

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

RECEIVED  
APR 29 1999

PIT REMEDIATION AND CLOSURE REPORT

OIL CON. DIV.  
DIST. 3

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Delo #2

Location: Unit A Sec 15 T 28 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☐ Other No equip. - pit abandoned.

Land Type: BLM ☒ State ☐ Fee ☐ Other

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

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 95'

Direction from reference: 70 Degrees ☒ East North ☒  
of ☐ West South ☐

Depth to Ground Water: Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 points) 20

(Vertical distance from contaminants to  
seasonal high water elevation of ground  
water)

Wellhead Protection Area: Yes (20 points)  
No (0 points) 0

(Less than 200 feet from a private  
domestic water source, or, less than 1,000  
feet from all other water sources)

Distance to Surface Water: Less than 200 feet (20 points)  
200 feet to 1,000 feet (10 points)  
Greater than 1,000 feet (0 points) 0

(Horizontal distance to perennial lakes,  
ponds, rivers, streams, creeks, irrigation  
canals and ditches)

RANKING SCORE (TOTAL POINTS): 20

Delo #2

Date Remediation Started: 4/22/98 Date Completed: 4/23/98

Remediation Method: Excavation X Approx. Cubic Yard 507

(Check all appropriate sections)

Landfarmed X Amount Landfarmed (cubic yds) 507

Other \_\_\_\_\_

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 38' X 30' X 12' 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 12' depth. See attached risk analysis form.

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 12'

Sample date 4/22/98 Sample time 11:25:00 AM

**Sample Results**

Benzene (ppm) 0.8900

Total BTEX (ppm) 40.6300

Field headspace (ppm) \_\_\_\_\_

TPH (ppm) 240.00 \*\*\* Method 8015A

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 April 27, 1999

SIGNATURE Maureen Gannon

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

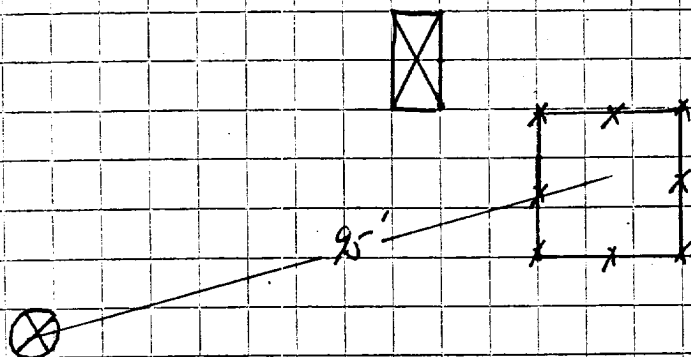
Dep #2

4-22-98

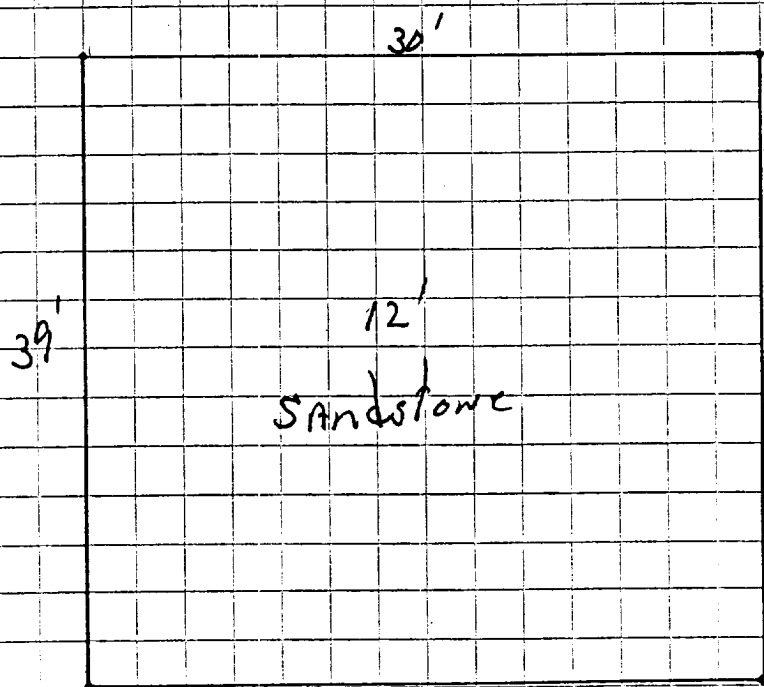
Burlington Resources

Sec. 15, 28N, 11W, A

start of excavation:



End of excavation:





## ANALYTICAL REPORT

Date: 29-Apr-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Delo #2
<b>Work Order:</b>	9804034	<b>Client Sample ID:</b>	9804221125; Bottom @ 12'
<b>Lab ID:</b>	9804034-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Delo #2	<b>Collection Date:</b>	4/22/98 11:25:00 AM
		<b>COC Record:</b>	7115

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
T/R Hydrocarbons: C10-C28	240	25		mg/Kg	1	4/27/98
<b>BTEX</b>						
						Analyst: HR
Benzene	890	250		µg/Kg	250	4/24/98
Toluene	840	500		µg/Kg	250	4/24/98
Ethylbenzene	4400	250		µg/Kg	250	4/24/98
m,p-Xylene	31000	500		µg/Kg	250	4/24/98
o-Xylene	3500	250		µg/Kg	250	4/24/98
Surr: Fluorobenzene	96.3	70-130		%REC	250	4/24/98
Surr: 1,4-Difluorobenzene	81.7	70-130		%REC	250	4/24/98
Surr: 4-Bromochlorobenzene	94.1	70-130		%REC	250	4/24/98

Total BTEX - 40630  
 40.63 ppm

## 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

1 of 2

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



## ANALYTICAL REPORT

Date: 29-Apr-98

**Client:** PNM - Public Service Company of NM  
**Work Order:** 9804034  
**Lab ID:** 9804034-02A    **Matrix:** SOIL  
**Project:** Delo #2

**Client Sample Info:** Delo #2  
**Client Sample ID:** 9804221420; Walls @ 10'  
**Collection Date:** 4/22/98 2:20:00 PM  
**COC Record:** 7115

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	20	25	JB	mg/Kg	1	4/27/98
<b>BTEX</b>		<b>SW8020A</b>				Analyst: DC
Benzene	ND	1		µg/Kg	1	4/24/98
Toluene	2	2		µg/Kg	1	4/24/98
Ethylbenzene	1.1	1		µg/Kg	1	4/24/98
m,p-Xylene	8.3	2		µg/Kg	1	4/24/98
o-Xylene	ND	1		µg/Kg	1	4/24/98
Surr: Fluorobenzene	104.9	70-130		%REC	1	4/24/98
Surr: 1,4-Difluorobenzene	105.8	70-130		%REC	1	4/24/98
Surr: 4-Bromochlorobenzene	110.6	70-130		%REC	1	4/24/98

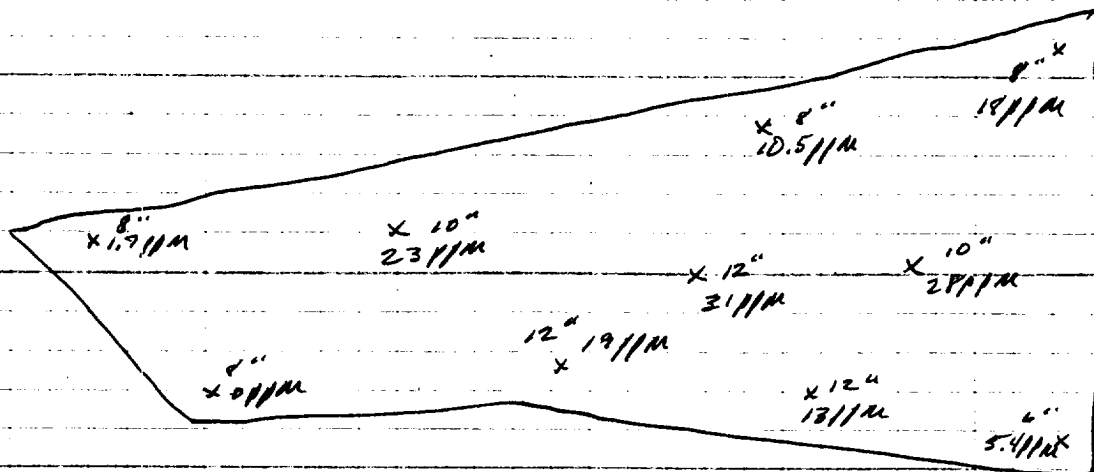
↳ Total BTEX - 11.4  
 .0114 ppm

**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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DeLo #2  
(A) 15-28N-11W  
Burlington  
San Juan County  
Lab Sample # 9806040930  
Field head spill: 39 ppm



OFF: (505) 325-5667

# ON SITE

LAB: (505) 325-1556

TECHNOLOGIES, LTD.

**On Site Technologies, LTD.**

**Date:** 08-Jun-98

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**CLIENT:** PNM - Public Service Company of NM

**Project:** Landfarm Composites

**Lab Order:** 9806013

## CASE NARRATIVE

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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: 08-Jun-98

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Delo #2
<b>Work Order:</b>	9806013	<b>Client Sample ID:</b>	9806040930: Landfarm
<b>Lab ID:</b>	9806013-04A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Landfarm Composites	<b>Collection Date:</b>	6/4/98 9:30:00 AM
		<b>COC Record:</b>	5224

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015</b>				<b>Analyst: HR</b>
T/R Hydrocarbons: C10-C28	40	25		mg/Kg	1	6/5/98

**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

1 of 1





## Environmental Services

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Well Name:	Delo #2
Well Legals:	Unit A, Sec 15, T28N, R11W
Pit Type:	Abandoned; no equipment
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Less than 50 feet

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### RISK ANALYSIS

PNM requests closure of their former pit on the Delo #2 well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 20 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Bloomfield, NM series 7.5 minute topographic map.)
2. PNM excavated 507 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 12 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 Delo #2 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 800 pits.