

# EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

RISK  
TPH-BTEX

Heath Gas Com F #1  
Meter/Line ID – 72505

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## SITE DETAILS

|                          |         |                            |         |
|--------------------------|---------|----------------------------|---------|
| Legals - Twn: 29N        | Rng: 9W | Sec: 8                     | Unit: E |
| NMOCD Hazard Ranking: 10 |         | Land Type: Fee             |         |
| Operator: Amoco          |         | Pit Closure Date: 05/18/94 |         |

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## RATIONALE FOR RISK-BASED CLOSURE

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The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A Phase I excavation was conducted on May 18, 1994, to 12 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the test pit. Approximately 40 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 464 ppm; laboratory analysis indicated a benzene concentration of <1.2 mg/kg, a total BTEX concentration of 202 mg/kg, and a TPH concentration of 5000 mg/kg. TPH and total BTEX were above required remediation levels for the Hazard Ranking Score.

On June 22, 1995, a Phase II borehole was conducted to 18 feet below ground surface where bedrock was encountered. Groundwater was not encountered in the borehole. The borehole was grouted to the surface in a manner to direct surface runoff away from the pit area.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over six years.
- The pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the excavations or borehole.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Bedrock was encountered at 18 feet below ground surface; consequently, impact to groundwater is unlikely.
- Excavated material has been removed from the pit eliminating potential direct contact with livestock and the public.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- The pit was excavated to the practical extent of the equipment, according to EPNG's pit closure plan.

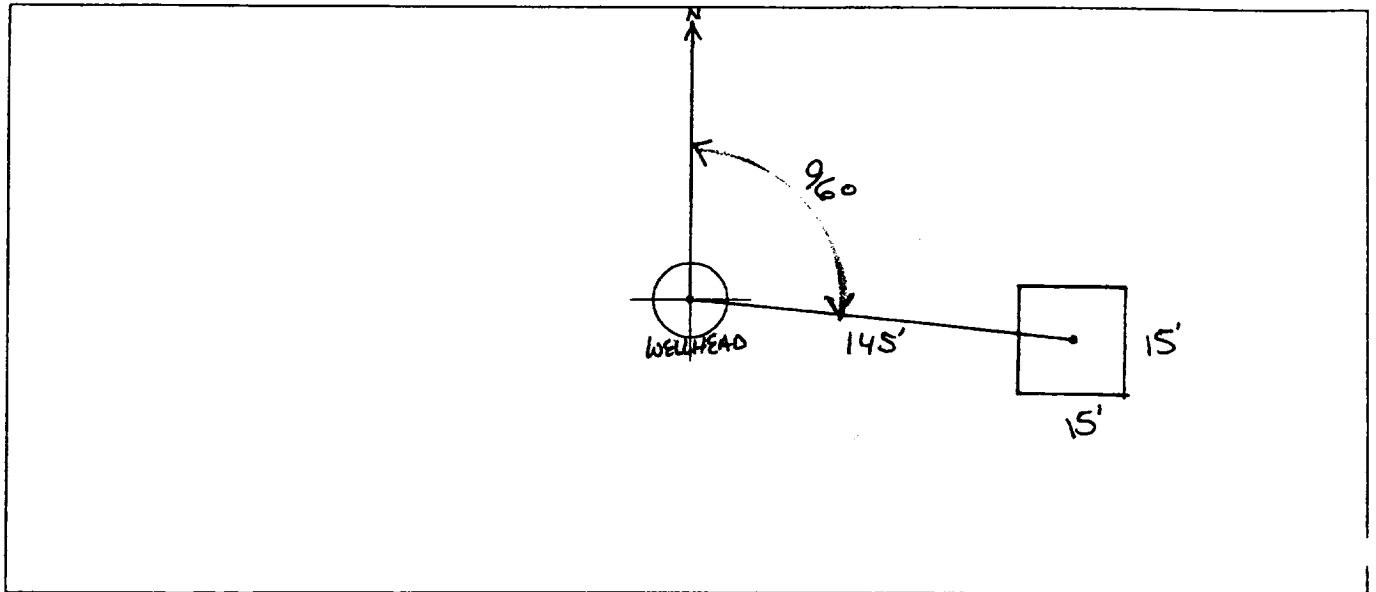
# FIELD PIT SITE ASSESSMENT FORM

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL         | <p>Meter: <u>72505</u> Location: <u>HEATH GAS com F #1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>8</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5.7.94</u> Area: <u>10</u> Run: <u>53</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| SITE ASSESSMENT | <p><b>NMOCD Zone:</b><br/>(From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1)<br/>Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input type="checkbox"/> (1)<br/>State <input type="checkbox"/> (2)<br/>Fee <input checked="" type="checkbox"/> (3)<br/>Indian _____</p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)<br/>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)<br/>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b><br/>Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)<br/>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)<br/>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)<br/><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> POINTS</p> |
| REMARKS         | <p>Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON A HILL ABOVE SAN JUAN RIVER. POOLINE AND TOPO CONFIRMED LOCATION TO BE INSIDE THE U.Z.</u></p> <p style="text-align: right;"><u>DIG &amp; HAUL</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

# ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 96° Footage from Wellhead 145'  
 b) Length : 15' Width : 15' Depth : 3'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

TOOK PICTURES AT 12:05 P.M.

END DUMP

Completed By:

Robert Thompson

Signature

5.7.94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL</b>            | <p>Meter: <u>72505</u> Location: <u>HEATH GAS Com F #1</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>8</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>5-18-94</u> Area: <u>10</u> Run: <u>53</u></p>                                                                                                                                                                                                                                       |
| <b>FIELD OBSERVATIONS</b> | <p>Sample Number(s): <u>KP#58</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>464</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>                                                                                                                                                                            |
| <b>CLOSURE</b>            | <p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>40</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>5-18-94</u> Pit Closed By: <u>B.E.I</u></p> |
| <b>REMARKS</b>            | <p>Remarks : <u>Some Line marker's Pit is Dry dug down</u><br/> <u>4' soil Turned Dark Brown . smells Bad. 12' Soil still</u><br/> <u>DARK Brown . And smell's</u></p>                                                                                                                                                                                                                                                                                                                                      |
|                           | <p>Signature of Specialist: <u>Kelly Padilla</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

|                            | Field ID | Lab ID            |
|----------------------------|----------|-------------------|
| SAMPLE NUMBER:             | KP58     | 945218            |
| MTR CODE   SITE NAME:      | 72505    | N/A               |
| SAMPLE DATE   TIME (Hrs):  | 5-18-94  | 0915              |
| SAMPLED BY:                | N/A      |                   |
| DATE OF TPH EXT.   ANAL.:  | 5-19-94  | 5/19/94           |
| DATE OF BTEX EXT.   ANAL.: | 5/23/94  | 5/26/94           |
| TYPE   DESCRIPTION:        | VC       | Brown sand & clay |

REMARKS:

RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | 41.2   | MG/KG | 50         |   |      |       |
| TOLUENE        | 20     | MG/KG | 50         |   |      |       |
| ETHYL BENZENE  | 41.2   | MG/KG | 50         |   |      |       |
| TOTAL XYLENES  | 180    | MG/KG | 50         |   |      |       |
| TOTAL BTEX     | 202    | MG/KG |            |   |      |       |
| TPH (418.1)    | 5000   | MG/KG |            |   | 2.03 | 28    |
| HEADSPACE PID  | 464    | PPM   |            |   |      |       |
| PERCENT SOLIDS | 86.3   | %     |            |   |      |       |

- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 -

The Surrogate Recovery was at N/A % for this sample All QA/QC was acceptable.

NOTE:

ATI results attached. Surrogate recovery not obtainable due to sampled dilution.

DF = Dilution Factor Used

Approved By:

*John Smith*

Date:

7/14/94

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405389  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

| SAMPLE ID. #  | CLIENT I.D. | MATRIX | DATE SAMPLED | DATE EXTRACTED | DATE ANALYZED | DIL. FACTOR |
|---------------|-------------|--------|--------------|----------------|---------------|-------------|
| 10            | 945201      | NON-AQ | 05/17/94     | 05/23/94       | 05/26/94      | 20          |
| 11            | 945217      | NON-AQ | 05/17/94     | 05/23/94       | 05/26/94      | 50          |
| 12            | 945218      | NON-AQ | 05/18/94     | 05/23/94       | 05/26/94      | 50          |
| PARAMETER     |             |        | UNITS        | 10             | 11            | 12          |
| BENZENE       |             |        | MG/KG        | <0.50          | 3.9           | <1.2        |
| TOLUENE       |             |        | MG/KG        | 26             | 140           | 20          |
| HYLBENZENE    |             |        | MG/KG        | 9.3            | <1.2          | <1.2        |
| TOTAL XYLENES |             |        | MG/KG        | 150            | 210           | 180         |

## SURROGATE:

BROMOFLUOROBENZENE (%) 67 NA\* NA\*

\*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION



Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107  
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **405389**

June 2, 1994

El Paso Natural Gas Company  
P.O. Box 4990  
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/20/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

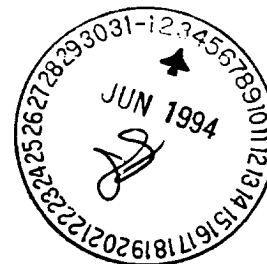
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jd

Enclosure





## CHAIN OF CUSTODY RECORD

| PROJECT NUMBER                                                                       |         | PROJECT NAME                |        | REQUESTED ANALYSIS                                                                                        |     | REMARKS      |          |
|--------------------------------------------------------------------------------------|---------|-----------------------------|--------|-----------------------------------------------------------------------------------------------------------|-----|--------------|----------|
| 11957                                                                                |         | Pit Closure Project # 24324 |        |                                                                                                           |     |              |          |
| SAMPLERS: (Signature)                                                                |         | DATE:                       |        |                                                                                                           |     |              |          |
| Kelly Padilla                                                                        |         | 5-18-94                     |        |                                                                                                           |     |              |          |
| LAB ID                                                                               | DATE    | TIME                        | MATRIX | SAMPLE NUMBER                                                                                             | TPH | BTEX         | EPA 8020 |
| 5218                                                                                 | 5-18-94 | 0915                        |        | KP # 58                                                                                                   | ✓   | ✓            | 52       |
| <div> <div>RECEIVED BY: (Signature)</div> <div>RECEIVED BY: (Signature)</div> </div> |         |                             |        |                                                                                                           |     |              |          |
| RECEIVED BY: (Signature)                                                             |         | DATE/TIME                   |        | RECEIVED BY: (Signature)                                                                                  |     | DATE/TIME    |          |
| Kelly Padilla                                                                        |         | 5-18-94 1500                |        | Brenda Rice                                                                                               |     | 5/19/94 0915 |          |
| RECEIVED BY: (Signature)                                                             |         | DATE/TIME                   |        | RECEIVED BY: (Signature)                                                                                  |     | DATE/TIME    |          |
|                                                                                      |         |                             |        |                                                                                                           |     |              |          |
| REQUESTED TURNAROUND TIME:                                                           |         |                             |        | RESULTS & INVOICES TO:                                                                                    |     |              |          |
| <input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH                       |         |                             |        | FIELD SERVICES LABORATORY<br>EL PASO NATURAL GAS COMPANY<br>P.O. BOX 4990<br>FARMINGTON, NEW MEXICO 87499 |     |              |          |
| CARRIER CO.                                                                          |         |                             |        | CHARGE CODE                                                                                               |     |              |          |
| BILL NO.:                                                                            |         |                             |        | 505-599-2144                                                                                              |     |              |          |



# RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1  
 Well # 1 of 1  
 Page 1

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(606) 326-2262 FAX (606) 326-2388

Project Name EPNG Pits  
 Project Number 14509 Phase 601  
 Project Location Heath Gas Com F#1, 72505

Elevation \_\_\_\_\_  
 Borehole Location \_\_\_\_\_  
 GWL Depth \_\_\_\_\_  
 Logged By S.Kelly  
 Drilled By K. Padilla  
 Date/Time Started 6/22/95, 1240  
 Date/Time Completed 6/22/95, 1310

Well Logged By S.Kelly  
 Personnel On-Site K. Padilla, F. Rivera, J. Tipton  
 Contractors On-Site \_\_\_\_\_  
 Client Personnel On-Site \_\_\_\_\_  
 Drilling Method 4 1/4" ID HSA  
 Air Monitoring Method CGI, PID

| Depth<br>(Feet) | Sample<br>Number | Sample<br>Interval | Sample<br>Type &<br>Recovery<br>(inches) | Sample Description<br>Classification System: USCS                                                    | USCS<br>Symbol | Depth<br>Lithology<br>Change<br>(feet) | Air Monitoring<br>Units: NDU<br>BZ BH S |  |  | Drilling Conditions<br>& Blow Counts |
|-----------------|------------------|--------------------|------------------------------------------|------------------------------------------------------------------------------------------------------|----------------|----------------------------------------|-----------------------------------------|--|--|--------------------------------------|
| 0               |                  |                    |                                          | Backfill to 12'                                                                                      |                |                                        |                                         |  |  |                                      |
| 5               |                  |                    |                                          |                                                                                                      |                |                                        |                                         |  |  |                                      |
| 10              |                  |                    |                                          |                                                                                                      |                |                                        |                                         |  |  |                                      |
| 15              | 1                | 15-17              | .41                                      | SK6/2245<br>silty CLAY, dk d brown, non plastic, stiff, damp.                                        |                | 17.5                                   |                                         |  |  | 203 1254<br>66                       |
| 20              | 2                | 18-20              | 1.0'                                     | SAND, brown, med sand, trace silt, damp, med dense                                                   |                | 19.5                                   |                                         |  |  | 76 1305<br>635                       |
| 25              |                  | 20-22              |                                          | sandy GRAVEL, light gray, 20-30% fine to med sand, med., angular and rounded gravel, med. dense, dry |                |                                        |                                         |  |  |                                      |
| 30              |                  |                    |                                          | BOH- 20'                                                                                             |                |                                        |                                         |  |  |                                      |
| 35              |                  |                    |                                          |                                                                                                      |                |                                        |                                         |  |  |                                      |
| 40              |                  |                    |                                          |                                                                                                      |                |                                        |                                         |  |  |                                      |

Comments: Refusal of augers at 18' due to cobble. Took split spoon from 18' to 20'. Did not take sample due to high heads, space readings at refusal.  
AK 6/22/95  
 Geologist Signature Sarah Kelly

TABLE 1

## RECON® Soil-Gas and Groundwater Investigation

El Paso Natural Gas Company Sites  
San Juan Basin  
Farmington, New Mexico

| PIT LOCATION NAME                 | METER NUMBER | SAMPLE IDENTIFICATION | PREVIOUS INVESTIGATION                                 |
|-----------------------------------|--------------|-----------------------|--------------------------------------------------------|
| RINCON No. 48                     | 71025        | RINCON48              | Phase II HSA refusal at 23' bls                        |
| RINCON No. 10                     | 70645        | RINCON10              | Phase II HSA refusal at 25' bls                        |
| RINCON No. 70                     | 71580        | RINCON70              | Phase II HSA refusal at 32' bls                        |
| CHACON AMIGOS No. 2               | 93370        | CA2                   | Phase II HSA refusal at 30' bls                        |
| JAQUEZ A No. 1A                   | 89619        | JAC1A                 | Phase II HSA refusal at 18' bls                        |
| FLORANCE No. 107 PC               | 87017        | FLORANCE107           | Phase II HSA refusal at 29.5' bls                      |
| WALKER COM No. 1                  | 75879        | WALKERCOM1            | Phase II HSA refusal at 27.5' bls                      |
| HEATH F1                          | 72505        | HEATHF1               | Phase II HSA refusal at 18' bls                        |
| DAY No. 3                         | 90847        | DAY3                  | Phase II HSA refusal at 30' bls                        |
| SULLIVAN No. 1                    | 70760        | SULLIVAN1             | Phase II HSA refusal at 23' bls                        |
| MARCOTTE 1A                       | 89903        | MARCOTTE1A            | Phase II HSA refusal at 18' bls                        |
| TRUJILLO No.1 PC                  | 72089        | TRUJILLO1PC           | GW encountered in phase I excavation                   |
| FEDERAL 6 No. 32                  | 94768        | FEDERAL6No32          | Phase II soil boring indicated GW at less than 20' bls |
| CANYON LARGO 304                  | 93788        | C-LARGO304            | Phase II soil boring indicated GW at less than 20' bls |
| CANYON LARGO 298                  | 93590        | C-LARGO298            | Phase II soil boring indicated GW at less than 20' bls |
| CANYON LARGO 302                  | 93793        | C-LARGO302            | Phase II soil boring indicated GW at less than 20' bls |
| K-17 LINE DRIP                    | N/A          | K17LINEDRIP           | Phase II soil boring indicated GW at less than 20' bls |
| HOWELL No. 3 LINE DRIP            | N/A          | HOWELL#3LD            | Phase II soil boring indicated GW at less than 20' bls |
| LATERAL 2C-1 LINE DRIP            | N/A          | LATERAL2C-1           | Phase II HSA refusal at 42' bls                        |
| CUTLER 2                          | 74289        | CUTLER2               | Phase II soil boring indicated GW at less than 20' bls |
| LATERAL 2C-22 No. 3 LINE DRIP     | N/A          | L2C-22No3LD           | Phase II soil boring indicated GW at less than 20' bls |
| NICKELS No. 1 DK                  | 73034        | NICKELS#1DK           | Phase II soil boring indicated GW at less than 20' bls |
| McGRATH No. 1                     | 70862        | MACGRATH#1            | Phase II soil boring indicated GW at less than 20' bls |
| FLORA VISTA #1                    | 75718        | FLORAVISTA1           | Phase II soil boring indicated GW at less than 20' bls |
| MARSHALL B-1J                     | 89039        | MB1J                  | Phase II soil boring indicated GW at less than 20' bls |
| ARGO No. 1E                       | 93780        | ARGO#1E               | Phase II soil boring indicated GW at less than 20' bls |
| TRUNK D LINE DRIP                 | N/A          | TDLD                  | Phase II soil boring indicated GW at less than 20' bls |
| K-31 LINE DRIP                    | N/A          | K31LINEDRIP           | Phase II soil boring indicated GW at less than 20' bls |
| MILES FEDERAL No. 1E              | 94495        | MILES#1E-01           | Phase II soil boring indicated GW at less than 20' bls |
| ELLIOT GAS COM No. M1             | 73147        | EGC#M1                | Phase II HSA refusal at 22' bls                        |
| ELLIOT GAS COM No. S1             | 75265        | EGC#S1                | Phase II HSA refusal at 20' bls                        |
| LINDRITH B24                      | 94967        | LINDRITHB24           | Phase II soil boring indicated GW at less than 20' bls |
| LINDRITH 23                       | 74692        | LINDRITH23            | Phase II soil boring indicated GW at less than 20' bls |
| CANEPLA GAS COM No. 1             | 70714        | CGC#1                 | Phase II HSA refusal at 18.5' bls                      |
| OHIO C GVT #3                     | 72890        | OCG3                  | GW encountered during Phase II excavation              |
| C3 LOOP LINE DRIP                 | N/A          | C3LLD                 | No GW encountered in Phase I excavation                |
| SAN JUAN UNIT 28-6 #79 PM         | 72265        | SJU28679PM            | Phase II soil boring indicated GW at less than 20' bls |
| HAMMOND 41A                       | 89894        | H41A                  | Phase II soil boring indicated GW at less than 20' bls |
| HSA = Hollow-stem auger drill rig |              |                       |                                                        |
| bls = below land surface          |              |                       |                                                        |
| GW = groundwater                  |              |                       |                                                        |

## RECON® Soil-Gas and Groundwater Investigation

El Paso Natural Gas Company Sites  
San Juan Basin  
Farmington, New Mexico

| Location Name                 | U-S-T-R   | Meter |         | Sample I.D.  | Sample Matrix            | No. of      |         | No. of      |         | Depth | Comments                                |
|-------------------------------|-----------|-------|---------|--------------|--------------------------|-------------|---------|-------------|---------|-------|-----------------------------------------|
|                               |           | No.   | U-S-T-R |              |                          | Probe Holes | Samples | Probe Holes | Samples |       |                                         |
| Rincon No. 48                 | N30-27-6  | 71025 |         | RINCON48     | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Rincon No. 10                 | C36-27-7  | 70645 |         | RINCON10     | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Rincon No. 70                 | A27-27-7  | 71580 |         | RINCON70     | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Chacon Amigos No. 2           | I2-22-3   | 93370 |         | CA2          | Soil-gas                 | 4           | 16      | 4           | 16      | 3-12  | Benzene above action levels             |
| Jaquez A No. 1A               | D5-29-9   | 89619 |         | JAC1A        | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Florance No. 107 PC           | E8-30-9   | 87017 |         | FLORANCE107  | Soil-gas                 | 6           | 24      | 6           | 24      | 3-12  | BTEX below action levels                |
| Walker Corn No. 1             | P25-30-9  | 75879 |         | WALKERCOM1   | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Heath F1                      | E8-29-9   | 72505 |         | HEATHF1      | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Day No. 3                     | A17-29-8  | 90847 |         | DAY3         | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Sullivan No. 1                | M22-32-10 | 70760 |         | SULLIVAN1    | Soil-gas                 | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Marcotte 1A                   | I5-31-10  | 89903 |         | MARCOTTE1A   | Soil-gas                 | 15          | 18      | 15          | 18      | 4-6   | Benzene above action level and offsite  |
| Trujillo No. 1 PC             | M21-29-10 | 72089 |         | TRUJILLO1PC  | Groundwater              | 6           | 32      | 6           | 32      | 3-30  | BTEX above action levels                |
| Federal 6 No. 32              | G6-26-7   | 94768 |         | FEDERAL6No32 | Soil-gas and Groundwater | 6           | 15      | 6           | 15      | 3-21  | BTEX above action levels                |
| Canyon Largo 304              | C11-24-6  | 93788 |         | C-LARGO304   | Soil-gas and Groundwater | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Canyon Largo 298              | A3-24-6   | 93590 |         | C-LARGO298   | Soil-gas                 | 8           | 17      | 8           | 17      | 3-24  | BTEX below action levels                |
| Canyon Largo 302              | J3-24-6   | 93793 |         | C-LARGO302   | Soil-gas and Groundwater | 3           | 3       | 3           | 3       | 18-27 | BTEX below action levels                |
| K-17 Line Drip                | C26-27-8  | N/A   |         | K17LINEDRIP  | Groundwater              | 3           | 3       | 3           | 3       | 21-27 | BTEX below action levels                |
| Howell No. 3 Line Drip        | C3-27-8   | N/A   |         | HOWELL#3LD   | Groundwater              | 3           | 12      | 3           | 12      | 3-12  | BTEX below action levels                |
| Lateral 2C-1 Line Drip        | P36-27-11 | N/A   |         | LATERAL2C-1  | Soil-gas                 | 4           | 4       | 4           | 4       | 24-27 | BTEX below action levels                |
| Cutler 2                      | A14-24-6  | 93793 |         | CUTLER2      | Groundwater              | 3           | 3       | 3           | 3       | 18-24 | BTEX below action levels                |
| Lateral 2C-22 No. 3 Line Drip | G13-24-6  | N/A   |         | L2C-22No3LD  | Groundwater              | 5           | 5       | 5           | 5       | 12-15 | Benzene above action levels             |
| Nickels No. 1 DK              | K11-31-13 | 73034 |         | NICKELS#1DK  | Groundwater              | 3           | 3       | 3           | 3       | 9     | BTEX below action levels                |
| McGrath No. 1                 | F7-31-11  | 70862 |         | MACGRATH#1   | Soil-gas                 | 3           | 3       | 3           | 3       | 24-30 | BTEX below action levels                |
| Flora Vista #1                | F22-30-12 | 75718 |         | FLORAVISTA1  | Groundwater              | 3           | 3       | 3           | 3       | 8-20  | BTEX below action levels                |
| Marshall B-1J                 | O14-27-9  | 89039 |         | MB1J         | Soil-gas                 | 3           | 3       | 3           | 3       | 24-30 | BTEX below action levels                |
| Argo No. 1E                   | N18-27-10 | 93780 |         | ARGO#1E      | Groundwater              | 3           | 3       | 3           | 3       | 15-24 | BTEX below action levels                |
| Trunk D Line Drip             | E20-28-8  | N/A   |         | TDLD         | Groundwater              | 3           | 3       | 3           | 3       | 21-24 | Benzene above action levels and offsite |
| K-31 Line Drip                | N16-25-6  | N/A   |         | K31LINEDRIP  | Groundwater              | 14          | 14      | 14          | 14      | 21-24 | Benzene above action levels and offsite |

## RECON® Soil-Gas and Groundwater Investigation

El Paso Natural Gas Company Sites  
San Juan Basin  
Farmington, New Mexico

| Location Name                                       | U-S-T-R   | Meter No. | Sample I.D. | Sample Matrix            | No. of      |         | Depth | Comments                                |
|-----------------------------------------------------|-----------|-----------|-------------|--------------------------|-------------|---------|-------|-----------------------------------------|
|                                                     |           |           |             |                          | Probe Holes | Samples |       |                                         |
| Miles Federal No. 1E                                | N5-28-7   | 94495     | MILES#1E    | Groundwater              | 3           | 3       | 24-30 | BTEX below action levels                |
| Elliot Gas Com No. M1                               | I33-30-9  | 73147     | EGC#M1      | Soil-gas                 | 3           | 12      | 3-12  | BTEX below action levels                |
| Elliot Gas Com No. S1                               | M33-30-9  | 75265     | EGC#S1      | Soil-gas                 | 3           | 12      | 3-12  | BTEX below action levels                |
| Lindrith B24                                        | N9-24-3   | 94967     | LINDRITHB24 | Groundwater              | 3           | 3       | 21-27 | Benzene above action levels and offsite |
| Lindrith B23                                        | D9-24-3   | 74691     | LINDRITHB23 | Groundwater              | 3           | 3       | 21-27 | BTEX below action levels                |
| Caneple Gas Com No. 1                               | M18-31-10 | 70714     | CGC#1       | Soil-gas                 | 3           | 12      | 3-12  | BTEX below action levels                |
| Ohio C Gvt #3                                       | P26-28-11 | 72890     | OCG3        | Soil-gas and Groundwater | 3           | 3       | 9-17  | Benzene above action levels and offsite |
| C3 Loop Line Drip                                   | D28-29-9  | N/A       | C3LLD       | Soil-gas                 | 3           | 12      | 3-12  | BTEX below action levels                |
| San Juan Unit 28-6 #79 PM                           | M11-27-6  | 722654    | SJU28679PM  | Groundwater              | 7           | 7       | 30-36 | BTEX above action levels                |
| Hammond 41A                                         | O25-27-8  | 89894     | H41A        | Groundwater              | 9           | 9       | 15-23 | BTEX above action levels                |
| U-S-T-R = Unit-Section-Township-Range               |           |           |             |                          |             |         |       |                                         |
| BTEX = benzene, toluene, ethyl benzene, and xylenes |           |           |             |                          |             |         |       |                                         |

# PHILIP

Sample Analysis Worksheet

| Sample I.D.    | Probe Hole Number | Depth (Feet) | Analysis Time | Analysis Date | Injection Vol. (μL) | Multiplier | VAC in. Hg | Comments             |
|----------------|-------------------|--------------|---------------|---------------|---------------------|------------|------------|----------------------|
| WALKERCOM1-12- | PH-03             | 12           | 1019          | 11/6/95       | 500                 | 0.2        | 8          | QC - Duplicate       |
| Blank-23       | N/A               | N/A          | 1028          | 11/6/95       | 500                 | 0.2        | N/A        | QC - System Blank    |
| QCRT-07        | N/A               | N/A          | 1038          | 11/6/95       | 100                 | 1          | N/A        | QC - Retention Times |
| HEATHF1-01     | PH-01             | 3            | 1104          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| HEATHF1-02     | PH-01             | 6            | 1117          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| HEATHF1-03     | PH-01             | 9            | 1136          | 11/6/95       | 500                 | 0.2        | 9          | Soil-gas             |
| HEATHF1-04     | PH-01             | 12           | 1159          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| HEATHF1-05     | PH-02             | 3            | 1209          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| HEATHF1-06     | PH-02             | 6            | 1220          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| HEATHF1-07     | PH-02             | 9            | 1230          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| HEATHF1-08     | PH-02             | 12           | 1240          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| HEATHF1-09     | PH-03             | 3            | 1250          | 11/6/95       | 500                 | 0.2        | 9          | Soil-gas             |
| HEATHF1-10     | PH-03             | 6            | 1306          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| HEATHF1-11     | PH-03             | 9            | 1316          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| HEATHF1-12     | PH-03             | 12           | 1327          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| HEATHF1-12-D   | PH-03             | 12           | 1336          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| Blank-24       | N/A               | N/A          | 1356          | 11/6/95       | 500                 | 0.2        | N/A        | QC - Duplicate       |
| QCRT-08        | N/A               | N/A          | 1421          | 11/6/95       | 100                 | 1          | N/A        | QC - System Blank    |
| DAY3-01        | PH-01             | 3            | 1440          | 11/6/95       | 500                 | 0.2        | 9          | Soil-gas             |
| DAY3-02        | PH-01             | 6            | 1455          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| DAY3-03        | PH-01             | 9            | 1505          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| DAY3-04        | PH-01             | 12           | 1613          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| DAY3-05        | PH-02             | 3            | 1517          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| DAY3-06        | PH-02             | 6            | 1529          | 11/6/95       | 500                 | 0.2        | 9          | Soil-gas             |
| DAY3-07        | PH-02             | 9            | 1547          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |
| DAY3-08        | PH-02             | 12           | 1603          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| DAY3-09        | PH-03             | 3            | 1623          | 11/6/95       | 500                 | 0.2        | 8          | Soil-gas             |
| DAY3-10        | PH-03             | 6            | 1634          | 11/6/95       | 500                 | 0.2        | 10         | Soil-gas             |

NA - not applicable  
QC - quality control  
D - duplicate analysis

# PHILIP

## RECON SAMPLE ANALYSIS

### DATA SUMMARY TABLE

Project: 13947

| Sample I.D.     | Probe Hole Number | Depth (feet) | Benzene (ug/L) | Toluene (ug/L) | Ethyl benzene (ug/L) | m+p-Xylene (ug/L) | o-Xylene (ug/L) | Comments             |
|-----------------|-------------------|--------------|----------------|----------------|----------------------|-------------------|-----------------|----------------------|
| WALKERCOM1-12-D | N/A               | 12           | ND(1)          | ND(1)          | <1                   | 3                 | <1              | QC - Duplicate       |
| Blank-23        | N/A               | N/A          | ND(1)          | ND(1)          | ND(1)                | ND(1)             | ND(1)           | QC - System Blank    |
| QCRT-07         | N/A               | N/A          | 204            | 154            | 119                  | 113               | 107             | QC - Retention Times |
| HEATHF1-01      | PH-01             | 3            | ND(1)          | ND(1)          | 1                    | 4                 | <1              | Soil-gas             |
| HEATHF1-02      | PH-01             | 6            | ND(1)          | ND(1)          | <1                   | 3                 | <1              | Soil-gas             |
| HEATHF1-03      | PH-01             | 9            | ND(1)          | ND(1)          | <1                   | 2                 | <1              | Soil-gas             |
| HEATHF1-04      | PH-01             | 12           | ND(1)          | ND(1)          | <1                   | 2                 | <1              | Soil-gas             |
| HEATHF1-05      | PH-02             | 3            | ND(1)          | ND(1)          | 1                    | 5                 | <1              | Soil-gas             |
| HEATHF1-06      | PH-02             | 6            | ND(1)          | ND(1)          | <1                   | 4                 | <1              | Soil-gas             |
| HEATHF1-07      | PH-02             | 9            | ND(1)          | ND(1)          | 1                    | 5                 | 1               | Soil-gas             |
| HEATHF1-08      | PH-02             | 12           | ND(1)          | ND(1)          | <1                   | 4                 | <1              | Soil-gas             |
| HEATHF1-09      | PH-03             | 3            | ND(1)          | ND(1)          | 3                    | 12                | 1               | Soil-gas             |
| HEATHF1-10      | PH-03             | 6            | ND(1)          | ND(1)          | 3                    | 12                | 3               | Soil-gas             |
| HEATHF1-11      | PH-03             | 9            | ND(1)          | ND(1)          | 2                    | 7                 | 1               | Soil-gas             |
| HEATHF1-12      | PH-03             | 12           | ND(1)          | ND(1)          | <1                   | 4                 | <1              | Soil-gas             |
| HEATHF1-12-D    | PH-03             | 12           | ND(1)          | ND(1)          | <1                   | 4                 | <1              | QC - Duplicate       |
| Blank-24        | N/A               | N/A          | ND(1)          | ND(1)          | ND(1)                | ND(1)             | ND(1)           | QC - System Blank    |
| QCRT-08         | N/A               | N/A          | 307            | 280            | 255                  | 251               | 248             | QC - Retention Times |
| DAY3-01         | PH-01             | 3            | ND(1)          | ND(1)          | 9                    | 32                | 6               | Soil-gas             |
| DAY3-02         | PH-01             | 6            | ND(1)          | ND(1)          | 7                    | 26                | 5               | Soil-gas             |
| DAY3-03         | PH-01             | 9            | ND(1)          | 2              | 6                    | 23                | 7               | Soil-gas             |
| DAY3-04         | PH-01             | 12           | 2              | 28             | 7                    | 25                | 8               | Soil-gas             |
| DAY3-05         | PH-02             | 3            | ND(1)          | ND(1)          | ND(1)                | ND(1)             | ND(1)           | Soil-gas             |
| DAY3-06         | PH-02             | 6            | ND(1)          | ND(1)          | ND(1)                | ND(1)             | ND(1)           | Soil-gas             |
| DAY3-07         | PH-02             | 9            | 48             | 39             | 34                   | 32                | 53              | Soil-gas             |
| DAY3-08         | PH-02             | 12           | 8              | 7              | 5                    | 6                 | 9               | Soil-gas             |
| DAY3-09         | PH-03             | 3            | ND(1)          | ND(1)          | ND(1)                | ND(1)             | ND(1)           | Soil-gas             |
| DAY3-10         | PH-03             | 6            | ND(1)          | ND(1)          | ND(1)                | 2                 | ND(1)           | Soil-gas             |

D = duplicate analysis.

QC = quality control.

ug/L = micrograms of compound detected per liter of soil vapor analyzed.

ND = not detected at the lower quantifiable limit indicated in parenthesis.

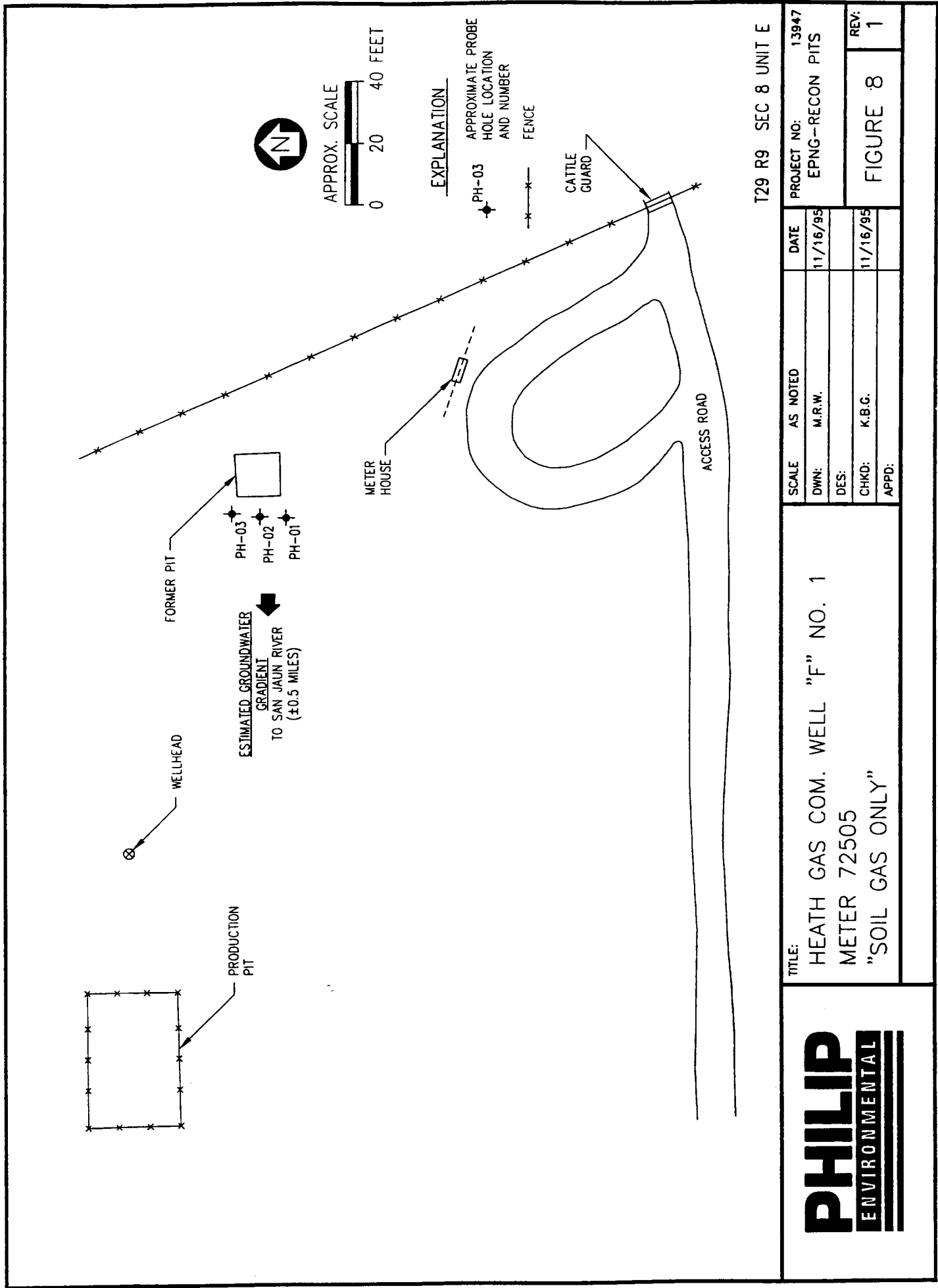
NA = not applicable.

QA Review:

Paul Anderson / KBG

Review Date:

1-31-96 AK 2/13/96



T29 R9 SEC 8 UNIT E

| SCALE | AS NOTED | DATE     | PROJECT NO:      |
|-------|----------|----------|------------------|
| DWN:  | M.R.W.   | 11/16/95 | 13947            |
| DES:  |          |          | EPNG--RECON PITS |
| CHKD: | K.B.G.   | 11/16/95 |                  |
| APPD: |          |          |                  |

|        |                                                                 |
|--------|-----------------------------------------------------------------|
| TITLE: | HEATH GAS COM. WELL "F" NO. 1<br>METER 72505<br>"SOIL GAS ONLY" |
|--------|-----------------------------------------------------------------|

**PHILIP**  
ENVIRONMENTAL

REV: 1  
FIGURE 8