<u>District I</u> 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

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.

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V	•

# Pit Closed-Loop System Below-Grade Tank or

anu		I It, Closed Bo	op bystem, below Grade Tame, o	<u> -</u>
10324	<u>Propo</u>	sed Alternative M	Method Permit or Closure Plan Ap	plication
		☐ Closure of a pit, clo ☐ Modification to an	submitted for an existing permitted or non-perm	ed alternative method
	•		-144) per individual pit, closed-loop system, below-	erade tank or alternative request
Please be advised that environment. Nor doe	approval of this re	quest does not relieve the op	perator of liability should operations result in pollution illity to comply with any other applicable governmental	of surface water, ground water or the
Operator: Flm Ride	re Exploration Co	mpany, LLC OGRID #:14	4 ± 19 19052	•
Address: PO Box 1		-	17032	
Facility or well nan				
API Number: 30-04				
		hip 23 N Range 5 W Coun		
–			07.334588 NAD: □1927 ⊠ 1983	
•	-	☐ Private ☒ Tribal Trus		
2.		· ·	41.1	A to the first of
Pit: Subsection	on For G of 19.15	5.17.11 NMAC Temp	oray Pit was not permitted as p	RCVD AUG 10'12
Temporary: 🛛 Dr	illing 🔲 Workov	er 19.15	5. 17.8 .A	OIL CONS. DIV.
Permanent E	Emergency 🔲 Ca	vitation P&A		DIST. 3
☑ Lined ☐ Unli	ned Liner type:	Thickness 20 mil 🛛 LL	DPE HDPE PVC Other	
String-Reinforce     String-Reinforce	ed			
Liner Seams: 🛛 V	Velded X Factor	y Other	Volume: 9,939 bbl Dimensions: L	<u>160'</u> x W <u>40'</u> x D <u>10'</u>
3.	0.1	H C10 15 17 11 NNAA	2	
Type of Operation:		n H of 19.15.17.11 NMAC lling a new well 🔲 Work	over or Drilling (Applies to activities which require	prior approval of a permit or notice of
intent)	l Abous Ground 6	Steel Tanks 🖸 Haul-off I	Dina C Other	
			nil LLDPE HDPE PVC Other	
		y Other		
	Tactor	y Calei		
4.  Relow-grade ta	nk: Subsection	I of 19.15.17.11 NMAC		
			lewalls, liner, 6-inch lift and automatic overflow shu	ut-off
			Other	
	_	•	PVC Other	
5.	***************************************			
Alternative Me				ı
Submittal of an exc	eption request is a	equired. Exceptions must	t be submitted to the Santa Fe Environmental Burea	u 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						
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)						
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 19.15.16.8 NMAC						
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.						
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 so material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate d 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 pad 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	☐ Yes ☐ No					
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.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  Visual inspection (certification) of the proposed site: Aerial photo: Satellite image.	Yes No					
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>						
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					

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)
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   Siting Criteria Company Plan   Discount of
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)
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 Peclametrian Plan - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.1 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if								
facilities are required.								
	sposal 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 operations?  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 NMA 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	C							
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							
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								
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								
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								
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								
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								
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								
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 19.15.17.13 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  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								

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): Title:
Signature: Date:
e-mail address: Telephone:
OCD Approval: Permit Application (including closure plan) Closure Plan-(only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 9/18/2012  Title: OCD Permit Number:
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: April 9, 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 indentify 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
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) − See attached: Closure Notices □ Proof of Deed Notice (required for on-site closure) − Not required on BLM/Tribal land □ Plot Plan (for on-site closures and temporary pits) − See attached: Plot Plan □ Confirmation Sampling Analytical Results (if applicable) − Not Applicable − Waste Material Sampling Results below OCD Closure Standards. □ Waste Material Sampling Analytical Results (required for on-site closure) − See attached: Envirotech Analytical Results □ Disposal Facility Name and Permit Number −On-Site closure levels met standards − Waste material not removed. □ Soil Backfilling and Cover Installation − See attached: Site Photography □ Re-vegetation Application Rates and Seeding Technique − Pursuant to the BLM MOU and Approved Closure Plan □ Site Reclamation (Photo Documentation) − See attached: Site Photography □ On-site Closure Location: Latitude 36.203666 Longitude -107.334588 NAD: □ 1927 □ 1983
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): Ms Amy Mackey Title: Administrative Manager
Signature: Date: 8/4/2
e-mail address: amackeyl@elmridge.net Telephone: (505) 632-3476 Ext. 201

Elm Ridge Exploration

Lease Name: Jicarilla 429 GD #1

API Number: **30-043-21005** Closure Date: **April 9, 2012** 

#### **Detailed Closure Report**

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

#### Documentation includes:

- Details on capping and covering, where applicable (see report)
- Plot Plan (Pit Diagram) (Included as an attachment)
- Inspection Reports (Included as an attachment)
- Sampling Results (Included as an attachment)
- C-105 (Included as an attachment)
- Copy of Deed Notice will be filed with County Clerk (Not required on Federal, State, or Tribal land)

### **Drill Pit Closure Plan Checklist**

1) An operator shall close a pit 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. An operator shall close any other permitted temporary pit within six months from the date that the operator releases the drilling or work over rig. The appropriate division district office may grant an extension not to exceed three months.

The rig release date was January 1, 2012. Closure activities were completed on April 9, 2012.

2) The operator of a temporary pit shall remove all liquids from the temporary pit prior to closure and dispose of the liquids in a division approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division office approves. All free standing liquids will be removed before backfilling the pit and disposed of at an Elm Ridge Disposal Well or at Basin Disposal's evaporation pond.

All recovered liquids were removed and disposed of at Carson WDW 242 prior to closure sampling on April 9, 2012.

3) On-Site Burial. The operator shall demonstrate and comply with the siting requirements in Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC if the proposed closure method of a temporary pit involves on-site burial. The preferred method of closure will be on-site, in place burial, assuming all criteria outlined in 19.15.17.13 (B) are met.

The pit was closed using on-site burial. The drill pit met all requirements, and was buried in-place prior to April 9, 2012. One (1) five (5) point composite sample was collected from the drill pit using a hand auger to depths between five (5) and ten (10) feet below ground surface.

4) An alternative interim marking system will be used to allow for safer and more efficient operations. A minimum 4" O.D. steel pipe will be set at least 36" deep at the center of the

API Number: **30-043-21005**Closure Date: **April 9, 2012** 

pit. A threaded collar will be on the top of the pipe. A minimum 12" x 12" steel plate will be welded atop the threaded collar. The top of the plate will be flush with ground level. The standard location information listed will be welded onto the plate, plus a notation that it marks an on-site buried, temporary pit. Upon plugging the well, the plate will be removed, and the pit will be marked as described in 19.15.17.13.F(1)(d).

A division approved in-ground marker will be placed with a four (4) foot riser upon P&A of this well location. Information welded onto the marker will include: Elm Ridge Exploration, Lease #BIA Contract 429, Unit Letter N, Sec. 23, Twn. 23N, Rng 5W, on-site burial and the date.

The operator shall report the exact location of the on-site burial on form C-105 filed with the division.

Please find attached the C-105 form that is filed with the division.

6) The operator shall file a deed notice identifying the exact location of the on-site burial with the county clerk in the county where the on-site burial occurs.

Due to the land being located on Jicarilla Apache Land a deed notice was not applicable.

7) Elm Ridge Exploration will stabilize or solidify the contents to a bearing capacity sufficient to support the temporary pit's final cover. Elm Ridge Exploration will mix the contents with soil or other material at a mixing ratio of no greater than 3-1, soil or other material: to drill pit contents.

Contents of drill pit were mixed at a 3:1 ratio of soil to contents of drill pit prior to backfill.

8) A five (5)-point composite sample will be taken of the pit, and all samples will be tested per Subsection B of 19.15.17.13(B)(1)(b). If the criteria are not met, then all contents will be handled per subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13. (i.e. dig and haul). If a dig and haul is required, then the disposal facility will be Envirotech's Landfarm (NM01-0011).

Initial sampling on 4/9/12 returned results that were below the NMOCD regulatory standards for all constituents analyzed; see attached laboratory results.

Sample	Chloride	Benzene (8021)	BTEX (8021)	TPH (418.1)	DRO/GRO (8015)
NMOCD Regulatory Standards	1,000 mg/kg	0.2 mg/kg	50.0 mg/kg	2,500 mg/kg	500 mg/kg
Contents	20 mg/kg	0.0295 mg/kg	0.420 mg/kg	177 mg/kg	<0.1 mg/kg

9) After completing solidification and testing, the pit area will be backfilled with compacted, waste free, earthen material. At least four (4) feet of cover will be achieved. The cover will include one (1) foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

Site was backfilled using one (1) foot of topsoil and approximately four (4) feet of non-waste containing earthen material used for cover.

Elm Ridge Exploration

Lease Name: Jicarilla 429 GD #1 API Number: 30-043-21005

Closure Date: April 9, 2012

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

The site was re-contoured to match the fit, shape, line and form of the surrounding area. It was re-shaped to prevent ponding and erosion, and in such a way that natural drainage was unimpeded. Water bars or silt traps were not needed to prevent erosion. The final recontour has a uniform appearance and a smooth surface, and fits the natural landscape. See attached photos of site re-contouring.

11) Notice will be sent to the OCD when the reclaimed area is seeded.

Elm Ridge Exploration will comply with the BLM's re-seeding requirements in this area in accordance with the federal rules and regulations as allowed by the BLM/OCD Memorandum of Understanding. Reseeding will occur or has occurred on (Date: 6/13/12).

12) The operator shall notify the surface owner by certified mail, return receipt requested, that the operator plans to close a temporary pit, a permanent pit, a below grade tank or where the operator has approval for on-site closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.

Due to a misunderstanding and miscommunication of the notification of closure to surface owner, Elm Ridge Exploration will send notification that on-site closure activities have occurred. Elm Ridge Exploration will be sure to send notification prior to closure activities in the future. See attached Land Owner Notification.

13) After approval of this application, Elm Ridge Exploration will notify the OCD verbally, or by other means, at least 72 hours, but not more than one week, prior to any closure operations. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range, well name and number and API number.

Due to a misunderstanding and miscommunication of the notification of closure to the OCD, Elm Ridge Exploration will send notification that on-site closure activities have occurred. Elm Ridge Exploration will be sure to send notification prior to closure activities in the future. See attached OCD notification.

14) Elm Ridge Exploration will close the pit in accordance with OCD rules 19.15.17.12 &13. Post closure documents will be submitted within 60 days of pit closure and will include forms C-105 and C-144, cover details, pit diagram, inspection report and closure sampling results.

See attached C-105, C-144, pit diagrams, closure sampling results. Cover was installed in accordance with 19.15.17.12 &13.

Submit To Appropriate District Office Two Copies District 1 1625 N. French Dr., Hobbs, NM 88240				State of New Mexico Energy, Minerals and Natural Resources				Form C-105 Revised August 1, 2011 1. WELL API NO.								
District II   811 S. First St., Artesia, NM 88210					1220 South St. Francis Dr.					30-04321043  2. Type of Lease ☐ STATE ☐ FEE ☒ FED/INDIAN  3. State Oil & Gas Lease No. BIA CONTRACT 429						
WELL (	COMF	LETIC	N OR F	RECC	MPL	ETION RE	POR	T A	NE	LOG				THE REAL PROPERTY.		
4. Reason for fill			· · · · · ·									5. Lease Nam	e or U	nit Agree	ment Name	7 - HE STANKED OF A 184 LANDING
☐ COMPLET	ION RE	PORT (Fi	ll in boxes	#1 throu	eh #3 i	for State and Fee	e wells	only)				6. Well Numb		Jicarilla 4	129 GD	
C-144 CLOS #33; attach this a	SURE A	ТТАСНМ	IENT (Fil	l in boxe	s #1 thr	ough #9. #15 Da	ne Rig	Releas			/or					818 T
		⊠ work	OVER [	DEEPI	ENING	□PLUGBACE	к 🗆 г	OIFFE	REI	NT RESERV	OIF	OTHER_				
8. Name of Opera Elm Ridge Explo		-										9. OGRID		149052		
10. Address of O		····										11. Pool name	or Wi	ildcat		
Post Office Box	156, Bloc	omfield, N	ew Mexico	, 87413												
12.Location	Unit Ltr	Sec	tion	Towns	hip	Range	Lot			Feet from the	he	N/S Line	Feet	from the	E/W Line	County
Surface:																
BH:													<del></del>			
13. Date Spudded		Date T.D. I	Reached			Released 1/11/2				-		(Ready to Prod		R	7. Elevations (I T, GR, etc.)	
18. Total Measur	ed Depth	of Well		19. I	lug Bac	k Measured Dep	oth		20.	Was Directi	iona	d Survey Made?	,	21. Tyr	e Electric and	Other Logs Run
22. Producing Int	terval(s).	of this co	mpletion - 7	Top. Bot	tom, Na	ame		i_						1		
23.				CASING RECORD (Report all string					rinş							
CASING SI	ZE	WE	GHT LB./I	Т.		DEPTH SET			HO	OLE SIZE CEMENTIN		CEMENTIN	TING RECORD AMOUNT PULLI		T PULLED	
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						<del></del>	$\dashv$					1				
24.					LIN	ER RECORD					25.			NG REC		
SIZE	TOP		BO	ТОМ		SACKS CEM	ENT	SCRI	EEN	1	SIZ	Æ	DE	EPTH SE	r PAC	KER SET
							-						+			
26. Perforation	record (i	interval, si	ze, and nur	nber)		L		·27. /	ACI	ID, SHOT,	FR	ACTURE, CE	MEN	T, SOU	EEZE, ETC.	
							Į			INTERVAL					TERIAL USE	)
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20							PPA	)DI	C	ΓΙΟΝ		<u> </u>				
28. Date First Produc	ction		Product	on Met	od (Flo	owing, gas lift, pr					)	Well Status	(Proc	L or Shut	-in)	
								, 011,0					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	
Date of Test	Hour	s Tested	Cho	ke Size		Prod'n For Test Period		Oil -	Bbl		Gas	s - MCF	Wa	ater - Bbl	Gas	Oil Ratio
Flow Tubing Press.	Casir	ng Pressur		culated : ir Rate	24-	Oil - Bbl.	1	1	ias -	- MCF	]	Water - Bbl.		Oil Gra	vity - API - (C	orr.)
29. Disposition o	f Gas (So	ld, used fo	or fuel, vent	ed, etc.		L.,							30. T	est Witne	ssed By	
31. List Attachme					····					<del></del>						
			<u> </u>			., ,										
32. If a temporary				-		_	•		t							
33. If an on-site h	ourial was	s used at th	ne well, rep	ort the e	xact loc											
I hereby certij	fy that t	he infor	mation si	hown c	n both	Latitude 3 a sides of this	36.2036 form	is tru	eg N	and compl	ete	Longitude 1 to the best of	07.334 f my	4588 Deg knowled	WN Ige and beli	AD 1927 1983 ef
Signature						Printed Name Ms. A	my M	lacke	y	Title	Ad	ministrative	Man	ager	Date ·	
E-mail Addres	ss an	nackey l	@elmrid	ge.net												

## **INSTRUCTIONS**

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

### INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southe	astern New Mexico	Northy	Northwestern New Mexico				
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"				
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"				
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"				
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"				
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville				
T. Queen	T. Silurian	T. Menefee	T. Madison				
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert				
T. San Andres	T. Simpson	T. Mancos	T. McCracken				
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte				
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite				
T. Blinebry	T. Gr. Wash	T. Dakota					
T.Tubb	T. Delaware Sand	T. Morrison					
T. Drinkard	T. Bone Springs	T.Todilto					
T. Abo	T	T. Entrada					
T. Wolfcamp	T	T. Wingate					
T. Penn_	T	T. Chinle					
T. Cisco (Bough C)	T	T. Permian					

			OIL OR GAS SANDS OR ZONES
No. 1, from	to	No. 3, from	to
No. 2, from	to	No. 4, from	to
	IMPORTANT '	WATER SANDS	
Include data on rate o	f water inflow and elevation to which water	er rose in hole.	
No. 1, from	to	feet	••••••
No. 2, from	toto	feet	
No. 3, from	toto	feet	• • • • • • • • • • • • • • • • • • • •
·	LITHOLOGY RECORD	(Attach additional sheet if necess	ary)

From	То	Thickness Lithology		From	То	Thickness In Feet	Lithology
					:		
			!				
			j				

DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980

811 South First, Artesia, N.M. 88210

N 88°30'57" W

1000 Rio Brazos Rd., Astec, N.M. 87410

DISTRICT II

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised Febuary 21, 1994 Instructions on back

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, NM 87504-2088

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV

Change pool & dedication from 140 to 32012: AMENDED REPORT 2040 South Pacheco, Santa Fe, NH 87504-2088 WELL LOCATION AND ACREAGE DEDICATIONERLAT 30-043-71599 DAKOTA Name BASIN Well Number Property Code Property Name 3122 JICARILLA 429 GD 149052 Operator Name <sup>e</sup> Elevation 6774 **ELM RIDGE EXPLORATION** Surface Location North/South line UL or lot no. Range Section Township Lot Idn Feet from the East/West line County 23 N 5 W 835 WEST SANDOVAL N 23 SOUTH 11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line Range County Dedicated Acres 13 Joint or Infill 14 Consolidation Code 18 Order No. NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION S 88°03'01" E 5237.45 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is 57 rolete to the best of my knowledge and ballet ō 5284 Signature **BRIAN WOOD** Printed Name CONSULTANT Title MAR. 29, 2007 SECTION 23 18 SURVEYOR CERTIFICATION I haraby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 12/28/05 ш 1660 0-12-51

a 5235.90°

June 28, 2012



Mr. Jonathan Kelly New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

RE: Drill Pit Closure Notifications for the Multiple Well Sites, Sandoval and Rio Arriba County, New Mexico

Dear Mr. Kelly,

Drill pit closure activities were conducted at the following well sites in Sandoval County, New Mexico on April 9, 2012.

- 1) Chacon Amigos #9, API: 30-043-21005, Unit H, Section 2, Township 22N, Range 3W
- 2) Chacon Amigos #10, API: 30-043-21006, Unit D, Section 12, Township 22N, Range 3W
- 3) Jicarilla 429 GD #1, API: 30-043-21043, Unit N, Section 23, Township 23N, Range 5W
- 4) Bonanza #9, API: 30-043-21002, Unit J, Section 12, Township 22N, Range 3W

Drill pit closure activities were conducted at the following well site in Rio Arriba County, New Mexico on April 17, 2012.

1) Jicarilla 40 GD #3, API: 30-039-30248, Unit J, Section 35, Township 24N, Range 5W

Pre-construction notifications of the on-site closure activities of a temporary drill pit were made during the permit application process. Unfortunately, notification of drill pit closure activity dates were not submitted to the Jicarilla Apache Nation Oil and Gas Administration or the New Mexico Oil Conservation Division (NMOCD). Re-vegetation application rates and seeding techniques were conducted in pursuant to the BLM MOU and the NMOCD Approved Closure Plan. Drill pit closure activities were conducted in conformance to the requirements stated in NMAC 19.15.17.13 Closure Requirements for a Permitted Temporary Pit.

We truly apologize for our oversight to provide notification of drill pit closure activities, and will ensure that notifications will be sent prior to drill pit closure activities in the future. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,

ELM RIDGE RESOURCES

Apry Mackey

Elm Ridge Resources amymackey@elmridge.net

ConocoPhillips Hancock (hBr) Well Site 92115-1296

June 28, 2012

Ms. Annette Torivio

Jicarilla Apache Nation
Oil and Gas Administration
#6 Dulce Rock Road
Dulce, New Mexico 87528



Phone: (575) 759-3485

## RE: DRILL PIT CLOSURE NOTIFICATIONS FOR THE MULTIPLE WELL SITES, SANDOVAL AND RIO ARRIBA COUNTY, NEW MEXICO

Dear Ms. Torivio,

Drill pit closure activities were conducted at the following well sites in Sandoval County, New Mexico on April 9, 2012.

- 1) Chacon Amigos #9, API: 30-043-21005, Unit H, Section 2, Township 22N, Range 3W
- 2) Chacon Amigos #10, API: 30-043-21006, Unit D, Section 12, Township 22N, Range 3W
- 3) Jicarilla 429 GD #1, API: 30-043-21043, Unit N, Section 23, Township 23N, Range 5W
- 4) Bonanza #9, API: 30-043-21002, Unit J, Section 12, Township 22N, Range 3W

Drill pit closure activities were conducted at the following well site in Rio Arriba County, New Mexico on April 17, 2012.

1) Jicarilla 40 GD #3, API: 30-039-30248, Unit J, Section 35, Township 24N, Range 5W

Pre-construction notifications of the on-site closure activities of a temporary drill pit were made during the permit application process. Unfortunately, notification of drill pit closure activity dates were not submitted to the Jicarilla Apache Nation Oil and Gas Administration or the New Mexico Oil Conservation Division (NMOCD). Re-vegetation application rates and seeding techniques were conducted in pursuant to the BLM MOU and the NMOCD Approved Closure Plan. Drill pit closure activities were conducted in conformance to the requirements stated in NMAC 19.15.17.13 Closure Requirements for a Permitted Temporary Pit.

We truly apologize for our oversight to provide notification of drill pit closure activities, and will ensure that notifications will be sent prior to drill pit closure activities in the future. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,

ELM RIDGE RESOURCES

Amy/Mackey

Elm Ridge Resources

amymackey@elmridge.net

English

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Send Mail

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PRINT DETAILS

YOUR LABEL NUMBER

SERVICE

STATUS OF YOUR ITEM

DATE & TIME

IE LOCATION

DULCE, NM 87528

FEATURES

700714900000\$3987592

Delivered

July 05, 2012, 9:19 am

Certified Mail

Notice Left

July 02, 2012, 11.32 am

DULCE, NM 87528

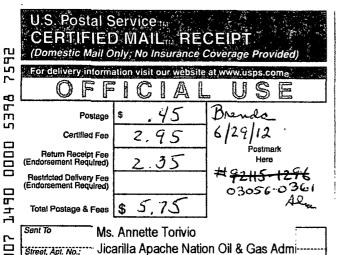
Depart USPS Sort Facility June 30, 2012

ALBUQUERQUE, NM 87101

Processed through USPS Sort Facility

June 29, 2012, 11:36 pm

ALBUQUERQUE, NM 87101



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Chacon Amigos #10 Drill pit closure

ŞE	NDE	R: cc	MPLE	TE THI	S SECT	rion .
					3. Also	

- item 4 if Restricted Delivery is desired.

  Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.
- 1. Article Addressed to:

No.

#6 Dulce Rock Road

Dulce, NM 87528

Ms. Annette Torivio
Jicarilla Apache Nation Oil & Gas Admin
#6 Dulce Rock Road

Dulce, NM 87528

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Signature

☐ Agent

Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1?
If YES, enter delivery address below:

1? ∐ Yes ☐ No

3. Service Type

Certified Mail
Registered

☐ Express Mail

Return Receipt for Merchandise

☐ Insured Mail ☐ CO.D.

4. Restricted Delivery (Extra Fee)

☐ Yes

2. Article Number (Transfer from service label)

7007 1490 0000 5398 7592

# ELM RIDGE EXPLORATION JICARILLA 429 GD #1 SITE RESTORATION PHOTOGRAPHY JOB NUMBER: 03056-0360

PHOTOS TAKEN: APRIL 9, 2012

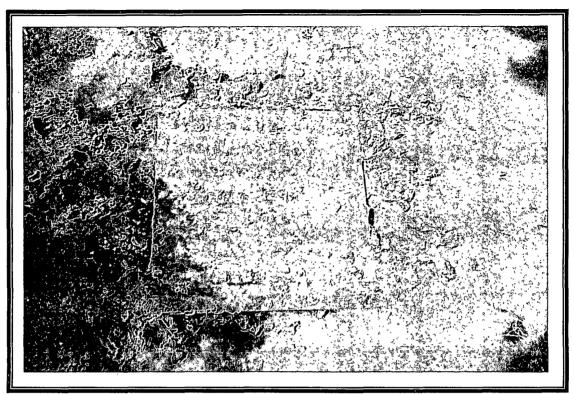


Photo 1: Pit Marker for Jicarilla 429 GD #1 Well Site

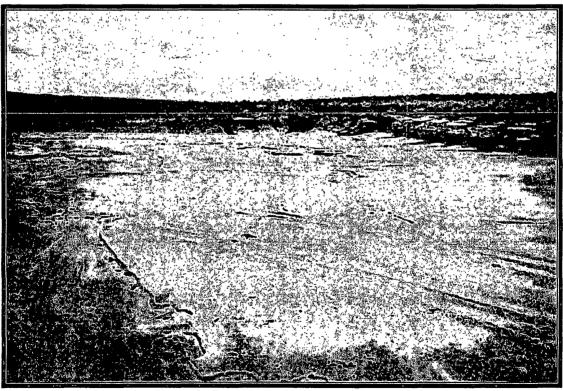


Photo 2: Overview of Recontoured Area

# ELM RIDGE EXPLORATION JICARILLA 429 GD #1 SITE RESTORATION PHOTOGRAPHY JOB NUMBER: 03056-0360

PHOTOS TAKEN: APRIL 9, 2012

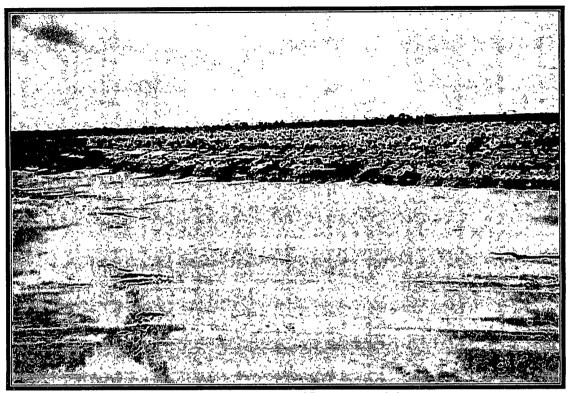


Photo 3: Another View of Recontoured Area



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

Client:	Elm Ridge Exploration	Project #:	03056-0360
Sample ID:	5pt. Composite	Date Reported:	04-11-12
Laboratory Number:	61632	Date Sampled:	04-09-12
Chain of Custody No:	13708	Date Received:	04-09-12
Sample Matrix:	Soil	Date Extracted:	04-10-12
Preservative:	Cool	Date Analyzed:	04-11-12
Condition:	Intact	Analysis Requested:	8015 TPH

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

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

Drill Pit Sampling/ Jicarilla 429 6D #1

Analyst

Ph (505) 632-0615 Fx (505) 632-1865

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

5796 US Highway 64, Farmington, NM 87401

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301



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

### **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	0411TCAL QA/QC	Date Reported:	04-11-12
Laboratory Number:	61632	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-11-12
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept: Range
Gasoline Range C5 - C10	04-11-12	9.9960E+02	1.0000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	04-11-12	9.9960E+02	1.0000E+03	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	272	109%	75 - 125%
Diesel Range C10 - C28	ND	250	252	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Was

SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 61632-61635

Analyst

Ph (505) 632-0615 Fx (505) 632-1865



## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Elm Ridge Exploration	Project #:	03056-0360
Sample ID:	5pt. Composite	Date Reported:	04-13-12
Laboratory Number:	61632	Date Sampled:	04-09-12
Chain of Custody:	13708	Date Received:	04-09-12
Sample Matrix:	Soil	Date Analyzed:	04-12-12
Preservative:	Cool	Date Extracted:	04-10-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

	Dilation.	30
Parameter	Concentration	Det. Limit
Parameter	(ug/Kg)	(ug/Kg)
Benzene	29.5	10.0
Toluene	100	10.0
Ethylbenzene	65.8	10.0
p,m-Xylene	142	10.0
o-Xylene	81.8	10.0
Total BTFX	420	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	82.6 %
	1,4-difluorobenzene	93.5 %
	Bromochlorobenzene	86.1 %

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: Drill Pit Sampling/ Jicarilla 429 6D #1

Analyst

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301



## **EPA METHOD 8021 AROMATIC VOLATILE ORGANICS**

Client:	N/A	Р	roject #:	N	/A
Sample ID:	0412BCAL QA/QC		ate Reported:		1-13-12
Laboratory Number:	61632		ate Sampled:	N.	/A
Sample Matrix:	Soil		ate Received:	N	/A
Preservative:	N/A		ate Analyzed:	_	1-12-12
Condition:	N/A		nalysis:		TEX
	হৈছে বিভাগে । কান্যা কাল্যাধনালোকের লগা কলেনে । ১৮৮৫ চন । সংস্কৃতি হৈছে । কান্যাধনালোকের লগা কলেনে । ১৮৮৫ চন ।	dangton alto an Ensurement of the malford	ilution:	50 - בייני איני איני איני איני איני איני אינ	ويوارها والمتحد مواريون والمحدور الديدان
Calibration and	l-Cal RF:	C-Cal RF:	%Diff	Blank	Detect
Detection Limits (ug/L	Land to the Land of the A	Ccept. Range 0-15%		Conc	Limit
Benzene	4.5808E-06	4.5855E-06	0.001	ND	0.2
Toluene	4.2066E-06	4.2131E-06	0.002	ND	0.2
Ethylbenzene	4.6321E-06	4.6321E-06	0.000	ND	0.2
p,m-Xylene	3.4478E-06	3.4450E-06	0.001	ND	0.2
o-Xylene	4.9214E-06	4.9214E-06	0.000	ND	0.2
Duplicate Conc. (ug/Kg)  Benzene Toluene	<sup>2</sup> 9.5	30.5	0.03	0 - 30%	Detect. Limit
Ethylbenzene p,m-Xylene o-Xylene	65.8 142 81.8	122 73.5 131 78.6	0.21 0.12 0.08 0.04	0 - 30% 0 - 30% 0 - 30% 0 - 30%	10 10 10 10
p,m-Xylene	65.8 142	73.5 131 78.6	0.12 0.08 0.04	0 - 30% 0 - 30% 0 - 30%	10 10
p,m-Xylene o-Xylene	65.8 142 81.8 Sample	73.5 131 78.6	0.12 0.08 0.04	0 - 30% 0 - 30% 0 - 30%	10 10 10
p,m-Xylene o-Xylene Spike Conc. (ug/Kg)	65.8 142 81.8	73.5 131 78.6 Amount Spiked S	0.12 0.08 0.04 Spiked Sample	0 - 30% 0 - 30% 0 - 30%	10 10 10 Accept Range
p,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene	65.8 142 81.8 Sample	73.5 131 78.6 Amount Spiked S	0.12 0.08 0.04 Spiked Sample	0 - 30% 0 - 30% 0 - 30% % Recovery	10 10 10 Accept Range 39 - 150
p,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene Toluene Ethylbenzene	65.8 142 81.8 Sample 29.5 100 65.8	73.5 131 78.6 Amount Spiked S 2500 2500 2500	0.12 0.08 0.04 Spiked Sample 2310 2280 2170	0 - 30% 0 - 30% 0 - 30% % Recovery 91.3 87.7 84.6	10 10 10 Accept Range 39 - 150 46 - 148 32 - 160
p,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene Toluene	65.8 142 81.8 Sample 29.5 100	73.5 131 78.6 Amount Spiked \$ 2500 2500	0.12 0.08 0.04 Spiked Sample 2310 2280	0 - 30% 0 - 30% 0 - 30% % Recovery 91.3 87.7	10 10 10 Accept Range 39 - 150 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 61632-61635 and 61637-61641,

Analyst

Ph (505) 632-0615 Fx (505) 632-1865

5796 US Highway 64, Farmington, NM 87401

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301



# EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0360
Sample ID:	5 pt Composite	Date Reported:	04/16/12
Laboratory Number:	61632	Date Sampled:	04/09/12
Chain of Custody No:	13708	Date Received:	04/09/12
Sample Matrix:	Soil	Date Extracted:	04/10/12
Preservative:	Cool	Date Analyzed:	04/10/12
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

**Total Petroleum Hydrocarbons** 

177

7.4

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments: Drill Pit Sampling / Jicarilla 429 6D #1

Analyst

Ph (505) 632-0615 Fx (505) 632-1865

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



Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301





### **EPA METHOD 418.1** TOTAL PETROLEUM HYDROCARBONS **QUALITY ASSURANCE REPORT**

Client: Sample ID: **QA/QC QA/QC**  Project #:

N/A

Date Reported:

04-11-12

Laboratory Number:

04-10-TPH.QA/QC 61632

Date Sampled:

N/A

Sample Matrix: Preservative:

Freon-113 N/A

Date Analyzed: Date Extracted: 04-10-12 04-10-12

Condition:

N/A

Analysis Needed:

TPH

03-20-12

04-10-12

1,850

1,720

7.0%

+/- 10%

Blank Conc. (mg/Kg)

**Detection Limit** 

**TPH** 

ND

7.4

Duplicate Conc. (mg/Kg)

Sample . . .

Duplicate % Difference Accept. Range

**TPH** 

177

148

16.7%

+/- 30%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result % Recovery Accept Range **TPH** 

2,000

2,290

105%

80 - 120%

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

QA/QC for Samples 61632-61635, 61637-61641, 61643-61644.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865





### Chloride

Elm Ridge Exploration Project #: 03056-0360 Client: Sample ID: 5pt. Composite Date Reported: 04-13-12 61632 Lab ID#: Date Sampled: 04-09-12 Sample Matrix: Soil Date Received: 04-09-12 Preservative: Cool Date Analyzed: 04-11-12 Condition: Intact Chain of Custody: 13708

Concentration (mg/Kg) **Parameter** 

**Total Chloride** 

20

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.

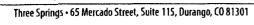
Comments:

Drill Pit Sampling / Jicarilla 429 6D #1

Analyst

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865







13708

## CHAIN OF CUSTODY RECORD

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June 25<sup>th</sup>, 2012

Mr. Jonathan Kelly New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410

**RE: Drill Pit Inspections** 

Dear Mr. Kelly,

The Drill Pit Permit required daily inspections of the pit liner for all open pits. Visual inspections were done during drilling operations, but there was no documentation done. As you are aware there has been little to no drilling activity in the San Juan Basin for the past couple years. Due to the low activity, the employees that were hired by the drilling company are inexperienced and they failed to document the drill pit inspections.

Now that we are aware that the rig crew failed to follow the proper procedures; we have taken measures to ensure that all required paper work is thoroughly read and the rules are followed.

AmylMackey

Lem Ridge Exploration CO LLC
Amackey1@elmridge.net

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September 6, 2012

RCVD SEP 17'12 OIL CONS. DIV.

DIST. 3

Mr. Jonathan Kelly New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

RE: C-144 Permit # 10324 For Pit Closure on the Jicarilla 429 GD #1 API 30-043-21043.

Dear Mr. Kelly,

Unfortunately, an oversight occurred within our company. The above referenced well was approved for a closed loop system. The Construction Foreman was digging drill pits for several locations at the same time. There was some confusion on the permit process for the field and a pit was constructed on this location instead of using a closed loop system.

Elm Ridge plans to have the Construction Foreman double check the crews building locations and match locations to the permits in the future. The administrative staff with also double check that locations are built according to the permits through the Construction Foreman and the Drilling rig Consultants to insure this does not happen again.

Respectfully sybmitted,

ELM RIDGE EXPLORATION CO LLC

Amy Mackey

Elm Ridge Exploration Co LLC amymackey@elmridge.net