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

Well Name: HORN 22-27-34 FED COM Well Location: T26S / R29E / SEC 15 / County or Parish/State: /

SESE /

Well Number: 412H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM21767 Unit or CA Name: Unit or CA Number:

US Well Number: 3001549837 Well Status: Drilling Well Operator: WPX ENERGY

PERMIAN LLC

Sundry Print Report

LONG VO Date: 2024.01.31 11:00:03 -06'00'

Notice of Intent

Sundry ID: 2772621

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/31/2024

Time Sundry Submitted: 06:48

Date proposed operation will begin: 01/31/2024

Procedure Description: Skid Sundry Attention Long Vo WPX Energy Permian, LLC respectfully request to skid over from the original permitted SHL location of 1008 FSL, 1194 FEL, SEC 42-26S-29E and re-drill the approved subject 15-26S-29E wellbore in a different SHL due to pressures and a 4-string casing design change. The new SHL will be 948 FSL, 1194 FEL, SEC 15-26S-29E. The new well name will be Horn 22-27-34 Fed Com 412H and have a separate API. We request the original well associated with API 30-015-49837 to have a well name change to Horn 22-27-34 Fed Com 412Y. Please see the attached new plat, drill plan, and directional.

NOI Attachments

Procedure Description

WA018416267_HORN_22_27_34_FED_COM_412H_WL_R3_20240131064130.pdf

HORN_22_27_34_FED_COM_412H_Directional_Plan_01_30_24_20240131064129.pdf

HORN_22_27_34_FED_COM_412H_20240131064129.pdf

Received by OCD: Well Read & Horn : 2821 M FED COM Well Location: T26S / R29E / SEC 15 / County or Parish/State: /

SESE /

Well Number: 412H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM21767 Unit or CA Name: Unit or CA Number:

US Well Number: 3001549837 Well Status: Drilling Well Operator: WPX ENERGY

PERMIAN LLC

Page 2 of 30

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: CHELSEY GREEN Signed on: JAN 31, 2024 06:26 AM

Name: WPX ENERGY PERMIAN LLC

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City

State: OK

Phone: (405) 228-8595

Email address: Chelsey.Green@dvn.com

Field

Representative Name:

Street Address:

City: State: Zip:

Phone:

Email address:

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: WPX Energy Permian LLC

LEASE NO.: NMNM21767

LOCATION: Section 15, T.26 S., R.29 E., NMPM COUNTY: Fiddy County, New Maying

Eddy County, New Mexico

WELL NAME & NO.: | Horn 22-27-34 Fed Com 412H

SURFACE HOLE FOOTAGE: 948'/S & 1194'/E **BOTTOM HOLE FOOTAGE** 50'/S & 930'/E **ATS/API ID:** 3001549837 **APD ID:** 10400064396

APD ID: 1040006439 Sundry ID: 2772621

COA

H2S	No 🔽		
Potash	None T		
Cave/Karst	Medium 🔻		
Potential			
Cave/Karst	☐ Critical		
Potential			
Variance	None	Flex Hose	C Other
Wellhead	Conventional and Multibov	/I <u>~</u>	
Other	☑ 4 String	Capitan Reef	□WIPP
		None -	
		_	
Other	Pilot Hole	☐ Open Annulus	
	None 🔻		
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None ▼	Int 2 ▼	Squeeze
	_		None -
Special	□ Water	▼ COM	□ Unit
Requirements	Disposal/Injection		
Special	☐ Batch Sundry		
Requirements			
Special	▼ Break Testing	☐ Offline	☐ Casing
Requirements		Cementing	Clearance
Variance			

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 375 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. The surface hole shall be 17 1/2 inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 10-3/4 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

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

3. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:

Option 1 (Single Stage):

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 5105' (715 sxs Class H/C+ additives).
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. (Squeeze 270 sxs Class C)
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 10-3/4" X 8-5/8" annulus after primary cementing stage. <u>Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 8-5/8" casing to surface after the second stage BH to verify TOC.</u>

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least 200 feet into previous casing string.
 Operator shall provide method of verification.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. Annular which shall be tested to 3500 (70% Working Pressure) psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 10-3/4 intermediate casing shoe shall be 5000 (5M) psi. Annular which shall be tested to 3500 (70% Working Pressure) psi.
- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8 inch intermediate casing shoe shall be 5000 (5M) psi.

Option 2:

- a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 13-3/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance (Approved)

- 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 Choose an item. 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

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 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.

LVO 1/31/2024

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

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

BUREAU OF LAND MANAGEMENT	
NDRY NOTICES AND REPORTS ON WELLS	

BORI	EAU OF LAND MAN	AGEMENT		NMI	NM21767			
Do not use this f		ORTS ON WELLS to drill or to re-enter an PD) for such proposals		6. If Indian, Allottee or T	Tribe Name			
SUBMIT IN 1	RIPLICATE - Other instru	uctions on page 2		7. If Unit of CA/Agreement, Name and/or No.				
1. Type of Well	_			8 Well Name and No.				
Oil Well Gas W	_			8. Well Name and No. H	ORN 22-27-34 F	ED COM/412H		
2. Name of Operator WPX ENERGY I	PERMIAN LLC			9. API Well No. 30-0	15-54659			
3a. Address 3500 One Williams Cen	ter, Tulsa, OK 74172	3b. Phone No. <i>(include area code</i> (539) 573-0212	2)	10. Field and Pool or Exp Purple Sage/WOLFC	•			
4. Location of Well (Footage, Sec., T.,R SEC 15/T26S/R29E/NMP	.,M., or Survey Description)			11. Country or Parish, St EDDY/NM	ate			
12. CHE	CK THE APPROPRIATE B	OX(ES) TO INDICATE NATURE	E OF NOTI	CE, REPORT OR OTHE	R DATA			
TYPE OF SUBMISSION		TY	PE OF AC	ΓΙΟΝ				
Notice of Intent	Acidize Alter Casing	Deepen Hydraulic Fracturing	=	uction (Start/Resume)	Water Shut-0			
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	=	mplete oorarily Abandon	Other			
Final Abandonment Notice	Convert to Injection	Plug Back	Wate	r Disposal				
 Describe Proposed or Completed Of the proposal is to deepen directional the Bond under which the work will completion of the involved operatio completed. Final Abandonment Not is ready for final inspection.) 	ly or recomplete horizontal be perfonned or provide the ns. If the operation results in	ly, give subsurface locations and n e Bond No. on file with BLM/BIA n a multiple completion or recomp	neasured ar Required letion in a	nd true vertical depths of a subsequent reports must new interval, a Form 3160	all pertinent marke be filed within 30 0-4 must be filed o	ers and zones. Attach days following once testing has been		
Skid Sundry Attention Long Vo								
WPX Energy Permian, LLC res 26S-29E 42-26S-29E and re-drill the app will be 948 FSL, 1194 FEL, SE the original well associated with	oroved subject wellbore in C 15-26S-29E. The new	n a different SHL due to pressu well name will be Horn 22-27-3	res and a 4 Fed Cor	4-string casing design of the string casing the 412H and have a seg	change. The nevoarate API. We r	equest		

15-2 plat, drill plan, and directional.

14. I hereby certify that the foregoing is true and correct. Name (<i>Printed/Typed</i>) CHELSEY GREEN / Ph: (405) 228-8595	Regulatory Comp	liance Professional	
(Electronic Submission)	Date	01/31/2	024
THE SPACE FOR FEDI	ERAL OR STATE C	FICE USE	
Approved by			
	Title]	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject lewhich would entitle the applicant to conduct operations thereon.			

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: SESE / 1008 FSL / 1194 FEL / TWSP: 26S / RANGE: 29E / SECTION: 15 / LAT: 32.0375715 / LONG: -103.966955 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 100 FNL / 1130 FEL / TWSP: 26S / RANGE: 29E / SECTION: 22 / LAT: 32.0345 / LONG: -103.9668 (TVD: 9874 feet, MD: 10032 feet)

BHL: LOT 12 / 1895 FNL / 930 FEL / TWSP: 26S / RANGE: 29E / SECTION: 34 / LAT: 32.0001 / LONG: -103.967 (TVD: 10110 feet, MD: 22516 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 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>
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 Numbe	er	² Pool Code	³ Pool Name	
30-015-546	59	98220	PURPLE SAGE; WOLFCAMP (GAS)	
⁴ Property Code		5 P1	roperty Name	⁶ Well Number
333166		HORN 22-	-27-34 FED COM	412H
⁷ OGRID No.		8 O _l	perator Name	⁹ Elevation
246289		WPX ENERO	GY PERMIAN, LLC	2927.9

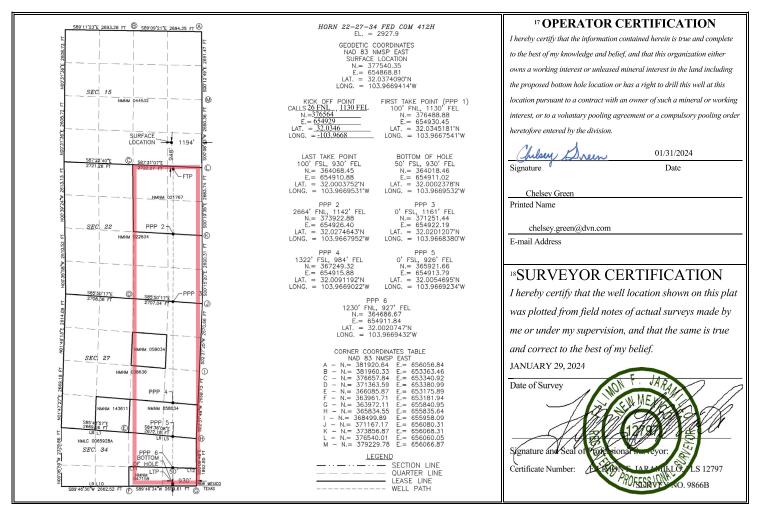
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	15	26 S	29 E		948	SOUTH	1194	EAST	EDDY

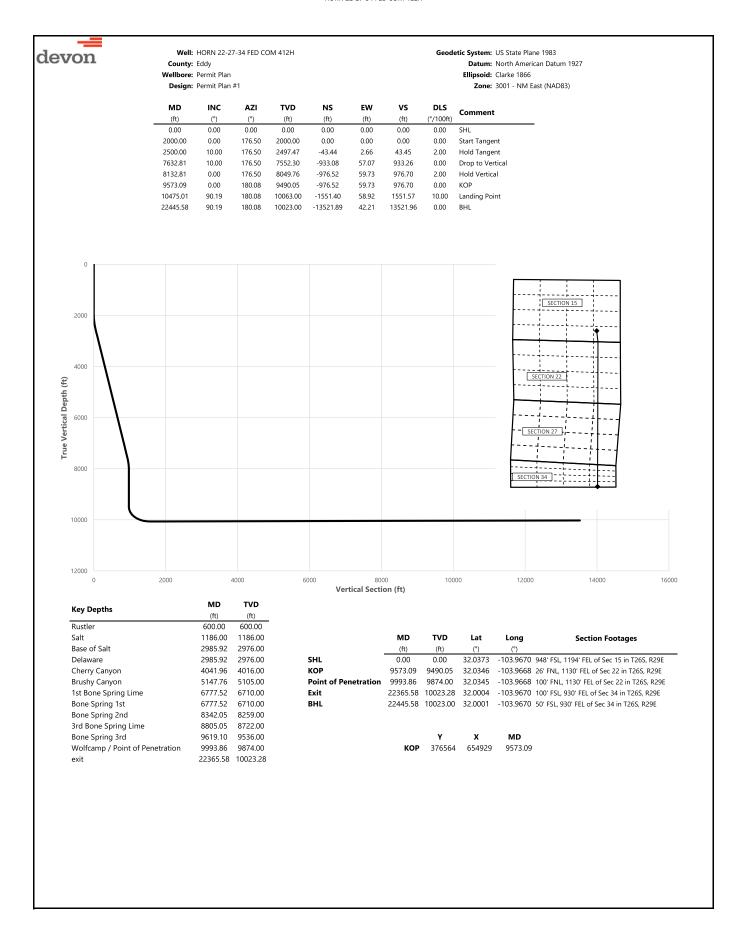
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section 34	Township 26 S	Range 29 E	Lot Idn	Feet from the 50	North/South line SOUTH	Feet from the 930	East/West line EAST	County EDDY
12 Dedicated Acres	s ¹³ Joint	or Infill	4 Consolidation	n Code			15 Order No.		
761.71									

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.



Inten	t X	As Dril	led											
API#														
-	rator Nai X ENEF	me: RGY PEF	RMIAN,	LLC		Property Name: HORN 22-27-34 FED COM								Well Number 412H
Kick C	Off Point	(KOP)												
UL A	Section 22	Township 26S	Range 29E	Lot	Feet 26		From N		Feet		From	n E/W	County	
Latitu 32.0	ide	1200	1-0-		Longitu	Longitude NA								
32.0	J40				-103.8	2008							83	
First 7	Take Poir	nt (FTP)												
UL A	Section 22	Township 26S	Range 29E	Lot	Feet 100	From N/S NORTH		Feet 1130		From E/W EAST		County EDDY		
Latitu 32.0	ide)34518	· 31	ı	I	_	Longitude 103.9667541							NAD 83	
Last T	ake Poin	t (LTP)			-1									
UL	Section 34	Township 26S	Range 29E	Lot 12	Feet 100		m N/S OUTH	Feet 930		From		Count		
Latitu 32.0	ide 00375	52		I	Longitu 103.9		9531	I				NAD 83		
ls this	well the	e defining v	well for th	e Hori	zontal Տր	oacin	g Unit?]				
ls this	well an	infill well?												
	l is yes p ng Unit.	lease prov	ide API if	availal	ole, Oper	ator	Name	and v	vell n	umbei	for [Definiı	ng well fo	or Horizontal
API#														
Ope	rator Nai	me:	1			Pro	perty N	ame	:					Well Number
														KZ 06/29/201





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)

	_	Permit Plan						Zone: 3001 - NM East (NA
MD	INC	AZI	TVD	NS	EW	vs	DLS	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	176.50	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	176.50	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	176.50	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	176.50	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	176.50	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	176.50	600.00	0.00	0.00	0.00	0.00	Rustler,
700.00	0.00	176.50	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	176.50	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	176.50	900.00	0.00	0.00	0.00	0.00	
00.00	0.00	176.50	1000.00	0.00	0.00	0.00	0.00	
100.00	0.00	176.50	1100.00	0.00	0.00	0.00	0.00	
186.00	0.00	176.50	1186.00	0.00	0.00	0.00	0.00	Salt
200.00	0.00	176.50	1200.00	0.00	0.00	0.00	0.00	
300.00	0.00	176.50	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	176.50	1400.00	0.00	0.00	0.00	0.00	
500.00 600.00	0.00	176.50	1500.00	0.00	0.00	0.00	0.00	
700.00	0.00 0.00	176.50 176.50	1600.00 1700.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	
800.00	0.00	176.50	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	176.50	1900.00	0.00	0.00	0.00	0.00	
200.00	0.00	176.50	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	176.50	2000.00	-1.74	0.00	1.74	2.00	Start langent
2200.00	4.00	176.50	2199.84	-6.97	0.43	6.97	2.00	
2300.00	6.00	176.50	2299.45	-15.66	0.96	15.67	2.00	
400.00	8.00	176.50	2398.70	-27.83	1.70	27.83	2.00	
2500.00	10.00	176.50	2497.47	-43.44	2.66	43.45	2.00	Hold Tangent
2600.00	10.00	176.50	2595.95	-60.77	3.72	60.79	0.00	J
2700.00	10.00	176.50	2694.43	-78.11	4.78	78.12	0.00	
2800.00	10.00	176.50	2792.91	-95.44	5.84	95.46	0.00	
2900.00	10.00	176.50	2891.39	-112.77	6.90	112.79	0.00	
2985.92	10.00	176.50	2976.00	-127.66	7.81	127.69	0.00	Base of Salt, Delaware
3000.00	10.00	176.50	2989.87	-130.10	7.96	130.13	0.00	
3100.00	10.00	176.50	3088.35	-147.44	9.02	147.46	0.00	
3200.00	10.00	176.50	3186.83	-164.77	10.08	164.80	0.00	
300.00	10.00	176.50	3285.31	-182.10	11.14	182.13	0.00	
3400.00	10.00	176.50	3383.79	-199.43	12.20	199.47	0.00	
3500.00	10.00	176.50	3482.27	-216.77	13.26	216.81	0.00	
3600.00	10.00	176.50	3580.75	-234.10	14.32	234.14	0.00	
3700.00 3800.00	10.00	176.50	3679.23	-251.43	15.38	251.48	0.00	
3900.00	10.00 10.00	176.50 176.50	3777.72 3876.20	-268.76 -286.10	16.44 17.50	268.81 286.15	0.00 0.00	
1000.00	10.00	176.50	3974.68	-303.43	18.56	303.48	0.00	
1041.96	10.00	176.50	4016.00	-303.43	19.00	310.76	0.00	Cherry Canyon
1100.00	10.00	176.50	4073.16	-320.76	19.62	320.82	0.00	cherry carryon
1200.00	10.00	176.50	4171.64	-338.09	20.68	338.16	0.00	
1300.00	10.00	176.50	4270.12	-355.42	21.74	355.49	0.00	
1400.00	10.00	176.50	4368.60	-372.76	22.80	372.83	0.00	
1500.00	10.00	176.50	4467.08	-390.09	23.86	390.16	0.00	
1600.00	10.00	176.50	4565.56	-407.42	24.92	407.50	0.00	
1700.00	10.00	176.50	4664.04	-424.75	25.98	424.83	0.00	
1800.00	10.00	176.50	4762.52	-442.09	27.04	442.17	0.00	
1900.00	10.00	176.50	4861.00	-459.42	28.10	459.50	0.00	
5000.00	10.00	176.50	4959.48	-476.75	29.16	476.84	0.00	
100.00	10.00	176.50	5057.97	-494.08	30.22	494.18	0.00	
147.76	10.00	176.50	5105.00	-502.36	30.73	502.46	0.00	Brushy Canyon
200.00	10.00	176.50	5156.45	-511.42	31.28	511.51	0.00	
300.00	10.00	176.50	5254.93	-528.75	32.34	528.85	0.00	
400.00	10.00	176.50	5353.41	-546.08	33.40	546.18	0.00	
500.00	10.00	176.50	5451.89	-563.41	34.46	563.52	0.00	
600.00	10.00	176.50	5550.37	-580.75	35.52	580.85	0.00	
700.00	10.00	176.50	5648.85	-598.08	36.58	598.19	0.00	
00.008	10.00	176.50	5747.33	-615.41	37.64	615.53	0.00	
900.00	10.00	176.50	5845.81	-632.74	38.70	632.86	0.00	
00.00	10.00	176.50	5944.29	-650.08	39.76	650.20	0.00	
5100.00	10.00	176.50	6042.77	-667.41	40.82	667.53	0.00	
	10.00	176.50	6141.25	-684.74	41.88	684.87	0.00	
5200.00								
300.00	10.00	176.50	6239.73	-702.07	42.94	702.20	0.00	
		176.50 176.50 176.50	6239.73 6338.22 6436.70	-702.07 -719.41 -736.74	42.94 44.00 45.06	702.20 719.54 736.88	0.00	



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 Plar	1 111					Zone: 3001 - NM East (NAD8
MD	INC	AZI	TVD	NS	EW	vs	DLS	6
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
600.00	10.00	176.50	6535.18	-754.07	46.12	754.21	0.00	
700.00	10.00	176.50	6633.66	-771.40	47.18	771.55	0.00	
5777.52	10.00	176.50	6710.00	-784.84	48.00	784.98	0.00	1st Bone Spring Lime, Bone Spring 1st
6800.00	10.00	176.50	6732.14	-788.74	48.24	788.88	0.00	
6900.00	10.00	176.50	6830.62	-806.07	49.30	806.22	0.00	
7000.00	10.00	176.50	6929.10	-823.40	50.36	823.55	0.00	
7100.00	10.00	176.50	7027.58	-840.73	51.42	840.89	0.00	
200.00	10.00	176.50	7126.06	-858.06	52.48	858.22	0.00	
7300.00	10.00	176.50	7224.54	-875.40	53.54	875.56	0.00	
7400.00	10.00	176.50	7323.02	-892.73	54.60	892.90	0.00	
7500.00	10.00	176.50	7421.50	-910.06	55.66	910.23	0.00	
7600.00	10.00	176.50	7519.99	-927.39	56.72	927.57	0.00	
632.81	10.00	176.50	7552.30	-933.08	57.07	933.26	0.00	Drop to Vertical
700.00	8.66	176.50	7618.60	-943.95	57.73	944.13	2.00	
800.00	6.66	176.50	7717.70	-957.25	58.55	957.43	2.00	
7900.00	4.66	176.50	7817.21	-967.09	59.15	967.27	2.00	
100.00	2.66	176.50	7917.00	-973.45	59.54	973.63	2.00	
100.00	0.66	176.50	8016.95	-976.34	59.72	976.52	2.00	Hald Vartical
132.81	0.00	176.50	8049.76	-976.52	59.73	976.70	2.00	Hold Vertical
3200.00 3300.00	0.00 0.00	180.08 180.08	8116.95 8216.95	-976.52 -976.52	59.73 59.73	976.71 976.71	0.00	
342.05	0.00	180.08	8216.95 8259.00	-976.52 -976.52	59.73 59.73	976.71	0.00	Bone Spring 2nd
400.00	0.00	180.08	8259.00	-976.52 -976.52	59.73 59.73	976.71 976.71	0.00	Done Spring Cliu
3500.00	0.00	180.08	8416.95	-976.52 -976.52	59.73 59.73	976.71	0.00	
3600.00	0.00	180.08	8516.95	-976.52 -976.52	59.73	976.71	0.00	
3700.00	0.00	180.08	8616.95	-976.52 -976.52	59.73	976.71	0.00	
8800.00	0.00	180.08	8716.95	-976.52	59.73	976.71	0.00	
8805.05	0.00	180.08	8722.00	-976.52	59.73	976.71	0.00	3rd Bone Spring Lime
8900.00	0.00	180.08	8816.95	-976.52	59.73	976.71	0.00	
9000.00	0.00	180.08	8916.95	-976.52	59.73	976.71	0.00	
9100.00	0.00	180.08	9016.95	-976.52	59.73	976.71	0.00	
9200.00	0.00	180.08	9116.95	-976.52	59.73	976.71	0.00	
9300.00	0.00	180.08	9216.95	-976.52	59.73	976.71	0.00	
9400.00	0.00	180.08	9316.95	-976.52	59.73	976.71	0.00	
9500.00	0.00	180.08	9416.95	-976.52	59.73	976.71	0.00	
573.09	0.00	180.08	9490.05	-976.52	59.73	976.70	0.00	KOP
600.00	2.69	180.08	9516.94	-977.16	59.73	977.34	10.00	
9619.10	4.60	180.08	9536.00	-978.37	59.72	978.55	10.00	Bone Spring 3rd
9700.00	12.69	180.08	9615.92	-990.52	59.71	990.70	10.00	
00.008	22.69	180.08	9711.07	-1020.87	59.66	1021.05	10.00	
9900.00	32.69	180.08	9799.50	-1067.28	59.60	1067.46	10.00	
9993.86	42.08	180.08	9874.00	-1124.21	59.52	1124.39	10.00	Wolfcamp / Point of Penetration
00.000	42.69	180.08	9878.53	-1128.34	59.52	1128.52	10.00	
0100.00	52.69	180.08	9945.76	-1202.20	59.41	1202.38	10.00	
0200.00	62.69	180.08	9999.14	-1286.61	59.29	1286.79	10.00	
0300.00	72.69	180.08	10037.06	-1379.01	59.17	1379.19	10.00	
0400.00	82.69	180.08	10058.35	-1476.59	59.03	1476.76	10.00	
475.01	90.19	180.08	10063.00		58.92	1551.57	10.00	Landing Point
0500.00	90.19	180.08	10062.92		58.89	1576.56	0.00	
600.00	90.19	180.08	10062.58		58.75	1676.56	0.00	
0700.00	90.19	180.08		-1776.39	58.61	1776.56	0.00	
0800.00	90.19	180.08	10061.91		58.47	1876.56	0.00	
0900.00	90.19	180.08	10061.58	-1976.38	58.33	1976.56	0.00	
1000.00	90.19	180.08	10061.25	-2076.38	58.19	2076.56	0.00	
1100.00	90.19	180.08	10060.91	-2176.38	58.05	2176.55	0.00	
1200.00	90.19	180.08	10060.58	-2276.38	57.91	2276.55	0.00	
1300.00	90.19	180.08	10060.24	-2376.38	57.77	2376.55	0.00	
1400.00	90.19	180.08	10059.91	-2476.38	57.63	2476.55	0.00	
1500.00	90.19	180.08	10059.58	-2576.38	57.50	2576.55	0.00	
1600.00	90.19	180.08	10059.24	-2676.38	57.36	2676.55	0.00	
1700.00	90.19	180.08	10058.91	-2776.38	57.22	2776.54	0.00	
1800.00	90.19	180.08	10058.57	-2876.38	57.08	2876.54	0.00	
1900.00	90.19	180.08	10058.24	-2976.38	56.94	2976.54	0.00	
2000.00	90.19	180.08	10057.91	-3076.38	56.80	3076.54	0.00	
2100.00	90.19	180.08	10057.57	-3176.38	56.66	3176.54	0.00	
2200.00	90.19	180.08	10057.24	-3276.38	56.52	3276.54	0.00	
2300.00	90.19	180.08	10056.90	-3376.38	56.38	3376.54	0.00	
	90.19	180.08	10056.57	-3476.38 -3576.37	56.24 56.10	3476.53 3576.53	0.00	
2400.00	00 10				56 III	メンノわ シイ	(1(1(1	
2500.00 2500.00 2600.00	90.19 90.19	180.08 180.08	10056.24 10055.90	-3676.37	55.96	3676.53	0.00	



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					Zone: 3001 - NM East (NAD
MD	INC	AZI	TVD	NS	EW	vs	DLS	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
12700.00	90.19	180.08	10055.57	-3776.37	55.82	3776.53	0.00	
12800.00	90.19	180.08	10055.23	-3876.37	55.68	3876.53	0.00	
12900.00	90.19	180.08	10053.23	-3976.37	55.54	3976.53	0.00	
13000.00	90.19	180.08	10054.57	-4076.37	55.41	4076.52	0.00	
13100.00	90.19	180.08	10054.23	-4176.37	55.27	4176.52	0.00	
13200.00	90.19	180.08	10053.90	-4276.37	55.13	4276.52	0.00	
13300.00	90.19	180.08	10053.56	-4376.37	54.99	4376.52	0.00	
13400.00	90.19	180.08	10053.23	-4476.37	54.85	4476.52	0.00	
13500.00	90.19	180.08	10052.90	-4576.37	54.71	4576.52	0.00	
13600.00	90.19	180.08	10052.56	-4676.37	54.57	4676.51	0.00	
13700.00	90.19	180.08	10052.23	-4776.37	54.43	4776.51	0.00	
13800.00	90.19	180.08	10051.89	-4876.37	54.29	4876.51	0.00	
13900.00	90.19	180.08	10051.56	-4976.37	54.15	4976.51	0.00	
14000.00	90.19	180.08	10051.23	-5076.36	54.01	5076.51	0.00	
14100.00	90.19	180.08	10050.89	-5176.36	53.87	5176.51	0.00	
14200.00	90.19	180.08	10050.56	-5276.36	53.73	5276.51	0.00	
14300.00	90.19	180.08	10050.22	-5376.36	53.59	5376.50	0.00	
14400.00	90.19	180.08	10049.89	-5476.36	53.45	5476.50	0.00	
14500.00	90.19	180.08	10049.56	-5576.36	53.31	5576.50	0.00	
14600.00	90.19	180.08	10049.22	-5676.36	53.18	5676.50	0.00	
14700.00	90.19	180.08	10048.89	-5776.36	53.04	5776.50	0.00	
14800.00	90.19	180.08	10048.55	-5876.36	52.90	5876.50	0.00	
14900.00	90.19	180.08	10048.22	-5976.36	52.76	5976.49	0.00	
15000.00	90.19	180.08	10047.89	-6076.36	52.62	6076.49	0.00	
15100.00	90.19	180.08	10047.55	-6176.36	52.48	6176.49	0.00	
15200.00	90.19	180.08	10047.22	-6276.36	52.34	6276.49 6376.49	0.00	
15300.00	90.19	180.08 180.08	10046.88	-6376.36	52.20		0.00	
15400.00 15500.00	90.19 90.19	180.08	10046.55 10046.22	-6476.36 -6576.35	52.06 51.92	6476.49 6576.48	0.00 0.00	
15600.00	90.19	180.08	10046.22	-6676.35	51.78	6676.48	0.00	
15700.00	90.19	180.08	10045.55	-6776.35	51.76	6776.48	0.00	
15800.00	90.19	180.08	10045.21	-6876.35	51.50	6876.48	0.00	
15900.00	90.19	180.08	10043.21	-6976.35	51.36	6976.48	0.00	
16000.00	90.19	180.08	10044.55	-7076.35	51.22	7076.48	0.00	
16100.00	90.19	180.08	10044.21	-7176.35	51.09	7176.48	0.00	
16200.00	90.19	180.08	10043.88	-7276.35	50.95	7276.47	0.00	
16300.00	90.19	180.08	10043.54	-7376.35	50.81	7376.47	0.00	
16400.00	90.19	180.08	10043.21	-7476.35	50.67	7476.47	0.00	
16500.00	90.19	180.08	10042.88	-7576.35	50.53	7576.47	0.00	
16600.00	90.19	180.08	10042.54	-7676.35	50.39	7676.47	0.00	
16700.00	90.19	180.08	10042.21	-7776.35	50.25	7776.47	0.00	
16800.00	90.19	180.08	10041.87	-7876.35	50.11	7876.46	0.00	
16900.00	90.19	180.08	10041.54	-7976.35	49.97	7976.46	0.00	
17000.00	90.19	180.08	10041.21	-8076.34	49.83	8076.46	0.00	
17100.00	90.19	180.08	10040.87	-8176.34	49.69	8176.46	0.00	
17200.00	90.19	180.08	10040.54	-8276.34	49.55	8276.46	0.00	
17300.00	90.19	180.08	10040.20	-8376.34	49.41	8376.46	0.00	
17400.00	90.19	180.08	10039.87	-8476.34	49.27	8476.45	0.00	
17500.00	90.19	180.08	10039.54	-8576.34	49.13	8576.45	0.00	
17600.00	90.19	180.08	10039.20	-8676.34	48.99	8676.45	0.00	
17700.00	90.19	180.08	10038.87	-8776.34	48.86	8776.45	0.00	
17800.00	90.19	180.08	10038.53	-8876.34	48.72	8876.45	0.00	
17900.00	90.19	180.08	10038.20	-8976.34	48.58	8976.45	0.00	
18000.00	90.19	180.08	10037.87	-9076.34	48.44	9076.45	0.00	
18100.00	90.19	180.08	10037.53	-9176.34	48.30	9176.44	0.00	
18200.00	90.19	180.08	10037.20	-9276.34	48.16	9276.44	0.00	
18300.00	90.19	180.08	10036.86	-9376.34	48.02	9376.44	0.00	
18400.00	90.19	180.08	10036.53	-9476.34	47.88	9476.44	0.00	
18500.00	90.19	180.08	10036.20	-9576.34	47.74	9576.44	0.00	
18600.00	90.19	180.08	10035.86	-9676.33	47.60	9676.44	0.00	
18700.00	90.19	180.08	10035.53	-9776.33	47.46	9776.43	0.00	
18800.00	90.19	180.08	10035.19	-9876.33	47.32	9876.43	0.00	
18900.00	90.19	180.08	10034.86	-9976.33	47.18	9976.43	0.00	
19000.00	90.19	180.08		-10076.33	47.04	10076.43	0.00	
19100.00	90.19	180.08		-10176.33	46.90	10176.43	0.00	
19200.00	90.19	180.08		-10276.33	46.76	10276.43	0.00	
19300.00	90.19 90.19	180.08		-10376.33	46.63	10376.42	0.00	
10400 00	3U. 19	180.08	10055.19	-10476.33	46.49	10476.42	0.00	
19400.00		120.00	10022 05	-10576 22	16 3E	10576 42	በ በባ	
19400.00 19500.00 19600.00	90.19 90.19	180.08 180.08		-10576.33 -10676.33	46.35 46.21	10576.42 10676.42	0.00 0.00	



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
19700.00	90.19	180.08	10032.19	-10776.33	46.07	10776.42	0.00	
19800.00	90.19	180.08	10031.85	-10876.33	45.93	10876.42	0.00	
19900.00	90.19	180.08	10031.52	-10976.33	45.79	10976.42	0.00	
20000.00	90.19	180.08	10031.18	-11076.33	45.65	11076.41	0.00	
20100.00	90.19	180.08	10030.85	-11176.32	45.51	11176.41	0.00	
20200.00	90.19	180.08	10030.52	-11276.32	45.37	11276.41	0.00	
20300.00	90.19	180.08	10030.18	-11376.32	45.23	11376.41	0.00	
20400.00	90.19	180.08	10029.85	-11476.32	45.09	11476.41	0.00	
20500.00	90.19	180.08	10029.51	-11576.32	44.95	11576.41	0.00	
20600.00	90.19	180.08	10029.18	-11676.32	44.81	11676.40	0.00	
20700.00	90.19	180.08	10028.85	-11776.32	44.67	11776.40	0.00	
20800.00	90.19	180.08	10028.51	-11876.32	44.54	11876.40	0.00	
20900.00	90.19	180.08	10028.18	-11976.32	44.40	11976.40	0.00	
21000.00	90.19	180.08	10027.84	-12076.32	44.26	12076.40	0.00	
21100.00	90.19	180.08	10027.51	-12176.32	44.12	12176.40	0.00	
21200.00	90.19	180.08	10027.18	-12276.32	43.98	12276.39	0.00	
21300.00	90.19	180.08	10026.84	-12376.32	43.84	12376.39	0.00	
21400.00	90.19	180.08	10026.51	-12476.32	43.70	12476.39	0.00	
21500.00	90.19	180.08	10026.17	-12576.32	43.56	12576.39	0.00	
21600.00	90.19	180.08	10025.84	-12676.31	43.42	12676.39	0.00	
21700.00	90.19	180.08	10025.51	-12776.31	43.28	12776.39	0.00	
21800.00	90.19	180.08	10025.17	-12876.31	43.14	12876.39	0.00	
21900.00	90.19	180.08	10024.84	-12976.31	43.00	12976.38	0.00	
22000.00	90.19	180.08	10024.50	-13076.31	42.86	13076.38	0.00	
22100.00	90.19	180.08	10024.17	-13176.31	42.72	13176.38	0.00	
22200.00	90.19	180.08	10023.84	-13276.31	42.58	13276.38	0.00	
22300.00	90.19	180.08	10023.50	-13376.31	42.44	13376.38	0.00	
22365.58	90.19	180.08	10023.28	-13441.89	42.35	13441.96	0.00	exit
22400.00	90.19	180.08	10023.17	-13476.31	42.31	13476.38	0.00	
22445.58	90.19	180.08	10023.00	-13521.89	42.21	13521.96	0.00	BHL

HORN 22-27-34 FED COM 412H

1. Geologic Formations

TVD of target	10023	Pilot hole depth	N/A
MD at TD:	22446	Deepest expected fresh water	

Basin

Dasin	Depth	Water/Mineral	
TD			TT 1.6
Formation	(TVD)	Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	600		
Salt	1186		
Base of Salt	2976		
Delaware	2976		
Cherry Canyon	4016		
Brushy Canyon	5105		
1st Bone Spring Lime	6710		
Bone Spring 1st	6710		
Bone Spring 2nd	8259		
3rd Bone Spring Lime	8722		
Bone Spring 3rd	9536		
Wolfcamp	9874		

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
17 1/2	13 3/8	54.5	J-55	BTC	0.0	625 MD	0	625 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0.0	3001 MD	0	3001 TVD
9 7/8	8 5/8	32.0	P110	MOFXL	0	9473 MD	0	9473 TVD
7 7/8	5 1/2	20.0	P110HP	CDC-HTQ	0	22446 MD	0	10023 TVD

- •All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Primary Design)

Casing	# Sks	тос	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	491	Surf	13.2	1.44	Lead: Class C Cement + additives
Int	188	Surf	9	3.27	Lead: Class C Cement + additives
int	101	2501	13.2	1.44	Tail: Class H / C + additives
T 1	208	Surf	9	3.27	Lead: Class C Cement + additives
Int 1	507	5105	13.2	1.44	Tail: Class H / C + additives
Int 1	270	Surf	9	1.44	Squeeze Lead: Class C Cement + additives
Intermediate	208	Surf	9	3.27	Lead: Class C Cement + additives
Squeeze	507	5105	13.2	1.44	Tail: Class H / C + additives
Production	117	7573	9	3.27	Lead: Class H /C + additives
Floduction	1704	9573	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 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 and Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Require d WP	T	ype	✓	Tested to:
				Annular		50% of rated working pressure
Int	13-5/8"	5M	Bline	d Ram	X	
IIIt	13-3/8	J1 V1	Pipe	Ram		5M
			Doub	le Ram	X	3101
			Other*			
	13-5/8"		Annular (5M)		X	100% of rated working pressure
Int 1		5M	Blind Ram		X	5M
mit i		SIVI	Pipe Ram			
			Double Ram		X	
			Other*			1
			Annul	ar (5M)	X	100% of rated working pressure
Production	13-5/8"	5M	Blind Ram Pipe Ram Double Ram		X	
Troduction	13-3/6	J1V1				5M
					X] 3101
			Other*			
	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
N A variance is requested to	A variance is requested to run a 5 M annular on a 10M system					

5. Mud Program (Four String Design)

Section	Туре	Weight (ppg)
Surface	WBM	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Intermediate 1	WBM	8.5-9
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

6. Logging and Testing Procedures

Logging, C	Logging, Coring and Testing					
	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.					
	No logs are planned based on well control or offset log information.					
	Drill stem test? If yes, explain.					
	Coring? If yes, explain.					

Additiona	ıl 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	5473
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 43 CFR 3176. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.

measured va	lues 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 (43 CFR 3172, all COAs and NMOCD regulations).
- 3 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	;
X	Directional Plan
	Other, describe

letal One Corp.	MO-FXL			MO-FXL 8-5/8 32.0					
14.10			CDS#	P110HSCY					
Metal O ne	*1 Pipe Body: BMP P110HS0			MinYS125ksi					
	Special Drift 7.8			SD7.875					
	Connection Data	a Sheet	Date	27-Nov-23					
	Geometry	<u>Imperia</u>	<u>ıl</u>	<u>S.I.</u>					
	Pipe Body								
	Grade *1	P110HSCY		P110HSCY					
	MinYS *1	125	ksi	125	ksi				
	Pipe OD (D)	8 5/8	in	219.08	mm				
MO-FXL	Weight	32.00	lb/ft	47.68	kg/m				
	Actual weight	31.10	-	46.34	kg/m				
	Wall Thickness (t)	0.352	in	8.94	mm				
	Pipe ID (d)	7.921	in	201.19	mm				
	Pipe body cross section	9.149	in ²	5,902	mm ²				
	Special Drift Dia. *1	7.875	in	200.03	mm				
	-	-	-	-	-				
	Connection								
	Box OD (W)	8.625	in	219.08	mm				
\uparrow \longleftrightarrow	PIN ID	7.921	in	201.19	mm				
	Make up Loss	3.847		97.71					
Вох			in in ²		mm 2				
critica		5.853		3686	mm ²				
area	Joint load efficiency	69	%	69	%				
	Thread Taper Number of Threads	1	1 / 10 (1.2" per ft) 5 TPI						
Make	Performance								
	D. Borformonoo Bronortioo	for Dina Bady							
	Performance Properties			5.097	LNI				
	S.M.Y.S. *1	1,144	kips	5,087 61.50	kN MPa				
Pin	S.M.Y.S. *1 M.I.Y.P. *1	1,144 8,930	kips psi	61.59	MPa				
oss	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin	1,144 8,930 4,300 fied Minimum YIE num Internal Yield	kips psi psi ELD Stre	61.59 29.66 ngth of Pipe body re of Pipe body	MPa MPa dy				
Pin	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875,	kips psi psi ELD Stre Pressu Collapse	61.59 29.66 ngth of Pipe body re of Pipe body	MPa MPa dy				
Pin	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio	kips psi psi ELD Stre d Pressu Collapsi n	61.59 29.66 ngth of Pipe body re of Pipe body e Strength 4,300	MPa MPa dy				
oss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load	1,144 8,930 4,300 fied Minimum YIE num Internal Yiel 125ksi, SD7.875, for Connectio 789 kips	kips psi psi ELD Stre d Pressu Collapse n (69%	61.59 29.66 ngth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.)	MPa MPa dy				
oss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips	kips psi psi ELD Stre d Pressu Collapse n (69%	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.)	MPa MPa dy				
oss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure	1,144 8,930 4,300 fied Minimum YIE num Internal Yiel 125ksi, SD7.875, for Connectio 789 kips	kips psi psi ELD Stre d Pressu Collapse n (69% (69% 70%	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.)	MPa MPa dy 0psi				
oss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips	kips psi psi psi psi psi psi psi psi psi	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St	MPa MPa dy 0psi				
oss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Speci M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft)	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips	kips psi psi ELD Stre d Pressu Collapse n (69% (69% 70%	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St	MPa MPa dy 0psi				
Pin	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Specion M.I.Y.P. = Minin *1: BMP P110HSCY: MinyS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips 6,250 psi	kips psi psi ELD Stre d Pressu Collapsi n (69% (70% 100% c	61.59 29.66 Ingth of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St	MPa MPa dy Opsi				
Pin	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Specion M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min.	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips 6,250 psi	kips psi psi Pressu Collapsi (69% (70% 100% (2	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St	MPa MPa dy Opsi				
loss Pin critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Specion M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti.	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips 6,250 psi (kips psi psi Pressu Collapsi (69% (70% 100% (2	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St 9	MPa MPa MPa dy Opsi crength				
critica	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Specion M.I.Y.P. = Minin *1: BMP P110HSCY: MinYS Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS (deg. /100ft) Recommended Torque Min.	1,144 8,930 4,300 fied Minimum YIE num Internal Yield 125ksi, SD7.875, for Connectio 789 kips 789 kips 6,250 psi	kips psi psi Pressu Collapsi (69% (70% 100% (2	61.59 29.66 Ingth of Pipe body re of Pipe body e Strength 4,300 of S.M.Y.S.) of S.M.Y.S.) of M.I.Y.P.) of Collapse St	MPa MPa dy Opsi				

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The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to http://www.mtlo.co.jp/mo-con/_images/top/WebsiteTerms_Active_20333287_1.pdf the contents of which are incorporated by reference into this Connection Data Sheet.

15-26-29-P Sundry ID 2772621 Horn 22-27-34 Fed Com 412H Eddy NM21767 DEVON ENERGY PRODUCTION COMPANY LP 13-22g 1-30 2024 LV

Horn 22-27-34 Fed Com 412H

13 3/8		ce csg in a	17 1/2 i	nch hole.		<u>Design I</u>	-actors			Surface		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	54.50		j 55	btc	41.75	6.45	1.67	375	16	2.80	12.17	20,43
"B"				btc				0				0
	w/8.4#/g	mud, 30min Sfc Csg Tes	t psig: 1,500	Tail Cmt	does not	circ to sfc.	Totals:	375				20,43
Comparison o	f Proposed to Min	mum Required Cem	ent Volumes									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min D
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
17 1/2	0.6946	491	707	260	171	9.00	977	2M				1.56
10 3/4	casino	inside the	13 3/8			Design I	actors			Int 1		
Segment	#/ft	Grade	13 3/0	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weig
"A"	45.50	Orado	j 55	btc sc	3.71	1.28	0.81	3,001	2	1.53	2.14	136,5
"B"	10.00		, 00	510 00	0.7 1	1.20	0.01	0	_	1.00	2	0
_	w/8 4#/g	mud, 30min Sfc Csg Tes	t nsig: 1 196				Totals:	3,001				136,5
	w/o. 4 #/g		,	ed to achieve a top of	0	ft from su		375				overlap
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min D
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
12 1/4	0.1882	289	760	583	30	10.50	2345	3M				0.50
D V Tool(s):						70.00	sum of sx	Σ CuFt				Σ%exc
by stage % :		#VALUE!	#VALUE!				289	760				30
class 'C' tail cm	t yld > 1.35											
		,,		_								
Burst Frac Grac	lient(s) for Segment	(s): A, B, C, D = 1.19,	b, c, d All > 0.70, Ok									
8 5/8	casing	inside the	10 3/4			Design Fac	ctors			Int 2		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	а-В	a-C	Weig
"A"	32.00		p 110	mo-fxl	2.60	0.97	1.14	9,473	1	1.92	1.83	303,1
"B"			· ·					0				0
"C"								0				0
"D"								0				0
	10.4111	mud, 30min Sfc Csg Tes	241				Totals:	9.473				303,1

8 5/8	ca	sing inside the	10 3/4			Design Fa	ctors			Int 2		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00	р	110	mo-fxl	2.60	0.97	1.14	9,473	1	1.92	1.83	303,136
"B"								0				0
"C"								0				0
"D"								0				0
	w/8	.4#/g mud, 30min Sfc Csg Test psig:	241				Totals:	9,473				303,136
		The cement volum	e(s) are inten	ded to achieve a top of	2801	ft from su	ırface or a	200				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
9 7/8	0.1261	715	1410	843	67	9.00	3262	5M				0.63
		Setting Depths for D V Tool(s):	5105				sum of sx	Σ CuFt				<u>Σ%excess</u>
% exce	ss cmt by stage	156	33				985	1799				113
Class 'C' tail cr	mt yld > 1.35											
				,,_,								

5 1/2	casing	g inside the	8 5/8	_		Design I	-actors			Prod 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00		p 110	cdc-htq	3.20	2.23	2.31	22,446	2	3.87	3.74	448,920
"B"								0				0
	w/8.4#/g	mud, 30min Sfc Csg Test	psig: 2,205				Totals:	22,446				448,920
		The cement v	olume(s) are intend	led to achieve a top of	9273	ft from su	rface or a	200				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
7 7/8	0.1733	1821	2836	2283	24	10.50						0.79
Class 'H' tail cm	nt yld > 1.20		Capitan Reef es	t top XXXX.								

Carlsbad Field Office 1/31/2024

District III

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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**

CONDITIONS

Action 309884

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	309884
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply	1/31/2024