

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**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.*FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 20185. Lease Serial No.  
NMNM61349

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
RANA SALADA FED COM 0504 133H9. API Well No.  
30-015-46086-00-X110. Field and Pool or Exploratory Area  
CULEBRA BLUFF11. County or Parish, State  
EDDY COUNTY, NM**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 DELA. Contact: KURT SHIPLEY  
Email: kshipley@novooil.com3a. Address  
1001 WEST WILSHIRE BOULEVARD SUITE 206  
OKLAHOMA CITY, OK 731163b. Phone No. (include area code)  
Ph: 405-286-3916

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 6 T23S R29E NESE 1443FSL 607FEL  
32.330982 N Lat, 104.017578 W Lon**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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 recompleat 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 recompleat 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.

Request to move Surface Hole Location

From:  
1443 feet FSL & 612 feet FEL, Section 6, T23S, R29E, NESETo:  
1443 feet FSL & 607 feet FEL Section 6, T23S, R29E, NESE

Moved on the same pad site and there will be no new surface disturbance.

Request to move Bottom Hole Location

RECEIVED

MAR 20 2020

EMNRD-OCDARTESIA

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #504952 verified by the BLM Well Information System  
For NOVO OIL AND GAS NORTHERN DELA, sent to the Carlsbad  
Committed to AFMSS for processing by JUANA MEDRANO on 03/02/2020 (20JM0052SE)**

Name (Printed/Typed) BRIAN WOOD

Title CONSULTANT

Signature (Electronic Submission)

Date 02/28/2020

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

Approved By JEROMY PORTER

Title PETROLEUM ENGINEER

Date 03/13/2020

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)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***No Change  
Wrong C102  
Attached

**Additional data for EC transaction #504952 that would not fit on the form**

**32. Additional remarks, continued**

From:

1870 feet FSL & 330 feet FEL, Section 4, T23S, 29E, NESE

To:

2178 feet FSL & 2510 feet FWL Section 4, T23SS, R29, NESW

Request to change Producing Formation from Culebra Bluff, Bone Spring South to Wolfcamp B

See attached for detailed changes from 3-string to 4-string, casing and cementing specs, and mud program. There has been no change to the surface casing.

## Revisions to Operator-Submitted EC Data for Sundry Notice #504952

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM61349	NMNM61349
Agreement:		
Operator:	NOVO OIL & GAS N DELAWARE LLC 1001 W. WILSHIRE BLVD. SUITE 206 OKLAHOMA CITY, OK 73116 Ph: 405-285-3916	NOVO OIL AND GAS NORTHERN DELA 1001 WEST WILSHIRE BOULEVARD SUITE 206 OKLAHOMA CITY, OK 73116 Ph: 4054040414
Admin Contact:	KURT SHIPLEY VP-OPERATIONS E-Mail: kshipley@novoog.com Cell: 405-404-0414 Ph: 405-286-3916	KURT SHIPLEY VP-OPERATIONS E-Mail: kshipley@novoog.com Cell: 405-404-0414 Ph: 405-286-3916
Tech Contact:	BRIAN WOOD CONSULTANT E-Mail: brian@permitswest.com  Ph: 505-466-8120	BRIAN WOOD CONSULTANT E-Mail: brian@permitswest.com  Ph: 505-466-8120
Location:		
State:	NM	NM
County:	EDDY COUNTY	EDDY
Field/Pool:	CULEBRA BLUFF BONE SPR SO	CULEBRA BLUFF
Well/Facility:	RANA SALADA FED COM 0504 133H Sec 6 T23S R29E Mer NMP NESE 1443FSL 612FEL	RANA SALADA FED COM 0504 133H Sec 6 T23S R29E NESE 1443FSL 607FEL 32.330982 N Lat, 104.017578 W Lon

## **CHANGE TO PLANS**

### **Move Surface Hole Location**

From: 1242' FSL & 639' FEL, Section 6, T-23-S, R-29-E, SESE

To: 1444' FSL & 587' FEL Section 6, T-23-S, R-29-E., SESE

Moved on the same pad site and there will be no new surface disturbance.

### **Move Bottom Hole Location**

From: 330' FSL & 330' FEL, Section 4, T-23-S, R-29-E, SESE

To: 890' FSL & 130' FEL Section 4, T-23-S, R-29-E, SESE

### **Producing Formation**

From: Wolfcamp XY carbonate

To: Wolfcamp B

### **Substitution Casing**

9-5/8", 40.0 ppf, J-55, BTC to be set at 2,970' TMD

Design Safety Factors: Collapse 1.63, Burst 2.63, Tension 3.15

7-5/8", 29.7 ppf, L-80HC Anaconda-SP SF to be set at 9,780' TMD

Design Safety Factors: Burst 3.20 SF, Collapse 2.8 SF, Tension 1.60 SF (Casing Specification Sheet is attached)

5-1/2" 23# P-110 EYHC Anaconda SP to be set at 21,217' TMD

Design Safety Factors: Burst 1.25 SF, Collapse 2.8SF, Tension 2.41 SF (Casing Specification Sheet is attached)

### **Single Stage Cement Job for 9-5/8" Intermediate Casing String (TOC = Surface)**

Lead: 481 Sacks; 928 cu. ft.; 20% excess; 1.93 cu.ft./sx; 12.80 ppg; Class C + gel + accelerator + LCM; 700 psi 24 hour compressive strength

Tail: 142 Sacks; 188 cu. ft.; 20% excess; 1.32 cu.ft./sx; 14.80 ppg; Class C; 1200 psi 24 hour compressive strength

### **Single Stage Cement Job for 7-5/8" Intermediate Casing String (TOC = Surface)**

Lead: 392 Sacks; 1,059 cu. ft.; 20% excess; 2.70 cu.ft./sx; 10.50 ppg; Class H + gel + extender + retarder + LCM + beads; 500 psi 24 hour compressive strength

Tail: 96 Sacks; 121 cu. ft.; 20% excess; 1.26 cu.ft./sx; 14.50 ppg; Class H + gel + retarder + LCM; 1200 psi 24 hour compressive strength

### **Single Stage Cement Job for 5-1/2" Production Casing String (TOC = 9,280')**

Tail: 695 Sacks; 1196 cu. Ft.; 20% Excess; 1.72 cu.ft./sx; 13.2 ppg; Class H + Fluid Loss + Retarder + LCM; 1200 psi 24 hour compressive strength

## 7.625 29.7# L-80 HC Anaconda-SP SF (Special Clearance)

### Pipe Body Data

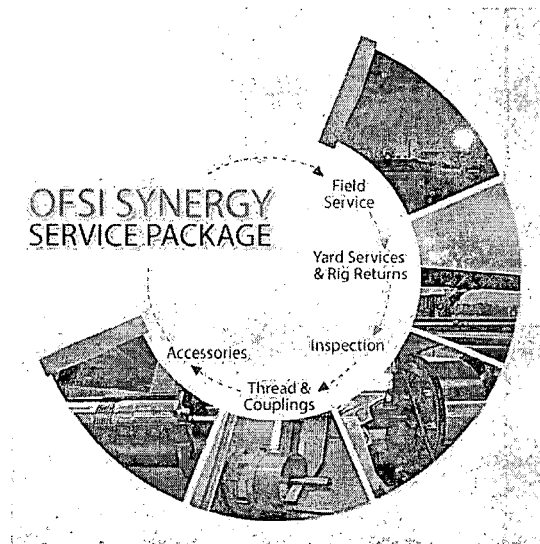
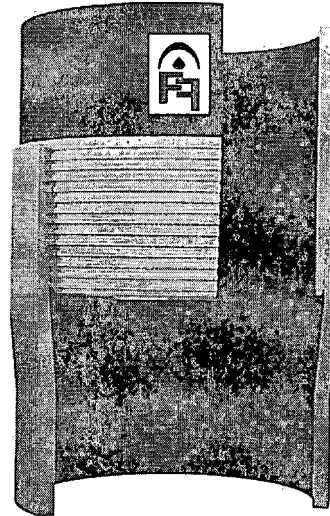
Nominal OD	7.625	Inches
Wall Thickness	0.375	Inches
Weight	29.04	lb/ft
PE Weight	29.7	lb/ft
Nominal ID	6.875	Inches
Drift	6.750	Inches
Minimum Yield Strength	80,000	PSI
Minimum Tensile Strength	95,000	PSI
RBW	87.5%	Rating

### Connection Data

Connection OD	7.906	Inches
Connection ID	6.875	Inches
Make-Up loss	4.003	Inches
Tension Efficiency	81.0%	Rating
Compression Efficiency	81.0%	Rating
Yield Strength in Tension	553,000	LBS.
Yield Strength in Compression	553,000	LBS.
MIYP (Burst)	6,890	PSI
Collapse Pressure	5,510	PSI
Uniaxial Bending	39	degrees

### Make-Up torques

Yield torque	55,000	FT-LBS.
Max Operating Torque	44,000	FT-LBS.
Max Make-Up	20,000	FT-LBS.
Optimum Make-Up	16,500	FT-LBS.
Minimum Make-Up	13,000	FT-LBS.



Technical Sales Support: Rafael Escamilla Jr., Cell: 281-961-7704, [jescamilla@ofsint.com](mailto:jescamilla@ofsint.com)

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## 5.5 23# P-110 EYHC Anaconda SP

### Pipe Body Data

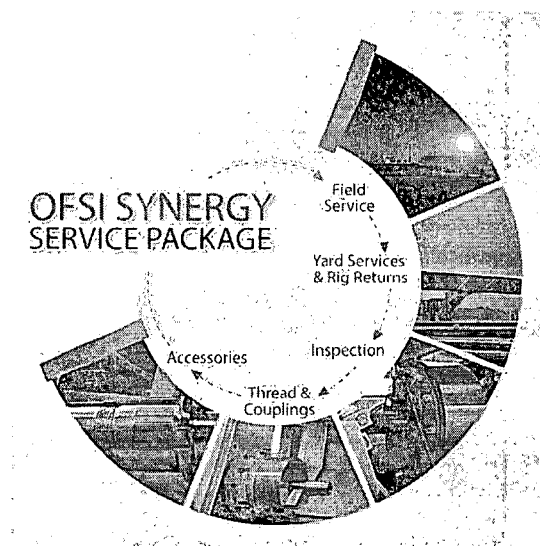
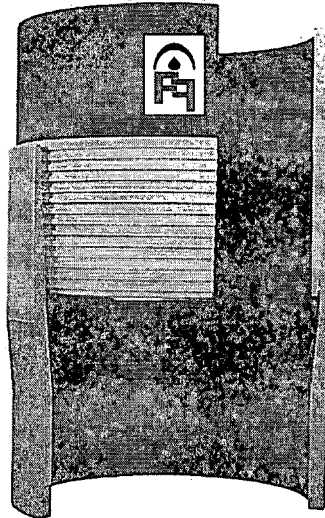
Nominal OD	5.500	Inches
Wall Thickness	0.415	Inches
Weight	23.00	lb/ft
PE Weight	22.56	lb/ft
Nominal ID	4.670	Inches
Drift	4.545	Inches
Minimum Yield Strength	125,000	PSI
Minimum Tensile Strength	130,000	PSI
RBW	87.5%	Rating

### Connection Data

Connection OD	5.748	Inches
Connection ID	4.670	Inches
Make-Up loss	4.692	Inches
Tension Efficiency	90%	Rating
Compression Efficiency	90%	Rating
Yield Strength in Tension	746,000	LBS.
Yield Strength in Compression	746,000	LBS.
MIYP (Burst)	16,510	PSI
Collapse Pressure	16,000	PSI
Uniaxial Bending	94	degrees

### Make-Up torques

Yield torque	44,000	FT-LBS.
Max Operating Torque	35,200	FT-LBS.
Max Make-Up	20,000	FT-LBS.
Optimum Make-Up	16,500	FT-LBS.
Minimum Make-Up	13,000	FT-LBS.



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