OK

Kennedy, Bert
DEPUTY OIL & GAS INSPECTOR

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

DEC 17 1998

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
JUL 31 1998
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: EH Pipken #8

Location: Unit N Sec 1 T 27 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☑ Other

Land Type: BLM ☑ State ☐ Fee ☐ Other

Pit Location: (Attach diagram)

Pit dimensions: length 15 ' width 15 ' depth 3 '

Reference: wellhead ☑ other

Footage from reference: 159'

Direction from reference: Due 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)	10
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):			10

EH Pipken #8

Date Remediation Started: 4/27/98 **Date Completed:** 4/27/98

Remediation Method: (Check all appropriate sections)
Excavation X Approx. Cubic Yard 162
Landfarmed X Amount Landfarmed (cubic yds) 162
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 pit size of 25' X 25' X 7' 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.

*** Bedrock encountered at 7'. See attached risk analysis and lab 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 Bottom of excavation (3 pt.).
Sample depth 7'
Sample date 4/27/98 Sample time 2:05:00 PM

Sample Results

Benzene (ppm) *** 22.0000
Total BTEX (ppm) 208.2000
Field headspace (ppm)
TPH (ppm) 480.00 Method 8015

Vertical Extent (ft) Risk Analysis form attached Yes ✔ No

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

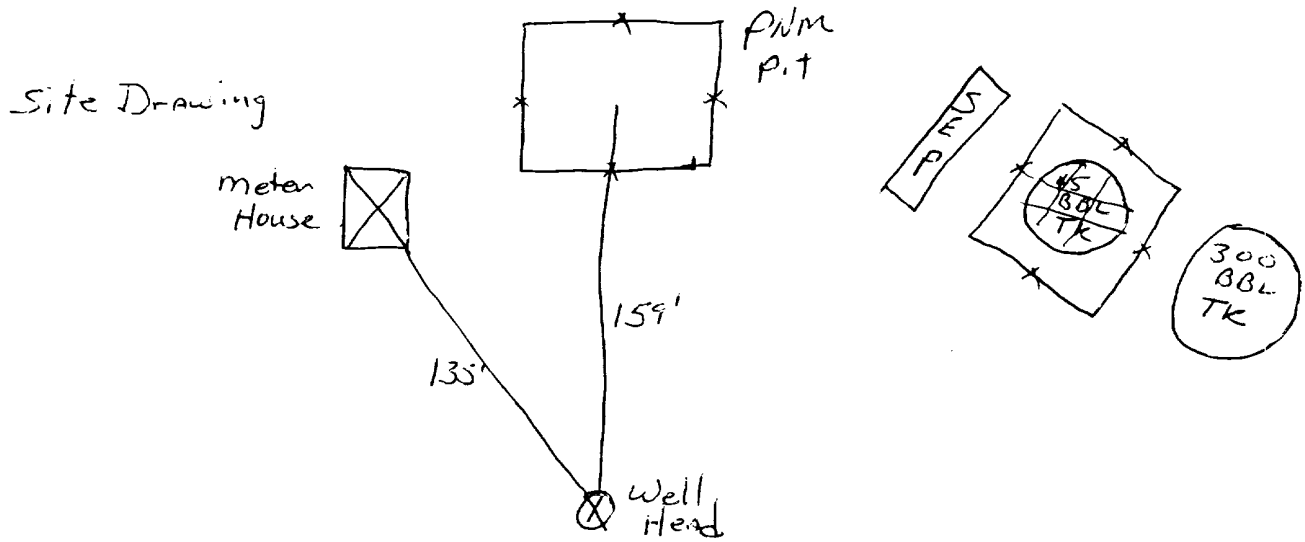
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE **July 27, 1998**
SIGNATURE Mary Cook
PRINTED NAME AND TITLE **Gary Cook** **Environmental Technician III**

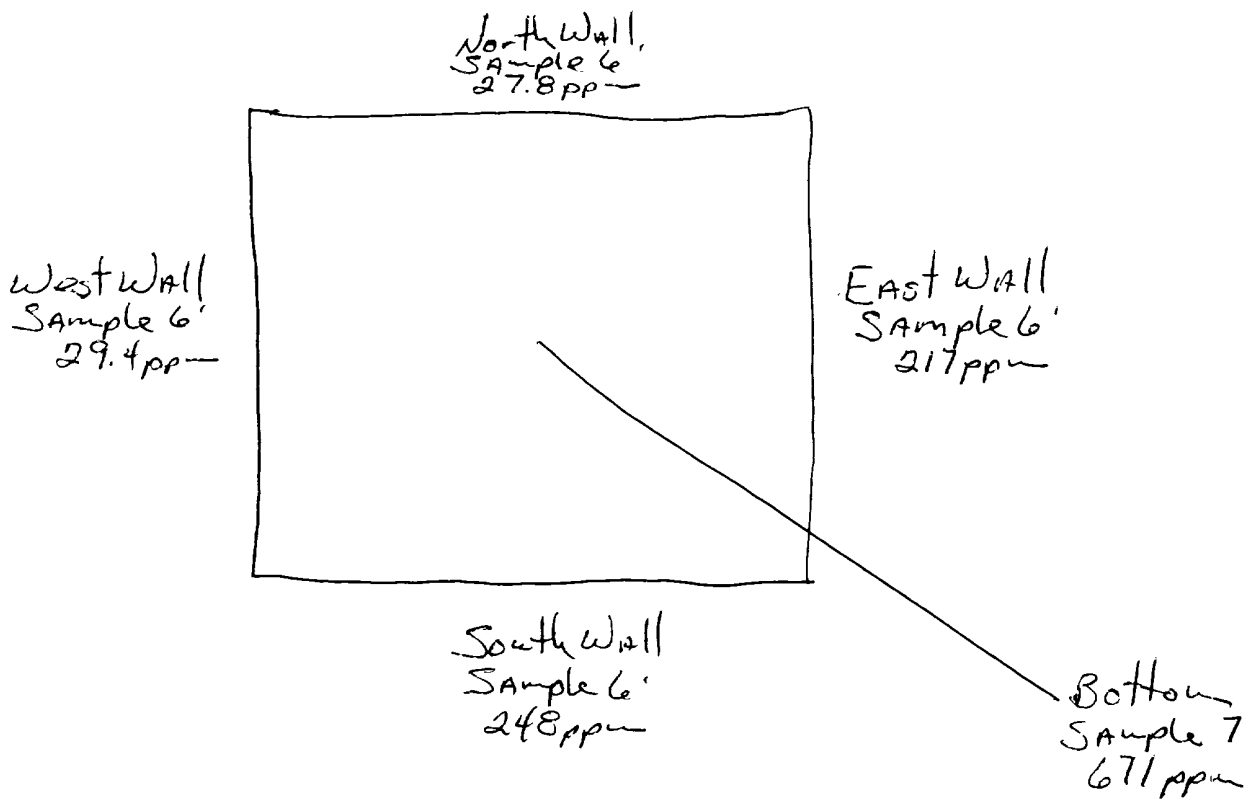
Pipkin # 8
Sec 1 T27N R11W Unit N
Cross Timber

4/21/98

Site Drawing



Excavation Drawing



OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: *06-May-98*

CLIENT: PNM - Public Service Company of NM
Project: Pit Remediation
Lab Order: 9804042

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: *06-May-98*

Client:	PNM - Public Service Company of NM	**Client Sample Info:**	Pipkin #8
Work Order:	9804042	**Client Sample ID:**	9804271405: 3pt. Bottom
Lab ID:	9804042-03A **Matrix:** SOIL	**Collection Date:**	4/27/98 2:05:00 PM
Project:	Pit Remediation	**COC Record:**	7118

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS	**SW8015**					Analyst: **DC**
T/R Hydrocarbons: C10-C28	480	25		mg/Kg	1	4/30/98
BTEX	**SW8020A**					Analyst: **DC**
Benzene	22000	1000		µg/Kg	1000	5/3/98
Toluene	98000	2000		µg/Kg	1000	5/3/98
Ethylbenzene	8200	1000		µg/Kg	1000	5/3/98
m,p-Xylene	64000	2000		µg/Kg	1000	5/3/98
o-Xylene	16000	1000		µg/Kg	1000	5/3/98

208200

208.20 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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ANALYTICAL REPORT

Date: *06-May-98*

Client:	PNM - Public Service Company of NM	**Client Sample Info:**	Pipkin #8
Work Order:	9804042	**Client Sample ID:**	9804271406; 4pt. Walls
Lab ID:	9804042-04A **Matrix:** SOIL	**Collection Date:**	4/27/98 2:06:00 PM
Project:	Pit Remediation	**COC Record:**	7118

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015**				Analyst: **DC**
T/R Hydrocarbons: C10-C28	600	25		mg/Kg	1	4/30/98
BTEX		**SW8020A**				Analyst: **DC**
Benzene	480	50		µg/Kg	50	5/3/98
Toluene	810	100		µg/Kg	50	5/3/98
Ethylbenzene	170	50		µg/Kg	50	5/3/98
m,p-Xylene	1600	100		µg/Kg	50	5/3/98
o-Xylene	430	50		µg/Kg	50	5/3/98

3490
3.490 ppm

Qualifiers:

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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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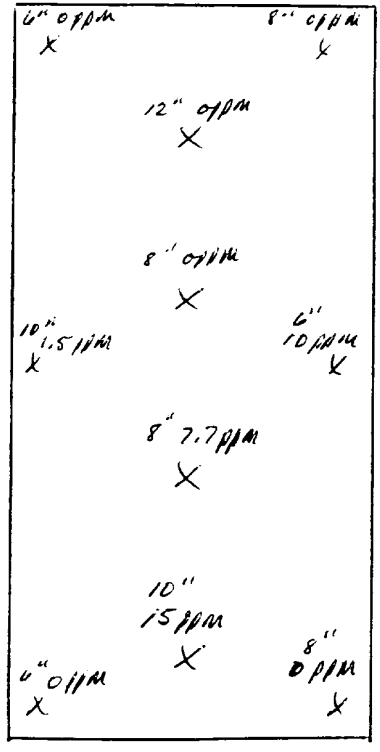
Parker 8
SW4/SW4
N-1-27N-11W
Coose Tembers
Lab Sample # 9805210730
Field Head space 11.0 ppm

N



6" - 12"

⊗ WH

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: *29-May-98*

CLIENT: PNM - Public Service Company of NM
Project: Landfarm Composites
Lab Order: 9805071

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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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *29-May-98*

Client:	PNM - Public Service Company of NM	**Client Sample Info:**	Pipken 8 Landfarm
Work Order:	9805071	**Client Sample ID:**	9805210730
Lab ID:	9805071-03A **Matrix:** SOIL	**Collection Date:**	5/21/98 7:30:00 AM
Project:	Landfarm Composites	**COC Record:**	5221

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		**SW8015**				Analyst: **DC**
T/R Hydrocarbons: C10-C28	460	25		mg/Kg	1	5/27/98

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

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PNM®

Environmental Services

Well Name:	EH Pipken #8
Well Legals:	Unit N, Sec 1, T27N, R11W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Less than 200 feet
Groundwater Depth:	Less than 50 feet

RISK ANALYSIS

PNM requests closure of their former pit on the EH Pipken #8 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 30 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash (East Fork Kutz Canyon). (Reference: topographic map.)

2. PNM excavated 162 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.

3. Bedrock was encountered at 7 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 their former pit on the EH Pipken #8 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.