

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

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

District III
1000 Rio Brazos Rd., Las Alamos, NM 87811

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 30 1999

OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Culpepper Martin #2 Drip

Location: Unit P Sec 30 T 32 N R 12 W County San Juan

Pit Type: Separator ☐ Dehydrator ☐ Other Line drip

Land Type: BLM ☐ State ☐ Fee ☒ Other

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

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 119'

Direction from reference: 90 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 #2 Drip

Date Remediation Started: 05/10/1999

Date Completed: 05/11/1999

Remediation Method:

Excavation ☒

Approx. Cubic Yard 662

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 662

Other

Remediation Location:

Onsite

X - Culpepper Martin #2

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 27.5' X 32.5' X 20' 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 21'. See attached risk analysis form and lab analysis.

Ground Water Encountered:

No



Yes



Depth

Final Pit Closure Sampling:

Sample Location

5 pt. composite - bottom.

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

Sample depth

20'

Sample date

05/11/1999

Sample time

10:10:00 AM

Sample Results

Benzene (ppm)

8.600

Total BTEX (ppm)

90.000 ***

Field headspace (ppm)

TPH (ppm)

170.00

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

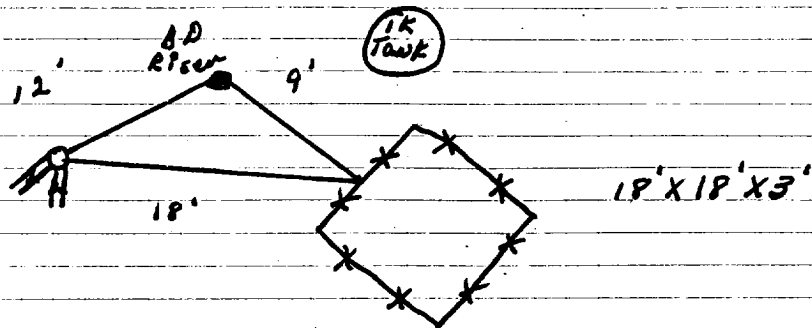
PRINTED NAME Maureen Gannon
AND TITLE Project Manager

Culpper Martin #2 Drift

(P) 30-32N-12W

WFS

5-10-94



Excavation Sampling

27.5' (N45) x 32.5' (E40) x 20' (D)

PID readings

5' - 2149 ppm

10' - 1540 ppm

15' - 1552 ppm

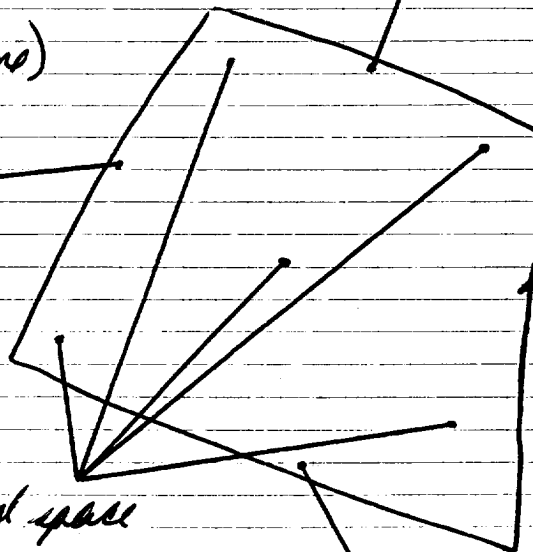
20' - 1708 ppm

21' - 1228 ppm (sandstone)

west wall head space
at 20' - 16.7 ppm

north wall head space
at 20' - 11.6 ppm

East wall head space
at 20' - 0 ppm



south wall head space
at 20' - 0 ppm

not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 20-May-99

CLIENT: PNM - Public Service Company of NM

Project: Culpepper Martin #2 Drip

Lab Order: 9905045

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.

Ray

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 20-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #2 Drip
Work Order:	9905045	Client Sample ID:	9905111010; 5pt. Bottom Comp
Lab ID:	9905045-01A	Matrix:	SOIL
Project:	Culpepper Martin #2 Drip	Collection Date:	5/11/99 10:10:00 AM
		COC Record:	7191

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	170	25		mg/Kg	1	5/19/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	8600	1000		µg/Kg	1000	5/12/99
Toluene	40000	2000		µg/Kg	1000	5/12/99
Ethylbenzene	3200	1000		µg/Kg	1000	5/12/99
m,p-Xylene	32000	2000		µg/Kg	1000	5/12/99
o-Xylene	6200	1000		µg/Kg	1000	5/12/99

90000
90 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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 20-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #2 Drip
Work Order:	9905045	Client Sample ID:	9905111015; 4 Wall Comp
Lab ID:	9905045-02A	Matrix:	SOIL
Project:	Culpepper Martin #2 Drip	Collection Date:	5/11/99 10:15:00 AM
		COC Record:	7191

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	5/19/99

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

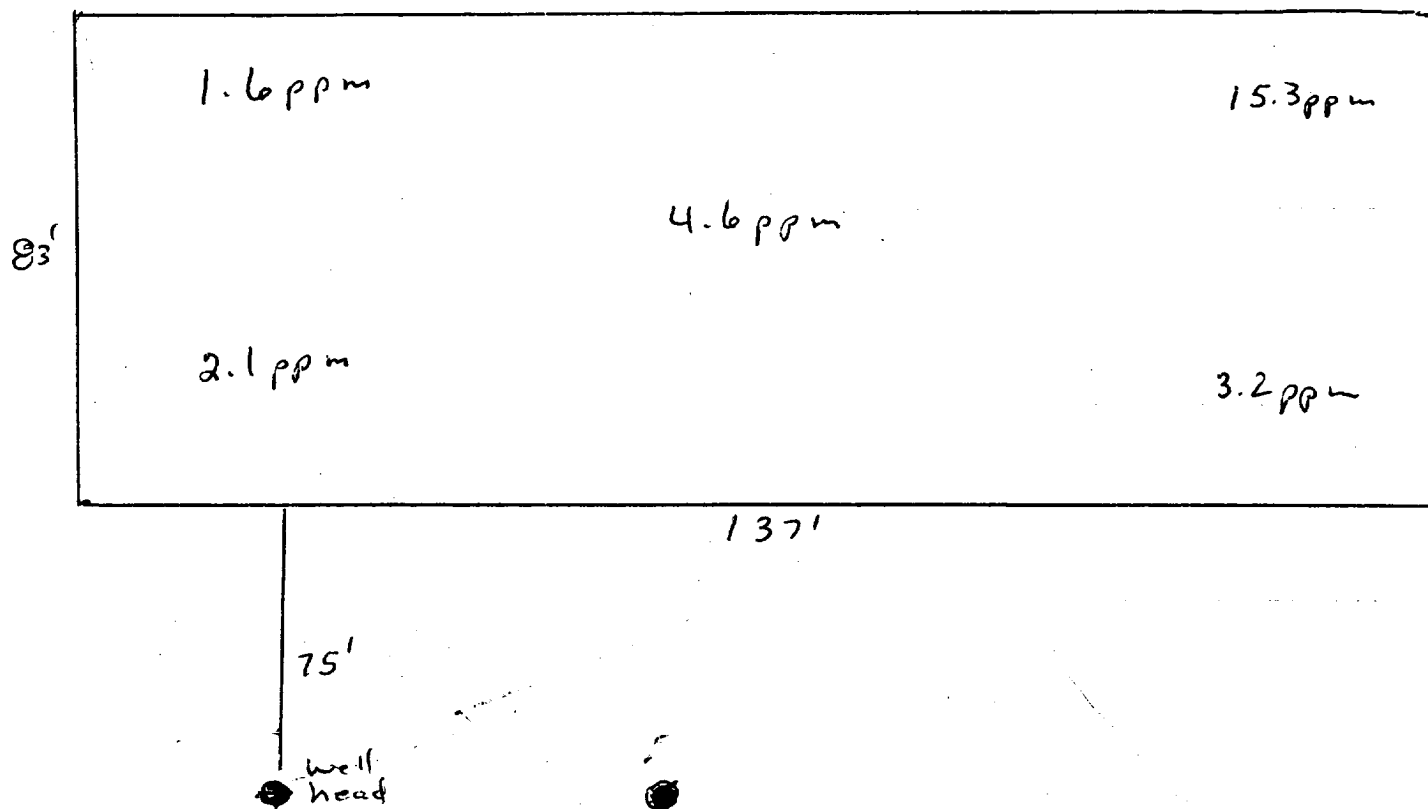
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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Culpepper Martin #2 Drift
Sec. 30 T-32N R-12W UCP
WFS

Land farm Denwing App 662 Cu yds



Field Headspace: ~~19.2~~ 19.2 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 21-Jun-99

CLIENT: PNM - Public Service Company of NM
Project: Culpepper Martin Landfarms
Lab Order: 9906057

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.

RB

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 21-Jun-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #2 Drip LF
Work Order:	9906057	Client Sample ID:	9906151230; 5pt. Comp.
Lab ID:	9906057-03A	Matrix:	SOIL
Project:	Culpepper Martin Landfarms	Collection Date:	6/15/99 12:30:00 PM
		COC Record:	7720

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/18/99

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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- TECHNOLOGY BEEN USED TO TEST WITH THE ENVIRONMENT -



Environmental Services

Well Name:	Culpepper Martin #2 Drip
Well Legals:	Unit P, Sec 30, T32N, R12W
Pit Type:	Line Drip
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 Culpepper Martin #2 Drip well site using a limited risk analysis based on the following conditions:

1. Groundwater is estimated to be at a depth of 109 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: La Plata, NM series 7.5 minute topographic map.)
2. PNM excavated 662 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 21 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 #2 Drip well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.