GW - 191

REPORTS

YEAR(S):

2006 - 1996

TRC

Customer-Focused Solutions

December 26, 2006

Mr. Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

RE: 2006 Plug and Abandonment Report
Kinder Morgan, Inc.
Former Hobbs Gas Plant, Lea County, NM
New Mexico Oil Conservation Division (OCD) Discharge Plan GW-191
TRC Environmental Corporation (TRC)

Mr. Wayne Price:

Pursuant to your email received September 27, 2006; TRC initiated and completed field activities at the Former Hobbs Gas Plant located in Lea County (Figure 1) on November 2, 2006. Field activities included the abandonment of monitor wells at the subject site and adjoining properties.

Monitor well abandonment activities were completed on November 2, 2006 by White Drilling Company, Inc. (NM License Number WD-1456). Field activities were observed by a TRC Environmental representative. The abandoned wells included: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6R, MW-8 and MW-10. Wells MW-7, MW-9, MW-11 and MW-12 were scheduled to be abandoned; however, Xcel Energy has requested that the wells be transferred to their custody for their ongoing monitoring activities. TRC is currently facilitating the proper paperwork between Kinder Morgan and Xcel Energy required to achieve this request. Locations of the abandoned monitor wells are presented on Figure 2, Plugged and Abandoned Wells. New Mexico Well Plugging Records are provided in Attachment A, Plug and Abandonment Records. Representative photo documentation of the field activities is included in Attachment B, Field Activity Photos.

With the acceptance of this report TRC hereby requests that the New Mexico OCD terminate the Former Hobbs Gas Plant discharge plan GW-191.

If you have any questions regarding these activities or the project please call Creed Caldwell IV, P.G. with TRC Environmental Corporation at (713) 821-6068.

Sincerely,
TRC Environmental Corporation

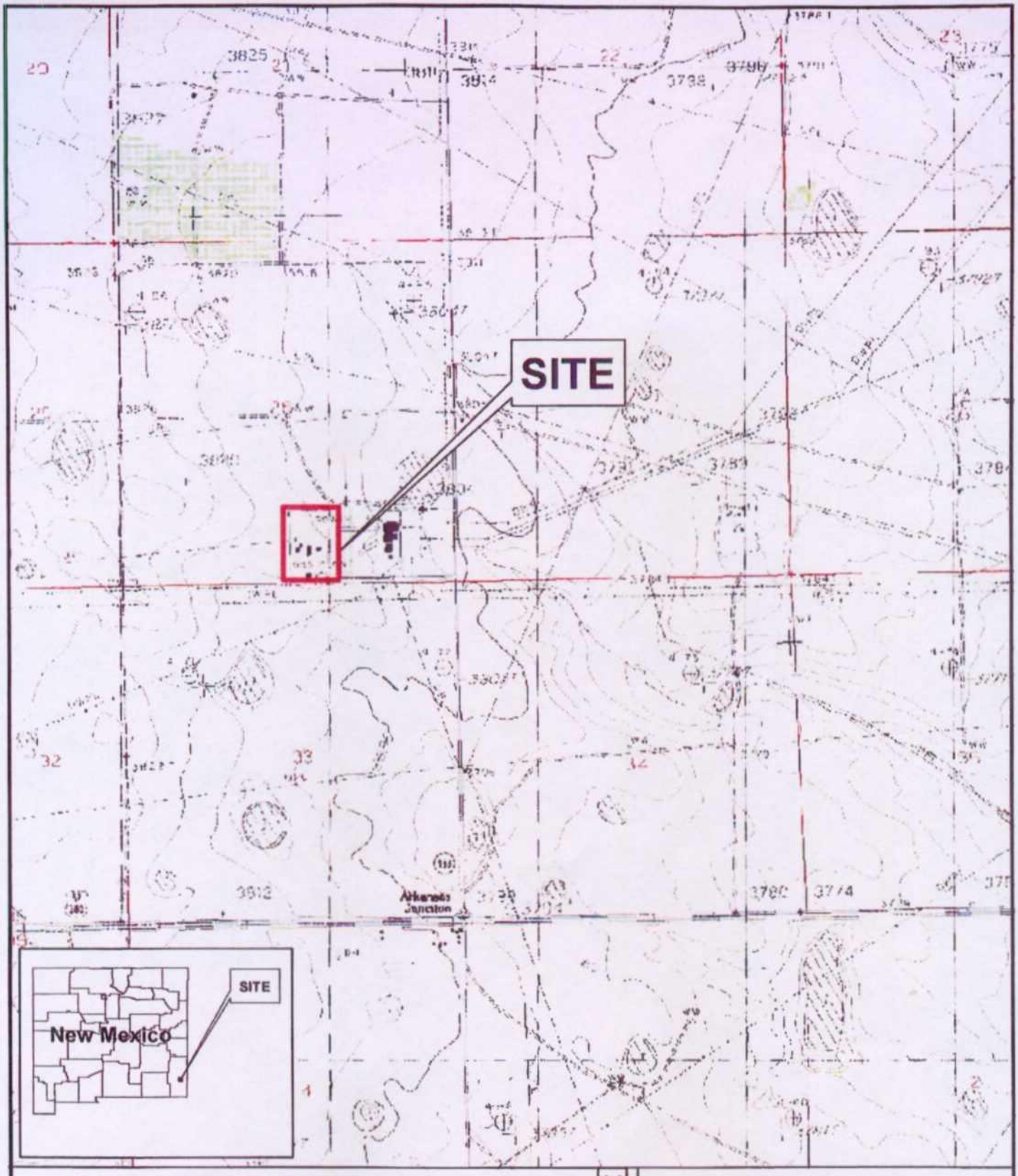
Creed Caldwell IV, P.G.
Project Manager

c: John Greer, Kinder Morgan
W. Scott Brake, Xcel Energy
Project File

2313 W. Sam Houston Parkway N., Suite 107 • Houston, Texas 77043
Telephone 713-821-7000 • Fax 713-821-6000

FIGURE 1

SITE LOCATION MAP



SOURCE:
USGS 7.5 MINUTE QUADRANGLE MAPS
FOR MONUMENT NORTH, NM (1979)
OBTAINED FROM NEW MEXICO RESOURCE
GEOGRAPHIC INFORMATION SYSTEM PROGRAM
VIA THEIR WEBSITE: http://www.rgis.unm.edu

SITE LOCATION MAP

KINDER MORGAN

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

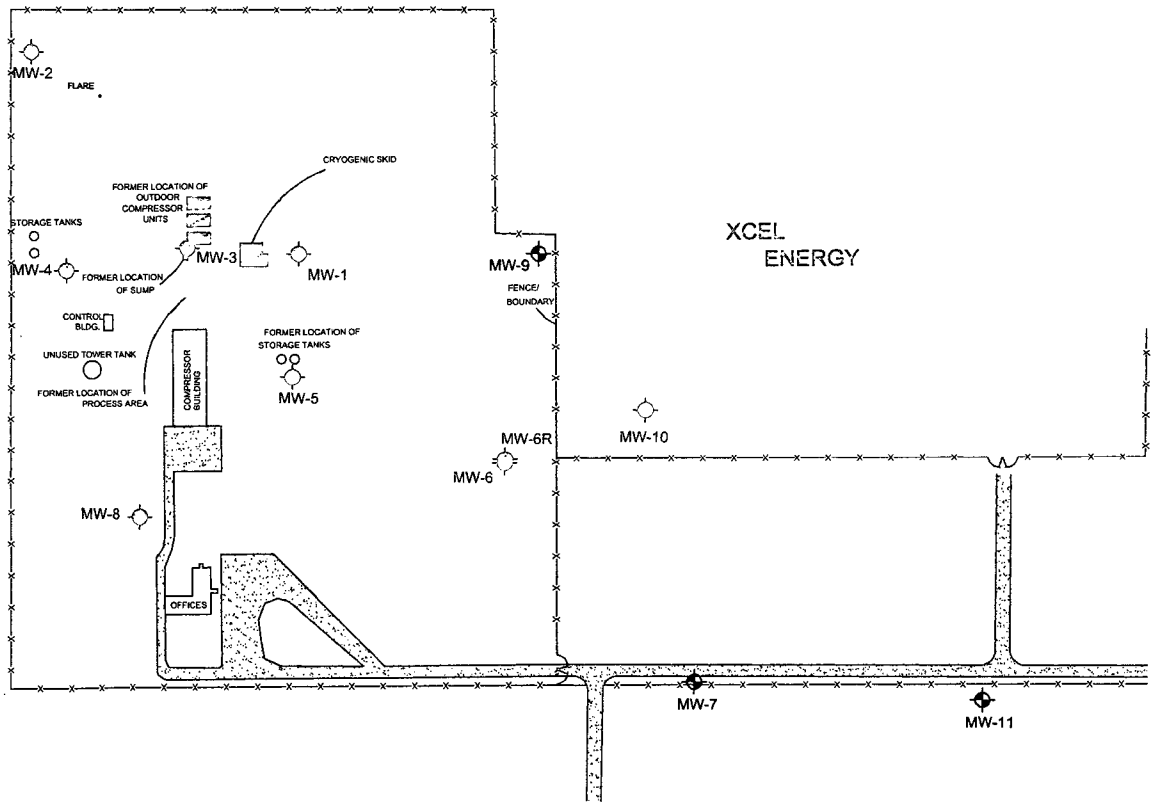
PROJECT NO : 40299	DATE: 3/05

TRC
Environmental Corporation
Customer-Focused Solutions
2313 W SAM HOUSTON PARKWAY N.
SUITE 107
HOUSTON, TEXAS 77043
713-821-7000

FIGURE 1

FIGURE 2

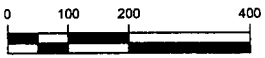
PLUGGED AND ABANDONED WELLS



LEGEND

MW-1 - MONITOR WELL LOCATION

MW-6 - PLUGGED MONITOR WELL LOCATION



SCALE IN FEET
1" = 200'-0"

PLUGGED AND ABANDONED WELLS

KINDER MORGAN

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

PROJECT NO.: 50942 | DATE: 12/06

TRC Environmental Corporation
Customer-Focused Solutions
2313 W. SAM HOUSTON PARKWAY N.
STE. 107
HOUSTON, TEXAS 77043
713-821-7000

FIGURE 2

ATTACHMENT A

PLUG AND ABANDONMENT RECORDS

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 44.4 s Longitude: 103 d 21 m 24.2 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-6R

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-6R

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	0.0	10.0	2 sks of cement/1.997 cu ft
2	10.0	80.0	8 sks of bentonite pellets
3			
4			
5			

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-6R

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: MW-6R

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller _____ (mm/dd/year) 11/22/06

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ; FWL ____ ; FSL ____ ; Use _____ ; Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C, or D required, E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 45.2 s Longitude: 103 d 21 m 21.6 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-10

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-10

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	**0.0**	**10.0**	**2 sks of cement/1.997 cu ft**
2	**10.0**	**66.0**	**7 sks of bentonite pellets**
3			
4			
5			

File Number: ______________

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-10

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: ______________ Trn Number: ______________

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:MW-10

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 11/22/06
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ;FWL ____ ;FSL ____ ;Use _____ ;Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C, or D required, E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 43.3 s Longitude: 103 d 21 m 31.3 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-8

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-8

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	0.0	10.0	2 sks of cement/1.997 cu ft
2	10.0	69.0	7.5 sks of bentonite pellets
3			
4			
5			

File Number: ____________

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-8

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: MW-8

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 11/22/16
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ; FWL ____ ; FSL ____ ; Use _____ ; Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. ____ 1/4 ____ 1/4 ____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 45.7 s Longitude: 103 d 21 m 28.4 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-5

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: ..Y-5

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Cly , TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	**0.0**	**10.0**	**2 ... f cement/1.997 cu ft**
2	**10.0**	**63.0**	**7 ... f bentonite pellets**
3			
4			
5			

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-5

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:MW-5

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ Driller

11/22/06 (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ;FWL ____ ;FSL ____ ;Use _____ ;Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. ____ 1/4 ____ 1/4 ____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 47.5 s Longitude: 103 d 21 m 32.8 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-4

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-4

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	0.0	10.0	2 sks of cement/1.997 cu ft
2	10.0	63.0	7 sks of bentonite pellets
3			
4			
5			

File Number: ____________

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-4

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. **ADDITIONAL STATEMENTS OR EXPLANATIONS:MW-4**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 11/22/06
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ **;FWL** ____ **;FSL** ____ **;Use** _____ **;Location No.** _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 47.9 s Longitude: 103 d 21 m 30.5 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-3

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-3

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	0.0	10.0	2 sks of cement/1.997 cu ft
2	10.0	63.0	7 sks of bentonite pellets
3			
4			
5			

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-3

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. **ADDITIONAL STATEMENTS OR EXPLANATIONS:MW-3**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 11/22/06
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ;FWL ____ ;FSL ____ ;Use _____ ;Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 47.8 s Longitude: 103 d 21 m 28.2 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-2

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-2

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**
Address: **P.O. Box 906, Clyde, TX 79510**
Plugging Method: **Hand Mix**
Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	**0.0**	**10.0**	**2 sks of cement/1.997 cu ft**
2	**10.0**	**60.0**	**7 sks of bentonite pellets**
3			
4			
5			

File Number: ______________

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-2

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: MW-2

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

11/22/06
(mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ; FWL ____ ; FSL ____ ; Use _____ ; Location No. _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Kinder Morgan, Inc. Work Phone: _____
Contact: John Greer Home Phone: _____
Address: One Allen Center, 500 Dallas St.
Suite 1000
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. _____ 1/4 _____ 1/4 _____ 1/4 Section: 28 Township: 18S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 42 m 47.8 s Longitude: 103 d 21 m 28.2 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Excel Energy

3. DRILLING CONTRACTOR: MW-1

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD

Drilling began: _____; Completed: _____; Type tools: _____;
Size of hole: _____ in.; Total depth of well: _____ ft.;
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: MW-1

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: **White Drilling Company, Inc.**

Address: **P.O. Box 906, Clyde, TX 79510**

Plugging Method: **Hand Mix**

Date Well Plugged: **11/2/06**

Plugging approved by: **Wayne Price**

State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
1	0.0	10.0	2 sks of cement/1.997 cu ft
2	10.0	60.0	7 sks of bentonite pellets
3			
4			
5			

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: MW-1

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: MW-1

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 11/22/06
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ;FWL _____ ;FSL _____ ;Use _____ ;Location No. _____

File Number: _____ Trn Number: _____

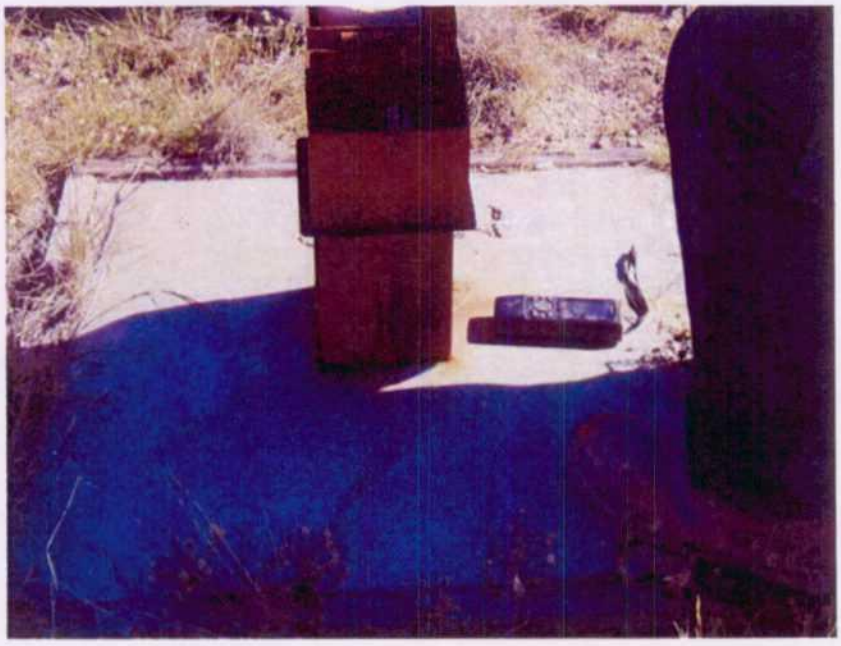
ATTACHMENT B

FIELD ACTIVITY PHOTOS

Bentonite chips being top loaded into a monitor well.

Unsuccessful attempt by White Drilling to remove monitor well casing from the ground.

Bentonite chips being hydrated.



Monitor well location being recorded for report use.

Monitor well surface completion being removed by White Drilling employees.

Bentonite chips being top loaded into a monitor well.

White Drilling employee hydrating bentonite chips at intervals in monitor well.

White Drilling employees cementing the top of a monitor well.

TRC

TRC
Customer-Focused Solutions

July 10, 2006

Mr. Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

Subject: **2006 Semi-Annual Groundwater Monitoring Summary Report and Request for Site Closure**
Kinder Morgan, Inc. - Former Hobbs Gas Plant at Hobbs (Lea County), NM
New Mexico Oil Conservation Division (NMOCD) Discharge Plan GW-191
TRC Environmental Corporation Project #50942

Mr. Price:

This letter report (and appendices) summarizes the semi-annual groundwater monitoring activities conducted at the above-referenced location in May 2006 by TRC Environmental Corporation (TRC). A site location map is illustrated on Figure 1. The site and general vicinity contain monitor wells MW-1 through MW-12 as illustrated on Figure 2. Monitor wells MW-7, MW-10, MW-11, and MW-12 are located off-site on the adjacent Excel Energy Cunningham Power Station property and State of New Mexico property. Kinder Morgan, Inc. (KMI) has retained responsibility for the historical environmental impacts relating to the operation of the former gas plant facility.

Laboratory analytical results indicate concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) are below the laboratory reporting limits for the last two years or four (4) semi-annual sampling events from November 2004 through May 2006. Based on laboratory analytical results for the last four (4) semi-annual groundwater sampling events, KMI is requesting site closure and monitor well plugging and abandonment.

GROUNDWATER SAMPLING PROCEDURES

During each semi-annual sampling event, the 12 monitor wells were gauged for water levels and phase-separated hydrocarbons (PSH), if present. Groundwater levels and LNAPL thickness from each monitor well were recorded in a dedicated field book. Sampling was conducted in accordance with the New Mexico Oil Conservation Division (NMOCD) Discharge Plan GW-191.

Monitor wells MW-1 and MW-5 were not purged or sampled during the May 2006 event due to insufficient water columns present at both wells. Monitor wells MW-2, MW-4, and MW-8 were not required for purging and sampling as previously approved by the NMOCD.

2313 W. Sam Houston Parkway N., Suite 107 • Houston, Texas 77043
Telephone (713) 8231-7000 • Fax (713) 821-6000

The non-dedicated gauging and sampling equipment were decontaminated prior to use at each monitor well location. Decontamination fluids and disposable personal protective equipment were placed in containers for temporary on-site storage. Each container was labeled for contents, accumulation date, and container number.

Groundwater samples were collected using a pre-cleaned submersible pump and dedicated tubing. The pumping rates were maintained between 0.25 to 0.5 liters per minute (L/min). Low-flow purging and sampling were conducted in accordance with the United States Environmental Protection Agency (EPA) guidelines (EPA/540/S-95/504). Water quality parameters (*e.g.*, pH, specific conductance, turbidity, temperature, dissolved oxygen, and oxidation reduction potential) were measured using an in-line flow-through-cell. Purging continued until the parameters stabilized. The flow rate for sampling was maintained at the same rate at which purging was conducted. Samples were transferred directly from the dedicated tubing into the laboratory-provided glass sample containers. The sample containers were sealed, labeled, and placed on ice inside a cooler to maintain a temperature of 4 °C. Trip and equipment blank samples were collected and placed in the cooler with the groundwater samples. These samples were analyzed to determine if any sample contaminants were introduced during sample collection and delivery. A standard chain-of-custody form was completed and accompanied the groundwater samples to Trace Analysis, Inc. of Lubbock, Texas.

The collected samples were analyzed for:

- BTEX by USEPA Method 8021B; and
- Chlorides by USEPA Method 300.0.

Appropriate quality control and assurance methods were employed, including the analyses of method blanks and laboratory control spikes.

GROUNDWATER ELEVATIONS

Table 1 provides a cumulative summary of the groundwater elevations measured from September 1996 through May 2006.

May 2006

Of the 12 wells that were gauged, only monitor well MW-5 was dry. Groundwater elevations ranged from 3,759.06 feet above mean sea level (MSL) at monitor well MW-2 (upgradient) to 3,748.75 feet MSL at monitor well MW-12 (downgradient).

A potentiometric surface contour map for May 2006 is illustrated on Figure 3. The hydraulic gradient (direction of groundwater flow) is to the southeast at an approximate gradient of 0.005 ft./ft. This direction is consistent with historical gauging events.

GROUNDWATER ANALYTICAL RESULTS

Table 2 provides a cumulative summary of groundwater analytical results from February 1996 through May 2006. The laboratory data sheets and the chain-of-custody form for the May 2006 sampling event is provided in Appendix A.

May 2006

For this sampling event, groundwater samples were collected from monitor wells MW-3, MW-6R, MW-7, MW-9, MW-10, MW-11, and MW-12. BTEX constituents were not detected above the laboratory reporting limit (<0.001 mg/L) in these samples. This is the fourth consecutive semi-annual sampling event in which BTEX constituents were not detected.

Chlorides were detected above the laboratory reporting limit (0.5 mg/L) at the following monitor well locations:

- MW-3 (42.8 mg/L);
- MW-6R (41.2 mg/L);
- MW-7 (48.3 mg/L);
- MW-9 (92.9 mg/L);
- MW-10 (138 mg/L);
- MW-11 (57.9 mg/L); and
- MW-12 (35.8 mg/L).

The reported chloride concentrations are well below the Water Quality Control Commission (WQCC) established guideline of 250 mg/L. This is the fourth consecutive semi-annual sampling event in which the chloride concentrations were well below the regulatory guideline.

A duplicate sample was collected from monitor well MW-7 in order to determine the reproducibility of the analytical results. This sample, labeled MW-99 on the sample chain-of-custody form, exhibited a nearly identical chloride concentration (48.2 mg/L) to the well MW-7 concentration (48.3 mg/L), thus indicating consistent laboratory results. BTEX constituents were not detected above the laboratory reporting limits in the duplicate sample.

QUALITY CONTROL REVIEW OF LABORATORY ANALYTICAL DATA

A review of the monitoring data and associated quality control (QC) data was performed for the May 2006 sampling event. QC data indicate that measurement data are sufficient to meet project quality objectives, the data are defensible, and QC mechanisms are generally effective in ensuring measurement data reliability. No potential data quality issues were identified.

BTEX compounds were not detected above laboratory reporting limits for the trip and equipment blank samples.

CONCLUSIONS

Based on the observations and results of the gauging and sampling events for May 2006 combined with a review of the historical site information, TRC concludes the following:

- Monitor well MW-5 was dry during the monitoring event;
- The hydraulic gradient is to the southeast. Monitor well MW-2 is upgradient and monitor well MW-12 is downgradient with respect to groundwater flow beneath the site area;
- BTEX constituents were not detected above the laboratory reporting limits during the May 2006 monitoring event;
- BTEX constituents have not been detected above the laboratory reporting limits for the last four (4) semi-annual sampling events or the equivalent of eight (8) quarterly sampling events;
- Chloride concentrations were below the WQCC established guideline of 250 mg/L; and
- Chloride concentrations have been below the WQCC established guideline for the last four (4) semi-annual sampling events or the equivalent of eight (8) quarterly sampling events.

RECOMMENDATIONS

Based on the conclusions, KMI is requesting site closure and monitor well plugging and abandonment. Following NMOCD approval of site closure and monitor well plugging and abandonment, KMI/TRC will mobilize to the site to plug and abandon the monitor wells in accordance with New Mexico WQCC

guidelines. Following plugging and abandonment, KMI will submit a Final Site Closure Report documenting field activities in relation to monitor well plugging and abandonment and IDW disposal.

If you have any questions, please do not hesitate to call me at 713.821.6004 or Mr. John Greer with Kinder Morgan at (713) 369-9193.

Respectfully submitted,

TRC ENVIRONMENTAL CORPORATION

John D. Daniels

John D. Daniels, P.G.
Senior Project Manager

JDD:rms

c: John Greer, Kinder Morgan
Project File

Attachments

Tables

TABLES

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-1: Screened Interval ~41-61 ft bgs.						
MW-1	9/17/1996	495.73	-	53.10	-	442.63
MW-1	10/23/1996	495.73	-	53.34	-	442.39
MW-1	4/10/1997	495.73	-	54.32	-	441.41
MW-1	7/7/1997	495.73	-	64.64	-	431.09
MW-1	10/8/1997	495.73	-	64.98	-	430.75
MW-1	1/6/1998	495.73	-	55.28	-	440.45
MW-1	4/3/1998	495.73	-	55.60	-	440.13
MW-1	6/25/1998	495.73	-	55.87	-	439.86
MW-1	10/2/1998	495.73	-	56.36	-	439.37
MW-1	1/5/1999	495.73	-	54.98	-	440.75
MW-1	4/1/1999	495.73	-	56.89	-	438.84
MW-1	7/14/1999	495.73	-	57.39	-	438.34
MW-1	10/22/1999	495.73	-	57.74	-	437.99
MW-1	1/25/2000	495.73	-	59.00	-	436.73
MW-1	4/3/2000	495.73	-	58.51	-	437.22
MW-1	7/17/2000	495.73	-	59.10	-	436.63
MW-1	10/24/2000	495.73	-	59.45	-	436.28
MW-1	1/24/2001	495.73	-	59.82	-	435.91
MW-1	10/18/2001	495.73	-	Dry	-	Dry
MW-1	3/19/2002	495.73	-	Dry	-	Dry
MW-1	8/14/2002	495.73	-	Dry	-	Dry
MW-1	1/13/2003	495.73	-	60.19	-	435.54
MW-1	8/26/2003	495.73	-	Dry	-	Dry
MW-1	5/11/2004	495.73	-	60.22	-	435.51
MW-1	11/22/2004	495.73	-	60.17	-	435.56
MW-1	2/24/2005	3,815.62	-	60.13	-	3,755.49
MW-1	5/18/2005	3,815.62	-	60.21	-	3,755.41
MW-1	11/15/2005	3,815.62	-	60.26	-	3,755.36
MW-1	5/21/2006	3,815.62	-	60.20	-	3,755.42
MW-2: Screened Interval ~43-63 ft bgs.						
MW-2	9/17/1996	Not Installed.				
MW-2	10/23/1996	502.41	-	58.33	-	444.08
MW-2	4/10/1997	502.41	-	59.54	-	442.87
MW-2	7/7/1997	502.41	-	60.00	-	442.41
MW-2	10/8/1997	502.41	-	60.39	-	442.02
MW-2	1/6/1998	502.41	-	60.70	-	441.71
MW-2	4/3/1998	502.41	-	61.06	-	441.35
MW-2	6/25/1998	502.41	-	61.37	-	441.04
MW-2	10/2/1998	502.41	-	61.91	-	440.50
MW-2	1/5/1999	502.41	-	60.39	-	442.02
MW-2	4/1/1999	502.41	-	62.28	-	440.13
MW-2	7/14/1999	502.41	-	62.28	-	440.13

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-2: Screened Interval ~43-63 ft bgs.						
MW-2	10/22/1999	502.41	-	62.31	-	440.10
MW-2	1/25/2000	502.41	-	62.34	-	440.07
MW-2	4/3/2000	502.41	-	62.34	-	440.07
MW-2	7/17/2000	502.41	-	62.34	-	440.07
MW-2	10/24/2000	502.41	-	62.37	-	440.04
MW-2	1/24/2001	502.41	-	62.37	-	440.04
MW-2	10/18/2001	502.41	-	62.37	-	440.04
MW-2	3/19/2002	502.41	-	Dry	-	Dry
MW-2	8/14/2002	502.41	-	Dry	-	Dry
MW-2	1/13/2003	502.41	-	62.39	-	440.02
MW-2	8/26/2003	502.41	-	62.41	-	440.00
MW-2	5/11/2004	502.41	-	62.48	-	439.93
MW-2	11/22/2004	502.41	-	62.49	-	439.92
MW-2	2/24/2005	3,821.54	-	62.46	-	3,759.08
MW-2	5/18/2005	3,821.54	-	62.49	-	3,759.05
MW-2	11/15/2005	3,821.54	-	62.50	-	3,759.04
MW-2	5/21/2006	3,821.54	-	62.48	-	3,759.06
MW-3: Screened Interval ~45-65 ft bgs.						
MW-3	9/17/1996	Not Installed.				
MW-3	10/23/1996	499.13	-	56.28	-	442.85
MW-3	4/10/1997	499.13	-	57.25	-	441.88
MW-3	7/7/1997	499.13	-	57.59	-	441.54
MW-3	10/8/1997	499.13	-	57.92	-	441.21
MW-3	1/8/1998	499.13	-	58.24	-	440.89
MW-3	4/3/1998	499.13	-	58.41	-	440.72
MW-3	6/25/1998	499.13	-	58.84	-	440.29
MW-3	10/2/1998	499.13	-	59.36	-	439.77
MW-3	1/5/1999	499.13	-	57.92	-	441.21
MW-3	4/1/1999	499.13	-	59.89	-	439.24
MW-3	7/14/1999	499.13	-	60.40	-	438.73
MW-3	10/22/1999	499.13	-	60.76	-	438.37
MW-3	1/25/2000	499.13	-	61.21	-	437.92
MW-3	4/3/2000	499.13	-	61.57	-	437.56
MW-3	7/17/2000	499.13	-	62.11	-	437.02
MW-3	10/24/2000	499.13	-	62.48	-	436.65
MW-3	1/24/2001	499.13	-	62.83	-	436.30
MW-3	10/18/2001	499.13	-	64.17	-	434.96
MW-3	3/19/2002	499.13	-	64.44	-	434.69
MW-3	8/14/2002	499.13	-	Dry	-	Dry
MW-3	1/13/2003	499.13	-	64.34	-	434.79
MW-3	8/26/2003	499.13	-	64.80	-	434.33
MW-3	5/11/2004	499.13	-	64.98	-	434.15
MW-3	11/22/2004	499.13	-	64.01	-	435.12
MW-3	2/24/2005	3,818.24	-	63.56	-	3,754.68
MW-3	5/18/2005	3,818.24	-	63.48	-	3,754.76
MW-3	11/15/2005	3,818.24	-	63.45	-	3,754.79
MW-3	5/21/2006	3,818.24	-	63.22	-	3,755.02

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-4: Screened Interval ~45-65 ft bgs.						
MW-4	9/17/1996	Not Installed.				
MW-4	10/23/1996	501.12	-	58.12	-	443.00
MW-4	4/10/1997	501.12	-	58.83	-	442.29
MW-4	7/7/1997	501.12	-	59.19	-	441.93
MW-4	10/8/1997	501.12	-	59.56	-	441.56
MW-4	1/6/1998	501.12	-	59.91	-	441.21
MW-4	4/3/1998	501.12	-	60.21	-	440.91
MW-4	6/25/1998	501.12	-	60.48	-	440.64
MW-4	10/2/1998	501.12	-	60.97	-	440.15
MW-4	1/5/1999	501.12	-	59.56	-	441.56
MW-4	4/1/1999	501.12	-	61.57	-	439.55
MW-4	7/14/1999	501.12	-	62.03	-	439.09
MW-4	10/22/1999	501.12	-	62.37	-	438.75
MW-4	1/25/2000	501.12	-	62.82	-	438.30
MW-4	4/3/2000	501.12	-	63.14	-	437.98
MW-4	7/17/2000	501.12	-	63.73	-	437.39
MW-4	10/24/2000	501.12	-	64.10	-	437.02
MW-4	1/24/2001	501.12	-	64.45	-	436.67
MW-4	10/18/2001	501.12	-	Dry	-	Dry
MW-4	3/19/2002	501.12	-	Dry	-	Dry
MW-4	8/14/2002	501.12	-	Dry	-	Dry
MW-4	1/13/2003	501.12	-	Dry	-	Dry
MW-4	8/26/2003	501.12	-	Dry	-	Dry
MW-4	5/11/2004	501.12	-	Dry	-	Dry
MW-4	11/22/2004	501.12	-	Dry	-	Dry
MW-4	2/24/2005	3,820.24	-	Dry	-	Dry
MW-4	5/18/2005	3,820.24	-	Dry	-	Dry
MW-4	11/15/2005	3,820.24	-	Dry	-	Dry
MW-4	5/21/2006	3,820.24	-	65.03	-	3,755.21
MW-5: Screened Interval ~45-65 ft bgs.						
MW-5	9/17/1996	Not Installed.				
MW-5	10/23/1996	500.84	-	58.96	-	441.88
MW-5	4/10/1997	500.84	-	59.77	-	441.07
MW-5	7/7/1997	500.84	-	60.10	-	440.74
MW-5	10/8/1997	500.84	-	60.31	-	440.53
MW-5	1/6/1998	500.84	-	60.76	-	440.08
MW-5	4/3/1998	500.84	-	61.05	-	439.79
MW-5	6/25/1998	500.84	-	61.05	-	439.79
MW-5	10/2/1998	500.84	-	61.77	-	439.07
MW-5	1/5/1999	500.84	-	60.31	-	440.53
MW-5	4/1/1999	500.84	-	62.24	-	438.60
MW-5	7/14/1999	500.84	-	62.76	-	438.08
MW-5	10/22/1999	500.84	-	63.08	-	437.76

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-5: Screened Interval ~45-65 ft bgs.						
MW-5	1/25/2000	500.84	-	63.51	-	437.33
MW-5	4/3/2000	500.84	-	63.84	-	437.00
MW-5	7/17/2000	500.84	-	64.35	-	436.49
MW-5	10/24/2000	500.84	-	64.68	-	436.16
MW-5	1/24/2001	500.84	-	Dry	-	Dry
MW-5	10/18/2001	500.84	-	Dry	-	Dry
MW-5	3/19/2002	500.84	-	Dry	-	Dry
MW-5	8/14/2002	500.84	-	Dry	-	Dry
MW-5	1/13/2003	500.84	-	Dry	-	Dry
MW-5	8/26/2003	500.84	-	Dry	-	Dry
MW-5	5/11/2004	500.84	-	Dry	-	Dry
MW-5	11/22/2004	500.84	-	67.10	-	433.74
MW-5	2/24/2005	3,819.20	-	Dry	-	Dry
MW-5	5/18/2005	3,819.20	-	Dry	-	Dry
MW-5	11/15/2005	3,819.20	-	Dry	-	Dry
MW-5	5/21/2006	3,819.20	-	Dry	-	Dry
MW-6: Screened Interval ~43-63 ft bgs.						
MW-6	9/17/1996	Not Installed.				
MW-6	10/23/1996	496.27	-	55.53	-	440.74
MW-6	4/10/1997	496.27	-	56.28	-	439.99
MW-6	7/7/1997	496.27	-	56.58	-	439.69
MW-6	10/8/1997	496.27	-	56.68	-	439.59
MW-6	1/6/1998	496.27	-	57.23	-	439.04
MW-6	4/3/1998	496.27	-	57.49	-	438.78
MW-6	6/25/1998	496.27	-	57.49	-	438.78
MW-6	10/2/1998	496.27	-	57.17	-	439.10
MW-6	1/5/1999	496.27	-	56.88	-	439.39
MW-6	4/1/1999	496.27	-	58.52	-	437.75
MW-6	7/14/1999	496.27	-	59.08	-	437.19
MW-6	10/22/1999	496.27	-	59.36	-	436.91
MW-6	1/25/2000	496.27	-	59.77	-	436.50
MW-6	4/3/2000	496.27	-	60.08	-	436.19
MW-6	7/17/2000	496.27	-	60.50	-	435.77
MW-6	10/24/2000	496.27	-	60.86	-	435.41
MW-6	1/24/2001	496.27	-	61.22	-	435.05
MW-6	10/18/2001	496.27	-	Dry	-	Dry
MW-6	3/19/2002	496.27	-	Dry	-	Dry
MW-6	8/14/2002	496.27	-	Dry	-	Dry
MW-6	1/13/2003	496.27	-	62.57	-	433.70
MW-6	8/26/2003	496.27	-	Dry	-	Dry
MW-6	5/11/2004	496.27	-	Dry	-	Dry
MW-6	11/22/2004	496.27	-	Dry	-	Dry
MW-6R: Screened Interval ~60-80 ft bgs.						
MW-6R	2/24/2005	3,816.52	-	63.32	-	3,753.20
MW-6R	5/18/2005	3,816.52	-	63.48	-	3,753.04
MW-6R	11/15/2005	3,816.52	-	63.70	-	3,752.82
MW-6R	5/21/2006	3,816.52	-	63.39	-	3,753.13

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-7: Screened Interval ~49-69 ft bgs.						
MW-7	9/17/1996	Not Installed.				
MW-7	10/23/1996	Not Installed.				
MW-7	4/10/1997	495.44	-	57.28	-	438.16
MW-7	7/7/1997	495.44	-	57.54	-	437.90
MW-7	10/8/1997	495.44	-	57.85	-	437.59
MW-7	1/6/1998	495.44	-	58.17	-	437.27
MW-7	4/3/1998	495.44	-	58.47	-	436.97
MW-7	6/25/1998	495.44	-	58.70	-	436.74
MW-7	10/2/1998	495.44	-	58.99	-	436.45
MW-7	1/5/1999	495.44	-	57.85	-	437.59
MW-7	4/1/1999	495.44	-	59.36	-	436.08
MW-7	7/14/1999	495.44	-	59.84	-	435.60
MW-7	10/22/1999	495.44	-	60.14	-	435.30
MW-7	1/25/2000	495.44	-	60.58	-	434.86
MW-7	4/3/2000	495.44	-	60.83	-	434.61
MW-7	7/17/2000	495.44	-	61.10	-	434.34
MW-7	10/24/2000	495.44	-	61.46	-	433.98
MW-7	1/24/2001	495.44	-	61.84	-	433.60
MW-7	10/18/2001	495.44	-	62.79	-	432.65
MW-7	3/19/2002	495.44	-	63.43	-	432.01
MW-7	8/14/2002	495.44	-	63.67	-	431.77
MW-7	1/13/2003	495.44	-	63.65	-	431.79
MW-7	8/26/2003	495.44	63.91	63.92	Sheen	431.52
MW-7	5/11/2004	495.44	-	64.35	-	431.09
MW-7	11/22/2004	495.44	-	63.58	-	431.86
MW-7	2/24/2005	3,814.44	-	62.91	-	3,751.53
MW-7	5/18/2005	3,814.44	-	62.98	-	3,751.46
MW-7	11/15/2005	3,814.44	-	63.28	-	3,751.16
MW-7	5/21/2006	3,814.44	-	63.03	-	3,751.41
MW-8: Screened Interval ~51-71 ft bgs.						
MW-8	9/17/1996	Not Installed.				
MW-8	10/23/1996	Not Installed.				
MW-8	4/10/1997	501.81	-	60.32	-	441.49
MW-8	7/7/1997	501.81	-	60.67	-	441.14
MW-8	10/8/1997	501.81	-	61.00	-	440.81
MW-8	1/6/1998	501.81	-	61.35	-	440.46
MW-8	4/3/1998	501.81	-	61.61	-	440.20
MW-8	6/25/1998	501.81	-	61.87	-	439.94
MW-8	10/2/1998	501.81	-	62.27	-	439.54
MW-8	1/5/1999	501.81	-	61.00	-	440.81
MW-8	4/1/1999	501.81	-	62.79	-	439.02
MW-8	7/14/1999	501.81	-	63.19	-	438.62

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-8: Screened Interval ~51-71 ft bgs.						
MW-8	10/22/1999	501.81	-	63.51	-	438.30
MW-8	1/25/2000	501.81	-	63.97	-	437.84
MW-8	4/3/2000	501.81	-	64.26	-	437.55
MW-8	7/17/2000	501.81	-	64.68	-	437.13
MW-8	10/24/2000	501.81	-	65.04	-	436.77
MW-8	1/24/2001	501.81	-	64.38	-	437.43
MW-8	10/18/2001	501.81	-	66.51	-	435.30
MW-8	3/19/2002	501.81	-	66.99	-	434.82
MW-8	8/14/2002	501.81	-	67.23	-	434.58
MW-8	1/13/2003	501.81	-	67.12	-	434.69
MW-8	8/26/2003	501.81	-	67.41	-	434.40
MW-8	5/11/2004	501.81	-	67.71	-	434.10
MW-8	11/22/2004	501.81	-	Dry	-	Dry
MW-8	2/24/2005	3,820.83	-	66.49	-	3,754.34
MW-8	5/18/2005	3,820.83	-	66.43	-	3,754.40
MW-8	11/15/2005	3,820.83	-	66.52	-	3,754.31
MW-8	5/21/2006	3,820.83	-	66.36	-	3,754.47
MW-9: Screened Interval ~48-68 ft bgs.						
MW-9	9/17/1996	Not Installed.				
MW-9	10/23/1996	Not Installed.				
MW-9	4/10/1997	496.85	-	56.29	-	440.56
MW-9	7/7/1997	496.85	-	56.66	-	440.19
MW-9	10/8/1997	496.85	-	57.00	-	439.85
MW-9	1/6/1998	496.85	-	57.38	-	439.47
MW-9	4/3/1998	496.85	-	57.67	-	439.18
MW-9	6/25/1998	496.85	-	57.95	-	438.90
MW-9	10/2/1998	496.85	-	58.34	-	438.51
MW-9	1/5/1999	496.85	-	57.00	-	439.85
MW-9	4/1/1999	496.85	-	58.73	-	438.12
MW-9	7/14/1999	496.85	-	59.31	-	437.54
MW-9	10/22/1999	496.85	-	59.61	-	437.24
MW-9	1/25/2000	496.85	-	60.07	-	436.78
MW-9	4/3/2000	496.85	-	60.43	-	436.42
MW-9	7/17/2000	496.85	-	60.92	-	435.93
MW-9	10/24/2000	496.85	-	61.30	-	435.55
MW-9	1/24/2001	496.85	-	61.67	-	435.18
MW-9	10/18/2001	496.85	-	62.94	-	433.91
MW-9	3/19/2002	496.85	-	63.47	-	433.38
MW-9	8/14/2002	496.85	-	63.95	-	432.90
MW-9	1/13/2003	496.85	-	63.33	-	433.52
MW-9	8/26/2003	496.85	-	63.80	-	433.05
MW-9	5/11/2004	496.85	-	64.03	-	432.82
MW-9	11/22/2004	496.85	-	62.99	-	433.86
MW-9	2/24/2005	3,815.91	-	62.39	-	3,753.52
MW-9	5/19/2005	3,815.91	-	62.50	-	3,753.41
MW-9	11/15/2005	3,815.91	-	62.63	-	3,753.28
MW-9	5/21/2006	3,815.91	-	62.27	-	3,753.64

TABLE 1. CUMULATIVE SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE-SEPARATE HYDROCARBON THICKNESS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	TOC Elevation * (ft MSL)	Depth to PSH (ft btoc)	Depth to GW (ft btoc)	PSH Thickness (ft)	GW Elevation (ft MSL)
MW-10: Screened Interval ~47-67 ft bgs.						
MW-10	9/17/1996	Not Installed.				
MW-10	10/23/1996	Not Installed.				
MW-10	4/10/1997	492.46	-	52.83	-	439.63
MW-10	7/7/1997	492.46	-	53.09	-	439.37
MW-10	10/8/1997	492.46	-	53.43	-	439.03
MW-10	1/6/1998	492.46	-	53.86	-	438.60
MW-10	4/3/1998	492.46	-	54.17	-	438.29
MW-10	6/25/1998	492.46	-	54.35	-	438.11
MW-10	10/2/1998	492.46	-	54.76	-	437.70
MW-10	1/5/1999	492.46	-	54.43	-	438.03
MW-10	4/1/1999	492.46	-	55.04	-	437.42
MW-10	7/14/1999	492.46	-	55.59	-	436.87
MW-10	10/22/1999	492.46	-	55.94	-	436.52
MW-10	1/25/2000	492.46	-	56.35	-	436.11
MW-10	4/3/2000	492.46	-	56.96	-	435.50
MW-10	7/17/2000	492.46	-	57.02	-	435.44
MW-10	10/24/2000	492.46	-	57.44	-	435.02
MW-10	1/24/2001	492.46	-	57.84	-	434.62
MW-10	10/18/2001	492.46	-	59.91	-	432.55
MW-10	3/19/2002	492.46	-	59.67	-	432.79
MW-10	8/14/2002	492.46	-	59.76	-	432.70
MW-10	1/13/2003	492.46	-	59.62	-	432.84
MW-10	8/26/2003	492.46	-	61.97	-	430.49
MW-10	5/11/2004	492.46	-	60.41	-	432.05
MW-10	11/22/2004	492.46	-	65.28	-	427.18
MW-10	2/24/2005	3,811.42	-	NM	-	NM
MW-10	5/18/2005	3,811.42	-	58.75	-	3,752.67
MW-10	11/15/2005	3,811.42	-	59.93	-	3,751.49
MW-10	5/21/2006	3,811.42	-	58.50	-	3,752.92
MW-11: Screened Interval ~60-80 ft bgs.						
MW-11	2/24/2005	3,811.66	-	61.52	-	3,750.14
MW-11	5/18/2005	3,811.66	-	61.78	-	3,749.88
MW-11	11/15/2005	3,811.66	-	62.20	-	3,749.46
MW-11	5/21/2006	3,811.66	-	61.94	-	3,749.72
MW-12: Screened Interval ~60-80 ft bgs.						
MW-12	2/24/2005	3,811.70	-	62.61	-	3,749.09
MW-12	5/18/2005	3,811.70	-	62.67	-	3,749.03
MW-12	11/15/2005	3,811.70	-	63.10	-	3,748.60
MW-12	5/21/2006	3,811.70	-	62.95	-	3,748.75

NOTES:

GW = Groundwater

PSH = Phase-separated hydrocarbons

TOC = Top of casing

ft. MSL = Feet mean sea level

ft. btoc = Feet below top of casing

* Top of casing elevations were surveyed to ft. MSL on 2/24/05 by John West Surveying.

Prior to 2/24/05 top of casing elevations were based on an arbitrary elevation of 500 ft.

TABLE 2. CUMULATIVE SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Phenol (mg/l)	Naphthalene (mg/l)	Chlorides (mg/l)
	WQCC Guideline:	0.01	0.75	0.75	0.62	0.005	0.03	250
MW-1	2/14/1996	**0.083**	<0.001	<0.001	0.01	--	--	--
MW-1	2/29/1996	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-1	4/20/1996	**0.305**	<0.001	0.002	0.032	<0.001	0.017	--
MW-1	10/23/1996	**0.352**	<0.001	0.026	0.081	0.025	0.010	--
MW-1	4/10/1997	**0.268**	<0.001	0.012	0.034	<0.001	0.007	--
MW-1	7/7/1997	**0.243**	--	--	--	--	0.005	--
MW-1	10/8/1997	**0.180**	<0.001	0.012	<0.001	--	0.003	<10
MW-1	1/5/1998	**0.138**	<0.001	0.008	<0.001	--	0.002	6.2
MW-1	4/3/1998	**0.109**	<0.001	0.004	0.006	--	0.003	51
MW-1	6/25/1998	**0.071**	<0.001	0.002	0.003	--	<0.001	7.3
MW-1	10/2/1998	**0.078**	<0.005	<0.005	<0.005	--	<0.001	14
MW-1	1/5/1999	0.005	<0.001	<0.001	<0.001	--	--	--
MW-1	4/1/1999	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-1	7/14/1999	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-1	10/22/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-1	1/25/2000	0.001	<0.001	<0.001	<0.001	--	--	--
MW-1	4/3/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-1	7/17/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-1	10/24/2000	**0.055**	0.036	0.025	0.090	--	--	--
MW-1	1/24/2001	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-1	10/18/2001	Insufficient water column present to purge/sample.						
MW-1	3/19/2002	Insufficient water column present to purge/sample.						
MW-1	8/14/2002	Insufficient water column present to purge/sample.						
MW-1	1/13/2003	Insufficient water column present to purge/sample.						
MW-1	8/26/2003	Insufficient water column present to purge/sample.						
MW-1	5/11/2004	Insufficient water column present to purge/sample.						
MW-1	11/22/2004	Insufficient water column present to purge/sample.						
MW-1	5/18/2005	Insufficient water column present to purge/sample.						
MW-1	11/15/2005	Insufficient water column present to purge/sample.						
MW-1	5/21/2006	Insufficient water column present to purge/sample.						
MW-2	10/23/1996	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-2	4/10/1997	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-2	7/7/1997	<0.001	--	--	--	--	--	--
MW-2	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	<0.001	19
MW-2	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
MW-2	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	96
MW-2	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	25
MW-2	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	--
MW-2	1/5/1999	Sampling discontinued as approved by OCD.						
MW-2	1/13/2003	Sampling discontinued as approved by OCD.						
MW-2	8/26/2003	Sampling discontinued as approved by OCD.						
MW-2	5/11/2004	Sampling discontinued as approved by OCD.						
MW-2	11/22/2004	Sampling discontinued as approved by OCD.						
MW-2	5/18/2005	Sampling discontinued as approved by OCD.						
MW-2	11/15/2005	Sampling discontinued as approved by OCD.						
MW-2	5/21/2006	Sampling discontinued as approved by OCD.						
MW-3	10/23/1996	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-3	4/10/1997	**0.016**	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-3	7/7/1997	0.003	<0.001	<0.001	<0.001	--	--	--
MW-3	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	<0.001	64
MW-3	1/8/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
MW-3	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	130
MW-3	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	12
MW-3	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	46
MW-3	1/5/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	4/1/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	7/14/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	10/22/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	1/25/2000	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	4/3/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-3	7/17/2000	**0.01**	<0.005	<0.005	<0.005	--	--	--
MW-3	10/24/2000	**0.02**	0.008	<0.005	0.014	--	--	--
MW-3	1/24/2001	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-3	10/18/2001	0.006	<0.001	<0.001	<0.001	--	--	--
MW-3	3/19/2002	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-3	8/14/2002	Insufficient water column present to purge/sample.						

TABLE 2. CUMULATIVE SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Phenol (mg/l)	Naphthalene (mg/l)	Chlorides (mg/l)
	WQCC Guideline:	0.01	0.75	0.75	0.62	0.005	0.03	250
MW-3	1/13/2003	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-3	8/26/2003	Insufficient water column present to purge/sample.						
MW-3	5/11/2004	Insufficient water column present to purge/sample.						
MW-3	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	156
MW-3	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	139
MW-3	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	48.9
MW-3	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	42.8
MW-4	10/23/1996	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-4	4/10/1997	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-4	7/7/1997	<0.001	--	--	--	--	--	--
MW-4	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	<0.001	<10
MW-4	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	10
MW-4	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	58
MW-4	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	11
MW-4	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	18
MW-4	1/5/1999	Sampling discontinued as approved by OCD.						
MW-4	1/13/2003	Sampling discontinued as approved by OCD.						
MW-4	8/26/2003	Sampling discontinued as approved by OCD. Well was dry.						
MW-4	5/11/2004	Sampling discontinued as approved by OCD. Well was dry.						
MW-4	11/22/2004	Sampling discontinued as approved by OCD. Well was dry.						
MW-4	5/18/2005	Sampling discontinued as approved by OCD. Well was dry.						
MW-4	11/15/2005	Sampling discontinued as approved by OCD. Well was dry.						
MW-4	5/21/2006	Sampling discontinued as approved by OCD.						
MW-5	10/23/1996	**0.135**	<0.001	0.006	0.071	<0.001	<0.001	--
MW-5	4/10/1997	**0.043**	<0.001	<0.001	0.063	<0.001	0.001	--
MW-5	7/7/1997	**0.015**	--	--	--	--	<0.001	--
MW-5	10/8/1997	**0.050**	<0.001	<0.001	<0.001	--	0.001	24
MW-5	1/6/1998	**0.031**	<0.001	<0.001	0.010	--	<0.001	27
MW-5	4/3/1998	**0.037**	<0.001	0.002	0.019	--	0.001	69
MW-5	6/25/1998	**0.017**	<0.001	<0.001	0.006	--	<0.001	23
MW-5	10/2/1998	**0.011**	<0.001	<0.001	<0.001	--	<0.001	87
MW-5	1/5/1999	0.005	<0.001	<0.001	<0.001	--	--	--
MW-5	4/1/1999	0.003	<0.001	<0.001	<0.001	--	--	--
MW-5	7/14/1999	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-5	10/22/1999	<0.001	<0.001	<0.001	<0.001	--		--
MW-5	1/25/2000	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-5	4/3/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-5	7/17/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-5	10/24/2000	<0.005	<0.005	<0.005	<0.005	--	--	--
MW-5	1/24/2001	Insufficient water column present to purge/sample.						
MW-5	10/18/2001	Insufficient water column present to purge/sample.						
MW-5	3/19/2002	Insufficient water column present to purge/sample.						
MW-5	8/14/2002	Insufficient water column present to purge/sample.						
MW-5	1/13/2003	Insufficient water column present to purge/sample.						
MW-5	8/26/2003	Insufficient water column present to purge/sample.						
MW-5	5/11/2004	Insufficient water column present to purge/sample.						
MW-5	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	30.3
MW-5Dup	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	30.4
MW-5	5/18/2005	Insufficient water column present to purge/sample.						
MW-5	11/15/2005	Insufficient water column present to purge/sample.						
MW-5	5/21/2006	Insufficient water column present to purge/sample.						
MW-6	10/23/1996	**0.192**	<0.001	0.006	0.013	<0.001	<0.001	--
MW-6	4/10/1997	**0.272**	<0.001	<0.001	0.014	<0.001	0.001	--
MW-6	7/7/1997	**0.106**	--	--	--	--	--	--
MW-6	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	0.001	30
MW-6	1/6/1998	**0.132**	<0.001	<0.001	0.004	--	<0.001	31
MW-6	4/3/1998	**0.165**	<0.001	0.002	0.008	--	0.001	98
MW-6	6/25/1998	**0.143**	<0.001	<0.001	0.009	--	<0.001	28
MW-6	10/2/1998	**0.157**	<0.005	<0.005	0.012	--	<0.001	31
MW-6	1/5/1999	**0.123**	<0.001	<0.001	0.004	--	--	56
MW-6	4/1/1999	**0.12**	<0.001	<0.001	<0.001	--	--	31
MW-6	7/14/1999	**0.093**	<0.005	<0.005	<0.005	--	--	34
MW-6	10/22/1999	**0.09**	<0.001	<0.001	<0.001	--		31.5
MW-6	1/25/2000	**0.105**	<0.001	<0.001	<0.001	--	--	35
MW-6	4/3/2000	**0.157**	<0.005	<0.005	<0.005	--	--	33
MW-6	7/17/2000	**0.126**	<0.005	<0.005	<0.005	--	--	33
MW-6	10/24/2000	**0.031**	<0.005	<0.005	0.006	--	--	30

TABLE 2. CUMULATIVE SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Phenol (mg/l)	Naphthalene (mg/l)	Chlorides (mg/l)
	WQCC Guideline:	0.01	0.75	0.75	0.62	0.005	0.03	250
MW-6	1/24/2001	**0.02**	<0.005	<0.005	<0.005	--	--	28
MW-6	10/18/2001	Insufficient water column present to purge/sample.						
MW-6	3/19/2002	Insufficient water column present to purge/sample.						
MW-6	8/14/2002	Insufficient water column present to purge/sample.						
MW-6	1/13/2003	Insufficient water column present to purge/sample.						
MW-6	8/26/2003	Insufficient water column present to purge/sample.						
MW-6	5/11/2004	Insufficient water column present to purge/sample.						
MW-6	11/22/2004	Insufficient water column present to purge/sample.						
MW-6	5/18/2005	Plugged and abandoned in February 2005; replaced with monitor well MW-6R.						
MW-6R	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	37.7
MW-6R	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	41.4
MW-6R	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	41.2
MW-7	1/9/1997	<0.001	<0.001	0.006	0.013	<0.001	<0.001	--
MW-7	4/10/1997	<0.001	<0.001	<0.001	0.014	<0.001	0.001	--
MW-7	7/7/1997	<0.001	--	--	--	--	--	--
MW-7	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	0.001	33
MW-7	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	37
MW-7	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	0.001	120
MW-7	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	33
MW-7	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	36
MW-7	1/5/1999	<0.001	<0.001	<0.001	<0.001	--	--	74
MW-7	4/1/1999	<0.001	<0.001	<0.001	<0.001	--	--	36
MW-7	7/14/1999	<0.001	<0.001	<0.001	<0.001	--	--	35
MW-7	10/22/1999	<0.001	<0.001	<0.001	<0.001	--		35.2
MW-7	1/25/2000	<0.001	<0.001	<0.001	<0.001	--	--	32
MW-7	4/3/2000	<0.001	<0.001	<0.001	<0.001	--	--	31
MW-7	7/17/2000	<0.001	<0.001	<0.001	<0.001	--	--	32
MW-7	10/24/2000	<0.001	<0.001	<0.001	<0.001	--	--	33
MW-7	1/24/2001	<0.005	<0.005	<0.005	<0.005	--	--	33
MW-7	10/18/2001	**0.025**	<0.001	<0.001	<0.001	--	--	39.5
MW-7	3/19/2002	**0.414**	<0.001	<0.001	<0.001	--	--	39.8
MW-7	8/14/2002	**0.750**	<0.005	<0.005	<0.005	--	--	47.1
MW-7	1/13/2003	**0.799**	<0.005	<0.005	<0.005	--	--	38.5
MW-7	8/26/2003	Sheen detected. Not sampled.						
MW-7	5/11/2004	**0.122**	<0.001	<0.001	<0.001	--	--	46.5
MW-7	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	47.6
MW-7	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	39.6
MW-7Dup	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	42.4
MW-7	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	47.4
MW-7	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	48.3
MW-7Dup	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	48.2
MW-8	10/23/1996	Well not installed.						
MW-8	4/10/1997	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
MW-8	7/7/1997	<0.001	--	--	--	--	--	--
MW-8	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	<0.001	15
MW-8	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
MW-8	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
MW-8	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	26
MW-8	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	27
MW-8	1/5/1999	Sampling discontinued as approved by OCD.						
MW-8	1/13/2003	Sampling discontinued as approved by OCD.						
MW-8	8/26/2003	Sampling discontinued as approved by OCD.						
MW-8	5/11/2004	Sampling discontinued as approved by OCD.						
MW-8	11/22/2004	Sampling discontinued as approved by OCD.						
MW-8	5/18/2005	Sampling discontinued as approved by OCD.						
MW-8	11/15/2005	Sampling discontinued as approved by OCD.						
MW-8	5/21/2006	Sampling discontinued as approved by OCD.						
MW-9	10/23/1996	Well not installed.						
MW-9	4/10/1997	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	**320**
MW-9	7/7/1997	<0.001	--	--	--	--	--	41
MW-9	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	0.001	**560**
MW-9	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	**490**
MW-9	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	0.001	**460**
MW-9	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	**290**
MW-9	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	200
MW-9	1/5/1999	<0.001	<0.001	<0.001	<0.001	--	--	**520**
MW-9	4/1/1999	<0.001	<0.001	<0.001	<0.001	--	--	**260**

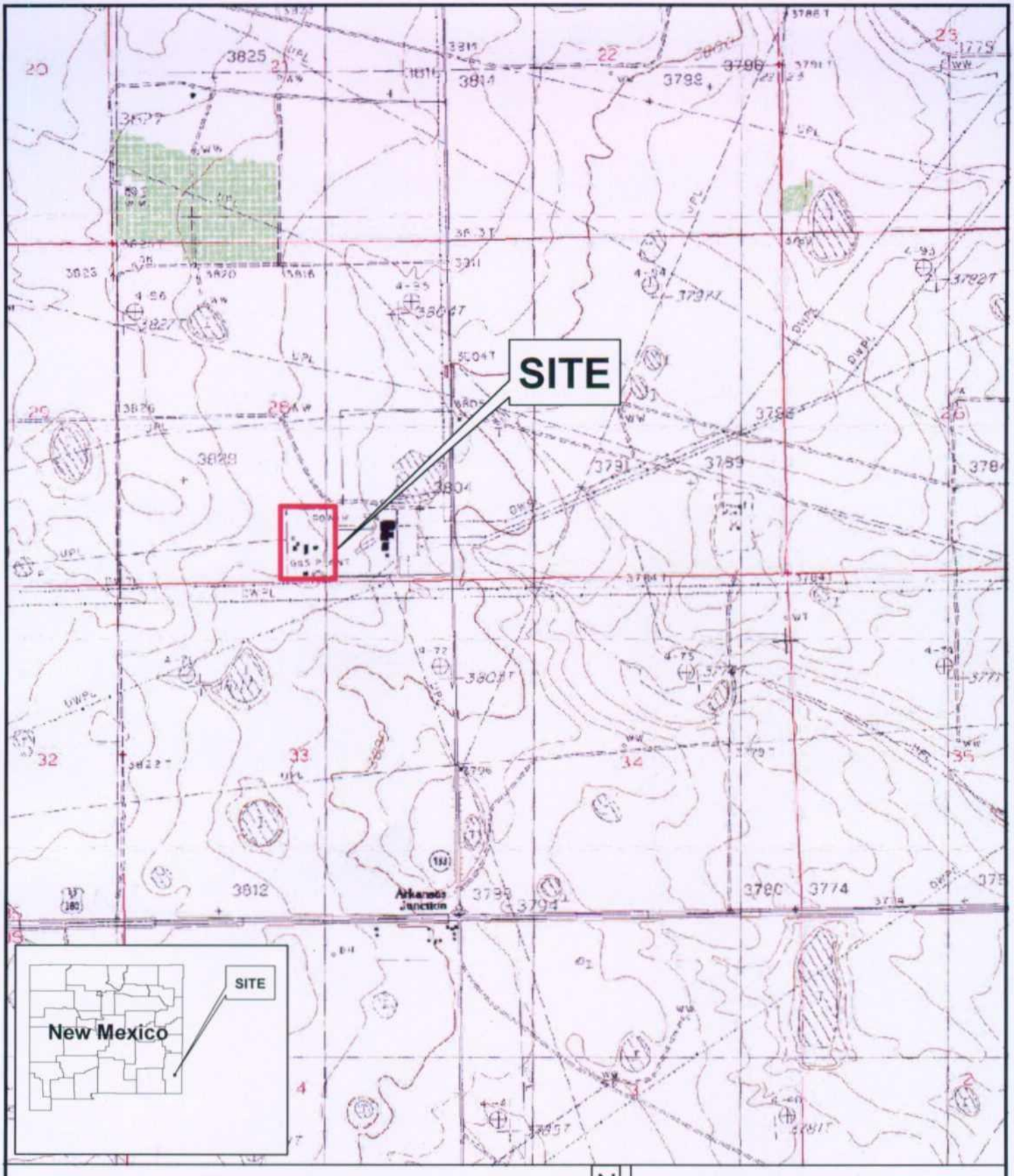
TABLE 2. CUMULATIVE SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Former Hobbs Gas Plant
Hobbs (Lea County), New Mexico

Monitor Well	Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Phenol (mg/l)	Naphthalene (mg/l)	Chlorides (mg/l)
	WQCC Guideline:	0.01	0.75	0.75	0.62	0.005	0.03	250
MW-9	7/14/1999	<0.001	<0.001	<0.001	<0.001	--	--	**284**
MW-9	10/22/1999	<0.001	<0.001	<0.001	<0.001	--		**278**
MW-9	1/25/2000	<0.005	<0.005	<0.005	<0.005	--	--	**300**
MW-9	4/3/2000	<0.005	<0.005	<0.005	<0.005	--	--	**250**
MW-9	7/17/2000	<0.001	<0.001	<0.001	<0.001	--	--	95
MW-9	10/24/2000	<0.001	<0.001	<0.001	<0.001	--	--	40
MW-9	1/24/2001	<0.005	<0.005	<0.005	<0.005	--	--	42
MW-9	10/18/2001	<0.001	<0.001	<0.001	<0.001	--	--	166
MW-9	3/19/2002	0.0046	<0.001	<0.001	<0.001	--	--	77.5
MW-9	8/14/2002	0.0022	<0.001	<0.001	<0.001	--	--	106
MW-9	1/13/2003	<0.001	<0.001	<0.001	<0.001	--	--	92.1
MW-9	8/26/2003	<0.005	<0.005	<0.005	<0.005	--	--	111
MW-9	5/11/2004	<0.001	<0.001	<0.001	<0.001	--	--	206
MW-9	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	104
MW-9	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	91.5
MW-9	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	144
MW-9	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	92.9
MW-10	10/23/1996	Well not installed.						
MW-10	4/10/1997	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	--
MW-10	7/7/1997	<0.001	--	--	--	--	--	8.8
MW-10	10/8/1997	<0.001	<0.001	<0.001	<0.001	--	0.001	110
MW-10	1/6/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	101
MW-10	4/3/1998	<0.001	<0.001	<0.001	<0.001	--	0.001	180
MW-10	6/25/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	140
MW-10	10/2/1998	<0.001	<0.001	<0.001	<0.001	--	<0.001	160
MW-10	1/5/1999	<0.001	<0.001	<0.001	<0.001	--	--	140
MW-10	4/1/1999	<0.001	<0.001	<0.001	<0.001	--	--	128
MW-10	7/14/1999	<0.001	<0.001	<0.001	<0.001	--	--	124
MW-10	10/22/1999	<0.001	<0.001	<0.001	<0.001	--		122
MW-10	1/25/2000	<0.001	<0.001	<0.001	<0.001	--	--	120
MW-10	4/3/2000	<0.001	<0.001	<0.001	<0.001	--	--	130
MW-10	7/17/2000	<0.005	<0.005	<0.005	<0.005	--	--	130
MW-10	10/24/2000	<0.001	<0.001	<0.001	<0.001	--	--	150
MW-10	1/24/2001	<0.005	<0.005	<0.005	<0.005	--	--	18
MW-10	10/18/2001	<0.001	<0.001	<0.001	<0.001	--	--	119
MW-10	3/19/2002	0.0043	<0.001	<0.001	<0.001	--	--	78.9
MW-10	8/14/2002	<0.001	<0.001	<0.001	<0.001	--	--	96.4
MW-10	1/13/2003	<0.001	<0.001	<0.001	<0.001	--	--	140
MW-10	8/26/2003	<0.001	0.0012	<0.001	<0.001	--	--	162
MW-10	5/11/2004	<0.001	<0.001	<0.001	<0.001	--	--	111
MW-10D	5/11/2004	<0.001	<0.001	<0.001	<0.001	--	--	106
MW-10	11/22/2004	<0.001	<0.001	<0.001	<0.001	--	--	26.8
MW-10	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	197
MW-10	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	183
MW-10	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	138
MW-11	2/24/2005	<0.001	<0.001	<0.001	<0.001	--	--	76.4
MW-11	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	62.8
MW-11	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	68.8
MW-11Dup	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	--
MW-11	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	57.9
MW-12	2/24/2005	<0.001	<0.001	<0.001	<0.001	--	--	43.7
MW-12	5/18/2005	<0.001	<0.001	<0.001	<0.001	--	--	36
MW-12	11/15/2005	<0.001	<0.001	<0.001	<0.001	--	--	36.4
MW-12	5/21/2006	<0.001	<0.001	<0.001	<0.001	--	--	35.8

NOTE:
Shaded and **bolded** results exceed the New Mexico Water Quality Commission established guideline levels:
benzene = 0.01 mg/L and chlorides = 250 mg/L.
mg/L = milligrams per Liter or parts per million.
-- = Constituent not analyzed for.

Figures

FIGURES



SOURCE:
USGS 7.5 MINUTE QUADRANGLE MAPS
FOR MONUMENT NORTH, NM (1979)
OBTAINED FROM NEW MEXICO RESOURCE
GEOGRAPHIC INFORMATION SYSTEM PROGRAM
VIA THEIR WEBSITE: http://www.rgis.unm.edu

SITE LOCATION MAP

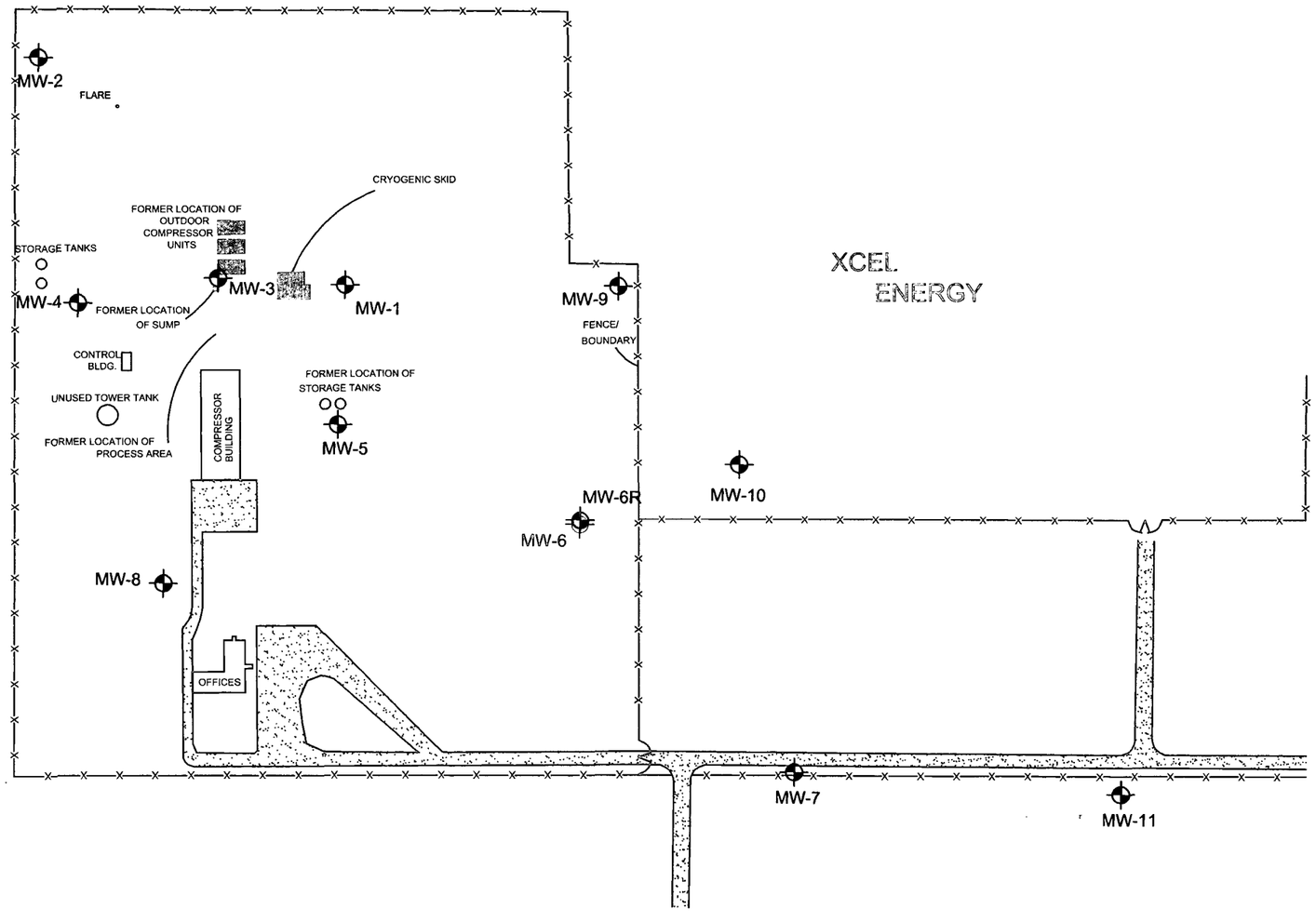
KINDER MORGAN

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

PROJECT NO.: 50942 | DATE: 6/06

TRC
Environmental Corporation
Customer-Focused Solutions
2313 W SAM HOUSTON PARKWAY N.
SUITE 107
HOUSTON, TEXAS 77043
713-821-7000

FIGURE 1



LEGEND

MW-1 - MONITOR WELL LOCATION

MW-6 - PLUGGED MONITOR WELL LOCATION

0 100 200 400

SCALE IN FEET
1" = 200'-0"

SITE MAP

KINDER MORGAN

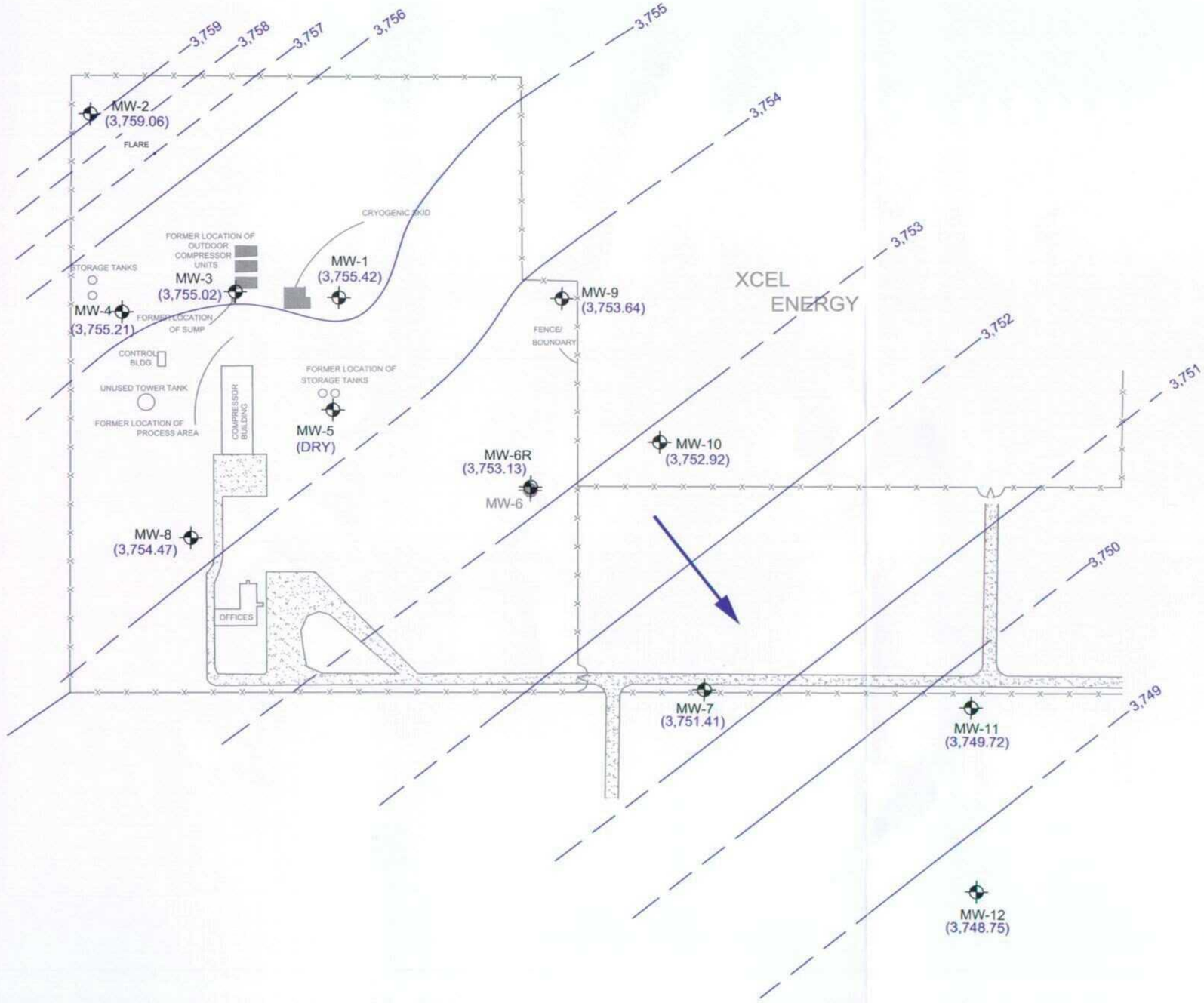
FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

PROJECT NO.: 50942 | DATE: 6/06

TRC Environmental Corporation
Customer-Focused Solutions
2313 W. SAM HOUSTON PARKWAY N.
STE. 107
HOUSTON, TEXAS 77043
713-821-7000

FIGURE 2

HOU J:\Kinder Morgan\West Texas (Sandhill - Waddell - Hobbs)\Hobbs Gas Plant\Reports\2006 Semiannual GW Rpt\DWGS\ KINDER MORGAN-HOBBS-FIG-2-SITE-MAP.dwg, Layout1 06/26/06



LEGEND

MW-1 (3,755.42) - MONITOR WELL LOCATION W/ GROUNDWATER ELEVATION (ft. MSL)

MW-6 - PLUGGED MONITOR WELL LOCATION

- APPARENT DIRECTION OF GROUNDWATER FLOW

3,751 - POTENTIOMETRIC SURFACE (ft. MSL) CONTOUR INTERVAL = 1.0 FT.

0 100 200 400

SCALE IN FEET
1" = 200'-0"

POTENTIOMETRIC SURFACE CONTOUR MAP (MAY 2006)

KINDER MORGAN

FORMER HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

PROJECT NO.: 50942 | DATE: 6/06

TRC Environmental Corporation
Customer-Focused Solutions
2313 W. SAM HOUSTON PARKWAY N.
STE. 107
HOUSTON, TEXAS 77043
713-821-7000

FIGURE 3

HOU J:\Kinder Morgan\West Texas (Sandhill - Waddell - Hobbs)\Hobbs Gas Plant\Reports\2006 Semiannual GW Rpt\DWGS\ KINDER MORGAN-HOBBS-FIG-3-POTENTIO.dwg Layout1 06/26/06

Appendix A

APPENDIX A

ANALYTICAL RESULTS

Summary Report

Brett Neff
TRC
2313 W Sam Houston Parkway N.
Suite 107
Houston, TX, 77043

Report Date: June 1, 2006

Work Order: 6052306

Project Location: Hobbs,NM
Project Name: Hobbs Gas Plant
Project Number: 40299-0002-00004

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
91074	MW-12	water	2006-05-21	10:34	2006-05-23
91075	MW-11	water	2006-05-21	11:29	2006-05-23
91076	MW-7	water	2006-05-21	14:31	2006-05-23
91077	EBlank	water	2006-05-21	14:45	2006-05-23
91078	MW-10	water	2006-05-21	15:23	2006-05-23
91079	MW-6R	water	2006-05-21	16:11	2006-05-23
91080	MW-9	water	2006-05-21	16:56	2006-05-23
91081	MW-3	water	2006-05-21	17:40	2006-05-23
91082	MW-99	water	2006-05-21	00:00	2006-05-23
91083	TRIP	water	2006-05-21	00:00	2006-05-23

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
91074 - MW-12	<0.00100	<0.00100	<0.00100	<0.00100	
91075 - MW-11	<0.00100	<0.00100	<0.00100	<0.00100	
91076 - MW-7	<0.00100	<0.00100	<0.00100	<0.00100	
91077 - EBlank	<0.00100	<0.00100	<0.00100	<0.00100	
91078 - MW-10	<0.00100	<0.00100	<0.00100	<0.00100	
91079 - MW-6R	<0.00100	<0.00100	<0.00100	<0.00100	
91080 - MW-9	<0.00100	<0.00100	<0.00100	<0.00100	
91081 - MW-3	<0.00100	<0.00100	<0.00100	<0.00100	
91082 - MW-99	<0.00100	<0.00100	<0.00100	<0.00100	
91083 - TRIP	<0.00100	<0.00100	<0.00100	<0.00100	

Sample: 91074 - MW-12

Param	Flag	Result	Units	RL
Chloride		**35.8**	mg/L	0.500

Sample: 91075 - MW-11

Param	Flag	Result	Units	RL
Chloride		**57.9**	mg/L	0.500

Sample: 91076 - MW-7

Param	Flag	Result	Units	RL
Chloride		**48.3**	mg/L	0.500

Sample: 91078 - MW-10

Param	Flag	Result	Units	RL
Chloride		**138**	mg/L	0.500

Sample: 91079 - MW-6R

Param	Flag	Result	Units	RL
Chloride		**41.2**	mg/L	0.500

Sample: 91080 - MW-9

Param	Flag	Result	Units	RL
Chloride		**92.9**	mg/L	0.500

Sample: 91081 - MW-3

Param	Flag	Result	Units	RL
Chloride		**42.8**	mg/L	0.500

Sample: 91082 - MW-99

Param	Flag	Result	Units	RL
Chloride		**48.2**	mg/L	0.500

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Brett Neff
TRC
2313 W Sam Houston Parkway N.
Suite 107
Houston, TX, 77043

Report Date: June 1, 2006

Work Order: 6052306

Project Location: Hobbs,NM
Project Name: Hobbs Gas Plant
Project Number: 40299-0002-00004

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
91074	MW-12	water	2006-05-21	10:34	2006-05-23
91075	MW-11	water	2006-05-21	11:29	2006-05-23
91076	MW-7	water	2006-05-21	14:31	2006-05-23
91077	EBlank	water	2006-05-21	14:45	2006-05-23
91078	MW-10	water	2006-05-21	15:23	2006-05-23
91079	MW-6R	water	2006-05-21	16:11	2006-05-23
91080	MW-9	water	2006-05-21	16:56	2006-05-23
91081	MW-3	water	2006-05-21	17:40	2006-05-23
91082	MW-99	water	2006-05-21	00:00	2006-05-23
91083	TRIP	water	2006-05-21	00:00	2006-05-23

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 91074 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0840	mg/L	1	0.100	84	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0798	mg/L	1	0.100	80	46.4 - 136.5

Sample: 91074 - MW-12

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26933	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23635	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**35.8**	mg/L	5	0.500

Sample: 91075 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0890	mg/L	1	0.100	89	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0840	mg/L	1	0.100	84	46.4 - 136.5

Sample: 91075 - MW-11

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26933	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23635	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride	-	**57.9**	mg/L	5	0.500

Sample: 91076 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0855	mg/L	1	0.100	86	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0788	mg/L	1	0.100	79	46.4 - 136.5

Sample: 91076 - MW-7

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**48.3**	mg/L	5	0.500

Sample: 91077 - EBlank

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0812	mg/L	1	0.100	81	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0768	mg/L	1	0.100	77	46.4 - 136.5

Sample: 91078 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0807	mg/L	1	0.100	81	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0765	mg/L	1	0.100	76	46.4 - 136.5

Sample: 91078 - MW-10

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**138**	mg/L	10	0.500

Sample: 91079 - MW-6R

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0850	mg/L	1	0.100	85	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0781	mg/L	1	0.100	78	46.4 - 136.5

Sample: 91079 - MW-6R

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**41.2**		mg/L	5	0.500

Sample: 91080 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26842	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23571	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0854	mg/L	1	0.100	85	78.1 - 125.4
4-Bromofluorobenzene (4-BFB)		0.0812	mg/L	1	0.100	81	46.4 - 136.5

Sample: 91080 - MW-9

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**92.9**		mg/L	5	0.500

Sample: 91081 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26840	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23569	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene	[1]	<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100

continued...

[1]Sample was not <2 pH. Sample ran unpreserved.

sample 91081 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0970	mg/L	1	0.100	97	70.6 - 129.2

Sample: 91081 - MW-3

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**42.8**		mg/L	5	0.500

Sample: 91082 - MW-99

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26840	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23569	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene	[2]	<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0980	mg/L	1	0.100	98	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.0973	mg/L	1	0.100	97	70.6 - 129.2

Sample: 91082 - MW-99

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	26934	Date Analyzed:	2006-05-25	Analyzed By:	WB
Prep Batch:	23636	Sample Preparation:	2006-05-24	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**48.2**		mg/L	5	0.500

[2]Sample was not <2 pH. Sample ran unpreserved.

Sample: 91083 - TRIP

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	26839	Date Analyzed:	2006-05-25	Analyzed By:	KB
Prep Batch:	23568	Sample Preparation:	2006-05-25	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	70.6 - 129.2

Method Blank (1) QC Batch: 26839

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.000603	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	58.5 - 118

Method Blank (1) QC Batch: 26840

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.000603	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	58.5 - 118

Method Blank (1) QC Batch: 26842

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000153	mg/L	0.001
Toluene		<0.000283	mg/L	0.001
Ethylbenzene		<0.000621	mg/L	0.001
Xylene		<0.000456	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0869	mg/L	1	0.100	87	80.4 - 108
4-Bromofluorobenzene (4-BFB)		0.0849	mg/L	1	0.100	85	75.1 - 117

Method Blank (1)

QC Batch: 26933 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23635 | QC Preparation: 2006-05-24 | Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0552	mg/L	0.5

Method Blank (1)

QC Batch: 26934 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23636 | QC Preparation: 2006-05-24 | Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0552	mg/L	0.5

Laboratory Control Spike (LCS-1)

QC Batch: 26839 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23568 | QC Preparation: 2006-05-25 | Prepared By: KB

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.100	0.0955	mg/L	1	0.100	<0.000255	100	5	80.8 - 112	20
Toluene	0.100	0.0956	mg/L	1	0.100	<0.000210	100	4	78 - 114	20
Ethylbenzene	0.102	0.0978	mg/L	1	0.100	<0.000317	102	4	78.6 - 116	20
Xylene	0.307	0.294	mg/L	1	0.300	<0.000603	102	4	83.2 - 112	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	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.100	mg/L	1	0.100	103	100	79.9 - 117
4-Bromofluorobenzene (4-BFB)	0.101	0.0991	mg/L	1	0.100	101	99	79 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 26840 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23569 | QC Preparation: 2006-05-25 | Prepared By: KB

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0981	0.0927	mg/L	1	0.100	<0.000255	98	6	80.8 - 112	20
Toluene	0.0976	0.0930	mg/L	1	0.100	<0.000210	98	5	78 - 114	20
Ethylbenzene	0.0981	0.0943	mg/L	1	0.100	<0.000317	98	4	78.6 - 116	20
Xylene	0.296	0.284	mg/L	1	0.300	<0.000603	99	4	83.2 - 112	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	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.100	0.0986	mg/L	1	0.100	100	99	79.9 - 117
4-Bromofluorobenzene (4-BFB)	0.0988	0.0972	mg/L	1	0.100	99	97	79 - 123

Laboratory Control Spike (LCS-1)

QC Batch: 26842 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23571 | QC Preparation: 2006-05-25 | Prepared By: KB

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.106	0.109	mg/L	1	0.100	<0.000153	106	3	80 - 120	20
Toluene	0.106	0.108	mg/L	1	0.100	<0.000283	106	2	80 - 120	20
Ethylbenzene	0.106	0.107	mg/L	1	0.100	<0.000621	106	1	80 - 120	20
Xylene	0.321	0.325	mg/L	1	0.300	<0.000456	107	1	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	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0997	0.101	mg/L	1	0.100	100	101	80 - 120
4-Bromofluorobenzene (4-BFB)	0.103	0.104	mg/L	1	0.100	103	104	80 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 26933 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23635 | QC Preparation: 2006-05-24 | Prepared By: WB

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.5	12.1	mg/L	1	12.5	<0.0552	92	5	90 - 110	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 26934 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23636 | QC Preparation: 2006-05-24 | Prepared By: WB

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.2	12.1	mg/L	1	12.5	<0.0552	97	1	90 - 110	20

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

Matrix Spike (MS-1)

QC Batch: 26839 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23568 | QC Preparation: 2006-05-25 | Prepared By: KB

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	[3,4]	0.00100	na	mg/L	1	0.100	<0.000255	1	200	70.9 - 126	20
Toluene	[5,6]	0.000500	na	mg/L	1	0.100	<0.000210	0	200	70.8 - 125	20
Ethylbenzene	[7,8]	<0.000317	na	mg/L	1	0.100	<0.000317	0	0	74.8 - 125	20
Xylene	[9,10]	0.000900	na	mg/L	1	0.300	<0.000603	0	200	75.7 - 126	20

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	[11]	0.102	na	mg/L	1	0.1	102	0	73.6 - 121
4-Bromofluorobenzene (4-BFB)	[12]	0.103	na	mg/L	1	0.1	103	0	81.8 - 114

Matrix Spike (MS-1)

QC Batch: 26840 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23569 | QC Preparation: 2006-05-25 | Prepared By: KB

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	[13]	0.0985	na	mg/L	1	0.100	<0.000255	98	200	70.9 - 126	20
Toluene	[14]	0.0979	na	mg/L	1	0.100	<0.000210	98	200	70.8 - 125	20
Ethylbenzene	[15]	0.0992	na	mg/L	1	0.100	<0.000317	99	200	74.8 - 125	20
Xylene	[16]	0.298	na	mg/L	1	0.300	<0.000603	99	200	75.7 - 126	20

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

continued ...

[3]Matrix spike recoveries out of control limits due to spike error. Use LCS/LCSD to demonstrate analysis is under control.
[4]RPD is out of range because a matrix spike duplicate was not prepared.
[5]Matrix spike recoveries out of control limits due to spike error. Use LCS/LCSD to demonstrate analysis is under control.
[6]RPD is out of range because a matrix spike duplicate was not prepared.
[7]Matrix spike recoveries out of control limits due to spike error. Use LCS/LCSD to demonstrate analysis is under control.
[8]RPD is out of range because a matrix spike duplicate was not prepared.
[9]Matrix spike recoveries out of control limits due to spike error. Use LCS/LCSD to demonstrate analysis is under control.
[10]RPD is out of range because a matrix spike duplicate was not prepared.
[11]RPD is out of range because a matrix spike duplicate was not prepared.
[12]RPD is out of range because a matrix spike duplicate was not prepared.
[13]RPD is out of range because a matrix spike duplicate was not prepared.
[14]RPD is out of range because a matrix spike duplicate was not prepared.
[15]RPD is out of range because a matrix spike duplicate was not prepared.
[16]RPD is out of range because a matrix spike duplicate was not prepared.

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT) [17]	0.0999	na	mg/L	1	0.1	100	0	73.6 - 121
4-Bromofluorobenzene (4-BFB) [18]	0.0971	na	mg/L	1	0.1	97	0	81.8 - 114

Matrix Spike (MS-1)

QC Batch: 26842 | Date Analyzed: 2006-05-25 | Analyzed By: KB
Prep Batch: 23571 | QC Preparation: 2006-05-25 | Prepared By: KB

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene [19]	0.108	na	mg/L	1	0.100	<0.000153	108	200	88.4 - 114	20
Toluene [20]	0.108	na	mg/L	1	0.100	<0.000283	108	200	81.4 - 116	20
Ethylbenzene [21]	0.106	na	mg/L	1	0.100	<0.000621	106	200	82.5 - 118	20
Xylene [22]	0.323	na	mg/L	1	0.300	<0.000456	108	200	77.9 - 117	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT) [23]	0.103	na	mg/L	1	0.1	103	0	84 - 109
4-Bromofluorobenzene (4-BFB) [24]	0.107	na	mg/L	1	0.1	107	0	74 - 120

Matrix Spike (MS-1)

QC Batch: 26933 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23635 | QC Preparation: 2006-05-24 | Prepared By: WB

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	1620	1640	mg/L	100	12.5	506	89	1	25.4 - 171	20

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

Matrix Spike (MS-1)

QC Batch: 26934 | Date Analyzed: 2006-05-25 | Analyzed By: WB
Prep Batch: 23636 | QC Preparation: 2006-05-24 | Prepared By: WB

[17]RPD is out of range because a matrix spike duplicate was not prepared.
[18]RPD is out of range because a matrix spike duplicate was not prepared.
[19]RPD is out of range because a matrix spike duplicate was not prepared.
[20]RPD is out of range because a matrix spike duplicate was not prepared.
[21]RPD is out of range because a matrix spike duplicate was not prepared.
[22]RPD is out of range because a matrix spike duplicate was not prepared.
[23]RPD is out of range because a matrix spike duplicate was not prepared.
[24]RPD is out of range because a matrix spike duplicate was not prepared.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	765	776	mg/L	50	12.5	176	94	1	25.4 - 171	20

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

Standard (ICV-1)

QC Batch: 26839 Date Analyzed: 2006-05-25 Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.101	101	85 - 115	2006-05-25
Toluene		mg/L	0.100	0.102	102	85 - 115	2006-05-25
Ethylbenzene		mg/L	0.100	0.104	104	85 - 115	2006-05-25
Xylene		mg/L	0.300	0.311	104	85 - 115	2006-05-25

Standard (CCV-1)

QC Batch: 26839 Date Analyzed: 2006-05-25 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0992	99	85 - 115	2006-05-25
Toluene		mg/L	0.100	0.0979	98	85 - 115	2006-05-25
Ethylbenzene		mg/L	0.100	0.0978	98	85 - 115	2006-05-25
Xylene		mg/L	0.300	0.296	99	85 - 115	2006-05-25

Standard (ICV-1)

QC Batch: 26840 Date Analyzed: 2006-05-25 Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0934	93	85 - 115	2006-05-25
Toluene		mg/L	0.100	0.0936	94	85 - 115	2006-05-25
Ethylbenzene		mg/L	0.100	0.0949	95	85 - 115	2006-05-25
Xylene		mg/L	0.300	0.286	95	85 - 115	2006-05-25

Standard (CCV-1)

QC Batch: 26840 Date Analyzed: 2006-05-25 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0969	97	85 - 115	2006-05-25
Toluene		mg/L	0.100	0.0962	96	85 - 115	2006-05-25
Ethylbenzene		mg/L	0.100	0.0955	96	85 - 115	2006-05-25

continued ...

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.1	97	90 - 110	2006-05-25

Standard (CCV-1)

QC Batch: 26934 Date Analyzed: 2006-05-25 Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.3	98	90 - 110	2006-05-25

Report Date: June 1, 2006
40299-0002-00004

Work Order: 6052306
Hobbs Gas Plant

Page Number: 15 of 15
Hobbs,NM

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Fax (806) 794-1298
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TraceAnalysis, Inc.

155 McCutcheon, Suite H
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Tel (915) 585-3443
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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 6052306

Company Name: TRC
Phone #: 713-821-7000
Address: (Street, City, Zip) 2313 W. Sam Houston Pkwy. Ste. 107 Houston, TX 77043
Fax #: 713-821-6000
Contact Person: Charles Bates
E-mail: cbates@tresolutions.com
Invoice to: (If different from above)
Project #: 40299
Project Name: ~~Hobbs~~ Kinder Morgan
Project Location (including state): Hobbs, N.M.
Sampler Signature: Charles Bates

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
91074	MW-12	3		X								X	~~X~~	5/21	1034
75	MW-11	3		X								X	~~X~~	5/21	1129
76	MW-7	3		X								X	~~X~~	5/21	1431
77	EBlank	2		X								X	~~X~~	5/21	1445
78	MW-10	3		X								X	~~X~~	5/21	1523
79	MW-6R	3		X								X	~~X~~	5/21	1611
80	MW-9	3		X								X	~~X~~	5/21	1656
81	MW-3	3		X								X	~~X~~	5/21	1740
82	MW-99	3		X								X	~~X~~	5/21	
83	TRIP	2		X											
	TEMP BLANK	1		X											

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX (8021B) / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	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	Moisture Content	Chloride	Turn Around Time if different from standard	Hold
	X	X															X		
	X	X															X		
	X	X															X		
	X	X																	
	X	X															X		
	X	X															X		
	X	X															X		
	X	X															X		
	X	X															X		
	X																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Charles Bates	5/22/06	1840	Helen Shelton	5/22/06	1840
Helen Shelton	5/22/06	1930			
			Received at Laboratory by: Megan McLeod	5/23/06	1030

LAB USE ONLY
Intact (Y) N
Headspace Y (N)
Temp 4°C
Log-In-Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Lone Star 37147674

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

29-43

ORIGINAL COPY

OCD File Copy.

Eco-logical
Environmental Services Inc.

STAGE 1 ABATEMENT PLAN
AND
SITE CLOSURE PLAN
HOBBS NATURAL GAS PLANT
K N ENERGY, INC.
HOBBS, LEA COUNTY, NEW MEXICO

Date Prepared:
January 14, 1997

ECO Project No.:
279-512

Prepared For:
New Mexico Oil Conservation Division
Mr. Patricio Sanchez

On Behalf of:
K N Energy, Inc.

Prepared By:
Eco-logical Environmental Services, Inc.
2200 Market St.
Midland, New Mexico 79703
915/520-7535

Eco-logical
Environmental Services Inc.

STAGE 1 ABATEMENT PLAN
AND
SITE CLOSURE PLAN
HOBBS NATURAL GAS PLANT
K N ENERGY, INC.
HOBBS, LEA COUNTY, NEW MEXICO

Date Prepared:
January 14, 1997

ECO Project No.:
279-512

Prepared By:

Carrie E. Eick, P.E.
Project Manager

Reviewed By:

Shane Estep, R.E.M.
President

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K N Energy, Inc.
Hobbs Natural Gas Plant
Hobbs, Lea County, New Mexico

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K N Energy, Inc.
Hobbs Natural Gas Plant
Hobbs, Lea County, New Mexico

1.0 EXECUTIVE SUMMARY

Eco-logical Environmental Services, Inc. (ECO) was contracted by K N Energy, Inc. (KN) to conduct an environmental assessment of the groundwater at their facility identified as Hobbs Natural Gas Plant. The plant is located ten miles west of Hobbs, New Mexico. This project was conducted for the purpose of submitting an Abatement Plan and Closure Plan to the New Mexico Oil Conservation Division (OCD). Originally, the OCD required the investigation after their inspection in 1995, and at the time, requested a discharge plan. Since the OCD inspection was conducted, KN has closed the plant and the equipment is being removed. The purpose of this report is to request closure for the site and to present an abatement plan for the existing impacted groundwater.

The investigation conducted in February of 1996 revealed that the surface gravels and top four feet of rock were impacted with hydrocarbons in the area of the cryogenic skid, west sump, and the compressor units. Groundwater, encountered at a depth of 55', has also been impacted by historic operations. Currently the benzene concentration is above the health standards for groundwater in the shallow aquifer (State of New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2). Lab analysis for the up and down gradient wells (MW-2 and MW-7) were found to be non-detect for the contaminants of concern as stated by the OCD Guidelines.

K N Energy is in the process of removing the equipment at the site including the sources that environmentally impacted the soils and groundwater. Seven monitor wells at the site will be sampled quarterly for benzene. Wells MW-1 and MW-5 will also be analyzed for naphthalene for one year. After one year, the site and analytical results from the wells will be evaluated and, if necessary, recommend a more active form of remediation in a Stage 2 Abatement Plan. Per OCD guidelines, quarterly sampling will continue for a minimum of two years after the agreed cleanup levels are reached.

2

2.0 STAGE 1 ABATEMENT PLAN

2.1 Site Description

2.1.1 Location K N Energy, Inc. Natural Gas Processing Plant is located approximately ten miles west of Hobbs, New Mexico, on U.S. Highway 180 to the west of Highway 483. The plant is located in the southeast 1/4 of Section 28, Township 18 South and Range 36 East. The approximate geographic coordinates for the center of the site, obtained with a Global Positioning Satellite (G.P.S.) receiver, were 32^0 42' 57" N latitude and 103^0 21' 13" W longitude. The plant encompasses 24 acres. The site is located in a rural environment. Adjacent properties are used for cattle grazing, an electric plant, and oil and gas production. The U.S.G.S. Monument North Quadrangle Map indicated the approximate site elevation at 3,815 feet above mean sea level (AMSL). The general surface topography of the site slopes down to the east at a 0.6% grade. A Site Location Map is included as Map 1. A facility layout diagram is presented on Map 2.

2.1.2 Operational History The plant was constructed in 1976 by Southwestern Public Service as a natural gas transmission facility. The site was purchased by Cabot Corporation in 1977 and was sold to Maple Properties in 1989. American Oil and Gas purchased the site in 1992 and in 1994, KN merged with American and became the owners. Equipment on-site consisted of compressors, generators, cryogenic equipment, amine units, aboveground storage tanks, glycol reboilers, cooling tower, and a flare pit.

No direct discharges to the ground surface or subsurface are known to have occurred since KN's ownership. During this groundwater investigation historic releases were found to have occurred from the west sump and possibly the cryoskid area. Historic releases from the compressors and cryoskid area were identified in a soils delineation report to the OCD (June 6, 1996).

2.1.3 Site Investigation History The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995. During this inspection they noted several deficiencies at the site relative to discharge plan compliance. The noted items referred to the need for new/additional containment structures at five locations, methods to insure

tank integrity, and the delineation of impacted soils/rock at three locations. In a letter issued by the OCD on December 6, 1995, the above deficiencies were detailed in a seven point letter. This letter indicated that KN must propose and implement processes that would correct the noted deficiencies. The following chronology depicts the actions conducted at the facility:

Dec. 1995	Workplan for soils delineation submitted,
Jan. 1996	Soils workplan approved,
Feb. 1996	Delineation of impacted soils and rock conducted and containment construction begins.
June 1996	Soils Delineation Investigation Report filed with request for Groundwater Delineation,
Oct. 1996	Workplan for groundwater delineation filed, OCD approval of plan, and monitor well installation begun,
Dec. 1996	K N announces impending closure of plant. ECO requests extension of time and change from Discharge Permit to Closure Plan,
Jan 1997	Additional groundwater monitoring well installed and submission of Abatement Plan and Closure Plan Report.

2.2 Groundwater Investigation Findings

2.2.1 Site Geology/Hydrology Soils at the site were investigated during the advancement of 15 soil borings and seven monitor wells at the site during 1996 and 1997. The surface soils at the plant consist of two to four inches of sub-rounded gravel fill over 0 to 6 feet of very hard limestone, underlain by 1 to 11 feet of caliche. This in turn is underlain by 9 to 20 feet of dry sand. Sandstone is encountered, which at some locations, also contains layers of dry sand. The sandstone becomes very hard at depths beginning at 50 to 55 feet and varies in thickness of 1 to 11 feet. Moist sand is encountered at an average depth of 54 feet but can range from 47 to 59 feet below ground surface (bgs) and

is present to the bottom of the deepest well at 71 feet. No moist soils or rocks were encountered until the borings penetrated the water bearing sands below the very hard sandstone. Specific descriptions of the soils/rock encountered in the shallow borings is presented in the earlier Soils Delineation Investigation Report.

Soils from the installation of monitor wells did not indicate any impacted soils with the exception of the well placed near the west sump. The soils at this location were stained gray and contained hydrocarbon and septic odors to a depth of 53 feet (near the water table). Test results did not reveal any concentrations of TRPH or BTEX and no elevated levels of total metals were present. Well logs are presented in Section 4.

In October of 1996, measurement of the plant's new monitor wells indicated that the groundwater flow direction was southeast at 135 degrees from north. Gradient was 1:300 or a drop of 10 feet per 3,000 feet. Groundwater was encountered at depths between 53 and 58 feet bgs. Map 3 depicts the groundwater gradient.

A water well search of one mile radius around the center of the site revealed four water wells. The wells were constructed between 1957 and 1965. Based on water depths obtained at the time of installation, the regional groundwater flow is to the southeast at approximately a drop of 10 feet per 1,750 feet. These water levels, as compared with the water depth from MW-1, indicate that the depth to groundwater has remained fairly constant. The closest well is approximately 2,000 feet to the north and up-gradient. The remaining wells are approximately 1 mile to the north-northwest, northeast, and south-southeast. The screen intervals of the water wells are between 69 and 209 feet bgs. The location of the water wells are presented on Map 4 and the water well logs are present in Section 5.

2.2.2 Surface Hydrology The surface gradient in the area slopes down to the east. The plant processing area itself directs rainwater to a low area near the amine units. No natural surface waters are present adjacent to or at the site. The closest natural surface water is located one-half mile east of the site at the beginning of an intermittent stream. This stream leads southeast to an intermittent pond found 1.25 miles east-southeast from the site. Since plant construction in 1976, the area has been kept free from vegetation. There are no signs of adverse impacts to surrounding vegetation and wildlife associated with the plant.

2.2.3 Monitoring Program Seven monitor wells were installed at the site. Well MW-1 was initially installed to show if any impact to groundwater had occurred. Its location was selected to be down-gradient from the main processing area. The remaining wells were positioned near potential sources or to provide points of compliance. Well locations are presented on Map 5.

2.2.4 Analytical Results In summary, the soils obtained and tested during the well installation contained no impacted soils with levels above published OCD Guidelines. Benzene was detected above the WQCC 3103 Guidelines in the water from wells MW-1, MW-5, and MW-6. Laboratory detection levels for phenol were above the OCD Guidelines allowable level and will be resampled during the first quarterly monitoring event at a detection level of 0.005 ppm. No free phase of any product was encountered. Results of the analysis of the soil samples and the water samples are presented in tables 1, 2, and 3 at the end of Section 2. Section 5 contains the lab reports.

2.2.5 Recommendations Recommendations include quarterly sampling for benzene in all wells and naphthalene in wells MW-1 and MW-5. The first round of sampling should include testing for phenol to a detection level of at least 0.005 ppm. The original testing did not reach this detection level. If phenols are found to be present above the WQCC level of 0.005 ppm, testing for phenol will also be completed quarterly. After a period of one year the water analysis for the site will be evaluated and recommendations made for further activities. Quarterly sampling will occur for two years according to OCD Guidelines. Sampling will begin following the approval of this Closure Plan by the OCD.

Depth to groundwater and the presence of free product will be performed prior to each sampling event. This information will be used to prepare groundwater gradient maps.

2.3 Quality Assurance Plan

The existing wells (and any future wells) are installed to the following specifications:

The wells are set to depths between 55 and 70 feet below grade. Twenty feet of factory slotted screen is installed. Both the screen and the riser are made of two or four inch diameters, schedule 40 PVC. The casing rises above the ground surface and is protected by a lockable steel aboveground protector. A concrete pad exists around each well. Sand filter pack surrounds the screen and is two to three feet above the top of the screen.

Two to four feet of a 3/8" chip bentonite seal is above the sand. The remaining portion of the well annulus is sealed with a cement/bentonite grout.

Each well was logged and soil samples screened by a PID meter. Samples were obtained from drill cuttings every two feet for the purpose of soil descriptions. PID readings were made on a five foot interval or where impacted soil odors were detected. Each well was depicted on a well drawing which indicates well construction, water level, PID readings, and soil/rock descriptions.

Any collected samples obtained with an elevated PID reading were packaged for delivery to TraceAnalysis. Samples were placed in clean sample jars and stored on ice. The samples were tested for BTEX, TPH, and WQCC 3103 total metals. If more than five samples from each well contained PID readings, the OCD was contacted and a mutual agreement made as to which samples to test. If no PID readings were encountered, the sample above the water table was submitted for testing for TPH and BTEX.

Once the wells were installed, the site was surveyed to establish the site boundaries, well locations and elevations, and major site equipment. The resulting map was scaled and indicates the well locations. This map, along with the depth to groundwater, will be used to establish groundwater gradient and flow direction.

Wells were developed by pumping a minimum of three well volumes from the well. The pump and all equipment that came into contact with the water were washed and triple rinsed prior to moving to the next well. The wells were developed from what was suspected to be the least impacted to the most impacted. After development, the wells were sampled by lowering a single use, weighted bailer gently into the water to minimize the disturbance to any volatile contaminates in the water. During the first round of water sampling the full suite of samples were collected from the wells as described in WQCC 3103.

All generated soil cuttings were stored onsite in a plastic lined bermed area or drums. All water was stored onsite in poly drums. The wastes will be characterized for the presence of Hazardous Constituents as defined by 40 CFR part 261. The wastes will be properly treated and disposed.

2.4 Sampling and Analysis Plan

2.4.1 Soils

Sampling Schedule - Soil samples were collected from the soil cuttings during drilling of the monitor wells every five feet. Where impacted soils were suspected and conditions permitted, a split spoon sampling device was hydraulically advanced into the soil horizon.

Sample Analyses - Up to five samples per well were analyzed. Samples were submitted for analysis if PID readings were present. Soil samples were tested for BTEX, TPH, and WQCC 3103 listed total metals.

Sampling Methodology - All sampling equipment was steam cleaned or washed and triple rinsed between samples. The drill rig and related equipment were steam cleaned between well locations. Where impacted soils were suspected and conditions permitted, a split spoon sampling device was used. Samples were placed into clean laboratory provided jars and placed on ice. Each jar was marked with the following:

- Job number,
- Sample location and depth,
- Time and date of collection,
- Name of technician, and
- Preservation.

In addition to the sample labels, each sample was logged onto a Chain-of Custody Form which also indicated the above along with the required tests.

2.4.2 Groundwater

Sampling Schedule - Water samples were collected from the well bores after a minimum of two to three days had passed since the well installation. Groundwater sampling will occur each quarter of the year for a period of two years. Quarterly sampling will begin after approval of this Closure Plan.

Sample Analyses - A set of samples from each of the seven wells will be collected. The full suite of sampling as stated in the WQCC 3130 Part A, was analyzed during the initial round of sampling. Future sampling will include:

Benzene (EPA 8020)	2 voas with HCl
or	
Benzene, Naphthalene (EPA Method 8240)	2 voas with HCl

Sampling Methodology - Each well will be purged by pumping, the pump will be cleaned between wells and the order of the purging and sampling will be from the cleanest to dirtiest suspected well. A minimum of three well volumes or until the well is dry will be purged and placed into poly drums. A disposable bailer and clean string or Teflon wire, which will be used solely and specifically for that well, will be used to collect the water sample. The bailer will be gently lowered into each well so as not to disrupt the casing environment. Agitation is kept to a minimum to reduce aeration of the sample. Each well will be gaged for water level and product thickness (if present) prior to purging. Samples will be placed into clean laboratory provided jars and placed on ice. Each jar will be marked with the following:

- Job number,
- Sample location and depth,
- Time and date of collection,
- Name of technician, and
- Preservation.

In addition to the sample labels, each sample will be logged onto a Chain-of Custody Form which will also indicate the above along with the required tests.

2.5 Health and Safety

Safe work practices will be followed at all times. In addition to Level C PPE, the following personal protective equipment will be used at all times:

1. Safety Glasses
2. Work or chemical resistant gloves
3. H_2S meter on-site.

During the execution of any sampling activities, if an environment is encountered which exceeds the standards of the existing level of PPE or of the training of the worker, all workers will leave the work area immediately. Workers will not reenter the area until the area has been monitored and the proper PPE and/or training has been obtained.

Any variations to the Health and Safety Plan will be noted.

2.6 Activity Schedule

Quarterly sampling will begin after approval of this Closure Plan and every three months thereafter. Quarterly reports will be filed with the OCD within one month of receipt of the lab results. Quarterly summary reports will contain cumulative lab analysis for each well and a gradient map. A detailed report will be submitted as the fourth quarter report. This report will include an evaluation of the well data and any recommendations (Stage 2 Abatement Plan).

3.0 CLOSURE PLAN

3.1 Closure Measures

The KN Hobbs Gas Plant was officially off line and unmanned on January 3, 1997. During December of 1996 and the early months of 1997 the plant is being disassembled and its equipment moved to other KN sites in North America. As part of this closure and dismantling, all above ground and below ground piping and equipment will be drained to insure no further releases. All remaining vessels are being drained of fluids which are then being disposed, recycled, or sold. The equipment is being assessed as to its condition and any equipment or containment systems that may be used at other sites are being moved.

After the equipment has been removed, the stained surface gravels and soils will be removed and remediated along with the gravels and soils stored near the flare pit.

3.2 Maintenance and Monitoring Program

The plant will remain inside of a locked chain link fence to limit access to the public. Access to the site is limited to KN employees and their representatives. Any personnel on-site are there for the purposes of dismantling or moving equipment, observing the conditions of the site and the progress of the shut down, or monitoring the remaining impacted soils or groundwater.

General maintenance and access to the site will be occurring weekly until all usable equipment is removed. Environmental monitoring will be limited to any required abatement of the soils/rock and quarterly sampling of the groundwater. Quarterly sampling will begin upon approval of this Plan.

3.3 Financial Assurity

The plant site and property will remain owned by KN, a nation wide company. KN is listed as a 1.4 billion dollar, publicly owned corporation on the New York Stock Exchange. It is the intention of KN to clean the site to the clean up standards to be agreed upon between the OCD and KN. KN has budgeted monies to address the site closure issues for the site

in New Mexico. This money has been reserved for state and federal environmental issues.

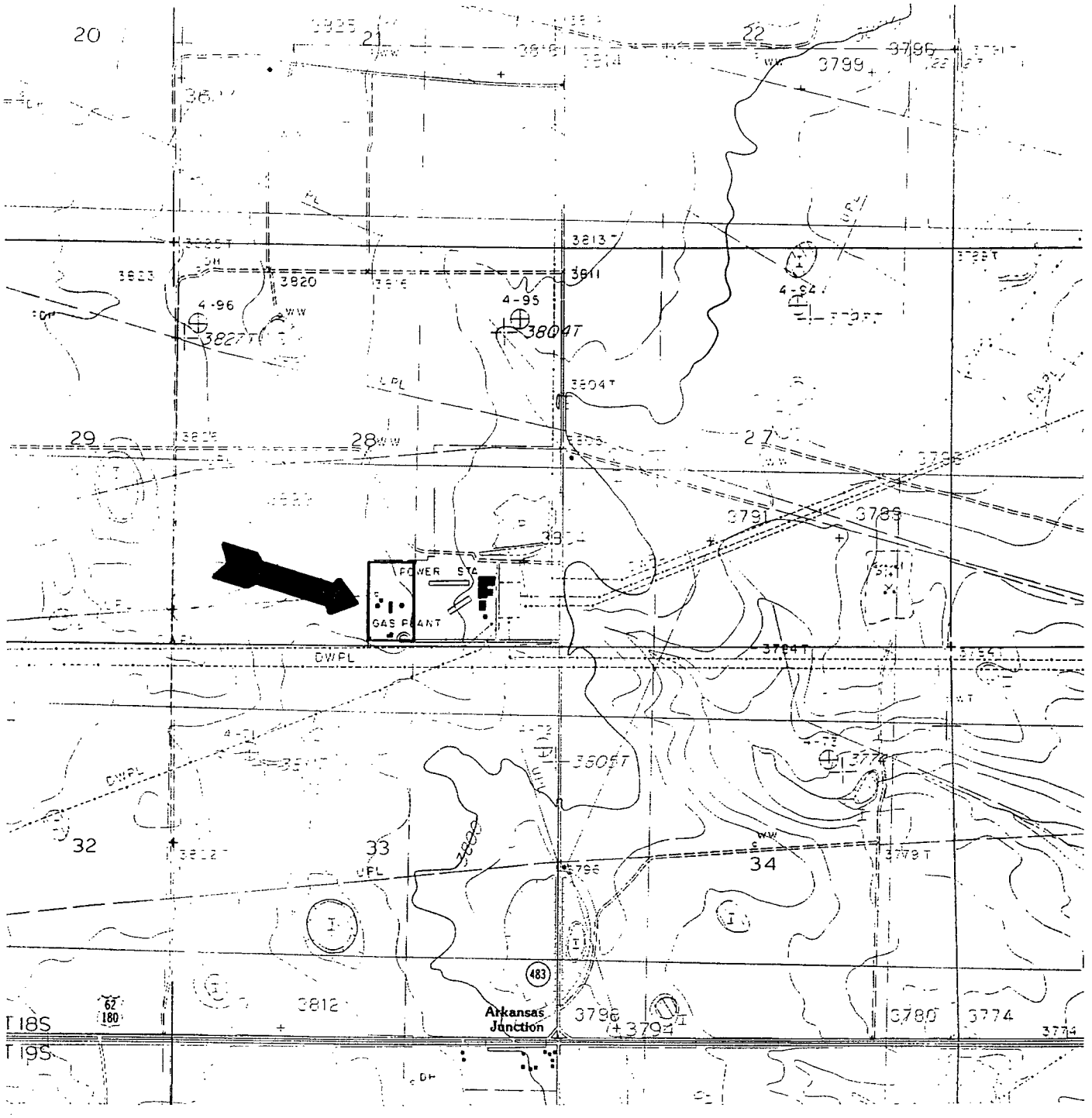
KN Headquarters
K N Energy, Inc.
P.O. Box 281305
Lakewood, CO 802258304

3.4 Stage 1 Abatement Plan

Abatement at the plant is proposed to consist of three items at this time. Item one is the removal of all potential sources. Sources have been identified as the west sump and the cryogenic system. At this time, these and all other equipment at the site have been shut down and are being drained of all remaining fluids and removed from the site.

Item two is to remove the loose surface gravels that have been stained in the areas of the cryoskid, compressors, flare pit, storage tanks and other isolated areas. These gravels will be remediated on site to TRPH levels of less than 1,000 ppm. Once clean, the gravels are anticipated to be spread on site.

Item three is to perform quarterly monitoring of the groundwater beginning after OCD approval of this Closure Plan. Groundwater will be sampled specifically for benzene in all wells and also for naphthalene in wells MW-1 and MW-5. Sampling will occur for a period of one year to establish any trends at the site. Due to the remoteness of the site and the closest down gradient well over one mile to the south, active remediation is not recommend at this time. After one year of groundwater sampling, the lab data will be evaluated. If contaminant concentrations are not decreasing, and the OCD requires cleanup rather than an EPA risk evaluation, an active remediation process will begin. The active remediation may require well tests and involve bio-remediation, air sparging, or vapor extraction. This information will be presented in a Stage 2 Abatement Plan. If the concentrations of the contaminate compounds are found to be decreasing, quarterly sampling will continue until eight consecutive sampling events are below the agreed cleanup levels.



½ 0 1 MILE

APPROXIMATE SCALE IN MILES

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE 1:24,000 FEET

CONTOUR INTERVAL = 10 FEET

☐ SITE LOCATION

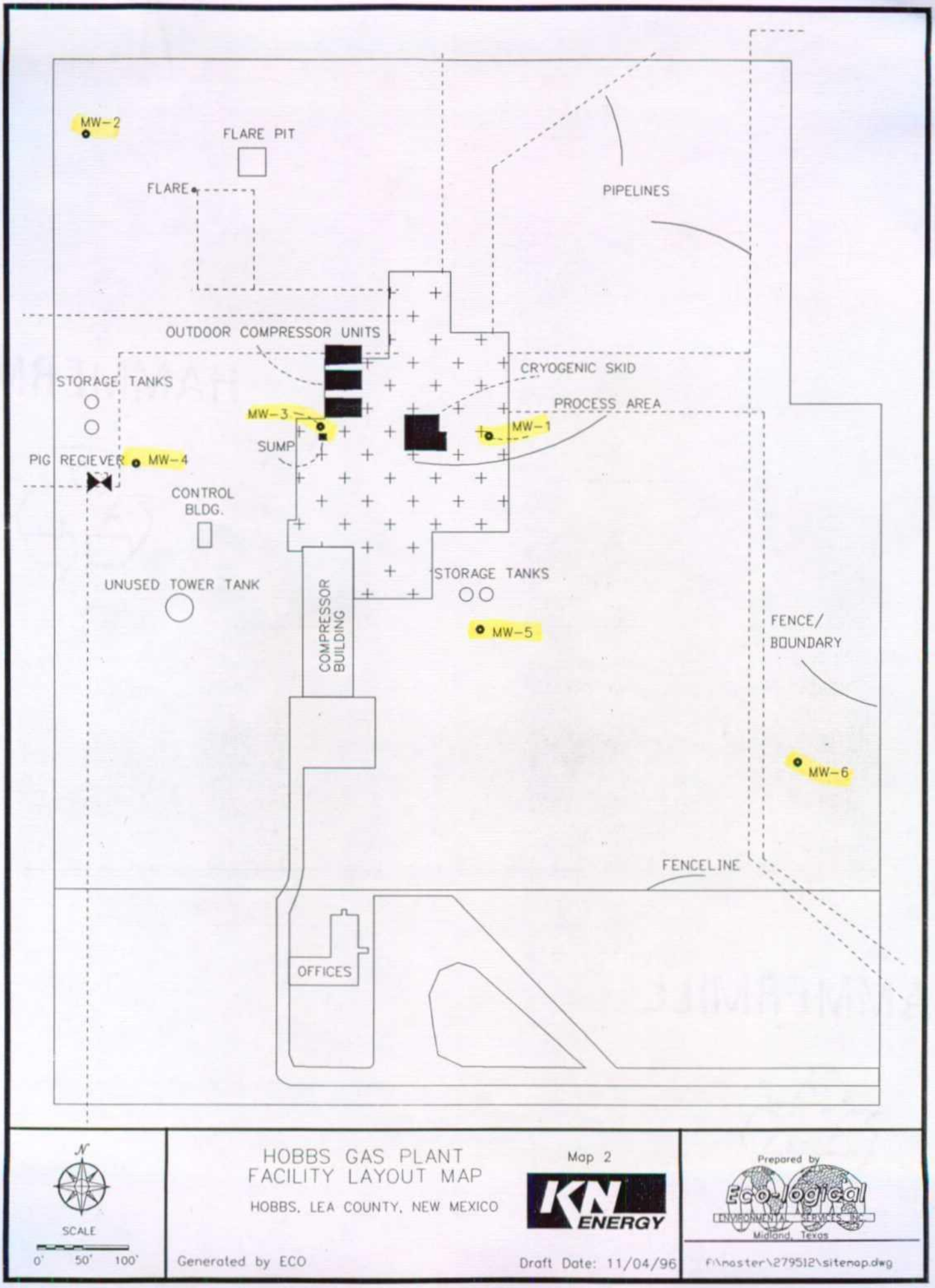
SITE COORDINATES: 24.08 ACRES IN SECTION 28, T18S, R36E, LEA COUNTY, NEW MEXICO
SOURCE: MONUMENT NORTH, NM / LEA COUNTY, 1985

PROJECT #: 279 / 512
DATE: MAY 10, 1996

FIGURE 1
GENERAL SITE LOCATION MAP
FORMER CABOT/MAPLE SITES
HOBBS NATURAL GAS PLANT
LEA COUNTY, NEW MEXICO

PREPARED FOR: KN ENERGY

Eco-logical ENVIRONMENTAL SERVICES


MW-2
FLARE PIT
FLARE
PIPELINES
OUTDOOR COMPRESSOR UNITS
CRYOGENIC SKID
STORAGE TANKS
MW-3
PROCESS AREA
MW-1
SUMP
PIG RECIEVER
MW-4
CONTROL BLDG.
UNUSED TOWER TANK
COMPRESSOR BUILDING
STORAGE TANKS
MW-5
FENCE/ BOUNDARY
MW-6
FENCELINE
OFFICES
N
SCALE
0' 50' 100'
HOBBS GAS PLANT
FACILITY LAYOUT MAP
HOBBS, LEA COUNTY, NEW MEXICO
Map 2
KN ENERGY
Prepared by
Eco-logical
ENVIRONMENTAL SERVICES INC.
Midland, Texas
Generated by ECO
Draft Date: 11/04/96
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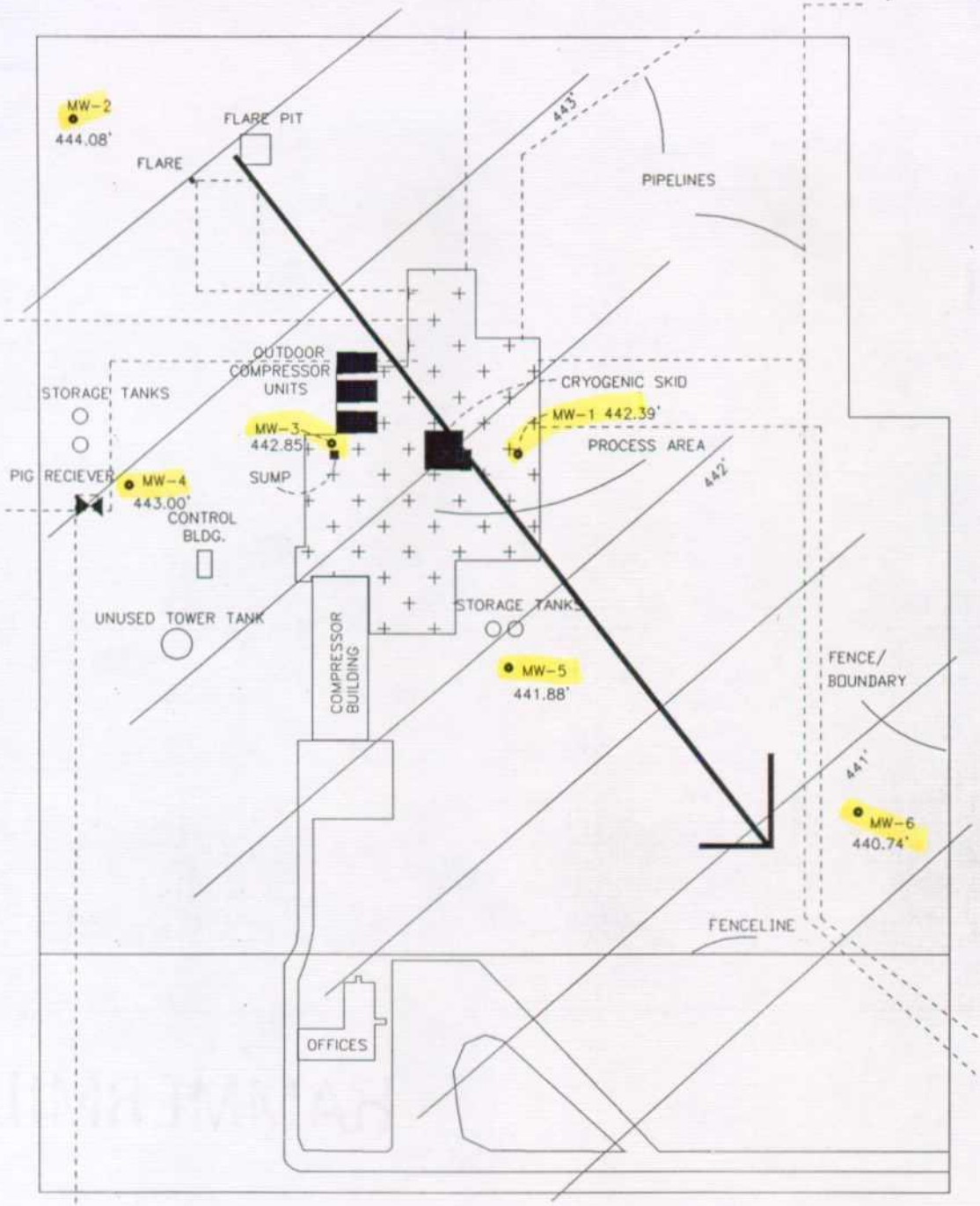

N

SCALE

0' 50' 100'

HOBBS GAS PLANT
GROUNDWATER GRADIENT

October 23, 1996

HOBBS, LEA COUNTY, NEW MEXICO

MAP 3

KN ENERGY

Prepared by

Eco-logical ENVIRONMENTAL SERVICES INC.

Midland, Texas

Generated by ECO

Draft Date: 11/14/96

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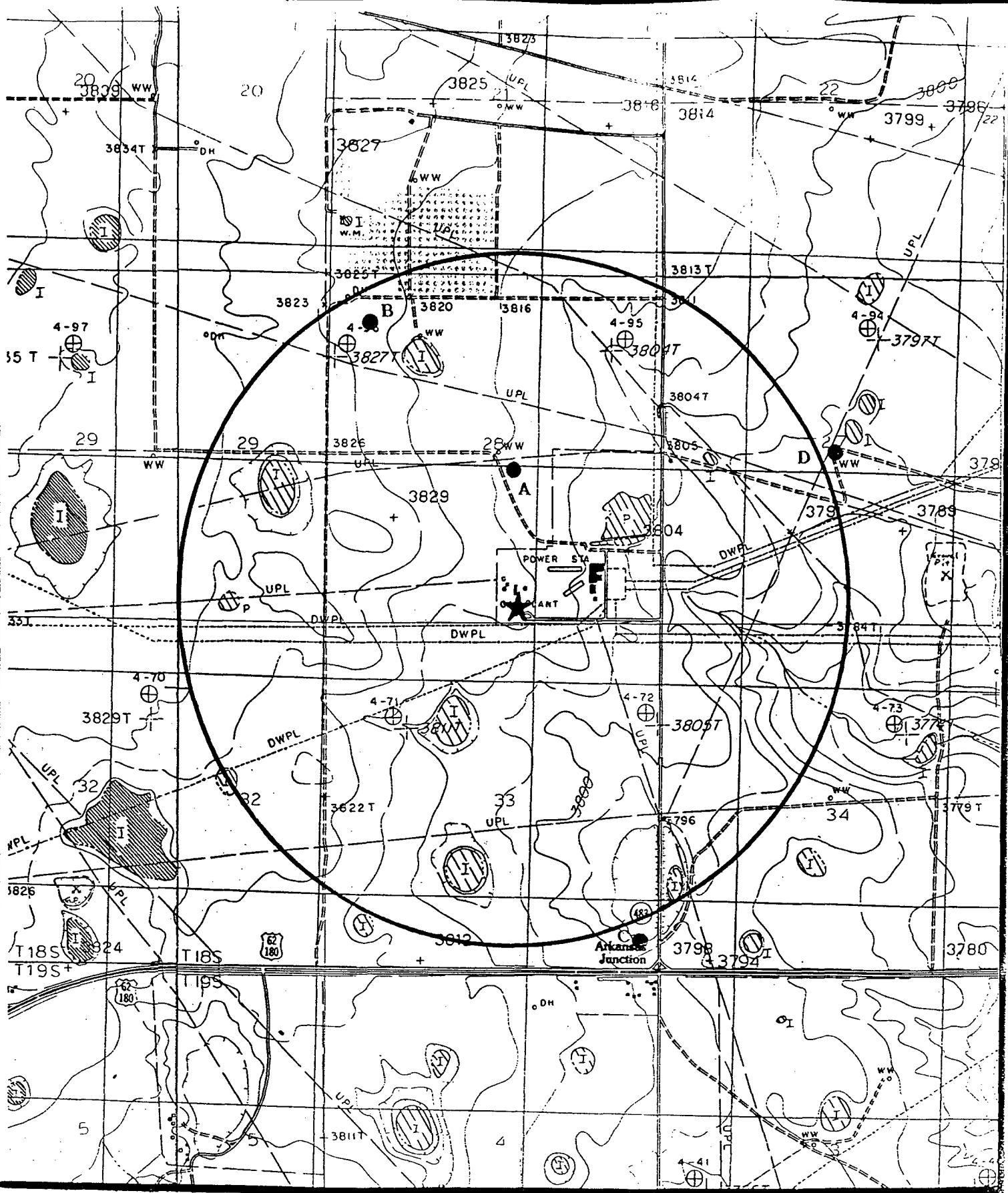
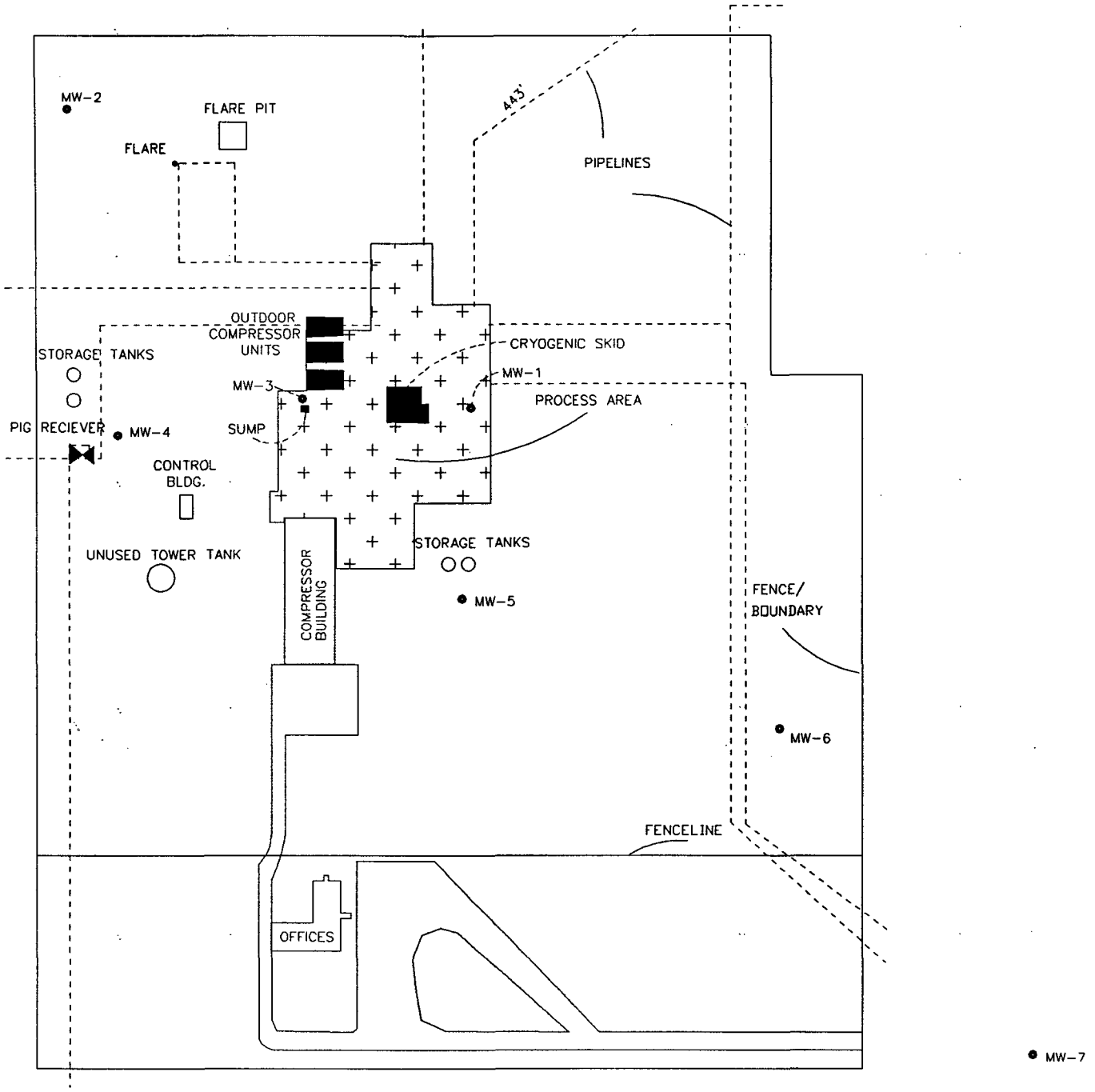


Eco-Logical Environmental **Project #100-10389-B**	**Subject Property:** Highway 180 & 483, Lea County, New Mexico
1 Mile Water Well Survey Prepared by Agency Information Consultants AIC #02-0045897 02/07/96	Monument North, NM (Provisional Edition 1985) 7.5' USGS Quad, Scale 1:24000



SCALE

0' 50' 100'

HOBBS GAS PLANT
MONITOR WELL LOCATIONS

HOBBS, LEA COUNTY, NEW MEXICO

MAP 5

KN ENERGY

Prepared by

Eco-logical ENVIRONMENTAL SERVICES INC.
Midland, Texas

Generated by ECO

Draft Date: 11/14/96

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TABLE 1
HOBBS GAS PLANT
LAB ANALYSIS FROM MONITOR WELL SOILS
October 18 to 20, 1996
January 3, 1997

Well	Depth ft	TPH	B	T	E	X	As	Se	Cd	Cr	Pb	Ag	Ba	Al	Hg	Co	Cu	Fe	Mn	Ni	Zn	B	Mo
MW-1	Previously existing well - No Soils Analyzed																						
MW-2	38-40	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	<5	62	2500	<0.25	<3	<2	2190	18.3	<20	6.36	<3	<10
MW-2	44-46	10.2	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	0.7	33	1950	<0.25	<3	<2	2020	18	<20	4.44	<3	<10
MW-2	54-56	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	<0.5	<20	913	<0.25	<3	<2	998	7.5	<20	2.79	<3	<10
MW-2	58-60	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	5.71	<10	<0.5	47	2150	<0.25	<3	<2	2660	24.7	<20	5.01	<3	<10
MW-3	4-6	<10	<0.05	<0.05	<0.05	<0.05	10	<10	<2	<5	<10	1.3	173	1160	<0.25	<3	4.24	735	5.9	<20	2.51	<3	<10
MW-3	14-16	<10	<0.05	<0.05	<0.05	<0.05	14	<10	<2	<5	<10	0.6	170	1560	<0.25	<3	<2	2130	13.7	<20	5.16	<3	<10
MW-3	18-20	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	<0.5	191	2510	<0.25	<3	<2	2070	22.2	<20	6.15	<3	<10
MW-3	34-36	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	5.34	<10	<0.5	103	2030	<0.25	<3	<2	1830	13.8	<20	6.44	<3	<10
MW-3	48-50	<10	<0.05	<0.05	<0.05	<0.05	11	<10	<2	5.47	<10	<0.5	<20	2010	<0.25	<3	<2	2140	17.9	<20	6.5	<3	<10
MW-3	64-65	<10	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	34-36	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	5.3	<10	<5	170	1800	<0.25	<3	<5	1500	10	<20	4.6	<3	<10
MW-4	48-50	<10	<0.05	<0.05	<0.05	<0.05	11	<10	<2	<5	<10	<5	37	2100	<0.25	<3	<5	2500	19	<20	6.5	<3	<10
MW-5	28-30	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	5.8	<10	<5	190	2900	<0.25	<3	<5	2500	21	<20	4.3	<3	<10
MW-5	48-50	11.9	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	<5	22	2300	<0.25	<3	<5	2300	25	<20	5.8	<3	<10
MW-5	62-65	51.7	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	44-46	<10	<0.05	<0.05	<0.05	<0.05	<10	<10	<2	<5	<10	<5	26	1900	<0.25	<3	<5	1900	18	<20	4.4	<3	<10
MW-6	58-61	41.9	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	54-56	<10	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OCD LIMITS		100	10				100*	20*	20*	100*	100*	100*	2000*										

* 20 times TCLP value for Hazardous Classification All results in mg/kg Shaded Results are over known OCD limits

TABLE 2
HOBBS GAS PLANT
LAB ANALYSIS FROM MONITOR WELL GROUNDWATER TESTS
October 23, 1996

Well	TDS	Nitrate-N	Fluoride	Phenol	Alkalinity	Ba	Mn	K	Mg	Ca	Na	Ra pc/L	B	T	E	X	PAH Naphthalene	Benzo-a-pyrene	pH	Chloride	Sulfate
MW-1	737	<1.0	0.5	0.01	609	0.34	0.16	5.5	45	160	39	16	0.352	<0.001	0.026	0.081	0.025	<0.001	7.3	25	37
MW-2	356	2.9	1.1	<0.01	152	<0.20	<0.01	4.8	6	58	33	3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.7	29	55
MW-3	760	7.8	0.6	<0.01	243	<0.20	<0.01	7.5	16	150	45	6	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.4	120	120
MW-4	392	3.7	0.7	<0.01	244	<0.20	<0.01	4.1	11	91	9.3	2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	14	45
MW-5	853	<1.0	0.5	<0.01	244	0.28	0.11	6.2	27	160	94	9	0.135	<0.001	0.006	0.071	<0.001	<0.001	7.1	33	100
MW-6	511	1.41	0.7	<0.01	274	<0.20	<0.01	4.6	12	100	39	6	0.192	<0.001	<0.001	0.013	<0.001	<0.001	7.4	30	83
MW-7		1.7		<0.001									<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		44	97
OCD Limit	1000	10	1.6	0.005		1.0	0.2					30	0.01	0.750	0.750	0.620	0.03	0.00007	6 to 9	250	600

All results in mg/L except where noted Shaded Results are over known OCD limits Remaining test results are below detection limits MW-7 tests still pending MW-7 sampled 01/09/97

TABLE 3
CUMULATIVE LAB RESULTS FOR MW-1

Date	As ppm	Se ppm	Cr ppm	Cd ppm	Pb ppm	Ba ppm	Ag ppm	Hg ppm	B ppm	T ppm	E ppm	X ppm	TH ppm
02/14/96	<0.1	<0.1	<0.05	<0.02	<0.1	<0.2	<0.01	<0.001	0.083	<0.001	<0.001	0.008	<0.20
02/29/96	NR	NR	NR	NR	NR	NR	NR	NR	<.001	<0.001	<0.001	<0.001	NR
04/20/96	<0.1	<0.1	<0.05	<0.02	<0.1	<0.2	<0.01	<0.001	0.305	<0.001	0.002	0.032	<0.20

TDS = 1,446 ppm
NR indicates Test Not Run

TABLE 3 Continued

Date	K ppm	Mg ppm	Ca ppm	Na ppm	NO_3-NO_2)-N ppm	TDS ppm	Ch ppm	F ppm	Sulfate ppm	*HCO_3 ppm	Naphthalene ppm
04/20/96	7.1	23.8	148	82.5	2.6	756	25	0.4	67	670	0.017

* Alkalinity as $CaCO_3$ Remaining PAH by EPA 8270 ND Chloroform, Bromodichloromethane, Dibromochloromethane, Bromoform = ND

MONITOR WELL NO. MW-1

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 1

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		Surf. Elev: 496.32 ft TOC Elev: 495.73 ft Flush Mount Manhole Cover with 4x4 foot Concrete Pad
	0.0-2.0	G		3	FILL - Gravel, light gray, coarse grained, dry, no odor, no stain	GP				
					LIMESTONE - gray, dry, no odor					
	2.0-4.0	G		4	CALICHE - light yellow brown, moist, no odor with cherty/limey layers					
5	4.0-6.0	G		4				5		
	6.0-8.0	G		5						
	8.0-10.0	G		5	SAND - very light yellow brown, medium grained, moist, no odor with sandstone seams					
10	10.0-12.0	G		4				10		
	12.0-14.0	G		5	becoming light orange brown, fine grained					
15	14.0-16.0	G		5		SP		15		
	16.0-18.0	G		4						2 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
20	18.0-20.0	G						20		
				5	SANDSTONE - light yellow brown, moist, no odor					
25								25		
	25.0-30.0	G		5	SAND - light yellow brown, fine grained, moist, no odor	SP				
30								30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 2/13/96

Drilling completed: 2/13/96

Drilling method: Air Rotary

Development method: Pump

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: 444.3 ft

ft

ft

Dates Measured: 02/14/96

Notes: SE of Main Processing

Area Elevation Relative to Site

Datum

MONITOR WELL NO. MW-1

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 1

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
				5	SANDSTONE - light yellow brown, with sand layers, moist, no odor					
35	33.0-35.0	G			LIMESTONE/SANDSTONE with chert layers, brown, dry, no odor			35		Bentonite Chip Seal
	35.0-38.0	G		5						
				5	LIMESTONE - light brown, dry, no odor					
40				5	DOLOMITE - light pink brown, dry, no odor			40		Top of Screen
45								45		Filter Sand
	47.0-50.0	G		5	SAND - light brown, fine grained, moist, no odor					
50								50		2 inch Diameter Sch. 40 PVC Screen, 0.010 Slot
				5	becoming moist	SP				
55								55		
60								60		Bottom of Screen at 60'
65								65		
70								70		

MONITOR WELL NO. MW-2

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 2

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: 502.41 ft Surf. Elev: 499.92 ft
	0.0-2.0	G		0	FILL - GRAVEL with sand, dry, no odor LIMESTONE (Limey Caliche) - light gray brown, dry, no odor	GP				Aboveground Wellhead Protector with 2.5x2.5 foot Concrete Pad
	2.0-4.0	G			CALICHE - limey, light brown, moist, no odor					
5	4.0-6.0	G		0				5		
	6.0-8.0	G								
	8.0-10.0	G		0	SAND - fine grained, with caliche lenses, moist, no odor					
10	10.0-12.0	G			no caliche			10		
	12.0-14.0	G			with sandstone lenses					
15	14.0-16.0	G		0				15		4 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
	16.0-18.0	G				SP				
	18.0-20.0	G		0						
20	20.0-22.0	G			becoming light brown			20		
	22.0-24.0	G								
25	24.0-26.0	G		0	SANDSTONE - very light gray brown, moist, no odor, highly silicified quartz sandstone			25		
	26.0-28.0	G								
	28.0-30.0	G		0						
30								30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 10/18/96

Drilling completed: 10/18/96

Drilling method: Air Rotary

Development method: Pump

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: Near Northwest Fence Corner Elevation Relative to Site Datum

MONITOR WELL NO. MW-2

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 2

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
	30.0-32.0	G			becoming very light brown					
	32.0-34.0	G								
35	34.0-36.0	G		0				35		Bentonite Chip Seal
	36.0-38.0	G			becoming light brown, less silicified					
	38.0-40.0	G		0.3						
40	40.0-42.0	G						40		Top of Screen
	42.0-44.0	G			SAND - brown, very fine grained, moist, very slight sweet odor					
45	44.0-46.0	G		0.1	with sandstone lenses			45		Filter Sand
	46.0-48.0	G			becoming light pink brown, slight sweet odor, no sandstone lenses					
	48.0-50.0	G		0		SP				
50	50.0-52.0	G			becoming very moist, no odor			50		4 inch Diameter Sch. 40 PVC Screen, 0.020 Slot
	52.0-54.0	G								
55	54.0-56.0	G		0.5				55		
	56.0-58.0	G			SANDSTONE - pink brown, moist, no odor very very hard, highly silicified					
	58.0-61.0	G		0.8	SAND - light pink brown, very fine grained, wet, no odor becoming brown, with trace clay	SP				
60								60		Bottom of Screen at 59.8' Endcap at 60.1' Termination Depth at 61' with Filter Sand
65								65		
70								70		

MONITOR WELL NO. MW-3

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 3

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: 499.13 ft Surf. Elev: 497.30 ft
	0.0-2.0	G		0	FILL - Gravel, with sand	GP				
					LIMESTONE (Limey Caliche) - light brown, dry, no odor					Aboveground Wellhead Protector with 2.5x2.5 foot Concrete Pad
	2.0-4.0	G			CALICHE - light brown, moist, very slight hydrocarbon odor becoming light brown gray, visually					
5	4.0-6.0	G		0.1	impacted			5		
	6.0-8.0	G			with sand, very slightly odor of old hydrocarbons					
	8.0-10.0	G		0.1						
10	10.0-12.0	G			SAND - light gray, very fine grained, moist, very slight hydrocarbon odor, visually impacted			10		
	12.0-14.0	G			becoming light gray brown with caliche lenses, slightly visually impacted					
15	14.0-16.0	G		0.2	becoming light brown, no caliche, not visually impacted			15		
	16.0-18.0	G			becoming light gray brown, very slightly visually impacted	SP				
	18.0-20.0	G		0.3						4 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
20	20.0-22.0	G			becoming light gray, visually impacted			20		
	22.0-24.0	G			SANDSTONE - very light pink brown, moist, very slight septic odor					
25	24.0-26.0	G		0				25		
	26.0-28.0	G			becoming light brown, moderate septic odor					
	28.0-30.0	G		0	[illegible] to 31					
30								30		

Continued Next Page

Drilling Co: **McDonald Drilling**

Drilled by: **T. McDonald**

Logged by: **C. Eick**

Drilling started: **10/19/96**

Drilling completed: **10/19/96**

Drilling method: **Air Rotary**

Development method: **Pump**

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: **Near North Side of Amine Sump, South of Compressor Units Elevation Relative to Site Datum**

MONITOR WELL NO. MW-3

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 3

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
	30.0-32.0	G			becoming brown gray, slight septic odor, visually impacted					
	32.0-34.0	G			with slight hydrocarbon odor					
35	34.0-36.0	G		3.5	becoming pink brown, no longer visually impacted			35		
	36.0-38.0	G			becoming brown					
	38.0-40.0	G		0	becoming light brown with sand, very, very slight septic odor, no hydrocarbon odor					Bentonite Chip Seal
40	40.0-42.0	G			SAND - light brown, fine grained, with sandstone seams, moist, very slight septic odor	SP		40		
	42.0-44.0	G			SANDSTONE - brown, with sand seams, moist, very slight septic odor					Top of Screen
45	44.0-46.0	G		0	SAND - brown, fine grained, moist, very slight septic and hydrocarbon odor, visually impacted			45		
	46.0-48.0	G			becoming gray, visually impacted					
	48.0-50.0	G		0.3		SP				
50	50.0-52.0	G						50		Filter Sand
	52.0-54.0	G			SANDSTONE - pink brown, moist, very highly silicified quartz					4 inch Diameter Sch. 40 PVC Screen, 0.020 Slot
55	54.0-56.0	G		0	SAND - pink brown, very fine grained, wet, no odor			55		
	56.0-58.0	G			with trace clay, saturated					
	58.0-60.0	G		0		SP				
60	60.0-62.0	G			becoming dark pink brown, very slight septic odor			60		
	62.0-64.0	G								Bottom of Screen at 63' Endcap at 63.3'
65	64.0-65.0	G		0				65		Termination Depth at 65' with Filter Sand
70								70		

MONITOR WELL NO. MW-4

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 4

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: 501.12 ft Surf. Elev: 499.32 ft
	0.0-2.0	G		0	FILL - gravel, dark brown, with sand and clay, dry, no odor	GP				Aboveground Wellhead Protector with 2.5x2.5 foot Concrete Pad
	2.0-4.0	G			CALICHE - light brown, with sand, moist, no odor					
5	4.0-6.0	G		0	SANDSTONE - brown, moist, no odor, highly silicified quartz			5		
	6.0-8.0	G			with limestone lenses with caliche					
10	8.0-10.0	G		0				10		
	10.0-12.0	G			with sand					
	12.0-14.0	G								
15	14.0-16.0	G		0				15		
	16.0-18.0	G			SAND - light brown, with caliche layers, moist, no odor, very fine grained no caliche becoming light pink brown					
20	18.0-20.0	G		0		SP		20		4 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
	20.0-22.0	G								
	22.0-24.0	G			becoming dark pink brown					
25	24.0-26.0	G		0	SANDSTONE - very light brown, moist, no odor, highly silicified quartz			25		
	26.0-28.0	G								
	28.0-30.0	G								
30								30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 10/19/96

Drilling completed: 10/19/96

Drilling method: Air Rotary

Development method: Pump

LEGEND

- ▽ Water level enc. during drilling
- ▼ Static Water level
- ▼ Free Phase Product level

Samplers:

- G Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: West Side of Cooling Tower Foundation, East of West Product Tanks Elevation Relative to Site Datum

MONITOR WELL NO. MW-4

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 4

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
	30.0-32.0	G			becoming light pink brown, with sand seams					
	32.0-34.0	G			becoming very light brown					
35	34.0-36.0	G		0.2	no sand seams			35		
	36.0-38.0	G								
	38.0-40.0	G		0						
40	40.0-42.0	G						40		Bentonite Chip Seal
	42.0-44.0	G			with sand seams					Top of Screen
45	44.0-46.0	G		0				45		
	46.0-48.0	G								
	48.0-50.0	G		0.3	SAND - dark pink brown, very fine grained, moist, no odor					
50	50.0-52.0	G			becoming very moist	SP		50		Filter Sand
	52.0-54.0	G			becoming wet					4 inch Diameter Sch. 40 PVC Screen, 0.020 Slot
55	54.0-56.0	G		0	SANDSTONE - brown, moist, no odor, very, very, silicified quartz			55		
	56.0-58.0	G			SAND - brown, very fine grained, with trace clay, saturated, no odor					
	58.0-60.0	G		0						
60	60.0-62.0	G			becoming dark pink brown	SP		60		
	62.0-64.0	G								Bottom of Screen at 63' Endcap at 63.3'
65	64.0-65.0	G		0				65		Termination Depth at 65' with Filter Sand
70								70		

MONITOR WELL NO. MW-5

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 5

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: 500.84 ft Surf. Elev: 499.08 ft
	0.0-2.0	G		0	FILL - gravel, light gray brown, with sand and clay, moist, no odor	GP				Aboveground Wellhead Protector with 2.5x2.5 foot Concrete Pad
	2.0-4.0	G			CALICHE - light brown, moist, no odor					
5	4.0-6.0	G		0	becoming very light brown with sand			5		
	6.0-8.0	G			SAND - very light brown, with caliche seams, moist, no odor					
10	8.0-10.0	G		0	no caliche			10		
	10.0-12.0	G								
	12.0-14.0	G								
15	14.0-16.0	G		0	becoming light brown	SP		15		
	16.0-18.0	G								
20	18.0-20.0	G		0				20		4 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
	20.0-22.0	G								
	22.0-24.0	G			with sandstone lenses					
25	24.0-26.0	G		0				25		
	26.0-28.0	G			SANDSTONE - very light brown, moist, no odor very silicified quartz					
				0.3	very very slight sweet odor					
30	28.0-30.0	G						30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 10/20/96

Drilling completed: 10/20/96

Drilling method: Air Rotary

Development method: Pump

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: South Side of East Product and Water Tanks Elevation relative to site datum

MONITOR WELL NO. MW-5

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 5

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
	30.0-32.0	G			with sand lenses					
	32.0-34.0	G			SAND - very light brown, compact, with sandstone lenses, moist, no odor	SP				
35	34.0-36.0	G		0	SANDSTONE - very light brown, moist, no odor, highly silicified quartz			35		
	36.0-38.0	G								
	38.0-40.0	G		0						Bentonite Chip Seal
40	40.0-42.0	G			becoming light brown			40		
	42.0-44.0	G								Top of Screen
45	44.0-46.0	G		0				45		
	46.0-48.0	G			SAND - pink brown, very fine grained, moist, no odor					
	48.0-50.0	G		0						
50	50.0-52.0	G				SP		50		Filter Sand
	52.0-54.0	G			becoming wet					4 inch Diameter Sch. 40 PVC Screen, 0.020 Slot
55	54.0-56.0	G		0				55		
					SANDSTONE - pink brown, moist, no odor, very highly silicified quartz					
	56.0-58.0	G			SAND - pink brown, very fine grained, trace clay, saturated, no odor					
	58.0-60.0	G		0	becoming dark yellow brown					
60								60		
	60.0-62.0	G				SP				
	62.0-65.0	G		0						Bottom of Screen at 63' Endcap at 63.3'
65								65		Termination Depth at 65' with Filter Sand
70								70		

MONITOR WELL NO. MW-6

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 5

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: 496.27 ft Surf. Elev: 493.89 ft
	0.0-2.0	G		0	FILL - gravel with sand and clay	GP				
					CALICHE - light brown, moist, no odor					Aboveground Wellhead Protector with 2.5x2.5 foot Concrete Pad
	2.0-4.0	G			becoming very light brown					
5	4.0-6.0	G		0				5		
	6.0-8.0	G								
	8.0-10.0	G		0						
10					with sand layers			10		
	10.0-12.0	G			SAND - very light brown, very fine grained, moist, no odor					
	12.0-14.0	G								
15	14.0-16.0	G		0				15		
	16.0-18.0	G				SP				4 inch Diameter Sch. 40 PVC Riser with Cement-Bentonite Grout
	18.0-20.0	G		0						
20					becoming light brown			20		
	20.0-22.0	G								
	22.0-24.0	G			SANDSTONE - very light brown, highly silicified quartz, moist, no odor					
25	24.0-26.0	G		0				25		
	26.0-28.0	G								
	28.0-30.0	G		0						
30								30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 10/20/96

Drilling completed: 10/20/96

Drilling method: Air Rotary

Development method: Pump

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: Near Southeast Fence Corner Elevation Relative to Site Datum

MONITOR WELL NO. MW-6

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 5

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
	30.0-32.0	G								
	32.0-34.0	G								
35	34.0-36.0	G		0	becoming brown			35		Bentonite Chip Seal
	36.0-38.0	G								
	38.0-40.0	G		0						
40	40.0-42.0	G						40		Top of Screen
	42.0-44.0	G								
	44.0-46.0	G		0	SAND - yellow brown, very fine grained, moist, no odor			45		
45	46.0-48.0	G			becoming very moist	SP				
	48.0-50.0	G		0						Filter Sand
50	50.0-52.0	G			SANDSTONE - brown, very highly silicified quartz, moist, no odor			50		4 inch Diameter Sch. 40 PVC Screen, 0.020 Slot
	52.0-54.0	G			SAND - dark pink brown, very fine grained, trace clay, saturated, no odor					
55	54.0-56.0	G		0		SP		55		
	56.0-58.0	G								
	58.0-61.0	G		0						
60								60		Bottom of Screen at 60' Endcap at 60.3' Termination Depth at 61' with Filter Sand
65								65		
70								70		

MONITOR WELL NO. MW-7

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 7

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		TOC Elev: ft Surf. Elev: ft
					SILTY SAND - brown, very fine grained, dry, no odor	SM				Aboveground Steel Protector with concrete pad
					LIMESTONE - very light brown, dry, no odor					
5					CALICHE - light brown, with sand, moist, no odor			5		
	8.0-10.0	G		0						
10					SAND - light brown, fine grained, occasional caliche layers, moist, no odor			10		
15								15		
					becoming light pink brown	SP				
	18.0-20.0	G		0						
20					becoming light orange brown with sandstone seams			20		4" Diameter Sch. 40 PVC Riser with cement/bentonite grout
25								25		
					SANDSTONE - light orange brown, with sand seams, moist, no odor					
					very hard, becoming light brown gray					
	28.0-30.0	G		0						
30								30		

Continued Next Page

Drilling Co: McDonald Drilling

Drilled by: T. McDonald

Logged by: C. Eick

Drilling started: 1/3/97

Drilling completed: 1/3/97

Drilling method: Air Rotary

Development method: Pump

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water levels: _____ ft

_____ ft

_____ ft

Dates Measured: _____

Notes: Approximately 180' East of Main Gate on Access Road

MONITOR WELL NO. MW-7

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 7

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
					Continued from previous page					
30								30		
35								35		
	38.0-40.0	G		0	becoming light brown, no sand seams					
40								40		
45					less consolidated, with sand seams			45		4.5' of Bentonite Chip Seal
	48.0-50.0	G		0	sand layer					
50					very consolidated			50		
					sand layers, weakly consolidated, becoming brown					
55	54.0-56.0	G		0	becoming strongly consolidated, no sand			55		Sch. 40 Slotted Screen with Filter Sand
	58.0-60.0	G		0						
60	60.0-62.0	G		0	SAND - orange brown, medium to fine grained, wet, no odor			60		
65						SP		65		Bottom of Screen at 68' Endcap at 68.3'
70								70		

Continued Next Page

MONITOR WELL NO. MW-7

KN Energy - Hobbs Gas Plant

Hobbs, New Mexico

Figure 7

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	HNU (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
					Continued from previous page					
70								70		Filter Sand
75								75		
80								80		
85								85		
90								90		
95								95		
100								100		
105								105		
110								110		

AIC
AGENCY INFORMATION CONSULTANTS
An ERIIS Company

February 13, 1996

Carrie Eick
Eco-Logical Environmental
2200 Market Street
Midland, TX 79703

Re: AIC Job #02-0045897
Water Well Search
Hobbs Gas Plant
Hwy 180 7 Hwy 483
Hobbs, New Mexico

Dear Mr. Eick:

At your request, Agency Information Consultants, Inc. (AIC) has conducted a water well search for the above-referenced site. Water well records in New Mexico are maintained by the New Mexico State Engineers Office in Santa Fe. These records are sorted geographically (by the township/range grid system), and AIC has obtained copies of all water wells on record in the sections concerning the site. AIC does not guarantee the accuracy of the information as provided by the original sources, nor can we guarantee that no plotting errors have occured. The purpose of these maps is to give the user a "working approximation" of the positions of reported well positions. AIC has plotted those wells that are in the area of review on the enclosed map.

SUMMARY

AIC was able to locate 4 water wells in the sections concerning the area of review.

Thank you for using AIC for this project. Please call me if you have any questions.

Diane Barnes
Production Manager

800 Brazos, Suite 740 • Austin, TX 78701 • (800) 945-9509 • (512) 478-8991 • FAX (512) 478-5215

Form WR-23 *Ore, ist.* STATE ENGINEER OFFICE A

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1 *28*

T 14 S

(Plat of 640 acres) *R-36-E*

(A) Owner of well Southwestern Public Service, Hobbs,

Street and Number

City Hobbs State New Mexico

Well was drilled under Permit No. and is located in the

[illegible] ¼ [illegible] ¼ [illegible] ¼ of Section [illegible] Twp. [illegible] Rge. [illegible]

(B) Drilling Contractor Bob Boyd & Son License No. *A6494*

Street and Number *1745 N. 4th St.*

City *Las Cruces* State New Mexico

Drilling was commenced 19

Drilling was completed 19

Elevation at top of casing in feet above sea level Total depth of well

State whether well is shallow or artesian Depth to water upon completion

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2				Send on back
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12 3/4	41.51				309'		89'	309'

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received AUG 4 1955

OFFICE GROUND WATER SUPERVISOR ROSWELL, NEW MEXICO

File No. *L-1550* Use *Ind* Location No. *18.36.28.41111*

Section [illegible] LOG OF W[illegible]

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	5	5'		Cloddie rock
5	23	23		Cletcho
23	30	2		Sand & gravel
30	43	13		Lime rock
43	44	1		Sand
44	54	10		Lime rock
54	59	5		Hard-sand rock
59	64	5		Yellow cletcho
64	65	1		Hard-sand stone
65	74	9		Sand water
74	75	1		Cletcho
75	80	5		Sand
80	92	12		Sand stone
92	136	44		Sand & gravel
136	140	4		Cletcho
140	150	10		Sand
150	154	4		Cletcho
154	170	16		Sand & gravel
170	174	4		Stk Boulders
174	192	22		Sand, gravel, boulders
192	195	3		Boulders
195	204	9		Gravel & sand
204	206	2		Red Bed

L S Elev 3916
Depth to K Trc 204'
Elev of K Trc 3712'

Loc. No. 18.36.29. [illegible]
Hydro. Survey _____ Field Check X

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

[signature]
Well Driller

SOURCE OF ALTITUDE GIVEN
Interpolated from Topo. Sheet _____
Determined by Inst. Leveling X (Scout)
Other _____

T-P Coal Oil
State W

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Rowan Drilling Co.
Street and Number Box 1873
City Midland State Texas
Well was drilled under Permit No. ______ and is located in the ____ ¼ NW ¼ NW ¼ of Section 28 Twp. 18 S Rge. 36 E
(B) Drilling Contractor Abbott Bros. License No. WD-46
Street and Number Box 637
City Hobbs State New Mexico
Drilling was commenced December 27 1957
Drilling was completed December 28 1957

Elevation at top of casing in feet above sea level ______ Total depth of well 125
State whether well is shallow or artesian Shallow Depth to water upon completion 45

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	45	125	80	Water Sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
	NONE							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ______ License No. ______
Street and Number ______ City ______ State ______
Tons of Clay used ______ Tons of Roughage used ______ Type of roughage ______
Plugging method used ______ Date Plugged ______ 19__
Plugging approved by: Cement Plugs were placed as follows:

______
Basin Supervisor

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received DEC 31 1957
GROUND WATER SUPERVISOR
ROSWELL NEW MEXICO

File No. L-3757 Use O.W.D. Location No. 18.36.28.110

Oil well drilling

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	17	16		Caliche
17	25	8		Sand Rock
25	40	15		Dry Sand
40	45	5		Sand Rock
45	125	80		Water Sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbott

Well Driller

Form WR-23 STATE ENGINEER OFFICE

FIELD ENGR. LOG

WELL RECORD

C

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Lorena Bigbee

Street and Number P. O. Box 133

City Hobbs, State N. Mex.

Well was drilled under Permit No. L-4011 and is located in the ... ¼ ... ¼ SE ¼ of Section 33 Twp. 18S Rge. 36 E.

(B) Drilling Contractor W. L. Van Hoy License No. WD-208

Street and Number P. O. Box 74

City Oil Center, State N. Mex.

Drilling was commenced Nov. 24 19 53

Drilling was completed Nov. 26, 19 53

Elevation at top of casing in feet above sea level ... Total depth of well 100

State whether well is shallow or artesian Shallow Depth to water upon completion 65 '

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	69	100	31	Course water sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
6 "			0	4	4'		None	
	(6 " nipple in top of hole, no other pipe used.)							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ... License No. ...

Street and Number ... City ... State ...

Tons of Clay used ... Tons of Roughage used ... Type of roughage ...

Plugging method used ... Date Plugged ... 19 ...

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received DEC 2 1958

OFFICE
GROUND WATER SUPERVISOR
ROSWELL, NEW MEXICO

File No. L-4011 Use. Dom. Location No. 18.36.33.444

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	65	65	Greyish	Caliche
65	69	4	Greyish	Hard Rock
69	100	31	Greyish	Course Water-sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

W. L. Van Doog
Well Driller

Form WR-23

SANTA FE

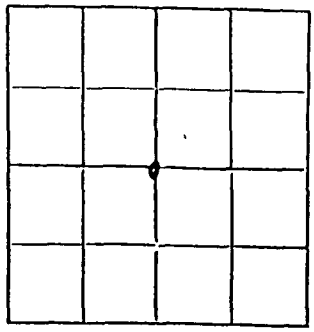
STATE ENGINEER OFFICE

well No. 4 (1)

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1



(Plat of 640 acres)

(A) Owner of well New Mexico Electric Co.

Street and Number

City Hobbs State New Mexico

Well was drilled under Permit No. [illegible] and is located in the

Center ¼ ¼ ¼ of Section 34 Twp. 18S Rge. 36E

(B) Drilling Contractor Abbott Bros. License No. WD-46

Street and Number P.O. Box 637

City Hobbs State New Mexico

Drilling was commenced February 12 19 65

Drilling was completed February 18 19 65

Elevation at top of casing in feet above sea level Total depth of well 190

State whether well is shallow or artesian Shallow Depth to water upon completion 70

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	70	181	111	Sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
24"	hole							
14"	.375	weld	0	190	190	open	70	190
	wall							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received [illegible]

[illegible]

File No. L-5176-X-3 Use Domestic Location No. 18.34.34.[illegible]

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	7	7		Caliche
7	21	14		sand
21	24	3		rock
24	30	6		sand
30	40	10		sand
40	48	8		rock
48	70	12		sand
70	90	20		sand
90	100	10	Brown	sand
100	115	15		sand
115	140	25		sand
140	155	15		sand
155	175	20	Brown	sand
175	181	6		sand
181	186	5		sandy clay
186	190	4	red	clay

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbott

Well Driller

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL SERVICES
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

October 24, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/22/96
Analysis Date: 10/22/96
Sampling Date: 10/18-20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TRPHC (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P,O XYLENE (mg/kg)	TOTAL BTEX (mg/kg)
T60768	MW-2 (38-40')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60769	MW-2 (44-46')	10.2	<0.050	<0.050	<0.050	<0.050	<0.050
T60770	MW-2 (54-56')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60771	MW-2 (58-60')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60772	MW-3 (4-6')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60773	MW-3 (14-16')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60774	MW-3 (18-20')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60775	MW-3 (34-36')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60776	MW-3 (48-50')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60777	MW-3 (64-65')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60778	MW-4 (34-36')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60779	MW-4 (48-50')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60780	MW-5 (28-30')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60781	MW-5 (48-50')	11.9	<0.050	<0.050	<0.050	<0.050	<0.050
T60782	MW-5 (62-65')	51.7	<0.050	<0.050	<0.050	<0.050	<0.050
T60783	MW-6 (44-46')	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T60785	MW-6 (58-61')	41.9	<0.050	<0.050	<0.050	<0.050	<0.050
QC	Quality Control	99	0.100	0.100	0.100	0.300	
REPORTING LIMIT		10	0.050	0.050	0.050	0.050	
RPD		2	4	4	3	4	
% Extraction Accuracy		103	101	100	101	101	
% Instrument Accuracy		100	100	100	100	100	

CHEMIST: TRPHC: AG BTEX: RW
METHODS: EPA SW 846-8020, 5030, 3550 High Level; EPA 418.1.
BTEX SPIKE: 5.000 mg/kg BTEX. BTEX QC: 0.100 mg/L BTEX.
TRPHC SPIKE: 250 mg/kg TRPHC. TRPHC QC: 100 mg/L TRPHC.

BB 10-24-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 04, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/23/96
Analysis Date: 10/24/96
Sampling Date: 10/18/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/kg)	Se (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ag (mg/kg)	Ba mg/kg	Al (mg/kg	Hg (mg/kg)	Co (mg/kg)	Cu (mg/kg)
T60768	MW-2 (38-40')	<10	<10	<2.0	<5.0	<10	<5.0	62	2,500	<0.25	<3	<2
T60769	MW-2 (44-46')	<10	<10	<2.0	<5.0	<10	0.7	33	1,950	<0.25	<3	<2
T60770	MW-2 (54-56')	<10	<10	<2.0	<5.0	<10	<0.5	<20	913	<0.25	<3	<2
T60771	MW-2 (58-60')	<10	<10	<2.0	5.71	<10	<0.5	47	2,150	<0.25	<3	<2
QC	Quality Control	5.14	4.97	4.91	4.77	4.97	5.35	4.89	4.96	0.0048	4.91	4.91
REPORTING LIMIT		10	10	2	5	10	0.5	20	20	0.25	3	2
RPD		2	3	1	1	2	2	4	15	0	2	3
% Extraction Accuracy		85	79	70	76	73	103	76	96	95	75	74
% Instrument Accuracy		103	99	98	95	99	107	98	99	95	98	98

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)
T60768	MW-2 (38-40')	2,190	18.3	<20	6.36	<3.0	<10
T60769	MW-2 (44-46')	2,020	18	<20	4.44	<3.0	<10
T60770	MW-2 (54-56')	998	7.5	<20	2.79	<3.0	<10
T60771	MW-2 (58-60')	2,660	24.7	<20	5.01	<3.0	<10
QC	Quality Control	4.99	5.03	4.91	4.97	6.48	4.7
REPORTING LIMIT		3	0.1	20	2	3.0	10
RPD		19	4	2	6	1	2
% Extraction Accuracy		95	76	73	77	95	69
% Instrument Accuracy		100	101	98	99	109	94

METHODS: EPA SW 846-6010, 3051, 7471.
CHEMIST: Hg: CB As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo, B: RR
TOTAL METALS SPIKE: 2.50 mg/kg Hg; 120 mg/kg B; 800.0 mg/kg As, Ba, Al; 100.0 mg/kg Se, Cu; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb, Co, Mn, Ni, Zn, Mo; 400.0 mg/kg Fe.
TOTAL METALS QC: 0.005 mg/L Hg; 6.0 mg/L B; 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 04, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/23/96
Analysis Date: 10/24/96
Sampling Date: 10/19/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/kg)	Se (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ag (mg/kg)	Ba mg/kg	Al (mg/kg	Hg (mg/kg)	Co (mg/kg)	Cu (mg/kg)
T60772	MW-3 (4-6')	10	<10	<2	<5	<10	1.3	173	1,160	<0.25	<3	4.24
T60773	MW-3 (14-16')	14	<10	<2	<5	<10	0.6	170	1,560	<0.25	<3	<2
T60774	MW-3 (18-20')	<10	<10	<2	<5	<10	<0.5	191	2,510	<0.25	<3	<2
T60775	MW-3 (34-36')	<10	<10	<2	5.34	<10	<0.5	103	2,030	<0.25	<3	<2
T60776	MW-3 (48-50')	11	<10	<2	5.47	<10	<0.5	<20	2,010	<0.25	<3	<2
QC	Quality Control	5.14	4.97	4.91	4.77	4.97	5.35	4.89	4.96	0.0048	4.91	4.91
REPORTING LIMIT		10	10	2	5	10	0.5	20	20	0.25	3	2
RPD		2	3	1	1	2	2	4	15	0	2	3
% Extraction Accuracy		85	79	70	76	73	103	76	96	95	75	74
% Instrument Accuracy		103	99	98	95	99	107	98	99	95	98	98

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)
T60772	MW-3 (4-6')	735	5.9	<20	2.51	<3.0	<10
T60773	MW-3 (14-16')	2,130	13.7	<20	5.16	<3.0	<10
T60774	MW-3 (18-20')	3,070	22.2	<20	6.15	<3.0	<10
T60775	MW-3 (34-36')	1,830	13.8	<20	6.44	<3.0	<10
T60776	MW-3 (48-50')	2,140	17.9	<20	6.5	<3.0	<10
QC	Quality Control	4.99	5.03	4.91	4.97	6.48	4.7
REPORTING LIMIT		3	0.1	20	2	3.0	10
RPD		19	4	2	6	1	2
% Extraction Accuracy		95	76	73	77	95	69
% Instrument Accuracy		100	101	98	99	109	94

METHODS: EPA SW 846-6010, 3051, 7471.
CHEMIST: Hg: CB As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo, B: RR
TOTAL METALS SPIKE: 2.50 mg/kg Hg; 120 mg/kg B; 800.0 mg/kg As, Ba, Al; 100.0 mg/kg Se, Cu; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb, Co, Mn, Ni, Zn, Mo; 400.0 mg/kg Fe.
TOTAL METALS QC: 0.005 mg/L Hg; 6.0 mg/L B; 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 04, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/23/96
Analysis Date: 10/24/96
Sampling Date: 10/19/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/kg)	Se (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ag (mg/kg)	Ba mg/kg	Al (mg/kg	Hg (mg/kg)	Co (mg/kg)	Cu (mg/kg)
T60778	MW-4 (34-36')	<10	<10	<2.0	5.3	<10	<5.0	170	1,800	<0.25	<3	<5.0
T60779	MW-4 (48-50')	11	<10	<2.0	<5.0	<10	<5.0	37	2,100	<0.25	<3	<5.0
QC	Quality Control	5.47	4.89	4.77	4.72	4.86	5.39	4.91	4.98	0.0048	4.82	4.93
REPORTING LIMIT		10	10	2	5	10	0.5	20	20	0.25	3	5.0
RPD		17	17	15	4	14	1	17	17	0	15	22
% Extraction Accuracy		89	73	75	82	76	101	79	114	95	77	87
% Instrument Accuracy		110	98	95	94	97	108	98	100	95	96	99

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)
T60778	MW-4 (34-36')	1,500	10	<20	4.6	<3.0	<10
T60779	MW-4 (48-50')	2,500	19	<20	6.5	<3.0	<10
QC	Quality Control	4.95	4.96	4.81	4.92	6.48	4.64
REPORTING LIMIT		3	0.1	20	2	3.0	10
RPD		21	15	3	15	1	18
% Extraction Accuracy		105	81	78	82	95	72
% Instrument Accuracy		99	99	96	98	109	93

METHODS: EPA SW 846-6010, 3051, 7471.
CHEMIST: Hg: CB As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo, B: RR
TOTAL METALS SPIKE: 2.50 mg/kg Hg; 120 mg/kg B; 800.0 mg/kg As, Se, Ba, Al; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb, Co, Mn, Ni, Zn, Mo; 100.0 mg/kg Cu; 400.0 mg/kg Fe.
TOTAL METALS QC: 0.005 mg/L Hg; 6.0 mg/L B; 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo.

BL
Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 04, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/23/96
Analysis Date: 10/24/96
Sampling Date: 10/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/kg)	Se (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ag (mg/kg)	Ba mg/kg	Al (mg/kg	Hg (mg/kg)	Co (mg/kg)	Cu (mg/kg)
T60780	MW-5 (28-30')	<10	<10	<2.0	5.8	<10	<5.0	190	2,900	<0.25	<3	<5.0
T60781	MW-5 (48-50')	<10	<10	<2.0	<5.0	<10	<5.0	22	2,300	<0.25	<3	<5.0
QC	Quality Control	5.47	4.89	4.77	4.72	4.86	5.39	4.91	4.98	0.0048	4.82	4.93
REPORTING LIMIT		10	10	2	5	10	0.5	20	20	0.25	3	5.0
RPD		17	17	15	4	14	1	17	17	0	15	22
% Extraction Accuracy		89	73	75	82	76	101	79	114	95	77	87
% Instrument Accuracy		110	98	95	94	97	108	98	100	95	96	99

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)
T60780	MW-5 (28-30')	2,500	21	<20	4.3	<3.0	<10
T60781	MW-5 (48-50')	2,300	25	<20	5.8	<3.0	<10
QC	Quality Control	4.95	4.96	4.81	4.92	6.48	4.64
REPORTING LIMIT		3	0.1	20	2	3.0	10
RPD		21	15	3	15	1	18
% Extraction Accuracy		105	81	78	82	95	72
% Instrument Accuracy		99	99	96	98	109	93

METHODS: EPA SW 846-6010, 3051, 7471.
CHEMIST: Hg: CB As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo, B: RR
TOTAL METALS SPIKE: 2.50 mg/kg Hg; 120 mg/kg B; 800.0 mg/kg As, Se, Ba, Al; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb, Co, Mn, Ni, Zn, Mo; 100.0 mg/kg Cu; 400.0 mg/kg Fe.
TOTAL METALS QC: 0.005 mg/L Hg; 6.0 mg/L B; 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo.

BF
Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 04, 1996
Receiving Date: 10/22/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/23/96
Analysis Date: 10/24/96
Sampling Date: 10/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/kg)	Se (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)	Ag (mg/kg)	Ba mg/kg	Al (mg/kg	Hg (mg/kg)	Co (mg/kg)	Cu (mg/kg)
T60783	MW-6 (44-46')	<10	<10	<2.0	<5.0	<10	<5.0	26	1,900	<0.25	<3	<5.0
QC	Quality Control	5.47	4.89	4.77	4.72	4.86	5.39	4.91	4.98	0.0048	4.82	4.93
REPORTING LIMIT		10	10	2	5	10	0.5	20	20	0.25	3	5.0
RPD		17	17	15	4	14	1	17	17	0	15	22
% Extraction Accuracy		89	73	75	82	76	101	79	114	95	77	87
% Instrument Accuracy		110	98	95	94	97	108	98	100	95	96	99

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)
T60783	MW-6 (44-46')	1,900	18	<20	4.4	<3.0	<10
QC	Quality Control	4.95	4.96	4.81	4.92	6.48	4.64
REPORTING LIMIT		3	0.1	20	2	3.0	10
RPD		21	15	3	15	1	18
% Extraction Accuracy		105	81	78	82	95	72
% Instrument Accuracy		99	99	96	98	109	93

METHODS: EPA SW 846-6010, 3051, 7471.
CHEMIST: Hg: CB As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo, B: RR
TOTAL METALS SPIKE: 2.50 mg/kg Hg; 120 mg/kg B; 800.0 mg/kg As, Se, Ba, Al; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb, Co, Mn, Ni, Zn, Mo; 100.0 mg/kg Cu; 400.0 mg/kg Fe.
TOTAL METALS QC: 0.005 mg/L Hg; 6.0 mg/L B; 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, Mo.

BC
Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Carrie Erick
Phone #: 915 520 7535
FAX #: 915 520 7737
Company Name & Address: [illegible] Environmental 2200 Market Midland, TX 79703
Project #: 274-52
Project Name: Hobbs Gas Plant
Project Location: Hobbs, NM
Sampler Signature: Carrie E. Erick

LAB # (LAB USE ONLY)	FIELD CODE		# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	BTEX, ~~MTBE~~	TPH	~~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	8240 / 8260	8270	TOTAL METALS *
(0)768	MW-2	(38-40')	1	4oz		X					X		10/18/96	2:50	X	X	X						X
69	MW-2	(41-46')												2:55									
70	MW-2	(54-56')												3:05									
71	MW-2	(58-60')												3:10									
72	MW-3	(4-6)											10/19/96	8:25									
73	MW-3	(14-16)												8:35									
74	MW-3	(18-20)												8:40									
75	MW-3	(34-36)												9:00									
76	MW-3	(48-50')												9:15									
77	MW-3	(64-65')												9:30	X	X							
78	MW-4	(34-36)												1:00	X	X	X						X

SPECIAL HANDLING

Turn around # of days: 11-4
Fax ASAP: X
Hold:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Erick	10/21/96	2:25PM	Helen Shelton	10/21/96	2:25PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Helen Shelton	10/21/96	6:00PM			
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			M Lopez	10-22-96	10:35

REMARKS

* Total Metals List includes Ag, As, Ba, Cd, Cr, Pb, Hg, Se, Cu, Fe, Mn, Zn, Al, B, Co, Mo, Ni

296AC

MW3 - 14-16 sample Broken - sample salvaged
MW 4 - 34-36 - sample Broken - sample salvaged

CT 11 samples - HS

TraceAnalysis, Inc.

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Tel (806) 794 1296 Fax (806) 794 1298
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CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICH

Phone #:

FAX #:

Company Name & Address: ECO-LOGICAL

Project #: 279-S12

Project Name: HOBBS GAS PLANT

Project Location: HOBBS, NM

Sampler Signature: Carrie T. Eich

ANALYSIS REQUEST

SPECIAL HANDLING

LAB # (LAB USE ONLY)	FIELD CODE		# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	BTEX, MTBE	TPH	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	8240 / 8260	8270	Turn around # of days	Fax ASAP	Hold
600779	MW-4	(48-50)	1	4oz		X					X		10/19	1:15	X	X	X							X		
30	MW-5	(28-30)	1										10/20/96	8:50	X	X	X									
31	MW-5	(48-50)	1											9:10	X	X	X									
32	MW-5	(62-65)	1											9:30	X	X										
33	MW-6	(44-46)	1	4oz									10/21/96	12:30	X	X	X									
34	MW-6	(48-50)	1											12:35											X	
35	MW-6	(58-61)	1											12:50	X	X										

Relinquished by: Carrie T. Eich **Date:** 10/21/96 **Time:** 2:25 PM

Received by: Helen Shelton **Date:** 10/21/96 **Time:** 2:25 PM

Relinquished by: **Date:** **Time:** 6:15 PM

Received by: **Date:** **Time:**

Relinquished by: **Date:** **Time:**

Received at Laboratory by: M Lopez **Date:** 10-22-96 **Time:** 10:35

REMARKS

Total Metals also include Ag, As, Ba, Cd, Cr, Pb, Hg, Se, Cu, Fe, Mn, Zn, Al, B, Co, Mo, Ni

CT

7 samples - HC

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ANALYTICAL RESULTS FOR
Eco-Logical Environmental Services
Attention CARRIE EICK
2200 Market Street
Midland TX 79703

Date: Jan 08, 1997
Date Rec: 1/7/97
Project: 279-512
Proj Name: HOBS GAS PLANT
Proj Loc: HOBBS, NM

Lab Receiving # : 9701000083
Sampling Date: 1/3/97
Sample Condition: Intact and Cool
Sample Received By: ML

TA#	Field Code	MATRIX	TRPHC (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O XYLENE (mg/Kg)	TOTAL BTEX mg/Kg
T65488	MW-7 54-56'	Soil	<10.0	<0.050	<0.050	<0.050	<0.050	<0.050
QC			100	0.091	0.091	0.091	0.281	
RPD			2	1	1	1	1	
% Extraction Accuracy			109	89	90	92	94	
% Instrument Accuracy			100	91	91	91	94	

Reporting Limit:			10	0.05	0.05	0.05	0.05	
TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: mg/L	SPIKE: mg/Kg	
BTEX	EPA 5030	1/8/97	EPA 8020	1/8/97	RW	0.100 ea	5.0 ea	
TRPHC	EPA 3550	1/7/97	EPA 418.1	1/7/97	AG	100	250	

BL
Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1-8-97
Date

TraceAnalysis, Inc.

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83

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Carrie C. Eck
Phone #: 915/520-7535
FAX #: 915/520-7737

Company Name & Address: ECO-LOGICAL

Project #: 279-S12
Project Name: HOBBS GAS PLANT

Project Location: HOBBS, NM
Sampler Signature: Carrie C. Eck

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX, ~~MTBE~~	TPH	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	8240 / 8260	8270	SPECIAL HANDLING: Turn around # of days	Fax ASAP	Hold
65488	MW-7 54-56	1	4oz		Y					X		1/3/97	11:30	X	X									X	

Relinquished by: Shawnna James Date: 1/6/97 Time: 10:05 AM
Received by: Helen Shelton Date: 1/6/97 Time: 10:05 AM

Relinquished by: Helen Shelton Date: 1/6/97 Time: 7:00 PM
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Date: 1-7-97 Time: 10:45

REMARKS: please RUSH

1-9

1 sample - HS

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
Eco-Logical Environment
Attention CARRIE EICK
2200 Market Street
Midland TX 79703

Date: Nov 01, 1996
Date Rec: 10/25/96
Project: 279-512
Proj Name: HOBS GAS PLANT
Proj Loc: HOBBS, NM

Lab Receiving # : 9610000371
Sampling Init Date: 10/23/96
Sampling Compl Date: 10/23/96
Samples Intact, Cool: Yes
Sample Received By: ML

TA#	Field Code	MATRIX	TRPHC (mg/L)
T 61002	MW-1	Water	<0.200
T 61003	MW-2	Water	<0.200
T 61004	MW-3	Water	<0.200
T 61005	MW-4	Water	<0.200
T 61006	MW-5	Water	<0.200
T 61007	MW-6	Water	<0.200
QC			103
RPD			2
% Extraction Accuracy:			101
% Instrument Accuracy:			103

Reporting Limit: 0.2

TEST	PREP METHOD	PREP DATE	ANALYSIS METHOD	ANALYSIS COMPLETED	CHEMIST	QC: (mg/L)	SPIKE: (mg/L)
TRPHC	N/A	10/30/96	EPA 418.1	10/30/96	AG	100	8.5

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-1-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	pH (s.u.)	CYANIDE (mg/L)	CHLORIDE (mg/L)	SULFATE (mg/L)
T61002	MW-1	7.3	<0.01	25	37
T61003	MW-2	7.7	<0.01	29	55
T61004	MW-3	7.4	<0.01	120	120
T61005	MW-4	7.5	<0.01	14	45
T61006	MW-5	7.1	<0.01	33	100
T61007	MW-6	7.4	<0.01	30	83
QC	Quality Control	7.0	0.04	27	27
REPORTING LIMIT		---	0.01	1.0	1.0
RPD		0	0	0	3
% Extraction Accuracy		---	75	107	109
% Instrument Accuracy		100	85	108	108

METHODS: EPA 150.1, 300.0, 335.2.
CHEMIST: CYANIDE/CHLORIDE/SULFATE: MS pH: JT
CYANIDE SPIKE AND QC: 0.04 mg/L CYANIDE.
CHLORIDE SPIKE: 500 mg/L CHLORIDE.
CHLORIDE QC: 25 mg/L CHLORIDE.
SULFATE SPIKE: 500 mg/L SULFATE.
SULFATE QC: 25 mg/L SULFATE.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/29/96
Analysis Date: 10/29/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TDS (mg/L)	NITRATE-N (mg/L)	FLUORIDE (mg/L)	PHENOLS (mg/L)	ALKALINITY (mg/L)
T61002	MW-1	737	<1.0	0.5	0.01	609
T61003	MW-2	356	2.9	1.1	<0.01	152
T61004	MW-3	760	7.8	0.6	<0.01	243
T61005	MW-4	392	3.7	0.7	<0.01	244
T61006	MW-5	853	<1.0	0.5	<0.01	593
T61007	MW-6	511	1.41	0.7	<0.01	274
QC	Quality Control	---	10.0	0.98	0.68	---
RPD		0	21	6	0	0
% Extraction Accuracy		---	114	95	105	---
% Instrument Accuracy		---	100	96	91	---

METHODS: EPA 160.1, 300.0, 340.2, 420.2, 310.1.
CHEMIST: TDS/FLUORIDE/PHENOLS: MS/RCD NITRATE-N: MS ALKALINITY: RCD
NITRATE-N SPIKE: 200 mg/L NITRATE-N.
NITRATE-N QC: 10 mg/L NITRATE-N.
FLUORIDE SPIKE: 1.1 mg/L FLUORIDE.
FLUORIDE QC: 1.0 mg/L FLUORIDE.
PHENOLS SPIKE: 0.668 mg/L PHENOLS.
PHENOLS QC: 0.8 mg/L PHENOLS.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

November 07, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 11/05/96
Analysis Date: 11/05/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

		DISSOLVED METALS			
TA#	Field Code	POTASSIUM (mg/L)	MAGNESIUM (mg/L)	CALCIUM (mg/L)	SODIUM (mg/L)
T61002	MW-1	5.5	45	160	39
T61003	MW-2	4.8	6.0	58	33
T61004	MW-3	7.5	16	150	45
T61005	MW-4	4.1	11	91	9.3
T61006	MW-5	6.2	27	160	94
T61007	MW-6	4.6	12	100	39
QC	Quality Control	25.3	23.9	24.2	24.55
Reporting Limit		0.30	0.10	0.10	0.40
RPD		3	0	0	1
% Extraction Accuracy		103	94	91	96
% Instrument Accuracy		101	96	97	98

METHODS: EPA SW 846-3005, 6010.
CHEMIST: RR
DISSOLVED METALS SPIKE: 100.0 mg/L POTASSIUM, MAGNESIUM, CALCIUM, SODIUM.
DISSOLVED METALS QC: 25.0 mg/L POTASSIUM, MAGNESIUM, CALCIUM, SODIUM.

BE

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-7-96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/28/96
Analysis Date: 10/28/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61002
FIELD CODE: MW - 1

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	*352	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61002
FIELD CODE: MW - 1

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	26	1
m & p-Xylene	79	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	2	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

Tentatively Identified Compounds and Estimated concentrations (ug/L)

	RT	CONC.
(1) Propyl-Benzene	19.30	19
(2) (1-methylethyl)-benzene	19.48	40
(3) 1-ethyl-2-methyl-benzene	20.00	69
(4) 1,3,5-trimethyl-benzene	20.29	224
(5) Unidentified Hydrocarbon	21.64	25
(6) 2,3-dihydro-1-methylindene	22.83	21
(7) 1-methyl-4-(1-methylethyl)-benzene	24.62	22
(8) 1,2,3,4-tetrahydro-Napthalene	25.27	22
(9) Napthalene	26.76	23

SURROGATES	**% RECOVERY**
Dibromofluoromethane	102
Toluene-d8	99
4-Bromofluorobenzene	98

ND = Not Detected
***NOTE: Estimated concentration. Response over standard range.**

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61003
FIELD CODE: MW - 2

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61003
FIELD CODE: MW - 2

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

Tentatively Identified Compounds and Estimated concentrations (ug/L)

	RT	CONC.
(1) Unidentified Hydrocarbon	17.20	1
(2) Unidentified Hydrocarbon	19.40	1

SURROGATES	% RECOVERY
Dibromofluoromethane	102
Toluene-d8	99
4-Bromofluorobenzene	96

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61004
FIELD CODE: MW - 3

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	1	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61004
FIELD CODE: MW - 3

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	**ND**	**1**
Tetrachloroethene	**ND**	**1**
Chlorobenzene	**ND**	**1**
Ethylbenzene	**ND**	**1**
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

SURROGATES	% RECOVERY
Dibromofluoromethane	104
Toluene-d8	100
4-Bromofluorobenzene	97

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61005
FIELD CODE: MW - 4

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61005
FIELD CODE: MW - 4

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

SURROGATES	**% RECOVERY**
Dibromofluoromethane	104
Toluene-d8	100
4-Bromofluorobenzene	97

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61006
FIELD CODE: MW - 5

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	135	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61006
FIELD CODE: MW - 5

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	6	1
m & p-Xylene	71	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

Tentatively Identified Compounds and Estimated concentrations (ug/L)

	RT	CONC.
(1) Unidentified Hydrocarbon	8.75	9
(2) Amylene Hydrate	11.78	12
(3) Unidentified Hydrocarbon	14.15	5
(4) Propyl-Benzene	19.34	4
(5) 1-ethyl-4-methyl-benzene	19.51	8
(6) 1-ethyl-2-methyl-benzene	20.03	22
(7) 1,2,3-trimethyl-benzene	20.33	40

SURROGATES	% RECOVERY
Dibromofluoromethane	102
Toluene-d8	99
4-Bromofluorobenzene	95

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/25/96
Analysis Date: 10/25/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61007
FIELD CODE: MW - 6

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	192	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61007
FIELD CODE: MW - 6

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	13	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

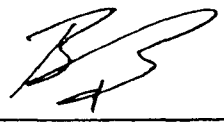
Tentatively Identified Compounds and Estimated concentrations (ug/L)

	RT	CONC.
(1) (1-methylethyl)-Benzene	18.63	3
(2) 1,2,4-trimethyl-benzene	19.59	8
(3) 1-ethyl-2-methyl-benzene	20.03	8
(4) 1,2,3-trimethyl-Benzene	20.32	16

SURROGATES	% RECOVERY
Dibromofluoromethane	104
Toluene-d8	100
4-Bromofluorobenzene	95

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP



Director, Dr. Blair Leftwich
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10-31-96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

October 31, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/28/96
Analysis Date: 10/28/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#: T61008
FIELD CODE: Trip Blank

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

TA #: T61008
FIELD CODE: Trip Blank

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane	ND	5

SURROGATES	% RECOVERY
Dibromofluoromethane	100
Toluene-d8	99
4-Bromofluorobenzene	94

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

10-31-96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/28/96

PAH — Reporting — T61002

8270 Compounds (mg/L)	Limit	MW-1	QC	RPD	%EA	%IA
Naphthalene	0.001	0.016	80	2	51	100
Acenaphthylene	0.001	ND	79	0	59	99
Acenaphthene	0.001	ND	79	0	56	99
Fluorene	0.001	ND	80	3	62	100
Phenanthrene	0.001	ND	80	6	56	100
Anthracene	0.001	ND	75	2	65	94
Fluoranthene	0.001	ND	79	5	80	99
Pyrene	0.001	ND	79	0	83	99
Benzo[a]anthracene	0.001	ND	82	18	79	103
Chrysene	0.001	ND	75	22	91	94
Benzo[b]fluoranthene	0.001	ND	82	15	78	103
Benzo[k]fluoranthene	0.001	ND	73	3	81	91
Benzo[a]pyrene	0.001	ND	80	25	80	100
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	70	27	58	88
Benzo[g,h,i]perylene	0.001	ND	66	25	54	83
2-methylnaphthalene	0.001	0.005	---	---	---	---
1-methylnaphthalene	0.001	0.004	---	---	---	---

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	57
2-Fluorobiphenyl SURR	60
Terphenyl-d14 SURR	80

METHODS: EPA SW 846-8270, 3510.
CHEMIST: RD/CC

11-4-96

Director, Dr. Blair Leftwich — DATE
Director, Dr. Bruce McDonell

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/28/96

PAH — Reporting — T61003

8270 Compounds (mg/L)	Limit	MW-2	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	80	2	51	100
Acenaphthylene	0.001	ND	79	0	59	99
Acenaphthene	0.001	ND	79	0	56	99
Fluorene	0.001	ND	80	3	62	100
Phenanthrene	0.001	ND	80	6	56	100
Anthracene	0.001	ND	75	2	65	94
Fluoranthene	0.001	ND	79	5	80	99
Pyrene	0.001	ND	79	0	83	99
Benzo[a]anthracene	0.001	ND	82	18	79	103
Chrysene	0.001	ND	75	22	91	94
Benzo[b]fluoranthene	0.001	ND	82	15	78	103
Benzo[k]fluoranthene	0.001	ND	73	3	81	91
Benzo[a]pyrene	0.001	ND	80	25	80	100
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	70	27	58	88
Benzo[g,h,i]perylene	0.001	ND	66	25	54	83
2-methylnaphthalene	0.001	ND	---	---	---	---
1-methylnaphthalene	0.001	ND	---	---	---	---

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	57
2-Fluorobiphenyl SURR	57
Terphenyl-d14 SURR	61

METHODS: EPA SW 846-8270, 3510.

CHEMIST: RD/CC

11-4-96

Director, Dr. Blair Leftwich — DATE
Director, Dr. Bruce McDonell

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/28/96

PAH — Reporting Limit — T61004

8270 Compounds (mg/L)	Reporting Limit	MW-3	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	80	2	51	100
Acenaphthylene	0.001	ND	79	0	59	99
Acenaphthene	0.001	ND	79	0	56	99
Fluorene	0.001	ND	80	3	62	100
Phenanthrene	0.001	ND	80	6	56	100
Anthracene	0.001	ND	75	2	65	94
Fluoranthene	0.001	ND	79	5	80	99
Pyrene	0.001	ND	79	0	83	99
Benzo[a]anthracene	0.001	ND	82	18	79	103
Chrysene	0.001	ND	75	22	91	94
Benzo[b]fluoranthene	0.001	ND	82	15	78	103
Benzo[k]fluoranthene	0.001	ND	73	3	81	91
Benzo[a]pyrene	0.001	ND	80	25	80	100
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	70	27	58	88
Benzo[g,h,i]perylene	0.001	ND	66	25	54	83
2-methylnaphthalene	0.001	ND	---	---	---	---
1-methylnaphthalene	0.001	ND	---	---	---	---

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	52
2-Fluorobiphenyl SURR	54
Terphenyl-d14 SURR	74

METHODS: EPA SW 846-8270, 3510.

CHEMIST: RD/CC

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/28/96

PAH

8270 Compounds (mg/L)	Reporting Limit	T61005 MW-4	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	80	2	51	100
Acenaphthylene	0.001	ND	79	0	59	99
Acenaphthene	0.001	ND	79	0	56	99
Fluorene	0.001	ND	80	3	62	100
Phenanthrene	0.001	ND	80	6	56	100
Anthracene	0.001	ND	75	2	65	94
Fluoranthene	0.001	ND	79	5	80	99
Pyrene	0.001	ND	79	0	83	99
Benzo[a]anthracene	0.001	ND	82	18	79	103
Chrysene	0.001	ND	75	22	91	94
Benzo[b]fluoranthene	0.001	ND	82	15	78	103
Benzo[k]fluoranthene	0.001	ND	73	3	81	91
Benzo[a]pyrene	0.001	ND	80	25	80	100
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	70	27	58	88
Benzo[g,h,i]perylene	0.001	ND	66	25	54	83
2-methylnaphthalene	0.001	ND	---	---	---	---
1-methylnaphthalene	0.001	ND	---	---	---	---

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	57
2-Fluorobiphenyl SURR	58
Terphenyl-d14 SURR	67

METHODS: EPA SW 846-8270, 3510.

CHEMIST: RD/CC

11-4-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/29/96

PAH — Reporting — T61006

8270 Compounds (mg/L)	Limit	MW-5	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	79	2	51	99
Acenaphthylene*	0.001	ND	76	0	59	95
Acenaphthene*	0.001	ND	78	0	56	98
Fluorene*	0.001	ND	75	3	62	94
Phenanthrene	0.001	ND	79	6	56	99
Anthracene	0.001	ND	77	2	65	96
Fluoranthene	0.001	ND	76	5	80	95
Pyrene	0.001	ND	78	0	83	98
Benzo[a]anthracene	0.001	ND	79	18	79	99
Chrysene	0.001	ND	74	22	91	93
Benzo[b]fluoranthene	0.001	ND	86	15	78	108
Benzo[k]fluoranthene	0.001	ND	66	3	81	83
Benzo[a]pyrene	0.001	ND	81	25	80	101
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	66	27	58	83
Benzo[g,h,i]perylene	0.001	ND	65	25	54	81
2-methylnaphthalene	0.001	ND	---	---	---	---
1-methylnaphthalene	0.001	ND	---	---	---	---

ND = Not Detected
*NOTE: Estimated concentration. Surrogate recovery out of limits.

	% RECOVERY
Nitrobenzene-d5 SURR	39
2-Fluorobiphenyl SURR	*40
Terphenyl-d14 SURR	91

METHODS: EPA SW 846-8270, 3510.
CHEMIST: RD/CC

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Sampling Date: 10/23/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant
Extraction Date: 10/25/96
Analysis Date: 10/28/96

PAH	Reporting	T61007				
8270 Compounds (mg/L)	Limit	MW-6	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	80	2	51	100
Acenaphthylene	0.001	ND	79	0	59	99
Acenaphthene	0.001	ND	79	0	56	99
Fluorene	0.001	ND	80	3	62	100
Phenanthrene	0.001	ND	80	6	56	100
Anthracene	0.001	ND	75	2	65	94
Fluoranthene	0.001	ND	79	5	80	99
Pyrene	0.001	ND	79	0	83	99
Benzo[a]anthracene	0.001	ND	82	18	79	103
Chrysene	0.001	ND	75	22	91	94
Benzo[b]fluoranthene	0.001	ND	82	15	78	103
Benzo[k]fluoranthene	0.001	ND	73	3	81	91
Benzo[a]pyrene	0.001	ND	80	25	80	100
Indeno[1,2,3-cd]pyrene	0.001	ND	67	26	57	84
Dibenz[a,h]anthracene	0.001	ND	70	27	58	88
Benzo[g,h,i]perylene	0.001	ND	66	25	54	83
2-methylnaphthalene	0.001	ND	---	---	---	---
1-methylnaphthalene	0.001	ND	---	---	---	---

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	72
2-Fluorobiphenyl SURR	77
Terphenyl-d14 SURR	80

METHODS: EPA SW 846-8270, 3510.
CHEMIST: RD/CC

11-4-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

November 06, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

Prep Date: 10/26/96
Analysis Date: 10/28/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS

TA#	FIELD CODE	As (mg/L)	Se (mg/L)	Cd (mg/L)	Cr (mg/L)	Pb (mg/L)	Ag (mg/L)	Ba (mg/L)	Al (mg/L)	Hg (mg/L)	Co (mg/L)	Cu (mg/L)
T61002	MW-1	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	0.34	<0.20	<0.001	<0.03	<0.02
T61003	MW-2	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	<0.20	<0.20	<0.001	<0.03	<0.02
T61004	MW-3	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	<0.20	<0.20	<0.001	<0.03	<0.02
T61005	MW-4	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	<0.20	<0.20	<0.001	<0.03	<0.02
T61006	MW-5	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	0.28	<0.20	<0.001	<0.03	<0.02
T61007	MW-6	<0.10	<0.05	<0.01	<0.05	<0.05	<0.05	<0.20	<0.20	<0.001	<0.03	<0.02
QC	Quality Control	5.35	5.22	5.28	5.01	5.23	5.39	4.89	4.81	0.005	5.17	4.91
REPORTING LIMIT		0.10	0.05	0.01	0.05	0.10	0.05	0.20	0.20	0.001	0.03	0.02
RPD		2	0	2	2	1	31	0	1	4	1	0
% Extraction Accuracy		105	96	101	104	98	81	98	96	92	99	93
% Instrument Accuracy		107	104	106	100	105	108	98	96	100	103	98

TA#	FIELD CODE	Fe (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	B (mg/L)	Mo (mg/L)	U (mg/L)
T61002	MW-1	<0.05	0.16	<0.20	<0.02	<0.03	<0.10	<0.50
T61003	MW-2	<0.05	<0.01	<0.20	<0.02	<0.03	<0.10	<0.50
T61004	MW-3	<0.05	<0.01	<0.20	<0.02	<0.03	<0.10	<0.50
T61005	MW-4	<0.05	<0.01	<0.20	<0.02	<0.03	<0.10	<0.50
T61006	MW-5	<0.05	0.11	<0.20	<0.02	<0.03	<0.10	<0.50
T61007	MW-6	<0.05	<0.01	<0.20	<0.02	<0.03	<0.10	<0.50
QC	Quality Control	5.06	5.21	5.19	5.11	4.75	4.93	4.79
REPORTING LIMIT		0.05	0.01	0.20	0.02	0.03	0.10	0.50
RPD		1	0	0	1	16	1	0
% Extraction Accuracy		98	100	100	101	75	95	108
% Instrument Accuracy		101	104	104	102	95	99	96

METHODS: EPA SW 846-6010, 3015, 7470.
CHEMIST: As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, B, Mo, U: RR Hg: CB
TOTAL METALS SPIKE: 8.0 mg/L As, Se, Ba, Al; 0.2 mg/L Cd, Ag; 0.8 mg/L Cr; 2.0 mg/L Pb, Co, Mn, Ni, Zn, B, Mo; 0.0005 mg/L Hg; 4.0 mg/L U.
TOTAL METALS QC: 5.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba, Al, Co, Cu, Fe, Mn, Ni, Zn, B, Mo; 0.005 mg/L Hg; 4.0 mg/L U.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-6-96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

October 23, 1996
Receiving Date: 10/16/96
Sample Type: Water
Project No: 116-032
Project Location: Odessa, TX

Extraction Date: 10/18/96
Analysis Date: 10/19/96
Sampling Date: 10/15/96
Sample Condition: I & C
Sample Received by: ML
Project Name: Baker - Hillmont

TA#	FIELD CODE	TOTAL As (mg/L)	TOTAL Cr (mg/L)	TOTAL Pb (mg/L)
T60502	MW-1	0.007	<0.05	<0.05
T60503	MW-2	0.219	<0.05	<0.05
T60504	MW-3A	0.009	<0.05	<0.05
T60505	MW-4	0.012	<0.05	<0.05
T60506	MW-5	<0.005	<0.05	<0.05
T60507	MW-6	0.043	<0.05	<0.05
QC	Quality Control	0.093	0.51	1.24
Reporting Limit		0.005	0.05	0.10
RPD		1	0	1
% Extraction Accuracy		98	95	92
% Instrument Accuracy		93	102	99

METHODS: EPA SW 846-3015, 6010, 7060.
CHEMIST: RR
TOTAL Pb SPIKE: 2.0 mg/L TOTAL Pb.
TOTAL Pb QC: 1.25 mg/L TOTAL Pb.
TOTAL Cr SPIKE: 0.8 mg/L TOTAL Cr.
TOTAL Cr QC: 0.5 mg/L TOTAL Cr.
TOTAL As SPIKE: 0.0975 mg/L TOTAL As.
TOTAL As QC: 0.100 mg/L TOTAL As.

10-23-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

Controls for Environmental
Pollution, Inc.
P.O. Box 5351
Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

TraceAnalysis, Inc
6701 Aberdeen Avenue
Lubbock, TX 79424

Attn: Melissa Lopez
Invoice Number:

Order #: 96-10-207
Date: 11/05/96 10:44
Work ID: Water (NR)
Date Received: 10/29/96
Date Completed: 11/05/96
Client Code: TRACE_ANAL

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	61002 MW-1
02	61003 MW-2
03	61004 MW-3
04	61005 MW-4
05	61006 MW-5
06	61007 MW-6

Remainder of sample(s) for routine analysis will be disposed of three weeks from final report date. Sample(s) for bacteria analysis only, will be disposed of immediately after analysis. This is not applicable if other arrangements have been made.

Certified By

Controls for Environmental
Pollution, Inc.
P.O. Box 5351
Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

TraceAnalysis, Inc.
6701 Aberdeen Avenue
Lubbock, TX 79424

Attn. Melissa Lopez
Invoice Number:

Order #: 96-10-207
Date: 11/05/96 10:44
Work ID: Water (NR)
Date Received: 10/29/96
Date Completed: 11/05/96
Client Code: TRACE_ANAL

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	61002 MW-1
02	61003 MW-2
03	61004 MW-3
04	61005 MW-4
05	61006 MW-5
06	61007 MW-6

Remainder of sample(s) for routine analysis will be disposed of three weeks from final report date. Sample(s) for bacteria analysis only, will be disposed of immediately after analysis. This is not applicable if other arrangements have been made.

Certified By

Controls for Environmental
TEST RESULTS BY SAMPLE

Sample: 01A 61002 MW-1 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	16+/-2	1	pCi/liter	10/31/96	MM

Sample: 02A 61003 MW-2 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	3+/-1	1	pCi/liter	10/31/96	MM

Sample: 03A 61004 MW-3 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	6+/-2	1	pCi/liter	10/31/96	MM

Sample: 04A 61005 MW-4 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	2+/-1	1	pCi/liter	10/31/96	MM

Sample: 05A 61006 MW-5 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	9+/-2	1	pCi/liter	10/31/96	MM

Sample: 06A 61007 MW-6 Collected: 10/23/96

Test Description	Result	D.L.	Units	Analyzed	By
Total Radium	6+/-2	1	pCi/liter	10/31/96	MM

6701 Aberdeen Avenue
Lubbock, Texas 79424
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FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

November 04, 1996
Receiving Date: 10/25/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 10/28/96
Analysis Date: 10/30/96
Sampling Date: 10/23/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TOTAL PCB's (mg/L)
T61002	MW-1	<0.0002
T61003	MW-2	<0.0002
T61004	MW-3	<0.0002
T61005	MW-4	<0.0002
T61006	MW-5	<0.0002
T61007	MW-6	<0.0002
QC	Quality Control	0.505
REPORTING LIMIT		0.0002
RPD		8
% Extraction Accuracy		76
% Instrument Accuracy		101

METHODS: EPA SW 846-3510, 8080.
CHEMIST: MB
TOTAL PCB's SPIKE: 0.005 mg/kg TOTAL PCB's.
TOTAL PCB's QC: 0.5 mg/L TOTAL PCB's.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

11-4-96
DATE

61002-8

TraceAnalysis, Inc.

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

371

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK	**Phone #:** 915/520-7535 **FAX #:** 915/520-7737
Company Name & Address: ECO-LOGICAL	2200 MARKET ST MIDLAND, TX 79703
Project #: 279-S12	**Project Name:** Hobbs Gas Plant
Project Location: HOBBS, NM	**Sampler Signature:** Carrie E. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NaOH	H2SO4	SAMPLING: DATE	TIME
61002	MW-1	2	1½L	X						X			10/23/96	415
	MW-1	2	2L	X					X	X				
	MW-1	1	L	X						X		X		
	MW-1	2	2L	X						X				
	MW-1	1	½L	X				X		X				
	MW-1	1	L	X							X			
	MW-1	1	L	X						X				
	MW-1	2	VOA	X				X						
61008	TRIP BLANK	2	VOA	X										

ANALYSIS REQUEST

BTEX, MTBE	TPH	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 WATER QUALITY	8240 / 8260	8270 - Semi Volatiles	Total Metals	RADIOACTIVITY	Phenol	CN
									X	X		
	X							X			X	
						X	X	X				X

SPECIAL HANDLING

Turn around # of days	Fax ASAP	Hold
	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eick	10/24/96	11:25	Shawnne James	10/24/96	11:25
Shawnne James	10/24/96	4:45	Helen Shelton	10/24/96	4:45PM
Helen Shelton	10/24/96	8:30PM			

Received at Laboratory by:	Date:	Time:
M Lopez	10-25-96	10:30

REMARKS
* MW-1 please filter remaining sample in Liter container

Complete test list Attached

14 Samples - HS

299AL

B1/6

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICH
Phone #:
FAX #:
Company Name & Address: ECO-LOGICAL
Project #: 279-512
Project Name :
Project Location:
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/NaOH	H_2SO_4	SAMPLING: DATE	TIME
61003	MW-2	1	1/2L	X					X	X			10/23/96	2:30
	MW-2	2	2L						X					
	MW-2	1	L									X		
	MW-2	2	2L											
	MW-2	1	1/2L					X						
	MW-2	1	L								X			
	MW-2	1	L											
	MW-2	2	VOA					X						

BTEX, MTBE	TPH	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 WATER QUALITY	8240/~~8260~~	8270 PAH	TOTAL METALS	RADIOACTIVITY	Phenol	CN
									X			
										X		
											X	
	X							X				
												X
						X						
							X					

SPECIAL HANDLING: Turn around # of days; Fax ASAP: X; Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eich	10/24/96	11:25	Shawnna James	10/24/96	11:25
Shawnna James	10/24/96	4:45	Helen Shelton	10/24/96	4:45PM
Helen Shelton	10/24/96	8:30PM			

Received at Laboratory by: M Rios Date: 10-25-96 Time: 10:30

REMARKS

SEE ATTACHED
test list

CT 11 samples - HS PS 2/6

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK

Phone #:

FAX #:

Company Name & Address: ECO-LOGICAL

Project #: 279-512

Project Name :

Project Location:

Sampler Signature: Carrie C. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	H2SO4	SAMPLING: DATE	TIME
61004	MW-3	1	½L	X					X	X			10/23/96	2:00
	MW-3	2	2L						X					
	MW-3	1	L									X		
	MW-3	2	2L											
	MW-3	1	½L					X						
	MW-3	1	L								X			
	MW-3	1	L											
	MW-3	2	VOA					X						

ANALYSIS REQUEST

BTEX, MTBE	TPH	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 WATER QUALITY	8240 ~~8260~~	8270 PAH	TOTAL METALS	RADIOACTIVITY	Phenol	CN
	X							X	X	X	X	X
						X	X					

SPECIAL HANDLING

Turn around # of days	Fax ASAP	Hold
	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie C. Eick	10/24/96	11:25	Shawnne James	10/24/96	11:25
Shawnne James	10/24/96	4:45	Helen Shelton	10/24/96	4:45 PM
Helen Shelton	10/24/96	8:30 PM	M Lopez	10-25-96	10:30

REMARKS

SEE ATTACHED TEST LIST

CT 11 samples - H.S

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Phone #:

FAX #:

Company Name & Address: ECO

Project #: 279- ~~580~~ 512

Project Name :

Project Location:

Sampler Signature: Carri E. Eck

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE ~~NaOH~~	H_2SO_4	SAMPLING: DATE	TIME
61005	MW-4	1	½L	X					X	X			10/23/96	3:15
	MW-4	2	2L						X					
	MW-4	1	L									X		
	MW-4	2	2L											
	MW-4	1	½L					X						
	MW-4	1	L								X			
	MW-4	1	L											
	MW-4	2	VOA					X						

ANALYSIS REQUEST

BTEX, MTBE	TPH	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~~ WATER QUALITY	8240 ~~/8260~~	8270 PAH	TOTAL METALS	RADIOACTIVITY	Phenol	CN
									X	X	X	X
	X							X				
						✓						
							X					

SPECIAL HANDLING

Turn around # of days	Fax ASAP	Hold
	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carri E. Eck	10/24/96	11:25	Shawnne James	10/24/96	11:25
Shawnne James	10/24/96	4:45	Helen Shelton	10/24/96	4:45PM
Helen Shelton	10/24/96	8:30PM	M Rey	10-25-96	10:30

REMARKS

SEE ATTACHED TEST LIST

CT 11 samples - HS PJ 4/6

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Phone #:

FAX #:

Company Name & Address: ECO

Project #: 279-512

Project Name :

Project Location: HOBBS, NM

Sampler Signature: Carrie E. Erick

ANALYSIS REQUEST

SPECIAL HANDLING

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	H2SO4	SAMPLING: DATE	TIME
61006	MW-5	1	L	X						X			10/23/96	4:50
	MW-5	2	2L						X					
	MW-5	1	L									X		
	MW-5	2	2L											
	MW-5	1	½L					X						
	MW-5	1	L								X			
	MW-5	1	L											
	MW-5	2	VOA					X						

BTEX, MTBE	TPH	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	RCRA WATER QUALITY	8240 ~~8260~~	8270 PAH	TOTAL METALS	RADIO ACTIVITY	PHENOL	CN
									X	X		
											X	
	X											X
						X	1					
							X					

SPECIAL HANDLING	
Turn around # of days	
Fax ASAP	X
Hold	

Relinquished by: Carrie E. Erick **Date:** 10/24/96 **Time:** 11:25

Received by: Shawnna James **Date:** 10/24/96 **Time:** 11:25

Relinquished by: Shawnna James **Date:** 10/24/96 **Time:** 4:45

Received by: Helen Shelton **Date:** 10/24/96 **Time:** 4:45PM

Relinquished by: Helen Shelton **Date:** 10/24/96 **Time:** 8:30PM

Received at Laboratory by: M Lopez **Date:** 10-25-96 **Time:** 10:30

REMARKS

Please Filter Metals Sample

See Attached Test LIST

11 samples - HS PS 5/6

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Phone #:

FAX #:

Company Name & Address:
ECO

Project #:
279-512

Project Name :

Project Location:

Sampler Signature:
Cami E. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	H2SO4	SAMPLING: DATE	TIME
61007	MW-6	1	1/2L	X					X				10/23/96	3:45
	MW-6	2	2L						X					
	MW-6	1	L									X		
	MW-6	2	2L											
	MW-6	1	1/2L					X						
	MW-6	1	L								X			
	MW-6	1	L											
	MW-6	2	VOA					X						

ANALYSIS REQUEST

BTEX, MTBE	TPH	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 WATER QUALITY	8240/8260	8270 PAHs	TOTAL METALS	RADIO ACTIVITY	PHENOL	CN
	X							X				
						X						
							X					

SPECIAL HANDLING

Turn around # of days	Fax ASAP	Hold
	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Cami E. Eick	10/24/96	11:25	Shawnee James	10/24/96	11:25
Shawnee James	10/24/96	4145	Helen Shelton	10/24/96	4:45 PM
Helen Shelton	10/24/96	8:30 PM	M Day	10-25-96	10:30

REMARKS

See Attached Test LIST

CF 11 samples - HS

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 13, 1997
Receiving Date: 01/10/97
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Extraction Date: 01/10/97
Analysis Date: 01/10/97
Sampling Date: 01/09/97
Sample Condition: I & C
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	SULFATE (mg/L)	CHLORIDE (mg/L)	NITRATE-N (mg/L)
T65605	MW-7	97	44	1.7
QC	Quality Control	25	25	10
Reporting Limit		1.0	1.0	0.10
RPD		0	2	0
% Extraction Accuracy		105	102	104
% Instrument Accuracy		98	100	100

METHODS: EPA 300.0.
CHEMIST: MS
CHLORIDE SPIKE: 500 mg/L CHLORIDE.
CHLORIDE QC: 25 mg/L CHLORIDE.
NITRATE-N SPIKE: 200 mg/L NITRATE-N.
NITRATE-N QC: 5.0 mg/L NITRATE-N.
SULFATE SPIKE: 500 mg/L SULFATE.
SULFATE QC: 25 mg/L SULFATE.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1-13-97
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 13, 1997
Receiving Date: 01/10/97
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/10/97
Analysis Date: 01/10/97
Sampling Date: 01/09/97
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

FIELD CODE: MW-7
TA #: T65605

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

FIELD CODE: MW-7
TA #: T65605

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2
1,2-Dibromoethane (EDB)	ND	5

SURROGATES	% RECOVERY
Dibromofluoromethane	99
Toluene-d8	95
4-Bromofluorobenzene	91

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1-13-97
Date

5701 Aberdeen Avenue
Lubbock, Texas 79424
806 • 794 • 1296
FAX 806 • 794 • 1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

January 13, 1997
Receiving Date: 01/10/97
Sample Type: Water
Sampling Date: 01/09/97
Sample Condition: I & C
Sample Received by: ML
Project Name: Hobbs Gas Plant
Project No: 279-512
Project Location: Hobbs, NM
Extraction Date: 01/10/97
Analysis Date: 01/11/97

TA #T65605
Field Code: MW-7

EPA 8270	Reporting Limit	Concentration (mg/L)	QC	RPD	%EA	%IA
Phenol	0.001	ND	83	4	21	104
2-Chlorophenol	0.005	ND		4	38	
2-Methylphenol	0.001	ND				
4-Methylphenol/3-Methylphenol	0.001	ND				
2-Nitrophenol	0.005	ND	82			103
2,4-Dimethylphenol	0.005	ND				
2,4-Dichlorophenol	0.005	ND	76			95
Naphthalene	0.001	ND				
2,6-Dichlorophenol	0.005	ND				
4-Chloro-3-methylphenol	0.005	ND	76	7	49	95
2-Methylnaphthalene	0.001	ND				
2,4,6-Trichlorophenol	0.005	ND	81			101
2,4,5-Trichlorophenol	0.005	ND				
2,4-Dinitrophenol	0.005	ND				
4-Nitrophenol	0.005	ND		10	29	
2,3,4,6-Tetrachlorophenol	0.005	ND				
1-Methylnaphthalene	0.001	ND				
4,6-Dinitro-2-methylphenol	0.001	ND				
Pentachlorophenol	0.005	ND	76	0	54	95
Benzo[a]pyrene	0.001	ND	82			103

SURROGATES	% RECOVERY
2-Fluorophenol SURR	28
Phenol-d6 SURR	30
Nitrobenzene-d5 SURR	50
2-Fluorobiphenyl SURR	63
2,4,6-Tribromophenol SURR	76
Terphenyl-d14 SURR	78

METHODS: EPA SW 846-8270, 3510.
CHEMIST: RD/CC

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1-13-97
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market St.
Midland, TX 79703

January 13, 1997
Receiving Date: 01/10/97
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 01/10/97
Analysis Date: 01/13/97
Sampling Date: 01/09/97
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TOTAL PCB's (mg/L)
T65605	MW - 7	<0.0001
QC	Quality Control	0.44
REPORTING LIMIT		0.0001
RPD		0
% Extraction Accuracy		80
% Instrument Accuracy		88

METHODS: EPA SW 846-3510, 8080.
CHEMIST: MB
TOTAL PCB's SPIKE: 0.5 mg/L TOTAL PCB's.
TOTAL PCB's QC: 0.005 mg/L TOTAL PCB's.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

1-13-97
DATE

TRACE ANALYSIS, INC.
A Laboratory for Advanced Environmental Research and Analysis

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE E[illegible]
Phone #: 915/520-75[illegible]5
FAX #: 915/520-[illegible]37

Company Name & Address: ECO L[illegible]

Project #: 279-512
Project Name : Hobbs G[illegible] Plant

Project Location: HOBBS NM
Sampler Signature: Carrie E. E[illegible]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	H_2SO_4	SAMPLING: DATE	TIME	BTEX, MTBE	TPH	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	8240/8260 Volatiles	8270 PAH	Total Metals As Listed	Phenol	Cyanide	Water Quality	Turn around # of days	Fax ASAP	Hold
	MW-7	1	1/2G	X					X	X			1/9/97	1:30										X					Y	
	↓	1	L	X						X		X	|	|											X					
	↓	2	L	X						Y			|	|									X							
	↓	1/4	1/2L	X				X		X			|	|		X														
	↓	1	L	X						X	X		|	|												X				
	↓	2	VOA	X				X		Y			|	|								X								
	↓	2	L	X						X																	X			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eak	1/9/97	4:55 PM	Helen Shelton	1/9/97	4:53PM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

REMARKS

Please Rush - See Attached List for testing.
Need TPH & Volatiles by 1/13/97
A[illegible] noon. If [illegible] T[illegible]
by then, [illegible] also [illegible] BT[illegible] & Fax
to ECO See Att[illegible]

Eco-logical
Environmental Services Inc.

(File Copy
Eco-191)

REPORT
DELINEATION INVESTIGATION
HOBBS NATURAL GAS PLANT
K N ENERGY, INC.
HOBBS, LEA COUNTY, NEW MEXICO

Date Prepared:
June 6, 1996

RECEIVED
JUL 0 9 1996
Environmental Bureau
Oil Conservation Division

ECO Project No.:
279-512

Prepared For:
New Mexico Oil Conservation Division
Mr. Chris Eustice

On Behalf of:
K N Energy, Inc.

Prepared By:
Eco-logical Environmental Services, Inc.
2200 Market St.
Midland, New Mexico 79703
915/520-7535

Eco-logical
Environmental Services Inc.

REPORT
DELINEATION INVESTIGATION
HOBBS NATURAL GAS PLANT
K N ENERGY, INC.
HOBBS, LEA COUNTY, NEW MEXICO

Date Prepared:
June 6, 1996

ECO Project No.:
279-512

Prepared By:

Carrie E. Eick

Carrie E. Eick, P.E.
Project Manager

Reviewed By:

Shane Estep

Shane Estep, R.E.M.
President

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

TABLE OF CONTENTS

K N Energy, Inc.
Hobbs Natural Gas Plant
Hobbs, Lea County, New Mexico

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(continued)

1.0 EXECUTIVE SUMMARY

Eco-logical Environmental Services, Inc. (ECO) was contracted by K N Energy, Inc. (K N) to conduct an environmental assessment of shallow soils and groundwater at their facility identified as Hobbs Natural Gas Plant located ten miles west of Hobbs, New Mexico. This project was requested by the New Mexico Oil Conservation Division (OCD) after their inspection in 1995. The OCD inspection of the facility was to determine compliance with the state discharge permitting requirements. Since the OCD inspection was conducted, K N has decided to close the processing portion of the plant and operate the facility only as a compressor station. As a result, the plant equipment would be removed from the site.

The scope of work involved sampling and delineating the impacted soils and rock at the facility to address the environmental issues raised during the OCD approval process of the discharge plan. Specific concerns addressed in this inspection related to the Cryogenic Skid, the Flare Pit, the Compressor Units, and groundwater.

In mid February, 1996, soil borings were advanced at the site to observe impacts to the soils and one monitor well was installed at the site to evaluate the water depth and quality. Soil conditions at the site consist of 2 to 6 feet of hard limestone, underlain by 1 to 8 feet of caliche. This in turn is underlain by 11 to 13 feet of dry sand and 5 feet of sandstone. Layers of sand and sandstone exist to a depth of 33 feet where a 14 foot layer of limestone is present to a depth of 47 feet. At this depth a sand is encountered which becomes moist at 52 feet. Groundwater is present at a depth of 53 feet.

Selected soil and water samples were analyzed for the suspected contaminants and compared to the OCD action level guidelines. It was determined that groundwater was encountered at a depth of 53 feet below grade and may be impacted. In addition, the site is greater than 1,000 feet from a surface water body or source and greater than 200 feet from a domestic water source. As a result, the soil clean up levels that could be considered are 1,000 ppm Total Petroleum Hydrocarbons (TRPH), 50 ppm total BTEX, and 10 ppm of Benzene.

Following these guidelines, it appears that the top two to four feet to the north and northeast of the cryogenic skid must be remediated. These areas contained stained

surface gravel and rock with TRPH values of 2,520 to 32,800 ppm. The top two feet of soil/rock in the flare pit as wells as the existing soil (gravel) piles must also be remediated to a depth of two feet. The TRPH values are 5,590 and 386,000, respectively. The gravel piles are from historic cleanup of small stained areas from the plant. The final area of investigation is the area of the compressor units. This area also contains stained surface gravels and impacted adjacent rock two to four feet deep. The impacted areas are concentrated in the stained gravels directly adjacent to the units and to the east of the middle and south unit as well as to the south of the south unit. TRPH values above the 1,000 ppm limit ranged from 4,770 to 6,390 ppm.

The amount of the affected rock and surface gravel is estimated to be 412 cubic yards. Removal of the surface gravels is possible, however, removal of the rock layer appears inappropriate due to its close proximity to working equipment and pipelines. This area is recommended to be treated biologically or left in place and monitored until such time as plant closure.

Test results from three separate episodes of groundwater samples indicate that benzene is present above the health standards for groundwater (State of New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2). Sample results also indicate that the amount of benzene varied. It is suggested that three additional monitor wells be installed to evaluate the amount of benzene as well as PAH, chlorinated hydrocarbons, TRPH, metals, and anion/cations in the groundwater before any conclusions are made as to the possible impacts to groundwater.

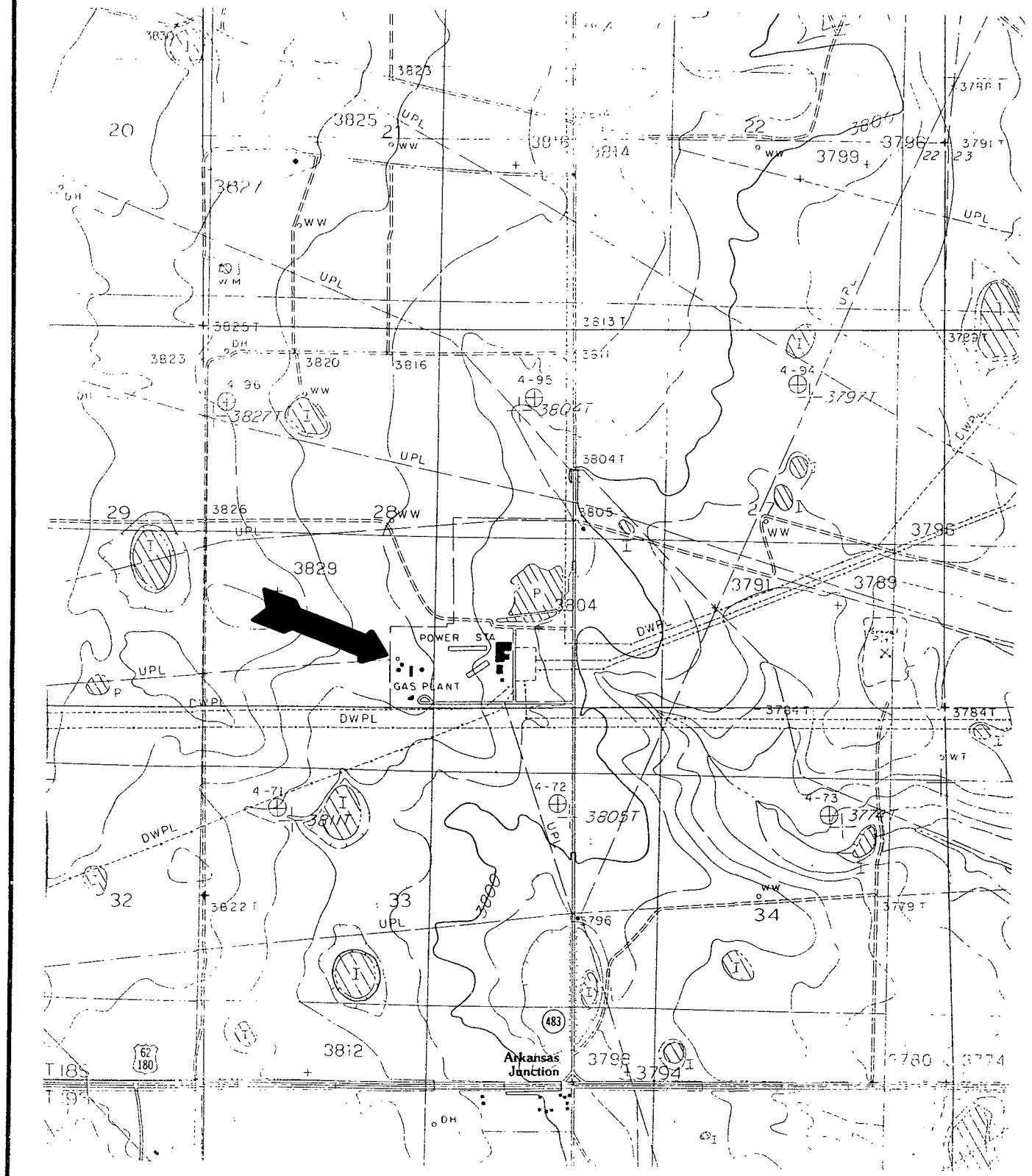
2.0 INTRODUCTION

2.1 Background

The plant, American Processing, L.P. Hobbs Natural Gas Plant, was constructed in 1976. In 1994 K N Energy, Inc. became the operator and owner of the facility. The Oil Conservation Division (OCD) of New Mexico inspected the plant on October 16, 1995. During this inspection they noted several deficiencies at the site relative to discharge plan compliance. The noted items referred to the need for new/additional containment structures at five locations, methods to insure tank integrity, and the delineation of impacted soils/rock at three locations. In a letter issued by the OCD on December 6, 1995, the above deficiencies were detailed in a seven point letter. The letter addressed that methods must be proposed that would address and implement processes that would correct the noted deficiencies.

2.2 Site Description

K N Energy, Inc. Natural Gas Processing Plant is located approximately ten miles west of Hobbs on U.S. Highway 180 to the west of Highway 483. The approximate geographic coordinates for the center of the site obtained with a Global Positioning Satellite (GPS) receiver and were 32^0 42' 57" N latitude and 103^0 21' 13" W longitude. The site is located in a rural environment. Adjacent properties are used for cattle grazing and an electric plant. The U.S.G.S. Monument North Quadrangle Map indicated the approximate site elevation at 3,815 feet above mean sea level (AMSL). The general surface topography of the site is sloping down to the east from the west. A Site Location Map is included as Map 1. A site layout diagram is presented on Map 2.



APPROX. SCALE
1" = 2,000'
0' 1,000' 2,000'

MAP-1 SITE LOCATION
HOBBS GAS PLANT
KN ENERGY
HOBBS, LEA COUNTY, NEW MEXICO

ADAPTED FROM USGS QUADRANGLE MAP MONUMENT NORTH

Prepared by
ECO-LOGICAL
ENVIRONMENTAL SERVICES, INC.
Midland, Texas

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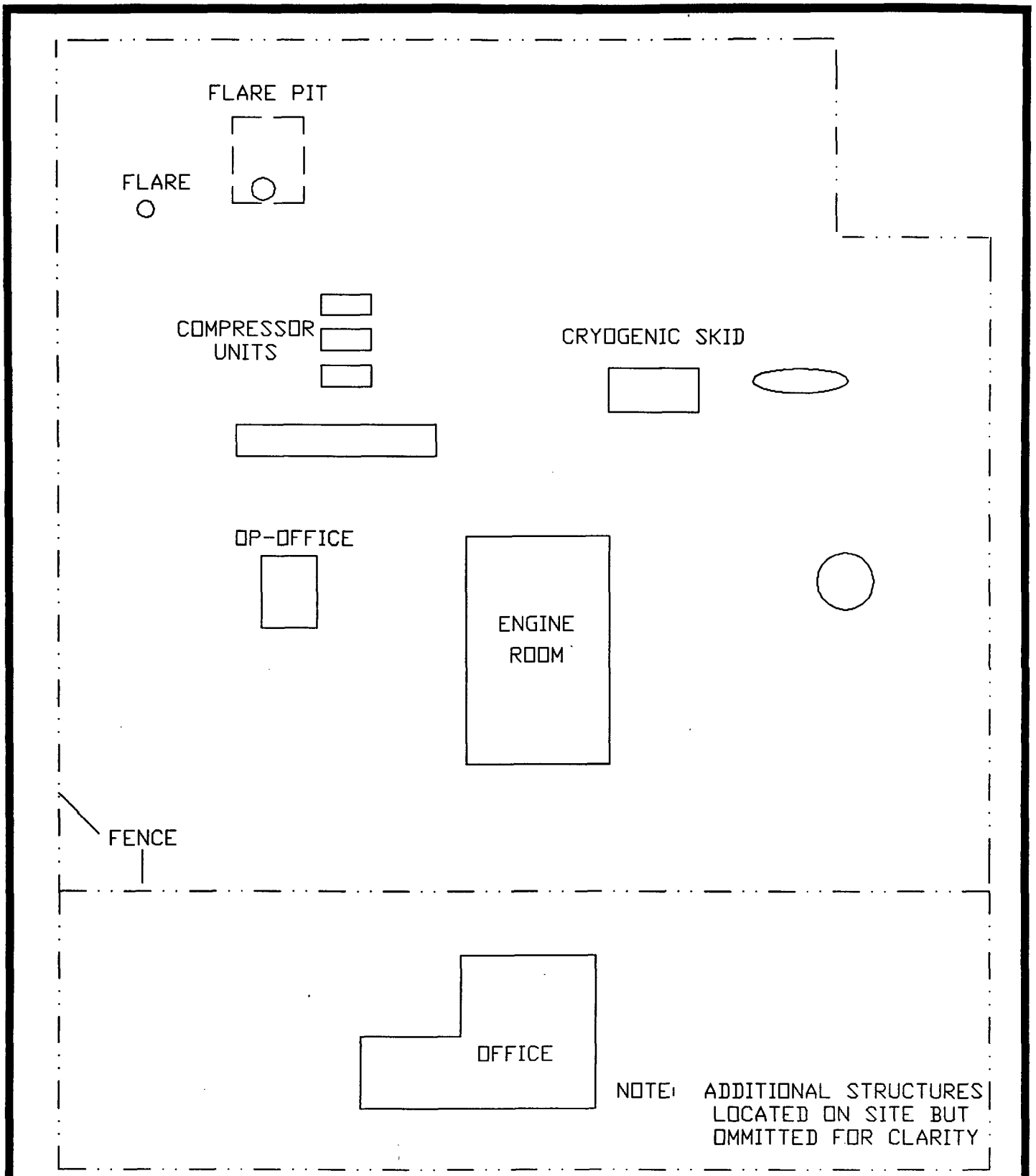


N

Drawing not to scale

MAP-2 FACILITY LAYOUT MAP
HOBBS GAS PLANT
KN ENERGY
HOBBS, LEA COUNTY, NEW MEXICO

Drafted By: C. Eick
Reviewed By: S. Estep

Date Drafted: 02/21/96
Date Revised:

Prepared by
Eco-logical
ENVIRONMENTAL SERVICES, INC.
Midland, Texas

Storage: F:\master\279512\facilmap.skd

3.0 SCOPE OF SERVICES

3.1 Scope of Work

It is the intention of this investigation to delineation the impacted soils/rock associated with the Cryogenic Skid, the Flare Pit, and the Compressor Units. The objective of the environmental assessment was to gather data and render an opinion on the environmental conditions present at the property relative to the amount of impacted soils/rock in both a vertical and horizontal extent adjacent to each of the three areas, and potential impacts to shallow groundwater.

Each area is located on separate locations at the site. As a result, each location was investigated separately. The general method of investigation was similar at each site. The soils around each site were investigated by the advancement of several soil borings. Samples were collected from the borings and selected samples submitted for analysis. Boring locations were chosen based on visual observations of surface impacted soils. Step out borings were located based on accessability and attempts were made to locate the borings between two previous boring locations which were observed to be impacted during the field investigation (based on odor, PID readings, and visible indications of impacted soils). Samples to be analyzed were selected based on highest PID readings, strongest odors, largest amount of observed impacted soils, and anticipated depth of impacted soils/rock. Samples from each individual step out boring were composite samples of the suspected impacted depth zones in the initial borings advanced in surface stained soil areas.

Depth to groundwater was evaluated from a review of a water well inventory based on registered wells located within a one mile radius of the center of the site and the installation of one monitor well. The well was developed and sampled for constituents thought to possibly cause impact to the groundwater from plant operations including TRPH, BTEX, and RCRA 8 total metals.

This report presents the findings of the field and analytical investigation and any conclusions derived from this investigation. Also included are recommendations for remediation.

3.2 Involved Parties

Eco-logical Environmental Services, Inc. has completed the preliminary investigation of the hydrocarbon impacted soils/rock at the Hobbs Natural Gas Plant. This investigation was under the request of K N Energy, Inc.. Additional contractors used during the investigation included McDonald Drilling to advance the borings and TraceAnalysis to conduct the laboratory testing. Both subcontractors were under the direction of Eco-logical personnel.

3.3 Limitations

The professional opinions expressed herein do not necessarily represent scientific certainties. Findings, conclusions, and recommendations were based solely on the observations made during the site inspection, analytical data, and other data available to ECO. ECO makes no representation concerning hazardous or toxic substances or other latent conditions which may be discovered by means of investigation or techniques that were beyond the scope of work undertaken by ECO during this investigation.

4.0 SITE GEOLOGY/HYDROLOGY

Soil conditions at the site were investigated by drilling 15 soil borings and one monitor well. The surface soils at the plant consist of two to four inches of sub-rounded gravel fill over 2 to 6 feet of very hard limestone, underlain by 1 to 8 feet of caliche. This in turn is underlain by 11 to 13 feet of dry sand and 5 feet of sandstone. A five foot layer of dry sand is again encountered at a depth of 31 feet and underlain by 2 feet of sandstone and 5 feet of interbedded limestone and sandstone. A hard layer of limestone is again encountered at a depth of 38 feet. Sand is encountered at a depth of 47 feet and is present to the bottom of the deepest boring at 60 feet.

No moist soils or rocks were encountered until a depth of 52 feet. This depth corresponds to the last sand horizon encountered at a depth of 47 feet. The sands become saturated at a depth of 53 feet where the static water level was measured.

A water well search of one mile radius around the center of the site revealed four water wells. The wells were constructed between 1957 and 1965. Based on water depths obtained at the time of installation, the regional groundwater flow is to the southeast at approximately a drop of 10 feet per 1,750 feet. These water levels, as compared to the water depth from MW-1, indicate that the depth to groundwater has remained fairly constant. The closest well is approximately 2,000 feet to the north and assumed up-gradient. The remaining wells are located approximately 1 mile to the north-northwest, northeast, and south-southeast. Well logs and a location map are present in Section 11.

5.0 SITE INVESTIGATIONS

5.1 Field Investigation and Sampling Techniques

Sampling at the sites was conducted by advancing soil borings in selected locations. All borings were advanced with a Badger Drilling Rig using air rotary techniques. Boring locations were selected based on visually stained surface soils, accessibility, and safety. After boring completion, all borings were filled with a cement/bentonite grout to the surface. Graphical representations of the borings logs are presented in Section 12.

Samples were collected with a spilt spoon sampling device which was hydraulically pushed into non-lithified soils. The sampler was washed and rinsed between each use. Samples were also collected as grab samples. This method involved placement of a screen catcher by the surface of the hole and catching drill cuttings as they rose to the surface. Prior to each sampling zone, the bore hole was blown clean prior to the advancement of the drill bit.

All equipment used during the collection of samples and between each borehole were steam cleaned. Proper sampling protocol was utilized to collect, test, and store the samples including the use of clean surgical type gloves to handle each sample and were changed between samples. Samples were subjected to a headspace test with a PID and a soil description including observations of odor and visual signs of impaction of hydrocarbons were noted on a field boring log. After boring completion, samples were selected for analytical testing and placed into clean laboratory glass jars with a Teflon lid. All samples were labeled and placed on ice. Laboratory samples were recorded on a Chain-of-Custody form and signed by the site supervisor and the receiving laboratory. The following schedule details the tests that were performed on each sample per site.

Cryogenic Skid

- Total Petroleum Hydrocarbons (EPA Method 418.1)
- BTEX (EPA SW 846-8020)
- Total RCRA Metals (EPA Method SW 846-3051, 6010, 7471)

Flare Pit

- Total Petroleum Hydrocarbons (EPA Method 418.1)
- BTEX (EPA SW 846-8020)

Soil Piles

- Total Petroleum Hydrocarbons (EPA Method 418.1)
- Total RCRA Metals (EPA Method SW 846-3051, 6010, 7471)
- Semi-Volatiles (EPA Method 8270)
- Volatiles (EPA Method 8240)

Compressor Units

- Total Petroleum Hydrocarbons (EPA Method 418.1)
- BTEX (EPA SW 846-8020)
- Total RCRA Metals (EPA Method SW 846-3051, 6010, 7471)
- GC Scan for Glycol (EPA Method 8000)
- Volatiles (EPA Method 8240)

Groundwater

- Total Petroleum Hydrocarbons (EPA Method 418.1)
- BTEX (EPA SW 846-8020)
- Total Dissolved Solids (EPA 160.1)
- Volatiles (EPA Method 8240)
- Polycyclic Aromatic Hydrocarbons (EPA 8270)
- Major Anions and Cations
- Halogenated Hydrocarbons
- Total RCRA Metals (EPA Method SW 846-3015, 6010, 7470)

Boring locations were selected in the field based on areas of visibly impacted soils and possible ponding of contamination areas. The locations were also selected based on accessibility to a drill rig and aboveground and underground obstructions such as piping, electrical conduits, and foundations. All soil cuttings and generated water were removed and placed adjacent to the west side of the flare pit. The solid material was placed on plastic sheeting and covered with additional plastic and the water was placed into a poly drum. Final disposal will occur during remediation of the site. Boring logs are presented in Section 12.

5.2 Cryogenic Skid

The Cryogenic Skid is approximately 37 feet long and 22.5 feet wide. It is elevated above a concrete base on a metal skid (Photos 1 and 2, Section 10.0, arrows indicate boring

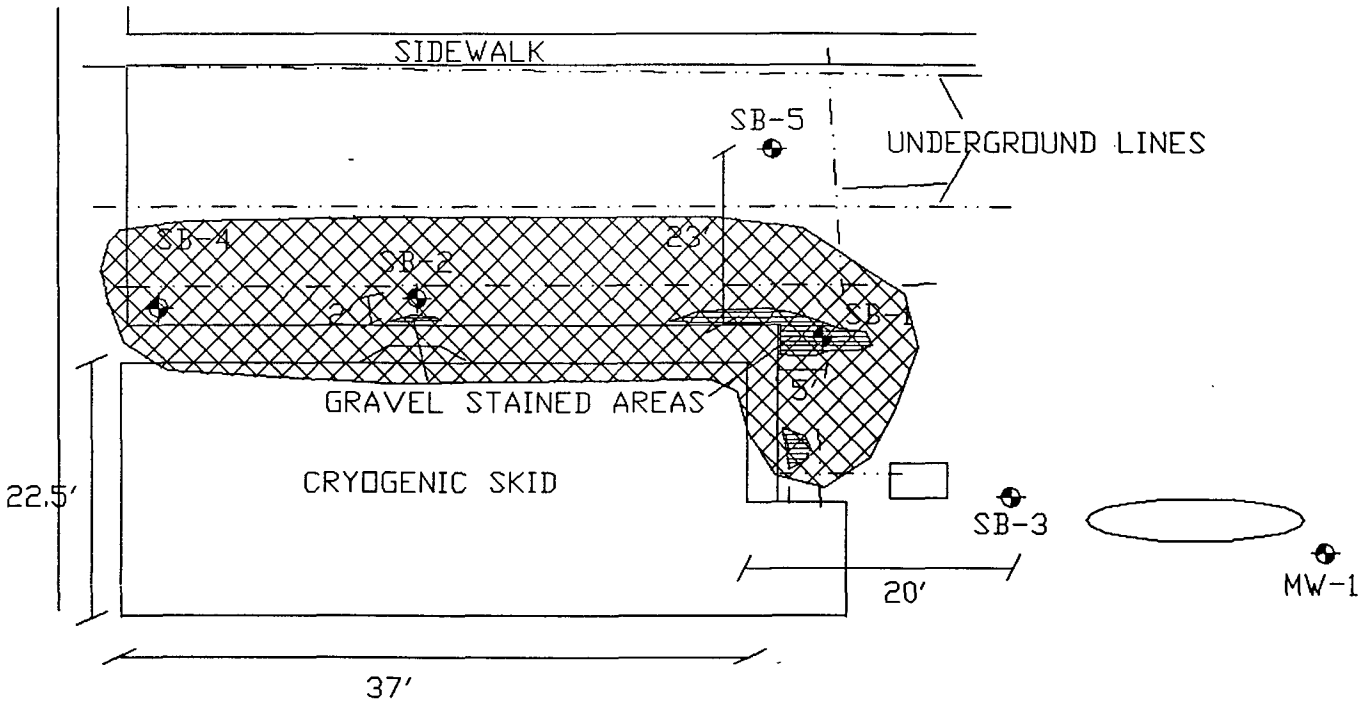
locations). The concrete is covered with oily liquid residues. Several pieces of equipment were observed to have historic staining from leaks including a small motor located on the north edge near the sidewalk. Impacted gravels and stained sidewalks were observed on the adjacent ground. This area, as well as the northeast corner, contained stained gravel. No free liquids were observed in these areas. One boring was advanced in each of these areas. Petroleum odors were detected in both borings from the surface to a depth of four to eight feet where no odors were detected. A chemical odor was then detected in both borings at a depth of 14 to 16 feet. Additional borings were advanced to attempt to determine the extent of the impacted soils/rock. However, impacted soils were still evident in two additional borings from the surface to six feet to the west and from the surface to the boring termination to the southeast. Contamination was not apparent to the north. Additional areas of investigation are limited to non-existent due to access limitations.

Soil conditions in this area are best described as two to four inches of gravel base underlain by one to six feet of very hard limestone. This is underlain by three to seven feet of caliche. The borings terminated at depths of 22 feet in a fine grained sand where a sandstone and or limestone layer is encountered. Map 3 depicts the boring locations as well as impacted soils extent.

5.3 Flare Pit and Soil Piles

The inside dimensions of the Flare Pit are approximately 32 feet long and 16 feet wide with the outside dimensions of 55 by 43 feet. The pit bottom is two to three feet below the surrounding grade and the berms rise four to five feet above the bottom. The bottom of the flare pit is stained black and contains one to two inches of free soils on top of limestone. Several piles of oil stained gravel are present on the inside of the pit berm (Photos 3 and 4, Section 10.0). No free liquids were observed in the area outside of a small fiberglass tank located at the south end of the pit. One boring was advanced in bottom of the pit. Petroleum odors were detected in first sample obtained from the surface to two foot depth. No additional odors were detected in this boring or the surrounding borings. The surrounding borings were advanced around the pit to attempt to determine the horizontal extent of any impacted soils/rock beyond the bermed area. No odors or visible evidence was detected during the field investigation.

Soil conditions in this area are best described as two to four inches of gravel base underlain by two to six feet of very hard limestone. This is underlain by zero to five feet



IMPACTED SOILS/ROCK
SURFACE STAINED SOILS
SOIL BORING LOCATION

N

Drawing not to scale

MAP-3 CRYOGENIC SKID
HOBBS GAS PLANT
KN ENERGY
HOBBS, LEA COUNTY, NEW MEXICO

Drafted By: C. Eick
Reviewed By: S. Estep
Date Drafted: 02/21/96
Date Revised:

Prepared by
Eco-logical
ENVIRONMENTAL SERVICES, INC.
Midland, Texas

Storage: F:\master\279512\cryo.skd

of caliche. The borings terminated at a depths of 10 feet in a fine grained sand. Map 4 depicts the boring locations as well as impacted soils/rock extent.

5.4 Compressor Unit

The Compressor Units occupy an area of 30 by 80 feet. Each unit is slightly different but all are located on individual concrete slabs approximately 20 to 23 feet long and 20 feet wide (Photo 5, Section 10.0). The concrete contains free oily liquids and antifreeze (Photo 6, Section 10.0). One boring was advanced in an area of heavily stained gravel adjacent to the concrete pad. Petroleum odors were detected in the boring from the surface to a depth of four feet. Additional borings were advanced to attempt to determine the extent of the impacted soils/rock. Where present, petroleum odors were detected at the surface but not below a depth of four feet. Additional areas of investigation are limited to non-existent due to access limitations, with the exception of the westerly direction. Map 5 depicts the boring locations as well as impacted soils/rock extent.

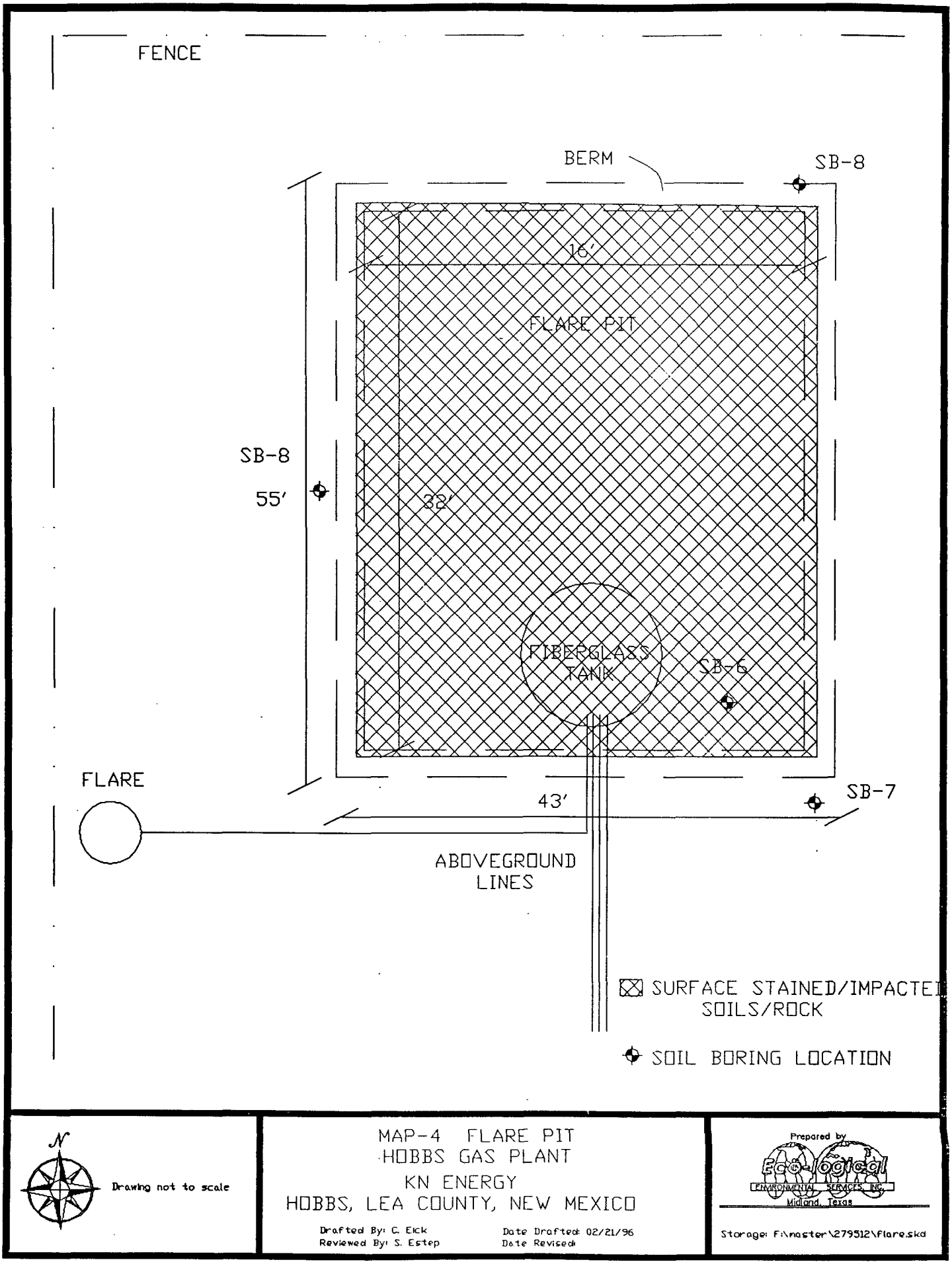
Soil conditions in this area are best described as two to four inches of gravel base underlain by one to four feet of very hard limestone. This is underlain by one to five feet of caliche. The borings terminated at a depths of eight to eleven feet in a fine grained sand.

East per Wayne Price.
Also, see map - previous page.
(MAP 3)

5.5 Groundwater

One Monitor Well (MW-1) was installed to the (west) of the Cryogenic Skid. Air rotary techniques were used to advance the hole and a two inch diameter PVC well was installed. Groundwater was encountered at an approximate depth of 53 feet below grade. The water bearing zone was a sand beneath a hard limestone. The sand layer begins at a depth of 47 feet. The well contains a 20 foot screened interval from 60 to 40 feet, with two (2) inch PVC casing extending to the surface. The well is sand-packed with 8/16" sand from 60 to 36 feet, with 4 feet of bentonite pellets above the sand, and cement slurry from the top of the bentonite to the surface. A well diagram is provided in Section 12.

Based on the rough date provided from the water well search the groundwater flow direction is to the southeast at approximately a drop of 10 feet per 1,750 feet. These water levels, as compared to the water depth from MW-1, indicate that the depth to groundwater has remained fairly constant.



N

Drawing not to scale

MAP-4 FLARE PIT
HOBBS GAS PLANT
KN ENERGY
HOBBS, LEA COUNTY, NEW MEXICO

Drafted By: C. Eick
Reviewed By: S. Estep

Date Drafted: 02/21/96
Date Revised:

Prepared by
Ecological
ENVIRONMENTAL SERVICES, INC.
Midland, Texas

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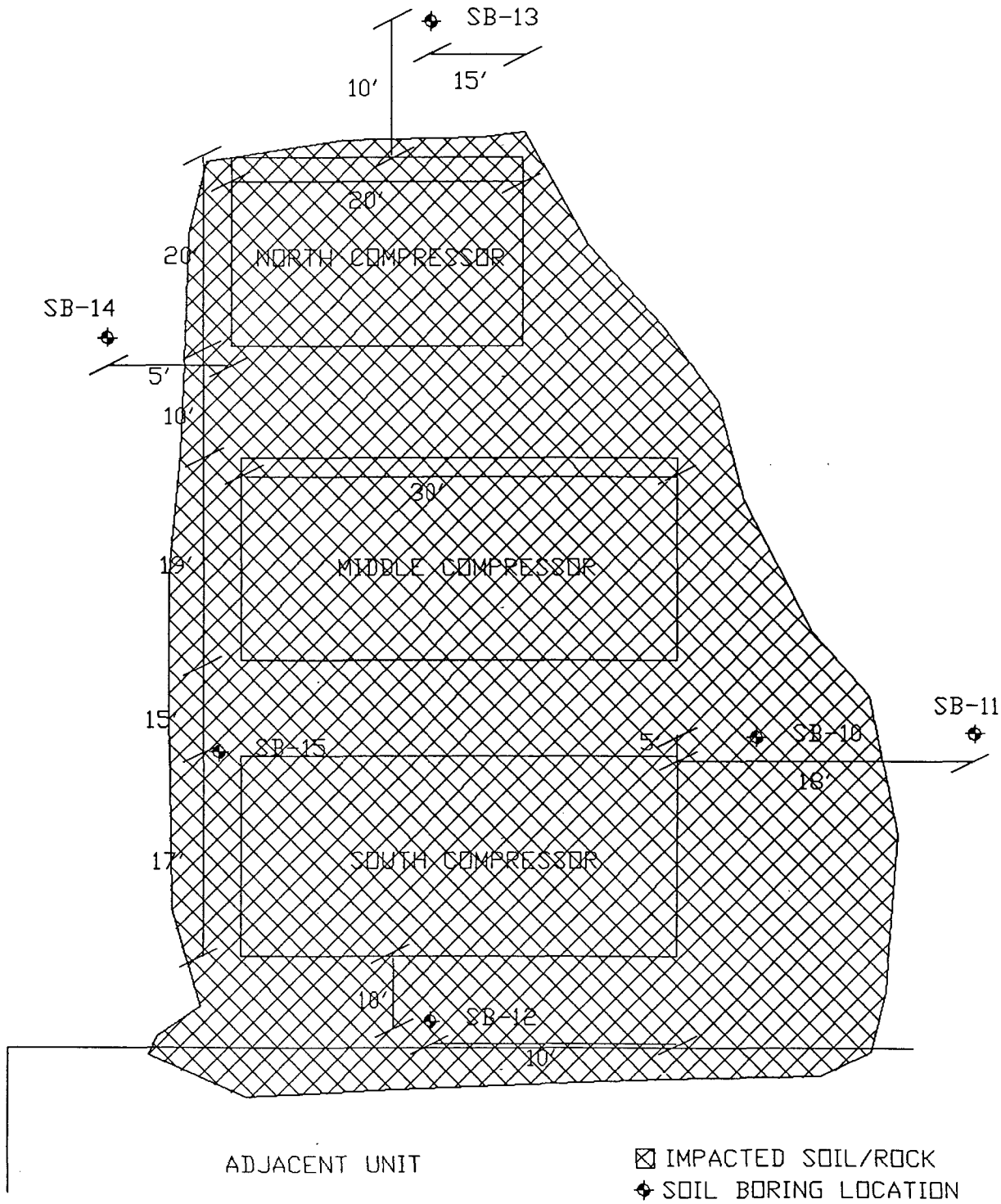

N

Drawing not to scale

MAP-5 COMPRESSOR UNITS
HOBBS GAS PLANT
KN ENERGY
HOBBS, LEA COUNTY, NEW MEXICO

Drafted By: C. Eick
Reviewed By: S. Estep

Date Drafted: 02/21/96
Date Revised:

Prepared by
Ecological
ENVIRONMENTAL SERVICES, INC.
Midland, Texas

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6.0 ANALYTICAL RESULTS

6.1 Cryogenic Skid

Thirteen samples were obtained to evaluate the amount of the impacted soils/rock in the area of the Cryogenic Skid. Of these samples, three contained results higher than the OCD action level. These areas were concentrated near the surface in the gravel, the top two to four feet of the limestone, and in the stained areas. Table 1 presents the results of the laboratory testing. Complete laboratory reports are included in Section 13.

TABLE 1
CRYOGENIC SKID AREA ANALYTICAL RESULTS

	As ppm	Se ppm	Cr ppm	Cd ppm	Pb ppm	Ba ppm	Ag ppm	Hg ppm	B ppm	T ppm	E ppm	X ppm	TPH ppm
SB-1 (0-2)	<10	<50	6.5	<2	<10	670	<1	<0.25	<0.05	<0.05	<0.05	0.077	32,800
SB-1 (2-4)	21.1		6.25			652			<0.05	<0.05	<0.05	0.055	3,220
SB-1 (8-10)	<10	<50	<5	<2	<10	266	<1	<0.25	<0.05	<0.05	<0.05	<0.05	31
SB-2 (0-4)	13	<50	<5	<2	<10	428	<1	<0.25	<0.05	<0.05	<0.05	0.539	9,360
SB-2 (14-16)	<10	<50	<5	<2	<10	70	<1	<0.25	<0.05	<0.05	<0.05	<0.05	<10
SB-2 (18-20)	<10	<50	<5	<2	<10	59	<1	<0.25	<0.05	<0.05	<0.05	<0.05	<10
SB-3 (0-4)	<10	<50	<5	<2	<10	457	<1	<0.25	<0.05	<0.05	<0.05	<0.05	40
SB-3 (8-10)	12	<50	<5	<2	<10	319	<1	<0.25	<0.05	<0.05	<0.05	<0.05	<10
SB-3 (18-20)	<10		<5			52.4			<0.05	<0.05	<0.05	<0.05	<10
SB-3 (22-24)	<10		5.2			180			<0.05	<0.05	<0.05	<0.05	<10
SB-4 (0-6)	<10	<50	<5	<2	<10	456	<1	<0.25	<0.05	<0.005	<0.05	0.109	2,520
SB-4 (10-20)									<0.05	<0.05	<0.05	<0.05	<10
SB-5 (0-12)	<10		<5			30.5			<0.05	<0.05	<0.05	<0.05	<10

6.3 Flare Pit and Soil Piles

Seven samples were obtained to evaluate the amount of the impacted soils/rock in the area of the Flare Pit and Soil Piles in the Flare Pit. Of these samples, only the Soil Piles (made of gravel from previous small historic cleanups from unknown areas around the site) and the top two feet of soil and limestone in the Pit contained results higher than the OCD action level. Table 2 presents the results of the laboratory testing. Complete laboratory reports are included in Section 13.

TABLE 2
FLARE PIT AND SOIL PILES ANALYTICAL RESULTS

	As ppm	Se ppm	Cr ppm	Cd ppm	Pb ppm	Ba ppm	Ag ppm	Hg ppm	B ppm	T ppm	E ppm	X ppm	TPH ppm
Soil Piles	<10	<50	16.4	3.8	34.6	93	<1	<0.25	<0.025	<0.025	<0.025	<0.025	386,000
SB-6 (0-2)	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	0.107	5,590
SB-6 (4-6)	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	<0.05	27
SB-6 12-13	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	<0.05	<10
SB-7 (0-8)	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	<0.05	<10
SB-8 (0-8)	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	<0.05	<10
SB-9 (0-10)	NR	NR	NR	NR	NR	NR	NR	NR	<0.05	<0.05	<0.05	<0.05	<10

Soil Piles Non-Detect for remaining 8240 Compounds, Non-Detect for 8270 except for Endosulfan-1 (0.0049), Endrin (0.0065), and a-Chlordane (0.0031), Also tentatively identified Hexacoasane, Docosane, 2-methylelcosane, Heneicosane, Octadecane, 4-methylnonadecane, 8-methylheptadecane, and 2,6,10,14-tetramethyl-hexadecane

6.4 Compressor Units

Ten samples were obtained to evaluate the amount of the impacted soils/rock in the area of the Compressor Units. Of these samples, three contained results higher than the OCD action level. These areas were concentrated in the surface gravels in the stained areas as well as the limestone to depths of two to four feet between the units and to the south of the south unit. Table 3 presents the results of the laboratory testing. Complete laboratory reports are included in Section 13.

TABLE 3
COMPRESSOR UNITS ANALYTICAL RESULTS

	As ppm	Se ppm	Cr ppm	Cd ppm	Pb ppm	Ba ppm	Ag ppm	Hg ppm	B ppm	T ppm	E ppm	X ppm	TPH ppm
Stain 0-0.25	NR	NR	NR	NR	NR	NR	NR	NR	<.05	<0.05	<0.05	<0.05	4,770
SB-10 (2-4)	<10	<50	<5	<2	<10	484	<1	<0.25	<.025	0.053	0.058	0.415	6,390
SB-10 (4-6)	<10	<50	6.5	<2	<10	670	<1	<0.25	<.025	<0.025	<0.025	<.025	523
SB-10 (9-11)	<10	<50	<5	<2	<10	356	<1	<0.25	<.025	<0.025	<0.025	<.025	11
SB-11 (0-4)	<10	<50	7.7	<2	<10	400	<1	<0.25	<.025	<0.025	<0.025	<.025	16
SB-12 (0-2)	<10	<50	<5	7.2	<10	497	<1	<0.25	<.025	<0.025	<0.025	<.025	5,990
SB-12 (2-4)				<2		1,060			<0.05	<0.05	<0.05	<0.05	<10
SB-13 (0-4)	<10	<50	7.3	<2	<10	237	<1	<0.25	<.025	<0.025	<0.025	<.025	<10
SB-14 (0-4)	<10	<50	5.7	<2	<10	684	<1	<0.25	<.025	<0.025	<0.025	<.025	25
SB-15 (0-4)	<10	<50	7.2	<2	<10	371	<1	<0.25	<.025	<0.025	<0.025	<.025	234

Soil Boring Samples Non-Detect for Glycol and remaining 8240 Compounds

6.5 Groundwater

Three sampling episodes were conducted at well MW-1 to determine if the groundwater was impacted from the site operations. The first sampling event revealed minor levels of Benzene and Xylene. The Benzene level was above the OCD level for groundwater. A second sampling event was performed. During this sampling event, separate disposable bailers were used for both sampling and well purging. This event revealed no detection of BTEX constituents. A third sampling event was conducted per the March 27, 1996 OCD letter requiring specific analytical tests not previously performed. During this event, Benzene, xylene, naphthalene, and cations and anions were detected. Table 4 presents the results of the laboratory testing. Complete laboratory reports are included in Section 13.

TABLE 4
WATER WELL SAMPLES ANALYTICAL RESULTS

Date	As ppm	Se ppm	Cr ppm	Cd ppm	Pb ppm	Ba ppm	Ag ppm	Hg ppm	B ppm	T ppm	E ppm	X ppm	TPH ppm
02/14/96	<0.1	<0.1	<0.05	<0.02	<0.1	<0.2	<0.01	<0.001	0.083	<0.001	<0.001	0.008	<0.20
02/29/96	NR	NR	NR	NR	NR	NR	NR	NR	<.001	<0.001	<0.001	<0.001	NR
04/20/96	<0.1	<0.1	<0.05	<0.02	<0.1	<0.2	<0.01	<0.001	0.305	<0.001	0.002	0.032	<0.20

TDS = 1,446 ppm
NR indicates Test Not Run

TABLE 4 Continued
WATER WELL SAMPLES ANALYTICAL RESULTS

Date	K ppm	Mg ppm	Ca ppm	Na ppm	NO_3-NO2)-N ppm	TDS ppm	Ch ppm	F ppm	Sulfate ppm	*HCO_3 ppm	Naphthalene ppm
04/20/96	7.1	23.8	148	82.5	2.6	756	25	0.4	67	670	0.017

* Alkalinity as CaCO3
Remaining PAH by EPA 8270 ND
Chloroform, Bromodichloromethane, Dibromochloromethane, Bromoform = ND

7.0 OCD REMEDIATION GUIDELINES

The New Mexico Oil Conservation Division issues remediation guidelines for leaks, spills and releases of petroleum related materials. In the guidelines, clean up levels for soils have been set for Benzene, BTEX, and TPH. Which cleanup level that should be obtained is determined by the ranking of the site. If the site is given a ranking of above 19 the cleanup levels would be 10, 50, and 100, respectively. The Hobbs Natural Gas Plant technically has this ranking because the deepest impacted soil/rock has been documented to be at a depth of four to six feet below grade and only 47 feet above groundwater (present at a depth of 53 feet) and groundwater may be impacted. It is believed that due to the three layers of hard rock and two layers of dry sands between the impacted soil/rock and the groundwater that cleanup levels of the second ranking standard could be used. These values for soil cleanup are 10 ppm for Benzene, 50 ppm for BTEX, and 1,000 ppm for TRPH. The OCD may consider these levels.

Two of the three sampling rounds indicate that the groundwater contains levels of benzene above the health standard limits of 0.01 mg/l. Due to the many hard rock layers and dry sand layers located above the groundwater it is surmised that the contaminate may be from off-site. The site does exist in a hydrocarbon producing area.

8.0 CONCLUSIONS

8.1 Soil/Rock

The OCD ranks sites based on the depth to groundwater below the deepest ground impacted soils/rock, distance to wellheads, and distance to surface water bodies. Groundwater at the Plant is at 53 feet below grade and between 47 to 51 feet below the deepest levels of impacted soils/rock observed. In addition, three layers of hard rock and two layers of sand exist between the surface and the water bearing strata. No private wells are known to exist within 200 feet of the site or within 1,000 feet of other water wells. Finally, the site is not located within 1,000 feet of a surface water body. This information, along with the opinion of Eco-logical personnel ranks the site and identifies the remediation action level of 1,000 ppm for TRPH, 50 ppm for total BTEX, and 10 ppm for Benzene.

Based on the above action levels, some areas of the plant will be remediated. The surface gravels around each of the units and the soil/gravel piles in the Flare Pit can easily be removed and treated and/or disposed. The affected surface limestone presents slight complications. This rock is very hard and can only be removed by jack hammer or explosives. Both methods appear to be inappropriate due to the close proximity of plant operations and pipelines. The option of capping the affected areas is also under consideration. It is the intention of K N to stop any ongoing releases and implement additional operations and maintenance procedures. This will include the installation of containment systems and implementation of better housekeeping measures.

The following table presents the estimated amount of affected gravels and rock that must be remediated or capped. The total volume of affected gravels and limestone above the level of 1,000 ppm is estimated to be 43 and 369 cubic yards, respectively.

TABLE 5 IMPACTED SOILS/ROCK VOLUMES					
Site	Surface Area (ft)	Gravel Depth (ft)	Rock Depth (ft)	Gravel (cy)	Rock (cy)
Cryogenic Skid	5 x 37 + 8 x 15	0.33	4	4	45
Flare Pit	16 x 32	0.25	2	5	38
Soil/Gravel Piles and Cuttings	N/A	N/A	N/A	10	0
Compressor Units	3 x 86 (west area) 3(30 x 9) (center areas) 10 x 86 (east area)	0.33	4	24	286
			TOTAL	43	369

8.2 Groundwater

Standards based on groundwater of 10,000 mg/l TDS concentrations or less for human health standards were met with the exception of benzene where the standard was 0.01 mg/l and test results were 0.08 mg/l, non-detect, and 0.305 mg/l on three separate sampling events. Based on three sampling events, a potential exists for groundwater contamination.

9.0 RECOMMENDATIONS

9.1 Soil/Rock

In addition to stopping the sources of the contamination, it is recommended that two types of remediation be performed at this site. The affected gravels can be removed and properly disposed. The affected rock can not easily be removed. It is recommended that one of the following options be considered:

- The rock may be left in place and the area monitored. Monitoring would take the form of removing any accumulated water/liquids to minimize any additional impacted soils/rock;
- Place a plastic liner on top of the rock and then cap the area to keep liquids from contacting the impacted rock, with monitoring.

9.2 Groundwater

Due to the anticipated closure of the plant (with the exception of the compressors) all potential sources that may impact the groundwater should be removed or upgraded. It is then recommended that three additional wells be installed. One placed up-gradient to evaluate the quality of the groundwater arriving on site and two down-gradient to help determine groundwater flow direction. All wells should be sampled quarterly for a period of one year. After a period of one year, the results should be reviewed and remediation or closure plan be written and submitted to the OCD.

1. Cryogenic Skid. Looking southwest at SB-1 location. Note surface staining.

2. Cryogenic Skid. Looking West at SB-1, SB-2, and SB-4. Note Surface Contamination.

3. Flare Pit. Looking Northwest at SB-8. Note Contaminated Soil Piles on Berm Slopes.

4. Flare Pit. Looking Northeast at SB-6 and SB-8. Note Contaminated Soil Piles on Berm Slopes.

5. Compressor Units. Looking Southeast at middle and South Units and SB-14 and SB-15.

6. Compressor Units. Looking Southwest at Middle Unit near SB-10. Note Surface Contamination and Weep Holes.

AIC
AGENCY INFORMATION CONSULTANTS
An ERIIS Company

February 13, 1996

Carrie Eick
Eco-Logical Environmental
2200 Market Street
Midland, TX 79703

Re: AIC Job #02-0045897
Water Well Search
Hobbs Gas Plant
Hwy 180 7 Hwy 483
Hobbs, New Mexico

Dear Mr. Eick:

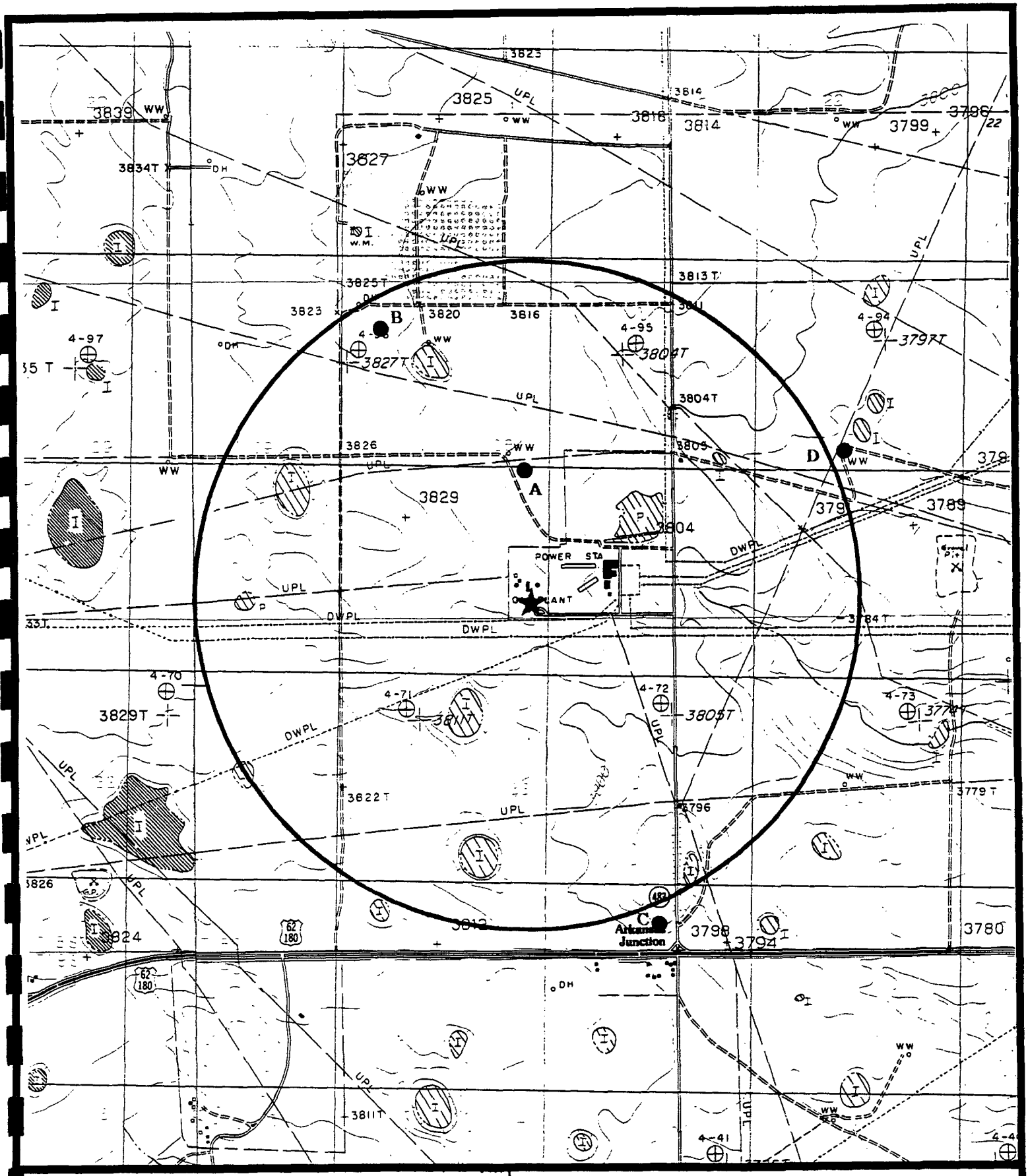
At your request, Agency Information Consultants, Inc. (AIC) has conducted a water well search for the above-referenced site. Water well records in New Mexico are maintained by the New Mexico State Engineers Office in Santa Fe. These records are sorted geographically (by the township/range grid system), and AIC has obtained copies of all water wells on record in the sections concerning the site. AIC does not guarantee the accuracy of the information as provided by the original sources, nor can we guarantee that no plotting errors have occured. The purpose of these maps is to give the user a "working approximation" of the positions of reported well positions. AIC has plotted those wells that are in the area of review on the enclosed map.

SUMMARY

AIC was able to locate 4 water wells in the sections concerning the area of review.

Thank you for using AIC for this project. Please call me if you have any questions.

Diane Barnes
Production Manager



Eco-Logical Environmental **Project #100-10389-B**	**Subject Property:** Highway 180 & 483, Lea County, New Mexico
1 Mile Water Well Survey **Prepared by Agency Information Consultants** **AIC #02-0045897 02/07/96**	Monument North, NM (Provisional Edition 1985) 7.5' USGS Quad, Scale 1:24000

Form WR-23 Ow, w.f. STATE ENGINEER OFFICE A 17 1

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1 28

T 14 S

(Plat of 640 acres) R-36-E

(A) Owner of well Southwest Public Service, Hobbs,

Street and Number

City Hobbs State New Mexico

Well was drilled under Permit No. and is located in the NW ¼ NW ¼ SE ¼ of Section 28 Twp. 18S Rge. 36E

(B) Drilling Contractor Bob Boyd & Son License No. A6494

Street and Number 1745 N. 4th St.

City Las Cruces State New Mexico

Drilling was commenced 19

Drilling was completed 19

Elevation at top of casing in feet above sea level Total depth of well

State whether well is shallow or artesian Depth to water upon completion

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2				Read on back
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12 3/4	41.51				309'		289'	309'

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received AUG 4 1955

OFFICE GROUND WATER SUPERVISOR ROSWELL, NEW MEXICO

File No. L-1550 Use Ind. Location No. 18.36.28.411C

Form WR-23 Orig- S.E. STATE ENGINEER OFFICE

T-P Coal Oil State W

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Rowan Drilling Co.

Street and Number Box 1873

City Midland State Texas

Well was drilled under Permit No. ____ and is located in the ¼ NW ¼ NW ¼ of Section 28 Twp. 18 S Rge. 36 E

(B) Drilling Contractor Abbott Bros. License No. WD-46

Street and Number Box 637

City Hobbs State New Mexico

Drilling was commenced December 27 19 57

Drilling was completed December 28 19 57

Elevation at top of casing in feet above sea level ____ Total depth of well 125

State whether well is shallow or artesian Shallow Depth to water upon completion 45

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	45	125	80	Water Sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
	NONE							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____

Street and Number ____ City ____ State ____

Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____

Plugging method used ____ Date Plugged ____ 19 ____

Plugging approved by:

____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received DEC 31 1957

OFFICE GROUND WATER SUPERVISOR ROSWELL, NEW MEXICO

File No. L-3757 Use O.W.D. Location No. 18.36.28.110

Old well drilled

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	17	16		Caliche
17	25	8		Sand Rock
25	40	15		Dry Sand
40	45	5		Sand Rock
45	125	80		Water Sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbott
Well Driller

Form WR-23 STATE ENGINEER OFFICE

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Lorene Bigham

Street and Number P. O. Box 133

City Hobbs, State N. M.

Well was drilled under Permit No. L-4011 and is located in the SW ¼ NW ¼ SE ¼ of Section 33 Twp. 18S Rge. 36E

(B) Drilling Contractor W. L. Van Ley License No. WD-708

Street and Number P. O. Box 74

City Oil Center, State N. M.

Drilling was commenced Nov. 24 19 58

Drilling was completed Nov. 26, 19 58

Elevation at top of casing in feet above sea level Total depth of well 109

State whether well is shallow or artesian Shallow Depth to water upon completion 65 '

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	69	100	31	Course water sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
6 "			0	4	4'		None	
	(6 " nipple in top of hole, no other pipe used.)							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received DEC 2 1958

OFFICE GROUND WATER SUPERVISOR ROSWELL, NEW MEXICO

File No. L-4011 Use Dom. Location No. 18.36.33.444

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	65	65	Greyish	Caliche
65	69	4	Greyish	Hard Rock
69	100	31	Greyish	Course Water-sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

W. L. VanDorn

Well Driller

Form WR-23

SANTA FE

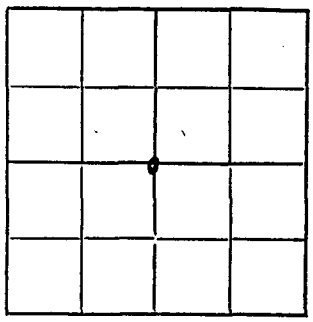
STATE ENGINEER OFFICE

WELL RECORD

well No. 4 (1)

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1



(Plat of 640 acres)

(A) Owner of well New Mexico Electric Co.

Street and Number

City Hobbs State New Mexico

Well was drilled under Permit No. [illegible] and is located in the Center ¼ ¼ ¼ of Section 34 Twp. 18S Rge. 36E

(B) Drilling Contractor Abbott Bros. License No. WD-46

Street and Number P.O. Box 637

City Hobbs State New Mexico

Drilling was commenced February 12 19 65

Drilling was completed February 18 19 65

Elevation at top of casing in feet above sea level Total depth of well 190

State whether well is shallow or artesian Shallow Depth to water upon completion 70

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	70	181	111	Sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
24"	hole							
14"	.375	weld	0	190	190	open	70	190
	wall							

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received

1965 FEB 25 AM 8:31

File No. L-5176-X-3 Use Ind Location No. 18.36.34.[illegible]

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	7	7		Caliche
7	21	14		sand
21	24	3		rock
24	30	6		sand
30	40	10		sand
40	48	8		rock
48	70	12		sand
70	90	20		sand
90	100	10	Brown	sand
100	115	15		sand
115	140	25		sand
140	155	15		sand
155	175	20	Brown	sand
175	181	6		sand
181	186	5		sandy clay
186	190	4	red	clay

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbott

Well Driller

MONITOR WELL NO. MW-1

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Plate
1

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
0								0		Surf. Elev: Grade ft
	0.0-2.0	G		3	FILL - Gravel, light gray, coarse grained, dry, no odor, no stain	GP				TOC Elev: ft
					LIMESTONE - gray, dry, no odor					Flush Mount Manhole Cover with 4x4 foot concrete pad
	2.0-4.0	G		4	CALICHE - light yellow brown, moist, no odor					
5	4.0-6.0	G		4	with cherty/limey layers			5		
	6.0-8.0	G		5						
	8.0-10.0	G		5	SAND - very light yellow brown, medium grained, moist, no odor					
10					with sandstone seams			10		
	10.0-12.0	G		4						
	12.0-14.0	G		5	becoming light orange brown, fine grained					
15	14.0-16.0	G		5		SP		15		
	16.0-18.0	G								4 inch diameter riser with cement-bentonite grout
	18.0-20.0	G		4						
20								20		
				5	SANDSTONE - light yellow brown, moist, no odor					
25								25		
	25.0-30.0	G		5	SAND - light yellow brown, fine grained, moist, no odor	SP				
30								30		
					Continued Next Page					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/13/96
Drilling completed: 2/13/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Static Water level
- Free Phase Product level

Samplers:

- Grab Sample
- Split Spoon
- Jam Tube
- Shelby Tube
- Auger

Water levels: _____ ft
_____ ft
_____ ft

Dates Measured: 02/14/96

Notes:

MONITOR WELL NO. MW-1

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Plate
1

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	Well Construction Graphics	Well Construction Details
30					Continued from previous page			30		
				5	SANDSTONE - light yellow brown, with sand layers, moist, no odor					
35	33.0-35.0	G			LIMESTONE/SANDSTONE with chert layers, brown, dry, no odor			35		
	35.0-38.0	G								Bentonite Chip Seal
				5	LIMESTONE - light brown, dry, no odor					
				5	DOLOMITE - light pink brown, dry, no odor					
40				5				40		Top of Screen
45								45		Filter Sand
	47.0-50.0	G		5	SAND - light brown, fine grained, moist, no odor					
50								50		4 inch diameter screen, Schedule 40, 0.010 slot
				5	becoming moist	SP				
55								55		
60								60		Bottom of Screen at 60'
65								65		
70								70		

SOIL BORING NO. SB-1

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
1

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		24	FILL - Gravel, stained brown, coarse grained, dry, petroleum odor	GP			32,800	<0.05	<0.05	<0.05	0.077
	2.0-4.0	G		29	LIMESTONE - brown gray, stained, petroleum odor becoming light brown with caliche				3,220	<0.05	<0.05	<0.05	0.055
5	4.0-6.0	G		9	CALICHE - light brown, dry, no odor			5					
	6.0-8.0	G		6	with sand								
	8.0-10.0	X		24	SAND - light orange brown, fine grained, moist, no odor				31	<0.05	<0.05	<0.05	<0.05
10	10.0-12.0	G		4	becoming light yellow brown			10					
	12.0-14.0	G		4	becoming very light red brown								
15	14.0-15.3	X		13	slight chemical odor SANDSTONE LENSE becoming moist no odor	SP		15					
	16.0-18.0	G		3									
20	18.0-20.0	X		10				20					
	20.0-22.0	X		6									
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/13/96
Drilling completed: 2/13/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ____ ft
____ ft
____ ft
Date Measured:
Notes: Cryogenic Skid No Water Encountered

SOIL BORING NO. SB-2

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
2

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G			FILL - Gravel, stained brown gray, coarse grained, dry, petroleum odor	GP							
	2.0-4.0	G		50	LIMESTONE - brown gray, with caliche layer, petroleum odor				9,360	<0.05	<0.05	<0.05	0.539
5	4.0-8.0	G		6	CALICHE - very light yellow brown, dry, petroleum odor			5					
10	8.0-14.0	G		4	SAND - gray brown, medium grained, moist, no odor			10					
15	14.0-16.0	X		15	becoming brown gray, moderate chemical odor			15	<10	<0.05	<0.05	<0.05	<0.05
				9	becoming light red brown, no odor	SP							
20	18.0-20.0	X		4	becoming orange brown, very slight chemical odor			20	<10	<0.05	<0.05	<0.05	<0.05
25	22.0-25.0	G		4	LIMESTONE/SANDSTONE - brown, dry, no odor			25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/13/96
Drilling completed: 2/13/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: Cryogenic Skid No Water Encountered

SOIL BORING NO. SB-3

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
3

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-4.0	G			FILL - Gravel, gray, coarse grained, dry, no odor	GP							
				56	LIMESTONE - gray, dry, very slight petroleum odor				40	<0.05	<0.05	<0.05	<0.05
					CALICHE - very light brown, dry, moderate organic odor								
5	4.0-4.5			22				5					
	8.0-10.0			86	SAND - light gray, fine grained, with silt, dry, petroleum odor								
10					becoming very light brown, dry			10	<10	<0.05	<0.05	<0.05	<0.05
	10.0-14.0	G		15									
15						SP		15					
	18.0-20.0			84									
20								20	<10	<0.05	<0.05	<0.05	<0.05
	22.0-24.0	G		5	SANDSTONE - light brown, dry, slight petroleum odor				<10	<0.05	<0.05	<0.05	<0.05
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

▽ Water level enc. during drilling
▼ Water level prior to backfilling

Samplers:
G Grab Sample
Split Spoon
Split Barrel
Shelby Tube
Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: Cryogenic Skid No Water Encountered

SOIL BORING NO. SB-4

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
4

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-1.5	G		173	FILL - Gravel, light gray, coarse grained, dry, no odor	GP							
	1.5-6.0	G			LIMESTONE - gray, dry, moderate petroleum odor								
5				75	CALICHE - very light brown, dry, moderate petroleum odor			5	2,520	<0.05	<0.05	<0.05	0.109
	6.0-10.0	G		3	SANDSTONE/CALICHE LAYERS - very light gray brown, dry, no odor								
10								10					
	10.0-15.0	G		4	SAND - light brown gray, fine grained, dry, very slight petroleum odor								
15								15					
	15.0-20.0	G		3	organic odor	SP			<10	<0.05	<0.05	<0.05	<0.05
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: Cryogenic Skid No Water Encountered

SOIL BORING NO. SB-5

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
5

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-6.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor LIMESTONE - light gray, dry, no odor becoming brown gray	GP							
5								5					
	6.0-10.0	G		2	CALICHE - very light gray brown, dry, no odor				<10	<0.05	<0.05	<0.05	<0.05
10					SAND - very light brown, fine grained, dry, no odor			10					
	10.0-18.0	G		2		SP							
15								15					
	18.0-20.0	X		2	becoming light brown with siltstone lenses								
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- ▽ Water level enc. during drilling
- ▼ Water level prior to backfilling

Samplers:

- G Grab Sample
- X Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: Cryogenic Skid No Water Encountered

SOIL BORING NO. SB-6

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
6

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		68	FILL - Gravel, gray, coarse grained, dry, petroleum odor	GP			5,590	<0.05	<0.05	<0.05	0.107
	2.0-4.0	G		2	LIMESTONE - gray, dry, strong petroleum odor with caliche layers, no odor								
5	4.0-6.0	G		2				5	27	<0.05	<0.05	<0.05	<0.05
	6.0-8.0	X		1	SAND - very light yellow brown, fine grained, dry, no odor								
	8.0-10.0	G		1									
10								10					
	12.0-13.3	X		1		SP			<10	<0.05	<0.05	<0.05	<0.05
	13.3-16.0	G		1									
15								15					
	16.0-20.0	G		1									
20								20					
25								25					
30								30					

Drilling Co: **McDonald Drilling**
Drilled by: **T. McDonald**
Logged by: **C. Eick**
Drilling started: **2/14/96**
Drilling completed: **2/14/96**
Drilling method: **Air Rotary**
Development method: _____

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: **Flare Pit No Water Encountered Grade 2-3 feet below surrounding grade**

SOIL BORING NO. SB-7

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
7

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0					
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, no odor	GP							
	2.0-4.0	G		2	LIMESTONE - very light gray with caliche, dry, no odor								
5	4.0-6.0	G		2	CALICHE - very light brown, dry, no odor			5	<10	<0.05	<0.05	<0.05	<0.05
	6.0-8.0	G		0									
10								10					
15								15					
20								20					
25								25					
30								30					

Surf. Elev: Grade ft

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: Flare Pit No Water Encountered

SOIL BORING NO. SB-8

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
8

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		0	FILL - Gravel, gray, dry, no odor LIMESTONE - very light gray brown, with caliche, dry, no odor	GP							
	2.0-8.0	G		0	CALICHE - very light brown, dry, no odor			5	<10	<0.05	<0.05	<0.05	<0.05
10	8.0-10.0	X		0	SAND - very light brown gray, fine grained with silt, dry, no odor	SP		10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

▽ Water level enc. during drilling
▼ Water level prior to backfilling

Samplers:
G Grab Sample
X Split Spoon
Split Barrel
Shelby Tube
Auger

Water level: ft
ft
ft
Date Measured:
Notes: Flare Pit No Water Encountered

SOIL BORING NO. SB-9

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
9

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor	GP							
					LIMESTONE - light brown gray, dry, no odor								
	2.0-4.0	G		2	LIMESTONE/CALICHE - very light brown, dry, no odor								
5	4.0-6.0	G		2	CALICHE - very light brown, dry, no odor			5	<10	<0.05	<0.05	<0.05	<0.05
	6.0-8.0	G		2	SAND - very light brown, dry, no odor	SP							
10	8.0-10.0	G		2				10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured:
Notes: Flare Pit No Water Encountered

SOIL BORING NO. SB-10

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
10

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		18	FILL - Gravel, gray, coarse grained, dry, petroleum odor	GP							
	2.0-4.0	G		126	LIMESTONE - gray brown, moist, moderate petroleum odor LIMESTONE/CALICHE - light gray brown, dry, slight petroleum odor				6,390	<0.025	0.053	0.058	0.415
5	4.0-6.0	G		7	CALICHE - light brown, dry, no odor			5	523	<0.025	<0.025	<0.025	<0.025
	6.0-8.0	G		4									
	8.0-9.0	G		5									
10	9.0-11.0	X		3	SAND - light brown, dry, no odor	SP		10	11	<0.025	<0.025	<0.025	<0.025
15								15					
20								20					
25								25					
30								30					

Drilling Co: **McDonald Drilling**
Drilled by: **T. McDonald**
Logged by: **C. Eick**
Drilling started: **2/14/96**
Drilling completed: **2/14/96**
Drilling method: **Air Rotary**
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:
- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: **Compressor Units No**
Water Encountered

SOIL BORING NO. SB-11

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
11

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor	GP							
					LIMESTONE - light gray, dry, no odor				16	<0.025	<0.025	<0.025	<0.025
	2.0-4.0	G		3	CALICHE - very light brown, dry, no odor								
5	4.0-8.0	G		2				5					
10								10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: Compressor Units No
Water Encountered

SOIL BORING NO. SB-12

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
12

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		10	FILL - Gravel, gray, coarse grained, dry, slight petroleum odor	GP			5,990	<0.025	<0.025	<0.025	<0.025
					LIMESTONE - brown gray, dry, slight petroleum odor								
	2.0-4.0	G		2	CALICHE - brown gray, dry, very slight petroleum odor				<10	<0.05	<0.05	<0.05	<0.05
5	4.0-6.0	G		2	SAND - gray, fine grained, dry, no odor			5					
	6.0-8.0	G		0		SP							
	8.0-10.0	G		0	very, very slight petroleum odor								
10								10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: Compressor Units No
Water Encountered

SOIL BORING NO. SB-13

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
13

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor	GP							
					LIMESTONE - light gray, dry, no odor				<10	<0.025	<0.025	<0.025	<0.025
	2.0-4.0	G		2	CALICHE - light brown, dry, no odor								
5	4.0-6.0	G		2	SAND - very light brown, with caliche, dry, no odor			5					
	6.0-8.0	G		0		SP							
	8.0-10.0	X		0	no caliche, becoming very light gray								
10								10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- ▽ Water level enc. during drilling
- ▼ Water level prior to backfilling

Samplers:

- G Grab Sample
- X Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: Compressor Units No
Water Encountered

SOIL BORING NO. SB-14

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
14

Project No: **279-512**

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor	GP							
					LIMESTONE - brown gray, dry, no odor				25	<0.025	<0.025	<0.025	<0.025
	2.0-4.0	G		2	CALICHE - light brown, dry, no odor								
5	4.0-6.0	G		2	SAND - very light brown, fine grained, dry, no odor	SP		5					
	6.0-8.0	G		2									
10								10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- Water level enc. during drilling
- Water level prior to backfilling

Samplers:

- Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: _____ ft
_____ ft
_____ ft
Date Measured: _____
Notes: Compressor Units No
Water Encountered

SOIL BORING NO. SB-15

KN Energy
Hobbs Gas Plant
Hobbs, New Mexico

Figure
15

Project No: 279-512

Depth (feet)	Sample ID Interval (ft, bgs)	Sampler	Recovery (ft/ft)	PID (ppm)	Overburden/Lithologic Description	USCS	Graphic Log	Depth (feet)	TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylene (ppm)
0								0		Surf. Elev: Grade ft			
	0.0-2.0	G		2	FILL - Gravel, gray, coarse grained, dry, no odor	GP							
					LIMESTONE - brown gray, dry, no odor								
	2.0-4.0	G		2	CALICHE - light brown, dry, no odor				234	<0.025	<0.025	<0.025	<0.025
5	4.0-6.0	G		2	SAND - very light brown, fine grained, dry, no odor	SP		5					
	6.0-8.0	G		2									
10								10					
15								15					
20								20					
25								25					
30								30					

Drilling Co: McDonald Drilling
Drilled by: T. McDonald
Logged by: C. Eick
Drilling started: 2/14/96
Drilling completed: 2/14/96
Drilling method: Air Rotary
Development method:

LEGEND

- ▽ Water level enc. during drilling
- ▼ Water level prior to backfilling

Samplers:

- G Grab Sample
- Split Spoon
- Split Barrel
- Shelby Tube
- Auger

Water level: ft
ft
ft
Date Measured:
Notes: Compressor Units No
Water Encountered

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

February 28, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

Prep Date: 02/17/96
Analysis Date: 02/18/96
Sampling Date: 02/13-14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TA#	Field Code	TRPHC (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P,O XYLENE (mg/kg)	TOTAL BTEX (mg/kg)
T48313	SB-10 (2-4)	6,390	NR	NR	NR	NR	NR
T48314	SB-9 0-10	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48315	SB-8 0-8	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48316	SB-7 0-8	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48317	SB-6 0-2	5,590	<0.050	<0.050	<0.050	0.107	0.107
T48318	SB-6 4-6	27	<0.050	<0.050	<0.050	<0.050	<0.050
T48319	SB-6 12-13	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48320	Compressor Stack Stain	4,770	<0.050	<0.050	<0.050	<0.050	<0.050
T48321	SB-2 0-4	9,360	<0.050	<0.050	<0.050	0.539	0.539
T48322	SB-2 14-16	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48323	SB-2 18-20	<10	<0.050	<0.050	<0.050	<0.050	<0.050
T48324	SB-4 0-6	2,520	<0.050	<0.050	<0.050	0.109	0.109
T48325	SB-1 0-2	32,800	<0.050	<0.050	<0.050	0.077	0.077
T48326	SB-1 8-10	31	<0.050	<0.050	<0.050	<0.050	<0.050
T48327	SB-3 0-4	40	<0.050	<0.050	<0.050	<0.050	<0.050
T48328	SB-3 8-10	<10	<0.050	<0.050	<0.050	<0.050	<0.050
QC	Quality Control	101	0.097	0.095	0.093	0.309	
Reporting Limit		10	0.050	0.050	0.050	0.050	
RPD		2	3	5	3	3	
% Extraction Accuracy		100	90	90	88	92	
% Instrument Accuracy		102	98	96	94	103	

NR = NOT RUN
METHODS: EPA SW 846-8020, 5030, 3550 High Level; EPA 418.1.
BTEX SPIKE: 2.500 mg/kg BTEX.
BTEX QC: 0.100 mg/L BTEX.
TRPHC SPIKE: 250 mg/kg TRPHC.
TRPHC QC: 100 mg/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 19, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Extraction Date: 02/17/96
Analysis Date: 02/18/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TA#	FIELD CODE	TRPHC (mg/kg)
T48294	Soil Piles	386,000
T48295	SB-15 0-4	234
T48296	SB-14 0-4	25
T48297	SB-13 0-4	<10
T48298	SB-12 0-2	5,990
T48299	SB-11 0-4	16
T48300	SB-10 9-11	11
T48301	SB-10 4-6	523
QC	Quality Control	101
REPORTING LIMIT		10
RPD		2
% Extraction Accuracy		100
% Instrument Accuracy		102

METHODS: EPA SW 846-3550 HIGH LEVEL; EPA 418.1.
TRPHC SPIKE: 250 mg/kg TRPHC.
TRPHC QC: 100 mg/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2-19-96
DATE

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 28, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Extraction Date: 02/27/96
Analysis Date: 02/27/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TA#	FIELD CODE	ETHYLENE GLYCOL (mg/kg)
T48295	SB-15 0-4	<100
T48296	SB-14 0-4	<100
T48297	SB-13 0-4	<100
T48298	SB-12 0-2	<100
T48299	SB-11 0-4	<100
T48300	SB-10 9-11	<100
T48301	SB-10 4-6	<100
T48313	SB-10 2-4	<100
QC	Quality Control	90.4
REPORTING LIMIT		100
RPD		9
% Extraction Accuracy		22
% Instrument Accuracy		95

METHODS: EPA 8000.
ETHYLENE GLYCOL SPIKE: 50 mg/kg ETHYLENE GLYCOL.
ETHYLENE GLYCOL QC: 100 mg/L ETHYLENE GLYCOL.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Extraction Date: 02/19/96
Analysis Date: 02/22/96
Sampling Date: 02/13-14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TOTAL METALS (mg/kg)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ag	Ba	Hg
T48301	SB-10 4-6	<10	<50	6.5	<2	<10	<1	670	<0.25
T48313	SB-10 2-4	<10	<50	<5	<2	<10	<1	484	<0.25
T48321	SB-2 0-4	13	<50	<5	<2	<10	<1	428	<0.25
T48322	SB-2 14-16	<10	<50	<5	<2	<10	<1	70	<0.25
T48323	SB-2 18-20	<10	<50	<5	<2	<10	<1	59	<0.25
T48324	SB-4 0-6	35	<50	<5	<2	<10	<1	456	<0.25
T48325	SB-1 0-2	<10	<50	17	<2	<10	<1	257	<0.25
T48326	SB-1 8-10	<10	<50	<5	<2	<10	<1	266	<0.25
T48327	SB-3 0-4	<10	<50	<5	<2	<10	<1	457	<0.25
T48328	SB-3 8-10	12	<50	<5	<2	<10	<1	319	<0.25
QC	Quality Control	23.8	10.0	1.9	6.9	23.4	1.0	1.0	2.5
Reporting Limit		10	50	5	2	10	1	2	0.25
RPD		1	0	2	1	2	0	0	8
% Extraction Accuracy		98	98	95	98	96	96	93	100
% Instrument Accuracy		95	100	95	92	94	100	100	97

METHODS: EPA SW 846-3051, 6010, 7471.
TOTAL METALS SPIKE: 800 mg/kg As, Se, Ba; 80 mg/kg Cr; 20 mg/kg Cd, Ag; 200 mg/kg Pb; 2.5 mg/kg Hg.
TCLP METALS QC: 25.0 mg/L As, Pb; 10.0 mg/L Se; 2.0 mg/L Cr; 7.5 mg/L Cd; 1.0 mg/L Ag, Ba; 2.5 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

TRACE ANALYSIS, INC.
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Extraction Date: 02/19/96
Analysis Date: 02/22/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TOTAL METALS (mg/kg)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ag	Ba	Hg
T48294	Soil Piles	<10	<50	16.4	3.8	34.6	<1	93	<0.25
T48295	SB-15 0-4	<10	<50	7.2	<2	<10	<1	371	<0.25
T48296	SB-14 0-4	<10	<50	5.7	<2	<10	<1	684	<0.25
T48297	SB-13 0-4	<10	<50	7.3	<2	<10	<1	237	<0.25
T48298	SB-12 0-2	<10	<50	<5	7.2	<10	<1	497	<0.25
T48299	SB-11 0-4	<10	<50	7.7	<2	<10	<1	400	<0.25
T48300	SB-10 9-11	<10	<50	<5	<2	<10	<1	356	<0.25
QC	Quality Control	25.0	10.7	2.1	7.4	24.4	1.0	1.0	2.5
Reporting Limit		10	50	5	2	10	1	2	0.25
RPD		0	0	1	12	0	2	8	8
% Extraction Accuracy		93	95	100	95	87	122	116	100
% Instrument Accuracy		100	107	105	99	98	100	100	97

METHODS: EPA SW 846-3051, 6010, 7471.
TOTAL METALS SPIKE: 800 mg/kg As, Se, Ba; 80 mg/kg Cr; 20 mg/kg Cd, Ag; 200 mg/kg Pb; 2.5 mg/kg Hg.
TCLP METALS QC: 25.0 mg/L As, Pb; 10.0 mg/L Se; 2.0 mg/L Cr; 7.5 mg/L Cd; 1.0 mg/L Ag, Ba; 2.5 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48294 Soil Piles	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T48294 Soil Piles	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	92
Toluene-d8	96
4-Bromofluorobenzene	95

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 28, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/23/96
Analysis Date: 02/23/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48295 SB-15 0-4	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Location: Hobbs Gas Plant

8240 Compounds (ug/kg)	T48295 SB-15 0-4	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	79
Toluene-d8	88
4-Bromofluorobenzene	88

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds	T48296 SB-14 0-4 (ug/kg)*	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Location: Hobbs Gas Plant

8240 Compounds	T48296 SB-14 0-4 (ug/kg)*	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	69
Toluene-d8	86
4-Bromofluorobenzene	88

*** Estimated concentration. Surrogate recovery out of limits due to sample matrix effects.**

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48297 SB-13 0-4	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Location: Hobbs Gas Plant

8240 Compounds (ug/kg)	T48297 SB-13 0-4	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	72
Toluene-d8	82
4-Bromofluorobenzene	84

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48298 SB-12 0-2	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds (ug/kg)	T48298 SB-12 0-2	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	% RECOVERY
Dibromofluoromethane	79
Toluene-d8	95
4-Bromofluorobenzene	95

*ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48299 SB-11 0-4	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Location: Hobbs Gas Plant

8240 Compounds (ug/kg)	T48299 SB-11 0-4	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	76
Toluene-d8	95
4-Bromofluorobenzene	97

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds	T48300 SB-10 9-11 (ug/kg)*	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds	T48300 SB-10 9-11 (ug/kg)*	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	% RECOVERY
Dibromofluoromethane	57
Toluene-d8	71
4-Bromofluorobenzene	72

* Estimated Concentration. Surrogate recovery out of limits due to sample matrix effects.

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds (ug/kg)	T48301 SB-10 4-6	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Location: Hobbs Gas Plant

8240 Compounds (ug/kg)	T48301 SB-10 4-6	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	**% RECOVERY**
Dibromofluoromethane	84
Toluene-d8	106
4-Bromofluorobenzene	107

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 26, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/20/96
Analysis Date: 02/20/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

8240 Compounds	T48313 SB-10 2-4 (ug/kg)*	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	53	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

8240 Compounds	T48313 SB-10 2-4 (ug/kg)*	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	58	25
m & p-Xylene	298	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	117	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50
Tentatively Identified Compounds		
methyl-cyclohexane	254	
ethyl-cyclohexane	193	
Nonane	447	
Decane	474	
1,3,5-trimethyl benzene	316	
1,2,3-trimethyl benzene	287	

SURROGATES	**% RECOVERY**
Dibromofluoromethane	55
Toluene-d8	71
4-Bromofluorobenzene	68

***Estimated Concentration. Surrogate recovery out of limits due to sample matirx effects.**

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 27, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Sampling Date: 02/14/96
Sample Condition: I & C
Sample Received by: DH
Project Name: NA
Project Location: Hobbs Gas Plant
Extraction Date: 02/21/96
Analysis Date: 02/25/96

EPA 8270 (mg/kg)	Reporting Limit	T48294 Soil Piles	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.50	ND				
2-Picoline	2.50	ND				
Methyl methanesulfonate	2.50	ND				
Ethyl methanesulfonate	2.50	ND				
Phenol	2.50	ND	107.0	6	77	107
Aniline	12.50	ND				
bis(2-Chloroethyl)ether	12.50	ND				
2-Chlorophenol	12.50	ND		6	83	
1,3-Dichlorobenzene	2.50	ND				
1,4-Dichlorobenzene	2.50	ND	108	5	77	108
Benzyl alcohol	12.50	ND				
1,2-Dichlorobenzene	2.50	ND				
2-Methylphenol	2.50	ND				
bis(2-chloroisopropyl)ether	12.50	ND				
4-Methylphenol/3-Methylphenol	2.50	ND				
Acetophenone	12.50	ND				
n-Nitrosodi-n-propylamine	2.50	ND		4	92	
Hexachloroethane	2.50	ND				
Nitrobenzene	2.50	ND				
N-Nitrosopiperidine	12.50	ND				
Isophorone	12.50	ND				
2-Nitrophenol	12.50	ND	101			101
2,4-Dimethylphenol	12.50	ND				
bis(2-Chloroethoxy)methane	2.50	ND				
Benzoic acid	25.00	ND				
2,4-Dichlorophenol	12.50	ND	98			98
1,2,4-Trichlorobenzene	2.50	ND		3	91	
a,a-Dimethylphenethylamine	25.00	ND				
Naphthalene	2.50	ND				

EPA 8270 (mg/kg)	Reporting Limit	T48294 Soil Piles	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	91			91
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	103	3	96	103
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	103			103
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	101	3	87	101
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		6	59	
1-Napthylamine	12.5	ND				
2,6-Dinitrotoluene	2.5	ND		4	89	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
n-Nitrosodiphenylamine & Diphenylamine	2.5	ND	95			95
Diphenylhydrazine	12.5	ND				

EPA 8270 (mg/kg)	Reporting Limit	T48294 Soil Piles	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	115	7	37	115
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	109			109
Benzidine	25	ND				
Pyrene	2.5	ND		0	120	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	98			98
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

Project No: 279-512

Project Location: **Hobbs Gas Plant**

EPA 8270 (mg/kg)	Reporting Limit	T48294 Soil Piles	QC	RPD	%EA	%IA
a-BHC	0.0025	ND	0.024	10	88	96
b-BHC	0.0025	ND	0.028	4	104	112
g-BHC	0.0025	ND	0.023	4	92	92
d-BHC	0.0025	ND	0.026	4	96	104
Heptachlor	0.0025	ND	0.024	8	100	96
Aldrin	0.0025	ND	0.023	4	92	92
Heptachlor epoxide	0.0025	ND	0.027	8	108	108
Endosulfan-1	0.0025	0.0049	0.025	9	96	100
Endosulfan-2	0.005	ND	0.057	4	98	114
P,P'-DDE	0.005	ND	0.055	2	100	110
Dieldrin	0.005	ND	0.047	7	90	94
Endrin	0.005	0.0065	0.052	9	94	104
P,P'-DDD	0.005	ND	0.057	2	108	114
Endrin Aldehyde	0.005	ND	0.049	2	86	98
Endosulfan Sulfate/P,P'-DDT	0.005	ND	0.055	2	94	110
Endrin Ketone	0.005	ND	0.057	2	94	114
Methoxychlor	0.025	ND	0.274	2	93	110
a-Chlordane	0.0025	0.0031	0.022	5	88	88
g-Chlordane	0.0025	ND	0.024	4	92	96
Toxaphene	0.25	ND	2.12	10	129	106
PCB's	2.5	ND	---	2	79	96

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

Hexacosane	14.8	4-methylnonadecane	23.6
Docosane	16.5	8-methylheptadecane	16.6
2-methyleicosane	16.5	2,6,10,14-tetramethyl-hexadecane	33.9
Heneicosane	20.3		
Octadecane	22.5		

	% RECOVERY
2-Fluorophenol SURR	74
Phenol-d6 SURR	72
Nitrobenzene-d5 SURR	72
2-Fluorobiphenyl SURR	80
2,4,6-Tribromophenol SURR	76
Terphenyl-d14 SURR	104

METHODS: EPA SW 846-8270, 8080, 3510.

Director, Dr. Blair Leftwich

Director, Dr. Bruce McDonell

2/29/96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 28, 1996
Receiving Date: 02/16/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs Gas Plant

Extraction Date: 02/27/96
Analysis Date: 02/27/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TOTAL METALS (mg/L)

TA#	Field Code	As	Se	Cr	Cd	Pb	Ba	Ag	Hg
T48293	MW - 1	<0.1	<0.1	<0.05	<0.02	<0.1	<0.2	<0.01	<0.001
QC	Quality Control	24.7	10.1	7.2	2.1	23.2	0.94	0.098	0.0051
Reporting Limit		0.1	0.1	0.05	0.02	0.1	0.2	0.01	0.001
RPD		6	3	4	6	0	3	0	6
% Extraction Accuracy		88	89	105	90	85	86	85	97
% Instrument Accuracy		99	101	96	105	93	94	98	102

METHODS: EPA SW 846-3015, 6010, 7470.
TOTAL METALS SPIKE: 8.0 mg/L As, Se, Ba, 0.8 mg/L Cr, 0.2 mg/L Cd, Ag, 2.0 mg/L Pb; 0.05 mg/L Hg.
TOTAL METALS QC: 25.0 mg/L As, Pb; 10.0 mg/L Se; 7.5 mg/L Cr; 2.0 mg/L Cd; 1.0 mg/L Ag, Ba; 0.005 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2/28/96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

February 23, 1996
Receiving Date: 02/16/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs Gas Plant

Prep Date: 02/17/96
Analysis Date: 02/17/96
Sampling Date: 02/14/96
Sample Condition: Intact & Cool
Sample Received by: DH
Project Name: NA

TA#	Field Code	TDS* (mg/L)	TRPHC (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
T48293	MW - 1	1,466	<0.200	0.083	<0.001	<0.001	0.008	0.091
QC	Quality Control	---	103.000	0.089	0.090	0.087	0.287	
Reporting Limit		---	0.200	0.001	0.001	0.001	0.001	
RPD		17	1	6	6	6	7	
% Extraction Accuracy		---	96	92	92	88	98	
% Instrument Accuracy		---	103	90	90	88	96	

***NOTE: Holding time exceeded.**

METHODS: EPA SW 846-8020, 5030; EPA 418.1, 160.1.
BTEX SPIKE AND QC: 0.100 BTEX.
TRPHC SPIKE: 8.5 mg/L TRPHC.
TRPHC QC: 100 mg/L TRPHC.

BS
Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

2-23-96
Date

TraceAnalysis, Inc.

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

47AD

C 47AD EQUEST

Project Manager: Carrie E. Eick **Phone #:**
FAX #:

Company Name & Address: Eco-logical

Project #: 279-512 **Project Name :**

Project Location: HOBBS GAS PLANT **Sampler Signature:** Carrie E. Eick

ANALYSIS REQUEST — SPECIAL HANDLING

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	BTEX,	TPH	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	8240 Vol	8270 Semi Vol	Total RCRA Metals	TDS	GLY COL	Turn around # of days	Fax ASAP	Hold
48293	MW-1	1	52?	X				X		X		2/14/96	PM		X												X	
	MW-1	1	500	X					X	X			|										X				|	
	MW-1	3		X						X			|	X										X			|	
94	SOIL PILES (Rock ...)	3	12oz		X					X		|	AM		X						X	X	X				|	
95	SB-15 0-4	1	4		X					X		2/14	PM	[illegible]	X						X		X		X		|	
96	SB-14 0-4	|	|		|					|		|	|	|	|						|		|		|		|	
97	SB-13 0-4	|	|		|					|		|	|	|	|						|		|		|		|	
98	SB-12 0-2	|	|		|					|		|	|	|	|						|		|		|		|	
99	SB-11 0-4	|	|		|					|		|	|	|	|						|		|		|		|	
300	SB-10 9-11	|	|		|					|		|	|	|	|						|		|		|		|	
01	SB-10 4-6	|	|		|					|		|	|	|	|						|		|		|		|	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie Eick	2/15/96	4:40pm	Helen Shelton	2/15/96	4:40PM
Helen Shelton	2/15/96	9:20PM			
			Received at Laboratory by: [signature]	2-16-96	9:30

REMARKS
Please call regarding test for GLYCOL
C/I
1/4

[illegible] Greyhound ... (328) ... 15 Samples - HS

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Carrie Eick
Phone #:
FAX #:

Company Name & Address: ECO-LOGICAL

Project #: 279-512
Project Name : HOBBS Gas Plant

Project Location: HOBBS
Sampler Signature: Carrie Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	SAMPLING: TIME	BTEX, MTBE	TPH	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	8240 / 8260	8270	Turn around # of days	Fax ASAP	Hold
48302	SB-1 2-4	1	4		X					X		2/13	PM												X
03	SB-1 14-15																								
04	SB-1 18-20																								
05	SB-3 4-4.5											2/14	AM												
06	SB-3 18-20																								
07	SB-3 22-24																								
08	SB-5 0-18 (12)																								
09	SB-4 8-10 (10-20)																								
10	SB-2 22-25											2/13	PM												
11	SB-12 2-4											2/14	PM												
12	SB-1 20-22											2/13	PM												

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eick	2/15/96	4:40pm	Helen Shelton	2/15/96	4:40PM
Helen Shelton	2/15/96	9:20PM			
			Received at Laboratory by: [signature]	2-16-96	9:30

REMARKS

47AD

47AD

C/I

9/4

Airborne Greyhound

11 Samples - H.S

47AD

TraceAnalysis, Inc.

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

CHAIN-OF-CU 47AD

Project Manager: **Phone #:** **FAX #:**

Company Name & Address: ECO-LOGICAL

Project #: **Project Name :**

Project Location: **Sampler Signature:** Carrie E. Eck

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	SAMPLING: TIME	BTEX, MTBE	TPH	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	8240 / 8260	8270	Total RCRA METALS	GLYCOL	Turn around # of days	Fax ASAP	Hold
48313	SB-10 (2-4)	1	4		X					X		2/14/96	PM	X	X						X		X	X		X	
14	SB-9 0-10	1	4									2/14	AM	X	X												
15	SB-8 0-8																										
16	SB-7 0-8																										
17	SB-6 0-2																										
18	SB-6 4-6																										
19	SB-6 12-13																										
20	COMPESSOR STACK STAIN	1										2/14	PM	X	X												
21	SB-2 0-4											2/13	PM	X	X								X				
22	SB-2 14-16																										
23	SB-2 18-20																										

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eck	2/15/96	4:40pm	Helen Shelton	2/15/96	4:40 pm
Helen Shelton	2/15/96	9:20pm	Received by:		
Relinquished by:			Received at Laboratory by: [signature]	2-16-96	9:30

REMARKS

c/I

3/4

Shipped Greyhound

(328) 2 Samples - HS

TraceAnalysis, Inc.

6701 Aberdeen Avenue Lubbock, Texas 79424
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1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:
Phone #:
FAX #:

Company Name & Address: ECO - LOGICAL

Project #:
Project Name :

Project Location:
Sampler Signature: Carrie Eick

LAB # (LAB USE ONLY)	FIELD CODE		# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE		SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX, ~~MTBE~~	TPH	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	8240 / 8260	8270	Total RCRA Metals				SPECIAL HANDLING: Turn around # of days	Fax ASAP	Hold		
48324	SB-4	0-6	1	4		X						X			2/14	AM	X	X								X					X			
25	SB-1	0-2	"	"		"						"			2 13	PM	"	"								"					"			
26	SB-1	8-10	"	"		"						"			2 13	PM	"	"								"					"			
27	SB-3	0-4	"	"		"						"			2 14	AM	"	"								"					"			
28	SB-3	8-10	"	"		"						"			2 14	AM	"	"								"					"			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eick	2/15/96	4:40pm	Helen Shelton	2/15/96	4:40PM
Helen Shelton	2/15/96	9:00PM			
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			[illegible signature]	2-16-96	9:30

REMARKS

C/I [illegible]

5/4

Shipped Greyhound 2/15/96

5 Samples - HS

TraceAnalysis, Inc.

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1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK
Phone #: 915/520-7535
FAX #: 915/520-7737

Company Name & Address: ECO-LOGICAL
2200 MARKET ST
MIDLAND, TX 79703

Project #: 275-S12
Project Name: HOBBS GAS PLANT

Project Location: HOBBS, TX
Sampler Signature: Carrie E. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
48302	SB-1 (2-4)	1	402		X							2/13/96	PM
06	SB-3 (18-20)											2/14	AM
07	SB-3 (22-24)												
09	SB-4 (10-20)												
08	SB-5 (0-12)												
11	SB-12 (2-4)												PM

ANALYSIS REQUEST

LAB #	BTEX, [redacted]	TPH	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	8240 / 8260	8270	Total Cd, Ba	Total Cr, Ba, As
48302	X	X									X
06	X	X									X
07	X	X									X
09	X	X									
08	X	X									X
11	X	X								X	

SPECIAL HANDLING

LAB #	Turn around # of days	Fax ASAP	Hold
48302		X	
06		↓	
07			
09			
08			
11		↓	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

REMARKS

MELISSA,

RUN these tests from HOLD SAMPLES submitted (2/15/96) [47AD]

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

March 13, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 275-512
Project Location: Hobbs, NM

Extraction Date: 03/06/96
Analysis Date: 03/06/96
Sampling Date: 02/13-14/96
Sample Condition: I & C
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TOTAL As (mg/kg)	TOTAL Cr (mg/kg)	TOTAL Ba (mg/kg)
T48302	SB-1 (2-4)	21.1	6.25	653
T48306	SB-3 (18-20)	<10.0	<5.0	52.4
T48307	SB-3 (22-24)	<10.0	5.2	180
T48308	SB-5 (0-12)	<10.0	<5.0	30.5
QC	Quality Control	21.4	1.53	3.2
REPORTING LIMIT		10.0	5.0	20.0
RPD		3	1	1
% Extraction Accuracy		88	101	109
% Instrument Accuracy		86	76	107

METHODS: EPA SW 846-3051, 6010.
TOTAL METALS SPIKE: 800.0 mg/kg As; 80.0 mg/kg Cr; 1,000 mg/kg Ba.
TOTAL METALS QC: 25.0 mg/L As; 2.0 mg/L Cr; 3.0 mg/L Ba.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

3-13-96
DATE

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

March 13, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 275-512
Project Location: Hobbs, NM

Extraction Date: 03/06/96
Analysis Date: 03/06/96
Sampling Date: 02/14/96
Sample Condition: I & C
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	TOTAL Cd (mg/kg)	TOTAL Ba (mg/kg)
T48311	SB-12 (2-4)	<2.0	1,060
QC	Quality Control	7.74	3.2
REPORTING LIMIT		2.0	20.0
RPD		5	1
% Extraction Accuracy		92	109
% Instrument Accuracy		103	107

METHODS: EPA SW 846-3051, 6010.
TOTAL METALS SPIKE: 20.0 mg/kg Cd; 1,000 mg/kg Ba.
TOTAL METALS QC: 7.5 mg/L Cd; 3.0 mg/L Ba.

BL

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

3-13-96
DATE

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

March 08, 1996
Receiving Date: 02/16/96
Sample Type: Soil
Project No: 275-512
Project Location: Hobbs, NM

Prep Date: 03/07/96
Analysis Date: 03/07/96
Sampling Date: 02/13-14/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	Field Code	TRPHC (mg/kg)	MTBE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P,O XYLENE (mg/kg)	TOTAL BTEX (mg/kg)
T48302	SB-1 (2-4)	3,220	<0.050	<0.050	<0.050	<0.050	0.055	0.055
T48306	SB-3 (18-20)	<10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
T48307	SB-3 (22-24)	<10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
T48309	SB-4 (10-20)	<10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
T48308	SB-5 (0-12)	<10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
T48311	SB-12 (2-4)	<10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
QC	Quality Control	100	0.101	0.093	0.090	0.087	0.290	
Reporting Limit		10	0.050	0.050	0.050	0.050	0.050	
RPD		1	4	4	4	4	4	
% Extraction Accuracy		108	105	98	94	93	98	
% Instrument Accuracy		100	102	94	90	88	97	

METHODS: EPA SW 846-8020, 5030, 3550 HIGH LEVEL; EPA 418.1.
MTBE/BTEX SPIKE: 2.500 mg/kg MTBE/BTEX.
MTBE/BTEX QC: 0.100 mg/L MTBE/BTEX.
TRPHC SPIKE: 250 mg/kg TRPHC.
TRPHC QC: 100 mg/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

3-8-96
Date

48302-R

Faxed 3-13

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK

Phone #: 915/520-7535

FAX #: 915/520-7737

Company Name & Address: ECO-LOGICAL, 2200 MARKET ST, MIDLAND, TX 79703

Project #: 275-512

Project Name: HOBBS GAS PLANT

Project Location: HOBBS, TX

Sampler Signature: Carrie E. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	WATER	SOIL	AIR	SLUDGE		HCL	HNO3	ICE	NONE		DATE	TIME	BTEX, [redacted]	TPH	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	8240/8260	8270	Total Cd Ba	Total Cr, Ba, As		Turn around # of days	Fax ASAP	Hold		
48302	SB-1 (2-4)	1	4oz		X									2/13/96	PM	X	X									X			X			
06	SB-3 (18-20)	↓	↓		↓									2/14	AM	X	X									X			↓			
07	SB-3 (22-24)	↓	↓		↓									↓	↓	X	X									X			↓			
09	SB-4 (10-20)	↓	↓		↓									↓	↓	X	X												↓			
08	SB-5 (0-12)	↓	↓		↓									↓	↓	X	X									X			↓			
11	SB-12 (2-4)	↓	↓		↓										PM	X	X								X				↓			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: M Lopez	Date: ~~3-5-96~~ 2-16-96	Time: 11:30

REMARKS

MELISSA, Run all samples on COC regardless of hold time ML 3-5-96
Run these tests from HOLD samples submitted (2/15/96) (HEAD)

Samples actually rec'd on 2-16-96

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

March 07, 1996
Receiving Date: 03/02/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 03/06/96
Analysis Date: 03/06/96
Sampling Date: 02/29/96
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Hobbs Gas Plant

TA#	Field Code	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
T49078	MW - 1	<0.001	<0.001	<0.001	<0.001	<0.001
QC	Quality Control	0.097	0.095	0.093	0.311	
Reporting Limit		0.001	0.001	0.001	0.001	
RPD		3	3	3	4	
% Extraction Accuracy		96	94	92	104	
% Instrument Accuracy		98	96	94	104	

METHODS: EPA SW 846-8020, 5030.
MTBE/BTEX SPIKE AND QC: 0.100 MTBE/BTEX.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

3-7-96
Date

TraceAnalysis, Inc.

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

Faxed 3-2

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK
Phone #: 915/520-7525
FAX #: 915/520-7737

Company Name & Address: ECO-LOGICAL 2200 Market St MIDLAND, TX 79703

Project #: 279-512

Project Name: Hobbs Gas Plant

Project Location: Hobbs ~~Gas Plant~~ NM

Sampler Signature: Carrie E. Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: BTEX, MTBE	TPH	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	8240 / 8260	8270	SPECIAL HANDLING: Turn around # of days	Fax ASAP	Hold
49078	MW-1	2	VOA	X						X		2/29	PM	X										X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie E. Eick	3/1/96	4:05 PM	Helen Shelton	3/01/96	4:05 PM
Helen Shelton	3/1/96	7:30 PM			
			Received at Laboratory by: [signature]	3/2/96	10:00

REMARKS 62AQ

Delivered Greyhound   ECOBTXCFXS(333) 2-HS

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 29, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 04/25/96
Analysis Date: 04/25/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

FIELD CODE: MW - 1
TA #: T51468

8240 Compounds	Concentration (ug/L)	Reporting Limit
Chloroform	ND	1
Bromodichloromethane	ND	1
Dibromochloromethane	ND	1
Bromoform	ND	1

SURROGATES	RECOVERY
Dibromofluoromethane	109
Toluene-d8	109
4-Bromofluorobenzene	102

ND = Not Detected

METHODS: EPA SW 846-5030, 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-29-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 29, 1996
Receiving Date: 04/23/96
Sample Type: Water
Proj. Locat.: Hobbs, NM
Sampling Date: 04/20/96
Sample Condition: I & C
Sample Received by: ML
Project No: 279-512
Project Name: Hobbs Gas Plant
Extraction Date: 04/23/96
Analysis Date: 04/24/96

PAH Reporting T51468

8270 Compounds (mg/L)	Limit	MW - 1	QC	RPD	%EA	%IA
Naphthalene	0.001	0.017	108	0	90	108
Acenaphthylene	0.001	ND	102	0	97	102
Acenaphthene	0.001	ND	97	2	91	97
Fluorene	0.001	ND	97	2	95	97
Phenanthrene	0.001	ND	100	0	88	100
Anthracene	0.001	ND	101	0	83	101
Fluoranthene	0.001	ND	105	2	94	105
Pyrene	0.001	ND	86	3	100	86
Benzo[a]anthracene	0.001	ND	109	2	90	109
Chrysene	0.001	ND	109	6	139	109
Benzo[b]fluoranthene	0.001	ND	97	1	109	97
Benzo[k]fluoranthene	0.001	ND	111	6	120	111
Benzo[a]pyrene	0.001	ND	107	5	112	107
Indeno[1,2,3-cd]pyrene	0.001	ND	111	2	127	111
Dibenz[a,h]anthracene	0.001	ND	100	1	153	100
Benzo[g,h,i]perylene	0.001	ND	103	2	118	103

ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	87
2-Fluorobiphenyl SURR	91
Terphenyl-d14 SURR	94

METHODS: EPA SW 846-8270, 3510.

Director, Dr. Blair Leftwich — DATE 4/29/96

Director, Dr. Bruce McDonell

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

May 01, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 04/25/96
Analysis Date: 04/25/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

FIELD CODE: MW - 1
TA#: T51468

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	253*	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

ECO-LOGICAL ENVIRONMENTAL
Project No: 279-512
Project Location: Hobbs, NM
Project Name: Hobbs Gas Plant

FIELD CODE: MW - 1
TA#: T51468

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	35	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2

SURROGATES	**% RECOVERY**
Dibromofluoromethane	109
Toluene-d8	109
4-Bromofluorobenzene	102

***NOTE: Estimated concentration. Response over standard range.**

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

5-1-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 25, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 04/23/96
Analysis Date: 04/23/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	Field Code	TRPHC (mg/L)	MTBE (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P,O XYLENE (mg/L)	TOTAL BTEX (mg/L)
T51468	MW - 1	<0.200	<0.001	0.305	<0.001	0.002	0.032	0.339
QC	Quality Control	103.500	0.096	0.0102	0.103	0.100	0.193	
Reporting Limit		<0.200	0.001	0.001	0.001	0.001	0.001	
RPD		1	15	2	2	2	4	
% Extraction Accuracy		84	108	104	105	102	98	
% Instrument Accuracy		104	96	102	103	100	97	

METHODS: EPA SW 846-8020, 5030; EPA 418.1.
MTBE/BTEX SPIKE AND QC: 0.100 mg/L MTBE/BTEX.
TRPHC SPIKE: 8.500 mg/L TRPHC. TRPHC QC: 100.000 mg/L TRPHC.

BB

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-25-96

Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 29, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Extraction Date: 04/23/96
Analysis Date: 04/25/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TOTAL METALS (mg/L)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
T51468	MW - 1	<0.1	<0.1	<0.02	<0.05	<0.1	<0.01	<0.2	<0.001
QC	Quality Control	2.26	1.58	1.8	1.75	1.7	2.11	1.75	0.0051
Reporting Limit		0.1	0.1	0.02	0.05	0.1	0.01	0.2	0.001
RPD		0	0	2	0	1	1	2	0
% Extraction Accuracy		107	77	78	82	109	85	98	98
% Instrument Accuracy		113	79	90	88	85	105	88	102

METHODS: EPA SW 846-3015, 6010, 7470.
CHEMISTS: As,Se,Cr,Cd,Pb,Ag,Ba: RR Hg: RC
TOTAL METALS SPIKE: 8.0 mg/L As, Se; 0.2 mg/L Cd, Ag; 0.8 mg/L Cr; 2.0 mg/L Pb; 30.0 mg/L Ba; 0.0050 mg/L H
TOTAL METALS QC: 2.0 mg/L As, Se, Cd, Cr, Pb, Ag, Ba; 0.0050 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-29-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 29, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 04/23/96
Analysis Date: 04/25/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	Field Code	POTASSIUM (mg/L)	MAGNESIUM (mg/L)	CALCIUM (mg/L)	SODIUM (mg/L)
T51468	MW - 1	7.1	23.8	148	82.5
QC	Quality Control	23.75	1.57	1.85	0.51
Reporting Limit		0.3	0.01	0.01	0.4
RPD		1	1	0	1
% Extraction Accuracy		118	91	88	88
% Instrument Accuracy		119	79	93	99

METHODS: EPA 200.7.
CHEMIST: RR
SPIKE: 100.0 mg/L POTASSIUM, MAGNESIUM, CALCIUM, SODIUM.
QC: 20.0 mg/L POTASSIUM; 2.0 mg/L MAGNESIUM, SODIUM, CALCIUM.

BS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-29-96

Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
ECO-LOGICAL ENVIRONMENTAL
Attention: Carrie Eick
2200 Market Street
Midland, TX 79703

April 29, 1996
Receiving Date: 04/23/96
Sample Type: Water
Project No: 279-512
Project Location: Hobbs, NM

Prep Date: 04/23/96
Analysis Date: 04/23/96
Sampling Date: 04/20/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Hobbs Gas Plant

TA#	FIELD CODE	(NO3-NO2)-N (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L as CaCo3) HCO3	CO3
T51468	MW - 1	2.6	756	25	0.4	67	670	0
QC	Quality Control	1.01	---	494	0.91	10.0	---	---
RPD		4	0	1	13	2		
% Extraction Accuracy		111	---	100	85	83	---	---
% Instrument Accuracy		100	---	99	95	103	---	---
REPORTING LIMIT		0.01	---	0.5	0.1	1	0	0

METHODS: EPA 353.3, 160.1, 375.4, 310.1, 340.2; 4500 Cl-B.
CHEMISTS: (NO3-NO2)-N: JW; TDS, CHLORIDE, SULFATE: MS; FLUORIDE: MS/BD; ALKALINITY: JT
SPIKE: 1.33 mg/L (NO3-NO2)-N; 500 mg/L CHLORIDE; 1.0 mg/L FLUORIDE; 10.0 mg/L SULFATE.
QC: 1.0 mg/L (NO3-NO2)-N; 500 mg/L CHLORIDE; 1.0 mg/L FLUORIDE; 10.0 mg/L SULFATE.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-29-96
Date

51468

Faxed 4-23

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CARRIE EICK
Phone #: 915 520 7535
FAX #: 915 520 7737
Company Name & Address: Ecological 2200 Market St Midland TX 79703
Project #: 279-512
Project Name: Hobbs Gas Plant
Project Location: HOBBS, NM
Sampler Signature: Carrie E Eick

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
51468	MW-1	2	VOA	X				Y		X		4/20/96	10:45
	MW-1	2	VOA										
	MW-1	1	500						X				
	MW-1	1	1L										
	MW-1	1	1L										
	MW-1	1	1L										

ANALYSIS REQUEST

BTEX 8020	TPH 418.1	Total Metals As Ba Cd Cr Pb Hg Se 6010	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	8240 / 8260	8270	PAH 8100 8270	Halogenated Hydrocarbons 8240	Major Cations & Anions 6010	TDS
X												
	X	X							X	X		
											X	
												X

SPECIAL HANDLING

Turn around # of days	Fax ASAP	Hold
	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Carrie Eick	4/22/96	4:50 pm	Helen Shelton	4/22/96	4:50 PM
Helen Shelton	4/22/96	7:00 PM			

Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			M Hays	4-23-96	10:50

REMARKS: Need both 8240 and 8020 per CE 4-23-96 mc
1144A
TDH
Cl F SO4 NO3 CO3 HCO3 OH
Na Ca Mg K

Shipped Greyhound

CF 8 samples - HS