

District III
P.O. Box 1980, Hobbs, NM
DEPUTY OIL & GAS INSPECTOR
District IV
P.O. Drawer DD, Artesia, NM 88221

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

District III
1000 Rio Brazos Rd. Aztec, NM 87410

FEB 28 1997

PIT REMEDIATION AND CLOSURE REPORT

RECEIVED
OCT 31 1996

OIL CON. DIV.
DIST. III

Operator: PNM Gas Services (Amoco) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Helen Jackson #1

Location: Unit A Sec. 34 T. 29 N R. 9 W County San Juan

Pit Type: Separator Dehydrator ☒ Other

Land Type: BLM ☒ State Fee Other

Pit Location: Pit dimensions: length 15 width 15 depth 3

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 120'

Direction from reference: 10 Degrees East North ☒
of ☒ West South

Depth to Ground Water:

(Vertical distance from contaminants to
seasonal high water elevation of ground
water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or, less than 1,000
feet from all other water sources)

Yes (20 points)
No (0 points) 0

Distance to Surface Water:

(Horizontal distance to perennial lakes,
ponds, rivers, streams, creeks, irrigation
canals and ditches)

Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 8/9/96 **Date Completed:** 8/9/96

Remediation Method: Excavation X **Approx. Cubic Yard** 222

(Check all appropriate sections) Landfarmed X **Amount Landfarmed (cubic yds)** 192

Other _____

Remediation Location: Onsite X Offsite _____
(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location: _____

General Description of Remedial Action:

Excavated contaminated soil to pit size of 20'x20'x15' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by plowing/disking until soil met regulatory levels.

Ground Water Encountered: No ✓ Yes _____ **Depth** _____

Final Pit Closure Sampling:

Sample Location 5 pt composite-4 side walls and center of pit bottom

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 13'

Sample date 8/9/96 **Sample time** 2:00:00 PM

Sample Results

Benzene (ppm) 0.0096

Total BTEX (ppm) 32.1075

Field headspace (ppm) _____

TPH 100.80 **Method** 8015A

Vertical Extent (ft) _____ **Risk Assessment form attached** Yes _____ No ✓

Ground Water Sample: Yes _____ No ✓ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

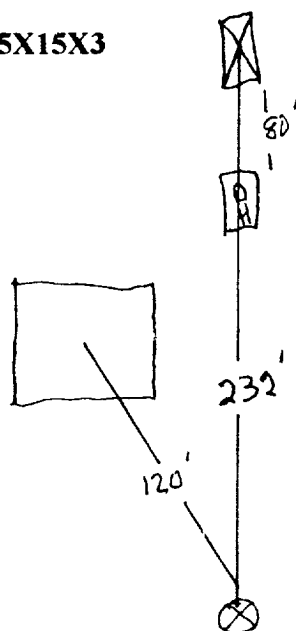
DATE October 25, 1996

SIGNATURE Maureen Gannon

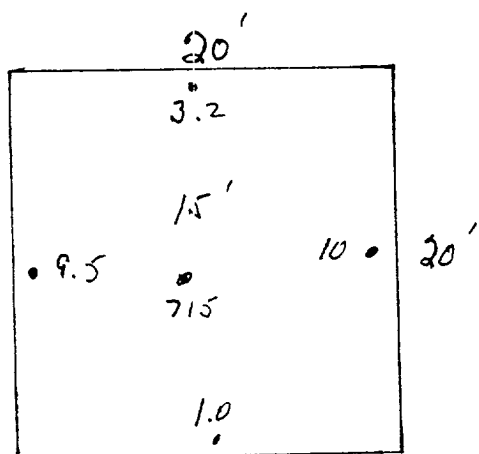
PRINTED NAME AND TITLE Maureen Gannon
Environmental Engineer

Helen Jackson #1
Amoco
Sec. 34, 29N, 9W

Pit dimensions at start: 15X15X3



Excavated pit dimensions: 20X20X15



OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *13-Aug-96*
COC No.: *4964*
Sample No. *11714*
Job No. *2-1000*

Project Name: ***PNM Gas Services - Helen Jackson #1***

Project Location: ***9608091400; 5pt. Composite***

Sampled by: GC Date: *9-Aug-96* Time: *14:00*

Analyzed by: DC Date: *13-Aug-96*

Sample Matrix: *Soil*

Laboratory Analysis

| <i>Parameter</i> | <i>Result</i> | <i>Unit of Measure</i> | <i>Detection Limit</i> | <i>Unit of Measure</i> |
|--|---------------|------------------------|------------------------|------------------------|
| <i>Diesel Range Organics (C10 - C28)</i> | 100.8 | mg/kg | 5.0 | mg/kg |

Quality Assurance Report

DRO QC No.: *0479-QC*

Calibration Check

| <i>Parameter</i> | <i>Method Blank</i> | <i>Unit of Measure</i> | <i>True Value</i> | <i>Analyzed Value</i> | <i>% Diff</i> | <i>Limit</i> |
|---------------------------------|---------------------|------------------------|-------------------|-----------------------|---------------|--------------|
| <i>Diesel Range (C10 - C28)</i> | < 5.0 | ppm | 100 | 97 | 2.7 | 15% |

Matrix Spike

| <i>Parameter</i> | <i>1- Percent Recovered</i> | <i>2 - Percent Recovered</i> | <i>Limit</i> | <i>%RSD</i> | <i>Limit</i> |
|-------------------------------|-----------------------------|------------------------------|--------------|-------------|--------------|
| <i>Diesel Range (C10-C28)</i> | 112 | 114 | (70-130) | 1 | 20% |

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*

Date: *8/13/96*

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *13-Aug-96*
COC No.: *4964*
Sample No.: *1714*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Helen Jackson #1*

Project Location: *9608091400; 5pt. Composite*

Sampled by: *GC* Date: *9-Aug-96* Time: *14:00*

Analyzed by: *DC* Date: *13-Aug-96*

Sample Matrix: *Soil*

Laboratory Analysis

| Parameter | Result | Unit of Measure | Detection Limit | Unit of Measure |
|--------------|---------|-----------------|-----------------|-----------------|
| Benzene | 9.6 | ug/kg | 0.2 | ug/kg |
| Toluene | 2275.8 | ug/kg | 0.2 | ug/kg |
| Ethylbenzene | 2214.0 | ug/kg | 0.2 | ug/kg |
| m,p-Xylene | 21752.8 | ug/kg | 0.2 | ug/kg |
| o-Xylene | 5855.3 | ug/kg | 0.2 | ug/kg |
| TOTAL | | 32107.5 | ug/kg | |

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *8/13/96*

Helen Jackson #1

9-10-96

Amoco

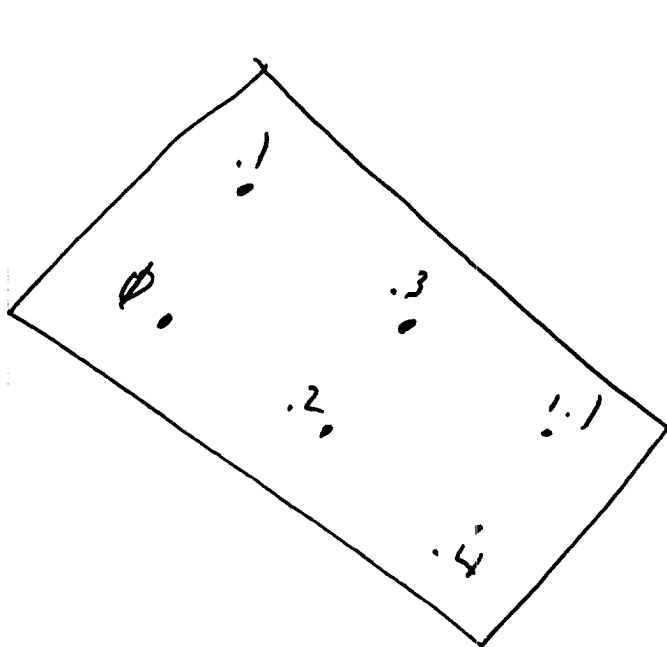
Sec. 34, 29N, 9W

Land Farm : On-location

Composite sample #1 9609101430

6 pl.

Soil vapor PID reading : 3.3 ppm



2"-12" depth
Sand

OFF: (505) 325-5667



LAB: (505) 325-1556

Diesel Range Organics

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *12-Sep-96*
COC No.: *5027*
Sample No.: *12104*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Helen Jackson #1 Landfarm*
Project Location: *9609101430; 6pt. Composite, 2"-12" depth*
Sampled by: *GC* Date: *10-Sep-96* Time: *14:30*
Analyzed by: *BV* Date: *12-Sep-96*
Sample Matrix: *Soil*

Laboratory Analysis

| <i>Parameter</i> | <i>Result</i> | <i>Unit of Measure</i> | <i>Detection Limit</i> | <i>Unit of Measure</i> |
|--|---------------|------------------------|------------------------|------------------------|
| <i>Diesel Range Organics (C10 - C28)</i> | <i>114.1</i> | <i>mg/kg</i> | <i>5.0</i> | <i>mg/kg</i> |

Quality Assurance Report

DRO QC No.: *0489-QC*

Calibration Check

| <i>Parameter</i> | <i>Method Blank</i> | <i>Unit of Measure</i> | <i>True Value</i> | <i>Analyzed Value</i> | <i>% Diff</i> | <i>Limit</i> |
|---------------------------------|---------------------|------------------------|-------------------|-----------------------|---------------|--------------|
| <i>Diesel Range (C10 - C28)</i> | <i><5.0</i> | <i>ppm</i> | <i>100</i> | <i>104</i> | <i>3.6</i> | <i>15%</i> |

Matrix Spike

| <i>Parameter</i> | <i>1 - Percent Recovered</i> | <i>2 - Percent Recovered</i> | <i>Limit</i> | <i>%RSD</i> | <i>Limit</i> |
|-------------------------------|------------------------------|------------------------------|-----------------|-------------|--------------|
| <i>Diesel Range (C10-C28)</i> | <i>96</i> | <i>95</i> | <i>(70-130)</i> | <i>1</i> | <i>20%</i> |

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*

Date: *9/12/96*

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- THE COMPANY IS NOT RESPONSIBLE FOR THE ENVIRONMENT -