

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other INJ-DIS 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. NMNM59383 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. TACO TRUCK FED SWD 1
2. Name of Operator NOVO OIL AND GAS NORTHERN DELAWARE LLC		9. API Well No. 30-015-53310
3a. Address 1001 West Wilshire Boulevard Suite 206, Oklahoma City, OK	3b. Phone No. (include area code) (405) 404-0414	10. Field and Pool, or Exploratory DEVONIAN
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface LOT 1 / 852 FNL / 773 FEL / LAT 32.3393933 / LONG -104.0008143 At proposed prod. zone LOT 1 / 852 FNL / 773 FEL / LAT 32.3393933 / LONG -104.0008143		11. Sec., T. R. M. or Blk. and Survey or Area SEC 5/T23S/R29E/NMP
14. Distance in miles and direction from nearest town or post office* 6 miles		12. County or Parish EDDY
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 773 feet		16. No of acres in lease 17. Spacing Unit dedicated to this well 0.0
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 789 feet		19. Proposed Depth 15250 feet / 15250 feet
20. BLM/BIA Bond No. in file FED:		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3022 feet
22. Approximate date work will start* 03/21/2022		23. Estimated duration 90 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature (Electronic Submission)	Name (Printed/Typed) BRIAN WOOD / Ph: (405) 404-0414	Date 05/21/2022
Title President		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 09/20/2022
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field Office		

Application approval 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.
 Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 09/20/2022

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1,
2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015- 53310	² Pool Code 96101	³ Pool Name SWD; DEVONIAN
⁴ Property Code 333730	⁵ Property Name TACO TRUCK FED SWD	
⁷ OGRID No. 372920	⁸ Operator Name NOVO OIL & GAS NORTHERN DELAWARE, LLC	⁶ Well Number 1
		⁹ Elevation 3022.4

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	5	23 S	29 E		852	NORTH	773	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>N89°58'23"E 2641.56 FT</p> <p>NW CORNER SEC. 5 LAT. = 32.3417741°N LONG. = 104.0153768°W NMSP EAST (FT) N = 488215.14 E = 639533.08</p> <p>LOT 4</p>		<p>N/4 CORNER SEC. 5 LAT. = 32.3417556°N LONG. = 104.0068255°W NMSP EAST (FT) N = 488216.38 E = 642174.05</p> <p>LOT 3</p>		<p>S89°55'57"E 2642.41 FT</p> <p>LOT 2</p>		<p>LOT 1</p> <p>852'</p> <p>773'</p> <p>SURFACE LOCATION</p>		<p>S00°39'50"W 2668.63 FT</p>	
<p>W/4 CORNER SEC. 5 LAT. = 32.3343323°N LONG. = 104.0155256°W NMSP EAST (FT) N = 485507.76 E = 639495.15</p>		<p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD83.</p>		<p>NE CORNER SEC. 5 LAT. = 32.3417246°N LONG. = 103.9982714°W NMSP EAST (FT) N = 488213.27 E = 644815.88</p>		<p>E/4 CORNER SEC. 5 LAT. = 32.3343915°N LONG. = 103.9983985°W NMSP EAST (FT) N = 485545.40 E = 644784.96</p>		<p>S00°40'49"W 2660.25 FT</p>	
<p>SW CORNER SEC. 5 LAT. = 32.3269490°N LONG. = 104.0156765°W NMSP EAST (FT) N = 482821.66 E = 639456.52</p>		<p>S/4 CORNER SEC. 5 LAT. = 32.3270383°N LONG. = 104.0071330°W NMSP EAST (FT) N = 482862.06 E = 642095.38</p>		<p>SE CORNER SEC. 5 LAT. = 32.3270813°N LONG. = 103.9985277°W NMSP EAST (FT) N = 482885.93 E = 644753.39</p>		<p>S89°07'22"W 2639.76 FT</p>		<p>S89°29'08"W 2658.70 FT</p>	

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

1-13-21

Signature: *Brian Wood* Date: **1-13-21**

Printed Name: **BRIAN WOOD**

E-mail Address: **brian@permitswest.com**

(505) 466-8120

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 16, 2020

Date of Survey

Signature and Seal of Professional Surveyor: *[Signature]*

Certificate Number: **12797**

NEW MEXICO PROFESSIONAL SURVEYOR

FRANCIS JARAMILA

NO. 6300E



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

Drilling Plan Data Report

09/20/2022

APD ID: 10400084443

Submission Date: 05/21/2022

Highlighted data
reflects the most
recent changes

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC

Well Name: TACO TRUCK FED SWD

Well Number: 1

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
8469620	QUATERNARY	3022	0	0	OTHER : None	USEABLE WATER	N
8469621	RUSTLER ANHYDRITE	2654	368	368	ANHYDRITE	NONE	N
8469622	UNKNOWN	278	2744	2744	OTHER : BX BLM Salt	NONE	N
8469623	LAMAR	79	2943	2943	LIMESTONE	NONE	N
8469624	CHERRY CANYON	-1009	4031	4031	SANDSTONE	NATURAL GAS, OIL	N
8469625	BRUSHY CANYON	-2173	5195	5195	SANDSTONE	NATURAL GAS, OIL	N
8469626	BONE SPRING LIME	-3556	6578	6578	LIMESTONE	NATURAL GAS, OIL	N
8469627	BONE SPRING 1ST	-4625	7647	7647	SANDSTONE	NATURAL GAS, OIL	N
8469628	BONE SPRING 2ND	-4840	7862	7862	OTHER : Carbonate	NATURAL GAS, OIL	N
8469629	BONE SPRING 2ND	-5353	8375	8375	SANDSTONE	NATURAL GAS, OIL	N
8469630	BONE SPRING 3RD	-5706	8728	8728	OTHER : Carbonate	NATURAL GAS, OIL	N
8469631	BONE SPRING 3RD	-6556	9578	9578	SANDSTONE	NATURAL GAS, POTASH	N
8469632	WOLFCAMP	-6849	9871	9871	OTHER : XY Carbonate	NATURAL GAS, OIL	N
8469633	WOLFCAMP	-7008	10030	10030	OTHER : A Carbonate	NATURAL GAS, OIL	N
8469634	WOLFCAMP	-7277	10299	10299	OTHER : B Carbonate	NATURAL GAS, OIL	N
8469635	WOLFCAMP	-7925	10947	10947	OTHER : C Carbonate	NATURAL GAS, OIL	N
8469636	WOLFCAMP	-8146	11168	11168	OTHER : D Carbonate	NATURAL GAS, OIL	N

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
8469637	STRAWN	-8626	11648	11648	SANDSTONE	NATURAL GAS, OIL	N
8469638	ATOKA	-8799	11821	11821	SANDSTONE	NATURAL GAS, OIL	N
8469639	MORROW	-9731	12753	12753	SANDSTONE	NATURAL GAS, OIL	N
8469640	BARNETT	-10212	13234	13234	SHALE	NATURAL GAS, OIL	N
8469641	MISSISSIPPIAN	-10686	13708	13708	LIMESTONE	NATURAL GAS, OIL	N
8469642	WOODFORD	-11280	14302	14302	SHALE	NATURAL GAS, OIL	N
8469643	DEVONIAN	-11392	14414	14414	OTHER : Carbonate	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M**Rating Depth:** 15000

Equipment: A 13.625" 10,000-psi BOP system will be installed on a multi-bowl (speed head) wellhead with a 13.625" flanged casing spool. Top flange of casing spool will be set in a cellar below ground level. BOP system will consist of a single pipe ram on the bottom, mud cross, double pipe ram with blind rams on bottom and pipe rams on top, and annular preventer. Blowout preventer will be installed on top of the 13.375" surface casing and will remain installed to TD of the well. Wellhead, blowout preventer, and choke manifold diagrams are included.

Requesting Variance? YES

Variance request: Variance is requested to use a co-flex hose between the BOP system and choke manifold. A typical coflex pressure test certificate is attached. An equipment specific co-flex pressure test certificate will be on site when testing the BOP.

Testing Procedure: BOP system will be isolated with a test plug and tested by an independent tester to 250-psi low and 10,000-psi high for 10 minutes. Surface casing will be pressure tested to 250-psi low and 1500-psi high. Intermediate casing will be pressure tested to 250-psi low and (0.22 psi x shoe TVD which is equivalent to 631 psi) high for 30 minutes. All casing strings will be tested in accordance with Onshore Order 2 III.B.1.h

Choke Diagram Attachment:

Taco_Truck_Choke_20220414094521.pdf

BOP Diagram Attachment:

Taco_Truck_BOP_20220414094531.pdf

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1**Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	26	20.0	NEW	API	N	0	438	0	438	3022	2584	438	J-55	94	BUTT	1.125	1.125	DRY	1.6	DRY	1.6
2	OTHER	20	13.375	NEW	API	N	0	2869	0	2869	3022	153	2869	HCK-55	54.5	BUTT	1.125	1.125	DRY	1.6	DRY	1.6
3	INTERMEDIATE	12.25	9.625	NEW	API	N	0	9871	0	9871	3022	-6849	9871	OTHER	40	BUTT	1.125	1.125	DRY	1.6	DRY	1.6
4	PRODUCTION	8.75	7.625	NEW	NON API	N	8871	14424	8871	14424	-5849	-11402	5553	P-110	39	OTHER - VAM SEMI-FJ	1.125	1.125	DRY	1.6	DRY	1.6
5	OPEN HOLE	6.75					14424	15250					826									

Casing Attachments**Casing ID:** 1 **String** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing_Design_Assumptions_20220521071059.pdf

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1**Casing Attachments****Casing ID:** 2 **String** OTHER - Salt**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing_Design_Assumptions_20220521071137.pdf

Casing ID: 3 **String** INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing_Design_Assumptions_20220521071211.pdf

Casing ID: 4 **String** PRODUCTION**Inspection Document:****Spec Document:**

7.625_Casing_Spec_20220414095107.pdf

Tapered String Spec:**Casing Design Assumptions and Worksheet(s):**

Casing_Design_Assumptions_20220521071246.pdf

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1**Casing Attachments****Casing ID:** 5 **String** OPEN HOLE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):****Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Tail		0	438	717	1.84	13.2	1319	100	Class C	Gel + Accelerator + LCM
PRODUCTION	Lead		0	0	0	0	0	0	0	None	None
PRODUCTION	Tail		0	1442 4	460	1.59	13.2	731	20	Class H	Fluid Loss + Retarder + LCM
OTHER	Lead		0	2869	1106	2.56	11.8	2831	20	Class C	Gel + Retarder + LCM
OTHER	Tail		0	2869	175	1.32	14.8	231	20	Class C	Gel + Retarder + LCM
INTERMEDIATE	Lead		0	9871	1909	3.13	10.2	5975	50	Class C or H	Fluid Loss ++ Retarder + LCM, maybe beads for compressive strength
INTERMEDIATE	Tail		0	9871	150	1.39	13.8	208	50	Class C or H	Fluid Loss + Retarder + LCM

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1**Section 5 - Circulating Medium****Mud System Type:** Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:****Describe what will be on location to control well or mitigate other conditions:** All necessary mud products (barite, bentonite, LCM) to control weight and fluid loss will be on site at all times. Mud program may change due to hole conditions.**Describe the mud monitoring system utilized:** An electronic PVT mud system will monitor flow rate, pump pressure, stroke rate, and volume**Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	438	OTHER : Fresh Water Spud Mud	8.3	8.3							
438	2869	OTHER : Brine	9.8	10.2							
2869	9871	OTHER : Cut Brine	9	9.5							
9871	14424	OTHER : Brine	9.5	12.5							
14424	15250	OTHER : Brine	8.5	12.5							

Operator Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC**Well Name:** TACO TRUCK FED SWD**Well Number:** 1

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

A 2-person mud logging program will be used from 3000' to TD. GR log will be acquired by MDW tools from the intermediate casing to TD.

List of open and cased hole logs run in the well:

GAMMA RAY LOG,

Coring operation description for the well:

No core or drill stem test is planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8387**Anticipated Surface Pressure:** 5031**Anticipated Bottom Hole Temperature(F):** 265**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards****Hydrogen Sulfide drilling operations plan required?** YES**Hydrogen sulfide drilling operations**

Taco_Truck_H2S_Plan_v2_20220521072827.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:**Other proposed operations facets description:**

This was previously submitted as Rana Salada Fed Com 05 124H, a horizontal oil well. Novo changed plans and would like to submit as a SWD vertical well.

Injection string will be 5.5, 20#, P-110EC, BTC set at 14,424.

Other proposed operations facets attachment:

Taco_Truck_Drill_Plan_Revised_20220414100222.pdf

Taco_Truck_Speedhead_Specs_20220414100234.pdf

10M_Well_Control_Plan_20220414100246.pdf

CoFlex_Certs_20220414100930.pdf

Other Variance attachment:

Casing_Cement_Variance_20220414100257.pdf

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	NOVO Oil & Gas Northern Delaware, LLC
WELL NAME & NO.:	Taco Truck Fed SWD 1
LOCATION:	Sec 5-23S-29E-NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input checked="" type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **20** inch surface casing shall be set at approximately **150** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours

after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash. Inadequate cement volumes proposed for 13 3/8 inch casing. Operator must have at least 40% more cement to meet BLM's minimum excess cementing requirements.
 - ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
4. The minimum required fill of cement behind the **7-5/8** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

WELL COMPLETION

The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on open-hole logs. If hydrocarbon shows occur while drilling, the operator shall notify the BLM.

The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open hole logs from TD to top of Devonian

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
2. Restrict the injection fluid to the approved formation.
3. If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the

requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall

commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



H₂S Drilling Operations Plan

- a. All personnel will be trained in H₂S working conditions as required by Onshore Order 6 before drilling out of the surface casing.
- b. Two briefing areas will be established. Each will be at least 150' from the wellhead, perpendicular from one another, and easily entered and exited. See H₂S page 5 for more details.
- c. H₂S Safety Equipment/Systems:
 - i. Well Control Equipment
 - Flare line will be $\geq 150'$ from the wellhead and ignited by a pilot light.
 - Beware of SO₂ created by flaring.
 - Choke manifold will include a remotely operated choke.
 - Mud gas separator
 - ii. Protective Equipment for Essential Personnel
 - Every person on site will be required to wear a personal H₂S and SO₂ monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest.
 - One self-contained breathing apparatus (SCBA) 30-minute rescue pack will be at each briefing area. Two 30-minute SCBA packs will be stored in the safety trailer.
 - Four work/escape packs will be on the rig floor. Each pack will have a long enough hose to allow unimpaired work activity.
 - Four emergency escape packs will be in the doghouse for emergency evacuation.
 - Hand signals will be used when wearing protective breathing apparatus.
 - Stokes litter or stretcher
 - Two full OSHA compliant body harnesses
 - A 100-foot long x 5/8" OSHA compliant rope
 - One 20-pound ABC fire extinguisher

iii. H₂S Detection & Monitoring Equipment

- Every person on site will be required to wear a personal H₂S and SO₂ monitor at all times while on site. Monitors will not be worn on hard hats. Monitors will be worn on the front of the chest.
- A stationary detector with three sensors will be in the doghouse.
- Sensors will be installed on the rig floor, bell nipple, and at the end of the flow line or where drilling fluids are discharged.
- Visual alarm will be triggered at 10 ppm.
- Audible alarm will be triggered at 10 ppm.
- Calibration will occur at least every 30 days. Gas sample tubes will be kept in the safety trailer.

iv. Visual Warning System

- Color-coded H₂S condition sign will be set at the entrance to the pad.
- Color-coded condition flag will be installed to indicate current H₂S conditions.
- Two wind socks will be installed that will be visible from all sides.

v. Mud Program

- A water based mud with a pH of ≥ 10 will be maintained to control corrosion, H₂S gas returns to the surface, and minimize sulfide stress cracking and embrittlement.
- Drilling mud containing H₂S gas will be degassed at an optimum location for the rig configuration.
- This gas will be piped into the flare system.
- Enough mud additives will be on location to scavenge and/or neutralize H₂S where formation pressures are unknown.

vi. Metallurgy

- All equipment that has the potential to be exposed to H₂S will be suitable for H₂S service.
- Equipment that will meet these metallurgical standards include the drill string, casing, wellhead, BOP assembly, casing head and spool, rotating head, kill lines, choke, choke manifold and lines, valves, mud-gas separators, DST tools, test units, tubing, flanges, and other related equipment (elastomer packings and seals).

vii. Communication from well site

- Cell phones and/or two-way radios will be used to communicate from the well site.

- d. A remote-controlled choke, mud-gas separator, and a rotating head will be installed before drilling or testing any formation expected to contain H₂S.

Company Personnel to be Notified

Kurt Shipley, Vice-President - Operations Office: (405) 609-1596

Local & County Agencies

Loving Fire Department 911 or (575) 745-3600

Eddy County Sheriff (Carlsbad) 911 (575) 887-7551

Eddy County Emergency Management (Carlsbad) (575) 887-9511

Carlsbad Medical Center Hospital (575) 887-4100

Eddy County South Road Department (Carlsbad) (575) 885-4835

State Agencies

NM State Police (Carlsbad) (575) 885-3138

NM Oil Conservation (Artesia) (575) 748-1283

NM Oil Conservation (Santa Fe) (505) 476-3440

NM Dept. of Transportation (Roswell) (575) 637-7201

Federal Agencies

BLM Carlsbad Field Office (575) 234-5972

National Response Center (800) 424-8802

US EPA Region 6 (Dallas) (800) 887-6063

(214) 665-6444

Residents within 2 miles

none

Air Evacuation

Med Flight Air Ambulance (Albuquerque) (800) 842-4431

Lifeguard (Albuquerque) (888) 866-7256

Veterinarians

Desert Willow Veterinary Services (Carlsbad) (575) 885-3399

Animal Care Center (Carlsbad) (575) 885-5352

NOVO OIL & GAS NORTHERN DELAWARE, LLC

TACO TRUCK CTB & SWD PADS

SEC. 5, T-23-S, R-29-E, N.M.P.M.,
EDDY COUNTY, N.M.*Before digging
call for utility
line location!*highest ground
to Northwindssocks on rig floor
& at mud tanksflare >150' from wellhead
flare line straightPRIMARY safety briefing area
>150' from wellhead
& exit routesecondary briefing area
>150' from wellhead
& exit routewarning sign
& windssockprevailing wind
from SouthCTB OVERALL DIMENSIONS: 350' X 350' = 2.812 ACRES
SWD OVERALL DIMENSIONS: 680' X 460' = 7.182 ACRES**Notes:**

1. All Bearings, distances and coordinates are based upon the New Mexico State Plane Coordinate System, East Zone, NAD 83, in U.S. survey feet.
2. Contractor shall contact "One-Call" for location of any marked or unmarked buried pipelines or cables on pad and/or access road at least two (2) working days prior to construction.
3. United Field Services Inc. is not liable for underground utilities or pipelines.
4. Cut and Fill calculations are rounded to the nearest foot.

I, MARSHALL W. LINDEEN, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17078, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.

MARSHALL W. LINDEEN P.S. #17078

DATE

4-27-22



PAGE 1 OF 3

0 100 200
SCALE: 1"=200'

NOVO OIL & GAS NORTHERN DELAWARE, LLC

SURVEYED: 12/02/21	REV./BY: 4/18/22/A.A.D.	APP. BY: M.W.L.
DRAWN BY: C.B.	DATE DRAWN: 12/14/21	FILE NAME: 11610-T01



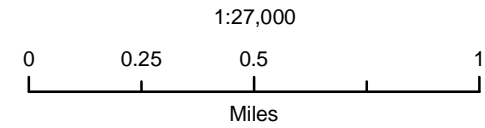
P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505) 334-0408

Novo Oil & Gas Northern Delaware LLC

Taco Truck Fed SWD 1
H₂S Contingency Plan:
Radius Map

Section 5, Township 23S, Range 29E
Eddy County, New Mexico

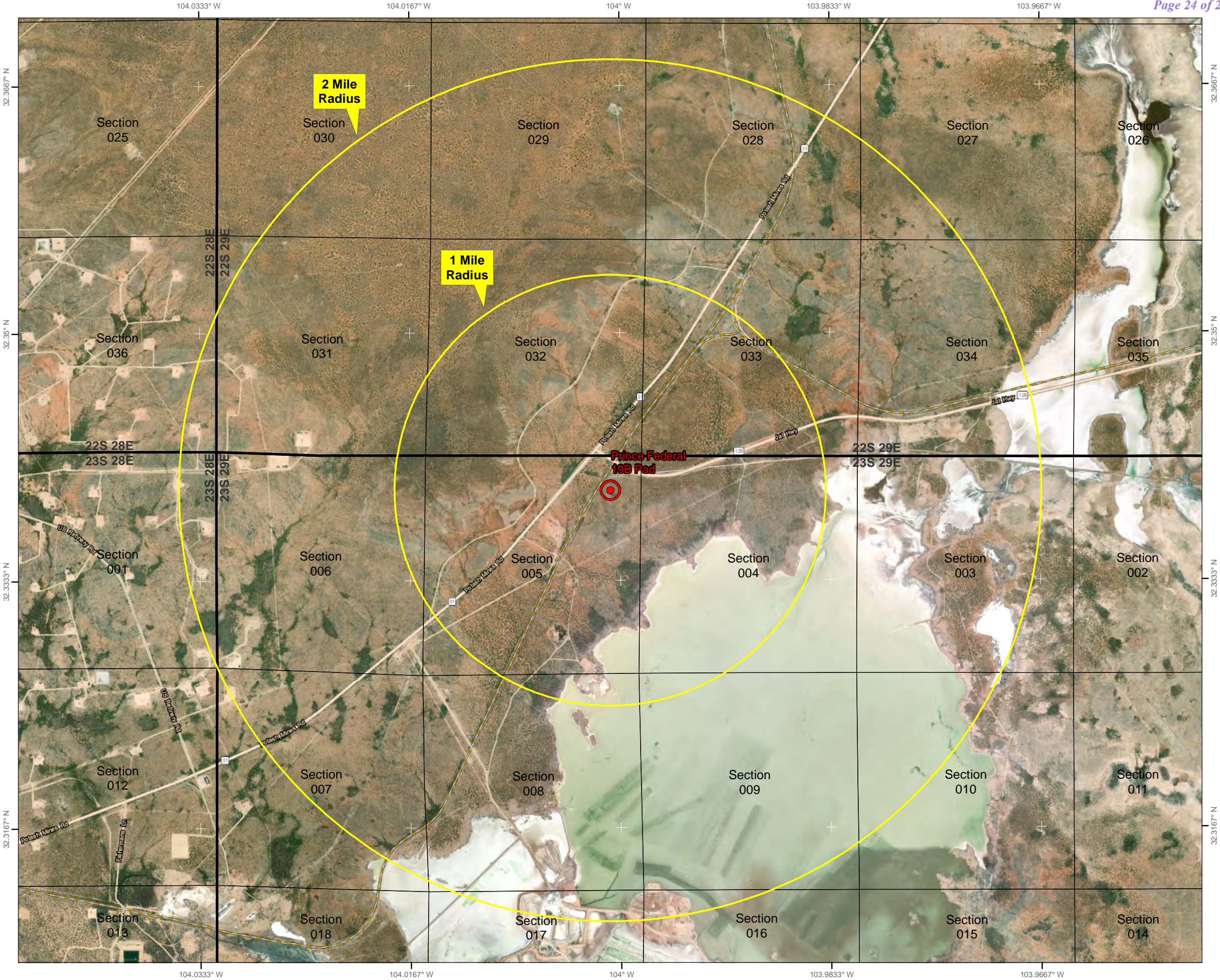
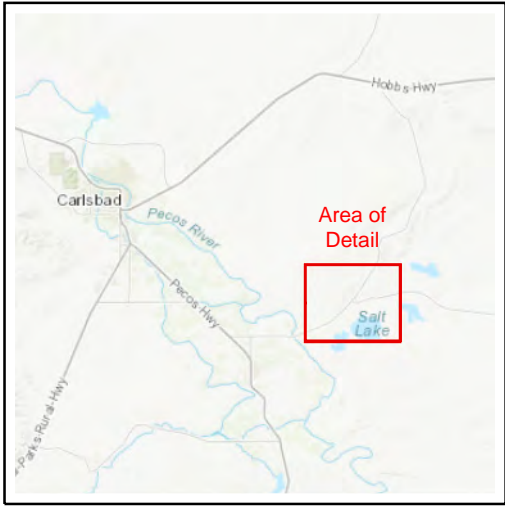
 Well Pad Location

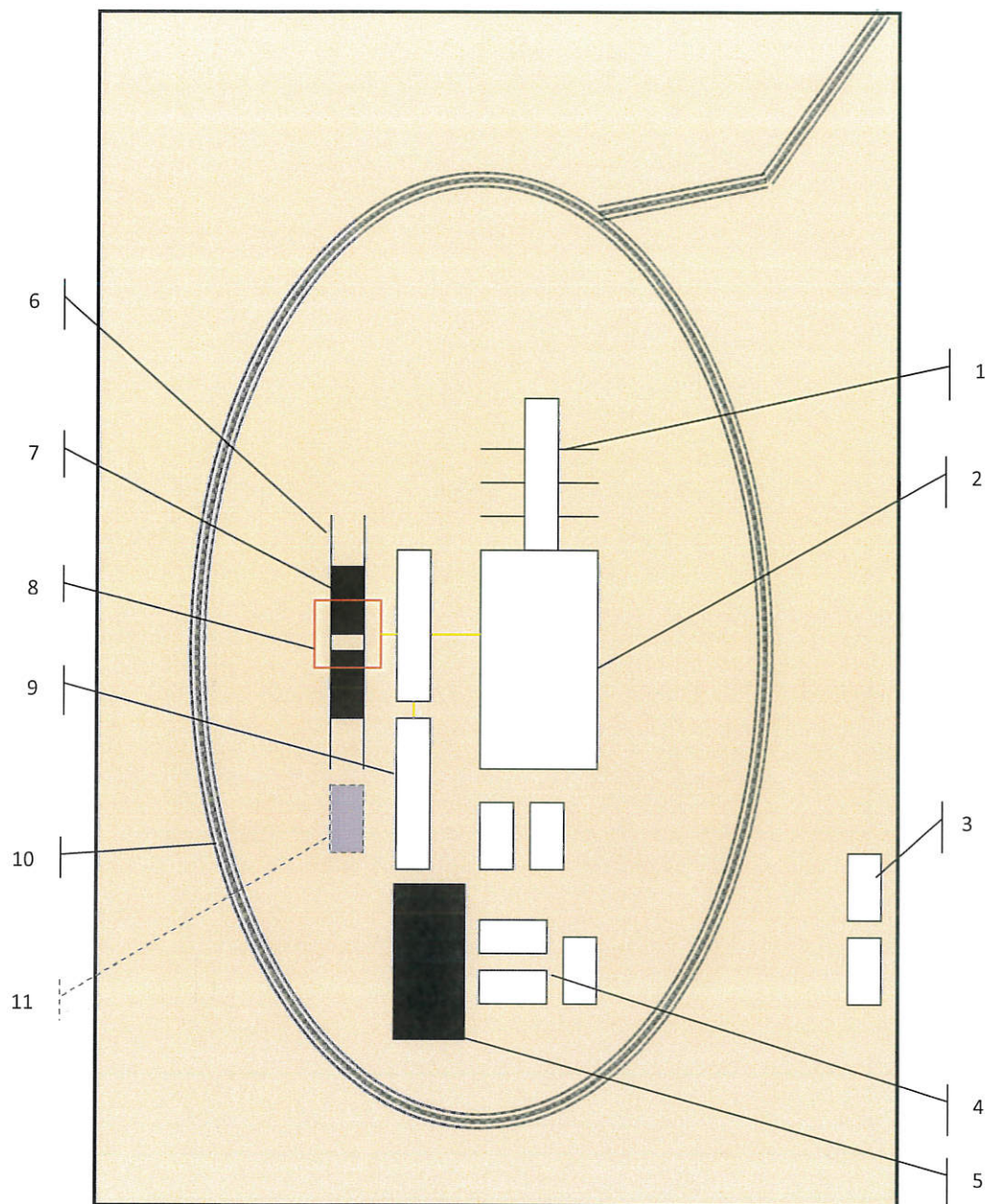


NAD 1983 New Mexico State Plane East
FIPS 3001 Feet



Prepared by Permits West, Inc., January 15, 2021
for Novo Oil & Gas Northern Delaware, LLC





Schematic Closed Loop Drilling Rig*

1. Pipe Rack
2. Drill Rig
3. House Trailers/ Offices
4. Generator/Fuel/Storage
5. Overflow-Frac Tank
6. Skids
7. Roll Offs
8. Hopper or Centrifuge
9. Mud Tanks
10. Loop Drive
11. Generator (only for use with centrifuge)

*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

PERMITS WEST, INC.
 PROVIDING PERMITS for LAND USERS
 37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

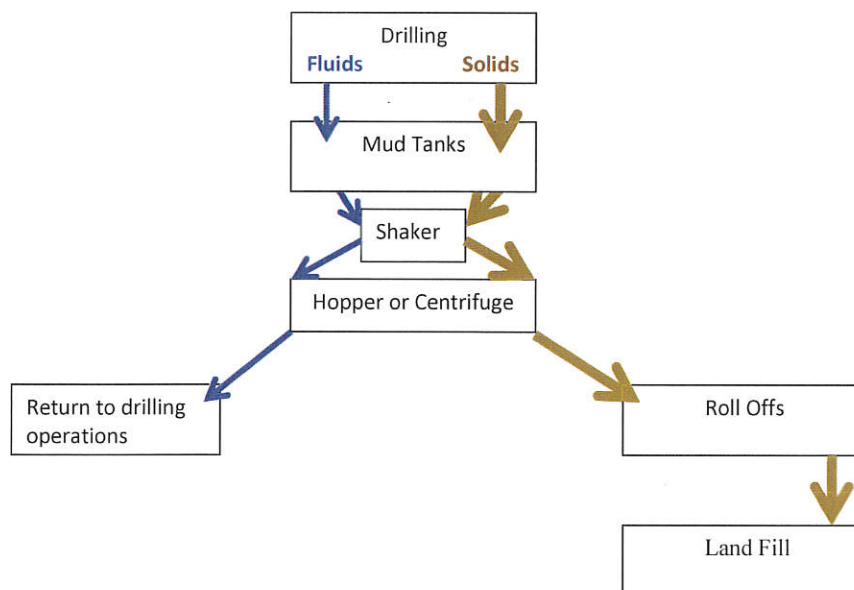


Above: Centrifugal Closed Loop System



Closed Loop Drilling System: Mud tanks to right (1)
 Hopper in air to settle out solids (2)
 Water return pipe (3)
 Shaker between hopper and mud tanks (4)
 Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil
 Field Service

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 17Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

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

COMMENTS

Action 145256

COMMENTS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 145256
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
kpickford	SWD-2459	1/20/2023

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CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	1/20/2023
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	1/20/2023
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	1/20/2023
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	1/20/2023