Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone 2. Name of Operator 9. API Well No. 30-015-54330 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, applied for, on this lease, ft. 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date Title Approved by (Signature) Name (Printed/Typed) Date Title Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. 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



<u>District 1</u>
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
<u>District II</u>
811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District IIII</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

¹² Dedicated Acres

1 API Number

13 Joint or Infill

⁴ Consolidation Code

District IV

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

Pool Name

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

² Pool Code

¹⁵ Order No.

30)-015-5 ₄	4330	98220)		PURPL	E SAGE; WOI	LFCAMP ((GAS)			
⁴ Proper	ty Code			⁵ P	roperty Name				⁶ Well Number			
3346	677		;		604H							
⁷ OGR	ID No.					⁹ Elevation						
43	23				3438'							
	¹⁰ Surface Location											
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/V	West line	County		
Н	9	24 SOUTH	31 EAST, N.M.P.M.		1324'	NORTH	994'	EAS	ST	EDDY		
•			11 Bottom H	ole Locat	ion If Diffe	erent From S	Surface					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/V	Vest line	County		
О	16	24 SOUTH	31 EAST, N.M.P.M.		25'	SOUTH	2310'	EA	ST	EDDY		

640 DEFINING R-20250, TOTAL UNIT ACRES 5119.76

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. B///////// 'nδ 17 OPERATOR CERTIFICATION Proposed SND JAVELINA UNIT 9 16 P604 NO. 604H WELL I hereby certify that the information contained herein is true and complete First Take Point 324 X = 672,029' (NAD27 NM E) Y = 449,791' 330' FNL, 2310' FEL to the best of my knowledge and belief, and that this organization either LAT. 32.235368° N (NAD27) LONG. 103.776970° W owns a working interest or unleased mineral interest in the land including N 53°14'17" X = 713,213' (NAD83/2011 NM E) the proposed bottom hole location or has a right to drill this well at this 1,645.65' Y = 449.850994 LAT. 32.235491° N (NAD83/2011) LONG. 103.777454° W location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory 14 PROPOSED FIRST TAKE POINT PROPOSED MID-POINT pooling order heretofore entered by the division 4,951 X = 670,711' (NAD27 NM E) X = 670,737' (NAD27 NM E) Y = 450,776' Y = 445,825' 08/24/2022 indy Herrera-Murillo LAT. 32.238094° N (NAD27) LAT. 32.224484° N (NAD27) LONG. 103.781217° W LONG. 103.781213° W Date Signature X = 711,921' (NAD83/2011 NM E) X = 711.894' (NAD83/2011 NM E) 34" = 450,835' Y = 445,884' LAT. 32,224607° N (NAD83/2011) LAT 32 238217° N (NAD83/2011) Cindy Herrera-Murillo ∞ا LONG. 103.781702° W LONG. 103.781697° W 00 PROPOSED LAST TAKE POINT PROPOSED BOTTOM HOLE eeof@chevron.com X = 670,761' (NAD27 NM E) Y = 440,874' Proposed-LOCATION X = 670,763' (NAD27 NM E) Y = 440,569' E-mail Address Mid-Point LAT. 32.210874° N (NAD27) LONG. 103.781217° W LAT. 32.210036° N (NAD27) X = 711,945' (NAD83/2011 NM E) LONG. 103.781218° W Y = 440.933X = 711,947' (NAD83/2011 NM E) 18 SURVEYOR CERTIFICATION LAT. 32.210998° N (NAD83/2011) Y = 440.628LONG 103 781701° W LAT. 32.210159° N (NAD83/2011) I hereby certify that the well location shown on this 256.01 LONG. 103.781701° W plat was plotted from field notes of actual surveys made by me or under my supervision, and that the ш CORNER COORDINATES TABLE (NAD 27) same is true and correct to the best of my belief. 43" A - X=667735.20, Y=451086.48 LASZ B - X=670378.83, Y=451103.84 16 01/27/2022 Date of Survey
Signature and Sor of Proces C - X=671698.62, Y=451112.46 16 MEX . 00 D - X=673019.77. Y=451121.09 E - X=667766.42, Y=445807.89 S F - X=670406.82, Y=445823.13 23006 04/27/2022 G - X=671727.03, Y=445830.75 H - X=673047.23, Y=445838.37 Proposed I - X=667795.37, Y=440527.58 Last Take Point J - X=670434.14, Y=440542.26 K - X=671753.53, Y=440542.26 330' FSL, 2310' FEL L - X=673072.91, Y=440556.94 Certificate/Number 2310'

VI. Separation Equipment:

Separation equipment installed at each Chevron facility is designed for maximum anticipated throughput and pressure to minimize waste. Separation equipment is designed and built according to ASME Sec VIII Div I to ensure gas is separated from liquid streams according to projected production.

VII./VIII. Operational & Best Management Practices:

- 1. General Requirements for Venting and Flaring of Natural Gas:
 - In all circumstances, Chevron will flare rather than vent unless flaring is technically infeasible and venting of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment.
 - Chevron installs and operates vapor recovery units (VRUs) in new facilities to minimize venting and flaring.
 If a VRU experiences operating issues, it is quickly assessed so that action can be taken to return the VRU to operation or, if necessary, facilities are shut-in to reduce the venting or flaring of natural gas.

2. During Drilling Operations:

- Flare stacks will be located a minimum of 110 feet from the nearest surface hole location.
- If an emergency or malfunction occurs, gas will be flared or vented to avoid a risk of an immediate and substantial adverse impact on public health, safety or the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Natural gas is captured or combusted if technically feasible using best industry practices and control technologies, such as the use of separators (e.g., Sand Commanders) during normal drilling and completions operations.

3. During Completions:

- Chevron typically does not complete traditional flowback, instead Chevron will flow produced oil, water, and gas to a centralized tank battery and continuously recover salable quality gas. If Chevron completes traditional flowback, Chevron conducts reduced emission completions as required by 40 CFR 60.5375a by routing gas to a gas flow line as soon as practicable once there is enough gas to operate a separator.
 Venting does not occur once there is enough gas to operate a separator
- Normally, during completions a flare is not on-site. A Snubbing Unit will have a flare on-site, and the flare volume will be estimated.
- If natural gas does not meet pipeline quality specification, the gas is sampled twice per week until the gas meets the specifications.

4. During Production:

- An audio, visual and olfactory (AVO) inspection will be performed daily (at minimum) for active wells and
 facilities to confirm that all production equipment is operating properly and there are no leaks or releases
 except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells
 and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will
 be available upon request by the division.
- Monitor manual liquid unloading for wells on-site, takes all reasonable actions to achieve a stabilized rate
 and pressure at the earliest practical time and takes reasonable actions to minimize venting to the
 maximum extent practicable.
- In all circumstances, Chevron will flare rather than vent unless flaring is technically infeasible and venting
 of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or
 the environment.
- Chevron's design for new facilities utilizes air-activated pneumatic controllers and pumps.
- If natural gas does not meet pipeline quality specification, the gas is sampled twice per week until the gas meets the specifications.
- Chevron does not produce oil or gas until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.

5. Performance Standards

- Equipment installed at each facility is designed for maximum anticipated throughput and pressure to minimize waste. Tank pressure relief systems utilize a soft seated or metal seated PSVs, as appropriate, which are both designed to not leak.
- Flare stack has been designed for proper size and combustion efficiency. New flares will have a
 continuous pilot and will be located at least 100 feet from the well and storage tanks and will be securely
 anchored.
- New tanks will be equipped with an automatic gauging system.
- An audio, visual and olfactory (AVO) inspection will be performed daily (at minimum) for active wells and
 facilities to confirm that all production equipment is operating properly and there are no leaks or releases
 except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells
 and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will
 be available upon request by the division.

6. Measurement or Estimation of Vented and Flared Natural Gas

- Chevron estimates or measures the volume of natural gas that is vented, flared, or beneficially used during drilling, operations, regardless of the reason or authorization for such venting or flaring.
- Where technically practicable, Chevron will install meters on flares installed after May 25, 2021. Meters
 will conform to industry standards. Bypassing the meter will only occur for inspecting and servicing of the
 meter.

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: <u>Che</u>	vron USA_		OGRID:	4323		Date: 8 / 10 / 22
II. Type: ⊠ Original □ A	Amendment	due to 🗆 19.15.2	27.9.D(6)(a) NM	AC □ 19.15.27.9.D	(6)(b) NMAC □	Other.
If Other, please describe: _						
III. Well(s): Provide the form the form the form the recompleted from a sing					wells proposed to	be drilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SND 9 16 FED COM PAD 604 503H	Pending	UL:H-9-24S- 31E	1323' FNL 1019' FEL	1780 BBL/D	4750 MCF/D	4780 BBL/D
SND 9 16 FED COM PAD 604 504H	Pending	UL:H-9-24S- 31E	1324' FNL 944' FEL	1780 BBL/D	4750 MCF/D	4780 BBL/D
SND 9 16 FED COM PAD 604 604H	Pending	UL:H-9-24S- 31E	1323' FNL 944' FEL	1780 BBL/D	4750 MCF/D	4780 BBL/D
SND 9 16 FED COM PAD 604 605H	Pending	UL:H-9-24S- 31E	1324' FNL 969' FEL	1780 BBL/D	4750 MCF/D	4780 BBL/D
SND 9 16 FED COM PAD 604 606H	Pending	UL:H-9-24S- 31E	1324' FNL 919' FEL	1780 BBL/D	4750 MCF/D	4780 BBL/D
IV. Central Delivery Poin	t Name: _	Sand Dur	nes CTB 10		[See 19.	15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
SND 9 16 FED COM PAD 604 503H	<u>Pending</u>	7/23/2024	N/A	N/A	N/A	N/A
SND 9 16 FED COM PAD 604 504H	<u>Pending</u>	8/10/2024	N/A	N/A	N/A	N/A
SND 9 16 FED COM PAD 604 604H	<u>Pending</u>	8/28/2024	N/A	N/A	N/A	N/A
SND 9 16 FED COM PAD 604 605H	<u>Pending</u>	9/15/2024	N/A	N/A	N/A	N/A

Page 1 of 4

SND 9 16 FED COM PAD	<u>Pending</u>	09/01/2024	N/A	N/A	N/A	N/A
604 606H						

VI. Separation Equipment:

Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices:

Attach a complete description of the actions Operator will take to comply with the requirements of

Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices:

Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☑ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in			

XI. Map. \square Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator \square does \square does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality:

Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

(i)

Section 3 - Certifications <u>Effective May 25, 2021</u>

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🗵 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) **(b)** power generation for grid; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Cindy	Herrera-Murillo
Printed Name:	Cindy Herrera-Murillo
Title:	Sr HSE Regulatory affairs Coordinator
E-mail Address:	eeof@chevron.com
Date:	08/25/2022
Phone: 575-263-0431	
	OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

Pressure Rating (PSI): 5M Rating Depth: 11796

Equipment: Chevron will have a minimum of a 5,000 psi rig stack for drill out below surface casing. The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test will be conducted by a third party.

Requesting Variance? YES

Variance request: - Chevron respectfully request to vary from the Onshore Order 2 where it states: "(A full BOP Test) shall be performed: when initially installed and whenever any seal subject to test pressure is broken." We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. No BOP components nor any break will ever surpass 21 days between testing. A break test will consist of a 250 psi low / 5.000 psi high for 10 min each test against the connection that was broken when skidding the rig. Upon the first nipple up of the pad a full BOP test will be performed. A full BOP test will be completed prior to drilling the production liner hole sections, unless the BOP connection was not broken prior to drilling that hole section (example: drilling straight from production into production liner hole section). A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. Break Tests will not be performed on Production hole sections. - Chevron requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nippled up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC Technologies and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party. - Chevron also requests a variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please refer to the attached testing and specification documents. -Authorization to follow Onshore Order 2 Section B - Casing and Cementing Requirements to wait to 500 psi comprehensive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at sufficient strength prior to performing a shoe test and drilling ahead through the next hole section.

Testing Procedure: Stack will be tested as specified in the attached testing requirements, upon NU and not to exceed 30 days. Test BOP from 250 psi to 5000 psi in Ram and 250 psi to 3500 psi in annular. BOP/BOPE will be tested by an independent service company to 250 psi low and a minimum of the high pressure indicated above. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed each hole section unless approval from the BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs). BOP test will be conducted by a third party.

Choke Diagram Attachment:

D2.1a_BLM_5M_Choke_Manifold_Diagram_20210823122058.pdf

D2.2a_BLM_Choke_Hose_Test_Specs_and_Pressure_Test_Continental_20210823122144.pdf

BOP Diagram Attachment:

D2.1b_NM_Slim_Hole_Wellhead_6650_psi_UH_S_20210823122152.pdf

D2.3a_BLM_5M_Annular_10M_Rams_Stackup_and_Test_Plan_20210823122216.pdf

Sundry_Break_Testing_and_WOC_500_psi_SND_Pad604_20220825091437.pdf

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	16	13.375	NEW	API	Ν	0	787	0	787	3438	2651	787	J-55	54.5	BUTT	2.13	1.43	DRY	2.09	DRY	3.46
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4301	0	4261	3465	-823	4301	L-80	40	BUTT	1.24	1.64	DRY	3.16	DRY	3.26
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	11351	0	11134	3442	-7696	11351	OTH ER		OTHER - BLUE	1.63	1.15	DRY	2.3	DRY	2.3
4	LINER	6.12 5	5.0	NEW	API	N	11051	11801	10801	11534	-7363	-8096	750	P- 110	_	OTHER - W513	1.39	1.1	DRY	1.63	DRY	2.54
5	PRODUCTI ON	6.12 5	4.5	NEW	API	N	11801	22166	11534	11796	-8096	-8358	10365	P- 110		OTHER - W521	1.39	1.1	DRY	1.63	DRY	2.54

Casing Attachments

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $13.375_54.5ppf_J55_STC_20220823114831.pdf$

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

	.	
Casing	Attac	hments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $9.625_40.0 lb_L80 lC_BTC_20220823115049.pdf$

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7_29ppf_TN110SS_TSH_Blue_20220829094802.pdf

Casing ID: 4

String

LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

5_.18ppf_P110_Flush_W513_20220829095732.pdf

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

Casing Attachments

Casing ID: 5

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $4.5_11.6ppf_P110_TSH_W521_20220829095502.pdf$

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	N/A	N/A
SURFACE	Tail		0	787	514	1.33	14.8	684	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER
PRODUCTION	Lead		0	0	0	0	0	0		N/A	N/A

INTERMEDIATE	Lead	0	3301	519	2.49	11.9	1293	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER
INTERMEDIATE	Tail	3301	4301	323	1.33	14.8	429	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER
PRODUCTION	Lead	0	1035 1	730	2.49	11.9	1819	25	CLASS C	Extender, Antifoam, Retarder
PRODUCTION	Tail	1035 1	1135 1	141	1.33	14.8	188	25	CLASS C	Extender, Antifoam, Retarder
LINER	Lead	1105 1	2216 6	984	1.33	14.8	1308	25	CLASS H	Extender, Antifoam, Retarder, Viscosifier

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: A closed system will be used consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical portatoilet and then hauled to an approved sanitary landfill. If a reserve pit is approved, then the operation will utilize a open loop system via the permitted reserve pit and a closed system will be used consisting of above ground steel tanks All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transporting of E&P waste will follow EPA regulations and accompanying manifests.

Describe the mud monitoring system utilized: A mud test shall be performed every 24 hours after muddling up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated a PVT, stroke counter, flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume in compliance with Onshore Order #2. A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1135	2216	OIL-BASED MUD	10	12							Viscosity 50-70 Filtrate 5-10 -Due to wellbore instability in the lateral, may exceed the MW weight window needed to maintain overburden stresses
4301	1135 1	OTHER: WBM/SALT- STURATED	8.7	9							Viscosity: 26-36 Filtrate: 15-25
0	787	SPUD MUD	8.3	8.9							Viscosity: 26-36 Filtrate: 15-25
787	4301	SALT SATURATED	8.9	10							Viscosity: 26-36 Filtrate: 15-25

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Production tests are not planned.

Logs run include: Gamma Ray Log, Directional Survey

Coring Operations are not planned.

List of open and cased hole logs run in the well:

GAMMA RAY LOG, MUD LOG/GEOLOGIC LITHOLOGY LOG, DIRECTIONAL SURVEY,

Coring operation description for the well:

Conventional whole core samples are not planned; direction survey will be run - will send log(s) when run.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7361 Anticipated Surface Pressure: 4765

Anticipated Bottom Hole Temperature(F): 165

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Pressure ramp begins in the bottom of the thirdbone spring. PP increases to approximately 12.0 ppg once into the wolfcamp.

Contingency Plans geoharzards description:

- "- Casing design accounts for pressure ramp.
- Mud weighting agents available on location to increase drilling fluid density.
- BOP, choke, and well control drills.
- BOP functioned and pressure tested"

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Chevron Standard H2S Contingency Plan 20220823121507.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

SND_Javelina_Unit_9_16_P604_604H_20220829100446.pdf

DefPlan100ft_SND_JavelinaUnit916P604No.604H_R0_20220829100622.pdf

Other proposed operations facets description:

- Authorization to use the spudder rig to spud the well and set surface casing. The drilling rig will move in less than 90 days to continue drilling operations. Rig layouts attached.
- ***Drilling plan attached contains a contingency cement program.

Other proposed operations facets attachment:

5_well_rig_layout_patterson2_20220823121351.pdf

Operational Best Management Practices V2 20220823121412.pdf

Well Name: SND JAVELINA UNIT 9 16 P604 Well Number: 604H

SND_Pad_604_Gas_Management_Plan___NMOCD__1_20220829100336.pdf

Other Variance attachment:

Schlumberger

Report Date: Client: Field: Structure / Slot:

Borehole: UWI / API#:

Survey Name: Survey Date:

Version / Patch:

Tort / AHD / DDI / ERD Ratio: Coordinate Reference System: Location Lat / Long: Location Grid N/E Y/X: CRS Grid Convergence Angle: Grid Scale Factor:

SND Javelina Unit 9 16 P604 No. 604H R0 mdv 05May22 Proposal **Geodetic Report**

(Def Plan)



Chevron NM, Eddy County (NAD 27 EZ)

Chevron SND Javelina Unit Pad 604 / 604H SND Javelina Unit 9 16 P604 No. 604H SND Javelina Unit 9 16 P604 No. 604H

Unknown / Unknown

SND Javelina Unit 9 16 P604 No. 604H R0 mdv 05May22 May 05, 2022

May 05, 2022 118.876 " 1/2315.677 ft / 6.440 / 1.044 NAD27 New Mexico State Plane, Eastern Zone, US Feet N 32" 14" 7.32401", W 103" 46" 37.09007" N 449791.000 ftUS, E 672029.000 ftUS 0.2968 " 0.99994299

2.10.829.1

Survey / DLS Computation: Vertical Section Azimuth: Vertical Section Origin: TVD Reference Datum: Minimum Curvature / Lubinski 179.710 ° (Grid North) 0.000 ft, 0.000 ft RKB = 28ft TVD Reference Elevation:

Seabed / Ground Elevation: Magnetic Declination: Total Gravity Field Strength: 6.491°

Gravity Model:

47622.225 nT 59.853 ° May 05, 2022 HDGM 2022 Grid North 0.2968 ° Total Magnetic Field Strength: Magnetic Dip Angle: Declination Date: Magnetic Declination Model: North Reference:

Grid Convergence Used: Total Corr Mag North->Grid North: 6.1944° Local Coord Referenced To:

3466.000 ft above MSL 3438.000 ft above MSL 998.4404mgn (9.80665 Based) GARM

Well Head

Comments	MD (ft)	Incl (°)	Azim Grid	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	449791.00	672029.00 N	32 14 7.32 W	
	100.00	0.00	313.79	100.00	0.00	0.00	0.00	0.00	449791.00	672029.00 N		/ 103 46 37.09
	200.00	0.00	313.79	200.00	0.00	0.00	0.00	0.00	449791.00	672029.00 N		
	300.00	0.00	313.79	300.00	0.00	0.00	0.00	0.00	449791.00	672029.00 N		
	400.00	0.00	313.79	400.00	0.00	0.00	0.00	0.00	449791.00		32 14 7.32 W	
D	500.00	0.00	313.79	500.00	0.00	0.00	0.00	0.00	449791.00		32 14 7.32 W	
Rustler (RSLR) Build 1.5°/100ft	521.00	0.00 0.00	313.79 313.79	521.00 600.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	449791.00 449791.00	672029.00 N 672029.00 N	32 14 7.32 W 32 14 7.32 W	
Build 1.5 / 1001t	600.00	1.50	313.79	699.99	-0.91	0.91		1.50			32 14 7.32 W	
Rustler Los Medaños Member	700.00 736.03	2.04	313.79	736.00	-1.68	1.68	-0.94 -1.75	1.50	449791.91 449792.68		32 14 7.33 W	
Rustler Los Medaños M-1 Unit	762.05	2.43	313.79	762.00	-2.39	2.38	-2.48	1.50	449793.38		32 14 7.35 W	
Nasici Los wedanos wi- i Onic	800.00	3.00	313.79	799.91	-3.64	3.62	-3.78	1.50	449794.62	672025.22 N		
Salado (SLDO)	855.19	3.83	313.79	855.00	-5.93	5.90	-6.15	1.50	449796.90		32 14 7.38 W	
	900.00	4.50	313.79	899.69	-8.19	8.15	-8.50	1.50	449799.15		32 14 7.41 W	
	1000.00	6.00	313.79	999.27	-14.56	14.48	-15.11	1.50	449805.48	672013.90 N	32 14 7.47 W	/ 103 46 37.27
	1100.00	7.50	313.79	1098.57	-22.73	22.61	-23.59	1.50	449813.61		32 14 7.55 W	
	1200.00	9.00	313.79	1197.54	-32.71	32.54	-33.95	1.50	449823.54	671995.05 N	32 14 7.65 W	/ 103 46 37.48
	1300.00	10.50	313.79	1296.09	-44.50	44.26	-46.17	1.50	449835.26		32 14 7.76 W	
	1400.00	12.00	313.79	1394.16	-58.07	57.76	-60.26	1.50	449848.76		32 14 7.90 W	
	1500.00	13.50	313.79	1491.70	-73.42	73.03	-76.19	1.50	449864.03		32 14 8.05 W	
Hold	1566.35	14.50	313.79	1556.07	-84.58	84.14	-87.77	1.50	449875.13		32 14 8.16 W	
	1600.00	14.50	313.79	1588.65	-90.44	89.97	-93.85	0.00	449880.96		32 14 8.22 W	
	1700.00	14.50	313.79	1685.47	-107.86	107.29	-111.92	0.00	449898.28		32 14 8.39 W	
	1800.00	14.50	313.79	1782.29	-125.27	124.61	-129.99	0.00	449915.60		32 14 8.56 W	
	1900.00	14.50	313.79	1879.10	-142.68	141.93	-148.06	0.00	449932.92		32 14 8.74 W	
	2000.00	14.50	313.79	1975.92	-160.09	159.25	-166.13	0.00	449950.24		32 14 8.91 W	
	2100.00	14.50 14.50	313.79	2072.74	-177.50	176.57	-184.20	0.00	449967.56		32 14 9.08 W	
	2200.00		313.79	2169.55	-194.92	193.90	-202.26		449984.88		32 14 9.25 W	
	2300.00 2400.00	14.50 14.50	313.79 313.79	2266.37 2363.19	-212.33 -229.74	211.22 228.54	-220.33 -238.40	0.00 0.00	450002.20 450019.52		32 14 9.43 W 32 14 9.60 W	
	2500.00	14.50	313.79	2460.01	-229.74 -247.15	245.86	-256.47	0.00	450036.84		32 14 9.00 W	
	2600.00	14.50	313.79	2556.82	-264.57	263.18	-274.54	0.00	450054.16		32 14 9.77 W	
	2700.00	14.50	313.79	2653.64	-281.98	280.50	-274.54	0.00	450054.16		32 14 9.94 W	
Castile (CSTL)	2761.31	14.50	313.79	2713.00	-292.65	291.12	-303.69	0.00	450071.48		32 14 10.11 W	
Castile (CSTL)	2800.00	14.50	313.79	2750.46	-299.39	297.82	-310.68	0.00	450088.80		32 14 10.29 W	
	2900.00	14.50	313.79	2847.27	-316.80	315.14	-328.74	0.00	450106.12		32 14 10.46 W	
	3000.00	14.50	313.79	2944.09	-334.21	332.46	-346.81	0.00	450123.44		32 14 10.63 W	
	3100.00	14.50	313.79	3040.91	-351.63	349.78	-364.88	0.00	450140.76		32 14 10.80 W	
	3200.00	14.50	313.79	3137.72	-369.04	367.11	-382.95	0.00	450158.08		32 14 10.98 W	
	3300.00	14.50	313.79	3234.54	-386.45	384.43	-401.02	0.00	450175.40		32 14 11.15 W	
	3400.00	14.50	313.79	3331.36	-403.86	401.75	-419.09	0.00	450192.72	671609.94 N	32 14 11.32 W	/ 103 46 41.94
	3500.00	14.50	313.79	3428.17	-421.28	419.07	-437.16	0.00	450210.04	671591.87 N	32 14 11.49 W	/ 103 46 42.15
	3600.00	14.50	313.79	3524.99	-438.69	436.39	-455.22	0.00	450227.36	671573.80 N	32 14 11.67 W	/ 103 46 42.36
	3700.00	14.50	313.79	3621.81	-456.10	453.71	-473.29	0.00	450244.68		32 14 11.84 W	
	3800.00	14.50	313.79	3718.62	-473.51	471.03	-491.36	0.00	450262.00		32 14 12.01 W	
	3900.00	14.50	313.79	3815.44	-490.92	488.35	-509.43	0.00	450279.32		32 14 12.18 W	
	4000.00	14.50	313.79	3912.26	-508.34	505.67	-527.50	0.00	450296.64		32 14 12.35 W	
	4100.00	14.50	313.79	4009.08	-525.75	522.99	-545.57	0.00	450313.96		32 14 12.53 W	
	4200.00	14.50	313.79	4105.89	-543.16	540.32	-563.64	0.00	450331.28		32 14 12.70 W	
	4300.00	14.50	313.79	4202.71	-560.57	557.64	-581.71	0.00	450348.60		32 14 12.87 W	
1 (I MAD)	4400.00	14.50 14.50	313.79 313.79	4299.53 4304.00	-577.99 -578.79	574.96 575.76	-599.77 -600.61	0.00	450365.92 450366.72		32 14 13.04 W	
Lamar (LMAR) Bell Canyon (BLCN)	4404.62 4454.20	14.50	313.79	4352.00	-578.79 -587.42	575.76 584.35	-609.57	0.00	450366.72 450375.31		32 14 13.05 W	
Bell Carryon (BLCN)	4500.00	14.50	313.79	4396.34	-595.40	592.28	-617.84	0.00	450375.37		32 14 13.14 W	
	4600.00	14.50	313.79	4493.16	-612.81	609.60	-635.91	0.00	450303.24		32 14 13.39 W	
	4700.00	14.50	313.79	4589.98	-630.22	626.92	-653.98	0.00	450417.88		32 14 13.56 W	
	4800.00	14.50	313.79	4686.79	-647.64	644.24	-672.05	0.00	450435.20		32 14 13.73 W	
	4900.00	14.50	313.79	4783.61	-665.05	661.56	-690.12	0.00	450452.52		32 14 13.91 W	
	5000.00	14.50	313.79	4880.43	-682.46	678.88	-708.19	0.00	450469.84		32 14 14.08 W	
	5100.00	14.50	313.79	4977.24	-699.87	696.20	-726.25	0.00	450487.16	671302.79 N	32 14 14.25 W	/ 103 46 45.50
	5200.00	14.50	313.79	5074.06	-717.28	713.53	-744.32	0.00	450504.48		32 14 14.42 W	
	5300.00	14.50	313.79	5170.88	-734.70	730.85	-762.39	0.00	450521.80	671266.65 N	32 14 14.59 W	/ 103 46 45.92
Cherry Canyon (CRCN)	5350.74	14.50	313.79	5220.00	-743.53	739.64	-771.56	0.00	450530.59	671257.49 N	32 14 14.68 W	103 46 46.03
	5400.00	14.50	313.79	5267.69	-752.11	748.17	-780.46	0.00	450539.12	671248.59 N	32 14 14.77 W	/ 103 46 46.13
	5500.00	14.50	313.79	5364.51	-769.52	765.49	-798.53	0.00	450556.44	671230.52 N	32 14 14.94 W	/ 103 46 46.34
	5600.00	14.50	313.79	5461.33	-786.93	782.81	-816.60	0.00	450573.76		32 14 15.11 W	
	5700.00	14.50	313.79	5558.15	-804.35	800.13	-834.67	0.00	450591.08		32 14 15.28 W	
	5800.00	14.50	313.79	5654.96	-821.76	817.45	-852.73	0.00	450608.40		32 14 15.46 W	
	5900.00	14.50	313.79	5751.78	-839.17	834.77	-870.80	0.00	450625.72		32 14 15.63 W	
	6000.00	14.50	313.79	5848.60	-856.58	852.09	-888.87	0.00	450643.04		32 14 15.80 W	
	6100.00	14.50	313.79	5945.41	-873.99	869.42	-906.94	0.00	450660.36		32 14 15.97 W	
	6200.00	14.50	313.79	6042.23	-891.41	886.74	-925.01	0.00	450677.68		32 14 16.15 W	
	6300.00	14.50	313.79	6139.05	-908.82	904.06	-943.08	0.00	450695.00		32 14 16.32 W	
	6400.00	14.50	313.79	6235.86	-926.23	921.38	-961.15	0.00	450712.32		32 14 16.49 W	
	6500.00	14.50	313.79	6332.68	-943.64	938.70	-979.22	0.00	450729.64		32 14 16.66 W	
	6600.00	14.50	313.79	6429.50	-961.06	956.02	-997.28	0.00	450746.96		32 14 16.84 W	
Brushy Canyon (BCN)	6689.35 6700.00	14.50	313.79	6516.00	-976.61	971.50	-1013.43	0.00	450762.44		32 14 16.99 W	
		14.50	313.79	6526.31	-978.47	973.34	-1015.35	0.00	450764.28	671013.71 N	32 14 17.01 W	/ 103 46 48.85
			040 70	0000 10	00= 00	000 00	4000 10		450701.00	07000= 01		1 400 40 10 1
	6800.00 6900.00	14.50 14.50	313.79 313.79	6623.13 6719.95	-995.88 -1013.29	990.66 1007.98	-1033.42 -1051.49	0.00 0.00	450781.60 450798.92		32 14 17.18 W 32 14 17.35 W	

...SND Javelina Unit 9 16 P604 No. 604H\SND Javelina Unit 9 16 P604 No. 604H R0 mdv 05May22

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7000.00	14.50	313.79	6816.76	-1030.70	1025.30	-1069.56	0.00 0.00	450816.24 450833.56		32 14 17.52 W 32 14 17.70 W	103 46 49.48
	7100.00 7200.00	14.50 14.50	313.79 313.79	6913.58 7010.40	-1048.12 -1065.53	1042.63 1059.95	-1087.63 -1105.70	0.00	450850.88	670941.44 N 670923.37 N		
	7300.00 7400.00	14.50 14.50	313.79 313.79	7107.22 7204.03	-1082.94 -1100.35	1077.27 1094.59	-1123.76 -1141.83	0.00	450868.20 450885.52		32 14 18.04 W 32 14 18.21 W	
Drop .75°/100ft	7412.31	14.50	313.79	7204.03	-1100.55	1094.59	-1144.06	0.00	450887.66		32 14 16.21 W	
	7500.00 7600.00	13.84 13.09	313.79 313.79	7300.97 7398.22	-1117.43 -1133.62	1111.57 1127.68	-1159.55 -1176.36	0.75 0.75	450902.51 450918.62		32 14 18.38 W 32 14 18.54 W	
	7700.00	12.34	313.79	7495.77	-1148.93	1142.91	-1192.24	0.75	450933.84	670836.83 N	32 14 18.69 W	103 46 50.90
	7800.00 7900.00	11.59 10.84	313.79 313.79	7593.60 7691.69	-1163.35 -1176.88	1157.25 1170.71	-1207.20 -1221.24	0.75 0.75	450948.19 450961.64		32 14 18.84 W 32 14 18.97 W	
	8000.00	10.09	313.79	7790.03	-1189.51	1183.28	-1234.35	0.75	450974.21	670794.72 N	32 14 19.10 W	103 46 51.39
	8100.00 8200.00	9.34 8.59	313.79 313.79	7888.59 7987.37	-1201.24 -1212.08	1194.95 1205.73	-1246.53 -1257.77	0.75 0.75	450985.88 450996.66		32 14 19.21 W 32 14 19.32 W	
	8300.00	7.84	313.79	8086.35	-1222.02	1215.62	-1268.09	0.75	451006.55	670760.99 N	32 14 19.42 W	103 46 51.78
Bone Spring (BSGL)	8400.00 8401.51	7.09 7.08	313.79 313.79	8185.50 8187.00	-1231.05 -1231.18	1224.60 1224.73	-1277.46 -1277.60	0.75 0.75	451015.53 451015.66		32 14 19.51 W 32 14 19.51 W	
Upper Avalon (AVU)	8452.88	6.69	313.79	8238.00	-1235.47	1228.99	-1282.04	0.75	451019.92	670747.04 N	32 14 19.55 W	103 46 51.94
	8500.00 8600.00	6.34 5.59	313.79 313.79	8284.81 8384.27	-1239.19 -1246.41	1232.69 1239.88	-1285.90 -1293.40	0.75 0.75	451023.62 451030.81		32 14 19.59 W 32 14 19.66 W	
	8700.00	4.84	313.79	8483.86	-1252.73	1246.17	-1299.96	0.75	451037.09	670729.12 N	32 14 19.72 W	103 46 52.15
	8800.00 8900.00	4.09 3.34	313.79 313.79	8583.55 8683.34	-1258.14 -1262.65	1251.55 1256.03	-1305.57 -1310.25	0.75 0.75	451042.48 451046.96		I 32 14 19.78 W I 32 14 19.82 W	
Lower Avalon (AVL)	8944.73	3.00	313.79	8728.00	-1264.37	1257.74	-1312.03	0.75	451048.67	670717.05 N	32 14 19.84 W	103 46 52.29
	9000.00 9100.00	2.59 1.84	313.79 313.79	8783.21 8883.13	-1266.24 -1268.93	1259.61 1262.28	-1313.98 -1316.76	0.75 0.75	451050.54 451053.21		I 32 14 19.86 W I 32 14 19.88 W	
	9200.00	1.09	313.79	8983.10	-1270.71	1264.05	-1318.61	0.75	451054.97	670710.47 N	32 14 19.90 W	103 46 52.37
Hold	9300.00 9345.00	0.34 0.00	313.79 313.79	9083.09 9128.09	-1271.57 -1271.66	1264.91 1265.00	-1319.50 -1319.60	0.75 0.75	451055.83 451055.93		I 32 14 19.91 W I 32 14 19.91 W	
5.45	9400.00	0.00	313.79	9183.09	-1271.66	1265.00	-1319.60	0.00	451055.93	670709.48 N	32 14 19.91 W	103 46 52.38
First Bone Spring Upper (FBU)	9402.91 9500.00	0.00 0.00	313.79 313.79	9186.00 9283.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
5.15	9600.00	0.00	313.79	9383.09	-1271.66	1265.00	-1319.60	0.00	451055.93		32 14 19.91 W	
First Bone Spring Lower (FBL)	9697.91 9700.00	0.00 0.00	313.79 313.79	9481.00 9483.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
	9800.00	0.00	313.79	9583.09	-1271.66	1265.00	-1319.60	0.00	451055.93		32 14 19.91 W	
	9900.00 10000.00	0.00	313.79 313.79	9683.09 9783.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
Second Bone Spring Upper (SBU)	10053.91	0.00	313.79	9837.00	-1271.66	1265.00	-1319.60	0.00	451055.93		32 14 19.91 W	
	10100.00 10200.00	0.00 0.00	313.79 313.79	9883.09 9983.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		I 32 14 19.91 W I 32 14 19.91 W	
	10300.00 10400.00	0.00 0.00	313.79 313.79	10083.09 10183.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00	451055.93 451055.93		I 32 14 19.91 W I 32 14 19.91 W	
	10500.00	0.00	313.79	10283.09	-1271.66	1265.00	-1319.60	0.00	451055.93		1 32 14 19.91 W	
Second Bone Spring Lower (SBL)	10537.91 10600.00	0.00 0.00	313.79 313.79	10321.00 10383.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
	10700.00	0.00	313.79	10483.09	-1271.66	1265.00	-1319.60	0.00	451055.93		32 14 19.91 W	
	10800.00 10900.00	0.00	313.79 313.79	10583.09 10683.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
	11000.00	0.00	313.79	10783.09	-1271.66	1265.00	-1319.60	0.00	451055.93	670709.48 N	32 14 19.91 W	103 46 52.38
	11100.00 11200.00	0.00	313.79 313.79	10883.09 10983.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		32 14 19.91 W 32 14 19.91 W	
Third Bone Spring (TBS)	11280.91	0.00	313.79	11064.00	-1271.66	1265.00	-1319.60	0.00	451055.93	670709.48 N	32 14 19.91 W	103 46 52.38
KOP, Build 10°/100ft	11300.00 11351.00	0.00	313.79 313.79	11083.09 11134.09	-1271.66 -1271.66	1265.00 1265.00	-1319.60 -1319.60	0.00 0.00	451055.93 451055.93		I 32 14 19.91 W I 32 14 19.91 W	
,	11400.00	4.90	179.70	11183.03	-1269.57	1262.91	-1319.59	10.00	451053.83	670709.49 N	32 14 19.89 W	103 46 52.38
	11500.00 11600.00	14.90 24.90	179.70 179.70	11281.42 11375.33	-1252.40 -1218.40	1245.74 1211.74	-1319.50 -1319.32	10.00 10.00	451036.66 451002.67		I 32 14 19.72 W I 32 14 19.38 W	
	11700.00	34.90	179.70	11461.91	-1168.62	1161.96	-1319.06	10.00	450952.89	670710.02 N	32 14 18.89 W	103 46 52.38
Wolfcamp A (WCA)	<i>1174</i> 9.20 11800.00	39.82 44.90	179.70 179.70	11501.00 11538.52	-1138.77 -1104.55	1132.11 1097.89	-1318.90 -1318.72	10.00 10.00	450923.04 450888.83		32 14 18.59 W 32 14 18.26 W	
570.0	11900.00	54.90	179.70	11602.86	-1028.16	1021.50	-1318.32	10.00	450812.44		32 14 17.50 W	
FTP Cross	11943.26 12000.00	59.23 64.90	<i>179.70</i> 179.70	11626.37 11652.94	-991.86 -941.75	985.20 935.10	-1318.13 -1317.86	10.00 10.00	450776.14 450726.04		32 14 17.14 W 32 14 16.64 W	
	12100.00 12200.00	74.90 84.90	179.70 179.70	11687.26	-847.96	841.31 742.98	-1317.37	10.00 10.00	450632.26 450533.94		32 14 15.72 W 32 14 14.74 W	
Wolfcamp A Target 2 (Z-sand)	12243.60	89.26	179.70	11704.78 11707.00	-749.64 -706.11	699.45	-1316.85 -1316.62	10.00	450490.41		32 14 14.74 W	
Landing Point	12243.94 12300.00	89.29 89.29	179.70 179.70	11707.00 11707.70	-705.77 -649.71	699.11 643.06	-1316.62 -1316.33	10.00 0.00	450490.07 450434.02		32 14 14.31 W 32 14 13.75 W	
	12400.00	89.29	179.70	11708.93	-549.72	543.06	-1315.80	0.00	450334.03		32 14 13.75 W	
	12500.00 12600.00	89.29 89.29	179.70 179.70	11710.16 11711.39	-449.72 -349.73	443.07 343.08	-1315.28 -1314.75	0.00	450234.05 450134.06		I 32 14 11.78 W I 32 14 10.79 W	
	12700.00	89.29	179.70	11712.62	-249.74	243.09	-1314.22	0.00	450034.08	670714.85 N	32 14 9.80 W	103 46 52.38
	12800.00 12900.00	89.29 89.29	179.70 179.70	11713.86 11715.09	-149.75 -49.76	143.10 43.11	-1313.70 -1313.17	0.00 0.00	449934.09 449834.11		32 14 8.81 W 32 14 7.82 W	
	13000.00	89.29	179.70	11716.32	50.24	-56.88	-1312.65	0.00	449734.12	670716.43 N	32 14 6.83 W	103 46 52.37
	13100.00 13200.00	89.29 89.29	179.70 179.70	11717.55 11718.79	150.23 250.22	-156.87 -256.86	-1312.12 -1311.59	0.00	449634.14 449534.15		32 14 5.84 W 32 14 4.85 W	
	13300.00	89.29	179.70	11720.02	350.21	-356.85	-1311.07	0.00	449434.17	670718.01 N	32 14 3.86 W	103 46 52.37
	13400.00 13500.00	89.29 89.29	179.70 179.70	11721.25 11722.48	450.21 550.20	-456.85 -556.84	-1310.54 -1310.01	0.00	449334.18 449234.20		32 14 2.87 W 32 14 1.88 W	
	13600.00	89.29	179.70	11723.71	650.19	-656.83	-1309.49	0.00	449134.21		32 14 0.89 W	
	13700.00 13800.00	89.29 89.29	179.70 179.70	11724.95 11726.18	750.18 850.18	-756.82 -856.81	-1308.96 -1308.44	0.00	449034.23 448934.24		32 13 59.90 W 32 13 58.91 W	
	13900.00	89.29	179.70	11727.41	950.17	-956.80	-1307.91	0.00	448834.26		32 13 57.92 W 32 13 56.93 W	
	14000.00 14100.00	89.29 89.29	179.70 179.70	11728.64 11729.88	1050.16 1150.15	-1056.79 -1156.78	-1307.38 -1306.86	0.00	448734.27 448634.29		32 13 56.93 W 32 13 55.94 W	
	14200.00 14300.00	89.29 89.29	179.70 179.70	11731.11 11732.34	1250.15 1350.14	-1256.77 -1356.77	-1306.33 -1305.81	0.00 0.00	448534.30 448434.31	670722.75 N	32 13 54.95 W 32 13 53.97 W	103 46 52.37
	14400.00	89.29	179.70	11733.57	1450.13	-1456.76	-1305.28	0.00	448334.33		32 13 53.97 W	
	14500.00 14600.00	89.29 89.29	179.70 179.70	11734.81 11736.04	1550.12 1650.12	-1556.75 -1656.74	-1304.75 -1304.23	0.00	448234.34 448134.36		32 13 51.99 W 32 13 51.00 W	
	14700.00	89.29	179.70	11737.27	1750.11	-1756.73	-1303.70	0.00	448034.37	670725.38 N	32 13 50.01 W	103 46 52.37
	14800.00 14900.00	89.29 89.29	179.70 179.70	11738.50 11739.73	1850.10 1950.09	-1856.72 -1956.71	-1303.18 -1302.65	0.00 0.00	447934.39 447834.40		32 13 49.02 W 32 13 48.03 W	
	15000.00	89.29	179.70	11740.97	2050.09	-2056.70	-1302.12	0.00	447734.42	670726.95 N	32 13 47.04 W	103 46 52.37
	15100.00 15200.00	89.29 89.29	179.70 179.70	11742.20 11743.43	2150.08 2250.07	-2156.69 -2256.68	-1301.60 -1301.07	0.00	447634.43 447534.45		32 13 46.05 W 32 13 45.06 W	
	15300.00	89.29	179.70	11744.66	2350.06	-2356.68	-1300.54	0.00	447434.46	670728.53 N	32 13 44.07 W	103 46 52.37
	15400.00 15500.00	89.29 89.29	179.70 179.70	11745.90 11747.13	2450.06 2550.05	-2456.67 -2556.66	-1300.02 -1299.49	0.00 0.00	447334.48 447234.49		32 13 43.08 W 32 13 42.09 W	
	15600.00	89.29	179.70	11748.36	2650.04	-2656.65	-1298.97	0.00	447134.51	670730.11 N	32 13 41.10 W	103 46 52.37
	15700.00 15800.00	89.29 89.29	179.70 179.70	11749.59 11750.83	2750.03 2850.02	-2756.64 -2856.63	-1298.44 -1297.91	0.00 0.00	447034.52 446934.54		32 13 40.11 W 32 13 39.12 W	
	15900.00	89.29	179.70	11752.06	2950.02	-2956.62	-1297.39	0.00	446834.55	670731.69 N	32 13 38.13 W	103 46 52.37
	16000.00 16100.00	89.29 89.29	179.70 179.70	11753.29 11754.52	3050.01 3150.00	-3056.61 -3156.60	-1296.86 -1296.34	0.00 0.00	446734.57 446634.58		32 13 37.14 W 32 13 36.15 W	

...SND Javelina Unit 9 16 P604 No. 604H\SND Javelina Unit 9 16 P604 No. 604H R0 mdv 05May22

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
-	16200.00	89.29	179.70	11755.75	3249.99	-3256.59	-1295.81	0.00	446534.60		32 13 35.17 V	
	16300.00	89.29	179.70	11756.99	3349.99	-3356.59	-1295.28	0.00	446434.61	670733.79 N	32 13 34.18 V	V 103 46 52.37
	16400.00	89.29	179.70	11758.22	3449.98	-3456.58	-1294.76	0.00	446334.63		32 13 33.19 V	
	16500.00	89.29	179.70	11759.45	3549.97	-3556.57	-1294.23	0.00	446234.64		32 13 32.20 V	
	16600.00	89.29	179.70	11760.68	3649.96	-3656.56	-1293.71	0.00	446134.66		32 13 31.21 V	
	16700.00	89.29	179.70	11761.92	3749.96	-3756.55	-1293.18	0.00	446034.67		32 13 30.22 V	
	16800.00	89.29	179.70	11763.15	3849.95	-3856.54	-1292.65	0.00	445934.69		32 13 29.23 V	
MP, Turn 2°/100ft	16900.00 16909.70	89.29 89.29	179.70 179.70	11764.38 11764.50	3949.94 3959.64	-3956.53 -3966.23	-1292.13 -1292.08	0.00	445834.70 445825.00		32 13 28.24 V 32 13 28.14 V	
Hold	16910.52	89.29	179.71	11764.51	3960.46	-3967.05	-1292.06	2.00	445824.18		32 13 28.13 V	
11014	17000.00	89.29	179.71	11765.61	4049.93	-4056.52	-1291.63	0.00	445734.72		32 13 27.25 V	
	17100.00	89.29	179.71	11766.85	4149.93	-4156.51	-1291.13	0.00	445634.73		32 13 26.26 V	
	17200.00	89.29	179.71	11768.08	4249.92	-4256.51	-1290.63	0.00	445534.75		32 13 25.27 V	
	17300.00	89.29	179.71	11769.31	4349.91	-4356.50	-1290.13	0.00	445434.76		32 13 24.28 V	
	17400.00	89.29	179.71	11770.55	4449.90	-4456.49	-1289.64	0.00	445334.78		32 13 23.29 V	
	17500.00	89.29	179.71	11771.78	4549.90	-4556.48	-1289.14	0.00	445234.79	670739.94 N	32 13 22.30 V	V 103 46 52.37
	17600.00	89.29	179.71	11773.01	4649.89	-4656.47	-1288.64	0.00	445134.80	670740.43 N	32 13 21.31 V	V 103 46 52.37
	17700.00	89.29	179.71	11774.25	4749.88	-4756.46	-1288.14	0.00	445034.82		32 13 20.32 V	
	17800.00	89.29	179.71	11775.48	4849.87	-4856.45	-1287.65	0.00	444934.83		32 13 19.33 V	
	17900.00	89.29	179.71	11776.71	4949.87	-4956.44	-1287.15	0.00	444834.85		32 13 18.34 V	
	18000.00	89.29	179.71	11777.95	5049.86	-5056.43	-1286.65	0.00	444734.86		32 13 17.35 V	
	18100.00	89.29	179.71	11779.18	5149.85	-5156.43	-1286.15	0.00	444634.88		32 13 16.37 V	
	18200.00 18300.00	89.29 89.29	179.71 179.71	11780.41 11781.65	5249.84 5349.83	-5256.42 -5356.41	-1285.66 -1285.16	0.00 0.00	444534.89 444434.91		32 13 15.38 V 32 13 14.39 V	
	18400.00	89.29	179.71	11782.88	5449.83	-5456.40	-1284.66	0.00	444334.92		32 13 14.39 V	
	18500.00	89.29	179.71	11784.11	5549.82	-5556.39	-1284.16	0.00	444234.94		32 13 13.40 V	
	18600.00	89.29	179.71	11785.35	5649.81	-5656.38	-1283.67	0.00	444134.95		32 13 11.42 V	
	18700.00	89.29	179.71	11786.58	5749.80	-5756.37	-1283.17	0.00	444034.97		32 13 10.43 V	
IFP1, Build 2°/100ft	18733.97	89.29	179.71	11787.00	5783.77	-5790.34	-1283.00	0.00	444001.00		32 13 10.09 V	
Hold	18762.75	89.87	179.72	11787.21	5812.55	-5819.12	-1282.86	2.00	443972.22	670746.22 N	32 13 9.81 V	V 103 46 52.37
	18800.00	89.87	179.72	11787.30	5849.80	-5856.37	-1282.67	0.00	443934.98	670746.40 N	32 13 9.44 V	V 103 46 52.37
	18900.00	89.87	179.72	11787.52	5949.80	-5956.37	-1282.18	0.00	443834.99		32 13 8.45 V	
	19000.00	89.87	179.72	11787.75	6049.80	-6056.36	-1281.69	0.00	443734.99		32 13 7.46 V	
	19100.00	89.87	179.72	11787.98	6149.80	-6156.36	-1281.19	0.00	443635.00		32 13 6.47 V	
	19200.00	89.87	179.72	11788.21	6249.80	-6256.36	-1280.70	0.00	443535.01		32 13 5.48 V	
	19300.00	89.87 89.87	179.72 179.72	11788.44 11788.67	6349.80	-6356.36 -6456.36	-1280.21 -1279.72	0.00	443435.01 443335.02		32 13 4.49 V 32 13 3.50 V	
	19400.00 19500.00	89.87	179.72	11788.90	6449.80 6549.80	-6556.36	-1279.72	0.00	443335.02		32 13 3.50 V	
	19600.00	89.87	179.72	11789.13	6649.80	-6656.36	-1278.73	0.00	443135.04		32 13 1.52 V	
	19700.00	89.87	179.72	11789.36	6749.80	-6756.35	-1278.24	0.00	443035.04		32 13 0.53 V	
	19800.00	89.87	179.72	11789.58	6849.80	-6856.35	-1277.74	0.00	442935.05		32 12 59.54 V	
	19900.00	89.87	179.72	11789.81	6949.80	-6956.35	-1277.25	0.00	442835.06		32 12 58.55 V	
	20000.00	89.87	179.72	11790.04	7049.80	-7056.35	-1276.76	0.00	442735.07	670752.32 N	32 12 57.56 V	V 103 46 52.38
	20100.00	89.87	179.72	11790.27	7149.80	-7156.35	-1276.26	0.00	442635.07		32 12 56.57 V	
	20200.00	89.87	179.72	11790.50	7249.80	-7256.35	-1275.77	0.00	442535.08		32 12 55.59 V	
	20300.00	89.87	179.72	11790.73	7349.80	-7356.35	-1275.28	0.00	442435.09		32 12 54.60 V	
	20400.00	89.87	179.72	11790.96	7449.80	-7456.34	-1274.78	0.00	442335.10		32 12 53.61 V	
	20500.00	89.87 89.87	179.72 179.72	11791.19	7549.80	-7556.34	-1274.29 -1273.80	0.00 0.00	442235.10 442135.11		32 12 52.62 V 32 12 51.63 V	
	20600.00 20700.00	89.87	179.72	11791.42 11791.64	7649.80 7749.80	-7656.34 -7756.34	-1273.30	0.00	442035.11		32 12 51.65 V	
	20800.00	89.87	179.72	11791.87	7849.80	-7756.34 -7856.34	-1273.30	0.00	442035.12		32 12 30.64 V	
	20900.00	89.87	179.72	11792.10	7949.80	-7956.34	-1272.32	0.00	441835.13		32 12 49.66 V	
	21000.00	89.87	179.72	11792.33	8049.79	-8056.34	-1271.83	0.00	441735.14		32 12 47.67 V	
	21100.00	89.87	179.72	11792.56	8149.79	-8156.33	-1271.33	0.00	441635.15		32 12 46.68 V	
	21200.00	89.87	179.72	11792.79	8249.79	-8256.33	-1270.84	0.00	441535.15		32 12 45.69 V	
	21300.00	89.87	179.72	11793.02	8349.79	-8356.33	-1270.35	0.00	441435.16		32 12 44.70 V	
	21400.00	89.87	179.72	11793.25	8449.79	-8456.33	-1269.85	0.00	441335.17	670759.22 N	32 12 43.71 V	V 103 46 52.38
	21500.00	89.87	179.72	11793.48	8549.79	-8556.33	-1269.36	0.00	441235.18		32 12 42.72 V	
	21600.00	89.87	179.72	11793.70	8649.79	-8656.33	-1268.87	0.00	441135.18		32 12 41.73 V	
	21700.00	89.87	179.72	11793.93	8749.79	-8756.32	-1268.37	0.00	441035.19		32 12 40.74 V	
170.0	21800.00	89.87	179.72	11794.16	8849.79	-8856.32	-1267.88	0.00	440935.20		32 12 39.75 V	
LTP Cross	21861.18	89.87	179.72	11794.30	8910.97	-8917.50	-1267.58	0.00	440874.03		32 12 39.15 V	
	21900.00 22000.00	89.87 89.87	179.72 179.72	11794.39 11794.62	8949.79 9049.79	-8956.32 -9056.32	-1267.39 -1266.89	0.00	440835.21 440735.21		32 12 38.76 V 32 12 37.77 V	
	22000.00	89.87 89.87	179.72 179.72	11794.62 11794.85	9049.79 9149.79	-9056.32 -9156.32	-1266.89 -1266.40	0.00	440735.21 440635.22		32 12 37.77 V 32 12 36.78 V	
SND Javelina Unit 9 16 P604 No. 604H BHL	22166.23	89.87	179.72	11795.00	9216.02	-9222.54	-1266.07	0.00	440559.00		32 12 36.13 V	
Javoa o o .o i oo+ i+o. oo+ii biiL	22.00.20	33.01	.13.12	55.66	02 10.02	ULLL.UT	.200.07	0.00		5. 5. 55.00 IN	JE 12 00.10 V	10 02.00

Survey Type:

Def Plan

Survey Error Model:

ISCWSA Rev 3 *** 3-D 97.071% Confidence 3.0000 sigma

51	Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Cas	sing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
		1	0.000	28.000	1/100.000	30.000	30.000		B001Mb_MWD+HRGM-Depth Only	SND Javelina Unit 9 16 P604 No. 604H / SND Javelina Unit 9 16 P604 No. 604H R0 mdv 05May22
		1	28.000	22166.226	1/100.000	30.000	30.000		B001Mb_MWD+HRGM	SND Javelina Unit 9 16 P604 No. 604H / SND Javelina Unit 9 16

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Chervon

LEASE NO.: | NMNM63757

WELL NAME & NO.: | SND Javelina Unit 9 16 P604 604H

SURFACE HOLE FOOTAGE: 1324'/N & 994'/E **BOTTOM HOLE FOOTAGE** 25'/S & 2310'/E

LOCATION: | Section 9, T.24 S., R.31 E., NMPM

COUNTY: Eddy County, New Mexico

COA

H2S	O Yes	⊙ No	
Potash	O None	Secretary	⊙ R-111-P
Cave/Karst Potential	• Low	Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	• Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	✓ Unit
Break Testing	• Yes	O No	

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 Onshore Order 6 requirements, 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 792 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - 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 **24 hours in the Potash Area** 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 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to 24%. Additional cement maybe requried.**

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- ❖ In <u>R111 Potash Areas</u> if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Excess calculates to 15%. Additional cement maybe requried.
- 4. The minimum required fill of cement behind the $5 \times 4-1/2$ inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

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. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 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 OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

BOPE Break Testing Variance (Note: For 5M BOPE or less)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- 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 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.
- 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 Onshore Oil and Gas Order No. 2.

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
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- Lea County
 Call 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 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 Onshore Oil and Gas Order No. 2 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

- 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 OOGO2.III.A.2.i 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 when specified), 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 Onshore Order No. 2.

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.

ZS060423



Training

MCBU Drilling and Completions H₂S training requirements are intended to define the minimum level of training required for employees, contractors and visitors to enter or perform work at MCBU Drilling and Completions locations that have known concentrations of H₂S.

Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H₂S, who are not required to perform work in H₂S areas, will be provided with an awareness level of H₂S training prior to entering any H₂S areas. At a minimum, awareness level training will include:

- 1. Physical and chemical properties of H₂S
- 2. Health hazards of H₂S
- 3. Personal protective equipment
- 4. Information regarding potential sources of H₂S
- 5. Alarms and emergency evacuation procedures

Awareness level training will be developed and conducted by personnel who are qualified either by specific training, educational experience and/or work-related background.

Advanced Level H₂S Training

Employees and contractors required to work in areas that may contain H₂S will be provided with Advanced Level H₂S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H₂S training will include:

- 1. H₂S safe work practice procedures;
- 2. Emergency contingency plan procedures;
- 3. Methods to detect the presence or release of H₂S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H₂S equipment.
- 4. Basic overview of respiratory protective equipment suitable for use in H₂S environments. Note: Employees who work at sites that participate in the Chevron Respirator User program will require separate respirator training as required by the MCBU Respiratory Protection Program;
- 5. Basic overview of emergency rescue techniques, first aid, CPR and medical evaluation procedures. Employees who may be required to perform "standby" duties are required to receive additional first aid and CPR training, which is not covered in the Advanced Level H₂S training;
- 6. Proficiency examination covering all course material.

Advanced H₂S training courses will be instructed by personnel who have successfully completed an appropriate H₂S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.



H₂S Training Certification

All employees and visitors will be issued an H_2S training certification card (or certificate) upon successful completion of the appropriate H_2S training course. Personnel working in an H_2S environment will carry a current H_2S training certification card as proof of having received the proper training on their person at all times.

Briefing Area

A minimum of two briefing areas will be established in locations that at least one area will be upwind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated upwind briefing areas for instructions.

H₂S Equipment

Respiratory Protection

- a) Six 30 minute SCBAs 2 at each briefing area and 2 in the Safety Trailer.
- b) Eight 5 minute EBAs 5 in the dog house at the rig floor, 1 at the accumulator, 1 at the shale shakers and 1 at the mud pits.

Visual Warning System

- a) One color code sign, displaying all possible conditions, will be placed at the entrance to the location with a flag displaying the current condition.
- b) Two windsocks will be on location, one on the dog house and one on the Drill Site Manager's Trailer.

H₂S Detection and Monitoring System

- a) H₂S monitoring system (sensor head, warning light and siren) placed throughout rig.
 - Drilling Rig Locations: at a minimum, in the area of the Shale shaker, rig floor, and bell nipple.
 - Workover Rig Locations: at a minimum, in the area of the Cellar, rig floor and circulating tanks or shale shaker.



Well Control Equipment

- a) Flare Line 150' from wellhead with igniter.
- b) Choke manifold with a remotely operated choke.
- c) Mud / gas separator

Mud Program

In the event of drilling, completions, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater the following shall be considered:

- 1. Use of a degasser
- 2. Use of a zinc based mud treatment
- 3. Increasing mud weight

Public Safety - Emergency Assistance

<u>Agency</u>	Telephone Number
Lea County Sheriff's Department	575-396-3611
Fire Department:	
Carlsbad	575-885-3125
Artesia	575-746-5050
Lea County Regional Medical Center	575-492-5000
Jal Community Hospital	505-395-2511
Lea County Emergency Management	575-396-8602
Poison Control Center	800-222-1222

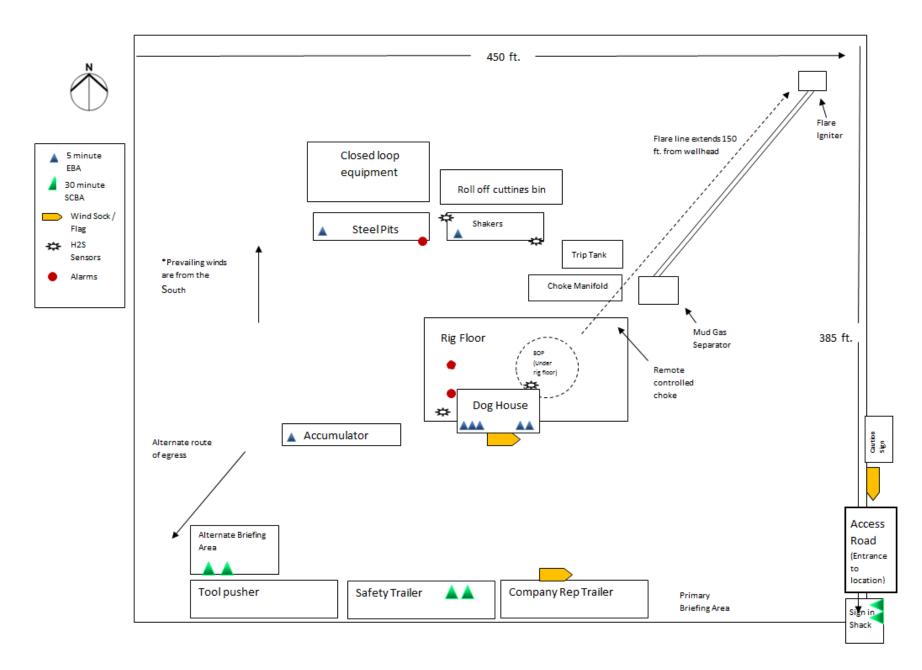


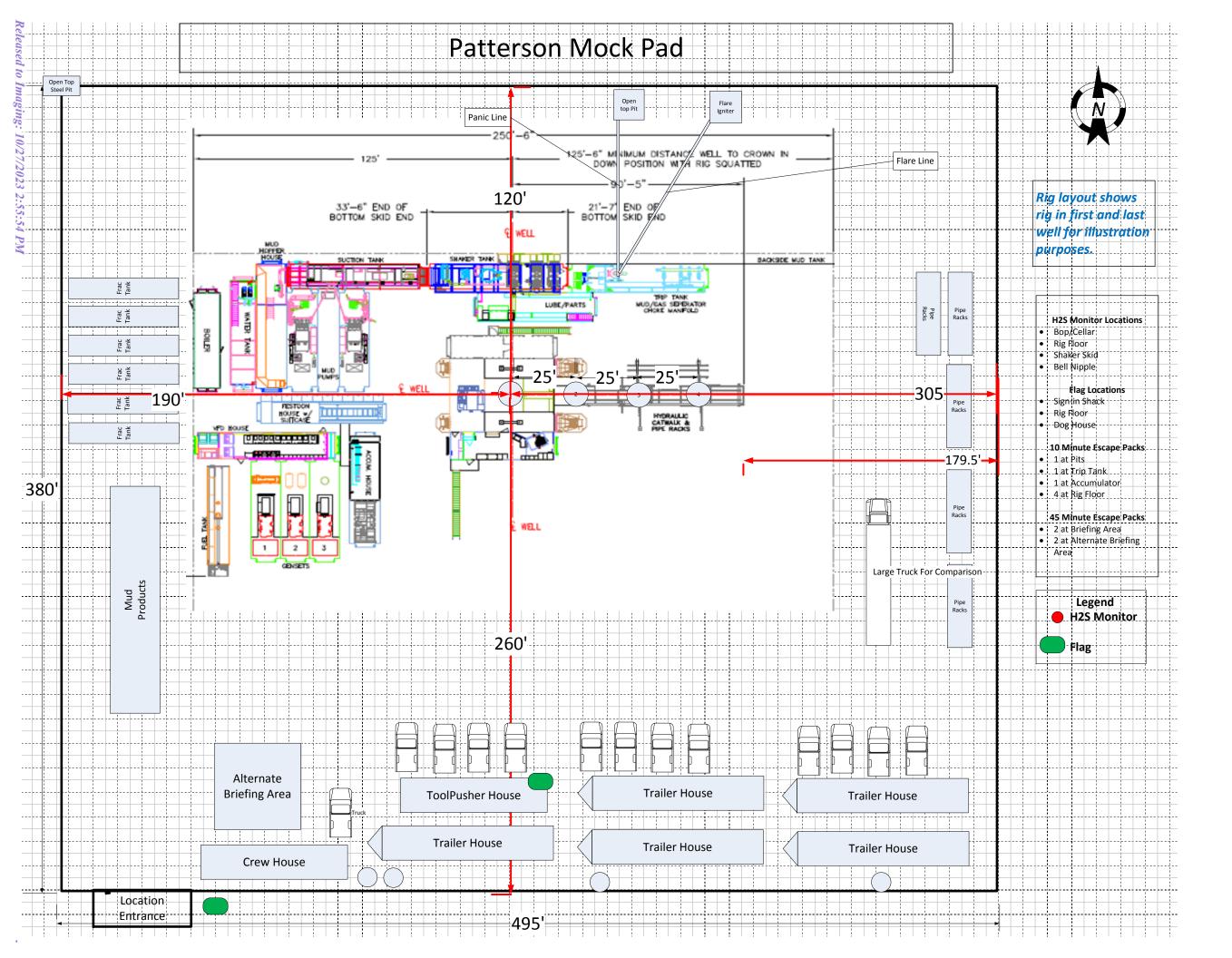
Chevron MCBU D&C Emergency Notifications

Below are lists of contacts to be used in emergency situations.

	Name	Title	Office Number	Cell Phone
1.	TBD	Drilling Engineer		
2.	Sergio Hernandez	Superintendent	713 372 1402	
5.	Dennis Mchugh	Drilling Manager	(713) 372-4496	
6.	Kyle Eastman	Operations Manager	713-372-5863	
7.	TBD	D&C HES		
8.	TBD	Completion Engineer		







Ope	rator Nar		.1		1	Droporty N	ama:					Wall Number
	rator Nar	ne:				Property N	ame.					Well Number
ick (Off Point	(KOP)										
UL	Section	Township	Range	Lot	Feet	From N	/S	Feet	Fron	n E/W	County	
Latitu	ıde				Longitu	de					NAD	
irst T	Гаке Poin	it (FTP)										
UL	Section	Township	Range	Lot	Feet	From N	/S	Feet	Fron	n E/W	County	
Latitu	ıde				Longitude NAD						NAD	
.ast T	ake Poin	t (LTP)										
UL	Section	Township	Range	Lot	Feet	From N/S	Feet		From E/W	Count	:у	
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KZ 06/29/2018



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

Drilling Plan Data Report

10/25/2023

APD ID: 10400087696

Submission Date: 08/30/2022

Highlighted data reflects the most

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND JAVELINA UNIT 9 16 P604

Well Number: 604H

recent changes

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12032176	RUSTLER	3470	521	762	DOLOMITE	NONE	N
12032196	SALADO	2616	854	854	HALITE, SALT	NONE	N
12032193	CASTILE	754	2716	2716	ANHYDRITE	NONE	N
12032195	LAMAR	-816	4286	4326	LIMESTONE	NONE	N
12032177	BELL CANYON	-863	4333	4373	SANDSTONE	NONE	N
12032179	CHERRY CANYON	-1741	5211	5251	SANDSTONE	NONE	N
12032180	BRUSHY CANYON	-3048	6518	6618	SANDSTONE	NONE	N
12032181	BONE SPRING	-4719	8189	8289	LIMESTONE	NATURAL GAS, OIL	N
12032191	UPPER AVALON SHALE	-4769	8239	8339	LIMESTONE, SHALE	NATURAL GAS, OIL	N
12032183	BONE SPRING 1ST	-5716	9186	9403	SANDSTONE	NATURAL GAS, OIL	N
12032184	BONE SPRING 2ND	-6365	9835	10052	SANDSTONE	NATURAL GAS, OIL	N
12032197	BONE SPRING 3RD	-7592	11062	11279	SANDSTONE	NATURAL GAS, OIL	N
12032175	WOLFCAMP	-8035	11505	11722	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

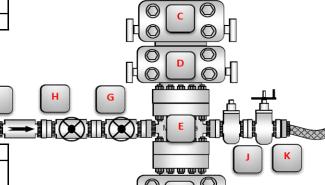
BLOWOUT PREVENTER SCHEMATIC

Operation: Intermediate & Production Drilling Operations

Minimum System operation pressure **BOP Stack Pressure Part** Size Description Rating 13-5/8" N/A Rotating Head/Bell nipple 13-5/8" 5,000 Annular В 13-5/8" C 10,000 Blind Ram 13-5/8" 10,000 D Pipe Ram Ē 13-5/8" 10,000 **Mud Cross** F 13-5/8" 10,000 Pipe Ram **Kill Line Pressure Part** Size Description Rating Inside Kill Line Valve (gate 2" G 10,000 valve) Outside Kill Line Valve 2" 10,000 (gate valve) 2" 10,000 Kill Line Check valve



Flow Line



	<u>Choke line</u>										
Part	Size	Pressure	Description								
Part	Size	Rating	Description								
J	3"	10,000	HCR (gate valve)								
K	3"	10,000	Manual HCR (gate valve)								
		<u>Wellhead</u>									
Part	Size	Pressure Rating	Description								
L	13-5/8"	5,000	FMC Multibowl wellhead								

BOP Installation Checklist: The following items must be verified and checked off prior to pressure testing BOP equipment

The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.

All valves on the kill line and choke line will be full opening and will allow straight flow through.

Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be install on all manual valves on the choke and kill line

A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will remain open unless accumulator is inoperative.

Upper kelly cock valve with handle will be available on rig floor along with saved valve and subs to fit all drill string connections in use.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 279172

CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	279172
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	10/27/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/27/2023
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	10/27/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/27/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/27/2023
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	10/27/2023