District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III *1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

District IV

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Form C-144 June 1, 2004

Pit or Below-Grade Tank Registration or Closure

	k covered by a "general plan"? Yes ⊠ No r below-grade tank ☐ Closure of a pit or below-gra				
Address: 610 Reilly Ave., Farmington, NM 87401	Degrator: Merrion Oil & Gas Telephone: (505)324-5326 e-mail address: cdinning@merrion.bz				
Facility or well name: Keeling No. 1 API #: 30-045-05299 U	// or Otr/Otr R nw/ne Sec 20 T 25N R	8W			
County: San Juan Latitude Longitude		_ · 	Indian 🔲		
		2021,55,5	77/20 TO 10		
<u>Pit</u>	Below-grade tank	\$ 8 P	32		
<u>Type:</u> Drilling ☐ Production ☒ Disposal ☐	Volume:bbl Type of fluid:	BER AM			
Workover	Construction material:		MS (28.33)		
Lined Unlined 🛛	Double-walled, with leak detection? Yes [] If no	t, explain why not COMS			
Liner type: Synthetic Thicknessmil Clay		DIST.			
Pit Volume 200 bbl 15' X 15' X 4'	•		" 1.v		
	Less than 50 feet	(20 points)	37 EV		
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)	Sava		
water elevation of ground water.)	100 feet or more	(0 points)	0		
	Yes	(20 points)			
Wellhead protection area: (Less than 200 feet from a private domestic	No	' ' '	0		
water source, or less than 1000 feet from all other water sources.)	INO .	(0 points)	U		
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)			
· · · · · · · · · · · · · · · · · · ·	200 feet or more, but less than 1000 feet	(10 points)			
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	(0 points)	20		
	Ranking Score (Total Points)		20		
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	relationship to other equipment and tanks. (2) Indica	ate disposal location: (check the	onsite box if		
your are burying in place) onsite \(\square\) offsite \(\text{X} \) If offsite, name of facility \(\text{E} \)	• • • • • • • • • • • • • • • • • • • •	•			
remediation start date and end date. (4) Groundwater encountered: No 🛛 Y					
		nt. and attach sample	icsuits. (5)		
Attach soil sample results and a diagram of sample locations and excavations		· · · · · · · · · · · · · · · · · · ·			
Additional Comments: Pit is approximately 120' south of wellhead.					
· · · · · · · · · · · · · · · · · · ·					
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines , Date: December 20, 2005	f my knowledge and belief. I further certify that th a general permit □, or an (attached) alternative €	e above-described pit or below OCD-approved plan .	-grade tank has		
Printed Name/Title Connie Dinning/ Production Engineer Signatur	e (SD)	_			
Your certification and NMOCD approval of this application/closure does no otherwise endanger public health or the environment. Nor does it relieve the regulations.					
Approval: Printed Name/Title	Signature Lewy Far	DEC 2	2 2005		
	//	•			

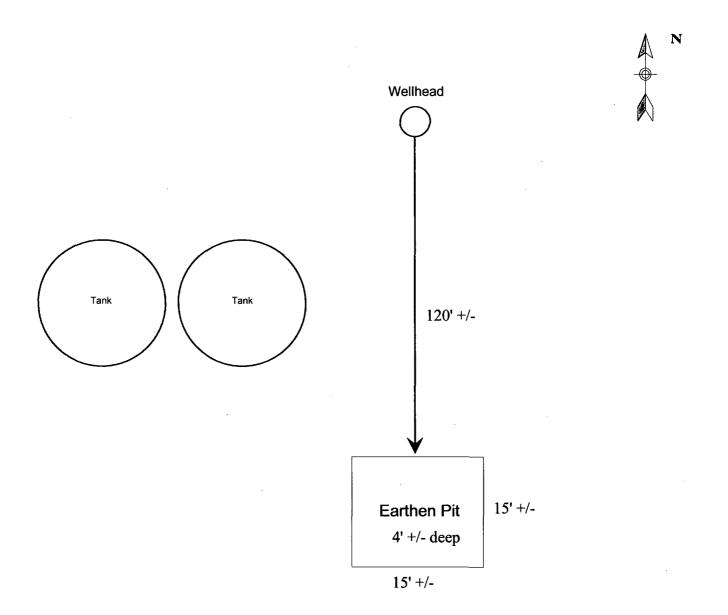
Keeling No. 1 Pit Closure, Case Narrative December 20, 2005

Cleanup began on May 3, 2005. Discharge to this pit had ceased several years ago. The soil was sandy in this location, so contamination had migrated fairly extensively. All contaminated soil was removed. The sides and bottom of the excavation were tested with an OVM meter until all the contaminated soil was removed. Composite samples were taken from the sides and bottom of the excavation and sent to the lab for analysis. When the lab results were received, the excavation was backfilled with clean soil.

The contaminated soil was hauled to Envirotech Landfarm #2.

MERRION OIL & GAS Pit Location Diagram

Keeling No. 1



This sketch is to provide relative positioning information only, it is not drawn to scale

Well: Keeling No. 1

Location: nw/ne, Sec 20, T25N, R8W

San Juan County, New Mexico

Drawn by: CSD

Date: December 20, 2005



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Merrion Oil	Project #:	03048-009
4 Wall Composite	Date Reported:	05-10-05
32909	Date Sampled:	05-09-05
14020	Date Received:	05-09-05
Soil	Date Analyzed:	05-10-05
Cool	Date Extracted:	05-09-05
Cool & Intact	Analysis Requested:	BTEX
	4 Wall Composite 32909 14020 Soil Cool	4 Wall Composite Date Reported: 32909 Date Sampled: 14020 Date Received: Soil Date Analyzed: Cool Date Extracted:

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND ND	2.1
Toluene	7.6	1.8
Ethylbenzene	8.3	1.7
o,m-Xylene	28.8	1.5
o-Xylene	10.5	2.2
Total BTEX	55.2	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Keeling #1.

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Review

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil	Project #:	03048-009
Sample ID:	4 Bottom Composite	Date Reported:	05-10-05
Laboratory Number:	32910	Date Sampled:	05-09-05
Chain of Custody:	14020	Date Received:	05-09-05
Sample Matrix:	Soil	Date Analyzed:	05-10-05
Preservative:	Cool	Date Extracted:	05-09-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	2.1	
Toluene	3.0	1.8	
Ethylbenzene	19.3	1.7	
p,m-Xylene	144	1.5	
o-Xylene	33.7	2.2	
Total BTEX	200		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments:

Keeling #1.

Analyst C. Office

Mustinem Walters
Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Merrion Oil	Project #:	03048-009
Sample ID:	4 Wall Composite	Date Reported:	05-10-05
Laboratory Number:	32909	Date Sampled:	05-09-05
Chain of Custody No:	14020	Date Received:	05-09-05
Sample Matrix:	Soil	Date Extracted:	05-09-05
Preservative:	Cool	Date Analyzed:	05-10-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	0.4	0.1
Total Petroleum Hydrocarbons	0.4	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Keeling #1.

MAY 1 2 2005



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

		, in the second	
Client:	Merrion Oil	Project #:	03048-009
Sample ID:	4 Bottom Composite	Date Reported:	05-10-05
Laboratory Number:	32910	Date Sampled:	05-09-05
Chain of Custody No:	14020	Date Received:	05-09-05
Sample Matrix:	Soil	Date Extracted:	05-09-05
Preservative:	Cool	Date Analyzed:	05-10-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2.7	0.2
Diesel Range (C10 - C28)	17.2	0.1
Total Petroleum Hydrocarbons	19.9	0.2

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Keeling #1.

Analyst C. Officer

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