Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

DEI	AKTIVIENT OF THE INTERN	JK			T	
BUREAU OF LAND MANAGEMENT				5. Lease Serial No.	NMNM97120	
Do not use this t	IOTICES AND REPORTS C form for proposals to drill ( Use Form 3160-3 (APD) for	or to re-enter a	an	6. If Indian, Allottee	or Tribe Name	
SUBMIT IN	TRIPLICATE - Other instructions or	n page 2		7. If Unit of CA/Agr	eement, Name and/or No	
1. Type of Well	7.II.			8. Well Name and N	D. BO DUKE FED 5/3H	
Oil Well Gas W	_			9. API Well No. 300	BO DUKE FED 5/3H	
2. Name of Operator EARTHSTONE		N 6 1 1				
3a. Address 1400 WOODLOCH FOI	REST DRIVE SUITE 300, 35. Phono (281) 29	e No. <i>(include area d</i> 18-4240	code)	10. Field and Pool or Haystack Butte/W		
4. Location of Well (Footage, Sec., T., K SEC 5/T23S/R26E/NMP	2.,M., or Survey Description)			11. Country or Parisl EDDY/NM	n, State	
12. CHE	CK THE APPROPRIATE BOX(ES) T	O INDICATE NATU	JRE OF NOTI	CE, REPORT OR OT	HER DATA	
TYPE OF SUBMISSION			TYPE OF ACT	ΓΙΟΝ		
Notice of Intent  Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Hydraulic Fracturin New Construction	g Recla	uction (Start/Resume amation mplete	Water Shut-Off Well Integrity Other	
Final Abandonment Notice	Change Plans Convert to Injection	Plug and Abandon Plug Back		oorarily Abandon r Disposal		
completed. Final Abandonment No is ready for final inspection.)  1) SET 5-1/2" CIBP @ 6,550'; CMT. @ 6,550'-6,470'. 2) PUN "C" CMT. @ 1,840'-1,097' (9-5 "C" CMT. @ 562'-413' (T/SAL' SXS. CLASS "C" CMT. @ 63'- DRY HOLE MARKER.	ons. If the operation results in a multiple tices must be filed only after all required CIRC. WELL W/ M.L.F.; PRES. TEMP (25) SXS. CLASS "C" CMT. @ 95/8" CSG.SHOE, T/DLWR., B/SALTT, 13-3/8" CSG.SHOE); WOC X TAS'. 6) DIG OUT X CUT OFF WELL WE PLAN TO USE A CLOSED-LOCOCD RULE 19.15.17.	ements, including red EST 5-1/2" CSG. X 5,075'-4,925' (T/BN T); WOC X TAG TO NG TOC. 5) PERF. HEAD 3' B.G.L.; W	CIBP TO 750 NSG.); WOC 2 DC. 4) PERF. X CIRC. TO VELD ON STE	D# X HOLD; PUMP X TAG TOC. 3) PUI X ATTEMPT TO S SURF., FILLING AL EEL PLATE TO CS TANK AND HAUL C	the operator has detenning (10) SXS. CLASS "C" MP (90) SXS. CLASS QZ. (70) SXS. CLASS L ANNULI, (25) GS. X INSTALL	ned that the site
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Type	d)				
DAVID EYLER / Ph: (432) 687-303	3	Title Agent				
Signatur David Cyle	r	Date		03/08/	2023	
= 9	THE SPACE FOR F	EDERAL OR	STATE OF	ICE USE		
Approved by			NOINEED		00/45/	2000
KEITH P IMMATTY / Ph: (575) 988	3-4722 / Approved	Title	NGINEER		03/15/2 Date	1023
Conditions of approval, if any, are attackertify that the applicant holds legal or $\epsilon$ which would entitle the applicant to con	equitable title to those rights in the sub	varrant or ject lease Office	CARLSBAD			
Title 19 II C C Section 1001 and Title 4	2 II C C Cti 1212l iti	£ 1	uinalre and reill	fully to male to	lamortmant or occurf-	L - I I - :4 - 1 C4 - 4 -

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.

#### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

#### SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

### **NOTICES**

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

# **Additional Information**

# **Location of Well**

 $0. \ SHL: \ SWSE \ / \ 175 \ FSL \ / \ 1980 \ FEL \ / \ TWSP: \ 23S \ / \ RANGE: \ 26E \ / \ SECTION: \ 5 \ / \ LAT: \ 32.326813 \ / \ LONG: \ -104.313473 \ (\ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \ )$  PPP: \ SWSE \ / \ 101 \ FSL \ / \ 1919 \ FEL \ / \ TWSP: \ 23S \ / \ RANGE: \ 26E \ / \ SECTION: \ 5 \ / \ LAT: \ 0.0 \ / \ LONG: \ 0.0 \ (\ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \ ) BHL: \ LOT \ 2 \ / \ 333 \ FNL \ / \ 1966 \ FEL \ / \ TWSP: \ 23S \ / \ RANGE: \ 26E \ / \ SECTION: \ 5 \ / \ LAT: \ 0.0 \ / \ LONG: \ 0.0 \ (\ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \ )

Well Name: BO DUKE FED 5	Well Location: SWSE 5 23S 26E	Lease Number: NMNM97120	Allottee or Tribe Name:	
Well Number: 3H	Type of Well: OIL WELL	Unit or CA Name:	Unit or CA Number:	
<b>US Well Number:</b> 300154269300S1	County or Parish/State: EDDY / NM	Operator: EARTHSTONE OPERATING LLC	<b>Sundry ID:</b> 2719791	
Sundry P	rint Report	Sundry 3160-5		

- 1) SET 5-1/2" CIBP @ 6,000'; CIRC. WELL W/ M.L.F.; PRES. TEST 5-1/2" CSG. X CIBP TO 500# X HOLD 30mins; PUMP (25) SXS. CLASS "C" CMT on top of CIBP.
- 2) PUMP (25) SXS. CLASS "C" CMT. @ 5,050'-4,840' (T/BNSG.); WOC X TAG TOC.
- 3) PUMP (90) SXS. CLASS "C" CMT. @ 1,840'-1,085' (9-5/8" CSG.SHOE, T/DLWR., B/SALT); WOC X TAG TOC.
- 4) PERF. X ATTEMPT TO SQZ. (165) SXS. CLASS "C" CMT. @ 562'-Surface' (T/SALT, 13-3/8" CSG.SHOE, High Cave Karst Area Surface Plug); Verify to surface inside casing and in annulus. If no injection rate, spot from 563' to 350'. Tag and attempt perf and sqz again.
- 5) DIG OUT X CUT OFF WELLHEAD 3' B.G.L.; WELD ON STEEL PLATE TO CSGS. X INSTALL DRY HOLE MARKER.

DURING THIS PROCEDURE WE PLAN TO USE A CLOSED-LOOP SYSTEM WITH A STEEL TANK AND HAUL CONTENTS TO THE REQUIRED DISPOSAL, PER OCD RULE 19.15.17.

> KEITH Date: 2023.03.15

Digitally signed by KEITH **IMMATTY** 

14:09:27 -06'00'

Sundry ID 2719791

Plug Type	Тор	Bottom	Length	Tag	Sacks	Notes
						Perf and sqz. High
				Verify		cave karst area.
				circulated		Bring salt plug to
Surface Plug	0.00	562.00	562.00	to surface	165.00	surface
						Perf and sqz. High
						cave karst area.
				WOC and		Bring salt plug to
Shoe Plug	408.37	513.00	104.63	Tag	165.00	surface
						Perf and sqz. High
						cave karst area.
				WOC and		Bring salt plug to
Top of Salt @ 512	456.88	562.00	105.12	Tag	165.00	surface
				WOC and		
Base of Salt @ 1147	1085.53	1197.00	111.47	Tag	90.00	Same as below
				WOC and		
Delaware @ 1783	1715.17	1833.00	117.83	Tag	90.00	Same as below
				WOC and		
Shoe Plug	1722.10	1840.00	117.90	Tag	90.00	
Bonesprings @ 5000	4840.00	5050.00	210.00		25.00	
				WOC and		Leak test 500psi,
CIBP Plug	5965.00	6000.00	35.00	Tag	25.00	30mins

No more than 2000' is to be allowed between plugs in open hole, and no more than 3000' between plugs in cased hole.

Class H >7500'

Class C<7500'

Fluid used to mix the cement in R111P shall be saturated with the salts common to the section penetrated, and in suitable proportions, but not more than 3% calcium chloride by weight of cement will be considered the desired mixture whenever possible.

Critical, High Cave Karst: Cave Karst depth to surface

R111P: Solid plug in all annuli - 50' from bottom of salt to surface.

Class C: 1.32 ft^3/sx Class H: 1.06 ft^3/sx

Onshore Order 2.III.G Drilling Abandonment Requirements: "All formations bearing usable-quality water, oil, gas, or geothermal resources, and/or a prospectively valuable deposit of minerals shall be protected.

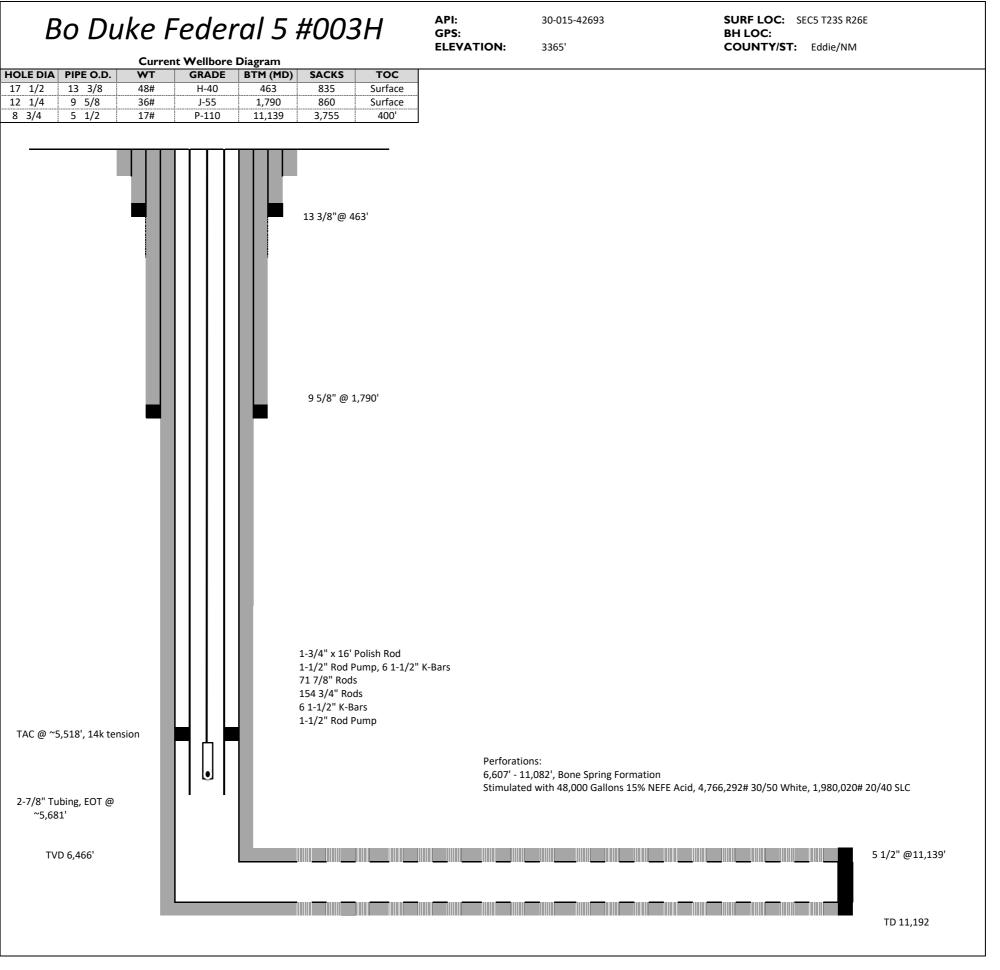
Cave Karst/Potash Cement	Critical KARST DEPTH/TOS to surface	500.00
-		
Shoe @	463.00	
Shoe @	1790.00	
Shoe @	11139.00	

Perforations
Perforations Top @ 6607.00 Bottom @ 11082.00

CIBP @ 6000.00

Received by OCD: 3/20/2023 10:48:24 AM

Page 8 of 15



7/5ALT -512 13/5ALT. -1,147003 13/5ALT. -1,147003 T/DIWR-1,78.5.4 T/BNSG. -5,00034

# BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

# Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

- 2. <u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-689-5981.
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.** 

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. <u>Dry Hole Marker</u>: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds). A weep hole shall be left if a metal plate is welded in place.

- 7. <u>Subsequent Plugging Reporting:</u> Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**
- 8. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.



# **United States Department of the Interior**

### BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

### **Reclamation Objectives and Procedures**

**Reclamation Objective:** Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any/all contaminants, scrap/trash, equipment, pipelines and powerlines (Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure). Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip (across the slope and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- 1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you

have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos Supervisory Petroleum Engineering Tech/Environmental Protection Specialist 575-234-5909 (Office), 575-361-2648 (Cell)

Arthur Arias Environmental Protection Specialist 575-234-6230

Crisha Morgan Environmental Protection Specialist 575-234-5987

Jose Martinez-Colon Environmental Protection Specialist 575-234-5951

Mark Mattozzi Environmental Protection Specialist 575-234-5713

Robert Duenas Environmental Protection Specialist 575-234-2229

Trishia Bad Bear, Hobbs Field Station Natural Resource Specialist 575-393-3612

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

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** 

COMMENTS

Action 198763

### **COMMENTS**

Operator:	OGRID:
Earthstone Operating, LLC	331165
1400 Woodloch Forest; Ste 300	Action Number:
The Woodlands, TX 77380	198763
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

### COMMENTS

Creat	ted By	Comment	Comment Date
johi	n.harrison	Accepted for record - NMOCD JRH 4/5/23 BLM approved P&A 3/15/23	4/5/2023

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

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 198763

## **CONDITIONS**

Operator:	OGRID:
Earthstone Operating, LLC	331165
1400 Woodloch Forest; Ste 300	Action Number:
The Woodlands, TX 77380	198763
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

### CONDITIONS

Created By	Condition	Condition Date
john.harrisoi	None	4/5/2023