Form 3160-3 (June 2015) UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MAN APPLICATION FOR PERMIT TO		OMB No.	PPROVED 1004-0137 wary 31, 2018				
1a. Type of work:   DRILL	REENTER			7. If Unit or CA Agre	ement, Name and N		
	Other Single Zone	Multiple Zone		8. Lease Name and W	Vell No.		
2. Name of Operator				9. API Well No.			
3a. Address	3b. Phone N	No. (include area coa	le)	10. Field and Pool, or	r Exploratory		
4. Location of Well (Report location clearly and in accordance	e with any State	requirements.*)		11. Sec., T. R. M. or I	Blk. and Survey or A		
At surface							
At proposed prod. zone 14. Distance in miles and direction from nearest town or post of	£C *			12. County or Parish	13. State		
14. Distance in miles and direction from nearest town or post of	mce*			12. County of Farish	15. State		
<ul><li>15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)</li></ul>	16. No of a	cres in lease	17. Spacir	ng Unit dedicated to thi	is well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Propose	d Depth	20. BLM/	BIA Bond No. in file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approx	imate date work will	start*	23. Estimated duratio	on		
	24. Attac	chments					
The following, completed in accordance with the requirements (as applicable)	of Onshore Oil	and Gas Order No.	1, and the H	lydraulic Fracturing ru	le per 43 CFR 3162		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office</li> </ol>		Item 20 above). 5. Operator certifie	cation.	s unless covered by an mation and/or plans as r	-		
25. Signature	Name	e (Printed/Typed)		]	Date		
Title							
Approved by (Signature)	Name	e (Printed/Typed)		]	Date		
Title	Office	2					
Application approval does not warrant or certify that the applicat applicant to conduct operations thereon. Conditions of approval, if any, are attached.	ant holds legal	or equitable title to t	hose rights	in the subject lease wh	ich would entitle the		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, of the United States any false, fictitious or fraudulent statements					ny department or ag		
	IVED WI	TH CONDIT	IONS				
(Continued on page 2)		00/20/2021		*(Inst	tructions on pag		



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## 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

20.015	<sup>1</sup> API Num	ber	<sup>2</sup> Pool				<sup>3</sup> Pool Nai							
30-015	5-49006		133	67		COTTO	N DRAW;I	BONE	SPRIN	G				
<sup>4</sup> Proper	ty Code		<sup>5</sup> Property Name <sup>6</sup> Well Number											
331662			SND 11 2 FED COM 004 P27 217H											
<sup>7</sup> OGR	ID No.		<sup>8</sup> Operator Name <sup>9</sup> Elevation											
			CHEVRON U.S.A. INC. 3555'											
			<sup>10</sup> Surface Location											
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line		County				
В	14	24 SOUTH	31 EAST, N.M.P.M.		270'	NORTH	1512'	EA	ST	EDDY				
			<sup>11</sup> Bottom I	Hole Locat	tion 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	West line	County				
В	2	24 SOUTH	31 EAST, N.M.P.M.	31 EAST, N.M.P.M. 25' NORTH 1430' EAST										
<sup>12</sup> Dedicated A	cres <sup>13</sup> Join	t or Infill	ill <sup>14</sup> Consolidation Code <sup>15</sup> Order No.											
320														

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.

16	A C	F   1430'	17 OPERATOR CERTIFICATION
SND 11 2 FED COM 004 P27 PROPOSED FIRST TAKE POINT			I hereby certify that the information contained herein is true and complete
NO. 217H WELL         Prior 0020 Filled Filled Filled           X=         682,100         X=         682,180		<u>/</u> //	to the best of my knowledge and belief, and that this organization either
V= 445.626 V= 445.997			owns a working interest or unleased mineral interest in the land including
LAT. 32.223772 N LAT. 32.224789 N	Proposed		the proposed bottom hole location or has a right to drill this well at this
LONG. 103.744473 W LONG. 103.744207 W X= 723.284 X= 723.364	Last Take Point	2	
V- 445.685 V- 446.056	100' FNL, 1430' FEL		location pursuant to a contract with an owner of such a mineral or
LAT. 32.223895 N NAD83/2011 LAT. 32.224912 N NAD83/2011			working interest, or to a voluntary pooling agreement or a compulsory
LONG. 103.744956 W LONG. 103.744690 W			pooling order heretofore entered by the division.
ELEVATION +3555' NAVD 88			Kaules Milmarill analana
PROPOSED LAST TAKE POINT PROPOSED BOTTOM HOLE LOCATION			Kayla Mdomill 3/12/2020
X= 682,127 X= 682,127			Signature Date
Y= 456,358 NAD 27 Y= 456,433 NAD 27			
LAT. 32.253271 N LAT. 32.253477 N LONG. 103.744195 W LONG. 103.744195 W		30	KAYLA MCCONNELL
X= 723,311 X= 723,310		0,4	Printed Name
Y= 456,417 NAD83/2011 Y= 456,492 NAD83/2011		W 10,436.	GNCV@CHEVRON.COM
LAT. 32.253394 N LONG. 103.744680 W LONG. 103.744680 W			E-mail Address
		39	
		00°17'36"	<b><sup>18</sup>SURVEYOR CERTIFICATION</b>
		ź ź	I hereby certify that the well location shown on this
			plat was plotted from field notes of actual surveys
			made by me or under my supervision, and that the
CORNER COORDINATES TABLE			
(NAD 27)	11		same is true and correct to the best of my belief.
A - Y=456436.48, X=678280.36	Proposed		as L. LASTA
B - Y=445873.60, X=678324.50	First Take Point		06/07/2019
C - Y=456451.10, X=680918.57	100' FSL, 1430' FEL		Date of Survey
D - Y=445889.45, X=680967.68			Signature and Seal of Professional Surveyor.
E - Y=444569.01, X=680975.58	N 12°12'02" E		
F - Y=456458.41, X=682237.67	379.10'		25000 08/15/2019
G - Y=445897.38, X=682289.27			
H - Y=444576.97, X=682296.95	B D	G J	
I - Y=456465.72, X=683556.77			XXXXXXXXX
J - Y=445905.30, X=683610.86	14	1512'	/ you wall you /
		270'	Certificate Number
	E	∾ H	V

Page 2 of 42

## 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.

Re	ceived	bv	OCD:	10/14/2021	12:38:54 PM
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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: Chevron USA OGRID: 4323

**Date:** <u>10 / 5 / 21</u>

**II. Type:**  $\square$  Original  $\square$  Amendment due to  $\square$  19.15.27.9.D(6)(a) NMAC  $\square$  19.15.27.9.D(6)(b) NMAC  $\square$  Other.

If Other, please describe:

III. Well(s): 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	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SND 11 2 FED COM 004 P27 #216H	Pending	UL:B, Sec. 14, T24S-R31E	270' FNL, 1,537' FEL	1800 BBL/D	5200 MCF/D	2225 BBL/D
SND 11 2 FED COM 004 P27 #217H	Pending	UL:B, Sec. 14, T24S-R31E	270' FNL, 1,512' FEL	1800 BBL/D	5200 MCF/D	2225 BBL/D
SND 11 2 FED COM 004 P27 #218H	Pending	UL:B, Sec. 14, T24S-R31E	270' FNL, 1,487' FEL	1800 BBL/D	5200 MCF/D	2225 BBL/D

## IV. Central Delivery Point Name: <u>SND 12 CTB</u> [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	Completion	Initial Flow	First Production
		_	Date	Commencement Date	Back Date	Date
SND 11 2 FED COM 004	Pending	Dec 1 <sup>st</sup> , 2022	N/A	N/A	N/A	N/A
P27 #216H	0					
SND 11 2 FED COM 004	Pending	Dec 15th, 2022	N/A	N/A	N/A	N/A
P27 #217H	0					
SND 11 2 FED COM 004	Pending	Jan 1 <sup>st</sup> , 2023	N/A	N/A	N/A	N/A
P27 #218H	C					

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.

 $\Box$  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.**  $\Box$  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  $\Box$  will  $\Box$  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  $\Box$  does  $\Box$  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:**  $\Box$  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.

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

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

 $\boxtimes$  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

 $\Box$  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.**  $\Box$  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.**  $\Box$  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:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

## Section 4 - Notices

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

(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:
Printed Name: Cindy Herrera-Murillo
Title: Sr Regulatory Affairs Coordinator
E-mail Address eeof@chevron.com
Date: 10/5/2021
Phone:575-263-0431
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

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# 

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

APD ID: 10400055935

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 11 2 FED COM 004 P27

Well Number: 217H Well Work Type: Drill

Submission Date: 04/08/2020

Highlighted data reflects the most

10/04/2021

Drilling Plan Data Report

Page 9 of 42

recent changes

Show Final Text

Well Type: OIL WELL

# **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
708442	RUSTLER	3554	722	722	ANHYDRITE	NONE	N
708443	CASTILE	550	3004	3004	SALT	NONE	N
708444	LAMAR	-979	4533	4533	LIMESTONE	NONE	N
708445	BELL CANYON	-1014	4568	4568	SANDSTONE	NONE	N
708446	CHERRY CANYON	-1894	5448	5448	SANDSTONE	NONE	N
708448	BRUSHY CANYON	-3126	6680	6680	SANDSTONE	NONE	N
708449	BONE SPRING	-4839	8393	8400	LIMESTONE, SHALE	OIL	N
708450	AVALON SAND	-4909	8463	8470	SHALE	NATURAL GAS, OIL	Y
708451	AVALON SAND	-5565	9119	19877	SHALE	NATURAL GAS, OIL	Y

## **Section 2 - Blowout Prevention**

## Pressure Rating (PSI): 5M

Rating Depth: 9119

**Equipment:** Chevron will have a minimum of a 5,000 psi rig stack (see proposed schematic) 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 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. 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. - A variance 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

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: SND 11 2 FED COM 004 P27

Well Number: 217H

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 break test will NOT be performed on our last production section. A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. We will test seals that have been broken individually between full BOP tests. Time between tests for a single test or full test will not exceed 21 days. **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 the high pressure indicated above per Onshore Order 2 requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from the BLM is received otherwise. Flex choke hose will be used for all wells on the pad. BOP test will be conducted by a third party.

## **Choke Diagram Attachment:**

Choke\_Flex\_Hose\_2\_20200326061721.pdf

CoFlex\_Hose\_Variance\_Salanova\_20200326061802.pdf

## **BOP Diagram Attachment:**

BLM\_5M\_Annular\_10M\_Stack\_BOP\_Choke\_Schematic\_20200326062158.pdf

Break\_Testing\_Variance\_SND\_P27\_20200326062145.pdf

## **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	17.5	13.375	NEW	API	N	0	875	0	875	3554	2679	875	J-55		OTHER - BTC	1.58	1.65	DRY	1.88	DRY	1.88
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	9400	0	9400	3554	-5846		OTH ER	40	LT&C	2.42	1.44	DRY	1.7	DRY	1.7
	PRODUCTI ON	8.5	5.5	NEW	API	N	0	19877	0	9119	3554	-5565	19877	P- 110		OTHER - TXP-BTC	1.75	1.29	DRY	1.54	DRY	1.54

## **Casing Attachments**

*Received by OCD: 10/14/2021 12:38:54 PM* 

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 11 2 FED COM 004 P27

Well Number: 217H

## **Casing Attachments**

Casing ID: 1 String Type: SURFACE

**Inspection Document:** 

Spec Document:

**Tapered String Spec:** 

## Casing Design Assumptions and Worksheet(s):

 $13.375\_54.5ppf\_J55\_BTC\_20200326073511.pdf$ 

Casing ID: 2 String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

Tapered String Spec:

## Casing Design Assumptions and Worksheet(s):

9.625\_40.0lb\_L80IC\_BTC\_20200326074307.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

**Tapered String Spec:** 

## Casing Design Assumptions and Worksheet(s):

 $5.500\_20lb\_P110IC\_TXP\_20200326130052.pdf$ 

**Section 4 - Cement** 

## Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 11 2 FED COM 004 P27

Well Number: 217H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	875	908	1.34	14.8	1217	125		Extender, Antifoam, Retarder

INTERMEDIATE	Lead		0	8400	1003	2.56	11.9	2568	100	Class C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		8400	9400	382	1.33	14.8	507	50	Class C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead	8500	0	8500	841	2.46	11.9	2070	50	Class C	Extender, Antifoam, Retarder, Viscosifier

PRODUCTION	Lead	8500	1887 7	1735	1.85	13.2	3209	35	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Tail	1887 7	1987 7	115	2.19	15	252	10	Extender, Antifoam, Retarder, Viscosifier

## 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. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating 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 mudding 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 pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

**Circulating Medium Table** 

## **Operator Name: CHEVRON USA INCORPORATED**

Well Name: SND 11 2 FED COM 004 P27

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	875	OTHER : Fresh Water Mud	8.3	9							Viscosity: 28 - 30 Filtrate: N/C
875	9400	OTHER : Brine	8.3	10							Viscosity: 28-31 Filtrate: 15-25
9400	1987 7	OIL-BASED MUD	8.5	11							Viscosity: 10-15 Filtrate: 15-25 Due to wellbore stability, the mud program may exceed the MW window needed to maintain overbalance to pore pressure.

## Section 6 - Test, Logging, Coring

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

The anticipated type and amount of testing, logging, and coring are as follows: a. Drill stem tests are not planned. b. The logging program will be as follows:

Type: Mudlogs Logs: 2 man mudlog. Interval: Surface casing shoe through prod hole TD. Timing: While drilling or circulating. Type: LWD. Logs: MWD Gamma. Interval: Int. and Prod. Hole. Timing: While drilling.

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

GAMMA RAY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

## Coring operation description for the well:

Conventional whole core samples are not planned. A directional survey will be run.

## **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 4181

Anticipated Surface Pressure: 2174

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations plan:

Received by OCD: 10/14/2021 12:38:54 PM

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: SND 11 2 FED COM 004 P27

Well Number: 217H

## **Section 8 - Other Information**

## Proposed horizontal/directional/multi-lateral plan submission:

SND\_11\_2\_FED\_COM\_004\_P27\_Gas\_Capture\_Plan\_20200326130840.pdf

SND\_11\_2\_Fed\_Com\_004\_P27\_217H\_9\_Point\_Drilling\_Plan\_20200407104214.pdf

SND\_11\_2\_Fed\_Com\_004\_P27\_No.\_217H\_prelim1\_Wellpath\_20200407104235.pdf

SND\_11\_2\_Fed\_Com\_004\_P27\_No.\_217H\_prelim1\_Plot\_20200407104311.pdf

## Other proposed operations facets description:

Chevron is also requesting 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.

Chevron is also requesting a variance from the Onshore Order 2 to preform a break test on the BOP when able to finish the next hole section within 21 days of the previous full BOP test. Upon the first nipple up of the pas a full BOP test will be preformed. A break test will not be preformed on our last production hole section. A break test will only be preformed on operation where BLM documentation states a 5M or less Bop can be utilized. Summary with details attached below.

## Other proposed operations facets attachment:

H2S\_Contingency\_Plan\_20200326130902.pdf

Rig\_Layout\_20200326130911.pdf

WOC\_Sundry\_Variance\_SND\_P27\_20200326130447.pdf

## Other Variance attachment:



# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1 Page 1 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

REPORT SETUP INFORM	REPORT SETUP INFORMATION										
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 6.0								
North Reference	Grid	User	Gilbjosl								
Scale	0.999947	Report Generated	25-Feb-20 at 9:24:40 AM								
Convergence at slot	0.31° East	Database	WA_HOU_Midland_Defn								

WELLPATH LOCATION	WELLPATH LOCATION											
	Local coo	rdinates	Grid co	ordinates	Geographic coordinates							
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude						
Slot Location	0.00	25.00	682100.00	445626.00	32°13'25.5765"N	103°44'40.1058"W						
Facility Reference Pt			682075.00	445626.00	32°13'25.5778"N	103°44'40.3968"W						
Field Reference Pt			152400.30	0.00	30°59'42.8458"N	105°26'33.6593"W						

WELLPATH DATUM										
Calculation method	Minimum curvature	Patterson 245 (KB) to Facility Vertical Datum	3587.60ft							
Horizontal Reference Pt	Slot	Patterson 245 (KB) to Mean Sea Level	3587.60ft							
Vertical Reference Pt	Patterson 245 (KB)	Patterson 245 (KB) to Ground Level at Slot (SND 11 2 Fed Com 004 P27 No. 217H)	32.60ft							
MD Reference Pt	Patterson 245 (KB)	Section Origin	N 0.00, E 0.00 ft							
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.71°							

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1

Page 2 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
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Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

### WELLPATH DATA (214 stations) + = interpolated, = extrapolated station MD Azimuth TVD Vert Sect DLS Inclination North East Grid East **Grid North** Lonaitude **Build Rate** Turn Rate Comments Latitude [ft] [US ft] [°/100ft] [°/100ft] [°/100ft] [°] [ft] [ft] [ft] [ft] [US ft] [°] 0.00+ 0.000 147.500 0.00 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 147.500 0.00 103°44'40.1058"W 32.60 0.000 32.60 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 0.00 0.00 0.00 Tie On 147.500 132.60 0.00 32°13'25.5765"N 132.60† 0.000 0.00 0.00 682100.00 445626.00 103°44'40.1058"W 0.00 0.00 0.00 232.60† 147.500 232.60 0.00 0.00 445626.00 32°13'25.5765"N 0.00 0.000 0.00 682100.00 103°44'40.1058"W 0.00 0.00 147.500 0.00 332.60† 0.000 332.60 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 432.60† 0.000 147.500 432.60 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 147.500 532.60 0.00 445626.00 103°44'40.1058"W 532.60+ 0.000 0.00 0.00 682100.00 32°13'25.5765"N 0.00 0.00 0.00 0.00 445626.00 32°13'25.5765"N 632.60+ 0.000 147.500 632.60 0.00 0.00 682100.00 103°44'40.1058"W 0.00 0.00 0.00 732.60+ 0.000 147.500 732.60 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 832.60† 0.000 147.500 832.60 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 932.60† 0.000 147.500 932.60 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 1032.60+ 0.000 147.500 1032.60 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 1100.00 0.000 147.500 1100.00 0.00 0.00 0.00 682100.00 445626.00 32°13'25.5765"N 103°44'40.1058"W 0.00 0.00 0.00 End of Tangent 1132.60+ 0.489 147.500 1132.60 -0.12 -0.12 0.07 682100.07 445625.88 32°13'25.5753"N 103°44'40.1049"W 1.50 1.50 0.00 1232.60† 1.989 147.500 1232.57 -1.95 -1.94 1.24 682101.24 445624.06 32°13'25.5572"N 103°44'40.0915"W 1.50 1.50 0.00 1332.60+ 3.489 147.500 1332.46 -5.99 -5.97 3.80 682103.80 445620.03 32°13'25.5172"N 103°44'40.0619"W 1.50 1.50 0.00 1432.60† 4.989 147.500 1432.18 -12.24 -12.21 7.78 682107.78 445613.80 32°13'25.4553"N 103°44'40.0160"W 1.50 1.50 0.00 103°44'39.9540"W 1532.60† 147.500 1531.68 -20.70 -20.64 1.50 1.50 0.00 6.489 13.15 682113.15 445605.36 32°13'25.3715"N 1632.60+ 7.989 147.500 1630.88 -31.37 -31.27 19.92 682119.92 445594.74 32°13'25.2660"N 103°44'39.8759"W 1.50 1.50 0.00 1633.33 -31.35 445594.65 32°13'25.2652"N 1.50 8.000 147.500 1631.60 -31.45 19.97 682119.97 103°44'39.8753"W 1.50 0.00 End of Build 1732.60+ 147.500 1729.90 -43.14 -43.00 27.40 682127.39 445583.00 32°13'25.1495"N 103°44'39.7896"W 0.00 0.00 0.00 8.000 1828.93 -54.92 -54.74 1832.60+ 8.000 147.500 34.87 682134.87 445571.26 32°13'25.0329"N 103°44'39.7033"W 0.00 0.00 0.00 1932.60† 8.000 147.500 1927.96 -66.69 -66.48 42.35 682142.35 445559.52 32°13'24.9163"N 103°44'39.6170"W 0.00 0.00 0.00 2032.60+ 8.000 147.500 2026.98 -78.47 -78.22 49.83 682149.83 445547.79 32°13'24.7998"N 103°44'39.5307"W 0.00 0.00 0.00 -90.24 2132.60† 8.000 147.500 2126.01 -89.95 57.31 682157.30 445536.05 32°13'24.6832"N 103°44'39.4444"W 0.00 0.00 0.00 147.500 -102.02 0.00 2232.60† 8.000 2225.04 -101.69 64.78 682164.78 445524.31 32°13'24.5667"N 103°44'39.3581"W 0.00 0.00 2332.60† 8.000 147.500 2324.06 -113.79 -113.43 72.26 682172.26 445512.58 32°13'24.4501"N 103°44'39.2719"W 0.00 0.00 0.00 2432.60† 147.500 2423.09 -125.57 -125.17 682179.74 445500.84 32°13'24.3336"N 103°44'39.1856"W 0.00 0.00 8.000 79.74 0.00 2532.60† 8.000 147.500 2522.12 -137.34 -136.91 87.22 682187.21 445489.10 32°13'24.2170"N 103°44'39.0993"W 0.00 0.00 0.00 2632.60† 8.000 147.500 2621.14 -149.12 -148.64 94.70 682194.69 445477.37 32°13'24.1005"N 103°44'39.0130"W 0.00 0.00 0.00

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1

Page 3 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

### WELLPATH DATA (214 stations) **†** = interpolated, **‡** = extrapolated station MD Azimuth TVD Vert Sect North DLS Inclination East Grid East Grid North Latitude Lonaitude **Build Rate** Turn Rate Comments [ft] [ft] [US ft] [US ft] [°/100ft] [°/100ft] [°/100ft] [°] [°] [ft] [ft] [ft] 2633.33 2621.87 8.000 147.500 -149.21 -148.73 94.75 682194.75 445477.28 32°13'24.0996"N 103°44'39.0123"W 0.00 0.00 0.00 End of Tangent 2720.26 -160.36 -159.84 103°44'38.9306"W 2732.60+ 7.255 147.500 101.83 682201.82 445466.17 32°13'23.9893"N 0.75 -0.75 0.00 2832.60† 147.500 2819.54 -170.49 32°13'23.8889"N -0.75 6.506 -169.95 108.27 682208.26 445456.06 103°44'38.8564"W 0.75 0.00 2932.60† 2918.96 -179.53 -178.95 445447.06 32°13'23.7995"N 103°44'38.7901"W 0.75 -0.75 0.00 5.756 147.500 114.01 682214.00 119.04 3032.60† 5.005 147.500 3018.52 -187.46 -186.86 682219.04 445439.15 32°13'23.7210"N 103°44'38.7320"W 0.75 -0.75 0.00 3132.60+ 4.255 147.500 3118.20 -194.29-193.67 123.38 682223.37 445432.34 32°13'23.6534"N 103°44'38.6819"W 0.75 -0.75 0.00 3232.60† 3.505 3217.97 -200.02 127.02 445426.63 103°44'38.6400"W -0.75 147.500 -199.38 682227.01 32°13'23.5967"N 0.75 0.00 3332.60+ 682229.94 445422.03 2.756 147.500 3317.82 -204.64 -203.98 129.95 32°13'23.5510"N 103°44'38.6061"W 0.75 -0.75 0.00 3432.60+ 2.005 147.500 3417.73 -208.15 -207.49 132.18 682232.18 445418.53 32°13'23.5162"N 103°44'38.5804"W 0.75 -0.75 0.00 103°44'38.5627"W 3532.60+ 1.256 147.500 3517.69 -210.56 -209.89 133.71 682233.70 445416.13 32°13'23.4923"N 0.75 -0.75 0.00 3632.60+ 0.505 147.500 3617.68 -211.86 -211.18 134.54 682234.53 445414.83 32°13'23.4795"N 103°44'38.5532"W 0.75 -0.75 0.00 3700.00 0.000 350.000 3685.07 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.75 -0.75 0.00 End of Drop 3732.60+ 0.000 350.000 3717.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 3832.60† 0.000 350.000 3817.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 3932.60+ 0.000 350.000 3917.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 4017.67 4032.60† 0.000 350.000 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 -212.11 0.00 4132.60† 0.000 350.000 4117.67 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 4232.60† 350.000 4217.67 -212.11 445414.58 0.00 0.00 0.00 0.000 -211.43 134.70 682234.69 32°13'23.4770"N 103°44'38.5514"W 4317.67 4332.60† 350.000 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 0.000 -212.11 445414.58 32°13'23.4770"N 0.00 4432.60† 0.000 350.000 4417.67 -211.43 134.70 682234.69 103°44'38.5514"W 0.00 0.00 4532.60† 350.000 4517.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 0.000 -212.11 0.00 4632.60† 0.000 350.000 4617.67 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 4732.60† 0.000 350.000 4717.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 4832.60† 350.000 4817.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 0.000 4932.60† 0.000 350.000 4917.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 0.00 5032.60+ 0.000 350.000 5017.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 350.000 5132.60† 0.000 5117.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 445414.58 5232.60+ 350.000 5217.67 -212.11 -211.43 682234.69 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 0.000 134.70 5332.60† 0.000 350.000 5317.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 5432.60† 0.000 350.000 5417.67 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1 Page 4 of 10



Page 18 of 42

REFERENC	EFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]		-	[°/100ft]	[°/100ft]	[°/100ft]	
5532.60†	0.000	350.000	5517.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
5632.60†	0.000	350.000	5617.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
5732.60†	0.000	350.000	5717.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
5832.60†	0.000	350.000	5817.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
5932.60†	0.000	350.000	5917.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6032.60†	0.000	350.000	6017.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6132.60†	0.000	350.000	6117.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6232.60†	0.000	350.000	6217.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6332.60†	0.000	350.000	6317.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6432.60†	0.000	350.000	6417.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6532.60†	0.000	350.000	6517.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6632.60†	0.000	350.000	6617.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6732.60†	0.000	350.000	6717.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6832.60†	0.000	350.000	6817.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
6932.60†	0.000	350.000	6917.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7032.60†	0.000	350.000	7017.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7132.60†	0.000	350.000	7117.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7232.60†	0.000	350.000	7217.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7332.60†	0.000	350.000	7317.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7432.60†	0.000	350.000	7417.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7532.60†	0.000	350.000	7517.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7632.60†	0.000	350.000	7617.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7732.60†	0.000	350.000	7717.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7832.60†	0.000	350.000	7817.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
7932.60†	0.000	350.000	7917.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
8032.60†	0.000	350.000	8017.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
8132.60†	0.000	350.000	8117.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
8232.60†	0.000	350.000	8217.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
8332.60†	0.000	350.000	8317.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	
8432.60	0.000	350.000	8417.67	-212.11	-211.43	134.70	682234.69	445414.58	32°13'23.4770"N	103°44'38.5514"W	0.00	0.00	0.00	

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1

Page 5 of 10



Page 19 of 42

REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

### WELLPATH DATA (214 stations) **†** = interpolated, **‡** = extrapolated station MD Azimuth TVD Vert Sect North East Grid East DLS Inclination **Grid North** Latitude Lonaitude **Build Rate** Turn Rate Comments [ft] [US ft] [US ft] [°/100ft] [°/100ft] [°/100ft] [°] [ft] [ft] [ft] [ft] ſ°1 8526.93 350.000 8512.00 0.000 -212.11 -211.43 134.70 682234.69 445414.58 32°13'23.4770"N 103°44'38.5514"W 0.00 0.00 0.00 End of Tangent 0.567 350.000 8517.67 -212.08 -211.40 134.69 8532.60+ 682234.68 445414.61 32°13'23.4773"N 103°44'38.5514"W 10.00 10.000.00 350.000 8617.08 -202.53 -201.86 133.01 682233.00 445424.15 32°13'23.5718"N 10.00 8632.60† 10.567 103°44'38.5704"W 10.00 0.00 8732.60† 20.567 350.000 8713.29 -176.11 -175.47 128.36 682228.35 445450.54 32°13'23.8332"N 103°44'38.6229"W 10.00 10.00 0.00 -133.63 -133.02 120.87 8832.60 30.567 350.000 8803.38 682220.86 445492.99 32°13'24.2537"N 103°44'38.7073"W 10.00 10.00 0.00 8926.93 40.000 350.000 8880.29 -79.98 -79.42 111.42 682211.41 445546.58 32°13'24.7845"N 103°44'38.8139"W 10.00 10.00 0.00 End of Build 40.554 350.191 -76.37 -75.81 110.79 682210.78 445550.20 32°13'24.8203"N 103°44'38.8210"W 10.00 8932.60 8884.62 9.76 3.37 445620.62 32°13'25.5177"N 50.355 -5.38 100.53 682200.52 2.80 9032.60+ 352.990 8954.69 -5.89 103°44'38.9360"W 10.00 9.80 9132.60+ 60.206 355.086 9011.58 75.80 76.27 92.09 682192.08 445702.26 32°13'26.3262"N 103°44'39.0290"W 10.00 9.85 2.10 9053.56 9232.60† 70.085 356.803 166.23 166.67 85.73 682185.73 445792.66 32°13'27.2210"N 103°44'39.0972"W 10.00 9.88 1.72 9332.60† 79.978 358.316 9079.36 262.65 263.06 81.66 682181.65 445889.05 32°13'28.1751"N 103°44'39.1385"W 10.00 9.89 1.51 9431.01 89.720 359.716 9088.19 360.53 360.94 79.98 682179.98 445986.92 32°13'29.1438"N 103°44'39.1517"W 10.00 9.90 1.42 End of 3D Arc 9432.60† 89.720 359.716 9088.19 362.12 362.53 79.98 682179.97 445988.51 32°13'29.1595"N 103°44'39.1517"W 0.00 0.00 0.00 9532.60 89.720 359.716 9088.68 462.12 462.53 79.48 682179.48 446088.50 32°13'30.1490"N 103°44'39.1511"W 0.00 0.00 0.00 9632.60† 89.720 359.716 9089.17 562.12 562.53 78.98 682178.98 446188.49 32°13'31.1386"N 103°44'39.1505"W 0.00 0.00 0.00 89.720 9732.60 359.716 9089.66 662.12 662.52 78.49 682178.49 446288.49 32°13'32.1281"N 103°44'39.1498"W 0.00 0.00 0.00 762.12 77.99 0.00 9832.60† 89.720 359.716 9090.15 762.52 682177.99 446388.48 32°13'33.1176"N 103°44'39.1492"W 0.00 0.00 862.11 862.52 77.50 0.00 0.00 0.00 9932.60 89.720 359.716 9090.64 682177.49 446488.47 32°13'34.1072"N 103°44'39.1486"W 77.00 10032.60† 89.720 359.716 9091.13 962.11 962.52 682177.00 446588.46 32°13'35.0967"N 103°44'39.1480"W 0.00 0.00 0.00 1062.51 76.51 10132.60† 89.720 359.716 9091.62 1062.11 682176.50 446688.46 32°13'36.0862"N 103°44'39.1474"W 0.00 0.00 0.00 10232.60† 89.720 359.716 9092.11 1162.11 1162.51 76.01 682176.01 446788.45 32°13'37.0758"N 103°44'39.1468"W 0.00 0.00 0.00 1262.51 75.52 10332.60 89.720 359.716 9092.60 1262.11 682175.51 446888.44 32°13'38.0653"N 103°44'39.1462"W 0.00 0.00 0.00 10432.60† 89.720 359.716 9093.09 1362.11 1362.51 75.02 682175.02 446988.43 32°13'39.0548"N 103°44'39.1455"W 0.00 0.00 0.00 10532.60† 89.720 359.716 9093.58 1462.11 1462.50 74.52 682174.52 447088.42 32°13'40.0444"N 103°44'39.1449"W 0.00 0.00 0.00 1562.50 74.03 10632.60† 89.720 359.716 9094.06 1562.11 682174.03 447188.42 32°13'41.0339"N 103°44'39.1443"W 0.00 0.00 0.00 447288.41 0.00 0.00 10732.60+ 89.720 359.716 9094.55 1662.11 1662.50 73.53 682173.53 32°13'42.0234"N 103°44'39.1437"W 0.00 73.04 10832.60† 89.720 359.716 9095.04 1762.10 1762.50 682173.03 447388.40 32°13'43.0130"N 103°44'39.1431"W 0.00 0.00 0.00 10932.60† 89.720 359.716 9095.53 1862.49 72.54 682172.54 447488.39 32°13'44.0025"N 103°44'39.1425"W 0.00 1862.10 0.00 0.00 359.716 11032.60† 89.720 9096.02 1962.10 1962.49 72.05 682172.04 447588.38 32°13'44.9920"N 103°44'39.1419"W 0.00 0.00 0.00 447688.38 11132.60† 89.720 359.716 9096.51 2062.10 2062.49 71.55 682171.55 32°13'45.9816"N 103°44'39.1412"W 0.00 0.00 0.00

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1

Page 6 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

### WELLPATH DATA (214 stations) **†** = interpolated, **‡** = extrapolated station MD Azimuth TVD Vert Sect North East Grid East DLS Inclination Grid North Latitude Lonaitude **Build Rate** Turn Rate Comments [ft] [US ft] [US ft] [°/100ft] [°/100ft] [°/100ft] ٢°٦ [°] [ft] [ft] [ft] [ft] 359.716 9097.00 2162.10 2162.49 11232.60 89.720 71.06 682171.05 447788.37 32°13'46.9711"N 103°44'39.1406"W 0.00 0.00 0.00 2262.10 2262.48 70.56 11332.601 89.720 359.716 9097.49 682170.56 447888.36 32°13'47.9606"N 103°44'39.1400"W 0.00 0.00 0.00 359.716 9097.98 2362.10 2362.48 70.06 682170.06 447988.35 32°13'48.9502"N 103°44'39.1394"W 11432.60 89.720 0.00 0.00 0.00 11532.60 89.720 359.716 2462.10 2462.48 69.57 682169.57 448088.34 103°44'39.1388"W 0.00 0.00 9098.47 32°13'49.9397"N 0.00 2562.09 2562.48 69.07 0.00 11632.60 89.720 359.716 9098.96 682169.07 448188.34 32°13'50.9292"N 103°44'39.1382"W 0.00 0.00 448288.33 11732.60 89.720 359.716 9099.45 2662.09 2662.47 68.58 682168.57 32°13'51.9188"N 103°44'39.1376"W 0.00 0.00 0.00 11832.60 359.716 9099.93 2762.09 32°13'52.9083"N 103°44'39.1369"W 0.00 89.720 2762.47 68.08 682168.08 448388.32 0.00 0.00 103°44'39.1363"W 67.59 0.00 11932.601 89.720 359.716 9100.42 2862.09 2862.47 682167.58 448488.31 32°13'53.8978"N 0.00 0.00 12032.601 89.720 359.716 9100.91 2962.09 2962.47 67.09 682167.09 448588.30 32°13'54.8874"N 103°44'39.1357"W 0.00 0.00 0.00 0.00 End of Tangent 12050.30 89.720 359.716 9101.00<sup>1</sup> 2979.79 2980.16 67.00 682167.00 448606.00 32°13'55.0625"N 103°44'39.1356"W 0.00 0.00 12108.89 90.891 359.714 9100.69 3038.37 3038.75 66.71 682166.71 448664.58 32°13'55.6422"N 103°44'39.1353"W 2.00 2.00 0.00 End of 3D Arc 12132.60 90.891 359.714 9100.32 3062.08 3062.46 66.59 682166.59 448688.29 32°13'55.8769"N 103°44'39.1351"W 0.00 0.00 0.00 12232.60 90.891 359.714 9098.76 3162.07 3162.45 66.10 682166.09 448788.27 32°13'56.8663"N 103°44'39.1345"W 0.00 0.00 0.00 12332.60 90.891 359.714 9097.21 3262.06 3262.43 65.60 682165.59 448888.26 32°13'57.8557"N 103°44'39.1339"W 0.00 0.00 0.00 12432.60 90.891 359.714 9095.65 3362.05 3362.42 65.10 682165.10 448988.24 32°13'58.8451"N 103°44'39.1334"W 0.00 0.00 0.00 12532.60 90.891 359.714 9094.10 3462.04 3462.41 64.60 682164.60 449088.22 32°13'59.8346"N 103°44'39.1328"W 0.00 0.00 0.00 12632.60 90.891 359.714 9092.54 3562.02 3562.39 64.10 682164.10 449188.20 32°14'0.8240"N 103°44'39.1322"W 0.00 0.00 0.00 12732.60 90.891 359.714 9090.98 3662.01 3662.38 63.60 682163.60 449288.18 32°14'1.8134"N 103°44'39.1316"W 0.00 0.00 0.00 12832.60 90.891 359.714 9089.43 3762.00 3762.37 63.11 682163.10 449388.16 32°14'2.8028"N 103°44'39.1310"W 0.00 0.00 0.00 12932.60 90.891 359.714 9087.87 3861.99 3862.35 62.61 682162.61 449488.14 32°14'3.7923"N 103°44'39.1304"W 0.00 0.00 0.00 13032.60 90.891 359.714 9086.32 3961.98 3962.34 62.11 682162.11 449588.12 32°14'4.7817"N 103°44'39.1299"W 0.00 0.00 0.00 13132.60 90.891 359.714 9084.76 4061.96 4062.33 61.61 682161.61 449688.10 32°14'5.7711"N 103°44'39.1293"W 0.00 0.00 0.00 13232.60 90.891 359.714 9083.20 4161.95 4162.31 61.11 449788.09 103°44'39.1287"W 0.00 0.00 0.00 682161.11 32°14'6.7605"N 13332.60 359.714 4261.94 4262.30 60.62 682160.61 449888.07 103°44'39.1281"W 0.00 90.891 9081.65 32°14'7.7500"N 0.00 0.00 13432.60 90.891 359.714 9080.09 4361.93 4362.29 60.12 682160.11 449988.05 32°14'8.7394"N 103°44'39.1275"W 0.00 0.00 0.00 13532.60 90.891 359.714 9078.54 4461.92 4462.27 59.62 682159.62 450088.03 32°14'9.7288"N 103°44'39.1269"W 0.00 0.00 0.00 4562.26 13632.60 90.891 359.714 9076.98 4561.90 59.12 682159.12 450188.01 32°14'10.7182"N 103°44'39.1264"W 0.00 0.00 0.00 13732.60 90.891 359.714 9075.43 4661.89 4662.25 58.62 682158.62 450287.99 32°14'11.7077"N 103°44'39.1258"W 0.00 0.00 0.00 13832.60 90.891 359.714 9073.87 4761.88 4762.23 58.12 682158.12 450387.97 32°14'12.6971"N 103°44'39.1252"W 0.00 0.00 0.00 13932.60 90.891 359.714 9072.31 4861.87 4862.22 57.63 682157.62 450487.95 32°14'13.6865"N 103°44'39.1246"W 0.00 0.00 0.00

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1 Page 7 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

WELLPATH	<b>VELLPATH DATA (214 stations)</b> † = interpolated, ‡ = extrapolated station													
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]		_	[°/100ft]	[°/100ft]	[°/100ft]	
14032.60†	90.891	359.714	9070.76	4961.85	4962.21	57.13	682157.12	450587.94	32°14'14.6759"N	103°44'39.1240"W	0.00	0.00	0.00	
14132.60†	90.891	359.714	9069.20	5061.84	5062.19	56.63	682156.63	450687.92	32°14'15.6654"N	103°44'39.1234"W	0.00	0.00		
14232.60†	90.891	359.714	9067.65	5161.83	5162.18	56.13	682156.13	450787.90	32°14'16.6548"N	103°44'39.1229"W	0.00	0.00		
14332.60†	90.891	359.714	9066.09	5261.82	5262.17	55.63	682155.63	450887.88	32°14'17.6442"N	103°44'39.1223"W	0.00	0.00		
14432.60†	90.891	359.714	9064.53	5361.81	5362.15	55.13	682155.13	450987.86	32°14'18.6336"N	103°44'39.1217"W	0.00	0.00		
14532.60†	90.891	359.714	9062.98	5461.79	5462.14	54.64	682154.63	451087.84	32°14'19.6231"N	103°44'39.1211"W	0.00	0.00	0.00	
14632.60†	90.891	359.714	9061.42	5561.78	5562.13	54.14	682154.14	451187.82	32°14'20.6125"N	103°44'39.1205"W	0.00	0.00		
14659.78	90.891	359.714	9061.00 <sup>2</sup>	5588.96	5589.31	54.00	682154.00	451215.00	32°14'20.8814"N	103°44'39.1204"W	0.00	0.00	0.00	End of Tangent
14695.84	90.171	359.692	9060.67	5625.02	5625.36	53.82	682153.81	451251.05	32°14'21.2382"N	103°44'39.1202"W	2.00	-2.00	-0.06	End of 3D Arc
14732.60†	90.171	359.692	9060.56	5661.78	5662.12	53.62	682153.62	451287.81	32°14'21.6020"N	103°44'39.1202"W	0.00	0.00	0.00	
14832.60†	90.171	359.692	9060.26	5761.78	5762.12	53.08	682153.08	451387.80	32°14'22.5915"N	103°44'39.1200"W	0.00	0.00		
14932.60†	90.171	359.692	9059.96	5861.78	5862.12	52.55	682152.54	451487.80	32°14'23.5810"N	103°44'39.1199"W	0.00	0.00	0.00	
15032.60†	90.171	359.692	9059.66	5961.78	5962.12	52.01	682152.01	451587.79	32°14'24.5706"N	103°44'39.1198"W	0.00	0.00	0.00	
15132.60†	90.171	359.692	9059.36	6061.78	6062.11	51.47	682151.47	451687.78	32°14'25.5601"N	103°44'39.1196"W	0.00	0.00		
15232.60†	90.171	359.692	9059.07	6161.77	6162.11	50.93	682150.93	451787.77	32°14'26.5497"N	103°44'39.1195"W	0.00	0.00		
15332.60†	90.171	359.692	9058.77	6261.77	6262.11	50.40	682150.40	451887.77	32°14'27.5392"N	103°44'39.1194"W	0.00	0.00		
15432.60†	90.171	359.692	9058.47	6361.77	6362.11	49.86	682149.86	451987.76	32°14'28.5287"N	103°44'39.1192"W	0.00	0.00		
15532.60†	90.171	359.692	9058.17	6461.77	6462.11	49.32	682149.32	452087.75	32°14'29.5183"N	103°44'39.1191"W	0.00	0.00	0.00	
15632.60†	90.171	359.692	9057.88	6561.77	6562.10	48.79	682148.78	452187.74	32°14'30.5078"N	103°44'39.1189"W	0.00	0.00		
15732.60†	90.171	359.692	9057.58	6661.77	6662.10	48.25	682148.25	452287.74	32°14'31.4974"N	103°44'39.1188"W	0.00	0.00		
15832.60†	90.171	359.692	9057.28	6761.77	6762.10	47.71	682147.71	452387.73	32°14'32.4869"N	103°44'39.1187"W	0.00	0.00		
15932.60†	90.171	359.692	9056.98	6861.77	6862.10	47.18	682147.17	452487.72	32°14'33.4764"N	103°44'39.1185"W	0.00	0.00		
16032.60†	90.171	359.692	9056.68	6961.77	6962.10	46.64	682146.64	452587.71	32°14'34.4660"N	103°44'39.1184"W	0.00	0.00	0.00	
16132.60†	90.171	359.692	9056.39	7061.77	7062.09	46.10	682146.10	452687.71	32°14'35.4555"N	103°44'39.1183"W	0.00	0.00		
16232.60†	90.171	359.692	9056.09	7161.77	7162.09	45.57	682145.56	452787.70	32°14'36.4451"N	103°44'39.1181"W	0.00	0.00		
16332.60†	90.171	359.692	9055.79	7261.77	7262.09	45.03	682145.03	452887.69	32°14'37.4346"N	103°44'39.1180"W	0.00	0.00		
16432.60†	90.171	359.692	9055.49	7361.77	7362.09	44.49	682144.49	452987.68	32°14'38.4241"N	103°44'39.1179"W	0.00	0.00		
16532.60†	90.171	359.692	9055.19	7461.77	7462.09	43.96	682143.95	453087.68	32°14'39.4137"N	103°44'39.1177"W	0.00	0.00	0.00	
16632.60†	90.171	359.692	9054.90	7561.77	7562.09	43.42	682143.42	453187.67	32°14'40.4032"N	103°44'39.1176"W	0.00	0.00		
16732.60†	90.171	359.692	9054.60	7661.77	7662.08	42.88	682142.88	453287.66	32°14'41.3928"N	103°44'39.1174"W	0.00	0.00	0.00	

# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1 Page 8 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION								
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H						
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal							
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H						
Slot	SND 11 2 Fed Com 004 P27 No. 217H								

WELLPATH	H DATA (2	14 statio	<b>ns)</b> †=ir	nterpolated, ‡	= extrapolate	d station								
MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[°/100ft]	[°/100ft]	[°/100ft]	
16832.60†	90.171	359.692	9054.30	7761.77	7762.08	42.34	682142.34	453387.66	32°14'42.3823"N	103°44'39.1173"W	0.00	0.00	0.00	
16932.60†	90.171	359.692	9054.00	7861.77	7862.08	41.81	682141.81	453487.65	32°14'43.3718"N	103°44'39.1172"W	0.00	0.00	0.00	
17032.60†	90.171	359.692	9053.70	7961.77	7962.08	41.27	682141.27	453587.64	32°14'44.3614"N	103°44'39.1170"W	0.00	0.00	0.00	
17132.60†	,	359.692	9053.41	8061.77	8062.08	40.73	682140.73	453687.63	32°14'45.3509"N	103°44'39.1169"W	0.00	0.00	0.00	
17232.60†	90.171	359.692	9053.11	8161.77	8162.07	40.20	682140.20	453787.63	32°14'46.3404"N	103°44'39.1168"W	0.00	0.00	0.00	
17268.98	90.171	359.692	9053.00 <sup>3</sup>	8198.14	8198.45	40.00	682140.00	453824.00	32°14'46.7004"N	103°44'39.1167"W	0.00	0.00	0.00	End of Tangent
17283.08	89.889	359.715	9052.99	8212.25	8212.56	39.93	682139.93	453838.11	32°14'46.8400"N	103°44'39.1167"W	2.00	-1.99	0.16	End of 3D Arc
17332.60†	89.889	359.715	9053.09	8261.77	8262.07	39.68	682139.68	453887.62	32°14'47.3300"N	103°44'39.1164"W	0.00	0.00	0.00	
17432.60†	89.889	359.715	9053.28	8361.77	8362.07	39.18	682139.18	453987.61	32°14'48.3195"N	103°44'39.1158"W	0.00	0.00	0.00	
17532.60†	89.889	359.715	9053.47	8461.77	8462.07	38.69	682138.68	454087.60	32°14'49.3091"N	103°44'39.1152"W	0.00	0.00	0.00	
17632.60†	89.889	359.715	9053.67	8561.76	8562.07	38.19	682138.19	454187.60	32°14'50.2986"N	103°44'39.1146"W	0.00	0.00	0.00	
17732.60†	89.889	359.715	9053.86	8661.76	8662.07	37.69	682137.69	454287.59	32°14'51.2881"N	103°44'39.1140"W	0.00	0.00	0.00	
17832.60†	89.889	359.715	9054.05	8761.76	8762.07	37.19	682137.19	454387.58	32°14'52.2777"N	103°44'39.1134"W	0.00	0.00	0.00	
17932.60†	89.889	359.715	9054.25	8861.76	8862.06	36.69	682136.69	454487.58	32°14'53.2672"N	103°44'39.1128"W	0.00	0.00	0.00	
18032.60†	89.889	359.715	9054.44	8961.76	8962.06	36.20	682136.19	454587.57	32°14'54.2568"N	103°44'39.1123"W	0.00	0.00	0.00	
18132.60†	89.889	359.715	9054.63	9061.76	9062.06	35.70	682135.70	454687.56	32°14'55.2463"N	103°44'39.1117"W	0.00	0.00	0.00	
18232.60†	89.889	359.715	9054.82	9161.76	9162.06	35.20	682135.20	454787.56	32°14'56.2358"N	103°44'39.1111"W	0.00	0.00	0.00	
18332.60†	89.889	359.715	9055.02	9261.76	9262.06	34.70	682134.70	454887.55	32°14'57.2254"N	103°44'39.1105"W	0.00	0.00	0.00	
18432.60†	89.889	359.715	9055.21	9361.76	9362.06	34.20	682134.20	454987.54	32°14'58.2149"N	103°44'39.1099"W	0.00	0.00	0.00	
18532.60†	89.889	359.715	9055.40	9461.76	9462.06	33.70	682133.70	455087.54	32°14'59.2045"N	103°44'39.1093"W	0.00	0.00	0.00	
18632.60†	89.889	359.715	9055.60	9561.76	9562.05	33.21	682133.20	455187.53	32°15'0.1940"N	103°44'39.1087"W	0.00	0.00	0.00	
18732.60†	89.889	359.715	9055.79	9661.76	9662.05	32.71	682132.71	455287.52	32°15'1.1836"N	103°44'39.1081"W	0.00	0.00	0.00	
18832.60†	89.889	359.715	9055.98	9761.76	9762.05	32.21	682132.21	455387.51	32°15'2.1731"N	103°44'39.1076"W	0.00	0.00	0.00	
18932.60†	89.889	359.715	9056.18	9861.76	9862.05	31.71	682131.71	455487.51	32°15'3.1626"N	103°44'39.1070"W	0.00	0.00	0.00	
19032.60†	89.889	359.715	9056.37	9961.76	9962.05	31.21	682131.21	455587.50	32°15'4.1522"N	103°44'39.1064"W	0.00	0.00	0.00	
19132.60†	89.889	359.715	9056.56	10061.76	10062.05	30.72	682130.71	455687.49	32°15'5.1417"N	103°44'39.1058"W	0.00	0.00	0.00	
19232.60†	89.889	359.715	9056.75	10161.76	10162.05	30.22	682130.22	455787.49	32°15'6.1313"N	103°44'39.1052"W	0.00	0.00	0.00	
19332.60†	89.889	359.715	9056.95	10261.76	10262.04	29.72	682129.72	455887.48	32°15'7.1208"N	103°44'39.1046"W	0.00	0.00	0.00	
19432.60†	89.889	359.715	9057.14	10361.76	10362.04	29.22	682129.22	455987.47	32°15'8.1103"N	103°44'39.1040"W	0.00	0.00	0.00	
19532.60†	89.889	359.715	9057.33	10461.76	10462.04	28.72	682128.72	456087.47	32°15'9.0999"N	103°44'39.1034"W	0.00	0.00	0.00	
10002.001	00.000	000.110	0007.00	10101.70	10102.04	20.72	502120.12	100001.47		100 1100.1004 W	0.00	0.00	0.00	



# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1

Page 9 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

## WELLPATH DATA (214 stations) + = interpolated, = extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate Comments	
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[°/100ft]	[°/100ft]	[°/100ft]	
19632.60†	89.889	359.715	9057.53	10561.76	10562.04	28.22	682128.22	456187.46	32°15'10.0894"N	103°44'39.1028"W	0.00	0.00	0.00	
19732.60†	89.889	359.715	9057.72	10661.76	10662.04	27.73	682127.73	456287.45	32°15'11.0790"N	103°44'39.1023"W	0.00	0.00	0.00	
19832.60†	89.889	359.715	9057.91	10761.76	10762.04	27.23	682127.23	456387.45	32°15'12.0685"N	103°44'39.1017"W	0.00	0.00	0.00	
19878.16	89.889	359.715	9058.00 <sup>4</sup>	10807.32	10807.59	27.00	682127.00	456433.00	32°15'12.5193"N	103°44'39.1014"W	0.00	0.00	0.00End of Tar	igent



# Planned Wellpath Report SND 11 2 Fed Com 004 P27 No. 217H\_prelim1 Page 10 of 10



REFERENC	REFERENCE WELLPATH IDENTIFICATION									
Operator	Chevron U.S.A. Inc.	Well	SND 11 2 Fed Com 004 P27 No. 217H							
Field	Purple Sage (Eddy County, NM) NAD 27	API/Legal								
Facility	SND 11 2 Fed Com 004 P27	Wellbore	SND 11 2 Fed Com 004 P27 No. 217H							
Slot	SND 11 2 Fed Com 004 P27 No. 217H									

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
3) SND 11 2 Fed Com 004 P27 No. 217H TP2	17268.98	9053.00	8198.45	40.00	682140.00	453824.00	32°14'46.7004"N	103°44'39.1167"W	point
SND 11 2 Fed Com 004 P27 No. 217H LTP	N/A	9058.00	10732.59	27.00	682127.00	456358.00	32°15'11.7771"N	103°44'39.1062"W	point
4) SND 11 2 Fed Com 004 P27 No. 217H PBHL	19878.16	9058.00	10807.59	27.00	682127.00	456433.00	32°15'12.5193"N	103°44'39.1014"W	point
2) SND 11 2 Fed Com 004 P27 No. 217H MP	14659.78	9061.00	5589.31	54.00	682154.00	451215.00	32°14'20.8814"N	103°44'39.1204"W	point
SND 11 2 Fed Com 004 P27 No. 217H FTP	N/A	9088.00	371.02	80.00	682180.00	445997.00	32°13'29.2435"N	103°44'39.1508"W	point
1) SND 11 2 Fed Com 004 P27 No. 217H TP1	12050.30	9101.00	2980.16	67.00	682167.00	448606.00	32°13'55.0625"N	103°44'39.1356"W	point

SURVEY PROGRA	AM - Ref Wellbor	re: SND 11 2 Fed Com 004 P27 No. 217H	Ref Wellpath: SND 11 2 Fed Com 004 P27 No. 217H_prelim1	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.60	8526.00	OWSG MWD rev2 + HRGM		SND 11 2 Fed Com 004 P27 No. 217H
8526.00	19878.16	BH AutoTrak Curve (2019) (Axial)		SND 11 2 Fed Com 004 P27 No. 217H

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Chevron
LEASE NO.:	NMNM029234
LOCATION:	Section 14, T.24 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	SND 11 2 Fed Com 004 P27 217H
SURFACE HOLE FOOTAGE:	270'/N & 1512'/E
<b>BOTTOM HOLE FOOTAGE</b>	25'/N & 1430'/E

# COA

H2S	C Yes	🖸 No	
Potash	C None	Secretary	© R-111-P
Cave/Karst Potential	💽 Low	C Medium	C High
Cave/Karst Potential	Critical		
Variance	C None	• Flex Hose	C Other
Wellhead	Conventional	Multibowl	© Both
Other	□4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	□ Water Disposal	COM	🗖 Unit

## 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 **990** 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

<u>24 hours in the Potash Area</u> 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.

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>Secretary Potash Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- Operator has proposed to pump down 9-5/8" X 13-3/8" annulus. <u>Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to BLM.</u>
- 3. The minimum required fill of cement behind the 7 inch production casing is:
  - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.
- 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)**

## **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.
- 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. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

# 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) 393-3612

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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. **ZS093021** 

### Received by OCD: 10/14/2021 12:38:54 PM ONSHORE ORDER NO. 1

Chevron SND 11 2 Fed Com 004 P27 217H Eddy County, NM

## Pad Summary: SND P27

The table below lists all the wells for the given pad and their respective name and TVD's (ft) for their production target intervals:

Well Name(s)	Target TVD	Formation Desc.
SND 11 2 Fed Com 004 P27 216H	9,071	Avalon
SND 11 2 Fed Com 004 P27 217H	9,088	Avalon
SND 11 2 Fed Com 004 P27 218H	9,115	Avalon

### 1. FORMATION TOPS

The estimated tops of important geologic markers are as follows: Elevation: 3555 ft

FORMATION	TVDSS	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION
Rustler (RSLR)	2783	772	772	Dolomite	N/A	
Salado (top of Salt	2409	1,146	1,146	Salt	N/A	
Castile (CSTL)	551	3,004	3,117	Anhydrite	N/A	
Lamar (LMAR)	-978	4,533	4,701	Limestone	N/A	
Bell Canyon (BLCN)	-1013	4,568	4,737	Sandstone	N/A	
Cherry Canyon (CRCN)	-1893	5,448	5,642	Sandstone	N/A	
Brushy Canyon (BCN)	-3125	6,680	6,891	Sandstone	N/A	
Bone Spring (BSGL)	-4838	8,393	8,614	Limestone	N/A	
Upper Avalon (AVN)	-4908	8,463	8,669	Limestone/Shale/Sandstone	Oil	
AVL Shale	-5564	9,119	19,877	Sandstone/Shale	Oil	yes

WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
SHL	3555	-	-
KOP	-4957	8,512	8,526
FTP	-5533	9,088	9,441
LTP	-5503	9,058	19,802

## 2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expe	500	
Water	Cherry Canyon	5,448
Oil/Gas	Avalon	8,463
Oil/Gas	AVL Shale	9,119

All shows of fresh water and minerals will be reported and protected.

## 3. BOP EQUIPMENT

**Chevron will have a minimum of a 5,000 psi rig stack** (see proposed schematic) for drill out below surface casing. The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, production, and production liner will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise (see variance request below). 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.

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 /  $\geq$  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.

### **Received by OCD: 10/14/2021 12:38:54 PM** ONSHORE ORDER NO. 1

Chevron SND 11 2 Fed Com 004 P27 217H Eddy County, NM

## 4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	То	(TVD)	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	1,070'	1,070'	16"	13-3/8"	54.5 #	J-55	STC	New
Intermediate	0'	4,701'	4,533'	12-1/4"	9-5/8"	40#	L-80	BTC	New
Prod/Intermediate 2	0'	8,526'	8,512'	8-3/4"	7"	29.0 #	P/TN-110	BLUE	New
Production Liner	8,226'	9,026'	9,058'	6-1/8"	5"	18.0 #	P-110	W513	New
FIGULEION LINE	9,026'	19,877'	9,000	6-1/8"	4-1/2"	11.6 #	P-110	W521	New

\*\*5" casing ran from TOL to 45 deg. Max OD at connection is 5.00 inches

Chevon will keep casing fluid filled at all times and while RIH. Chevron will check casing at a minimum of every 20 jts (~840') while running intermediate and production casing in order to maintain collapse SF. (and never to surpass 1/3 of casing)

CONFIDENTIAL -- TIGHT HOLE

PAGE:

DRILLING PLAN

2

SF	<b>Calculations based</b>	on the following	"Worst Case"	casing design:

Surface	1,500'	ftTVD	max depths
Intermediate	5,500'	ftTVD	max depths
Prod/Intermediate 2	11,000'	ftTVD	max depths
Production Liner	22,500'	ftMD	max depths

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.43	2.13	4.07	1.53
Intermediate	1.64	1.24	2.78	1.99
Prod/Intermediate 2	1.15	1.63	2.39	1.18
Production Liner	1.10	1.39	1.32	1.16

The following worst case load cases were considered for calculation of the above Min. Safety Factors:

Burst Design	Surf	Int	Int 2	Prod Lnr
Pressure Test- Surface, Prod Csg, Prod Liner				
P external: Mud weight above TOC, PP below	Х	Х	Х	Х
P internal: Test psi + next section heaviest mud in csg				
Displace to Gas				
P external: Mud weight above TOC, PP below	Х	Х	Х	Х
P internal: Dry Gas from Next Csg Point				
Gas over mud (60/40) - Prod Csg				
P external: Mud weight above TOC, PP below		Х	Х	Х
P internal: 60% gas over 40% mud from hole TD PP				
Stimulation (Frac) Pressures-				
P external: Mud weight above TOC, PP below			Х	Х
P internal: Max inj pressure w/ heaviest injected fluid				
Tubing leak- Prod Csg (packer at KOP)				
P external: Mud weight above TOC, PP below		Х	Х	Х
P internal: Leak just below surf, 8.45 ppg packer fluid				
Collapse Design	Surf	Prod	Prod	Prod
Full Evacuation				
P external: Mud weight gradient	Х	Х	Х	Х
P internal: none				
Cementing- Surf, Int, Prod Csg				
P external: Wet cement	Х	Х	Х	Х
P internal: displacement fluid - water				
Tension Design	Surf	Prod	Prod	Prod
50-100k lb overpull				
	Х	Х	Х	Х

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Chevron SND 11 2 Fed Com 004 P27 217H Eddy County, NM

## 5. CEMENTING PROGRAM

Slurry	Туре	Тор	Bottom	Sacks	Yield	Density	%Excess	Water	Volume cuft	Additives
Surface Csg 13-3/8"										
Tail	Class C	0'	1,070'	500	1.34	14.8	100	6.40	670	Extender, Antifoam, Retarder
Intermediate Csg 9-5/8"	•									
Lead	Class C	0'	3,701'	1159	2	13.2	100	14.60	2318	Extender, Antifoam, Retarder
Tail	Class C	3,701'	4,701'	336	1.4	14.8	50	6.50	470	Extender, Antifoam, Retarder
Prod Intermediate-2 7"										
			Planned	single stage	e cement job					
Lead	Class C	4,201'	7,526'	375	2	13.2	50	14.60	750	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	7,526'	8,526'	134	1.4	14.8	25	6.50	188	Extender, Antifoam, Retarder, Viscosifier
			Co	ntingency: T	op Job					
Tail	Class C	0'	6,000'	805	1.4	14.8	25	6.50	1128	Extender, Antifoam, Retarder, Viscosifier
Production Liner 5" x 4-	1/2"									
Lead	Class C	8,226'	19,877'	745	1.84	13.2	25	9.86	1372	Extender, Antifoam, Retarder, Viscosifier

Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.

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## Received by OCD: 10/14/2021 12:38:54 PM ONSHORE ORDER NO. 1

Chevron SND 11 2 Fed Com 004 P27 217H Eddy County, NM

From	То	Туре	Weight	Weight at TD	Viscosity	Filtrate	Notes
0'	1,070'	Spud mud	8.3 - 8.9	8.9	26-36	15-25	
0'	4,701'	Brine	8.3 - 10.6	10.0	26-36	15-25	
4,701'	8,526'	WBM/Brine	8.7 - 10.6	9.0	26-36	15-25	
8,526'	19,877'	OBM	8.7 - 10.5	9.6	50-70	5-10	

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 porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating of E&P waste will follow EPA regulations and accompanying manifests.

A mud test shall be performed every 24 hours after mudding 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 pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

## 7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

No production Tests planned Mud logging is planned Gamma ray log planned No coring operations planned

## 8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. No abnormal pressure or temperatures are expected. Estimated BHP is: 4,522 psi
 b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered



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Page 36 of 42



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.



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.

Adjustable chokes may be remotely operated but will have backup hand pump for hydraulic actuation in case of loss of rig air or power.

Flare and panic lines will terminate a minimum of 150' from the wellhead. These lines will terminate at a location as per approved APD.

All valves (except chokes) on choke line, kill line and choke manifold will be full opening and will allow straight through flow. This excludes any valves between the mud gas separator and shale shakers.

All manual valves will have hand wheels installed.

Flare systems will have an effective method for ignition.

All connections will be flanged, welded or clamped

If buffer tank is used, a valve will be used on all lines at any entry or exit point to or from the buffer tank.

# **BLOWOUT PREVENTER SCHEMATIC**

Operation:

Intermediate & Production

Minimum System operation pressure

5,000 psi

Minimum Requirements

## **Closing Unit and Accumulator Checklist**

The following item must be performed, verified, and checked off at least once per well prior to low/high pressure testing of BOP equipment. This must be repeated after 6 months on the same well.

Precharge pressure for each accumulator bottle must fall within the range below. Bottles may be further charged with nitrogen gas only. Tested precharge pressures must be recorded for each individual bottle and kept on location through the end of the well. Test will be conducted prior to connecting unit to BOP stack.

Check one that applies	Accumulator working pressure rating	Minimum acceptable operating pressure	Desired precharge pressure	Maximum acceptable precharge pressure	Minimum acceptable precharge pressure
	1500 psi	1500 psi	750 psi	800 psi	700 psi
	2000 psi	2000 psi	1000 psi	1100 psi	900 psi
	3000 psi	3000 psi	1000 psi	1100 psi	900 psi

Accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if used), close all rams, close the annular preventer, and retain a minimum of 200 psi above the maximum acceptable precharge pressure (see table above) on the closing manifold without the use of the closing pumps. This test will be performed with test pressure recorded and kept on location through the end of the well

Accumulator fluid reservoir will be double the usable fluid volume of the accumulator system capacity. Fluid level will be maintained at manufacturer's recommendations. Usable fluid volume will be recorded. Reservior capacity will be recorded. Reservoir fluid level will be recorded along with manufacturer's recommendation. All will be kept on location through the end of the well.

Closing unit system will have two independent power sources (not counting accumulator bottles) to close the preventers.

Power for the closing unit pumps will be available to the unit at all times so that the pumps will automatically start when the closing valve manifold pressure decreases to the pre-set level. It is recommended to check that air line to accumulator pump is "ON" during each tour change.

With accumulator bottles isolated, closing unit will be capable of opening the hydraulically-operated choke line valve (if used) plus close the annular preventer on the smallest size drill pipe within 2 minutes and obtain a minimum of 200 psi above maximum acceptable precharge pressure (see table above) on the closing manifold. Test pressure and closing time will be recorded and kept on location through the end of the well.

Master controls for the BOPE system will be located at the accumulator and will be capable of opening and closing all preventer and the choke line valve (if used)

Remote controls for the BOPE system will be readily accessible (clear path) to the driller and located on the rig floor (not in the dog house). Remote controls will be capable of closing all preventers.

Record accumulator tests in drilling reports and IADC sheet

## **BOPE 5K Test Checklist**

The following items must be checked off prior to beginning test:

- BLM will be given at least 4 hour notice prior to beginning BOPE testing.
- $\Box$  Valve on casing head below test plug will be open.
- □ Test will be performed using clear water.

The following items must be performed during the BOPE testing:

- BOPE will be pressure tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs, and at a minimum of 30 day intervals. Test pressure and times will be recorded by a 3<sup>rd</sup> party on a test charge and kept on location through the end of the well.
- Test plug will be used.
- Ram type preventer and all related well control equipment will be tested to 250 psi (low) and 5,000 psi (high).
- □ Annular type preventer will be tested to 250 psi (low) and 3,500 psi (high).
- Valves will be tested fromt eh working pressure side with all downstream valves open.
   The check valve will be held open to test the kill line valve(s).
- Each pressure test will be held for 10 minutes with no allowable leak off.
- Master controls and remote controls to the closing unit (accumulator) must be function tested as part of the BOPE test.
- □ Record BOP tests and pressures in drilling reports and IADC sheet.

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

District IV

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

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COMMENTS

Action 56026

COMMENTS

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	56026
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

### COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 10/19/2021	10/19/2021

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

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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

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	56026
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created	Condition	Condition
Ву		Date
kpickford	Notify OCD 24 hours prior to casing & cement	10/19/2021
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/19/2021
	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	10/19/2021
	zones and shall immediately set in cement the water protection string	
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	10/19/2021
	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	10/19/2021
	solids must be contained in a steel closed loop system	

Page 42 of 42

Action 56026