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 June 6, 2013

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

Type of action: Below grade tank registration Permit of a pit or proposed alternative method
API Number: 30-045-09060 OCD Permit Number: U/L or Qtr/Qtr
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
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 Unspecified
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.
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

dlb

20

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.	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	
Signed in compliance with 15.15.10.0 (white	
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.	Tel ment at 11
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 acce	ptable 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
- Min Office of the State Engineer - TWATERS database scarcif, [0505, Data obtained from hearby wens	
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.	☐ Yes ☐ No ☐ NA
NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	I 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)	☐ Yes ☐ No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within the second time and the first of the second to be a second	
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	☐ Yes ☐ No
Society; Topographic map	
Within a 100-year floodplain. (Does not apply to below grade tanks)	☐ Yes ☐ No
- FEMA map	
Poloni Con de Tombre	
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured	☐ Yes ☒ No
from the ordinary high-water mark).	L les M No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;	☐ Yes ☒ No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	No. Levil
Within 100 fort of a serious language and a serious description of the serious serious and the serious serious language and the serious seriou	
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.)	☐ Yes ☐ No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	☐ Yes ☐ No
application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
risual inspection (certification) of the proposed site, Aeriai photo, sateritte intage	12
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.	☐ Yes ☐ No
NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	

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	180
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	T. AND
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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached. 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 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 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. and 19.15.17.13 NMAC	NMAC 15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
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 doc 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 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:	

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 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 ₂ 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	documents are
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 F	luid Management Pit
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	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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	
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 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
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
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
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 	
Within a 100-year floodplain.	Yes No
- FEMA map	Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. 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 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	11 NMAC 15.17.11 NMAC
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 beling the Name (Print): Title:	
Signature: Date:	
e-mail address:	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 1210 Title OCD Permit Number:	210015
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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report. complete this
☐ Closure Completion Date: 12/23/2013	
 20. Closure Method: Waste Excavation and Removal □ On-Site Closure Method □ Alternative Closure Method □ Waste Removal (Closed-lo □ If different from approved plan, please explain. 	op systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please incommark 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)	dicate, by a check

22.	
Operator Closure Certification:	
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.	
Table county and the electric complete with an applicable closure requirements and contained specified in the applicable plant	
Name (Print): Crystal Walker Title: Regulatory Coordinator	
Signature: Date: 12/1/2015	
Signature.	
e-mail address: crystal.walker@cop.com Telephone: (505) 326-9837	

Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Closure Report

Lease Name: Murphy E 2 API No.: 30-045-09060

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan:

1. BR shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.

The below-grade tank referenced above was closed within 60 days of cessation of the below-grade tanks operation.

 BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

BR will receive prior approval to 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.

The below-grade tank was disposed of in a division-approved manner.

4. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.

All on-site equipment associated with the below-grade tank was removed.

5. BR will test the soils beneath the below-grade tank to determine whether a release has occurred. BR shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. BR shall notify the division of its results on form C-141.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg		
Benzene	EPA SW-846 8021B or 8260B	0.2		
BTEX	EPA SW-846 8021B or 8260B	50		
TPH	EPA SW-846 418.1	100		
Chlorides	EPA 300.0	250		

If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

A release was not determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

- 8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
 - i. Operator's name
 - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

Notification of closure was not provided to the Aztec Division office between 72 hours and one week prior to closure.

The surface owner shall be notified of BR's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

The closure process notification to the landowner was not found. A P&A field inspection was conducted with the landowner on 8/16/13.

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping, including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. BR shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. BR will repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 11 was accomplished per the above reference stipulations on 06/15/2015

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 13. 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 below-grade tank. Closure report will be filed on C-144 and incorporate the following:
 - Soil Backfilling and Cover Installation (See Report)
 - Re-vegetation application rates and seeding techniques (See Report)
 - Photo documentation of the site reclamation (Included as an attachment)
 - Confirmation Sampling Results (Included as an attachment)
 - Proof of closure notice (Not Available)

Closure documentation was provided as soon as possible.

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

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Form C-141 Revised August 8, 2011

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

				ease Notific		OPERA'				al Report	\boxtimes	Final Repo
Name of Co	ompany Bu	urlington Res	sources C	il & Gas Compan	y		ystal Walker			ar resport		T III T T T T T T T T T T T T T T T T T
		h St, Farmin					No.(505) 326-9	837			7	
Facility Nar	me: Murpl	hy E 2				Facility Typ	e: Gas Well					
Surface Ow	ner Feder	al		Mineral O	wner l	Federal			API No	0.30-045-0	9060	
				LOCA	TIO	N OF RE	LEASE					
Unit Letter C	Section 34	Township 30N	Range 11W	Feet from the		/South Line North	Feet from the 1550		West Line West	County San Juan		
	34	5011	1111				le -107.981796		TV CSC	Jan ouan		
						OF REL						
Type of Rele	ase			NAI	UKE	Volume of			Volume l	Recovered		
Type of Release ource of Release Was Immediate Notice Given? Yes No Not Release By Whom? Was a Watercourse Reached? Yes No I a Watercourse was Impacted, Describe Fully.*							Hour of Occurren	ce	10000	Hour of Dis	scovery	
W I .		21 0				TOTAL TO	WH C					
Was Immedia	ate Notice C		Yes [No Not Re	quired	If YES, To	Whom'?					
By Whom?				- W-W		Date and H	Hour			7		
	course Reac						olume Impacting	the Wate	ercourse.			
			Yes 🖂	No								
No release w	vas encount	em and Reme ered during	the BGT	Closure.								
regulations al public health should their o or the environ	or the envir operations h	are required to conment. The ave failed to a	o report as acceptana adequately OCD accep	e is true and comple nd/or file certain re ce of a C-141 repor investigate and re otance of a C-141 re	lease n t by th mediat	otifications a e NMOCD m e contaminati	nd perform corre- arked as "Final Rion that pose a the	ctive act Report" d reat to gr	ions for rel loes not rel round wate	eases which ieve the ope r, surface wa	may en rator of ater, hu	ndanger f liability man health
C:	1	tal L	U-1	· kee			OIL CON	SERV	ATION	DIVISIO	DN	\
Signature:										11)
Printed Name	e: Crystal W					Approved by	Environmental S	Specialist		rosse		5
_		Valker			+		Environmental S		0	Date:		5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

November 02, 2015

Emilee Skyles Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281

FAX

RE: COPC Murphy E 2

OrderNo.: 1510C35

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/27/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1510C35

Date Reported: 11/2/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: BGT S-1

Project:

COPC Murphy E 2

Collection Date: 10/26/2015 9:34:00 AM

Lab ID:

1510C35-001

Matrix: SOIL

Received Date: 10/27/2015 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH					Analy	st: TOM
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	10/29/2015	22036
EPA METHOD 300.0: ANIONS					Analy	st: LGT
Chloride	ND	30	mg/Kg	20	10/29/2015 12:47:43	PM 22082
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analy	st: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/29/2015 5:44:05 F	M 22053
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/29/2015 5:44:05 F	M 22053
Surr: DNOP	98.0	70-130	%REC	1	10/29/2015 5:44:05 F	M 22053
EPA METHOD 8015D: GASOLINE RAI	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/28/2015 12:33:02	PM 22037
Surr: BFB	87.3	75.4-113	%REC	1	10/28/2015 12:33:02	PM 22037
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.049	mg/Kg	1	10/28/2015 12:33:02	PM 22037
Toluene	ND	0.049	mg/Kg	1	10/28/2015 12:33:02	PM 22037
Ethylbenzene	ND	0.049	mg/Kg	1	10/28/2015 12:33:02	PM 22037
Xylenes, Total	ND	0.097	mg/Kg	1	10/28/2015 12:33:02	PM 22037
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	10/28/2015 12:33:02	PM 22037

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 6 J

- Sample pH Not In Range
- Reporting Detection Limit RL

Hall Environmental Analysis Laboratory, Inc.

WO#:

1510C35

02-Nov-15

Client:

Animas Environmental

Project:

COPC Murphy E 2

Sample ID MB-22082

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 22082

RunNo: 29897

Prep Date: 10/29/2015

Analysis Date: 10/29/2015

SeqNo: 910686

Units: mg/Kg

HighLimit

RPDLimit

Qual

Analyte Chloride

Result PQL ND 1.5

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Prep Date: 10/29/2015

Sample ID LCS-22082

Batch ID: 22082

PQL

1.5

RunNo: 29897

SPK value SPK Ref Val %REC LowLimit

SeqNo: 910687

Units: mg/Kg

Analyte

Analysis Date: 10/29/2015

SPK value SPK Ref Val %REC

HighLimit

RPDLimit

0

92.6

110

Chloride

Result

15.00

14

90

LowLimit

%RPD

%RPD

Qual

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Detection Limit

Page 2 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1510C35

02-Nov-15

Client: Project:

Animas Environmental COPC Murphy E 2

Sample ID MB-22036

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID: PBS

Batch ID: 22036

PQL

RunNo: 29879

Prep Date: 10/27/2015 Analysis Date: 10/29/2015

SeqNo: 910049

Units: mg/Kg

Analyte

LCSS

Prep Date: 10/27/2015

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit

Qual

Petroleum Hydrocarbons, TR Sample ID LCS-22036 ND 20

SampType: LCS Batch ID: 22036

TestCode: EPA Method 418.1: TPH

RunNo: 29879

Units: mg/Kg

Analyte

Client ID:

Analysis Date: 10/29/2015

Result

SeqNo: 910050

LowLimit

HighLimit

Petroleum Hydrocarbons, TR

100

PQL 20 SPK value SPK Ref Val 100.0

%REC 104

83.6 TestCode: EPA Method 418.1: TPH

116

RPDLimit

Qual

Sample ID LCSD-22036

Client ID: LCSS02

SampType: LCSD

Batch ID: 22036

20

RunNo: 29879 SeqNo: 910051

Units: mg/Kg

116

HighLimit

Qual

%RPD

Analyte

Analysis Date: 10/29/2015 PQL Result

SPK value SPK Ref Val 0

%REC LowLimit 101

83.6

2.79

%RPD

%RPD

RPDLimit

Petroleum Hydrocarbons, TR

Prep Date: 10/27/2015

100

100.0

20

Qualifiers:

R

Value exceeds Maximum Contaminant Level.

RPD outside accepted recovery limits

- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1510C35

02-Nov-15

Client: Project: Animas Environmental COPC Murphy E 2

Sample ID MB-22053 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 22053 RunNo: 29870 Prep Date: 10/28/2015 Analysis Date: 10/29/2015 SeqNo: 910099 Units: mg/Kg **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.7 10.00 96.6 70 130

Sample ID LCS-22053	SampT	ype: LC	S	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	n ID: 22	053	F	RunNo: 2	9870				
Prep Date: 10/28/2015	Analysis D)ate: 10	0/29/2015	8	SeqNo: 9	10100	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.3	57.4	139			7-11
Surr: DNOP	4.4		5.000		87.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1510C35

02-Nov-15

Client:

Animas Environmental

Sample ID MB-22037	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 22037	RunNo: 29859						
Prep Date: 10/27/2015	Analysis Date: 10/28/2015	SeqNo: 909453	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual				
Gasoline Range Organics (GRO)	ND 5.0			MALE TO				
Surr: BFB	870 1000	86.7 75.4	113	William C.				
Sample ID LCS-22037	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 22037	RunNo: 29859						
Prep Date: 10/27/2015	Analysis Date: 10/28/2015	SeqNo: 909454	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual				
Gasoline Range Organics (GRO)	26 5.0 25.00	0 105 79.6	122	7 4 7 4				
Surr: BFB	940 1000	93.9 75.4	113					
Sample ID 5ML RB	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range	WEWE				
Client ID: PBS	Batch ID: R29859	RunNo: 29859						
Prep Date:	Analysis Date: 10/28/2015	SeqNo: 909477	Units: %REC					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual				
Surr: BFB	870 1000	87.0 75.4	113					

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch ID: R29859		F	RunNo: 2						
Prep Date:		Analysis Da	ate: 1	0/28/2015	8	SeqNo: 9	09478	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		950		1000		95.1	75.4	113		A 14.5	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
 - Sample pH Not In Range
- RL Reporting Detection Limit

Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510C35

02-Nov-15

Client: Animas Environmental Project: COPC Murphy E 2

Sample ID MB-22037	SampType: MBLK Batch ID: 22037 Analysis Date: 10/28/2015			Tes						
Client ID: PBS				F	RunNo: 2	9859				
Prep Date: 10/27/2015				8	SeqNo: 9	09488	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050						Harry.		
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID LCS-22037	SampType: LCS			TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batc	h ID: 22	037	F									
Prep Date: 10/27/2015	Analysis Date: 10/28/2015			5	SeqNo: 9	09489	Units: mg/F	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	1.1	0.050	1.000	0	113	80	120						
Toluene	1.0	0.050	1.000	0	102	80	120						
Ethylbenzene	0.99	0.050	1.000	0	98.6	80	120						
Xylenes, Total	3.0	0.10	3.000	0	98.5	80	120						
Surr: 4-Bromofluorobenzene	1 1		1 000		111	80	120						

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

RcotNo: 1 Work Order Number: 1510C35 Animas Environmental Client Name: Received by/date: 10/27/2015 7:30:00 AM Logged By: Lindsay Mangin 10/27/2015 9:41:17 AM Completed By: Lindsay Mangin Reviewed By: Chain of Custody Not Present Yes No . 1 Custody seals intact on sample bottles? Yes V No 🗌 Not Present 2. Is Chain of Custody complete? Courier 3. How was the sample delivered? Log In No 🗌 NA 🗌 Yes V 4. Was an attempt made to cool the samples? No 🗌 NA . Yes V Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes V 6. Sample(s) in proper container(s)? No 🗌 7. Sufficient sample volume for indicated test(s)? Yes V No 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No V Yes 9. Was preservative added to bottles? No . No VOA Viels Yes _ 10. VOA vials have zero headspace? No V 11. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: 12. Does paperwork match bottle labels? Yes V (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes V No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗌 Yes V 14. Is it clear what analyses were requested? Checked by: No Yes V 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) NA V Yes No 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax In Person Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By Good

Chain-of-Custody Record ient: Animas Environmental Services, LLC ailing Address: 604 W Pinon St. Farmington, NM 87401 ione #: 505-564-2281 nail or Fax#: eskyles@animasenvironmental.com VQC Package:			X Standard RushProject Name:				HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com												
							4901 Hawkins NE - Albuquerque, NM 87109												
			Project #:	Tel. 505-345-3975 Fax 505-345-4107															
						01. 0	000	10 0		Name and Address of the Owner, where	Req	-							
			Project Manag				1												
Standa	7		☐ Level 4 (Full Validation		E. Skyles			-4		77									П
creditation:			Sampler: C. Lameman												$ \ $			11	
NELAP Other			On Ice: X Yes No															3	
EDD (Type)			Sample Temperature: /_ 3				-	0										0 P	
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX - 8021B	TPH - EPA 418.1	Chlorides - 300.0										Air Bubbles (Y or N)
210-15	0934	SOIL	BGT S-1	1 - 4 oz.	cool	-001	+	X	8	, ,	y					\Box			Ť
	1				77.35		-	,	6	1/2/	D					\vdash	+	+	Н
								60	1	130	1/2			+	+	\vdash	+	+	Н
									1	-			-	+	+	H	+	+	+
										14			1	+	+	H		+	Н
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te:	Time: 1632	Relinquish	ed by:	Received by:	1 last	10/2/ 1/20	wo	#					nillips			Ш		1	
126/15	Time:	Relinquishe	ottre Waller	Received by: Jac. Och	Hacte 1	Date Time	USE	RID	Gi	ARRI	ECD			isa Hi	unter				



