

RISK
EX

George S. Frost
DEPUTY CHIEF OF POLICE

JICARILLA APACHE TRIBE

ENVIRONMENTAL PROTECTION OFFICE

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

P.O. BOX 507
DULCE, NEW MEXICO 87528

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Jicarilla E-10

Location: Unit: I Sec. 22 T. 26 N R. 4 W County Rio Arriba

Pit Type: Separator Dehydrator X Other

Land Type: Jicarilla Apache

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

(Attach diagram) Reference: wellhead X other

Footage from reference: 90'

Direction from reference: 45 Degrees East North

 West South

Depth to Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (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 No	(20 points) (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 200 feet to 1,000 feet Greater than 1,000 feet	(20 points) (10 points) (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 Greater than 100 feet	(10 points) (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 Greater than 100 feet	(10 points) (0 points)	<u>0</u>
RANKING SCORE (TOTAL POINTS):			<u>0</u>

Date Remediation Started: 11/4/98 Date Completed: 12/15/98 ^{RSD}
11/7/98

Remediation Method: Excavation X Approx. Cubic Yards 462

(Check all appropriate sections)

Landfarmed _____ Amount Landfarmed (cubic yds): 462

Other _____

Remediation Location: Onsite _____ Offsite Jicarilla Landfarm #6

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

General Description of Remedial Action:

Removed Contamination From all 4 side walls to below
100 ppm head space reading.
8' depth rock bottom & sampled
Excavated pit 30' X 52' X 8'

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 Northwall, East wall, Southwall, West wall

Bottom 3 point composite

Sample depth 8'

Sample date 11/4/98 Sample time 1345

Sample Results

Soil: Benzene (ppm) 2.2 ppm Water: Benzene (ppb) _____

Total BTEX (ppm) 158.2 ppm Toluene (ppb) _____

Field headspace (ppm) 1211 ppm Ethylbenzene (ppb) _____

TPH 680 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 11/4/98 PRINTED NAME Gary Cook

SIGNATURE Gary Cook AND TITLE Environmental Technician 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): R-A Attached

SIGNED: K. C. Marshall DATE: 12-15-98

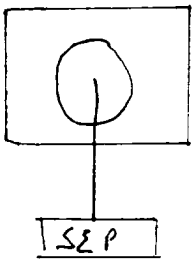
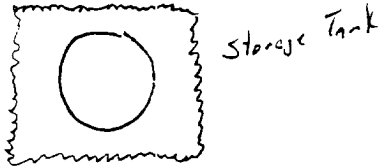
Jicavilla E-10

Conoco

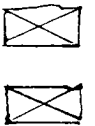
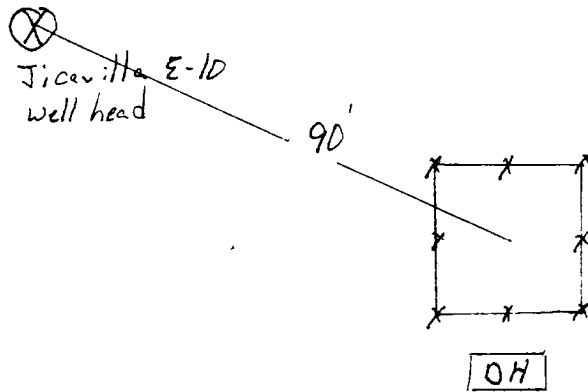
Sec. 22, 26N, 4W, I

11-4-98

Site drawing:



Compressor

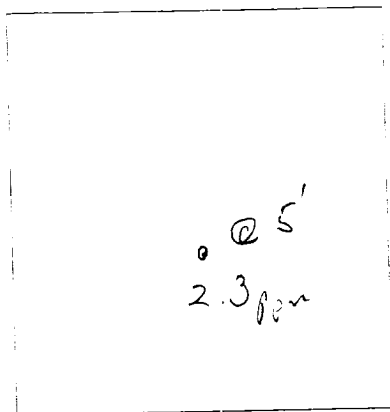


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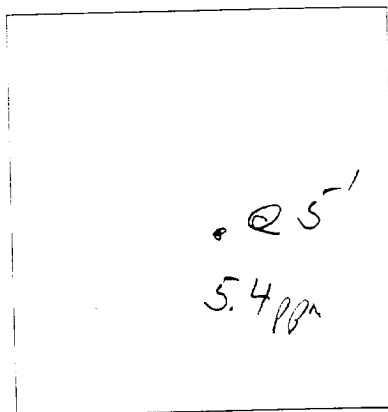
Jicavilla E-10
Conoco
Sec. 22, 26 N, 4 W, I

11/4/98

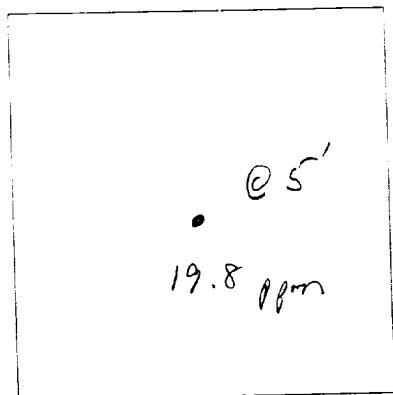
North Wall



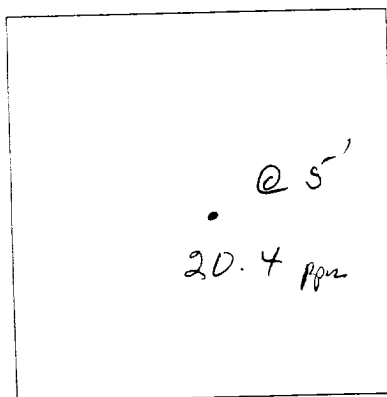
South Wall



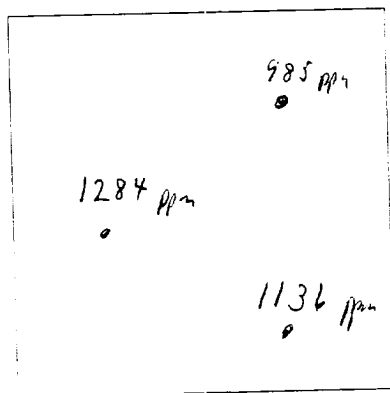
East Wall



West Wall



Bottom



@ 8' depth
Rock

3 pt. comp.

headsace reading = 1211 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 16-Nov-98

CLIENT: PNM - Public Service Company of NM
Project: Jicarilla E-10
Lab Order: 9811024

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: 16-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla E-10
Work Order:	9811024	Client Sample ID:	9811041345; Bottom @ 8 ft
Lab ID:	9811024-01A	Matrix:	SOIL
Project:	Jicarilla E-10	Collection Date:	11/4/98 1:45:00 PM
		COC Record:	7420

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	680	25		mg/Kg	1	11/15/98
BTEX		SW8020A				Analyst: HR
Benzene	2200	500		µg/Kg	500	11/9/98
Toluene	40000	1000		µg/Kg	500	11/9/98
Ethylbenzene	10000	500		µg/Kg	500	11/9/98
m,p-Xylene	84000	1000		µg/Kg	500	11/9/98
o-Xylene	22000	500		µg/Kg	500	11/9/98

158.200

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: 16-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla E-10
Work Order:	9811024	Client Sample ID:	9811041350; Walls @ 5 ft
Lab ID:	9811024-02A	Matrix:	SOIL
Project:	Jicarilla E-10	Collection Date:	11/4/98 1:50:00 PM
		COC Record:	7420

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	11/15/98

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

Well Name:	Jicarilla E #10
Well Legals	Unit I, Sec 22, T26N, R4W
Pit Type:	Dehydrator
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 E #10 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 193 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Schmitz Ranch, 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 462 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. Rock was encountered at 8 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 E #10 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.