

District I *Denny E. Foust*  
P.O. Box 1980, Hobbs, NM  
District II **DEPUTY OIL & GAS INSPECTOR**  
P.O. Drawer DD, Artesia, NM 88221  
District III  
3000 Rio Brazos Rd, Aztec, NM 87410  
**SEP 03 1999**

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street  
Santa Fe, New Mexico 87505

*OK Risk*  
*Becker*  
SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

**RECEIVED**  
**JUL 30 1999**  
**OIL CON. DIV.**  
**DIST. 3**

*Approved* **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: Culpepper Martin #7A  
Location: Unit I Sec 28 T 32 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: 110'  
Direction from reference: 50 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) 0

(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):** 0

Culpepper Martin #7A

Date Remediation Started: 04/15/1999

Date Completed: 04/15/1999

Remediation Method: Excavation ☒

Approx. Cubic Yard 106

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 106

Other

Remediation Location: Onsite ☒

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 20' X 24' X 6' 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 6'. See attached risk analysis form and lab analysis.

Ground Water Encountered: No ☒ Yes ☐ Depth

Final Pit Closure Sampling:

Sample Location Five point composite - bottom of excavation.

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

Sample depth 6'

Sample date 04/15/1999 Sample time 10:20:00 AM

Sample Results

Benzene (ppm) 22.000

Total BTEX (ppm) 366.000 \*\*\*

Field headspace (ppm)

TPH (ppm) 300.00 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 July 27, 1999

SIGNATURE Maureen Gannon

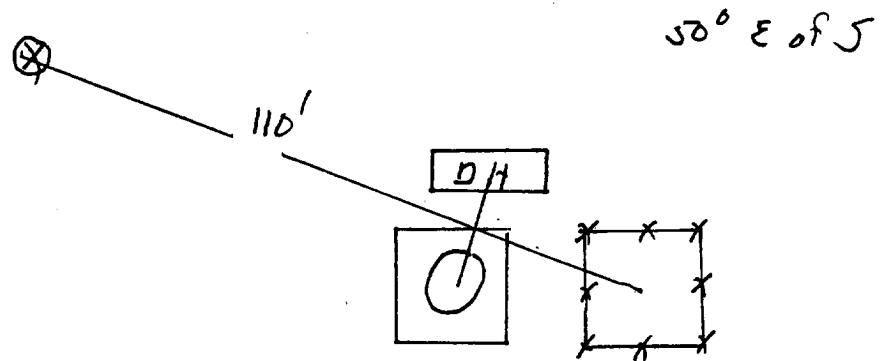
PRINTED NAME Maureen Gannon  
AND TITLE Project Manager

Culpepper Martin #7A  
Burlington  
Sec. 28, 32N, 12W, I

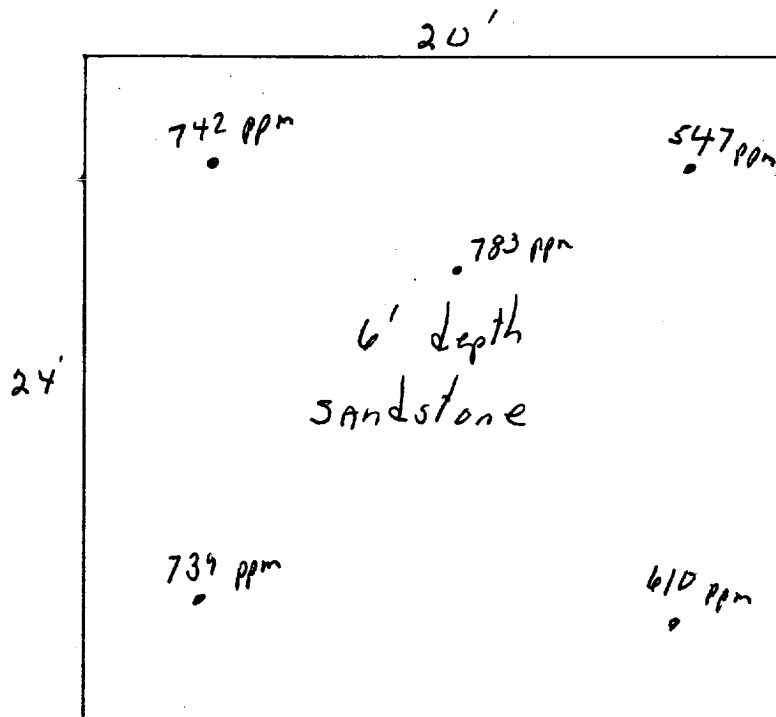
4/15/99



Site diagram:



End of excavation:



OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date:** 29-Apr-99

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

**Project:** Culpepper Martin #7A

**Lab Order:** 9904028

## **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.

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OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 29-Apr-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Culpepper Martin #7A
<b>Work Order:</b>	9904028	<b>Client Sample ID:</b>	9904151020; Bottom @ 6ft
<b>Lab ID:</b>	9904028-01A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Culpepper Martin #7A	<b>Collection Date:</b>	4/15/99 10:20:00 AM
		<b>COC Record:</b>	7563

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: DC
T/R Hydrocarbons: C10-C28	300	25		mg/Kg	1	4/27/99
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>				Analyst: HR
Benzene	22000	2500		µg/Kg	2500	4/22/99
Toluene	130000	5000		µg/Kg	2500	4/22/99
Ethylbenzene	19000	2500		µg/Kg	2500	4/22/99
m,p-Xylene	160000	5000		µg/Kg	2500	4/22/99
o-Xylene	35000	2500		µg/Kg	2500	4/22/99

366000  
366 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 1

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- TECHNOLOGY SERVING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

## ANALYTICAL REPORT

Date: 29-Apr-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Culpepper Martin #7A
<b>Work Order:</b>	9904028	<b>Client Sample ID:</b>	9904151025; Walls @ 3ft
<b>Lab ID:</b>	9904028-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	Culpepper Martin #7A	<b>Collection Date:</b>	4/15/99 10:25:00 AM
		<b>COC Record:</b>	7563

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	4/16/99

**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 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Culpepper Martin 7A  
Sec-28 T-32N R-12W UL-1  
Burlington

LANDFARM Drawing  
on location App 106 cu yds

Wellhead



9.0 ppm

1.8 ppm

97.7 ppm

11.5 ppm

20.7 ppm

2" to 12" Depth  
HEADSPACE Reading 37.3 ppm  
Sample 9905190853

Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

**On Site Technologies, LTD.**

**Date: 27-May-99**

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

**Project:** C.M./Moore/Montoya LF

**Lab Order:** 9905066

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**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: 27-May-99

<b>Client:</b>	PNM - Public Service Company of NM	<b>Client Sample Info:</b>	Culpepper Martin #7A LF
<b>Work Order:</b>	9905066	<b>Client Sample ID:</b>	9905190853; 5pt Comp
<b>Lab ID:</b>	9905066-02A	<b>Matrix:</b>	SOIL
<b>Project:</b>	C.M./Moore/Montoya LF	<b>Collection Date:</b>	5/19/99 8:53:00 AM
		<b>COC Record:</b>	7620

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				<b>Analyst: DC</b>
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	5/25/99

**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 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



## **Environmental Services**

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Well Name:	Culpepper Martin #7A
Well Legals:	Unit I, Sec 28, T32N, R12W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	Greater than 100 feet

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### **RISK ANALYSIS**

PNM requests closure of their former pit on the Culpepper Martin #7A well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 235 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Adobe Downs Ranch, NM series 7.5 minute topographic map.)
2. PNM excavated 106 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 6 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 Culpepper Martin #7A well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.