

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

OK
Risk
351BTEX

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

RECEIVED
APR 29 1999

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: Richardson #1A

Location: Unit A Sec 10 T 31 N R 12 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ Other

Land Type: BLM ☒ State ☐ Fee ☐ Other

Pit Location: Pit dimensions: length 20 width 20 depth 3

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 105'

Direction from reference: 15 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	(20 points)	
	50 feet to 99 feet	(10 points)	
	Greater than 100 feet	(0 points)	<u>10</u>

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)	<u>0</u>

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)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 10

Richardson #1A

Date Remediation Started: 5/11/98 Date Completed: 5/12/98

Remediation Method: Excavation X Approx. Cubic Yard 532
(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 400
Other X - 132 cu yds clean overburden.

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

Backfill Material Location: _____

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 25' X 23' X 25' 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.

Vertical extent drilling conducted to 35'. Bottom hole results below OCD guidelines as indicated on attached lab analysis.

Ground Water Encountered: No ☒ Yes ☐ Depth _____

Final Pit Closure Sampling:

Sample Location Bottom of excavation.

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

Sample depth 25'

Sample date 5/12/98 Sample time 8:00:00 AM

Sample Results

Benzene (ppm) 28.0000

Total BTEX (ppm) 715.0000

Field headspace (ppm) _____

TPH (ppm) 79.00 Method 8015A

Vertical Extent (ft) 35' 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 April 27, 1999

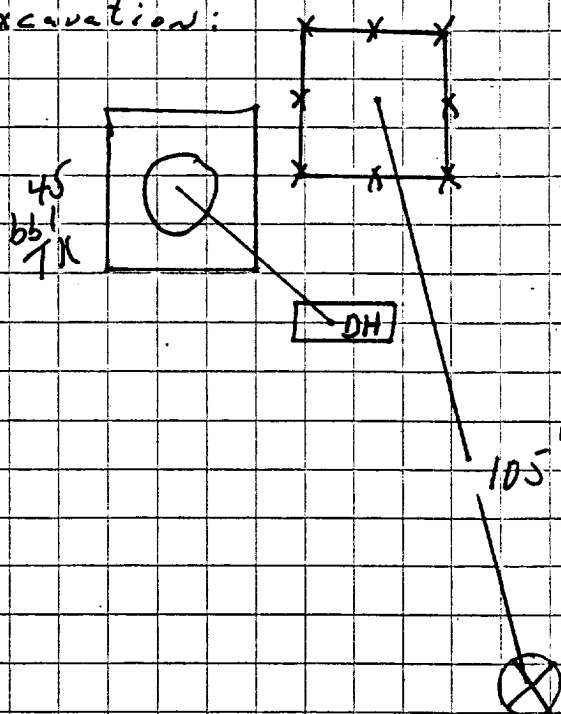
SIGNATURE Maureen Gannon

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

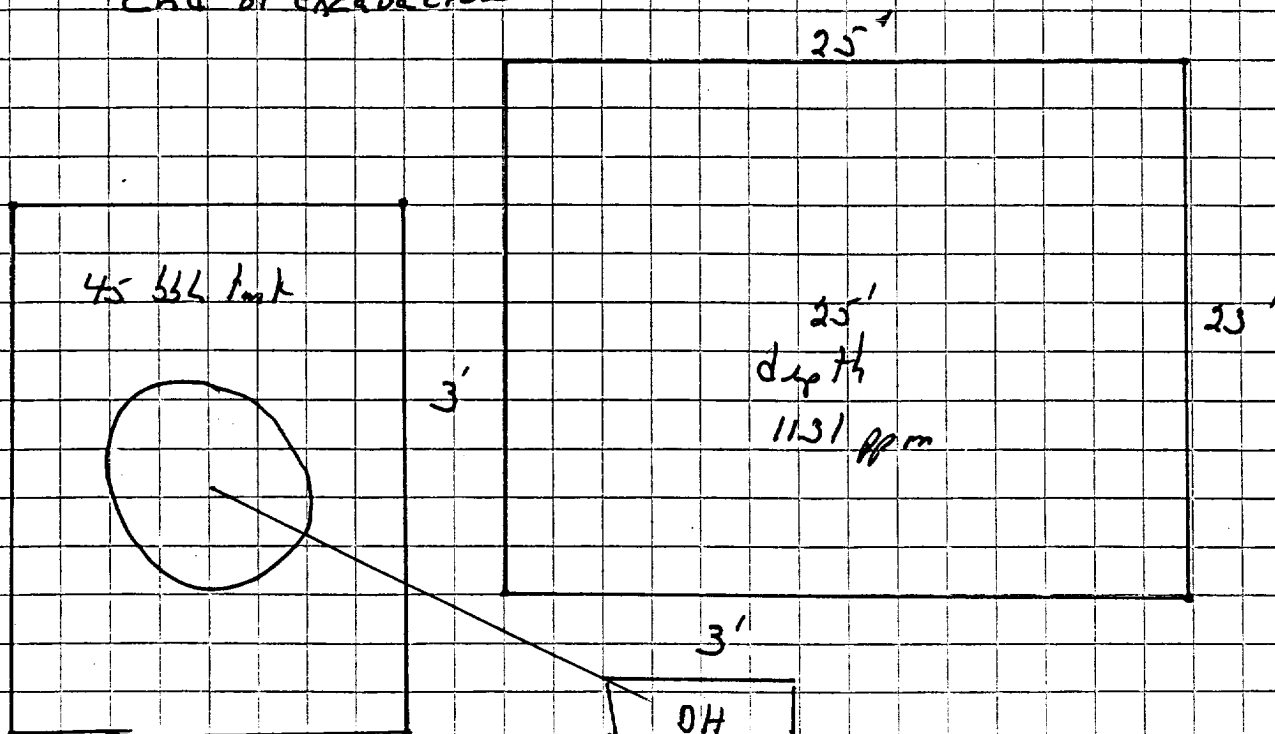
Richardson # 1A
Burlington
Sec. 10, 31N, 12W, 1A

5/11/98

start of excavation:



End of excavation



OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 26-May-98

CLIENT: PNM - Public Service Company of NM

Project: Richardson #1A

Lab Order: 9805037

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

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 26-May-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Richardson #1A
Work Order:	9805037	Client Sample ID:	9805120800; Bottom @ 25ft.
Lab ID:	9805037-01A	Matrix:	SOIL
Project:	Richardson #1A	Collection Date:	5/12/98 8:00:00 AM
		COC Record:	7212

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	79	25		mg/Kg	1	5/21/98
BTEX		SW8020A				Analyst: HR
Benzene	28000	2500		µg/Kg	2500	5/19/98
Toluene	350000	5000		µg/Kg	2500	5/19/98
Ethylbenzene	41000	2500		µg/Kg	2500	5/19/98
m,p-Xylene	240000	5000		µg/Kg	2500	5/19/98
o-Xylene	56000	2500		µg/Kg	2500	5/19/98

715000
715.0 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

OFF: (505) 325-5667

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 26-May-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Richardson #1A
Work Order:	9805037	Client Sample ID:	9805121000; Walls @ 16ft.
Lab ID:	9805037-02A	Matrix:	SOIL
Project:	Richardson #1A	Collection Date:	5/12/98 10:00:00 AM
		COC Record:	7212

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	ND	SW8015 25		mg/Kg	1	Analyst: DC 5/21/98
BTEX						
Benzene	ND	SW8020A 1		µg/Kg	1	Analyst: HR 5/18/98
Toluene	2.1	2		µg/Kg	1	5/18/98
Ethylbenzene	ND	1		µg/Kg	1	5/18/98
m,p-Xylene	3.4	2		µg/Kg	1	5/18/98
o-Xylene	1.2	1		µg/Kg	1	5/18/98

6.7
0.0067 ppm

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Richardson # 1A

6-29-98

BR

Sec. 10, 31W, 12N, A

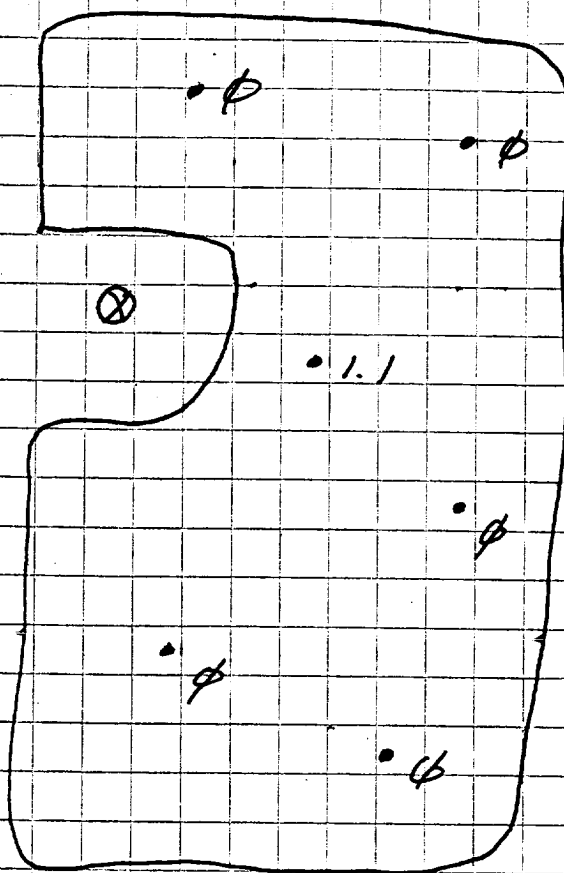
Landfarm:

532 yards

9806290830

2"-12" depth

Soil vapor head space = 5.3 ppm



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 01-Jul-98

CLIENT: PNM - Public Service Company of NM

Project: Landfarms

Lab Order: 9806114

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: 01-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Richardson #1A
Work Order:	9806114	Client Sample ID:	9806290830; 6pt. Comp 2-12in.
Lab ID:	9806114-02A	Matrix:	SOIL
Project:	Landfarms	Collection Date:	6/29/98 8:30:00 AM
		COC Record:	7306

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	34	25		mg/Kg	1	6/30/98

Qualifiers:

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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

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 11-Mar-99

CLIENT: PNM - Public Service Company of NM
Project: Richardson 1A
Lab Order: 9902078

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: 11-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Richardson 1A
Work Order:	9902078	Client Sample ID:	9902181115; Vert. Extent @ 35ft.
Lab ID:	9902078-01A	Matrix:	SOIL
Project:	Richardson 1A	Collection Date:	2/18/99 11:15:00 AM
		COC Record:	7194

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	Analyst: HR 3/9/99
BTEX						
Benzene	ND	1		µg/Kg	1	Analyst: HR 2/24/99
Toluene	ND	2		µg/Kg	1	2/24/99
Ethylbenzene	ND	1		µg/Kg	1	2/24/99
m,p-Xylene	ND	2		µg/Kg	1	2/24/99
o-Xylene	ND	1		µg/Kg	1	2/24/99

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road

Farmingington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1

Well # _____

Page 1 of 1

Project Number 20731 Phase 600177

Project Name PNM VERTICAL EXTENT

Project Location RICHARDSON #1A

Elevation _____

Borehole Location LTR: S:10 T:31N R:12W

GWL Depth _____

Drilled By K. PADILLA

Well Logged By Cecil Kirby

Date Started 2-19-99

Date Completed 2-18-99

Drilling Method 4 1/4 ID HSA

Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace BZ=0
5										
10										
15										
20										
25										
30	①	1.5'		Tan Lt Brn Fm - med Grn Sand with 2-10 CG Loose		1.7 15.2				10 Blows
35	②	1.5'		PR Brn Fmg Silty Sand with Iron stained (weathered clay)? nodules Lab Sample Retrieved ~8000 med grn 200% F ₃ /S ₁₁ STIFF		5.5 6.8				15 Blows
40										

Comments:

Geologist Signature

Cecil Kirby