

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

Risk
Vertical
extent
45
RECEIVED
NOV - 1 1999
OIL CON. DIV.
DIST. 3

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
1 COPY TO
STATE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Martinez #1

Location: Unit M Sec 2 T 25 N R 3 W County Rio Arriba

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: 68'

Direction from reference: 80 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

Martinez #1

Date Remediation Started: 01/19/1999

Date Completed: 01/19/1999

Remediation Method: Excavation ☒

Approx. Cubic Yard 444

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 360

Other 84 cu yds clean overburden

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 24' X 25' 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.

*** Vertical extent drilling conducted to 45'. 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

20'

Sample date

01/19/1999

Sample time

10:30:00 AM

Sample Results

Benzene (ppm) < 5

Total BTEX (ppm) 701 ***

Field headspace (ppm)

TPH (ppm)

840.00

Method

8015B

Vertical Extent (ft) 45'

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 October 28, 1999

SIGNATURE

Maureen Gannon

PRINTED NAME Maureen Gannon
AND TITLE Project Manager

Martinez #1
Energen
Sec. 2, 25N, 3W, m

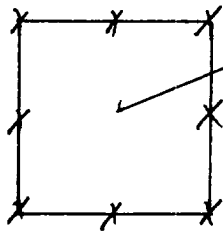
1-19-99

Site Diagram:

↑
N



S
E
P



68'



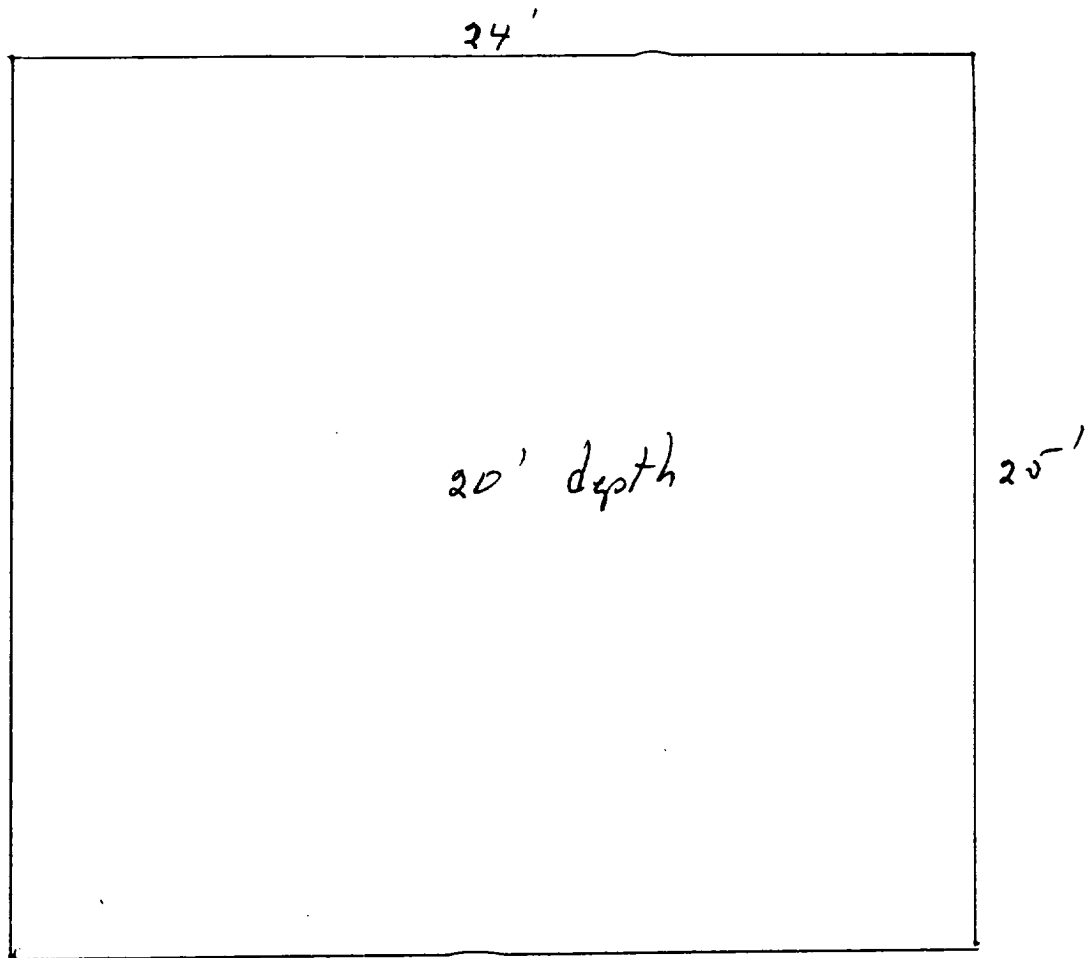
Martinez #1

1-19-99

Energren

Sec. 2, 25N, 3W, m

End of excavation:



OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 29-Jan-99

CLIENT: PNM - Public Service Company of NM

Project: Martinez #1

Lab Order: 9901011

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: 29-Jan-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Martinez #1
Work Order:	9901011	Client Sample ID:	9901191030 Bottom @ 20ft
Lab ID:	9901011-01A	Matrix:	SOIL
Project:	Martinez #1	Collection Date:	1/19/99 10:30:00 AM
		COC Record:	7457

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	840	25		mg/Kg	1	1/28/99
BTEX		SW8021B				Analyst: HR
Benzene	ND	5000		µg/Kg	5000	1/25/99
Toluene	180000	10000		µg/Kg	5000	1/25/99
Ethylbenzene	46000	5000		µg/Kg	5000	1/25/99
m,p-Xylene	380000	10000		µg/Kg	5000	1/25/99
o-Xylene	95000	5000		µg/Kg	5000	1/25/99

701000
701 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

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY FLEXIBLE INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 29-Jan-99

Client:	PNM - Public Service Company of NM	Client Sample Info: Martinez #1
Work Order:	9901011	Client Sample ID: 9901191105 Walls @ 15ft
Lab ID:	9901011-02A	Matrix: SOIL
Project:	Martinez #1	Collection Date: 1/19/99 11:05:00 AM
		COC Record: 7457

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	1/28/99
BTEX		SW8021B				Analyst: HR
Benzene	ND	1		µg/Kg	1	1/25/99
Toluene	ND	2		µg/Kg	1	1/25/99
Ethylbenzene	ND	1		µg/Kg	1	1/25/99
m,p-Xylene	ND	2		µg/Kg	1	1/25/99
o-Xylene	ND	1		µg/Kg	1	1/25/99

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

1 of 1

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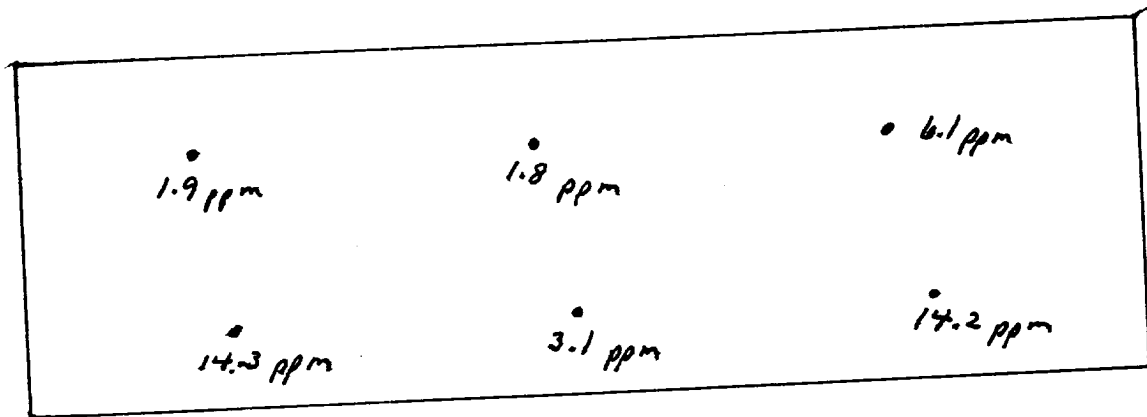
- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Martinez #1
Energen Resources
Sec. 2, 25N, 3W

3/24/99

Landfarm: On location
approximately 444 yards

↑
N



⊗ well head

2"-12" depth
sample # 99D3240900
soil vapor head space reading = 17.8 ppm

not to scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 29-Mar-99

CLIENT: PNM - Public Service Company of NM
Project: Landfarms
Lab Order: 9903054

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: 29-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Martinez #1
Work Order:	9903054	Client Sample ID:	9903240905
Lab ID:	9903054-02A	Matrix:	SOIL
Project:	Landfarms	Collection Date:	3/24/99 9:05:00 AM
		COC Record:	7552

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	3/24/99

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

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 29-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Martinez #1
Work Order:	9903054	Client Sample ID:	9903240900
Lab ID:	9903054-01A	Matrix:	SOIL
Project:	Landfarms	Collection Date:	3/24/99 9:00:00 AM
		COC Record:	7552

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	3/24/99

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

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OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 01-Oct-99

CLIENT: PNM - Public Service Company of NM

Project: Martinez #1

Lab Order: 9909073

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-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Martinez #1
Work Order:	9909073	Client Sample ID:	9909211107; Bottom @ 45ft.
Lab ID:	9909073-01A	Matrix:	SOIL
Project:	Martinez #1	Collection Date:	09/21/1999 11:07:00 AM
		COC Record:	7809

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	09/28/1999
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	250		µg/Kg	250	09/24/1999
Toluene	2100	500		µg/Kg	250	09/24/1999
Ethylbenzene	620	250		µg/Kg	250	09/24/1999
m,p-Xylene	6600	500		µg/Kg	250	09/24/1999
o-Xylene	1700	250		µg/Kg	250	09/24/1999

11020
11,020 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

RECORD OF SUBSURFACE EXPLORAT

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # 1

Well # 1

Page 1 of 2

Project Name PNM VERTICAL EXTENT

Project Number 02800044 Phase 1001

Project Location MARTINEZ #1

Elevation 7233'
 Borehole Location T25N R3W S2M
 GWL Depth NONE ENCOUNTERED
 Logged By C. COLLICOTT
 Drilled By K. PADILLA & D. PADILLA
 Date/Time Started 9/21/99 9:15am
 Date/Time Completed 9/21/99 11:30am

Well Logged By C. COLLICOTT
 Personnel On-Site K. PADILLA & D. PADILLA
 Contractors On-Site D
 Client Personnel On-Site ROY
 Drilling Method AUGER
 Air Monitoring Method PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			0-20' CLEAN FILL						
20	① 20'-22'		① GOOD RECOVERY. SLIGHTLY STIFF SILTY SAND, GRAYISH BROWN WITH SPOTTY OXIDATION. STRONG HC ODOR, NO OBVIOUS STAIN.						① 17 BLOWS SS 1759 PPM HS 2196 PPM
25	② 25'-27'		② GOOD RECOVERY. TOP 6" SLIGHTLY PLASTIC SILTY SAND. BOTTOM 18" LOOSE GRAY POORLY SORTED SAND WITH SMALL GRAVEL. GREENISH-GREY, STRONG ODOR, MAYBE SLIGHT STAIN						② 18 BLOWS SS 1632 PPM HS 2084 PPM
30	③ 30'-32'								③ 50+ BLOWS SS 1394 PPM HS 1224 PPM
35	④ 35'-37'								④ 50+ BLOWS SS 902 PPM HS 680 PPM
40									

Comments:

SUNNY, COOL, LIGHT BREEZE. SITE/HOLE IS ~8' FROM EDGE
 OF PAD ~50 yards from WASH.

Geologist Signature

Cathy Collcott

RECORD OF SUBSURFACE EXPLORAT.

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 325-2262 FAX (505) 328-2388

Borehole # 1

Well # 2

Page 2 of 2

Project Name PNM VERTICAL EXTENT

Project Number 62800044 Phase 6001

Project Location MARTINEZ #1

Elevation 7233'

Borehole Location T25N R3W S2M

GWL Depth NONE ENCOUNTERED

Logged By C. CULLICOTT

Drilled By K. PADILLA ? D. PADILLA

Date/Time Started 9/21/99 9:15am

Date/Time Completed 9/21/99 11:30am

Well Logged By C. CULLICOTT

Personnel On-Site K. PADILLA ? D. PADILLA

Contractors On-Site P

Client Personnel On-Site ROY

Drilling Method AUGER

Air Monitoring Method P.D.

Depth (Feet)	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
40	⑤ 40-42'		⑤ MODERATELY STIFF SILT/SILTSTONE w/ SOME "SHALY" PARTINGS LITTLE SAND, SOME CLAY. GRAY w/ ORANGE MOTTLING ODOR						⑤ 50+ BLOWS SS 971 ppm HS 297 ppm
45	⑥ 45- 47		⑥ SILTSTONE, GRAY, WITH MAROON/DRAB/BSH YELLOW MOTTLING, MAROON FINE GRAINED SLIGHT ODOR						⑥ 50+ BLOWS SS 130 ppm HS 309 ppm
10									
15									
20									
25									
30									
35									
40									

Comments:

HOLE BACKFILLED WITH CUTTINGS

Geologist Signature

Cathy Cullcott

1' Martinez #1
Vertical Extent

③ 30'-32' 1/2" (RECOVER)

STIFF SILT w/ ^{MINOR} CLAY & SAND. MOTTLED DARK
PINK / ORANGISH YELLOW / LIGHT GRAY.

NO STAIN; ~~NO~~ HG DOR

④ 35-32'

50+ BLOWS

SS 902 ppm

HS ppm

STIFF SILT w/ SAND & CLAY.

MOTTLED MAROON / ORANGISH YELLOW /
GRAY. MAROON PART IS MORE
CLAYEY THAN OTHER
COLORS. GDOR, NO STAIN.