

Denny S. Hunt
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

OK

Approved

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (<u>Conoco</u>)		Telephone: <u>324-3764</u>	
Address: <u>603 W. Elm Street Farmington, NM 87401</u>			
Facility or Well Name: <u>Jicarilla K-2</u>			
Location:	Unit: <u>B</u>	Sec. <u>11</u>	T. <u>25 N</u> R. <u>5 W</u> County <u>Rio Arriba</u>
Pit Type:	Separator <u>X</u>	Dehydrator <u> </u>	Other <u>no PNM equipment connected.</u>
Land Type:	<u>Jicarilla Apache</u>		

Pit Location:	Pit dimensions:	length <u>20'</u>	width <u>20'</u>	depth <u>3'</u>
(Attach diagram)	Reference:	wellhead <u>X</u>	other <u> </u>	
	Footage from reference:	<u>162'</u>		
	Direction from reference:	<u>25°</u> Degrees <u>X</u> East	North <u>X</u>	
		<u> </u> West	South <u> </u>	

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 1,000 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):			<u>0</u>

Date Remediation Started: 9/21/98 Date Completed: 12/15/98 ^{RAD}
~~9/23/98~~

Remediation Method: Excavation X Approx. Cubic Yards 1280 yds

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 1280 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.
 dug bottom of pit to 30' depth and sampled
Excavated pit 48' X 24' X 30'

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

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

Sample Location 9809230830 North, South, East & West walls

9809230815 Bottom of pit 3 points.

Sample depth walls @ 15', Bottom @ 30'

Sample date 9/23/98 Sample time 0815

Sample Results

Soil: Benzene (ppm) 26 N/D RAD Water: Benzene (ppb) _____

Total BTEX (ppm) 1.09 Toluene (ppb) _____

Field headspace (ppm) 1098 Ethylbenzene (ppb) _____

TPH 26 ppm Method TPH-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 9/23/98

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.

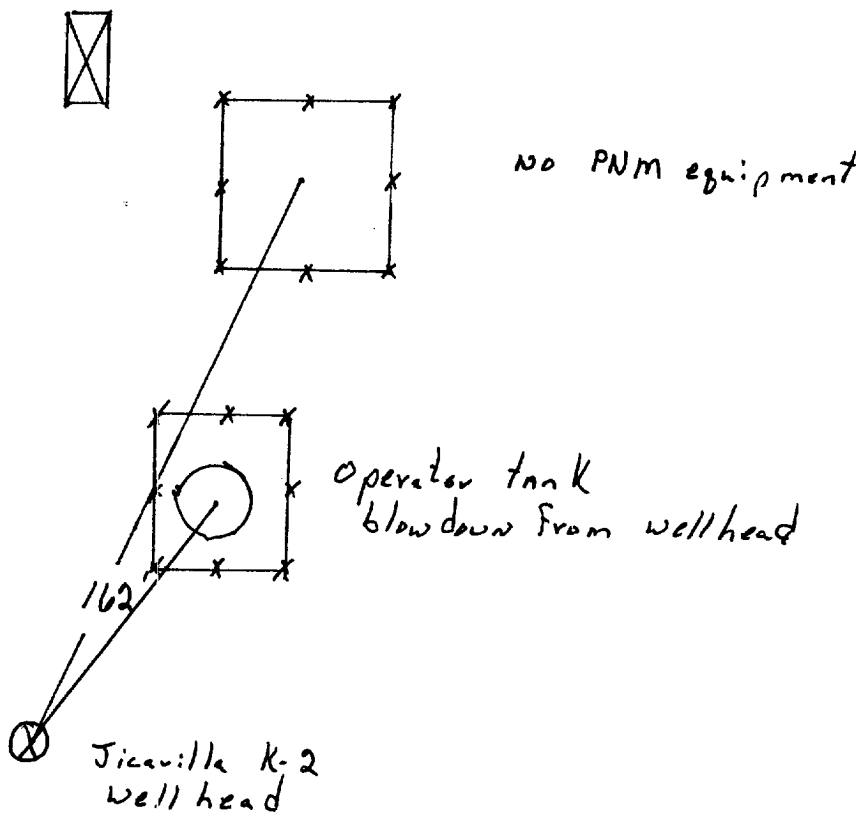
APPROVED: YES X NO _____ (REASON): _____

SIGNED: Kent M... DATE: 11-2-98

Jicavilla K-2
Conoco
Sec. 11, 25N, 5W, B

9/21/98

↑
N



not to scale

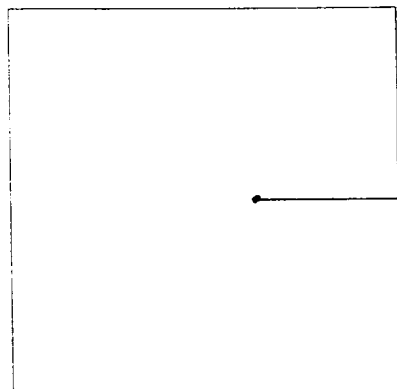
Jicarilla K-2

9/21/98

CONOCO

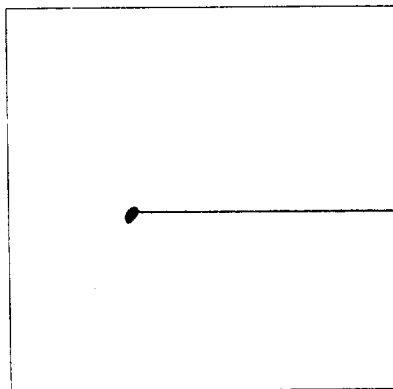
Sec. 11, 25N, 5W, B

North Wall



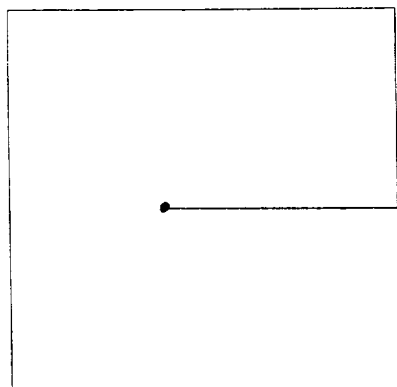
7.8 ppm
@ 15' depth

South Wall



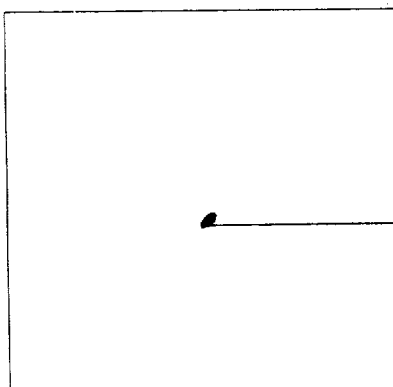
1.9 ppm
@ 15' depth

East Wall



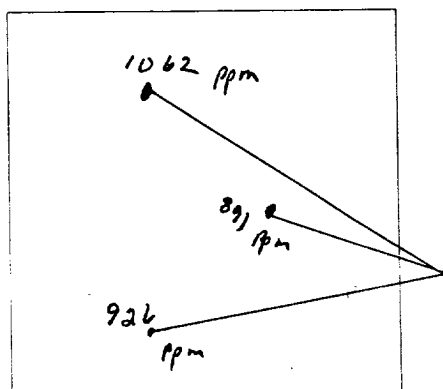
56.3 ppm
@ 15' depth

West Wall



1.6 ppm
@ 15' depth

Bottom



954 ppm @ 30' depth

3 pt. comp.
head space reading = 1098 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 08-Oct-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla K-2
Lab Order: 9809072

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-Oct-98

Client: PNM - Public Service Company of NM
Work Order: 9809072
Lab ID: 9809072-02A **Matrix:** SOIL
Project: Jicarilla K-2

Client Sample Info: Jicarilla K-2
Client Sample ID: 9809230815; Bottom @ 30ft.
Collection Date: 9/23/98 1:30:00 PM
COC Record: 7391 *0815AM RAD*

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	26	25		mg/Kg	1	10/5/98
BTEX						
Benzene	ND	50		µg/Kg	50	9/29/98
Toluene	330	100		µg/Kg	50	9/29/98
Ethylbenzene	99	50		µg/Kg	50	9/29/98
m,p-Xylene	570	100		µg/Kg	50	9/29/98
o-Xylene	100	50		µg/Kg	50	9/29/98

1099
1.099 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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ANALYTICAL REPORT

Date: 08-Oct-98

Client: PNM - Public Service Company of NM
Work Order: 9809072
Lab ID: 9809072-01A **Matrix:** SOIL
Project: Jicarilla K-2

Client Sample Info: Jicarilla K-2
Client Sample ID: 9809230830; Walls @ 15ft.
Collection Date: 9/23/98 8:30:00 AM
COC Record: 7391

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	180	25		mg/Kg	1	Analyst: HR 10/5/98
BTEX		SW8020A				Analyst: DC
Benzene	ND	1		µg/Kg	1	9/29/98
Toluene	ND	2		µg/Kg	1	9/29/98
Ethylbenzene	2.4	1		µg/Kg	1	9/29/98
m,p-Xylene	15	2		µg/Kg	1	9/29/98
o-Xylene	5.4	1		µg/Kg	1	9/29/98

22.8
 0.0228 ppm

Qualifiers:

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R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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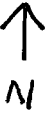
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NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

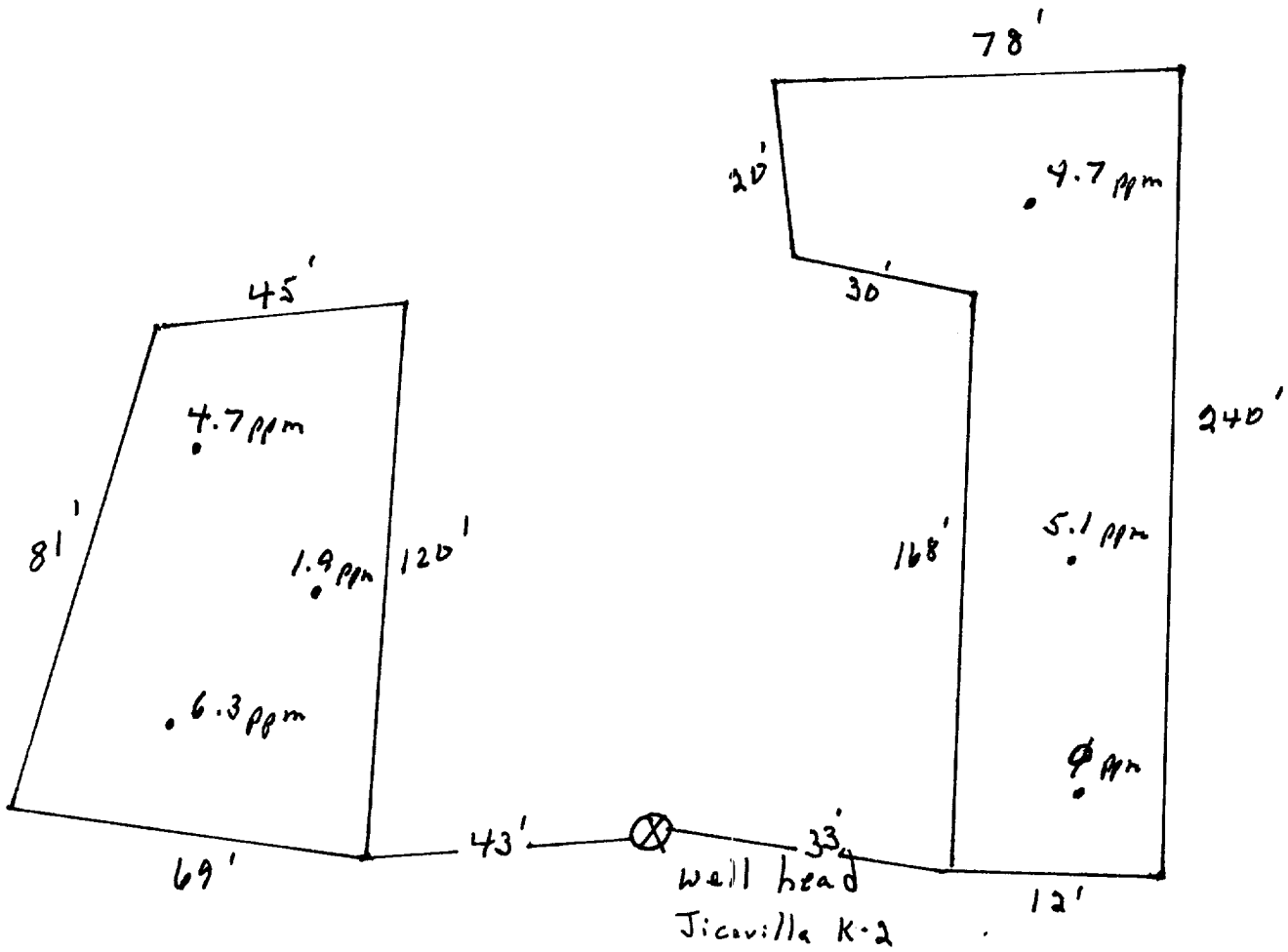
Operator: PNM Gas Services (<u>CONDUCT</u>) Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401	
Facility or Well Name: <u>Jicarilla K-2</u>	
Location: Unit: <u>B</u> Sec. <u>11</u> T. <u>25</u> N R. <u>5</u> W County <u>Rio Arriba</u>	
Land Type: <u>Jicarilla Apache</u>	
Date Remediation Started: <u>9/21/98</u>	Date Completed: <u>9/23/98</u> <u>12/15/98</u>
Remediation Method: Landfarmed <u>X</u>	Approx. cubic yards <u>1280 yds</u> <u>RAD</u>
Composted <u>—</u>	
Other <u>—</u>	
Depth to Ground Water: (pts.) <u>0</u>	Final Closure Sampling: Sampling Date: <u>11/12/98</u> Time <u>0912</u> Sampling Results: Field Headspace (ppm) <u>16.9 ppm</u> TPH (ppm) <u>33</u> Method <u>TPH-8015</u> Other <u>—</u>
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>11/25/98</u>	PRINTED NAME <u>Gary Cook</u> <u>Gary Burnham</u>
SIGNATURE <u>Mary Cook</u>	AND TITLE <u>Environmental Technician II</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 <u>—</u> (REASON) <u>was as Backfill</u>	
SIGNED: <u>Ken C. M...ll</u>	DATE: <u>12-15-98</u>

Jicavilla K-2
CONOCO
Sec. 11, 25N, 5W, B

9/24/98



Land Farm location: On Site



2"-12" depth
soil vapor head space = 16.9 ppm

not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 19-Nov-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla Pit Remediation
Lab Order: 9811041

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: 19-Nov-98

Client: PNM - Public Service Company of NM
Work Order: 9811041
Lab ID: 9811041-02A **Matrix:** SOIL
Project: Jicarilla Pit Remediation

Client Sample Info: Jicarilla K-2 LF
Client Sample ID: 9811120912; 6pt. Comp.
Collection Date: 11/12/98 9:12:00 AM
COC Record: 7401

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				
T/R Hydrocarbons: C10-C28	33	25		mg/Kg	1	Analyst: DC 11/16/98

Qualifiers:

PQL - Practical Quantitation Limit

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