Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROV	Eυ
OMB No. 1004-01	137
Expires: October 31,	2021

5.	Lease	Serial	No

BURI	EAU OF LAND MANAGEMENT	J. Lease Serial IVO.	J. Deuse Beriui 140.			
Do not use this f	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee or	6. If Indian, Allottee or Tribe Name			
abandoned wen.	ose romi oroc-o (Ar b) for suc	7 IFIL:: + -F.C.A /A				
	TRIPLICATE - Other instructions on page	/. If Unit of CA/Agree	ement, Name and/or No.			
1. Type of Well			8. Well Name and No.			
Oil Well Gas W	Vell Other					
2. Name of Operator			9. API Well No.			
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or I	Exploratory Area		
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish,	State		
12. CHE	CK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE OF NOT	 ΓΙCE, REPORT OR OTH	IER DATA		
TYPE OF SUBMISSION		TYPE OF A	CTION			
Notice of Intent	Acidize Deep	=	oduction (Start/Resume)	Water Shut-Off		
_		~ =	clamation	Well Integrity		
Subsequent Report			complete	Other		
Final Abandonment Notice	Change Plans Plug Convert to Injection Plug		nporarily Abandon ter Disposal			
_	peration: Clearly state all pertinent details, in		1	rk and approximate duration thereof. If		
completed. Final Abandonment Not is ready for final inspection.)	ns. If the operation results in a multiple comices must be filed only after all requirements					
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)	Title				
Signature		Date				
	THE SPACE FOR FEDI	ERAL OR STATE O	FICE USE			
Approved by						
		Title		Date		
Conditions of approval, if any, are attack certify that the applicant holds legal or e which would entitle the applicant to con-	ned. Approval of this notice does not warrant quitable title to those rights in the subject leaduct operations thereon.	tor				
	B U.S.C Section 1212, make it a crime for an		illfully to make to any de	partment or agency of the United States		

(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

(Form 3160-5, page 2)

Additional Information

Additional Remarks

Directionals, Multibowl and updated BOPS.

Location of Well

0. SHL: NWNE / 330 FNL / 1490 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.150942 / LONG: -104.225772 (TVD: 0 feet, MD: 0 feet) PPP: SWSE / 2640 FNL / 1854 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.143447 / LONG: -104.2269306 (TVD: 8806 feet, MD: 11100 feet) PPP: NWNE / 1025 FNL / 1854 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.149033 / LONG: -104.2269389 (TVD: 8778 feet, MD: 9067 feet) BHL: SWSE / 330 FSL / 1854 FEL / TWSP: 25S / RANGE: 27E / SECTION: 18 / LAT: 32.123608 / LONG: -104.226892 (TVD: 8838 feet, MD: 18318 feet)

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

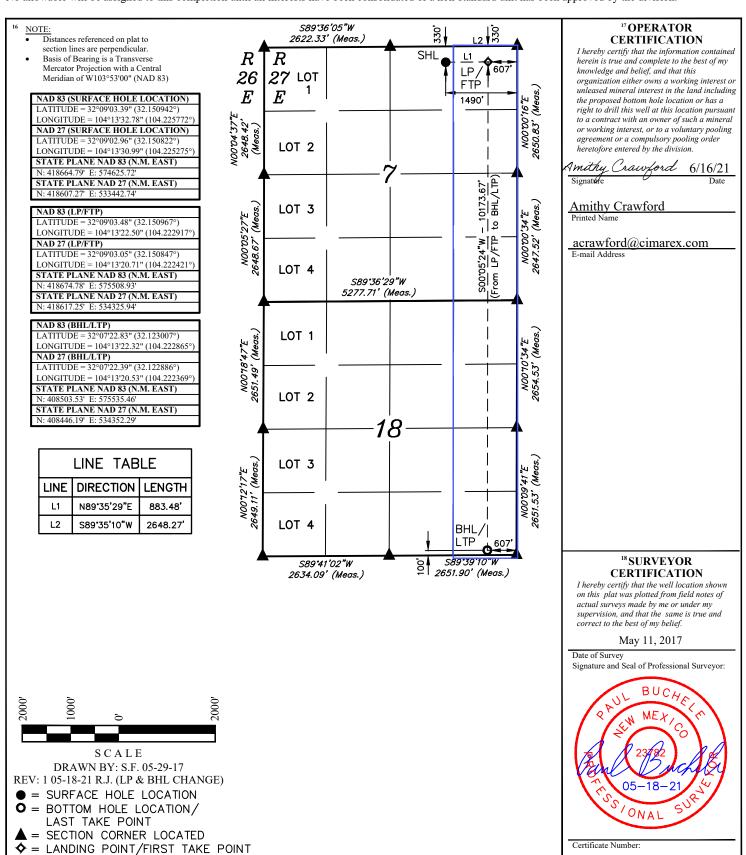
¹ API Number		² Pool Code			
30-015-45707		97494 Cottonwood Draw: Bone S		Spring (o)	
4 Property Code		5 Pr	6 Well Number		
317791		DAVINC	32H		
7 OGRID No.		8 OI	9 Elevation		
215099		CIMARE	EX ENERGY CO.	3307.9'	

10 Surface Location North/South line Feet from the East/West line

UL or lot no. B	Section 7	Township 25S	Range 27E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 1490	East/West line EAST	County EDDY		
	"Bottom Hole Location If Different From Surface										

	UL or lot no. P	Section 18	Township 25S	Range 27E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 607	East/West line EAST	County EDDY
ſ	12 Dedicated Acres 320		³ Joint or Infill	14 Conso	olidation Code	15 Order N).			

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.



1. Geological Formations

TVD of target 7,700 MD at TD 17,727 Pilot Hole TD N/A

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	0	Useable Water	
Salado	1252	N/A	
Castille	1870	N/A	
Bell Canyon	2088	Hydrocarbons	
Cherry Canyon	3075	Hydrocarbons	
Brushy Canyon	4127	Hydrocarbons	
Brushy Canyon Lower	5296	Hydrocarbons	
Bone Spring	5621	Hydrocarbons	
Bone Spring A Shale	5739	Hydrocarbons	
Bone Spring C Shale	6085	Hydrocarbons	
1st Bone Spring Ss	6576	Hydrocarbons	
2nd Bone Spring Ss	7037	Hydrocarbons	
2nd Bone Spring Ss Lower	7788	Hydrocarbons	
3rd Bone Spring Ss	8389	Hydrocarbons	
Wolfcamp	8713	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	450	450	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.59	8.40	14.91
12 1/4	0	2068	2068	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.08
8 3/4	0	6353	6353	7"	26.00	L-80	LT&C	1.82	2.44	2.57
8 3/4	6353	7920	7651	7"	26.00	N-80	вт&С	1.51	2.02	17.90
6	6253	17727	7700	4-1/2"	11.60	P-110	BT&C	1.72	2.43	21.86
					BLM	Minimum Sa	lfety Factor	1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Υ
Does casing meet API specifications? If no, attach casing specification sheet.	Υ
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Υ
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
ls well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
ls well located in critical Cave/Karst?	N
f yes, are there three strings cemented to surface?	N
Is AC Report included?	N

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description	
Surface	91	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite	
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM	
Intermediate 392		12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite	
	121	14.80	1.34	6.32	9.5	Tail: Class C + LCM	
Production	331	10.30	3.64	22.18		Lead: Tuned Light + LCM	
	117	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS	
			-	-			
Completion System	729	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS	
		-	-	-			

Casing String	тос	% Excess
Surface	0	33
Intermediate	0	50
Production	1868	25
Completion System	7720	10

Cimarex request the ability to perform casing integrity tests after plug bump of cement job.

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Туре		Tested To
12 1/4	13 5/8	2M	Annular	Х	
			Blind Ram		
			Pipe Ram		2M
			Double Ram	X	
			Other		
8 3/4	13 5/8	5M	Annular	Х	
			Blind Ram		
			Pipe Ram		5M
			Double Ram	Х	
			Other		
6	13 5/8	5M	Annular	Х	
			Blind Ram		
			Pipe Ram	Х	5M
			Double Ram	Х	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

- X Formation integrity test will be performed per Onshore Order #2.
 On Exploratory wells or 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.
 Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
- X A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
 - N Are anchors required by manufacturer?

5. Mud Program

Depth	Type Weight (ppg) Vi		Viscosity	Water Loss
0' to 450'	FW Spud Mud	8.30 - 8.80	- 8.80 30-32 N/C	
450' to 2068'	Brine Water	9.70 - 10.20	30-32	N/C
2068' to 7920'	FW/Cut Brine	8.50 - 9.00	30-32	N/C
7920' to 17727'	Oil Based Mud	10.50 - 11.00	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logg	Logging, Coring and Testing			
Х	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.			
	No logs are planned based on well control or offset log information.			
	Drill stem test?			
	Coring?			

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4404 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

X H2S is present

X H2S plan is attached

8. Other Facets of Operation

9. Wellhead

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi test. Annular will be tested to 100% of working pressure. The pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

The multi-bowl wellhead will be installed by vendor's representative. A copy of the installation instructions has been sent to the BLM field office.

The wellhead will be installed by a third-party welder while being monitored by the wellhead vendor representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

A solid steel body pack-off will be utilized after running and cementing the production casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

All casing strings will be tested as per Onshore Order No.2 to atleast 0.22 psi/ft or 1,500 whichever is greater and not to exceed 70% of casing burst.

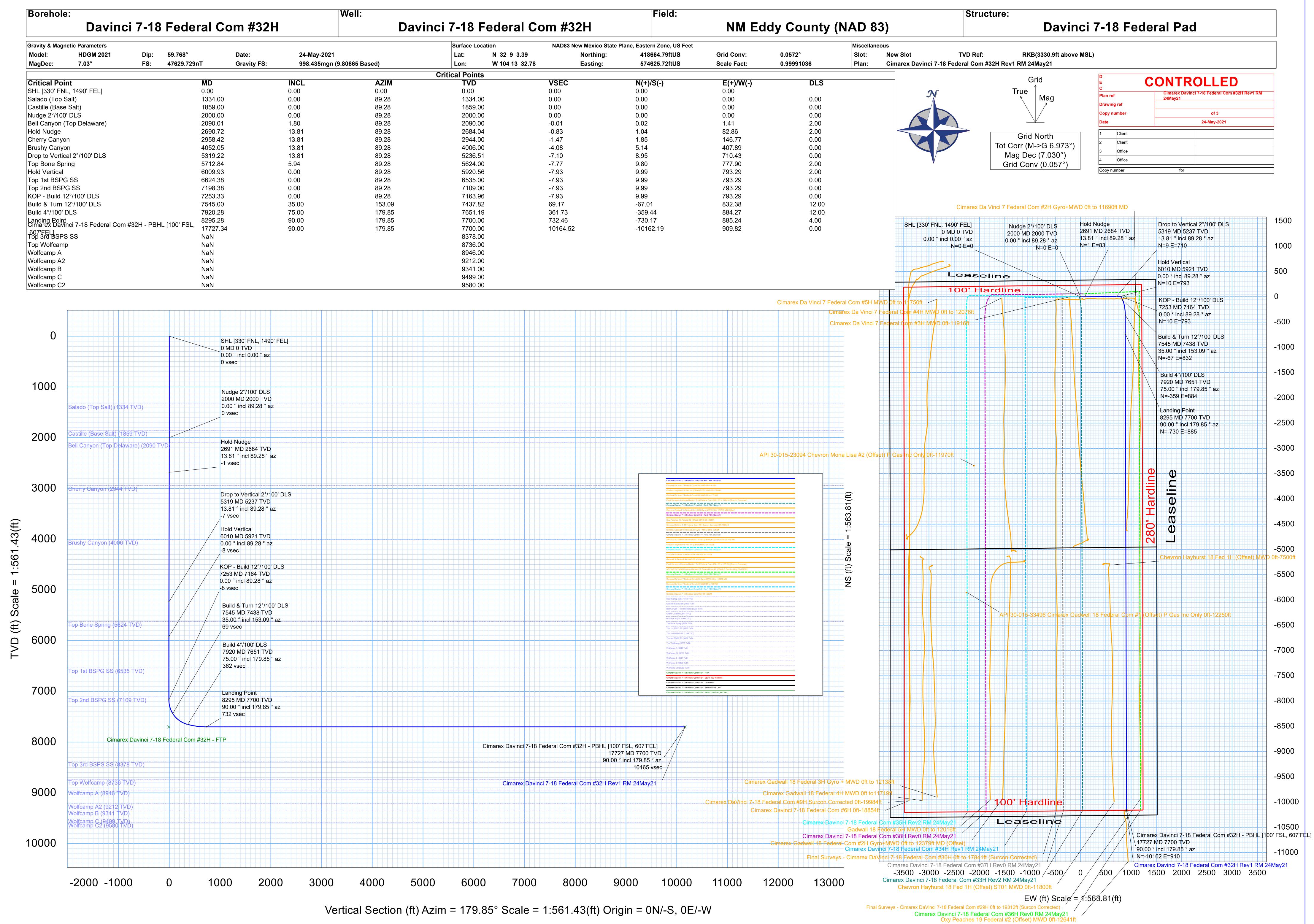
If well conditions dictate conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Schlumberger

Cimarex Energy

Rev 1

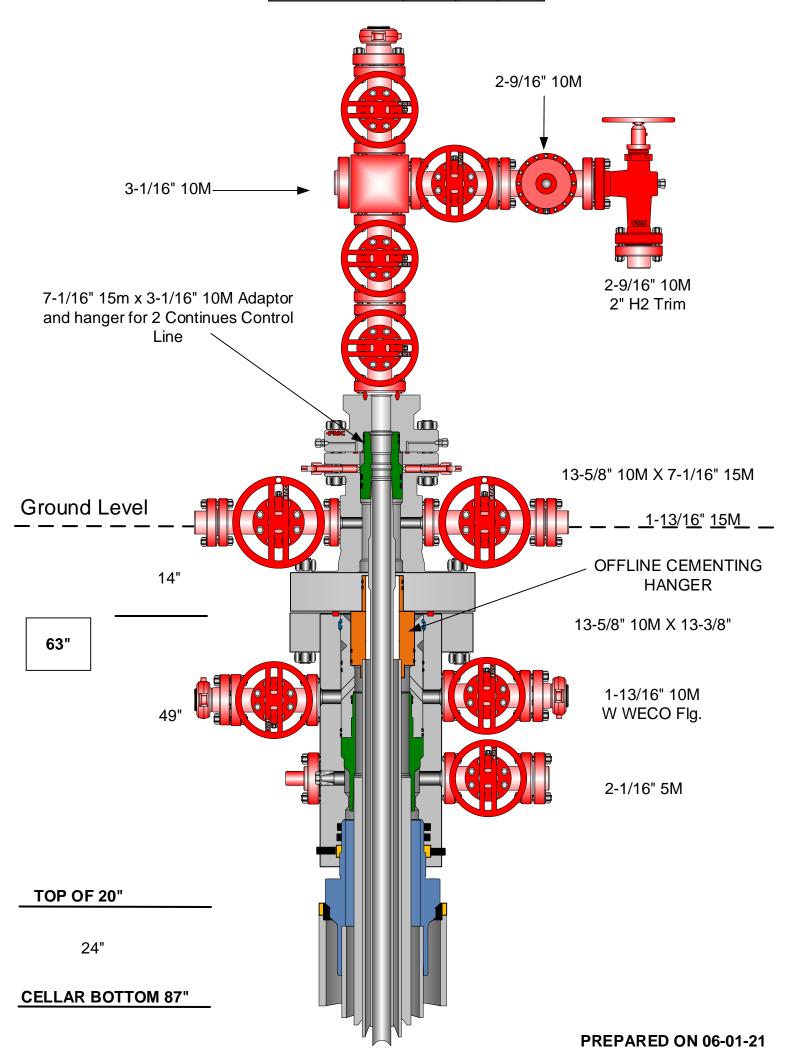


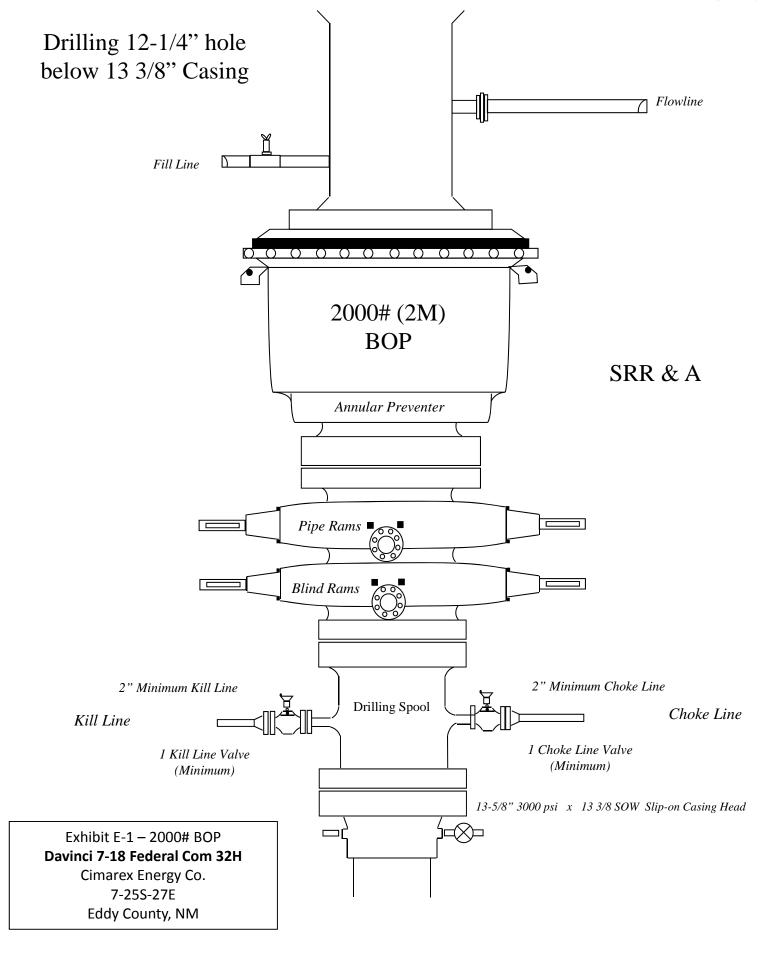


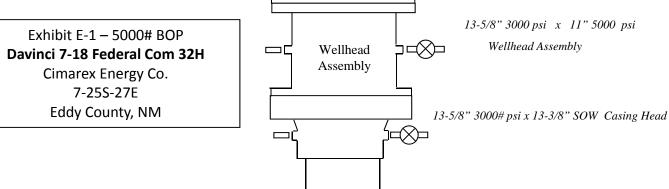


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8 3/4	0	6353	6353	7"	26.00	L-80	LT&C	1.82	2.44	2.57
8 3/4	6353	7920	7651	7"	26.00	N-80	BT&C	1.51	2.02	17.90
6	6253	17727	7700	4-1/2"	11.60	P-110	BT&C	1.72	2.43	21.86
	•				BLM	Minimum S	afety Factor	1.125	1	1.6 Dry 1.8 Wet

CACTUS FOR SERVICE WEARBUSHING IN CASING HEAD & CASING SPOOL







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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

COMMENTS

Action 116103

COMMENTS

Operator:	OGRID:
CIMAREX ENERGY CO.	215099
600 N. Marienfeld Street	Action Number:
Midland, TX 79701	116103
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By		Comment Date
kpickford	KP GEO review 9/21/2022	9/21/2022

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Action 116103

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CIMAREX ENERGY CO.	215099
600 N. Marienfeld Street	Action Number:
Midland, TX 79701	116103
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
jagarcia	None	9/30/2022