District I P.O. Box 1980, Hobbs, NM State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

District III 1000 Rio Brazos Rd, Aztec, NM 87410

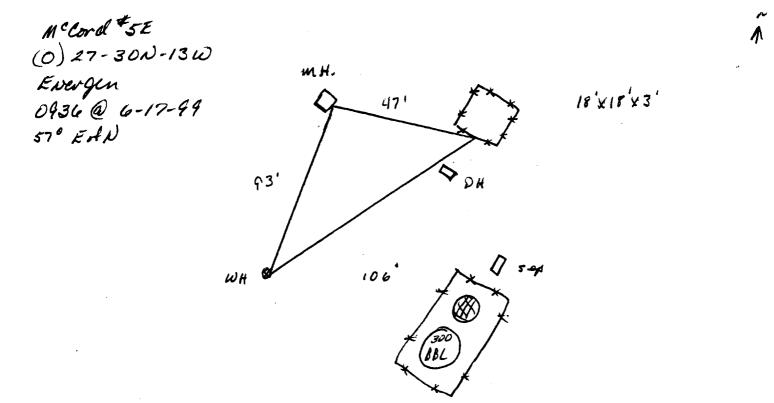
OIL CONSERVATION DIVISION

2040 South Pacheco Street Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator:	PNM Gas Services (Energen) Telephone: 324-3764	
Address:	603 W. Elm Street Farmington, NM	87401	·
Facility or W	/ell Name: McCord #5E		
Location:	Unit O Sec	27 T 30 N R 13 W County San	Juan
Pit Type:	Separator Dehyo	drator Other	
Land Type:	BLM State	Fee Other	
Pit Location:	Pit dimensions: length		
(Attach diagra	m) Reference: wellhead	☑ other	
	Footage from reference:	106'	
	Direction from reference: _5	- - -	
		of West South	
Depth to Gro (Vertical distance from seasonal high water ele water	contaminants to vation of ground	50 feet to 99 feet (10 Greater than 100 feet (0	points) points) points) 0
Wellhead Pro (Less than 200 feet from domestic water source, feet from all other water	or, less than 1,000	Yes (20) No (20)	0 points) 0 points) 0
(Horizontal distance to ponds, rivers, streams,	urface Water:	200 feet to 1,000 feet (10	points) points) points) 0
canals and ditches		RANKING SCORE (TOTAL POINTS):	0

cCord #5E			D.4. O 1.4.4.	
Date Remediation Started:	06/17/	1999	Date Completed:	06/17/1999
Remediation Method:	Excavation	х	Approx. Cubic Yard	50
Check all ppropriate	Landfarmed	x	Amount Landfarmed	(cubic yds) 50
ections)	Other			
Remediation Location: (i.e., landfarmed onsite, name and	Onsite	X	Offsite	
location of offsite facility)				
Backfill Material Location:				
General Description of Rem	nedial Action:			
Excavated contaminated soi	I to a pit size of 1	6.5' X 16.5' X 5' a	nd landfarmed soil onsite within	a bermed area at a depth of
6" to 12". Soil was aerated b			· · · · · · · · · · · · · · · · · · ·	
*** Sandstone encountered	at 5'. See attache	ed risk analysis for	m.	
Ground Water Encountere	d: No	<u> </u>	Yes	Depth
Final Pit Closure Sampling:	Sample Location	on 5 pt comp	posite-bottom	
(if multiple samples, attach sample result and diagram of	Sample depth	5'		
sample locations and depths.)	Sample date	06/17/1999	Sample time	12:08:00 PM
	Sample Result	s		
	Benze	ne (ppm)	3.3	
•	Total :	BTEX (ppm)	122.3 ***	
	Field h	eadspace (ppm)		
	TPH (ppm)	6710.0	0*** Method	8015B
Vertical Extent (ft)			Risk Analysis form attached	Yes No
Ground Water Sample:	Yes	No	(If yes, see attach	ned Groundwater Site
I HEREBY CERTIFY THA KNOWLEDGE AND MY		MATION ABOVE	E IS TRUE AND COMPLETE T	TO THE BEST OF MY
DATE January 24, 20 SIGNATURE YMA	000	u)	PRINTED NAME MAND TITLE PI	aureen Gannon roject Manager



Excavation Sampling 16.5'(N+5) x 16.5'(E+W) x 5'(0) PID keadings 3'- 1308 ppm 5'- 1638 ppm worthwallsample at 5 - 63.2 ppm west wall sample Eastwallsample south wall sample at 5'- 2.2 ppm 5-point bottom composite sample Field Headspace (walls): 64.5

irat to coal



LAB: (505) 325-1556

On Site Technologies, LTD.

CLIENT:

PNM - Public Service Company of NM

Project:

McCord #5 & #5E

Lab Order:

9906063

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.





LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 07-Jul-99

Client:

PNM - Public Service Company of NM

Work Order:

9906063

Lab ID:

))00005

9906063-03A Matrix: SOIL

Project:

McCord #5 & #5E

Client Sample Info: McCord #5E

Client Sample ID: 9906171208; 5pt. Bottom Comp

Collection Date: 6/17/99 12:08:00 PM

COC Record: 7641

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
NECEL PANCE ORCANICS	SI	W8015B			Analyst: DC
DIESEL RANGE ORGANICS	6710	120	mg/Kg	5	7/1/99
T/R Hydrocarbons: C10-C28	SW8021B			Analyst: DC	
AROMATIC VOLATILES BY GC/PID	3300	250	μg/Kg	250	6/24/99
Benzene	34000	500	μg/Kg	250	6/24/99
Toluene	7000	250	μg/Kg	250	6/24/99
Ethylbenzene	60000	500	μg/Kg	250	6/24/99
m,p-Xylene o-Xylene	18000	250	μg/Kg	250	6/24/99
•	12230	00			
	122.3) DOM	^		

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



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 07-Jul-99

Client:

PNM - Public Service Company of NM

Work Order:

9906063

9906063-04A

Matrix: SOIL

Lab ID: Project:

McCord #5 & #5E

Client Sample Info: McCord #5E

Client Sample ID: 9906171215; 4pt. Wall Comp

Collection Date: 6/17/99 12:15:00 PM

COC Record: 7641

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
DIESEL RANGE ORGANICS T/R Hydrocarbons: C10-C28	SW8015B 480 25 mg/Kg		1	Analyst: DC 7/1/99	

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 Surr: - Surrogate

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

1 of 1

McCord # 5E Sec. 34 T-30N R-13W Evergen Sandfarm Drawing 1.7 ppm 72 ADM x 113 ppm 19.7ppm 34 x oppm Head Space - 40.7 ppm Sample # - 9908121415 WH 2" to 12"

not to scale

LAB: (505) 325-1556

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM

Project:

PNM Pit Remediation Landfarms

Lab Order:

9908034

CASE NARRATIVE

Date: 17-Aug-99

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.



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 17-Aug-99

Client:

PNM - Public Service Company of NM

Work Order:

9908034

Lab ID:

9908034-06A

Matrix: SOIL

Project:

PNM Pit Remediation Landfarms

Client Sample Info: McCord #5E LF

Client Sample ID: 9908121415; 6pt Comp

Collection Date: 08/12/1999 2:15:00 PM

COC Record: 7653

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
DIESEL RANGE ORGANICS T/R Hydrocarbons: C10-C28	SV 3230	V8015B 25	mg/Kg	1	Analyst: DC 08/13/1999

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



Well Name: Well Legals:

Pit Type:

Horizontal Distance to Surface Water:

Groundwater Depth:

McCord #5E Sec 27, T30N, R13W, Unit O Dehydrator Greater than 1,000 feet Greater than 100 feet

RISK ANALYSIS

PNM requests closure of their former pit on the McCord #5E well site using a limited risk analysis based on the following conditions:

- 1. Groundwater is estimated to be at a depth of 190 feet based upon the elevation of the site and the elevation of the nearest "listed" or "named" wash. (Reference: Farmington North, NM series 7.5 minute topographic map.)
- 2. PNM excavated 50 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 5 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 McCord #5E well site poses minimal threat to groundwater, human health and the environment based upon our past experience in excavating over 1,000 pits.