

Donna L. Fort
DEPUTY OIL & GAS INSPECTOR

FEB 08 1999

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

Risk BTEX
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-10
Location: Unit: I Sec. 26 T. 26 N R. 5 W County Rio Arriba
Pit Type: Separator X 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: 190'
Direction from reference: 75° Degrees X East North _____
_____ 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)

0 *PAD*

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 1,000 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 *PAD*

Date Remediation Started:

10-7-98

Date Completed:

12/15/98 RAD
10-20-98

Remediation Method:

Excavation

X

Approx. Cubic Yards

6805

(Check all appropriate sections)

Landfarmed

X

Amount Landfarmed (cubic yds):

3375 RAD
5405
5405

Other

staged - 1400 cu yds Overburden

Remediation Location:

Onsite

X

Offsite

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

3375 cu. yds. onsite2030 cu. yds. taken
to TNT - Schmitz Ranch,
N. Mex

General Description of Remedial Action:

Removed contaminated soil from all 4 side walls
as to get a below 100 ppm headspace reading.
Dug bottom to 32' depth and sampled.

Ground Water Encountered:

No

X

Yes

Depth

Final Pit Closure
Sampling:

Sample Location

North wall, South wall, East Wall, West Wall
3 point composite bottom

Sample depth

32'

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

Sample date

10/16/98

Sample time

1715

Sample Results

Soil: Benzene (ppm)

NO

Water: Benzene (ppb)

Total BTEX (ppm)

100

Toluene (ppb)

Field headspace (ppm)

792

Ethylbenzene (ppb)

TPH 1800 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

10/20/98

PRINTED NAME

Gary Cook
Ray Burman

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:

Kent M...

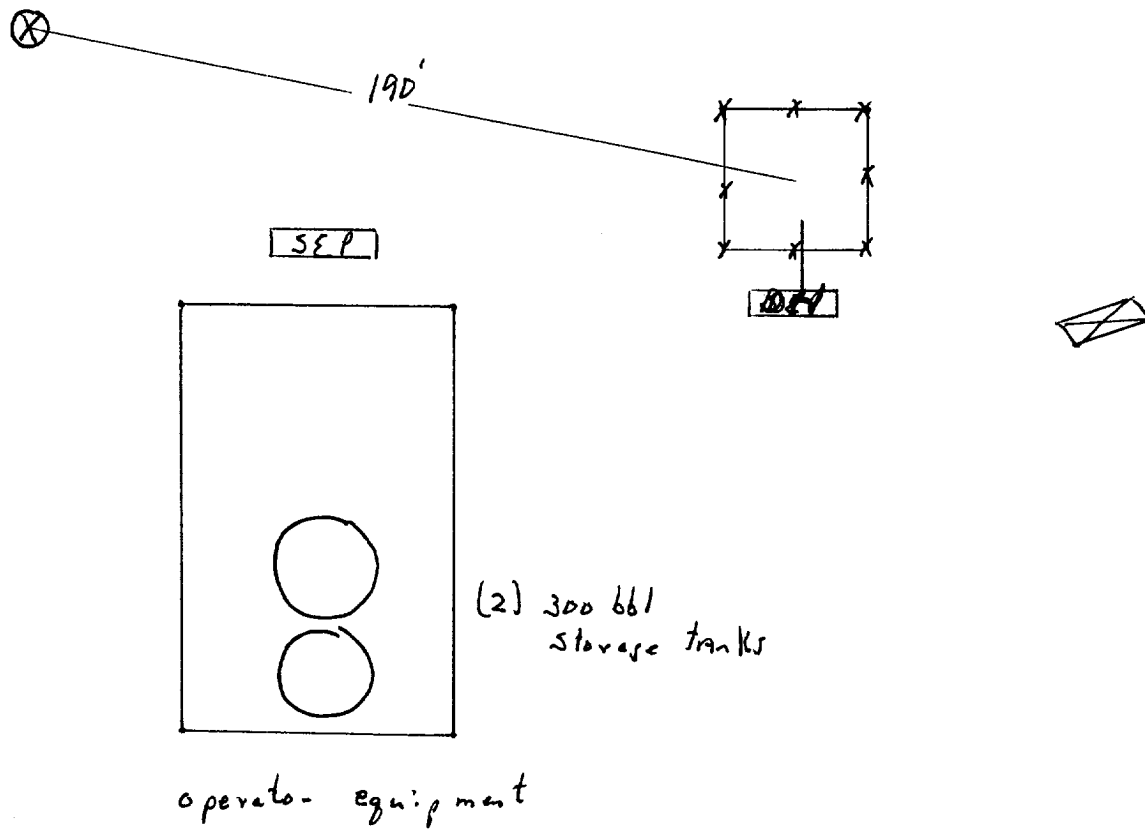
DATE:

11-30-98

Jicarilla J-10
Burlington Resources
Sec. 26, 26 N, 5W, 1

10/7/98

Site diagram:



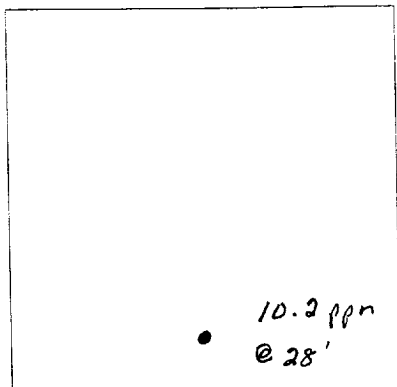
Jicavilla J-10

10/7/98

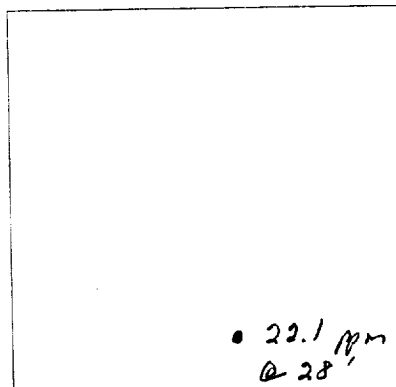
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Sec. 26, 26N, 5W, I

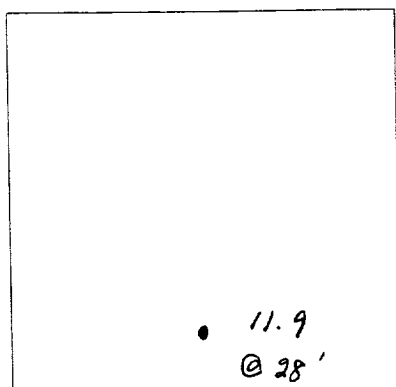
North Wall



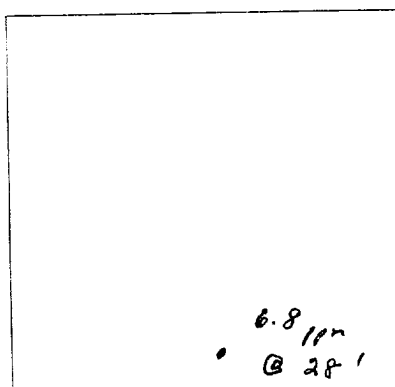
South Wall



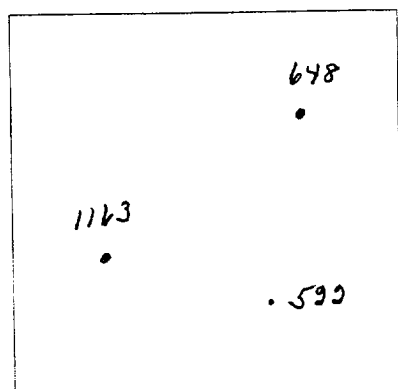
East Wall



West Wall



Bottom



@ 32' depth

3 pt. comp.
head space reading = 792 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 04-Nov-98

CLIENT: PNM - Public Service Company of NM

Project: Jicarilla J-10

Lab Order: 9810051

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: 04-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-10
Work Order:	9810051	Client Sample ID:	9810161415; Bottom @ 32ft.
Lab ID:	9810051-02A	Matrix:	SOIL
Project:	Jicarilla J-10	Collection Date:	10/16/98 2:15:00 PM
		COC Record:	7408

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	1800	25		mg/Kg	1	Analyst: HR 10/30/98
BTEX						Analyst: DC
Benzene	ND	250		µg/Kg	250	10/22/98
Toluene	16000	500		µg/Kg	250	10/22/98
Ethylbenzene	4000	250		µg/Kg	250	10/22/98
m,p-Xylene	65000	500		µg/Kg	250	10/22/98
o-Xylene	15000	250		µg/Kg	250	10/22/98

109,000

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

Sur: - Surrogate

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1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 04-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-10
Work Order:	9810051	Client Sample ID:	9810161400; Walls @ 28ft.
Lab ID:	9810051-01A	Matrix:	SOIL
Project:	Jicarilla J-10	Collection Date:	10/16/98 2:00:00 PM
		COC Record:	7408

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	10/21/98

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

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Environmental Services

Well Name:	Jicarilla J #10
Well Legals:	Unit I, Sec 26, T26N, R5W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	50 feet to 99 feet
Groundwater Depth:	Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the Jicarilla J #10 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 60 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 6805 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 32 feet. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes their former pit on the Jicarilla J #10 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

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

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Bellingar) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87401
Facility or Well Name: Jicarilla J-10
Location: Unit: I Sec. 26 T. 26 N R. 5 W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 10/17/98 Date Completed: 10/20/98
Remediation Method: Landfarmed X 2100 yds Approx. cubic yards 6805
Composted
Other 4705 yds to TNT Landfarm

Depth to Ground Water: (pts.) 10
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): 10

Final Closure Sampling:

Sampling Date: 11/30/98 Time 1104
Sampling Results:
Field Headspace (ppm) 38.7 ppm
TPH (ppm) 83 Method TPH-800
Other

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

DATE 12/2/98 PRINTED NAME Roy Burnham Gary Cook
SIGNATURE Mary Cook AND TITLE Environmental Technician II

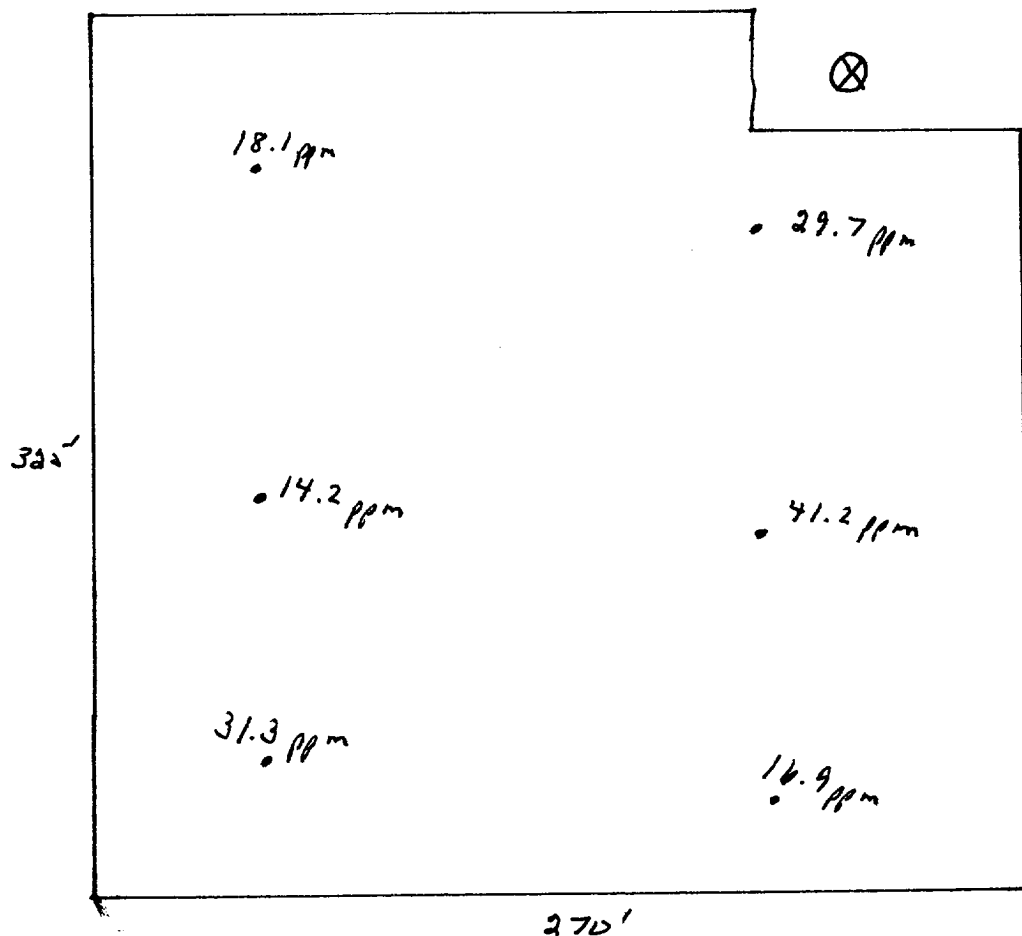
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE
JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

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

Jicaville J-10
Burlington Resources
Sec. 26, 26N, 5W, I

10/7/98

Land farm: On location
TNT Landfarm



2"-12" depth

yards landfarmed on location = 2100 yds

Soil vapor headspace reading = 38.7 ppm

Backfilled pit with clean dirt from borrow pit.

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 04-Dec-98

CLIENT: PNM - Public Service Company of NM

Project: Jicarilla Pit Remediation Landfarms

Lab Order: 9812001

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: 04-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jicarilla J-10 LF
Work Order:	9812001	Client Sample ID:	9811301104; 6pt. Composite
Lab ID:	9812001-01A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation Landfarms	Collection Date:	11/30/98 11:04:00 AM
		COC Record:	7444

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	83	25		mg/Kg	1	12/3/98

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
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