

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

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

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: Grenier #1A

Location: Unit B Sec 6 T 31 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ Other

Land Type: BLM ☐ State ☐ Fee ☒ Other

Pit Location: Pit dimensions: length 20 ' width 20 ' depth 2 '

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 93'

Direction from reference: 80 Degrees ☐ East North ☐
West of 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) 0

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) 0

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) 0

RANKING SCORE (TOTAL POINTS): 0

RECEIVED
JAN 3 1 1990
OIL CON. DIV.
DIST. 3

Grenier #1A

Date Remediation Started: 05/13/1999

Date Completed: 05/13/1999

Remediation Method:

Excavation ☒

Approx. Cubic Yard 544

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 500

Other 44 cu yds 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 25' X 28' X 21' 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 conducted to 60'. Bottom hole results below OCD guidelines as indicated on attached 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 21'

Sample date 05/13/1999

Sample time 10:15:00 AM

Sample Results

Benzene (ppm) 4.5

Total BTEX (ppm) 179.3 ***

Field headspace (ppm)

TPH (ppm) 260.00 Method 8015B

Vertical Extent (ft) 60'

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 January 24, 2000

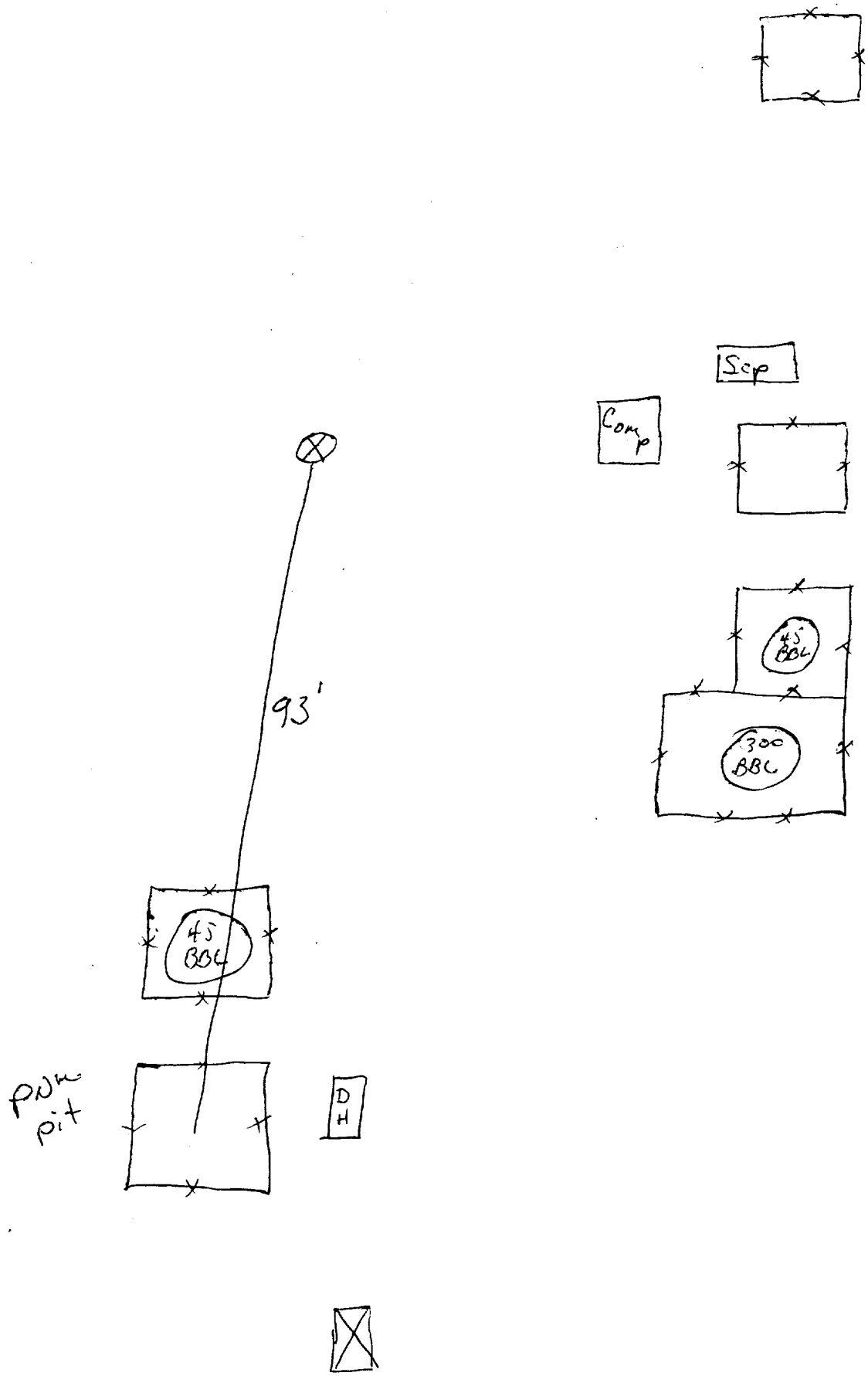
SIGNATURE

Maureen Gannon

PRINTED NAME Maureen Gannon
AND TITLE Project Manager

Sec. 6 T31N R11W Unit B
Burlington

Site Drawing



Sec 6 T31N R11W Unit B
Barlington

Excavation Drawing

2.5 X 28 X 21

North wall
Sample 18'
1006' ppm

Bottom
Sample 21'
1036 ppm

West wall
Sample 18'
0.0 ppm

East wall
Sample 18'
468 ppm

South wall
Sample 18'
2.2 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 26-May-99

CLIENT: PNM - Public Service Company of NM
Project: Grenier 1A & 17E
Lab Order: 9905054

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.

Kon

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 26-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A
Work Order:	9905054	Client Sample ID:	9905131015; 5pt Bottom Comp
Lab ID:	9905054-02A	Matrix:	SOIL
Project:	Grenier 1A & 17E	Collection Date:	5/13/99 10:15:00 AM
		COC Record:	7481

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
T/R Hydrocarbons: C10-C28	260	25		mg/Kg	1	Analyst: DC 5/25/99
AROMATIC VOLATILES BY GC/PID						
		SW8015B				Analyst: DM
Benzene	4500	1000		µg/Kg	1000	5/21/99
Toluene	63000	2000		µg/Kg	1000	5/21/99
Ethylbenzene	9800	1000		µg/Kg	1000	5/21/99
m,p-Xylene	82000	2000		µg/Kg	1000	5/21/99
o-Xylene	20000	1000		µg/Kg	1000	5/21/99

179300
179.3 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	Surrogate - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 26-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A
Work Order:	9905054	Client Sample ID:	9905131010; 2pt Wall Comp
Lab ID:	9905054-01A	Matrix:	SOIL
Project:	Grenier 1A & 17E	Collection Date:	5/13/99 10:10:00 AM
		COC Record:	7481

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	5/20/99

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 26-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A
Work Order:	9905054	Client Sample ID:	9905131012; E. Wall
Lab ID:	9905054-03A	Matrix:	SOIL
Project:	Grenier 1A & 17E	Collection Date:	5/13/99 10:12:00 AM
		COC Record:	7481

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	5/20/99
AROMATIC VOLATILES BY GC/PID						
		SW8021B				Analyst: DM
Benzene	ND	2		µg/Kg	2	5/19/99
Toluene	ND	4		µg/Kg	2	5/19/99
Ethylbenzene	ND	2		µg/Kg	2	5/19/99
m,p-Xylene	8.9	4		µg/Kg	2	5/19/99
o-Xylene	10	2		µg/Kg	2	5/19/99

18.9
0.0189 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: 26-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A
Work Order:	9905054	Client Sample ID:	9905131014; N.Wall
Lab ID:	9905054-04A	Matrix:	SOIL
Project:	Grenier 1A & 17E	Collection Date:	5/13/99 10:14:00 AM
		COC Record:	7481

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS						
		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	1150	25		mg/Kg	1	5/20/99
AROMATIC VOLATILES BY GC/PID						
		SW8021B				Analyst: DM
Benzene	47000	5000		µg/Kg	5000	5/19/99
Toluene	400000	10000		µg/Kg	5000	5/19/99
Ethylbenzene	47000	5000		µg/Kg	5000	5/19/99
m,p-Xylene	410000	10000		µg/Kg	5000	5/19/99
o-Xylene	100000	5000		µg/Kg	5000	5/19/99

1,004,000
1,004 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

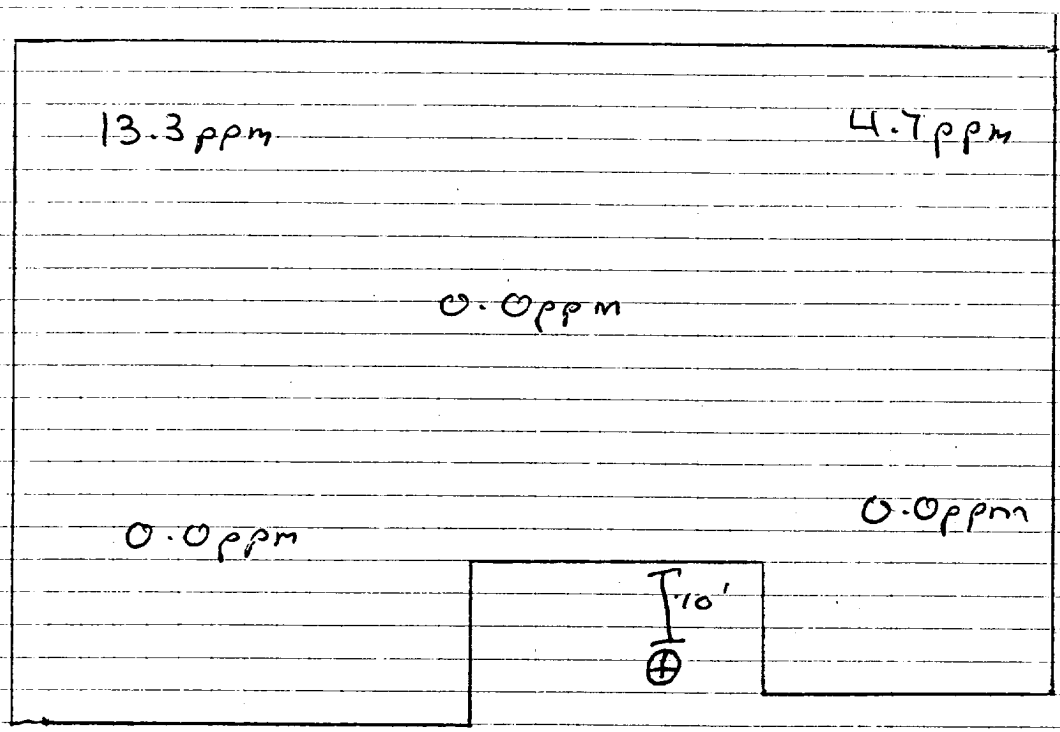
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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Sec-6 T-31N R-11W
Burlington

Landfarm Drawing

App 544 cu. yds



Headspace 0.0 ppm
Sample # 9907070842

Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 22-Jul-99

CLIENT: PNM - Public Service Company of NM
Project: Dusenbery, Grenier & Horton LF
Lab Order: 9907013

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: 22-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A LF
Work Order:	9907013	Client Sample ID:	9907070900; 5pt Comp
Lab ID:	9907013-02A	Matrix:	SOIL
Project:	Dusenbery, Grenier & Horton LF	Collection Date:	7/7/99 9:00:00 AM
		COC Record:	7032

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/19/99

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 -

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 13-Oct-99

CLIENT: PNM - Public Service Company of NM

Project: Grenier 1A; Vertical Extent Drilling

Lab Order: 9909082

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: 13-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 1A
Work Order:	9909082	Client Sample ID:	9909281040; Drilling @ 60ft
Lab ID:	9909082-01A	Matrix:	SOIL
Project:	Grenier 1A; Vertical Extent Drilling	Collection Date:	09/28/1999 10:40:00 AM
		COC Record:	7763

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B		Analyst: DC		
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	10/06/1999
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	1		µg/Kg	1	10/04/1999
Toluene	2.2	2		µg/Kg	1	10/04/1999
Ethylbenzene	ND	1		µg/Kg	1	10/04/1999
m,p-Xylene	4.4	2		µg/Kg	1	10/04/1999
o-Xylene	1.5	1		µg/Kg	1	10/04/1999

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 -

RECORD OF SUBSURFACE EXPLORATION

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 62800044 Phase 35

Project Location CR25W10N21E1A

Elevation

Borehole Location T31N R11W G.B.

GWL Depth NONE ENCOUNTERED

Logged By C. CULLICOTT

Drilled By H. PADILLA D. PADILLA

Date/Time Started 9/28/99 8:20AM

Date/Time Completed 9/28/99 11:10AM

Well Logged By C. CULLICOTT

Personnel On-Site H. PADILLA D. PADILLA

Contractors On-Site ✓

Client Personnel On-Site CARY COOK

Drilling Method ROUSEL

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 BZ BH S			Drilling Conditions & Blow Counts
0			0-20' CLEAN FILL						
20	① 20-21 1/2'		* ① FULL RECOVERY DAMP BROWN SANDY CLAY W/ SILT, SOME GRAY STAIN. STRONG H.C. COOR. PLASTIC						① 2 BLOWS SS 300 ppm HS 434 ppm
25	② 25-27'		* ② FULL RECOVERY DAMP BROWN CLAYEY SAND, PLASTIC COOR, NO OBVIOUS STAIN						② 2 BLOWS SS 482 ppm HS 347 ppm
30	③ 30-31 1/2'		③ FULL RECOVERY. VERY STIFF BROWN SANDY SILTY CLAY, SLIGHT COOR. MANY PLANT ROOT TRAILS.						③ 22 BLOWS SS 133 ppm HS 227 ppm
35	④ 35-37'		④ HALF RECOVERY GRAY SANDY SILTY CLAY, SLIGHTLY STIFF STRONG COOR						④ 33 BLOWS SS 379 ppm HS 383 ppm
40									

Comments: SUNNY, BREEZY, COOL

* NOTE: CARY SAYS THE PIT WAS FULL OF WATER WHEN IT
WAS BACKFILLED. HENCE WATNESS OF SAMPLES

Geologist Signature Cathy Cullicott

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2282 FAX (505) 326-2388

Borehole # 1

Well # 1

Page 2 of 2

Project Name PNM VERTICAL EXTENT

Project Number 02800044 Phase 35

Project Location GREENVIEW #1A

Elevation

Borehole Location T31N R11W S03

GWL Depth NONE ENCOUNTERED

Logged By C. CULLICOTT

Drilled By R. PADILLA & D. PADILLA

Date/Time Started 9/28/99 8:20 AM

Date/Time Completed 9/28/99 11:10 AM

Well Logged By C. CULLICOTT

Personnel On-Site R. PADILLA & D. PADILLA

Contractors On-Site X

Client Personnel On-Site C. ARY CROFT

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	
40	(5) 40-42		(5) MOTTLED TAN & GRAY FINE SANDY SILT, SLIGHTLY STIFF. SLIGHT ODR-DRY 10" RECOVERY						(5) 50T BLOWS SS 192 ppm HS 171 ppm
45	(6) 45-47		(6) SPLIT SPOON REFUSAL AFTER ~20 BLOWS 10" RECOVERY. UPPER FEW INCHES STIFF TAN YELLOWISH BROWN SANDY SILT. REST IS TAN YELLOWISH TAN POORLY SORTED SAND SLIGHTLY CONSOLIDATED						(6) 50T BLOWS SS 459 ppm HS 215 ppm
50	(7) 50-52		(7) SPLIT SPOON REFUSAL AFTER ~16 BLOWS 4" RECOVERY FINE YELLOWISH TAN SAND w/ SILT, SLIGHTLY STIFF. SLIGHT ODR						(7) 40T BLOWS SS 286 ppm HS 377 ppm
55	(8) 55-57		(8) SPLIT SPOON REFUSAL AFTER ~18 BLOWS FINE YELLOWISH TAN SILTY SAND, STIFF.						(8) 50T BLOWS SS 487 ppm HS 418 ppm
60	(9) 60-62		(9) SPLIT SPOON REFUSAL AFTER ~20 BLOWS YELLOWISH BROWN FINE SILTY SANDSTONES, VARYINGLY WELL CEMENTED						(9) 50T BLOWS SS 410 ppm HS ppm
25									
30									
35									
40									

Comments:

TD 60' REFUSAL ON SANDSTONE
HOLE BACK FILLED WITH CUTTINGS

Geologist Signature

Cathy Cullicott