

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

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

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: Merrion Oil & Gas Telephone: (505)324-5326 e-mail address: cdinning@merrion.bz  
Address: 610 Reilly Ave., Farmington, NM 87401  
Facility or well name: Canada Mesa 2E API #: 30-039-22118 U/L or Qtr/Qtr ne/nw Sec 24 T 24N R 6W  
County: Rio Arriba Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness \_\_\_\_\_ mil Clay ☐

Pit Volume 89 bbl 10' X 10' X 5'

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not. \_\_\_\_\_

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) Estimate greater than 50', no data

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

( 0 points)

10

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes We do not know at this point, we have been unable to access the State Engineer website  
No

(20 points)

( 0 points)

0

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

( 0 points)

20

**Ranking Score (Total Points)**

30

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: The pit was located about 123' from the wellhead, roughly 20° east of south.

JAN 2006

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative NMOCD-approved plan ☐.

Date: January 17, 2006

Printed Name/Title Connie Dinning/ Production Engineer

Signature \_\_\_\_\_

Your certification and NMOCD approval of this application/closure does not relieve the operator or liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

**DEPUTY OIL & GAS INSPECTOR, DIST. 4**

Printed Name/Title \_\_\_\_\_

Signature \_\_\_\_\_

Date: JAN 18 2006

Canada Mesa No. 1E  
Pit Closure, Case Narrative  
January 17, 2006

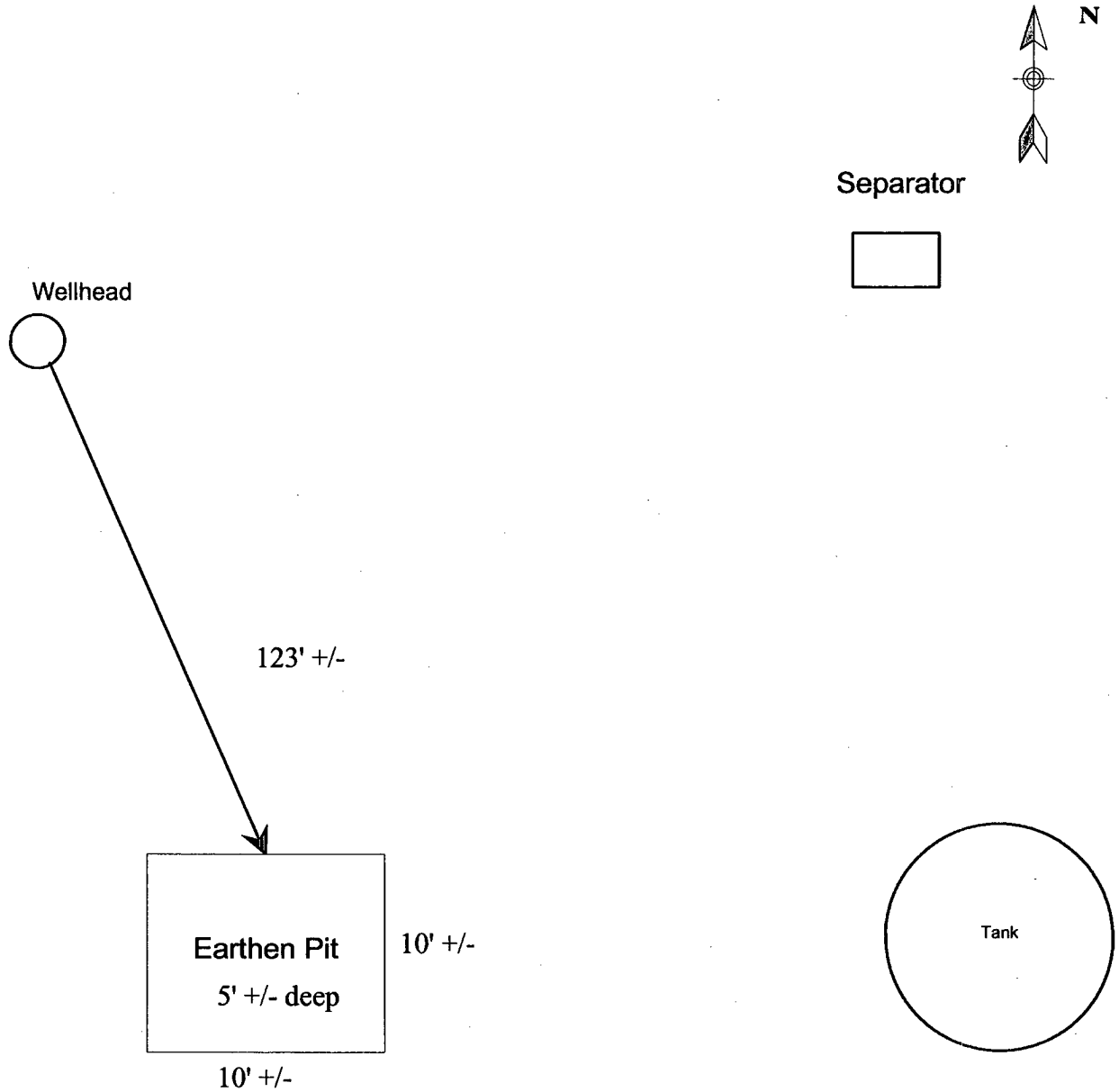
The unlined earthen pit was treated in place with fertilizer and air vent tubes on October 24, 1994.

Test holes were dug with a backhoe on January 4, 2006. We anticipated that we would remove contaminated soil and haul it to a landfarm. Samples were collected at various depths for testing with the OVM. The meter indicated zero organic vapor for all the samples. Further samples were then collected for lab analysis. The side sample composite was collected at a depth of about 4' from each of the sides of the pit, and a sample was collected from the bottom of the pit at a depth of about 6'. Lab results are attached. TPH was non detect for the lab samples. Benzene was non detect, and the highest total BTEX was 178.8  $\mu\text{g/Kg}$  from the composite side sample.

The test holes were backfilled, the plastic air tubes were removed and the surface of the pit was recontoured.

MERRION OIL & GAS  
Pit Location Diagram  
Canada Mesa No. 1E

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

Well: Canada Mesa No. 1E  
Location: ne/nw, Sec 24, T24N, R6W  
Rio Arriba County, New Mexico  
Drawn by: CSD  
Date: January 17, 2006

**EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

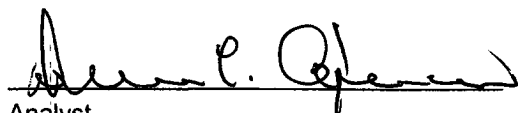
Client:	Merrion	Project #:	03048-09
Sample ID:	Bottom Pit 1E	Date Reported:	01-06-06
Laboratory Number:	35641	Date Sampled:	01-04-06
Chain of Custody No:	15303	Date Received:	01-05-06
Sample Matrix:	Soil	Date Extracted:	01-05-06
Preservative:	Cool	Date Analyzed:	01-06-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

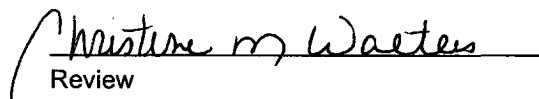
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Canada Mesa 1E.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

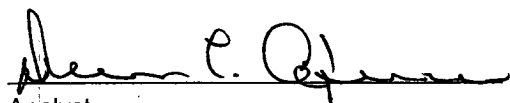
Client:	Merrion	Project #:	03048-09
Sample ID:	Wall Comp 1E	Date Reported:	01-06-06
Laboratory Number:	35642	Date Sampled:	01-04-06
Chain of Custody No:	15303	Date Received:	01-05-06
Sample Matrix:	Soil	Date Extracted:	01-05-06
Preservative:	Cool	Date Analyzed:	01-06-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

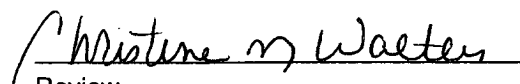
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Canadá Mesa 1E.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Merrion	Project #:	03048-009
Sample ID:	Bottom Pit 1E	Date Reported:	01-06-06
Laboratory Number:	35641	Date Sampled:	01-04-06
Chain of Custody:	15303	Date Received:	01-05-06
Sample Matrix:	Soil	Date Analyzed:	01-06-06
Preservative:	Cool	Date Extracted:	01-05-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	31.6	1.7
Ethylbenzene	2.7	1.5
p,m-Xylene	51.0	2.2
o-Xylene	13.5	1.0
Total BTEX	98.8	

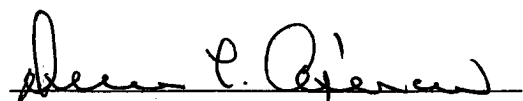
ND - Parameter not detected at the stated detection limit.

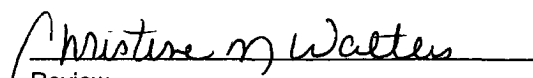
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: **Canadá Mesa 1E.**

  
Analyst

  
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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Merrion	Project #:	03048-009
Sample ID:	Wall Comp 1E	Date Reported:	01-06-06
Laboratory Number:	35642	Date Sampled:	01-04-06
Chain of Custody:	15303	Date Received:	01-05-06
Sample Matrix:	Soil	Date Analyzed:	01-06-06
Preservative:	Cool	Date Extracted:	01-05-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	19.5	1.7
Ethylbenzene	74.2	1.5
p,m-Xylene	61.5	2.2
o-Xylene	22.6	1.0
Total BTEX	178	

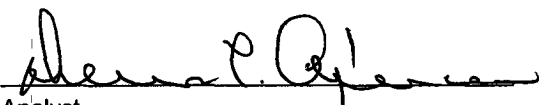
ND - Parameter not detected at the stated detection limit.

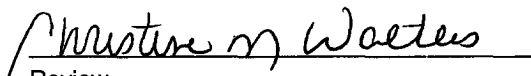
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: **Canadá Mesa 1E.**

  
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