	<0.001	--	<0.001	--
01/05/99	Sampling discontinued as approved by OCD						

Table 15

Historic Groundwater Analytical Results (mg/l)

Monitor Well #3

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	0.016	<0.001	<0.001	0.005	<0.001	<0.001	--
07/07/97	0.003	–		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	64
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	130
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	12
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	46
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	0.010	<0.005	<0.005	<0.005	--	--	--
10/24/00	0.020	0.008	<0.005	0.014	--	--	--
01/24/01	<0.005	<0.005	<0.005	<0.005	--	--	100
10/18/01	0.0059	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 16

Historic Groundwater Analytical Results (mg/l)

Monitor Well #4

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	<10
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	10
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	11
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	18
01/05/99	Sampling discontinued as approved by OCD						

Table 17

Historic Groundwater Analytical Results (mg/l)

Monitor Well #5

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.135	<0.001	0.006	0.071	<0.001	<0.01	--
04/10/97	0.043	<0.001	<0.001	0.063	<0.001	0.001	--
07/07/97	0.015	--	--	--	--	<0.001	--
10/08/97	0.050	<0.001	<0.001	<0.001	--	0.001	24
01/06/98	0.031	<0.001	<0.001	0.010	--	<0.001	27
04/03/98	0.037	<0.001	0.002	0.019	--	0.001	69
06/25/98	0.017	<0.001	<0.001	0.006	--	<0.001	23
10/02/98	0.011	<0.001	<0.001	<0.001	--	<0.001	87
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	0.003	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	--
10/24/00	<0.005	<0.005	<0.005	<0.005	--	--	--
01/24/01	Not enough water to sample.						
10/18/01	Not enough water to sample.						

Shaded areas indicate over OCD Limits

Table 18

Historic Groundwater Analytical Results (mg/l)

Monitor Well #6

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.192	<0.001	<0.001	0.013	<0.001	<0.01	--
04/10/97	0.272	<0.001	<0.001	0.014	<0.001	<0.001	--
07/07/97	0.106	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	30
01/06/98	0.132	<0.001	<0.001	0.004	--	<0.001	31
04/03/98	0.165	<0.001	<0.001	0.008	--	<0.001	98
06/25/98	0.143	<0.001	<0.001	0.009	--	<0.001	28
10/02/98	0.157	<0.005	<0.005	0.012	--	<0.001	31
01/05/99	0.123	<0.001	<0.001	0.004	--	--	56
04/01/99	0.120	<0.001	<0.001	<0.005	--	--	31
07/14/99	0.093	<0.005	<0.005	<0.005	--	--	34
10/22/99	0.090	<0.001	<0.001	<0.001	--	--	31.5
01/25/00	0.105	<0.001	<0.001	<0.001	--	--	35
04/03/00	0.157	<0.005	<0.005	<0.005	--	--	33
07/17/00	0.126	<0.005	<0.005	<0.005	--	--	33
10/24/00	0.031	<0.005	<0.005	0.006	--	--	30
01/24/01	0.020	<0.005	<0.005	<0.005	--	--	28
10/18/01	Not enough water to sample.						

Shaded areas indicate over OCD Limits

Table 19

Historic Groundwater Analytical Results (mg/l)

Monitor Well #7

Date	B	T	E	X	Phenol	Naphthalene	Chloride
01/09/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	37
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	120
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	36
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	74
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	36
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	35
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	35.2
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	32
04/03/00	<0.001	<0.001	<0.001	<0.001	--	--	31
07/17/00	<0.001	<0.001	<0.001	<0.001	--	--	32
10/24/00	<0.001	<0.001	<0.001	<0.001	--	--	33
01/24/01	<0.005	<0.005	<0.005	<0.005	--	--	33
10/18/01	0.0252	<0.001	<0.001	<0.001	--	--	39.5

Shaded areas indicate over OCD Limits

Table 20

Historic Groundwater Analytical Results (mg/l)

Monitor Well #8

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	15
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	26
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
01/05/99	Sampling discontinued as approved by OCD						

Table 21

Historic Groundwater Analytical Results (mg/l)

Monitor Well #9

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	320
07/07/97	<0.001	--	--	--	--	--	41
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	560
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	490
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	460
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	290
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	200
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	520
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	260
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	284
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	278
01/25/00	<0.005	<0.005	<0.005	<0.005	--	--	300
04/03/00	<0.005	<0.005	0.012	<0.005	--	--	250
07/17/00	<0.001	<0.001	<0.001	<0.001	--	--	95
10/24/00	<0.001	<0.001	<0.001	<0.001	--	--	40
01/24/01	<0.005	<0.005	<0.005	<0.005	--	--	42
10/18/01	<0.001	<0.001	<0.001	<0.001	--	--	166

Shaded areas indicate over OCD Limits

Table 22

Historic Groundwater Analytical Results (mg/l)

Monitor Well #10

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	8.8
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	110
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	101
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	180
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	140
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	140
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	128
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	124
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	122
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	120
04/03/00	<0.001	<0.001	<0.001	<0.001	--	--	130
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	130
10/24/00	<0.001	<0.001	<0.001	<0.001	--	--	150
01/24/01	<0.005	<0.005	<0.005	<0.005	--	--	18
10/18/01	<0.001	<0.001	<0.001	<0.001	--	--	119

Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: July 1, 2002

Order ID Number: A01012908

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163762	MW-1	Water	1/24/01	11:30	1/27/01
163763	MW-3	Water	1/24/01	11:14	1/27/01
163764	MW-6	Water	1/24/01	11:53	1/27/01
163765	MW-7	Water	1/24/01	10:35	1/27/01
163766	MW-9	Water	1/24/01	11:20	1/27/01
163767	MW-10	Water	1/24/01	10:57	1/27/01
163768	MW-6D	Water	1/24/01	11:53	1/27/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.
Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163762 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC08615	Date Analyzed:	1/30/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB07464	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.481	mg/Kg	5	0.10	96	70 - 130
4-BFB		0.431	mg/Kg	5	0.10	86	70 - 130

Sample: 163763 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC08615	Date Analyzed:	1/30/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB07464	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.487	mg/Kg	5	0.10	97	70 - 130
4-BFB		0.436	mg/Kg	5	0.10	87	70 - 130

Sample: 163763 - MW-3

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC08700	Date Analyzed:	1/30/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB07526	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL

Sample: 163764 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC08615	Date Analyzed:	1/30/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB07464	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.02	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.02	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.476	mg/Kg	5	0.10	95	70 - 130
4-BFB		0.426	mg/Kg	5	0.10	85	70 - 130

Sample: 163764 - MW-6

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08700 Date Analyzed: 1/30/01
Analyst: JS Preparation Method: N/A Prep Batch: PB07526 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL

Sample: 163765 - MW-7

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC08615 Date Analyzed: 1/30/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB07464 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.471	mg/Kg	5	0.10	94	70 - 130
4-BFB		0.42	mg/Kg	5	0.10	84	70 - 130

Sample: 163765 - MW-7

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08700 Date Analyzed: 1/30/01
Analyst: JS Preparation Method: N/A Prep Batch: PB07526 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL

Sample: 163766 - MW-9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC08615 Date Analyzed: 1/30/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB07464 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.437	mg/Kg	5	0.10	87	70 - 130
4-BFB		0.384	mg/Kg	5	0.10	76	70 - 130

Sample: 163766 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08700 Date Analyzed: 1/30/01
Analyst: JS Preparation Method: N/A Prep Batch: PB07526 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL

Sample: 163767 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC08615 Date Analyzed: 1/30/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB07464 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.445	mg/Kg	5	0.10	89	70 - 130
4-BFB		0.399	mg/Kg	5	0.10	79	70 - 130

Sample: 163767 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08700 Date Analyzed: 1/30/01
Analyst: JS Preparation Method: N/A Prep Batch: PB07526 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL

Sample: 163768 - MW-6D

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC08615 Date Analyzed: 1/30/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB07464 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.023	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.023	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.457	mg/Kg	5	0.10	91	70 - 130
4-BFB		0.403	mg/Kg	5	0.10	80	70 - 130

Sample: 163768 - MW-6D

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08700 Date Analyzed: 1/30/01
Analyst: JS Preparation Method: N/A Prep Batch: PB07526 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL

Quality Control Report
Method Blank

Method Blank

QCBatch: QC08615

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.102	mg/L	1	0.10	102	70 - 130
4-BFB		0.091	mg/L	1	0.10	91	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC08615

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.1	0.099	mg/L	1	0.10	<0.001	100	1	70 - 130	20
Benzene	0.099	0.098	mg/L	1	0.10	<0.001	99	1	70 - 130	20
Toluene	0.1	0.1	mg/L	1	0.10	<0.001	100	0	70 - 130	20
Ethylbenzene	0.097	0.096	mg/L	1	0.10	<0.001	97	1	70 - 130	20
M,P,O-Xylene	0.288	0.287	mg/L	1	0.30	<0.001	96	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.102	0.102	mg/L	1	0.10	102	102	70 - 130
4-BFB	0.092	0.092	mg/L	1	0.10	92	92	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC08615

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	1/30/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.095	95	85 - 115	1/30/01
Toluene		mg/L	0.10	0.095	95	85 - 115	1/30/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	1/30/01
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	1/30/01

CCV (2) QCBatch: QC08615

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.083	83	85 - 115	1/30/01
Benzene		mg/L	0.10	0.095	95	85 - 115	1/30/01
Toluene		mg/L	0.10	0.096	96	85 - 115	1/30/01
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	1/30/01
M,P,O-Xylene		mg/L	0.30	0.27	90	85 - 115	1/30/01

ICV (1) QCBatch: QC08615

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	1/30/01
Benzene		mg/L	0.10	0.097	97	85 - 115	1/30/01
Toluene		mg/L	0.10	0.098	98	85 - 115	1/30/01
Ethylbenzene		mg/L	0.10	0.095	95	85 - 115	1/30/01
M,P,O-Xylene		mg/L	0.30	0.286	95	85 - 115	1/30/01

163762-68

Equiva Services, LLC

Page____of____

Trace Analysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID #: [illegible]

Consulting Company Name: Eco-logical Environmental Phone #: (915) 520-7535

Address: 2200 Market st, Midland TX Fax #:

Consulting Contact: Scott Springer Cost Center #:

Location Code: ~~Eco~~ Kinder/Morgan Casualty Loss #: Equiva Job #

Consultant Job # 279-512

Location Address: Hobbs

Sampler Signature: Scott Springer

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Chloride	Turn Around Time if different from standard	Hold
163762	MW-1	2	VOA									1-24-01	11:30																		
63	MW-3	3	VOA/L										11:14																		
64	MW-6	3											11:53																		
65	MW-7	3											10:35																		
66	MW-9	3											11:20																		
67	MW-10	3											10:57																		
68	MW-6D	3											11:53																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Scott Springer	1-26-01	1630	J Thomas	3:30	1/26
J Thomas	1/26	5 P			
			Received at Laboratory by: Melanie [illegible]	1/27/01	1020

LAB USE ONLY
Intact: Y / N
Headspace:
Temp:
Log-in Review:

REMARKS: 2/2/01

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

Carrier # Bus 159 384 7838

Summary Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: October 29, 2001

Order ID Number: A01102207

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
182456	MW-3	Water	10/18/01	:	10/20/01
182457	MW-7	Water	10/18/01	:	10/20/01
182458	MW-9	Water	10/18/01	:	10/20/01
182459	MW-10	Water	10/18/01	:	10/20/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
182456 - MW-3	0.0059	<0.001	<0.001	<0.001	0.0059
182457 - MW-7	0.0252	<0.001	<0.001	<0.001	0.0252
182458 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
182459 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 182457 - MW-7

Param	Flag	Result	Units
CL		39.5	mg/L

Sample: 182458 - MW-9

Param	Flag	Result	Units
CL		166	mg/L

Sample: 182459 - MW-10

Param	Flag	Result	Units
CL		119	mg/L

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: October 29, 2001

Order ID Number: A01102207

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
182456	MW-3	Water	10/18/01	:	10/20/01
182457	MW-7	Water	10/18/01	:	10/20/01
182458	MW-9	Water	10/18/01	:	10/20/01
182459	MW-10	Water	10/18/01	:	10/20/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 182456 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC15070	Date Analyzed:	10/22/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB12819	Date Prepared:	10/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0059	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0059	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	72 - 128
4-BFB		0.0791	mg/L	1	0.10	79	72 - 128

Sample: 182457 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC15070	Date Analyzed:	10/22/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB12819	Date Prepared:	10/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0252	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0252	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.107	mg/L	1	0.10	107	72 - 128
4-BFB		0.0824	mg/L	1	0.10	82	72 - 128

Sample: 182457 - MW-7

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC15218	Date Analyzed:	10/22/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB12924	Date Prepared:	10/22/01

Param	Flag	Result	Units	Dilution	RDL
CL		39.5	mg/L	5	0.50

Sample: 182458 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC15070	Date Analyzed:	10/22/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB12819	Date Prepared:	10/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001

Continued ...

... *Continued* Sample: 182458 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.107	mg/L	1	0.10	107	72 - 128
4-BFB		0.0825	mg/L	1	0.10	82	72 - 128

Sample: 182458 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC15218 Date Analyzed: 10/22/01
Analyst: JS Preparation Method: N/A Prep Batch: PB12924 Date Prepared: 10/22/01

Param	Flag	Result	Units	Dilution	RDL
CL		166	mg/L	5	0.50

Sample: 182459 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15070 Date Analyzed: 10/22/01
Analyst: CG Preparation Method: E 5030B Prep Batch: PB12819 Date Prepared: 10/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.105	mg/L	1	0.10	105	72 - 128
4-BFB		0.0808	mg/L	1	0.10	81	72 - 128

Sample: 182459 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC15218 Date Analyzed: 10/22/01
Analyst: JS Preparation Method: N/A Prep Batch: PB12924 Date Prepared: 10/22/01

Param	Flag	Result	Units	Dilution	RDL
CL		119	mg/L	10	0.50

Quality Control Report
Method Blank

Method Blank

QCBatch: QC15070

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.106	mg/L	1	0.10	106	72 - 128
4-BFB		0.0799	mg/L	1	0.10	80	72 - 128

Method Blank

QCBatch: QC15218

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	0.50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC15070

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0921	0.0954	mg/L	1	0.10	<0.001	92	4	80 - 120	20
Benzene	0.0979	0.102	mg/L	1	0.10	<0.001	98	4	80 - 120	20
Toluene	0.0885	0.0929	mg/L	1	0.10	<0.001	88	5	80 - 120	20
Ethylbenzene	0.0909	0.0953	mg/L	1	0.10	<0.001	91	5	80 - 120	20
M,P,O-Xylene	0.276	0.287	mg/L	1	0.30	<0.001	92	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.105	0.110	mg/L	1	0.10	105	110	72 - 128
4-BFB	0.0961	0.0995	mg/L	1	0.10	96	100	72 - 128

Laboratory Control Spikes

QCBatch: QC15218

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.73	11.78	mg/L	1	12.50	<2.0	93	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC15218

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	237.10	237.77	mg/L	1	125	119	94	0	52 - 131	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC15070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0883	88	85 - 115	10/22/01
Benzene		mg/L	0.10	0.0981	98	85 - 115	10/22/01
Toluene		mg/L	0.10	0.0882	88	85 - 115	10/22/01
Ethylbenzene		mg/L	0.10	0.0905	90	85 - 115	10/22/01
M,P,O-Xylene		mg/L	0.30	0.275	92	85 - 115	10/22/01

CCV (2)

QCBatch: QC15070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.086	86	85 - 115	10/22/01
Benzene		mg/L	0.10	0.096	96	85 - 115	10/22/01
Toluene		mg/L	0.10	0.085	85	85 - 115	10/22/01
Ethylbenzene		mg/L	0.10	0.088	88	85 - 115	10/22/01
M,P,O-Xylene		mg/L	0.30	0.267	89	85 - 115	10/22/01

ICV (1)

QCBatch: QC15070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0974	97	85 - 115	10/22/01
Benzene		mg/L	0.10	0.104	104	85 - 115	10/22/01
Toluene		mg/L	0.10	0.0965	96	85 - 115	10/22/01
Ethylbenzene		mg/L	0.10	0.0984	98	85 - 115	10/22/01
M,P,O-Xylene		mg/L	0.30	0.295	98	85 - 115	10/22/01

CCV (1)

QCBatch: QC15218

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.68	93	90 - 110	10/22/01

ICV (1)

QCBatch: QC15218

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.76	94	90 - 110	10/22/01

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6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0110 2207

Company Name: Eco-logical Environmental
Phone #: (915) 520-7535

Address: (Street, City, Zip) 2200 Market st, Midland 79703
Fax #: (915) 520-7737

Contact Person: Scott Springer

Invoice to: (If different from above) Kinder / Morgan

Project #: 279-512
Project Name: HOBBS

Project Location: HOBBS
Sampler Signature: Scott Springer

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME
182456	MW-3	2	VOA	|					|							10:18	
57	MW-7	3	VOA 2	|					|							|	
58	MW-9	3	|	|					|							|	
59	MW-10	3	|	|					|							|	

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB #	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Chlorides					Turn Around Time if different from standard	Hold
182456		X																				
57		|														X						
58		|														|					
59		|														|					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Mark A Pendle	10/19/01	1630	Helen Shelton	10/19/01	1630
Helen Shelton	10/19/01	1830			
			Received at Laboratory by: Vicki Amuly	10:20:01	

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review MA

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier # Greyhound 163526660

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 11 samples HS

ORIGINAL COPY

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: Ecological Environmental — Phone #: (915) 520-7535

Address: (Street, City, Zip) 2700 Market St. Midland 79703 — Fax #: (915) 520-7737

Contact Person: Scott Springer

Invoice to: (If different from above) Kinder / Morgan

Project #: 279-512 — Project Name: Hobbs

Project Location: Hobbs — Sampler Signature: Scott Springer

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	MW-3	2	VOA											10:15	
	MW-7	3	VOA												
	MW-9	3	1												
	MW-10	3	1												

ANALYSIS REQUEST (Circle or Specify Method No.)

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Mark Pridly	10/19/01	1620	Helen Melton	10/19/01	1620
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

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

CHART COPY

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp °

Log-in Review

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier # Mesa Courier

Eco-logical
Environmental Services Inc.

Mr. Wayne Price
New Mexico Oil Conservation Division
2040 South Pacheo
Santa Fe, NM 87505

March 5, 2000
ECO # 279-512

Re.: Annual Groundwater Sampling Report
Kinder/Morgan, Inc.
Hobbs Gas Plant GW-191
Lea County, New Mexico

Dear Mr. Price:

Eco-logical Environmental Services, Inc. is submitting the Annual Groundwater Sampling Report for 2000.

If you have any questions or need additional information please do not hesitate to call me or Scott Springer at 800-375-0100.

Respectfully Submitted,
Eco-logical Environmental Services, Inc.

Shane Estep, REM
Project Manager

cc: Ms. Donna Williams, OCD - Hobbs, NM
Mr. John Greer, Kinder/Morgan, Inc., Houston, TX.

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Eco-logical
Environmental Services Inc.

2000 Annual Groundwater Monitoring and Sampling Report

Discharge Plan GW-191

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

Kinder Morgan, Inc.
One Allen Center
500 Dallas Street Suite 1000
Houston, Texas 77002

2200 Market Street 79703 • (915) 520-7535 • FAX (915) 520-7737

2000 Annual Groundwater Monitoring and Sampling Report

Discharge Plan GW-191

Former Hobbs Natural Gas Plant
Hobbs, Lea County, New Mexico

Date Prepared:
February 28, 2001

ECO Project No.:
279-512

Prepared for:
New Mexico Oil Conservation Division

On Behalf of:
Kinder Morgan, Inc.

Prepared by:
Eco-logical Environmental Services, Inc.

Scott Springer, Project Geologist

Shane Estep, Project Manager

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LIST OF FIGURES

I. Report Summary

The purpose of this report is to fulfill the requirements of the groundwater monitoring plan approved by the New Mexico Oil Conservation Division (OCD). On January 25, 2000, April 3, 2000, July 17, 2000, and October 24, 2000 Eco-logical Environmental Services, Inc. (Eco-logical) personnel were on-site to purge and sample ten (10) monitor wells (MW) at the Former Hobbs Gas Plant west of Hobbs, New Mexico (see Figure 1). The objective of this sampling event was to fulfill the Abatement Plan requirements approved by the OCD in April 1997 and as modified in December 1998. The modification removed MW-2, MW-4 and MW-8 from the requirements of quarterly sampling. This event involved the measurement of relative depths to water, purging of the monitoring wells, and sample collection and analyses. Figure 2 presents the site map with the locations of the monitor wells.

The plant has not been in operation for over three years. In addition to the plant closure, many compressors and skid mounted equipment have been removed. In the summer of 2000 the rest of the equipment belonging to Kinder Morgan, Inc. (KMI) was removed. The remaining equipment and structures have been sold to Transwestern Pipeline Company.

The initial task was to determine the static groundwater levels relative to the north side of the top of each well casing and to examine each well for the presence of phase separated hydrocarbons (PSH) using an interface probe with a calibrated tape (see Tables 1 - 10). Wells were measured from the least impacted to the most impacted as determined by previous sampling events. All equipment was properly decontaminated between gauging of wells. None of the wells exhibited free product.

The latest depth to groundwater at the site ranges from 57.4 to 65.1 feet below the ground surface. These depths represent an average drop in the water table of 4.65 feet since the sampling event in October of 1996 (see Figure 3). Monitor well 2 has had the same groundwater measurement (2 inches above the total well depth) since the January 2000 monitoring event indicated that water is trapped in the bottom cap and that the actual water level has dropped below the screened interval of the casing. The overall groundwater flow direction is stable to the southeast at an average gradient of 1:380 (see Figure 4 for a current gradient map).

After obtaining all measurements, the volume of water in each casing was calculated. The wells were then purged by hand bailing or by an electric submersible purge pump. Wells were purged until three well volumes of water were removed or until the well was dry. The bailers or pump were decontaminated between wells with a water and Alconox solution and rinsed in clean water. After allowing the wells to recover to at least 70 percent of the original water depth, samples were collected utilizing new, single use, one (1) liter bailers. Groundwater samples were then submitted to TraceAnalysis in Lubbock Texas for analyses. Based on previous analytical results and as approved by the OCD letter dated December 15, 1998, a minimized analyses schedule was performed. This included analysis for benzene, toluene, ethylbenzene, and xylene (BTEX) from monitor wells MW-1, MW-3, MW-5, MW-6, MW-7, MW-9, and MW-10 and chloride from monitor wells MW-6, MW-7, MW-9, and MW-10.

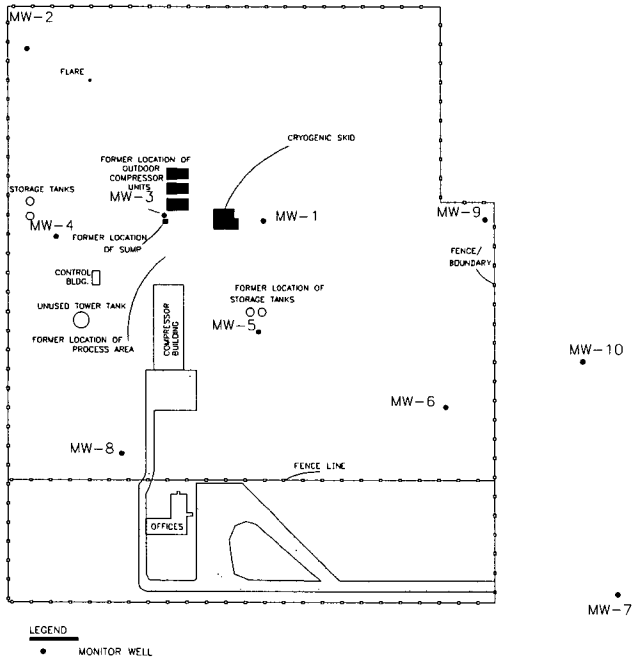
The latest analytical results showed that benzene levels in MW-6 continue to be present above the New Mexico Water Quality Control Commission (WQCC) Guideline level (see appendix) of 0.01 parts per million (ppm), at an average concentration of 0.105 ppm for the year. Data from MW-1 and MW-3 indicated that the guideline level was exceeded one out of four quarters for MW-1 and two of four quarters for MW-3. Prior to the last sampling event BTEX had not been detected in any significant levels since October of 1998 in MW-1 and since April 1997 in MW-3.

Only one well, MW-9, has historically contained chlorides above the established guidelines (located in 20 NMAC.6.2.3103) of 250 ppm. Chloride levels started at 300 ppm in January and have decreased to 40 ppm in the October sampling event. The last two quarterly sampling events indicated chloride levels to be below guidelines. The analytical results for the year are summarized as follows:

MW-1	Benzene	- ranged from 0.001 ppm to 0.055 ppm
	Toluene	- ranged from less than 0.001 ppm to 0.036 ppm
	Ethylbenzene	- ranged from less than 0.001 ppm to 0.025 ppm
	Xylene	- ranged from less than 0.001 ppm to 0.09 ppm
MW-2	Not Tested	
MW-3	Benzene	- ranged from less than 0.001 ppm to 0.02 ppm
	Toluene	- ranged from less than 0.001 ppm to 0.008 ppm
	Ethylbenzene	- all results were below detection levels
	Xylene	- ranged from less than 0.001 ppm to 0.014 ppm
MW-4	Not Tested	
MW-5	BTEX	- all results were below detection levels

MW-6	Benzene	- ranged from 0.031 ppm to 0.157 ppm
	Toluene	- all results were below detection levels
	Ethylbenzene	- all results were below detection levels
	Xylene	- ranged from less than 0.001 ppm to 0.006 ppm
	Chloride	- ranged from 30 ppm to 35 ppm
MW-7	BTEX	- remained less than 0.001 ppm
	Chloride	- ranged from 31 ppm to 33 ppm
MW-8	Not Tested	
MW-9	Benzene	- all results were below detection levels
	Toluene	- all results were below detection levels
	Ethylbenzene	- ranged from less than 0.001 ppm to 0.012 ppm
	Xylene	- all results were below detection levels
	Chloride	- ranged from 40 ppm tp 300 ppm
MW-10	BTEX	- remained less than 0.001 ppm
	Chloride	- ranged from 120 ppm to 150 ppm

Results of the analyses of the water samples are presented in Tables 11 to 20. Figures 6 to 11 represent the estimated benzene isograds for the year 2000 quarterly sampling events. Figure 5 presents the estimated isograds for benzene for the latest quarterly sampling event (October 22, 1999). Section 6 contains the lab reports for all four quarterly events covered in this report.



II. Chronology of Events

The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995, and noted several deficiencies. The deficiencies, and the related directives, were detailed in a letter issued by OCD on December 6, 1995. The letter was issued under OCD statutory authority and requires that KN Energy undertake and complete certain activities to fulfill OCD requirements. Previous activities undertaken by KN Energy, and the substance of activities reflected in this report, are to fulfill the requirements directed by OCD. The following chronology briefly summarizes the relevant activities conducted at the facility:

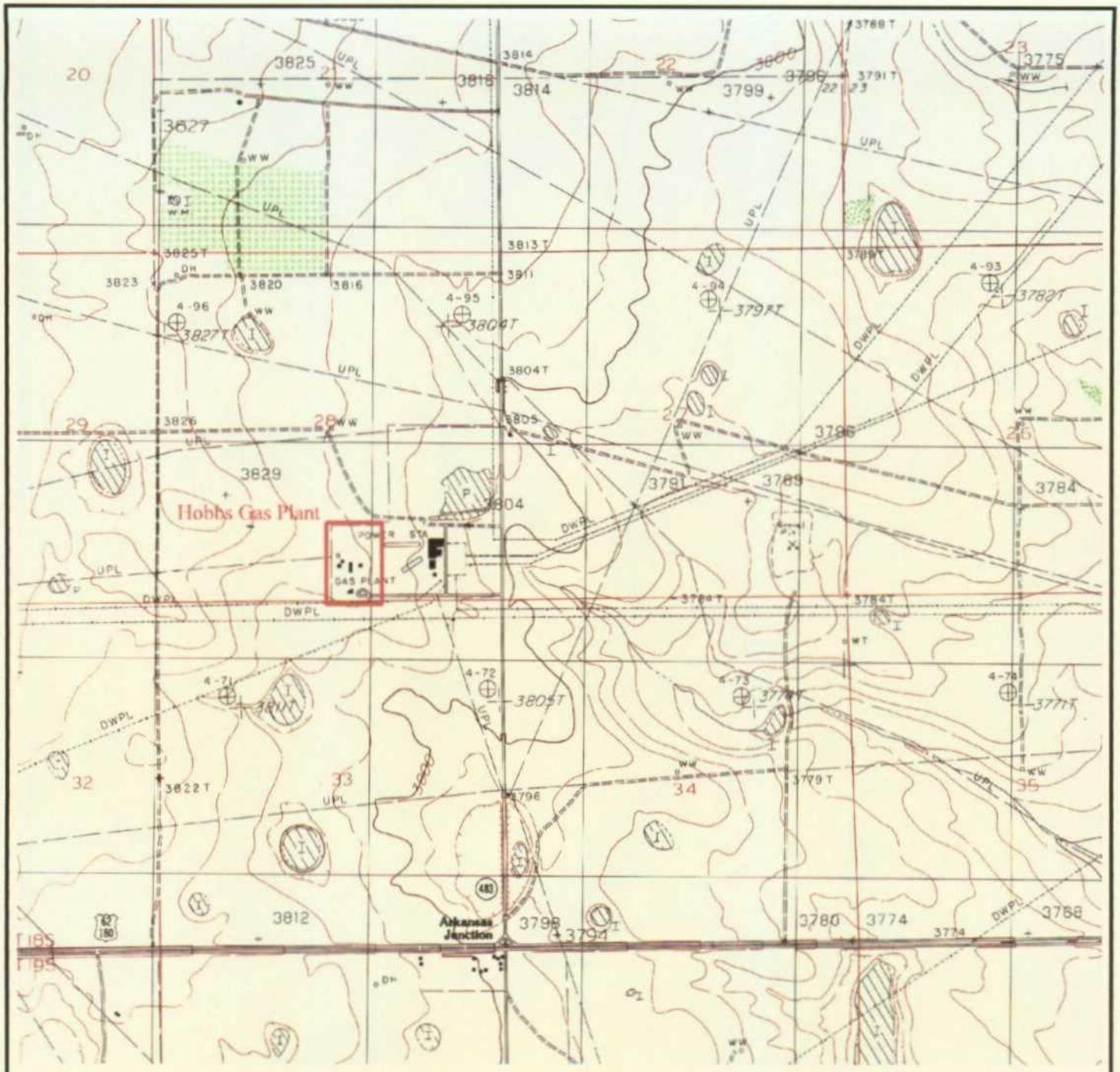
1994	KN Energy took possession of the plant in 1994 following a merger with American Oil and Gas.
Dec. 6, 1995	OCD directive issued to KN Energy on the initial items requiring action as a result of the Oct. 16, 1995 inspection.
Jan. 26, 1996	KN Energy initial response to OCD directive.
Jan. 30, 1996	Work Plan for soils delineation submitted with the inclusion that one monitor well would be installed if impacted soil was discovered within ten feet of the groundwater.
Mar. 27, 1996	Delineation Work Plan approved by OCD with report due July1, 1996.
June 6, 1996	Soils Delineation Investigation Report filed with scope of work for extended Groundwater Delineation included.
Sept. 26, 1996	Directive received from OCD requiring the full delineation work plan of all contamination at the site including groundwater be submitted for approval.
Oct. 9, 1996	Work Plan for groundwater delineation filed as per the Sept. 26, 1996 OCD directive.
Oct. 15, 1996	Approval of groundwater delineation work plan received from OCD.

Dec. 11, 1996	KN announces impending closure of plant. Eco-logical submits requests for extension of time and change from Discharge Permit to Closure Plan, with the installation of additional monitor wells.
Dec. 17, 1996	OCD approves request for extension of time and the additional monitor wells.
Jan. 14, 1997	Additional groundwater monitoring well installed, and Abatement Plan and Closure Plan Report were submission to OCD as per Dec. 17, 1996 OCD directive.
Feb. 7, 1997	Phone conference held with OCD, Eco-logical and KN personnel to discuss results of report and proposed work plan.
Feb. 25, 1997	After review of Abatement Plan and phone conference, OCD issued a directive stating that the existing monitor wells also be tested for the entire suite of 20 NMAC 6.2.3103 constituents excluding uranium, radioactivity and PCB's, and additional wells be installed to define the points of compliance in the groundwater. An update/amendment report to be submitted by May 25, 1997.
March 13, 1997	Response to Feb. 1997 OCD letter submitted outlining the points to be followed in the extended delineation work plan.
April 1997	Three additional monitor wells installed and a quarterly sampling and monitoring event occurs.
May 10, 1997	Submission of updated Abatement Report filed with OCD as per the Feb. 25, 1997 directive.
June 26, 1997	OCD approves the updated Abatement Report including reducing the testing to BTEX, Napthalene, and Chlorides, and that an annual report be submitted by June 1, 1998.
July 1997	Quarterly Sampling and Monitoring Event.
Oct. 1997	Quarterly Sampling and Monitoring Event.

October 1997	Sump, Cryoskid, Flare Pit, and Compressor soils excavated and stock piled prior to remediation pursuant to the approved Stage 1 Abatement Plan and Site Closure Plan dated January 14, 1997.
November 1997	Initial Treatment of excavated soils performed.
January 1998	Quarterly Sampling and Monitoring Event.
March 1998	Submission of Annual Groundwater Sampling Report to the OCD, with a recommendation to stop testing for Napthalene and discontinue sampling of MW-2, MW-4 and MW-8.
April 3, 1998	Quarterly Sampling and Monitoring Event.
June 25, 1998	Quarterly Sampling and Monitoring Event. Impacted stockpiled soil retreated.
October 2, 1998	Quarterly Sampling and Monitoring Event. Stock piled soil tested below OCD levels.
November 1998	Backfilling of excavations performed.
December 1998	OCD contacted by Eco-logical regarding January 1998 Annual Groundwater Report and Reduced Analyses Plan. OCD approved reduced analyses in letter dated December 15, 1998.
January 1999	Quarterly Sampling and Monitoring Event.
April 1999	Quarterly Sampling and Monitoring Event.
July 1999	Quarterly Sampling and Monitoring Event.
October 1999	Quarterly Sampling and Monitoring Event.
October 1999	K N Energy, Inc. changed name to Kinder Morgan, Inc. (Parent company of American Processing, L.P.)
January 2000	Quarterly Sampling and Monitoring Event.
April 2000	Quarterly Sampling and Monitoring Event.

June 2000	Removal of all KMI Equipment.
July 2000	Quarterly Sampling and Monitoring Event.
October 2000	Quarterly Sampling and Monitoring Event.
Dec. 4, 2000	KMI issued letter to OCD to renew Discharge Plan GW191 and proposes a reduction in groundwater sampling freqency for the year 2001. The selected monitor wells will be sampled the first and third quarters of the year.
March 2000	2000 Annual Report.

III. Maps, Graphs, & Tables

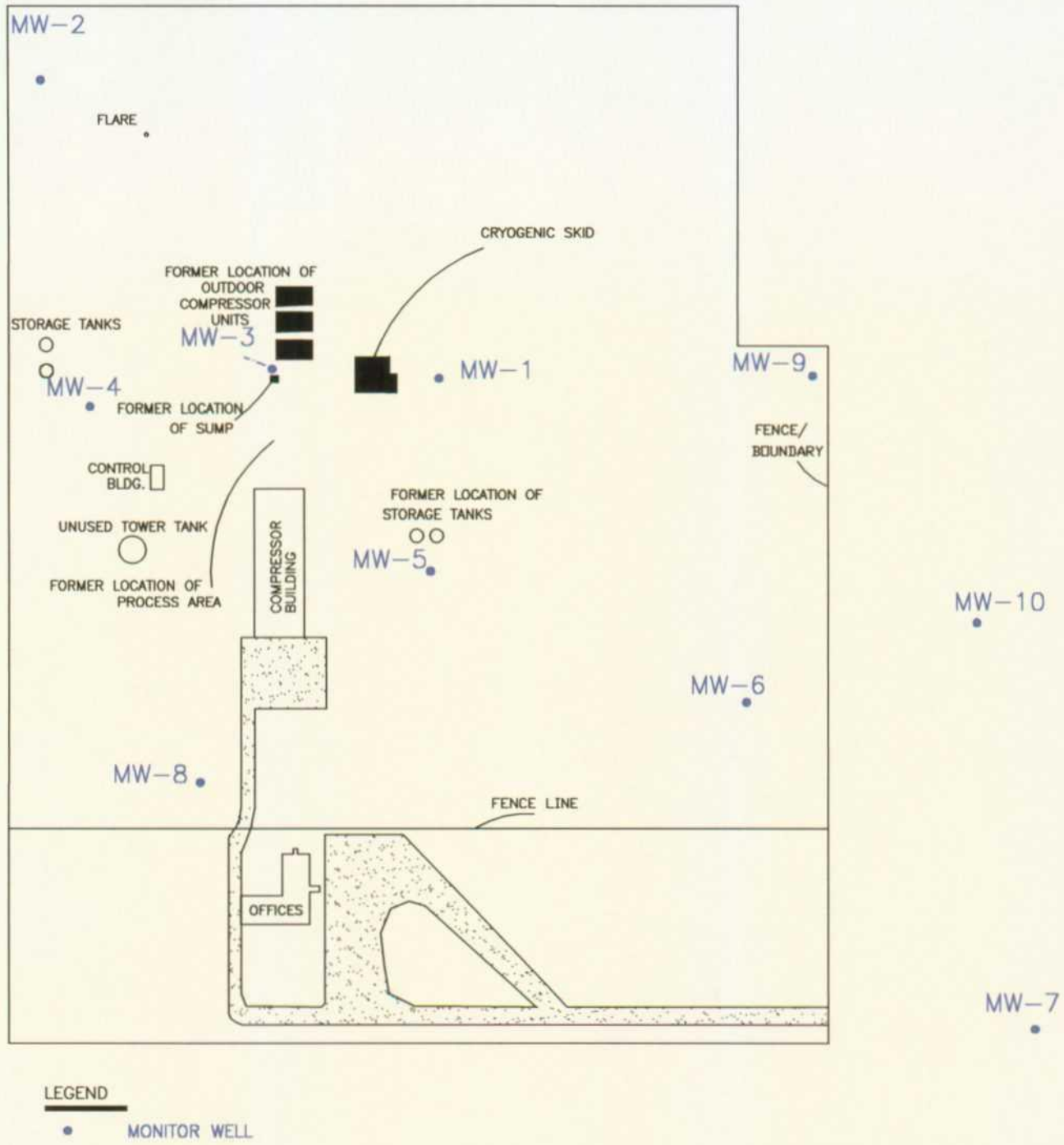


SITE COORDINATES: 24.08 ACRES IN SECTION 28, T18S, R36E, LEA COUNTY, NEW MEXICO
Source: Monument North, NM / Lea County, 1985
Project #: 279 / 512 Date: July 8, 1999

FIGURE 1
GENERAL SITE LOCATION MAP
HOBBS NATURAL GAS PLANT
LEA COUNTY, NEW MEXICO

PREPARED BY

Eco-logical Environmental Services Inc.



N

SCALE

0' 50' 100'

KINDER MORGAN, INC.–HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Site Map – 2000

FIGURE 2

Eco-logical Environmental Services Inc.

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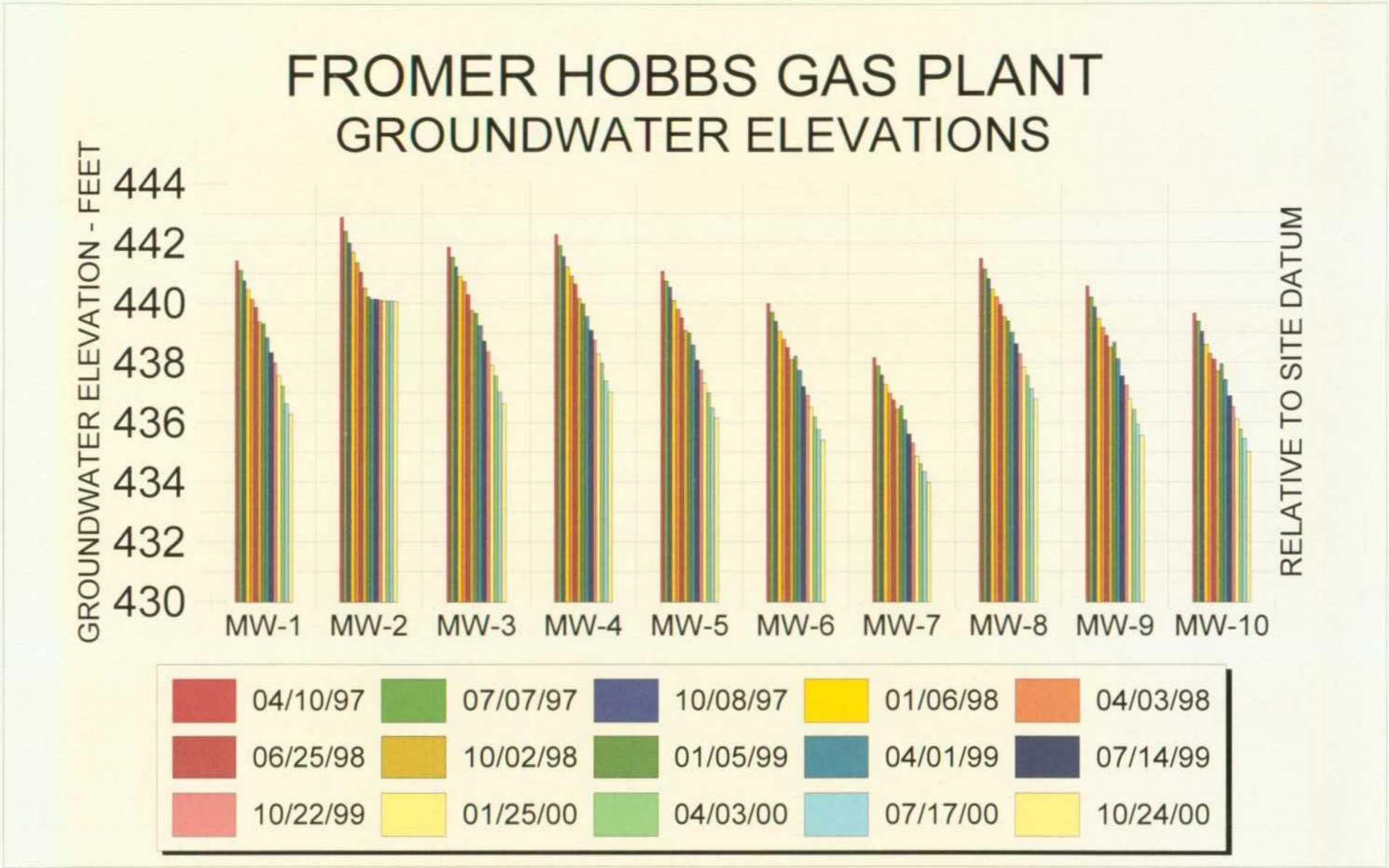
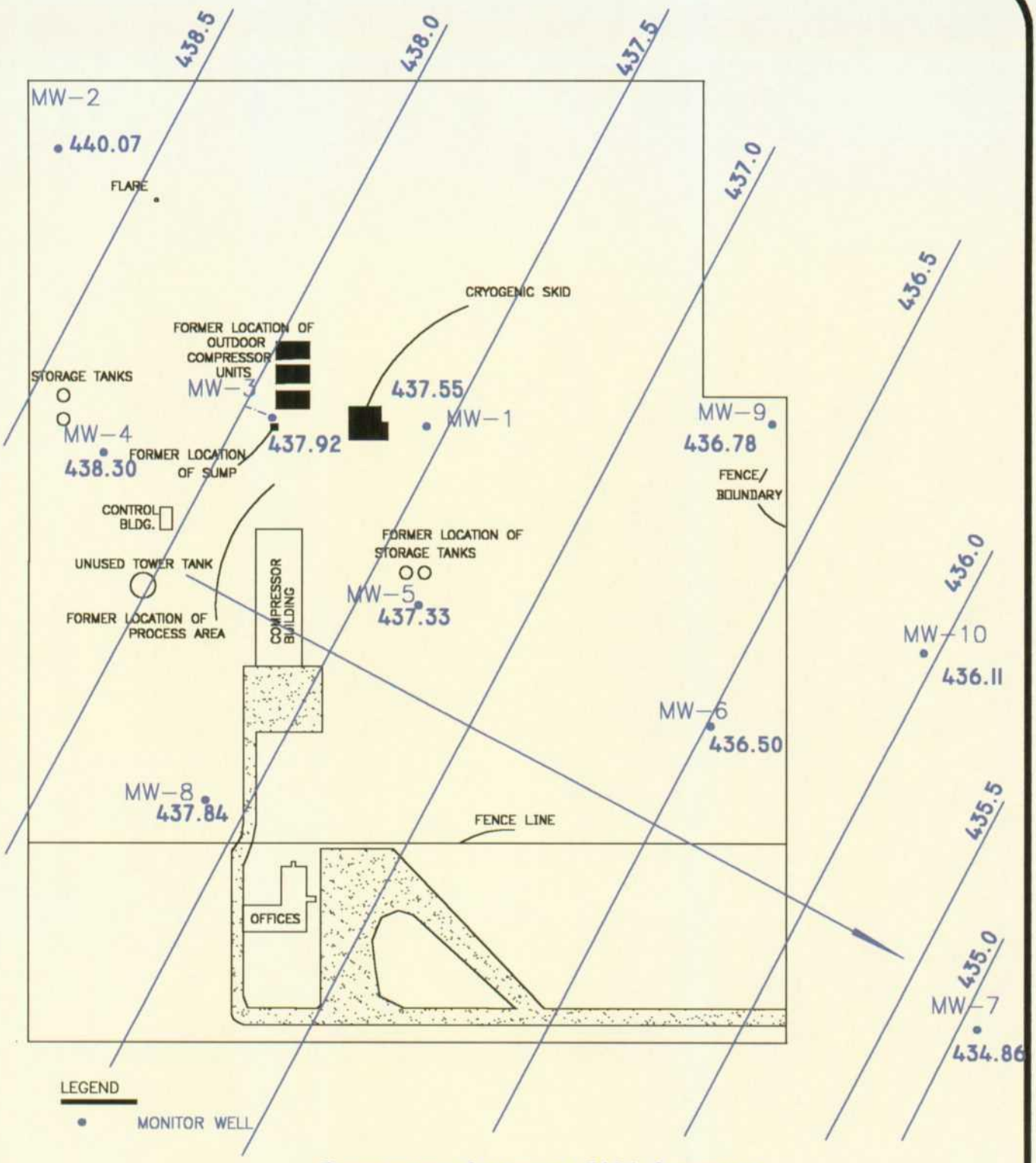

FROMER HOBBS GAS PLANT
GROUNDWATER ELEVATIONS
GROUNDWATER ELEVATION - FEET
444
442
440
438
436
434
432
430
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
RELATIVE TO SITE DATUM
04/10/97
07/07/97
10/08/97
01/06/98
04/03/98
06/25/98
10/02/98
01/05/99
04/01/99
07/14/99
10/22/99
01/25/00
04/03/00
07/17/00
10/24/00

Figure 3



GROUNDWATER GRADIENT = 360:1, SOUTHEAST

N

SCALE

0' 50' 100'

KINDER MORGAN, INC.—HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Groundwater Gradient Map — January 2000

FIGURE 4

Eco-logical Environmental Services Inc.

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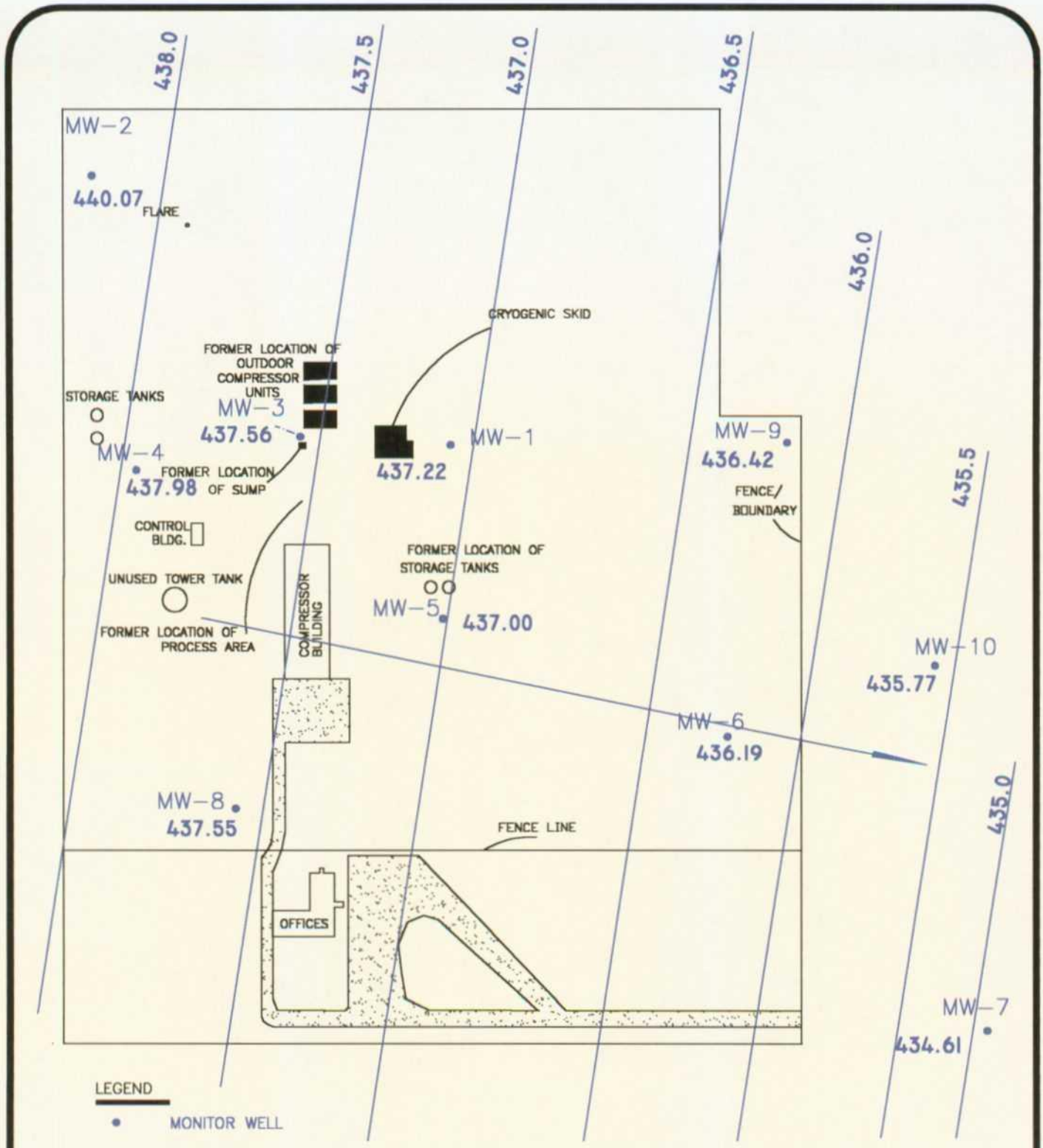

GROUNDWATER GRADIENT = 373:1, SOUTHEAST

N

SCALE

0' 50' 100'

KINDER MORGAN, INC.—HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO

Groundwater Gradient Map — April 2000

FIGURE 5

Eco-logical Environmental Services Inc.

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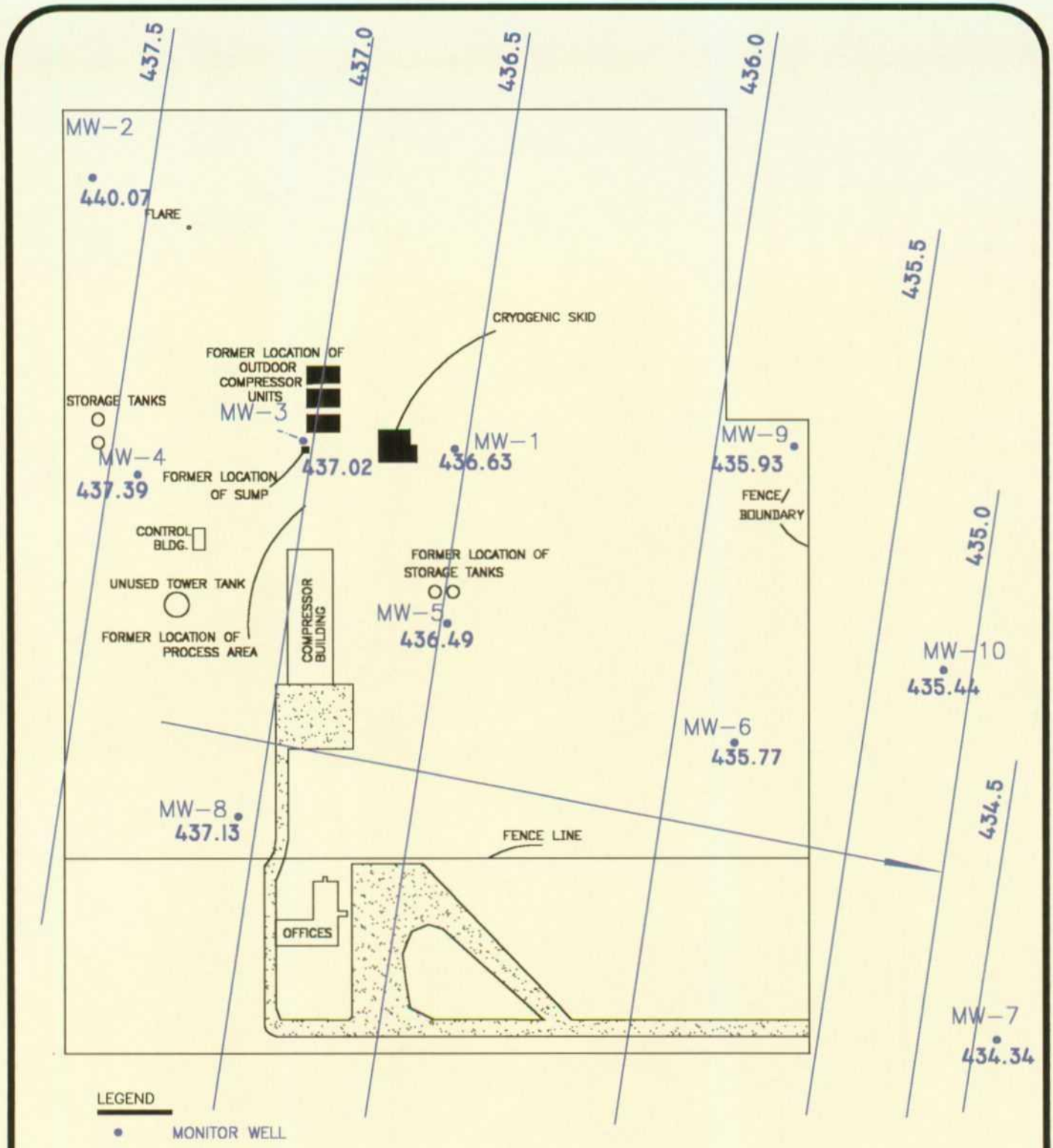

GROUNDWATER GRADIENT = 410:1, SOUTHEAST

N

SCALE

0' 50' 100'

KINDER MORGAN, INC.—HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Groundwater Gradient Map – July 2000

FIGURE 6

Eco-logical Environmental Services Inc.

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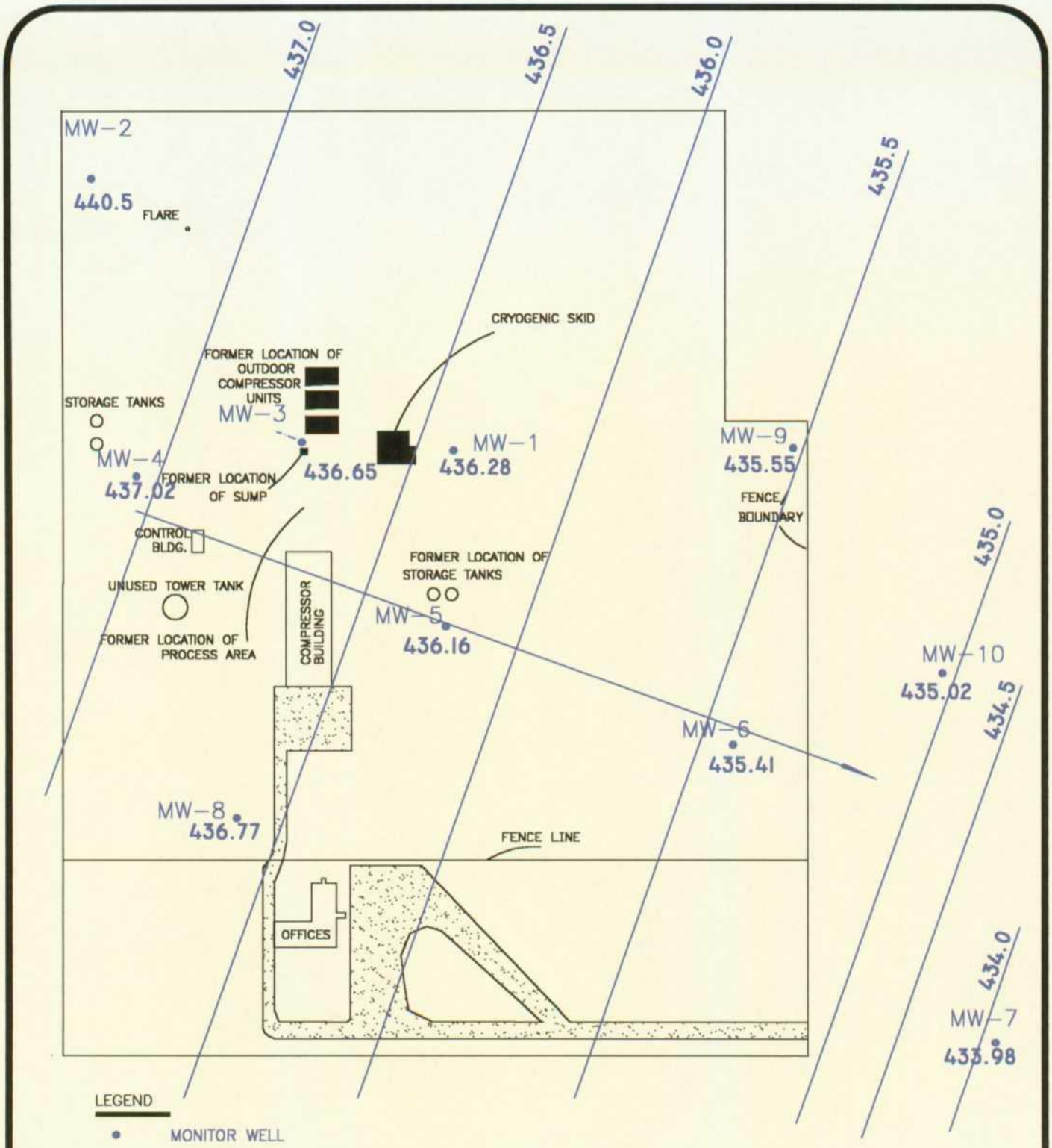


GROUNDWATER GRADIENT = 412:1, SOUTHEAST

N

SCALE

0' 50' 100'

KINDER MORGAN, INC.—HOBBS GAS PLANT

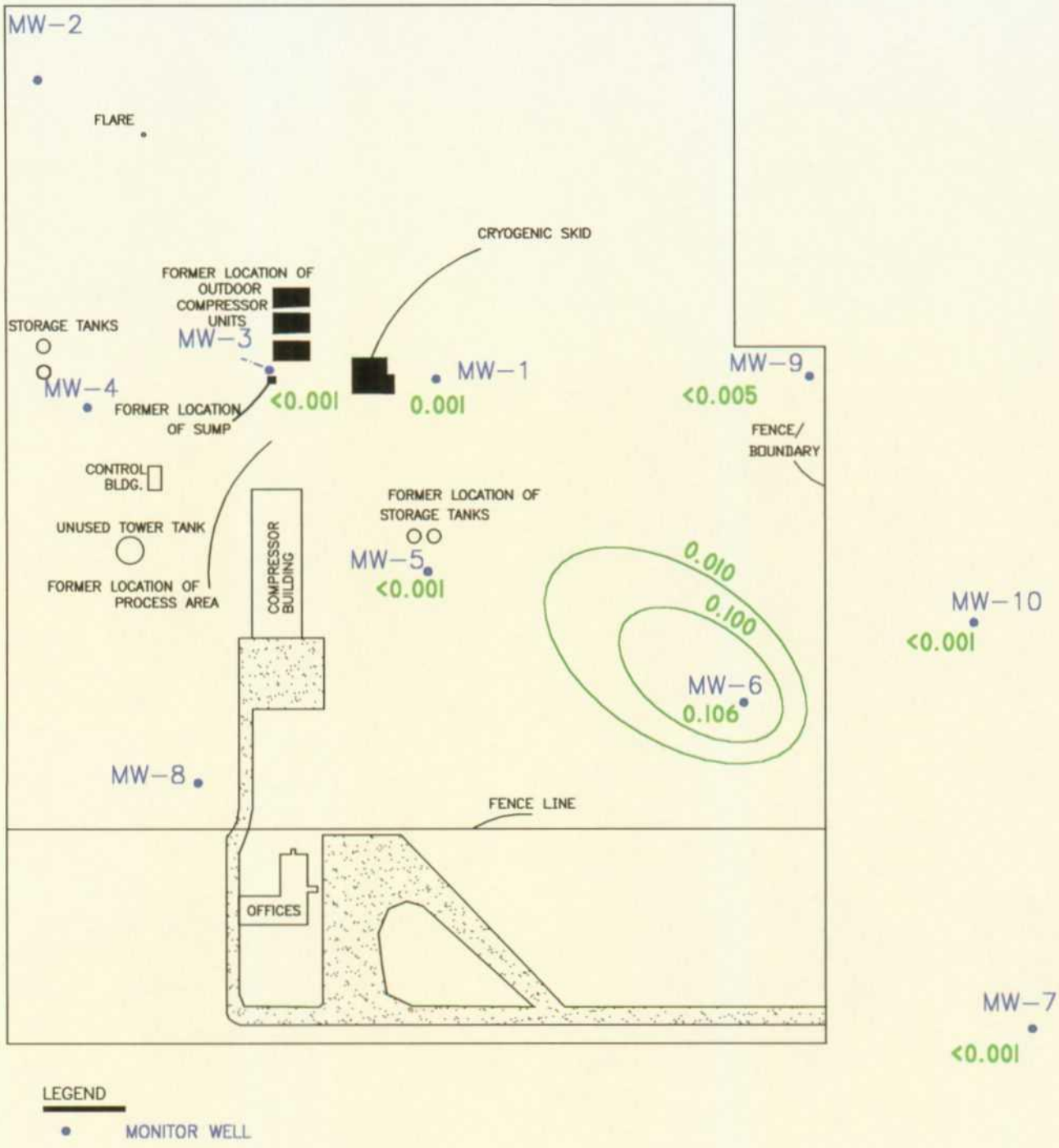
HOBBS, LEA COUNTY, NEW MEXICO

Groundwater Gradient Map – October 2000

FIGURE 7

Eco-logical Environmental Services Inc.

h:\master\279512\layer.dwg



N

SCALE

0' 50' 100'

KINDER MORGAN, INC.–HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Benzene Isograd Map – January 2000

FIGURE 8

Eco-logical Environmental Services Inc.

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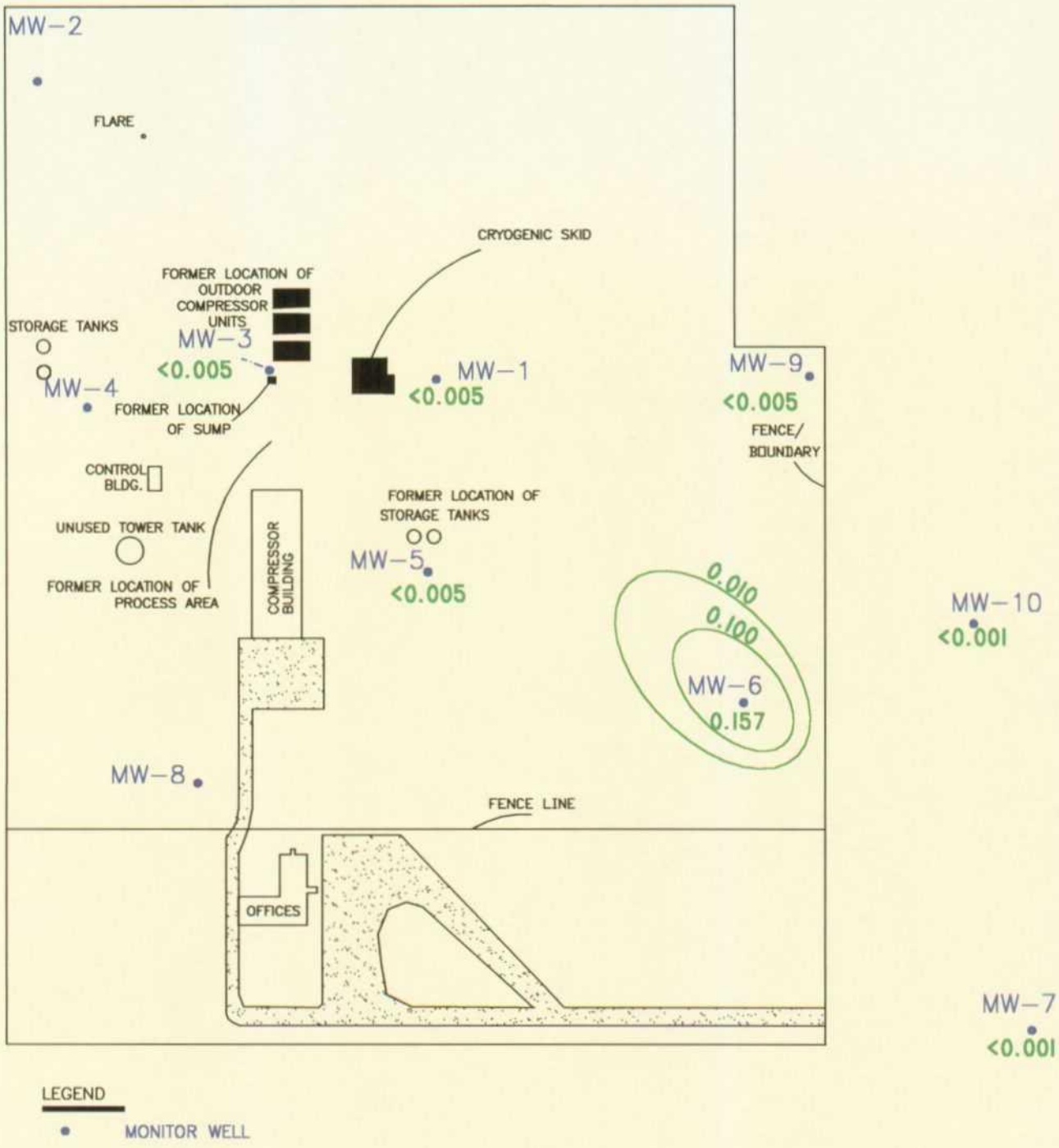


N

SCALE

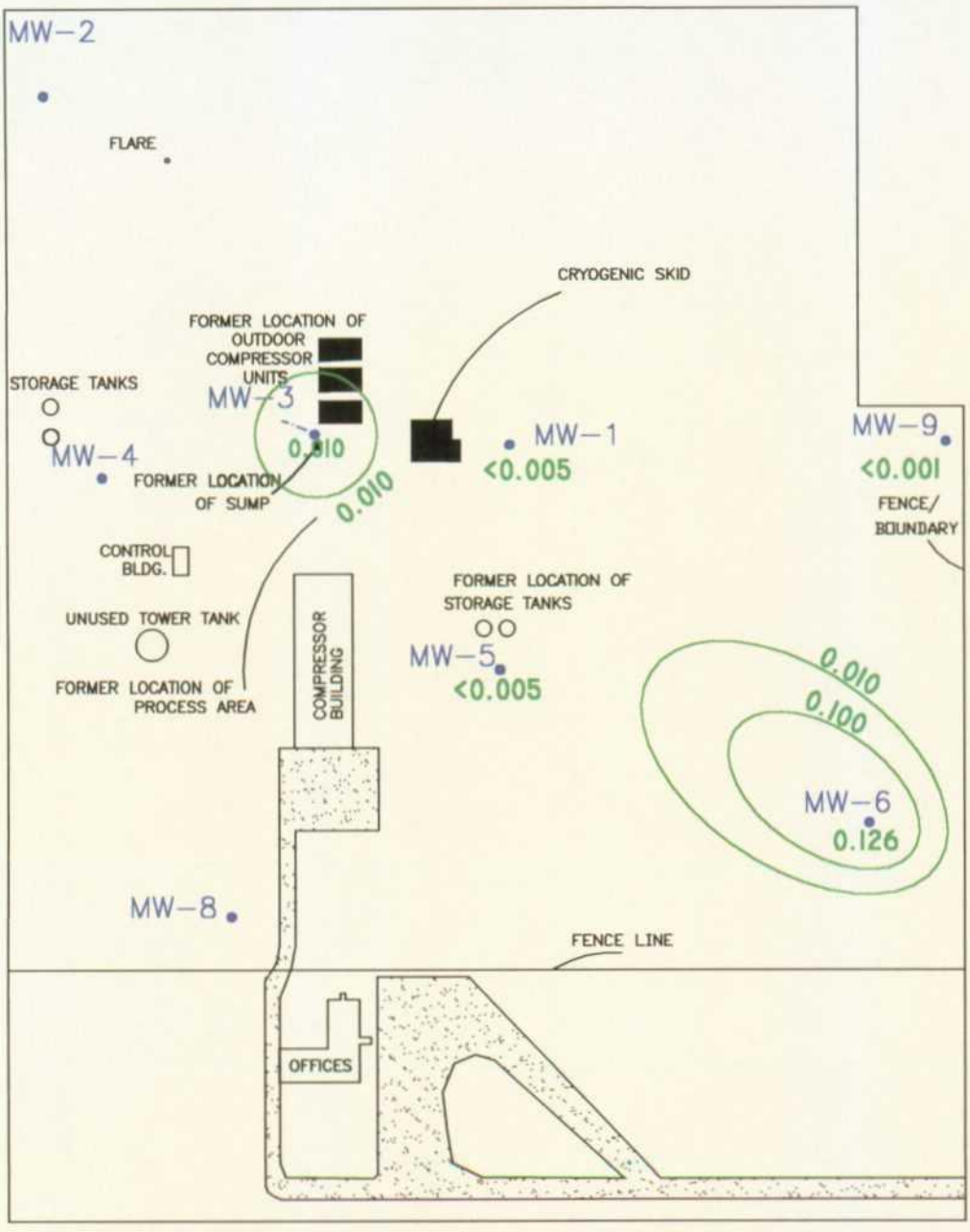
0' 50' 100'

KINDER MORGAN, INC.– HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Benzene Isograd Map – April 2000

FIGURE 9

Eco-logical Environmental Services Inc.

h:\master\279512\layer.dwg



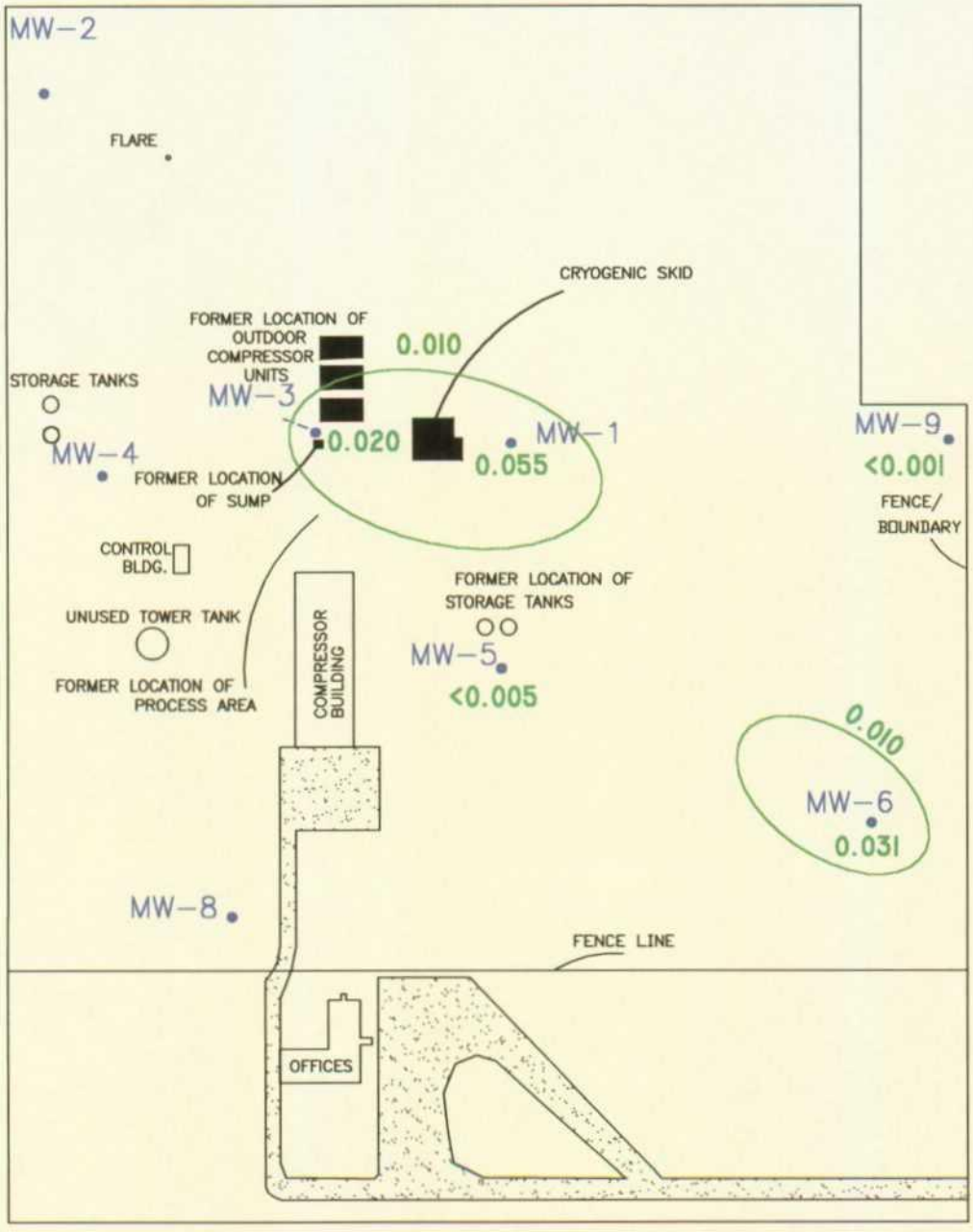
KINDER MORGAN, INC.– HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Benzene Isograd Map – July 2000

SCALE 0' 50' 100'

FIGURE 10

Eco-logical Environmental Services Inc.

h:\master\278512\layer.dwg



KINDER MORGAN, INC.–HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
Benzene Isograd Map – October 2000

SCALE
0' 50' 100'

FIGURE 11

Eco-logical Environmental Services Inc.

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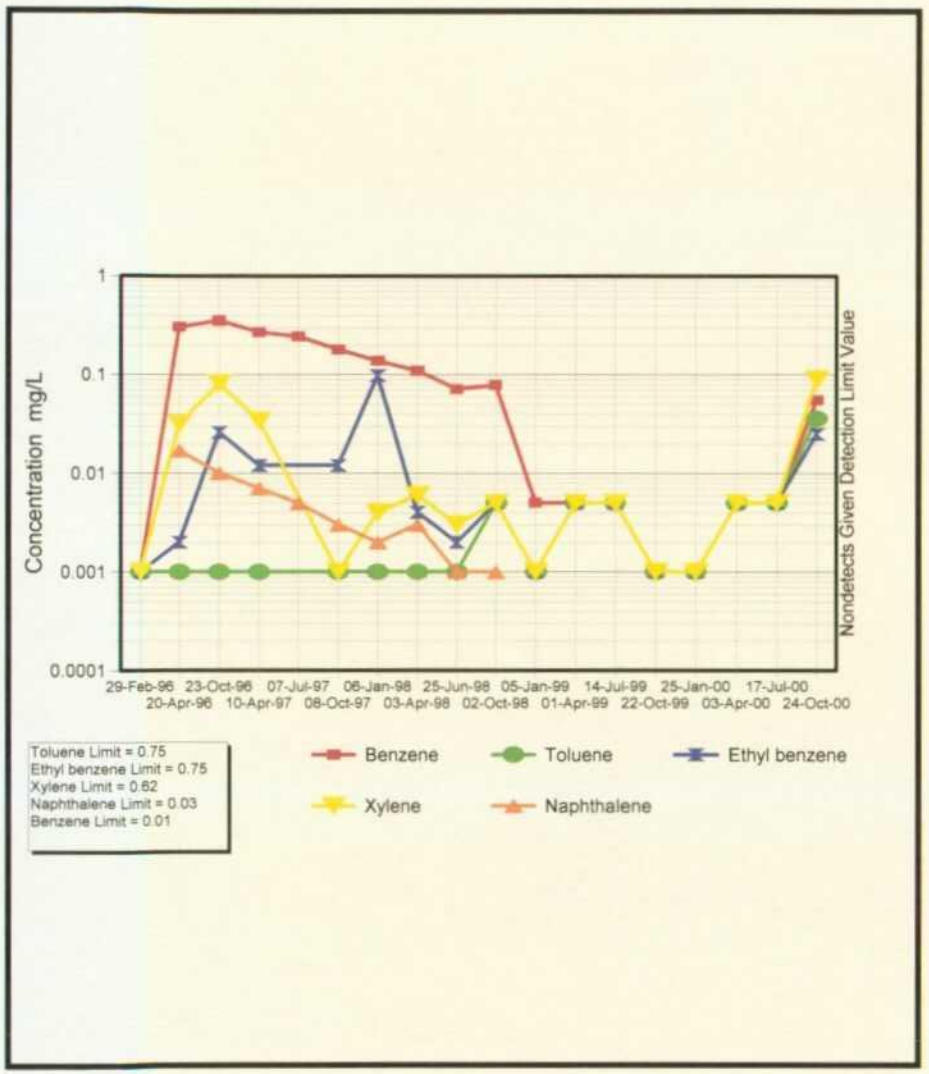
FORMER HOBBS GAS PLANT
MW-1 HISTORIC ANALYTICAL RESULTS



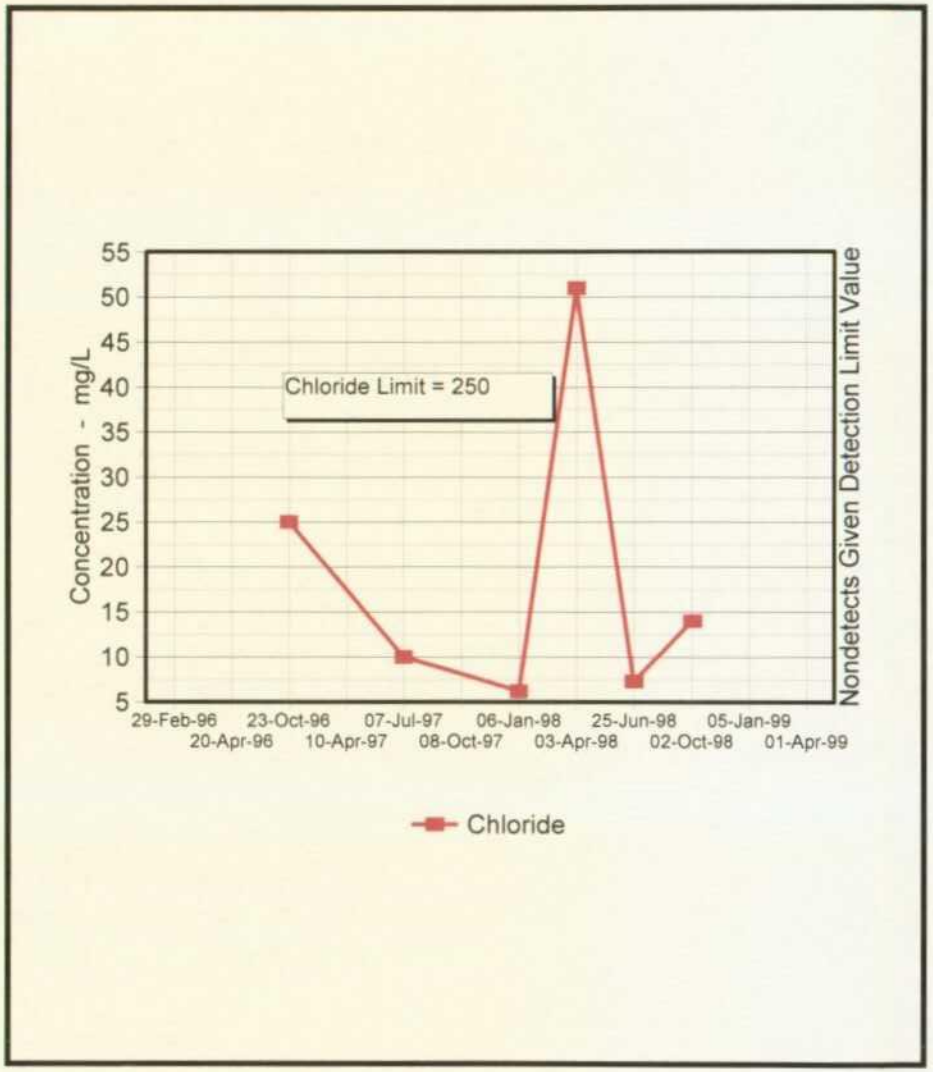
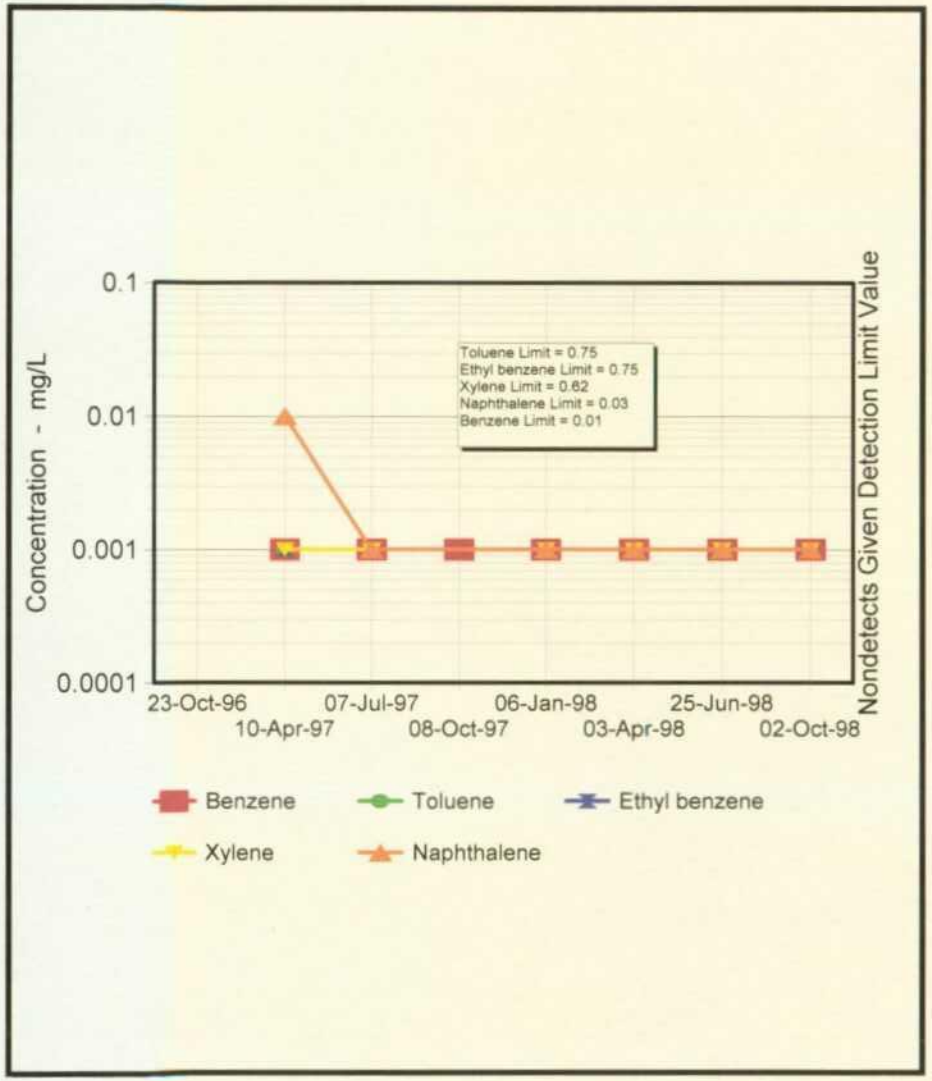


Figure 12

FORMER HOBBS GAS PLANT
MW-2 HISTORIC ANALYTICAL RESULTS



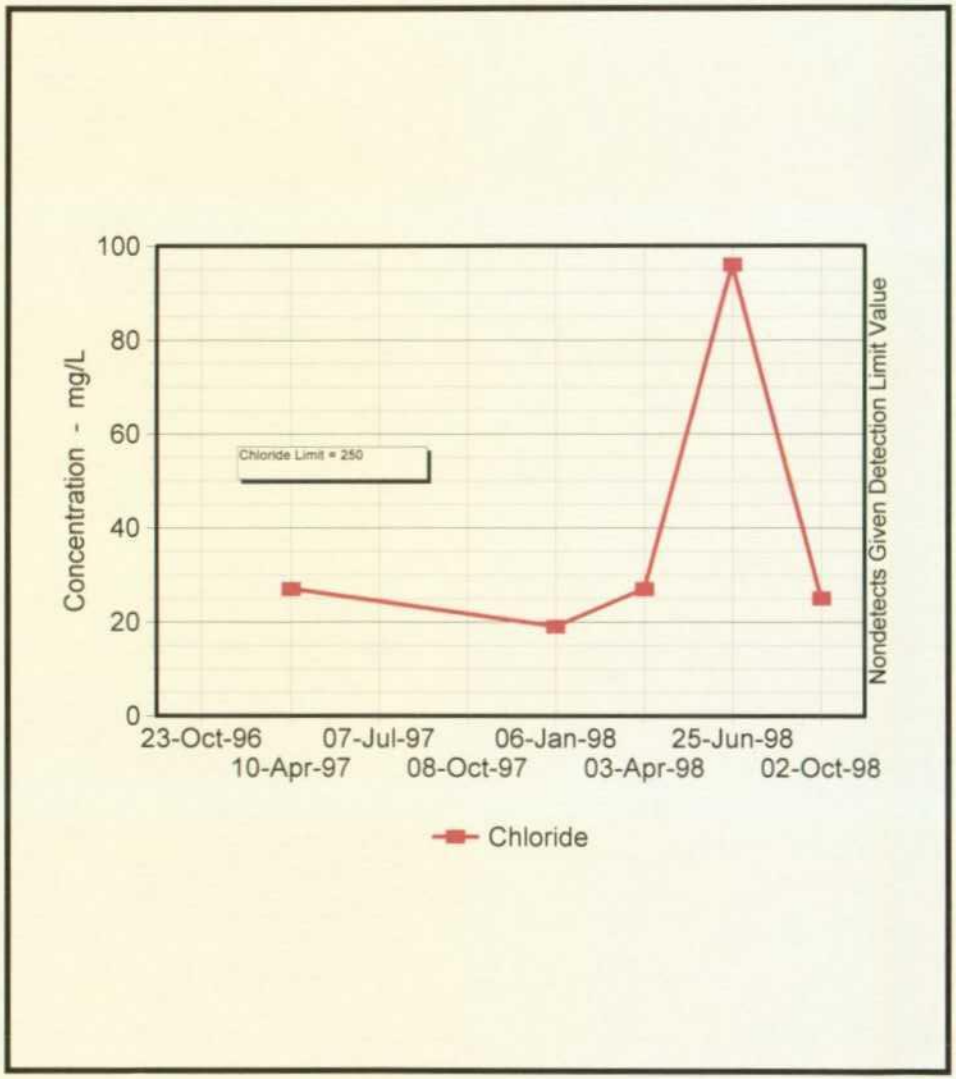
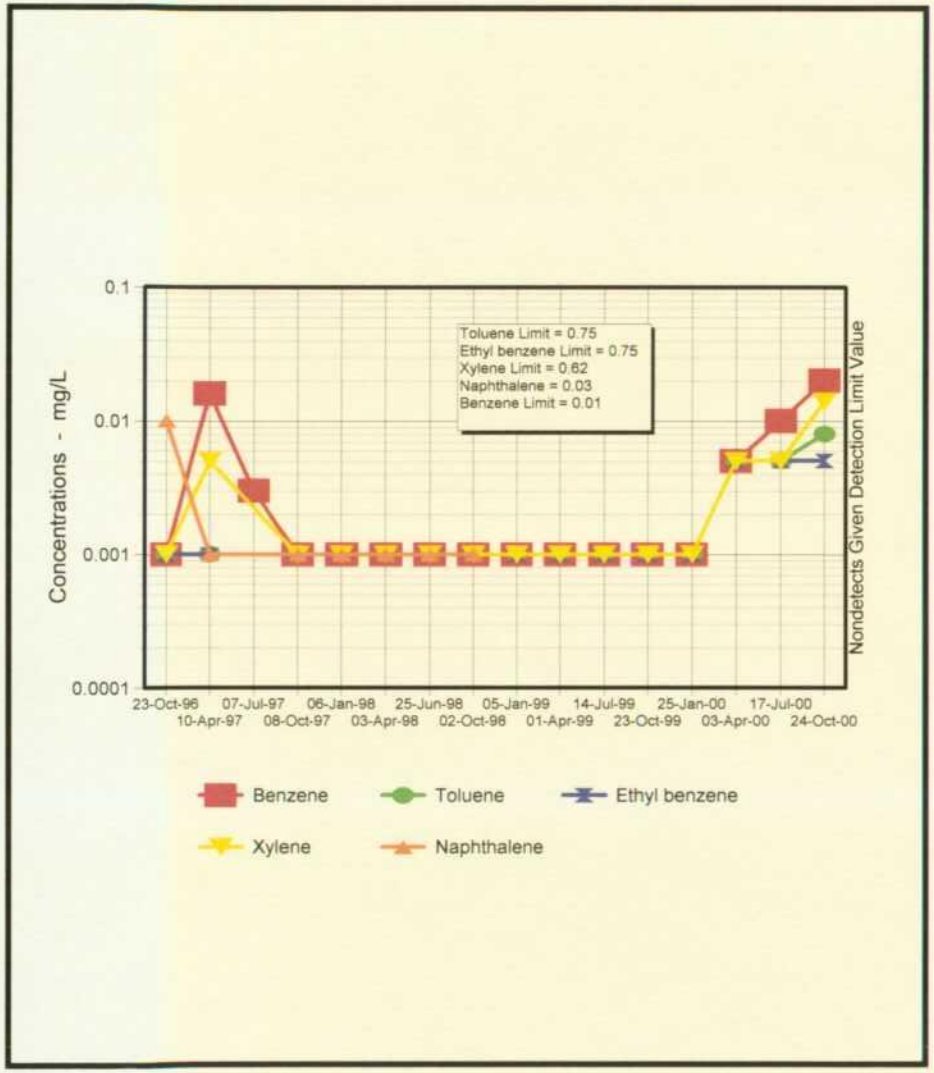


Figure 13

FORMER HOBBS GAS PLANT
MW-3 HISTORIC ANALYTICAL RESULTS



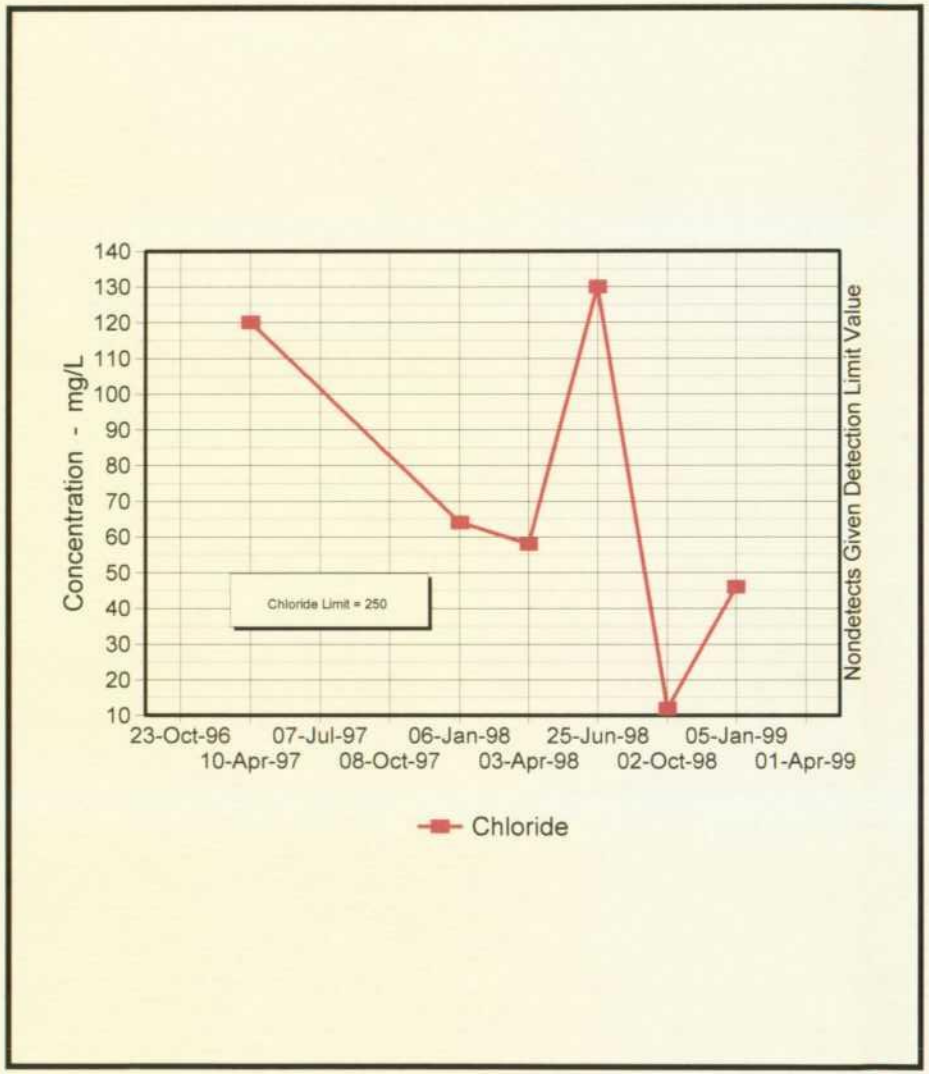
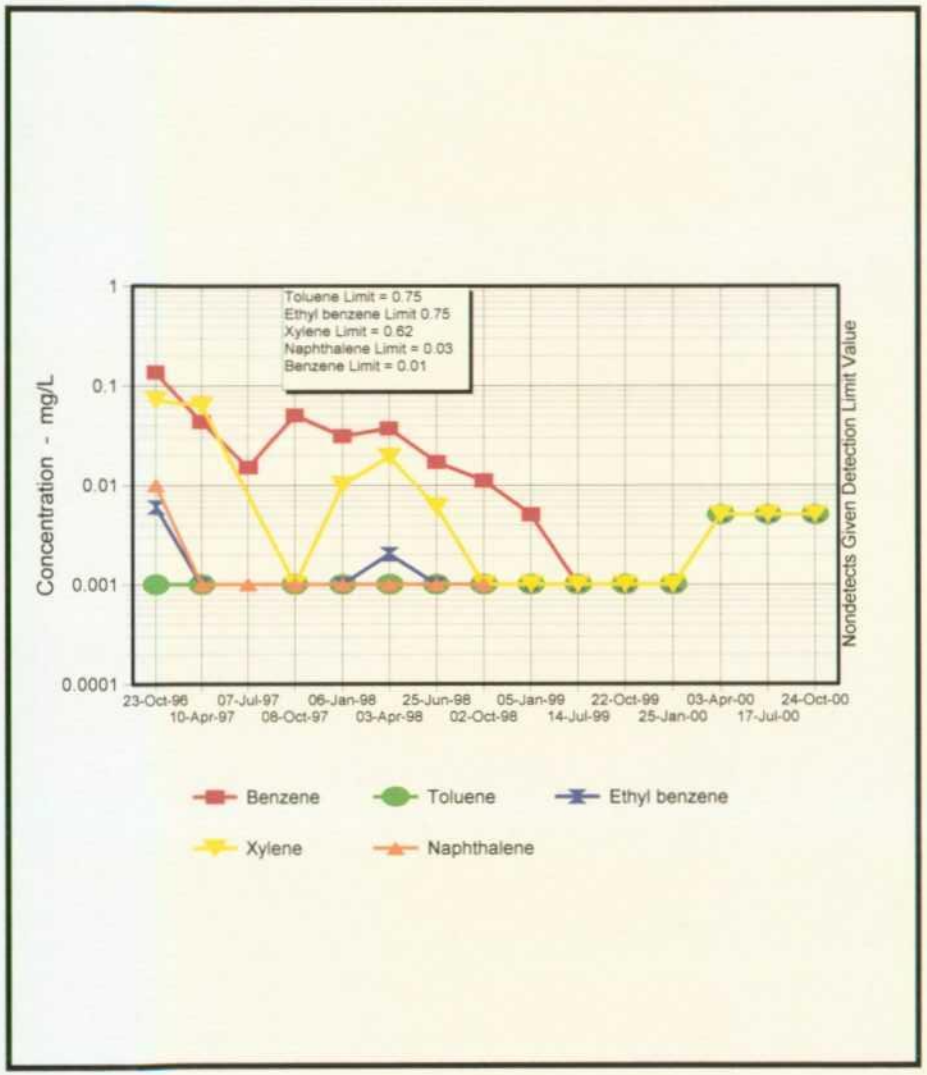


Figure 14

FORMER HOBBS GAS PLANT
MW-5 HISTORIC ANALYTICAL RESULTS



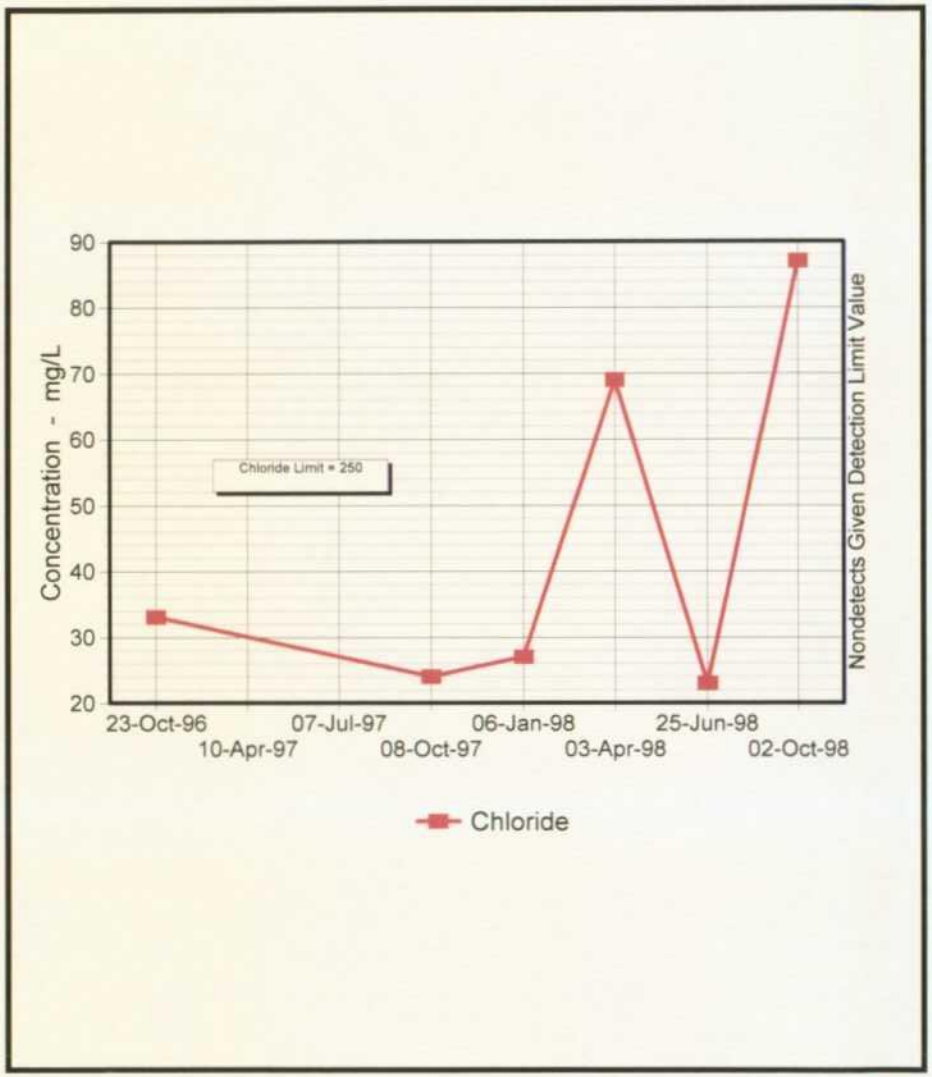
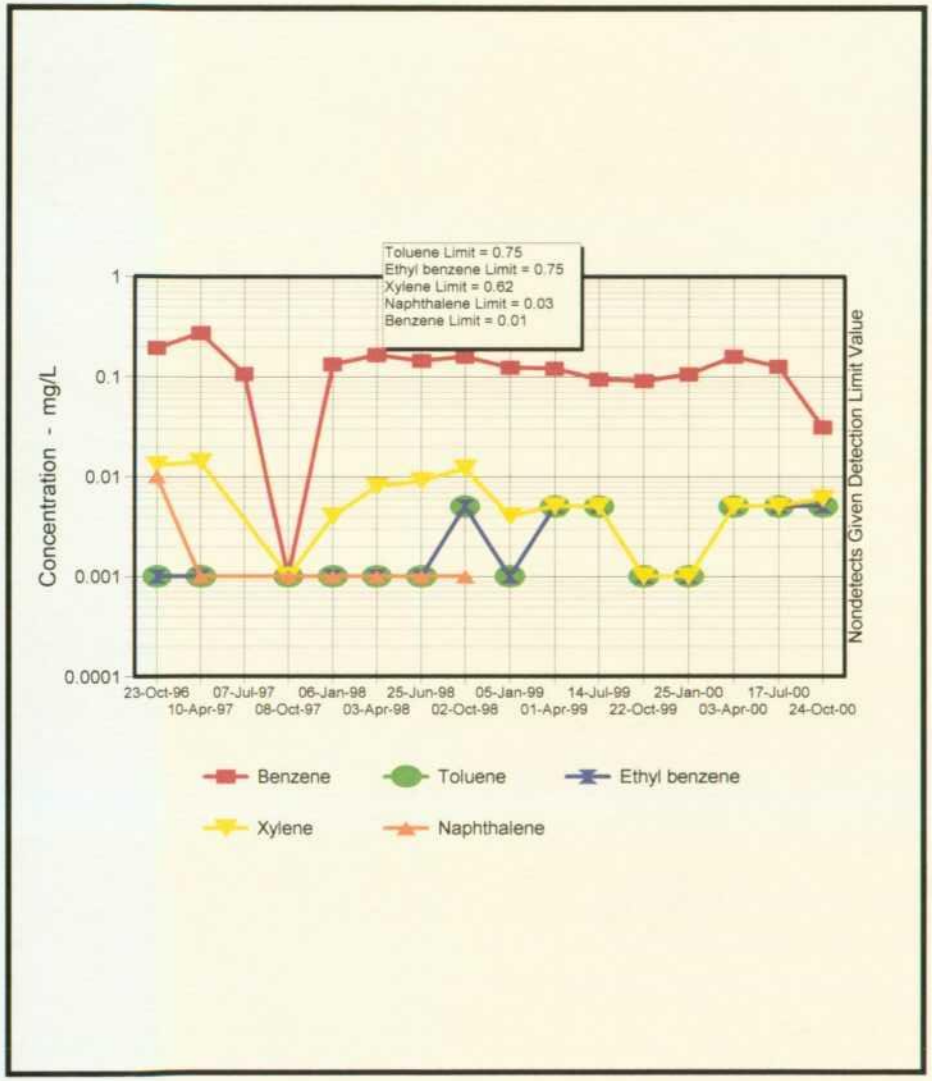


Figure 15

FORMER HOBBS GAS PLANT
MW-6 HISTORIC ANALYTICAL RESULTS



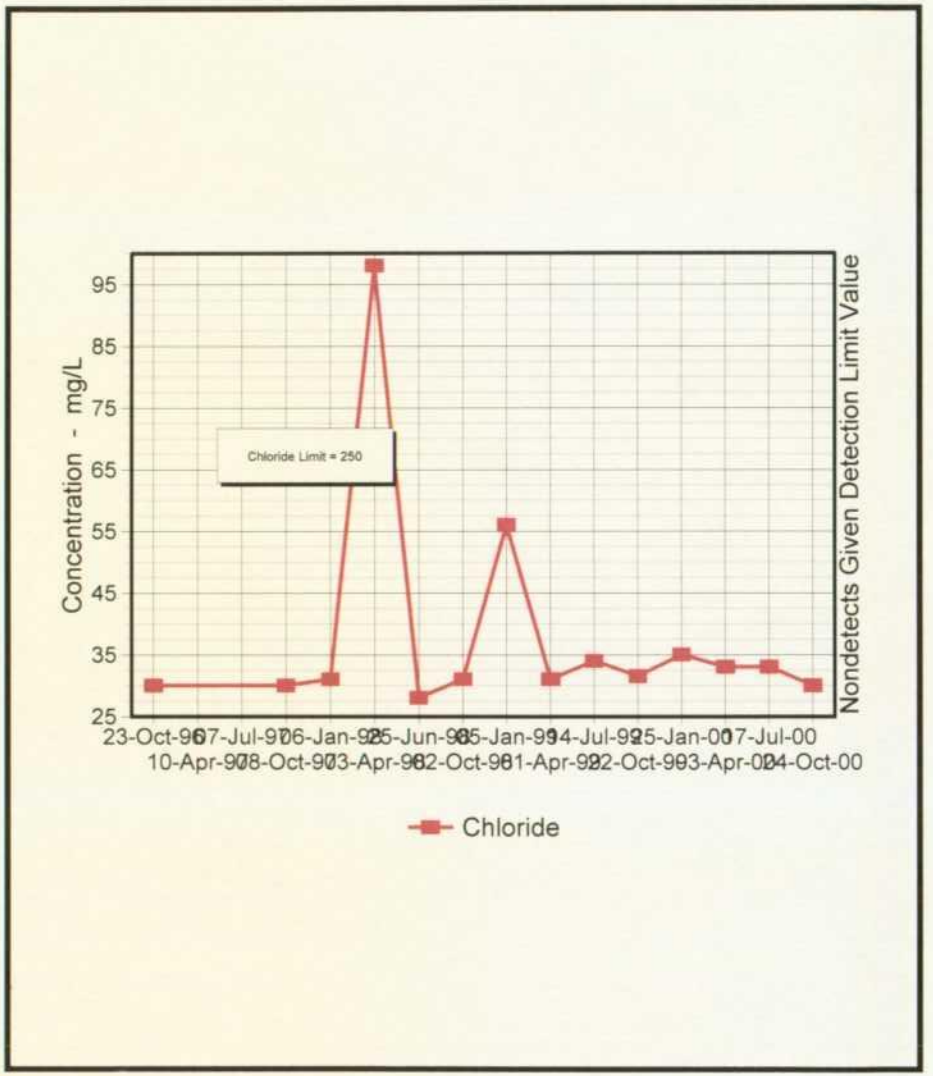


Figure 16

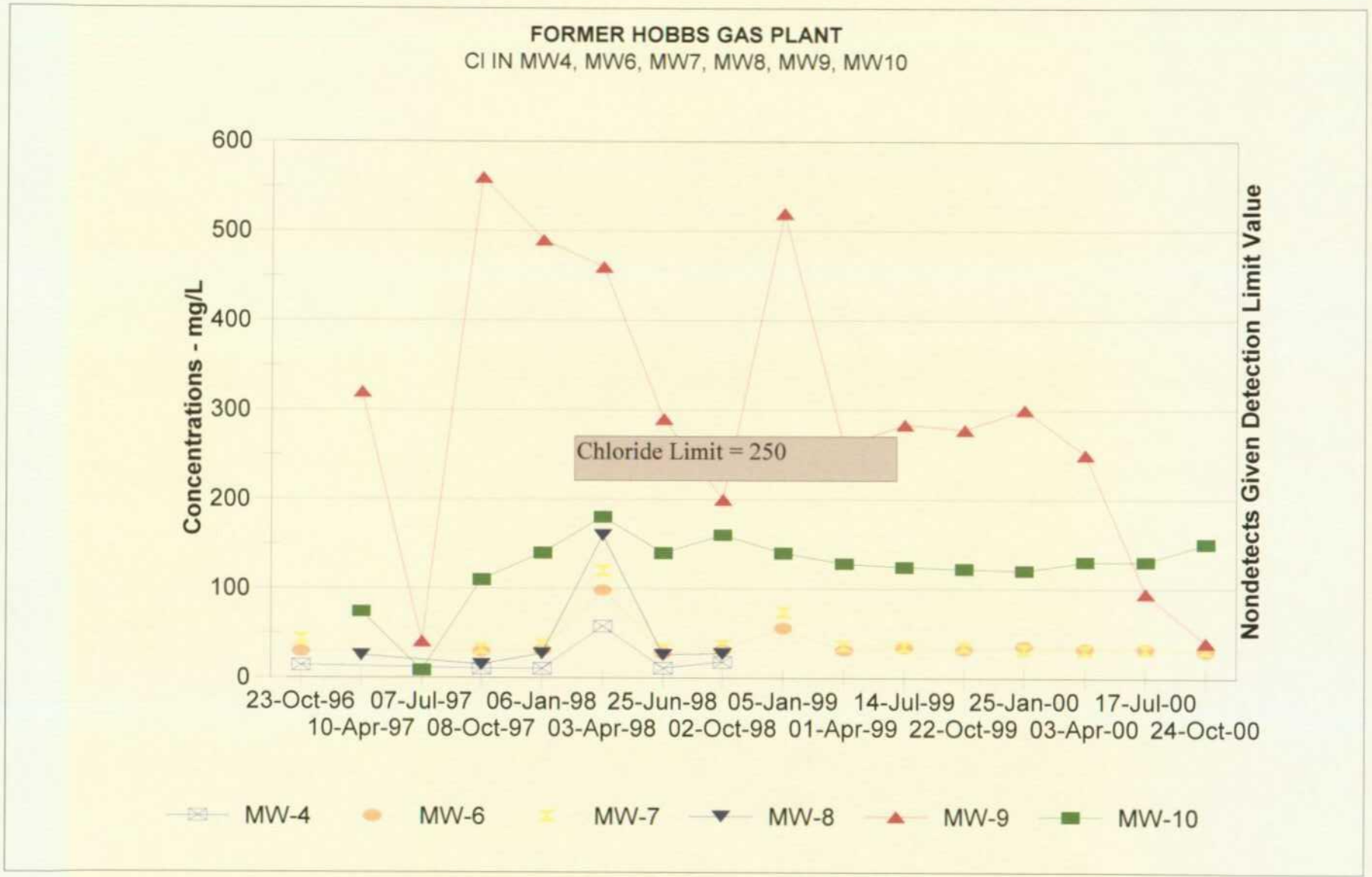

FORMER HOBBS GAS PLANT
Cl IN MW4, MW6, MW7, MW8, MW9, MW10
Concentrations - mg/L
Nondetects Given Detection Limit Value
600
500
400
300
200
100
0
Chloride Limit = 250
23-Oct-96
10-Apr-97
07-Jul-97
08-Oct-97
06-Jan-98
03-Apr-98
25-Jun-98
02-Oct-98
05-Jan-99
01-Apr-99
14-Jul-99
22-Oct-99
25-Jan-00
03-Apr-00
17-Jul-00
24-Oct-00
MW-4
MW-6
MW-7
MW-8
MW-9
MW-10

Figure 17

Table 1 Groundwater Table in Feet Monitor Well 1 Elevation of Screened Interval 436.7-456.7'						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	59.0	495.73	--	53.10	0.00	442.63
10/23/96	59.0	495.73	--	53.34	0.00	442.39
04/10/97	59.0	495.73	--	54.32	0.00	441.41
07/07/97	59.0	495.73	--	54.64	0.00	441.09
10/08/97	59.0	495.73	--	54.98	0.00	440.75
01/06/98	59.0	495.73	--	55.28	0.00	440.45
04/03/98	59.0	495.73	--	55.60	0.00	440.13
06/25/98	59.0	495.73	--	55.87	0.00	439.86
10/02/98	59.0	495.73	--	56.36	0.00	439.37
01/05/99	59.0	495.73	--	54.98	0.00	440.75
04/01/99	59.0	495.73	--	56.89	0.00	438.84
07/14/99	59.0	495.73	--	57.39	0.00	438.34
10/22/99	59.0	495.73	--	57.74	0.00	437.99
01/25/00	59.0	495.73	--	59.00	0.00	437.57
04/03/00	59.0	495.73	--	58.51	0.00	437.22
07/17/00	59.0	495.73	--	59.10	0.00	436.63
10/24/00	59.0	495.73	--	59.45	0.00	436.28

Table 2 Groundwater Table in Feet Monitor Well 2 Elevation of Screened Interval 440.4-460.4						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.0	502.41	--	58.33	0.00	444.08
04/10/97	62.0	502.41	--	59.54	0.00	442.87
07/07/97	62.0	502.41	--	60.00	0.00	442.41
10/08/97	62.0	502.41	--	60.39	0.00	442.02
01/06/98	62.0	502.41	--	60.70	0.00	441.71
04/03/98	62.0	502.41	--	61.06	0.00	441.35
06/25/98	62.0	502.41	--	61.37	0.00	441.04
10/02/98	62.0	502.41	--	61.91	0.00	440.50
01/05/99	62.0	502.41	--	60.39	0.00	442.02
04/01/99	62.0	502.41	--	62.28	0.00	440.13
07/14/99	62.0	502.41	--	62.28	0.00	440.13
10/22/99	62.0	502.41	--	62.31	0.00	440.10
01/25/00	62.0	502.41	--	62.34	0.00	440.07
04/03/00	62.0	502.41	--	62.34	0.00	440.07
07/17/00	62.0	502.41	--	62.34	0.00	440.07
10/24/00	62.0	502.41	--	62.36	0.00	440.05

Table 3 Groundwater Table in Feet Monitor Well 3 Elevation of Screened Interval 434.2-454.23						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.9	499.13	--	56.28	0.00	442.85
04/10/97	64.9	499.13	--	57.25	0.00	441.88
07/07/97	64.9	499.13	--	57.59	0.00	441.54
10/08/97	64.9	499.13	--	57.92	0.00	441.21
01/06/98	64.9	499.13	--	58.24	0.00	440.89
04/03/98	64.9	499.13	--	58.41	0.00	440.89
06/25/98	64.9	499.13	--	58.84	0.00	440.29
10/02/98	64.9	499.13	--	59.36	0.00	439.77
01/05/99	64.9	499.13	--	57.92	0.00	441.21
04/01/99	64.9	499.13	--	59.89	0.00	439.24
07/14/99	64.9	499.13	--	60.40	0.00	438.73
10/22/99	64.9	499.13	--	60.76	0.00	438.37
01/25/00	64.9	499.13	--	61.21	0.00	437.92
04/03/00	64.9	499.13	--	61.57	0.00	437.56
07/17/00	64.9	499.13	--	62.11	0.00	437.02
10/24/00	64.9	499.13	--	62.48	0.00	436.65

Table 4 Groundwater Table in Feet Monitor Well 4 Elevation of Screened Interval 436.8-456.8						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.3	501.12	--	58.12	0.00	443.00
04/10/97	64.3	501.12	--	58.83	0.00	442.29
07/07/97	64.3	501.12	--	59.19	0.00	441.93
10/08/97	64.3	501.12	--	59.56	0.00	441.56
01/06/98	64.3	501.12	--	59.91	0.00	441.21
04/03/98	64.3	501.12	--	60.21	0.00	440.91
06/25/98	64.3	501.12	--	60.48	0.00	440.64
10/02/98	64.3	501.12	--	60.97	0.00	440.15
01/05/99	64.3	501.12	--	59.56	0.00	441.56
04/01/99	64.3	501.12	--	61.57	0.00	439.55
07/14/99	64.3	501.12	--	62.03	0.00	439.09
10/22/99	64.3	501.12	--	62.37	0.00	438.75
01/25/00	64.3	501.12	--	62.82	0.00	438.30
04/03/00	64.3	501.12	--	63.14	0.00	437.98
07/17/00	64.3	501.12	--	63.73	0.00	437.39
10/24/00	64.3	501.12	--	64.10	0.00	437.02

Table 5 Groundwater Table in Feet Monitor Well 5 Elevation of Screened Interval 436.3-456.3						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.5	500.84	--	58.96	0.00	441.88
04/10/97	64.5	500.84	--	59.77	0.00	441.07
07/07/97	64.5	500.84	--	60.10	0.00	440.74
10/08/97	64.5	500.84	--	60.31	0.00	440.53
01/06/98	64.5	500.84	--	60.76	0.00	440.08
04/03/98	64.5	500.84	--	61.05	0.00	439.79
06/25/98	64.5	500.84	--	61.05	0.00	439.79
10/02/98	64.5	500.84	--	61.77	0.00	439.07
01/05/99	64.5	500.84	--	60.31	0.00	440.53
04/01/99	64.5	500.84	--	62.24	0.00	438.60
07/14/99	64.5	500.84	--	62.76	0.00	438.08
10/22/99	64.5	500.84	--	63.08	0.00	437.76
01/25/00	64.5	500.84	--	63.51	0.00	437.33
04/03/00	64.5	500.84	--	63.84	0.00	437.00
07/17/00	64.5	500.84	--	64.35	0.00	436.49
10/24/00	64.5	500.84	--	64.68	0.00	436.16

Table 6 Groundwater Table in Feet Monitor Well 6 Elevation of Screened Interval 433.6-453.6						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.7	496.27	--	55.53	0.00	440.74
04/10/97	62.7	496.27	--	56.28	0.00	439.99
07/07/97	62.7	496.27	--	56.58	0.00	439.69
10/08/97	62.7	496.27	--	56.88	0.00	439.39
01/06/98	62.7	496.27	--	57.23	0.00	439.04
04/03/98	62.7	496.27	--	57.49	0.00	438.78
06/25/98	62.7	496.27	--	57.49	0.00	438.78
10/02/98	62.7	496.27	--	57.17	0.00	438.10
01/05/99	62.7	496.27	--	56.88	0.00	439.39
04/01/99	62.7	496.27	--	58.52	0.00	437.75
07/14/99	62.7	496.27	--	59.08	0.00	437.19
10/22/99	62.7	496.27	--	59.36	0.00	436.91
01/25/00	62.7	496.27	--	59.77	0.00	436.50
04/03/00	62.7	496.27	--	60.08	0.00	436.19
07/17/00	62.7	496.27	--	60.50	0.00	435.77
10/24/00	62.7	496.27	--	60.86	0.00	435.41

Table 7 Groundwater Table in Feet Monitor Well 7 Elevation of Screened Interval 426.4-446.4						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	69.0	495.44	--	57.28	0.00	438.16
07/07/97	69.0	495.44	--	57.54	0.00	437.90
10/08/97	69.0	495.44	--	57.85	0.00	437.59
01/06/98	69.0	495.44	--	58.17	0.00	437.27
04/03/98	69.0	495.44	--	58.47	0.00	436.97
06/25/98	69.0	495.44	--	58.70	0.00	436.74
10/02/98	69.0	495.44	--	58.99	0.00	436.45
01/05/99	69.0	495.44	--	57.85	0.00	437.59
04/01/99	69.0	495.44	--	59.36	0.00	436.08
07/14/99	69.0	495.44	--	59.84	0.00	435.60
10/22/99	69.0	495.44	--	60.14	0.00	435.30
01/25/00	69.0	495.44	--	60.58	0.00	434.86
04/03/00	69.0	495.44	--	60.83	0.00	434.61
07/17/00	69.0	495.44	--	61.10	0.00	434.34
10/24/00	69.0	495.44	--	61.46	0.00	433.98

Table 8 Groundwater Table in Feet Monitor Well 8 Elevation of Screened Interval 430.9-450.9						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	70.9	501.81	--	60.32	0.00	441.49
07/07/97	70.9	501.81	--	60.67	0.00	441.49
10/08/97	70.9	501.81	--	61.00	0.00	440.81
01/06/98	70.9	501.81	--	61.35	0.00	440.46
04/03/98	70.9	501.81	--	61.61	0.00	440.20
06/25/98	70.9	501.81	--	61.87	0.00	439.94
10/02/98	70.9	501.81	--	62.27	0.00	439.54
01/05/99	70.9	501.81	--	61.00	0.00	440.81
04/01/99	70.9	501.81	--	62.79	0.00	439.02
07/14/99	70.9	501.81	--	63.19	0.00	438.62
10/22/99	70.9	501.81	--	63.51	0.00	438.30
01/25/00	70.9	501.81	--	63.97	0.00	437.84
04/03/00	70.9	501.81	--	64.26	0.00	437.55
07/17/00	70.9	501.81	--	64.68	0.00	437.13
10/24/00	70.9	501.81	--	65.04	0.00	436.77

Table 9 Groundwater Table in Feet Monitor Well 9 Elevation of Screened Interval 429.5-449.5						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	67.3	496.85	--	56.29	0.00	440.56
07/07/97	67.3	496.85	--	56.66	0.00	440.19
10/08/97	67.3	496.85	--	57.00	0.00	439.85
01/06/98	67.3	496.85	--	57.38	0.00	439.47
04/03/98	67.3	496.85	--	57.67	0.00	439.18
06/25/98	67.3	496.85	--	57.95	0.00	438.90
10/02/98	67.3	496.85	--	58.34	0.00	438.51
01/05/99	67.3	496.85	--	57.00	0.00	439.85
04/01/99	67.3	496.85	--	58.73	0.00	438.12
07/14/99	67.3	496.85	--	59.31	0.00	437.54
10/22/99	67.3	496.85	--	59.61	0.00	437.24
01/25/00	67.3	496.85	--	60.07	0.00	436.78
04/03/00	67.3	496.85	--	60.43	0.00	436.42
07/17/00	67.3	496.85	--	60.92	0.00	435.93
10/24/00	67.3	496.85	--	61.30	0.00	435.55

Table 10 Groundwater Table in Feet Monitor Well 10 Elevation of Screened Interval 426.0-446.0						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	66.5	492.46	--	52.83	0.00	439.63
07/07/97	66.5	492.46	--	53.09	0.00	439.37
10/08/97	66.5	492.46	--	53.43	0.00	439.03
01/06/98	66.5	492.46	--	53.86	0.00	438.60
04/03/98	66.5	492.46	--	54.17	0.00	438.29
06/25/98	66.5	492.46	--	54.35	0.00	438.11
10/02/98	66.5	492.46	--	54.76	0.00	437.70
01/05/99	66.5	492.46	--	53.43	0.00	439.03
04/01/99	66.5	492.46	--	55.04	0.00	437.42
07/14/99	66.5	492.46	--	55.59	0.00	436.87
10/22/99	66.5	492.46	--	55.94	0.00	436.52
01/25/00	66.5	492.46	--	56.35	0.00	436.11
04/03/00	66.5	492.46	--	56.96	0.00	435.77
07/17/00	66.5	492.46	--	57.02	0.00	435.44
10/24/00	66.5	492.46	--	57.44	0.00	435.02

Table 11 - MW-1 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
02/14/96	0.083	<0.001	<0.001	0.008	--	--	--
02/29/96	<0.001	<0.001	<0.001	<0.001	--	--	--
04/20/96	0.305	<0.001	0.002	0.032	<0.001	0.017	--
10/23/96	0.352	<0.001	0.026	0.081	0.025	0.01	--
04/10/97	0.268	<0.001	0.012	0.034	<0.001	0.007	--
07/07/97	0.243	--	--	--	--	0.005	--
10/08/97	0.180	<0.001	0.012	<0.001	--	.003	<10
01/06/98	0.138	<0.001	0.008	<0.001	--	0.002	6.2
04/03/98	0.109	<0.001	0.004	0.006	--	0.003	51
06/25/98	0.071	<0.001	0.002	0.003	--	<0.001	7.3
10/02/98	0.078	<0.005	<0.005	<0.005	--	<0.001	14.0
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.005	<0.005	<0.005	<0.005	--	--	--
07/14/99	<0.005	<0.005	<0.005	<0.005	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	--
10/24/00	0.055	0.036	0.025	0.090	--	--	--

Shaded areas indicate over OCD Limits

Table 12 - MW-2 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	19
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	96
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	25.0
10/02/98	0.002	<0.001	<0.001	<0.001	--	<0.001	--
01/05/99	Sampling discontinued as approved by OCD						

Table 13 - MW-3 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	0.016	<0.001	<0.001	0.005	<0.001	<0.001	--
07/07/97	0.003	–		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	64
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	130
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	12
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	46
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	0.010	<0.005	<0.005	<0.005	--	--	--
10/24/00	0.020	0.008	<0.005	0.014	--	--	--

Shaded areas indicate over OCD Limits

Table 14 - MW-4 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	<10
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	10
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	11
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	18
01/05/99	Sampling discontinued as approved by OCD						

Table 15 - MW-5 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.135	<0.001	0.006	0.071	<0.001	<0.01	--
04/10/97	0.043	<0.001	<0.001	0.063	<0.001	0.001	--
07/07/97	0.015	--	--	--	--	<0.001	--
10/08/97	0.050	<0.001	<0.001	<0.001	--	0.001	24
01/06/98	0.031	<0.001	<0.001	0.010	--	<0.001	27
04/03/98	0.037	<0.001	0.002	0.019	--	0.001	69
06/25/98	0.017	<0.001	<0.001	0.006	--	<0.001	23
10/02/98	0.011	<0.001	<0.001	<0.001	--	<0.001	87
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	0.003	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	--
04/03/00	<0.005	<0.005	<0.005	<0.005	--	--	--
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	--
10/24/00	<0.005	<0.005	<0.005	<0.005	--	--	--

Shaded areas indicate over OCD Limits

Table 16 - MW-6 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.192	<0.001	<0.001	0.013	<0.001	<0.01	--
04/10/97	0.272	<0.001	<0.001	0.014	<0.001	<0.001	--
07/07/97	0.106	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	30
01/06/98	0.132	<0.001	<0.001	0.004	--	<0.001	31
04/03/98	0.165	<0.001	<0.001	0.008	--	<0.001	98
06/25/98	0.143	<0.001	<0.001	0.009	--	<0.001	28
10/02/98	0.157	<0.005	<0.005	0.012	--	<0.001	31
01/05/99	0.123	<0.001	<0.001	0.004	--	--	56
04/01/99	0.120	<0.001	<0.001	<0.005	--	--	31
07/14/99	0.093	<0.005	<0.005	<0.005	--	--	34
10/22/99	0.090	<0.001	<0.001	<0.001	--	--	31.5
01/25/00	0.105	<0.001	<0.001	<0.001	--	--	35
04/03/00	0.157	<0.005	<0.005	<0.005	--	--	33
07/17/00	0.126	<0.005	<0.005	<0.005	--	--	33
10/24/00	0.031	<0.005	<0.005	0.006	--	--	30

Shaded areas indicate over OCD Limits

Table 17 - MW-7 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
01/09/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	37
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	120
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	36
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	74
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	36
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	35
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	35.2
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	32
04/03/00	<0.001	<0.001	<0.001	<0.001	--	--	31
07/17/00	<0.001	<0.001	<0.001	<0.001	--	--	32
10/24/00	<0.001	<0.001	<0.001	<0.001	--	--	33

Table 18 - MW-8 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	15
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	26
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
01/05/99	Sampling discontinued as approved by OCD						

Table 19 - MW-9 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	320
07/07/97	<0.001	--	--	--	--	--	41
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	560
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	490
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	460
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	290
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	200
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	520
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	260
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	284
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	278
01/25/00	<0.005	<0.005	<0.005	<0.005			300
04/03/00	<0.005	<0.005	0.012	<0.005			250
07/17/00	<0.001	<0.001	<0.001	<0.001			95
10/24/00	<0.001	<0.001	<0.001	<0.001			40

Shaded areas indicate over OCD Limits

Table 20 - MW-10 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	8.8
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	110
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	101
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	180
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	140
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	140
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	128
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	124
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	122
01/25/00	<0.001	<0.001	<0.001	<0.001	--	--	120
04/03/00	<0.001	<0.001	<0.001	<0.001	--	--	130
07/17/00	<0.005	<0.005	<0.005	<0.005	--	--	130
10/24/00	<0.001	<0.001	<0.001	<0.001	--	--	150

IV. Conclusions and Recommendations

The plant operations have ceased at the site and the sources that may have caused the impacts to the groundwater have been removed. In addition, the removed impacted soils have been remediated to meet WQCC Guideline levels and have been returned to the excavations per the Soils Work Plan approved in January 1996. Three of the ten monitor wells at the Former Hobbs Gas Plant have shown dissolved phase hydrocarbons (benzene) at levels above the OCD Guidelines at different times throughout the year.

- Fifteen (15) full quarterly groundwater monitoring and sampling events have been conducted at this site.

- Groundwater has dropped an average of 4.7 feet since the first sampling event of October 1996.

- Dissolved phase hydrocarbons have periodically occurred above OCD Guidelines in three of the ten monitor wells at the site (MW-1, MW-3, and MW-6) however, no free-phase hydrocarbons have been observed at the site.

- Only MW-6 has consistently contained concentrations of benzene above the WQCC Guideline level. The highest concentration down-gradient from the source is in monitor well MW-6 at an average concentration of 0.105 ppm.. The property line is 90 feet east of MW-6 and the groundwater flow direction is southeast. Concentrations in the next down-gradient monitor well (located off-site), a distance of 470 feet from MW-6, remains below detection limit.

- Soil cleanup objectives of the January 1997 Abatement and Closure plan have been met.

The level of benzene in MW-6 has been above the WQCC Guideline level of 0.01 ppm, but has been consistently declining. Benzene levels in MW-5 have remained below action levels during all of the 1999 and 2000 sampling events. The general trend in the benzene levels shows a decrease in concentrations. The recent appearance of BTEX in MW-1 and MW-3 could be attributed to a sampling or lab error and will be compared to future analytical data. Chloride levels present in MW-9 have decreased to below WQCC levels in the last two sampling events. Based on interviews with American Processing personnel no source of the chloride can be placed on former operations of the plant. The source of the chloride is not known and is **not** believed to be from the plant.

Based on historical analytical results, a reduction to semi-annual sampling and monitoring is proposed. Benzene is proposed to be monitored in wells MW-1, MW-3, MW-5, MW-6, MW-7, MW-9, and MW-10. Chloride is proposed to be monitored in wells MW-6, MW-7, MW-9, and MW-10. No testing is proposed for MW-2, MW-4, and MW-8 except for water levels at this time as requested in the January 6, 1998 Annual Report and approved by the OCD letter dated December 15, 1998.

V. Quality Assurance / Quality Control Procedures

Field quality assurance/quality control (QA/QC) measures consisted of equipment decontamination, use of disposable sampling equipment, calibrations of field instruments, ensuring that the samples were analyzed within the EPA holding times, documentation of work activities in a bound logbook, and adherence to strict chain-of-custody protocol. The laboratory QA/QC measures were based on guidance published in the most current edition of the EPA Test Methods for Evaluating Solid Waste SW-846.

Quality Control samples were also obtained to evaluate the data. A trip blank was also analyzed with nondetectable results, suggesting that no cross-contamination occurred during shipment. Cross contamination during sampling was limited due to the use of disposable equipment between wells and gauging and purging of wells from least contaminated to most contaminated. A duplicate sample was obtained from MW-6. A comparison to the original sample of the contaminates that were present reveals results within 9.8% on total BTEX. On a per chemical basis, the total difference occurred on benzene which differed by 11.4%. This duplicate difference does not indicate any errors in the sample collection or testing. The following table presents the QA/QC results for comparison.

Quality Control Samples	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
Trip	<0.001	<0.001	<0.001	<0.001
MW-6	0.031	<0.005	<0.005	0.006
MW-6D (duplicate)	0.035	<0.005	<0.005	0.006

Reported laboratory quality control parameters do not appear to indicate suspect results. No damaged or compromised containers were noted. No unusual relative percent difference (RPD) results were noted.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: November 21, 2000

Order ID Number: A00102528

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
156980	MW-1	Water	10/24/00	11:40	10/25/00
156981	MW-3	Water	10/24/00	11:20	10/25/00
156982	MW-5	Water	10/24/00	12:00	10/25/00
156983	MW-6	Water	10/24/00	12:20	10/25/00
156984	MW-7	Water	10/24/00	10:30	10/25/00
156985	MW-9	Water	10/24/00	13:00	10/25/00
156986	MW-10	Water	10/24/00	12:40	10/25/00
156987	MW-6D	Water	10/24/00	11:00	10/25/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 156980 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC06059	Date Analyzed:	10/30/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05311	Date Prepared:	10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.055	mg/L	5	0.001
Toluene		0.036	mg/L	5	0.001
Ethylbenzene		0.025	mg/L	5	0.001
M,P,O-Xylene		0.09	mg/L	5	0.001
Total BTEX		0.207	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.472	mg/L	1	0.10	94	72 - 128
4-BFB		0.469	mg/L	1	0.10	93	72 - 128

Sample: 156981 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC06059	Date Analyzed:	10/30/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05311	Date Prepared:	10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.02	mg/L	5	0.001
Toluene		0.008	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.014	mg/L	5	0.001
Total BTEX		0.042	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.517	mg/L	1	0.10	103	72 - 128
4-BFB		0.506	mg/L	1	0.10	101	72 - 128

Sample: 156982 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC06059	Date Analyzed:	10/30/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05311	Date Prepared:	10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.448	mg/L	1	0.10	89	72 - 128
4-BFB		0.585	mg/L	1	0.10	117	72 - 128

Sample: 156983 - MW-6

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC06059 Date Analyzed: 10/30/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05311 Date Prepared: 10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.031	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.006	mg/L	5	0.001
Total BTEX		0.036	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.43	mg/L	1	0.10	86	72 - 128
4-BFB		0.408	mg/L	1	0.10	81	72 - 128

Sample: 156983 - MW-6

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC06752 Date Analyzed: 11/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB05928 Date Prepared: 11/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		30	mg/L	1	0.50

Sample: 156984 - MW-7

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC06059 Date Analyzed: 10/30/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05311 Date Prepared: 10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.089	mg/L	1	0.10	89	72 - 128

Sample: 156984 - MW-7

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC06752 Date Analyzed: 11/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB05928 Date Prepared: 11/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		33	mg/L	1	0.50

Sample: 156985 - MW-9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC06059 Date Analyzed: 10/30/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05311 Date Prepared: 10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.1	mg/L	1	0.10	100	72 - 128
4-BFB		0.117	mg/L	1	0.10	117	72 - 128

Sample: 156985 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC06752 Date Analyzed: 11/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB05928 Date Prepared: 11/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		40	mg/L	1	0.50

Sample: 156986 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC06059 Date Analyzed: 10/30/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05311 Date Prepared: 10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.101	mg/L	1	0.10	101	72 - 128
4-BFB		0.106	mg/L	1	0.10	106	72 - 128

Sample: 156986 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC06752 Date Analyzed: 11/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB05928 Date Prepared: 11/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		150	mg/L	1	0.50

Sample: 156987 - MW-6D

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC06297 Date Analyzed: 10/30/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05313 Date Prepared: 10/30/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.035	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.006	mg/L	5	0.001
Total BTEX		0.04	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.58	mg/L	1	0.10	116	72 - 128
4-BFB		0.559	mg/L	1	0.10	111	72 - 128

Sample: 156987 - MW-6D

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC06752 Date Analyzed: 11/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB05928 Date Prepared: 11/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		32	mg/L	1	0.50

Quality Control Report
Method Blank

Sample: Method Blank

QCBatch: QC06059

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		0.001	mg/L	0.001
Ethylbenzene		0.004	mg/L	0.001
M,P,O-Xylene		0.013	mg/L	0.001
Total BTEX		0.018	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.118	mg/L	0.10	118	72 - 128
4-BFB		0.118	mg/L	0.10	118	72 - 128

Sample: Method Blank QCBatch: QC06297

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.121	mg/L	0.10	121	72 - 128
4-BFB		0.12	mg/L	0.10	120	72 - 128

Sample: Method Blank QCBatch: QC06752

Param	Flag	Results	Units	Reporting Limit
CL		<0.5	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<0.5	mg/L	0.50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC06059

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.082	mg/L	1	0.10	0.001	82		80 - 120	20
Benzene		0.087	mg/L	1	0.10	<0.001	87		80 - 120	20
Toluene		0.089	mg/L	1	0.10	0.001	89		80 - 120	20
Ethylbenzene		0.082	mg/L	1	0.10	0.004	82		80 - 120	20
M,P,O-Xylene		0.256	mg/L	1	0.30	0.013	85		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.081	mg/L	1	0.10	81	72 - 128
4-BFB		0.078	mg/L	1	0.10	78	72 - 128

Sample: LCSD QC Batch: QC06059

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.09	mg/L	1	0.10	0.001	90	9	80 - 120	20
Benzene		0.095	mg/L	1	0.10	<0.001	95	9	80 - 120	20
Toluene		0.096	mg/L	1	0.10	0.001	96	8	80 - 120	20
Ethylbenzene		0.091	mg/L	1	0.10	0.004	91	10	80 - 120	20
M,P,O-Xylene		0.279	mg/L	1	0.30	0.013	93	8	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.089	mg/L	1	0.10	89	72 - 128

Sample: LCS QC Batch: QC06297

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.103	mg/L	1	0.10	<0.001	103		80 - 120	20
Benzene		0.111	mg/L	1	0.10	<0.001	111		80 - 120	20
Toluene		0.114	mg/L	1	0.10	<0.001	114		80 - 120	20
Ethylbenzene		0.114	mg/L	1	0.10	<0.001	114		80 - 120	20
M,P,O-Xylene		0.349	mg/L	1	0.30	<0.001	116		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.11	mg/L	1	0.10	110	72 - 128
4-BFB		0.116	mg/L	1	0.10	116	72 - 128

Sample: LCSD QC Batch: QC06297

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.09	mg/L	1	0.10	<0.001	90	13	80 - 120	20
Benzene		0.098	mg/L	1	0.10	<0.001	98	12	80 - 120	20
Toluene		0.099	mg/L	1	0.10	<0.001	99	14	80 - 120	20

Continued ...

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ethylbenzene		0.101	mg/L	1	0.10	<0.001	101	12	80 - 120	20
M,P,O-Xylene		0.29	mg/L	1	0.30	<0.001	96	18	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.101	mg/L	1	0.10	101	72 - 128
4-BFB		0.101	mg/L	1	0.10	101	72 - 128

Sample: LCS QC Batch: QC06752

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		11.76	mg/L	1	12.50	<0.5	94		80 - 120	20

Sample: LCSD QC Batch: QC06752

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		11.89	mg/L	1	12.50	<0.5	95	1	80 - 120	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

Sample: MS QC Batch: QC06752

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		90.42	mg/L	1	62.50	32	93		80 - 120	20

Sample: MSD QC Batch: QC06752

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		89.74	mg/L	1	62.50	32	92	1	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC06059

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.092	92	80 - 120	10/30/00
Toluene		mg/L	0.10	0.095	95	80 - 120	10/30/00
Ethylbenzene		mg/L	0.10	0.089	89	80 - 120	10/30/00
M,P,O-Xylene		mg/L	0.30	0.277	92	80 - 120	10/30/00

Sample: CCV (2)

QC Batch: QC06059

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.112	112	80 - 120	10/30/00
Toluene		mg/L	0.10	0.11	110	80 - 120	10/30/00
Ethylbenzene		mg/L	0.10	0.114	114	80 - 120	10/30/00
M,P,O-Xylene		mg/L	0.30	0.337	112	80 - 120	10/30/00

Sample: ICV (1)

QC Batch: QC06059

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.102	102	80 - 120	10/30/00
Toluene		mg/L	0.10	0.1	100	80 - 120	10/30/00
Ethylbenzene		mg/L	0.10	0.105	105	80 - 120	10/30/00
M,P,O-Xylene		mg/L	0.30	0.306	102	80 - 120	10/30/00

Sample: CCV (1)

QC Batch: QC06297

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.09	90	80 - 120	10/30/00
Toluene		mg/L	0.10	0.088	88	80 - 120	10/30/00
Ethylbenzene		mg/L	0.10	0.086	86	80 - 120	10/30/00
M,P,O-Xylene		mg/L	0.30	0.255	85	80 - 120	10/30/00

Sample: ICV (1)

QC Batch: QC06297

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.106	106	80 - 120	10/30/00
Toluene		mg/L	0.10	0.106	106	80 - 120	10/30/00
Ethylbenzene		mg/L	0.10	0.108	108	80 - 120	10/30/00
M,P,O-Xylene		mg/L	0.30	0.333	111	80 - 120	10/30/00

Sample: CCV (1)

QC Batch: QC06752

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.85	94	80 - 120	11/20/00

Sample: ICV (1)

QC Batch: QC06752

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.89	95	80 - 120	11/20/00

151980-87

Page 1 of 1

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TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A00102528

Company Name: ECO-Logical Environmental
Phone #: 520-7535
Address: (Street, City, Zip) 2200 Market St.
Fax #:
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: Hobbs
Project Location: Hobbs
Sampler Signature: Kathy McGlothlin

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
19,980	MW 1	2	40ml	X				X		X	X	10/24	11:40
81	MW 3	2	VOA	X				X		X	X		11:20
82	MW 5	2	VOA	X				X		X	X		12:00
83	MW 6	3	VOA	X				X		X	X		12:20
84	MW 7	3		X				X		X	X	10	10:30
85	MW 9	3		X				X		X	X		1300
86	MW 10	3		X				X		X	X		1240
87	MW 6D	3		X				X		X	X		11:00

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Scott Springer	10/24/00	5:05PM	Helen Shelton	10/24/00	5:05PM
Helen Shelton	10/24/00	6:30PM	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Vicki Vinson	10-25-00	10:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 21 samples +TS

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LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 1° °
Log-in Review

REMARKS: 11/21/00

Carrier # Greyhound

6701 Aberdeen Avenue, Ste. 9
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Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #_____

Company Name: ECO-Logical Environmental
Phone #: 520-7535
Address: (Street, City, Zip) 2200 Market St.
Fax #:
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: Hobbs
Project Location: Hobbs
Sampler Signature: Kathy McGlothlin

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Chlorides				Turn Around Time if different from standard	Hold
	MW 1	2	40ml	X				X		X	X	10/24	11:40		X																			
	MW 3	2	VOA	X				X		X	X		11:20		X																			
	MW 5	2	VOA	X				X		X	X		12:00		X																			
	MW 6	3	VOA	X				X		X	X		12:20		X														X					
	MW 7	3		X				X		X	X	10	10:30		X														X					
	MW 9	3		X				X		X	X		1300		X														X					
	MW 10	3		X				X		X	X		1240		X														X					
	MW 6D	3		X				X		X	X		11:00		X														X					

Relinquished by: Scott Springer Date: 10/24/00 Time: 5:05PM
Received by: Helen Shelton Date: 10/24/00 Time: 5:05PM
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

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

REMARKS:

Carrier # Greyhound

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 21 samples - H/S

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TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: July 27, 2000

Order ID Number: A00071909

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
149929	MW-1	Water	7/17/00	11:30	7/18/00
149930	MW-3	Water	7/17/00	11:20	7/18/00
149931	MW-5	Water	7/17/00	11:40	7/18/00
149932	MW-6	Water	7/17/00	11:45	7/18/00
149933	MW-7	Water	7/17/00	9:40	7/18/00
149934	MW-9	Water	7/17/00	11:25	7/18/00
149935	MW-10	Water	7/17/00	9:25	7/18/00
149936	MW-6D	Water	7/17/00	11:45	7/18/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 149929 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03904	Date Analyzed:	7/25/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03376	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.474	mg/L	1	0.10	94	72 - 128
4-BFB		0.53	mg/L	1	0.10	106	72 - 128

Sample: 149930 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03904	Date Analyzed:	7/25/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03376	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.01	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.01	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.577	mg/L	1	0.10	115	72 - 128
4-BFB		0.585	mg/L	1	0.10	117	72 - 128

Sample: 149931 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03904	Date Analyzed:	7/25/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03376	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.542	mg/L	1	0.10	108	72 - 128
4-BFB		0.568	mg/L	1	0.10	113	72 - 128

Sample: 149932 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03904	Date Analyzed:	7/25/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03376	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.126	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.126	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.516	mg/L	1	0.10	103	72 - 128
4-BFB		0.542	mg/L	1	0.10	108	72 - 128

Sample: 149932 - MW-6

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC03816	Date Analyzed:	7/20/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB03300	Date Prepared:	7/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		33	mg/L	1	0.50

Sample: 149933 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC03904	Date Analyzed:	7/25/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB03376	Date Prepared:	7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.113	mg/L	1	0.10	113	72 - 128
4-BFB		0.111	mg/L	1	0.10	111	72 - 128

Sample: 149933 - MW-7

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC03816 Date Analyzed: 7/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB03300 Date Prepared: 7/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		32	mg/L	1	0.50

Sample: 149934 - MW-9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03904 Date Analyzed: 7/25/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03376 Date Prepared: 7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.127	mg/L	1	0.10	127	72 - 128
4-BFB		0.126	mg/L	1	0.10	126	72 - 128

Sample: 149934 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC03816 Date Analyzed: 7/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB03300 Date Prepared: 7/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		95	mg/L	1	0.50

Sample: 149935 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03904 Date Analyzed: 7/25/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03376 Date Prepared: 7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.428	mg/L	1	0.10	85	72 - 128
4-BFB		0.454	mg/L	1	0.10	90	72 - 128

Sample: 149935 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC03816 Date Analyzed: 7/20/00
Analyst: JS Preparation Method: N/A Prep Batch: PB03300 Date Prepared: 7/20/00

Param	Flag	Result	Units	Dilution	RDL
CL		130	mg/L	1	0.50

Sample: 149936 - MW-6D

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03904 Date Analyzed: 7/25/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03376 Date Prepared: 7/24/00

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.121	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.121	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.491	mg/L	1	0.10	98	72 - 128
4-BFB		0.492	mg/L	1	0.10	98	72 - 128

Quality Control Report
Method Blank

Sample: Method Blank QCBatch: QC03816

Param	Flag	Results	Units	Reporting Limit
CL		<0.5	mg/L	0.50

Sample: Method Blank QCBatch: QC03904

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.094	mg/L	0.10	94	72 - 128
4-BFB		0.081	mg/L	0.10	81	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC03904

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
Benzene		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
Toluene		0.089	mg/L	1	0.10	<0.001	89		80 - 120	20
Ethylbenzene		0.088	mg/L	1	0.10	<0.001	88		80 - 120	20
M,P,O-Xylene		0.259	mg/L	1	0.30	<0.001	86		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.08	mg/L	1	0.10	80	72 - 128

Sample: LCSD QC Batch: QC03904

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.09	mg/L	1	0.10	<0.001	90	2	80 - 120	20
Benzene		0.087	mg/L	1	0.10	<0.001	87	1	80 - 120	20
Toluene		0.088	mg/L	1	0.10	<0.001	88	1	80 - 120	20
Ethylbenzene		0.087	mg/L	1	0.10	<0.001	87	1	80 - 120	20
M,P,O-Xylene		0.255	mg/L	1	0.30	<0.001	85	2	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.093	mg/L	1	0.10	93	72 - 128
4-BFB		0.079	mg/L	1	0.10	79	72 - 128

Quality Control Report
Matrix Spikes and Duplicate Spikes

Sample: MS QC Batch: QC03816

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		246.18	mg/L	1	125	130	92		80 - 120	20

Sample: MSD QC Batch: QC03816

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		246.81	mg/L	1	125	130	93	0	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC03816

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.60	92	80 - 120	7/20/00

Sample: ICV (1) QC Batch: QC03816

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	11.55	92	80 - 120	7/20/00

Sample: CCV (1) QC Batch: QC03904

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.117	117	80 - 120	7/25/00
Toluene		mg/L	0.10	0.118	118	80 - 120	7/25/00
Ethylbenzene		mg/L	0.10	0.116	116	80 - 120	7/25/00
M,P,O-Xylene		mg/L	0.30	0.346	115	80 - 120	7/25/00

Sample: CCV (2)

QC Batch: QC03904

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.119	119	80 - 120	7/25/00
Toluene		mg/L	0.10	0.120	120	80 - 120	7/25/00
Ethylbenzene		mg/L	0.10	0.119	119	80 - 120	7/25/00
M,P,O-Xylene		mg/L	0.30	0.352	117	80 - 120	7/25/00

Sample: ICV (1)

QC Batch: QC03904

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.092	92	80 - 120	7/25/00
Toluene		mg/L	0.10	0.093	93	80 - 120	7/25/00
Ethylbenzene		mg/L	0.10	0.092	92	80 - 120	7/25/00
M,P,O-Xylene		mg/L	0.30	0.27	90	80 - 120	7/25/00

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TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 4000719.09

Company Name: Eco-logical Environmental Services
Phone #: (915) 520-7535
Address: (Street, City, Zip) 2200 Market ST Midland 79703
Fax #: (915) 520-7737
Contact Person: Scott Springer
Invoice to: (If different from above) Kinder Morgan
Project #: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs
Sampler Signature: Scott Springer

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
149929	MW-1	2	VOA												7/17/00	11:30
30	MW-3	2	VOA													11:20
31	MW-5	2	VOA													11:40
32	MW-6	3	VOA/L													11:45
33	MW-7	3	VOA/L													9:40
34	MW-9	3	VOA/L													11:25
35	MW-10	3	VOA/L													9:25
36	MW-6D	2	VOA													11:45

ANALYSIS REQUEST
(Circle or Specify Method No.)

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	7/17/00	4:50PM	Helen Shelton	7/17/00	4:50 PM
Helen Shelton	7/17/00	6:45PM			
			Received at Laboratory by:	Date:	Time:
			[signature]	7-18-00	9:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 20 samples - HS

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LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 3° °
Log-in Review

Carrier # Greyhound 641-159-3847-8097

REMARKS:

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Lubbock, Texas 79424
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TraceAnalysis, Inc.

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El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Ecological Environmental Service — Phone #: (915) 520-7535
Address: (Street, City, Zip) 2200 Market ST. Midland 79703 — Fax #: (915) 520-7537
Contact Person: Scott Springer
Invoice to: (If different from above) Kinder Morgan
Project #: 279-512 — Project Name: Former Hobbs Gas Plant
Project Location: Hobbs — Sampler Signature: Scott Springer

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
	MW-1	2	VOA												7/17/00	11:30
	MW-3	2	VOA													11:20
	MW-5	2	VOA													11:40
	MW-6	3	VOA/L													11:45
	MW-7	3	VOA/L													9:40
	MW-9	3	VOA/L													11:25
	MW-10	3	VOA/L													9:25
	MW-611	2	VOA													11:45

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	7/17/00	4:50PM	Helen Shelton	7/17/00	4:50 PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

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

REMARKS:

Carrier # Greyhound

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 20 samples - HS

CHART COPY

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: 4/20/00

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Order ID Number: A00040508

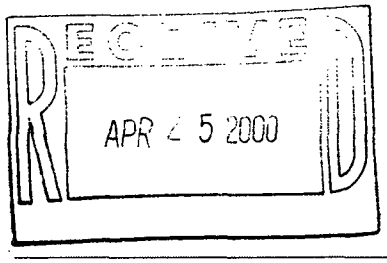
Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
143908	MW-1	Water	4/3/00	13:20	4/5/00
143909	MW-3	Water	4/3/00	13:00	4/5/00
143910	MW-5	Water	4/3/00	13:25	4/5/00
143911	MW-6	Water	4/3/00	13:30	4/5/00
143912	MW-7	Water	4/3/00	13:40	4/5/00
143913	MW-9	Water	4/3/00	13:10	4/5/00
143914	MW-10	Water	4/3/00	12:15	4/5/00
143915	MW-6D	Water	4/3/00	13:30	4/5/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director



Analytical Results Report

Sample Number: 143908
Description: MW-1

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Toluene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Ethylbenzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Total BTEX	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.522	5	0.1	104	72 - 128	RC	PB01672	QC01999
4-BFB	0.595	5	0.1	119	72 - 128	RC	PB01672	QC01999

Sample Number: 143909
Description: MW-3

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Toluene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Ethylbenzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Total BTEX	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.542	5	0.1	108	72 - 128	RC	PB01672	QC01999
4-BFB	0.6	5	0.1	120	72 - 128	RC	PB01672	QC01999

Sample Number: 143910
Description: MW-5

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Toluene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Ethylbenzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Total BTEX	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.542	5	0.1	108	72 - 128	RC	PB01672	QC01999
4-BFB	0.603	5	0.1	121	72 - 128	RC	PB01672	QC01999

Sample Number: 143911
Description: MW-6

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	0.157	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Toluene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Ethylbenzene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001
Total BTEX	0.157	5	S 8021B	4/10/00	4/10/00	RC	PB01672	QC01999	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.504	5	0.1	101	72 - 128	RC	PB01672	QC01999
4-BFB	0.586	5	0.1	117	72 - 128	RC	PB01672	QC01999

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	33	1	E 300.0	4/6/00	4/6/00	JS	PB01645	QC01969	0.5

Sample Number: 143912
Description: MW-7

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	4/12/00	4/12/00	RC	PB01727	QC02069	0.001
Toluene	<0.001	1	S 8021B	4/12/00	4/12/00	RC	PB01727	QC02069	0.001
Ethylbenzene	<0.001	1	S 8021B	4/12/00	4/12/00	RC	PB01727	QC02069	0.001
M,P,O-Xylene	0.003	1	S 8021B	4/12/00	4/12/00	RC	PB01727	QC02069	0.001
Total BTEX	0.003	1	S 8021B	4/12/00	4/12/00	RC	PB01727	QC02069	0.001

Surrogate ()	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.081	1	0.1	81	72 - 128	RC	PB01727	QC02069
4-BFB	0.08	1	0.1	80	72 - 128	RC	PB01727	QC02069

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	31	1	E 300.0	4/6/00	4/6/00	JS	PB01645	QC01969	0.5

Sample Number: 143913
Description: MW-9

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Toluene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Ethylbenzene	0.012	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Total BTEX	0.012	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.507	5	0.1	101	72 - 128	RC	PB01707	QC02045
4-BFB	0.522	5	0.1	104	72 - 128	RC	PB01707	QC02045

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	250	1	E 300.0	4/6/00	4/6/00	JS	PB01645	QC01969	0.5

Sample Number: 143914
Description: MW-10

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Toluene	<0.001	1	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Ethylbenzene	<0.001	1	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
M,P,O-Xylene	<0.001	1	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Total BTEX	<0.001	1	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.104	1	0.1	104	72 - 128	RC	PB01707	QC02045
4-BFB	0.103	1	0.1	103	72 - 128	RC	PB01707	QC02045

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	130	1	E 300.0	4/6/00	4/6/00	JS	PB01645	QC01969	0.5

Sample Number: 143915
Description: MW-6D

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	0.1	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Toluene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Ethylbenzene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
M,P,O-Xylene	<0.005	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001
Total BTEX	0.1	5	S 8021B	4/11/00	4/11/00	RC	PB01707	QC02045	0.001

* Test Comments - Elevated reporting limits due to silt in the sample matrix.

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.374	5	0.1	75	72 - 128	RC	PB01707	QC02045
4-BFB	0.377	5	0.1	75	72 - 128	RC	PB01707	QC02045

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/L)		<0.001	0.001	4/10/00	PB01672	QC01999
Toluene (mg/L)		<0.001	0.001	4/10/00	PB01672	QC01999
Ethylbenzene (mg/L)		<0.001	0.001	4/10/00	PB01672	QC01999
M,P,O-Xylene (mg/L)		<0.001	0.001	4/10/00	PB01672	QC01999
Total BTEX (mg/L)		<0.001	0.001	4/10/00	PB01672	QC01999

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)	0.086	0.1	86	72 - 128	QC01999
4-BFB (mg/L)	0.083	0.1	83	72 - 128	QC01999

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/L)		<0.001	0.001	4/11/00	PB01707	QC02045
Toluene (mg/L)		<0.001	0.001	4/11/00	PB01707	QC02045
Ethylbenzene (mg/L)		<0.001	0.001	4/11/00	PB01707	QC02045
M,P,O-Xylene (mg/L)		<0.001	0.001	4/11/00	PB01707	QC02045
Total BTEX (mg/L)		<0.001	0.001	4/11/00	PB01707	QC02045

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)	0.092	0.1	92	72 - 128	QC02045
4-BFB (mg/L)	0.09	0.1	90	72 - 128	QC02045

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/L)		<0.001	0.001	4/12/00	PB01727	QC02069
Toluene (mg/L)		<0.001	0.001	4/12/00	PB01727	QC02069
Ethylbenzene (mg/L)		<0.001	0.001	4/12/00	PB01727	QC02069
M,P,O-Xylene (mg/L)		<0.001	0.001	4/12/00	PB01727	QC02069
Total BTEX (mg/L)		<0.001	0.001	4/12/00	PB01727	QC02069

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)	0.104	0.1	104	72 - 128	QC02069
4-BFB (mg/L)	0.101	0.1	101	72 - 128	QC02069

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	4/6/00	PB01645	QC01969

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/L)		1	62.5	66.65	89		80 - 120	-	QC01969
MSD	CL (mg/L)		1	62.5	66.47	89	0	-	0 - 20	QC01969

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/L)	<0.001	1	0.1	0.102	102		80 - 120	-	QC01999
LCS	Benzene (mg/L)	<0.001	1	0.1	0.104	104		80 - 120	-	QC01999
LCS	Toluene (mg/L)	<0.001	1	0.1	0.105	105		80 - 120	-	QC01999
LCS	Ethylbenzene (mg/L)	<0.001	1	0.1	0.105	105		80 - 120	-	QC01999
LCS	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.316	105		80 - 120	-	QC01999

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/L)	1	0.1	0.086	86	72 - 128	QC01999
LCS	4-BFB (mg/L)	1	0.1	0.09	90	72 - 128	QC01999

LCSD	MTBE (mg/L)	<0.001	1	0.1	0.106	106	4	-	0 - 20	QC01999
LCSD	Benzene (mg/L)	<0.001	1	0.1	0.104	104	0	-	0 - 20	QC01999
LCSD	Toluene (mg/L)	<0.001	1	0.1	0.104	104	1	-	0 - 20	QC01999
LCSD	Ethylbenzene (mg/L)	<0.001	1	0.1	0.104	104	1	-	0 - 20	QC01999
LCSD	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.311	104	2	-	0 - 20	QC01999

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/L)	1	0.1	0.08	80	72 - 128	QC01999
LCSD	4-BFB (mg/L)	1	0.1	0.084	84	72 - 128	QC01999

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/L)	<0.001	1	0.1	0.099	99		80 - 120	-	QC02045
LCS	Benzene (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	-	QC02045
LCS	Toluene (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	-	QC02045
LCS	Ethylbenzene (mg/L)	<0.001	1	0.1	0.099	99		80 - 120	-	QC02045
LCS	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.29	97		80 - 120	-	QC02045

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/L)	1	0.1	0.091	91	72 - 128	QC02045
LCS	4-BFB (mg/L)	1	0.1	0.094	94	72 - 128	QC02045

LCSD	MTBE (mg/L)	<0.001	1	0.1	0.105	105	6	-	0 - 20	QC02045
LCSD	Benzene (mg/L)	<0.001	1	0.1	0.099	99	1	-	0 - 20	QC02045
LCSD	Toluene (mg/L)	<0.001	1	0.1	0.101	101	3	-	0 - 20	QC02045
LCSD	Ethylbenzene (mg/L)	<0.001	1	0.1	0.101	101	2	-	0 - 20	QC02045
LCSD	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.295	98	2	-	0 - 20	QC02045

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/L)	1	0.1	0.089	89	72 - 128	QC02045
LCSD	4-BFB (mg/L)	1	0.1	0.093	93	72 - 128	QC02045

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/L)	<0.001	1	0.1	0.114	114		80 - 120	-	QC02069
LCS	Benzene (mg/L)	<0.001	1	0.1	0.115	115		80 - 120	-	QC02069
LCS	Toluene (mg/L)	<0.001	1	0.1	0.115	115		80 - 120	-	QC02069
LCS	Ethylbenzene (mg/L)	<0.001	1	0.1	0.111	111		80 - 120	-	QC02069
LCS	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.330	110		80 - 120	-	QC02069

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/L)	1	0.1	0.101	101	72 - 128	QC02069
LCS	4-BFB (mg/L)	1	0.1	0.088	88	72 - 128	QC02069

LCSD	MTBE (mg/L)	<0.001	1	0.1	0.114	114	15	-	0 - 20	QC02069
LCSD	Benzene (mg/L)	<0.001	1	0.1	0.114	114	17	-	0 - 20	QC02069
LCSD	Toluene (mg/L)	<0.001	1	0.1	0.113	113	19	-	0 - 20	QC02069
LCSD	Ethylbenzene (mg/L)	<0.001	1	0.1	0.112	112	27	-	0 - 20	QC02069
LCSD	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.332	111	29	-	0 - 20	QC02069

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/L)	1	0.1	0.1	100	72 - 128	QC02069
LCSD	4-BFB (mg/L)	1	0.1	0.091	91	72 - 128	QC02069

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/L)		0.1	0.104	104	80 - 120	4/10/00	QC01999
ICV	Toluene (mg/L)		0.1	0.104	104	80 - 120	4/10/00	QC01999
ICV	Ethylbenzene (mg/L)		0.1	0.104	104	80 - 120	4/10/00	QC01999
ICV	M,P,O-Xylene (mg/L)		0.3	0.314	105	80 - 120	4/10/00	QC01999
CCV 1	Benzene (mg/L)		0.1	0.098	98	80 - 120	4/10/00	QC01999
CCV 1	Toluene (mg/L)		0.1	0.098	98	80 - 120	4/10/00	QC01999
CCV 1	Ethylbenzene (mg/L)		0.1	0.099	99	80 - 120	4/10/00	QC01999
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.293	98	80 - 120	4/10/00	QC01999
CCV 2	Benzene (mg/L)		0.1	0.1	100	80 - 120	4/10/00	QC01999
CCV 2	Toluene (mg/L)		0.1	0.099	99	80 - 120	4/10/00	QC01999
CCV 2	Ethylbenzene (mg/L)		0.1	0.1	100	80 - 120	4/10/00	QC01999
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.299	100	80 - 120	4/10/00	QC01999

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/L)		0.1	0.093	93	80 - 120	4/11/00	QC02045
ICV	Toluene (mg/L)		0.1	0.094	94	80 - 120	4/11/00	QC02045
ICV	Ethylbenzene (mg/L)		0.1	0.094	94	80 - 120	4/11/00	QC02045
ICV	M,P,O-Xylene (mg/L)		0.3	0.277	92	80 - 120	4/11/00	QC02045
CCV 1	Benzene (mg/L)		0.1	0.086	86	80 - 120	4/11/00	QC02045
CCV 1	Toluene (mg/L)		0.1	0.086	86	80 - 120	4/11/00	QC02045
CCV 1	Ethylbenzene (mg/L)		0.1	0.086	86	80 - 120	4/11/00	QC02045
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.251	84	80 - 120	4/11/00	QC02045
CCV 2	Benzene (mg/L)		0.1	0.091	91	80 - 120	4/11/00	QC02045
CCV 2	Toluene (mg/L)		0.1	0.09	90	80 - 120	4/11/00	QC02045
CCV 2	Ethylbenzene (mg/L)		0.1	0.091	91	80 - 120	4/11/00	QC02045
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.266	89	80 - 120	4/11/00	QC02045

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/L)		0.1	0.098	98	80 - 120	4/12/00	QC02069
ICV	Toluene (mg/L)		0.1	0.098	98	80 - 120	4/12/00	QC02069
ICV	Ethylbenzene (mg/L)		0.1	0.103	103	80 - 120	4/12/00	QC02069
ICV	M,P,O-Xylene (mg/L)		0.3	0.313	104	80 - 120	4/12/00	QC02069
CCV 1	Benzene (mg/L)		0.1	0.105	105	80 - 120	4/12/00	QC02069
CCV 1	Toluene (mg/L)		0.1	0.104	104	80 - 120	4/12/00	QC02069
CCV 1	Ethylbenzene (mg/L)		0.1	0.1	100	80 - 120	4/12/00	QC02069
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.298	99	80 - 120	4/12/00	QC02069
CCV 2	Benzene (mg/L)		0.1	0.094	94	80 - 120	4/12/00	QC02069

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 2	Toluene (mg/L)		0.1	0.094	94	80 - 120	4/12/00	QC02069
CCV 2	Ethylbenzene (mg/L)		0.1	0.095	95	80 - 120	4/12/00	QC02069
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.287	96	80 - 120	4/12/00	QC02069

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.36	91	80 - 120	4/6/00	QC01969
CCV 1	CL (mg/L)		12.5	11.41	91	80 - 120	4/6/00	QC01969

143908-15

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TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0004 0508

Company Name: ECO-logical Environmental Services
Phone #: (915) 520-7335
Address: (Street, City, Zip) 2200 Market ST, Midland 79703
Fax #: (915) 520-7737
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: Hobbs
Project Location: Hobbs
Sampler Signature: Scott Springer

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	NaHSO4	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Chloride	Turn Around Time if different from standard	Hold
143908	MW-1	2	VOA										4/3/00	13:20																	
909	MW-3	2	VOA											13:00																	
910	MW-5	2	VOA											13:25																	
911	MW-6	3	VOA L											13:30															X		
912	MW-7	3	VOA L											13:40															X		
913	MW-9	3	VOA L											13:10															X		
914	MW-10	3	VOA L											12:15															X		
915	MW-6D	2	VOA											13:30																	

Relinquished by: Scott Springer Date: 4/4/00 Time: 1340
Received by: Helen Shelton Date: 4/4/00 Time: 1:45 PM

Relinquished by: Helen Shelton Date: 4/4/00 Time: 6:15 PM
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Vicki Hensley Date: 4-5-00 Time: 9:40

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 20 samples HS

LAB USE ONLY

Intact (Y) N
Headspace Y (N)
Temp 1 °
Log-in Review TS 4/20

REMARKS:

Carrier # Greyhound 159-384-7187

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
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TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: Eco-logical Environmental Services
Phone #: (915) 520-7735
Address: (Street, City, Zip) 2200 Market St, Midland 79703
Fax #: (915) 520-7737
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: Hobbs
Project Location: Hobbs
Sampler Signature: Scott Springer

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	NaHSO4	SAMPLING: DATE	TIME
	MW-1	2	VOA										4/3/00	13:20
	MW-3	2	VOA											13:00
	MW-5	2	VOA											13:25
	MW-6	3	VOA L											13:30
	MW-7	3	VOA L											13:40
	MW-9	3	VOA L											13:10
	MW-10	3	VOA L											12:15
	MW-6D	2	VOA											13:30

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

Relinquished by: Scott Springer Date: 4/4/00 Time: 1340
Received by: Debra Shelton Date: 4/4/00 Time: 1:45 PM
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 2 coolers rec'd

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp °
Log-In Review

REMARKS:

Carrier # Greyhound

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Scott Springer
Eco-Logical Environmental Services
2200 Market Street
Midland, TX 79703

Report Date: 2/8/00

Project Number: 279-512
Project Name: Former Hobbs Gas Plant
Project Location: Hobbs, NM

Order ID Number: A00012606

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
139391	MW-1	Water	1/25/00	-	1/26/00
139392	MW-3	Water	1/25/00	-	1/26/00
139393	MW-5	Water	1/25/00	-	1/26/00
139394	MW-6	Water	1/25/00	-	1/26/00
139395	MW-7	Water	1/25/00	-	1/26/00
139396	MW-9	Water	1/25/00	-	1/26/00
139397	MW-10	Water	1/25/00	-	1/26/00
139398	MW-6D	Water	1/25/00	-	1/26/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 139391
Description: MW-1

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.101	1	0.1	101	72 - 128	RC	PB00461	QC00603
4-BFB	0.106	1	0.1	106	72 - 128	RC	PB00461	QC00603

Sample Number: 139392
Description: MW-3

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.105	1	0.1	105	72 - 128	RC	PB00461	QC00603
4-BFB	0.104	1	0.1	104	72 - 128	RC	PB00461	QC00603

Sample Number: 139393
Description: MW-5

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.102	1	0.1	102	72 - 128	RC	PB00461	QC00603
4-BFB	0.101	1	0.1	101	72 - 128	RC	PB00461	QC00603

Sample Number: 139394
Description: MW-6

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	0.105	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	0.105	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.098	1	0.1	98	72 - 128	RC	PB00461	QC00603
4-BFB	0.101	1	0.1	101	72 - 128	RC	PB00461	QC00603

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	35	1	E 300.0	1/27/00	1/27/00	JS	PB00467	QC00609	0.5

Sample Number: 139395
Description: MW-7

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.081	1	0.1	81	72 - 128	RC	PB00461	QC00603
4-BFB	0.076	1	0.1	76	72 - 128	RC	PB00461	QC00603

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	32	1	E 300.0	1/27/00	1/27/00	JS	PB00467	QC00609	0.5

Sample Number: 139396
Description: MW-9

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.005	5	S 8021B	2/4/00	2/4/00	RC	PB00580	QC00736	0.001
Toluene	<0.005	5	S 8021B	2/4/00	2/4/00	RC	PB00580	QC00736	0.001
Ethylbenzene	<0.005	5	S 8021B	2/4/00	2/4/00	RC	PB00580	QC00736	0.001
M,P,O-Xylene	<0.005	5	S 8021B	2/4/00	2/4/00	RC	PB00580	QC00736	0.001
Total BTEX	<0.005	5	S 8021B	2/4/00	2/4/00	RC	PB00580	QC00736	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.546	5	0.1	109	72 - 128	RC	PB00580	QC00736
4-BFB	0.551	5	0.1	110	72 - 128	RC	PB00580	QC00736

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	300	1	E 300.0	1/27/00	1/27/00	JS	PB00467	QC00609	0.5

Sample Number: 139397
Description: MW-10

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.078	1	0.1	78	72 - 128	RC	PB00461	QC00603
4-BFB	0.073	1	0.1	73	72 - 128	RC	PB00461	QC00603

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Ion Chromatography (IC) (mg/L)									
CL	120	1	E 300.0	1/27/00	1/27/00	JS	PB00467	QC00609	0.5

Sample Number: 139398
Description: MW-6D

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
Benzene	0.121	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Toluene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Ethylbenzene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
M,P,O-Xylene	<0.001	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001
Total BTEX	0.121	1	S 8021B	1/27/00	1/27/00	RC	PB00461	QC00603	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.173	1	0.1	173	72 - 128	RC	PB00461	QC00603
4-BFB	0.177	1	0.1	177	72 - 128	RC	PB00461	QC00603

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/L)		<0.001	0.001	1/27/00	PB00461	QC00603
Toluene (mg/L)		<0.001	0.001	1/27/00	PB00461	QC00603
Ethylbenzene (mg/L)		<0.001	0.001	1/27/00	PB00461	QC00603
M,P,O-Xylene (mg/L)		<0.001	0.001	1/27/00	PB00461	QC00603
Total BTEX (mg/L)		<0.001	0.001	1/27/00	PB00461	QC00603

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)	0.097	0.1	97	72 - 128	QC00603
4-BFB (mg/L)	0.094	0.1	94	72 - 128	QC00603

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/L)		<0.001	0.001	2/4/00	PB00580	QC00736
Toluene (mg/L)		<0.001	0.001	2/4/00	PB00580	QC00736
Ethylbenzene (mg/L)		<0.001	0.001	2/4/00	PB00580	QC00736
M,P,O-Xylene (mg/L)		<0.001	0.001	2/4/00	PB00580	QC00736
Total BTEX (mg/L)		<0.001	0.001	2/4/00	PB00580	QC00736

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	1/27/00	PB00467	QC00609

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/L)	120	1	62.5	186.44	106		80 - 120	0 - 20	QC00609
MSD	CL (mg/L)	120	1	62.5	186.32	106	0	80 - 120	0 - 20	QC00609

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	0 - 20	QC00603
LCS	Benzene (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	0 - 20	QC00603
LCS	Toluene (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	0 - 20	QC00603
LCS	Ethylbenzene (mg/L)	<0.001	1	0.1	0.096	96		80 - 120	0 - 20	QC00603
LCS	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.283	94		80 - 120	0 - 20	QC00603

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/L)	1	0.1	0.09	90	72 - 128	QC00603
LCS	4-BFB (mg/L)	1	0.1	0.089	89	72 - 128	QC00603

LCSD	MTBE (mg/L)	<0.001	1	0.1	0.104	104	16	80 - 120	0 - 20	QC00603
LCSD	Benzene (mg/L)	<0.001	1	0.1	0.108	108	16	80 - 120	0 - 20	QC00603
LCSD	Toluene (mg/L)	<0.001	1	0.1	0.108	108	17	80 - 120	0 - 20	QC00603
LCSD	Ethylbenzene (mg/L)	<0.001	1	0.1	0.106	106	17	80 - 120	0 - 20	QC00603
LCSD	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.315	105	20	80 - 120	0 - 20	QC00603

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/L)	1	0.1	0.098	98	72 - 128	QC00603
LCSD	4-BFB (mg/L)	1	0.1	0.099	99	72 - 128	QC00603

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/L)	<0.001	1	0.1	0.115	115		80 - 120	0 - 20	QC00736
LCS	Benzene (mg/L)	<0.001	1	0.1	0.114	114		80 - 120	0 - 20	QC00736
LCS	Toluene (mg/L)	<0.001	1	0.1	0.115	115		80 - 120	0 - 20	QC00736
LCS	Ethylbenzene (mg/L)	<0.001	1	0.1	0.114	114		80 - 120	0 - 20	QC00736
LCS	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.339	113		80 - 120	0 - 20	QC00736

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/L)	1	0.1	0.102	102	72 - 128	QC00736
LCS	4-BFB (mg/L)	1	0.1	0.113	113	72 - 128	QC00736

LCSD	MTBE (mg/L)	<0.001	1	0.1	0.115	115	0	80 - 120	0 - 20	QC00736
LCSD	Benzene (mg/L)	<0.001	1	0.1	0.114	114	0	80 - 120	0 - 20	QC00736
LCSD	Toluene (mg/L)	<0.001	1	0.1	0.113	113	2	80 - 120	0 - 20	QC00736
LCSD	Ethylbenzene (mg/L)	<0.001	1	0.1	0.112	112	2	80 - 120	0 - 20	QC00736
LCSD	M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.332	111	2	80 - 120	0 - 20	QC00736

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/L)	1	0.1	0.101	101	72 - 128	QC00736
LCSD	4-BFB (mg/L)	1	0.1	0.111	111	72 - 128	QC00736

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/L)		0.1	0.098	98	80 - 120	1/27/00	QC00603
ICV	Toluene (mg/L)		0.1	0.098	98	80 - 120	1/27/00	QC00603
ICV	Ethylbenzene (mg/L)		0.1	0.096	96	80 - 120	1/27/00	QC00603
ICV	M,P,O-Xylene (mg/L)		0.3	0.283	94	80 - 120	1/27/00	QC00603
CCV 1	Benzene (mg/L)		0.1	0.106	106	80 - 120	1/27/00	QC00603
CCV 1	Toluene (mg/L)		0.1	0.105	105	80 - 120	1/27/00	QC00603
CCV 1	Ethylbenzene (mg/L)		0.1	0.104	104	80 - 120	1/27/00	QC00603
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.311	104	80 - 120	1/27/00	QC00603
CCV 2	Benzene (mg/L)		0.1	0.104	104	80 - 120	1/27/00	QC00603
CCV 2	Toluene (mg/L)		0.1	0.103	103	80 - 120	1/27/00	QC00603
CCV 2	Ethylbenzene (mg/L)		0.1	0.102	102	80 - 120	1/27/00	QC00603
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.302	101	80 - 120	1/27/00	QC00603

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/L)		0.1	0.112	112	80 - 120	2/4/00	QC00736
ICV	Toluene (mg/L)		0.1	0.112	112	80 - 120	2/4/00	QC00736
ICV	Ethylbenzene (mg/L)		0.1	0.112	112	80 - 120	2/4/00	QC00736
ICV	M,P,O-Xylene (mg/L)		0.3	0.332	111	80 - 120	2/4/00	QC00736
CCV 1	Benzene (mg/L)		0.1	0.11	110	80 - 120	2/4/00	QC00736
CCV 1	Toluene (mg/L)		0.1	0.11	110	80 - 120	2/4/00	QC00736
CCV 1	Ethylbenzene (mg/L)		0.1	0.108	108	80 - 120	2/4/00	QC00736
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.321	107	80 - 120	2/4/00	QC00736
CCV 2	Benzene (mg/L)		0.1	0.114	114	80 - 120	2/4/00	QC00736
CCV 2	Toluene (mg/L)		0.1	0.114	114	80 - 120	2/4/00	QC00736
CCV 2	Ethylbenzene (mg/L)		0.1	0.114	114	80 - 120	2/4/00	QC00736
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.337	112	80 - 120	2/4/00	QC00736

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.47	92	80 - 120	1/27/00	QC00609
CCV 1	CL (mg/L)		12.5	11.53	92	80 - 120	1/27/00	QC00609

139391-98

Page 1 of 1

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A00012606

Company Name: ECO-logical ENVIRONMENTAL
Phone #: (915) 520-7535
Address: (Street, City, Zip) 2200 Market, Midland, 79703
Fax #: (915) 520-7737
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: KN Hobbs
Project Location: Hobbs
Sampler Signature: Scott Springer

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	Na2SO4	SAMPLING: DATE	TIME
139391	MW-1	2	VOA	✓									1-25-00	12-50
92	MW-3	2	VOA											1225
93	MW-5	2	VOA											1300
94	MW-6	3	VOA 250AG											1310
95	MW-7	3	VOA 250AG											1230
96	MW-9	3	VOA 250AG											1245
97	MW-10	3	VOA 250AG											1235
98	MW-6D	2	VOA											1310

ANALYSIS REQUEST
(Circle or Specify Method No.)

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

Relinquished by: Scott Springer Date: 1/25/00 Time: 5:00PM
Received by: Helen Shelton Date: 1/25/00 Time: 5:00PM
Relinquished by: Helen Shelton Date: 1/25/00 Time: 6:30PM
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Vicki Wrather Date: 1-26-00 Time: 9:30AM

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 20 samples-HS

LAB USE ONLY

Intact Y / N
Headspace Y (N)
Temp 0°
Log-In Review MS
Carrier # Greyhound 611-159-3801-6903

REMARKS:

2/8/00

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: Eco-logical Environmental
Phone #: (915) 520-7535
Address: (Street, City, Zip) 2200 Market, Midland, 79703
Fax #: (915) 520-7737
Contact Person: Scott Springer
Invoice to: (If different from above)
Project #: 279-512
Project Name: KN Hobbs
Project Location: Hobbs
Sampler Signature: Scott Springer

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	NaHSO4	SAMPLING: DATE	TIME
	MW-1	2	VOA	/									1-25-00	12:50
	MW-3	2	VOA											1225
	MW-5	2	VOA											1300
	MW-6	3	VOA 250ml											1310
	MW-7	3	VOA 250ml											1230
	MW-9	3	VOA 250ml											1245
	MW-10	3	VOA 250ml											1235
	MW-6D	2	VOA											1310

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

Relinquished by: Scott Springer Date: 1/25/00 Time: 5:00PM
Received by: Helen Shilton Date: 1/25/00 Time: 5:00PM
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp °
Log-In Review
Carrier #

REMARKS:

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 20 sampler-HS

CHART COPY

GROUNDWATER LEVELS AND MEASUREMENTS
K N ENERGY, INC.
FORMER HOBBS GAS PLANT
HOBBS, NEW MEXICO
ECO JOB NO. 279-512

East	10493.85	10048.36	10308.93	10104.83	10483.21	10835.81	11147.27	10228.42	10892.89	11066.41
North	9537.29	9871.37	9547.91	9510.93	9332.16	9185.31	8820.05	9098.68	9595.65	9273.17

09/17/96

Well	MW-1
TOC	495.73
Product Depth	
H2O Depth	53.10
Product Thickness	
Adjusted Prod. Thick	0.00
Adj. Depth to Liquid	53.10
H2O Elev Adjusted	442.63

10/23/96

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
TOC	495.73	502.41	499.13	501.12	500.84	496.27
Product Depth						
H2O Depth	53.34	58.33	56.28	58.12	58.96	55.53
Product Thickness						
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	53.34	58.33	56.28	58.12	58.96	55.53
H2O Elev Adjusted	442.39	444.08	442.85	443.00	441.88	440.74

04/10/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.32	59.54	57.25	58.83	59.77	56.28	57.28	60.32	56.29	52.83
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.32	59.54	57.25	58.83	59.77	56.28	57.28	60.32	56.29	52.83
H2O Elev Adjusted	441.41	442.87	441.88	442.29	441.07	439.99	438.16	441.49	440.56	439.63

07/07/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.64	60.00	57.59	59.19	60.1	56.58	57.54	60.67	56.66	53.09
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.64	60.00	57.59	59.19	60.10	56.58	57.54	60.67	56.66	53.09
H2O Elev Adjusted	441.09	442.41	441.54	441.93	440.74	439.69	437.90	441.14	440.19	439.37

10/08/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.98	60.39	57.92	59.56	60.31	56.88	57.85	61	57	53.43
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.98	60.39	57.92	59.56	60.31	56.88	57.85	61.00	57.00	53.43
H2O Elev Adjusted	440.75	442.02	441.21	441.56	440.53	439.39	437.59	440.81	439.85	439.03

01/06/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.28	60.70	58.24	59.91	60.76	57.23	58.17	61.35	57.38	53.86
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.28	60.70	58.24	59.91	60.76	57.23	58.17	61.35	57.38	53.86
H2O Elev Adjusted	440.45	441.71	440.89	441.21	440.08	439.04	437.27	440.46	439.47	438.60

04/03/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.60	61.06	58.41	60.21	61.05	57.49	58.47	61.61	57.67	54.17
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.60	61.06	58.41	60.21	61.05	57.49	58.47	61.61	57.67	54.17
H2O Elev Adjusted	440.13	441.35	440.72	440.91	439.79	438.78	436.97	440.20	439.18	438.29

06/25/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.87	61.37	58.84	60.48	61.33	57.76	58.7	61.87	57.95	54.35
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.87	61.37	58.84	60.48	61.33	57.76	58.70	61.87	57.95	54.35
H2O Elev Adjusted	439.86	441.04	440.29	440.64	439.51	438.51	436.74	439.94	438.90	438.11

10/02/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.36	61.91	59.36	60.97	61.77	58.17	58.99	62.27	58.34	54.76
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.36	61.91	59.36	60.97	61.77	58.17	58.99	62.27	58.34	54.76
H2O Elev Adjusted	439.37	440.50	439.77	440.15	439.07	438.10	436.45	439.54	438.51	437.70

01/05/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
H2O Elev Adjusted	439.30	440.22	439.67	439.97	439.00	438.22	436.56	439.39	438.67	437.95

04/01/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.89	62.28	59.89	61.57	62.24	58.52	59.36	62.79	58.73	55.04
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.89	62.28	59.89	61.57	62.24	58.52	59.36	62.79	58.73	55.04
H2O Elev Adjusted	438.84	440.13	439.24	439.55	438.60	437.75	436.08	439.02	438.12	437.42

07/14/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
											0.00
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	499.25
Product Depth											0.00
H2O Depth	57.39	62.28	60.40	62.03	62.76	59.08	59.84	63.19	59.31	55.59	60.66
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	57.39	62.28	60.40	62.03	62.76	59.08	59.84	63.19	59.31	55.59	60.66
H2O Elev Adjusted	438.34	440.13	438.73	439.09	438.08	437.19	435.60	438.62	437.54	436.87	438.59

10/22/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
											0.00
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	499.25
Product Depth											0.00
H2O Depth	57.74	62.31	60.76	62.37	63.08	59.36	60.14	63.51	59.61	55.94	60.94
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	57.74	62.31	60.76	62.37	63.08	59.36	60.14	63.51	59.61	55.94	60.94
H2O Elev Adjusted	437.99	440.10	438.37	438.75	437.76	436.91	435.30	438.30	437.24	436.52	438.31

01/25/00

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	0.00 499.25
Product Depth											0.00
H2O Depth	58.16	62.34	61.21	62.82	63.51	59.77	60.58	63.97	60.07	56.35	61.30
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	58.16	62.34	61.21	62.82	63.51	59.77	60.58	63.97	60.07	56.35	61.30
H2O Elev Adjusted	437.57	440.07	437.92	438.30	437.33	436.50	434.86	437.84	436.78	436.11	437.95

04/03/00

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	0.00 499.25
Product Depth											0.00
H2O Depth	58.51	62.34	61.57	63.14	63.84	60.08	60.83	64.26	60.43	56.69	61.58
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	58.51	62.34	61.57	63.14	63.84	60.08	60.83	64.26	60.43	56.69	61.58
H2O Elev Adjusted	437.22	440.07	437.56	437.98	437.00	436.19	434.61	437.55	436.42	435.77	437.67

07/17/00

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	0.00 499.25
Product Depth											0.00
H2O Depth	59.10	62.34	62.11	63.73	64.35	60.5	61.1	64.68	60.92	57.02	62.02
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	59.10	62.34	62.11	63.73	64.35	60.50	61.10	64.68	60.92	57.02	62.02
H2O Elev Adjusted	436.63	440.07	437.02	437.39	436.49	435.77	434.34	437.13	435.93	435.44	437.23

10/24/00

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Drop
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	0.00 499.25
Product Depth											0.00
H2O Depth	59.45	62.36	62.48	64.10	64.68	60.86	61.46	65.04	61.3	57.44	62.32
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	59.45	62.36	62.48	64.10	64.68	60.86	61.46	65.04	61.30	57.44	62.32
H2O Elev Adjusted	436.28	440.05	436.65	437.02	436.16	435.41	433.98	436.77	435.55	435.02	436.93

Water Level Difference (+ number is a decrease in water level)

04/10/97 and 04/03/98	1.28	1.52	1.16	1.38	1.28	1.21	1.19	1.29	1.38	1.34	1.30
07/07/97 and 08/23/96	1.23	1.37	1.25	1.29	1.23	1.18	1.16	1.20	1.29	1.28	1.25
10/08/97 and 10/02/96	1.38	1.52	1.44	1.41	1.46	1.29	1.14	1.27	1.34	1.33	1.36
1/8/98 and 1/5/99	1.15	1.49	1.22	1.24	1.08	0.82	0.71	1.07	0.80	0.65	1.02
4/3/98 and 4/1/99	1.29	1.22	1.48	1.36	1.19	1.03	0.89	1.18	1.06	0.87	1.16
10/22/98 and 10/24/00	1.71	0.05	1.72	1.73	1.60	1.50	1.32	1.53	1.69		
4/97 to 10/00	5.13	2.82	5.23	5.27	4.91	4.58	4.18	4.72	5.01	4.61	4.65

Iron (Fe)	1.0 mg/l
Manganese (Mn)	0.2 mg/l
Phenols	0.005 mg/l
Sulfate (SO_4)	600.0 mg/l
Total Dissolved Solids (TDS)	1000.0 mg/l
Zinc (Zn)	10.0 mg/l
pH	between 6 and 9

[2-18-77]

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C unless otherwise provided.

Aluminum (Al)	5.0 mg/l
Boron (B)	0.75 mg/l
Cobalt (Co)	0.05 mg/l
Molybdenum (Mo)	1.0 mg/l
Nickel (Ni)	0.2 mg/l

[2-18-77]

20 NMAC 6.2.III.3104 DISCHARGE PLAN REQUIRED

Unless otherwise provided by this Part, no person shall cause or allow effluent of leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge plan approved by the secretary. When a plan has been approved, discharges must be consistent with the terms and conditions of the plan. In the event of a transfer of the ownership, control, or possession of a facility for which an approved discharge plan is in effect, the transferee shall have authority to discharge under such plan, provided that the transferee has complied with Section 3111 of this Part, regarding transfers. [2-18-77, 12-24-87, 12-1-95]

20 NMAC 6.2.III.3105 EXEMPTIONS FROM DISCHARGE PLAN REQUIREMENT

Sections 3104 and 3106 of this Part do not apply to the following: [2-18-77]

A. Effluent or leachate which conforms to all the listed numerical standards of Section 3103 and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply; [2-18-77, 6-20-80, 7-2-81]

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day; [2-18-77, 12-24-87]

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system; [2-18-77]

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result; [2-18-77, 12-1-95]

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry

arroyos and ephemeral streams are not exempt from the discharge plan requirement, except as otherwise provided in this Section; [2-18-77]

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall where NPDES effluent limitations are imposed, unless the secretary determines that a hazard to public health may result. For purposes of this Subsection, monitoring requirements alone do not constitute effluent limitations; [2-18-77, 12-1-95]

G. Discharges resulting from flood control systems; [2-18-77]

H. Leachate which results from the direct natural infiltration of precipitation through disturbed materials, unless the secretary determines that a hazard to public health may result; [2-18-77, 6-26-80, 12-1-95]

I. Leachate which results entirely from the direct natural infiltration of precipitation through undisturbed materials; [2-18-77, 6-26-80]

J. Leachate from materials disposed of in accordance with the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the New Mexico Environmental Improvement Board; [2-18-77, 12-1-95]

K. Natural ground water seeping or flowing into conventional mine workings which re-enters the ground by natural gravity flow prior to pumping or transporting out of the mine and without being used in any mining process; this exemption does not apply to solution mining; [2-18-77]

L. Effluent or leachate discharges resulting from activities regulated by a mining plan approved and permit issued by the New Mexico Coal Surface Mining Commission, provided that this exemption shall not be construed as limiting the application of appropriate ground water protection requirements by the New Mexico Coal Surface Mining Commission; [2-18-77]

M. Effluent or leachate discharges which are regulated by the Oil Conservation Commission and the regulation of which by the Water Quality Control Commission would interfere with the exclusive authority granted under Section 70-2-12 NMSA 1978, or under other laws, to the Oil Conservation Commission. [2-18-77]

20 NMAC 6.2.III.3106 APPLICATION FOR DISCHARGE PLAN APPROVALS AND RENEWALS

A. Any person who, before or on June 18, 1977, is discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall, within 120 days of receipt of written notice from the secretary that a discharge plan is required, or such longer time as the secretary shall for good cause allow, submit a discharge plan to the secretary for approval; such person may discharge without an approved discharge plan until 240 days after written notification by the secretary that a discharge plan is required or such longer time as the secretary shall for good cause allow. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

B. Any person who intends to begin, after June 18, 1977, discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall notify the secretary giving the information enumerated in Section 1201.B.; the secretary shall, within 60 days, notify such person if a discharge plan is required; upon submission, the secretary shall review the discharge plan pursuant to Sections 3108 and 3109; for good cause shown, the secretary may allow such person to discharge without an approved plan for a period not to extend beyond February 18, 1978; after February 18, 1978, for good cause shown the secretary may allow such person to discharge without an approved discharge plan for a period not to exceed 120 days. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

C. A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with this Part. At

least the following information shall be included in the plan: [2-18-77]

1. Quantity, quality and flow characteristics of the discharge; [2-18-77]

2. Location of the discharge and of any bodies of water, watercourses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring; [2-18-77]

3. Depth to and TDS concentration of the ground water most likely to be affected by the discharge; [2-18-77]

4. Flooding potential of the site; [2-18-77]

5. Location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow; [2-18-77]

6. Depth to and lithological description of rock at base of alluvium below the discharge site if such information is available; [2-18-77]

7. Any additional information that may be necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of Section 3103 or the presence of any toxic pollutant at any place of withdrawal of water for present or reasonably foreseeable future use. Detailed information on site geologic and hydrologic conditions may be required for a technical evaluation of the applicant's proposed discharge plan; and [2-18-77, 6-26-80, 7-2-81]

8. Additional detailed information required for a technical evaluation of effluent disposal wells or in situ extraction wells as provided in Subpart V of this Part. [9-20-82]

D. An applicant for a discharge plan shall pay fees as specified in Section 3114. [8-17-91]

NEXT

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SUBPART IV -- PREVENTION AND ABATEMENT OF WATER POLLUTION

20 NMAC 6.2.IV.4101 PURPOSE

A. The purposes of this Subpart are to:

1. Abate pollution of subsurface water so that all ground water of the State of New Mexico which has a background concentration of 10,000 mg/L or less TDS, is either remediated or protected for use as domestic and agricultural water supply, and to remediate or protect those segments of surface waters which are gaining because of subsurface-water inflow, for uses designated in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1); and [12-1-95]

2. Abate surface-water pollution so that all surface waters of the State of New Mexico are remediated or protected for designated or attainable uses as defined in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

B. If the background concentration of any water contaminant exceeds the standard or requirement of Sections 4103.A, 4103.B or 4103.C of this Part, pollution shall be abated by the responsible person to the background concentration. [12-1-95]

C. The standards and requirements set forth in Section 4103 of this Part are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations. [12-1-95]

20 NMAC 6.2.IV.4102 [RESERVED]

20 NMAC 6.2.IV.4103 ABATEMENT STANDARDS AND REQUIREMENTS

A. The vadose zone shall be abated so that water contaminants in the vadose zone shall not be capable of contaminating ground water or surface water, in excess of the standards in Subsections B and C below, through leaching, percolation or as the water table elevation fluctuates. [12-1-95]

B. Ground-water pollution at any place of withdrawal for present or reasonably foreseeable future use, where the TDS concentration is 10,000 mg/L or less, shall be abated to conform to the following standards: [12-1-95]

1. toxic pollutant(s) as defined in Section 1101 of this Part shall not be present; and [12-1-95]

2. the standards of Section 3103 of this Part shall be met. [12-1-95]

C. Surface-water pollution shall be abated to conform to the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

D. Subsurface-water and surface-water abatement shall not be considered complete until a minimum of eight (8) consecutive quarterly samples from all compliance sampling stations approved by the secretary meet the abatement standards of Subsections A, B and C above. Abatement of water contaminants measured in solid-matrix samples of the vadose zone shall be considered complete after one-time sampling from compliance stations approved by the secretary. [12-1-95]

E. Technical Infeasibility.

1. If any responsible person is unable to fully meet the abatement standards set forth in Subsections A and B above using commercially accepted abatement technology pursuant to an approved abatement plan,

he may propose that abatement standards compliance is technically infeasible. Technical infeasibility proposals involving the use of experimental abatement technology shall be considered at the discretion of the secretary. Technical infeasibility may be demonstrated by a statistically valid extrapolation of the decrease in concentration(s) of any water contaminant(s) over the remainder of a twenty (20) year period, such that projected future reductions during that time would be less than 20% of the concentration(s) at the time technical infeasibility is proposed. A statistically valid decrease cannot be demonstrated by fewer than eight (8) consecutive quarters. The technical infeasibility proposal shall include a substitute abatement standard(s) for those contaminants that is/are technically feasible. Abatement standards for all other water contaminants not demonstrated to be technically infeasible shall be met. [12-1-95]

2. In no event shall a proposed technical infeasibility demonstration be approved by the secretary for any water contaminant if its concentration is greater than 200% of the abatement standard for that contaminant. [12-1-95]

3. If the secretary cannot approve any or all portions of a proposed technical infeasibility demonstration because the water contaminant concentration(s) is/are greater than 200% of the abatement standard(s) for each contaminant, the responsible person may further pursue the issue of technical infeasibility by filing a petition with the commission seeking:

a. approval of alternate abatement standard(s) pursuant to Section 4103.F below; or

b. granting of a variance pursuant to Section 1210 of this Part.

[12-1-95]

F. Alternative Abatement Standards.

1. At any time during or after the submission of a Stage 2 abatement plan, the responsible person may file a petition seeking approval of alternative abatement standard(s) for the standards set forth in Subsections A and B above. The commission may approve alternative abatement standard(s) if the petitioner demonstrates that:

a. (1) compliance with the abatement standard(s) is/are not feasible, by the maximum use of technology within the economic capability of the responsible person; or

(2) there is no reasonable relationship between the economic and social costs and benefits (including attainment of the standard(s) set forth in Section 4103) to be obtained;

b. the proposed alternative abatement standard(s) is/are technically achievable and cost-benefit justifiable; and

c. compliance with the proposed alternative abatement standard(s) will not create a present or future hazard to public health or undue damage to property.

2. The petition shall be in writing, filed with the secretary. The petition shall specify, in addition to the information required by Section 1210.A of this Part, the water contaminant(s) for which alternative standard(s) is/are proposed, the alternative standard(s) proposed, the three-dimensional body of water pollution for which approval is sought, and the extent to which the abatement standard(s) set forth in Section 4103 is/are now, and will in the future be, violated. The petition may include a transport, fate and risk assessment in accordance with accepted methods, and other information as the petitioner deems necessary to support the petition.

3. The commission shall review a petition for alternative abatement standards in accordance with the procedures for review of a variance petition provided in the commissions adjudicatory procedures, 20 NMAC 1.3.

[12-1-95, 11-15-96]

20 NMAC 6.2.IV.4104 ABATEMENT PLAN REQUIRED

A. Unless otherwise provided by this Part, all responsible persons who are abating, or who are required to abate, water pollution in excess of the standards and requirements set forth in Section 4103 of

this Part shall do so pursuant to an abatement plan approved by the secretary. When an abatement plan has been approved, all actions leading to and including abatement shall be consistent with the terms and conditions of the abatement plan. [12-1-95]

B. In the event of a transfer of the ownership, control or possession of a facility for which an abatement plan is required or approved, where the transferor is a responsible person, the transferee also shall be considered a responsible person for the duration of the abatement plan, and may jointly share the responsibility to conduct the actions required by this Part with other responsible persons. The transferror shall notify the transferee in writing, at least thirty (30) days prior to the transfer, that an abatement plan has been required or approved for the facility, and shall deliver or send by certified mail to the secretary a copy of such notification together with a certificate or other proof that such notification has in fact been received by the transferee. The transferror and transferee may agree to a designated responsible person who shall assume the responsibility to conduct the actions required by this Part. The responsible persons shall notify the secretary in writing if a designated responsible person is agreed upon. If the secretary determines that the designated responsible person has failed to conduct the actions required by this Part, the secretary shall notify all responsible persons of this failure in writing and allow them thirty (30) days, or longer for good cause shown, to conduct the required actions before issuing a compliance order pursuant to Section 1220 of this Part. [12-1-95]

C. If the source of the water pollution to be abated is a facility that operated under a discharge plan, the secretary may require the responsible person(s) to submit a financial assurance plan which covers the estimated costs to conduct the actions required by the abatement plan. Such a financial assurance plan shall be consistent with any financial assurance requirements adopted by the commission. [12-1-95]

20 NMAC 6.2.IV.4105 EXEMPTIONS FROM ABATEMENT PLAN REQUIREMENT

A. Except as provided in Subsection B of this Section, Sections 4104 and 4106 of this Part do not apply to a person who is abating water pollution: [12-1-95]

1. from an underground storage tank, under the authority of the Underground Storage Tank Regulations (20 NMAC Part 5) adopted by the New Mexico Environmental Improvement Board, or in accordance with the New Mexico Ground Water Protection Act; [12-1-95]

2. under the authority of the U.S. Environmental Protection Agency pursuant to either the federal Comprehensive Environmental Response, Compensation and Liability Act, and amendments, or the Resource Conservation and Recovery Act; [12-1-95]

3. under the authority of the secretary pursuant to the Hazardous Waste Management Regulations (20 NMAC 4.1) adopted by the New Mexico Environmental Improvement Board; [12-1-95]

4. under the authority of the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy pursuant to the Atomic Energy Act; [12-1-95]

5. from a solid waste landfill, under the authority of the secretary pursuant to the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the N.M. Environmental Improvement Board; [12-1-95]

6. under the authority of a ground-water discharge plan approved by the secretary, provided that such abatement is consistent with the requirements and provisions of Sections 4101, 4103, 4106.C, 4106.E, 4107 and 4112 of this Part; [12-1-95]

7. under the authority of a Letter of Understanding, Settlement Agreement or Administrative Order on Consent signed by the secretary prior to December 1, 1995, provided that abatement is being performed in full compliance with the terms of the Letter of Understanding, Settlement Agreement or Administrative Order on Consent; and [12-1-95]

8. on an emergency basis, or while abatement plan approval is pending, or in a manner that will result in compliance with the standards and requirements set forth in Section 4103 of this Part within one

hundred and eighty (180) days after notice is required to be given pursuant to Section 1203.A.1 of this Part, provided that the delegated agency does not object to the abatement action pursuant to Sections 1203.A.6 and 1203.A.7 of this Part. [12-1-95]

B. If the secretary determines that abatement of water pollution subject to Subsection A of this Section will not meet the standards of Sections 4103.B and C of this Part, or that additional action is necessary to protect health, welfare, environment or property, the secretary may notify a responsible person, by certified mail, to submit an abatement plan pursuant to Sections 4104 and 4106.A of this Part. The notification shall state the reasons for the secretary's determination. In any appeal of the secretary's determination under this Section, the secretary shall have the burden of proof. [12-1-95]

C. Sections 4104 and 4106 of this Part do not apply to the following activities: [12-1-95]

1. Discharges subject to an effective and enforceable National Pollutant Discharge Elimination System (NPDES) permit; [12-1-95]

2. Land application of ground water contaminated with nitrogen originating from human or animal waste and not otherwise exceeding the standards of Section 3103.A of this Part and not containing a toxic pollutant as defined in Section 1101 of this Part, provided that it is done in compliance with a discharge plan approved by the secretary; [12-1-95]

3. Abatement of water pollution resulting from the withdrawal and decontamination or blending of polluted water for use as a public or private drinking-water supply, by any person other than a responsible person, unless the secretary determines that a hazard to public health may result; and [12-1-95]

4. Reasonable operation and maintenance of irrigation and flood control facilities. [12-1-95]

20 NMAC 6.2.IV.4106 ABATEMENT PLAN PROPOSAL

A. Except as provided for in Section 4105 of this Part, a responsible person shall, within sixty (60) days of receipt of written notice from the secretary that an abatement plan is required, submit an abatement plan proposal to the secretary for approval. For good cause shown, the secretary may allow for a total of one hundred and twenty (120) days to prepare and submit the abatement plan proposal. [12-1-95]

B. Voluntary Abatement.

1. Any person wishing to abate water pollution in excess of the standards and requirements set forth in Section 4103 of this Part may submit a Stage 1 abatement plan proposal to the secretary for approval. Following approval by the secretary of a final site investigation report prepared pursuant to Stage 1 of an abatement plan, any person may submit a Stage 2 abatement plan proposal to the secretary for approval. [12-1-95]

2. Following approval of a Stage 1 or Stage 2 abatement plan proposal under Subsection B.1 of this Section, the person submitting the approved plan shall be a responsible person under this Subpart for the purpose of performing the approved Stage 1 or Stage 2 abatement plan. Nothing in this Section shall preclude the secretary from applying Section 1203.A.9 of this Part to a responsible person if applicable. [12-1-95]

C. Stage 1 Abatement Plan.

The purpose of Stage 1 of the abatement plan shall be to design and conduct a site investigation that will adequately define site conditions, and provide the data necessary to select and design an effective abatement option. Stage 1 of the abatement plan may include, but not necessarily be limited to, the following information depending on the media affected, and as needed to select and implement an expeditious abatement option: [12-1-95]

1. Descriptions of the site, including a site map, and of site history including the nature of the discharge that caused the water pollution, and a summary of previous investigations; [12-1-95]

2. Site investigation workplan to define:

a. site geology and hydrogeology, the vertical and horizontal extent and magnitude of vadose-zone

and ground-water contamination, subsurface hydraulic parameters including hydraulic conductivity, transmissivity, storativity, and rate and direction of contaminant migration, inventory of water wells inside and within one (1) mile from the perimeter of the three-dimensional body where the standards set forth in Section 4103.B are exceeded, and location and number of such wells actually or potentially affected by the pollution; and

b. surface-water hydrology, seasonal stream flow characteristics, ground-water/surface-water relationships, the vertical and horizontal extent and magnitude of contamination and impacts to surface water and stream sediments. The magnitude of contamination and impacts on surface water may be, in part, defined by conducting a biological assessment of fish, benthic macroinvertebrates and other wildlife populations. Seasonal variations should be accounted for when conducting these assessments. [12-1-95]

3. Monitoring program, including sampling stations and frequencies, for the duration of the abatement plan that may be modified, after approval by the secretary, as additional sampling stations are created; [12-1-95]

4. Quality assurance plan, consistent with the sampling and analytical techniques listed in Section 3107.B of this Part and with Section 1103 of the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1), for all work to be conducted pursuant to the abatement plan; [12-1-95]

5. Site health and safety plan for all work to be performed pursuant to the abatement plan; [12-1-95]

6. A schedule for all Stage 1 abatement plan activities, including the submission of summary quarterly progress reports, and the submission, for approval by the secretary, of a detailed final site investigation report; and [12-1-95]

7. Any additional information that may be required to design and perform an adequate site investigation. [12-1-95]

D. Stage 2 Abatement Plan.

Any responsible person shall submit a Stage 2 abatement plan proposal to the secretary for approval within sixty (60) days, or up to one hundred and twenty (120) days for good cause shown, after approval by the secretary of the final site investigation report prepared pursuant to Stage 1 of the abatement plan. [12-1-95]

E. The purpose of Stage 2 of the abatement plan shall be to select and design, if necessary, an abatement option that, when implemented, will result in attainment of the abatement standards and requirements set forth in Section 4103 of this Part, including post-closure maintenance activities. Stage 2 of the abatement plan should include, at a minimum, the following information: [12-1-95]

1. Brief description of the current situation at the site; [12-1-95]

2. Development and assessment of abatement options; [12-1-95]

3. Description, justification and design, if necessary, of preferred abatement option; [12-1-95]

4. Modification, if necessary, of the monitoring program approved pursuant to Stage 1 of the abatement plan, including the designation of pre and post abatement-completion sampling stations and sampling frequencies to be used to demonstrate compliance with the standards and requirements set forth in Section 4103 of this Part; [12-1-95]

5. Site maintenance activities, if needed, proposed to be performed after termination of abatement activities; [12-1-95]

6. A schedule for the duration of abatement activities, including the submission of summary quarterly progress reports; [12-1-95]

7. A public notification proposal designed to satisfy the requirements of Sections 4108.B and 4108.C of this Part; and [12-1-95]

8. Any additional information that may be reasonably required to select, describe, justify and design an effective abatement option. [12-1-95]

20 NMAC 6.2.IV.4107 OTHER REQUIREMENTS

A. Any responsible person shall allow any authorized representative of the secretary to: [12-1-95]

1. upon presentation of proper credentials, enter the facility at reasonable times; [12-1-95]

2. inspect and copy records required by an abatement plan; [12-1-95]

3. inspect any treatment works, monitoring and analytical equipment; [12-1-95]

4. sample any wastes, ground water, surface water, stream sediment, plants, animals, or vadose-zone material including vadose-zone vapor; [12-1-95]

5. use monitoring systems and wells under such responsible person's control in order to collect samples of any media listed in Section 4107.A.4 above; and [12-1-95]

6. gain access to off-site property not owned or controlled by such responsible person, but accessible to such responsible person through a third-party access agreement, provided that it is allowed by the agreement. [12-1-95]

B. Any responsible person shall provide the secretary, or a representative of the secretary, with at least four (4) working days advance notice of any sampling to be performed pursuant to an abatement plan, or any well plugging, abandonment or destruction at any facility where an abatement plan has been required. [12-1-95]

C. Any responsible person wishing to plug, abandon or destroy a monitoring or water supply well within the perimeter of the 3-dimensional body where the standards set forth in Section 4103.B are exceeded, at any facility where an abatement plan has been required, shall propose such action by certified mail to the secretary for approval, unless such approval is required from the State Engineer. The proposed action shall be designed to prevent water pollution that could result from water contaminants migrating through the well or borehole. The proposed action shall not take place without written approval from the secretary, unless written approval or disapproval is not received by the responsible person within thirty (30) days of the date of receipt of the proposal. [12-1-95]

20 NMAC 6.2.IV.4108 PUBLIC NOTICE AND PARTICIPATION

A. Within thirty (30) days of filing of a Stage 1 abatement plan proposal, the secretary shall issue a news release summarizing: [12-1-95]

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1. the source, extent, magnitude and significance of water pollution, as known at that time; [12-1-95]

2. the proposed Stage 1 abatement plan investigation; and [12-1-95]

3. the name and telephone number of an agency contact who can provide additional information. [12-1-95]

B. Within thirty (30) days of filing of a Stage 2 abatement plan proposal, or proposed significant modification of Stage 2 of the abatement plan, any responsible person shall provide to the secretary proof of public notice of the abatement plan to the following persons: [12-1-95]

1. the public, who shall be notified through publication of a notice in newspapers of general circulation in this state and in the county where the abatement will occur and, in areas with large percentages of non-English speaking people, through the mailing of the public notice in English to a bilingual radio station serving the area where the abatement will occur with a request that it be aired as a public service announcement in the predominant non-English language of the area; [12-1-95]

2. those persons, as identified by the secretary, who have requested notification, who shall be notified by mail; [12-1-95]

3. the New Mexico Trustee for Natural Resources, and any other local, state or federal governmental agency affected, as identified by the secretary, which shall be notified by certified mail; [12-1-95]

4. owners and residents of surface property located inside, and within one (1) mile from, the perimeter of the geographic area where the standards and requirements set forth in Section 4103 are exceeded who shall be notified by a means approved by the secretary; and [12-1-95]

5. the Governor or President of each Indian Tribe, Pueblo or Nation within the state of New Mexico, as identified by the secretary, who shall be notified by mail. [12-1-95]

C. The public notice shall include, as approved in advance by the secretary: [12-1-95]

1. name and address of the responsible person; [12-1-95]

2. location of the proposed abatement; [12-1-95]

3. brief description of the nature of the water pollution and of the proposed abatement action; [12-1-95]

4. brief description of the procedures followed by the secretary in making a final determination; [12-1-95]

5. statement on the comment period; [12-1-95]

6. statement that a copy of the abatement plan can be viewed by the public at the department's main office or at the department field office for the area in which the discharge occurred; [12-1-95]

7. statement that written comments on the abatement plan, and requests for a public meeting or hearing that include the reasons why a meeting or hearing should be held, will be accepted for consideration if sent to the secretary within sixty (60) days after the determination of administrative completeness; and [12-1-95]

8. address and phone number at which interested persons may obtain further information. [12-1-95]

D. A public meeting or hearing may be held if the secretary determines there is significant public interest. Notice of the time and place of the meeting or hearing shall be given at least thirty (30) days prior to the meeting or hearing pursuant to Subsections A and B above. The secretary may appoint a meeting facilitator or hearing officer. The secretary may require the responsible person to prepare for approval by the secretary a fact sheet, to be distributed at the public meeting or hearing and afterwards upon request, written in English and Spanish, describing site history, the nature and extent of water pollution, and the proposed abatement. The record of the meeting or hearing, requested under this Section, consists of a tape recorded or transcribed session, provided that the cost of a court recorder shall be paid by the person requesting the transcript. If requested by the secretary, the responsible person will provide a translator approved by the secretary at a public meeting or hearing conducted in a locale where testimony from non-English speaking people can reasonably be expected. At the meeting or hearing, all interested persons

secretary within thirty (30) days after receiving notice of the secretary's action. The petition shall specify the portions of the action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered to the secretary, and to the applicant or permittee if the petitioner is not the applicant or permittee, and attach a copy of the action for which review is sought. Unless a timely petition for hearing is made, the secretary's action is final. [12-1-95]

D. The proceedings before the commission shall be conducted as provided in the commissions adjudicatory procedures, 20 NMAC 1.3. [12-1-95, 11-15-96]

E. The cost of the court reporter for the hearing shall be paid by the petitioner. [12-1-95]

F. The appeal provisions do not relieve the owner, operator or responsible person of their obligations to comply with any federal or state laws or regulations. [12-1-95]

20 NMAC 6.2.IV.4115 COURT REVIEW OF COMMISSION DECISIONS

Court review of commission decisions shall be as provided by law. [12-1-95]

Eco-logical
Environmental Services Inc.

ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

AMERICAN PROCESSING, L.P., an affiliate of Kinder Morgan, Inc.

HOBBS GAS PLANT LEA COUNTY, NEW MEXICO

AMERICAN PROCESSING, L.P.,
370 Van Gordon
Lakewood, Colorado 80228

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ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

OCTOBER 10, 1999

HOBBS NATURAL GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO

DATE PREPARED:
MAY 25, 2000

ECO PROJECT NO.:
279-512

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION

ON BEHALF OF:
AMERICAN PROCESSING, L.P.,
AN AFFILIATE OF KINDER MORGAN, INC.

PREPARED BY:
ECO-LOGICAL ENVIRONMENTAL SERVICES, INC.

SCOTT SPRINGER, PROJECT GEOLOGIST

SHANE ESTEP, PROJECT MANAGER

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I. Report Summary

The purpose of this report is to fulfill the requirements of the groundwater monitoring plan approved by the New Mexico Oil Conservation Division (OCD). On January 5, 1999, April 1, 1999, July 14, 1999, and October 22, 1999 Eco-logical Environmental Services, Inc. (Eco-logical) personnel were on-site to purge and sample ten (10) monitor wells (MW) at the Former Hobbs Gas Plant west of Hobbs, New Mexico (see Figure 1). The objective of this sampling event was to fulfill the Abatement Plan requirements approved by the OCD in April 1997 and as modified in December 1998. The modification removed MW-2, MW-4 and MW-8 from the requirements of quarterly sampling. This event involved the measurement of relative depths to water, purging of the monitoring wells, and sample collection and analyses. Figure 2 presents the site map with the locations of the monitor wells.

The plant has not been in operation for nearly two years. In addition to the plant closure, many compressors and skid mounted equipment have been removed. Some additional equipment is also scheduled to be dismantled. The remaining equipment and structures have been sold to Transwestern Pipeline Company.

The initial task was to determine the static groundwater levels relative to the north side of the top of each well casing and to examine each well for the presence of phase separated hydrocarbons (PSH) using an interface probe with a calibrated tape (see Tables 1 - 10). Wells were measured from the least impacted to the most impacted as determined by previous sampling events. All equipment was properly decontaminated between gauging of wells. None of the wells exhibited free product.

The latest depth to groundwater at the site ranges from 54.5 to 63.5 feet below the ground surface. These depths represent an average drop in the water table of 4.2 feet since the sampling event in October of 1996 (see Figure 3). Depth to groundwater has been increasing in all wells since October 1996 with the exception of the last quarterly event in January 1999 which showed a slight decrease over the previous sampling event of October 1998. The overall groundwater flow direction is stable to the southeast at a gradient of 1:456 (see Figure 4 for a current gradient map).

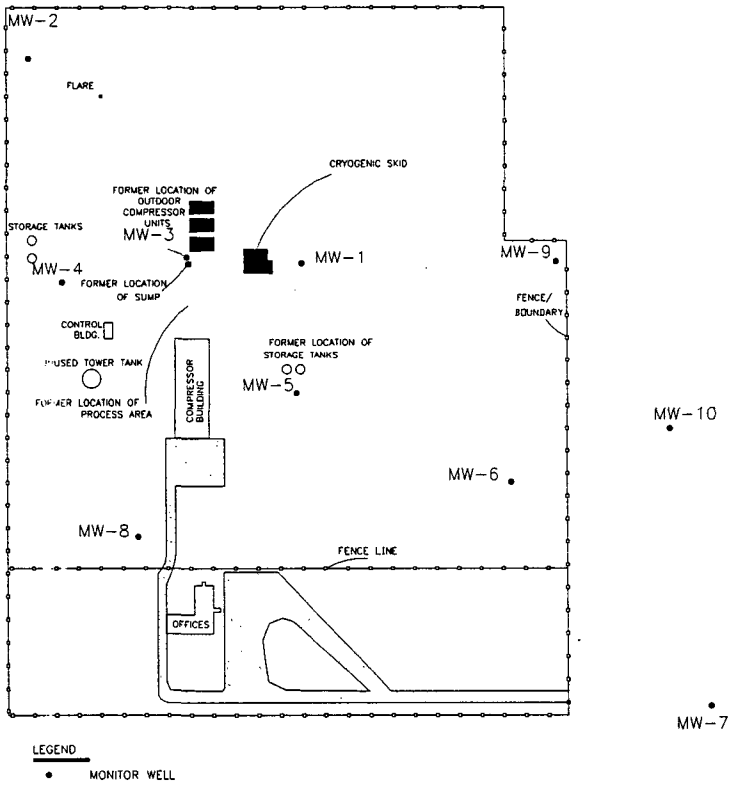
After obtaining all measurements, the volume of water in each casing was calculated. The wells were then purged by hand bailing or by an electric submersible purge pump. Wells were purged until three well volumes of water were removed or until the well was dry. The bailers or pump were decontaminated between wells with a water and Alconox solution and rinsed in clean water. After allowing the wells to recover to at least 70 percent of the

original water depth, samples were collected utilizing new, single use, one (1) liter bailers. Groundwater samples were then submitted to TraceAnalysis and Southern Petroleum Laboratories for analyses. Based on previous analytical results and as approved by the OCD letter dated December 15, 1998, a minimized analyses schedule was performed. This included analysis for benzene, toluene, ethylbenzene, and xylene (BTEX) from monitor wells MW-1, MW-3, MW-5, MW-6, MW-7, MW-9, and MW-10 and chloride from monitor wells MW-6, MW-7, MW-9, and MW-10.

The latest analytical results showed that benzene levels continue to be present above the New Mexico Water Quality Control Commission (WQCC) Guideline level (see appendix) of 0.01 parts per million (ppm) in water from monitor well MW-6 at an average concentration of 0.107 ppm for the year. Chloride is currently present at 278 ppm in MW-9. The chloride concentration has varied in this monitor well slightly above the established guidelines (located in 20 NMAC.6.2.3103) of 250 ppm for the year. The analytical results for the year are summarized as follows:

MW-1	Benzene	- ranged from less than 0.001 ppm to 0.005 ppm
	Toluene	- ranged from less than 0.001 ppm to less than 0.005 ppm
	Ethylbenzene	- ranged from less than 0.001 ppm to less than 0.005 ppm
	Xylene	- ranged from less than 0.001 ppm to less than 0.005 ppm
MW-2	Not Tested	
MW-3	BTEX	- remained less than 0.001 ppm
MW-4	Not Tested	
MW-5	Benzene	- ranged from less than 0.001 ppm to 0.005 ppm
	Toluene	- remained less than 0.001 ppm
	Ethylbenzene	- remained less than 0.001 ppm
	Xylene	- remained less than 0.001 ppm
MW-6	Benzene	- ranged from 0.123 ppm to 0.090 ppm
	Toluene	- ranged from less than 0.001 ppm to less than 0.005 ppm
	Ethylbenzene	- ranged from less than 0.001 ppm to less than 0.005 ppm
	Xylene	- ranged from less than 0.001 ppm to less than 0.005 ppm
	Chloride	- ranged from 31 ppm to 56 ppm
MW-7	BTEX	- remained less than 0.001 ppm
	Chloride	- ranged from 35 ppm to 74 ppm
MW-8	Not Tested	
MW-9	BTEX	- remained less than 0.001 ppm
	Chloride	- ranged from 260 ppm to 520 ppm
MW-10	BTEX	- remained less than 0.001 ppm
	Chloride	- ranged from 122 ppm to 140 ppm

Results of the analyses of the water samples are presented in Tables 11 to 21 and are presented on graphs in Figures 6 to 11. Figure 5 presents the estimated isograds for benzene for the latest quarterly sampling event (October 22, 1999). Section 6 contains the lab reports for all four quarterly events covered in this report.



II. Chronology of Events

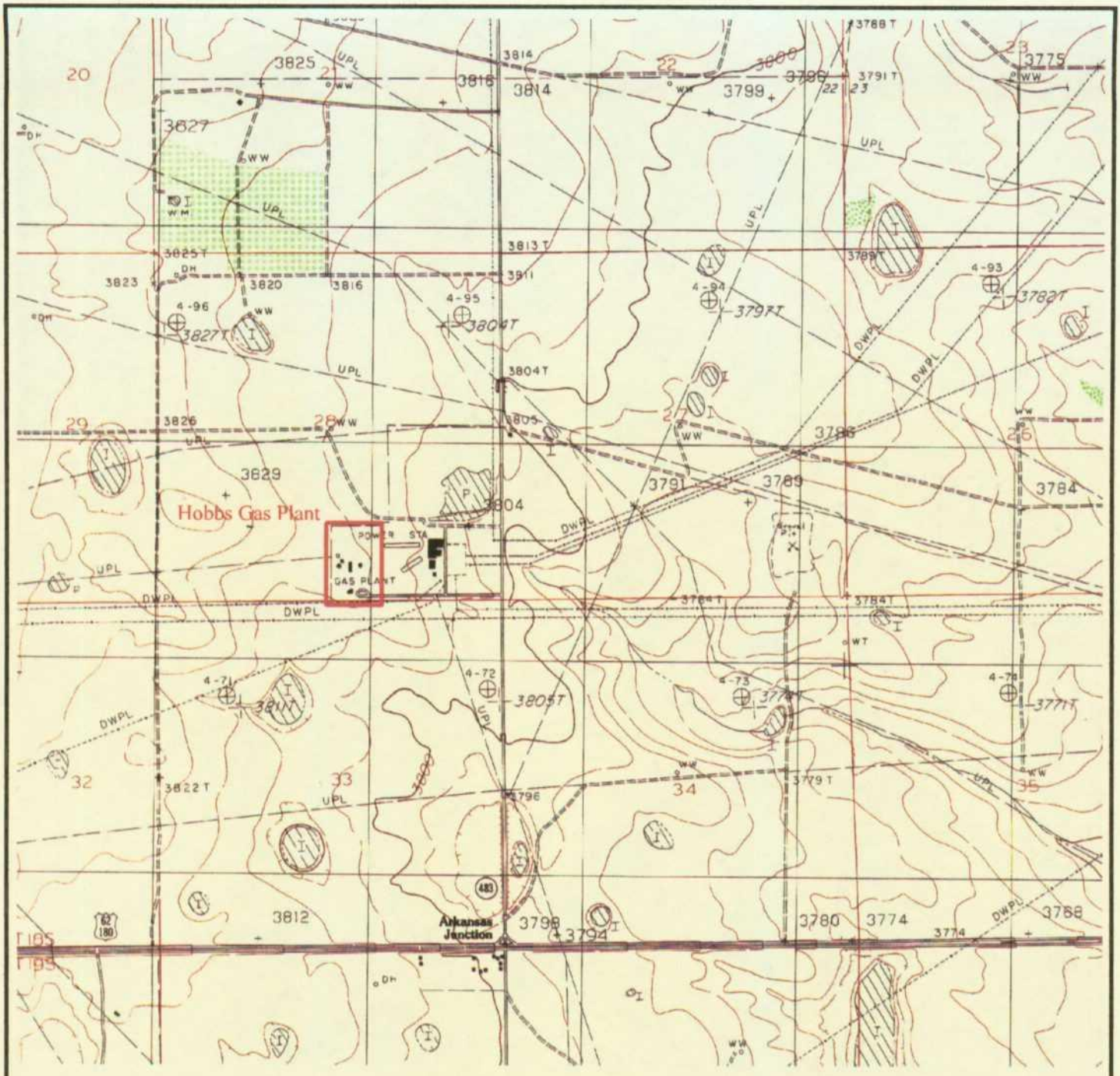
The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995, and noted several deficiencies. The deficiencies, and the related directives, were detailed in a letter issued by OCD on December 6, 1995. The letter was issued under OCD statutory authority and requires that KN Energy undertake and complete certain activities to fulfill OCD requirements. Previous activities undertaken by KN Energy, and the substance of activities reflected in this report, are to fulfill the requirements directed by OCD. The following chronology briefly summarizes the relevant activities conducted at the facility:

1994	KN Energy took possession of the plant in 1994 following a merger with American Oil and Gas.
Dec. 6, 1995	OCD directive issued to KN Energy on the initial items requiring action as a result of the Oct. 16, 1995 inspection.
Jan. 26, 1996	KN Energy initial response to OCD directive.
Jan. 30, 1996	Work Plan for soils delineation submitted with the inclusion that one monitor well would be installed if impacted soil was discovered within ten feet of the groundwater.
Mar. 27, 1996	Delineation Work Plan approved by OCD with report due July1, 1996.
June 6, 1996	Soils Delineation Investigation Report filed with scope of work for extended Groundwater Delineation included.
Sept. 26, 1996	Directive received from OCD requiring the full delineation work plan of all contamination at the site including groundwater be submitted for approval.
Oct. 9, 1996	Work Plan for groundwater delineation filed as per the Sept. 26, 1996 OCD directive.
Oct. 15, 1996	Approval of groundwater delineation work plan received from OCD.

Dec. 11, 1996	KN announces impending closure of plant. Eco-logical submits requests for extension of time and change from Discharge Permit to Closure Plan, with the installation of additional monitor wells.
Dec. 17, 1996	OCD approves request for extension of time and the additional monitor wells.
Jan. 14, 1997	Additional groundwater monitoring well installed, and Abatement Plan and Closure Plan Report were submission to OCD as per Dec. 17, 1996 OCD directive.
Feb. 7, 1997	Phone conference held with OCD, Eco-logical and KN personnel to discuss results of report and proposed work plan.
Feb. 25, 1997	After review of Abatement Plan and phone conference, OCD issued a directive stating that the existing monitor wells also be tested for the entire suite of 20 NMAC 6.2.3103 constituents excluding uranium, radioactivity and PCB's, and additional wells be installed to define the points of compliance in the groundwater. An update/amendment report to be submitted by May 25, 1997.
March 13, 1997	Response to Feb. 1997 OCD letter submitted outlining the points to be followed in the extended delineation work plan.
April 1997	Three additional monitor wells installed and a quarterly sampling and monitoring event occurs.
May 10, 1997	Submission of updated Abatement Report filed with OCD as per the Feb. 25, 1997 directive.
June 26, 1997	OCD approves the updated Abatement Report including reducing the testing to BTEX, Napthalene, and Chlorides, and that an annual report be submitted by June 1, 1998.
July 1997	Quarterly Sampling and Monitoring Event.
Oct. 1997	Quarterly Sampling and Monitoring Event.

October 1997	Sump, Cryoskid, Flare Pit, and Compressor soils excavated and stock piled prior to remediation pursuant to the approved Stage 1 Abatement Plan and Site Closure Plan dated January 14, 1997.
November 1997	Initial Treatment of excavated soils performed.
January 1998	Quarterly Sampling and Monitoring Event.
March 1998	Submission of Annual Groundwater Sampling Report to the OCD, with a recommendation to stop testing for Napthalene and discontinue sampling of MW-2, MW-4 and MW-8.
April 3, 1998	Quarterly Sampling and Monitoring Event.
June 25, 1998	Quarterly Sampling and Monitoring Event. Impacted stockpiled soil retreated.
October 2, 1998	Quarterly Sampling and Monitoring Event. Stock piled soil tested below OCD levels.
November 1998	Backfilling of excavations performed.
December 1998	OCD contacted by Eco-logical regarding January 1998 Annual Groundwater Report and Reduced Analyses Plan. OCD approved reduced analyses in letter dated December 15, 1998.
January 1999	Quarterly Sampling and Monitoring Event.
April 1999	Quarterly Sampling and Monitoring Event.
July 1999	Quarterly Sampling and Monitoring Event.
October 1999	Quarterly Sampling and Monitoring Event.
October 1999	K N Energy, Inc. changed name to Kinder Morgan, Inc. (Parent company of American Processing, L.P.)

III. Maps, Graphs, & Tables

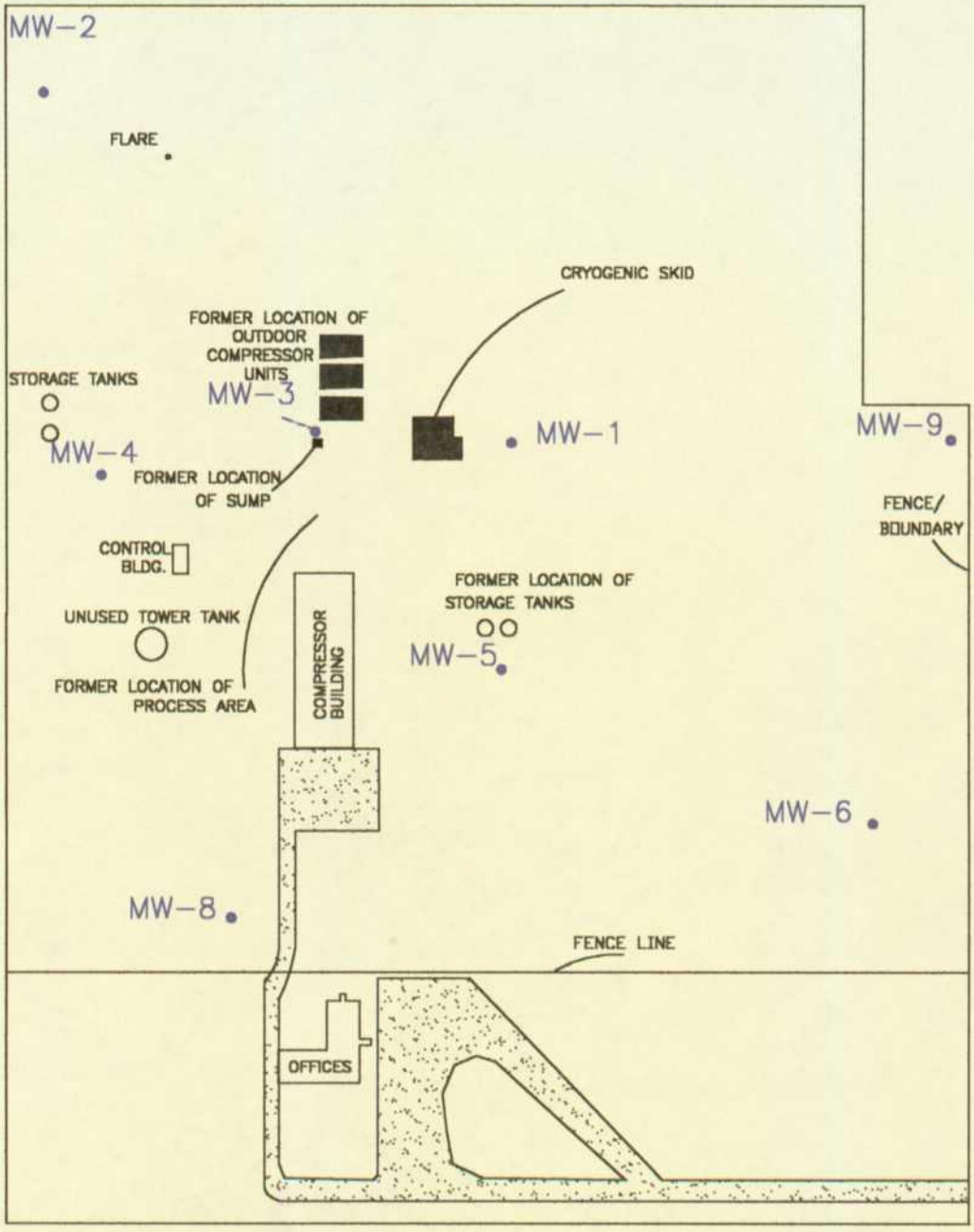


SITE COORDINATES: 24.08 ACRES IN SECTOIN 28, T18S, R36E, LEA COUNTY, NEW MEXICO
Source: Monument North, NM / Lea County, 1985
Project #: 279 / 512 Date: July 8, 1999

FIGURE 1
GENERAL SITE LOCATION MAP
HOBBS NATURAL GAS PLANT
LEA COUNTY, NEW MEXICO

PREPARED BY

Eco-logical
Environmental Services Inc.



N

SCALE

0' 50' 100'

HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
SITE MAP

KINDER MORGAN INC.

Figure 2

Eco-logical Environmental Services Inc.

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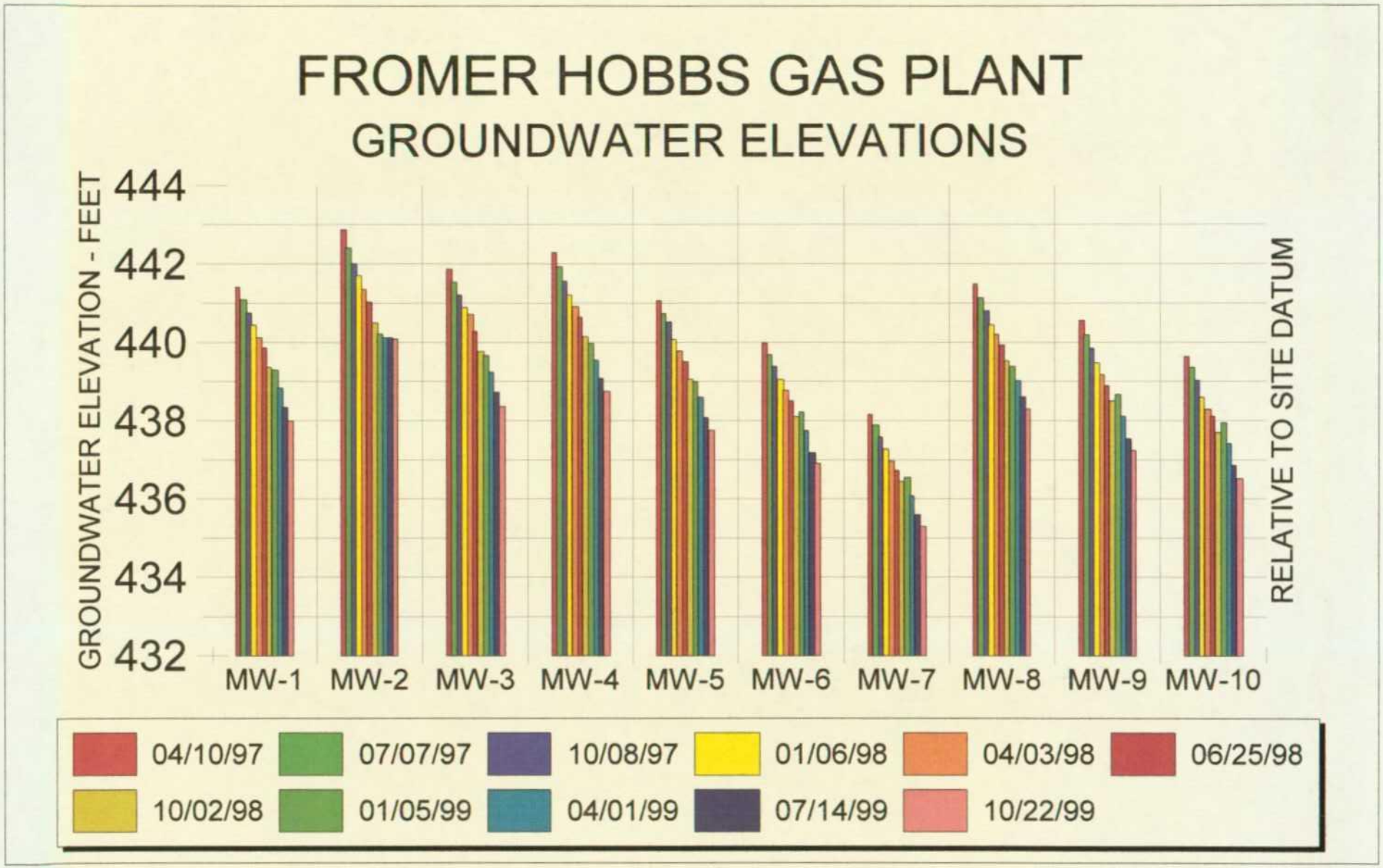
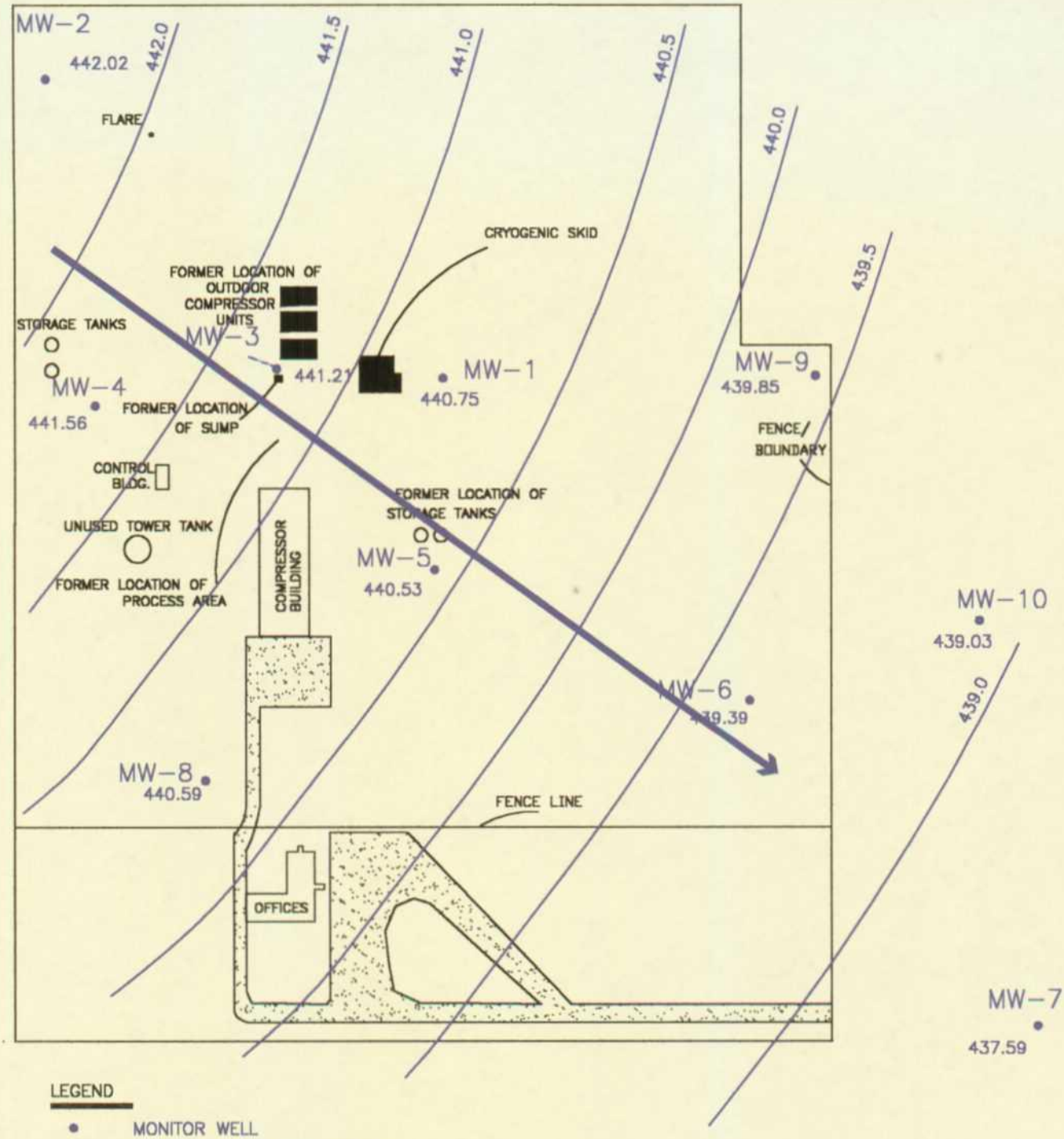

FROMER HOBBS GAS PLANT
GROUNDWATER ELEVATIONS
GROUNDWATER ELEVATION - FEET
444
442
440
438
436
434
432
RELATIVE TO SITE DATUM
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
04/10/97
07/07/97
10/08/97
01/06/98
04/03/98
06/25/98
10/02/98
01/05/99
04/01/99
07/14/99
10/22/99

Figure 3



SCALE
0' 50' 100'

HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
GROUNDWATER GRADIENT MAP
OCTOBER 1999

KINDER MORGAN INC.

Figure 4

Eco-logical Environmental Services Inc.

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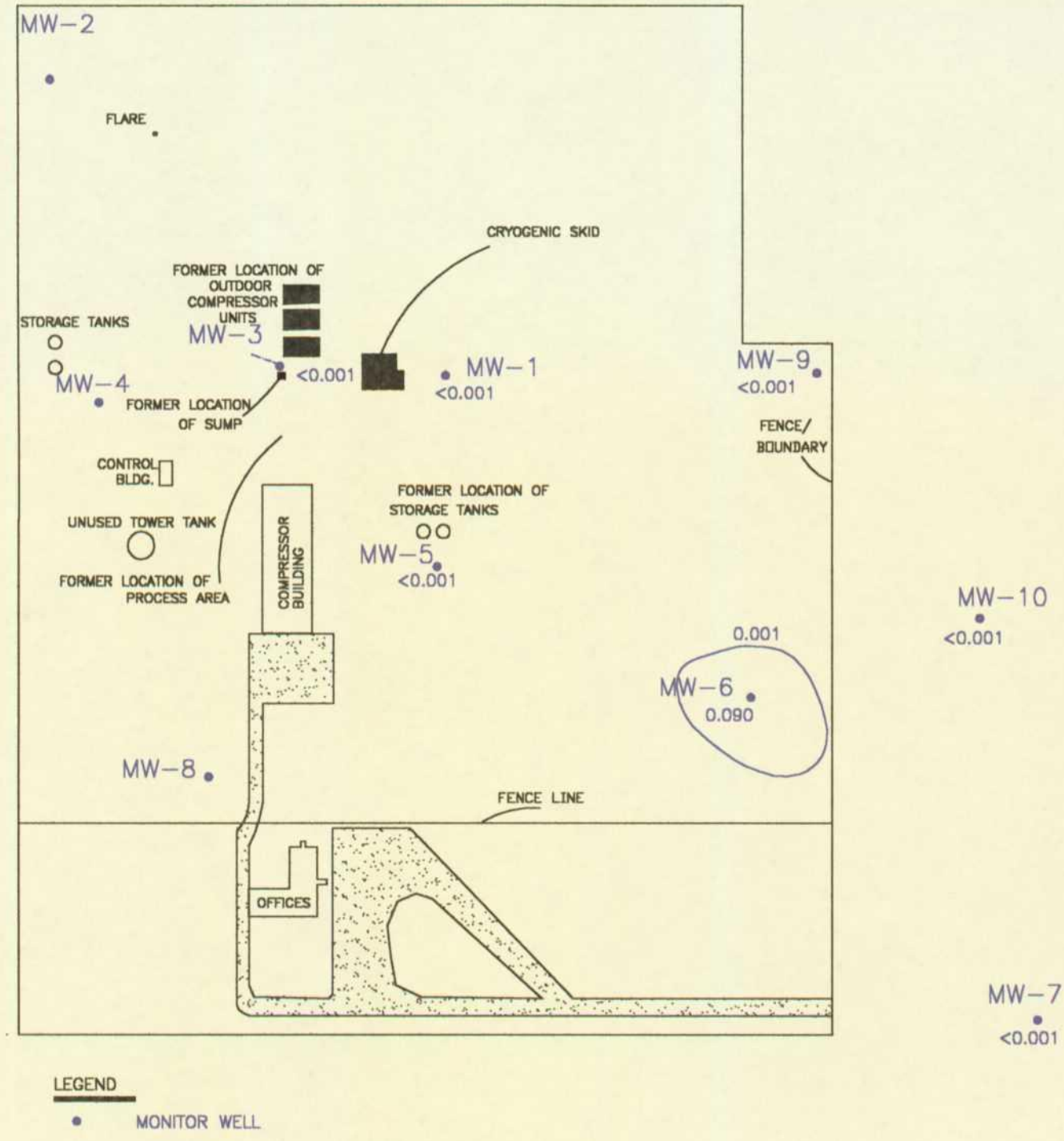

SCALE

0' 50' 100'

HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
OCTOBER 1999 BENZENE ISOGRAD MAP

KINDER MORGAN INC.

Figure 5

Eco-logical Environmental Services Inc.

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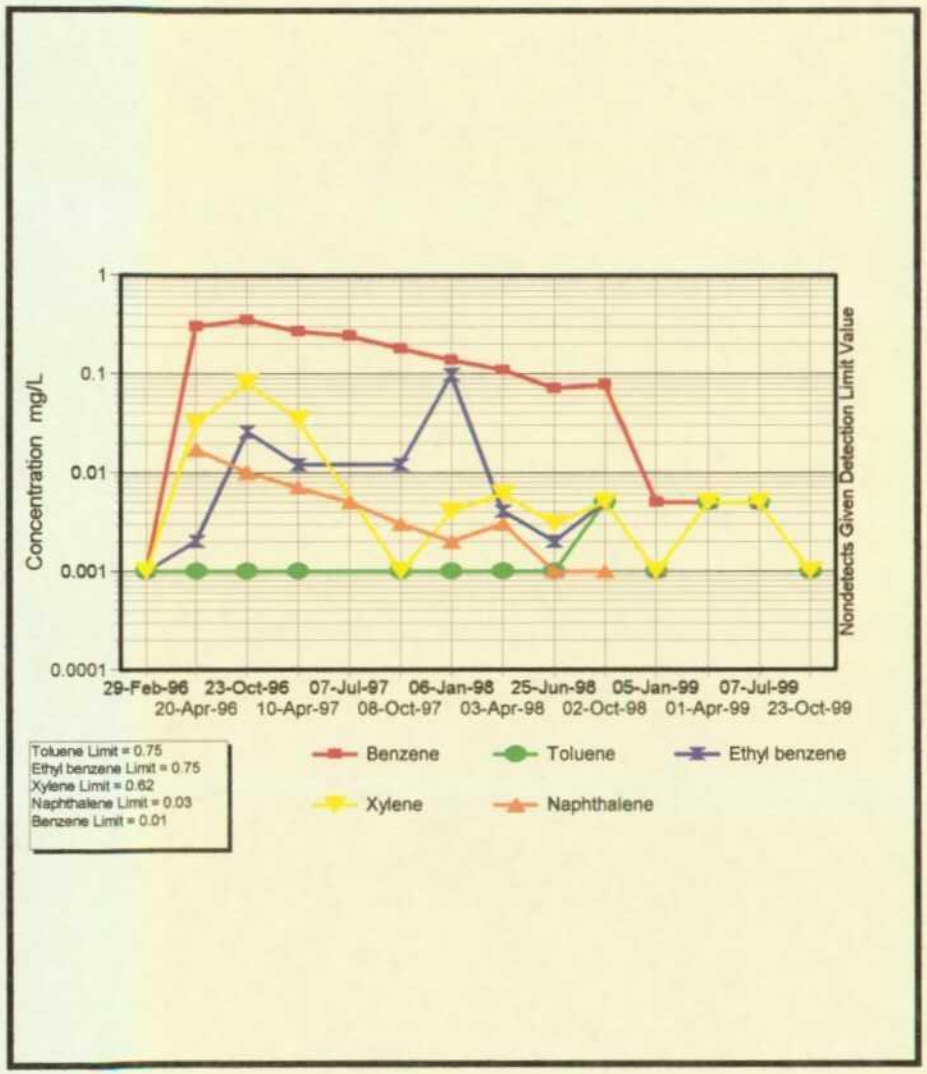
FORMER HOBBS GAS PLANT
MW-1 HISTORIC ANALYTICAL RESULTS



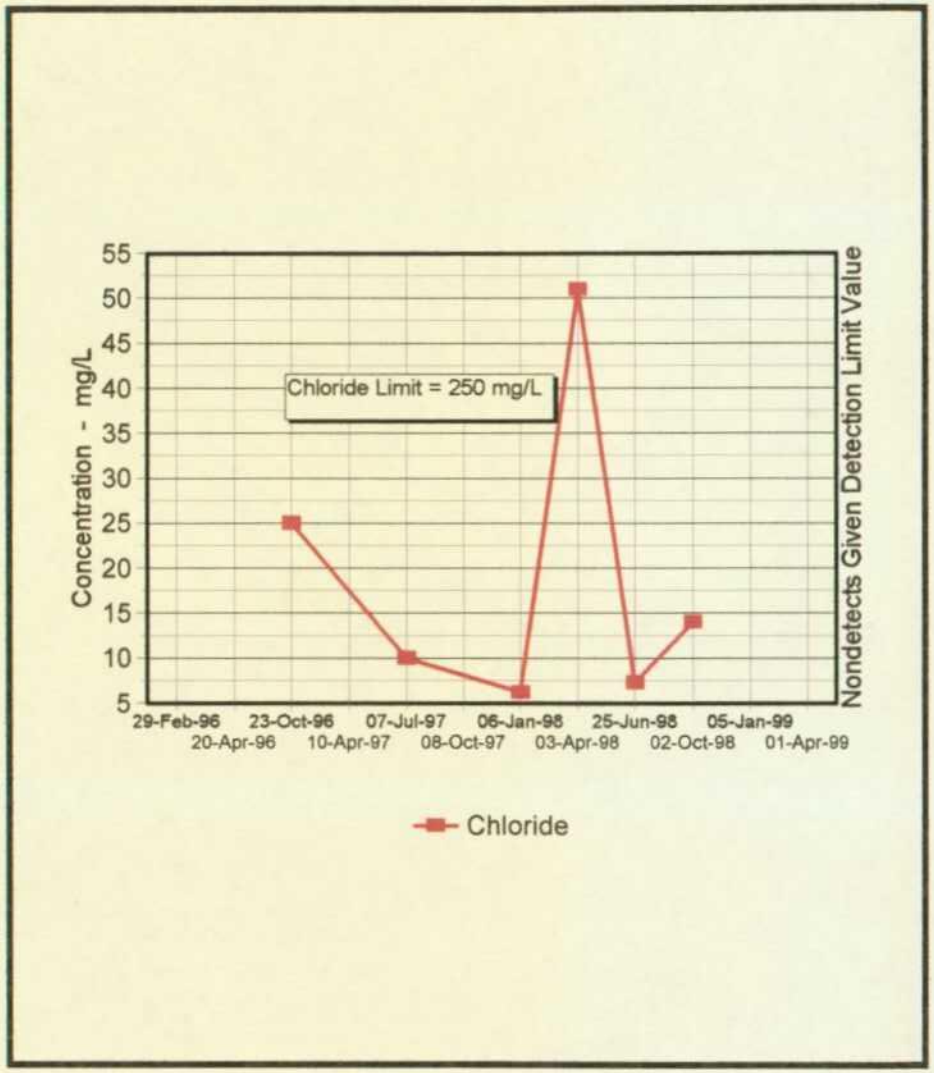
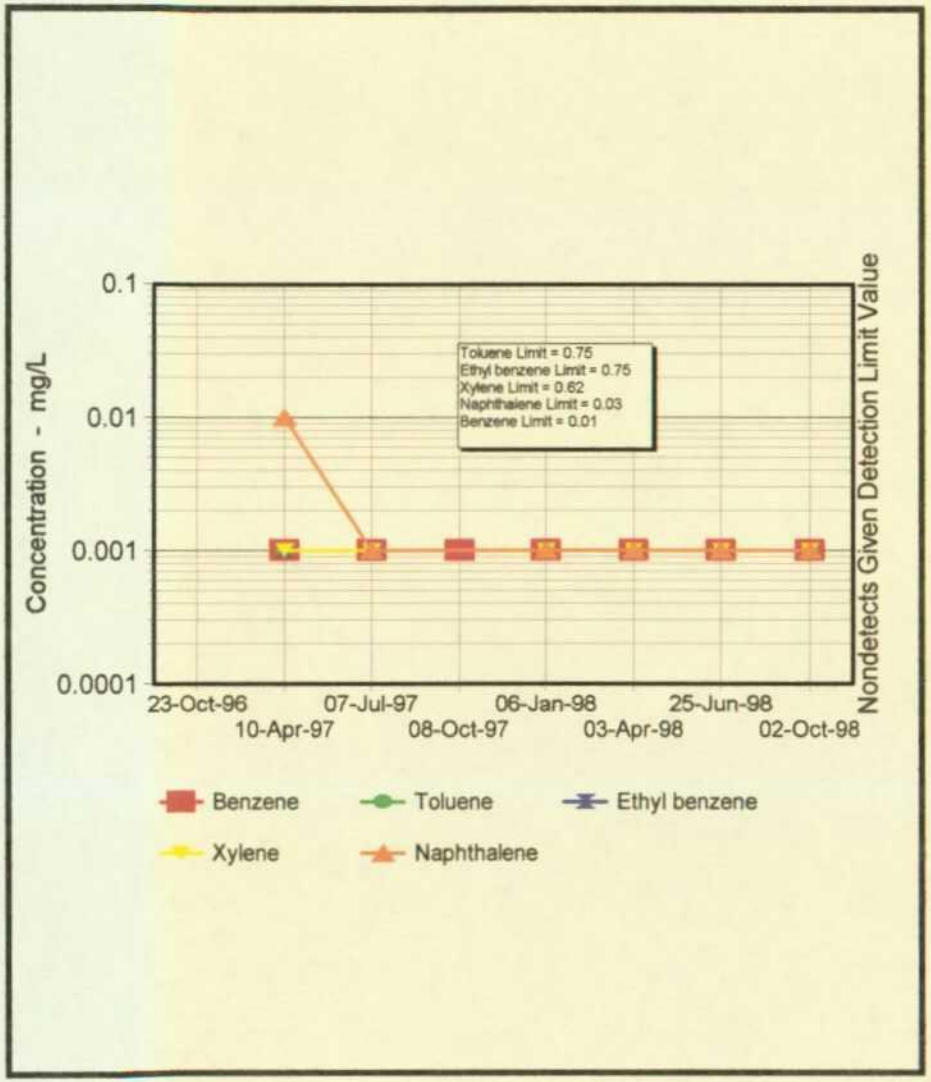


Figure 6

FORMER HOBBS GAS PLANT
MW-2 HISTORIC ANALYTICAL RESULTS



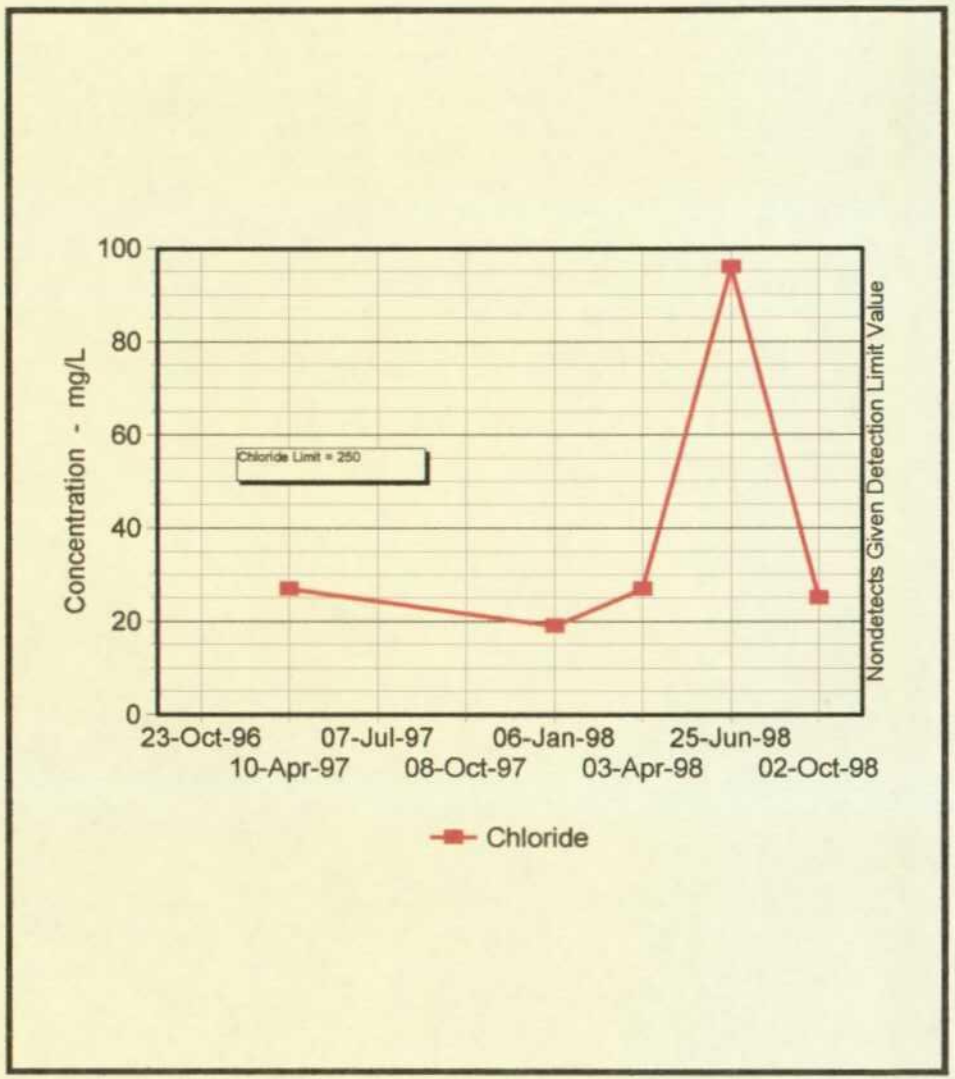
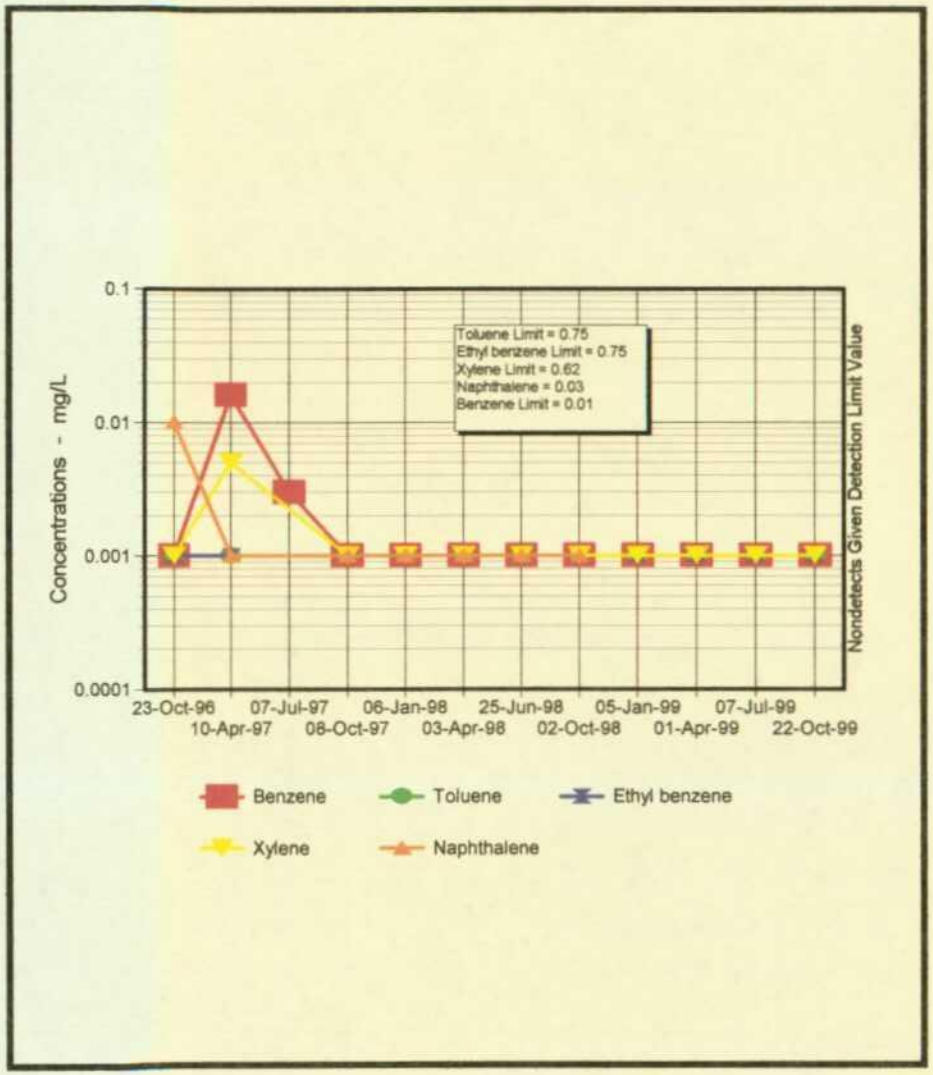


Figure 7

FORMER HOBBS GAS PLANT
MW-3 HISTORIC ANALYTICAL RESULTS



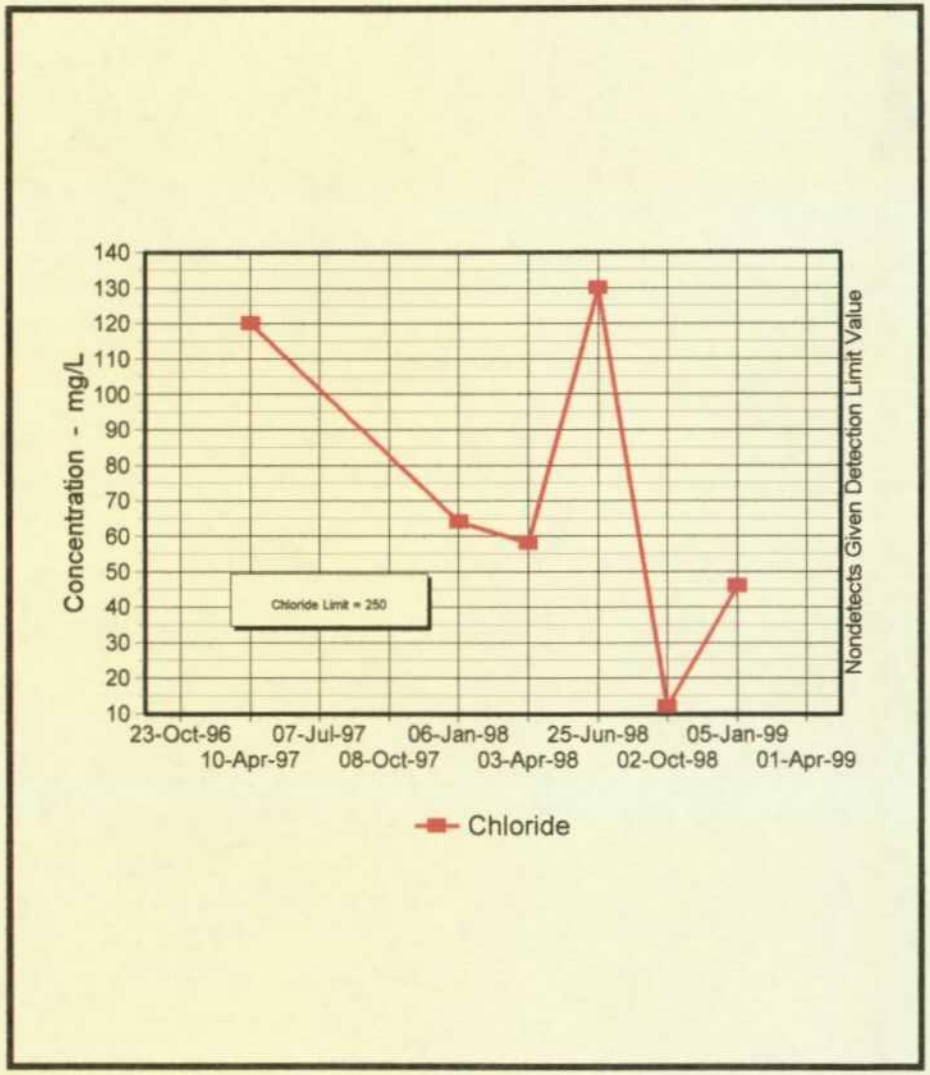
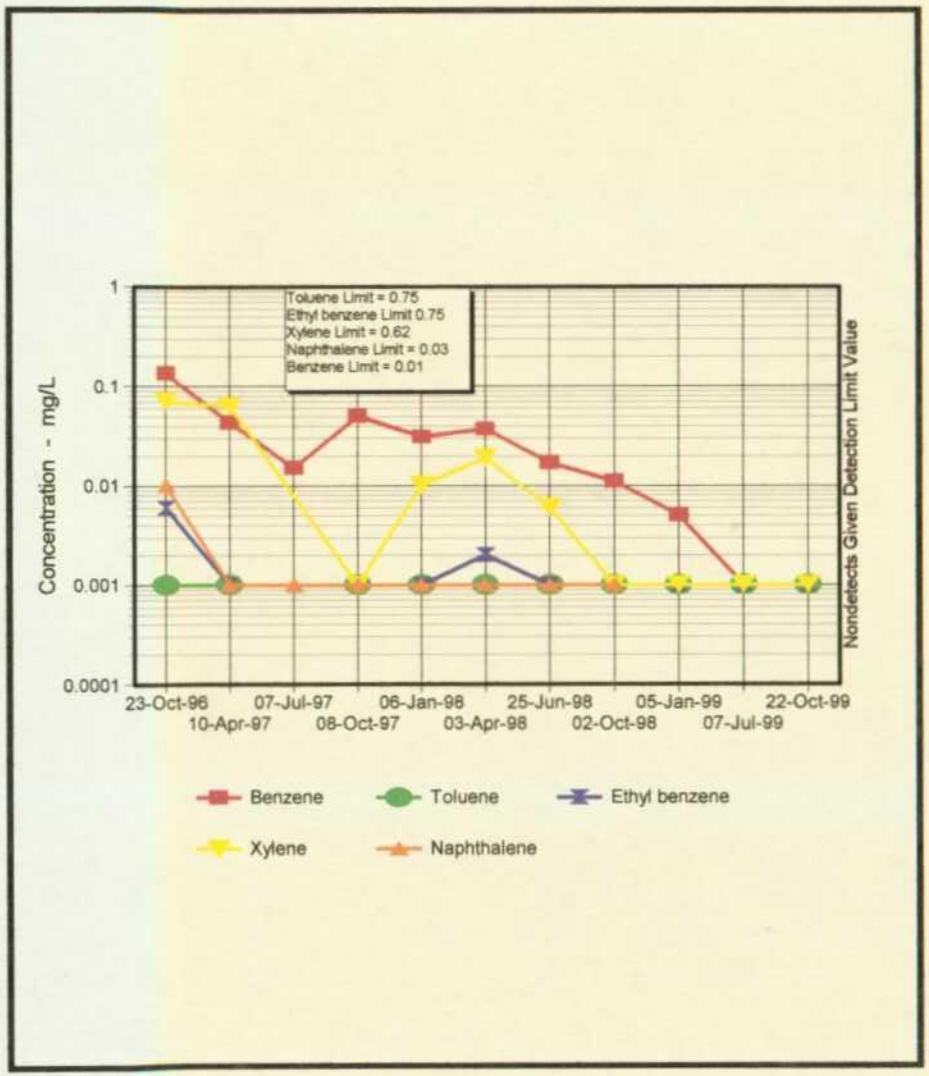


Figure 8

FORMER HOBBS GAS PLANT
MW-5 HISTORIC ANALYTICAL RESULTS



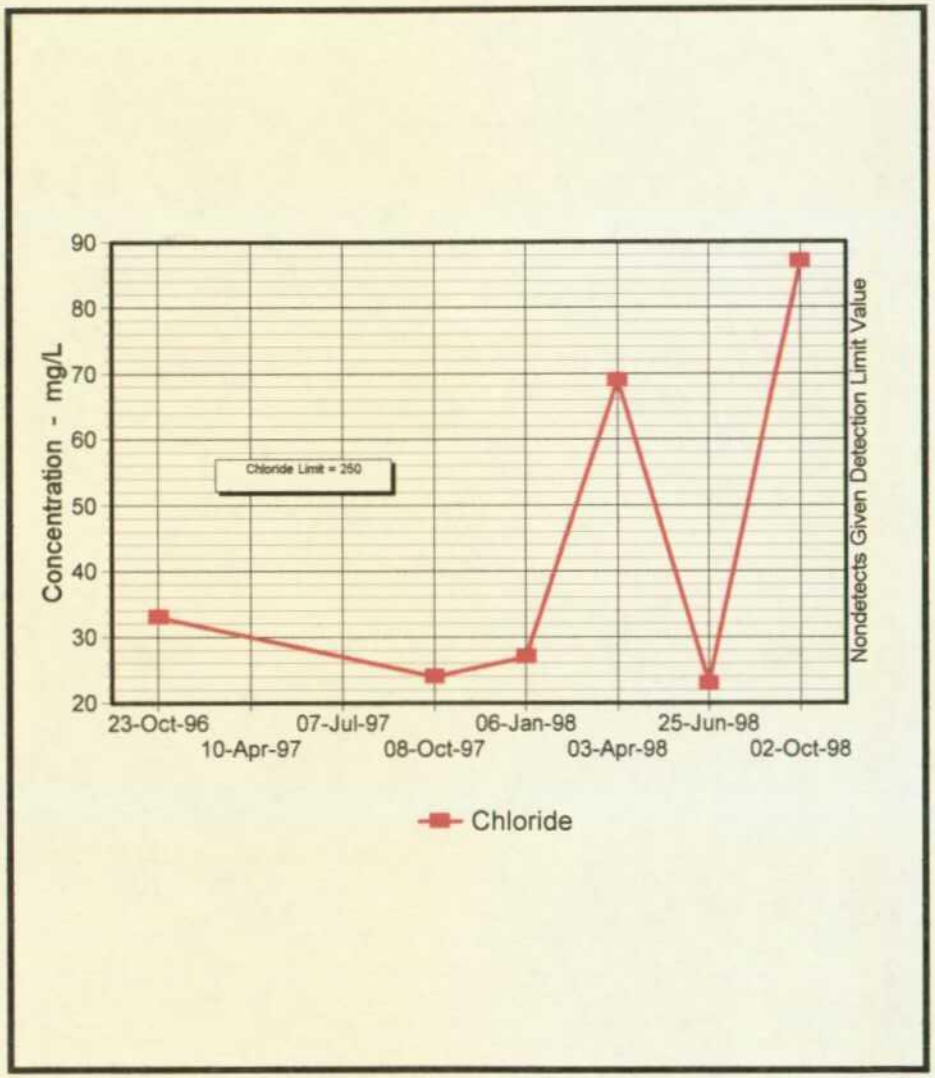
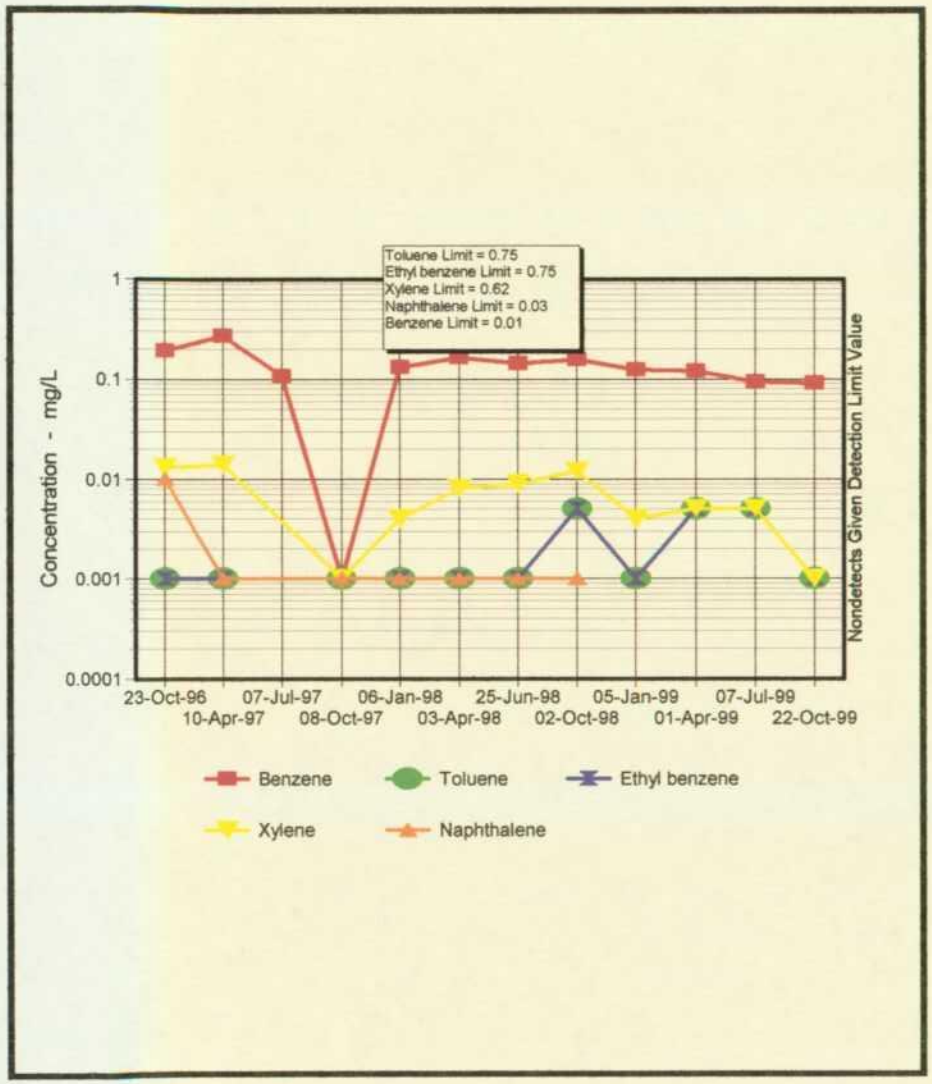


Figure 9

FORMER HOBBS GAS PLANT
MW-6 HISTORIC ANALYTICAL RESULTS



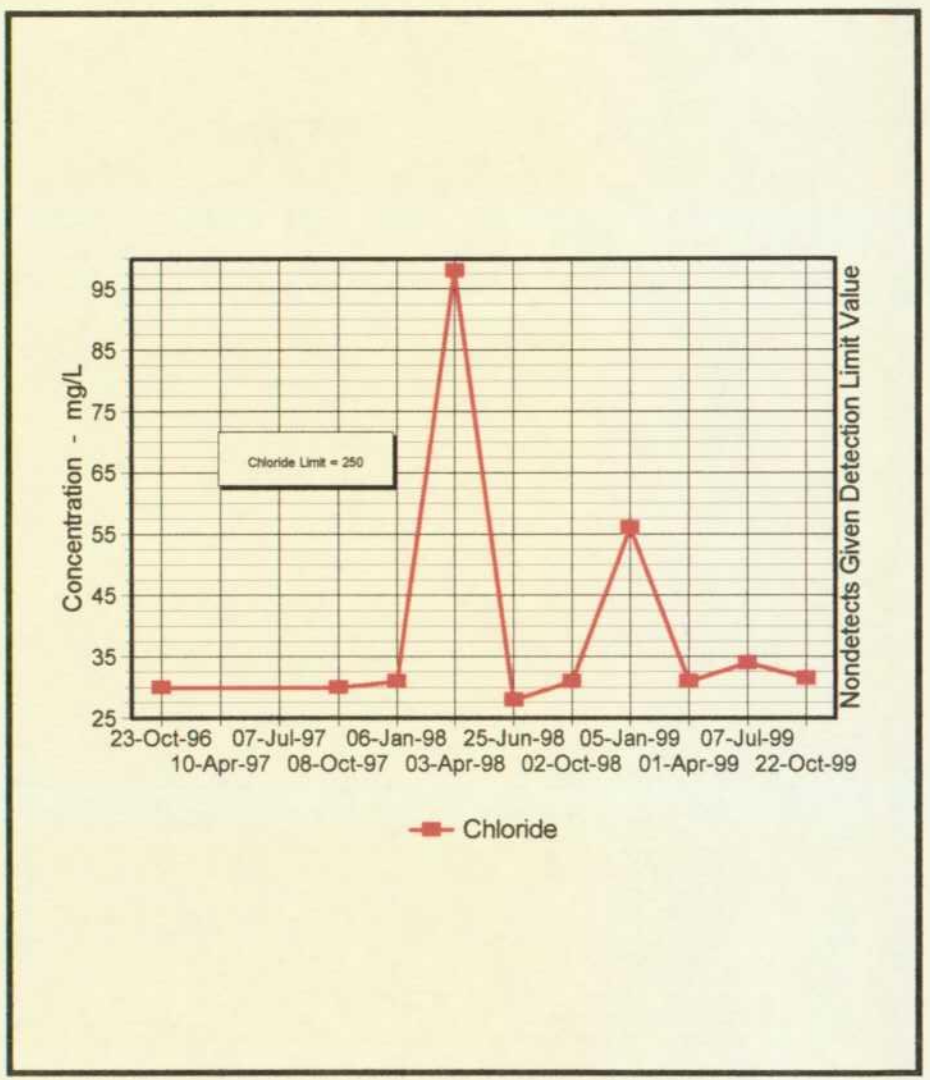


Figure 10

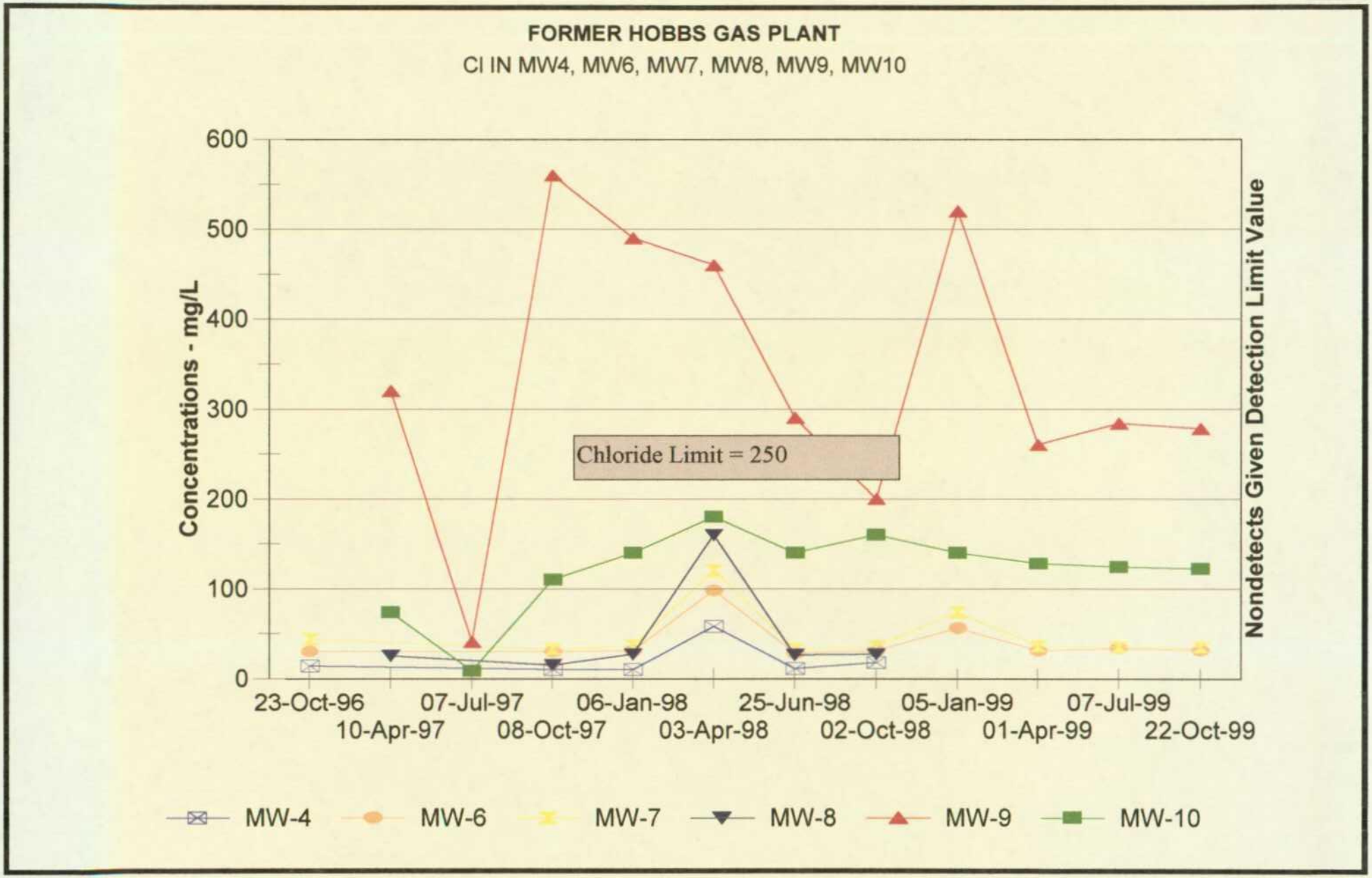

FORMER HOBBS GAS PLANT
Cl IN MW4, MW6, MW7, MW8, MW9, MW10
Concentrations - mg/L
Nondetects Given Detection Limit Value
600
500
400
300
200
100
0
Chloride Limit = 250
23-Oct-96
10-Apr-97
07-Jul-97
08-Oct-97
06-Jan-98
03-Apr-98
25-Jun-98
02-Oct-98
05-Jan-99
01-Apr-99
07-Jul-99
22-Oct-99
MW-4
MW-6
MW-7
MW-8
MW-9
MW-10

Figure 11

Table 1 Groundwater Table in Feet Monitor Well 1 Elevation of Screened Interval 436.7-456.7'						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	59.0	495.73	--	53.10	0.00	442.63
10/23/96	59.0	495.73	--	53.34	0.00	442.39
04/10/97	59.0	495.73	--	54.32	0.00	441.41
07/07/97	59.0	495.73	--	54.64	0.00	441.09
10/08/97	59.0	495.73	--	54.98	0.00	440.75
01/06/98	59.0	495.73	--	55.28	0.00	440.45
04/03/98	59.0	495.73	--	55.60	0.00	440.13
06/25/98	59.0	495.73	--	55.87	0.00	439.86
10/02/98	59.0	495.73	--	56.36	0.00	439.37
01/05/99	59.0	495.73	--	54.98	0.00	440.75
04/01/99	59.0	495.73	--	56.89	0.00	438.84
07/14/99	59.0	495.73	--	57.39	0.00	438.34
10/22/99	59.0	495.73	--	57.74	0.00	437.99

Table 2 Groundwater Table in Feet Monitor Well 2 Elevation of Screened Interval 440.4-460.4						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.0	502.41	--	58.33	0.00	444.08
04/10/97	62.0	502.41	--	59.54	0.00	442.87
07/07/97	62.0	502.41	--	60.00	0.00	442.41
10/08/97	62.0	502.41	--	60.39	0.00	442.02
01/06/98	62.0	502.41	--	60.70	0.00	441.71
04/03/98	62.0	502.41	--	61.06	0.00	441.35
06/25/98	62.0	502.41	--	61.37	0.00	441.04
10/02/98	62.0	502.41	--	61.91	0.00	440.50
01/05/99	62.0	502.41	--	60.39	0.00	442.02
04/01/99	62.0	502.41	--	62.28	0.00	440.13
07/14/99	62.0	502.41	--	62.28	0.00	440.13
10/22/99	62.0	502.41	--	62.31	0.00	440.10

Table 3 Groundwater Table in Feet Monitor Well 3 Elevation of Screened Interval 434.2-454.23						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.9	499.13	--	56.28	0.00	442.85
04/10/97	64.9	499.13	--	57.25	0.00	441.88
07/07/97	64.9	499.13	--	57.59	0.00	441.54
10/08/97	64.9	499.13	--	57.92	0.00	441.21
01/06/98	64.9	499.13	--	58.24	0.00	440.89
04/03/98	64.9	499.13	--	58.41	0.00	440.89
06/25/98	64.9	499.13	--	58.84	0.00	440.29
10/02/98	64.9	499.13	--	59.36	0.00	439.77
01/05/99	64.9	499.13	--	57.92	0.00	441.21
04/01/99	64.9	499.13	--	59.89	0.00	439.24
07/14/99	64.9	499.13	--	60.40	0.00	438.73
10/22/99	64.9	499.13	--	60.76	0.00	438.37

Table 4 Groundwater Table in Feet Monitor Well 4 Elevation of Screened Interval 436.8-456.8						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.3	501.12	--	58.12	0.00	443.00
04/10/97	64.3	501.12	--	58.83	0.00	442.29
07/07/97	64.3	501.12	--	59.19	0.00	441.93
10/08/97	64.3	501.12	--	59.56	0.00	441.56
01/06/98	64.3	501.12	--	59.91	0.00	441.21
04/03/98	64.3	501.12	--	60.21	0.00	440.91
06/25/98	64.3	501.12	--	60.48	0.00	440.64
10/02/98	64.3	501.12	--	60.97	0.00	440.15
01/05/99	64.3	501.12	--	59.56	0.00	441.56
04/01/99	64.3	501.12	--	61.57	0.00	439.55
07/14/99	64.3	501.12	--	62.03	0.00	439.09
10/22/99	64.3	501.12	--	62.37	0.00	438.75

Table 5 Groundwater Table in Feet Monitor Well 5 Elevation of Screened Interval 436.3-456.3						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.5	500.84	--	58.96	0.00	441.88
04/10/97	64.5	500.84	--	59.77	0.00	441.07
07/07/97	64.5	500.84	--	60.10	0.00	440.74
10/08/97	64.5	500.84	--	60.31	0.00	440.53
01/06/98	64.5	500.84	--	60.76	0.00	440.08
04/03/98	64.5	500.84	--	61.05	0.00	439.79
06/25/98	64.5	500.84	--	61.05	0.00	439.79
10/02/98	64.5	500.84	--	61.77	0.00	439.07
01/05/99	64.5	500.84	--	60.31	0.00	440.53
04/01/99	64.5	500.84	--	62.24	0.00	438.60
07/14/99	64.5	500.84	--	62.76	0.00	438.08
10/22/99	64.5	500.84	--	63.08	0.00	437.76

Table 6 Groundwater Table in Feet Monitor Well 6 Elevation of Screened Interval 433.6-453.6						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.7	496.27	--	55.53	0.00	440.74
04/10/97	62.7	496.27	--	56.28	0.00	439.99
07/07/97	62.7	496.27	--	56.58	0.00	439.69
10/08/97	62.7	496.27	--	56.88	0.00	439.39
01/06/98	62.7	496.27	--	57.23	0.00	439.04
04/03/98	62.7	496.27	--	57.49	0.00	438.78
06/25/98	62.7	496.27	--	57.49	0.00	438.78
10/02/98	62.7	496.27	--	57.17	0.00	438.10
01/05/99	62.7	496.27	--	56.88	0.00	439.39
04/01/99	62.7	496.27	--	58.52	0.00	437.75
07/14/99	62.7	496.27	--	59.08	0.00	437.19
10/22/99	62.7	496.27	--	59.36	0.00	436.91

Table 7 Groundwater Table in Feet Monitor Well 7 Elevation of Screened Interval 426.4-446.4						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev, Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	69.0	495.44	--	57.28	0.00	438.16
07/07/97	69.0	495.44	--	57.54	0.00	437.90
10/08/97	69.0	495.44	--	57.85	0.00	437.59
01/06/98	69.0	495.44	--	58.17	0.00	437.27
04/03/98	69.0	495.44	--	58.47	0.00	436.97
06/25/98	69.0	495.44	--	58.70	0.00	436.74
10/02/98	69.0	495.44	--	58.99	0.00	436.45
01/05/99	69.0	495.44	--	57.85	0.00	437.59
04/01/99	69.0	495.44	--	59.36	0.00	436.08
07/14/99	69.0	495.44	--	59.84	0.00	435.60
10/22/99	69.0	495.44	--	60.14	0.00	435.30

Table 8 Groundwater Table in Feet Monitor Well 8 Elevation of Screened Interval 430.9-450.9						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	70.9	501.81	--	60.32	0.00	441.49
07/07/97	70.9	501.81	--	60.67	0.00	441.49
10/08/97	70.9	501.81	--	61.00	0.00	440.81
01/06/98	70.9	501.81	--	61.35	0.00	440.46
04/03/98	70.9	501.81	--	61.61	0.00	440.20
06/25/98	70.9	501.81	--	61.87	0.00	439.94
10/02/98	70.9	501.81	--	62.27	0.00	439.54
01/05/99	70.9	501.81	--	61.00	0.00	440.81
04/01/99	70.9	501.81	--	62.79	0.00	439.02
07/14/99	70.9	501.81	--	63.19	0.00	438.62
10/22/99	70.9	501.81	--	63.51	0.00	438.30

Table 9 Groundwater Table in Feet Monitor Well 9 Elevation of Screened Interval 429.5-449.5						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	67.3	496.85	--	56.29	0.00	440.56
07/07/97	67.3	496.85	--	56.66	0.00	440.19
10/08/97	67.3	496.85	--	57.00	0.00	439.85
01/06/98	67.3	496.85	--	57.38	0.00	439.47
04/03/98	67.3	496.85	--	57.67	0.00	439.18
06/25/98	67.3	496.85	--	57.95	0.00	438.90
10/02/98	67.3	496.85	--	58.34	0.00	438.51
01/05/99	67.3	496.85	--	57.00	0.00	439.85
04/01/99	67.3	496.85	--	58.73	0.00	438.12
07/14/99	67.3	496.85	--	59.31	0.00	437.54
10/22/99	67.3	496.85	--	59.61	0.00	437.24

Table 10 Groundwater Table in Feet Monitor Well 10 Elevation of Screened Interval 426.0-446.0						
Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	66.5	492.46	--	52.83	0.00	439.63
07/07/97	66.5	492.46	--	53.09	0.00	439.37
10/08/97	66.5	492.46	--	53.43	0.00	439.03
01/06/98	66.5	492.46	--	53.86	0.00	438.60
04/03/98	66.5	492.46	--	54.17	0.00	438.29
06/25/98	66.5	492.46	--	54.35	0.00	438.11
10/02/98	66.5	492.46	--	54.76	0.00	437.70
01/05/99	66.5	492.46	--	53.43	0.00	439.03
04/01/99	66.5	492.46	--	55.04	0.00	437.42
07/14/99	66.5	492.46	--	55.59	0.00	436.87
10/22/99	66.5	492.46	--	55.94	0.00	436.52

Table 11 - MW-1 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
02/14/96	0.083	<0.001	<0.001	0.008	--	--	--
02/29/96	<0.001	<0.001	<0.001	<0.001	--	--	--
04/20/96	0.305	<0.001	0.002	0.032	<0.001	0.017	--
10/23/96	0.352	<0.001	0.026	0.081	0.025	0.01	--
04/10/97	0.268	<0.001	0.012	0.034	<0.001	0.007	--
07/07/97	0.243	--	--	--	--	0.005	--
10/08/97	0.180	<0.001	0.012	<0.001	--	.003	<10
01/06/98	0.138	<0.001	0.008	<0.001	--	0.002	6.2
04/03/98	0.109	<0.001	0.004	0.006	--	0.003	51
06/25/98	0.071	<0.001	0.002	0.003	--	<0.001	7.3
10/02/98	0.078	<0.005	<0.005	<0.005	--	<0.001	14.0
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.005	<0.005	<0.005	<0.005	--	--	--
07/14/99	<0.005	<0.005	<0.005	<0.005	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 12 - MW-2 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	19
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	96
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	25.0
10/02/98	0.002	<0.001	<0.001	<0.001	--	<0.001	--
01/05/99	Sampling discontinued as approved by OCD						

Table 13 - MW-3 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	0.016	<0.001	<0.001	0.005	<0.001	<0.001	--
07/07/97	0.003	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	64
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	130
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	12
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	46
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	--
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 14 - MW-4 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	<10
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	10
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	11
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	18
01/05/99	Sampling discontinued as approved by OCD						

Table 15 - MW-5 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.135	<0.001	0.006	0.071	<0.001	<0.01	--
04/10/97	0.043	<0.001	<0.001	0.063	<0.001	0.001	--
07/07/97	0.015	--	--	--	--	<0.001	--
10/08/97	0.050	<0.001	<0.001	<0.001	--	0.001	24
01/06/98	0.031	<0.001	<0.001	0.010	--	<0.001	27
04/03/98	0.037	<0.001	0.002	0.019	--	0.001	69
06/25/98	0.017	<0.001	<0.001	0.006	--	<0.001	23
10/02/98	0.011	<0.001	<0.001	<0.001	--	<0.001	87
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--
04/01/99	0.003	<0.001	<0.001	<0.001	--	--	--
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	--
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 16 - MW-6 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.192	<0.001	<0.001	0.013	<0.001	<0.01	--
04/10/97	0.272	<0.001	<0.001	0.014	<0.001	<0.001	--
07/07/97	0.106	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	30
01/06/98	0.132	<0.001	<0.001	0.004	--	<0.001	31
04/03/98	0.165	<0.001	<0.001	0.008	--	<0.001	98
06/25/98	0.143	<0.001	<0.001	0.009	--	<0.001	28
10/02/98	0.157	<0.005	<0.005	0.012	--	<0.001	31
01/05/99	0.123	<0.001	<0.001	0.004	--	--	56
04/01/99	0.120	<0.001	<0.001	<0.005	--	--	31
07/14/99	0.093	<0.005	<0.005	<0.005	--	--	34
10/22/99	0.090	<0.001	<0.001	<0.001	--	--	31.5

Shaded areas indicate over OCD Limits

Table 17 - MW-7 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
01/09/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	37
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	120
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	36
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	74
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	36
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	35
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	35.2

Table 18 - MW-8 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	15
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	26
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
01/05/99	Sampling discontinued as approved by OCD						

Table 19 - MW-9 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	320
07/07/97	<0.001	--	--	--	--	--	41
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	560
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	490
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	460
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	290
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	200
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	520
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	260
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	284
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	278

Shaded areas indicate over OCD Limits

Table 20 - MW-10 Historic Groundwater Analytical Results (mg/l)							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	8.8
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	110
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	101
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	180
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	140
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	140
04/01/99	<0.001	<0.001	<0.001	<0.001	--	--	128
07/14/99	<0.001	<0.001	<0.001	<0.001	--	--	124
10/22/99	<0.001	<0.001	<0.001	<0.001	--	--	122

IV. Conclusions and Recommendations

The plant operations have ceased at the site and the sources that may have caused the impacts to the groundwater have been removed. In addition, the removed impacted soils have been remediated to meet WQCC Guideline levels and have been returned to the excavations per the Soils Work Plan approved in January 1996. One of the ten monitor wells at the Former Hobbs Gas Plant continues to show dissolved phase hydrocarbons (benzene) at levels above the OCD Guidelines.

- Eleven (11) full quarterly groundwater monitoring and sampling events have been conducted at this site.

- Groundwater has dropped an average of 4.2 feet since the first sampling event of October 1996.

- Dissolved phase hydrocarbons are present above OCD Guidelines in one of the ten monitor wells at the site (MW-6) however, no free-phase hydrocarbons have been observed at the site.

- One monitor well contains concentrations of benzene above the WQCC Guideline level (MW-6). Benzene levels are generally declining with the highest concentration down-gradient from the source in monitor well MW-6. The property line is 90 feet east of MW-6 and the groundwater flow direction is southeast. Concentrations in the next down-gradient monitor well (located off-site), a distance of 470 feet from MW-6, remains nondetect.

- Xylene concentrations have been below detection limits for the last three sampling events.

- Soil cleanup objectives of the January 1997 Abatement and Closure plan have been met.

The level of benzene in MW-6 has been above the WQCC Guideline level of 0.01 ppm, but has been declining. Benzene levels in MW-5 have decreased to below action levels during all of the 1999 sampling events. The general trend in the benzene levels over the past four sampling events shows a decrease in benzene concentrations. Elevated chloride levels continue to be present in MW-9 varying slightly above the WQCC Guideline levels and will continue to be monitored. Based on interviews with American Processing personnel no source of the chloride can be placed on former operations of the plant. The source of the chloride is not known and is **not** believed to be from the plant.

Based on historical analytical results, a reduction to semi-annual sampling and monitoring is proposed. Benzene is proposed to be monitored in wells MW-1, MW-3, MW-5 to MW-7, MW-9, and MW-10. Chloride is proposed to be monitored in wells MW-6, MW-7, MW-9, and MW-10. No testing is proposed for MW-2, MW-4, and MW-8 except for water levels at this time as requested in the January 6, 1998 Annual Report and approved by the OCD letter dated December 15, 1998.

V. Quality Assurance / Quality Control Procedures

Field quality assurance/quality control (QA/QC) measures consisted of equipment decontamination, use of disposable sampling equipment, calibrations of field instruments, ensuring that the samples were analyzed within the EPA holding times, documentation of work activities in a bound logbook, and adherence to strict chain-of-custody protocol. The laboratory QA/QC measures were based on guidance published in the most current edition of the EPA Test Methods for Evaluating Solid Waste SW-846.

Quality Control samples were also obtained to evaluate the data. A trip blank was also analyzed with nondetectable results, suggesting that no cross-contamination occurred during shipment. Cross contamination during sampling was limited due to the use of disposable equipment between wells and gauging and purging of wells from least contaminated to most contaminated. A duplicate sample was obtained from MW-6. A comparison to the original sample of the contaminates that were present reveals results within 1.02% on total BTEX. On a per chemical basis, the total difference occurred on benzene which differed by 1.02%. This duplicate difference does not indicate any errors in the sample collection or testing. The following table presents the QA/QC results for comparison.

Quality Control Samples	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
Trip	<0.001	<0.001	<0.001	<0.001
MW-6	0.090	<0.001	<0.001	0.004
MW-6D (duplicate)	0.092	<0.001	<0.001	0.004

Reported laboratory quality control parameters do not appear to indicate suspect results. No damaged or compromised containers were noted. No unusual relative percent difference (RPD) results were noted.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

November 8, 1999

Mr. Scott Springer
ECO-LOGICAL ENVIRONMENT SVCS.
220 Market Street
Midland, TX 79703

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on October 23, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9910731 and analyzed for all parameters as listed on the chain of custody.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Scot Bramfitt
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 99-10-731

Approved for Release by:

Scot Bramfitt, Project Manager — 11/10/99 Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

****SUMMARY REPORT*****

11/05/99

Company: Eco-logical Environment Svcs.
Site: Hobbs
Project No: 279-512
Project: KN Hobbs

ANALYTICAL DATA
NOTE: ND - Not Detected

SPL ID MATRIX	CLIENT ID DATE SAMPLED	BENZENE PQL	TOLUENE PQL	ETHYLBENZ. PQL	XYLENE PQL	TPH-IR	TPH-GC	LEAD	MTBE
9910731-01 WATER	MW-1 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-02 WATER	MW-3 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-03 WATER	MW-5 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-04 WATER	MW-6 10/22/99	90 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-05 WATER	MW-7 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-06 WATER	MW-9 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-07 WATER	MW-10 10/22/99	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9910731-08 WATER	MW-6D 10/22/99	92 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				

BTEX - Method 8020A ***

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-01

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-1

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	107

Method 8020A ***
Analyzed by: DR
Date: 11/04/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-02

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-3

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	90
4-Bromofluorobenzene	93

Method 8020A ***
Analyzed by: DR
Date: 11/04/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-03

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-5

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	97
4-Bromofluorobenzene	97

Method 8020A ***
Analyzed by: DR
Date: 11/04/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-04

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-6

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	90	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	90		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	113		
4-Bromofluorobenzene	100		
Method 8020A ***			
Analyzed by: DR			
Date: 11/04/99			
Chloride	31.5	1.0	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 11/02/99 15:30:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-05

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-7

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	97		
4-Bromofluorobenzene	97		
Method 8020A ***			
Analyzed by: DR			
Date: 11/04/99			
Chloride	35.2	1.0	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 11/02/99 15:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-06

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-9

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8020A ***			
Analyzed by: DR			
Date: 11/04/99			
Chloride	278	5	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 11/02/99 15:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-07

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-10

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8020A ***			
Analyzed by: DR			
Date: 11/05/99			
Chloride	122	2	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 11/02/99 15:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9910731-08

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 11/05/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environment Svcs.
SAMPLE ID: MW-6D

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 10/22/99
DATE RECEIVED: 10/23/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	92	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	92		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	113
4-Bromofluorobenzene	100

Method 8020A ***
Analyzed by: DR
Date: 11/05/99

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: VARE991103221900

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	55	110	61 - 119
Toluene	ND	50	55	110	65 - 125
EthylBenzene	ND	50	54	108	70 - 118
O Xylene	ND	50	47	94.0	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	20	22	110	16	80.0	31.6 *	21	32 - 164
TOLUENE	ND	20	22	110	14	70.0	44.4 *	20	38 - 159
ETHYLBENZENE	ND	20	19	95.0	13	65.0	37.5 *	19	52 - 142
O XYLENE	ND	20	19	95.0	13	65.0	37.5 *	18	53 - 143
M & P XYLENE	ND	40	39	97.5	27	67.5	36.4 *	17	53 - 144

Analyst: DR
Sequence Date: 11/03/99
SPL ID of sample spiked: 9910731-02A
Sample File ID: E_K1120.TX0
Method Blank File ID:
Blank Spike File ID: E_K1111.TX0
Matrix Spike File ID: E_K1114.TX0
Matrix Spike Duplicate File ID: E_K1115.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9910731-03A 9910731-04A 9910731-06A 9910731-02A 9910731-05A 9910731-01A

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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: VARE991105094600

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	56	112	61 - 119
Toluene	ND	50	54	108	65 - 125
EthylBenzene	ND	50	52	104	70 - 118
O Xylene	ND	50	46	92.0	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	50	52	104	52	104	0	21	32 - 164
TOLUENE	ND	50	51	102	51	102	0	20	38 - 159
ETHYLBENZENE	ND	50	46	92.0	48	96.0	4.26	19	52 - 142
O XYLENE	ND	50	43	86.0	49	98.0	13.0	18	53 - 143
M & P XYLENE	ND	100	91	91.0	97	97.0	6.38	17	53 - 144

Analyst: DR
Sequence Date: 11/05/99
SPL ID of sample spiked: 99110051-01
Sample File ID: E_K1179.TX0
Method Blank File ID:
Blank Spike File ID: E_K1170.TX0
Matrix Spike File ID: E_K1061A.TX0
Matrix Spike Duplicate File ID: E_K1062A.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9910809-15A 9910731-08A 9910731-07A 9910809-17A 9910809-16A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 11/04/99
Analyzed on: 11/02/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.3 *

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	128	125.8	98.3	94 - 106

-9911066

Samples in batch:

9910731-04B 9910731-05B 9910731-06B 9910731-07B

COMMENTS:

LCS-SPL ID#991136006-14
99100397-11A WAS USED FOR QA/QC ONLY

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 11/04/99
Analyzed on: 11/02/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.3 *

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
99100397-11E	ND	2221	2500	4719	99.9	4626	96.2	3.8	5	92 -109

-9911066

Samples in batch:

9910731-04B 9910731-05B 9910731-06B 9910731-07B

COMMENTS:

LCS-SPL ID#991136006-14
99100397-11A WAS USED FOR QA/QC ONLY

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
10-23-99	1000

SPL Sample ID:
9910731

			Yes	No
1	Chain-of-Custody (COC) form is present.		—	
2	COC is properly completed.			—
3	If no, Non-Conformance Worksheet has been completed.		—	
4	Custody seals are present on the shipping container.		—	
5	If yes, custody seals are intact.		—	
6	All samples are tagged or labeled.		—	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		—	
9	Temperature of samples upon arrival:		3 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	814329584 55	
		Other:		
11	Method of sample disposal:	SPL Disposal	—	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	10-23-99

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9910731 095914 page ___ of ___

Client Name: Eco-logical Environmental
Address/Phone: 2200 Market St. Midland TX
Client Contact: Scott Springer (915) 520-7535
Project Name: KN Hobbs
Project Number: 279-512
Project Location: Hobbs
Invoice To: KN Energy

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water SL=sludge S=soil O=other:)	bottle (P=plastic G=glass A=amber glass V=vial)	size (1=1 liter 8=8oz 4=4oz 16=16oz 40=vial)	pres. (1=HCl 3=H2SO4 2=HNO3 O=other:)	Number of Containers	Requested Analysis: BTEX	Requested Analysis: Chloride
MW-1					W	V	40	1	3	X	
MW-3						V	40	1	3	X	
MW-5						V	40	1	3	X	
MW-6						VA	40	1	3	X	
MW-6						A	1	NONE	1		X
MW-7						VA	40.1	1, NONE	4	X	X
MW-9						VA	40.1	1, NONE	4	X	X
MW-10						VA	40.1	1, NONE	4	X	X
MW-60						V	40	1	3	X	X

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N
Temp: 3°C

Requested TAT

24hr ☐ 72hr ☐
48hr ☐ Standard ☒
Other ☐ _____

Special Reporting Requirements: Standard QC ☐ Fax Results ☐ Level 3 QC ☐ Raw Data ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial): SJ

	date	time	
1. Relinquished by Sampler: David E Jones	22 Oct 99	1630	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date 10-23-99	time 1000	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901
☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775
☐ 450 Hembree Drive, Traverse City, MI 49684 (616) 947-5777

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

July 28, 1999

Mr. Scott Springer
ECO-LOGICAL ENVIRONMENT SVCS.
220 Market Street
Midland, TX 79703

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on July 15, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9907506 and analyzed for all parameters as listed on the chain of custody.

Upon receiving your samples there was an extra sample received that was not on the chain of custody (MW-6D). Therefore we ran BTEX on that extra sample.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Electa Brown
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 99-07-506

Approved for Release by:

Electa Brown, Project Manager — 7/28/99 Date

Joel Grice
Laboratory Director

Ted Yen
Corporate Quality Assurance Director

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

****SUMMARY REPORT*****

07/28/99

Company: Eco-logical Environment Svcs.
Site: Hobbs
Project No: 279-512
Project: KN Hobbs

ANALYTICAL DATA
NOTE: ND - Not Detected

SPL ID MATRIX	CLIENT ID DATE SAMPLED	BENZENE PQL	TOLUENE PQL	ETHYLBENZ. PQL	XYLENE PQL	TPH-IR	TPH-GC	LEAD	MTBE
9907506-01 WATER	MW-1 07/14/99 12:30:00	ND 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L				
9907506-02 WATER	MW-3 07/14/99 12:00:00	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9907506-03 WATER	MW-5 07/14/99 12:45:00	ND 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L				
9907506-04 WATER	MW-6 07/14/99 13:00:00	93 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L	ND 5.0ug/L				
9907506-05 WATER	MW-7 07/14/99 12:05:00	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9907506-06 WATER	MW-9 07/14/99 12:15:00	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9907506-07 WATER	MW-10 07/14/99 10:10:00	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				
9907506-08 WATER	MW-6D 07/14/99	100 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L	ND 1.0ug/L				

BTEX - METHOD 5030/8020 ***

SPL, Inc., - Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-01

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-1

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 12:30:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL BTEX	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	93

METHOD 5030/8020 ***
Analyzed by: WLR
Date: 07/17/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-02

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-3

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 12:00:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL BTEX	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	90

METHOD 5030/8020 ***
Analyzed by: WLR
Date: 07/17/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-03

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-5

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 12:45:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL BTEX	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	93

METHOD 5030/8020 ***
Analyzed by: WLR
Date: 07/17/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-04

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-6

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 13:00:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	93	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL BTEX	93		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
METHOD 5030/8020 ***			
Analyzed by: WLR			
Date: 07/20/99			
Chloride	34	1	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 07/27/99 17:00:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-05

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-7

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 12:05:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL BTEX	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	97		
METHOD 5030/8020 ***			
Analyzed by: WLR			
Date: 07/20/99			
Chloride	35	1	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 07/27/99 17:00:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-06

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-9

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 12:15:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL BTEX	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
METHOD 5030/8020 ***			
Analyzed by: WLR			
Date: 07/20/99			
Chloride	284	5	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 07/27/99 17:00:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-07

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-10

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99 10:10:00
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL BTEX	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	93		
METHOD 5030/8020 ***			
Analyzed by: WLR			
Date: 07/21/99			
Chloride	124	2	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 07/27/99 17:00:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9907506-08

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 07/28/99

PROJECT: KN Hobbs
SITE: Hobbs
SAMPLED BY: Eco-logical Environmental
SAMPLE ID: MW-6D

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 07/14/99
DATE RECEIVED: 07/15/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	100	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL BTEX	100		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	110
4-Bromofluorobenzene	97

METHOD 5030/8020 ***
Analyzed by: WLR
Date: 07/21/99

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: HP_U990716081201

L A B O R A T O R Y C O N T R O L S A M P L E

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	100	97	97.0	72 - 128
Benzene	ND	100	99	99.0	61 - 119
Toluene	ND	100	97	97.0	65 - 125
EthylBenzene	ND	100	95	95.0	70 - 118
O Xylene	ND	100	100	100	72 - 117
M & P Xylene	ND	200	190	95.0	72 - 116

M A T R I X S P I K E S

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	100	99	99.0	98	98.0	1.02	20	39 - 150
BENZENE	ND	100	100	100	98	98.0	2.02	21	32 - 164
TOLUENE	ND	100	100	100	98	98.0	2.02	20	38 - 159
ETHYLBENZENE	ND	100	99	99.0	98	98.0	1.02	19	52 - 142
O XYLENE	ND	100	100	100	99	99.0	1.01	18	53 - 143
M & P XYLENE	ND	200	200	100	200	100	0	17	53 - 144

Analyst: WLR
Sequence Date: 07/16/99
SPL ID of sample spiked: 9907473-05B
Sample File ID: U_G2181.TX0
Method Blank File ID:
Blank Spike File ID: U_G2166.TX0
Matrix Spike File ID: U_G2177.TX0
Matrix Spike Duplicate File ID: U_G2178.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9907506-01A 9907506-02A 9907506-03A 9907400-02A 9907400-01A 9907400-02A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: HP_U990720105601

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	100	96	96.0	61 - 119
Toluene	ND	100	96	96.0	65 - 125
EthylBenzene	ND	100	98	98.0	70 - 118
O Xylene	ND	100	97	97.0	72 - 117
M & P Xylene	ND	200	200	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	100	110	110	110	110	0	21	32 - 164
TOLUENE	ND	100	110	110	110	110	0	20	38 - 159
ETHYLBENZENE	ND	100	120	120	110	110	8.70	19	52 - 142
O XYLENE	ND	100	110	110	110	110	0	18	53 - 143
M & P XYLENE	ND	200	230	115	220	110	4.44	17	53 - 144

Analyst: WLR
Sequence Date: 07/20/99
SPL ID of sample spiked: 9907585-01A
Sample File ID: U_G3040.TX0
Method Blank File ID:
Blank Spike File ID: U_G3033.TX0
Matrix Spike File ID: U_G3035.TX0
Matrix Spike Duplicate File ID: U_G3036.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9907506-06A 9907506-04A 9907506-05A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8020

Matrix: Aqueous
Units: ug/L

Batch Id: HP_U990721084500

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	100	100	100	72 - 128
Benzene	ND	100	96	96.0	61 - 119
Toluene	ND	100	95	95.0	65 - 125
EthylBenzene	ND	100	96	96.0	70 - 118
O Xylene	ND	100	97	97.0	72 - 117
M & P Xylene	ND	200	190	95.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	100	130	130	130	130	0	20	39 - 150
BENZENE	3.1	100	120	117	120	117	0	21	32 - 164
TOLUENE	1.1	100	120	119	120	119	0	20	38 - 159
ETHYLBENZENE	ND	100	120	120	120	120	0	19	52 - 142
O XYLENE	2.7	100	120	117	120	117	0	18	53 - 143
M & P XYLENE	1.3	200	250	124	240	119	4.12	17	53 - 144

Analyst: WLR
Sequence Date: 07/21/99
SPL ID of sample spiked: 9907585-02A
Sample File ID: U_G3081.TX0
Method Blank File ID:
Blank Spike File ID: U_G3067.TX0
Matrix Spike File ID: U_G3077.TX0
Matrix Spike Duplicate File ID: U_G3078.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9907589-02A 9907589-03A 9907589-04A 9907506-07A
9907506-08A 9907594-01A 9907594-02A 9907594-05A
9907594-06A 9907594-07A 9907594-08A 9907594-09A
9907594-03A 9907594-04A 9907594-09A 9907589-05A
9907589-01A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 07/28/99
Analyzed on: 07/27/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.3 *

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	162	163.1	101	94 - 106

-9907442

Samples in batch:

9907506-04B	9907506-05B	9907506-06B	9907506-07B
9907510-01G	9907519-01G	9907520-01G	9907634-01D

COMMENTS:

LCS-SPL ID#94453228-23

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 07/28/99
Analyzed on: 07/27/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.3 *

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9907506-04B	ND	33.7	50.0	83.3	99.2	81.5	95.6	3.7	5	92 -109

-9907442

Samples in batch:

9907506-04B	9907506-05B	9907506-06B	9907506-07B
9907510-01G	9907519-01G	9907520-01G	9907634-01D

COMMENTS:

LCS-SPL ID#94453228-23

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9907506

089403

page ___ of ___

Client Name:	Eco-logical Environmental
Address/Phone:	2200 Market ST, Midland TX
Client Contact:	Scott Springer (915)520-7535
Project Name:	KN Hobbs
Project Number:	279-512
Project Location:	Hobbs
Invoice To:	KN Energy

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX	Requested Analysis: Chloride
MW-1	7-14	12:30		X	W	V	40	1	3	X	
MW-3		1200				V	40	1	3	X	
MW-5		12:45				V	40	1	3	X	
MW-6		1:00				V A	40	1	3	X	
MW-6		1:00				A	1	None	1		X
MW-7		12:05				V, A	40, 1	1, None	4	X	X
MW-9		12:15				V, A	40, 1	1, None	4	X	X
MW-10	↓	10:10		↓	↓	V, A	40, 1	1, None	4	X	X

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp: 5°C

Requested TAT

24hr ☐ 72hr ☐

48hr ☐ Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time	
1. Relinquished by Sampler: Scott Springer	7-14-99	1600	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory: 7/15/99 1000

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 459-Hughes Drive, Traverse City, MI 49684 (616) 947-5777

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 7/15/99	Time: 1000

SPL Sample ID: 9907506

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		5° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	813477667320	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date: 7/15/99

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

April 14, 1999

Mr. Scott Springer
ECO-LOGICAL ENVIRONMENTAL SVCS.
220 Market Street
Midland, TX 79703

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on April 2, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9904093 and analyzed for all parameters as listed on the chain of custody.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Electa Brown
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 99-04-093

Approved for Release by:

Electa Brown, Project Manager — Date: 4/15/99

Joel Grice
Laboratory Director

Idelis Williams
Corporate Quality Assurance Director

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-01

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-1

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 13:00:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	107
4-Bromofluorobenzene	107

Method 8021B ***
Analyzed by: DR
Date: 04/08/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-02

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-3

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 11:40:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	103

Method 8021B ***
Analyzed by: DR
Date: 04/08/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-03

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-5

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 13:20:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	3.0	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	3		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	103

Method 8021B ***
Analyzed by: DR
Date: 04/08/99

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-04

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-6

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 13:45:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	120	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	120		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	107		
Method 8021B ***			
Analyzed by: DR			
Date: 04/08/99			
Chloride	31	1	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 04/08/99 14:30:00			

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-05

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-7

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 12:00:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8021B ***			
Analyzed by: DR			
Date: 04/08/99			
Chloride	36	1	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 04/08/99 14:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-06

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-9

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 12:40:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8021B ***			
Analyzed by: DR			
Date: 04/08/99			
Chloride	260	5	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 04/08/99 14:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-07

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-10

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 12:20:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L
Surrogate	**% Recovery**		
1,4-Difluorobenzene	103		
4-Bromofluorobenzene	103		
Method 8021B ***			
Analyzed by: DR			
Date: 04/08/99			
Chloride	128	1	mg/L
Method 325.3 *			
Analyzed by: CV			
Date: 04/08/99 14:30:00			

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-08

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Provided by SPL
SAMPLE ID: Trip Blank 03/16/99

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	1.0 P	ug/L
TOLUENE	ND	1.0 P	ug/L
ETHYLBENZENE	ND	1.0 P	ug/L
TOTAL XYLENE	ND	1.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	ND		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	103
4-Bromofluorobenzene	103

Method 8021B ***
Analyzed by: DR
Date: 04/08/99

ND - Not detected. (P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9904093-09

Eco-logical Environment Svcs.
220 Market Street
Midland, TX 79703
ATTN: Scott Springer

DATE: 04/13/99

PROJECT: Former Hobbs Gas Plant
SITE: Hobbs,NM
SAMPLED BY: Eco-Logical Environmental
SAMPLE ID: MW-6D

PROJECT NO: 279-512
MATRIX: WATER
DATE SAMPLED: 04/01/99 13:45:00
DATE RECEIVED: 04/02/99

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	110	5.0 P	ug/L
TOLUENE	ND	5.0 P	ug/L
ETHYLBENZENE	ND	5.0 P	ug/L
TOTAL XYLENE	ND	5.0 P	ug/L
TOTAL VOLATILE AROMATIC HYDROCARBONS	110		ug/L

Surrogate	% Recovery
1,4-Difluorobenzene	100
4-Bromofluorobenzene	107

Method 8021B ***
Analyzed by: DR
Date: 04/12/99

(P) - Practical Quantitation Limit ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
Method 8021B ***

Matrix: Aqueous
Units: ug/L

Batch Id: HP_S990407145200

L A B O R A T O R Y C O N T R O L S A M P L E

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	53	106	72 - 128
Benzene	ND	50	50	100	61 - 119
Toluene	ND	50	51	102	65 - 125
EthylBenzene	ND	50	51	102	70 - 118
O Xylene	ND	50	51	102	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

M A T R I X S P I K E S

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	22	110	22	110	0	20	39 - 150
BENZENE	ND	20	21	105	20	100	4.88	21	32 - 164
TOLUENE	1.2	20	22	104	21	99.0	4.93	20	38 - 159
ETHYLBENZENE	ND	20	21	105	20	100	4.88	19	52 - 142
O XYLENE	ND	20	21	105	20	100	4.88	18	53 - 143
M & P XYLENE	ND	40	41	102	40	100	1.98	17	53 - 144

Analyst: DR
Sequence Date: 04/07/99
SPL ID of sample spiked: 9904069-03B
Sample File ID: S_D1086.TX0
Method Blank File ID:
Blank Spike File ID: S_D1082.TX0
Matrix Spike File ID: S_D1084.TX0
Matrix Spike Duplicate File ID: S_D1085.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID):

9904040-01A	9904029-02D	9904037-01A	9904037-02A
9904063-01B	9904063-02B	9904063-03B	9904069-01B
9904069-02B	9904079-02A	9904079-01A	9904093-01A
9904093-02A	9904093-03A	9904093-04A	9904093-05A
9904093-06A	9904093-07A	9904069-03B	9903D13-03A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
Method 8021B ***

Matrix: Aqueous
Units: ug/L

Batch Id: HP_S990408035310

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
MTBE	ND	50	56	112	72 - 128
Benzene	ND	50	51	102	61 - 119
Toluene	ND	50	51	102	65 - 125
EthylBenzene	ND	50	51	102	70 - 118
O Xylene	ND	50	52	104	72 - 117
M & P Xylene	ND	100	100	100	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
MTBE	ND	20	24	120	23	115	4.26	20	39 - 150
BENZENE	4.1	20	24	99.5	24	99.5	0	21	32 - 164
TOLUENE	ND	20	21	105	20	100	4.88	20	38 - 159
ETHYLBENZENE	ND	20	20	100	20	100	0	19	52 - 142
O XYLENE	1.5	20	21	97.5	21	97.5	0	18	53 - 143
M & P XYLENE	ND	40	41	102	39	97.5	4.51	17	53 - 144

Analyst: DR
Sequence Date: 04/08/99
SPL ID of sample spiked: 9904249-01A
Sample File ID: S_D1116.TX0
Method Blank File ID:
Blank Spike File ID: S_D1110.TX0
Matrix Spike File ID: S_D1114.TX0
Matrix Spike Duplicate File ID: S_D1115.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL-Houston Historical Data (1st Q '97)
(***) = Source: SPL-Houston Historical Data (1st Q '97)

SAMPLES IN BATCH(SPL ID): 9904275-01B 9904275-02B 9904093-08A 9904093-09A
9904275-03B

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL BATCH QUALITY CONTROL REPORT **
Method 8021B ***

Matrix: Aqueous
Units: ug/L

Batch Id: HP_S990410025710

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Benzene	ND	50	50	100	61 - 119
Toluene	ND	50	50	100	65 - 125
EthylBenzene	ND	50	51	102	70 - 118
O Xylene	ND	50	51	102	72 - 117
M & P Xylene	ND	100	98	98.0	72 - 116

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
BENZENE	ND	20	21	105	21	105	0	21	32 - 164
TOLUENE	ND	20	20	100	20	100	0	20	38 - 159
ETHYLBENZENE	ND	20	19	95.0	19	95.0	0	19	52 - 142
O XYLENE	ND	20	22	110	22	110	0	18	53 - 143
M & P XYLENE	ND	40	39	97.5	39	97.5	0	17	53 - 144

Analyst: DR
Sequence Date: 04/10/99
SPL ID of sample spiked: 9904271-07B
Sample File ID: S_D1153.TX0
Method Blank File ID:
Blank Spike File ID: S_D1150.TX0
Matrix Spike File ID: S_D1151.TX0
Matrix Spike Duplicate File ID: S_D1152.TX0

* = Values outside QC Range due to Matrix Interference (except RPD)
« = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: SPL Historical LImits-1st Qtr.'97
(***) = Source: SPL Historical LImits-1st Qtr.'97

SAMPLES IN BATCH(SPL ID): 9904374-01A 9904374-02A 9904374-03A 9904374-04A 9904374-05A 9904374-06A 9904374-07A 9904374-08A 9904093-09A

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 04/09/99
Analyzed on: 04/08/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.2 *

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	105	104.3	99.3	90 - 110

-9904229

Samples in batch:

9903C99-01E	9903D06-01E	9903D12-01E	9903D12-02E
9903D12-03E	9903D12-04E	9904087-01D	9904087-02D
9904087-05D	9904087-06D	9904093-04B	9904093-05B
9904093-06B	9904093-07B		

COMMENTS:

LCS-SPL ID#94453222-13

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Aqueous

Reported on: 04/09/99
Analyzed on: 04/08/99
Analyst: CV

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Chloride
Method 325.2 *

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9904093-07B	ND	127.7	50.0	177.5	99.6	175.5	95.6	4.1	20	76 -131

-9904230

Samples in batch:

9903D12-03E 9903D12-04E 9904093-04B 9904093-05B
9904093-06B 9904093-07B

COMMENTS:

LCS-SPL ID#94453222-13

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9904093 | 078716 | page 1 of 2

Client Name: Eco-logical ENV
Address/Phone: 2200 Market Midland, Tx 915/520-7535
Client Contact: Scott Springer
Project Name: Former Hobbs Gas Plant
Project Number: 279-512
Project Location: Hobbs, NM
Invoice To: KN - John Greer

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX 8021B	Chlorides EPA SW 30
MW-1	4/1/99	13:00		X	W	V	40	1	3	X	
MW-3		11:40				V	40	1	3	X	
MW-5		13:20				V	40	1	3	X	
MW-6		13:45				V	40	1	3	X	
MW-6		↓				P	1	1	1		X
MW-7		12:00				V	40	1	3	X	
MW-7		↓				P	1	1	1		X
MW-9		12:40				V	40	1	3	X	
MW-9		↓				P	1	1	1		X
MW-10	↓	12:20		↓	↓	V	40	1	3	X	

Client/Consultant Remarks: Historic Results Attached Need D.L. Low

Laboratory remarks:

Intact? ☐ Y ☐ N
Temp: 30

Requested TAT

24hr ☐ 72hr ☐
48hr ☐ Standard ☐
Other ☐ _____

Special Reporting Requirements: Fax Results ☒ Raw Data ☐ Standard QC ☒ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time	
1. Relinquished by Sampler:			2. Received by:
3. Relinquished by:			4. Received by:
5. Relinquished by:			6. Received by Laboratory: Donna Stelly 4/2/99 800

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901
☐ 459-Hughes Drive, Traverse City, MI 49684 (616) 947-5777
☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9904093 | 078717 | page 2 of 2

Client Name: Eco-logical
Address/Phone:
Client Contact:
Project Name: Former Hobbs Gas Plant
Project Number: 279-512
Project Location:
Invoice To:

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	Requested Analysis: BTEX 8021B	Requested Analysis: CHLORIDES EPA 300.0
MW-10	4-1-99	12:20		X	W	P	1	1	1		X
TRIP	↓			↓	↓	V	40	—	~~2~~ 3	X	
MW-6D	↓	13:45		↓	↓	V	40	1	~~3~~ 4	X	

Client/Consultant Remarks:
2 MW-6D Containers Broke
1 MW-6 Containers Broke in Transit

Laboratory remarks:

Intact? ☐ Y ☐ N
Temp: 3°

Requested TAT

24hr ☐ 72hr ☐
48hr ☐ Standard ☐
Other ☐ _____

Special Reporting Requirements: Fax Results ☒ Raw Data ☐
Standard QC ☒ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time	
1. Relinquished by Sampler:			2. Received by:
3. Relinquished by:			4. Received by:
5. Relinquished by:			6. Received by Laboratory: [signature] 4/2/99 1000

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901
☐ 459-Hughes Drive, Traverse City, MI 49684 (616) 947-5777
☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 4-2-99	Time: 1000

SPL Sample ID: 9904093

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		3° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #) 808198487258		
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: JRockrum	Date: 4-2-99

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Lab Receiving # : 9901000038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

Date: Jan 12, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116218	MW-1	Water	0.005	<0.001	<0.001	<0.001	0.005
116219	MW-3	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116220	MW-5	Water	0.005	<0.001	<0.001	<0.001	0.005
116221	MW-6	Water	0.123	<0.001	<0.001	0.004	0.127
116222	MW-7	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116223	MW-9	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116224	MW-10	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116225	MW-6D	Water	0.112	<0.001	<0.001	0.004	0.116
Method Blank			<0.001	<0.001	<0.001	<0.001	
Reporting Limit			0.001	0.001	0.001	0.001	
QC			0.093	0.093	0.094	0.276	
RPD			2	1	2	2	
% Extraction Accuracy			96	96	99	97	
% Instrument Accuracy			93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

Director, Dr. Blair Leftwich

1-12-99
Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Lab Receiving # : 9901000038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

Date: Feb 03, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116226	Trip Blank	Water	<0.001	<0.001	<0.001	<0.001	<0.001
	Method Blank		<0.001	<0.001	<0.001	<0.001	
	Reporting Limit		0.001	0.001	0.001	0.001	
	QC		0.093	0.093	0.094	0.276	
	RPD		2	1	2	2	
	% Extraction Accuracy		96	96	99	97	
	% Instrument Accuracy		93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

RL
Director, Dr. Blair Leftwich

2-3-99
Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
ECO -LOGICAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 12, 1999
Receiving Date: 01/06/99
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/07/99
Analysis Date: 01/07/99
Sampling Date: 01/05/99
Sample Condition: Intact & Cool
Sample Received by: VW
Project Name: Former Hobbs Gas Plant

TA#	FIELD CODE	CHLORIDE (mg/L)
T116221	MW 6	56
T116222	MW 7	74
ICV		12.91
CCV		11.85
REPORTING LIMIT		0.5
RPD		2
% Extraction Accuracy		108
% Instrument Accuracy		99

METHODS: EPA SW 300.0
CHEMIST: JS
CHLORIDE SPIKE: 62.5 mg/L CHLORIDE
CHLORIDE CV: 12.5 mg/L CHLORIDE

Director, Dr. Blair Leftwich

1-12-99
DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
ECO -LOGICAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 12, 1999
Receiving Date: 01/06/99
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/07/99
Analysis Date: 01/07/99
Sampling Date: 01/05/99
Sample Condition: Intact & Cool
Sample Received by: VW
Project Name: Former Hobbs Gas Plant

TA#	FIELD CODE	CHLORIDE (mg/L)
T116223	MW 9	520
T116224	MW 10	140
ICV		11.85
CCV		11.85
REPORTING LIMIT		0.5
RPD		0
% Extraction Accuracy		94
% Instrument Accuracy		95

METHODS: EPA SW 300.0
CHEMIST: JS
CHLORIDE SPIKE: 62.5 mg/L CHLORIDE
CHLORIDE CV: 12.5 mg/L CHLORIDE

Director, Dr. Blair Leftwich

1-12-99
DATE

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 3 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR

Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Date: Feb 03, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

Lab Receiving # : 9901CC0038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116226	Trip Blank	Water	<0.001	<0.001	<0.001	<0.001	<0.001
	Method Blank		<0.001	<0.001	<0.001	<0.001	
	Reporting Limit		0.001	0.001	0.001	0.001	
	QC		0.093	0.093	0.094	0.276	
	RPD		2	1	2	2	
	% Extraction Accuracy		96	96	99	97	
	% Instrument Accuracy		93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

RL

Director, Dr. Blair Leftwich

2-3-99

Date

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # 38

Company Name: ECO-LOGICAL
Phone #: 915/520-7535
Address: 2200 Market Midland, TX
Fax #: 915/520-7737
Contact Person: CARRIE EICK
Invoice to: (If different from above)
Project #: 279-512
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, ~~TX~~ NM
Sampler Signature: Carrie E. Eick

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	Chloride	Turn Around Time if different from standard	Hold
116218	MW-1	4	.16L	✓				✓		✓		1/5/99	12:20		✓															
219	MW-3	4	.16L	✓				✓		✓			11:30		✓															
220	MW-5	4	.16L	✓				✓		✓			12:00		✓															
221	MW-6	4	.16L	✓				✓		✓			13:00		✓															
	MW-6	1	.25L	✓						✓			13:00															✓		
222	MW-7	4	.16L	✓				✓		✓			9:35		✓															
	MW-7	1	.25L	✓						✓			9:35															✓		
223	MW-9	4	.16L	✓				✓		✓			11:00		✓															
	MW-9	1	.25L	✓						✓			11:00															✓		
224	MW-10	4	.16L	✓				✓		✓			10:30		✓															
	MW-10	1	.25L	✓						✓			10:30															✓		

Relinquished by: Carrie E. Eick Date: 1/5/99 Time: 4:10 PM
Received by: Helen Shelton Date: 1/5/99 Time: 4:10 PM

Relinquished by: Helen Shelton Date: 1/5/99 Time: 6:00 PM
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Vicki Wendt Date: 1-6-99 Time: 9:00 Am

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 4°
Log-in Review [initials]

REMARKS:
Keep D.L. Low 1-12
Historic Results Attached
Need by 1/25/99

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 32 samples-HS

Carrier # Greyhound 1557589924

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY

LAB Order ID #

Company Name: Ecological — Phone #:

Address: (Street, City, Zip) — Fax #:

Contact Person: CARRIE EICH

Invoice to: (If different from above)

Project #: 279-S12 — Project Name: Former Hobbs Gas PLANT

Project Location: Hobbs, NM — Sampler Signature: Carrie E. Eich

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH					Turn Around Time if different from standard	Hold
116225	MW-6D	4	1L	✓				✓		✓		1/5/99	13:00		✓*																			
226	TRIP#	2	1L	✓						✓					✓*																			

Relinquished by: Carrie E. Eich — Date: 1/5/99 — Time: 4:10PM
Received by: Helen Shelton — Date: 1/5/99 — Time: 4:10PM

Relinquished by: Helen Shelton — Date: 1/5/99 — Time: 6:00PM
Received by: — Date: — Time:

Relinquished by: — Date: — Time:
Received at Laboratory by: Vicki Whidden — Date: 1-6-99 — Time: 9:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 6 samples-HS

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 4 °
Log-In Review

REMARKS: need by 1/25/99

Carrier # Greyhound 1557589924

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID #

Company Name: ECO-LOGICAL
Phone #: 915/520-7535
Address: 2200 Market Midland, TX
Fax #: 915/520-7737
Contact Person: CARRIE ECK
Invoice to: (If different from above)
Project #: 279-S12
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, ~~TX~~ NM
Sampler Signature: Carrie F. Eck

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
	MW-1	4	16L	✓				✓		✓		1/5/99	12:20
	MW-3	4	16L	✓				✓		✓			11:30
	MW-5	4	16L	✓				✓		✓			12:00
	MW-6	4	16L	✓				✓		✓			13:00
	MW-6	1	25L	✓						✓			13:00
	MW-7	4	16L	✓				✓		✓			9:35
	MW-7	1	25L	✓						✓			9:35
	MW-9	4	16L	✓				✓		✓			11:00
	MW-9	1	25L	✓						✓			11:00
	MW-10	4	16L	✓				✓		✓			10:30
	MW-10	1	25L	✓						✓			10:30

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	Chloride			Turn Around Time if different from standard	Hold
	✓													✓				
	✓																	
	✓																	
	✓																	
														✓				
	✓																	
														✓				
	✓																	
														✓				
	✓																	
														✓				

Relinquished by: Carrie F. Eck Date: 1/5/99 Time: 4:10 PM
Received by: Helen Shelton Date: 1/5/99 Time: 4:10 PM
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp °
Log-In Review

REMARKS:
Keep D.L. Low
Historic Results, Attached

Carrier # Overnight Courier

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 32 samples-HC

CHART COPY

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Eco-logical
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: CARRIE EICH
Invoice to: (If different from above)
Project #: 279-S12
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, NM
Sampler Signature: Carrie E. Eich

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
	MW-6D	4	1L	✓				✓		✓		1/5/99	13:00
	TRIP A	2	40z	✓						✓			

ANALYSIS REQUEST (Circle or Specify Method No.)

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E Eich	1/5/99	4:10PM	Helen Shelton	1/5/99	4:10 PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 16 samples-HS

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp °
Log-In Review

REMARKS:
Need by 1/23/99

Carrier # Greyhound

01/05/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
H2O Elev Adjusted	439.30	440.22	439.67	439.97	439.00	438.22	436.56	439.39	438.67	437.95

04/01/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.89	62.28	59.89	61.57	62.24	58.52	59.36	62.79	58.73	55.04
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.89	62.28	59.89	61.57	62.24	58.52	59.36	62.79	58.73	55.04
H2O Elev Adjusted	438.84	440.13	439.24	439.55	438.60	437.75	436.08	439.02	438.12	437.42

07/14/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	n Drop
											0.00
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	499.25
Product Depth											0.00
H2O Depth	57.39	62.28	60.40	62.03	62.76	59.08	59.84	63.19	59.31	55.59	60.66
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	57.39	62.28	60.40	62.03	62.76	59.08	59.84	63.19	59.31	55.59	60.66
H2O Elev Adjusted	438.34	440.13	438.73	439.09	438.08	437.19	435.60	438.62	437.54	436.87	438.59

10/22/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	n Drop
											0.00
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46	499.25
Product Depth											0.00
H2O Depth	57.74	62.31	60.76	62.37	63.08	59.36	60.14	63.51	59.61	55.94	60.94
Product Thickness											0.00
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	57.74	62.31	60.76	62.37	63.08	59.36	60.14	63.51	59.61	55.94	60.94
H2O Elev Adjusted	437.99	440.10	438.37	438.75	437.76	436.91	435.30	438.30	437.24	436.52	438.31

nmac

20 NMAC 6.2.III.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS

The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Section 3109.D. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this Section.

These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "Methods for Chemical Analysis of Water and Waste of the U.S. Environmental Protection Agency," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants. [2-18-77, 11-17-83, 3-3-86,12-1-95]

A. Human Health Standards-Ground water shall meet the standards of Subsection A and B unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 1101 for the combination of contaminants, or the Human Health Standard of Section 3103.A. for each contaminant shall apply, whichever is more stringent.

Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

Arsenic (As)	0.1 mg/l
Barium (Ba)	1.0 mg/l
Cadmium (Cd)	0.01 mg/l
Chromium (Cr)	0.05 mg/l
Cyanide (CN)	0.2 mg/l
Fluoride (F)	1.6 mg/l
Lead (Pb)	0.05 mg/l
Total Mercury (Hg)	0.002 mg/l
Nitrate (NO_3 as N)	10.0 mg/l
Selenium (Se)	0.05 mg/l
Silver (Ag)	0.05 mg/l
Uranium (U)	5.0 mg/l
Radioactivity: Combined Radium-226 & Radium-2283	0.0 pCi/l
Benzene	0.01 mg/l
Polychlorinated biphenyls (PCB's)	0.001 mg/l
Toluene	0.75 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2-dichloroethane (EDC)	0.01 mg/l
1,1-dichloroethylene (1,1-DCE)	0.005 mg/l
1,1,2,2-tetrachloroethylene (PCE)	0.02 mg/l
1,1,2-trichloroethylene (TCE)	0.1 mg/l
ethylbenzene	0.75 mg/l
total xylenes	0.62 mg/l
methylene chloride	0.1 mg/l
chloroform	0.1 mg/l
1,1-dichloroethane	0.025 mg/l
ethylene dibromide (EDB)	0.0001 mg/l
1,1,1-trichloroethane	0.06 mg/l
1,1,2-trichloroethane	0.01 mg/l
1,1,2,2-tetrachloroethane	0.01 mg/l
vinyl chloride	0.001 mg/l
PAHs: total naphthalene plus monomethylnaphthalenes	0.03 mg/l

benzo-a-pyrene 0.0007 mg/l
[2-18-77, 1-29-82, 3-3-86, 12-1-95]

B. Other Standards for Domestic Water Supply

Chloride (Cl) 250.0 mg/l
Copper (Cu) 1.0 mg/l

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Iron (Fe)	1.0 mg/l
Manganese (Mn)	0.2 mg/l
Phenols	0.005 mg/l
Sulfate (SO_4)	600.0 mg/l
Total Dissolved Solids (TDS)	1000.0 mg/l
Zinc (Zn)	10.0 mg/l
pH	between 6 and 9

[2-18-77]

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C unless otherwise provided.

Aluminum (Al)	5.0 mg/l
Boron (B)	0.75 mg/l
Cobalt (Co)	0.05 mg/l
Molybdenum (Mo)	1.0 mg/l
Nickel (Ni)	0.2 mg/l

[2-18-77]

20 NMAC 6.2.III.3104 DISCHARGE PLAN REQUIRED

Unless otherwise provided by this Part, no person shall cause or allow effluent of leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge plan approved by the secretary. When a plan has been approved, discharges must be consistent with the terms and conditions of the plan. In the event of a transfer of the ownership, control, or possession of a facility for which an approved discharge plan is in effect, the transferee shall have authority to discharge under such plan, provided that the transferee has complied with Section 3111 of this Part, regarding transfers. [2-18-77, 12-24-87, 12-1-95]

20 NMAC 6.2.III.3105 EXEMPTIONS FROM DISCHARGE PLAN REQUIREMENT

Sections 3104 and 3106 of this Part do not apply to the following: [2-18-77]

A. Effluent or leachate which conforms to all the listed numerical standards of Section 3103 and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply; [2-18-77, 6-20-80, 7-2-81]

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day; [2-18-77, 12-24-87]

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system; [2-18-77]

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result; [2-18-77, 12-1-95]

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry

arroyos and ephemeral streams are not exempt from the discharge plan requirement, except as otherwise provided in this Section; [2-18-77]

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall where NPDES effluent limitations are imposed, unless the secretary determines that a hazard to public health may result. For purposes of this Subsection, monitoring requirements alone do not constitute effluent limitations; [2-18-77, 12-1-95]

G. Discharges resulting from flood control systems; [2-18-77]

H. Leachate which results from the direct natural infiltration of precipitation through disturbed materials, unless the secretary determines that a hazard to public health may result; [2-18-77, 6-26-80, 12-1-95]

I. Leachate which results entirely from the direct natural infiltration of precipitation through undisturbed materials; [2-18-77, 6-26-80]

J. Leachate from materials disposed of in accordance with the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the New Mexico Environmental Improvement Board; [2-18-77, 12-1-95]

K. Natural ground water seeping or flowing into conventional mine workings which re-enters the ground by natural gravity flow prior to pumping or transporting out of the mine and without being used in any mining process; this exemption does not apply to solution mining; [2-18-77]

L. Effluent or leachate discharges resulting from activities regulated by a mining plan approved and permit issued by the New Mexico Coal Surface Mining Commission, provided that this exemption shall not be construed as limiting the application of appropriate ground water protection requirements by the New Mexico Coal Surface Mining Commission; [2-18-77]

M. Effluent or leachate discharges which are regulated by the Oil Conservation Commission and the regulation of which by the Water Quality Control Commission would interfere with the exclusive authority granted under Section 70-2-12 NMSA 1978, or under other laws, to the Oil Conservation Commission. [2-18-77]

20 NMAC 6.2.III.3106 APPLICATION FOR DISCHARGE PLAN APPROVALS AND RENEWALS

A. Any person who, before or on June 18, 1977, is discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall, within 120 days of receipt of written notice from the secretary that a discharge plan is required, or such longer time as the secretary shall for good cause allow, submit a discharge plan to the secretary for approval; such person may discharge without an approved discharge plan until 240 days after written notification by the secretary that a discharge plan is required or such longer time as the secretary shall for good cause allow. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

B. Any person who intends to begin, after June 18, 1977, discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall notify the secretary giving the information enumerated in Section 1201.B.; the secretary shall, within 60 days, notify such person if a discharge plan is required; upon submission, the secretary shall review the discharge plan pursuant to Sections 3108 and 3109; for good cause shown, the secretary may allow such person to discharge without an approved plan for a period not to extend beyond February 18, 1978; after February 18, 1978, for good cause shown the secretary may allow such person to discharge without an approved discharge plan for a period not to exceed 120 days. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

C. A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with this Part. At

least the following information shall be included in the plan: [2-18-77]

1. Quantity, quality and flow characteristics of the discharge; [2-18-77]

2. Location of the discharge and of any bodies of water, watercourses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring; [2-18-77]

3. Depth to and TDS concentration of the ground water most likely to be affected by the discharge; [2-18-77]

4. Flooding potential of the site; [2-18-77]

5. Location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow; [2-18-77]

6. Depth to and lithological description of rock at base of alluvium below the discharge site if such information is available; [2-18-77]

7. Any additional information that may be necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of Section 3103 or the presence of any toxic pollutant at any place of withdrawal of water for present or reasonably foreseeable future use. Detailed information on site geologic and hydrologic conditions may be required for a technical evaluation of the applicant's proposed discharge plan; and [2-18-77, 6-26-80, 7-2-81]

8. Additional detailed information required for a technical evaluation of effluent disposal wells or in situ extraction wells as provided in Subpart V of this Part. [9-20-82]

D. An applicant for a discharge plan shall pay fees as specified in Section 3114. [8-17-91]

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SUBPART IV -- PREVENTION AND ABATEMENT OF WATER POLLUTION

20 NMAC 6.2.IV.4101 PURPOSE

A. The purposes of this Subpart are to:

1. Abate pollution of subsurface water so that all ground water of the State of New Mexico which has a background concentration of 10,000 mg/L or less TDS, is either remediated or protected for use as domestic and agricultural water supply, and to remediate or protect those segments of surface waters which are gaining because of subsurface-water inflow, for uses designated in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1); and [12-1-95]

2. Abate surface-water pollution so that all surface waters of the State of New Mexico are remediated or protected for designated or attainable uses as defined in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

B. If the background concentration of any water contaminant exceeds the standard or requirement of Sections 4103.A, 4103.B or 4103.C of this Part, pollution shall be abated by the responsible person to the background concentration. [12-1-95]

C. The standards and requirements set forth in Section 4103 of this Part are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations. [12-1-95]

20 NMAC 6.2.IV.4102 [RESERVED]

20 NMAC 6.2.IV.4103 ABATEMENT STANDARDS AND REQUIREMENTS

A. The vadose zone shall be abated so that water contaminants in the vadose zone shall not be capable of contaminating ground water or surface water, in excess of the standards in Subsections B and C below, through leaching, percolation or as the water table elevation fluctuates. [12-1-95]

B. Ground-water pollution at any place of withdrawal for present or reasonably foreseeable future use, where the TDS concentration is 10,000 mg/L or less, shall be abated to conform to the following standards: [12-1-95]

1. toxic pollutant(s) as defined in Section 1101 of this Part shall not be present; and [12-1-95]

2. the standards of Section 3103 of this Part shall be met. [12-1-95]

C. Surface-water pollution shall be abated to conform to the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

D. Subsurface-water and surface-water abatement shall not be considered complete until a minimum of eight (8) consecutive quarterly samples from all compliance sampling stations approved by the secretary meet the abatement standards of Subsections A, B and C above. Abatement of water contaminants measured in solid-matrix samples of the vadose zone shall be considered complete after one-time sampling from compliance stations approved by the secretary. [12-1-95]

E. Technical Infeasibility.

1. If any responsible person is unable to fully meet the abatement standards set forth in Subsections A and B above using commercially accepted abatement technology pursuant to an approved abatement plan,

he may propose that abatement standards compliance is technically infeasible. Technical infeasibility proposals involving the use of experimental abatement technology shall be considered at the discretion of the secretary. Technical infeasibility may be demonstrated by a statistically valid extrapolation of the decrease in concentration(s) of any water contaminant(s) over the remainder of a twenty (20) year period, such that projected future reductions during that time would be less than 20% of the concentration(s) at the time technical infeasibility is proposed. A statistically valid decrease cannot be demonstrated by fewer than eight (8) consecutive quarters. The technical infeasibility proposal shall include a substitute abatement standard(s) for those contaminants that is/are technically feasible. Abatement standards for all other water contaminants not demonstrated to be technically infeasible shall be met. [12-1-95]

2. In no event shall a proposed technical infeasibility demonstration be approved by the secretary for any water contaminant if its concentration is greater than 200% of the abatement standard for that contaminant. [12-1-95]

3. If the secretary cannot approve any or all portions of a proposed technical infeasibility demonstration because the water contaminant concentration(s) is/are greater than 200% of the abatement standard(s) for each contaminant, the responsible person may further pursue the issue of technical infeasibility by filing a petition with the commission seeking:

a. approval of alternate abatement standard(s) pursuant to Section 4103.F below; or

b. granting of a variance pursuant to Section 1210 of this Part.

[12-1-95]

F. Alternative Abatement Standards.

1. At any time during or after the submission of a Stage 2 abatement plan, the responsible person may file a petition seeking approval of alternative abatement standard(s) for the standards set forth in Subsections A and B above. The commission may approve alternative abatement standard(s) if the petitioner demonstrates that:

a. (1) compliance with the abatement standard(s) is/are not feasible, by the maximum use of technology within the economic capability of the responsible person; or

(2) there is no reasonable relationship between the economic and social costs and benefits (including attainment of the standard(s) set forth in Section 4103) to be obtained;

b. the proposed alternative abatement standard(s) is/are technically achievable and cost-benefit justifiable; and

c. compliance with the proposed alternative abatement standard(s) will not create a present or future hazard to public health or undue damage to property.

2. The petition shall be in writing, filed with the secretary. The petition shall specify, in addition to the information required by Section 1210.A of this Part, the water contaminant(s) for which alternative standard(s) is/are proposed, the alternative standard(s) proposed, the three-dimensional body of water pollution for which approval is sought, and the extent to which the abatement standard(s) set forth in Section 4103 is/are now, and will in the future be, violated. The petition may include a transport, fate and risk assessment in accordance with accepted methods, and other information as the petitioner deems necessary to support the petition.

3. The commission shall review a petition for alternative abatement standards in accordance with the procedures for review of a variance petition provided in the commissions adjudicatory procedures, 20 NMAC 1.3.

[12-1-95, 11-15-96]

20 NMAC 6.2.IV.4104 ABATEMENT PLAN REQUIRED

A. Unless otherwise provided by this Part, all responsible persons who are abating, or who are required to abate, water pollution in excess of the standards and requirements set forth in Section 4103 of

this Part shall do so pursuant to an abatement plan approved by the secretary. When an abatement plan has been approved, all actions leading to and including abatement shall be consistent with the terms and conditions of the abatement plan. [12-1-95]

B. In the event of a transfer of the ownership, control or possession of a facility for which an abatement plan is required or approved, where the transferor is a responsible person, the transferee also shall be considered a responsible person for the duration of the abatement plan, and may jointly share the responsibility to conduct the actions required by this Part with other responsible persons. The transferror shall notify the transferee in writing, at least thirty (30) days prior to the transfer, that an abatement plan has been required or approved for the facility, and shall deliver or send by certified mail to the secretary a copy of such notification together with a certificate or other proof that such notification has in fact been received by the transferee. The transferror and transferee may agree to a designated responsible person who shall assume the responsibility to conduct the actions required by this Part. The responsible persons shall notify the secretary in writing if a designated responsible person is agreed upon. If the secretary determines that the designated responsible person has failed to conduct the actions required by this Part, the secretary shall notify all responsible persons of this failure in writing and allow them thirty (30) days, or longer for good cause shown, to conduct the required actions before issuing a compliance order pursuant to Section 1220 of this Part. [12-1-95]

C. If the source of the water pollution to be abated is a facility that operated under a discharge plan, the secretary may require the responsible person(s) to submit a financial assurance plan which covers the estimated costs to conduct the actions required by the abatement plan. Such a financial assurance plan shall be consistent with any financial assurance requirements adopted by the commission. [12-1-95]

20 NMAC 6.2.IV.4105 EXEMPTIONS FROM ABATEMENT PLAN REQUIREMENT

A. Except as provided in Subsection B of this Section, Sections 4104 and 4106 of this Part do not apply to a person who is abating water pollution: [12-1-95]

1. from an underground storage tank, under the authority of the Underground Storage Tank Regulations (20 NMAC Part 5) adopted by the New Mexico Environmental Improvement Board, or in accordance with the New Mexico Ground Water Protection Act; [12-1-95]

2. under the authority of the U.S. Environmental Protection Agency pursuant to either the federal Comprehensive Environmental Response, Compensation and Liability Act, and amendments, or the Resource Conservation and Recovery Act; [12-1-95]

3. under the authority of the secretary pursuant to the Hazardous Waste Management Regulations (20 NMAC 4.1) adopted by the New Mexico Environmental Improvement Board; [12-1-95]

4. under the authority of the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy pursuant to the Atomic Energy Act; [12-1-95]

5. from a solid waste landfill, under the authority of the secretary pursuant to the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the N.M. Environmental Improvement Board; [12-1-95]

6. under the authority of a ground-water discharge plan approved by the secretary, provided that such abatement is consistent with the requirements and provisions of Sections 4101, 4103, 4106.C, 4106.E, 4107 and 4112 of this Part; [12-1-95]

7. under the authority of a Letter of Understanding, Settlement Agreement or Administrative Order on Consent signed by the secretary prior to December 1, 1995, provided that abatement is being performed in full compliance with the terms of the Letter of Understanding, Settlement Agreement or Administrative Order on Consent; and [12-1-95]

8. on an emergency basis, or while abatement plan approval is pending, or in a manner that will result in compliance with the standards and requirements set forth in Section 4103 of this Part within one

hundred and eighty (180) days after notice is required to be given pursuant to Section 1203.A.1 of this Part, provided that the delegated agency does not object to the abatement action pursuant to Sections 1203.A.6 and 1203.A.7 of this Part. [12-1-95]

B. If the secretary determines that abatement of water pollution subject to Subsection A of this Section will not meet the standards of Sections 4103.B and C of this Part, or that additional action is necessary to protect health, welfare, environment or property, the secretary may notify a responsible person, by certified mail, to submit an abatement plan pursuant to Sections 4104 and 4106.A of this Part. The notification shall state the reasons for the secretary's determination. In any appeal of the secretary's determination under this Section, the secretary shall have the burden of proof. [12-1-95]

C. Sections 4104 and 4106 of this Part do not apply to the following activities: [12-1-95]

1. Discharges subject to an effective and enforceable National Pollutant Discharge Elimination System (NPDES) permit; [12-1-95]

2. Land application of ground water contaminated with nitrogen originating from human or animal waste and not otherwise exceeding the standards of Section 3103.A of this Part and not containing a toxic pollutant as defined in Section 1101 of this Part, provided that it is done in compliance with a discharge plan approved by the secretary; [12-1-95]

3. Abatement of water pollution resulting from the withdrawal and decontamination or blending of polluted water for use as a public or private drinking-water supply, by any person other than a responsible person, unless the secretary determines that a hazard to public health may result; and [12-1-95]

4. Reasonable operation and maintenance of irrigation and flood control facilities. [12-1-95]

20 NMAC 6.2.IV.4106 ABATEMENT PLAN PROPOSAL

A. Except as provided for in Section 4105 of this Part, a responsible person shall, within sixty (60) days of receipt of written notice from the secretary that an abatement plan is required, submit an abatement plan proposal to the secretary for approval. For good cause shown, the secretary may allow for a total of one hundred and twenty (120) days to prepare and submit the abatement plan proposal. [12-1-95]

B. Voluntary Abatement.

1. Any person wishing to abate water pollution in excess of the standards and requirements set forth in Section 4103 of this Part may submit a Stage 1 abatement plan proposal to the secretary for approval. Following approval by the secretary of a final site investigation report prepared pursuant to Stage 1 of an abatement plan, any person may submit a Stage 2 abatement plan proposal to the secretary for approval. [12-1-95]

2. Following approval of a Stage 1 or Stage 2 abatement plan proposal under Subsection B.1 of this Section, the person submitting the approved plan shall be a responsible person under this Subpart for the purpose of performing the approved Stage 1 or Stage 2 abatement plan. Nothing in this Section shall preclude the secretary from applying Section 1203.A.9 of this Part to a responsible person if applicable. [12-1-95]

C. Stage 1 Abatement Plan.

The purpose of Stage 1 of the abatement plan shall be to design and conduct a site investigation that will adequately define site conditions, and provide the data necessary to select and design an effective abatement option. Stage 1 of the abatement plan may include, but not necessarily be limited to, the following information depending on the media affected, and as needed to select and implement an expeditious abatement option: [12-1-95]

1. Descriptions of the site, including a site map, and of site history including the nature of the discharge that caused the water pollution, and a summary of previous investigations; [12-1-95]

2. Site investigation workplan to define:

a. site geology and hydrogeology, the vertical and horizontal extent and magnitude of vadose-zone

and ground-water contamination, subsurface hydraulic parameters including hydraulic conductivity, transmissivity, storativity, and rate and direction of contaminant migration, inventory of water wells inside and within one (1) mile from the perimeter of the three-dimensional body where the standards set forth in Section 4103.B are exceeded, and location and number of such wells actually or potentially affected by the pollution; and

b. surface-water hydrology, seasonal stream flow characteristics, ground-water/surface-water relationships, the vertical and horizontal extent and magnitude of contamination and impacts to surface water and stream sediments. The magnitude of contamination and impacts on surface water may be, in part, defined by conducting a biological assessment of fish, benthic macroinvertebrates and other wildlife populations. Seasonal variations should be accounted for when conducting these assessments. [12-1-95]

3. Monitoring program, including sampling stations and frequencies, for the duration of the abatement plan that may be modified, after approval by the secretary, as additional sampling stations are created; [12-1-95]

4. Quality assurance plan, consistent with the sampling and analytical techniques listed in Section 3107.B of this Part and with Section 1103 of the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1), for all work to be conducted pursuant to the abatement plan; [12-1-95]

5. Site health and safety plan for all work to be performed pursuant to the abatement plan; [12-1-95]

6. A schedule for all Stage 1 abatement plan activities, including the submission of summary quarterly progress reports, and the submission, for approval by the secretary, of a detailed final site investigation report; and [12-1-95]

7. Any additional information that may be required to design and perform an adequate site investigation. [12-1-95]

D. Stage 2 Abatement Plan.

Any responsible person shall submit a Stage 2 abatement plan proposal to the secretary for approval within sixty (60) days, or up to one hundred and twenty (120) days for good cause shown, after approval by the secretary of the final site investigation report prepared pursuant to Stage 1 of the abatement plan. [12-1-95]

E. The purpose of Stage 2 of the abatement plan shall be to select and design, if necessary, an abatement option that, when implemented, will result in attainment of the abatement standards and requirements set forth in Section 4103 of this Part, including post-closure maintenance activities. Stage 2 of the abatement plan should include, at a minimum, the following information: [12-1-95]

1. Brief description of the current situation at the site; [12-1-95]

2. Development and assessment of abatement options; [12-1-95]

3. Description, justification and design, if necessary, of preferred abatement option; [12-1-95]

4. Modification, if necessary, of the monitoring program approved pursuant to Stage 1 of the abatement plan, including the designation of pre and post abatement-completion sampling stations and sampling frequencies to be used to demonstrate compliance with the standards and requirements set forth in Section 4103 of this Part; [12-1-95]

5. Site maintenance activities, if needed, proposed to be performed after termination of abatement activities; [12-1-95]

6. A schedule for the duration of abatement activities, including the submission of summary quarterly progress reports; [12-1-95]

7. A public notification proposal designed to satisfy the requirements of Sections 4108.B and 4108.C of this Part; and [12-1-95]

8. Any additional information that may be reasonably required to select, describe, justify and design an effective abatement option. [12-1-95]

20 NMAC 6.2.IV.4107 OTHER REQUIREMENTS

A. Any responsible person shall allow any authorized representative of the secretary to: [12-1-95]

1. upon presentation of proper credentials, enter the facility at reasonable times; [12-1-95]

2. inspect and copy records required by an abatement plan; [12-1-95]

3. inspect any treatment works, monitoring and analytical equipment; [12-1-95]

4. sample any wastes, ground water, surface water, stream sediment, plants, animals, or vadose-zone material including vadose-zone vapor; [12-1-95]

5. use monitoring systems and wells under such responsible person's control in order to collect samples of any media listed in Section 4107.A.4 above; and [12-1-95]

6. gain access to off-site property not owned or controlled by such responsible person, but accessible to such responsible person through a third-party access agreement, provided that it is allowed by the agreement. [12-1-95]

B. Any responsible person shall provide the secretary, or a representative of the secretary, with at least four (4) working days advance notice of any sampling to be performed pursuant to an abatement plan, or any well plugging, abandonment or destruction at any facility where an abatement plan has been required. [12-1-95]

C. Any responsible person wishing to plug, abandon or destroy a monitoring or water supply well within the perimeter of the 3-dimensional body where the standards set forth in Section 4103.B are exceeded, at any facility where an abatement plan has been required, shall propose such action by certified mail to the secretary for approval, unless such approval is required from the State Engineer. The proposed action shall be designed to prevent water pollution that could result from water contaminants migrating through the well or borehole. The proposed action shall not take place without written approval from the secretary, unless written approval or disapproval is not received by the responsible person within thirty (30) days of the date of receipt of the proposal. [12-1-95]

20 NMAC 6.2.IV.4108 PUBLIC NOTICE AND PARTICIPATION

A. Within thirty (30) days of filing of a Stage 1 abatement plan proposal, the secretary shall issue a news release summarizing: [12-1-95]

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1. the source, extent, magnitude and significance of water pollution, as known at that time; [12-1-95]

2. the proposed Stage 1 abatement plan investigation; and [12-1-95]

3. the name and telephone number of an agency contact who can provide additional information. [12-1-95]

B. Within thirty (30) days of filing of a Stage 2 abatement plan proposal, or proposed significant modification of Stage 2 of the abatement plan, any responsible person shall provide to the secretary proof of public notice of the abatement plan to the following persons: [12-1-95]

1. the public, who shall be notified through publication of a notice in newspapers of general circulation in this state and in the county where the abatement will occur and, in areas with large percentages of non-English speaking people, through the mailing of the public notice in English to a bilingual radio station serving the area where the abatement will occur with a request that it be aired as a public service announcement in the predominant non-English language of the area; [12-1-95]

2. those persons, as identified by the secretary, who have requested notification, who shall be notified by mail; [12-1-95]

3. the New Mexico Trustee for Natural Resources, and any other local, state or federal governmental agency affected, as identified by the secretary, which shall be notified by certified mail; [12-1-95]

4. owners and residents of surface property located inside, and within one (1) mile from, the perimeter of the geographic area where the standards and requirements set forth in Section 4103 are exceeded who shall be notified by a means approved by the secretary; and [12-1-95]

5. the Governor or President of each Indian Tribe, Pueblo or Nation within the state of New Mexico, as identified by the secretary, who shall be notified by mail. [12-1-95]

C. The public notice shall include, as approved in advance by the secretary: [12-1-95]

1. name and address of the responsible person; [12-1-95]

2. location of the proposed abatement; [12-1-95]

3. brief description of the nature of the water pollution and of the proposed abatement action; [12-1-95]

4. brief description of the procedures followed by the secretary in making a final determination; [12-1-95]

5. statement on the comment period; [12-1-95]

6. statement that a copy of the abatement plan can be viewed by the public at the department's main office or at the department field office for the area in which the discharge occurred; [12-1-95]

7. statement that written comments on the abatement plan, and requests for a public meeting or hearing that include the reasons why a meeting or hearing should be held, will be accepted for consideration if sent to the secretary within sixty (60) days after the determination of administrative completeness; and [12-1-95]

8. address and phone number at which interested persons may obtain further information. [12-1-95]

D. A public meeting or hearing may be held if the secretary determines there is significant public interest. Notice of the time and place of the meeting or hearing shall be given at least thirty (30) days prior to the meeting or hearing pursuant to Subsections A and B above. The secretary may appoint a meeting facilitator or hearing officer. The secretary may require the responsible person to prepare for approval by the secretary a fact sheet, to be distributed at the public meeting or hearing and afterwards upon request, written in English and Spanish, describing site history, the nature and extent of water pollution, and the proposed abatement. The record of the meeting or hearing, requested under this Section, consists of a tape recorded or transcribed session, provided that the cost of a court recorder shall be paid by the person requesting the transcript. If requested by the secretary, the responsible person will provide a translator approved by the secretary at a public meeting or hearing conducted in a locale where testimony from non-English speaking people can reasonably be expected. At the meeting or hearing, all interested persons

secretary within thirty (30) days after receiving notice of the secretary's action. The petition shall specify the portions of the action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered to the secretary, and to the applicant or permittee if the petitioner is not the applicant or permittee, and attach a copy of the action for which review is sought. Unless a timely petition for hearing is made, the secretary's action is final. [12-1-95]

D. The proceedings before the commission shall be conducted as provided in the commissions adjudicatory procedures, 20 NMAC 1.3. [12-1-95, 11-15-96]

E. The cost of the court reporter for the hearing shall be paid by the petitioner. [12-1-95]

F. The appeal provisions do not relieve the owner, operator or responsible person of their obligations to comply with any federal or state laws or regulations. [12-1-95]

20 NMAC 6.2.IV.4115 COURT REVIEW OF COMMISSION DECISIONS

Court review of commission decisions shall be as provided by law. [12-1-95]

KN Energy, Inc.
One Allen Center
500 Dallas Street, Suite 1000
P.O. Box 283
Houston, TX 77001-0283
(713) 369-9000

July 12, 1999

New Mexico Oil Conservation Division
Atten: Mr. Jack Ford
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: KN Energy, Inc. – Former Hobbs Natural Gas Plant – GW-191
Annual Groundwater Sampling and Monitoring Report – 1998
Hobbs, New Mexico

Dear Mr. Ford:

Enclosed please find the 1998 Annual Groundwater Monitoring Report prepared by our consultant, Eco-logical Environmental Services, Inc., for the above referenced facility. The report summarizes the results of the monitoring data collected during 1998 and provides conclusions and recommendations for future activities.

Please do not hesitate to contact me at (713) 369-9193 or Mr. Shane Estep of Eco-logical at (915) 520-7535 if you have any questions or comments.

Sincerely,

John M. Greer
Environmental Coordinator

Cc: Donna Williams – New Mexico OCD, Hobbs Office
Paul Tourangeau – KN
Shane Estep – Eco-logical (w/o attachment)

Eco-logical
Environmental Services Inc.

ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

AMERICAN PROCESSING, L.P., an affiliate of K N ENERGY, INC.

HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

AMERICAN PROCESSING, L.P.,
370 Van Gordon
Lakewood, Colorado 80228

2200 Market Street 79703 • (915) 520-7535 • FAX (915) 520-7737

Eco-logical
Environmental Services Inc.

Quarterly Groundwater Monitoring and Sampling Annual Report June 10, 1999

Hobbs Natural Gas Plant
Hobbs, Lea County, New Mexico

Date Prepared:
June 10, 1999

ECO Project No.:
279-512

Prepared for:
New Mexico Oil Conservation Division

On Behalf of:
American Processing, L.P.,
an affiliate of K N Energy, Inc.

Prepared by:
Eco-logical Environmental Services, Inc.

Scott Springer, Project Geologist

Shane Estep, Project Manager

2200 Market 79703 (915) 520-7535 Midland, Texas Fax (915) 520-7737

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LIST OF FIGURES

I. Report Summary

The purpose of this report is to fulfill the requirements of the groundwater monitoring plan approved by the New Mexico Oil Conservation Division (OCD). This is the second annual report submitted to the OCD as required by the agency. On April 3, 1998, June 25, 1998, October 2, 1998, and January 5, 1999, Eco-logical Environmental Services, Inc. (Eco-logical) personnel were on-site to purge and sample ten (10) monitor wells (MW) at the Former Hobbs Gas Plant west of Hobbs, New Mexico (see Figure 1). The objective of this sampling event was to fulfill the Abatement Plan requirements approved by the OCD in April 1997 and as modified in December 1998. The modification removed MW-2, MW-4 and MW-8 from the requirements of quarterly sampling. This event involved the measurement of relative depths to water, purging of the monitoring wells, and sample collection and analyses. Figure 2 presents the site map with the locations of the monitor wells.

The plant has not been in operation for nearly two years. In addition to the plant closure, many compressors and skid mounted equipment have been removed. Some additional equipment is also scheduled to be dismantled. The remaining equipment and structures have been sold to Transwestern Pipeline Company.

The initial task was to determine the static groundwater levels relative to the north side of the top of each well casing and to examine each well for the presence of phase separated hydrocarbons (PSH) using an interface probe with a calibrated tape (see Tables 1 - 10). Wells were measured from the least impacted to the most impacted as determined by previous sampling events. All equipment was properly decontaminated between gauging of wells. None of the wells exhibited free product.

The latest depth to groundwater at the site ranges from 54.5 to 60.0 feet below the ground surface. These depths represent an average drop in the water table of 3.1 feet since the sampling event in October of 1996 (see Figure 3). Depth to groundwater has been increasing in all wells since October 1996 with the exception of the last quarterly event in January 1999 which showed a slight decrease over the previous sampling event of October 1998. The overall groundwater flow direction is stable to the southeast at a gradient of 1:379 (see Figure 4 for a current gradient map).

After obtaining all measurements, the volume of water in each casing was calculated. The wells were then purged by hand bailing or by an electric submersible purge pump. Wells were purged until three well volumes of water were removed or until the well was dry. The bailers or pump were decontaminated between wells with a water and Alconox solution and rinsed in clean water. After allowing the wells to recover to at least 70 percent of the original water depth, samples were collected utilizing new, single use, one (1) liter bailers. Groundwater samples were then submitted

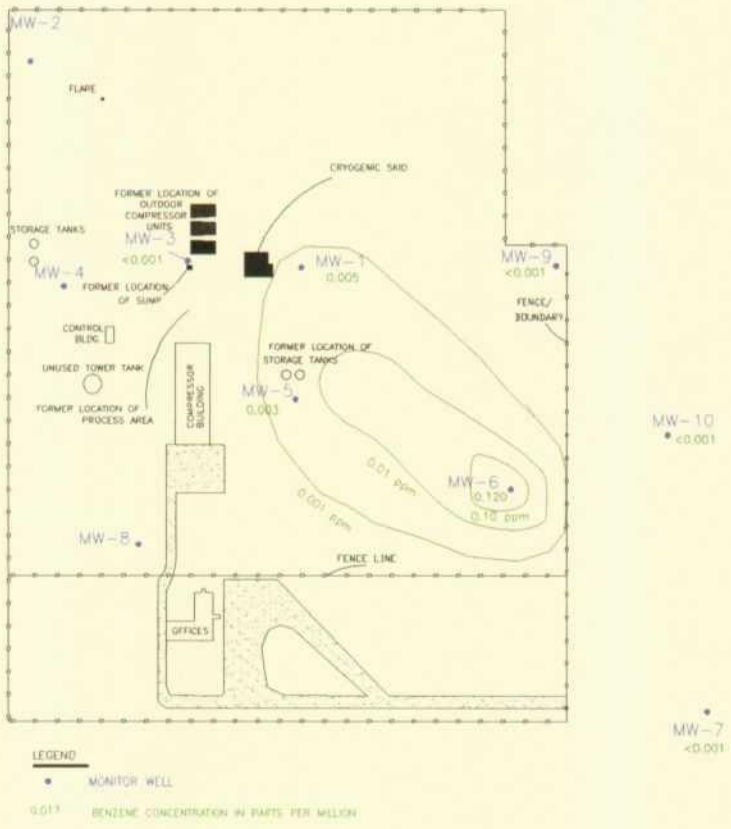
to TraceAnalysis, Inc., in Lubbock, Texas, for analyses. Based on previous analytical results and as approved by the OCD letter dated December 15, 1998, a minimized analyses schedule was performed. This included analysis for benzene, toluene, ethylbenzene, and xylene (BTEX) from wells MW-1, MW-3, MW-5, MW-7, MW-9, and MW-10 and chloride from wells MW-6, MW-7, MW-9, and MW-10. MW-2, MW-4, and MW-8 were not tested because of the distance from the plume and the plume is thought to be moving away from these wells.

The latest analytical results showed that benzene levels continue to be present above the New Mexico Water Quality Control Commission (WQCC) Guideline level (see appendix) of 0.01 parts per million (ppm) in water from monitor well MW-6 at a concentration of 0.123 ppm. Chloride is currently present at 520 ppm in MW-9. The chloride concentration has varied in this well both above and below the established guidelines (located in 20 NMAC.6.2.3103) of 250 ppm. The analytical results as compared with the sampling event of October 2, 1998 are as follows:

MW-1	Benzene	- decreased to 0.005 ppm
	Toluene	- remained nondetect
	Ethylbenzene	- remained nondetect
	Xylene	- remained nondetect
MW-2	Not Tested	
MW-3	BTEX	- remained less than 0.001 ppm
MW-4	Not Tested	
MW-5	Benzene	- decreased to 0.005 ppm
	Toluene	- remained less than 0.001 ppm
	Ethylbenzene	- remained less than 0.001 ppm
	Xylene	- remained less than 0.001 ppm
MW-6	Benzene	- decreased to 0.123 ppm
	Toluene	- remained nondetect
	Ethylbenzene	- remained nondetect
	Xylene	- decreased to 0.004 ppm
	Chloride	- increased to 56 ppm
MW-7	BTEX	- remained less than 0.001 ppm
	Chloride	- increased to 74 ppm
MW-8	Not Tested	
MW-9	BTEX	- remained less than 0.001 ppm
	Chloride	- increased to 520 ppm
MW-10	BTEX	- remained less than 0.001 ppm
	Chloride	- decreased to 140 ppm

Results of the analyses of the water samples are presented in Tables 11 to 21 and are presented on graphs in Figures 6 to 11. Figure 5 presents the estimated isograds for benzene for the latest quarterly sampling event (Jan. 15, 1999). Section 6 contains the lab reports for all four quarterly events covered in this report.

In addition to the sampling and monitoring of the groundwater at the site, soil work was performed and completed at the facility during the period of October 1997 to November 1998. Soil work was initially undertaken in October 1997 pursuant to the Soils Work Plan approved by the OCD in January of 1996. These soils had been excavated, stock piled, treated with bacteria and water, and shredded twice. Periodic treatments of bacteria and water were applied and then mixed with a backhoe. Samples collected in October 1998 indicated that the TPH levels in the treated soils were 774 ppm, which is below the WQCC Guideline level of 1,000 ppm (see appendix). Consistent with the work plan the soil was then returned to the excavations in November 1998. Section 6 contains the soil analytical results.



II. Chronology of Events

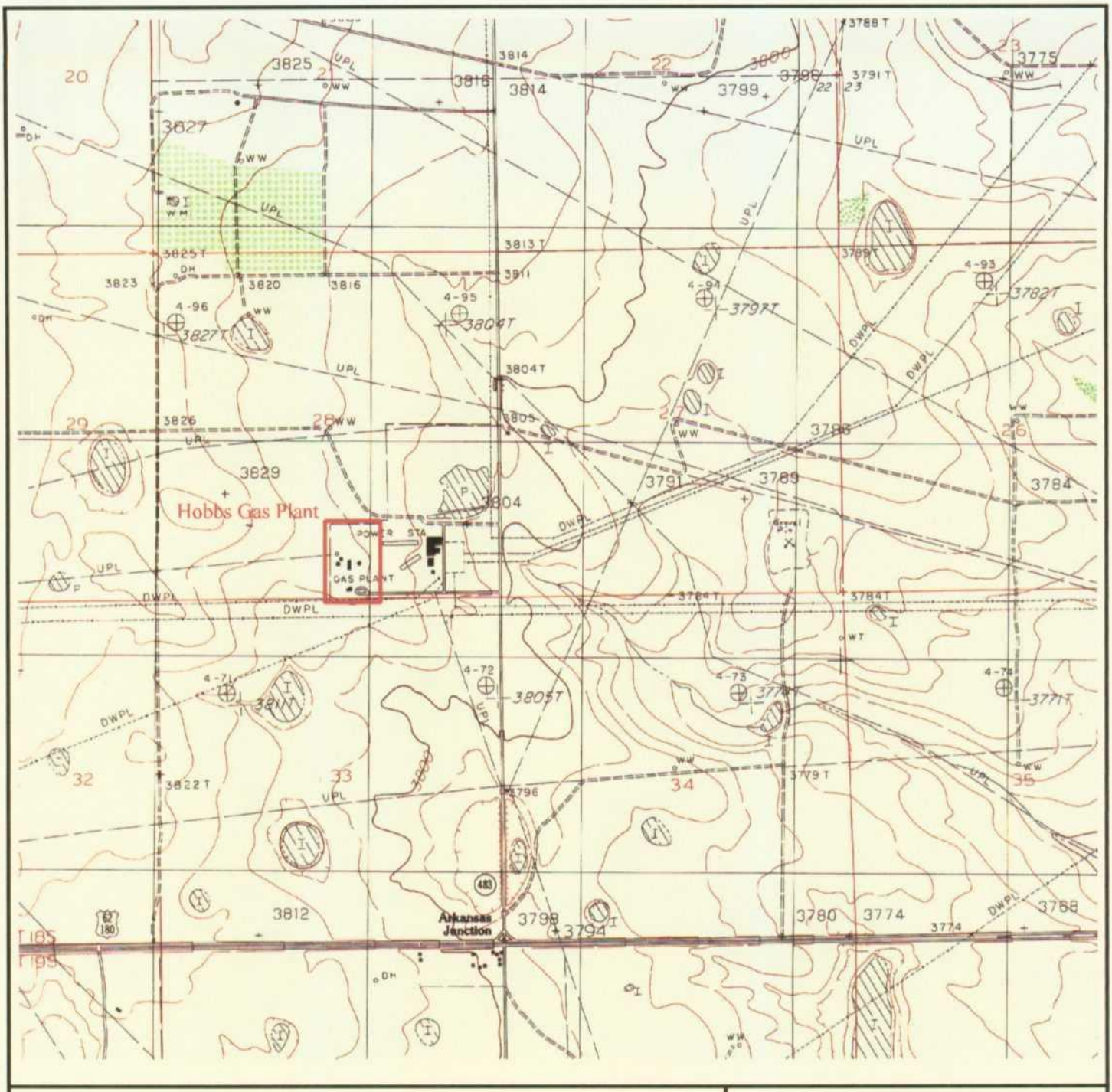
The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995, and noted several deficiencies. The deficiencies, and the related directives, were detailed in a letter issued by OCD on December 6, 1995. The letter was issued under OCD statutory authority and requires that KN Energy undertake and complete certain activities to fulfill OCD requirements. Previous activities undertaken by KN Energy, and the substance of activities reflected in this report, are to fulfill the requirements directed by OCD. The following chronology briefly summarizes the relevant activities conducted at the facility:

1994	K N Energy took possession of the plant in 1994 following a merger with American Oil and Gas.
Dec. 6, 1995	OCD directive issued to KN Energy on the initial items requiring action as a result of the Oct. 16, 1995 inspection.
Jan. 26, 1996	KNEnergy initial response to OCD directive.
Jan. 30, 1996	Work Plan for soils delineation submitted with the inclusion that one monitor well would be installed if impacted soil was discovered within ten feet of the groundwater.
Mar. 27, 1996	Delineation Work Plan approved by OCD with report due July1, 1996.
June 6, 1996	Soils Delineation Investigation Report filed with scope of work for extended Groundwater Delineation included.
Sept. 26, 1996	Directive received from OCD requiring the full delineation work plan of all contamination at the site including groundwater be submitted for approval.
Oct. 9, 1996	Work Plan for groundwater delineation filed as per the Sept. 26, 1996 OCD directive.
Oct. 15, 1996	Approval of groundwater delineation work plan received from OCD.
Dec. 11, 1996	KN announces impending closure of plant. Eco-logical submits requests for extension of time and change from Discharge Permit to Closure Plan, with the installation of additional monitor wells.

Dec. 17, 1996	OCD approves request for extension of time and the additional monitor wells.
Jan. 14, 1997	Additional groundwater monitoring well installed, and Abatement Plan and Closure Plan Report were submission to OCD as per Dec. 17, 1996 OCD directive.
Feb. 7, 1997	Phone conference held with OCD, Eco-logical and K N personnel to discuss results of report and proposed work plan.
Feb. 25, 1997	After review of Abatement Plan and phone conference, OCD issued a directive stating that the existing monitor wells also be tested for the entire suite of 20 NMAC 6.2.3103 constituents excluding uranium, radioactivity and PCB's, and additional wells be installed to define the points of compliance in the groundwater. An update/amendment report to be submitted by May 25, 1997.
March 13, 1997	Response to Feb. 1997 OCD letter submitted outlining the points to be followed in the extended delineation work plan.
April 1997	Three additional monitor wells installed and a quarterly sampling and monitoring event occurs.
May 10, 1997	Submission of updated Abatement Report filed with OCD as per the Feb. 25, 1997 directive.
June 26, 1997	OCD approves the updated Abatement Report including reducing the testing to BTEX, Napthalene, and Chlorides, and that an annual report be submitted by June 1, 1998.
July 1997	Quarterly Sampling and Monitoring Event.
Oct. 1997	Quarterly Sampling and Monitoring Event.
October 1997	Sump, Cryoskid, Flare Pit, and Compressor soils excavated and stock piled prior to remediation pursuant to the approved Stage 1 Abatement Plan and Site Closure Plan dated January 14, 1997.
November 1997	Initial Treatment of excavated soils performed.

January 1998	Quarterly Sampling and Monitoring Event.
March 1998	Submission of Annual Groundwater Sampling Report to the OCD, with a recommendation to stop testing for napthlene and discontinue sampling of MW-2, MW-4 and MW-8.
April 3, 1998	Quarterly Sampling and Monitoring Event.
June 25, 1998	Quarterly Sampling and Monitoring Event. Impacted stockpiled soil retreated.
October 2, 1998	Quarterly Sampling and Monitoring Event. Stock piled soil tested below OCD levels.
November 1998	Backfilling of excavations performed.
December 15, 1998	OCD contacted by Eco-logical regarding January 1998 Annual Groundwater Report and Reduced Analyses Plan. OCD approved reduced analyses in letter dated December 15, 1998.
5 January 1999	Quarterly Sampling and Monitoring Event.

III. Maps, Graphs, & Tables



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

Site Location

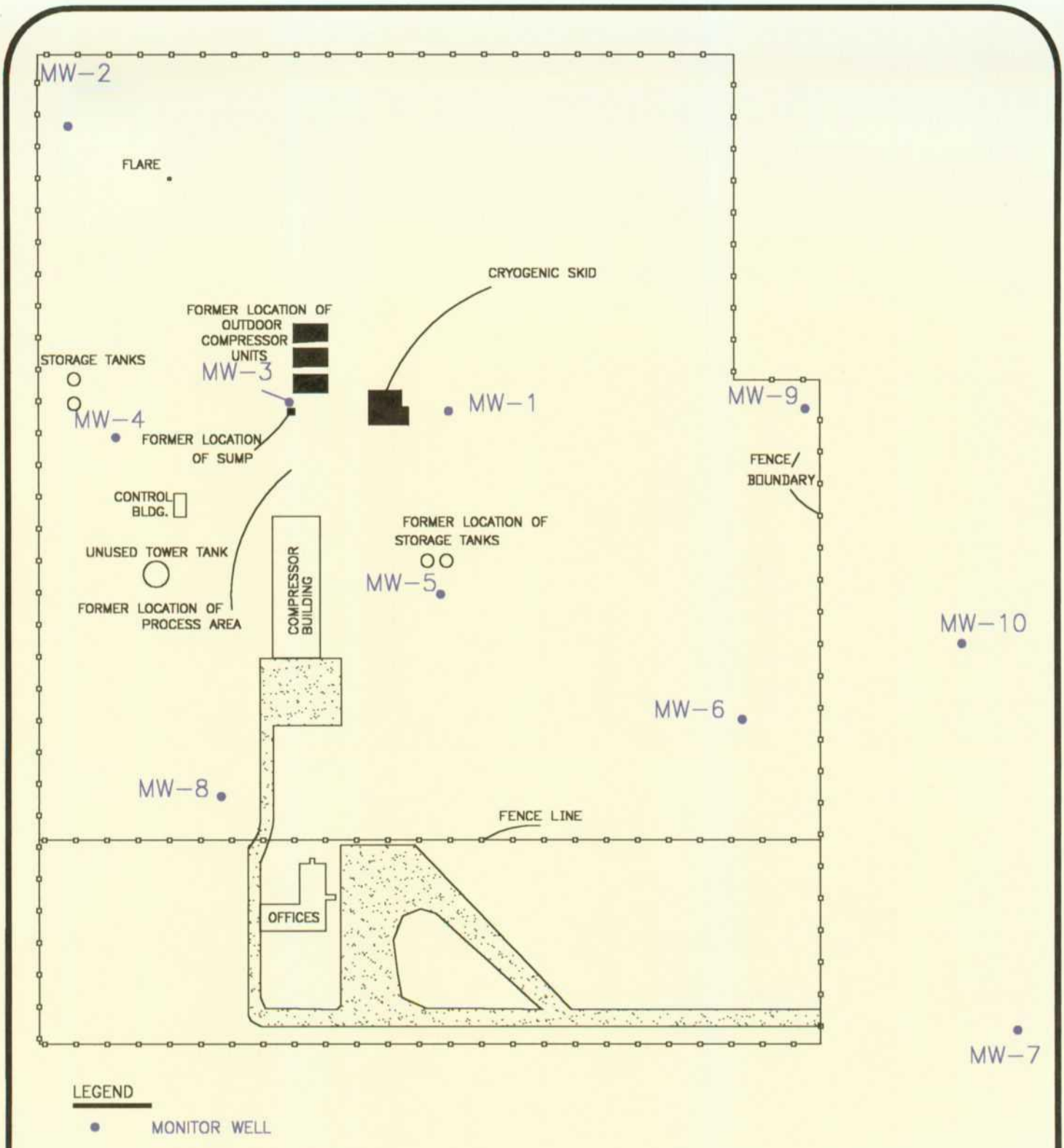
SITE COORDINATES: 24.08 ACRES IN SECTOIN 28, T18S, R36E, LEA COUNTY, NEW MEXICO
Source: Monument North, NM / Lea County, 1985
Project #: 279 / 512 Date: July 8, 1999

FIGURE 1

GENERAL SITE LOCATION MAP
HOBBS NATURAL GAS PLANT
LEA COUNTY, NEW MEXICO

PREPARED BY

Eco-logical
Environmental Services Inc.



N
W E

FIGURE 2
HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
SITE MAP

Eco-logical Environmental Services Inc.

H:/MASTER/27951Z/SITE.DWG

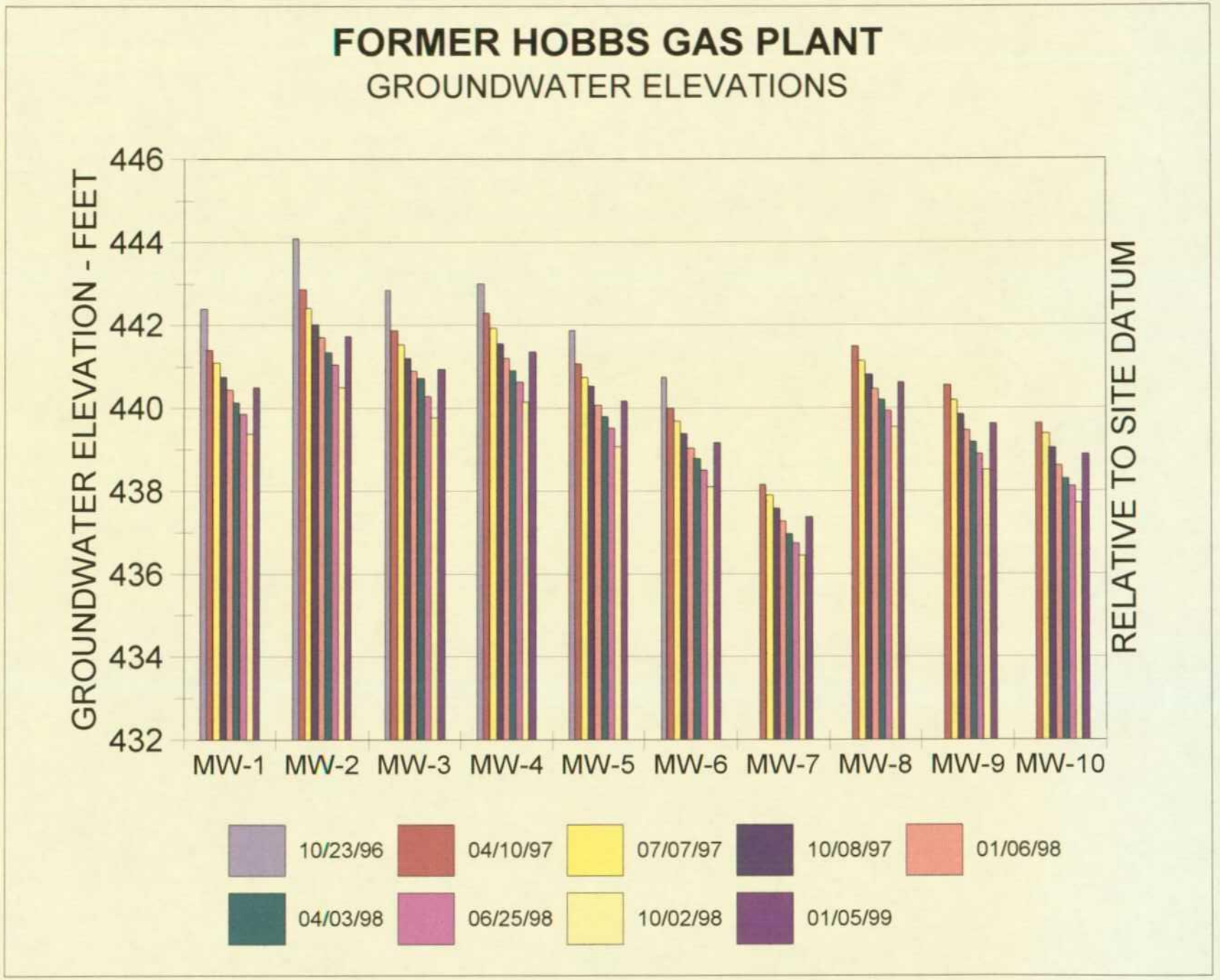

FORMER HOBBS GAS PLANT
GROUNDWATER ELEVATIONS
GROUNDWATER ELEVATION - FEET
RELATIVE TO SITE DATUM
446
444
442
440
438
436
434
432
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
10/23/96
04/10/97
07/07/97
10/08/97
01/06/98
04/03/98
06/25/98
10/02/98
01/05/99

Figure 3

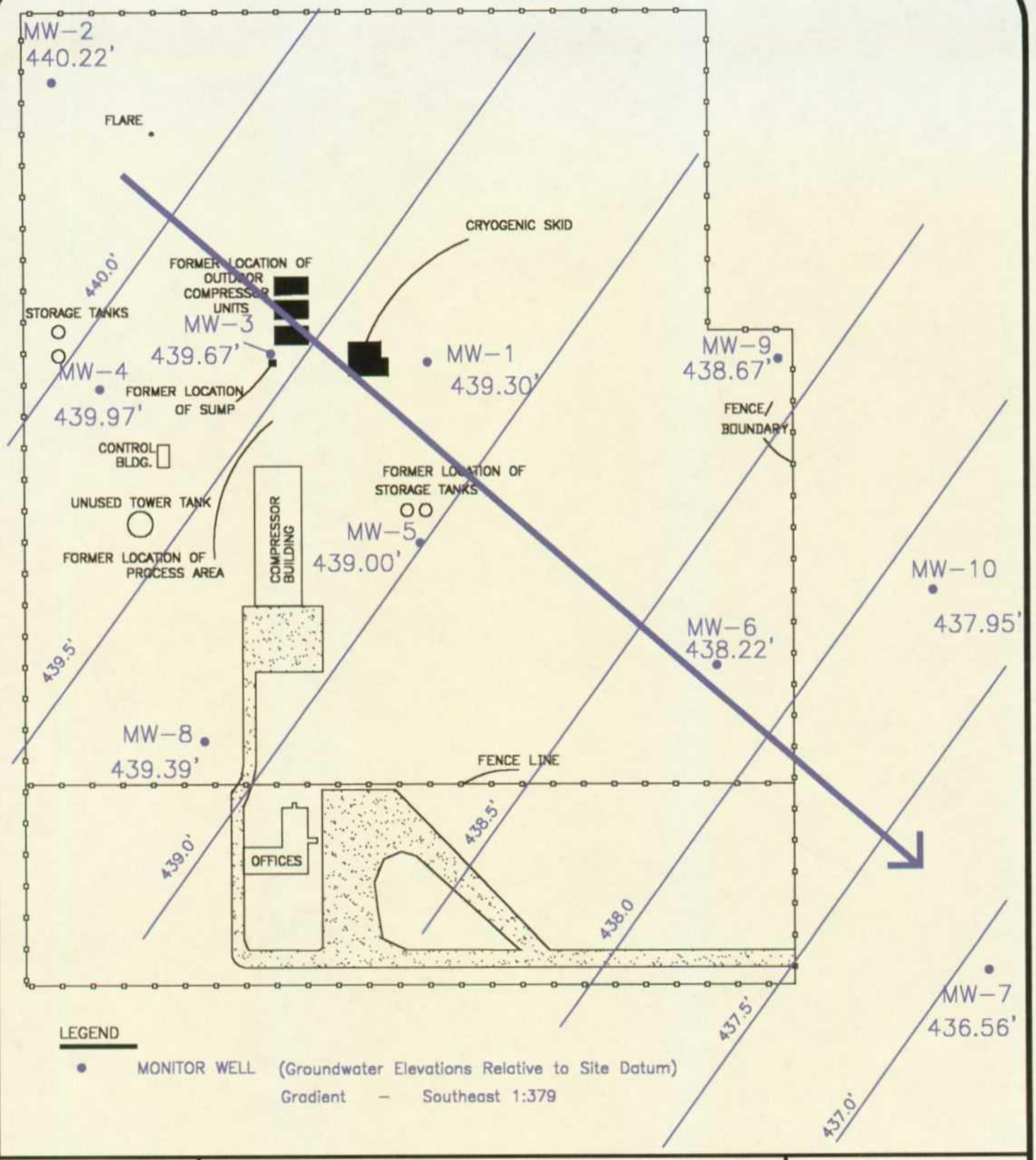


FIGURE 4
HOBBS GAS PLANT
HOBBS, LEA COUNTY, NEW MEXICO
GROUNDWATER GRADIENT MAP
JANUARY 5, 1999

Eco-logical Environmental Services Inc.

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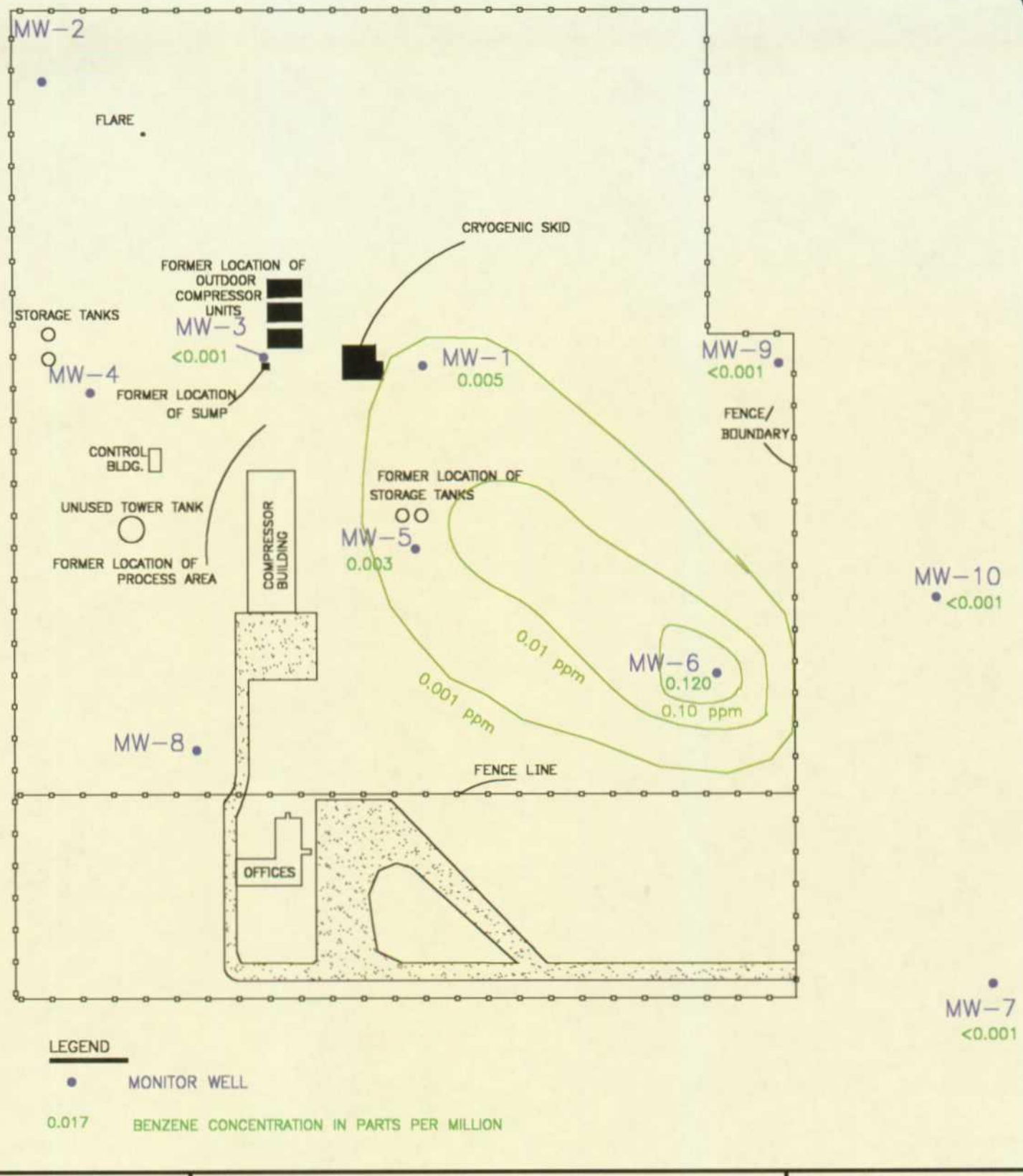

N

W E

FIGURE 5

HOBBS GAS PLANT

HOBBS, LEA COUNTY, NEW MEXICO

SITE MAP

Eco-logical Environmental Services Inc.

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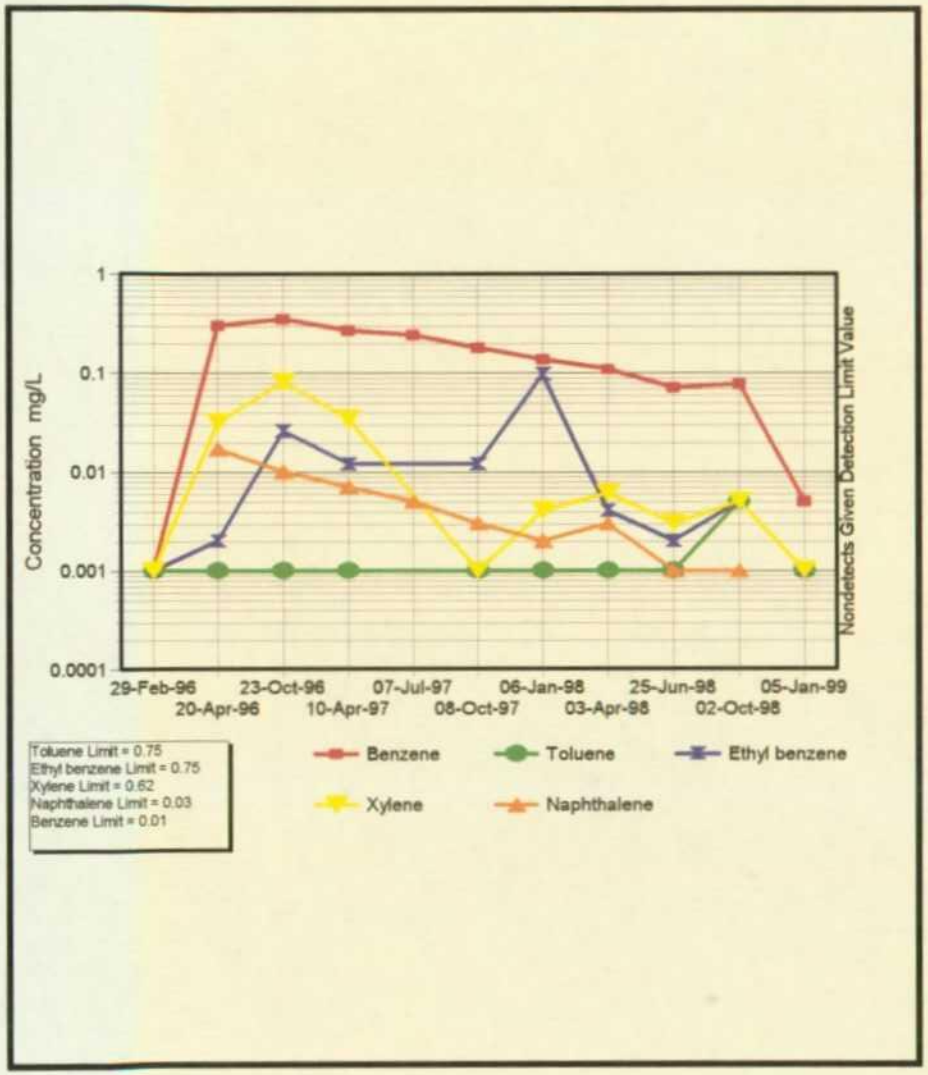
FORMER HOBBS GAS PLANT
MW-1 HISTORIC ANALYTICAL RESULTS



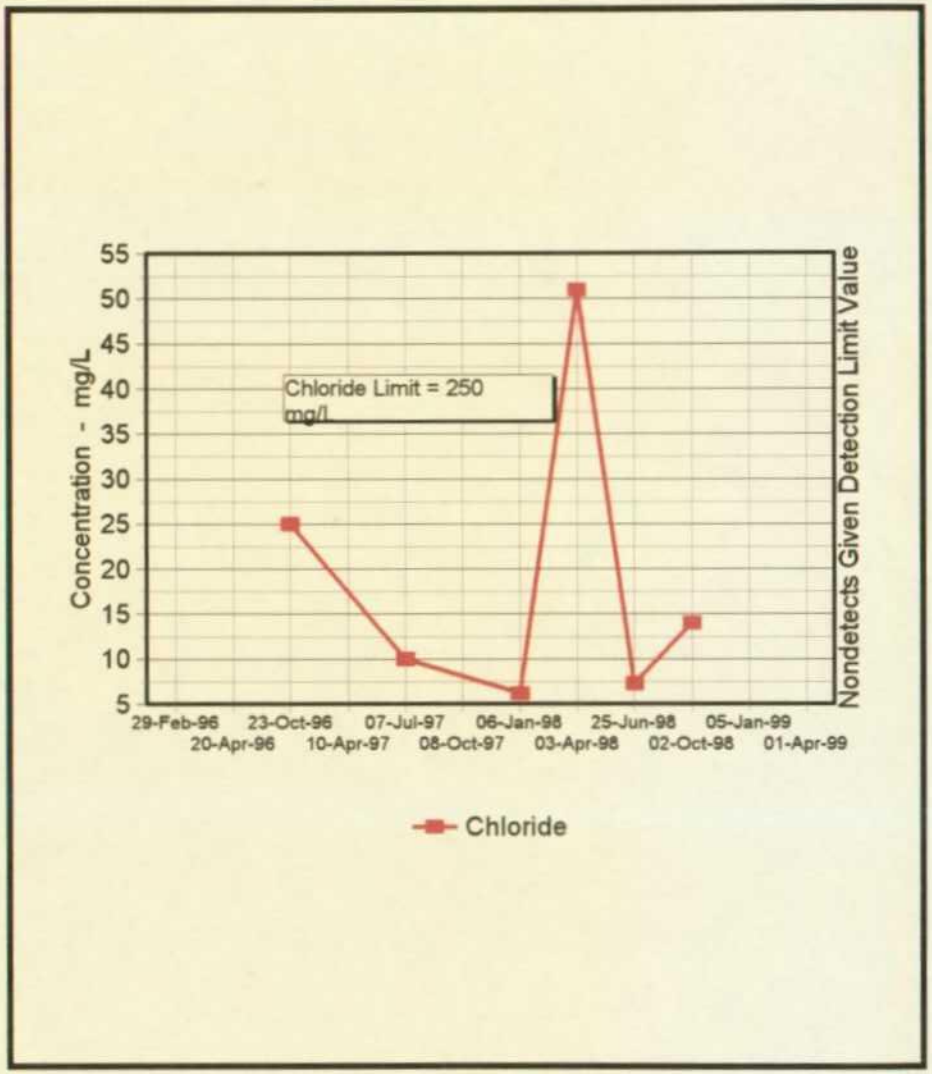
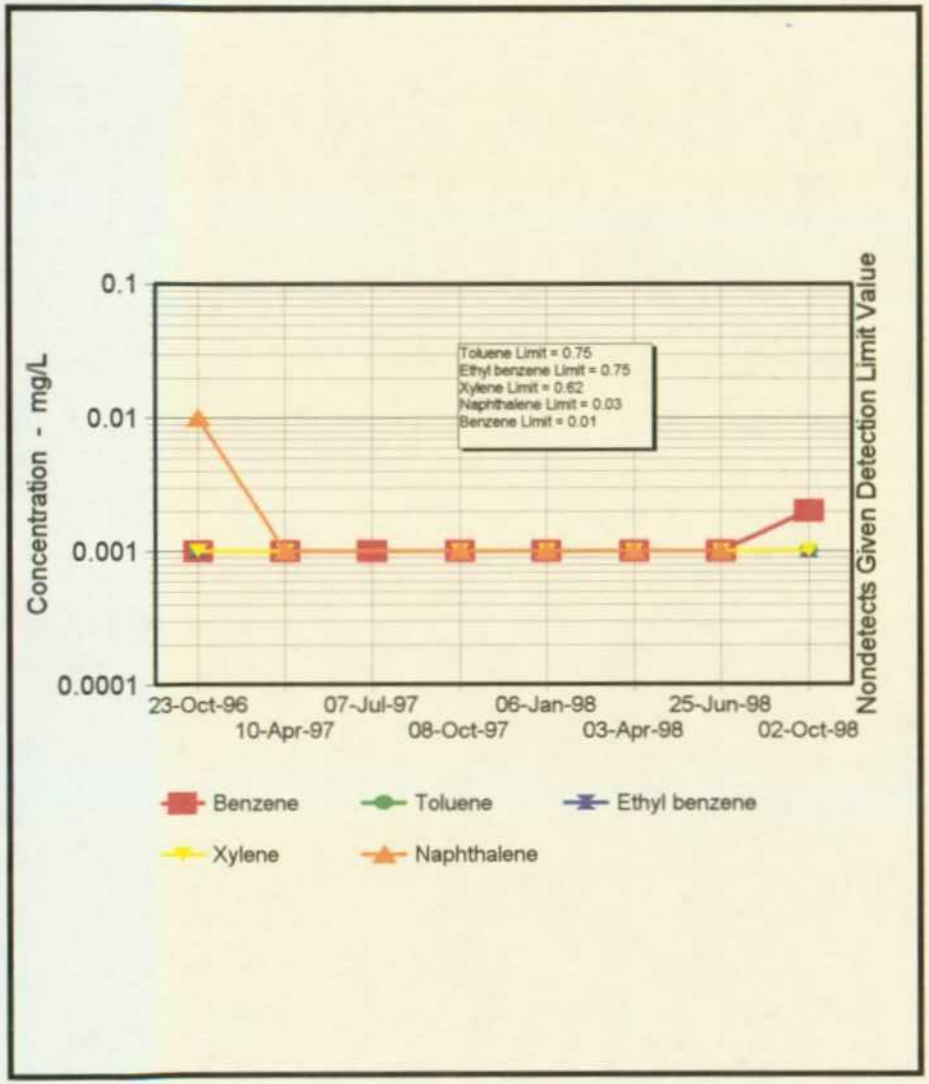


Figure 6

FORMER HOBBS GAS PLANT
MW-2 HISTORIC ANALYTICAL RESULTS



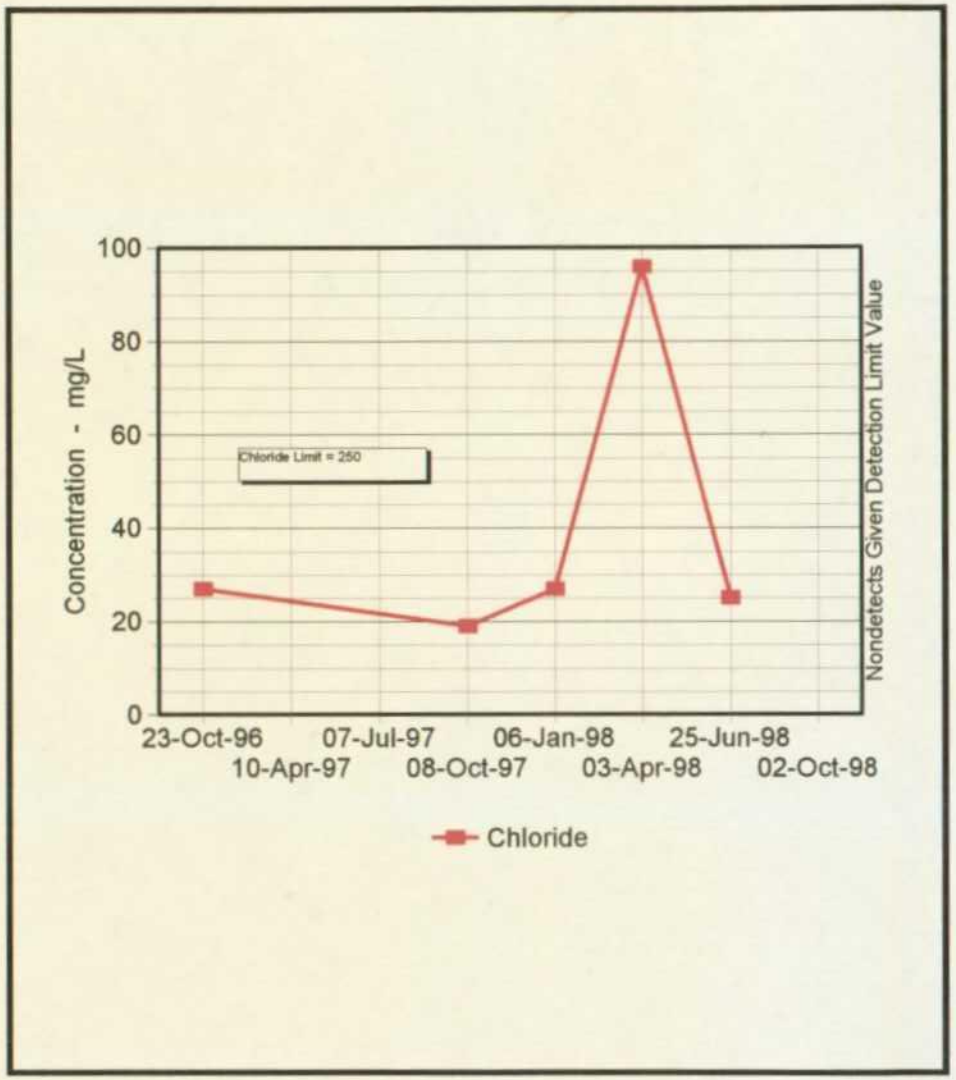
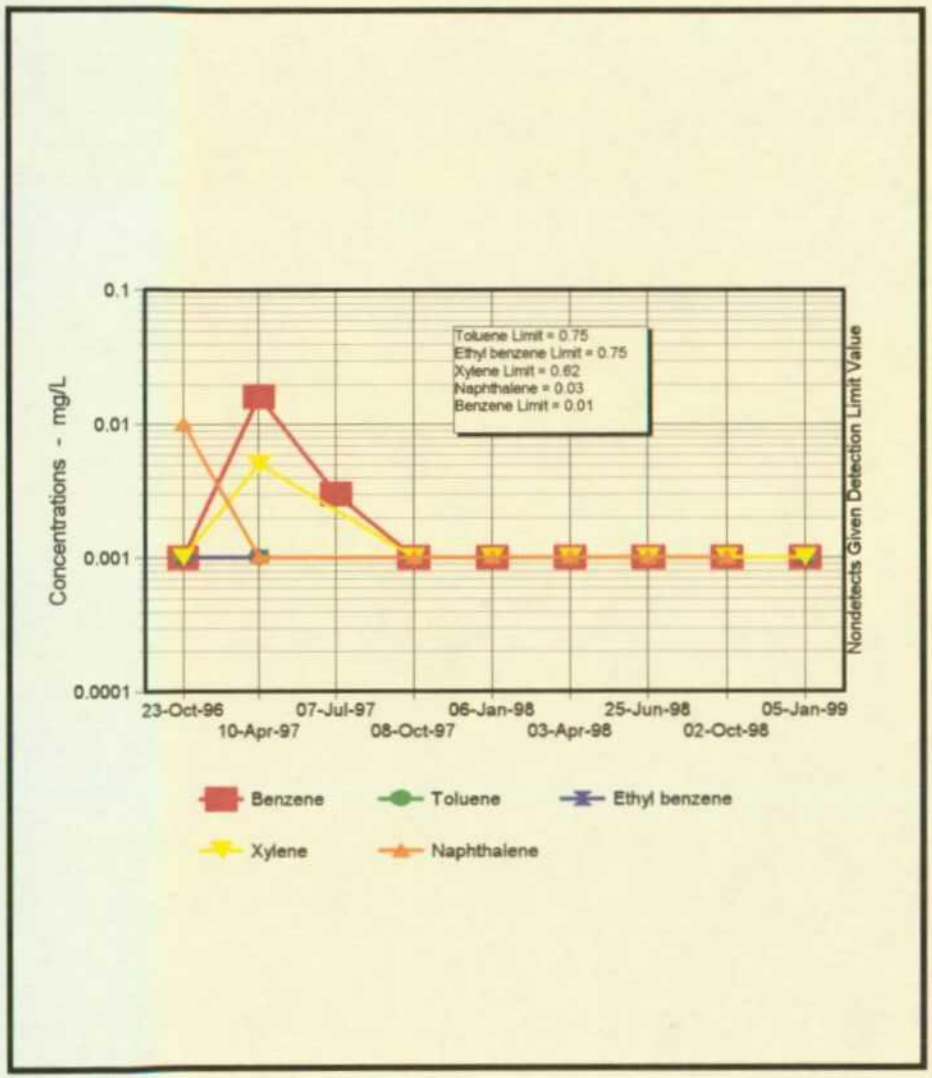


Figure 7

FORMER HOBBS GAS PLANT
MW-3 HISTORIC ANALYTICAL RESULTS



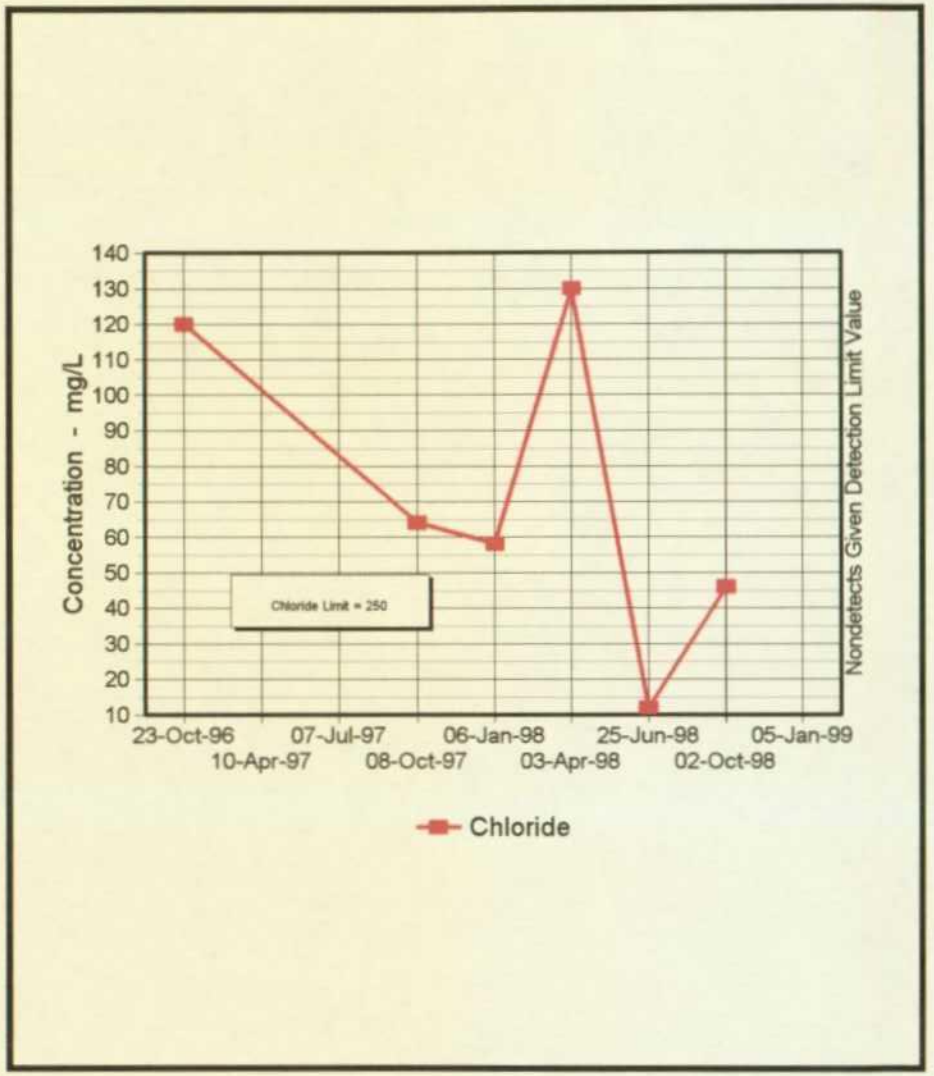
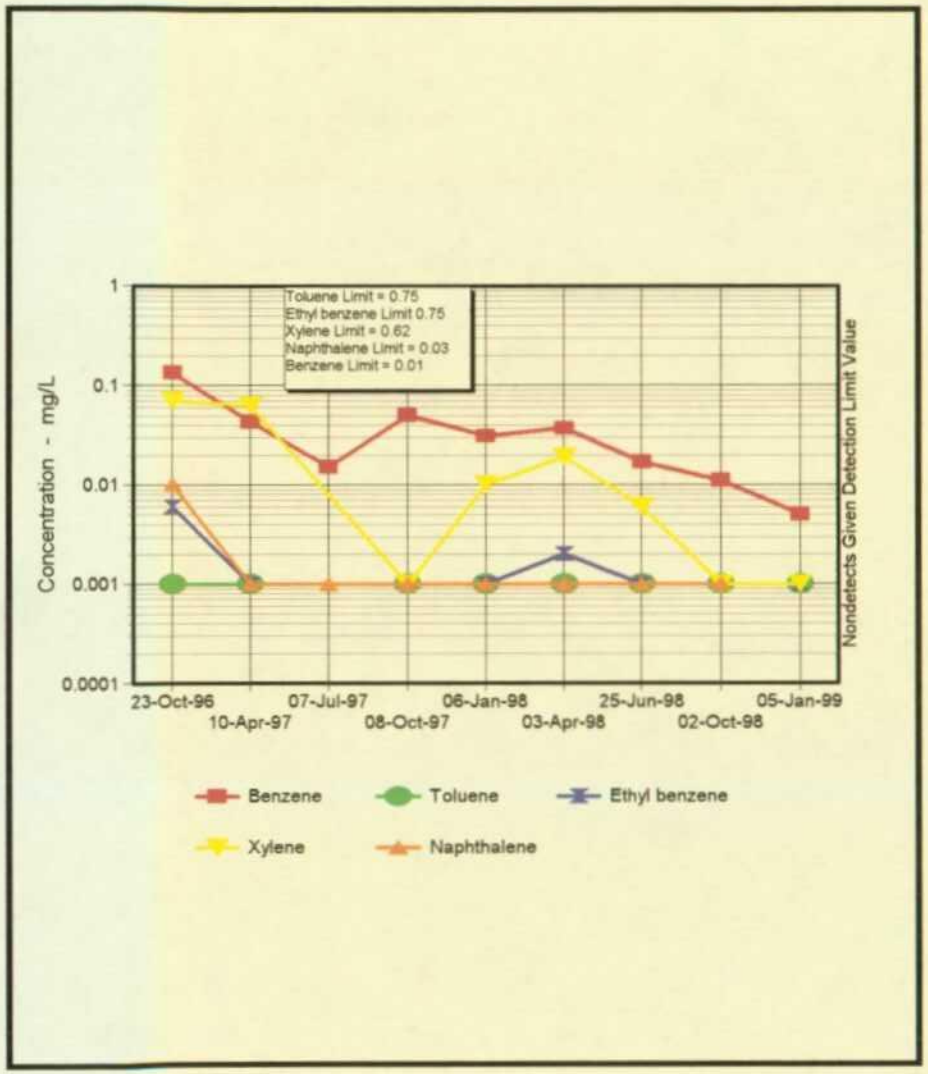


Figure 8

FORMER HOBBS GAS PLANT
MW-5 HISTORIC ANALYTICAL RESULTS



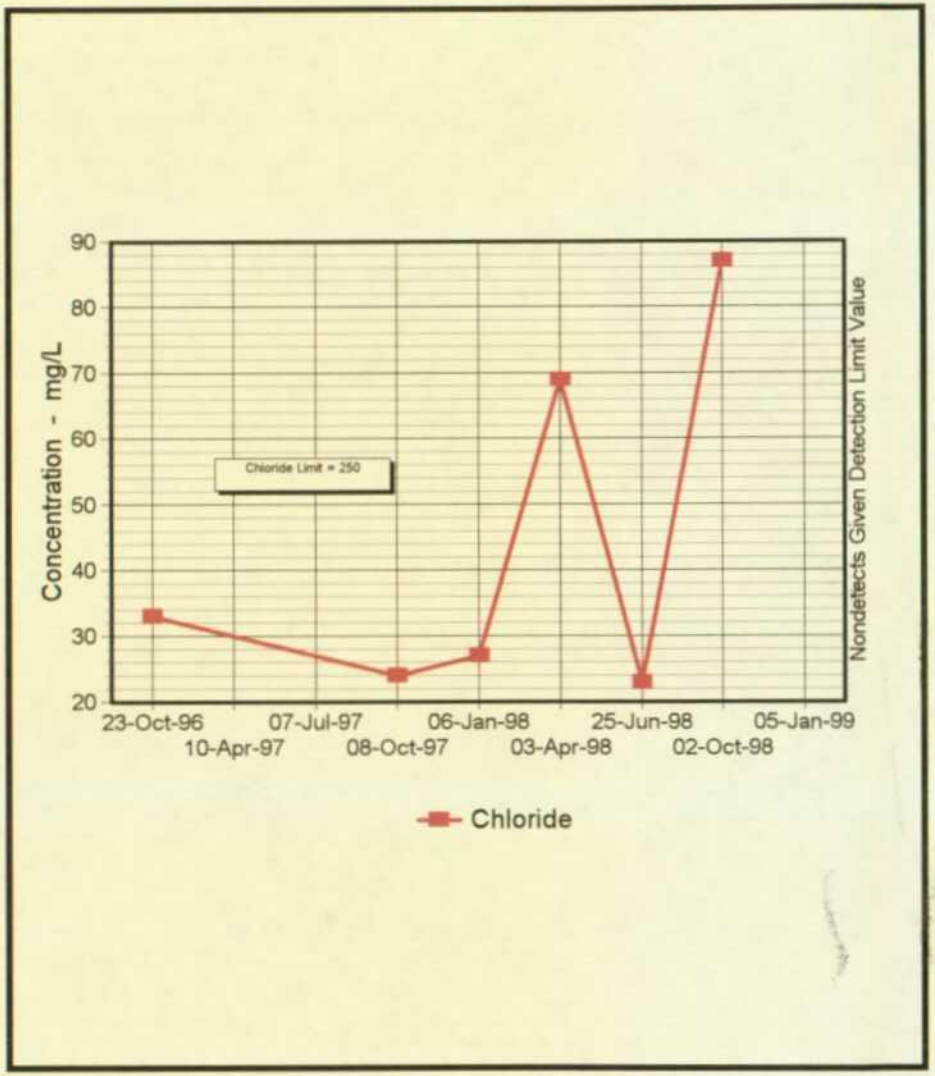
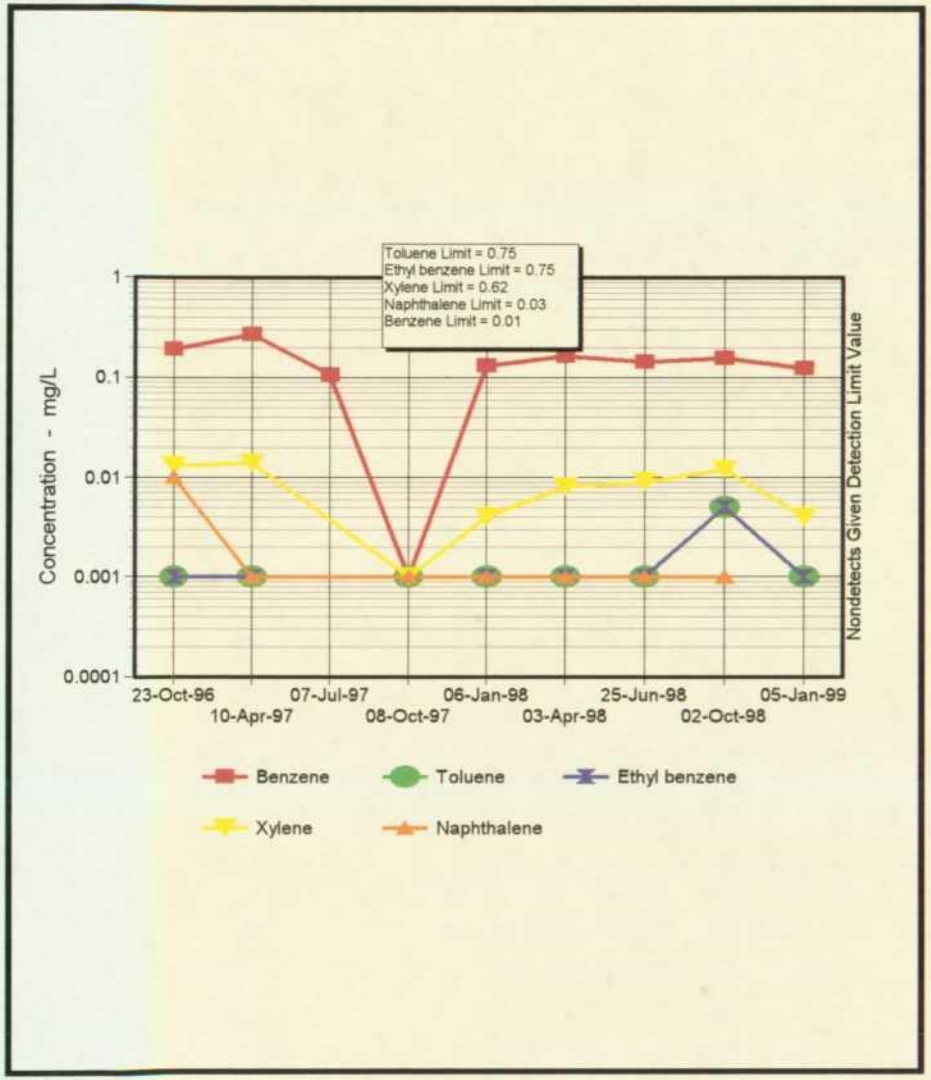


Figure 9

FORMER HOBBS GAS PLANT
MW-6 HISTORIC ANALYTICAL RESULTS



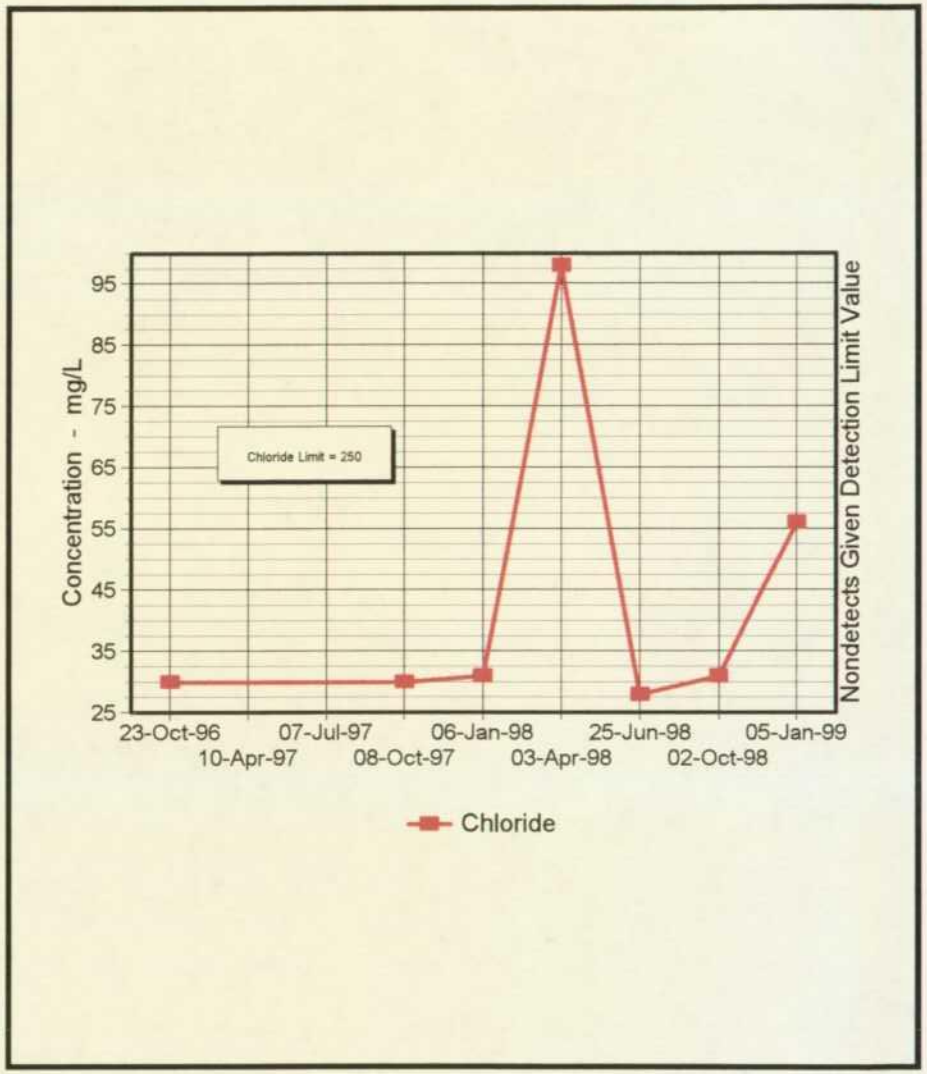


Figure 10

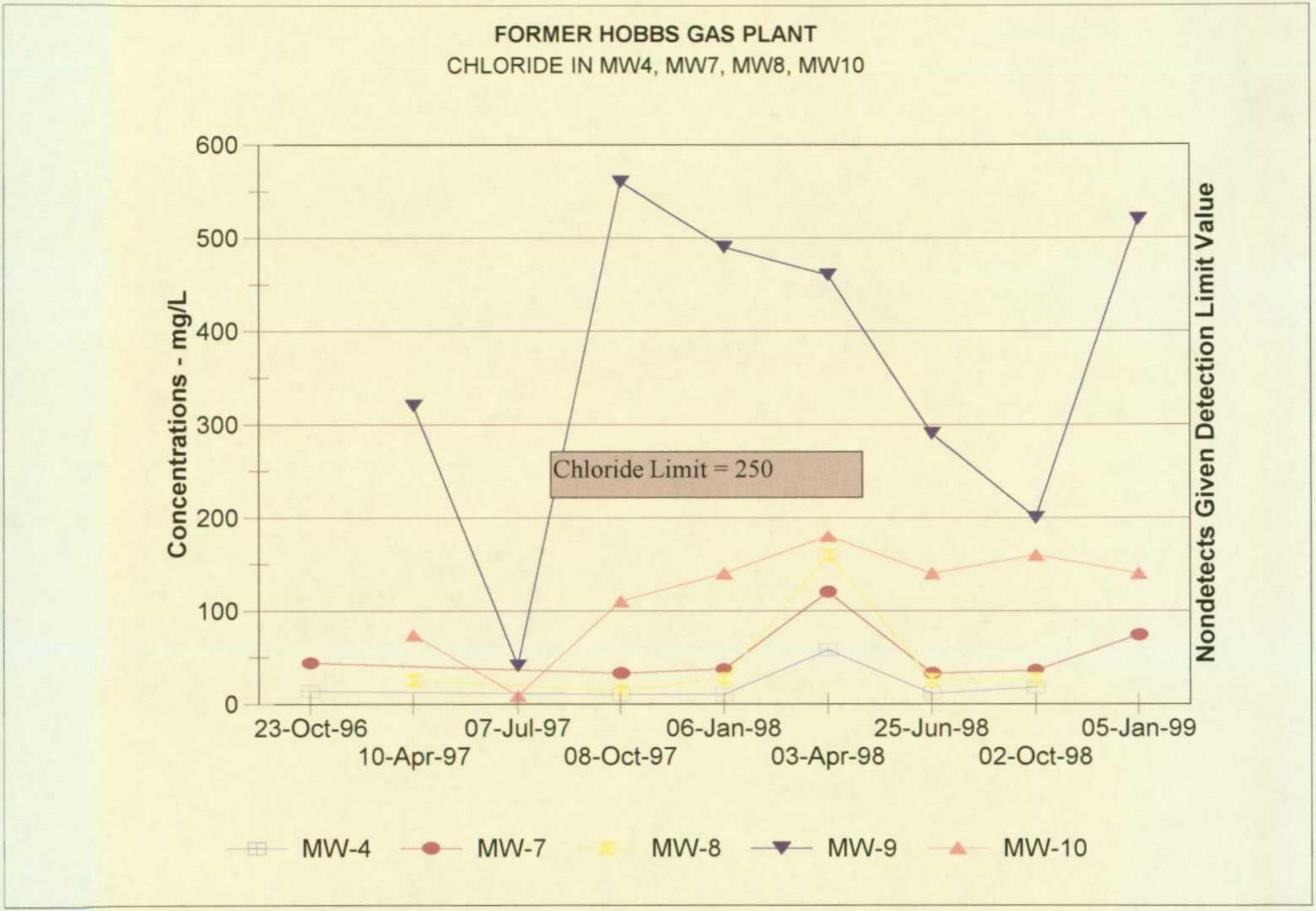

FORMER HOBBS GAS PLANT
CHLORIDE IN MW4, MW7, MW8, MW10
600
500
400
300
200
100
0
Concentrations - mg/L
Nondetects Given Detection Limit Value
Chloride Limit = 250
23-Oct-96
10-Apr-97
07-Jul-97
08-Oct-97
06-Jan-98
03-Apr-98
25-Jun-98
02-Oct-98
05-Jan-99
MW-4
MW-7
MW-8
MW-9
MW-10

Figure 11

Table 1
Groundwater Table in Feet
Monitor Well 1
Elevation of Screened Interval 436.7-456.7'

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	59.0	495.73	--	53.10	0.00	442.63
10/23/96	59.0	495.73	--	53.34	0.00	442.39
04/10/97	59.0	495.73	--	54.32	0.00	441.41
07/07/97	59.0	495.73	--	54.64	0.00	441.09
10/08/97	59.0	495.73	--	54.98	0.00	440.75
01/06/98	59.0	495.73	--	55.28	0.00	440.45
04/03/98	59.0	495.73	--	55.60	0.00	440.13
06/25/98	59.0	495.73	--	55.87	0.00	439.86
10/02/98	59.0	495.73	--	56.36	0.00	439.37
01/05/99	59.0	495.73	--	54.98	0.00	440.75

Table 2
Groundwater Table in Feet
Monitor Well 2
Elevation of Screened Interval 440.4-460.4

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.0	502.41	--	58.33	0.00	444.08
04/10/97	62.0	502.41	--	59.54	0.00	442.87
07/07/97	62.0	502.41	--	60.00	0.00	442.41
10/08/97	62.0	502.41	--	60.39	0.00	442.02
01/06/98	62.0	502.41	--	60.70	0.00	441.71
04/03/98	62.0	502.41	--	61.06	0.00	441.35
06/25/98	62.0	502.41	--	61.37	0.00	441.04
10/02/98	62.0	502.41	--	61.91	0.00	440.50
01/05/99	62.0	502.41	--	60.39	0.00	442.02

Table 3
Groundwater Table in Feet
Monitor Well 3
Elevation of Screened Interval 434.2-454.23

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.9	499.13	--	56.28	0.00	442.85
04/10/97	64.9	499.13	--	57.25	0.00	441.88
07/07/97	64.9	499.13	--	57.59	0.00	441.54
10/08/97	64.9	499.13	--	57.92	0.00	441.21
01/06/98	64.9	499.13	--	58.24	0.00	440.89
04/03/98	64.9	499.13	--	58.41	0.00	440.89
06/25/98	64.9	499.13	--	58.84	0.00	440.29
10/02/98	64.9	499.13	--	59.36	0.00	439.77
01/05/99	64.9	499.13	--	57.92	0.00	441.21

Table 4
Groundwater Table in Feet
Monitor Well 4
Elevation of Screened Interval 436.8-456.8

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.3	501.12	--	58.12	0.00	443.00
04/10/97	64.3	501.12	--	58.83	0.00	442.29
07/07/97	64.3	501.12	--	59.19	0.00	441.93
10/08/97	64.3	501.12	--	59.56	0.00	441.56
01/06/98	64.3	501.12	--	59.91	0.00	441.21
04/03/98	64.3	501.12	--	60.21	0.00	440.91
06/25/98	64.3	501.12	--	60.48	0.00	440.64
10/02/98	64.3	501.12	--	60.97	0.00	440.15
01/05/99	64.3	501.12	--	59.56	0.00	441.56

Table 5
Groundwater Table in Feet
Monitor Well 5
Elevation of Screened Interval 436.3-456.3

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	64.5	500.84	--	58.96	0.00	441.88
04/10/97	64.5	500.84	--	59.77	0.00	441.07
07/07/97	64.5	500.84	--	60.10	0.00	440.74
10/08/97	64.5	500.84	--	60.31	0.00	440.53
01/06/98	64.5	500.84	--	60.76	0.00	440.08
04/03/98	64.5	500.84	--	61.05	0.00	439.79
06/25/98	64.5	500.84	--	61.05	0.00	439.79
10/02/98	64.5	500.84	--	61.77	0.00	439.07
01/05/99	64.5	500.84	--	60.31	0.00	440.53

Table 6
Groundwater Table in Feet
Monitor Well 6
Elevation of Screened Interval 433.6-453.6

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
09/17/96	Well Not Installed					
10/23/96	62.7	496.27	--	55.53	0.00	440.74
04/10/97	62.7	496.27	--	56.28	0.00	439.99
07/07/97	62.7	496.27	--	56.58	0.00	439.69
10/08/97	62.7	496.27	--	56.88	0.00	439.39
01/06/98	62.7	496.27	--	57.23	0.00	439.04
04/03/98	62.7	496.27	--	57.49	0.00	438.78
06/25/98	62.7	496.27	--	57.49	0.00	438.78
10/02/98	62.7	496.27	--	57.17	0.00	438.10
01/05/99	62.7	496.27	--	56.88	0.00	439.39

Table 7
Groundwater Table in Feet
Monitor Well 7
Elevation of Screened Interval 426.4-446.4

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	69.0	495.44	--	57.28	0.00	438.16
07/07/97	69.0	495.44	--	57.54	0.00	437.90
10/08/97	69.0	495.44	--	57.85	0.00	437.59
01/06/98	69.0	495.44	--	58.17	0.00	437.27
04/03/98	69.0	495.44	--	58.47	0.00	436.97
06/25/98	69.0	495.44	--	58.70	0.00	436.74
10/02/98	69.0	495.44	--	58.99	0.00	436.45
01/05/99	69.0	495.44	--	57.85	0.00	437.59

Table 8
Groundwater Table in Feet
Monitor Well 8
Elevation of Screened Interval 430.9-450.9

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	70.9	501.81	--	60.32	0.00	441.49
07/07/97	70.9	501.81	--	60.67	0.00	441.49
10/08/97	70.9	501.81	--	61.00	0.00	440.81
01/06/98	70.9	501.81	--	61.35	0.00	440.46
04/03/98	70.9	501.81	--	61.61	0.00	440.20
06/25/98	70.9	501.81	--	61.87	0.00	439.94
10/02/98	70.9	501.81	--	62.27	0.00	439.54
01/05/99	70.9	501.81	--	61.00	0.00	440.81

Table 9
Groundwater Table in Feet
Monitor Well 9
Elevation of Screened Interval 429.5-449.5

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	67.3	496.85	--	56.29	0.00	440.56
07/07/97	67.3	496.85	--	56.66	0.00	440.19
10/08/97	67.3	496.85	--	57.00	0.00	439.85
01/06/98	67.3	496.85	--	57.38	0.00	439.47
04/03/98	67.3	496.85	--	57.67	0.00	439.18
06/25/98	67.3	496.85	--	57.95	0.00	438.90
10/02/98	67.3	496.85	--	58.34	0.00	438.51
01/05/99	67.3	496.85	--	57.00	0.00	439.85

Table 10
Groundwater Table in Feet
Monitor Well 10
Elevation of Screened Interval 426.0-446.0

Date	TD	TOC Elevation	Depth to PSH	Depth to GW	Product Thickness	GW Elev. Corrected for PSH
10/23/96	Well Not Installed					
04/10/97	66.5	492.46	--	52.83	0.00	439.63
07/07/97	66.5	492.46	--	53.09	0.00	439.37
10/08/97	66.5	492.46	--	53.43	0.00	439.03
01/06/98	66.5	492.46	--	53.86	0.00	438.60
04/03/98	66.5	492.46	--	54.17	0.00	438.29
06/25/98	66.5	492.46	--	54.35	0.00	438.11
10/02/98	66.5	492.46	--	54.76	0.00	437.70
01/05/99	66.5	492.46	--	53.43	0.00	439.03

Table 11
Historic Groundwater Analytical Results
in mg/l
MW-1

Date	B	T	E	X	Phenol	Naphthalene	Chloride
02/14/96	0.083	<0.001	<0.001	0.008	–	–	–
02/29/96	<0.001	<0.001	<0.001	<0.001	–	–	–
04/20/96	0.305	<0.001	0.002	0.032	<0.001	0.017	–
10/23/96	0.352	<0.001	0.026	0.081	0.025	0.01	–
04/10/97	0.268	<0.001	0.012	0.034	<0.001	0.007	–
07/07/97	0.243	–	–	–	–	0.005	–
10/08/97	0.180	<0.001	0.012	<0.001	–	.003	<10
01/06/98	0.138	<0.001	0.008	<0.001	–	0.002	6.2
04/03/98	0.109	<0.001	0.004	0.006	–	0.003	51
06/25/98	0.071	<0.001	0.002	0.003	–	<0.001	7.3
10/02/98	0.078	<0.005	<0.005	<0.005	–	<0.001	14.0
01/05/99	0.005	<0.001	<0.001	<0.001	–	–	–

Shaded areas indicate over OCD Limits

Table 12
Historic Groundwater Analytical Results
in mg/l
MW-2

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	–
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–
07/07/97	<0.001	–	–	–	–	–	–
10/08/97	<0.001	<0.001	<0.001	<0.001	–	<0.001	19
01/06/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	96
06/25/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	25.0
10/02/98	0.002	<0.001	<0.001	<0.001	–	<0.001	–
01/05/99	Sampling discontinued as approved by OCD						

Table 13 Historic Groundwater Analytical Results in mg/l MW-3							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	0.016	<0.001	<0.001	0.005	<0.001	<0.001	--
07/07/97	0.003	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	64
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	130
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	12
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	46
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 14 Historic Groundwater Analytical Results in mg/l MW-4							
Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	--
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	<10
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	10
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	11
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	18
01/05/99	Sampling discontinued as approved by OCD						

Table 15
Historic Groundwater Analytical Results
in mg/l
MW-5

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.135	<0.001	0.006	0.071	<0.001	<0.01	--
04/10/97	0.043	<0.001	<0.001	0.063	<0.001	0.001	--
07/07/97	0.015	--	--	--	--	<0.001	--
10/08/97	0.05	<0.001	<0.001	<0.001	--	0.001	24
01/06/98	0.031	<0.001	<0.001	0.010	--	<0.001	27
04/03/98	0.037	<0.001	0.002	0.019	--	0.001	69
06/25/98	0.017	<0.001	<0.001	0.006	--	<0.001	23
10/02/98	0.011	<0.001	<0.001	<0.001	--	<0.001	87
01/05/99	0.005	<0.001	<0.001	<0.001	--	--	--

Shaded areas indicate over OCD Limits

Table 16
Historic Groundwater Analytical Results
in mg/l
MW-6

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	0.192	<0.001	<0.001	0.013	<0.001	<0.01	--
04/10/97	0.272	<0.001	<0.001	0.014	<0.001	<0.001	--
07/07/97	0.106	--		--	--	--	--
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	30
01/06/98	0.132	<0.001	<0.001	0.004	--	<0.001	31
04/03/98	0.165	<0.001	<0.001	0.008	--	<0.001	98
06/25/98	0.143	<0.001	<0.001	0.009	--	<0.001	28
10/02/98	0.157	<0.005	<0.005	0.012	--	<0.001	31
01/05/99	0.123	<0.001	<0.001	0.004	--	--	56

Shaded areas indicate over OCD Limits

Table 17
Historic Groundwater Analytical Results
in mg/l
MW-7

Date	B	T	E	X	Phenol	Naphthalene	Chloride
01/09/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–
07/07/97	<0.001	–	–	–	–	–	–
10/08/97	<0.001	<0.001	<0.001	<0.001	–	<0.001	33
01/06/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	37
04/03/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	120
06/25/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	33
10/02/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	36
01/05/99	<0.001	<0.001	<0.001	<0.001	–	–	74

Table 18
Historic Groundwater Analytical Results
in mg/l
MW-8

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–
07/07/97	<0.001	–	–	–	–	–	–
10/08/97	<0.001	<0.001	<0.001	<0.001	–	<0.001	15
01/06/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	27
04/03/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	160
06/25/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	26
10/02/98	<0.001	<0.001	<0.001	<0.001	–	<0.001	27
01/05/99	–	–	–	–	–	–	–

Table 19
Historic Groundwater Analytical Results
in mg/l
MW-9

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	320
07/07/97	<0.001	--	--	--	--	--	41
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	560
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	490
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	460
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	290
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	200
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	520

Shaded areas indicate over OCD Limits

Table 20
Historic Groundwater Analytical Results
in mg/l
MW-10

Date	B	T	E	X	Phenol	Naphthalene	Chloride
10/23/96	Well Not Installed						
04/10/97	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
07/07/97	<0.001	--	--	--	--	--	8.8
10/08/97	<0.001	<0.001	<0.001	<0.001	--	<0.001	110
01/06/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	101
04/03/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	180
06/25/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	140
10/02/98	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
01/05/99	<0.001	<0.001	<0.001	<0.001	--	--	140

IV. Conclusions and Recommendations

The plant operations have ceased at the site and the sources that have caused the impacts to the groundwater have been removed. In addition, the removed impacted soils have been remediated to meet WQCC Guideline levels and have been returned to the excavations per the Soils Work Plan approved in January 1996. One of the ten wells at the Former Hobbs Gas Plant continues to show dissolved phase hydrocarbons (benzene) at levels above the OCD Guidelines.

- Eight (8) full quarterly groundwater monitoring and sampling events have been conducted at this site.
- Groundwater has dropped an average of 3.1 feet since the first sampling event of October 1996.
- Dissolved phase hydrocarbons are present in three of the ten monitor wells at the site (MW-1, MW-5, and MW-6) however, no free-phase hydrocarbons have been observed at the site.
- One monitor well contains concentrations of benzene above the WQCC Guideline level (MW-6). Benzene levels are generally declining with the highest concentration down-gradient from the source in well MW-6. The property line is within 130 feet parallel to groundwater flow. Concentrations in the next down-gradient well (located off-site), a distance of 470 feet from MW-6, remains nondetect.
- Xylene concentrations continue to be present in select wells but at levels below the WQCC Guideline levels.
- Soil cleanup objectives of the January 1997 Abatement and Closure plan have been met.

The level of benzene in MW-6 is above the WQCC Guideline level of 0.01 ppm. The general trend in the benzene levels over the past four sampling events shows a decrease in benzene concentrations. Elevated chloride levels continue to be present in MW-9 and vary both above and below the WQCC Guideline levels and will continue to be monitored. Based on interviews with KN personnel no source of the chloride can be placed on former operations of the plant. The source of the chloride is not known and is **not** believed to be from the plant.

Based on historical analytical results, a reduction to semi-annual sampling and monitoring is proposed. Benzene is proposed to be monitored in wells MW-1, MW-3, MW-5 to MW-7, MW-9, and MW-10. Chloride is proposed to be monitored in wells MW-6, MW-7, MW-9, and MW-10. No testing is proposed for MW-2, MW-4, and MW-8 except for water levels at this time as requested in the January 6, 1998 Annual Report and approved by the OCD letter dated December 15, 1998.

V. Quality Assurance / Quality Control Procedures

Field quality assurance/quality control (QA/QC) measures consisted of equipment decontamination, use of disposable sampling equipment, calibrations of field instruments, ensuring that the samples were analyzed within the EPA holding times, documentation of work activities in a bound logbook, and adherence to strict chain-of-custody protocol. The laboratory QA/QC measures were based on guidance published in the most current edition of the EPA Test Methods for Evaluating Solid Waste SW-846.

Quality Control samples were also obtained to evaluate the data. A trip blank was also analyzed with nondetectable results, suggesting that no cross-contamination occurred during shipment. Cross contamination during sampling was limited due to the use of disposable equipment between wells and gauging and purging of wells from least contaminated to most contaminated. A duplicate sample was obtained from MW-6. A comparison to the original sample of the contaminates that were present reveals results within 8.7% on total BTEX. On a per chemical basis, the total difference occurred on benzene which differed by 8.9%. This duplicate difference does not indicate any errors in the sample collection or testing. The following table presents the QA/QC results for comparison.

Quality Control Samples	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
Trip	<0.001	<0.001	<0.001	<0.001
MW-6	0.123	<0.001	<0.001	0.004
MW-6D (duplicate)	0.112	<0.001	<0.001	0.004

Reported laboratory quality control parameters do not appear to indicate suspect results. No damaged or compromised containers were noted. No unusual relative percent difference (RPD) results were noted.

TRACE ANALYSIS, INC.

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

ANALYTICAL RESULTS FOR
Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Lab Receiving # : 9901000038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

Date: Jan 12, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116218	MW-1	Water	0.005	<0.001	<0.001	<0.001	0.005
116219	MW-3	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116220	MW-5	Water	0.005	<0.001	<0.001	<0.001	0.005
116221	MW-6	Water	0.123	<0.001	<0.001	0.004	0.127
116222	MW-7	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116223	MW-9	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116224	MW-10	Water	<0.001	<0.001	<0.001	<0.001	<0.001
116225	MW-6D	Water	0.112	<0.001	<0.001	0.004	0.116
Method Blank			<0.001	<0.001	<0.001	<0.001	
Reporting Limit			0.001	0.001	0.001	0.001	
QC			0.093	0.093	0.094	0.276	
RPD			2	1	2	2	
% Extraction Accuracy			96	96	99	97	
% Instrument Accuracy			93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

Director, Dr. Blair Leftwich

1-12-99
Date

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR

Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Lab Receiving # : 9901000038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

Date: Feb 03, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116226	Trip Blank	Water	<0.001	<0.001	<0.001	<0.001	<0.001
	Method Blank		<0.001	<0.001	<0.001	<0.001	
	Reporting Limit		0.001	0.001	0.001	0.001	
	QC		0.093	0.093	0.094	0.276	
	RPD		2	1	2	2	
	% Extraction Accuracy		96	96	99	97	
	% Instrument Accuracy		93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

RL

Director, Dr. Blair Leftwich

2-3-99

Date

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
ECO -LOGICAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 12, 1999
Receiving Date: 01/06/99
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/07/99
Analysis Date: 01/07/99
Sampling Date: 01/05/99
Sample Condition: Intact & Cool
Sample Received by: VW
Project Name: Former Hobbs Gas Plant

TA#	FIELD CODE	CHLORIDE (mg/L)
T116221	MW 6	56
T116222	MW 7	74
ICV		12.91
CCV		11.85
REPORTING LIMIT		0.5
RPD		2
% Extraction Accuracy		108
% Instrument Accuracy		99

METHODS: EPA SW 300.0
CHEMIST: JS
CHLORIDE SPIKE: 62.5 mg/L CHLORIDE
CHLORIDE CV: 12.5 mg/L CHLORIDE

Director, Dr. Blair Leftwich

1-12-99
DATE

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

ANALYTICAL RESULTS FOR
ECO -LOGICAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 12, 1999
Receiving Date: 01/06/99
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/07/99
Analysis Date: 01/07/99
Sampling Date: 01/05/99
Sample Condition: Intact & Cool
Sample Received by: VW
Project Name: Former Hobbs Gas Plant

TA#	FIELD CODE	CHLORIDE (mg/L)
T116223	MW 9	520
T116224	MW 10	140
ICV		11.85
CCV		11.85
REPORTING LIMIT		0.5
RPD		0
% Extraction Accuracy		94
% Instrument Accuracy		95

METHODS: EPA SW 300.0
CHEMIST: JS
CHLORIDE SPIKE: 62.5 mg/L CHLORIDE
CHLORIDE CV: 12.5 mg/L CHLORIDE

Director, Dr. Blair Leftwich

1-12-99
DATE

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR

Eco-Logical Environmental Services
Attention Carrie Eick
2200 Market Street
Midland TX 79703

Date: Feb 03, 1999
Date Rec: 1/6/99
Project: 279-512
Proj Name: Former Hobbs Gas Plant
Proj Loc: Hobbs, NM

Lab Receiving # : 9901CC0038
Sampling Date: 1/5/99
Sample Condition: Intact and Cool
Sample Received By: VW

TA#	Field Code	MATRIX	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
116226	Trip Blank	Water	<0.001	<0.001	<0.001	<0.001	<0.001
Method Blank			<0.001	<0.001	<0.001	<0.001	
Reporting Limit			0.001	0.001	0.001	0.001	
QC			0.093	0.093	0.094	0.276	
RPC			2	1	2	2	
% Extraction Accuracy			96	96	99	97	
% Instrument Accuracy			93	93	94	92	

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
BTEX	EPA 5030	1/10/99	EPA 8021B	1/10/99	RC	0.100 ea	0.1 ea

RC

Director, Dr. Blair Leftwich

2-3-99

Date

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
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CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # 38

Company Name: ECO-LOGICAL
Phone #: 915/520-7535
Address: 2200 Market Midland, TX
Fax #: 915/520-7737
Contact Person: CARRIE Eich
Invoice to: (If different from above)
Project #: 279-S12
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, ~~TX~~ NM
Sampler Signature: Carrie E. Eich

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
116218	MW-1	4	40 mL	✓				✓		✓		1/5/99	12:20
219	MW-3	4	40 mL	✓				✓		✓			11:30
220	MW-5	4	40 mL	✓				✓		✓			12:00
221	MW-6	4	40 mL	✓				✓		✓			13:00
	MW-6	1	250 mL	✓						✓			13:00
222	MW-7	4	40 mL	✓				✓		✓			9:35
	MW-7	1	250 mL	✓						✓			9:35
223	MW-9	4	40 mL	✓				✓		✓			11:00
	MW-9	1	250 mL	✓						✓			11:00
224	MW-10	4	40 mL	✓				✓		✓			10:30
	MW-10	1	250 mL	✓						✓			10:30

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	Chloride				Turn Around Time if different from standard	Hold
	✓													✓					
	✓																		
	✓																		
	✓																		
														✓					
	✓																		
														✓					
	✓																		
														✓					
	✓																		
														✓					

Relinquished by: Carrie E. Eich Date: 1/5/99 Time: 4:10 PM
Received by: Helen Shelton Date: 1/5/99 Time: 4:10 PM
Relinquished by: Helen Shelton Date: 1/5/99 Time: 6:00 PM
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Vicki Wade Date: 1-6-99 Time: 9:00 AM

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 4 °
Log-in Review MS

REMARKS:
Keep D.L. Low 1-12
Historic Results Attached
Need by 1/25/99
32 samples-HS
Carrier # Greyhound 1557589924

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

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TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: Eco-logical
Phone #:
Address: (Street, City, Zip)
Fax #:
Contact Person: CARRIE EICH
Invoice to: (If different from above)
Project #: 279-S12
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, NM
Sampler Signature: Carrie E. Eich

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
116225	MW-6D	4	16L	✓				✓		✓		1/5/99	13:00
226	TRIP#	2	40L	✓						✓			

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eich	1/5/99	4:10PM	Helen Shelton	1/5/99	4:10 PM
Helen Shelton	1/5/99	6:00PM			
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			Vicki Wrede	1-6-99	9:00

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS:
need by 1/25/99

Carrier # Greyhound 1557589924

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 6 samples-HS

ORIGINAL COPY

TraceAnalysis, Inc.

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CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID #

Company Name: ECO-LOGICAL
Phone #: 915/520-7535
Address: 2200 Market Midland, TX
Fax #: 915/520-7737
Contact Person: CARRIE EICK
Invoice to: (If different from above)
Project #: 279-512
Project Name: Former Hobbs Gas PLANT
Project Location: Hobbs, ~~TX~~ NM
Sampler Signature: Carrie E. Eick

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	Chloride	Turn Around Time if different from standard	Hold
	MW-1	4	16L	✓				✓		✓		1/5/99	12:20		✓															
	MW-3	4	.16L	✓				✓		✓			11:30		✓															
	MW-5	4	.16L	✓				✓		✓			12:00		✓															
	MW-6	4	.16L	✓				✓		✓			13:00		✓															
	MW-6	1	.25L	✓						✓			13:00															✓		
	MW-7	4	16L	✓				✓		✓			9:35		✓															
	MW-7	1	.25L	✓						✓			9:35															✓		
	MW-9	4	.16L	✓				✓		✓			11:00		✓															
	MW-9	1	.25L	✓						✓			11:00															✓		
	MW-10	4	.16L	✓				✓		✓			10:30		✓															
	MW-10	1	.25L	✓						✓			10:30															✓		

Relinquished by: Carrie E. Eick Date: 1/5/99 Time: 4:10 PM
Received by: Helen Shelton Date: 1/5/99 Time: 4:10 PM
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

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

REMARKS: Keep DL Low
Historic Results Attached

Carrier # Greyhound

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32 samples-HC

CHART COPY

GROUNDWATER LEVELS AND MEASUREMENTS
K N ENERGY, INC.
FORMER HOBBS GAS PLANT
HOBBS, NEW MEXICO
ECO JOB NO. 279-512

East	10493.85	10048.36	10308.93	10104.83	10483.21	10835.81	11147.27	10228.42	10892.89	11068.41
North	9537.29	9871.37	9547.91	9510.93	9332.16	9185.31	8820.05	9098.68	9535.65	9273.17

09/17/96

Well	MW-1
TOC	495.73
Product Depth	
H2O Depth	53.10
Product Thickness	
Adjusted Prod. Thick	0.00
Adj. Depth to Liquid	53.10
H2O Elev Adjusted	442.63

10/23/96

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
TOC	495.73	502.41	499.13	501.12	500.84	496.27
Product Depth						
H2O Depth	53.34	58.33	56.28	58.12	58.96	55.53
Product Thickness						
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	53.34	58.33	56.28	58.12	58.96	55.53
H2O Elev Adjusted	442.39	444.08	442.85	443.00	441.88	440.74

04/10/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.32	59.54	57.25	58.83	59.77	56.28	57.28	60.32	56.29	52.83
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.32	59.54	57.25	58.83	59.77	56.28	57.28	60.32	56.29	52.83
H2O Elev Adjusted	441.41	442.87	441.88	442.29	441.07	439.99	438.16	441.49	440.56	439.63

07/07/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.64	60.00	57.59	59.19	60.1	56.58	57.54	60.67	56.66	53.09
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.64	60.00	57.59	59.19	60.10	56.58	57.54	60.67	56.66	53.09
H2O Elev Adjusted	441.09	442.41	441.54	441.93	440.74	439.69	437.90	441.14	440.19	439.37

10/08/97

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	54.98	60.39	57.92	59.56	60.31	56.88	57.85	61	57	53.43
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	54.98	60.39	57.92	59.56	60.31	56.88	57.85	61.00	57.00	53.43
H2O Elev Adjusted	440.75	442.02	441.21	441.56	440.53	439.39	437.59	440.81	439.85	439.03

01/06/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.28	60.70	58.24	59.91	60.76	57.23	58.17	61.35	57.38	53.86
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.28	60.70	58.24	59.91	60.76	57.23	58.17	61.35	57.38	53.86
H2O Elev Adjusted	440.45	441.71	440.89	441.21	440.08	439.04	437.27	440.46	439.47	438.60

04/03/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.60	61.06	58.41	60.21	61.05	57.49	58.47	61.61	57.67	54.17
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.60	61.06	58.41	60.21	61.05	57.49	58.47	61.61	57.67	54.17
H2O Elev Adjusted	440.13	441.35	440.72	440.91	439.79	438.78	436.97	440.20	439.18	438.29

06/25/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	55.87	61.37	58.84	60.48	61.33	57.76	58.7	61.87	57.95	54.35
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	55.87	61.37	58.84	60.48	61.33	57.76	58.70	61.87	57.95	54.35
H2O Elev Adjusted	439.86	441.04	440.29	440.64	439.51	438.51	436.74	439.94	438.90	438.11

10/02/98

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.36	61.91	59.36	60.97	61.77	58.17	58.99	62.27	58.34	54.76
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.36	61.91	59.36	60.97	61.77	58.17	58.99	62.27	58.34	54.76
H2O Elev Adjusted	439.37	440.50	439.77	440.15	439.07	438.10	436.45	439.54	438.51	437.70

01/05/99

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC	495.73	502.41	499.13	501.12	500.84	496.27	495.44	501.81	496.85	492.46
Product Depth										
H2O Depth	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
Product Thickness										
Adjusted Prod. Thick	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. Depth to Liquid	56.43	62.19	59.46	61.15	61.84	58.05	58.88	62.42	58.18	54.51
H2O Elev Adjusted	439.30	440.22	439.67	439.97	439.00	438.22	436.56	439.39	438.67	437.95

Well Elevation Drop	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	Elevation Drop
10/23/96 and 04/10/97	0.98	1.21	0.97	0.71	0.81	0.75					0.91
10/23/96 and 07/07/97	1.30	1.67	1.31	1.07	1.14	1.05					1.26
10/23/96 and 10/08/97	1.64	2.06	1.64	1.44	1.35	1.35					1.58
10/23/96 and 01/06/98	1.94	2.37	1.96	1.79	1.80	1.70					1.93
10/23/96 and 04/03/98	2.26	2.73	2.13	2.09	2.09	1.96					2.21
10/23/96 and 06/25/98	2.53	3.04	2.56	2.36	2.37	2.23					2.52
10/23/96 and 10/02/98	3.02	3.58	3.08	2.85	2.81	2.64					3.00
10/23/96 and 1/5/99	3.09	3.86	3.18	3.03	2.88	2.52					3.09
04/10/97 and 04/03/98	1.28	1.52	1.16	1.38	1.28	1.21	1.19	1.29	1.38	1.34	1.30
07/07/97 and 06/25/98	1.23	1.37	1.25	1.29	1.23	1.18	1.16	1.20	1.29	1.26	1.25
10/08/97 and 10/02/98	1.38	1.52	1.44	1.41	1.46	1.29	1.14	1.27	1.34	1.33	1.36
1/6/98 and 1/5/99	1.15	1.49	1.22	1.24	1.08	0.82	0.71	1.07	0.80	0.65	1.02

nmac

20 NMAC 6.2.III.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS

The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Section 3109.D. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this Section.

These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "Methods for Chemical Analysis of Water and Waste of the U.S. Environmental Protection Agency," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants. [2-18-77, 11-17-83, 3-3-86,12-1-95]

A. Human Health Standards-Ground water shall meet the standards of Subsection A and B unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 1101 for the combination of contaminants, or the Human Health Standard of Section 3103.A. for each contaminant shall apply, whichever is more stringent.

Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

Arsenic (As)	0.1 mg/l
Barium (Ba)	1.0 mg/l
Cadmium (Cd)	0.01 mg/l
Chromium (Cr)	0.05 mg/l
Cyanide (CN)	0.2 mg/l
Fluoride (F)	1.6 mg/l
Lead (Pb)	0.05 mg/l
Total Mercury (Hg)	0.002 mg/l
Nitrate (NO_3 as N)	10.0 mg/l
Selenium (Se)	0.05 mg/l
Silver (Ag)	0.05 mg/l
Uranium (U)	5.0 mg/l
Radioactivity: Combined Radium-226 & Radium-2283	0.0 pCi/l
Benzene	0.01 mg/l
Polychlorinated biphenyls (PCB's)	0.001 mg/l
Toluene	0.75 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2-dichloroethane (EDC)	0.01 mg/l
1,1-dichloroethylene (1,1-DCE)	0.005 mg/l
1,1,2,2-tetrachloroethylene (PCE)	0.02 mg/l
1,1,2-trichloroethylene (TCE)	0.1 mg/l
ethylbenzene	0.75 mg/l
total xylenes	0.62 mg/l
methylene chloride	0.1 mg/l
chloroform	0.1 mg/l
1,1-dichloroethane	0.025 mg/l
ethylene dibromide (EDB)	0.0001 mg/l
1,1,1-trichloroethane	0.06 mg/l
1,1,2-trichloroethane	0.01 mg/l
1,1,2,2-tetrachloroethane	0.01 mg/l
vinyl chloride	0.001 mg/l
PAHs: total naphthalene plus monomethylnaphthalenes	0.03 mg/l

benzo-a-pyrene 0.0007 mg/l
[2-18-77, 1-29-82, 3-3-86, 12-1-95]

B. Other Standards for Domestic Water Supply

Chloride (Cl) 250.0 mg/l
Copper (Cu) 1.0 mg/l

NEXT

Iron (Fe)	1.0 mg/l
Manganese (Mn)	0.2 mg/l
Phenols	0.005 mg/l
Sulfate (SO_4)	600.0 mg/l
Total Dissolved Solids (TDS)	1000.0 mg/l
Zinc (Zn)	10.0 mg/l
pH	between 6 and 9

[2-18-77]

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C unless otherwise provided.

Aluminum (Al)	5.0 mg/l
Boron (B)	0.75 mg/l
Cobalt (Co)	0.05 mg/l
Molybdenum (Mo)	1.0 mg/l
Nickel (Ni)	0.2 mg/l

[2-18-77]

20 NMAC 6.2.III.3104 DISCHARGE PLAN REQUIRED

Unless otherwise provided by this Part, no person shall cause or allow effluent of leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge plan approved by the secretary. When a plan has been approved, discharges must be consistent with the terms and conditions of the plan. In the event of a transfer of the ownership, control, or possession of a facility for which an approved discharge plan is in effect, the transferee shall have authority to discharge under such plan, provided that the transferee has complied with Section 3111 of this Part, regarding transfers. [2-18-77, 12-24-87, 12-1-95]

20 NMAC 6.2.III.3105 EXEMPTIONS FROM DISCHARGE PLAN REQUIREMENT

Sections 3104 and 3106 of this Part do not apply to the following: [2-18-77]

A. Effluent or leachate which conforms to all the listed numerical standards of Section 3103 and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply; [2-18-77, 6-20-80, 7-2-81]

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day; [2-18-77, 12-24-87]

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system; [2-18-77]

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result; [2-18-77, 12-1-95]

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry

arroyos and ephemeral streams are not exempt from the discharge plan requirement, except as otherwise provided in this Section; [2-18-77]

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall where NPDES effluent limitations are imposed, unless the secretary determines that a hazard to public health may result. For purposes of this Subsection, monitoring requirements alone do not constitute effluent limitations; [2-18-77, 12-1-95]

G. Discharges resulting from flood control systems; [2-18-77]

H. Leachate which results from the direct natural infiltration of precipitation through disturbed materials, unless the secretary determines that a hazard to public health may result; [2-18-77, 6-26-80, 12-1-95]

I. Leachate which results entirely from the direct natural infiltration of precipitation through undisturbed materials; [2-18-77, 6-26-80]

J. Leachate from materials disposed of in accordance with the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the New Mexico Environmental Improvement Board; [2-18-77, 12-1-95]

K. Natural ground water seeping or flowing into conventional mine workings which re-enters the ground by natural gravity flow prior to pumping or transporting out of the mine and without being used in any mining process; this exemption does not apply to solution mining; [2-18-77]

L. Effluent or leachate discharges resulting from activities regulated by a mining plan approved and permit issued by the New Mexico Coal Surface Mining Commission, provided that this exemption shall not be construed as limiting the application of appropriate ground water protection requirements by the New Mexico Coal Surface Mining Commission; [2-18-77]

M. Effluent or leachate discharges which are regulated by the Oil Conservation Commission and the regulation of which by the Water Quality Control Commission would interfere with the exclusive authority granted under Section 70-2-12 NMSA 1978, or under other laws, to the Oil Conservation Commission. [2-18-77]

20 NMAC 6.2.III.3106 APPLICATION FOR DISCHARGE PLAN APPROVALS AND RENEWALS

A. Any person who, before or on June 18, 1977, is discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall, within 120 days of receipt of written notice from the secretary that a discharge plan is required, or such longer time as the secretary shall for good cause allow, submit a discharge plan to the secretary for approval; such person may discharge without an approved discharge plan until 240 days after written notification by the secretary that a discharge plan is required or such longer time as the secretary shall for good cause allow. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

B. Any person who intends to begin, after June 18, 1977, discharging any of the water contaminants listed in Section 3103 or any toxic pollutant so that they may move directly or indirectly into ground water shall notify the secretary giving the information enumerated in Section 1201.B.; the secretary shall, within 60 days, notify such person if a discharge plan is required; upon submission, the secretary shall review the discharge plan pursuant to Sections 3108 and 3109; for good cause shown, the secretary may allow such person to discharge without an approved plan for a period not to extend beyond February 18, 1978; after February 18, 1978, for good cause shown the secretary may allow such person to discharge without an approved discharge plan for a period not to exceed 120 days. [2-18-77, 6-26-80, 7-2-81, 12-1-95]

C. A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use or processes expected to naturally occur which will ensure compliance with this Part. At

least the following information shall be included in the plan: [2-18-77]

1. Quantity, quality and flow characteristics of the discharge; [2-18-77]

2. Location of the discharge and of any bodies of water, watercourses and ground water discharge sites within one mile of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring; [2-18-77]

3. Depth to and TDS concentration of the ground water most likely to be affected by the discharge; [2-18-77]

4. Flooding potential of the site; [2-18-77]

5. Location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow; [2-18-77]

6. Depth to and lithological description of rock at base of alluvium below the discharge site if such information is available; [2-18-77]

7. Any additional information that may be necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of Section 3103 or the presence of any toxic pollutant at any place of withdrawal of water for present or reasonably foreseeable future use. Detailed information on site geologic and hydrologic conditions may be required for a technical evaluation of the applicant's proposed discharge plan; and [2-18-77, 6-26-80, 7-2-81]

8. Additional detailed information required for a technical evaluation of effluent disposal wells or in situ extraction wells as provided in Subpart V of this Part. [9-20-82]

D. An applicant for a discharge plan shall pay fees as specified in Section 3114. [8-17-91]

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SUBPART IV -- PREVENTION AND ABATEMENT OF WATER POLLUTION

20 NMAC 6.2.IV.4101 PURPOSE

A. The purposes of this Subpart are to:

1. Abate pollution of subsurface water so that all ground water of the State of New Mexico which has a background concentration of 10,000 mg/L or less TDS, is either remediated or protected for use as domestic and agricultural water supply, and to remediate or protect those segments of surface waters which are gaining because of subsurface-water inflow, for uses designated in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1); and [12-1-95]

2. Abate surface-water pollution so that all surface waters of the State of New Mexico are remediated or protected for designated or attainable uses as defined in the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

B. If the background concentration of any water contaminant exceeds the standard or requirement of Sections 4103.A, 4103.B or 4103.C of this Part, pollution shall be abated by the responsible person to the background concentration. [12-1-95]

C. The standards and requirements set forth in Section 4103 of this Part are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations. [12-1-95]

20 NMAC 6.2.IV.4102 [RESERVED]

20 NMAC 6.2.IV.4103 ABATEMENT STANDARDS AND REQUIREMENTS

A. The vadose zone shall be abated so that water contaminants in the vadose zone shall not be capable of contaminating ground water or surface water, in excess of the standards in Subsections B and C below, through leaching, percolation or as the water table elevation fluctuates. [12-1-95]

B. Ground-water pollution at any place of withdrawal for present or reasonably foreseeable future use, where the TDS concentration is 10,000 mg/L or less, shall be abated to conform to the following standards: [12-1-95]

1. toxic pollutant(s) as defined in Section 1101 of this Part shall not be present; and [12-1-95]

2. the standards of Section 3103 of this Part shall be met. [12-1-95]

C. Surface-water pollution shall be abated to conform to the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1). [12-1-95]

D. Subsurface-water and surface-water abatement shall not be considered complete until a minimum of eight (8) consecutive quarterly samples from all compliance sampling stations approved by the secretary meet the abatement standards of Subsections A, B and C above. Abatement of water contaminants measured in solid-matrix samples of the vadose zone shall be considered complete after one-time sampling from compliance stations approved by the secretary. [12-1-95]

E. Technical Infeasibility.

1. If any responsible person is unable to fully meet the abatement standards set forth in Subsections A and B above using commercially accepted abatement technology pursuant to an approved abatement plan,

he may propose that abatement standards compliance is technically infeasible. Technical infeasibility proposals involving the use of experimental abatement technology shall be considered at the discretion of the secretary. Technical infeasibility may be demonstrated by a statistically valid extrapolation of the decrease in concentration(s) of any water contaminant(s) over the remainder of a twenty (20) year period, such that projected future reductions during that time would be less than 20% of the concentration(s) at the time technical infeasibility is proposed. A statistically valid decrease cannot be demonstrated by fewer than eight (8) consecutive quarters. The technical infeasibility proposal shall include a substitute abatement standard(s) for those contaminants that is/are technically feasible. Abatement standards for all other water contaminants not demonstrated to be technically infeasible shall be met. [12-1-95]

2. In no event shall a proposed technical infeasibility demonstration be approved by the secretary for any water contaminant if its concentration is greater than 200% of the abatement standard for that contaminant. [12-1-95]

3. If the secretary cannot approve any or all portions of a proposed technical infeasibility demonstration because the water contaminant concentration(s) is/are greater than 200% of the abatement standard(s) for each contaminant, the responsible person may further pursue the issue of technical infeasibility by filing a petition with the commission seeking:

a. approval of alternate abatement standard(s) pursuant to Section 4103.F below; or

b. granting of a variance pursuant to Section 1210 of this Part.

[12-1-95]

F. Alternative Abatement Standards.

1. At any time during or after the submission of a Stage 2 abatement plan, the responsible person may file a petition seeking approval of alternative abatement standard(s) for the standards set forth in Subsections A and B above. The commission may approve alternative abatement standard(s) if the petitioner demonstrates that:

a. (1) compliance with the abatement standard(s) is/are not feasible, by the maximum use of technology within the economic capability of the responsible person; or

(2) there is no reasonable relationship between the economic and social costs and benefits (including attainment of the standard(s) set forth in Section 4103) to be obtained;

b. the proposed alternative abatement standard(s) is/are technically achievable and cost-benefit justifiable; and

c. compliance with the proposed alternative abatement standard(s) will not create a present or future hazard to public health or undue damage to property.

2. The petition shall be in writing, filed with the secretary. The petition shall specify, in addition to the information required by Section 1210.A of this Part, the water contaminant(s) for which alternative standard(s) is/are proposed, the alternative standard(s) proposed, the three-dimensional body of water pollution for which approval is sought, and the extent to which the abatement standard(s) set forth in Section 4103 is/are now, and will in the future be, violated. The petition may include a transport, fate and risk assessment in accordance with accepted methods, and other information as the petitioner deems necessary to support the petition.

3. The commission shall review a petition for alternative abatement standards in accordance with the procedures for review of a variance petition provided in the commissions adjudicatory procedures, 20 NMAC 1.3.

[12-1-95, 11-15-96]

20 NMAC 6.2.IV.4104 ABATEMENT PLAN REQUIRED

A. Unless otherwise provided by this Part, all responsible persons who are abating, or who are required to abate, water pollution in excess of the standards and requirements set forth in Section 4103 of

this Part shall do so pursuant to an abatement plan approved by the secretary. When an abatement plan has been approved, all actions leading to and including abatement shall be consistent with the terms and conditions of the abatement plan. [12-1-95]

B. In the event of a transfer of the ownership, control or possession of a facility for which an abatement plan is required or approved, where the transferor is a responsible person, the transferee also shall be considered a responsible person for the duration of the abatement plan, and may jointly share the responsibility to conduct the actions required by this Part with other responsible persons. The transferror shall notify the transferee in writing, at least thirty (30) days prior to the transfer, that an abatement plan has been required or approved for the facility, and shall deliver or send by certified mail to the secretary a copy of such notification together with a certificate or other proof that such notification has in fact been received by the transferee. The transferror and transferee may agree to a designated responsible person who shall assume the responsibility to conduct the actions required by this Part. The responsible persons shall notify the secretary in writing if a designated responsible person is agreed upon. If the secretary determines that the designated responsible person has failed to conduct the actions required by this Part, the secretary shall notify all responsible persons of this failure in writing and allow them thirty (30) days, or longer for good cause shown, to conduct the required actions before issuing a compliance order pursuant to Section 1220 of this Part. [12-1-95]

C. If the source of the water pollution to be abated is a facility that operated under a discharge plan, the secretary may require the responsible person(s) to submit a financial assurance plan which covers the estimated costs to conduct the actions required by the abatement plan. Such a financial assurance plan shall be consistent with any financial assurance requirements adopted by the commission. [12-1-95]

20 NMAC 6.2.IV.4105 EXEMPTIONS FROM ABATEMENT PLAN REQUIREMENT

A. Except as provided in Subsection B of this Section, Sections 4104 and 4106 of this Part do not apply to a person who is abating water pollution: [12-1-95]

1. from an underground storage tank, under the authority of the Underground Storage Tank Regulations (20 NMAC Part 5) adopted by the New Mexico Environmental Improvement Board, or in accordance with the New Mexico Ground Water Protection Act; [12-1-95]

2. under the authority of the U.S. Environmental Protection Agency pursuant to either the federal Comprehensive Environmental Response, Compensation and Liability Act, and amendments, or the Resource Conservation and Recovery Act; [12-1-95]

3. under the authority of the secretary pursuant to the Hazardous Waste Management Regulations (20 NMAC 4.1) adopted by the New Mexico Environmental Improvement Board; [12-1-95]

4. under the authority of the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy pursuant to the Atomic Energy Act; [12-1-95]

5. from a solid waste landfill, under the authority of the secretary pursuant to the Solid Waste Management Regulations (20 NMAC 9.1) adopted by the N.M. Environmental Improvement Board; [12-1-95]

6. under the authority of a ground-water discharge plan approved by the secretary, provided that such abatement is consistent with the requirements and provisions of Sections 4101, 4103, 4106.C, 4106.E, 4107 and 4112 of this Part; [12-1-95]

7. under the authority of a Letter of Understanding, Settlement Agreement or Administrative Order on Consent signed by the secretary prior to December 1, 1995, provided that abatement is being performed in full compliance with the terms of the Letter of Understanding, Settlement Agreement or Administrative Order on Consent; and [12-1-95]

8. on an emergency basis, or while abatement plan approval is pending, or in a manner that will result in compliance with the standards and requirements set forth in Section 4103 of this Part within one

hundred and eighty (180) days after notice is required to be given pursuant to Section 1203.A.1 of this Part, provided that the delegated agency does not object to the abatement action pursuant to Sections 1203.A.6 and 1203.A.7 of this Part. [12-1-95]

B. If the secretary determines that abatement of water pollution subject to Subsection A of this Section will not meet the standards of Sections 4103.B and C of this Part, or that additional action is necessary to protect health, welfare, environment or property, the secretary may notify a responsible person, by certified mail, to submit an abatement plan pursuant to Sections 4104 and 4106.A of this Part. The notification shall state the reasons for the secretary's determination. In any appeal of the secretary's determination under this Section, the secretary shall have the burden of proof. [12-1-95]

C. Sections 4104 and 4106 of this Part do not apply to the following activities: [12-1-95]

1. Discharges subject to an effective and enforceable National Pollutant Discharge Elimination System (NPDES) permit; [12-1-95]

2. Land application of ground water contaminated with nitrogen originating from human or animal waste and not otherwise exceeding the standards of Section 3103.A of this Part and not containing a toxic pollutant as defined in Section 1101 of this Part, provided that it is done in compliance with a discharge plan approved by the secretary; [12-1-95]

3. Abatement of water pollution resulting from the withdrawal and decontamination or blending of polluted water for use as a public or private drinking-water supply, by any person other than a responsible person, unless the secretary determines that a hazard to public health may result; and [12-1-95]

4. Reasonable operation and maintenance of irrigation and flood control facilities. [12-1-95]

20 NMAC 6.2.IV.4106 ABATEMENT PLAN PROPOSAL

A. Except as provided for in Section 4105 of this Part, a responsible person shall, within sixty (60) days of receipt of written notice from the secretary that an abatement plan is required, submit an abatement plan proposal to the secretary for approval. For good cause shown, the secretary may allow for a total of one hundred and twenty (120) days to prepare and submit the abatement plan proposal. [12-1-95]

B. Voluntary Abatement.

1. Any person wishing to abate water pollution in excess of the standards and requirements set forth in Section 4103 of this Part may submit a Stage 1 abatement plan proposal to the secretary for approval. Following approval by the secretary of a final site investigation report prepared pursuant to Stage 1 of an abatement plan, any person may submit a Stage 2 abatement plan proposal to the secretary for approval. [12-1-95]

2. Following approval of a Stage 1 or Stage 2 abatement plan proposal under Subsection B.1 of this Section, the person submitting the approved plan shall be a responsible person under this Subpart for the purpose of performing the approved Stage 1 or Stage 2 abatement plan. Nothing in this Section shall preclude the secretary from applying Section 1203.A.9 of this Part to a responsible person if applicable. [12-1-95]

C. Stage 1 Abatement Plan.

The purpose of Stage 1 of the abatement plan shall be to design and conduct a site investigation that will adequately define site conditions, and provide the data necessary to select and design an effective abatement option. Stage 1 of the abatement plan may include, but not necessarily be limited to, the following information depending on the media affected, and as needed to select and implement an expeditious abatement option: [12-1-95]

1. Descriptions of the site, including a site map, and of site history including the nature of the discharge that caused the water pollution, and a summary of previous investigations; [12-1-95]

2. Site investigation workplan to define:

a. site geology and hydrogeology, the vertical and horizontal extent and magnitude of vadose-zone

and ground-water contamination, subsurface hydraulic parameters including hydraulic conductivity, transmissivity, storativity, and rate and direction of contaminant migration, inventory of water wells inside and within one (1) mile from the perimeter of the three-dimensional body where the standards set forth in Section 4103.B are exceeded, and location and number of such wells actually or potentially affected by the pollution; and

b. surface-water hydrology, seasonal stream flow characteristics, ground-water/surface-water relationships, the vertical and horizontal extent and magnitude of contamination and impacts to surface water and stream sediments. The magnitude of contamination and impacts on surface water may be, in part, defined by conducting a biological assessment of fish, benthic macroinvertebrates and other wildlife populations. Seasonal variations should be accounted for when conducting these assessments. [12-1-95]

3. Monitoring program, including sampling stations and frequencies, for the duration of the abatement plan that may be modified, after approval by the secretary, as additional sampling stations are created; [12-1-95]

4. Quality assurance plan, consistent with the sampling and analytical techniques listed in Section 3107.B of this Part and with Section 1103 of the Water Quality Standards for Interstate and Intrastate Streams in New Mexico (20 NMAC 6.1), for all work to be conducted pursuant to the abatement plan; [12-1-95]

5. Site health and safety plan for all work to be performed pursuant to the abatement plan; [12-1-95]

6. A schedule for all Stage 1 abatement plan activities, including the submission of summary quarterly progress reports, and the submission, for approval by the secretary, of a detailed final site investigation report; and [12-1-95]

7. Any additional information that may be required to design and perform an adequate site investigation. [12-1-95]

D. Stage 2 Abatement Plan.

Any responsible person shall submit a Stage 2 abatement plan proposal to the secretary for approval within sixty (60) days, or up to one hundred and twenty (120) days for good cause shown, after approval by the secretary of the final site investigation report prepared pursuant to Stage 1 of the abatement plan. [12-1-95]

E. The purpose of Stage 2 of the abatement plan shall be to select and design, if necessary, an abatement option that, when implemented, will result in attainment of the abatement standards and requirements set forth in Section 4103 of this Part, including post-closure maintenance activities. Stage 2 of the abatement plan should include, at a minimum, the following information: [12-1-95]

1. Brief description of the current situation at the site; [12-1-95]

2. Development and assessment of abatement options; [12-1-95]

3. Description, justification and design, if necessary, of preferred abatement option; [12-1-95]

4. Modification, if necessary, of the monitoring program approved pursuant to Stage 1 of the abatement plan, including the designation of pre and post abatement-completion sampling stations and sampling frequencies to be used to demonstrate compliance with the standards and requirements set forth in Section 4103 of this Part; [12-1-95]

5. Site maintenance activities, if needed, proposed to be performed after termination of abatement activities; [12-1-95]

6. A schedule for the duration of abatement activities, including the submission of summary quarterly progress reports; [12-1-95]

7. A public notification proposal designed to satisfy the requirements of Sections 4108.B and 4108.C of this Part; and [12-1-95]

8. Any additional information that may be reasonably required to select, describe, justify and design an effective abatement option. [12-1-95]

20 NMAC 6.2.IV.4107 OTHER REQUIREMENTS

A. Any responsible person shall allow any authorized representative of the secretary to: [12-1-95]

1. upon presentation of proper credentials, enter the facility at reasonable times; [12-1-95]

2. inspect and copy records required by an abatement plan; [12-1-95]

3. inspect any treatment works, monitoring and analytical equipment; [12-1-95]

4. sample any wastes, ground water, surface water, stream sediment, plants, animals, or vadose-zone material including vadose-zone vapor; [12-1-95]

5. use monitoring systems and wells under such responsible person's control in order to collect samples of any media listed in Section 4107.A.4 above; and [12-1-95]

6. gain access to off-site property not owned or controlled by such responsible person, but accessible to such responsible person through a third-party access agreement, provided that it is allowed by the agreement. [12-1-95]

B. Any responsible person shall provide the secretary, or a representative of the secretary, with at least four (4) working days advance notice of any sampling to be performed pursuant to an abatement plan, or any well plugging, abandonment or destruction at any facility where an abatement plan has been required. [12-1-95]

C. Any responsible person wishing to plug, abandon or destroy a monitoring or water supply well within the perimeter of the 3-dimensional body where the standards set forth in Section 4103.B are exceeded, at any facility where an abatement plan has been required, shall propose such action by certified mail to the secretary for approval, unless such approval is required from the State Engineer. The proposed action shall be designed to prevent water pollution that could result from water contaminants migrating through the well or borehole. The proposed action shall not take place without written approval from the secretary, unless written approval or disapproval is not received by the responsible person within thirty (30) days of the date of receipt of the proposal. [12-1-95]

20 NMAC 6.2.IV.4108 PUBLIC NOTICE AND PARTICIPATION

A. Within thirty (30) days of filing of a Stage 1 abatement plan proposal, the secretary shall issue a news release summarizing: [12-1-95]

1. the source, extent, magnitude and significance of water pollution, as known at that time; [12-1-95]

2. the proposed Stage 1 abatement plan investigation; and [12-1-95]

3. the name and telephone number of an agency contact who can provide additional information. [12-1-95]

B. Within thirty (30) days of filing of a Stage 2 abatement plan proposal, or proposed significant modification of Stage 2 of the abatement plan, any responsible person shall provide to the secretary proof of public notice of the abatement plan to the following persons: [12-1-95]

1. the public, who shall be notified through publication of a notice in newspapers of general circulation in this state and in the county where the abatement will occur and, in areas with large percentages of non-English speaking people, through the mailing of the public notice in English to a bilingual radio station serving the area where the abatement will occur with a request that it be aired as a public service announcement in the predominant non-English language of the area; [12-1-95]

2. those persons, as identified by the secretary, who have requested notification, who shall be notified by mail; [12-1-95]

3. the New Mexico Trustee for Natural Resources, and any other local, state or federal governmental agency affected, as identified by the secretary, which shall be notified by certified mail; [12-1-95]

4. owners and residents of surface property located inside, and within one (1) mile from, the perimeter of the geographic area where the standards and requirements set forth in Section 4103 are exceeded who shall be notified by a means approved by the secretary; and [12-1-95]

5. the Governor or President of each Indian Tribe, Pueblo or Nation within the state of New Mexico, as identified by the secretary, who shall be notified by mail. [12-1-95]

C. The public notice shall include, as approved in advance by the secretary: [12-1-95]

1. name and address of the responsible person; [12-1-95]

2. location of the proposed abatement; [12-1-95]

3. brief description of the nature of the water pollution and of the proposed abatement action; [12-1-95]

4. brief description of the procedures followed by the secretary in making a final determination; [12-1-95]

5. statement on the comment period; [12-1-95]

6. statement that a copy of the abatement plan can be viewed by the public at the department's main office or at the department field office for the area in which the discharge occurred; [12-1-95]

7. statement that written comments on the abatement plan, and requests for a public meeting or hearing that include the reasons why a meeting or hearing should be held, will be accepted for consideration if sent to the secretary within sixty (60) days after the determination of administrative completeness; and [12-1-95]

8. address and phone number at which interested persons may obtain further information. [12-1-95]

D. A public meeting or hearing may be held if the secretary determines there is significant public interest. Notice of the time and place of the meeting or hearing shall be given at least thirty (30) days prior to the meeting or hearing pursuant to Subsections A and B above. The secretary may appoint a meeting facilitator or hearing officer. The secretary may require the responsible person to prepare for approval by the secretary a fact sheet, to be distributed at the public meeting or hearing and afterwards upon request, written in English and Spanish, describing site history, the nature and extent of water pollution, and the proposed abatement. The record of the meeting or hearing, requested under this Section, consists of a tape recorded or transcribed session, provided that the cost of a court recorder shall be paid by the person requesting the transcript. If requested by the secretary, the responsible person will provide a translator approved by the secretary at a public meeting or hearing conducted in a locale where testimony from non-English speaking people can reasonably be expected. At the meeting or hearing, all interested persons

secretary within thirty (30) days after receiving notice of the secretary's action. The petition shall specify the portions of the action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered to the secretary, and to the applicant or permittee if the petitioner is not the applicant or permittee, and attach a copy of the action for which review is sought. Unless a timely petition for hearing is made, the secretary's action is final. [12-1-95]

D. The proceedings before the commission shall be conducted as provided in the commissions adjudicatory procedures, 20 NMAC 1.3. [12-1-95, 11-15-96]

E. The cost of the court reporter for the hearing shall be paid by the petitioner. [12-1-95]

F. The appeal provisions do not relieve the owner, operator or responsible person of their obligations to comply with any federal or state laws or regulations. [12-1-95]

20 NMAC 6.2.IV.4115 COURT REVIEW OF COMMISSION DECISIONS

Court review of commission decisions shall be as provided by law. [12-1-95]