

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

JICARILLA APACHE TRIBE  
ENVIRONMENTAL PROTECTION OFFICE

195K  
BTEX  
no  
Refund  
SUBMIT ONE COPY  
TO NATURAL  
RESOURCE DEPT  
AND OIL-GAS  
ADMINISTRATION

FEB 08 1999

P.O. BOX 507  
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

*Approved*

Operator: PNM Gas Services ( Williams Field Service ) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla K15 Drip  
Location: Unit N Sec 1 T 25 N R 5 W County Rio Arriba  
Pit Type: Separator ☐ Dehydrator ☐ Other Manual drip blowdown.  
Land Type: Jicarilla Apache

Pit Location: Pit dimensions: Length 20 ' Width 20 ' Depth 3 '  
(Attach diagram) Reference: Wellhead ☐ Other Manual drip blown riser.  
Footage from reference: 12'  
Direction from reference: 64 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) 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 100 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: 10/21/98

Date Completed: 12/15/98

Remediation Method: Excavation ☒

Approx. Cubic Yards

~~1100~~ 1410 1530

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds)

Other ~~4102~~ yds. staged on ROW awaiting final disposition.Remediation Location: Onsite ☐

Offsite Staged material will be hauled to a

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

commercial landfarm. Jicarilla L.F. #24.

1410 cu. yds.  
120 cu. yds. Overburden

## General Description of Remedial Action:

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

Final excavation dimensions: 31'(N&amp;S)X43'(E&amp;W)X31'(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 31'

Sample date 10/27/98

Sample time 1145 1135

## Sample Results

Soil: Benzene (ppm) ND

Water: Benzene (ppb)

Total BTEX (ppm) 56.8

Toluene (ppb)

Field headspace (ppm) 443

Ethylbenzene (ppb)

TPH (ppm) 280

Method 8015

Total Xylenes (ppb)

Vertical Extent (ft) ~~20~~ RADRisk 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: 11-20-98

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 ☒NO ☐

(REASON): RA - Attached

SIGNATURE:

Ken C Mammolo

DATE:

12-15-98

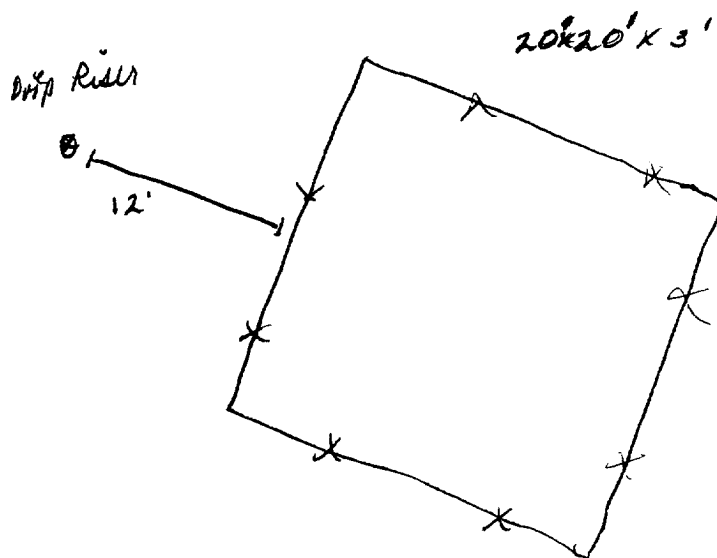
Jicarilla K15 Drip

(N) 1-25N-5W

WFS

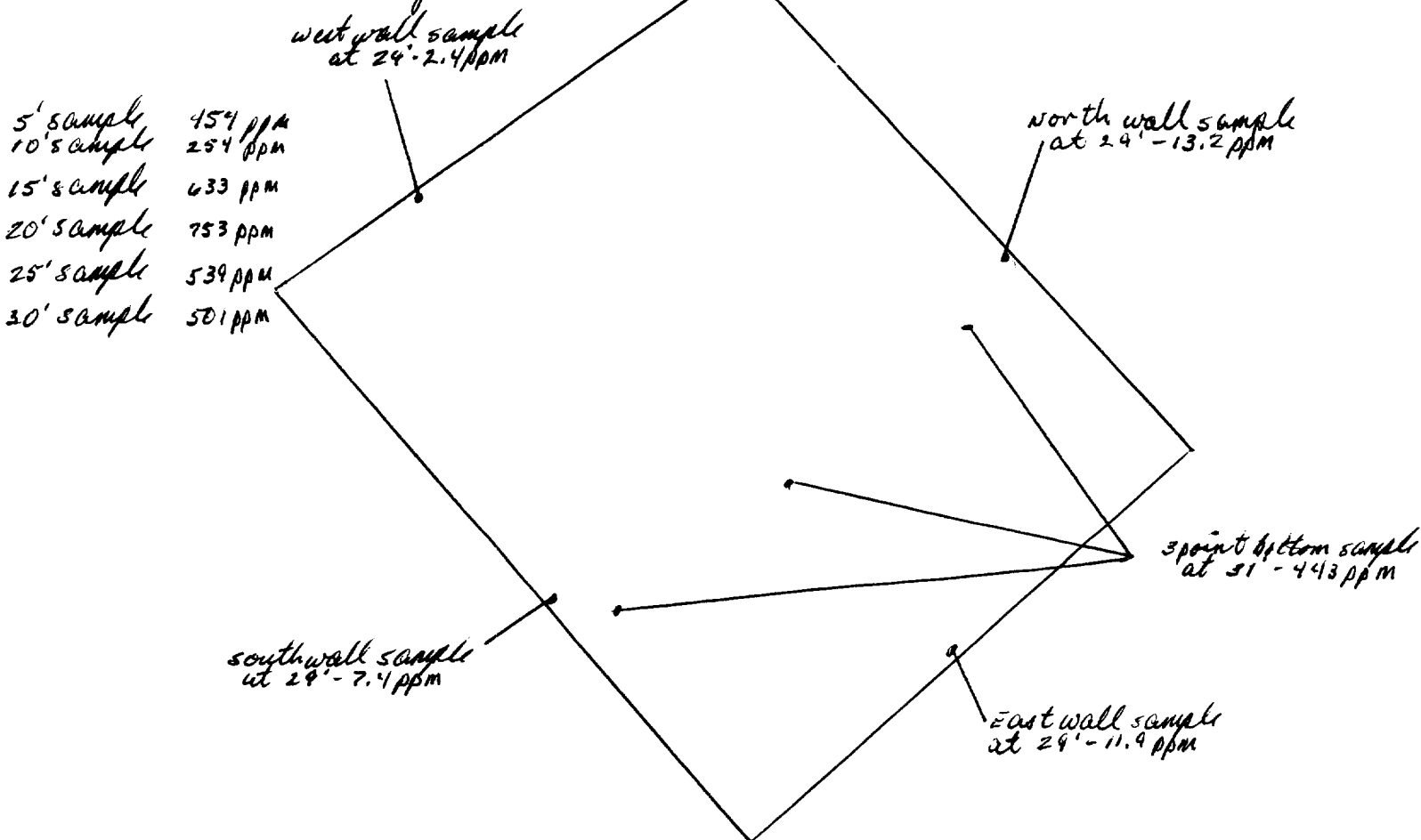
10-21-98

N



### Excavation Sampling

$31'(N+S) \times 43'(E+W) \times 31'(D)$



not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 11-Nov-98

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**CLIENT:** PNM - Public Service Company of NM  
**Project:** Jicarilla K-15 Drip  
**Lab Order:** 9810091

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**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: 11-Nov-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Jicarilla K-15 Drip
<b>Work Order:</b>	9810091	<b>Client Sample ID:</b>	9810271135; 3pt. Bottom Comp.
<b>Lab ID:</b>	9810091-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla K-15 Drip	<b>Collection Date:</b>	10/27/98 11:35:00 AM
		<b>COC Record:</b>	5768

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	280	25		mg/Kg	1	11/10/98
<b>BTEX</b>						
		<b>SW8020A</b>				Analyst: HR
Benzene	ND	250		µg/Kg	250	11/2/98
Toluene	11000	500		µg/Kg	250	11/2/98
Ethylbenzene	2800	250		µg/Kg	250	11/2/98
m,p-Xylene	35000	500		µg/Kg	250	11/2/98
o-Xylene	8000	250		µg/Kg	250	11/2/98

56,800  
56,800 ppm

<b>Qualifiers:</b>	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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 11-Nov-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Jicarilla K-15 Drip
<b>Work Order:</b>	9810091	<b>Client Sample ID:</b>	9810271145; 4 Wall Comp.
<b>Lab ID:</b>	9810091-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla K-15 Drip	<b>Collection Date:</b>	10/27/98 11:45:00 AM
		<b>COC Record:</b>	5768

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	11/10/98

**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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



***Environmental Services***

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Well Name:	Jicarilla K #15 Drip
Well Legals:	Unit N, Sec 1, T25N, R5W
Pit Type:	Manual drip blowdown
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

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**RISK ANALYSIS**

PNM requests closure of their former pit on the Jicarilla K #15 Drip well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 104 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 1192 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 31 feet. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Jicarilla K #15 Drip well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.