

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 (Conoco) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: JICARILLA K-13 #2

Location: Unit: M Sec. 11 T. 25 N R. 5 W County Rio Arriba

Pit Type: Separator XX Dehydrator Other

Land Type: Jicarilla Apache

Pit Location: Pit dimensions: length 21' width 21' depth 3'

(Attach diagram) Reference: wellhead X other _____

Footage from reference: 871

Direction from reference: 45 Degrees ~~X~~ East \leftarrow North ~~X~~
of
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)

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) :

10

Date Remediation Started: 9/23/98 Date Completed: 11/30/98

Remediation Method: Excavation X Approx. Cubic Yards 939

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 0

Other 19 cu. yds clean overburden
920 Cu Yds. 1

Remediation Location: X Onsite Offsite Hauled to INX Landfarm.

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

General Description of Remedial Action:

Removed contaminated Soil from all four side walls
AS TO get a below 100ppm headspace reading. Pit bottom is
rock. 3 PT Composite of Pit bottom. Final excavation: 33' X 32' X 24'

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 NORTH, EAST, South, West Side walls
and Pit bottom

Sample depth 24'

Sample date 9/24/98

Sample time 1324
1325 ✓

Sample Results

Soil: Benzene (ppm) 0.270

Water: Benzene (ppb) _____

Total BTEX (ppm) 57.67

Toluene (ppb) _____

Field headspace (ppm) 2792

Ethylbenzene (ppb) _____

TPH 1700 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 10/25/98

PRINTED NAME Roy Burnham

SIGNATURE Roy Burnham

AND TITLE Environmental Technician II

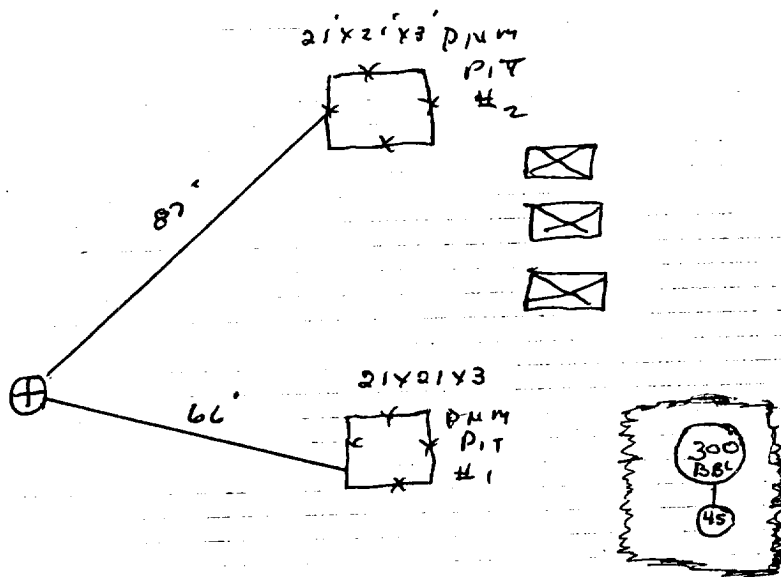
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

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

SIGNED: Kent M... DATE: 11-30-98

JICARILLA K-13
SEC-11 T 25N R-5W 46-0

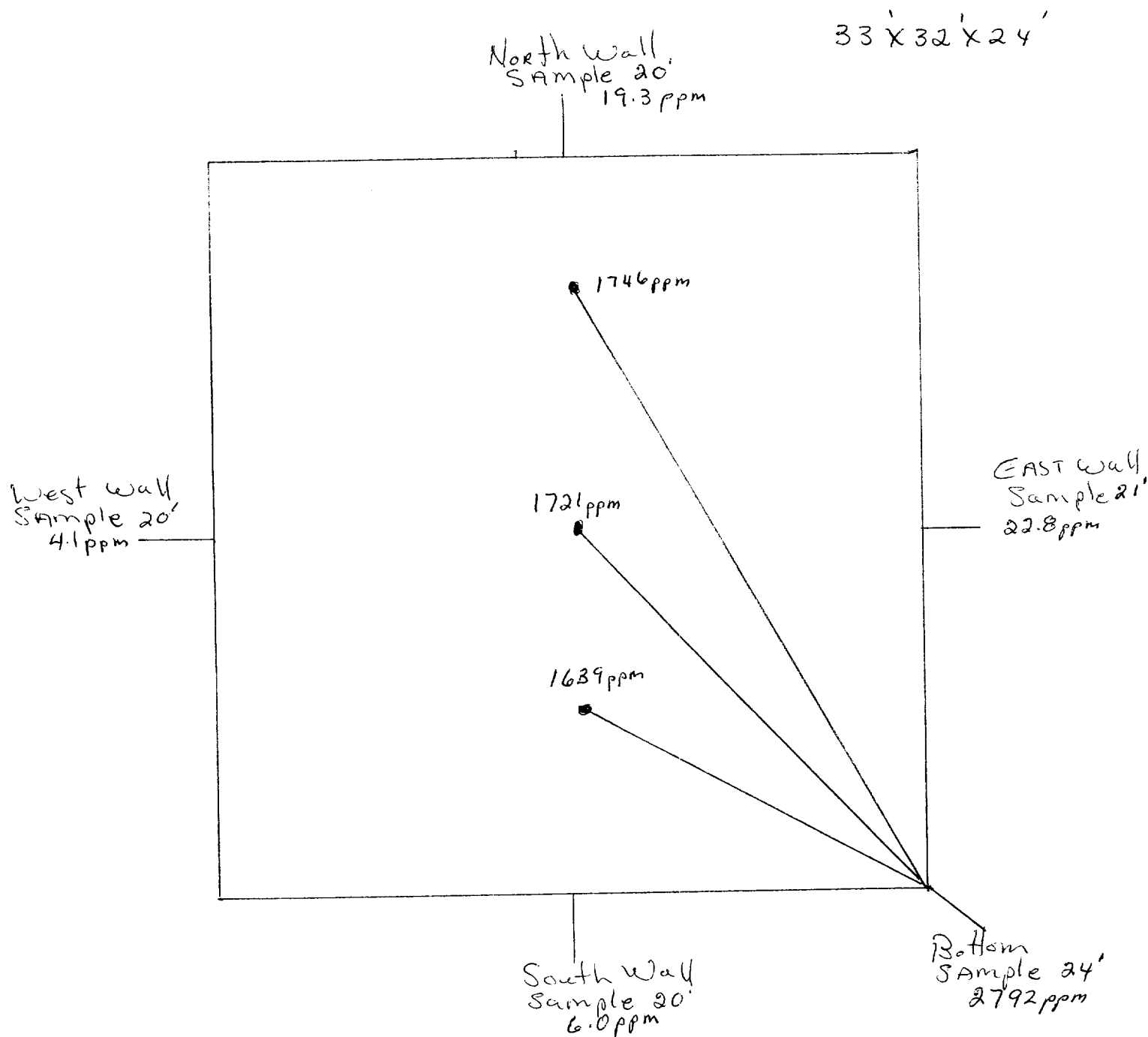
Site Drawing



Not To Scale

JICARILLA R-10 &
Sec-11 T25N R-5W
CONOCO

EXCAVATION DRAWING



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-13 #2
Lab Order: 9809069

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: 9809069
Lab ID: 9809069-02A **Matrix:** SOIL
Project: Jicarilla K-13 #2

Client Sample Info: Jicarilla K-13 #2
Client Sample ID: 9809241325; 3pt. Bottom Comp
Collection Date: 9/24/98 1:25:00 PM
COC Record: 7348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	1700	25		mg/Kg	1	10/2/98
BTEX		SW8020A				Analyst: DC
Benzene	270	200		µg/Kg	200	9/29/98
Toluene	9800	400		µg/Kg	200	9/29/98
Ethylbenzene	3700	200		µg/Kg	200	9/29/98
m,p-Xylene	35000	400		µg/Kg	200	9/29/98
o-Xylene	8900	200		µg/Kg	200	9/29/98

57670
57.670 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

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla K-13 #2
Work Order:	9809069	Client Sample ID:	9809241324; 4pt. Wall Comp
Lab ID:	9809069-01A	Matrix:	SOIL
Project:	Jicarilla K-13 #2	Collection Date:	9/24/98 1:24:00 PM
		COC Record:	7348

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	9/29/98

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
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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



Environmental Services

Well Name:	Jicarilla K-13 #2
Well Legals:	Unit M, Sec 11, T25N, R5W
Pit Type:	Separator
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 K-13 #2 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 163 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 939 cubic yards of soil from the former pit. Subsurface lateral contamination has been remediated (see attached map and analytical results for the side wall profiles). Source removal minimizes the possibility of surface water contamination.
4. Bedrock was encountered at 24 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 K-13 #2 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.