

Submit a Copy To Appropriate District

## Office

District I – (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II – (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III – (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV – (505) 476-3460  
 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-103  
 Revised July 18, 2013

WELL API NO. 30-039-22118	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Canada Mesa (NMSF079086)	
8. Well Number 1E	
9. OGRID Number 14634	
10. Pool name or Wildcat Devils Fork Gallup/DK	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator Merrion Oil & Gas Corporation	
3. Address of Operator 610 Reilly Ave, Farmington, NM 87401	
4. Well Location Unit Letter <u>C</u> : <u>1060</u> feet from the <u>North</u> line and <u>1840</u> feet from the <u>West</u> line Section <u>24</u> Township <u>24N</u> Range <u>6W</u> NMPM County <u>Rio Arriba</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6483 GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see the attached proposed PA procedure.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Philana Thompson TITLE HSE & Regulatory Compliance DATE 11/30/2022

Type or print name Philana Thompson E-mail address: pthompson@merrion.bz PHONE: 505-486-1171

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):



## WORKOVER PROCEDURE

Well Information			
<b>Well:</b>	<b>Canada Mesa 1E</b>	<b>Field:</b>	Basin DK/Devils Fork GL
<b>Location:</b>	1060' fnl & 1840' fwl Sec 24, T24N, R6W Rio Arriba Co, New Mexico	<b>Elevations:</b>	6,483' GL; 6,493' RKB
		<b>Depths:</b>	TOC Plug – 3,637' KB RBP – 5,279' KB PBTD – 6,664' KB TD – 6,700' KB
<b>API:</b>	30-039-22118	<b>Date:</b>	11/01/2022
<b>Tubulars:</b>	4 1/2" 10.5ppf J55 to 6698' KB 2 3/8" 4.7ppf J55 to 3625' KB	<b>Engineer:</b>	Shacie Murray (505-330-7605)
<b>Perforations:</b>	Gallup – 5,344' – 5,530' gross interval, 20 select fire shots Dakota – 6,474' – 6,529' gross interval, 20 select fire shots		
<b>Csg Hole:</b>	2,884' - 2,950' KB – squeeze attempt failed 3898' KB – squeezed w/ 20 sxs TOC at 3591' KB		

**Version 1 - Subject to change based on varying well conditions**

### Project Scope

Plug and abandon well.

### Plugging Procedure

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.

1. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary. ND WH, NU BOP.
2. RU wireline and run CBL. Adjust following plugs as necessary.
3. **Plug #1** (Dakota and Greenhorn Top, 6224' – 6424'): PU 4.5" CICR, TIH to set at 6424'. Pressure test tubing to 1000#. Mix 20 sxs Class G cement, spot on top of CICR to isolate the Dakota and Greenhorn formations. TOOH.
4. **Plug #2** (Gallup Top, 5194' – 5294'): PU 4.5" CICR, TIH to set at 5294'. Mix 12 sxs of Class G cement, spot on top of CICR to isolate the Gallup formation. Load casing with water and circulate well clean. Pressure test casing to 800#. Spot or tag subsequent plugs as appropriate according to CBL and pressure test results. TOOH, LD setting tool.
5. **Plug #3** (Point Lookout Top, 4220' – 4320'): TIH w/ tbg to 4320'. Mix 12 sxs Class G cement, spot balanced plug to isolate the Point Lookout formation. PUH.
6. **Plug #4** (Cliff House Top, 3520' – 3620'): Mix 12 sxs Class G cement, spot balanced plug to isolated the Cliff House formation.
7. **Plug #5** (Picture Cliffs Top, 2035' – 2135'): Mix 12 sxs Class G cement, spot balanced plug to isolate the Picture Cliffs formation. PUH.
8. **Plug #6** (Kirtland Top, 1640' – 1740'): Mix 12 sxs Class G cement, spot balanced plug to isolate the Kirtland formation. TOOH.



## WORKOVER PROCEDURE

9. **Plug #7** (Surface Csg Shoe and surface, 0' – 286'): RIH w/ wireline and perf at 286'. POOH, TIH w/ tubing to 286' and establish circulation. Mix approximately 150 sxs Class G cement, circulate around good cement, approximately 61.5 sxs outside (100% excess is additional 61.5 sxs) and 22 sxs inside (additional 50' excess is 5 sxs) to isolate the surface csg shoe and surface. SI well and WOC.
10. ND BOP and cut off wellhead below surface casing flange. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place.
11. RD, MOL and cut off anchors. Restore location per BLM stipulations



## WORKOVER PROCEDURE

### Plugged Wellbore:

#### Canada Mesa 1E

#### Plug Details

**Pipe Capacity:**  
 8-5/8" 24# to 4.5" 10.5#  
 0.04401 bbl/ft

**7-7/8" bit to 4.5" 10.5#**  
 0.04057 bbl/ft

**4.5" 10.5#**  
 0.01595 bbl/ft

**Cement Properties:**  
 Class G  
 15.8 lb/gal  
 1.15 cu. Ft/sx  
 5.6146 cu. Ft/bbl

Surface Shoe - 236'

Squeeze Hole - 978'  
TOC - TBD (1562' calc)Kirtland  
1690'Pictured Cliffs  
2085'  
Squeeze Hole - 2900'Cliff House  
3570'

Squeeze Hole 3898'

Point Lookout  
4270'Gallup  
5330'  
Perfs 5344' - 5530'Greenhorn  
6270'  
Dakota  
6440'

Perfs 6474' - 6529'

	Bottom	Top	Length	Inside cu. Ft	Outside cu. Ft	Inside (50' ex)	Outside (100% ex)	Total sxs
<b>Plug 7</b>	286	0	286	26	70.7	27	123	150
Perf @	286							
<b>Plug 6</b>	1740	1640	100	9		12		12
<b>Plug 5</b>	2135	2035	100	9		12		12
<b>Plug 4</b>	3620	3520	100	9		12		12
<b>Plug 3</b>	4320	4220	100	9		12		12
<b>Plug 2</b>	5294	5194	100	9		12		12
CICR @	5294							
<b>Plug 1</b>	6424	6224	200	18		20		20
CICR @	6424							
<b>Total:</b>								<b>218</b>



## WORKOVER PROCEDURE

### Current Wellbore Diagram:

#### Merrion Oil & Gas Corporation Wellbore Schematic

#### Canada Mesa #1E

#### Current Wellbore Configuration

Basin Dakota/ Devils Fork Gallup

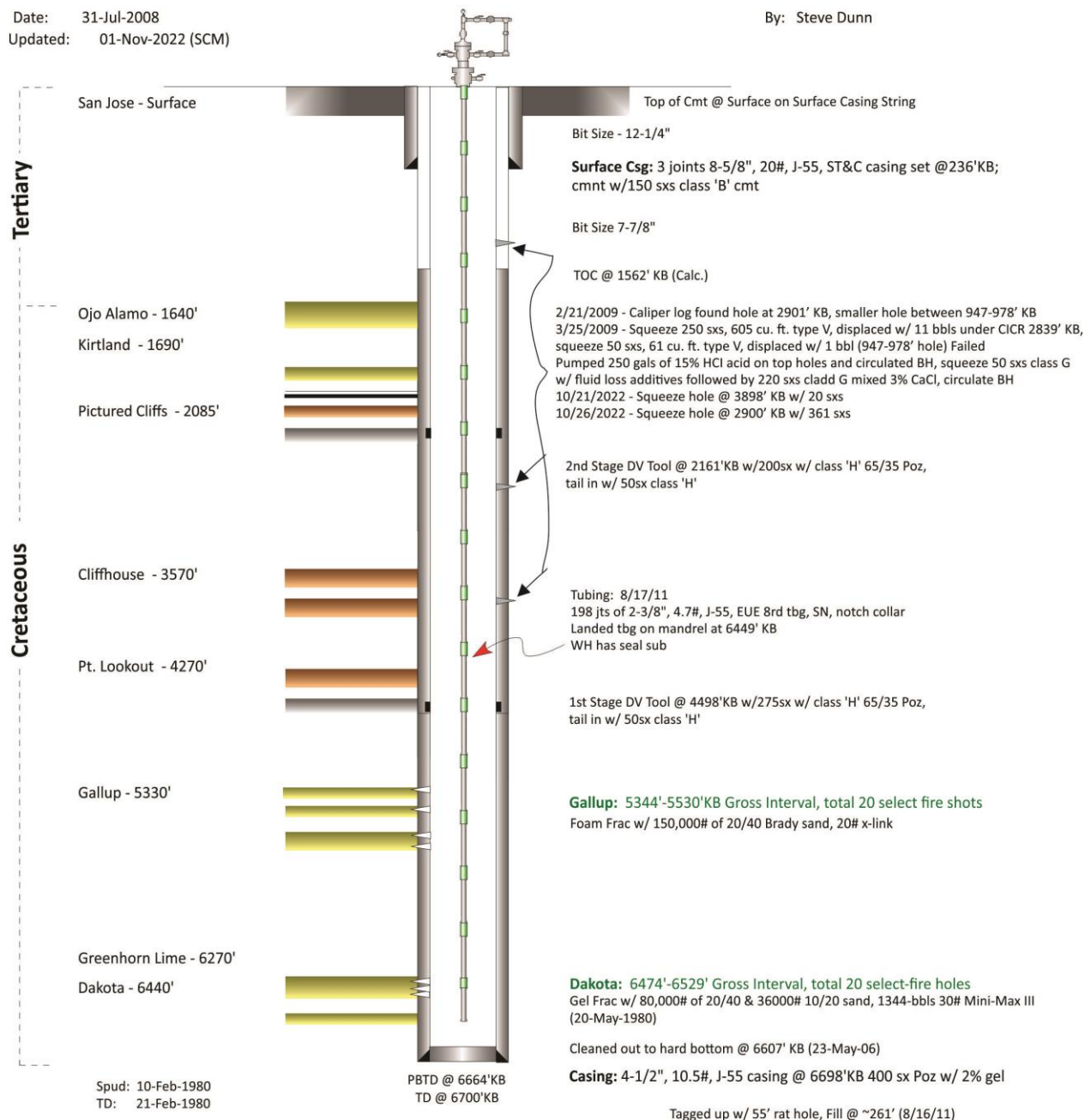
Location: 1060' fnl & 1840' fwl (ne nw)  
Sec 24, T24N, R6W, NMPM  
Rio Arriba Co, New Mexico

Elevation: 6,483' GL  
6,493' RKB

Date: 31-Jul-2008  
Updated: 01-Nov-2022 (SCM)

API No: 30-039-22118

By: Steve Dunn



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402**

AFMSS 2 Sundry ID 2704487

Attachment to notice of Intention to Abandon

Well: Canada Mesa 1E

**CONDITIONS OF APPROVAL**

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. The following modifications to your plugging program are to be made:
  - a. Add a plug to cover the Mancos formation top at 4430'.
  - b. A Point Lookout plug is not required.
  - c. Add a plug to cover the Chacra formation top at 2530'.
  - d. Add a plug to cover the Fruitland formation top at 1908'.
  - e. Add a plug, or extend the Kirtland plug (proposed Plug #6), to cover the Ojo Alamo formation top at 1535'.
  - f. Add a plug to cover the Nacimiento formation top at 860' (likely an inside/ outside plug base on calculated TOC).

Note: A reclamation onsite needs to be completed with BLM Surface staff to determine proper final reclamation steps and a reclamation plan should be submitted after.

3. Farmington Office is to be notified at least 24 hours before the plugging operations commence at (505) 564-7750.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 11/30/2022

# BLM FLUID MINERALS P&A Geologic Report

**Date Completed:** 11/30/2022

Well No. Canada Mesa #001E (API# 30-039-22118)	Location	1060	FNL	&	1840	FWL
Lease No. NMSF079086	Sec. 24	T24N			R06W	
Operator Merrion Oil & Gas Corporation	County	Rio Arriba		State	New Mexico	
Total Depth 6700'	PBTD 6664'	Formation Dakota/Gallup				
Elevation (GL)		Elevation (KB) 6493'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose			Surface	860	Surface/possible freshwater sands
Nacimiento			860	1535	Possible freshwater sands
Ojo Alamo Ss			1535	1690	Aquifer (possible freshwater)
Kirtland Shale			1690	1908	Possible gas
Fruitland			1908	2085	Coal/Gas/Water
Pictured Cliffs Ss			2085	2139	Probable Gas
Lewis Shale			2139	2530	
Chacra			2530	3570	Possible Gas
Cliff House Ss			3570	3658	Water/possible gas
Menefee			3658	4270	Coal/Ss/Water/possible gas
Point Lookout Ss			4270	4430	
Mancos Shale			4430	5330	Probable O&G
Gallup			5330	6270	O&G
Greenhorn			6270	6328	
Graneros Shale			6328	6440	Probable O&G
Dakota Ss			6440	PBTD	O&G/water
Morrison					

Remarks:

P & A

Reference Well:

1) **Formation Tops**  
Same

- Add a plug to cover the Mancos formation top at 4430'.
- A Point Lookout plug is not required.
- Add a plug to cover the Chacra formation top at 2530'.
- Add a plug to cover the Fruitland formation top at 1908'.
- Add a plug, or extend the Kirtland plug (proposed Plug #6), to cover the Ojo Alamo formation top at 1535'.
- Add a plug to cover the Nacimiento formation top at 860' (likely an inside/outside plug based on calculated TOC).
- Gallup perfs 5344' – 5530'.
- Dakota perfs 6474' – 6529'.

Prepared by: Chris Wenman

Well Name: CANADA MESA	Well Location: T24N / R6W / SEC 24 / NENW / 36.302734 / -107.42218	County or Parish/State: RIO ARRIBA / NM
Well Number: 1E	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF079086	Unit or CA Name:	Unit or CA Number:
US Well Number: 3003922118	Well Status: Producing Gas Well	Operator: MERRION OIL & GAS CORPORATION

Notice of Intent

Sundry ID: 2704487

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 11/28/2022	Time Sundry Submitted: 11:29
Date proposed operation will begin: 12/01/2022	

Procedure Description: Please see the attached proposed Plug & Abandon procedure

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

2022\_11\_01\_Canada\_Mesa\_1E\_\_Plugging\_Procedure\_\_20221128112751.pdf



<b>Well Name:</b> CANADA MESA	<b>Well Location:</b> T24N / R6W / SEC 24 / NENW / 36.302734 / -107.42218	<b>County or Parish/State:</b> RIO ARRIBA / NM
<b>Well Number:</b> 1E	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMSF079086	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3003922118	<b>Well Status:</b> Producing Gas Well	<b>Operator:</b> MERRION OIL & GAS CORPORATION

Conditions of Approval

Additional

24N06W24CKd\_Canada\_Mesa\_001E\_20221130145508.pdf

Authorized

2704487\_NOIA\_1E\_3003922118\_KR\_11302022\_20221130151549.pdf

General\_Requirement\_PxA\_20221130151536.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

<b>Operator Electronic Signature:</b> PHILANA THOMPSON	<b>Signed on:</b> NOV 28, 2022 11:29 AM
<b>Name:</b> MERRION OIL & GAS CORPORATION	
<b>Title:</b> Regulatory Analyst	
<b>Street Address:</b> 610 REILLY AVENUE	
<b>City:</b> FARMINGTON	<b>State:</b> NM
<b>Phone:</b> (505) 324-5336	
<b>Email address:</b> PTHOMPSON@MERRION.BZ	

Field

<b>Representative Name:</b>		
<b>Street Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
<b>Phone:</b>		
<b>Email address:</b>		

BLM Point of Contact

<b>BLM POC Name:</b> KENNETH G RENNICK	<b>BLM POC Title:</b> Petroleum Engineer
<b>BLM POC Phone:</b> 5055647742	<b>BLM POC Email Address:</b> krennick@blm.gov
<b>Disposition:</b> Approved	<b>Disposition Date:</b> 11/30/2022
<b>Signature:</b> Kenneth Rennick	

**GENERAL REQUIREMENTS FOR  
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES  
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

**4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.**

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. **If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.**

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H<sub>2</sub>S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 158900

**CONDITIONS**

Operator: MERRION OIL & GAS CORP 610 Reilly Avenue Farmington, NM 87401	OGRID: 14634
	Action Number: 158900
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	CBL required	12/9/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	12/9/2022
kpickford	Adhere to BLM approved COAs and plugs. See BLM COAs and GEO report.	12/9/2022