

**DEPUTY OIL & GAS INSPECTOR**

FEB 08 1999

## JICARILLA APACHE TRIBE

**ENVIRONMENTAL PROTECTION OFFICE**

P.O. BOX 507  
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL - GAS  
ADMINISTRATION

# PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Burlington Resources) Telephone: 324-3764

**Address:** 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Jicarilla J-20

**Location:** Unit: P Sec. 26 T. 26 N R. 5 W County Rio Arriba

**Pit Type:**      Separator       $\chi$       Dehydrator      Other \_\_\_\_\_

**Land Type:** Jicarilla Apache

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

(Attach diagram)      Reference:      wellhead    ☒      other \_\_\_\_\_

Footage from reference: 90'

Direction from reference: 70° Degrees      East of North       
X West of South X

**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)

**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)

**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)

**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)

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)

**RANKING SCORE (TOTAL POINTS) :**

Date Remediation Started: 10/6/98 Date Completed: 12/15/98 RAD  
10/6/98

Remediation Method: Excavation ☒ Approx. Cubic Yards 96 yds  
(Check all appropriate sections) Landfarmed ☒ Amount Landfarmed (cubic yds): 96 yds  
Other \_\_\_\_\_

Remediation Location: Onsite ☒ Offsite \_\_\_\_\_  
(i.e., landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action:

Removed contaminated soil from all 4 side walls  
and pit bottom as to get a below 100 ppm headspace  
reading.  
Excavated pit 18'X12'X12'

Ground Water Encountered: No ☒ Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit Closure Sampling:

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

Sample Location north wall, south wall, East wall, West wall - 11' @ 9'  
3 point composite bottom @ 12'

Sample depth 12'

Sample date 10-6-98 Sample time 1420

Sample Results

Soil: Benzene (ppm) ND Water: Benzene (ppb) \_\_\_\_\_

Total BTEX (ppm) ND (K3) Toluene (ppb) \_\_\_\_\_

Field headspace (ppm) 2.5 ppm Ethylbenzene (ppb) \_\_\_\_\_

TPH ND ppm Method TPH-8015 Total Xylenes (ppb) \_\_\_\_\_

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 10/6/98

PRINTED NAME Gary Cook  
Roy Burnham

SIGNATURE Gary Cook

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.

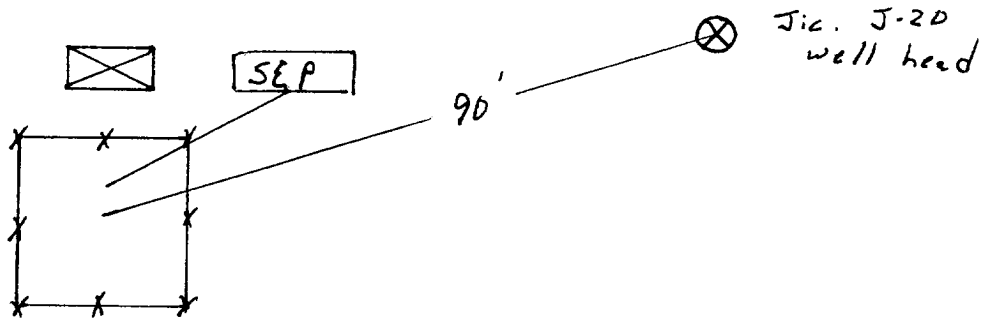
APPROVED: YES ☒ NO \_\_\_\_\_ (REASON): \_\_\_\_\_

SIGNED: Ken C Mamm DATE: 11-2-98

Jicarilla J-20  
Burlington Resources  
Sec. 26, 26N, 5W, P

10-6-98

site diagram:

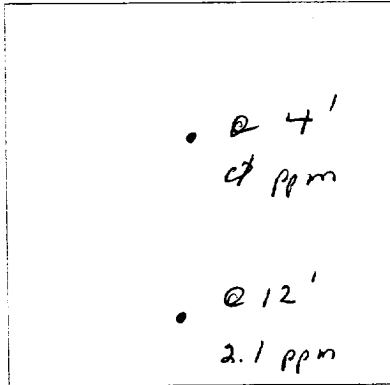


not to scale

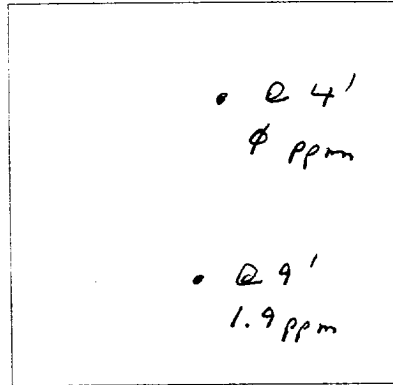
Ticcon: 11- J-20  
BR  
Sec 26, 26N, 5W, P

10/6/98

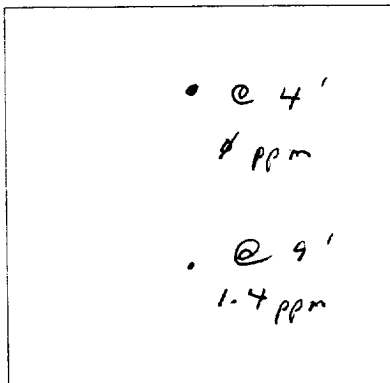
## North Wall



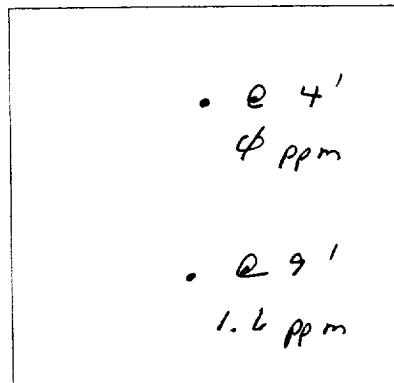
## South Wall



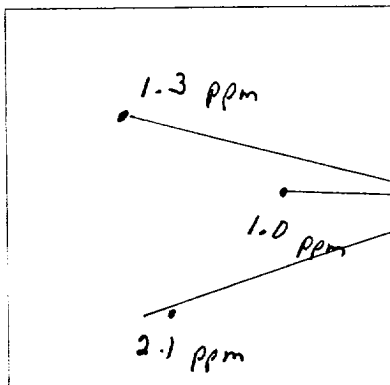
## East Wall



## West Wall



## Bottom



@ 12' depth

3 pt. comp.  
headspace reading = 2.5 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 21-Oct-98

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**CLIENT:** PNM - Public Service Company of NM

**Project:** Jicarilla J-20

**Lab Order:** 9810030

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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:** 21-Oct-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Jicarilla J-20
<b>Work Order:</b>	9810030	<b>Client Sample ID:</b>	9810061420; Bottom @ 12ft.
<b>Lab ID:</b>	9810030-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla J-20	<b>Collection Date:</b>	10/6/98 2:20:00 PM
		<b>COC Record:</b>	7397

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	10/19/98
<b>BTEX</b>		<b>SW8020A</b>				Analyst: HR
Benzene	ND	1		µg/Kg	1	10/16/98
Toluene	ND	2		µg/Kg	1	10/16/98
Ethylbenzene	ND	1		µg/Kg	1	10/16/98
m,p-Xylene	ND	2		µg/Kg	1	10/16/98
o-Xylene	ND	1		µg/Kg	1	10/16/98

7

**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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

**ANALYTICAL REPORT**

Date: 21-Oct-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Jicarilla J-20
<b>Work Order:</b>	9810030	<b>Client Sample ID:</b>	9810061430; Walls @ 9ft.
<b>Lab ID:</b>	9810030-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla J-20	<b>Collection Date:</b>	10/6/98 2:30:00 PM
		<b>COC Record:</b>	7397

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	10/19/98
<b>BTEX</b>		<b>SW8020A</b>				Analyst: HR
Benzene	ND	1		µg/Kg	1	10/16/98
Toluene	ND	2		µg/Kg	1	10/16/98
Ethylbenzene	1	1		µg/Kg	1	10/16/98
m,p-Xylene	ND	2		µg/Kg	1	10/16/98
o-Xylene	ND	1		µg/Kg	1	10/16/98

1  
0.001 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
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SUBMIT 1 COPY TO  
NATURAL  
RESOURCE DEPT  
AND OIL-GAS  
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services ( Durington ) Telephone: 324-3764  
Address: 603 W. Elm Street Farmington, NM 87401  
Facility or Well Name: Jicarilla J-20  
Location: Unit: P Sec. 26 T. 26 N R. 5 W County Rio Arriba  
Land Type: Jicarilla Apache

Date Remediation Started: 10/6/98 Date Completed: ~~10/6/98~~ 12/15/98  
Remediation Method: Landfarmed X Approx. cubic yards 96 yds  
Composted       
Other     

Depth to Ground Water: (pts.) 0  
Distance to an Ephemeral Stream: (pts.) 0  
Distance to Nearest Lake, Playa,  
or Watering Pond: (pts.) 0  
Wellhead Protection Area: (pts.) 0  
Distance to Surface Water: (pts.) 0  
Ranking Score (Total Points): 0

Final Closure Sampling:

Sampling Date: 11/16/98 Time 1116  
Sampling Results:  
Field Headspace (ppm) 13.1 ppm  
TPH (ppm) 28 Method TPH-8013  
Other     

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

DATE 12/13/98 PRINTED NAME ~~Roy Burnham~~ Gary Cook  
SIGNATURE Mary Cook AND TITLE Environmental Technician II

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE  
JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

APPROVED: YES X NO      (REASON) we are Backfill  
SIGNED: Ken C. M... DATE: 12-15-98



Jicavilla J-20

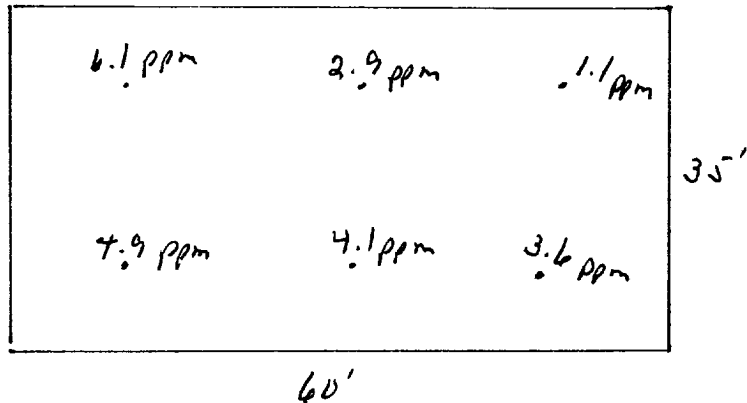
10/6/98

BR

Sec. 26, 26N, 5W, P

Landfarmed: on location

↑  
N



2"-12" depth

Soil vapor head space = 13.1 ppm

⊗ Jic. J-20  
well head

not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 30-Nov-98

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**CLIENT:** PNM - Public Service Company of NM

**Project:** Jicarilla Pit Remediation

**Lab Order:** 9811056

## **CASE NARRATIVE**

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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: 24-Nov-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Jicarilla J-20 LF
<b>Work Order:</b>	9811056	<b>Client Sample ID:</b>	9811161116 6pt Composite
<b>Lab ID:</b>	9811056-03A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Jicarilla Pit Remediation	<b>Collection Date:</b>	11/16/98 11:16:00 AM
		<b>COC Record:</b>	7402

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	28	25		mg/Kg	1	11/23/98

**Qualifiers:**

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