

Deanna S. Frost
DEPUTY OIL & GAS INSPECTOR

FEB 6 8 1999

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507
DULCE, NEW MEXICO 87528

RISK BTEX
SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

Approved
PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: JICARILLA 103-6Y DRIP

Location: Unit: M Sec. 20 T. 26 N R. 4 W County Rio Arriba

Pit Type: Separator Dehydrator Other Line Drip

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 20' width 20' depth 3'

(Attach diagram) Reference: wellhead other DRIP RISER

Footage from reference: 24'

Direction from reference: DUE Degrees East North
of
X 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

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)

0

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)

0

RANKING SCORE (TOTAL POINTS):

0

Date Remediation Started: 10/15/98 Date Completed: 12/15/98

Remediation Method: Excavation X Approx. Cubic Yards 286

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 286

Other _____

Remediation Location: Onsite _____ Offsite JICARILLA ^{RB} 103-64
(i.e., landfarmed onsite, name and location of offsite facility) JICARILLA Landfarm #6

General Description of Remedial Action:

Removed contaminated soil from all four side walls as to get below 100ppm headspace readings. Pit bottom is sandstone
Final excavation: 27' X 26' X 11'.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location North, East, South, West side walls and pit bottom

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

Sample depth 11'

Sample date 10/15/98 Sample time 1147/1148

Sample Results

Soil: Benzene (ppm) 20 Water: Benzene (ppb) _____

Total BTEX (ppm) 153.4 Toluene (ppb) _____

Field headspace (ppm) 1064 Ethylbenzene (ppb) _____

TPH 240 ppm Method 8015 Total Xylenes (ppb) _____

Ground Water Sample: Yes _____ No X (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 11/23/98 PRINTED NAME Roy Burnham

SIGNATURE Ray Burnham AND TITLE Environmental Technician II

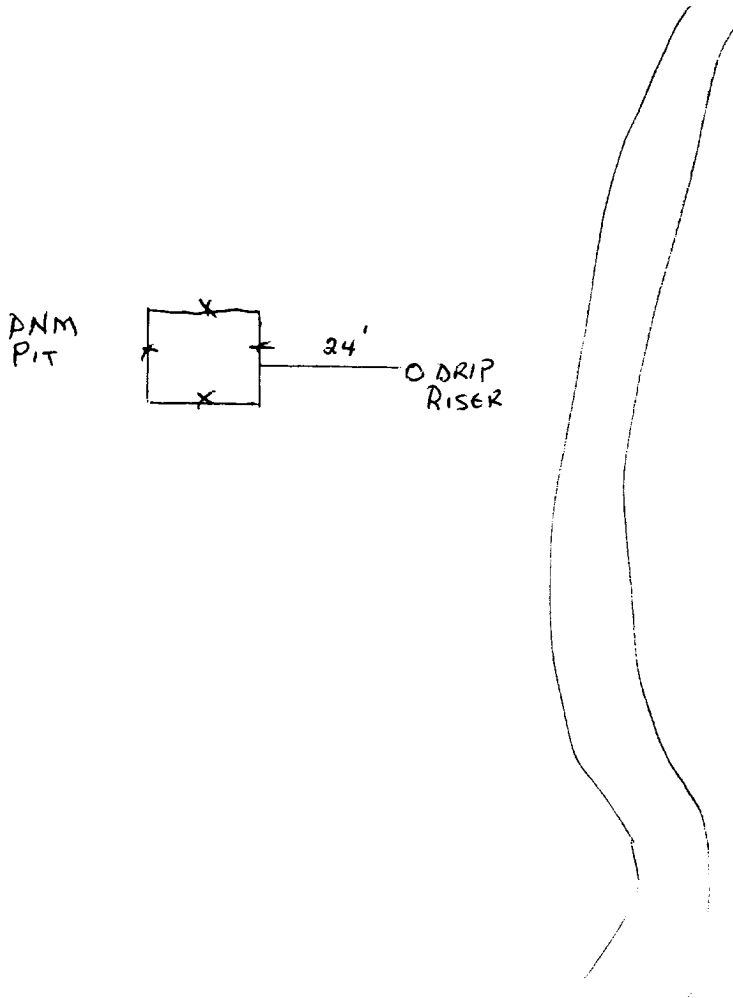
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON): R.A. Attached

SIGNED: [Signature] DATE: 12-15-98

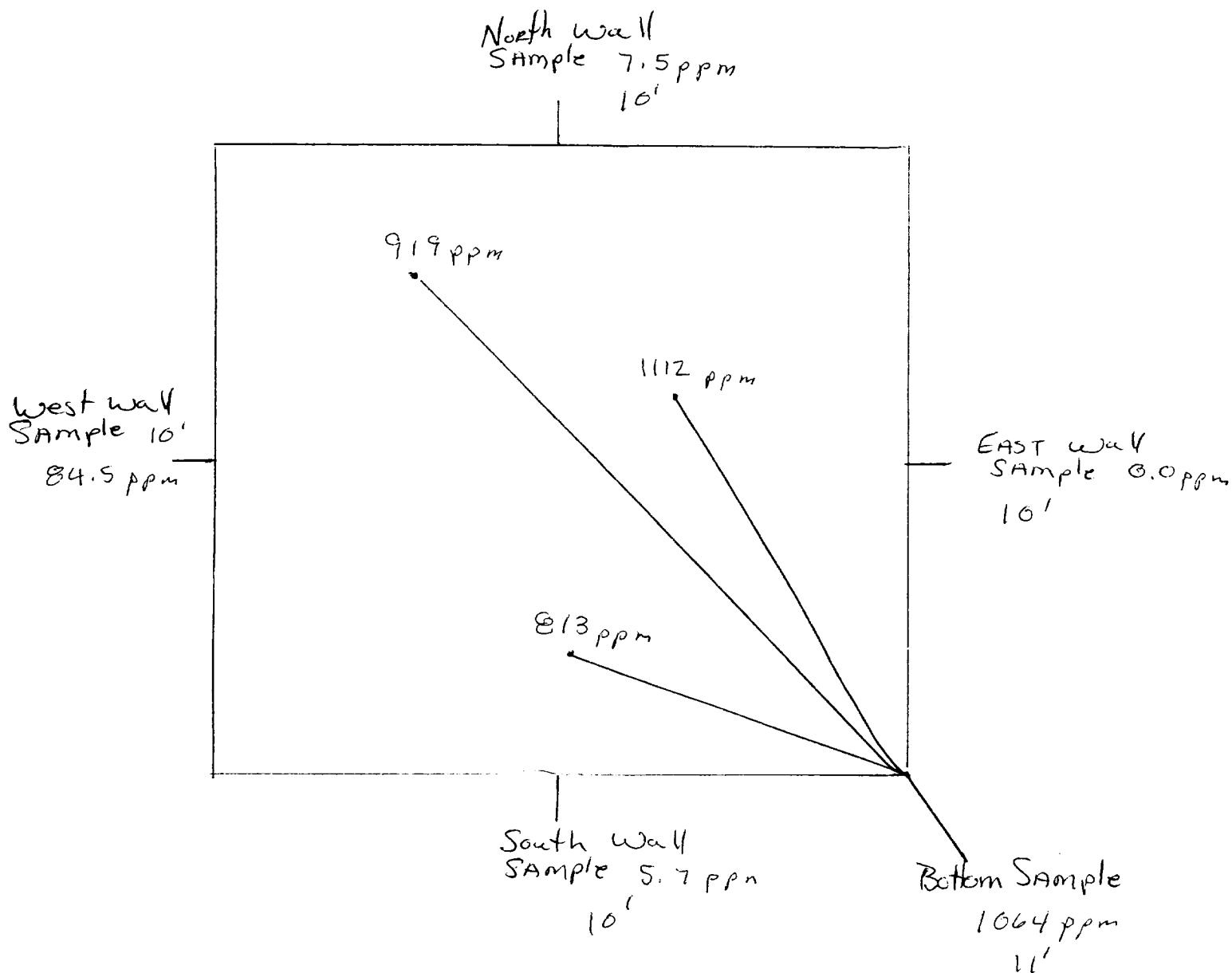
Sec-20 T-26N-R-4W ULM
WFS

Site Drawing



JICARILLA 103-6Y DRIP
SEC-20 T-26N R-4W ULM

EXCAVATION DRAWING



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 103-6Y Drip

Lab Order: 9810057

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.

**ANALYTICAL REPORT****Date:** 29-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla 103-6Y Drip
Work Order:	9810057	Client Sample ID:	9810151148; 3pt. Comp. Bottom
Lab ID:	9810057-02A	Matrix:	SOIL
Project:	Jicarilla 103-6Y Drip	Collection Date:	10/15/98 11:48:00 AM
		COC Record:	7355

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	240	25		mg/Kg	1	10/27/98
BTEX						
		SW8020A				Analyst: DC
Benzene	20000	1000		µg/Kg	1000	10/22/98
Toluene	69000	2000		µg/Kg	1000	10/22/98
Ethylbenzene	5400	1000		µg/Kg	1000	10/22/98
m,p-Xylene	48000	2000		µg/Kg	1000	10/22/98
o-Xylene	11000	1000		µg/Kg	1000	10/22/98

153400
1534 ppm

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr. - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- 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 103-6Y Drip
Work Order:	9810057	Client Sample ID:	9810151147; 4pt. Comp. Walls
Lab ID:	9810057-01A	Matrix:	SOIL
Project:	Jicarilla 103-6Y Drip	Collection Date:	10/15/98 11:47:00 AM
		COC Record:	7355

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	10/22/98

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



Environmental Services

Well Name:	Jicarilla 103-6Y Drip
Well Legals:	Unit M, Sec 20, T26N, R4W
Pit Type:	Line Drip
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 103-6Y Drip well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 108 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 286 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. Sandstone was encountered at 11 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.
5. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Jicarilla 103-6Y Drip well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.