

Form 3160-5  
(June 2019)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**5. Lease Serial No. **NMNM59383**

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator **NOVO OIL AND GAS NORTHERN DELAWARE LLC**3a. Address **300 N MARIENFIELD STREET SUITE 1000, MID** 3b. Phone No. (include area code)  
**(432) 695-4222**4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**SEC 5/T23S/R29E/NMP**

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
**CARTHEL FEDERAL SWD/2**9. API Well No. **3001523389**

10. Field and Pool or Exploratory Area

11. Country or Parish, State  
**EDDY/NM**

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

1) SET 4-1/2" CIBP @ 11,780'; CIRC. WELL W/ M.L.F.; PRES. TEST 4-1/2" CSG. @ 500# X HOLD FOR 30 MINS. 2) PUMP (25) SXs. CLASS "H" CMT. @ 11,780'-11,580'; WOC X TAG TOC. 3) PUMP (50) SXs. CLASS "H" CMT. @ 10,300'-9,810' (9-5/8" CSG.SHOE, T/STWN., T/WLCP.); WOC X TAG TOC. 4) PERF. X ATTEMPT TO SQZ. (70) SXs. CLASS "H" CMT. @ 8,085'-7,915' (SPACER PLUG); 5) PERF. X ATTEMPT TO SQZ. (75) SXs. CLASS "C" CMT. @ 6,648'-6,488' (T/BNSG.). 6) PERF. X ATTEMPT TO SQZ. (60) SXs. CLASS "C" CMT. @ 4,070'-3,930' (SPACER PLUG). 7) PERF. X ATTEMPT TO SQZ. (70) SXs. CLASS "C" CMT. @ 2,970'-2,813' (T/DLWR., 13-3/8" CSG.SHOE); WOC. X TAG TOC. 8) PERF. X ATTEMPT TO SQZ. (55) SXs. CLASS "C" CMT. @ 2,400'-2,280' (B/SALT); WOC X TAG TOC. 9) PERF. X ATTEMPT TO SQZ. (50) SXs. CLASS "C" CMT. @ 1,115'-1,005' (T/SALT); WOC X TAG TOC. 10) PERF. X ATTEMPT TO SQZ. (125) SXs. CLASS "C" CMT. @ 770'-446' (T/ANHY.); WOC X TAG TOC. 11) PERF. X CIRC. TO SURF., FILLING ALL ANNULI, (25) SXs. CLASS "C" CMT. @ 63'-3'. 12) DIG OUT X CUT OFF WELLHEAD 3' B.G.L.; VERIFY CMT. TO SURF. ON ALL ANNULI; 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

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

**DAVID EYLER / Ph: (432) 687-3033**Agent  
Title

Signature

(Electronic Submission)

Date **09/30/2024** 07/30/2024**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

**LONG VO / Ph: (575) 988-5402 / Approved**

Petroleum Engineer

Title

Date **09/30/2024**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **CARLSBAD**

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.

(Instructions on page 2)

## Additional Information

### Location of Well

0. SHL: SWNE / 1856 FNL / 2080 FEL / TWSP: 23S / RANGE: 29E / SECTION: 5 / LAT: 32.336143 / LONG: -104.0050729 ( TVD: 0 feet, MD: 0 feet )

BHL: SWNE / 1856 FNL / 2080 FEL / TWSP: 23S / SECTION: / LAT: 0.0 / LONG: 0.0 ( TVD: 0 feet, MD: 0 feet )

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(Form 3160-5, page 3)



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Sundry Print Report

09/23/2024

Well Name: CARTEL FEDERAL SWD	Well Location: T23S / R29E / SEC 5 / SWNE / 32.336143 / -104.0050729	County or Parish/State: EDDY / NM
Well Number: 2	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM59383	Unit or CA Name:	Unit or CA Number:
US Well Number: 300152338900S1	Operator: NOVO OIL AND GAS NORTHERN DELAWARE LLC	

LONG VO

Digitally signed by LONG VO  
Date: 2024.09.30 13:51:23  
-05'00'

## Notice of Intent

Sundry ID: 2803980

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 07/30/2024

Time Sundry Submitted: 04:50

Date proposed operation will begin: 08/25/2024

Procedure Description: 1) SET 4-1/2" CIBP @ 11,780'; CIRC. WELL W/ M.I.F.; PRES. TEST 4-1/2" CSG. @ 500# X HOLD FOR 30 MINS. 2) PUMP (28) SXS. CLASS "H" CMT. @ 11,780'-11,500'; WOC X TAG TOC. 3) PUMP (50) SXS. CLASS "H" CMT. @ 10,300'-9,810' (9-5/8" CSG. SHOE, T/STWN., T/WLCP.); WOC X TAG TOC. 4) PERF. X ATTEMPT TO SQZ. (70) SXS. CLASS "H" CMT. @ 8,085'-7,915' (SPACER PLUG); 5) PERF. X ATTEMPT TO SQZ. (75) SXS. CLASS "C" CMT. @ 6,648'-6,488' (T/BNSG.). 6) PERF. X ATTEMPT TO SQZ. (60) SXS. CLASS "C" CMT. @ 4,070'-3,930' (SPACER PLUG). 7) PERF. X ATTEMPT TO SQZ. (70) SXS. CLASS "C" CMT. @ 2,970'-2,813' (T/DLWR., 13-3/8" CSG. SHOE); WOC. X TAG TOC. 8) PERF. X ATTEMPT TO SQZ. (56) SXS. CLASS "C" CMT. @ 2,400'-2,280' (B/SALT); WOC X TAG TOC. 9) PERF. X ATTEMPT TO SQZ. (50) SXS. CLASS "C" CMT. @ 1,115'-1,005' (T/SALT); WOC X TAG TOC. 10) PERF. X ATTEMPT TO SQZ. (425) SXS. CLASS "C" CMT. @ 770'-446' (T/ANHY.); WOC X TAG TOC. 11) PERF. X CIRC. TO SURF., FILLING ALL ANNULI; (25) SXS. CLASS "C" CMT. @ 63'3"-12) DIG OUT X CUT OFF WELLHEAD 3' B.G.L.; VERIFY CMT. TO SURF. ON ALL ANNULI; 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

\* Run CBL from 4.5" CIBP to surface.  
\* TAG all Perf & Sqz.

## Surface Disturbance

Is any additional surface disturbance proposed?: No

## NOI Attachments

## Procedure Description

Permian\_Resources\_\_Proposed\_WBD\_\_Carthel\_Federal\_SWD\_002\_20240730164902.pdf

Permian\_Resources\_\_Current\_WBD\_\_Carthel\_Federal\_SWD\_002\_20240730164842.pdf

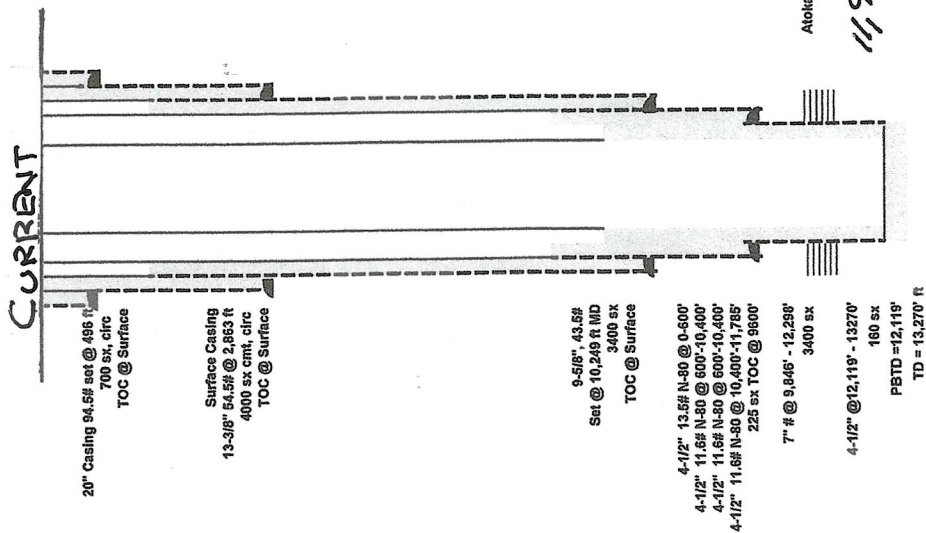
APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

Current Completion



30-015-23389

WELL NAME	CARTHEL FEDERAL #2	FORMATION	ATOKA
SURFACE LOCATION	2030' FNL & 2080' FEL OF SEC 5 OF T23S R29E	API Number	30-015-23389
SURFACE LOCATION	N	E	LONGITUDE
BOTTOM-HOLE LOCATION	LATITUDE	32.336648	-104.005094
ELEVATION	LATITUDE	32.336648	-104.005094
	GL	COUNTY	EDDY
	KB/RKB 17/3.017	STATE	NEW MEXICO
		FIELD	NORTHERN DELWARE BASIN
		TVD/TMD	12,119' / 12,119' PBTD



[illegible]

T/LANDY. ~ 720'  
T/SALT. ~ 4,060'  
B/SALT. ~ 2,340'  
T/DWR. ~ 2,920'  
T/ENSL. ~ 6,568'  
T/WLCP. ~ 7,860'  
T/STWN. ~ 10,187'  
T/AROKA ~ 11,785'

PROPOSED

ALPHA PORTS

20" Casing 9 5/8" set @ 455'  
700' ex. cline  
TOC @ Surface

Surface Casing  
13 3/8" N-40 @ 455'  
4000' ex. cline  
TOC @ Surface

9 5/8" x 30" Casing  
10 3/4" x 30" Casing  
11 3/4" x 30" Casing  
12 1/2" x 30" Casing

13 3/8" N-40 @ 455'  
11 3/8" N-40 @ 600'-10,400'  
11 5/8" N-40 @ 10,400'-11,785'  
225' ex. TOC @ 8000'

7" # @ 9,600' - 12,298'  
3400' ex

4-1/2" @ 12,115' - 13,270'  
160' ex  
PSTD = 12,115'  
TD = 13,270' ft

PERF. X SQZ. (60) SX5.0 11,780' - 11,880' - 11,934' - 12,000' - 12,050' - 12,100' - 12,150' - 12,200' - 12,250' - 12,300' - 12,350' - 12,400' - 12,450' - 12,500' - 12,550' - 12,600' - 12,650' - 12,700' - 12,750' - 12,800' - 12,850' - 12,900' - 12,950' - 13,000' - 13,050' - 13,100' - 13,150' - 13,200' - 13,250' - 13,300' - 13,350' - 13,400' - 13,450' - 13,500' - 13,550' - 13,600' - 13,650' - 13,700' - 13,750' - 13,800' - 13,850' - 13,900' - 13,950' - 14,000' - 14,050' - 14,100' - 14,150' - 14,200' - 14,250' - 14,300' - 14,350' - 14,400' - 14,450' - 14,500' - 14,550' - 14,600' - 14,650' - 14,700' - 14,750' - 14,800' - 14,850' - 14,900' - 14,950' - 15,000' - 15,050' - 15,100' - 15,150' - 15,200' - 15,250' - 15,300' - 15,350' - 15,400' - 15,450' - 15,500' - 15,550' - 15,600' - 15,650' - 15,700' - 15,750' - 15,800' - 15,850' - 15,900' - 15,950' - 16,000' - 16,050' - 16,100' - 16,150' - 16,200' - 16,250' - 16,300' - 16,350' - 16,400' - 16,450' - 16,500' - 16,550' - 16,600' - 16,650' - 16,700' - 16,750' - 16,800' - 16,850' - 16,900' - 16,950' - 17,000' - 17,050' - 17,100' - 17,150' - 17,200' - 17,250' - 17,300' - 17,350' - 17,400' - 17,450' - 17,500' - 17,550' - 17,600' - 17,650' - 17,700' - 17,750' - 17,800' - 17,850' - 17,900' - 17,950' - 18,000' - 18,050' - 18,100' - 18,150' - 18,200' - 18,250' - 18,300' - 18,350' - 18,400' - 18,450' - 18,500' - 18,550' - 18,600' - 18,650' - 18,700' - 18,750' - 18,800' - 18,850' - 18,900' - 18,950' - 19,000' - 19,050' - 19,100' - 19,150' - 19,200' - 19,250' - 19,300' - 19,350' - 19,400' - 19,450' - 19,500' - 19,550' - 19,600' - 19,650' - 19,700' - 19,750' - 19,800' - 19,850' - 19,900' - 19,950' - 20,000' - 20,050' - 20,100' - 20,150' - 20,200' - 20,250' - 20,300' - 20,350' - 20,400' - 20,450' - 20,500' - 20,550' - 20,600' - 20,650' - 20,700' - 20,750' - 20,800' - 20,850' - 20,900' - 20,950' - 21,000' - 21,050' - 21,100' - 21,150' - 21,200' - 21,250' - 21,300' - 21,350' - 21,400' - 21,450' - 21,500' - 21,550' - 21,600' - 21,650' - 21,700' - 21,750' - 21,800' - 21,850' - 21,900' - 21,950' - 22,000' - 22,050' - 22,100' - 22,150' - 22,200' - 22,250' - 22,300' - 22,350' - 22,400' - 22,450' - 22,500' - 22,550' - 22,600' - 22,650' - 22,700' - 22,750' - 22,800' - 22,850' - 22,900' - 22,950' - 23,000' - 23,050' - 23,100' - 23,150' - 23,200' - 23,250' - 23,300' - 23,350' - 23,400' - 23,450' - 23,500' - 23,550' - 23,600' - 23,650' - 23,700' - 23,750' - 23,800' - 23,850' - 23,900' - 23,950' - 24,000' - 24,050' - 24,100' - 24,150' - 24,200' - 24,250' - 24,300' - 24,350' - 24,400' - 24,450' - 24,500' - 24,550' - 24,600' - 24,650' - 24,700' - 24,750' - 24,800' - 24,850' - 24,900' - 24,950' - 25,000' - 25,050' - 25,100' - 25,150' - 25,200' - 25,250' - 25,300' - 25,350' - 25,400' - 25,450' - 25,500' - 25,550' - 25,600' - 25,650' - 25,700' - 25,750' - 25,800' - 25,850' - 25,900' - 25,950' - 26,000' - 26,050' - 26,100' - 26,150' - 26,200' - 26,250' - 26,300' - 26,350' - 26,400' - 26,450' - 26,500' - 26,550' - 26,600' - 26,650' - 26,700' - 26,750' - 26,800' - 26,850' - 26,900' - 26,950' - 27,000' - 27,050' - 27,100' - 27,150' - 27,200' - 27,250' - 27,300' - 27,350' - 27,400' - 27,450' - 27,500' - 27,550' - 27,600' - 27,650' - 27,700' - 27,750' - 27,800' - 27,850' - 27,900' - 27,950' - 28,000' - 28,050' - 28,100' - 28,150' - 28,200' - 28,250' - 28,300' - 28,350' - 28,400' - 28,450' - 28,500' - 28,550' - 28,600' - 28,650' - 28,700' - 28,750' - 28,800' - 28,850' - 28,900' - 28,950' - 29,000' - 29,050' - 29,100' - 29,150' - 29,200' - 29,250' - 29,300' - 29,350' - 29,400' - 29,450' - 29,500' - 29,550' - 29,600' - 29,650' - 29,700' - 29,750' - 29,800' - 29,850' - 29,900' - 29,950' - 30,000' - 30,050' - 30,100' - 30,150' - 30,200' - 30,250' - 30,300' - 30,350' - 30,400' - 30,450' - 30,500' - 30,550' - 30,600' - 30,650' - 30,700' - 30,750' - 30,800' - 30,850' - 30,900' - 30,950' - 31,000

\*TAG all Perf & 542.

11,920' - 11,934' \* Run CBL from CIBP to surface @ 11,780'

07/29/2024

**State of New Mexico**  
**Energy, Minerals and Natural Resources Department**  
**Oil Conservation Division**  
**Standard Plugging Conditions**



This document provides OCD's general plugging conditions of approval. It should be noted that the list below may not cover special plugging programs in unique and unusual cases, and OCD expressly reserves the right to impose additional requirements to the extent dictated by project conditions. The OCD also reserves the right to approve deviations from the below conditions if field conditions warrant a change. A C-103F NOI to P&A must be approved prior to plugging operations. Failure to comply with the conditions attached to a plugging approval may result in a violation of 19.15.5.11 NMAC, which may result in enforcement actions, including but not limited to penalties and a requirement that the well be re-plugged as necessary.

1. Notify OCD office at least 24 hours before beginning work and seek prior approval to implementing any changes to the C-103 NOI to PA.
  - North Contact, Monica Kuehling, 505-320-0243, [monica.kuehling@emnrd.nm.gov](mailto:monica.kuehling@emnrd.nm.gov)
  - South Contact, Gilbert Cordero, 575-626-0830, [gilbert.cordero@emnrd.nm.gov](mailto:gilbert.cordero@emnrd.nm.gov)
2. A Cement Bond Log is required to ensure strata isolation of producing formations, protection of water and correlative rights. A CBL must be run or be on file that can be used to properly evaluate the cement behind the casing.

Note: Logs must be submitted to OCD via OCD permitting. A copy of the log may be emailed to OCD inspector for faster review times, but emailing does not relieve the operators obligation to submit through OCD permitting.
3. Once Plugging operations have commenced, the rig must not rig down until the well is fully plugged without OCD approval. If gap in plugging operations exceeds 30 days, the Operator must file a subsequent sundry of work performed and revised NOI for approval on work remaining. At no time shall the rig be removed from location if it will result in waste or contamination of fresh water.
4. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
5. Fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
  - North, water or mud laden fluids
  - South, mud laden fluids
6. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to an OCD permitted disposal facility.

7. Class of cement shall be used in accordance with the below table for depth allowed.

Class	TVD Lower Limit (feet)
Class A/B	6,000
Class I/II	6,000
Class C or III	6,000
Class G and H	8,000
Class D	10,000
Class E	14,000
Class F	16,000

8. After cutting the well head any "top off cement jobs" must remain static for 30 minutes. Any gas bubbles or flow during this 30 minutes shall be reported to the OCD for approval of next steps.
9. Trucking companies being used to haul oilfield waste fluids (Commercial or Private) to a disposal facility shall have an approved OCD C-133 permit.
- A copy of this permit shall be available in each truck used to haul waste products.
  - It is the responsibility of the Operator and Contractor to verify that this permit is in place prior to performing work.
  - Drivers shall be able to produce a copy upon request of an OCD Compliance Officer.
10. Filing a [C-103] Sub. Plugging (C-103P) will serve as notification that the well has been plugged.
11. A [C-103] Sub. Release After P&A (C-103Q) shall be filed no later than a year after plugging and a site inspection by OCD Compliance officer to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to meet OCD standards before bonding can be released.
12. Produced water or brine-based fluids **may not** be used during any part of plugging operations without **prior OCD approval**.
13. Cementing;
- All cement plugs will be neat cement and a minimum of 100' in length. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
  - If cement does not exist between or behind the casing strings at recommended formation depths, the casing perforations will be shot at 50' below the formation top and the cement retainer shall be set no more than 50' from the perforations.
  - WOC (Wait on Cement) time will be:
    - 4 hours for accelerated (calcium chloride) cement.
    - 6 hours on regular cement.
  - Operator must tag all cement plugs unless it meets the below condition.
    - The operator has a passing pressure test for the casing annulus and the plug is only an inside plug.
  - If perforations are made operator must tag all plugs using the work string to tag unless given approval to tag with wireline by the correct contact from COA #1 of this document.
    - This includes plugs pumped underneath a cement retainer to ensure retainer seats properly after cement is pumped.
  - Cement can only be bull-headed with specific prior approval.
  - Squeeze pressures are not to exceed the exposed formations frac gradient or the burst pressure of the casing.

14. A cement plug is required to be set from 50' below to 50' above (straddling) formation tops, casing shoes, casing stubs, any attempted casing cut offs, anywhere the casing is perforated, DV tools.
- Perforation/Formation top plug. (When there is less than 100ft between the top perforation to the formation top.) These plugs are required to be started no greater than 50ft from the top perforation. However, the plug should be set below the formation top or as close to the formation top as possible for the maximum isolation between the formations. The plug is required to be a 100ft cement plug plus excess.
  - Perforation Plug when a formation top is not included. These plugs are required to be started within 50ft of the top perforation. The plug is required to be a 100ft cement plug plus excess.
  - Cement caps on top of bridge plugs or cement retainers for perforation plugs, that are not straddling a formation top, may be set using a bailer with a minimum of 35' of cement in lieu of the 100' plug. The bridge plug or retainer must be set within 50ft of the perforations.
  - Perforations are required below the surface casing shoe if cement does not exist behind the casing, a 30-minute minimum wait time will be required immediately after perforating 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. If gas is detected contact the OCD office for directions.
15. No more than 3000 feet is allowed between cement plugs in cased hole and no more than 2000 feet is allowed in open hole.
16. Formation Tops to be isolated with cement plugs, but not limited to are:
- Northwest See Figure A
  - South (Artesia) See Figure B
  - Potash See Figure C
    - In the R-111-P (Or as subsequently revised) Area a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, woe 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.
  - South (Hobbs) See Figure D1 and D2
  - Areas not provided above will need to be reviewed with the OCD on a case by case basis.
17. Markers
- Dry hole marker requirements 19.15.25.10.  
The operator shall mark the exact location of plugged and abandoned wells with a steel marker not less than four inches in diameter set in cement and extending at least four feet above mean ground level. The marker must include the below information:
    1. Operator name
    2. Lease name and well number
    3. API number
    4. Unit letter
    5. Section, Township and Range

- AGRICULTURE (Below grade markers)

In Agricultural areas a request can be made for a below ground marker. For a below ground marker the operator must file their request on a C-103 notice of intent, and it must include the following;

- A) Aerial photo showing the agricultural area
- B) Request from the landowner for the below ground marker.
- C) Subsequent plugging report for a well using a below ground marker must have an updated C-102 signed by a certified surveyor for SHL.

Note: A below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to OCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to OCD. OCD requires a current survey to verify the location of the below ground marker, however OCD will accept a GPS coordinate that were taken with a GPS that has an accuracy of within 15 feet.

18. If work has not commenced within 1 year of the approval of this procedure, the approval is automatically expired. After 1 year a new [C-103] NOI Plugging (C-103F) must be submitted and approved prior to work.

Figure A

North Formations to be isolated with cement plugs are:

- San Jose
- Nacimiento
- Ojo Alamo
- Kirtland
- Fruitland
- Picture Cliffs
- Chacra (if below the Chacra Line)
- Mesa Verde Group
- Mancos
- Gallup
- Basin Dakota (plugged at the top of the Graneros)
- Deeper formations will be reviewed on a case-by-case basis

Figure B

South (Artesia) Formations to be isolated with cement plugs are:

- Fusselman
- Montoya
- Devonian
- Morrow
- Strawn
- Atoka
- Permo-Penn
- Wolfcamp
- Bone Springs
- Delaware , in certain areas where the Delaware is subdivided into;
  - 1. Bell Canyon
  - 2. Cherry Canyon
  - 3. Brushy Canyon
- Any salt sections
- Abo
- Yeso
- Glorieta
- San Andres
- Greyburg
- Queen
- Yates

## Figure C

## Potash Area R-111-P

## T 18S – R 30E

Sec 10 Unit P. Sec 11 Unit M,N. Sec 13 Unit L,M,N. Sec 14 Unit C -P. Sec 15 Unit A G,H,I,J,K,N,O,P. Sec 22 Unit All

except for M. Sec 23, Sec 24 Unit C,D,E,L, Sec 26 Unit A-G, Sec 27 Unit A,B,C

## T 19S – R 29E

Sec 11 Unit P. Sec 12 Unit H-P. Sec 13. Sec 14 Unit A,B,F-P. Sec 15 Unit P. Sec 22 Unit A,B,C,F,G,H,I,J K,N,O,P. Sec 23.

Sec 24. Sec 25 Unit D. Sec 26 Unit A- F. Sec 27 Unit A,B,C,F,G,H.

## T 19S – R 30E

Sec 2 Unit K,L,M,N. Sec 3 Unit I,L,M,N,O,P. Sec 4 Unit C,D,E,F,G,I-P. Sec 5 Unit A,B,C,E-P. Sec 6 Unit I,O,P. Sec 7 – Sec

10. Sec 11 Unit D, G—P. Sec 12 Unit A,B,E-P. Sec 13 Unit A-O. Sec 14-Sec 18. Sec 19 Unit A-L, P. Sec 20 – Sec 23. Sec

24 Unit C,D,E,F,L,M,N. Sec 25 Unit D. Sec 26 Unit A-G, I-P. Sec 27, Sec 28, Sec 29 Unit

A,B,C,D,F,G,H,I,J,O,P. Sec 32

Unit A,B,G,H,I,J,N,O,P. Sec 33. Sec 34. Sec 35. Sec 36 Unit D,E,F,I-P.

## T 19S – R 31E

Sec 7 Unit C,D,E,F,L. Sec 18 Unit C,D,E,F,G,K,L. Sec 31 Unit M. Sec 34 Unit P. Sec 35 Unit M,N,O. Sec 36 Unit O,P.

## T 20S – R 29E

Sec 1 Unit H,I,P. Sec 13 Unit E,L,M,N. Sec 14 Unit B-P. Sec 15 Unit A,H,I,J,N,O,P. Sec 22 Unit A,B,C,F,G,H,I,J,O,P. Sec

23. Sec 24 Unit C,D,E,F,G,J-P. Sec 25 Unit A-O. Sec 26. Sec 27 Unit A,B,G,H,I,J,O,P. Sec 34 Unit A,B,G,H.

Sec 35 Unit

A-H. Sec 36 Unit B-G.

## T 20S – R 30E

Sec 1 – Sec 4. Sec 5 Unit A,B,C,E-P. Sec 6 Unit E,G-P. Sec 7 Unit A-H,I,J,O,P. Sec 8 – 17. Sec 18 Unit A,B,G,H,I,J,O,P.

Sec 19 Unit A,B,G,H,I,J,O,P. Sec 20 – 29. Sec 30 Unit A-L,N,O,P. Sec 31 Unit A,B,G,H,I,P. Sec 32 – Sec 36.

## T 20S – R 31E

Sec 1 Unit A,B,C,E-P. Sec 2. Sec 3 Unit A,B,G,H,I,J,O,P. Sec 6 Unit D,E,F,J-P. Sec 7. Sec 8 Unit E-P. Sec 9 Unit E,F,J-P.

Sec 10 Unit A,B,G-P. Sec 11 – Sec 36.

## T 21S – R 29E

Sec 1 – Sec 3. Sec 4 Unit L1 – L16,I,J,K,O,P. Sec 5 Unit L1. Sec 10 Unit A,B,H,P. Sec 11 – Sec 14. Sec 15 Unit A,H,I. Sec

23 Unit A,B. Sec 24 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 25 Unit A,O,P. Sec 35 Unit G,H,I,J,K,N,O,P. Sec 36 A,B,C,F – P.

## T 21S – R 30E

Sec 1 – Sec 36

T 21S – R 31E

Sec 1 – Sec 36

T 22S – R 28E

Sec 36 Unit A,H,I,P.

T 22S – R 29E

Sec 1. Sec2. Sec 3 Unit I,J,N,O,P. Sec 9 Unit G – P. Sec 10 – Sec 16. Sec 19 Unit H,I,J. Sec 20 – Sec 28. Sec 29 Unit

A,B,C,D,G,H,I,J,O,P. Sec 30 Unit A. Section 31 Unit C – P. Sec 32 – Sec 36

T 22S – R 30E

Sec 1 – Sec 36

T 22S – R 31E

Sec 1 – Sec 11. Sec 12 Unit B,C,D,E,F,L. Sec 13 Unit E,F,K,L,M,N. Sec 14 – Sec 23. Sec 24 Unit C,D,E,F,K,L,M,N. Sec 25

Unit A,B,C,D. Sec 26 Unit A,BC,D,G,H. Sec 27 – Sec 34.

T 23S – R 28E

Sec 1 Unit A

T 23S – R 29E

Sec 1 – Sec 5. Sec 6 Unit A – I, N,O,P. Sec 7 Unit A,B,C,G,H,I,P. Sec 8 Unit A – L, N,O,P. Sec 9 – Sec 16. Sec 17 Unit

A,B,G,H,I,P. Sec 21 – Sec 23. Sec 24 Unit A – N. Sec 25 Unit D,E,L. Sec 26. Sec 27. Sec 28 Unit A – J, N,O,P. Sec 33

Unit A,B,C. Sec 34 Unit A,B,C,D,F,G,H. Sec 35. Sec 36 Unit B,C,D,E,F,G,K,L.

T 23S – R 30E

Sec 1 – Sec 18. Sec 19 Unit A – I,N,O,P. Sec 20, Sec 21. Sec 22 Unit A – N, P. Sec 23, Sec 24, Sec 25. Sec 26 Unit

A,B,F-P. Sec 27 Unit C,D,E,I,N,O,P. Sec 28 Unit A – H, K,L,M,N. Sec 29 Unit A – J, O,P. Sec 30 Unit A,B. Sec 32 A,B. Sec

33 Unit C,D,H,I,O,P. Sec 34, Sec 35, Sec 36.

T 23S – R 31E

Sec 2 Unit D,E,J,O. Sec 3 – Sec 7. Sec 8 Unit A – G, K – N. Sec 9 Unit A,B,C,D. Sec 10 Unit D,P. Sec 11 Unit G,H,I,J,M,N,O,P. Sec 12 Unit E,L,K,M,N. Sec 13 Unit C,D,E,F,G,J,K,L,M,N,O. Sec 14. Sec 15 Unit A,B,E – P. Sec 16 Unit

I, K – P. Sec 17 Unit B,C,D,E, I – P. Sec 18 – Sec 23. Sec 24 Unit B – G, K,L,M,N. Sec 25 Unit B – G, J,K,L. Sec 26 – Sec

34. Sec 35 Unit C,D,E.

T 24S – R 29E

Sec 2 Unit A, B, C, D. Sec 3 Unit A

T 24S – R 30E

Sec 1 Unit A – H, J – N. Sec 2, Sec 3. Sec 4 Unit A,B,F – K, M,N,O,P. Sec 9 Unit A – L. Sec 10 Unit A – L, O,P. Sec 11.

Sec 12 Unit D,E,L. Sec 14 Unit B – G. Sec 15 Unit A,B,G,H.

T 24S – R 31E

Sec 3 Unit B – G, J – O. Sec 4. Sec 5 Unit A – L, P. Sec 6 Unit A – L. Sec 9 Unit A – J, O, P. Sec 10 Unit B – G, K – N. Sec

35 Unit E – P. Sec 36 Unit E, K, L, M, N.

T 25S – R 31E

Sec 1 Unit C, D, E, F. Sec 2 Unit A – H.

Figure D1 and D2

South (Hobbs) Formations to be isolated with cement plugs are:

The plugging requirements in the Hobbs Area are based on the well location within specific areas of the Area (See Figure D1). The Formations in the Hobbs Area to be isolated with cement plugs are (see Figure D2)

Figure D1 Map

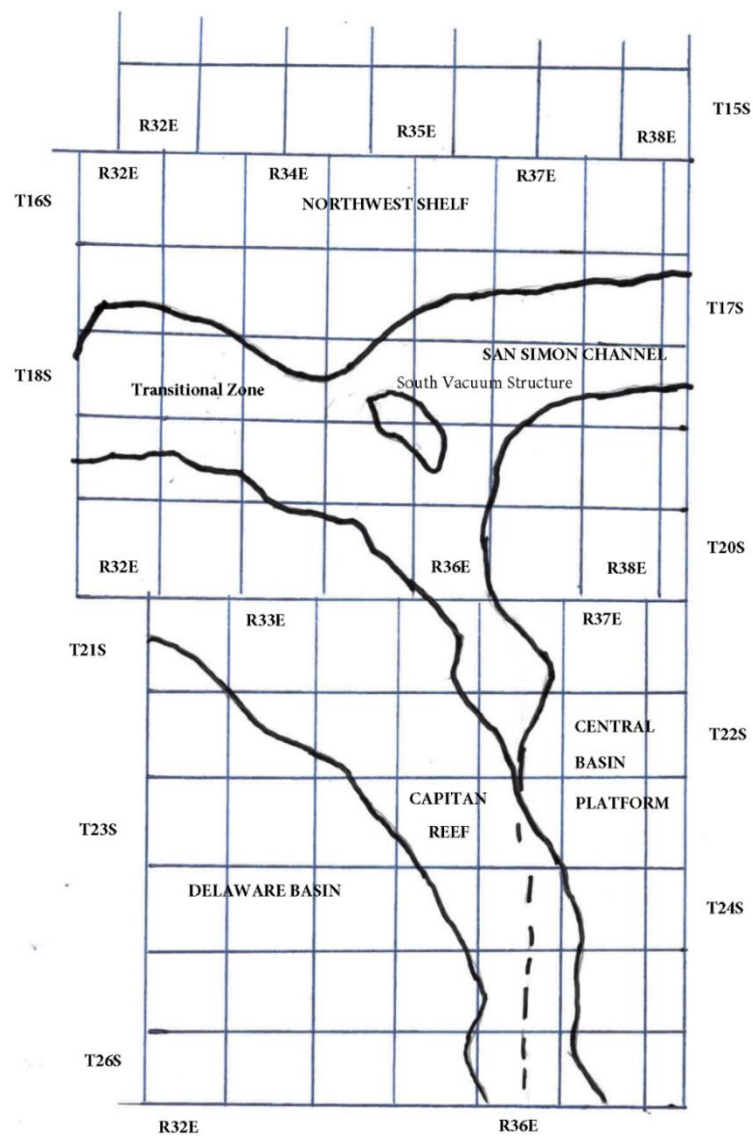


Figure D2 Formation Table

100' P'lug to isolate upper and lower fresh water zones (typiailly 2.50' to 350')						
NDIthwest Shelf	C;iptan Reef Area	Tran5ition Zone	San Simon Oh.annel	South \acJUUm Structure	Delaware Basin	Ce<n,tiral Basin Platform
Granit \./ash (Detrital basement material and fractured pre-Cambrian basement rock)	Siluro-Devonian	Morrow	Siluro-Devonian	Ellenburger	Siluro-Devonian	Granit \./ash (Detrital basement material, fractured pre-Cambrian basement rock and fracture Mafic Volcanic intrusives).
Montoya	Mississippian	Atoka	Morrow	Mckee	Morrow	Ellenburger
Fusselman	Morrow	Strawn	\./olfcamp	Siluro-Devonian	Atoka	Connell
Woodford	Atoka	Cisco	Abo Reef	Woodford	Strawn	Waddell
Siluro-Devonian	Strawn	Pennsylvanian	Bone Spring	Mississippian	Pennsylvanian	Mckee
Chester	Pennsylvanian	\./olfcamp	Delaware	Barnett Shale	Low er \./olfcamp	Simpson Group
Austin	\./olfcamp	Bone Spring	San Andres	Morrow	Upper \./olfcamp	Montoya
Mississippian	Abo Reef, if present	Delaware	Queen	Atoka	\./olfcamp	Fusselman
Morrow	Abo, if present	San Andres	Yates	Strawn	Third Bone Spring Sand (Top of \./olfbone)	Silurian
Atoka	Queen, if present	Grayburg-San Andres	Base of Salt	Canyon	First Bone Spring Sand (Top of Lower Bone Spring)	Devonian
Lower Pennsylvanian	Bone Spring	Queen	Rustler	Pennsylvanian	Bone Spring	Strawn
Cisco-Canyon	Delaware	Seven Rivers		Blinebry	Brushy Canyon	Pennsylvanian
Pennsylvanian	Base Capitan Reef	Yates		Bone Spring	Delaw are (Base of Salt)	\./olfcamp
Bough	Seven Rivers	Base of Salt		San Andres	Rustler	Abo
\./olfcamp	Yates	Rustler		Queen		Abo Reef
Abo	Top Capitan Reef			Base of Salt		Drinkard
Abo Reef, if present	Base of Salt			Rustler		Tubb
Yeso (Township 15 South to Township 17 South)	Rustler					Blinebry
Drinkard or Low er Yeso (Township 15 South to Township 17 South)						Paddock
Tubb (Township 15 South to Township 17 South)						Glorieta
Blinebry (Township 15 South to Township 17 South)						San Andres
Paddock (Township 15 South to Township 17 South)						Grayburg
Glorieta						Grayburg-San Andres
San Andres						Queen
Queen (Township 15 South to Township 17 South)						Seven Rivers
Seven Rivers (Township 15 South to Township 17 South)						Yates
Yates (Township 15 South to Township 17 South)						Base of Salt
Base of Salt						Rustler
Rustler						

**District I**  
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**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 388547

CONDITIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 388547
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
loren.diede	Notify NMOCD 24 hours prior to beginning P&A operations.	10/8/2024
loren.diede	Submit CBL into NMOCD Imaging via Electronic Permitting.	10/8/2024
loren.diede	NMOCD concurs with the BLM modifications to the proposed P&A procedure dated 09-30-2024.	10/8/2024
loren.diede	NMOCD does not consider this well to be within the LPCH restricted area and therefore an above-ground P&A marker is to be used.	10/8/2024