

Denny L. Frost

JICARILLA APACHE TRIBE

DEPUTY OIL & GAS INSPECTOR ENVIRONMENTAL PROTECTION OFFICE

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

FEB 08 1999

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 K-13 #1

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

Pit Type: Separator ☐ 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: 66'

Direction from reference: 10° 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)

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: 9/17/98 Date Completed: 1/6/99

Remediation Method: Excavation X Approx. Cubic Yards 1717

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds): 1717

Other _____

Remediation Location: Onsite X Offsite _____

(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 readings. Pit bottom is
Rock 3 PT Composite of Pit bottom
Final excavation: 61' X 38' X 20'

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location North, EAST, South, West side

walls and Pit bottom

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

Sample depth 20'

Sample date 9/23/98 Sample time 0945

0946 ✓

Sample Results

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

Total BTEX (ppm) 55.300 Toluene (ppb) _____

Field headspace (ppm) 1233 Ethylbenzene (ppb) _____

TPH 1100 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

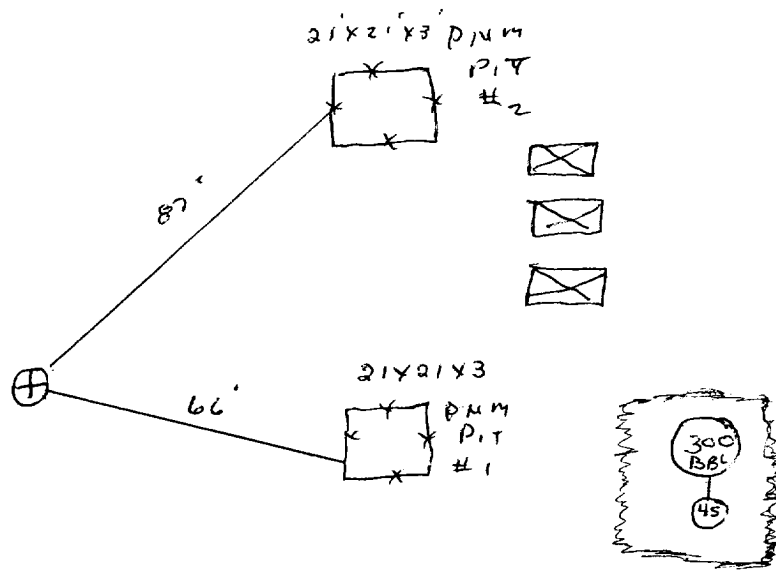
AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

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

SIGNED: Ken C Marshall DATE: 11-30-98

Jicarilla K-13
Sec-11 T25N R-5W 44-0

Site Drawing

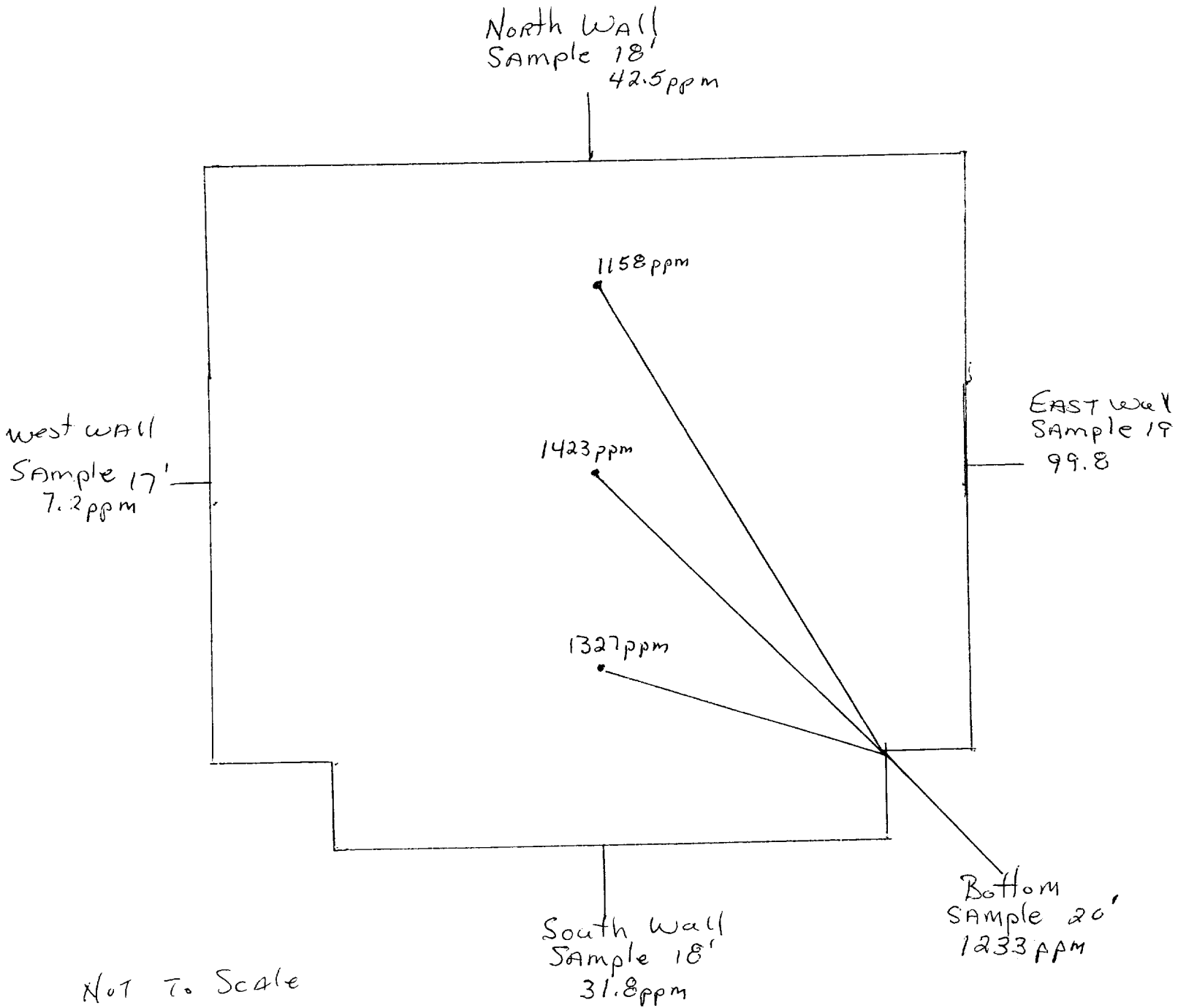


Not To Scale

JICAR 114 R-10
SEC-11 T-25N R-5W UL-M
CONOCO

EXCAVATION DRAWING

61' X 30' X 20'



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 #1
Lab Order: 9809068

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	Client Sample Info:	Jicarilla K-13 #1
Work Order:	9809068	Client Sample ID:	9809230946; 3pt. Bottom Comp
Lab ID:	9809068-02A	Matrix:	SOIL
Project:	Jicarilla K-13 #1	Collection Date:	9/23/98 9:46:00 AM
		COC Record:	7347

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	1100	25		mg/Kg	1	10/2/98
BTEX		SW8020A				Analyst: DC
Benzene	ND	500		µg/Kg	500	9/29/98
Toluene	12000	1000		µg/Kg	500	9/29/98
Ethylbenzene	3200	500		µg/Kg	500	9/29/98
m,p-Xylene	32000	1000		µg/Kg	500	9/29/98
o-Xylene	8100	500		µg/Kg	500	9/29/98

55300
55.300 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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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 #1
Work Order:	9809068	Client Sample ID:	9809230945; 4pt. Wall Comp
Lab ID:	9809068-01A	Matrix:	SOIL
Project:	Jicarilla K-13 #1	Collection Date:	9/23/98 9:45:00 AM
		COC Record:	7347

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:

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Environmental Services

Well Name:	Jicarilla K-13 #1
Well Legals:	Unit M, Sec 11, T25N, R5W
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 K-13 #1 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 1,717 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 20 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 #1 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.

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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 (Conoco) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87401
Facility or Well Name: JICARILLA K-13^{#1}
Location: Unit: M Sec. 11 T. 25 N R. 5 W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 9/17/98 Date Completed: 12/2/98
Remediation Method: Landfarmed ☒ Approx. cubic yards 1717
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: 11/23/98 Time 1128
Sampling Results:
Field Headspace (ppm) 4.9
TPH (ppm) 140 Method 8015
Other

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

DATE 1/5/99 PRINTED NAME Roy Burnham
SIGNATURE Roy Burnham AND TITLE Environmental Technician II

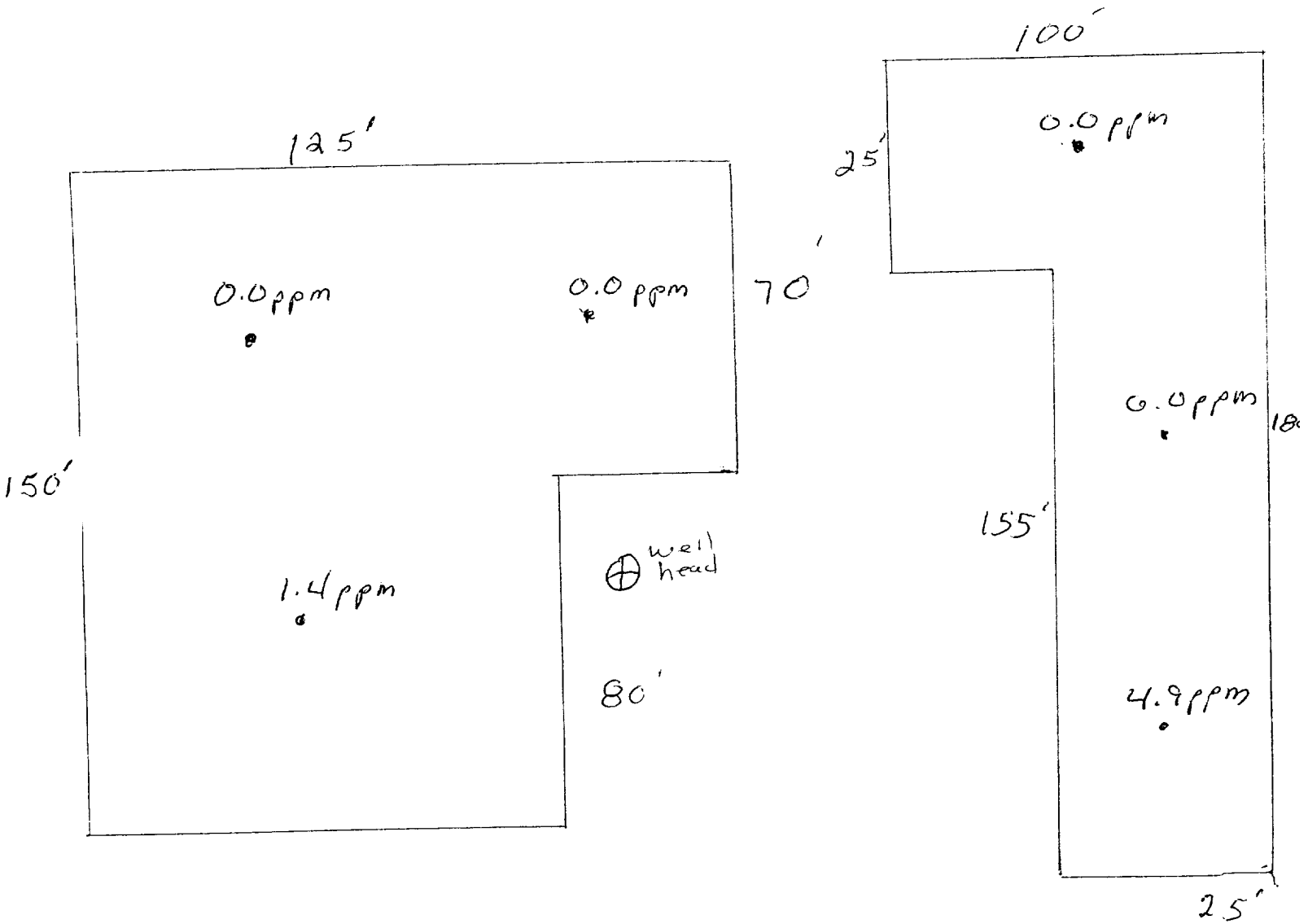
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE
JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

APPROVED: YES ☒ NO ☐ (REASON) Don't use as backfill.

SIGNED: Karena L. Callado DATE: 01-06-99

JICARILMA W
EC-11 T25N R-5W UL-M
Conoco

Land farm Drawing



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: 9811075

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 K-13 #1 LF
Work Order:	9811075	Client Sample ID:	9811231128; 6pt Composite
Lab ID:	9811075-03A	Matrix:	SOIL
Project:	Jicarilla Pit Remediation Landfarms	Collection Date:	11/23/98 11:28:00 AM
		COC Record:	7405

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	140	25		mg/Kg	1	12/2/98

Qualifiers:

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