22.
Operator Closure Certification:

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

Name (Print): Kristin Pope Title: Agent for Murchison Oil and Gas, Inc.

Signature: Kristin Pope Date: March 6, 2014

e-mail address: kristin@rthicksconsult.com Telephone: (575) 302-6755

approved

Jeffrey Lekins

Environmental Specialist

NMOCD-DIST I

7/02/14

JUL 0 2 2014

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 6, 2014

HOBBS OCD

MAR 1 0 2014

RECEIVED

Mr. Geoffrey Leking
NMOCD District 1
1625 French Drive
Hobbs, NM 88240
Via E-Mail and US Mail

RE: Temporary Pit Closure Report
Jackson Unit 24H, API #30-025-41093
Unit A, Section 22, T24S, R33E, Lea County

Dear Mr. Leking:

On behalf of Murchison Oil and Gas, R.T. Hicks Consultants submits this closure report for the above-referenced temporary pit in accordance with the approved C-144 closure plan. This report includes the following information listed in Part 21 of the C-144 form:

Requirements	Location in this Submission
Proof of Closure Notice (to surface owner and Division)	Attachment 1
Proof of Deed Notice (on-site closure on private land only)	Not applicable; State Land (no deed)
Plot Plan, C-105 form (for on-site closures and temporary pits)	Attachment 2
Confirmation Sampling Analytical Results	Not applicable
Waste Material Sampling Analytical Results (required for on-site closure)	Attachment 3
Disposal Facility Name and Permit Number	Not applicable; on-site closure
Soil Backfilling and Cover Installation	Attachment 4
Re-vegetation Application Rates and Seeding Technique	Attachment 5
Site Reclamation (photo documentation)	To follow
Updated C-144 form	Attachment 6

R.T. Hicks Consultants will notify NMOCD and provide photo-documentation when re-vegetation obligations described in subsection H of 19.15.17.13 NMAC are met.

Sincerely,
R.T. Hicks Consultants

Kristin Pope

Kristin Pope
Project Geologist

Copy: Murchison Oil and Gas
NM State Land Office, Terry Warnell

ATTACHMENT 1

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

December 4, 2013

Mr. Geoffrey Leking
NMOCD District 1
1625 French Drive
Hobbs, New Mexico 88240
Via Email

RE: Murchison Jackson Unit 24H, In-place Burial Notice
Unit A, Section 22, T24S, R33E, API # 30-025-41093

Dear Mr. Leking:

On behalf of Murchison Oil and Gas, R. T. Hicks Consultants is providing this notice to NMOCD with a copy to the State Land Office (certified, return receipt request). The above- referenced pit will begin closure operations on **Monday, December 9, 2013**. The closure process should require about two weeks.

The "In-place Burial" closure plan for the above-referenced pit was approved on May 16, 2013 by the NMOCD, prior to the establishment of the June 2013 Pit Rule. Construction and operation of the temporary pit has been conducted to satisfy the rule under which it was approved as well as the June 2013 Rule. In conformance with the 2013 Pit Rule, a five-point composite sample that is fully representative of the solids in the pit was recovered on August 22, 2013 and stabilized with the available mixing soil at a 3:1 ratio[1]. On November 22, 2013, we submitted a modified C-144 form and closure plan to NMOCD in anticipation of closure under the 2013 Pit Rule; NMOCD approved the closure plan today.

As shown in the summary table below, laboratory analyses of the stabilized cuttings composite demonstrate that the concentrations of the parameters listed in Table II of 19.15.17.13 NMAC (June 2013 Pit Rule) are below the limits that allow in-place burial of the stabilized cuttings.

3:1 Stabilized Cuttings Composite Sample		
Constituent	Table II Limit (GW>100')	8/22/13 Sample
Chloride	80,000 mg/kg	6240
TPH	2,500 mg/kg	1510
GRO+DRO	1,000 mg/kg	88
BTEX	50 mg/kg	6.82
Benzene	10 mg/kg	0.535

[1] (5) The operator shall collect, at a minimum, a five point composite of the contents of the temporary pit or drying pad/tank associated with a closed-loop system to demonstrate that, after the waste is solidified or stabilized with soil or other non-waste material at a ratio of no more than 3:1 soil or other non-waste material to waste, the concentration of any contaminant in the stabilized waste is not higher than the parameters in Table II of 19.15.17.13 NMAC.

R.T. Hicks Consultants is concerned that TPH by 418.1 method may not be an accurate representation of petroleum hydrocarbons in the pit solids because several drilling mud additives and/or lost circulation materials, such as cotton seed hulls and cedar fiber, become part of the result when using EPA method 418.1. We do not believe that the Rule intends to measure the concentration of non-petroleum organic material. Therefore, we asked the laboratory to analyze the samples by EPA method 8015B extended to included carbon numbers up to C35 (GRO+DRO+DROext). This analysis should include a complete range of purgeable and extractable hydrocarbons without also including the non-petroleum hydrocarbons that are measured by method 418.1. The significant difference between "total petroleum hydrocarbons" analyzed by 8015B (GRO+DRO+DROext = 88 mg/kg, as DROext=nd) and 418.1 (1510 mg/kg) is not surprising, based upon some limited research we have done and the nature of non-petroleum organic material in drilling fluids, such as biopolymer drilling fluid additives and cellulose.

I will follow up this notice to you with a phone call as required by the Pit Rule. As always, we appreciate your work to keep us on schedule.

Sincerely,

R.T. Hicks Consultants

Kristin Pope

Kristin Pope

Copy: Murchison Oil and Gas

Terry Warnell, State Land Office
New Mexico State Land Office
PO Box 1148
Santa Fe, NM 87504-1148
CERTIFIED MAIL – RETURN RECIEPT REQUEST

Murchison Jackson Unit 24H Closure Notice

SENDER: COMPLETE THIS SECTION

- ☒ Complete items 1, 2, and 3. Also complete 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:

State Land Office
Attn: Terry Warnell
P.O. Box 1148
Santa Fe, NM 87504

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) SANTA FE NM 875

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

DEC 12 2013

3. Service Type
☒ Certified Mail ☒ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7013 1090 0001 3977 5810

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

From: Kristin Pope
To: "Leking, Geoffrey R, EMNRD"
Subject: RE: Closure Plan/C-144 Modification: Jackson Unit 24H
Date: Wednesday, December 04, 2013 4:02:00 PM
Attachments: image001.png

Thanks. Closure Notice coming your way. I'll call you too as required.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755

From: Leking, Geoffrey R, EMNRD [mailto:GeoffreyR.Leking@state.nm.us]
Sent: Wednesday, December 04, 2013 2:46 PM
To: Kristin Pope
Subject: RE: Closure Plan/C-144 Modification: Jackson Unit 24H

Kristin

The above referenced document has been approved by the NMOCD-District 1.

Geoffrey Leking
Environmental Specialist
NMOCD-Hobbs
1625 N. French Drive
Hobbs, NM 88240
Office: (575) 393-6161 Ext. 113
Cell: (575) 399-2990
email: geoffreyr.leking@state.nm.us

From: Kristin Pope [mailto:kristin@rthicksconsult.com]
Sent: Monday, December 02, 2013 8:38 AM
To: Leking, Geoffrey R, EMNRD
Subject: RE: Closure Plan/C-144 Modification: Jackson Unit 24H

Geoff,

I hate to keep bothering you about this one but our closure deadline is Jan. 7 and adding the one-call timeline, and anticipating inclement weather and holiday breaks, we'd like to start it as soon as possible. This Closure Plan is the same as the others we've submitted under the new pit rule, but we've added the following lines as a result of your comments:

Let me know if I can help your review in any way. Thanks.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755

From: Kristin Pope [mailto:kristin@rthicksconsult.com]
Sent: Friday, November 22, 2013 2:57 PM
To: GeoffreyR.Leking@state.nm.us
Cc: Randy Hicks; ccottrell@jdmii.com; twarnell@slo.state.nm.us; Greg Boans; Chace Walls (cwalls@jdmii.com)
Subject: Closure Plan/C-144 Modification: Jackson Unit 24H

Mr. Leking:

On behalf of Murchison, the attached C-144 Permit Modification and Closure Plan for the Jackson Unit 24H pit is submitted for your approval. You approved this initial C-144 permit on 5/16/2013 under the old Pit Rule. This submission is to fulfill the requirements for closing the pit under the 2013 Rule.

We would like to being closure activities on Monday, December 2. Upon your approval, a formal notice of closure will follow. OCD and SLO will both receive hard copies in the mail.

Thank you for your attention to all of our projects.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755

ATTACHMENT 2

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD
MAR 10 2014
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-105
Revised August 1, 2011

1. WELL API NO.
30-025-41093

2. Type of Lease
☒ STATE ☐ FEE ☐ FED/INDIAN

3. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:

☐ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)

☒ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

5. Lease Name or Unit Agreement Name
Jackson Unit

6. Well Number:
24H

7. Type of Completion:
☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8. Name of Operator
MURCHISON OIL & GAS, INC.

9. OGRID
15363

10. Address of Operator

11. Pool name or Wildcat

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										

13. Date Spudded	14. Date T.D. Reached	15. Date Rig Released	16. Date Completed (Ready to Produce)	17. Elevations (DF and RKB, RT, GR, etc.)
		7/7/2013		

18. Total Measured Depth of Well	19. Plug Back Measured Depth	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run

22. Producing Interval(s), of this completion - Top, Bottom, Name

23. **CASING RECORD** (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

30. Test Witnessed By

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.
PLATE 1 ATTACHED

33. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude N 32.196746° Longitude W 103.559659° NAD 1927 **1983**

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Kristin Pope Printed Name KRISTIN POPE Title PROJECT GEOLOGIST, AGENT FOR MURCHISON Date 3/6/2014

E-mail Address kristin@rthicksconsult.com

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

Southeastern New Mexico		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 of water inflow and elevation to which water rose in hole.

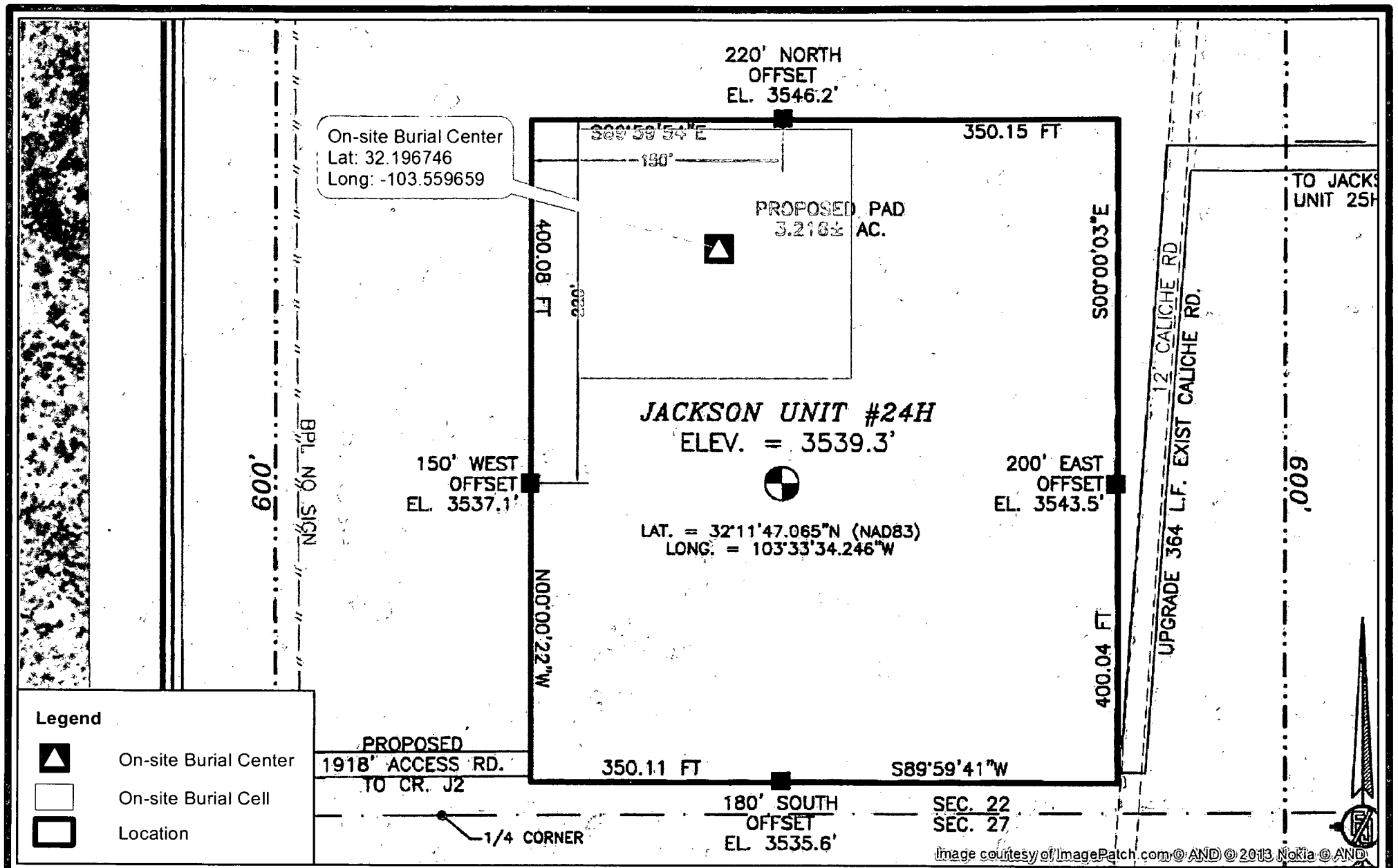
No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology		From	To	Thickness In Feet	Lithology



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	On-site Burial Location of Temporary Pit in relation to well pad	Plate 1 C-105 form
	Murchison Oil & Gas, Inc. Jackson Unit #24H	March 2014

ATTACHMENT 3

Waste Material Sampling Analytical Results

On August 22, 2013, five-point composite samples were collected from the temporary pit location and stabilized in a 3:1 ratio using material from the berms of the pit (below the liner) and from material stockpiled on site. The stabilized composite sample was submitted to Cardinal Laboratories in Hobbs, New Mexico for BTEX (8260B), GRO/GRO (8015M), TPH (418.1), and Chloride (SM4500) analyses.

The table below depicts the samples collected from the cuttings in this pit and their concentrations of the parameters listed in Table II of 19.15.17.13 NMAC (June 2013 Pit Rule). These analyses demonstrate that this site meets the criteria for in-place closure.

3:1 Stabilized Cuttings Composite Sample		
Constituent	Table II Limit (GW>100')	8/22/13 Sample
Chloride	80,000 mg/kg	6240
TPH	2,500 mg/kg	1510
GRO+DRO	1,000 mg/kg	88
BTEX	50 mg/kg	6.82
Benzene	10 mg/kg	0.535

The TPH concentration of 1,510 mg/kg by method 418.1 is surprising, especially when one totals the TPH concentration using GC FID methods (EPA 8015B) resulting in 88 mg/kg (results are shown at right).

Petroleum Hydrocarbons by GC FID

GRO C6 - C10	21.7
DRO >C10 - C28	66.3
EXT DRO >C28-C35	non-detect

88 mg/kg

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 29, 2013

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: JACKSON 24 H PIT

Enclosed are the results of analyses for samples received by the laboratory on 08/23/13 9:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
KRISTIN POPE
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	08/23/2013	Sampling Date:	08/21/2013
Reported:	08/29/2013	Sampling Type:	Soil
Project Name:	JACKSON 24 H PIT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Daniel Wade
Project Location:	LEA COUNTY, NM		

Sample ID: STABILIZED CUTTINGS (H302029-01)

BTEX 8021B mg/kg Analyzed By: DW S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.535**	0.050	08/28/2013	ND	2.13	107	2.00	2.16	
Toluene*	**2.17**	0.050	08/28/2013	ND	2.11	105	2.00	1.28	
Ethylbenzene*	**0.812**	0.050	08/28/2013	ND	2.13	107	2.00	0.398	
Total Xylenes*	**3.30**	0.150	08/28/2013	ND	6.37	106	6.00	0.201	
Total BTEX	**6.82**	0.300	08/28/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL *139 %* *89.4-126*

Chloride, SM4500Cl-B mg/kg Analyzed By: DW

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6240**	16.0	08/28/2013	ND	400	100	400	3.92	

TPH 418.1 mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	**1510**	100	08/27/2013	ND	5390	108	5000	2.46	

TPH 8015M mg/kg Analyzed By: CK/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**21.7**	10.0	08/28/2013	ND	182	90.8	200	1.55	
DRO >C10-C28	**66.3**	10.0	08/28/2013	ND	168	83.8	200	0.0292	
EXT DRO >C28-C35	<10.0	10.0	08/28/2013	ND					

Surrogate: 1-Chlorooctane *90.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *97.1 %* *63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: R.T. Hicks Consultants	BILL TO		
Project Manager: Kristin Pope	P.O. #:		
Address:	Company: RT Hicks		
City: State: Zip:	Attn: Randy Hicks		
Phone #: Fax #:	Address:		
Project #: Project Owner: Murchison	City:		
Project Name: Jackson 24H pit	State: Zip:		
Project Location: Lea County	Phone #:		
Sampler Name: Kristin Pope	Fax #:		

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chloride 300.0	TPH 418.1	GRO + DRO 8015M	BTEX 8021B or 8260B	Benzene 8021B or 8015M	MRO							
H302029-1	Stabilized Cuttings	C	1						X		X		8/2/13	0945	—	—	—	—	—	—							

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Kristin Pope	Date: 8.2.2013 Time: 0900	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 4° C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS: email to kristin@rtrickSconsult.com

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

ATTACHMENT 4

SOIL BACKFILLING & COVER INSTALLATION

In accordance with the requirements listed in paragraph D of 19.15.17.13 NMAC, the operator employed the following steps for in-place burial of the waste material from the temporary pit:

1. The on-site burial location and its depth is in compliance with the siting criteria presented in the C-144 application and the Pit Rule under which it was submitted to the NMOCD on April 17, 2013 and approved on May 16, 2013. After the rig was released on July 7, 2013, fluid contents in the pit were removed to be recycled for the drilling of other wells while the cuttings were allowed to dry.

2. On August 22, 2013, prior to the initiation of closure activities, composite samples from the inner and outer cells and clean soil from the berms of the pit below the liner were recovered from the pit. These were mixed in a ratio of 3 parts clean soil to 1 part cuttings and were analyzed for Chloride, TPH, GRO, DRO, MRO, Benzene, and BTEX at Cardinal Laboratories in Hobbs, New Mexico. The results, as noted in the subsequent closure notice, demonstrate that the stabilized pit contents would not exceed the parameter limits listed in Table II of the new Pit Rule (June 2013).

3. On November 22, 2013, R.T. Hicks Consultants submitted a modified C-144 form and closure plan to NMOCD for approval to close the pit under the June 2013 Pit Rule. NMOCD granted approval on December 4, 2013, a closure notice was submitted to the NMOCD, District 1 office in Hobbs and to the State Land Office on the same day. Verbal notice in the form of a phone call to NMOCD followed on December 5, 2013.

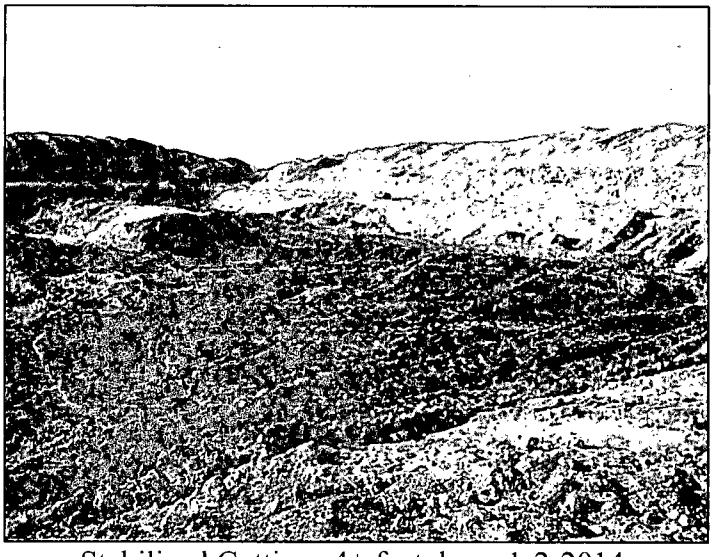
4. On December 9, 2013, closure activities commenced and stabilization of the pit contents was achieved by mixing the pit contents with the dry soil beneath the liner of the pit. Stabilization continued until January 2, 2014 when a paint filter test was performed by R.T. Hicks Consultants that confirmed that the process was complete and that the resultant floor of the excavation was at least 4 feet deep.

5. Following the January 2, 2014 inspection, having achieved all applicable stabilization requirements associated with in-place burial, a geomembrane liner was installed to completely cover the stabilized cuttings on January 8, 2014. Geoffrey Leking of NMOCD District 1 witnessed the installation and inspected the welded seams. The pit contents and liner were shaped to shed infiltrating water, slightly higher in the center.

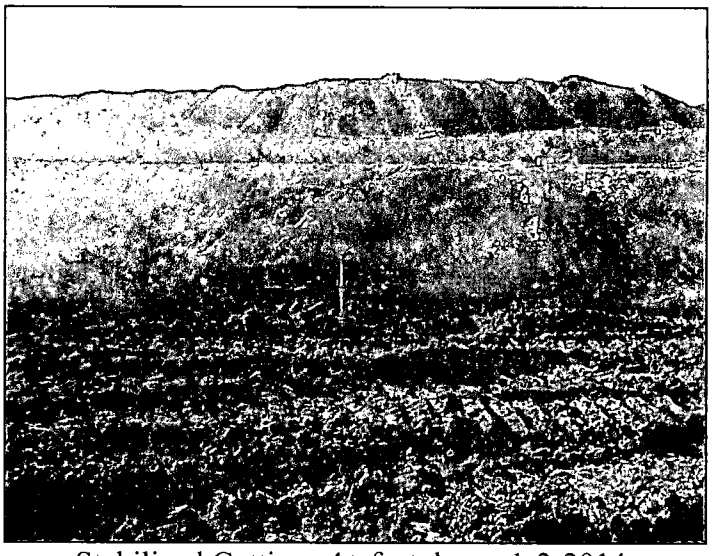
6. Once the geomembrane cover was in place, 4 feet or more of non-waste containing,

uncontaminated, earthen material and the reserved topsoil were replaced to their relative positions in accordance with Subsection (3) of Paragraph H of 19.15.17.13 NMAC. The soil cover consists of at least four feet of compacted, non-waste containing, earthen material. The uppermost topsoil is equal to the background thickness at least one foot.

7. The surface was contoured to blend with the surrounding topography and to prevent erosion and the ponding of water over the on-site closure. This work was completed on January 10, 2014.

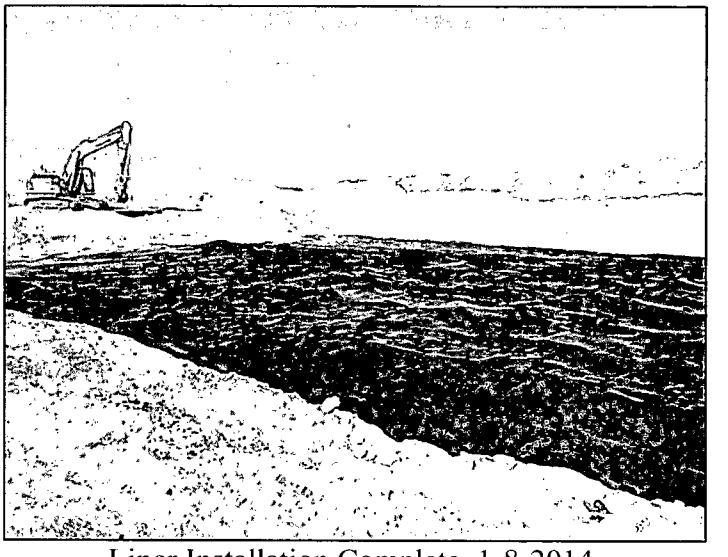


Stabilized Cuttings 4+ feet deep 1-2-2014



Stabilized Cuttings 4+ feet deep 1-2-2014

Paint Filter Test on Stabilized Cuttings 1-2-2014



Liner Installation Complete 1-8-2014

ATTACHMENT 5

RE-VEGETATION PROCEDURES

There were no roads or surface drainage features nearby that required restoration or preservation.

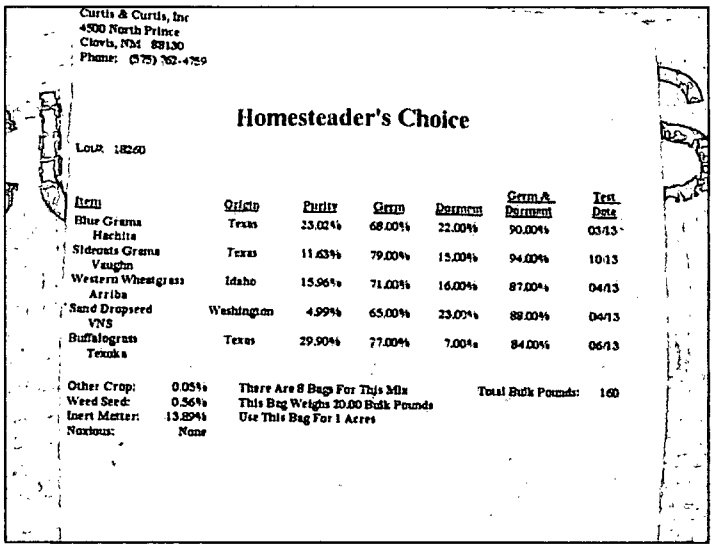
1. On March 3, 2014, Morgan Tools of Artesia seeded the topsoil on the on-site burial and interim reclamation areas using a seed drill pulled by a tractor that prepared the seedbed in the same pass using discs. The seed furrows were oriented perpendicular to the prevailing western wind to minimize erosion.

2. Approximately 35 pounds of a seed mixture consisting of 50% BLM #2 seed blend and 50% Homesteader's Choice blend was applied in accordance with the supplier's instructions to approximately 1 acre of the former temporary pit area. Species constituents of each blend are listed below and are appropriate for the soil type and conditions at this site. Note that Plains Bristlegrass, a majority component of the BLM #2 assortment, was unavailable so appropriate substitute species approved by the BLM were used.

BLM #2	***Homesteader's Choice***
Sideoats Grama	Blue Grama
Little Bluestem	Buffalograss
Sand Dropseed	Sideoats Grama
Indian Ricegrass	Western Wheatgrass
Plains Coreopsis	Sand Dropseed

3. The seeded area will be monitored for growth and the operator will repeat seeding until a successful vegetative cover is achieved as outlined in Subsection (5) of Paragraph H of 19.15.17.13 NMAC.

4. If conditions are not favorable for the establishment of vegetation, such as periods of drought, the operator may request that the division allow a delay in additional seeding until soil moisture conditions become favorable. The operator will notify the division and provide photo-documentation when it successful re-vegetation is achieved.



Curtis & Curtis, Inc
4500 North Prince
Clovis, NM 88130
Phone: (575) 762-4759

Homesteader's Choice

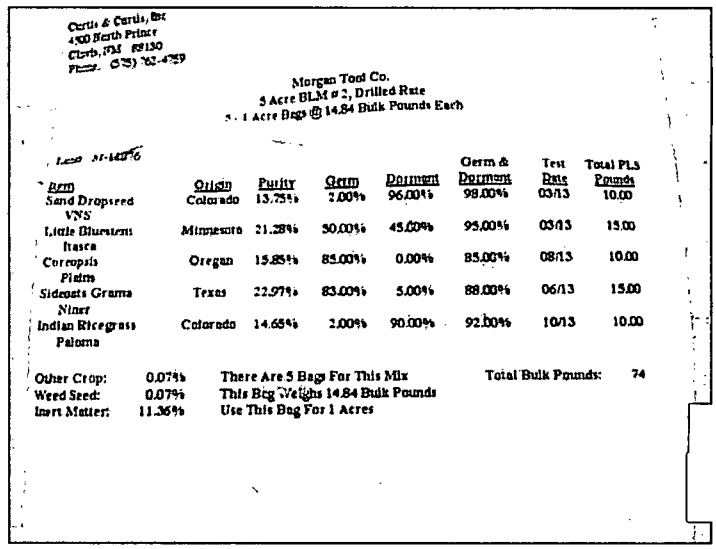
LOT#: 18260

Item	Origin	Purity	Germ	Dormant	Germ & Dormant	Test Date
Blue Grama Hachita	Texas	23.02%	68.00%	22.00%	90.00%	03/13
Sideoats Grama Vaughn	Texas	11.63%	79.00%	15.00%	94.00%	10/13
Western Wheatgrass Arriba	Idaho	15.96%	71.00%	16.00%	87.00%	04/13
Sand Dropseed VNS	Washington	4.99%	65.00%	23.00%	88.00%	04/13
Buffalograss Texoka	Texas	29.90%	77.00%	7.00%	84.00%	06/13

Other Crop: 0.05%
Weed Seed: 0.56%
Inert Matter: 13.89%
Noxious: None

There Are 8 Bags For This Mix
This Bag Weighs 20.00 Bulk Pounds
Use This Bag For 1 Acres

Total Bulk Pounds: 160



Curtis & Curtis, Inc
4500 North Prince
Clovis, NM 88130
Phone: (575) 762-4759

Morgan Tool Co.
5 Acre BLM #2, Drilled Rate
5 - 1 Acre Bags @ 14.84 Bulk Pounds Each

Lot# M-14876

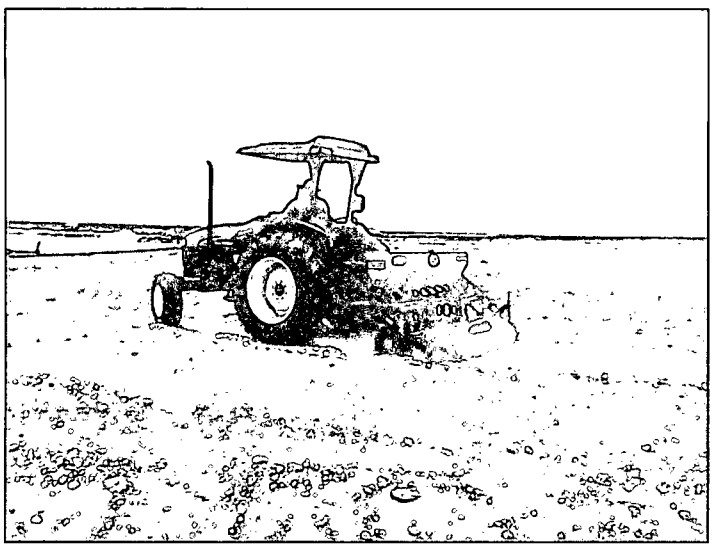
Item	Origin	Purity	Germ	Dormant	Germ & Dormant	Test Date	Total PLS Pounds
Sand Dropseed VNS	Colorado	13.75%	2.00%	96.00%	98.00%	03/13	10.00
Little Bluestem Itasca	Minnesota	21.28%	50.00%	45.00%	95.00%	03/13	15.00
Coreopsis Plains	Oregon	15.85%	85.00%	0.00%	85.00%	08/13	10.00
Sideoats Grama Niner	Texas	22.97%	83.00%	5.00%	88.00%	06/13	15.00
Indian Ricegrass Paloma	Colorado	14.65%	2.00%	90.00%	92.00%	10/13	10.00

Other Crop: 0.07%
Weed Seed: 0.07%
Inert Matter: 11.36%

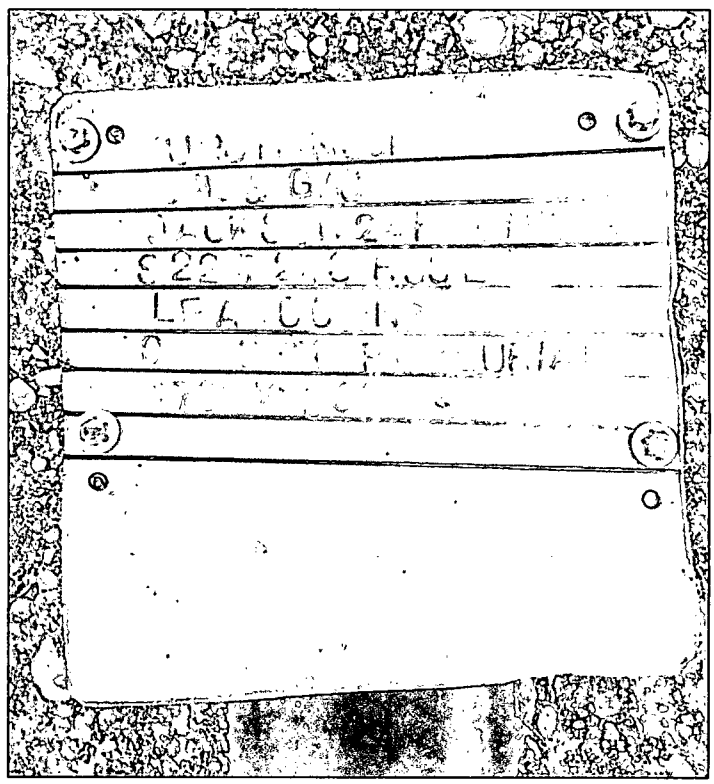
There Are 5 Bags For This Mix
This Bag Weighs 14.84 Bulk Pounds
Use This Bag For 1 Acres

Total Bulk Pounds: 74

Labels on seed sacks describing composition species



Tractor pulling seed drill across site 3-3-2014



Steel marker plate
to be placed on surface of on-site burial

ATTACHMENT 6

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

HOBBS OCD
MAR 10 2014
RECEIVED

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 Proposed Alternative Method Permit or Closure Plan Application

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

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

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

1.
Operator: Murchison Oil & Gas, Inc. OGRID #: 15363
Address: 1100 Mira Vista Blvd., Plano, TX 75093-4698
Facility or well name: Jackson Unit No. 24H
API Number: 30-025-41093 OCD Permit Number: P1-6006
U/L or Qtr/Qtr A Section 22 Township 24S Range 33E County: Lea
Center of Proposed Design: Latitude 32° 11' 47.065" N Longitude 103° 33' 34.246" W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☒ no
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: 21,146 bbl Dimensions: L 152 x W 151 x D 6-9 ft

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

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

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

6.

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

☐ Screen ☐ Netting ☐ Other_____

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

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

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

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

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells **See Figures 1 & 2**	☐ Yes ☒ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks) See Figure 5** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks) See Figure 7** - 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) See Figure 8** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. **(Does not apply to below grade tanks) See Figure 9** - FEMA map	☐ Yes ☒ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption:. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). **See Figure 3** - 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. **See Figure 4**	☐ 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 **See Figures 1 & 2**	☐ Yes ☒ No
Within 300 feet of a wetland. **See Figure 6** - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

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

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

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

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

11.

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

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

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

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

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

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

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

13.
Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

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

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

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

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

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

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

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

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

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

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

17.
Operator Application Certification:

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

Name (Print): Greg Boans Title: Production Superintendent

Signature: [signature] Date: November 22, 2013

e-mail address: gboans@jdmii.com Telephone: (575) 361-4962

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

OCD Representative Signature: [signature] **Approval Date:** 12/04/13

Title: Environmental Specialist **OCD Permit Number:** P1-6006

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

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

☑ **Closure Completion Date:** January 10, 2014

20.
Closure Method:

☐ Waste Excavation and Removal ☑ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

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

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

On-site Closure Location: Latitude N 32.196746° Longitude W 103.559659° NAD: ☐ 1927 ☑ 1983

22.

Operator Closure Certification:

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

Name (Print): Kristin Pope Title: Agent for Murchison Oil and Gas, Inc.

Signature: Kristin Pope Date: March 6, 2014

e-mail address: kristin@rthicksconsult.com Telephone: (575) 302-6755

approved

Environmental Specialist

NMOCD-DIST I

7/02/14