

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. 2nd 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: Manana Gas, Inc.

Telephone: 505-327-4892

e-mail address: paul@walsheng.net

Address: 7415 E. Main St. Farmington, NM 87402

Facility or well name: Crooked Seams #1 API #: 30-045-32012 U/L or Qtr/Qr P Sec14 T30N R12W

County: San Juan Latitude Longitude NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

Pit  
Type: Drilling ☒ Production ☐ Disposal ☐  
Workover ☐ Emergency ☐  
Lined ☒ Unlined ☐  
Liner type: Synthetic ☒ Thickness 12 mil Clay ☐  
Pit Volume 500 bbl

**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.)

Less than 50 feet X	(20 points) 20
50 feet or more, but less than 100 feet	(10 points)
100 feet or more	( 0 points)

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

Yes	(20 points)
No X	( 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 X	(20 points) 20
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more	( 0 points)

<b>Ranking Score (Total Points)</b>	<b>40</b>
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**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 6 ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Guidelines are general plan

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 OCD-approved plan ☐.

Date: 07/07/04

Printed Name/Title Paul C. Thompson, P.E.

Signature *Paul C. Thompson*

Your certification and NMOCD approval of this application/closure does not relieve the operator of 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. 3

Printed Name/Title

Signature

*Denny Taylor* JUL 12 2004

Date:



EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

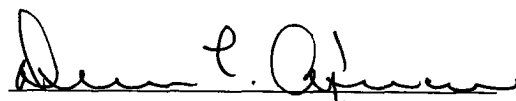
Client:	Manana Gas Inc.	Project #:	02127-002
Sample ID:	Crooked Seams #1	Date Reported:	06-08-04
Laboratory Number:	28956	Date Sampled:	06-04-04
Chain of Custody No:	12252	Date Received:	06-04-04
Sample Matrix:	Mud	Date Extracted:	06-07-04
Preservative:	Cool	Date Analyzed:	06-08-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

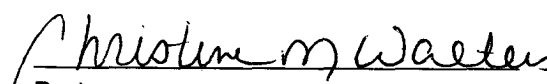
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.1	0.2
Diesel Range (C10 - C28)	15.1	0.1
Total Petroleum Hydrocarbons	16.2	0.2

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: **Reserve Pits.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## TRACE METAL ANALYSIS

Client:	Manana Gas Inc.	Project #:	02127-002
Sample ID:	Crooked Seams #1	Date Reported:	06-08-04
Laboratory Number:	28956	Date Sampled:	06-04-04
Chain of Custody:	12252	Date Received:	06-04-04
Sample Matrix:	Mud	Date Analyzed:	06-08-04
Preservative:	Cool	Date Digested:	06-07-04
Condition:	Cool & Intact	Analysis Needed:	RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.012	0.001	5.0
Barium	0.486	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.001	0.001	5.0
Lead	0.002	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.008	0.001	1.0
Silver	ND	0.001	5.0

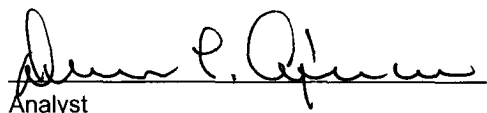
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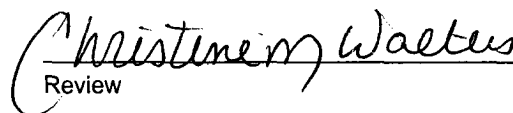
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission  
Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C  
section 261.24, August 24, 1998.

Comments: **Reserve Pits.**

  
Analyst

  
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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

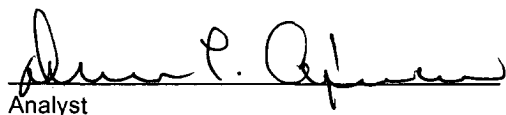
EC, SAR, ESP, CI Analysis

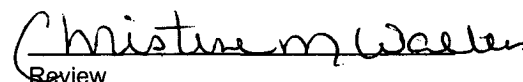
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Preservative:	Cool	Date Analyzed:	06-08-04
Condition:	Cool & Intact		

Parameter	Analytical Result	Units
Conductivity @ 25° C	12.35	mmhos/cm
Calcium	336	mg/Kg
Magnesium	<0.01	mg/Kg
Sodium	4,100	mg/Kg
Sodium Absorption Ratio (SAR)	87.1	ratio
Exchangeable Sodium Percent (ESP)	55.7	percent
Chloride	6,900	mg/Kg

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments: **Reserve Pits.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Manana Gas Inc.	Project #:	02127-002
Sample ID:	Crooked Seams #1	Date Reported:	06-08-04
Laboratory Number:	28956	Date Sampled:	06-04-04
Chain of Custody:	12252	Date Received:	06-04-04
Sample Matrix:	Mud	Date Analyzed:	06-08-04
Preservative:	Cool	Date Extracted:	06-07-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	24.4	1.8
Toluene	33.0	1.7
Ethylbenzene	59.6	1.5
p,m-Xylene	167	2.2
o-Xylene	55.6	1.0
Total BTEX	340	

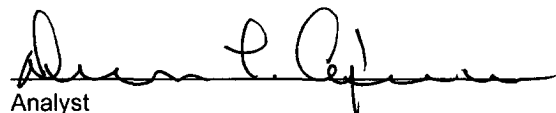
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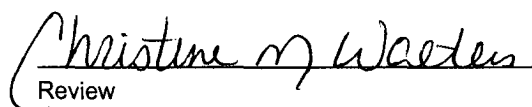
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97 %
	1,4-difluorobenzene	97 %
	Bromochlorobenzene	97 %

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: Reserve Pits.

  
Analyst

  
Review