

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

OIL CONSERVATION DIVISION

District III
1000 Rio Brazos Rd, Aztec, NM 87410

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>PNM Gas Services (Burlington)</u> Telephone: <u>324-3764</u>										
Address: <u>603 W. Elm Street Farmington, NM 87401</u>										
Facility or Well Name: <u>Rawson #2</u>										
Location:	Unit <u>B</u> Sec <u>35</u> T <u>31N</u> R <u>12W</u> County <u>San Juan</u>									
Pit Type:	Separator <input checked="" type="checkbox"/> Dehydrator <input checked="" type="checkbox"/> Other _____									
Land Type:	BLM <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Other _____									
Pit Location:	Pit dimensions: length <u>20</u> ' width <u>20</u> ' depth <u>3</u> '									
(Attach diagram)	Reference: wellhead <input checked="" type="checkbox"/> other _____									
	Footage from reference: <u>90</u> '									
	Direction from reference: <u>85</u> Degrees <input type="checkbox"/> East <input checked="" type="checkbox"/> North <input type="checkbox"/> South <input checked="" type="checkbox"/> West									
Depth to Ground Water:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%;">Less than 50 feet</td> <td style="width: 20%;">(20 points)</td> <td style="width: 30%;"></td> </tr> <tr> <td>50 feet to 99 feet</td> <td>(10 points)</td> <td></td> </tr> <tr> <td>Greater than 100 feet</td> <td>(0 points)</td> <td style="text-align: right; border-bottom: 1px solid black;">10</td> </tr> </table> <small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>	Less than 50 feet	(20 points)		50 feet to 99 feet	(10 points)		Greater than 100 feet	(0 points)	10
Less than 50 feet	(20 points)									
50 feet to 99 feet	(10 points)									
Greater than 100 feet	(0 points)	10								
Wellhead Protection Area:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%;">Yes</td> <td style="width: 20%;">(20 points)</td> <td style="width: 30%;"></td> </tr> <tr> <td>No</td> <td>(0 points)</td> <td style="text-align: right; border-bottom: 1px solid black;">0</td> </tr> </table> <small>(Less than 200 feet from a private domestic water source, or; less than 1,000 feet from all other water sources)</small>	Yes	(20 points)		No	(0 points)	0			
Yes	(20 points)									
No	(0 points)	0								
Distance to Surface Water:	<table style="width:100%; border: none;"> <tr> <td style="width: 50%;">Less than 200 feet</td> <td style="width: 20%;">(20 points)</td> <td style="width: 30%;"></td> </tr> <tr> <td>200 feet to 1,000 feet</td> <td>(10 points)</td> <td></td> </tr> <tr> <td>Greater than 1,000 feet</td> <td>(0 points)</td> <td style="text-align: right; border-bottom: 1px solid black;">0</td> </tr> </table> <small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>	Less than 200 feet	(20 points)		200 feet to 1,000 feet	(10 points)		Greater than 1,000 feet	(0 points)	0
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) :		10								

RECEIVED
JAN 31 1997
OIL CON. DIV.
DIST. 3

Rawson #2

Date Remediation Started: 06/01/1999

Date Completed: 06/01/1999

Remediation Method: Excavation X Approx. Cubic Yard 117

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds) 77

Other 40 cu yds overburden

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 16' X 22' X 9' 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 9'. See attached risk analysis form.

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 9'

Sample date 06/01/1999 Sample time 8:55:00 AM

Sample Results

Benzene (ppm) 5.5

Total BTEX (ppm) 357.5 ***

Field headspace (ppm) _____

TPH (ppm) 900.00 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 January 24, 2000

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

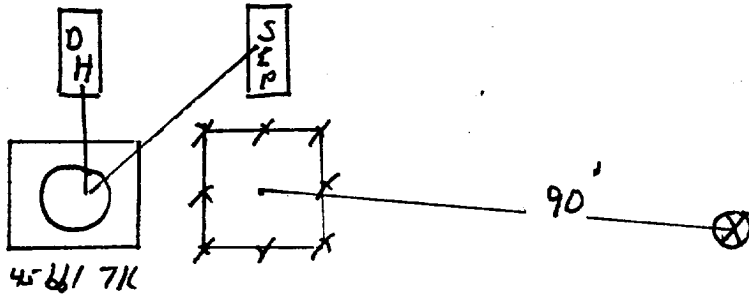
SIGNATURE 

Rawson # 2
Burlington
Sec. 35, 31N, 12W, B

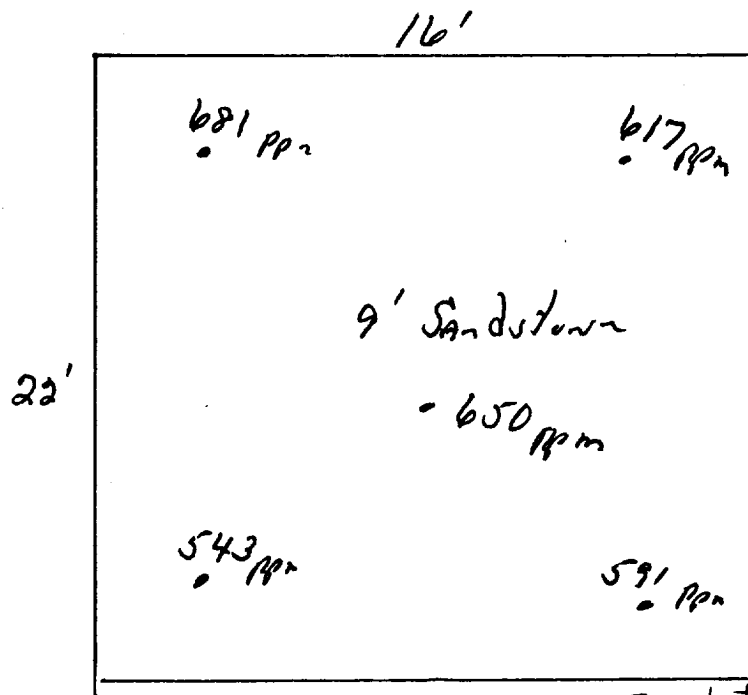
6-1-99

↑
N

Site diagram:



End of excavation:



Sample # 9906010900
walls Comp. H.S. 15.7 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 17-Jun-99

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation

Lab Order: 9906010

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.

6C

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 17-Jun-99

Client: PNM - Public Service Company of NM	Client Sample Info: Rawson #2
Work Order: 9906010	Client Sample ID: 9906010855; 9ft. <i>Bottom</i>
Lab ID: 9906010-03A Matrix: SOIL	Collection Date: 6/1/99 8:55:00 AM
Project: PNM Pit Remediation	COC Record: 7602

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	900	25		mg/Kg	1	6/11/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	5500	1000		µg/Kg	1000	6/10/99
Toluene	89000	2000		µg/Kg	1000	6/10/99
Ethylbenzene	23000	1000		µg/Kg	1000	6/10/99
m,p-Xylene	190000	2000		µg/Kg	1000	6/10/99
o-Xylene	50000	1000		µg/Kg	1000	6/10/99

357500
357.5 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

OFF: (505) 325-5667



GC

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 17-Jun-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Rawson #2
Work Order:	9906010	Client Sample ID:	9906010900; 6ft. Walls
Lab ID:	9906010-04A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	6/1/99 9:00:00 AM
		COC Record:	7602

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/9/99

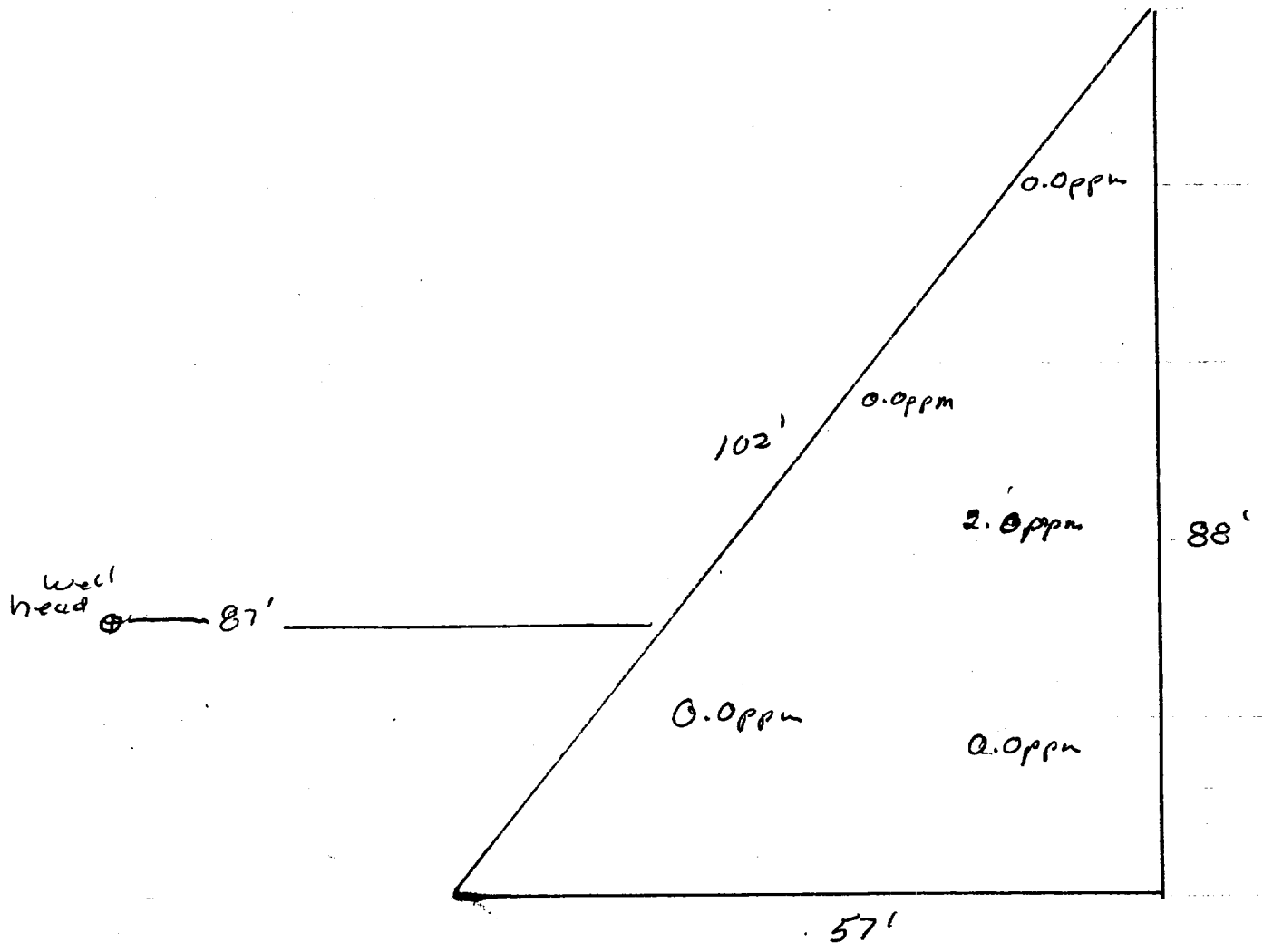
Qualifiers:

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

RAWSON #2
SEC-35 T-31X R-12W ULB
Burlington

Landfarm DRAWING

APP 77 cu.yds



2" to 12" Depth
Headspace 4.4ppm
Sample # 9907120948

Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 23-Jul-99

CLIENT: PNM - Public Service Company of NM

Project: PNM Pit Remediation Landfarms

Lab Order: 9907027

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: 23-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Rawson 2 LF
Work Order:	9907027	Client Sample ID:	9907120948; 5pt. Comp
Lab ID:	9907027-08A	Matrix:	SOIL
Project:	PNM Pit Remediation Landfarms	Collection Date:	7/12/99 9:48:00 AM
		COC Record:	7484

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/22/99

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



Environmental Services

Well Name:	Rawson #2
Well Legals:	Unit B, Sec 35, T31N, R12W
Pit Type:	Dehydrator
Horizontal Distance to Surface Water:	Greater than 1,000 feet
Groundwater Depth:	50 feet to 99 feet

RISK ANALYSIS

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

1. Groundwater is estimated to be at a depth of 92 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Flora Vista, NM series 7.5 minute topographic map.)
2. PNM excavated 117 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 9 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 that their former pit on the Rawson #2 well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.