

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE

FEB 08 1999

ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507
DULCE, NEW MEXICO 87528

Rish BTEX
SUBMIT ONE COPY
TO NATURAL
RESOURCE DEPT
AND OIL-GAS
ADMINISTRATION

Approved
PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Burlington) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87401
Facility or Well Name: Jicarilla J13
Location: Unit I Sec 36 T 26 N R 5 W County Rio Arriba
Pit Type: Separator ☒ Dehydrator ☒ Other _____
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: Length 20 ' Width 20 ' Depth 3 '
(Attach diagram) Reference: Wellhead ☒ Other _____
Footage from reference: 56'
Direction from reference: 63 degrees ☒ East or ☐ North
☐ 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) <u>0</u>

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) <u>0</u>

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 100 feet	(0 points) <u>0</u>

Distance to Ephemeral Stream (dry wash):

(Horizontal distance to all downgradient streams having a width of at least 10 feet)

Less than or equal to 100 feet	(10 points)
Greater than 100 feet	(0 points) <u>0</u>

Distance to Nearest Lake, Playa, or Watering Pond:

(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)

Less than or equal to 100 feet	(10 points)
Greater than 100 feet	(0 points) <u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 10/9/98

Date Completed: 12/15/98

Remediation Method: Excavation ☒

Approx. Cubic Yards 2889 3542 444

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 2889 RAD 1444 791

Other

Remediation Location:

Onsite



Offsite

2048 1445 2098

(i.e., landfarmed onsite, name and location of offsite facility)

791 cu. yds.

2048 yds. transported to TNT landfarm on highway 537 for final disposition.

General Description of Remedial Action:

Removal of contaminated soil from all four sidewalls, as to get a below 100 ppm head space reading.

Bottom is excavated to a depth greater than 30'.

Final excavation dimensions: 52'(N&S)X50'(E&W)X30'(D)

Ground Water Encountered: No ☒

Yes ☐

Depth

Final Pit Closure

Sampling:

Sample Location Composite of North, East, South, and West sidewalls and a three point composite of bottom.

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

Sample depth 30'

Sample date 10/16/98

Sample time 1125 1115

Sample Results

Soil: Benzene (ppm) ND

Water: Benzene (ppb)

Total BTEX (ppm) 77.0

Toluene (ppb)

Field headspace (ppm) 522

Ethylbenzene (ppb)

TPH (ppm) 1900

Method 8015

Total Xylenes (ppb)

Vertical Extent (ft) 30 RAD

Risk Analysis form attached: Yes ☒ No ☐

Ground Water Sample: Yes ☐ No ☒

(If yes, see attached Groundwater Site Summary Report)

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

DATE: 12-9-98

PRINTED NAME Ray Haston

SIGNATURE Ray Haston

TITLE Environmental Tech. III

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE:

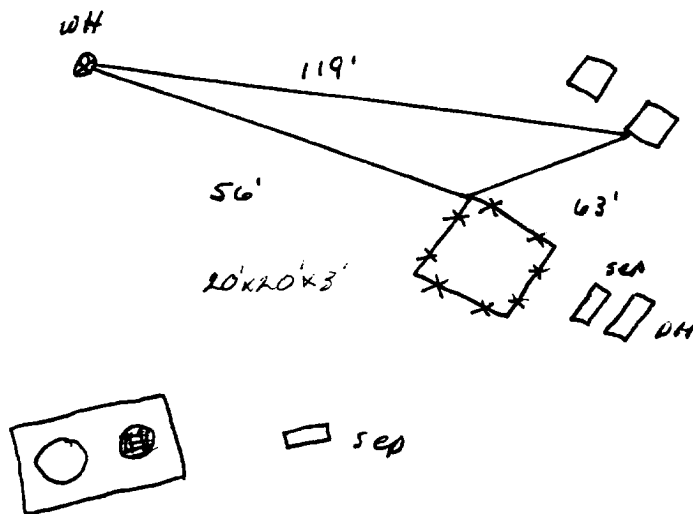
APPROVED: YES X NO (REASON): RA Attached

SIGNATURE Ken C Mammell

DATE: 12-15-98

Jicarilla J13
 (I) 36-26N-5W
 Burlington
 10-4-48

↑
N



Excavation Sampling

52' (N+S) X 50' (E+W) X 30' (D)

north wall sample
at 25' - 3.3 ppm

East wall sample
at 25' - 2.7 ppm

west wall sample at
at 30' - 12.4 ppm

3 point bottom
sample at 30'
522 ppm

south wall sample
at 20' - 7.8 ppm

not to scale

5' sample	1074 ppm
10' sample	962 ppm
15' sample	735 ppm
20' sample	862 ppm
25' sample	892 ppm
30' sample	602 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 29-Oct-98

CLIENT: PNM - Public Service Company of NM

Project: Jicarilla J-13

Lab Order: 9810052

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 29-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-13
Work Order:	9810052	Client Sample ID:	9810161115; 3pt. Comp. Bottom
Lab ID:	9810052-01A	Matrix:	SOIL
Project:	Jicarilla J-13	Collection Date:	10/16/98 11:15:00 AM
		COC Record:	5765

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	1900	25		mg/Kg	1	10/27/98
BTEX		SW8020A				Analyst: DC
Benzene	ND	500		µg/Kg	500	10/22/98
Toluene	5800	1000		µg/Kg	500	10/22/98
Ethylbenzene	4200	500		µg/Kg	500	10/22/98
m,p-Xylene	53000	1000		µg/Kg	500	10/22/98
o-Xylene	14000	500		µg/Kg	500	10/22/98

77000
77 ppm

Qualifiers:

- PQL - Practical Quantitation Limit
- ND - Not Detected at Practical Quantitation Limit
- J - Analyte detected below Practical Quantitation Limit
- B - Analyte detected in the associated Method Blank

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 29-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-13
Work Order:	9810052	Client Sample ID:	9810161125; 4 Wall Comp.
Lab ID:	9810052-02A	Matrix:	SOIL
Project:	Jicarilla J-13	Collection Date:	10/16/98 11:25:00 AM
		COC Record:	5765

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	10/21/98

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



Environmental Services

Well Name:	Jicarilla J #13
Well Legals:	Unit I, Sec 36, T26N, R5W
Pit Type:	Separator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Jicarilla J #13 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 188 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Lapis Point, NM series 7.5 minute topographic map.)
2. The site is located outside of the "vulnerable area" as defined under OCC Order No. R-7940-C.
3. PNM excavated 2889 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached analytical results). Source removal minimizes the possibility of surface water contamination.
4. The excavation was terminated at a depth of 30 feet. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Jicarilla J #13 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

JICARILLA APACHE TRIBE
ENVIRONMENTAL
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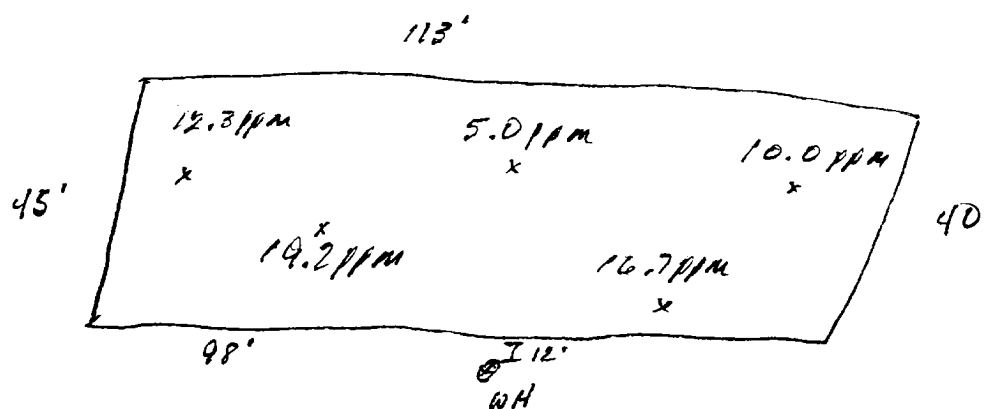
SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (<u>Burlington</u>) Telephone: <u>324-3764</u>	
Address: <u>603 W. Elm Street Farmington, NM 87401</u>	
Facility or Well Name: <u>Jicarilla T13</u>	
Location: Unit: <u>I</u> Sec. <u>36</u> T. <u>26</u> N R. <u>5</u> W County <u>Rio Arriba</u>	
Land Type: <u>Jicarilla Apache</u>	
Date Remediation Started: <u>10-9-98</u> Date Completed: <u>12-7-98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>1444 RAD 791</u>	
Composted _____	
Other <u>Area tilled into location; pit backfilled from borrow pit.</u>	
Depth to Ground Water: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>11-23-98</u> Time <u>1400</u> Sampling Results: Field Headspace (ppm) <u>17.8</u> TPH (ppm) <u>920</u> Method <u>8215</u> Other _____
Distance to an Ephemeral Stream: (pts.) <u>0</u>	
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>	
Wellhead Protection Area: (pts.) <u>0</u>	
Distance to Surface Water: (pts.) <u>0</u>	
Ranking Score (Total Points): <u>0</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>12-12-98</u>	PRINTED NAME <u>Roy Burnham Ray Haston</u>
SIGNATURE <u>Ray Haston</u>	AND TITLE <u>Environmental Technician III</u>
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
APPROVED: YES <u>X</u> NO _____ (REASON) <u>NO Backfill!!!</u>	
SIGNED: <u>Ker C Mando</u>	DATE: <u>12-15-98</u>

↑
N

J. Carilla J13
(I)-36-26N-5W
Burlington



2^a - 12"
Head space - 17.8 ppm

not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 08-Dec-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla Pit Remediation
Lab Order: 9811076

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-13 LF
Work Order:	9811076	Client Sample ID:	9811231400; 6pt Composite
Lab ID:	9811076-05A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	11/23/98 2:00:00 PM
		COC Record:	7406

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	920	25		mg/Kg	1	Analyst: HR 12/7/98

*Area graded off into location, pit backfilled
with clean soil from borrow pit*

Qualifiers:

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-13 LF
Work Order:	9811076	Client Sample ID:	9811231415; 6pt Composite
Lab ID:	9811076-06A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation	Collection Date:	11/23/98 2:15:00 PM
		COC Record:	7406

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	1100	25		mg/Kg	1	Analyst: HR 12/7/98

Qualifiers:

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ND - Not Detected at Practical Quantitation Limit

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