

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

Sundry Print Reports
01/30/2025

County or Parish/State: EDDY /

Well Name: STEEL GUITAR 26-35 Well Loc

FED COM

Well Number: 424H

Well Location: T26S / R29E / SEC 26 /

NENE / 32.0184929 / -103.9492587

Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM19609 Unit or CA Name: Unit or CA Number:

US Well Number: Operator: WPX ENERGY PERMIAN

LLC

# **Notice of Intent**

Sundry ID: 2830290

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/07/2025 Time Sundry Submitted: 10:44

Date proposed operation will begin: 01/07/2025

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests a name change and BHL move for the subject well (APD ID 10400093572). Devon also requests break test and offline cementing variances. Please see revised C102, drill plan, directional plan, and variance attachments. Permitted BHL: LOT 11, 1784 FNL, 2190 FEL, 35-26S-29E Proposed BHL: LOT 11, 1783 FNL, 2070 FEL, 35-26S-29E Permitted Well name: STEEL GUITAR 26-35 FED COM 424H Proposed Well name: STEEL GUITAR 35-26 FED COM 424H

# **NOI Attachments**

# **Procedure Description**

break\_test\_variance\_BOP\_1\_15\_24\_20250107103826.pdf

Offline\_Cementing\_\_\_Variance\_Request\_20250107103811.pdf

Steel\_Guitar\_35\_26\_Fed\_Com\_424H\_\_20250107103758.pdf

Steel\_Guitar\_35\_26\_Fed\_Com\_424H\_\_Directional\_Plan\_12\_12\_24\_20250107103003.pdf

WA018425587\_STEEL\_GUITAR\_35\_26\_FED\_COM\_424H\_WL\_R2\_SIGNED\_20250107102947.pdf

eived by OCD: 1/30/2025 9:00:19 AM Well Name: STEEL GUITAR 26-35

FED COM

Well Location: T26S / R29E / SEC 26 /

NENE / 32.0184929 / -103.9492587

County or Parish/State: EDDY? of

Well Number: 424H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

Lease Number: NMNM19609

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number:** 

**Operator: WPX ENERGY PERMIAN** 

# **Conditions of Approval**

# **Specialist Review**

26\_26\_29\_A\_Sundry\_ID\_2830290\_Steel\_Guitar\_26\_35\_Fed\_Com\_424H\_20250129141659.pdf

Break\_Test\_COA\_Variance\_20250129141659.pdf

Offline\_Cementing\_COA\_Variance\_20250129141659.pdf

# **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: AMY BROWN** Signed on: JAN 22, 2025 09:17 AM

Name: WPX ENERGY PERMIAN LLC

Title: Regulatory Professional

Street Address: 333 WEST SHERIDAN AVENUE

City: OKLAHOMA CITY State: OK

Phone: (405) 552-6137

Email address: AMY.BROWN@DVN.COM

# **Field**

**Representative Name:** 

**Street Address:** 

City:

State:

Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

**BLM POC Name: LONG VO BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5759885402 BLM POC Email Address: LVO@BLM.GOV

**Disposition:** Approved Disposition Date: 01/29/2025

Signature: Long Vo

Page 2 of 2

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BURI	EAU OF LAND MANAGEMENT	5. Lease Serial No.		
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 Tribe	Name	
	<b>TRIPLICATE</b> - Other instructions on pag	7. If Unit of CA/Agreement, 1	Name and/or No.	
I. Type of Well Oil Well Gas W	/ell Other		8. Well Name and No.	
2. Name of Operator			9. API Well No.	
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or Explora	tory 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 NOTICE, REPORT OR OT	HER DATA
TYPE OF SUBMISSION		TYPE	E OF ACTION	
Notice of Intent	Acidize Deep Alter Casing Hydr	en [ aulic Fracturing [	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity
Subsequent Report		Construction [ and Abandon [	Recomplete Temporarily Abandon	Other
Final Abandonment Notice	Convert to Injection Plug		Water Disposal	
is ready for final inspection.)	true and correct. Name (Printed/Typed)	s, including reclama	tion, have been completed and	the operator has detennined that the site
4. I hereby certify that the foregoing is	Title			
Signature		Date		
	THE SPACE FOR FEDI	ERAL OR STA	TE OFICE USE	
Approved by		Title		Date
	ned. Approval of this notice does not warran quitable title to those rights in the subject leduct operations thereon.	t or		
Title 18 U.S.C Section 1001 and Title 43	3 U.S.C Section 1212, make it a crime for ar	ny person knowingly	and willfully to make to any d	epartment 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, 3162.3-4.

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: NENE / 455 FNL / 1090 FEL / TWSP: 26S / RANGE: 29E / SECTION: 26 / LAT: 32.0184929 / LONG: -103.9492587 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 100 FNL / 2190 FEL / TWSP: 26S / RANGE: 29E / SECTION: 26 / LAT: 32.0195024 / LONG: -103.9527444 ( TVD: 9853 feet, MD: 9951 feet )

PPP: LOT 6 / 111 FNL / 2202 FEL / TWSP: 26S / RANGE: 29E / SECTION: 35 / LAT: 32.004835 / LONG: -103.9537954 ( TVD: 10328 feet, MD: 15600 feet )

PPP: NWSE / 2485 FSL / 2198 FEL / TWSP: 26S / RANGE: 29E / SECTION: 26 / LAT: 32.0119688 / LONG: -103.9532861 ( TVD: 10351 feet, MD: 13000 feet )

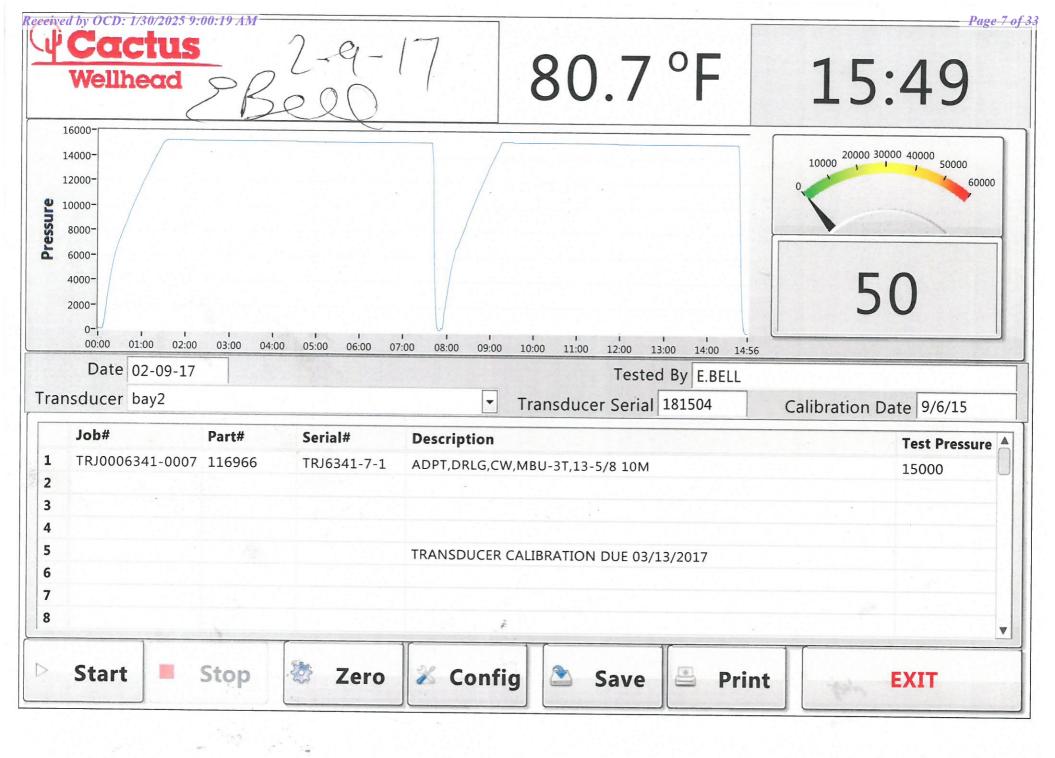
BHL: LOT 11 / 1784 FNL / 2190 FEL / TWSP: 26S / RANGE: 29E / SECTION: 35 / LAT: 32.0002416 / LONG: -103.9541234 ( TVD: 10313 feet, MD: 17274 feet )

#### **Section 2 - Blowout Preventer Testing Procedure**

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of the 10M BOPE to 5M for 10 minutes. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow 43 CFR 3172, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. Break test will be a 14 day interval and not a 30 day full BOPE test interval. If in the event break testing is not utilized, then a full BOPE test would be conducted.

- 1. Well Control Response:
- 1. Primary barrier remains fluid
- 2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
  - a) Annular first
  - b) If annular were to not hold, Upper pipe rams second (which were tested on the skid BOP test)
  - c) If the Upper Pipe Rams were to not hold, Lower Pipe Rams would be third



# **Offline Cementing**

Variance Request

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements.

# 1. Geologic Formations

TVD of target	10314	Pilot hole depth	N/A
MD at TD:	17279	Deepest expected fresh water	

#### Basin

Dusin	D (1	XX7.4/N/I*1	
	Depth	Water/Mineral	
Formation	(TVD)	Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	247		
Salt	1152		
Base of Salt	2981		
Delaware	2981		
Cherry Canyon	4037		
Brushy Canyon	4972		
1st Bone Spring Lime	6699		
Bone Spring 1st	7622		
Bone Spring 2nd	8227		
3rd Bone Spring Lime	8693		
Bone Spring 3rd	9512		
Wolfcamp	9853		

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program (Primary Design)

ĺ			Wt	Grade Conn		Casing	Interval	Casing	Interval
	Hole Size	Csg. Size	(PPF)			From (MD)	To (MD)	From (TVD)	To (TVD)
	14 3/4	10 3/4	40 1/2	H40	BTC	0	272	0	272
	9 7/8	8 5/8	32	P110	TLW	0	9778	0	9778
	7 7/8	5 1/2	17	P110	ВТС	0	17279	0	10314

<sup>•</sup> All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.

3. Cementing Program (Primary Design)

Casing	# Sks	тос	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	182	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	248	248 Surf 9		3.27	Lead: Class C Cement + additives
IIIt 1	557	4972	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate	563	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
	248	Surf	9	3.27	Lead: Class C Cement + additives
Squeeze	557	4972	13.2	1.44	Tail: Class H / C + additives
Production	117	7887	9	3.27	Lead: Class H /C + additives
	978	9887	13.2	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the 8-5/8' intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

**4. Pressure Control Equipment (Three String Design)** 

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		✓	Tested to:
			Annular		X	50% of rated working pressure
Int 1	13-5/8"	5M		d Ram	X	
IIIC 1	13-3/0	3111	Pipe	Ram		5M
			Doub	le Ram	X	JIVI
			Other*			
			Annular (5M)		X	50% of rated working pressure
Production	13-5/8"	5M	Blind Ram		X	
Troduction		3111	Pipe Ram			5M
			Doub	Double Ram		JIVI
			Other*			
			Annular (5M)			
			Blind Ram			
			Pipe Ram			
			Double Ram			
			Other*			
A variance is requested for the use of a diverter on the surface casing. See attached for schematic.  A variance is requested to run a 5 M annular on a 10M system						
A variance is requested to run a 5 M annular on a 10M system						

5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	10-10.5

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
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6. Logging and Testing Procedures

_	0. 1089								
	Logging, Coring and Testing								
ſ		Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the							
	X Completion Report and shumitted to the BLM.								
I		No logs are planned based on well control or offset log information.							
	Drill stem test? If yes, explain.								
		Coring? If yes, explain.							

Additional	logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	5631
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren 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.

cheountered	a measured values and formations will be provided to the BLM.
N	H2S is present
Y	H2S plan attached.

#### 8. Other facets of operation

Is this a walking operation? Potentially

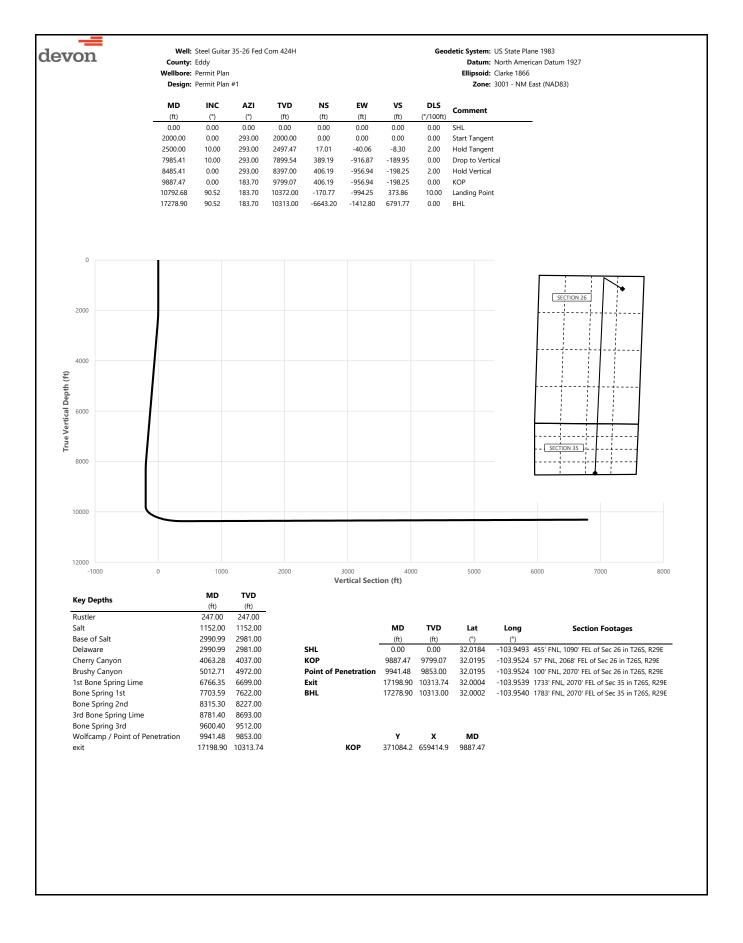
- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

#### Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
  - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
- <sup>3</sup> The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments	3
X	Directional Plan
	Other, describe





Well: Steel Guitar 35-26 Fed Com 424H

County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866

	Design: Permit Plan #1						<b>Zone:</b> 3001 - NM East (NAD83)				
MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment			
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)				
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL			
100.00 200.00	0.00	293.00 293.00	100.00 200.00	0.00	0.00	0.00	0.00				
247.00	0.00	293.00	247.00	0.00	0.00	0.00	0.00	Rustler			
300.00	0.00	293.00	300.00	0.00	0.00	0.00	0.00	Tiesde I			
400.00	0.00	293.00	400.00	0.00	0.00	0.00	0.00				
500.00	0.00	293.00	500.00	0.00	0.00	0.00	0.00				
600.00	0.00	293.00	600.00	0.00	0.00	0.00	0.00				
700.00	0.00	293.00	700.00	0.00	0.00	0.00	0.00				
800.00	0.00	293.00	800.00	0.00	0.00	0.00	0.00				
900.00 1000.00	0.00	293.00 293.00	900.00 1000.00	0.00	0.00	0.00	0.00				
1100.00	0.00	293.00	1100.00	0.00	0.00	0.00	0.00				
1152.00	0.00	293.00	1152.00	0.00	0.00	0.00	0.00	Salt			
1200.00	0.00	293.00	1200.00	0.00	0.00	0.00	0.00				
1300.00	0.00	293.00	1300.00	0.00	0.00	0.00	0.00				
1400.00	0.00	293.00	1400.00	0.00	0.00	0.00	0.00				
1500.00	0.00	293.00	1500.00	0.00	0.00	0.00	0.00				
1600.00	0.00	293.00	1600.00	0.00	0.00	0.00	0.00				
1700.00	0.00	293.00	1700.00	0.00	0.00	0.00	0.00				
1800.00 1900.00	0.00	293.00 293.00	1800.00 1900.00	0.00	0.00	0.00	0.00				
2000.00	0.00	293.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent			
2100.00	2.00	293.00	2000.00	0.68	-1.61	-0.33	2.00	Start rangent			
2200.00	4.00	293.00	2199.84	2.73	-6.42	-1.33	2.00				
2300.00	6.00	293.00	2299.45	6.13	-14.45	-2.99	2.00				
2400.00	8.00	293.00	2398.70	10.89	-25.66	-5.32	2.00				
2500.00	10.00	293.00	2497.47	17.01	-40.06	-8.30	2.00	Hold Tangent			
2600.00	10.00	293.00	2595.95	23.79	-56.05	-11.61	0.00				
2700.00	10.00	293.00	2694.43	30.58	-72.03	-14.92	0.00				
2800.00	10.00	293.00	2792.91	37.36	-88.02	-18.23	0.00				
2900.00 2990.99	10.00 10.00	293.00 293.00	2891.39 2981.00	44.15 50.32	-104.00 -118.55	-21.55 -24.56	0.00	Base of Salt, Delaware			
3000.00	10.00	293.00	2989.87	50.93	-119.98	-24.86	0.00	base of Sair, Delaware			
3100.00	10.00	293.00	3088.35	57.72	-135.97	-28.17	0.00				
3200.00	10.00	293.00	3186.83	64.50	-151.95	-31.48	0.00				
3300.00	10.00	293.00	3285.31	71.28	-167.94	-34.79	0.00				
3400.00	10.00	293.00	3383.79	78.07	-183.92	-38.10	0.00				
3500.00	10.00	293.00	3482.27	84.85	-199.91	-41.41	0.00				
3600.00	10.00	293.00	3580.75	91.64	-215.89	-44.73	0.00				
3700.00	10.00	293.00	3679.23	98.42	-231.88	-48.04	0.00				
3800.00 3900.00	10.00 10.00	293.00 293.00	3777.72 3876.20	105.21 111.99	-247.86 -263.84	-51.35 -54.66	0.00				
4000.00	10.00	293.00	3974.68	118.78	-279.83	-57.97	0.00				
4063.28	10.00	293.00	4037.00	123.07	-289.94	-60.07	0.00	Cherry Canyon			
4100.00	10.00	293.00	4073.16	125.56	-295.81	-61.28	0.00	, ,			
4200.00	10.00	293.00	4171.64	132.35	-311.80	-64.59	0.00				
4300.00	10.00	293.00	4270.12	139.13	-327.78	-67.91	0.00				
4400.00	10.00	293.00	4368.60	145.92	-343.77	-71.22	0.00				
4500.00	10.00	293.00	4467.08	152.70	-359.75	-74.53	0.00				
4600.00 4700.00	10.00 10.00	293.00 293.00	4565.56 4664.04	159.49 166.27	-375.74 -391.72	-77.84 -81.15	0.00				
4800.00	10.00	293.00	4762.52	173.06	-391.72 -407.70	-81.15 -84.46	0.00				
4900.00	10.00	293.00	4861.00	179.84	-423.69	-87.77	0.00				
5000.00	10.00	293.00	4959.48	186.63	-439.67	-91.09	0.00				
5012.71	10.00	293.00	4972.00	187.49	-441.70	-91.51	0.00	Brushy Canyon			
5100.00	10.00	293.00	5057.97	193.41	-455.66	-94.40	0.00				
5200.00	10.00	293.00	5156.45	200.20	-471.64	-97.71	0.00				
5300.00	10.00	293.00	5254.93	206.98	-487.63	-101.02	0.00				
5400.00	10.00	293.00	5353.41	213.77	-503.61	-104.33	0.00				
5500.00	10.00	293.00	5451.89 5550.27	220.55	-519.60	-107.64	0.00				
5600.00 5700.00	10.00 10.00	293.00 293.00	5550.37 5648.85	227.34 234.12	-535.58 -551.56	-110.95 -114.27	0.00				
5800.00	10.00	293.00	5747.33	240.91	-551.56 -567.55	-114.27	0.00				
5900.00	10.00	293.00	5845.81	247.69	-583.53	-120.89	0.00				
6000.00	10.00	293.00	5944.29	254.48	-599.52	-124.20	0.00				
6100.00	10.00	293.00	6042.77	261.26	-615.50	-127.51	0.00				
6200.00	10.00	293.00	6141.25	268.05	-631.49	-130.82	0.00				
6300.00	10.00	293.00	6239.73	274.83	-647.47	-134.13	0.00				
6400.00	10.00	293.00	6338.22	281.62	-663.45	-137.45	0.00				



Well: Steel Guitar 35-26 Fed Com 424H

County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983

**Datum:** North American Datum 1927 **Ellipsoid:** Clarke 1866

Zone: 3001 - NM East (NAD83)

	Design:	Permit Plan	1#1					<b>Zone:</b> 3001 - NM East (NAD83)
MD	INC	AZI	TVD	NS	EW	vs	DLS	<b>6</b>
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
6500.00	10.00	293.00	6436.70	288.40	-679.44	-140.76	0.00	
6600.00	10.00	293.00	6535.18	295.19	-695.42	-144.07	0.00	
6700.00	10.00	293.00	6633.66	301.97	-711.41	-147.38	0.00	
6766.35	10.00	293.00	6699.00	306.47	-722.01	-149.58	0.00	1st Bone Spring Lime
6800.00	10.00	293.00	6732.14	308.76	-727.39	-150.69	0.00	, 3
6900.00	10.00	293.00	6830.62	315.54	-743.38	-154.00	0.00	
7000.00	10.00	293.00	6929.10	322.33	-759.36	-157.31	0.00	
7100.00	10.00	293.00	7027.58	329.11	-775.35	-160.63	0.00	
7200.00	10.00	293.00	7126.06	335.90	-791.33	-163.94	0.00	
7300.00	10.00	293.00	7224.54	342.68	-807.31	-167.25	0.00	
7400.00	10.00	293.00	7323.02	349.47	-823.30	-170.56	0.00	
7500.00	10.00	293.00		356.25	-839.28	-170.30		
7600.00	10.00	293.00	7421.50 7519.99	363.04	-855.27	-173.07	0.00	
7700.00		293.00		369.82		-177.18		
	10.00		7618.47		-871.25		0.00	Dana Carina 1at
7703.59	10.00	293.00	7622.00	370.06	-871.83	-180.61	0.00	Bone Spring 1st
7800.00	10.00	293.00	7716.95	376.61	-887.24	-183.81	0.00	
7900.00	10.00	293.00	7815.43	383.39	-903.22	-187.12	0.00	
7985.41	10.00	293.00	7899.54	389.19	-916.87	-189.95	0.00	Drop to Vertical
8000.00	9.71	293.00	7913.91	390.16	-919.17	-190.43	2.00	
8100.00	7.71	293.00	8012.76	396.08	-933.11	-193.31	2.00	
8200.00	5.71	293.00	8112.07	400.64	-943.86	-195.54	2.00	
8300.00	3.71	293.00	8211.72	403.85	-951.41	-197.11	2.00	
8315.30	3.40	293.00	8227.00	404.22	-952.29	-197.29	2.00	Bone Spring 2nd
8400.00	1.71	293.00	8311.61	405.70	-955.76	-198.01	2.00	
8485.41	0.00	293.00	8397.00	406.19	-956.94	-198.25	2.00	Hold Vertical
8500.00	0.00	183.70	8411.60	406.19	-956.94	-198.25	0.00	
8600.00	0.00	183.70	8511.60	406.19	-956.94	-198.25	0.00	
8700.00	0.00	183.70	8611.60	406.19	-956.94	-198.25	0.00	
8781.40	0.00	183.70	8693.00	406.19	-956.94	-198.25	0.00	3rd Bone Spring Lime
8800.00	0.00	183.70	8711.60	406.19	-956.94	-198.25	0.00	1 3
8900.00	0.00	183.70	8811.60	406.19	-956.94	-198.25	0.00	
9000.00	0.00	183.70	8911.60	406.19	-956.94	-198.25	0.00	
9100.00	0.00	183.70	9011.60	406.19	-956.94	-198.25	0.00	
9200.00	0.00	183.70	9111.60	406.19	-956.94	-198.25	0.00	
9300.00	0.00	183.70	9211.60	406.19	-956.94	-198.25	0.00	
9400.00	0.00	183.70	9311.60	406.19	-956.94	-198.25	0.00	
9500.00	0.00	183.70	9411.60	406.19	-956.94	-198.25	0.00	
9600.00	0.00	183.70	9511.60	406.19	-956.94	-198.25	0.00	Deve Code and
9600.40	0.00	183.70	9512.00	406.19	-956.94	-198.25	0.00	Bone Spring 3rd
9700.00	0.00	183.70	9611.60	406.19	-956.94	-198.25	0.00	
9800.00	0.00	183.70	9711.60	406.19	-956.94	-198.25	0.00	
9887.47	0.00	183.70	9799.07	406.19	-956.94	-198.25	0.00	KOP
9900.00	1.25	183.70	9811.59	406.06	-956.94	-198.11	10.00	
9941.48	5.40	183.70	9853.00	403.66	-957.10	-195.73	10.00	Wolfcamp / Point of Penetration
10000.00	11.25	183.70	9910.87	395.20	-957.65	-187.35	10.00	
10100.00	21.25	183.70	10006.75	367.31	-959.45	-159.69	10.00	
10200.00	31.25	183.70	10096.33	323.22	-962.30	-115.98	10.00	
10300.00	41.25	183.70	10176.87	264.29	-966.11	-57.54	10.00	
10400.00	51.25	183.70	10245.93	192.29	-970.77	13.85	10.00	
10500.00	61.25	183.70	10301.41	109.42	-976.13	96.03	10.00	
10600.00	71.25	183.70	10341.63	18.19	-982.03	186.49	10.00	
10700.00	81.25	183.70	10365.36	-78.62	-988.29	282.48	10.00	
10792.68	90.52	183.70	10372.00	-170.77	-994.25	373.86	10.00	Landing Point
10800.00	90.52	183.70	10371.93	-178.07	-994.72	381.10	0.00	÷
10900.00	90.52	183.70	10371.02	-277.86	-1001.17	480.04	0.00	
11000.00	90.52	183.70	10371.02	-377.65	-1007.62	578.99	0.00	
11100.00	90.52	183.70	10370.11	-477.43	-1014.08	677.94	0.00	
11200.00	90.52	183.70	10368.30	-577.22	-1020.53	776.88	0.00	
11300.00	90.52	183.70	10366.30	-677.01	-1020.33	875.83	0.00	
11400.00	90.52	183.70	10367.39	-776.80	-1026.96	974.78	0.00	
11500.00	90.52	183.70	10365.57	-876.58	-1039.89	1073.72	0.00	
11600.00	90.52	183.70	10364.66	-976.37	-1046.34	1172.67	0.00	
11700.00	90.52	183.70		-1076.16	-1052.79	1271.62	0.00	
11800.00	90.52	183.70		-1175.95	-1059.24	1370.56	0.00	
11900.00	90.52	183.70		-1275.73	-1065.70	1469.51	0.00	
12000.00	90.52	183.70		-1375.52	-1072.15	1568.46	0.00	
12100.00	90.52	183.70		-1475.31	-1078.60	1667.40	0.00	
	00.53	183.70	10359.20	-1575.10	-1085.06	1766.35	0.00	
12200.00	90.52							
	90.52 90.52	183.70 183.70	10358.29	-1674.88 -1774.67	-1091.51 -1097.96	1865.30 1964.25	0.00	



Well: Steel Guitar 35-26 Fed Com 424H

County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983

**Datum:** North American Datum 1927 **Ellipsoid:** Clarke 1866

Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
12500.00	90.52	183.70	10356.47	-1874.46	-1104.41	2063.19	0.00	_
12600.00	90.52	183.70	10355.56	-1974.25	-1110.87	2162.14	0.00	
12700.00	90.52	183.70	10354.65	-2074.03	-1117.32	2261.09	0.00	
12800.00	90.52	183.70	10353.74	-2173.82	-1123.77	2360.03	0.00	
12900.00	90.52	183.70	10352.83	-2273.61	-1130.22	2458.98	0.00	
13000.00	90.52	183.70	10351.92	-2373.40	-1136.68	2557.93	0.00	
13100.00	90.52	183.70	10351.02	-2473.18	-1143.13	2656.87	0.00	
13200.00	90.52	183.70	10350.11	-2572.97	-1149.58	2755.82	0.00	
13300.00	90.52	183.70	10349.20	-2672.76	-1156.04	2854.77	0.00	
13400.00	90.52	183.70	10348.29	-2772.55	-1162.49	2953.71	0.00	
13500.00	90.52	183.70	10347.38	-2872.33	-1168.94	3052.66	0.00	
13600.00	90.52	183.70	10346.47	-2972.12	-1175.39	3151.61	0.00	
13700.00	90.52	183.70	10345.56	-3071.91	-1181.85	3250.56	0.00	
13800.00	90.52	183.70	10344.65	-3171.70	-1188.30	3349.50	0.00	
13900.00	90.52	183.70	10343.74	-3271.48	-1194.75	3448.45	0.00	
14000.00	90.52	183.70	10342.83	-3371.27	-1201.20	3547.40	0.00	
14100.00	90.52	183.70	10341.92	-3471.06	-1207.66	3646.34	0.00	
14200.00	90.52	183.70	10341.01	-3570.85	-1214.11	3745.29	0.00	
14300.00	90.52	183.70	10340.10	-3670.63	-1220.56	3844.24	0.00	
14400.00	90.52	183.70	10339.19	-3770.42	-1227.01	3943.18	0.00	
14500.00	90.52	183.70	10338.28	-3870.21	-1233.47	4042.13	0.00	
14600.00	90.52	183.70	10337.37	-3969.99	-1239.92	4141.08	0.00	
14700.00	90.52	183.70	10336.46	-4069.78	-1246.37	4240.02	0.00	
14800.00	90.52	183.70	10335.55	-4169.57	-1252.83	4338.97	0.00	
14900.00	90.52	183.70	10333.53	-4269.36	-1259.28	4437.92	0.00	
15000.00	90.52	183.70	10333.74	-4369.14	-1265.73	4536.86	0.00	
15100.00	90.52	183.70	10333.74	-4468.93	-1272.18	4635.81	0.00	
15200.00	90.52	183.70	10332.03	-4568.72	-1278.64	4734.76	0.00	
15300.00	90.52	183.70	10331.01	-4668.51	-1285.09	4833.71	0.00	
15400.00	90.52	183.70	10331.01	-4768.29	-1291.54	4932.65	0.00	
15500.00	90.52	183.70	10330.10	-4868.08	-1297.99	5031.60	0.00	
15600.00	90.52	183.70	10323.13	-4967.87	-1304.45	5130.55	0.00	
15700.00	90.52	183.70	10320.20	-5067.66	-1310.90	5229.49	0.00	
15800.00	90.52	183.70	10327.37	-5167.44	-1310.30	5328.44	0.00	
15900.00	90.52	183.70	10325.55	-5267.23	-1317.33	5427.39	0.00	
16000.00	90.52	183.70	10325.55	-5267.23 -5367.02	-1323.61	5526.33	0.00	
16100.00		183.70	10324.64	-5367.02	-1330.26		0.00	
	90.52					5625.28		
16200.00	90.52	183.70	10322.82	-5566.59	-1343.16	5724.23	0.00	
16300.00	90.52	183.70	10321.91	-5666.38	-1349.62	5823.17	0.00	
16400.00	90.52	183.70	10321.00	-5766.17	-1356.07	5922.12	0.00	
16500.00	90.52	183.70	10320.09	-5865.96	-1362.52	6021.07	0.00	
16600.00	90.52	183.70	10319.18	-5965.74	-1368.97	6120.01	0.00	
16700.00	90.52	183.70	10318.27	-6065.53	-1375.43	6218.96	0.00	
16800.00	90.52	183.70	10317.36	-6165.32	-1381.88	6317.91	0.00	
16900.00	90.52	183.70	10316.45	-6265.11	-1388.33	6416.86	0.00	
17000.00	90.52	183.70	10315.55	-6364.89	-1394.78	6515.80	0.00	
17100.00	90.52	183.70	10314.64	-6464.68	-1401.24	6614.75	0.00	
17198.90	90.52	183.70	10313.74	-6563.37	-1407.62	6712.61	0.00	exit
17200.00	90.52	183.70	10313.73	-6564.47	-1407.69	6713.70	0.00	
17278.90	90.52	183.70	10313.00	-6643.20	-1412.80	6791.77	0.00	BHL

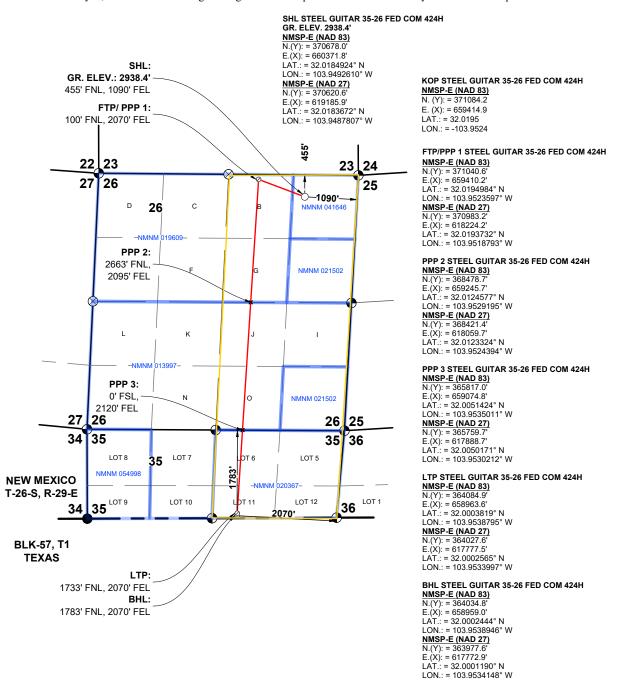
C-10	2		Ene	rgv. Min	State of Ne erals & Natur	w Mexico al Resources Departi	ment		Revised July 9, 2024			
	Electronically					TION DIVISION			Initial	Submittal		
Via OCD	Permitting							Submittal	<del></del>	ded Report		
								Type:	As Dri	^		
			<u> </u>		WELL LOCAT	PION INFORMATION			As Di	illed		
API Nun	har		Pool Code			Pool Name						
	15-55927	•		98220	ſ	PURPLE S	AGE; WO	OLFCAM	P (GAS)			
Property	Code		Property Na	ame	CTEEL CLU	EAD 05 00 EED 00	N 4		Well Number			
OGRID 1	No.		Operator N	ame	STEEL GUI	TAR 35-26 FED CO	IVI		Ground Level	424H Elevation		
o ordin .	24628	39	орегиют г		WPX ENEF	RGY PERMIAN, LLC				2938.4'		
Surface (	Owner:	State Fee	Tribal	Federal		Mineral Owner:	State F	ee Tr	ibal Federal			
					Surf	ace Location						
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitu		Longitude	County		
Α	26	26-S	29-E		455' FNL	1090' FEL	32.018 32°01'0	-	-103.949261 103°56'57.34"	EDDY		
					•	Hole Location	02 0.0					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitu		Longitude	County		
LOT 11	35	26-S	29-E		1783' FNL	2070' FEL	32.000 32°00'0		-103.953895 103°57'14.02"	EDDY		
					•							
Dedicate 430.		Infill or Definin	ng Well	Defining V	Well API 15-55926	Overlapping Spacing Un	nit (Y/N)	Consolidati	ion Code			
Order Nu	ımbers.					Well setbacks are under	Common Ow	nership:	Yes	No		
,					Kick O	Off Point (KOP)						
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitu	ıde	Longitude	County		
В	26	26-S	29-E		57' FNL	2068' FEL	32.019	95	-103.9524	EDDY		
					First T	ake Point (FTP)						
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitu <b>32.01</b> 9		Longitude -103.952360	County		
В	26	26-S	29-E		100' FNL	2070' FEL	32°01'1		-103.952360 103°57'08.49"	EDDY		
					Last Ta	ake Point (LTP)			•			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitu <b>32.00</b> 0		Longitude -103.953879	County		
LOT 11	35	26-S	29-E		1733' FNL	2070' FEL	32°00'0		103°57'13.97"	EDDY		
				1			1					
Unitized	Area or Area	of Uniform Inter	est	Spacing U	nit Type	orizontal	Groun	nd Floor Elev	ation:			
						ī						
OPERAT	OR CERTIF	ICATIONS				SURVEYOR CERTIFICA	TIONS					
my knowle organizat including location p interest, o	edge and belie ion either own the proposed to pursuant to a co or to a voluntar	information contain f and, if the well is as a working intered bottom hole location ontract with an ow y pooling agreeme	a vertical or d est or unleased on or has a righ ner of a workin	irectional well mineral inter to drill this ag interest or t	<b>ll, that this rest</b> in the land well at this unleased mineral	I hereby certify that the well surveys made by me or under my belief						
If this wel		al well, I further ce							Z ZW	MEX S Z		
in each tr	act (in the targ	essee or owner of a get pool or formation or obtained a comp	on) in which an	y part of the v	well's completed	m	/		Draft: FH!	7177)		
An	y A.	Brown	01/06/	2025		1 Jong	kin	_	197			
Signature	1		Date			Signature and Seal of Profe AMES C. TOMPKINS 27		yor	101	VAL SURVEY		
Amv	A. Brown	1				Date 10/30/2024	Job. No.: W	TC-56644	Draft: FH!			
Printed N						Certificate Number	Date of Surv	vey				
amy Email Ad	.brown@	dvn.com				27117		OCT	OBER 28, 20	024		
Eman Ac	iuress					1						

Note: 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.

#### ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



SECTION: 26, T-26-S, R-29-E, N.M.P.M.

COUNTY: EDDY STATE: NEW MEXICO

**DESCRIPTION:** 455' FNL & 1090" FEL **OPERATOR:** WPX ENERGY PERMIAN, LLC

WELL NAME: STEEL GUITAR 35-26 FED COM #424H

DUWI: WA018425587 UFID: AA000497611

WELL PAD: STEEL GUITAR 35-26 FED EAST PAD



**W T C**, INC. 405 S.W. 1st Street Andrews, TX 79714 (432) 523-2181

#### Steel Guitar 26-35 Fed Com 424H

10 3/4		surface csg in a	14 3/4 i	nch hole.		Design	Factors			Surface		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	40.50		h 40	btc	27.45	7.23	0.43	411	13	0.72	13.66	16,64
"B"				btc				0				0
_	v	v/8.4#/g mud, 30min Sfc Csg Tes	st nsig: 1 417	Tail Cmt	does not	circ to sfc.	Totals:	411				16,64
omnaricon o		to Minimum Required Cen		run ome	4000 1101	0110 10 010.	i otais.					10,01
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Di
Size		_	_	Cu Ft	•	Mud Wt		BOPE				
	Volume	Cmt Sx	CuFt Cmt		% Excess		MASP					Hole-C
14 3/4	0.5563	182	262	229	15	9.00	3182	5M				2.00
urst Frac Grad	ient(s) for S	egment(s) A, B = , b All > 0	0.70, OK.									
0 = /0		cosing inside the	10.2/4			Dosign	Factors			Int 1		
8 5/8		casing inside the	10 3/4	Counling	laint	Design		Longth	D@c			Moint
Segment	#/ft	Grade	440	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigl
"A"	32.00		p 110	tlw	3.44	0.79	1.59	9,778	2	2.66	1.33	
"B"							_	0				0
	v	v/8.4#/g mud, 30min Sfc Csg Tes	st psig: 2,151				Totals:	9,778				312,89
		The cement	volume(s) are intended	ed to achieve a top of	0	ft from su	irface or a	411				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Di
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
9 7/8	0.1261	805	1613	1241	30	10.50	3357	5M				0.44
D V Tool(s):	****		4972			10100	sum of sx	Σ CuFt				Σ%exce
												_,,,,,,,,
oy stage % :	t yld > 1.35	166	28				1368	2424				95
oy stage % :	t yld > 1.35	166						2424				95
by stage % :		casing inside the		······		<u>Design Fa</u>	1368	2424		Prod 1		95
y stage % : lass 'C' tail cm Tail cmt 5 1/2			28	Coupling	Body	Design Fa	1368	2424 Length	B@s	Prod 1 a-B	a-C	
oy stage % : class 'C' tail cm Tail cmt 5 1/2		casing inside the	28	Coupling btc	<b>Body</b> 3.11		1368		<b>B@s</b> 2		<b>a-C</b> 2.23	Weigl
by stage % : Class 'C' tail cm Tail cmt 5 1/2 Segment	#/ft	casing inside the	28 8 5/8	, ,	•	Collapse	1368  ctors  Burst	Length		а-В		Weigl
Tail cmt 5 1/2 Segment "A"	#/ft	casing inside the	28 8 5/8	, ,	•	Collapse	1368  ctors  Burst	Length 17,279		а-В		<b>Weigl</b> 293,74
Tail cmt 5 1/2 Segment "A" "C"	#/ft	casing inside the	28 8 5/8	, ,	•	Collapse	1368  ctors  Burst	Length 17,279 0		а-В		Weigl 293,74 0
y stage %: lass 'C' tail cm  Tail cmt 5 1/2  Segment "A" "B"	#/ft 17.00	casing inside the Grade	8 5/8 p 110	, ,	•	Collapse	1368  ctors  Burst 1.89	Length 17,279 0 0		а-В		Weigl 293,74 0 0
Tail cmt 5 1/2 Segment "A" "B" "C"	#/ft 17.00	casing inside the Grade	85/8 p 110	btc	3.11	Collapse 1.33	tors Burst 1.89 Totals:	Length 17,279 0 0 17,279		а-В	2.23	Weigl 293,74 0 0 0 293,74
y stage %: lass 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"	#/ft 17.00	casing inside the Grade w/8.4#/g mud, 30min Sfc Csg Tes The cement	85/8 p 110 st psig: 2,269 volume(s) are intend	btc ed to achieve a top of	3.11 9578	Collapse 1.33	tors Burst 1.89 Totals:	Length 17,279 0 0 17,279 200		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap.
Tail cmt 5 1/2 Segment "A" "C" "D"	#/ft 17.00 v	casing inside the Grade w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage	btc  ed to achieve a top of Min	3.11 9578 1 Stage	ft from su Drilling	totals:	Length 17,279 0 0 0 17,279 200 Req'd		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap.
Tail cmt 5 1/2 Segment "A" "B" "C" "D"	#/ft 17.00 v Annular Volume	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt	ed to achieve a top of Min Cu Ft	3.11 9578 1 Stage % Excess	Collapse 1.33  ft from su Drilling Mud Wt	tors Burst 1.89 Totals:	Length 17,279 0 0 17,279 200		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap. Min Di Hole-C
Tail cmt  5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage	btc  ed to achieve a top of Min	3.11 9578 1 Stage	ft from su Drilling	totals:	Length 17,279 0 0 0 17,279 200 Req'd		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap. Min Di Hole-C
Tail cmt  5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt	ed to achieve a top of Min Cu Ft	3.11 9578 1 Stage % Excess	Collapse 1.33  ft from su Drilling Mud Wt	totals:	Length 17,279 0 0 0 17,279 200 Req'd		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap. Min Di Hole-C
by stage %: Class 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt	ed to achieve a top of Min Cu Ft	3.11 9578 1 Stage % Excess	Collapse 1.33  ft from su Drilling Mud Wt	totals:	Length 17,279 0 0 0 17,279 200 Req'd		а-В	2.23	Weigl 293,74 0 0 0 293,74 overlap. Min Di Hole-C
by stage %: Class 'C' tail cm  Tail cmt 51/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt	ed to achieve a top of Min Cu Ft	3.11 9578 1 Stage % Excess	Collapse 1.33  ft from su Drilling Mud Wt	Totals: urface or a Calc MASP	Length 17,279 0 0 0 17,279 200 Req'd	2	а-В	2.23	Weigh 293,74 0 0 0 293,74
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 #N/A 0	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791	ed to achieve a top of Min Cu Ft	3.11 9578 1 Stage % Excess	ft from su Drilling Mud Wt 10.50	Totals: urface or a Calc MASP	Length 17,279 0 0 0 17,279 200 Req'd	2	<b>a-B</b> 3.17	2.23	Weigl 293,74 0 0 293,74 overlap. Min Di: Hole-Cp
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 llass 'C' tail cm #N/A 0 Segment	#/ft 17.00 v Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  W/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1095	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791	ed to achieve a top of Min Cu Ft 1335	9578 1 Stage % Excess 34	ft from su Drilling Mud Wt 10.50	Totals: Irface or a Calc MASP	Length 17,279 0 0 17,279 200 Req'd BOPE	2	a-B 3.17	2.23	Weigl 293,74 0 0 293,74 overlap. Min Di Hole-C 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm #N/A 0 Segment "A"	#/ft 17.00 v Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  W/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1095	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00	9578 1 Stage % Excess 34	ft from su Drilling Mud Wt 10.50	Totals: Irface or a Calc MASP	Length 17,279 0 0 17,279 200 Req'd BOPE	2	a-B 3.17	2.23	Weigi 293,74 0 0 293,74 0 overlap. Min Di Hole-C  0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm #N/A 0 Segment	#/ft 17.00 Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1095  Grade	8 5/8 p 110  st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791	ed to achieve a top of Min Cu Ft 1335	9578 1 Stage % Excess 34	ft from su Drilling Mud Wt 10.50	Totals: urface or a Calc MASP  Factors Burst	Length 17,279 0 0 0 17,279 200 Req'd BOPE	2	a-B 3.17	2.23	Weig 293,7-0 0 0 293,7-0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm #N/A 0 Segment "A"	#/ft 17.00 Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1095  Grade	8 5/8 p 110  st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791  5 1/2	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00 0.00	9578 1 Stage % Excess 34 #N/A	ft from st. Drilling Mud Wt. 10.50  Design Collapse	Totals:  Totals:  Totals:  Totals:  Totals:  Totals:  Totals:	Length 17,279 0 0 17,279 200 Req'd BOPE  Length 0 0	2	a-B 3.17	2.23	Weig 293,7-0 0 0 293,7-0 overlap. Min Di Hole-C 0.91 Weig 0 0 0
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm  #N/A 0 Segment "A" "B" """ """ """ """ """ """ """ """	#/ft 17.00 Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1095  Grade  v/8.4#/g mud, 30min Sfc Csg Tes Cmt vol C	8 5/8 p 110  st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791  5 1/2  st psig: each below includes the	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00 0.00  his csg, TOC intended	9578 1 Stage % Excess 34 #N/A	ft from su Drilling Mud Wt 10.50  Design Collapse	Totals: Inface or a Calc MASP  Factors Burst  Totals:	Length 17,279 0 0 17,279 200 Req'd BOPE  Length 0 0 4N/A	2	a-B 3.17	2.23	Weigi 293,7- 0 0 293,7- overlap. Min Di Hole-Ci 0.91 Weigi 0 0 0 overlap.
by stage %: Class 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm  #N/A 0 Segment "A" "B"  Hole	#/ft 17.00  Annular Volume 0.1733 t yld > 1.35  #/ft	casing inside the Grade  W/8.4#/g mud, 30min Sfc Csg Ter The cement 1 Stage Cmt Sx 1095  Grade  W/8.4#/g mud, 30min Sfc Csg Ter Cmt vol c 1 Stage	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791 5 1/2 st psig: alc below includes th	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00 0.00 his csg, TOC intended Min	9578 1 Stage % Excess 34  #N/A  #N/A	ft from su Drilling Mud Wt 10.50  Design Collapse  ft from su Drilling	Totals: Inface or a Calc MASP  Totals: Totals: Inface or a Calc MASP	Length 17,279 0 0 17,279 200 Req'd BOPE  Length 0 0 #N/A Req'd	2	a-B 3.17	2.23	Weigl 293,72 0 0 293,72 overlap. Min Di: Hole-CF 0.91  Weigl 0 0 overlap. Min Di:
by stage %: Class 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm  #N/A 0 Segment "A" "B"  Hole Size	#/ft 17.00 Annular Volume 0.1733 t yld > 1.35	casing inside the Grade  w/8.4#/g mud, 30min Sfc Csg Ter The cement 1 Stage Cmt Sx 1095  Grade  w/8.4#/g mud, 30min Sfc Csg Ter Cmt vol c 1 Stage Cmt Sx	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791  5 1/2 st psig: calc below includes th 1 Stage CuFt Cmt	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00 0.00  his csg, TOC intended Min Cu Ft	9578 1 Stage % Excess 34  #N/A  #N/A 1 Stage % Excess	ft from su Drilling Mud Wt 10.50  Design Collapse	Totals: Inface or a Calc MASP  Totals: Totals: Totals: Totals: Totals:	Length 17,279 0 0 17,279 200 Req'd BOPE  Length 0 0 4N/A	2	a-B 3.17	2.23	Weigl 293,72 0 0 293,72 overlap. Min Di: Hole-CF 0.91  Weigl 0 0 overlap. Min Di:
by stage %: Class 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm  #N/A 0 Segment "A" "B"  Hole	#/ft 17.00  Annular Volume 0.1733 t yld > 1.35  #/ft	casing inside the Grade  W/8.4#/g mud, 30min Sfc Csg Ter The cement 1 Stage Cmt Sx 1095  Grade  W/8.4#/g mud, 30min Sfc Csg Ter Cmt vol c 1 Stage	8 5/8 p 110 st psig: 2,269 volume(s) are intend 1 Stage CuFt Cmt 1791 5 1/2 st psig: alc below includes th	ed to achieve a top of Min Cu Ft 1335  Coupling 0.00 0.00 his csg, TOC intended Min	9578 1 Stage % Excess 34  #N/A  #N/A	ft from su Drilling Mud Wt 10.50  Design Collapse  ft from su Drilling	Totals: Inface or a Calc MASP  Totals: Totals: Inface or a Calc MASP	Length 17,279 0 0 17,279 200 Req'd BOPE  Length 0 0 #N/A Req'd	2	a-B 3.17	2.23	Weight 293,74 0 0 0 0 293,74 overlap. Min Dis Hole-Cp 0.91 Weight 0 0 0

Carlsbad Field Office 1/29/2025

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

All Previous COAs Still Apply. Variance request procedure is approved as written, please see below general conditions for variance.

#### A. PRESSURE CONTROL

#### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR part 3170 Subpart 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **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

    EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

    BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV

    (575) 361-2822
  - ✓ Lea CountyCall 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 2<sup>nd</sup> 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 **43** CFR part **3170** Subpart **3172** 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 intergrity 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 intergrity 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 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 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 43 CFR 3172.6(b)(9) 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170 Subpart 3172 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 43 CFR

# part 3170 Subpart 3172.

#### 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.

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

All Previous COAs Still Apply. Variance request procedure is approved as written, please see below general conditions for variance.

# **Offline Cementing**

Operator has been (**Approved**) to pump the proposed cement program offline in the **Intermediate(s) interval**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at Eddy County: 575-361-2822.

# **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

    EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

    BLM NM CFO DrillingNotifications@BLM.GOV

(575) 361-2822

- ✓ Lea CountyCall 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 2<sup>nd</sup> 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 **43** CFR part **3170** Subpart **3172** 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 intergrity 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 intergrity 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 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 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 43 CFR 3172.6(b)(9) 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170 Subpart 3172 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 43 CFR

# part 3170 Subpart 3172.

#### 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.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 426541

#### **CONDITIONS**

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	426541
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	4/4/2025