R 154 bedrock

District I
P.O. Box 1980, Hobbs, NM

District II
P.O. Drawer DD, Artesia, NM 88221

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

RECEIVED
NOV - 7 1995
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (Burlington) **Telephone:** 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Federal #1E

Location: Unit J Sec 18 T 30 N R 12 W County San Juan

Pit Type: Separator ☐ Dehydrator ☑ Other

Land Type: BLM ☑ State ☐ Fee ☐ Other

Pit Location: Pit dimensions: length 18 ' width 18 ' depth 3 '

(Attach diagram) Reference: wellhead ☑ other

Footage from reference: 99'

Direction from reference: 65 Degrees ☑ East North ☑ of ☐ 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)	0
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)	0
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)	0
RANKING SCORE (TOTAL POINTS):			0

Federal #1E

Date Remediation Started: 06/14/1999 **Date Completed:** 06/15/1999

Remediation Method: (Check all appropriate sections)
Excavation X Approx. Cubic Yard 133
Landfarmed X Amount Landfarmed (cubic yds) 133
Other

Remediation Location: (i.e., landfarmed onsite, name and location of offsite facility)
Onsite X Offsite

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 24' X 15' X 10' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

*** Sandstone encountered at 10'. See attached risk analysis form.

Ground Water Encountered: No ☑ Yes ☐ Depth

Final Pit Closure Sampling: (if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample Location 5 pt. composite - bottom.

Sample depth 10'

Sample date 06/15/1999 Sample time 7:15:00 AM

Sample Results

Benzene (ppm) 0.52

Total BTEX (ppm) 134.92 ***

Field headspace (ppm)

TPH (ppm) 280.00 Method 8015B

Vertical Extent (ft) Risk Analysis form attached Yes ☑ No ☐

Ground Water Sample: Yes ☐ No ☑ (If yes, see attached Groundwater Site Summary Report)

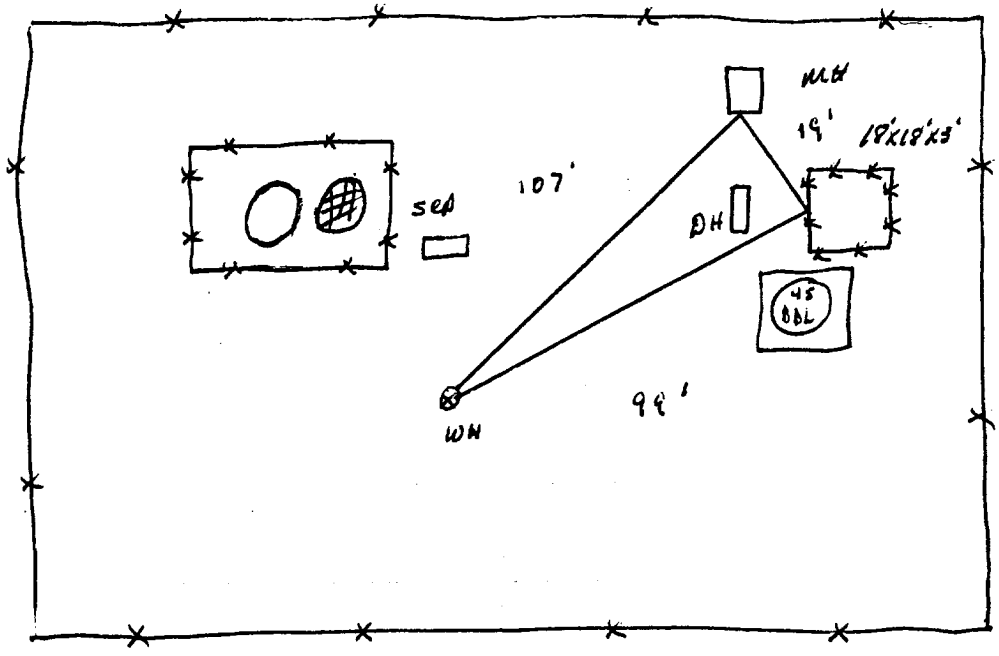
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE **October 28, 1999**

SIGNATURE Maureen Gannon

PRINTED NAME AND TITLE **Maureen Gannon, Project Manager**

Federal #1E
(J) 18-30S-12W
Burlington
6-14-94 @ 1420

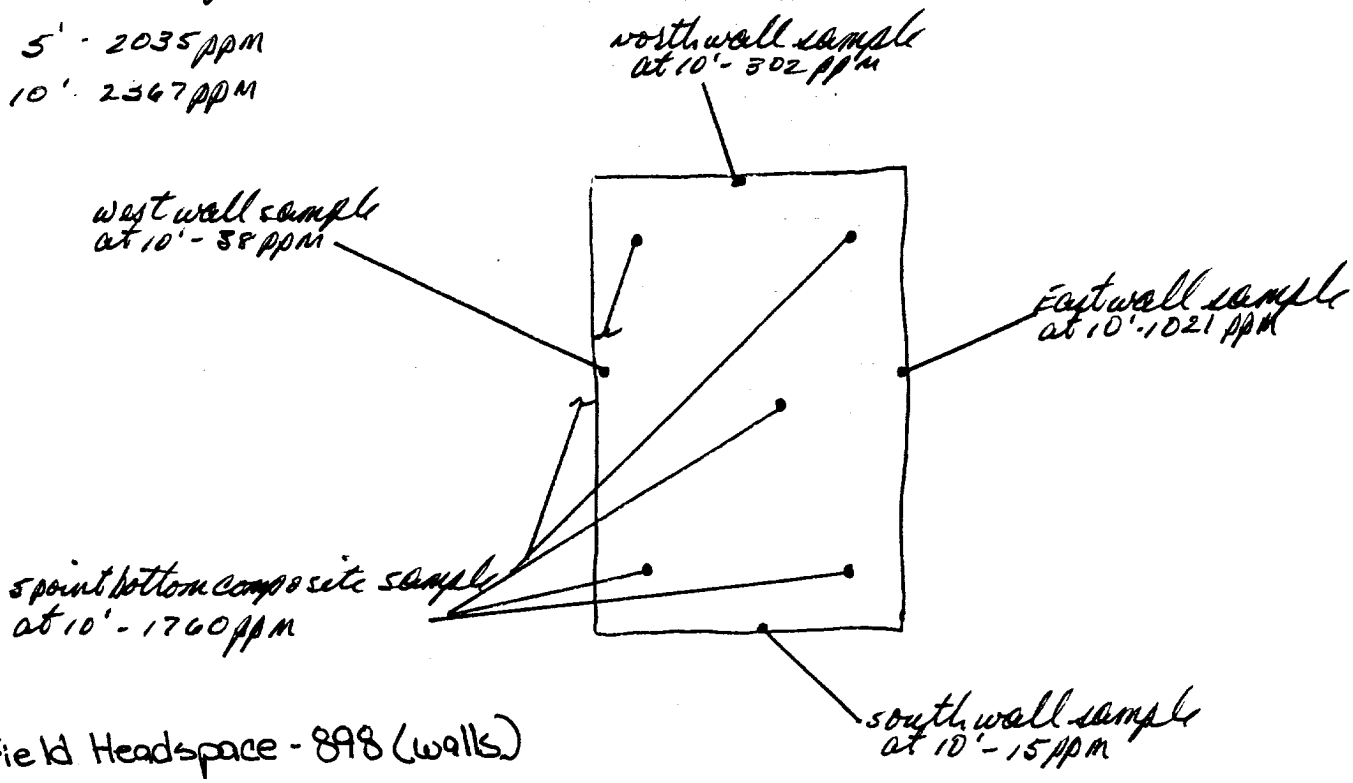


Excavation Sampling

24'(N+S) x 15'(E+W) x 10'(D)

PID Readings

5' - 2035 ppm
10' - 2367 ppm



Field Headspace - 898 (walls)

Not to scale

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: *30-Jun-99*

CLIENT: PNM - Public Service Company of NM
Project: PNM Pit Remediation
Lab Order: 9906054

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.

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KH

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *30-Jun-99*

Client: PNM - Public Service Company of NM
Work Order: 9906054
Lab ID: 9906054-01A **Matrix:** SOIL
Project: PNM Pit Remediation

Client Sample Info: Federal #1E
Client Sample ID: 9906150715; 5pt. Bottom Comp
Collection Date: 6/15/99 7:15:00 AM
COC Record: 7639

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **DC**
T/R Hydrocarbons: C10-C28	280	25		mg/Kg	1	6/28/99
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DC**
Benzene	520	250		µg/Kg	250	6/23/99
Toluene	37000	500		µg/Kg	250	6/23/99
Ethylbenzene	7400	250		µg/Kg	250	6/23/99
m,p-Xylene	72000	500		µg/Kg	250	6/23/99
o-Xylene	18000	250		µg/Kg	250	6/23/99

134920
134.92 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

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *30-Jun-99*

Client:	PNM - Public Service Company of NM	**Client Sample Info:**	Federal #1E
Work Order:	9906054	**Client Sample ID:**	9906150720; 4pt. Wall Comp
Lab ID:	9906054-02A **Matrix:** SOIL	**Collection Date:**	6/15/99 7:20:00 AM
Project:	PNM Pit Remediation	**COC Record:**	7639

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **DC**
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/25/99

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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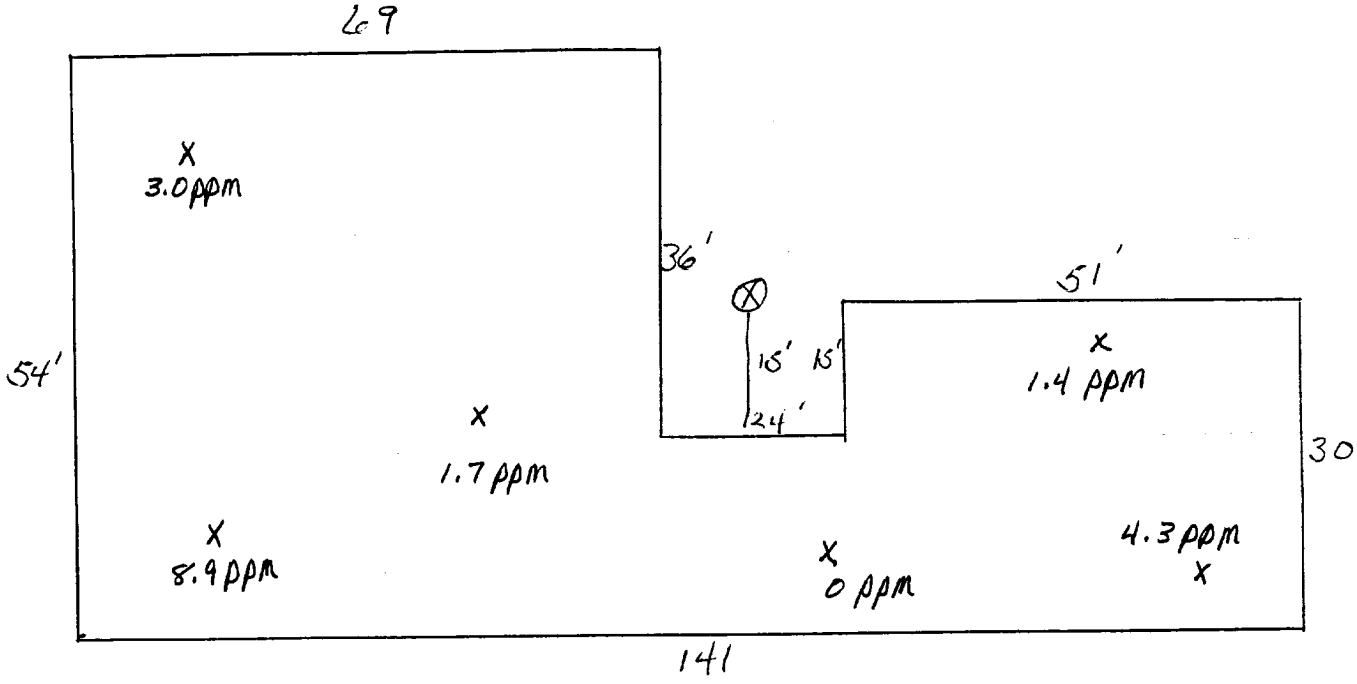
Sec. 18 T30N R12W Unit J
Burlington

Landfarm Drawing



Not to scale

Head space - 10.7 ppm

sample # - 9908101400

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: *16-Aug-99*

CLIENT: PNM - Public Service Company of NM
Project: PNM Pit Remediation Landfarms
Lab Order: 9908025

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.

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OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *16-Aug-99*

Client:	PNM - Public Service Company of NM	**Client Sample Info:**	Federal #1E LF
Work Order:	9908025	**Client Sample ID:**	9908101400; 6pt. Composite
Lab ID:	9908025-03A **Matrix:** SOIL	**Collection Date:**	08/10/1999 2:00:00 PM
Project:	PNM Pit Remediation Landfarms	**COC Record:**	7681

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015B**				Analyst: **DC**
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	08/11/1999

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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PNM®

Environmental Services

Well Name:	Federal #1E
Well Legals:	Sec 18, T30N, R12W, Unit J
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 Federal #1E well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 276 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Farmington North, NM series 7.5 minute topographic map.)

2. PNM excavated 133 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.

3. Sandstone was encountered at 10 feet below ground surface. Bedrock/sandstone provides a barrier between remaining contamination and groundwater. Vertical migration through bedrock or sandstone to groundwater is unlikely.

4. PNM excavated and performed remediation to the maximum depth and horizontal extent practicable.

PNM believes that their former pit on the Federal #1E well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.