District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

16498

Type of action:
- ☐ Below grade tank registration
- ☐ Permit of a pit or proposed alternative method
- ☒ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: M&G Drilling Company OGRID #: 141852
Address: PO Box 5940, Farmington NM 87499
Facility or well name: Graham #053A
API Number: 30-045-06702 OCD Permit Number:
U/L or Qtr/Qtr (C) NENW Section 10 Township 27N Range 08W County: San Juan
Center of Proposed Design: Latitude 36.5934143 Longitude -107.6716766 NAD83
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 210 bbl Type of fluid: Produced water
Tank Construction material: Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

W/ Closure Plan
X Photos
X Notification

5.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*
☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify _____

DISTRICT III
NOV 05 2018

NMOCD

19

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below.* Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☒ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Diane Montano Title: Agent for M&G Drilling

Signature: Date: 09/11/2018

e-mail address: dmontano@mgdrilling.com Telephone: 505-325-6779

18.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☒ OCD Conditions (see attachment)

OCD Representative Signature: **Approval Date:**

Title: Environmental Specialist **OCD Permit Number:**

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:**

20.
Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☐ Confirmation Sampling Analytical Results (if applicable)
- ☒ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude Longitude NAD: ☐ 1927 ☐ 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Diane Montano Title: Agent

Signature: Diane Montano Date: 10/31/2018

e-mail address: dmontano@mgdrilling.com Telephone: 505-325-6779

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: M & G Drilling

Chain Of Custody Number:

Samples Received: 9/28/2018 3:55:00PM

Job Number: 04033-0002

Work Order: P809073

Project Name/Location: Graham 53A

Report Reviewed By: Walter Hinchman Date: 10/5/18

Walter Hinchman, Laboratory Director

Date: 10/5/18

Tim Cain, Project Manager

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

5796 US Highway 64, Farmington, NM 87401
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301
Ph: (505) 632-0615 Fx: 505-632-1865
Ph: (970) 259-0615 Fx (800) 362-1879

envirotech
Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Graham 53A	P809073-01A	Soil	09/28/18	09/28/18	Glass Jar, 4 oz.

5796 US Highway 64, Farmington, NM 87401
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301
Ph: (505) 632-0615 Fx: (505) 632-1865
Ph: (970) 259-0615 Fx: (360) 762-1879

envirotech
Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Graham 53A
P809073-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
Toluene	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1840002	10/01/18	10/03/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*1840002*	*10/01/18*	*10/03/18*	*EPA 8021B*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	1840023	10/04/18	10/04/18	EPA 300.0/9056A	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	**112**	40.0	mg/kg	1	1840004	10/01/18	10/01/18	EPA 418.1	

envirotech
Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1840002 - Purge and Trap EPA 5030A										
Blank (1840002-BLK1)				Prepared: 10/01/18 0 Analyzed: 10/01/18 2						
Benzene	ND	100	ug/kg							
Toluene	ND	100	"							
Ethylbenzene	ND	100	"							
p,m-Xylene	ND	200	"							
o-Xylene	ND	100	"							
Total Xylenes	ND	100	"							
Total BTEX	ND	100	"							
Surrogate: 4-Bromochlorobenzene-PID	*8260*		"	*8000*		*103*	*50-150*			
LCS (1840002-BS1)				Prepared: 10/01/18 0 Analyzed: 10/01/18 2						
Benzene	5590	100	ug/kg	5000		112	70-130			
Toluene	5580	100	"	5000		112	70-130			
Ethylbenzene	5600	100	"	5000		112	70-130			
p,m-Xylene	11400	200	"	10000		114	70-130			
o-Xylene	5540	100	"	5000		111	70-130			
Total Xylenes	17000	100	"	15000		113	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8280*		"	*8000*		*104*	*50-150*			
Matrix Spike (1840002-MS1)	**Source: P809069-01**			Prepared: 10/01/18 0 Analyzed: 10/02/18 0						
Benzene	5780	100	ug/kg	5000	ND	116	54.3-133			
Toluene	5790	100	"	5000	ND	116	61.4-130			
Ethylbenzene	5850	100	"	5000	ND	117	61.4-133			
p,m-Xylene	11900	200	"	10000	ND	119	63.3-131			
o-Xylene	5780	100	"	5000	ND	116	63.3-131			
Total Xylenes	17700	100	"	15000	ND	118	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8150*		"	*8000*		*102*	*50-150*			
Matrix Spike Dup (1840002-MSD1)	**Source: P809069-01**			Prepared: 10/01/18 0 Analyzed: 10/02/18 0						
Benzene	5110	100	ug/kg	5000	ND	102	54.3-133	12.3	20	
Toluene	5100	100	"	5000	ND	102	61.4-130	12.7	20	
Ethylbenzene	5130	100	"	5000	ND	103	61.4-133	13.2	20	
p,m-Xylene	10500	200	"	10000	ND	105	63.3-131	12.9	20	
o-Xylene	5060	100	"	5000	ND	101	63.3-131	13.1	20	
Total Xylenes	15600	100	"	15000	ND	104	63.3-131	13.0	20	
Surrogate: 4-Bromochlorobenzene-PID	*8170*		"	*8000*		*102*	*50-150*			

envirotech
Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1840023 - Anion Extraction EPA 300.0/9056A										
Blank (1840023-BLK1)				Prepared & Analyzed: 10/04/18 0						
Chloride	ND	20.0	mg/kg							
LCS (1840023-BS1)				Prepared & Analyzed: 10/04/18 0						
Chloride	259	20.0	mg/kg	250		103	90-110			
Matrix Spike (1840023-MS1)	**Source: P810008-01**			Prepared & Analyzed: 10/04/18 0						
Chloride	653	20.0	mg/kg	250	378	110	80-120			
Matrix Spike Dup (1840023-MSD1)	**Source: P810008-01**			Prepared: 10/04/18 0 Analyzed: 10/04/18 1						
Chloride	622	20.0	mg/kg	250	378	97.8	80-120	4.87	20	

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Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1840004 - 418 Freon Solid Extraction										
Blank (1840004-BLK1)				Prepared & Analyzed: 10/01/18 1						
Total Petroleum Hydrocarbons	ND	40.0	mg/kg							
LCS (1840004-BS1)				Prepared & Analyzed: 10/01/18 1						
Total Petroleum Hydrocarbons	944	40.0	mg/kg	1000		94.4	80-120			
Matrix Spike (1840004-MS1)		**Source: P809073-01**		Prepared & Analyzed: 10/01/18 1						
Total Petroleum Hydrocarbons	1140	40.0	mg/kg	1000	112	102	70-130			
Matrix Spike Dup (1840004-MSD1)		**Source: P809073-01**		Prepared & Analyzed: 10/01/18 1						
Total Petroleum Hydrocarbons	1100	40.0	mg/kg	1000	112	99.2	70-130	2.86	30	

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Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/05/18 09:46

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Project Information | Chain of Custody | Page 1 of 1

Client:	MEG Drilling
Project:	GRAHAM 53A
Project Manager:	ALFONSO ATENCIO
Address:	PO BOX 5940
City, State, Zip	Farmington NM 87499
Phone:	720 556 0810
Email:	gatencio@qwestoffice.net

Report Attention

Report due by:	
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO# P809073 | Job Number 04033-0002

TAT: 1D | 3D

EPA Program: RCRA | CWA | SDW

State: NM | CO | UT | A — NM: X

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
1/51A	9/28	S	1	GRAHAM 53A	1			X			X	X	1 402 Jar

Additional Instructions: VIS ice in cooler

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: ALFONSO ATENCIO

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	9/28/18	15:55		9/28/18	15:55
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N

T1 | T2 | T3

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, **v** - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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laboratory@envirotech-inc.com

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Analytical Report

Report Summary

Client: M & G Drilling

Chain Of Custody Number:

Samples Received: 10/18/2018 3:43:00PM

Job Number: 04033-0002

Work Order: P810094

Project Name/Location: Graham 53A

Report Reviewed By: Draft Date: 10/19/18

Walter Hinchman, Laboratory Director

Draft Date: 10/19/18

Tim Cain, Project Manager

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

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M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/19/18 11:17

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Graham 53A	P810094-01A	Soil	10/18/18	10/18/18	Glass Jar, 4 oz.

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M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/19/18 11:17

Graham 53A
P810094-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1842026	10/19/18	10/19/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1842028	10/19/18	10/19/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1842028	10/19/18	10/19/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*98.0 %*		*50-150*	*1842026*	*10/19/18*	*10/19/18*	*EPA 8015D*	
Surrogate: n-Nonane		*126 %*		*50-200*	*1842028*	*10/19/18*	*10/19/18*	*EPA 8015D*	

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Analytical Laboratory

M & G Drilling	Project Name:	Graham 53A	
PO Box 5940	Project Number:	04033-0002	**Reported:**
Farmington NM, 87499	Project Manager:	Alfonzo Atencio	10/19/18 11:17

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

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Ph (970) 259-0615 Fr (800) 362-1879

Project Information | Chain of Custody | Page 1 of 1

Client:	M&G
Project:	GRAHAM 53A
Project Manager:	ALFONSO ATENCIO
Address:	
City, State, Zip	
Phone:	720 556 0810
Email:	Routehwy64@icloud.com

Report Attention	
Report due by:	
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only		TAT		EPA Program		
Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA
P8 94	64003-0007	X				

State: NM X | CO | UT | AZ

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
9/55A	10/18	S	1	GRAHAM 53A		X	X						

Additional Instructions: vis. ice in cooler -yg

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Alfonso Atencio	10/18/18	15:48		10/18/18	15:43
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboraotry is limited to the amount paid for on the report.

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