

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

Form C-1  
July 21, 2006

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.  
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

1012

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

**Instructions:** Please submit one application (Form C-144) per individual pit, closed-loop system, 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 ordinance.

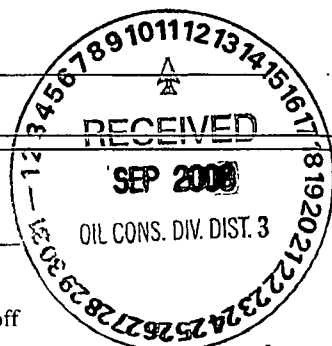
1. Operator: McElvain Oil & Gas Properties, Inc. OGRID #: 22044  
Address: 1050 17<sup>th</sup> Street, Suite 1800, Denver, CO 80265  
Facility or well name: SOUTHERN UNION 1  
API Number: 30-045-08854 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr B Section 3 Township 29N Range 13W County: SAN JUAN  
Center of Proposed Design: Latitude 36 45.591 N Longitude 108 11.353 W NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2. ☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☐ 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 \_\_\_\_\_

RCVD OCT 23 '12  
OIL CONS. DIV.  
DIST. 3

3. ☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_

4. ☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 210 bbl Type of fluid: Oil  
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 \_\_\_\_\_



5. ☐ **Alternative Method:**

Notice of an exception is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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6.

**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 \_\_\_\_\_

7.

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

- ☐ Screen ☐ Netting ☒ Other \_\_\_\_\_ Closed Top \_\_\_\_\_
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

**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 19.15.3.103 NMAC

9.

**Administrative Approvals 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:**

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

**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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. ( <i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i> ) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. ( <i>Applies to permanent pits</i> ) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N

11.

**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: \_\_\_\_\_

12.

**Closed-loop Systems 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.*

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: \_\_\_\_\_  
☐ Previously Approved Operating and Maintenance Plan API Number: \_\_\_\_\_ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

**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<sub>2</sub>S, 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

14.

**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 ☐ Closed-loop System  
☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

**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 F 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 I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)

**Instructions:** Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operation

☐ Yes (If yes, please provide the information below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

☐ 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17. **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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 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 between 50 and 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

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 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 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 private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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

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 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ 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

18. **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 F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

**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): Deborah K Powell Title: Engineering Tech Supervisor

Signature: Deborah K Powell Date: 8/18/2008 9-10-08

e-mail address: DebbyP@McElvain.com Telephone: 303-893-0933

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 11/30/2012

Title: Deputy Oil & Gas Inspector, District #3 Compliance Officer  
OCD Permit Number: \_\_\_\_\_

21.

**Closure Report (required within 60 days of closure completion):** Subsection K of 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: 10/04/2012

22.

**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.

23.

**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

*Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

- ☐ Site Reclamation (Photo Documentation)  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique

24.

**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)  
☐ 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

25.

**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): Tony G. Cooper Title: Sr EHS Specialist

Signature: Tony Cooper Date: 10-12-2012

e-mail address: Tony C @ mcelvain.com Telephone: 303-893-0933 x331

District I  
1625 N. French Dr., Hobbs, NM 88240  
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State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report    ☒ Final Report

Name of Company	McElvain Energy Inc.	Contact	Tony Cooper
Address	1050 17 <sup>th</sup> Street, Suite 2500, Denver, CO 80265	Telephone No.	970-893-0933 x331
Facility Name	SOUTHERN UNION 1B	Facility Type	Tank Battery
Surface Owner – City of Farmington	Mineral Owner- Federal	Lease No.	029124

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	03	29N	13W	990	FNL	1500	FEL	SAN JUAN

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

### NATURE OF RELEASE

Type of Release	Hydrocarbon Release (TPH below limits)	Volume of Release	NA	Volume Recovered	NA
Source of Release	210 bbl BGT	Date and Hour of Occurrence		Date and Hour of Discovery	Oct 4, 2012
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	NA		
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.* NA					

#### Describe Cause of Problem and Remedial Action Taken.\*

The 210 bbl steel below ground tank (BGT) was removed from the Southern Union B1 tank battery site. The closure was prompted by the installation of a new AST replacing the BGT. A "Well Site Equipment Modification Permit 12-04" was applied for and approved by the City of Farmington on July 11, 2012.

Upon verbal notification to the NMOCD the BGT was removed and a third party environmental company (Envirotech Inc.) was contracted to conduct confirmation soil sampling beneath the tank in a 200 sq ft area (10' x 20'). A 5-spot composite sample was collected on Oct 4, 2012 and submitted to the Envirotech Laboratory for analytical analysis. No saturated areas or areas of soil staining were observed after removal of the BGT.

BTEX, Benzene, and Chloride levels were all found to be below published standards for BGT closures. TPH was 344 ppm which is above published closure levels of 100 TPH. Using the NMOCD site ranking scale for spills with wellheads not in a wellhead protection area, and with surface to ground water levels > 100', and site to surface water distances greater than 200' the 344 ppm TPH level was under the 1000 ppm published level for closure. See attached COC and Envirotech lab analysis report for confirmation soil sampling results.

The area was backfilled with clean (non-waste containing) fill dirt. Since the total area disturbed during the pit closure is located in an area associated with ongoing production operations reseeding and permanent reclamation activities will be performed upon decommissioning of the site.

#### Describe Area Affected and Cleanup Action Taken.\*

No cleanup was performed. McElvain Energy Inc. is requesting no further action status be granted for this site.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Tony C Cooper</i>	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: <i>Tony G. Cooper</i>	Approved by District Supervisor:		
Title: <i>Sr EHS Specialist</i>	Approval Date:	Expiration Date:	
E-mail Address: <i>tonyc@mcelvain.com</i>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <i>10-12-12</i>	Phone: <i>303 893 0933 x331</i>		

**McElvain Oil & Gas Properties, Inc.**  
**San Juan Basin**  
**Closure Plan**

In accordance with Rule 19.15.17.1 NMAC the following procedure describes the closure plan for the McElvain Oil & Gas Properties, Inc (MOG) below grade tank on the Southern Union #1B well located in the NWNE of Sec 3, T29N, 13W.

**Closure Requirements:**

1. MOG shall close the below grade tank within the time periods provided in 19.15.17.13 NMAC or by an earlier date that the division requires because of imminent danger to fresh water, public health, or the environment.  
**Closure Date is Oct 4, 2012**
2. MOG shall close an existing below grade tank that does not meet the requirements of Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008 if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.  
**Closure Date is Oct 4, 2012**
3. MOG shall close a permitted below grade tank within 60 days of cessation of the below ground tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on C-144.  
**C-144 form is attached**
4. All liquids will be removed from the BGT prior to closure and the liquids disposed of in a division approved facility.  
**All liquids in BGT were transferred to the new AST before closure.**
5. MOG shall remove the below grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.  
**Tank has been steam cleaned and is in storage at a McElvain equipment yard**
6. MOG will remove any on-site equipment associated with the below grade tank unless the equipment is required for some other purpose.  
**Production equipment is still in service on the site**
7. MOG shall test the soils beneath the below grade tank to determine whether a release has occurred. MOG shall collect a five point composite sample and

individual grab samples from any area that is wet, discolored, or showing other evidence of a release. The samples will be analyzed for BTEX, TPH, and chlorides to demonstrate that the benzene concentration as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration as determined by EPA method 418.1 or other EPA method that the division approves does not exceed 100 mg/kg; and the chloride concentration as determined by EPA method 300.1 or other EPA method that the division approves does not exceed 250 mg/kg or the background concentration, whichever is greater. MOG shall notify the division of its results on form C-141.

**All required soil sampling was completed to NMOCD standards. Please refer to attached Laboratory Analysis report for further details.**

8. If MOG or the division determines that a release has occurred, then MOG shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC as appropriate.  
**A C-141 was completed and is included in this report.**
9. If contamination is confirmed by field sampling. MOG will follow the Guidelines For Remediation Of Leaks, Spills, and Releases NMOCD August 1993 when remediating identified contaminants.  
**Contaminant levels were below NMOCD standards.**
10. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then MOG shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; re-contour, and re-vegetate the site.  
**MOG backfilled the excavation with clean earthen fill material. Site is still active and in a core area of production operations so revegetation not required at this time.**
11. Notice of closure will be given to the Aztec Division office between 72 hours and one week of closure via email or verbally. The notification of closure will include the following:
  - Operator's name
  - Location by Unit Letter, Section Township, and Range.
  - Well name and API number**NMOCD Aztec Division (Brandon Powell) was notified verbally before activity began.**
12. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the blow grade tank. The closure report will be filed on C-144 and incorporate the following:
  - Details on capping and covering where applicable



- Inspection reports
- Sampling results

**2012 monthly BGT inspections are attached. Previous years available upon request.**

13. The site will be re-contoured to match the surrounding area. Natural drainages will be unimpeded and erosion control will be utilized where necessary.

**Completed; see attached photo of final grade and contour**

14. MOG shall seed the disturbed areas the first growing season with a division approved seed mixture after pit closure. Seeding will be accomplished by drilling on the contour whenever possible or by other division approved methods. Repeat seeding or planting will be continued until successful vegetative growth occurs.

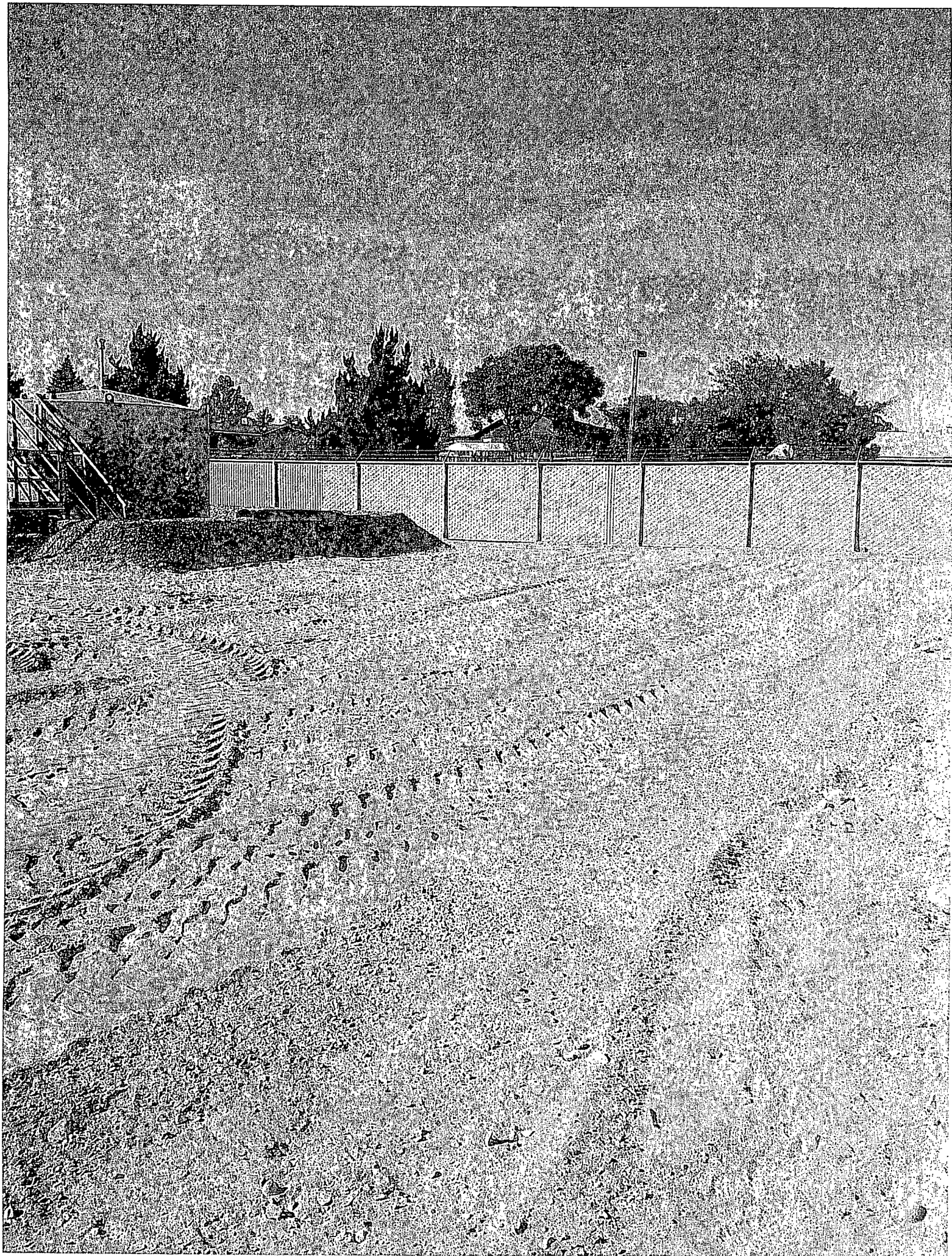
**Area is used for primary production operations. Will be reclaimed upon decommissioning of the site.**

15. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the thickness of the topsoil native to the area , whichever is greater.

**Area is used for primary production operations. Will be reclaimed upon decommissioning of the site.**

16. The surface owner shall be notified of MOG's closing of the below grade tank as per the approved closure plan using certified mail with return receipt requested.

**Notification made to City of Farmington and NMOCD**





October 11, 2012

Project Number 06039-0029

Mr. Randy Elledge  
McElvain Oil & Gas  
Post Office Box 5610  
Farmington, New Mexico 87499

Cell: (505) 320-4969

**RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE SOUTHERN UNION UNIT  
#1 WELL SITE, SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Elledge:

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities performed at the Southern Union Unit #1 well site located in Section 3, Township 29 North, Range 13 West, San Juan County, New Mexico. Upon Envirotech personnel's arrival on October 4, 2012, one (1) five (5)-point composite sample was collected from directly beneath the former BGT; see enclosed *Field Notes*. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID) and for chlorides. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for total BTEX using USEPA Method 8021 and for chlorides using USEPA Method 4500. The sample returned results below the regulatory limits for all constituents analyzed except TPH, which returned results above the BGT closure standard of 100 parts per million (ppm) TPH using USEPA Method 418.1; therefore, confirming a release had occurred.

A brief site assessment was conducted and the cleanup standards for the site were determined to be 1000 ppm TPH and 100 ppm organic vapors due to a horizontal distance to surface water between 200 and 1000 feet from the site, depth to groundwater greater than 100 feet, and the well site was not located within a wellhead protection area, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Spills, Leaks, and Releases. The sample from beneath the former BGT returned results below the regulatory standard for TPH using USEPA Method 418.1; see enclosed *Analytical Results*. Envirotech, Inc. recommends no further action in regards to this incident.

PAGE NO: <u>1</u> OF <u>1</u>	 (505) 432-0615 (800) 362-1879 5706 U.S. Hwy 64, Farmington, NM 87401	ENVIRONMENTAL SPECIALIST: <div style="font-size: 1.5em; font-family: cursive;">TLM/KC</div> LAT: <u>36°45'35.84"N</u> LONG: <u>108°11'20.90"W</u>
DATE STARTED: <u>10/4/2012</u>	DATE FINISHED: <u>10/4/2012</u>	

### FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>Southern Union</u> WELL #: <u>1</u>	TEMP PIT: <u>PERMANENT PIT: BGT: X</u>
LEGAL ADD: UNIT: <u>B</u> SEC: <u>3</u> TWP: <u>29N</u> RNG: <u>13W</u> PM: <u>NM</u>	
QTR/FOOTAGE: <u>990' FNL &amp; 1500' FEL</u> CNTY: <u>San Juan</u> ST: <u>NEW Mexico</u>	
EXCAVATION APPROX: <u>20</u> FT. X <u>10</u> FT. X <u>10</u> FT. DEEP CUBIC YARDAGE: <u>N/A</u>	
DISPOSAL FACILITY: <u>NA</u> REMEDIATION METHOD: <u>NA</u>	
LAND OWNER: <u>Federal</u> API: <u>3004508859</u> BGT / PIT VOLUME: <u>210 BBL</u>	
CONSTRUCTION MATERIAL: <u>metal</u> DOUBLE-WALLED, WITH LEAK DETECTION: <u>NO</u>	

LOCATION APPROXIMATELY: <u>35</u> FT. <u>45°</u> FROM WELLHEAD
DEPTH TO GROUNDWATER: <u>150</u>

#### TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP

BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 500 mg/kg

#### TEMPORARY PIT - GROUNDWATER ≥ 100 FEET DEEP

BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg

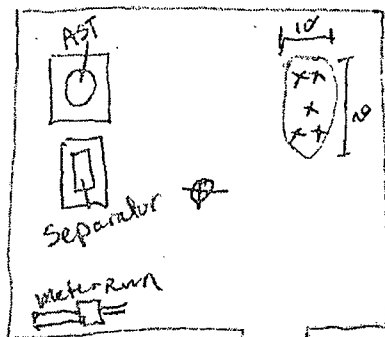
#### ☒ PERMANENT PIT OR BGT

BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg

#### FIELD 418.1 ANALYSIS

TIME	SAMPLE ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (mg/kg)
12:40	199.8 STD					217	
12:46	BGT Bottom	1	5	20	4	86	344
		2					
		3					
		4					
		5					
		6					

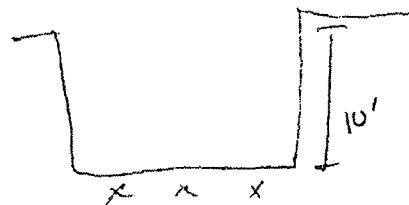
#### PERIMETER



#### FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC. (mg/kg)
BGT Bottom	0.6	< 32

#### PROFILE



x = 5-pt sample

#### LAB SAMPLES

SAMPLE ID	ANALYSIS	RESULTS
BGT Bottom	BENZENE	< 0.01
	BTEX	< 0.01
	GRO & DRO	NA
	CHLORIDES	4.71

#### NOTES:

5 pt composite collected Beneath tank.  
No visual staining observed.

#### Ranking:

WORKORDER #

WHO ORDERED

Client:

McElvain Energy



envirotech

(805) 622-0615 (800) 262-1879  
5708 U.S. Hwy 64, Farmington, NM 87401

Project No:

06039-C029

COC No:

14510

## FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1

DATE STARTED: 10/4/12

DATE FINISHED: 10/4/12

LOCATION: NAME: Southern Union WELL #: 1

QUAD/UNIT: B SEC: 3 TWP: 29N RNG: 8W PM: NM CNTY: SS ST: NM

ENVIRONMENTAL

QTR/FOOTAGE: 990' FNL &amp; 1500' FEL CONTRACTOR: NA

SPECIALIST: JLM/KCL

EXCAVATION APPROX: 20 FT. X 10 FT. X 10 FT. DEEP CUBIC YARDAGE: NA

DISPOSAL FACILITY: NA

REMEDICATION METHOD: NA

LAND USE: Federal - Recreation

LEASE:

LAND OWNER: Federal

CAUSE OF RELEASE: BGT

MATERIAL RELEASED: wellhead fluids

SPILL LOCATED APPROXIMATELY: 35 FT. 45° FROM wellhead

DEPTH TO GROUNDWATER: 150' NEAREST WATER SOURCE: 2,300' NEAREST SURFACE WATER: 750'

NMOCD RANKING SCORE: 10

NMOCD TPH CLOSURE STD: 1,000

PPM

## SOIL AND EXCAVATION DESCRIPTION:

No visual staining. BGT removed prior to arrival.

4/8.1 Result below spill closure of 1,000 ppm TPH.

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
BGT Bottom	12:46	1	8	5	20	4	86	344

## SPILL PERIMETER

OVM  
RESULTS

## SPILL PROFILE

See BGT/  
Pit closure  
Form

SAMPLE ID

FIELD HEADSPACE PID (ppm)

1

0.8

## LAB SAMPLES

SAMPLE ID

ANALYSIS

TIME

1

8021/Chloride, 12:46

See BGT/  
Pit closure  
Form

TRAVEL NOTES: CALLED OUT: ONSITE:



### Report Summary

Client: McElvain Oil and Gas

Chain of Custody Number: 14510

Samples Received: 10-04-12

Job Number: 06039-0029

Sample Number(s): 63383

Project Name/Location: Southern Union #1 BGT Closure

Entire Report Reviewed By:

A handwritten signature in black ink, consisting of a stylized 'S' followed by a large 'O' and a horizontal line.

Date:

10/8/12

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.



EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	McElvain Oil and Gas	Project #:	06039-0029
Sample ID:	BGT Bottom	Date Reported:	10-05-12
Laboratory Number:	63383	Date Sampled:	10-04-12
Chain of Custody:	14510	Date Received:	10-04-12
Sample Matrix:	Soil	Date Analyzed:	10-05-12
Preservative:	Cool	Date Extracted:	10-04-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
p,m-Xylene	ND	10.0
o-Xylene	ND	10.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95.8 %
	1,4-difluorobenzene	94.5 %
	Bromochlorobenzene	93.6 %

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: Southern Union #1 BGT Closure





**EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	N/A	Project #:	N/A
Sample ID:	1005BCAL QA/QC	Date Reported:	10-05-12
Laboratory Number:	63386	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-05-12
Condition:	N/A	Analysis:	BTEX
		Dilution:	50

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
	Accept. Range 0-15%				
Benzene	5.5515E-05	5.5515E-05	0.000	ND	0.2
Toluene	5.9297E-05	5.9297E-05	0.000	ND	0.2
Ethylbenzene	6.5177E-05	6.5177E-05	0.000	ND	0.2
p,m-Xylene	5.7400E-05	5.7400E-05	0.000	ND	0.2
o-Xylene	6.6406E-05	6.6406E-05	0.000	ND	0.2

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.00	0 - 30%	10
Toluene	ND	ND	0.00	0 - 30%	10
Ethylbenzene	ND	ND	0.00	0 - 30%	10
p,m-Xylene	ND	ND	0.00	0 - 30%	10
o-Xylene	ND	ND	0.00	0 - 30%	10

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	2500	2310	92.4	39 - 150
Toluene	ND	2500	2330	93.2	46 - 148
Ethylbenzene	ND	2500	2340	93.6	32 - 160
p,m-Xylene	ND	5000	4670	93.4	46 - 148
o-Xylene	ND	2500	2350	94.0	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

**Comments: QA/QC for Samples 63383 and 63386**





## Chloride

Client:	McElvain Oil and Gas	Project #:	06039-0029
Sample ID:	BGT Bottom	Date Reported:	10-05-12
Lab ID#:	63383	Date Sampled:	10-04-12
Sample Matrix:	Soil	Date Received:	10-04-12
Preservative:	Cool	Date Analyzed:	10-04-12
Condition:	Intact	Chain of Custody:	14510

Parameter	Concentration (mg/Kg)
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**Total Chloride**

**4.71**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.  
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **southern Union #1 BGT Closure**



RUSH

## CHAIN OF CUSTODY RECORD

14510

Client: <i>McElvain Oil and Gas</i>			Project Name / Location: <i>Southern Union #1 BGT Closure</i>			ANALYSIS / PARAMETERS															
Email results to:			Sampler Name: <i>Kyle Cassum</i>																		
Client Phone No.: <i>(505) 320-4469</i>			Client No.: <i>06039-0029</i>																		
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
					HgCl <sub>2</sub>	HCl															
<i>BGT Bottom</i>	<i>10-4-12</i>	<i>12:28</i>	<i>U3383</i>	<i>1) 4oz</i>			<i>Cool</i>		<i>X</i>								<i>X</i>			<i>Y</i>	<i>Y</i>
Relinquished by: (Signature) <i>[Signature]</i>				Date <i>10-4-12</i>	Time <i>15:05</i>	Received by: (Signature) <i>[Signature]</i>				Date <i>10/4/12</i>				Time <i>1505</i>							
Relinquished by: (Signature)						Received by: (Signature)															
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																					
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																					


**envirotech**  
Analytical Laboratory

5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com

McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	1/1/2012	Close Date	2/1/2012				
Meter No.	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs.	Tubing Pressure	Casing Pressure	Remarks
1/1/12	on	182	49				
1/2/12	on	183	57				
1/3/12	on	185	57				
1/4/12	on	189	57				
1/5/12	on	196	54		190	460	
1/6/12	on	188	47				
1/7/12	on	187	56				
1/8/12	on	187	55				
1/9/12	on	190	56				
1/10/12	on	185	55		190	460	
1/11/12	on	185	46				
1/12/12	on	181	54				
1/13/12	on	179	56				
1/14/12	on	182	54		190	460	
1/15/12	on	181	53				
1/16/12	on	180	45				
1/17/12	on	182	54				
1/18/12	on	178	56		185	460	
1/19/12	on	184	53				
1/20/12	on	183	52				90 inches is
1/21/12	on	184	42				
1/22/12	on	182	53				
1/23/12	on	183	54				
1/24/12	on	188	53		185	460	
1/25/12	on	186	47				
1/26/12	on	192	52				
1/27/12	on	192	52				
1/28/12	on	186	54				
1/29/12	on	186	51				
1/30/12	on	195	42				
1/31/12	on	195	50				
2/1/12							
Total	31		1616.0	0:0			
Average		185.7	52.1	0:0	30.3	74.2	

Summary					
Gas	Oil	Water	Oil Sales	Run days	
Total 1616.0	32.3		160.0	31.0	
Average 52.1	1.0				

Weekly Gas Oil Water Tubing Casing  
Week 1 53.9 1.6 190.0 460.0

Below Ground Tank Ins	
Date	Remarks
1/24/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	2/1/2012	Close Date	3/1/2012				
Meter No.	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
2/1/12	on	190	53				
2/2/12	on	188	53				
2/3/12	on	198	49		190	460	
2/4/12	on	184	47				
2/5/12	on	188	48				
2/6/12	on	193	53				
2/7/12	on	192	52				
2/8/12	on	202	48				
2/9/12	on	197	44				
2/10/12	on	195	51		200	460	
2/11/12	on	193	53				
2/12/12	on	190	51				
2/13/12	on	191	51				
2/14/12	on	192	43				
2/15/12	on	192	51				
2/16/12	on	193	52		195	450	
2/17/12	on	193	53				
2/18/12	on	192	50				
2/19/12	on	192	42				
2/20/12	on	191	52				
2/21/12	on	195	51		195	450	
2/22/12	on	194	50				
2/23/12	on	193	51				
2/24/12	on	185	43		195	450	
2/25/12	on	191	50				
2/26/12	on	177	55				
2/27/12	on	178	53				
2/28/12	on	172	50		180	450	
2/29/12	on	180	42				
3/1/12							
Total	29		1441.0	0.0			
Average		190.0	49.7	0.0	39.8	93.8	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1441.0	24.0		0.0	29.0
Average	49.7	0.8			

Weekly Gas Oil Water Tubing Casing  
Week 1 50.7 0.0 190.0 460.0

Below Ground Tank Ins	
Date	Remarks
2/24/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	3/1/2012	Close Date	4/1/2012				
Meter No	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
3/1/12	on	181	52				
3/2/12	on	188	51				
3/3/12	on	173	52				
3/4/12	on	181	49				
3/5/12	on	194	40		185	450	
3/6/12	on	192	49				
3/7/12	on	195	50				
3/8/12	on	191	51				
3/9/12	on	189	50				
3/10/12	on	182	51				
3/11/12	on	168	54				
3/12/12	on	174	51				
3/13/12	on	174	51		175	450	
3/14/12	on	173	51				
3/15/12	on	181	40				
3/16/12	on	171	50				
3/17/12	on	174	51				
3/18/12	on	174	53				
3/19/12	on	174	51				
3/20/12	on	174	44		175	450	
3/21/12	on	178	51				
3/22/12	on	175	52				
3/23/12	on	181	52		175	450	
3/24/12	on	182	50				
3/25/12	on	177	41				
3/26/12	on	185	50				
3/27/12	on	217	49		185	450	
3/28/12	on	182	52				
3/29/12	on	178	52				
3/30/12	on	181	42				
3/31/12	on	183	50				
4/1/12							
Total	31		1532.0	0.0			
Average		181.4	49.4	0.0	28.9	72.6	

Summary					
Gas	Oil	Water	Oil Sales	Run days	
Total	1532.0	19.6	0.0	31.0	
Average	49.4	0.6			

Weekly Gas Oil Water Tubing Casing  
Week 1 49.0 0.0 185.0 450.0

Below Ground Tank Ins	
Date	Remarks
3/23/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	4/1/2012	Close Date	5/1/2012				
Meter No	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
4/1/12	on	190	50				
4/2/12	on	192	48				
4/3/12	on	197	44				
4/4/12	on	196	50				
4/5/12	on	188	42		200	450	
4/6/12	on	186	51				
4/7/12	on	183	51				
4/8/12	on	185	50				
4/9/12	on	187	50				
4/10/12	on	188	42		188	450	
4/11/12	on	187	50				
4/12/12	on	189	50				
4/13/12	on	188	49				
4/14/12	on	190	42				
4/15/12	on	189	49				
4/16/12	on	186	50				
4/17/12	on	187	50		188	450	
4/18/12	on	186	51				
4/19/12	on	185	50				
4/20/12	on	191	40				
4/21/12	on	182	51				
4/22/12	on	179	50				
4/23/12	on	183	49				
4/24/12	on	185	50		185	450	
4/25/12	on	187	39				
4/26/12	on	188	49				
4/27/12	on	183	60				
4/28/12	on	183	57				
4/29/12	on	182	54				
4/30/12	on	186	43				
5/1/12							
Total	30		1461.0	0.0			
Average		186.9	48.7	0.0	25.4	60.0	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1461.0	18.2		0.0	30.0
Average	48.7	0.6			

Weekly	Gas	Oil	Water	Tubing	Casing
Week 1	48.0	0.0		200.0	450.0

Below Ground Tank Ins	
Date	Remarks
4/24/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Wel	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	5/1/2012	Close Date	6/1/2012				
Meter No.	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs.	Tubing Pressure	Casing Pressure	Remarks
5/1/12	on	199	50				
5/2/12	on	190	52				
5/3/12	on	193	49		190	460	
5/4/12	on	190	52				
5/5/12	on	197	42				
5/6/12	on	190	49				
5/7/12	on	192	50				
5/8/12	on	194	50		193	460	
5/9/12	on	196	51				
5/10/12	on	192	42				
5/11/12	on	194	48		192	460	
5/12/12	on	194	49				
5/13/12	on	193	50				
5/14/12	on	199	49				
5/15/12	on	197	42		200	460	
5/16/12	on	198	47				
5/17/12	on	196	48				
5/18/12	on	198	50				
5/19/12	on	193	50				
5/20/12	on	192	42				
5/21/12	on	193	47				
5/22/12	on	189	49				
5/23/12	on	187	50		190	450	
5/24/12	on	186	49				
5/25/12	on	196	41				
5/26/12	on	202	46				
5/27/12	on	193	52				
5/28/12	on	197	51				
5/29/12	on	190	52				
5/30/12	on	188	44				
5/31/12	on	187	47				
6/1/12							
Total	31		1490.0	0.0			
Average		193.4	48.1	0.0	31.1	73.9	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1490.0	15.4		0.0	31.0
Average	48.1	0.5			

Weekly Gas Oil Water Tubing Casing  
Week 1 49.1 0.0 190.0 460.0

Below Ground Tank Ins	
Date	Remarks
5/11/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Wel	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	6/1/2012	Close Date	7/1/2012				
Meter No	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
6/1/12	on	184	50				
6/2/12	on	183	52				
6/3/12	on	183	49				
6/4/12	on	197	42				
6/5/12	on	244	38		200	460	
6/6/12	on	259	42				
6/7/12	on	243	48				
6/8/12	on	255	44				
6/9/12	on	239	46				
6/10/12	on	208	49				
6/11/12	on	201	52				
6/12/12	on	200	52		205	460	
6/13/12	on	198	51				
6/14/12	on	190	44				
6/15/12	on	185	46				
6/16/12	on	201	48				
6/17/12	on	185	51				
6/18/12	on	188	47		190	460	
6/19/12	on	190	43				
6/20/12	on	192	44				
6/21/12	on	191	49				
6/22/12	on	193	49				
6/23/12	on	191	49				
6/24/12	on	192	44				
6/25/12	on	200	44				
6/26/12	on	200	48		200	460	
6/27/12	on	200	48				
6/28/12	on	202	48				
6/29/12	on	199	44				
6/30/12	on	197	44				
7/1/12							
Total	30		1405.0	0.0			
Average		203.0	46.8	0.0	26.5	61.3	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1405.0	10.3		0.0	30.0
Average	46.8	0.3			

Weekly Gas Oil Water Tubing Casing  
Week 1 45.9 0.0 200.0 460.0

Below Ground Tank Ins	
Date	Remarks
6/28/2012	ok



McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Pumper	Brent Elledge						
Open Date	7/1/2012	Close Date	8/1/2012				
Meter No	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
7/1/12	on	191	49				
7/2/12	on	190	49				
7/3/12	on	194	49		190	460	
7/4/12	on	194	44				
7/5/12	on	198	42				
7/6/12	on	197	48				
7/7/12	on	189	49				
7/8/12	on	182	48				
7/9/12	on	194	43		185	460	
7/10/12	on	196	42				
7/11/12	on	193	48				
7/12/12	on	192	49				
7/13/12	on	199	48				
7/14/12	on	196	44				
7/15/12	on	192	43				
7/16/12	on	186	49				
7/17/12	on	190	47		188	460	
7/18/12	on	191	48				
7/19/12	on	188	44				
7/20/12	on	191	42				
7/21/12	on	191	48				
7/22/12	on	209	45				
7/23/12	on	189	49				
7/24/12	on	191	45		190	460	
7/25/12	on	192	41				
7/26/12	on	193	53				work started on oil tank
7/27/12	on	193	39				
7/28/12	on	190	47				
7/29/12	on	190	48				
7/30/12	on	192	49				
7/31/12	on	192	45				transfer oil to new tank
8/1/12							
Total	31		1434.0	0.0			
Average		192.4	46.3	0.0	24.3	59.4	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1434.0	20.7		0.0	31.0
Average	46.3	0.7			

Weekly Gas Oil Water Tubing Casing  
Week 1 47.1 0.0 190.0 460.0

Below Ground Tank Ins	
Date	Remarks
7/31/2012	ok

McElvain Oil and Gas Properties, Inc.							
Lease/Well	Southern Union #1B						
Rumper	Brent Elledge						
Open Date	8/1/2012	Close Date	9/1/2012				
Meter No.	Run	Spring	Range	Chart Day			
72-774	4	500	150	Watts			
Day	On/Off	Line Pressure	MCF	Flow Hrs	Tubing Pressure	Casing Pressure	Remarks
8/1/12	on	190	40				
8/2/12	on	192	48				
8/3/12	on	194	47		192	460	
8/4/12	on	192	47				
8/5/12	on	190	46				
8/6/12	on	202	38				
8/7/12	on	200	49				
8/8/12	on	196	46				
8/9/12	on	204	48		198	460	
8/10/12	on	193	47				
8/11/12	on	192	41				
8/12/12	on	188	50				
8/13/12	on	188	48				
8/14/12	on	190	48		190	460	
8/15/12	on	191	46				
8/16/12	on	193	39				
8/17/12	on	195	47		195	460	
8/18/12	on	194	48				
8/19/12	on	192	48				
8/20/12	on	194	46				
8/21/12	on	194	39		195	460	
8/22/12	on	192	48				
8/23/12	on	190	48		192	460	
8/24/12	on	190	46				
8/25/12	on	192	45				
8/26/12	on	193	40				
8/27/12	on	200	54				
8/28/12	on	212	41				
8/29/12	on	203	42				
8/30/12	on	200	46				
8/31/12	on	207	47				
9/1/12							
Total	31		1413.0	0.0			
Average		194.9	45.6	0.0	37.5	89.0	

	Summary				
	Gas	Oil	Water	Oil Sales	Run days
Total	1413.0	14.0		0.0	31.0
Average	45.6	0.5			

Weekly Gas Oil Water Tubing Casing  
Week 1 45.0 0.3 192.0 460.0

Below Ground Tank Ins	
Date	Remarks
8/23/2012	ok



October 11, 2012

Project Number 06039-0029

Mr. Randy Elledge  
McElvain Oil & Gas  
Post Office Box 5610  
Farmington, New Mexico 87499

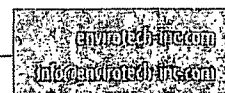
Cell: (505) 320-4969

**RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE SOUTHERN UNION UNIT  
#1 WELL SITE, SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Elledge:

Enclosed please find the field notes and analytical results for below-grade tank (BGT) closure activities performed at the Southern Union Unit #1 well site located in Section 3, Township 29 North, Range 13 West, San Juan County, New Mexico. Upon Envirotech personnel's arrival on October 4, 2012, one (1) five (5)-point composite sample was collected from directly beneath the former BGT; see enclosed **Field Notes**. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, for organic vapors using a photoionization detector (PID) and for chlorides. Additionally, the sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for total BTEX using USEPA Method 8021 and for chlorides using USEPA Method 4500. The sample returned results below the regulatory limits for all constituents analyzed except TPH, which returned results above the BGT closure standard of 100 parts per million (ppm) TPH using USEPA Method 418.1; therefore, confirming a release had occurred.


A brief site assessment was conducted and the cleanup standards for the site were determined to be 1000 ppm TPH and 100 ppm organic vapors due to a horizontal distance to surface water between 200 and 1000 feet from the site, depth to groundwater greater than 100 feet, and the well site was not located within a wellhead protection area, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Spills, Leaks, and Releases. The sample from beneath the former BGT returned results below the regulatory standard for TPH using USEPA Method 418.1; see enclosed **Analytical Results**. Envirotech, Inc. recommends no further action in regards to this incident.



McElvain Oil & Gas  
BGT Closure Documentation  
Southern Union Unit #1  
Project Number 06039-0029  
October 2012  
Page 2

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,  
**ENVIROTECH, INC.**

  
Kyle Cossum, EIT  
Staff Engineer  
[kcossum@envirotech-inc.com](mailto:kcossum@envirotech-inc.com)

Enclosure(s): Field Notes  
Analytical Results

Cc: Client File Number 06039

PAGE NO: 1 OF 1
**envirotech**

 (505) 632-0615 (800) 362-1879  
 5796 U.S. Hwy 64, Farmington, NM 87401

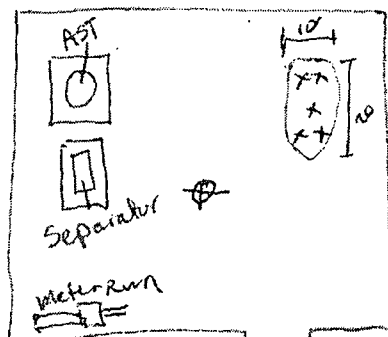
ENVIRONMENTAL SPECIALIST:

TLM/KC

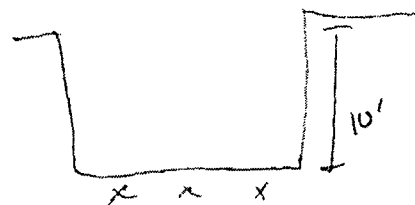
DATE STARTED: 10/4/2012DATE FINISHED: 10/4/2012LAT: 36°45'35.84"NLONG: 108°11'20.90"W
**FIELD REPORT: BGT / PIT CLOSURE VERIFICATION**

 LOCATION: NAME: Southern Union WELL #: 1 TEMP PIT: PERMANENT PIT: BGT: X  
 LEGAL ADD: UNIT: B SEC: 3 TWP: 29N RNG: 13W PM: NM  
 QTR/FOOTAGE: 990' FNL & 1500' FEL CNTY: San Juan ST: NEW Mexico
EXCAVATION APPROX: 20 FT. X 10 FT. X 10 FT. DEEP CUBIC YARDAGE: N/ADISPOSAL FACILITY: NA REMEDIATION METHOD: NALAND OWNER: Federal API: 3004508854 BGT/PIT VOLUME: 210 BBLCONSTRUCTION MATERIAL: metal DOUBLE-WALLED, WITH LEAK DETECTION: NOLOCATION APPROXIMATELY: 35 FT. 45° FROM WELLHEADDEPTH TO GROUNDWATER: 150
**TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP**
BENZENE  $\leq 0.2$  mg/kg, BTEX  $\leq 50$  mg/kg, GRO & DRO FRACTION (8015)  $\leq 500$  mg/kg, TPH (418.1)  $\leq 2500$  mg/kg, CHLORIDES  $\leq 500$  mg/kg
**TEMPORARY PIT - GROUNDWATER  $\geq 100$  FEET DEEP**
BENZENE  $\leq 0.2$  mg/kg, BTEX  $\leq 50$  mg/kg, GRO & DRO FRACTION (8015)  $\leq 500$  mg/kg, TPH (418.1)  $\leq 2500$  mg/kg, CHLORIDES  $\leq 1000$  mg/kg
**☒ PERMANENT PIT OR BGT**
BENZENE  $\leq 0.2$  mg/kg, BTEX  $\leq 50$  mg/kg, TPH (418.1)  $\leq 100$  mg/kg, CHLORIDES  $\leq 250$  mg/kg
**FIELD 418.1 ANALYSIS**

TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (mg/kg)
12:40	199.8 STD					217	
12:46	Bgt Bottom	1	5	20	4	86	344
		2					
		3					
		4					
		5					
		6					

**PERIMETER**

**FIELD CHLORIDES RESULTS**

SAMPLE ID	READING	CALC. (mg/kg)
Bgt Bottom	0.6	< 32

**PROFILE**


x = 5-pt sample

LAB SAMPLES mg/kg		
SAMPLE ID	ANALYSIS	RESULTS
Bgt Bottom	BENZENE	< 0.01
	BTEX	< 0.01
	GRO & DRO	NA
	CHLORIDES	4.71

**NOTES:**

 spt composite collected Beneath tank.  
 No visual staining observed.

**Ranking:**

WORKORDER #

WHO ORDERED



## Report Summary

Client: McElvain Oil and Gas

Chain of Custody Number: 14510

Samples Received: 10-04-12

Job Number: 06039-0029

Sample Number(s): 63383

Project Name/Location: Southern Union #1 BGT Closure

Entire Report Reviewed By:

A handwritten signature in black ink, consisting of a stylized 'S' followed by a large 'O' and a horizontal line.

Date:

10/8/12

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.



**EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	N/A	Project #:	N/A
Sample ID:	1005BCAL QA/QC	Date Reported:	10-05-12
Laboratory Number:	63386	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-05-12
Condition:	N/A	Analysis:	BTEX
		Dilution:	50

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
	Accept. Range 0-15%				
Benzene	5.5515E-05	5.5515E-05	0.000	ND	0.2
Toluene	5.9297E-05	5.9297E-05	0.000	ND	0.2
Ethylbenzene	6.5177E-05	6.5177E-05	0.000	ND	0.2
p,m-Xylene	5.7400E-05	5.7400E-05	0.000	ND	0.2
o-Xylene	6.6406E-05	6.6406E-05	0.000	ND	0.2

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.00	0 - 30%	10
Toluene	ND	ND	0.00	0 - 30%	10
Ethylbenzene	ND	ND	0.00	0 - 30%	10
p,m-Xylene	ND	ND	0.00	0 - 30%	10
o-Xylene	ND	ND	0.00	0 - 30%	10

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	2500	2310	92.4	39 - 150
Toluene	ND	2500	2330	93.2	46 - 148
Ethylbenzene	ND	2500	2340	93.6	32 - 160
p,m-Xylene	ND	5000	4670	93.4	46 - 148
o-Xylene	ND	2500	2350	94.0	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.  
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

**Comments: QA/QC for Samples 63383 and 63386**

**McELVAIN ENERGY INC.**  
1050 17th Street, Suite 2500  
Denver, CO 80265

RCVD NOV 28 '12  
OIL CONS. DIV.  
DIST. 3

November 26, 2012

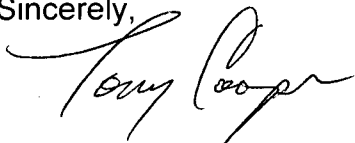
NMOCD District 3 Aztec Office  
1000 Rio Brazos Rd  
Aztec, NM 87410  
Attn: Brandon Powell

RE: Southern Union 1~~B~~ Pit Closure  
McElvain Energy Inc. /San Juan Basin

Dear Mr. Powell,

I have attached a copy of a letter that was sent to the surface owner of record at the Southern Union 1~~B~~ well site. The address of the owner of record was obtained from the county assessor's office. The letter was sent out three weeks ago. I have not received a confirmation that the letter was ever received or acknowledged with a signature. The letter was sent certified return receipt requested and I have attached the receipt from the USPS. I am respectfully requesting that this attempt be considered fulfillment of the surface owner notification requirement so that the pending Southern Union 1~~B~~ below grade tank closure may be finalized.

Sincerely,



Tony G. Cooper  
SR. EH&S Specialist  
McElvain Energy Inc.  
1050 17<sup>th</sup> St Suite 2500  
Denver CO 80265  
303-893-0933 x331



**McELVAIN ENERGY INC.**  
1050 17th Street, Suite 2500  
Denver, CO 80265

November 6, 2012

**VIA CERTIFIED MAIL- RETURN RECEIPT REQUESTED**

4 Corners Savings and Loan  
2200 E. Main  
Farmington, NM 87401  
Attn: Linda Boyce

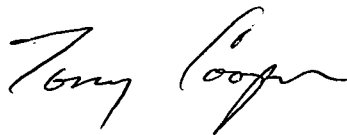
RE: Southern Union #1~~B~~  
3500 Carlton Av  
Farmington, New Mexico  
Northridge Park #3 Lot 10 Blk 9 Tax ID# R0032371

Dear Landowner,

Pursuant to paragraph 1 (b) of subsection F of 19.15.17.13 NMAC, an operator shall provide the surface owner the operator's proposal to close the below grade tank (BGT) on-site in compliance with the BGT closure methods specified in the same subsection of the NMAC. In 1959 a SUA was signed with the City of Farmington (COF) on this property. In error the COF was thought to be the property owner and notification was made to them before the closure. A recent search of the county records by McElvain Energy, Inc. discovered the error. The BGT closure has now been completed to the NMOCD standards. A final closure report has been filed with the NMOCD and the BLM. If you have any further questions on this project please feel free to contact me.

For further questions please contact Tony G. Cooper @  
303-893-0933 x331

Sincerely,



Tony G. Cooper  
SR. EH&S Specialist  
McElvain Energy Inc.

7011 1150 0801 8714 0663

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Sent To	4 Corners Savings & Loan
Street, Apt. No., or PO Box No.	2200 E. Main
City, State, ZIP+4	Farmington, NM 87401
PS Form 3800, August 2005	
See Reverse for Instructions	