

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM 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. **NMNM0542015**

6. If Indian, Allottee or Tribe Name

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

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

1. Type of Well  
 Oil Well  Gas Well  Other

8. Well Name and No. **OVATION FED COM 1318/223H**

2. Name of Operator **NOVO OIL AND GAS NORTHERN DELAWARE LLC**

9. API Well No. **3001549079**

3a. Address **228 ST. CHARLES AVENUE, SUITE 912, NEW** 3b. Phone No. (include area code)  
**(504) 523-1831**

10. Field and Pool or Exploratory Area  
**PURPLE SAGE/WOLFCAMP (GAS)**

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)  
**SEC 13/T23S/R28E/NMP**

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 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 checked="" 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 checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input 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 recomplate 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 perfonned 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 detennined that the site is ready for final inspection.)

RE-SUBMITTING WITH CORRECTIONS

8/3/2023: Workover to repair hole in tubing and replace necessary tubing and gas lift system.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
**LINDA GOOD / Ph: (405) 590-4809**

Signature

Title **Contractor**

Date **08/24/2023**

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by  
**JONATHON W SHEPARD / Ph: (575) 234-5972 / Accepted**

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.

Title **Petroleum Engineer**

Office **CARLSBAD**

Date **08/25/2023**

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)

## 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

## Additional Information

### Location of Well

0. SHL: SWSW / 460 FSL / 225 FWL / TWSP: 23S / RANGE: 28E / SECTION: 13 / LAT: 32.2995331 / LONG: -104.048924 ( TVD: 0 feet, MD: 0 feet )

PPP: NWSW / 1811 FSL / 180 FWL / TWSP: 23S / RANGE: 28E / SECTION: 13 / LAT: 32.3032322 / LONG: -104.0490696 ( TVD: 9665 feet, MD: 10050 feet )

BHL: NESE / 1810 FSL / 130 FEL / TWSP: 23S / RANGE: 29E / SECTION: 18 / LAT: 32.3028261 / LONG: -104.0158591 ( TVD: 9936 feet, MD: 20314 feet )

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

<b>Well Name:</b> OVATION FED COM 1318	<b>Well Location:</b> T23S / R28E / SEC 13 / SWSW / 32.2995331 / -104.048924	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 223H	<b>Type of Well:</b> CONVENTIONAL GAS WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM0542015	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 300154907900X1	<b>Well Status:</b> Drilling Well	<b>Operator:</b> NOVO OIL AND GAS NORTHERN DELAWARE LLC

### Subsequent Report

**Sundry ID:** 2747839

**Type of Submission:** Subsequent Report

**Type of Action:** Workover Operations

**Date Sundry Submitted:** 08/24/2023

**Time Sundry Submitted:** 12:27

**Date Operation Actually Began:** 08/03/2023

**Actual Procedure:** RE-SUBMITTING WITH CORRECTIONS 8/3/2023: Workover to repair hole in tubing and replace necessary tubing and gas lift system.

### SR Attachments

**Actual Procedure**

Ovation\_Fed\_Com\_1318\_223H\_tbg\_workover\_procedure\_revised\_and\_WBD\_attachments\_20230824122008.pdf

Well Name: OVATION FED COM 1318

Well Location: T23S / R28E / SEC 13 / SWSW / 32.2995331 / -104.048924

County or Parish/State: EDDY / NM

Well Number: 223H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM0542015

Unit or CA Name:

Unit or CA Number:

US Well Number: 300154907900X1

Well Status: Drilling Well

Operator: NOVO OIL AND GAS NORTHERN DELAWARE LLC

**Operator**

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

Operator Electronic Signature: LINDA GOOD

Signed on: AUG 24, 2023 12:27 PM

Name: NOVO OIL AND GAS NORTHERN DELAWARE LLC

Title: Contractor

Street Address: 1001 WEST WILSHIRE BLVE SUITE 206

City: OKLAHOMA CITY State: OK

Phone: (405) 590-4809

Email address: JCARTER@NOVOOG.COM

**Field**

Representative Name:

Street Address:

City: State: Zip:

Phone:

Email address:

**BLM Point of Contact**

BLM POC Name: JONATHON W SHEPARD

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: jshepard@blm.gov

Disposition: Accepted

Disposition Date: 08/25/2023

Signature: Jonathon Shepard



CAPITAL WORKOVER PROCEDURE

Well	Property Number	AFE Number
<b>OVATION FED COM 1318 223H</b>	<b>30015-10080</b>	<b>4500068</b>

Responsibility Paul Jobe – Senior Operations Engineer  
 Brad Walls – Production Superintendent  
 Aaron Cattley – Senior Operations Engineer  
 Aaron Roberge – Completion Superintendent  
 Rocky Garlow – Completion Superintendent

Procedure Date: July 27, 2023

**OVATION FED COM 1318 223H**  
**API #: 30-015-49079**

**WOLFCAMP A INTERVAL**

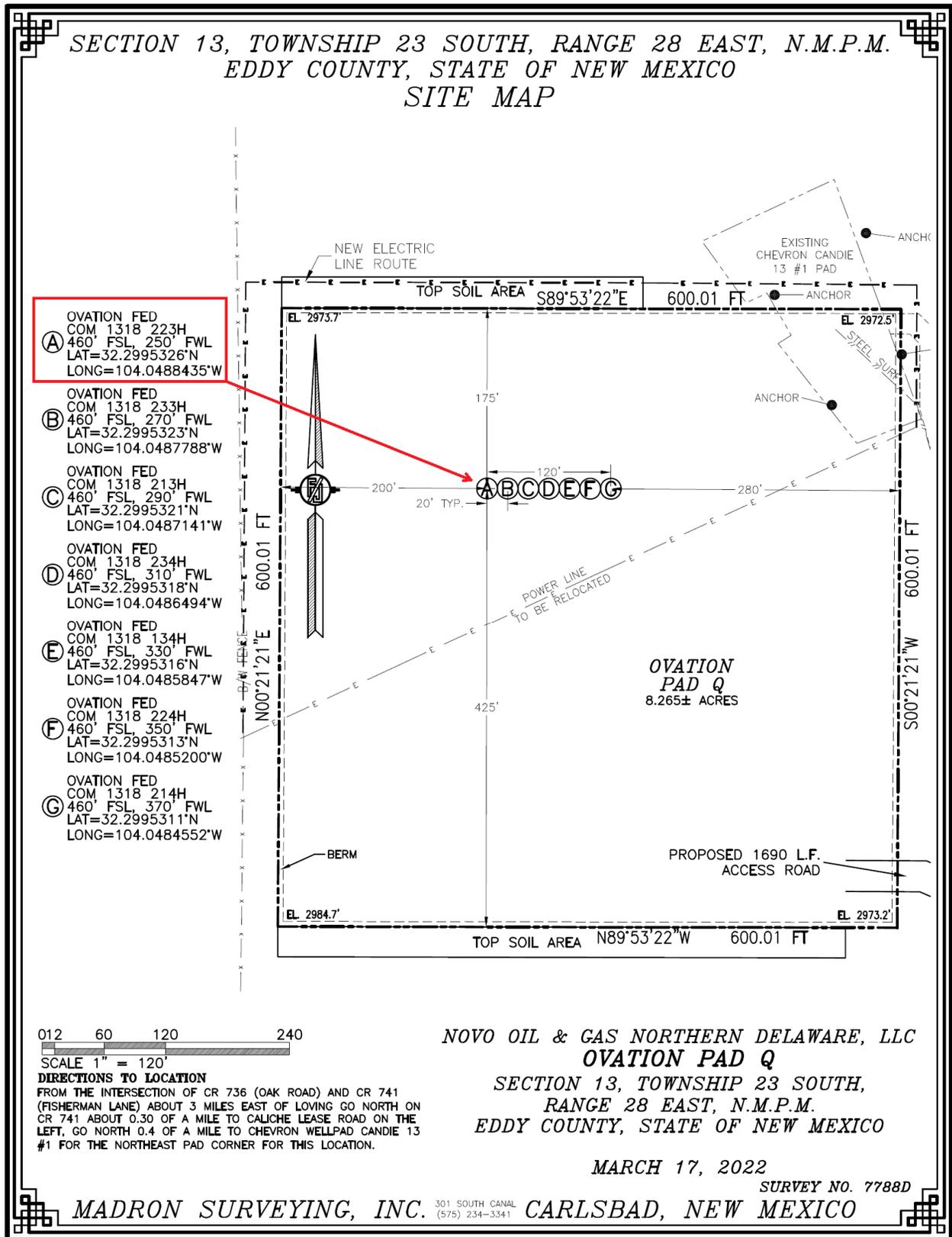
**GPS Coordinates: 32.29953289, -104.0488435**

Eddy County, NM

Directions: From Carlsbad, Travel South on Highway 285 for 7.7 miles. Turn left on New Mexico State Road 31(Potash Mines Rd) and travel 3.2 miles Turn right on to County Road 387 and go 1.5 miles. Turn left onto G.R. Howard Rd. and travel 1.2 miles. Turn left on to County Road 741 (Fisherman Lane) and travel 0.30 miles. Turn left on to lease road and travel 0.20 miles to location.

Novo Oil & Gas, LLC

### Wellsite Layout – Ovation Fed Com 1318 Pad Q



OVATION FED COM 1318 223H WORKOVER

Novo Oil & Gas, LLC

## **OVATION FED COM 1318 223H Workover Background and Scope**

### **Executive Summary:**

Production from the Ovation Fed Com 1318 223H began January 10, 2023, and the well flowed up tubing until March 14, 2023, when gas-lift injection was initialized. Since that time production from the well has been assisted by the gas-lift system via annular gas injection. Since July 13, 2023, the pressure differential between tubing and casing has rapidly diminished to the point where they have equalized. Since then, we have been circulating injection gas without any contribution from the reservoir. We evaluated the fluid level and found it to be 2,000 ft from surface. A test of the tubing and casing pressures indicates either a hole in the tubing or a cut gas-lift valve. Either of those preclude any measurable production contribution from the reservoir.

### **Scope of Workover:**

This workover is being proposed to remove and inspect the existing tubing, gas-lift system, packer and BHA, replace all joints and components that are damaged beyond reuse, then rerun tubing and gas-lift back into the well and return the well to production utilizing annular gas injection.

- Due to the deviated trajectory of this well, there is potential that we will not be able to deliver enough torque to unset the packer. This has been the case with other workovers on this pad. If this scenario is encountered the scope of the workover will include running free-point calculations, cutting tubing, then running the hole with fishing tools and work-string to retrieve tubing and packer. Historically we have been free all the way to the packer, just unable to deliver enough torque through the production tubing to unset the packer.

This workover is projected to last 4 days if all operations occur as a normal workover. The first 3 days to MIRU WOR and remove/fish tubing, gas-lift system, packer and BHA. The last day to rerun the tubing, gas-lift system, packer and BHA.

OVATION FED COM 1318 223H WORKOVER

Novo Oil &amp; Gas, LLC

## OVATION FED COM 1318 223H Workover Procedure

Casing: 5 1/2" 20# P-110 set at 20,389 ft  
Liner: None  
Tubing: 2-7/8", 6.5 #/ft L80 tubing and gas-lift system. EOT @ 9,963.71 ft  
Elevation: 2,975 ft GL 3,000.7 KB  
Average Lateral TVD: 9,965 ft

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### Pre-Job safety meeting

Before any work is performed there will be a tailgate safety meeting held to discuss the job details, hazards and inspection of equipment. Make sure all safety equipment in proper place: chock blocks, grounding cables, and fire extinguishers.

- Fall protection is required when working at heights. A man lift will be used when deemed appropriate by Novo company representative. Fall protection is required at all times while working from a man lift.
- Well and tubing string information will be given by the Novo company representative.
- Understanding of max pull capabilities of workover rig, and weight of tubing in well, as well as weight of work string.
- Proper PPE required to perform work
- Designated smoking area
- Emergency evacuation procedure and designated muster areas
- Job procedures and designated duties and responsibilities
- Contingency plans specific to each vendor involved in operations

- 
1. MIRU WOR.
  2. MIRU auxiliary equipment.
  3. Kill well with weighted brine.
  4. Install back-pressure valve, remove tree, install and test BOPs.
  5. Remove back-pressure valve.
  6. Unset packer at **9,950** ft and pull out of the hole with the existing tubing and gas-lift system, packer and BHA. **NOTE: Inspect tubing as it comes out of the hole to locate the hole in the tubing and to determine how many joints need to be replaced when re-running tubing and gas-lift system. If the tubing is in bad shape as it comes out of the well, lay down and contact Audra Manning with JD Rush to have a new tubing string delivered to location. Also contact Champion-X to provide gas-lift system replacement.**
  7. **NOTE: If packer will not unset and we cannot J off the packer, we will move into tubing recovery mode, running free-point calculations, cutting tubing below deepest gas-lift mandrel and pulling out of the hole with tubing and gas-lift system, then going back in with overshot and jars to get the packer and remaining tubing. IF THIS CONTINGENCY BECOMES NECESSARY, WE WILL HAVE A CALL TO DISCUSS PRIOR TO CUTTING TUBING.**
  8. RIH with gauge-ring/junk-basket combo to 9,800 ft ensure casing is clear, then POOH with same.

OVATION FED COM 1318 223H WORKOVER

Novo Oil & Gas, LLC

9. Run in hole on wireline with packer and BHA as below and set packer at **9,760 ft.**
  - 1 AS1X packer 2-7/8" x 5-1/2" 20 #/ft
  - Stringer nipple in top of packer with 2.31" ID profile
  - 2 pup-joints 2-7/8", 6.5 #/ft L80 tubing
  - 1 XN-Nipple 3.66" OD, 2.2" ID x profile x 2-7/8"
  - 1 pump out sub/Wireline re-entry guide 3.67" OD, 2.8" ID
  
10. Pick up and run-in hole with 2-7/8, 6.5#/ft L80 production tubing and gas-lift system as described in attached Gas Lift Design. Actual tubing depths will be as per on location calculations for depths based on actual tubing lengths.
  
11. **Sting into packer at 9,760 ft.**
  
12. EOT @ ~9,781 ft.
  
13. Space out and land tubing in tubing head, install back-pressure valve in tubing, remove BOP, and reinstall wellhead.
  
14. Remove back-pressure valve.
  
15. Rig up pump truck and pump through tubing and BHA to ensure all is clear.
  
16. Rig down and move off workover rig and auxiliary equipment.
  
17. Finalize surface connections.
  
18. Return well to production and gas-lift injection.

OVATION FED COM 1318 223H WORKOVER



Novo Oil &amp; Gas, LLC

**Gas Lift Installation Calculation Sheet – depths dependent on actual tubing lengths**

OVATION FED COM 1318 223H - UPDATED DESIGN - PACKER AT 9,760 FT				
Item	Description	Length each (ft)	Length (ft)	MD (ft)
3	sub 2-7/8", 6.5 #/ft EUE L80 tubing	5	15	15
0	GLV-14 top	4.1	0	15
0	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	0	15
0	GLV-13 top	4.1	0	15
46	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	1502.82	1517.82
1	GLV-12 top	4.1	4.1	1517.82
22	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	718.74	2240.66
1	GLV-11 top	4.1	4.1	2240.66
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	2996
1	GLV-10 top	4.1	4.1	2996
24	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	784.08	3784
1	GLV-9 top	4.1	4.1	3784
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	4540
1	GLV-8 top	4.1	4.1	4540
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	5295
1	GLV-7 top	4.1	4.1	5295
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	6051
1	GLV-6 top	4.1	4.1	6051
22	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	718.74	6774
1	GLV-5 top	4.1	4.1	6774
22	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	718.74	7497
1	GLV-4 top	4.1	4.1	7497
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	8252
1	GLV-3 top	4.1	4.1	8252
22	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	718.74	8975
1	GLV-2 top	4.1	4.1	8975
23	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	751.41	9730
1	GLV (OV)-1 top	4.1	4.1	9730
1	joints 2-7/8", 6.5 #/ft EUE L80 tubing	32.67	32.67	9767
1	On/Off Tool 5.5" x 2 7/8"	2	2	9769
1	Packer 5.5" AS1-X x 2-7/8" w/ 2.31" ID profile - t	6	6	9769
2	pup-joints 2-7/8", 6.5 #/ft EUE L80 tubing	6	12	9787
1	XN-Nipple 3.66" OD, 2.2" ID x profile x 2-7/8"	0.82	0.82	9787
1	Pump-out Plug/Wireline re-entry guide	0.42	0.42	9788

OVATION FED COM 1318 223H WORKOVER

Novo Oil & Gas, LLC

**Cost Estimate**

Ovation Fed Com 1318 223H  
July 27, 2023

Acct Code	Category	Description	Unit Cost	Unit	Total Cost
706	Workover Rig	COMPLETION/WORKOVER RIG	\$20,000	4	\$80,000
708	Tool & Equipment Rental	SLICKLINE	\$8,000.00	3	\$24,000
712	Tool & Equipment Rental	GAS BUSTER - WO FLOWBACK IRON	\$300.00	4	\$1,200
712	Tool & Equipment Rental	PORTABLES	\$500	4	\$2,000
712	Tool & Equipment Rental	TELEHANDLER	\$300	4	\$1,200
712	Tool & Equipment Rental	CRANE	\$4,500	4	\$18,000
712	Tool & Equipment Rental	FLOWBACK IRON/CREW	\$4,500	4	\$18,000
713	Fuel & Power	FUEL FOR ON LOCATION EQUIPMENT	\$3.0390	4000	\$12,156
717	Trucking	FUEL TRUCKING (PER HOUR)	\$150	8	\$1,200
717	Trucking	TRUCKING	\$2,500	4	\$10,000
721	Cased hole wireline	CASED HOLE WL GR/JB COMBO	\$15,000	1	\$15,000
722	Downhole Tools & Service	5-1/2" PACKER	\$20,000	1	\$20,000
722	Downhole Tools & Service	GAS LIFT SYSTEM	\$25,000	1	\$25,000
722	Downhole Tools & Service	FISHING TOOLS	\$12,000	3	\$36,000
722	Downhole Tools & Service	TUBING CUTTERS	\$12,000	3	\$36,000
726	Supervision	CONSULTING SERVICES/SUPERVISION	\$1,800	8	\$14,400
727	Contract Labor/Services	PACKER HAND	\$1,550	2	\$3,100
727	Contract Labor/Services	GAS LIFT SYSTEM HAND	\$1,550	2	\$3,100
727	Contract Labor/Services	TORQUE AND TEST	\$2,500	2	\$5,000
727	Contract Labor/Services	PRESSURE PUMPING SERVICES	\$8,500.00	4	\$34,000
727	Contract Labor/Services	WELLHEAD	\$3,600.00	2	\$7,200
727	Contract Labor/Services	MILEAGE	\$2.50	1200	\$3,000
727	Contract Labor/Services	PRODUCTION TUBING INSPECTION	\$10,000.00	1	\$10,000
751	Vaccum truck	VACUUM TRUCK	\$2,100	4	\$8,400
752	Water	10 PPG BRINE FOR KILLING WELL	\$12.00	400	\$4,800
752	Water	WATER FOR TREATING, ETC.	\$1.50	1000	\$1,500
755	Production Tubing	PRODUCTION TUBING - 2-7/8"	\$9.00	9760	\$87,840
<b>NOTE: 2-7/8" PRODUCTION TUBING IS FROM JD RUSH</b>					
747	Contingencies (Miscellaneous)			10%	\$482,096
<b>Workover Total</b>					<b>\$48,210</b>
					<b>\$530,306</b>

OVATION FED COM 1318 223H WORKOVER

Current Completion



<b>WELL NAME</b>		OVATION FED COM 1318 223H		<b>FORMATION</b>	Wolfcamp A
<b>SURFACE LOCATION</b>		460' FSL & 225' FWL OF SEC 13-T23S-R28E		<b>API Number</b>	30-015-49079
<b>SURFACE LOCATION</b>		<b>N</b>	<b>472819.22</b>	<b>E</b>	<b>629238.2</b>
<b>BOTTOM-HOLE LOCATION</b>		<b>LATITUDE</b>	<b>32.29953289</b>	<b>LONGITUDE</b>	<b>-104.0488435</b>
<b>ELEVATION</b>		<b>N</b>	<b>474040.46</b>	<b>E</b>	<b>639428.00</b>
<b>GL</b>		<b>LATITUDE</b>	<b>32.3028147</b>	<b>LONGITUDE</b>	<b>-104.0158599</b>
<b>KB / RKB</b>		<b>GL</b>	<b>2,975</b>	<b>COUNTY</b>	<b>EDDY</b>
		<b>STATE</b>	<b>NEW MEXICO</b>	<b>FIELD</b>	<b>NORTHERN DELWARE BASIN</b>
		<b>TVD/TMD</b>	<b>9,965' / 20,389'</b>		

**GAS LIFT**  
**INSTALLATION SHEET**

Date Installed: **8/4/2023**



Company: **Novo**  
Lease: **Ovation Fed Com 1318**  
Well No.: **223H**  
Field: **Northern Delaware Basin**

**Tubing**  
Size: **2 7/8**  
Thread: **8 Rnd**  
No. Joints: **297**

**Casing**  
Size: **5.5**  
Weight: **20#**  
Perf: **9965 TVD**

**Liner**  
O.D.: **N/A**  
I.D.: **N/A**  
Top: **N/A**

**Packer**  
Type: **5.5 20#**  
Weight/OD: **4.5**  
Depth MD: **9814**

**Design Info.**  
Fluid Rates: \_\_\_\_\_  
PWH: \_\_\_\_\_

**Gas Pressure**  
Kickoff: **1100**  
Operating: **1100**  
Gas Gravity: **0.75**

**Fluid**  
% Water: **80%**  
Kill Fluid Gradient: **0.52**

**Valves**  
Size: **1" 16 Port**  
Type Oper: **IPO**  
Type Checks: **Reverse Checks**  
Mandrel Size: **2 7/8**  
Type: **Jr Conventional**

Joints	Spacing	Depth	Valve Pressure		Surface Pressure		Port	OD	Data
			PSET/PTR0	PSO (Opening)	PSC (Closing)				
<b>KB</b>	25.50	25.50							
Hanger	0.50	26.00							Hanger
1	32.70	58.70							2 7/8 Jts.
Pup Jts.	20.30	79.00							10' 8" 2" Pup Jts.
46	1504.56	1583.56							2 7/8 Jts.
GLV12	4.10	1587.66	1075	1103	1037	16	4.335		GLV12
22	719.04	2306.70							2 7/8 Jts.
GLV11	4.10	2310.80	1060	1073	1008	16	4.335		GLV11
23	752.72	3063.52							2 7/8 Jts.
GLV10	4.10	3067.62	1050	1048	982	16	4.335		GLV10
23	752.07	3819.69							2 7/8 Jts.
GLV9	4.10	3823.79	1040	1021	956	16	4.335		GLV9
24	785.35	4609.14							2 7/8 Jts.
GLV8	4.10	4613.24	1030	996	931	16	4.335		GLV8
23	752.57	5365.81							2 7/8 Jts.
GLV7	4.10	5369.91	1025	971	906	16	4.335		GLV7
22	720.29	6090.20							2 7/8 Jts.
GLV6	4.10	6094.30	1020	950	885	16	4.335		GLV6
23	752.63	6846.93							2 7/8 Jts.
GLV5	4.10	6851.03	1015	924	859	16	4.335		GLV5
22	720.30	7571.33							2 7/8 Jts.
GLV4	4.10	7575.43	1010	898	832	16	4.335		GLV4
22	719.83	8295.26							2 7/8 Jts.
GLV3	4.10	8299.36	1005	872	807	16	4.335		GLV3
22	719.22	9018.58							2 7/8 Jts.
GLV2	4.10	9022.68	1000	846	779	16	4.335		GLV2
22	719.78	9742.46							2 7/8 Jts.
X Nipple	0.87	9743.33							2.31 X Nipple
1	32.70	9776.03							2 7/8 Jts.
GLV1	4.10	9780.13	930	729	677	16	4.335		GLV1
1	32.70	9812.83							2 7/8 Jts.
On/Off Tool	1.45	9814.28							4.500
Profile	0.30	9814.58							2.31X Profile Stinger
Packer	7.30	9821.88							4.500
Pup Jt.	6.10	9827.98							5.5 AS1-X Packer
Pup Jt.	6.10	9834.08							Pup Jts.
XN Nipple	1.10	9835.18							Pup Jts.
POP	0.45	9835.63							2.31 XN Nipple
		9835.63							2 7/8 POP

Remarks: **15 Points Compression 50 Pick Up 46 Neutral 40 Down 25 Set**  
For: **Mike James**  
Thanks for the work!

Service Rep: **Marcelo Acosta**  
Phone Number

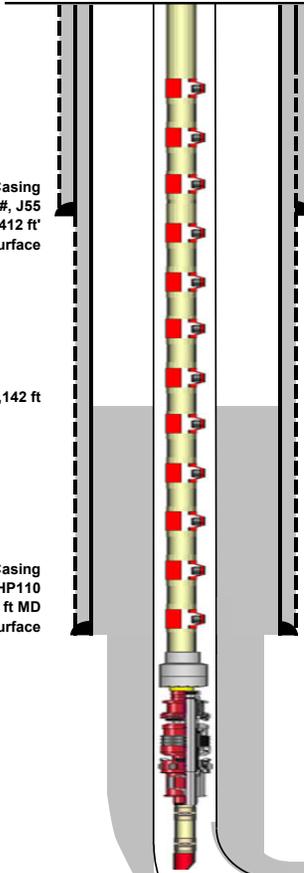
Perforated Intervals		
Stage	Top (ft)	Bottom (ft)
1	19930	20200
2	19636	19906
3	19342	19612
4	19048	19318
5	18752	19024
6	18460	18730
7	18166	18436
8	17876	18142
9	17578	17848
10	17284	17554
11	16990	17260
12	16696	16966
13	16402	16672
14	16108	16378
15	15814	16084
16	15520	15788
17	15226	15496
18	14932	15202
19	14638	14908
20	14344	14610
21	14050	14319
22	13756	14026
23	13462	13732
24	13168	13438
25	12878	13144
26	12580	12850
27	12286	12556
28	11992	12268
29	11702	11968
30	11404	11674
31	11110	11380
32	10816	11084
33	10522	10789
34	10302	10498

297 joints + 3 subs 2-7/8", 6.5 #/ft L80 tubing + 12 GL valves & X-nipple, 1 On/Off Tool 5.5" x 2-7/8", 1 X-Stinger profile x 2-7/8", 1 Packer 5.5" AS1-X x 2-7/8" set @ 9,814.58 ft (top) (9,821.88 ft bottom), 2 six ft pup-joints 2-7/8", 6.5 #/ft L80 tubing, 1 XN-Nipple 3.66" OD, 2.205" ID, 1 pump out sub/Wireline re-entry guide 3.67" OD, 2.8" ID, EOT @ 9,835.63 ft MD

Surface Casing  
13-3/8", 54.5#, J55  
Set @ 412 ft  
TOC @ Surface

Production TOC @ 5,142 ft

Intermediate Casing  
8-5/8" 32# HP110  
Set @ 9,393.4 ft MD  
TOC @ Surface



Average lateral TVD @ 9,965 ft

5-1/2" 20# P110 Set @ 20,389.0 ft  
TOC @ 5,142 ft

Schematic by Paul Jobe Senior Operations Engineer

Date: August 7, 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

**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 258359

**CONDITIONS**

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 258359
	Action Type: [C-103] Sub. Workover (C-103R)

**CONDITIONS**

Created By	Condition	Condition Date
dmcclore	None	9/5/2023