R. T. HICKS CONSULTANTS, LTD.

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

June 5, 2015

Dr. Tomas Oberding
NMOCD District 1
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Via E-Mail

RE: Pulliam 27-P #001 Closure Report, Alta Mesa Services LP.
API Number 30-009-20025

Dear Dr. Oberding:

R.T. Hicks Consultants, Ltd. is pleased to submit this Closure Report for the above referenced site. f you have any questions or concerns, please contact us at 505-266-5004. Thank you for your time and attention.

Sincerely,
R.T. Hicks Consultants

David J. Hamilton

David Hamilton
Project Scientist

R. T. HICKS CONSULTANTS, LTD.

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

June 5, 2015

Dr. Tomas Oberding
NMOCD District 1
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Via: E-Mail

RE: Pulliam 27-P #001Closure Report, Alta Mesa Services LP.

Dear Dr. Oberding:

In keeping with the requirements of the approved C-144 closure plan for the temporary pit, this report includes the following information listed in Part 24 of the C-144 form.

Required Information	**Location in Submission**
Proof of Closure Notice (to surface owner and Division	Attachment 1
Proof of Deed Notice (required for on-site closure)	Attachment 2
Plot Plan (for on-site closures and temporary pits)	Attachment 3 (C-105 and Plate 1)
Confirmation Sampling Analytical Results	Attachment 4
Waste Material Sampling Analytical Results (required for on-site closure)	Not Applicable
Disposal Facility Name and Permit Number	Not Applicable
Soil Backfilling and Cover Installation	Attachment 5
Re-vegetation Application and Seeding Technique	
Updated C-144 Form	Attachment 6
Site Reclamation (Photo Documentation)	To follow later

Center of On Site Closure Location:
Latitude: N 33.458487 Longitude: W -103.075197 WGS 84 (Google Earth)

We understand that OCD cannot formally release the site under the current Rule until we document re-vegetation. As mentioned above, please expect documentation of re-vegetation when it is established in accordance with subsection I of 19.15.17.13 NMAC.

Sincerely,
R.T. Hicks Consultants, Ltd.

David J. Hamilton

David Hamilton
Project Manager

Attachment 1

Attachment A

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:

DALE Pulliam
9145 Plantation DR
Canyon TX
79015

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Dale Pulliam ☑ Agent ☐ Addressee

B. Received by (Printed Name) D Pulliam
C. Date of Delivery 2-23

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

3. Service Type
☐ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7014 3490 0002 2421 8023

PS Form 3811, July 2013 Domestic Return Receipt

7014 3490 0002 2421 8023

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.
CANYON TX 79015

OFFICIAL USE

Postage	$ $2.03
Certified Fee	$3.30
Return Receipt Fee (Endorsement Required)	$2.70
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $8.03

0110
12
Postmark Here
FEB 19 2015
ALBUQUERQUE, NM 87110-9801
USPS
02/19/2015

Sent To
Street & Apt. No., or PO Box No.
City, State, ZIP+4

PS Form 3800, July 2014 See Reverse for Instructions

Attachment 2

E-5
85 7628

Doc# 150002936

STATE OF NEW MEXICO §
§
COUNTY OF CURRY §

This Notice is filed to provide information concerning certain environmental conditions and/or use limitations pursuant to the New Mexico Oil Conservation Division (NMOCD) Rule found in Title 19 of the New Mexico Administrative Code (NMAC), Chapter 15, and affects the real property (the Property) described as follows:

Unit P of Section 27, Township 8 North, Range 35 East

As the siting criteria in Paragraph (4) of Subsection C of 19.15.17.10 NMAC (effective date of June 16, 2008), were met, Alta Mesa services, L.P. elected to use burial trench closure of the temporary pit used for drilling Pulliam 27-P #001 (API Number 30-009-20025) in accordance with the criteria of Subsection D of 19.15.17.13 NMAC.
Alta Mesa Services, L.P. notified the surface owner, Dale Pulliam, on Feb. 19, 2015 of the use of this closure method (see Attachment A).

The location of the burial in place is as follows:

Being 0.169 acres of land

and said 0.169 acre tract being more particularly described as follows;

Commencing at a point with coordinates of (WGS 84 coordinate system):
Latitude 34.880472°
Longitude -103.216606°

Thence Notthwards a distance of 35.0 feet to a point with the coordinates of :
Latitude 34.880568°
Longitude -103.216607°

Thence Westwards a distance of 207.0 feet to a point with the coordinates of :
Latitude 34.880572°
Longitude -103.217297°

Thence Southwards a distance of 36.0 feet to a point with the coordinates of :
Latitude 34.880473°
Longitude -103.217299°

Thence Eastwards a distance of 207.0 feet to the point of beginning and containing 0.169 acres.

See Plate 1 attached hereto and incorporated herein by reference.

KT Hicks Consultants

CURRY COUNTY
ROSALIE L RILEY, CLERK
150002936
Book 533 Page 6595
2 of 5
05/08/2015 12:48 PM

This notice is required because the Property described immediately above currently meets NMOCD requirements for burial trench closure of a temporary drilling pit. The constituents of concern pose no significant present or future risk to humans or the environment based on the land use. No further remediation of the Property is required by the NMOCD as long as a person shall not build permanent structures over a burial in place closure without the appropriate division district office's written approval.

As of the date of this Notice, the record owner of title to the Property is Dale Pulliam with an address of 9145 Plantation Drive, Canyon, Texas 79015.

For additional information, contact:

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

This Notice may be rendered of no further force or effect only by a superseding deed notice executed by the NMOCD or its successor agencies and filed with the County Clerk of Lea County, NM in the same Real Property Records as those in which this Deed Notice is filed.

Executed this 30 day of April, 2015.

By: David Hamilton

Name: David Hamilton

Title: Agent for Alta Mesa Services, L.P.

STATE OF NEW MEXICO

(Bernalillo) COUNTY

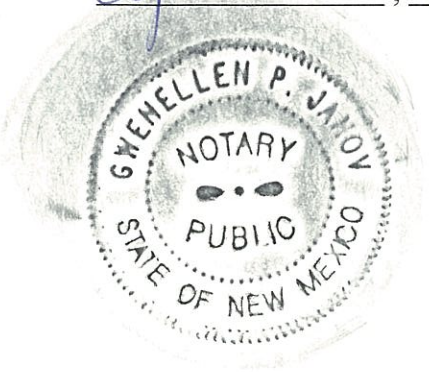
BEFORE ME, on this the 30th (date) day of April (month and year), 2015, personally appeared David Hamilton (name), Hydrologist (title), of R. T. Hicks Consultants (company),

Known to me to be the person whose name is subscribed to the foregoing instrument, and they

Acknowledge to me that they executed the same for the purposes and consideration therein

expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 30th day of April, 2015.



Notary Public in and for the State of New Mexico,
County of

My Commission Expires: 3/21/19

CURRY COUNTY
ROSALIE L RILEY, CLERK
150002936
Book 533 Page 6596
3 of 5
05/08/2015 12:48 PM

Attachment A

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:

DALE Pulliam
9145 Plantation DR
Canyon TX
79015

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Dale Pulliam ☑ Agent ☐ Addressee

B. Received by (Printed Name) D Pulliam
C. Date of Delivery 2-25

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

3. Service Type
☐ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7014 3490 0002 2421 8023

PS Form 3811, July 2013 Domestic Return Receipt

7014 3490 0002 2421 8023

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.
CANYON TX 79015

OFFICIAL USE

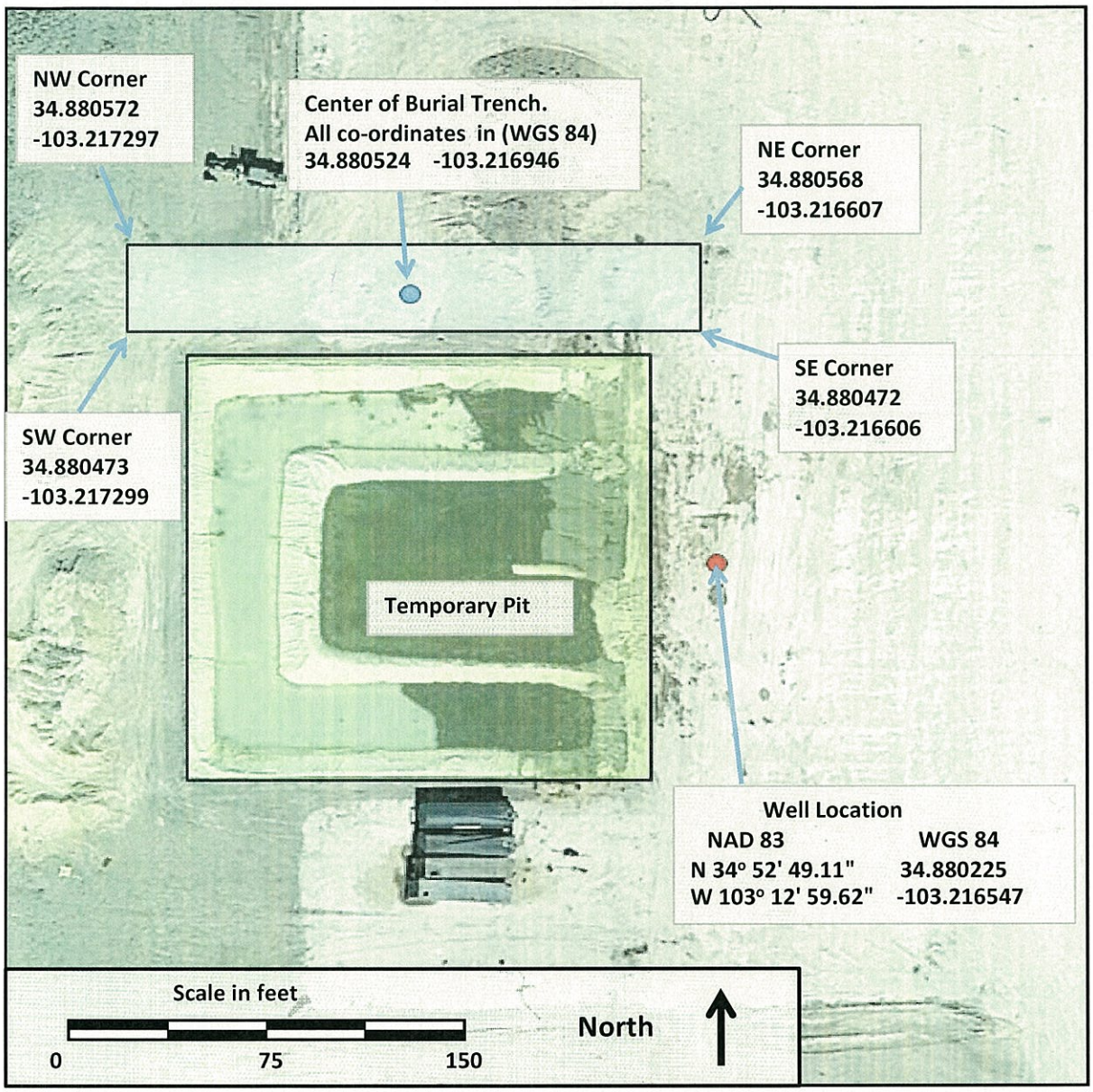
Postage	$ $2.03
Certified Fee	$3.30
Return Receipt Fee (Endorsement Required)	$2.70
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $8.03

0110
12
FEB 19 2015
Postmark Here
02/19/2015

Sent To
Street & Apt. No., or PO Box No.
City, State, ZIP+4

PS Form 3800, July 2014 See Reverse for Instructions

CURRY COUNTY
ROSALIE L RILEY, CLERK
150002936
Book 533 Page 6597
4 of 5
05/08/2015 12:48 PM



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 505-266-5004	**Burial Trench Location at Pulliam 27-P Site** **Unit P, Section 27, T8N, R 35E.**	**Plate 1**
	Alta Mesa Services, L.P.	**May, 2015**

Attachment 3

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

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.
30-009-20025

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
Pulliam 27-P

6. Well Number:
001

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

8. Name of Operator
Alta Mesa Services, L.P.

9. OGRID
295752

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:	P	27	8N	35 E						
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.)
		March 6, 2014		

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. See Plate 1

33. If an on-site burial was used at the well, report the exact location of the on-site burial: A Burial Trench was used for the on-site burial. See Plate 1

Co-ordinates in WGS 84 Center of Burial Trench Latitude 34.88025 Longitude -103.216946 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 | Printed Name | Title | Date

E-mail Address

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.

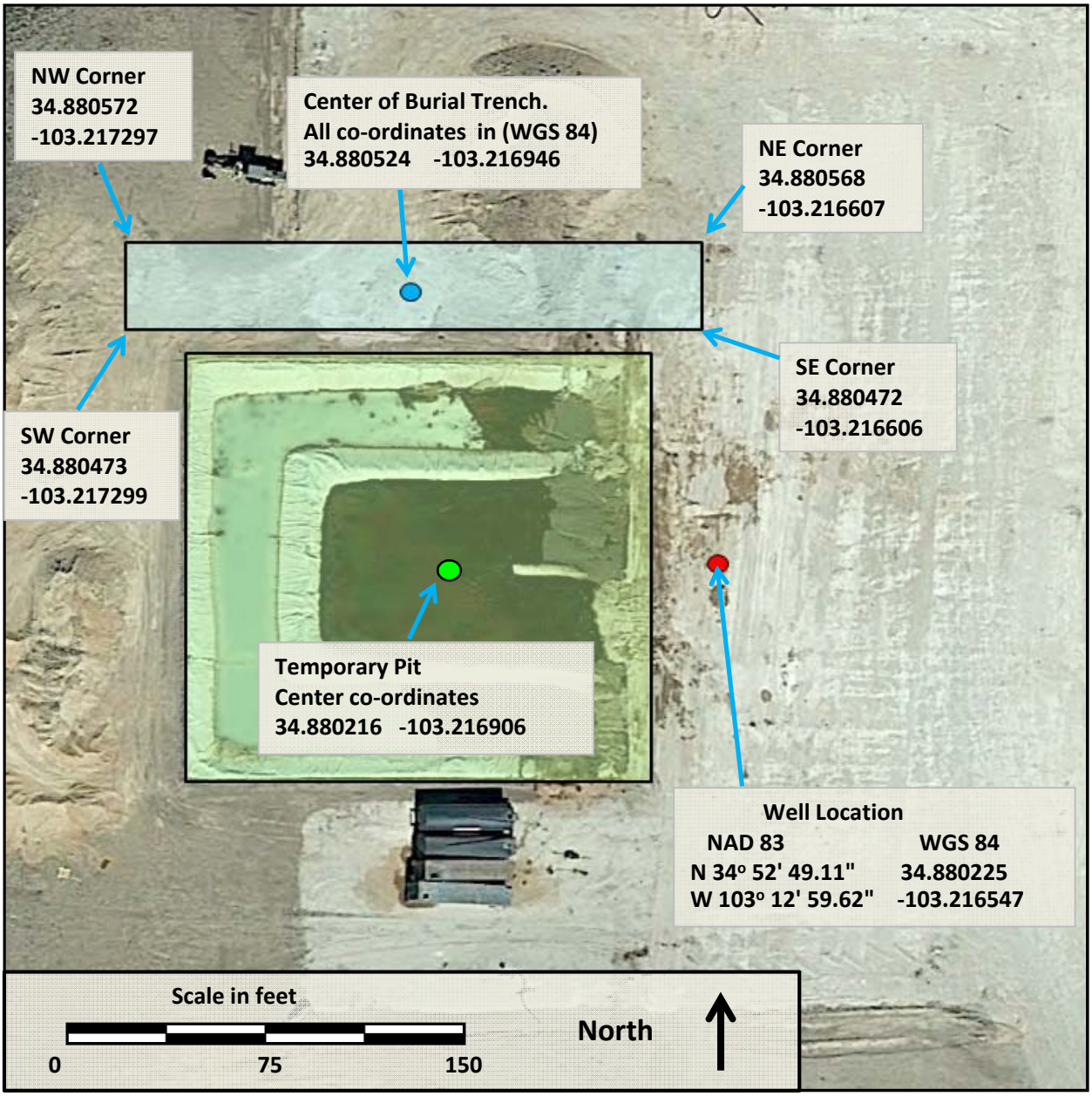
No. 1, from…….to……feet……

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 505-266-5004	**Burial Trench Location at Pulliam 27-P Site** **Unit P, Section 27, T8N, R 35E.**	**Plate 1**
	Alta Mesa Services, L.P.	**May, 2015**

Attachment 4

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

March 23, 2015

David Hamilton

R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104
TEL: (505) 266-5004
FAX (505) 266-0745

RE: Pulliam OrderNo.: 1503790

Dear David Hamilton:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/16/2015 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503790**
Date Reported: **3/23/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: NE Inner Pit
Project: Pulliam
Collection Date: 3/13/2015 1:25:00 PM
Lab ID: 1503790-001 **Matrix:** SOIL **Received Date:** 3/16/2015 1:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	130	9.9		mg/Kg	1	3/19/2015 8:50:17 AM	18211
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2015 8:50:17 AM	18211
Surr: DNOP	105	63.5-128		%REC	1	3/19/2015 8:50:17 AM	18211
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/19/2015 8:10:59 AM	18213
Surr: BFB	95.2	80-120		%REC	1	3/19/2015 8:10:59 AM	18213
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	3/20/2015 2:59:17 PM	18213
Toluene	ND	0.050		mg/Kg	1	3/20/2015 2:59:17 PM	18213
Ethylbenzene	ND	0.050		mg/Kg	1	3/20/2015 2:59:17 PM	18213
Xylenes, Total	ND	0.10		mg/Kg	1	3/20/2015 2:59:17 PM	18213
Surr: 4-Bromofluorobenzene	120	80-120	S	%REC	1	3/20/2015 2:59:17 PM	18213
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	82	30		mg/Kg	20	3/20/2015 11:14:14 PM	18255

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Comp minus NE I
Project: Pulliam
Collection Date: 3/13/2015 1:20:00 PM
Lab ID: 1503790-002 **Matrix:** SOIL **Received Date:** 3/16/2015 1:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	10	9.1		mg/Kg	1	3/19/2015 9:11:48 AM	18211
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/19/2015 9:11:48 AM	18211
Surr: DNOP	112	63.5-128		%REC	1	3/19/2015 9:11:48 AM	18211
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/19/2015 8:39:47 AM	18213
Surr: BFB	94.1	80-120		%REC	1	3/19/2015 8:39:47 AM	18213
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	1	3/19/2015 8:39:47 AM	18213
Toluene	ND	0.050		mg/Kg	1	3/19/2015 8:39:47 AM	18213
Ethylbenzene	ND	0.050		mg/Kg	1	3/19/2015 8:39:47 AM	18213
Xylenes, Total	ND	0.10		mg/Kg	1	3/19/2015 8:39:47 AM	18213
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	3/19/2015 8:39:47 AM	18213
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	130	30		mg/Kg	20	3/19/2015 10:45:08 AM	18226

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503790**

23-Mar-15

Client: R.T. Hicks Consultants, LTD

Project: Pulliam

Sample ID	**MB-18226**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**18226**	RunNo:	**24944**					
Prep Date:	**3/19/2015**	Analysis Date:	**3/19/2015**	SeqNo:	**735228**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-18226**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**18226**	RunNo:	**24944**					
Prep Date:	**3/19/2015**	Analysis Date:	**3/19/2015**	SeqNo:	**735229**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.7	90	110			

Sample ID	**MB-18255**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**18255**	RunNo:	**24980**					
Prep Date:	**3/20/2015**	Analysis Date:	**3/20/2015**	SeqNo:	**736233**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-18255**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**18255**	RunNo:	**24980**					
Prep Date:	**3/20/2015**	Analysis Date:	**3/20/2015**	SeqNo:	**736234**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503790**

23-Mar-15

Client: R.T. Hicks Consultants, LTD

Project: Pulliam

Sample ID **MB-18211**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18211**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734296** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.6	63.5	128			

Sample ID **1503790-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **NE Inner Pit**	Batch ID: **18211**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	190	10	50.00	132.8	119	29.2	176			
Surr: DNOP	4.9		5.000		98.3	63.5	128			

Sample ID **1503790-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **NE Inner Pit**	Batch ID: **18211**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734301** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	150	10	50.00	132.8	41.5	29.2	176	22.4	23	
Surr: DNOP	6.0		5.000		120	63.5	128	0	0	

Sample ID **LCS-18211**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18211**	RunNo: **24910**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734679** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	67.8	130			
Surr: DNOP	4.6		5.000		91.0	63.5	128			

Sample ID **MB-18252**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18252**	RunNo: **24910**
Prep Date: **3/20/2015**	Analysis Date: **3/20/2015**	SeqNo: **735247** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	63.5	128			

Sample ID **LCS-18252**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18252**	RunNo: **24910**
Prep Date: **3/20/2015**	Analysis Date: **3/20/2015**	SeqNo: **735261** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503790**

23-Mar-15

Client: R.T. Hicks Consultants, LTD

Project: Pulliam

Sample ID	**LCS-18252**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Diesel Range Organics**
Client ID:	**LCSS**	Batch ID:	**18252**	RunNo:	**24910**
Prep Date:	**3/20/2015**	Analysis Date:	**3/20/2015**	SeqNo:	**735261** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.9	63.5	128			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503790**

23-Mar-15

Client: R.T. Hicks Consultants, LTD

Project: Pulliam

Sample ID **MB-18213**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18213**	RunNo: **24929**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.4	80	120			

Sample ID **LCS-18213**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18213**	RunNo: **24929**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734778** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	64	130			
Surr: BFB	1000		1000		100	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503790**

23-Mar-15

Client: R.T. Hicks Consultants, LTD

Project: Pulliam

Sample ID **MB-18213**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18213**	RunNo: **24929**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734804** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **LCS-18213**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18213**	RunNo: **24929**
Prep Date: **3/18/2015**	Analysis Date: **3/19/2015**	SeqNo: **734805** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	103	69.8	143			
Benzene	1.0	0.050	1.000	0	103	76.6	128			
Toluene	0.98	0.050	1.000	0	97.8	75	124			
Ethylbenzene	0.97	0.050	1.000	0	96.8	79.5	126			
Xylenes, Total	2.9	0.10	3.000	0	96.7	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: RT HICKS Work Order Number: 1503790 RcptNo: 1

Received by/date: LM 03/16/15

Logged By: Anne Thorne 3/16/2015 1:50:00 PM Anne Thorne

Completed By: Anne Thorne 3/18/2015 Anne Thorne

Reviewed By: AG 03/18/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Not Present			

Chain-of-Custody Record

Client: RT Hicks Consultants

Mailing Address: 901 Rio Grande NW
Suite F-142 Alb., N.M. 87104

Phone #: 505 266 5004

Email or Fax#: david@rthicksconsult.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush _____

Project Name: Pulliam

Project #:

Project Manager: D. Hamilton

Sampler: DH

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503790	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
-13	13:25	Soil	NE Tanner Pit			-001	~~NO~~		X					~~NO~~ X	AT 03/18/15			
-13	13:20	Soil	Comp minus NE			-002	X		X					X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
-16	13:50	David Hamilton		03/16/15	1350
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: per Dave Hamilton rush
Analysis /AT 03/18/15

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Attachment 5

Protocols and Procedures used for the Trench Burial

In accordance with the requirements listed in paragraph D of 19.15.17.13 NMAC, the operator performed the following steps to meet requirements for closure of the temporary drilling pit.

1. The originally planned in-place burial location is in compliance with the siting criteria. This information was presented in the C-144 application submitted to the NMOCD on December 23, 2013 and approved on December 28, 2013.

The following timeline describes the well history as it relates to the closure of this temporary pit:

3/06/2014 The plugging rig was released
4/29/2014 Initial samples of waste material in the pit were obtained.
5/29/2014 Applied Micro-Blaze® to pit ® to cuttings using air sparge injection
6/19/2014 Sampled pit for closure; did not meet Table II criteria for GRO+DRO, TPH
7/4/2014 Rain Water removed
8/1/2014 Cuttings were mobilized using air sparge injection
8/15/2014 Applied Micro-Blaze® to pit ® to cuttings using air sparge injection
8/28/2014 Submitted and received 3-month extension for pit closure
8/29/2014 Cuttings were mobilized using air sparge injection
9/19/2014 Cuttings were mobilized using air sparge injection
Aug – Sept 2014 Approx. 20' of rain in site area
10/7/2014 Oil boom installed
Oct 16 – Dec 15 Six verbal communications with OCD regarding status of pit closure
11/2014 Rain water removed
12/18/2014 Sampled pit for closure; did not meet Table II criteria for GRO+DRO, TPH

2. After the results were obtained from the Dec. 18 sampling event, Alta Mesa applied for a variance to allow an in-place closure. NMOCD denied the variance request on February 2, 2015, but did allow either a burial trench option or a dig and haul option for closure.

3. On February 17, 2015, Alta Mesa notified NMOCD of their decision to use the burial trench option. The burial trench location is in compliance with the siting criteria, and this information was presented in the C-144 application.

4. The burial trench was dug and lined with a 30 Mil. string reinforced LLDPE liner in accordance with paragraph D of 19.15.17.13 NMAC.

5. Stabilization of the pit contents was achieved by mixing the pit contents with dry soil beneath the liner and with material forming the berms of the pit. The material was mixed at a ratio of not more than 2 parts of soil with 1 part of waste material. A paint filter test was performed by R.T. Hicks Consultants that confirmed that the process was in accordance with Paragraph D of 19.15.17.13 NMAC (Figure 1).

6. The stabilized materials were moved to the burial trench (Figure 2).

7. Based upon visual inspection and soil moisture content, an additional one to three feet of the soil beneath the discharge areas of the inner and outer horseshoes was removed and placed in the lined burial trench.

Figure 1: *Paint Filter Test at Pulliam 27-P #001, March 13, 2015. The photo was taken five minutes after the completion of the test.*

Figure 2: *View to northeast during placement of stabilized material from the temporary pit into the burial trench. The material was later shaped to have a slightly domed top before placement of the upper liner*

8. Materials in the burial trench were smoothed and shaped to shed infiltrating water from the center outwards.

9. On March 13 2015, Hicks Consultants collected a 10-point representative composite sample of materials from the floor of the former temporary drilling pit. Attachment 3 presents the laboratory analysis demonstrating that the bottom of the temporary drilling pit met closure standards.

10. A 30 Mil. string reinforced LLDPE liner was installed to completely cover the stabilized cuttings.

Soil Cover Activities

11. After the liner cover had been installed on March 25, 2015, 4 feet of non-waste containing, uncontaminated, earthen material and the reserved topsoil were replaced in their relative positions in accordance with Subsection (3) of Paragraph H of 19.15.17.13 NMAC. The uppermost topsoil of one foot is greater than or equal to the background thickness.

12. The top soil surface was completed by March 30, 2015. Final contours were blended with the surrounding topography to prevent erosion and ponding of surface water (Figure 3).

Figure 3: *View to south and southwest of completed top soil surface from the northern side of the burial trench (Photo taken on April 2, 2015). The topography was sloped to be higher over the burial trench and slopes down to the location of the former temporary drilling pit, in the left and center middle ground. Soil from the original excavation had been stockpiled on the right middle ground.*

13. The site is to be reseeded in the summer of 2015 in accordance with the landowner's request to return the land to its previous use. The site was formerly part of an agricultural field. As such, the landowner will specify application rates and schedules. It is expected that vegetative cover will attain 70% of pre-disturbance levels this growing season. If conditions or circumstances are such that the landowner elects not to plant this spring, the operator will inform the division of the delay in seeding. The operator will provide photo-documentation when successful re-vegetation is achieved.

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

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: Alta Mesa Services, LP OGRID #: 295752
Address: 15021 Katy Freeway, Suite 400, Houston, Texas 77094
Facility or well name: Pulliam Farms 27-P 001
API Number: 30-009-20025-00-00 OCD Permit Number:
U/L or Qtr/Qtr P Section 27 Township 8N Range 35E County: Curry
Center of Proposed Design: Latitude N 34. 52' 49.11" Longitude W 103. 12' 59.62" 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: 23,307 bbl Dimensions: L 160 x W 170 x D 5-9 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). Topographic map; Visual inspection (certification) of the proposed site **See Figure 3**	☐ 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. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site **See Figure 6**	☐ 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): Bridgette Helfrich Title: _____

Signature: _____ Date: November 18, 2013

e-mail address: bhelfrich@altamesa.net Telephone: (281) 944-0636

18.

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

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.

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

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

☐ **Closure Completion Date: April 2015**

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. A Burial Trench was used in accordance with NMOCD approved alternative method. See Attachment 5 for details.

21.

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

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

On-site Closure Location: Latitude 34.880524 Longitude -103.216946 Coordinates in WGS 84 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): Bridget Helfrich Title: Regulatory Coordinator

Signature: Bridget Helfrich Date: May 21, 2015

e-mail address: bhelfrich@AltaMesa.net Telephone: (281) 943 1373