Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-015-49149

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory
Cotton Draw;Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

Dean R McClure 9/22/2021

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 09/22/2021

District I
1625 N French Dr, Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St, Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr, Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-49149	13367	COTTON DRAW;BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
331700	SND 9 16 FED COM 002 P351	401H

[7] OGRID No.	[8] Operator Name	[9] Elevation
4323	CHEVRON U.S.A. INC.	3442'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	24 SOUTH	31 EAST, N.M.P.M.		619'	NORTH	1815'	WEST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	24 SOUTH	31 EAST, N.M.P.M.		25'	SOUTH	330'	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640	Infill		

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.

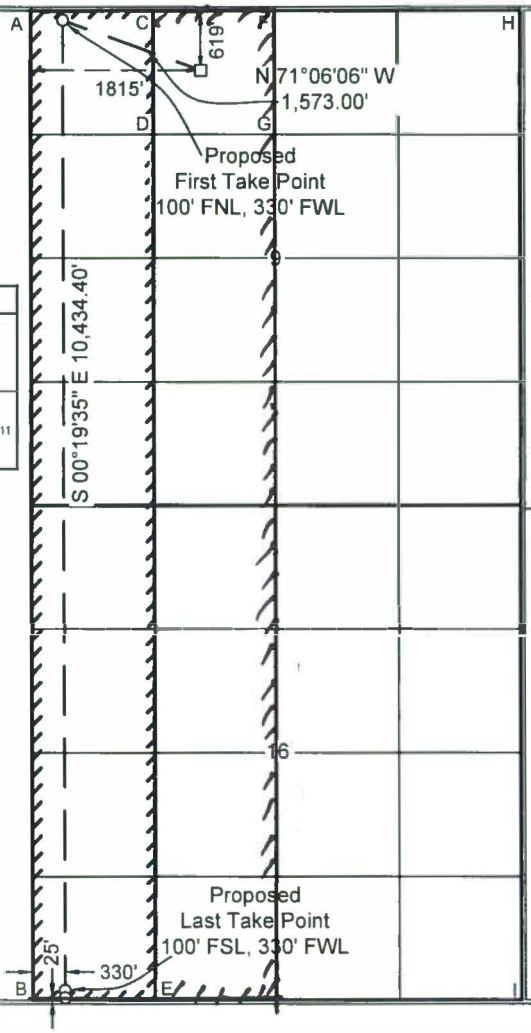
[16]

SND 9 16 FED COM 002 P351 NO. 401H WELL		
X=	669,554'	NAD 27
Y=	450,479'	
LAT.	32.237294° N	
LONG.	103.784962° W	
X=	710,738'	NAD83/2011
Y=	450,538'	
LAT.	32.237418° N	
LONG.	103.785447° W	
ELEVATION +3442' NAVD 88		

PROPOSED FIRST TAKE POINT			PROPOSED LAST TAKE POINT		
X=	668,066'	NAD 27	X=	668,125'	NAD 27
Y=	450,989'		Y=	440,629'	
LAT.	32.238716° N		LAT.	32.210239° N	
LONG.	103.789767° W		LONG.	103.789746° W	
X=	709,249'	NAD83/2011	X=	709,309'	NAD83/2011
Y=	451,048'		Y=	440,688'	
LAT.	32.238839° N		LAT.	32.210362° N	
LONG.	103.790252° W		LONG.	103.790229° W	

PROPOSED BOTTOM HOLE LOCATION		
X=	668,125'	NAD 27
Y=	440,554'	
LAT.	32.210033° N	
LONG.	103.789745° W	
X=	709,309'	NAD83/2011
Y=	440,613'	
LAT.	32.210156° N	
LONG.	103.790229° W	

CORNER COORDINATES TABLE (NAD 27)
A- Y=451086.48, X=667735.20
B- Y=440527.58, X=667795.37
C- Y=451095.15, X=669056.34
D- Y=449775.22, X=669063.91
E- Y=440534.92, X=669114.76
F- Y=451103.83, X=670377.48
G- Y=449783.62, X=670384.82
H- Y=451121.09, X=673019.77
I- Y=440556.94, X=673072.91



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cindy Herrera-Murillo 11/4/2021
Date

Cindy Herrera-Murillo
Printed Name

eeof@chevron.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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 same is true and correct to the best of my belief.

07/05/2019
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT L. LASTRAPES
NEW MEXICO
23006
PROFESSIONAL SURVEYOR
11/07/2019

Certificate Number

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

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

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

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

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

5. Performance Standards

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

6. Measurement or Estimation of Vented and Flared Natural Gas

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Chevron USA **OGRID:** 4323 **Date:** 11 / 29 / 21

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ 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 9 16 FED COM 002 P351 401H	*Pending*	UL:C, Sec 9, T24S-R31E	619'FNL, 1815' FWL	8400 BBL/D	15 MCF/D	12.2 BBL/D
SND 9 16 FED COM 002 P351 402H	*Pending*	UL:C ,Sec 9, T24S-R31E	619'FNL, 1840' FWL	8400 BBL/D	15 MCF/D	12.2/BBL/D
SND 9 16 FED COM 002 P351 403H	*Pending*	UL:C, Sec 9, T24S-R31E	615'FNL, 1865' FWL	8400 BBL/D	15 MCF/D	12.2/BBL/D
SND 9 16 FED COM 002 P351 404H	*Pending*	UL:C, Sec 9, T24S-R31E	615' FSL, 1815' FWL	8400 BBL/D	15 MCF/D	12.2 BBL/D

IV. Central Delivery Point Name: SND 9 CTB [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
SND 9 16 FED COM 002 P351 401H	*Pending*	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 402H	*Pending*	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 403H	*Pending*	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 404H	*Pending*	June 2023	N/A	N/A	N/A	N/A

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(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: Cindy Herrera-Murillo
Printed Name: Cindy Herrera-Murillo
Title: HSE Lead Regulatory
E-mail Address: eeof@chevron.com
Date: 11/29/2021
Phone:

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

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

Drilling Plan Data Report
09/30/2021

APD ID: 10400053933
Submission Date: 02/11/2020
Operator Name: CHEVRON USA INCORPORATED
Well Name: SND 9 16 FED COM 002 P351
Well Number: 401H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
651966	RUSTLER	3442	541	541	DOLOMITE	NONE	N
651983	CASTILE	717	2725	2725	ANHYDRITE	NONE	N
655898	LAMAR	-838	4280	4280	LIMESTONE	NONE	N
651967	BELL CANYON	-890	4332	4332	SANDSTONE	NONE	N
651969	CHERRY CANYON	-1782	5224	5224	SANDSTONE	NONE	N
651970	BRUSHY CANYON	-3022	6464	6464	SANDSTONE	NONE	N
651971	BONE SPRING LIME	-4706	8148	8148	LIMESTONE	NONE	N
651981	UPPER AVALON SHALE	-4773	8215	8215	LIMESTONE, SHALE	NONE	N
651973	BONE SPRING 1ST	-5712	9154	9350	SANDSTONE	NONE	N
651974	BONE SPRING 2ND	-6373	9815	10010	SANDSTONE	NONE	N
651984	BONE SPRING	-6842	10284	21275	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M
Rating Depth: 10284

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

Variance request: Chevron 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

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

third party. Chevron also requests a variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please refer to the attached testing and specification documents.

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

Choke Diagram Attachment:

BLM_5M_Annular_10M_Stack_BOP_Choke_Schematic_20200207124340.pdf

Continental_Test_Specs_and_Pressure_Test_20200207124424.pdf

BOP Diagram Attachment:

UHS_Multibowl_Wellhead_2017_20191219114507.pdf

BOP_Testing_Procedure_20191219114442.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	900	0	900	3442	2542	900	J-55	54.5	BUTT	2.42	1.72	DRY	5.79	DRY	5.79
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4300	0	4300		-858	4300	L-80	40	LT&C	1.64	1.57	DRY	2.31	DRY	2.31
3	PRODUCTION	8.75	7.0	NEW	API	N	0	9600	0	9600		-6158	9600	OTHER	29	OTHER - BLUE	4.3	1.15	DRY	2.22	DRY	2.22
4	LINER	6.125	4.5	NEW	API	N	9100	21275	9100	10284	-5658	-6842	12175	P-110	11.6	OTHER - W521	1.09	1.1	DRY	1.38	DRY	1.38

Casing Attachments

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

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_20200207124910.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_20200207125121.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7_29ppf_P110_TSH_Blue_20201023143432.pdf

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

Casing Attachments

Casing ID: 4 **String Type:** LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

4.5_11.6ppf_P110_TSH_W521_20201023143915.pdf

401H_9_Pt._Drilling_Plan_v2_20201023143944.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0		NONE	NONE
SURFACE	Tail		0	900	565	1.34	14.8	757	100	CLASS C	Extender, Antifoam, Retarder
INTERMEDIATE	Lead		0	3300	1543	1.34	14.8	2067	100	Class C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		3300	4300	467	1.34	14.8	626	100	Class C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		0	8600	631	2.56	11.9	1616	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Tail		8600	9600	141	1.33	14.8	188	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
LINER	Lead		9100	21275	779	1.84	13.2	1433	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

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 transporting of E&P waste will follow EPA regulations and accompanying manifests.

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
9600	21275	OIL-BASED MUD	9	11							Viscosity: 50-70 Filtrate: 5-10 Due to wellbore stability, the mud program may exceed the MW weight window needed to maintain overburden of pore pressure.
0	900	SPUD MUD	8.4	9							Viscosity: 26-36 Filtrate: 15-25 Target 8.5 ppg
900	4300	OTHER : BRINE	9.5	10.6							Viscosity: 26-36 Filtrate: 15-25 Target 10.1 ppg
4300	9600	OTHER : CUT BRINE/WBM/OBM	8.9	9.6							Viscosity: 27-55 Filtrate: 15-25 Target 9.4 ppg

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

Section 6 - Test, Logging, Coring

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

Drill stem tests are not planned
The logging program will be as follows:
Type: Mudlogs Logs: 2 man mudlog Interval: Surf csg 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/GEOLOGIC LITHOLOGY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,DIRECTIONAL SURVEY,

Coring operation description for the well:

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

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4672 **Anticipated Surface Pressure:** 2409

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:

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

401H_Directional_Survey_20200207130810.pdf
Rig_Layout_20200207130826.pdf
H2S_Contingency_Plan_20200207130854.pdf

Other proposed operations facets description:

Chevron formally requests the variances below:

- Authorization to use the spudder rig to spud the well and set surface casing. The drilling rig will move in less than 90 days to continue drilling operations. Rig layouts attached.

- A variance from the Onshore Order 2 to perform 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 pad a full BOP test will be performed. A break test will not be performed on our last production hole section. A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. Summary with details attached below.

- Authorization to follow Onshore Order 2 Section B - Casing and Cementing Requirements to wait to 500 psi

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351 **Well Number:** 401H

comprehensive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at sufficient strength prior to performing a shoe test and drilling ahead through the next hole section.

***Drilling plan attached contains a contingency cement program.

Other proposed operations facets attachment:

Other Variance attachment:

CUSA_Spudder_Rig_Data_20200207131008.pdf

SND_P351_Break_Testing_Variance_20200207131029.pdf

SND_351_WOC_Variance_20200207131038.pdf

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 1 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

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	**0.999942**	Report Generated	**21-Jan-20** at **11:12:23 AM**
Convergence at slot	**0.29° East**	Database	**WA_HOU_Midland_Defn**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W
Facility Reference Pt			**669554.00**	**450479.00**	32°14'14.2583"N	103°47'5.8641"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 816 (KB) to Facility Vertical Datum	**3472.00ft**
Horizontal Reference Pt	**Slot**	Patterson 816 (KB) to Mean Sea Level	**3472.00ft**
Vertical Reference Pt	**Patterson 816 (KB)**	Patterson 816 (KB) to Ground Level at Slot (SND 9 16 Fed Com 002 P351 No. 401H)	**30.00ft**
MD Reference Pt	**Patterson 816 (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**179.68°**

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 2 of 10

REFERENCE WELLPATH IDENTIFICATION			
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Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00†	0.000	310.400	0.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
30.00	0.000	310.400	30.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	Tie On
130.00†	0.000	310.400	130.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
230.00†	0.000	310.400	230.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
330.00†	0.000	310.400	330.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
430.00†	0.000	310.400	430.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
530.00†	0.000	310.400	530.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
630.00†	0.000	310.400	630.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
730.00†	0.000	310.400	730.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
830.00†	0.000	310.400	830.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	
900.00	0.000	310.400	900.00	0.00	0.00	0.00	669554.00	450479.00	32°14'14.2583"N	103°47'5.8641"W	0.00	0.00	0.00	End of Tangent
930.00†	0.450	310.400	930.00	-0.08	0.08	-0.09	669553.91	450479.08	32°14'14.2591"N	103°47'5.8652"W	1.50	1.50	0.00	
1030.00†	1.950	310.400	1029.97	-1.44	1.43	-1.68	669552.32	450480.43	32°14'14.2726"N	103°47'5.8836"W	1.50	1.50	0.00	
1130.00†	3.450	310.400	1129.86	-4.52	4.49	-5.27	669548.73	450483.49	32°14'14.3030"N	103°47'5.9252"W	1.50	1.50	0.00	
1230.00†	4.950	310.400	1229.59	-9.29	9.23	-10.85	669543.15	450488.23	32°14'14.3503"N	103°47'5.9899"W	1.50	1.50	0.00	
1330.00†	6.450	310.400	1329.09	-15.77	15.67	-18.41	669535.59	450494.67	32°14'14.4143"N	103°47'6.0775"W	1.50	1.50	0.00	
1430.00†	7.950	310.400	1428.30	-23.95	23.79	-27.96	669526.05	450502.79	32°14'14.4952"N	103°47'6.1882"W	1.50	1.50	0.00	
1530.00†	9.450	310.400	1527.15	-33.82	33.60	-39.48	669514.53	450512.59	32°14'14.5928"N	103°47'6.3217"W	1.50	1.50	0.00	
1630.00†	10.950	310.400	1625.56	-45.37	45.07	-52.96	669501.04	450524.07	32°14'14.7070"N	103°47'6.4780"W	1.50	1.50	0.00	
1730.00†	12.450	310.400	1723.48	-58.60	58.22	-68.40	669485.60	450537.21	32°14'14.8379"N	103°47'6.6570"W	1.50	1.50	0.00	
1830.00†	13.950	310.400	1820.84	-73.49	73.02	-85.79	669468.21	450552.01	32°14'14.9852"N	103°47'6.8586"W	1.50	1.50	0.00	
1900.00	15.000	310.400	1888.62	-84.91	84.36	-99.12	669454.89	450563.35	32°14'15.0981"N	103°47'7.0130"W	1.50	1.50	0.00	15 Degrees
1930.00†	15.000	310.400	1917.59	-89.97	89.39	-105.03	669448.98	450568.38	32°14'15.1482"N	103°47'7.0816"W	0.00	0.00	0.00	
2030.00†	15.000	310.400	2014.19	-106.86	106.16	-124.74	669429.27	450585.16	32°14'15.3152"N	103°47'7.3100"W	0.00	0.00	0.00	
2130.00†	15.000	310.400	2110.78	-123.74	122.94	-144.45	669409.56	450601.93	32°14'15.4821"N	103°47'7.5385"W	0.00	0.00	0.00	
2230.00†	15.000	310.400	2207.37	-140.63	139.71	-164.16	669389.85	450618.70	32°14'15.6491"N	103°47'7.7670"W	0.00	0.00	0.00	
2330.00†	15.000	310.400	2303.96	-157.51	156.49	-183.87	669370.14	450635.48	32°14'15.8161"N	103°47'7.9954"W	0.00	0.00	0.00	
2430.00†	15.000	310.400	2400.56	-174.39	173.26	-203.58	669350.43	450652.25	32°14'15.9831"N	103°47'8.2239"W	0.00	0.00	0.00	
2530.00†	15.000	310.400	2497.15	-191.28	190.04	-223.29	669330.72	450669.02	32°14'16.1501"N	103°47'8.4524"W	0.00	0.00	0.00	
2630.00†	15.000	310.400	2593.74	-208.16	206.81	-243.00	669311.01	450685.80	32°14'16.3171"N	103°47'8.6808"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 3 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 401H
Field	Purple Sage (Eddy Co., NM) NAD 27	API/Legal	
Facility	SND 9 16 Fed Com 002 P351	Wellbore	SND 9 16 Fed Com 002 P351 No. 401H
Slot	SND 9 16 Fed Com 002 P351 No. 401H		

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
2730.00†	15.000	310.400	2690.33	-225.05	223.58	-262.71	669291.31	450702.57	32°14'16.4840"N	103°47'8.9093"W	0.00	0.00	0.00	
2830.00†	15.000	310.400	2786.93	-241.93	240.36	-282.42	669271.60	450719.34	32°14'16.6510"N	103°47'9.1378"W	0.00	0.00	0.00	
2930.00†	15.000	310.400	2883.52	-258.82	257.13	-302.13	669251.89	450736.12	32°14'16.8180"N	103°47'9.3662"W	0.00	0.00	0.00	
3030.00†	15.000	310.400	2980.11	-275.70	273.91	-321.84	669232.18	450752.89	32°14'16.9850"N	103°47'9.5947"W	0.00	0.00	0.00	
3130.00†	15.000	310.400	3076.70	-292.59	290.68	-341.55	669212.47	450769.67	32°14'17.1520"N	103°47'9.8232"W	0.00	0.00	0.00	
3230.00†	15.000	310.400	3173.30	-309.47	307.46	-361.26	669192.76	450786.44	32°14'17.3190"N	103°47'10.0517"W	0.00	0.00	0.00	
3330.00†	15.000	310.400	3269.89	-326.35	324.23	-380.97	669173.05	450803.21	32°14'17.4859"N	103°47'10.2801"W	0.00	0.00	0.00	
3430.00†	15.000	310.400	3366.48	-343.24	341.01	-400.68	669153.34	450819.99	32°14'17.6529"N	103°47'10.5086"W	0.00	0.00	0.00	
3530.00†	15.000	310.400	3463.08	-360.12	357.78	-420.39	669133.63	450836.76	32°14'17.8199"N	103°47'10.7371"W	0.00	0.00	0.00	
3630.00†	15.000	310.400	3559.67	-377.01	374.56	-440.10	669113.93	450853.53	32°14'17.9869"N	103°47'10.9655"W	0.00	0.00	0.00	
3730.00†	15.000	310.400	3656.26	-393.89	391.33	-459.81	669094.22	450870.31	32°14'18.1539"N	103°47'11.1940"W	0.00	0.00	0.00	
3830.00†	15.000	310.400	3752.85	-410.78	408.10	-479.52	669074.51	450887.08	32°14'18.3209"N	103°47'11.4225"W	0.00	0.00	0.00	
3930.00†	15.000	310.400	3849.45	-427.66	424.88	-499.23	669054.80	450903.85	32°14'18.4878"N	103°47'11.6510"W	0.00	0.00	0.00	
4030.00†	15.000	310.400	3946.04	-444.55	441.65	-518.94	669035.09	450920.63	32°14'18.6548"N	103°47'11.8794"W	0.00	0.00	0.00	
4130.00†	15.000	310.400	4042.63	-461.43	458.43	-538.65	669015.38	450937.40	32°14'18.8218"N	103°47'12.1079"W	0.00	0.00	0.00	
4230.00†	15.000	310.400	4139.22	-478.31	475.20	-558.36	668995.67	450954.17	32°14'18.9888"N	103°47'12.3364"W	0.00	0.00	0.00	
4330.00†	15.000	310.400	4235.82	-495.20	491.98	-578.07	668975.96	450970.95	32°14'19.1558"N	103°47'12.5649"W	0.00	0.00	0.00	
4430.00†	15.000	310.400	4332.41	-512.08	508.75	-597.78	668956.25	450987.72	32°14'19.3228"N	103°47'12.7933"W	0.00	0.00	0.00	
4530.00†	15.000	310.400	4429.00	-528.97	525.53	-617.49	668936.55	451004.50	32°14'19.4897"N	103°47'13.0218"W	0.00	0.00	0.00	
4630.00†	15.000	310.400	4525.59	-545.85	542.30	-637.20	668916.84	451021.27	32°14'19.6567"N	103°47'13.2503"W	0.00	0.00	0.00	
4730.00†	15.000	310.400	4622.19	-562.74	559.08	-656.91	668897.13	451038.04	32°14'19.8237"N	103°47'13.4788"W	0.00	0.00	0.00	
4830.00†	15.000	310.400	4718.78	-579.62	575.85	-676.62	668877.42	451054.82	32°14'19.9907"N	103°47'13.7072"W	0.00	0.00	0.00	
4930.00†	15.000	310.400	4815.37	-596.50	592.62	-696.33	668857.71	451071.59	32°14'20.1577"N	103°47'13.9357"W	0.00	0.00	0.00	
5030.00†	15.000	310.400	4911.96	-613.39	609.40	-716.04	668838.00	451088.36	32°14'20.3246"N	103°47'14.1642"W	0.00	0.00	0.00	
5130.00†	15.000	310.400	5008.56	-630.27	626.17	-735.75	668818.29	451105.14	32°14'20.4916"N	103°47'14.3926"W	0.00	0.00	0.00	
5230.00†	15.000	310.400	5105.15	-647.16	642.95	-755.46	668798.58	451121.91	32°14'20.6586"N	103°47'14.6211"W	0.00	0.00	0.00	
5330.00†	15.000	310.400	5201.74	-664.04	659.72	-775.17	668778.87	451138.68	32°14'20.8256"N	103°47'14.8496"W	0.00	0.00	0.00	
5430.00†	15.000	310.400	5298.33	-680.93	676.50	-794.88	668759.17	451155.46	32°14'20.9926"N	103°47'15.0781"W	0.00	0.00	0.00	
5530.00†	15.000	310.400	5394.93	-697.81	693.27	-814.59	668739.46	451172.23	32°14'21.1596"N	103°47'15.3066"W	0.00	0.00	0.00	
5630.00†	15.000	310.400	5491.52	-714.70	710.05	-834.30	668719.75	451189.00	32°14'21.3265"N	103°47'15.5350"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

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Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
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WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
5730.00†	15.000	310.400	5588.11	-731.58	726.82	-854.01	668700.04	451205.78	32°14'21.4935"N	103°47'15.7635"W	0.00	0.00	0.00	
5830.00†	15.000	310.400	5684.70	-748.46	743.60	-873.72	668680.33	451222.55	32°14'21.6605"N	103°47'15.9920"W	0.00	0.00	0.00	
5900.00	15.000	310.400	5752.32	-760.28	755.34	-887.52	668666.53	451234.29	32°14'21.7774"N	103°47'16.1519"W	0.00	0.00	0.00	Hold
5930.00†	14.775	310.400	5781.31	-765.31	760.33	-893.39	668660.66	451239.29	32°14'21.8271"N	103°47'16.2200"W	0.75	-0.75	0.00	
6030.00†	14.025	310.400	5878.17	-781.54	776.45	-912.33	668641.73	451255.41	32°14'21.9876"N	103°47'16.4395"W	0.75	-0.75	0.00	
6130.00†	13.275	310.400	5975.34	-796.93	791.75	-930.30	668623.76	451270.70	32°14'22.1398"N	103°47'16.6478"W	0.75	-0.75	0.00	
6230.00†	12.525	310.400	6072.82	-811.49	806.22	-947.30	668606.76	451285.17	32°14'22.2838"N	103°47'16.8449"W	0.75	-0.75	0.00	
6330.00†	11.775	310.400	6170.58	-825.22	819.86	-963.33	668590.73	451298.81	32°14'22.4196"N	103°47'17.0307"W	0.75	-0.75	0.00	
6430.00†	11.025	310.400	6268.61	-838.12	832.67	-978.38	668575.68	451311.62	32°14'22.5471"N	103°47'17.2052"W	0.75	-0.75	0.00	
6530.00†	10.275	310.400	6366.88	-850.17	844.65	-992.45	668561.60	451323.59	32°14'22.6664"N	103°47'17.3683"W	0.75	-0.75	0.00	
6620.00	9.600	310.400	6455.53	-860.31	854.71	-1004.28	668549.78	451333.66	32°14'22.7666"N	103°47'17.5054"W	0.75	-0.75	0.00	9.6 Degrees
6630.00†	9.600	310.400	6465.39	-861.39	855.79	-1005.55	668548.51	451334.74	32°14'22.7773"N	103°47'17.5201"W	0.00	0.00	0.00	
6730.00†	9.600	310.400	6563.99	-872.27	866.60	-1018.25	668535.81	451345.55	32°14'22.8849"N	103°47'17.6674"W	0.00	0.00	0.00	
6830.00†	9.600	310.400	6662.59	-883.15	877.41	-1030.95	668523.11	451356.36	32°14'22.9925"N	103°47'17.8146"W	0.00	0.00	0.00	
6930.00†	9.600	310.400	6761.19	-894.03	888.22	-1043.65	668510.41	451367.16	32°14'23.1001"N	103°47'17.9618"W	0.00	0.00	0.00	
7030.00†	9.600	310.400	6859.79	-904.91	899.03	-1056.35	668497.71	451377.97	32°14'23.2077"N	103°47'18.1090"W	0.00	0.00	0.00	
7130.00†	9.600	310.400	6958.39	-915.79	909.84	-1069.05	668485.01	451388.78	32°14'23.3153"N	103°47'18.2562"W	0.00	0.00	0.00	
7230.00†	9.600	310.400	7056.99	-926.67	920.64	-1081.75	668472.31	451399.59	32°14'23.4229"N	103°47'18.4035"W	0.00	0.00	0.00	
7330.00†	9.600	310.400	7155.59	-937.55	931.45	-1094.45	668459.61	451410.40	32°14'23.5305"N	103°47'18.5507"W	0.00	0.00	0.00	
7430.00†	9.600	310.400	7254.19	-948.43	942.26	-1107.15	668446.91	451421.20	32°14'23.6381"N	103°47'18.6979"W	0.00	0.00	0.00	
7530.00†	9.600	310.400	7352.79	-959.31	953.07	-1119.85	668434.21	451432.01	32°14'23.7457"N	103°47'18.8451"W	0.00	0.00	0.00	
7630.00†	9.600	310.400	7451.39	-970.19	963.88	-1132.55	668421.51	451442.82	32°14'23.8533"N	103°47'18.9923"W	0.00	0.00	0.00	
7730.00†	9.600	310.400	7549.99	-981.07	974.69	-1145.25	668408.82	451453.63	32°14'23.9608"N	103°47'19.1396"W	0.00	0.00	0.00	
7830.00†	9.600	310.400	7648.59	-991.95	985.50	-1157.95	668396.12	451464.44	32°14'24.0684"N	103°47'19.2868"W	0.00	0.00	0.00	
7930.00†	9.600	310.400	7747.19	-1002.83	996.30	-1170.65	668383.42	451475.24	32°14'24.1760"N	103°47'19.4340"W	0.00	0.00	0.00	
8030.00†	9.600	310.400	7845.79	-1013.71	1007.11	-1183.35	668370.72	451486.05	32°14'24.2836"N	103°47'19.5812"W	0.00	0.00	0.00	
8130.00†	9.600	310.400	7944.39	-1024.59	1017.92	-1196.05	668358.02	451496.86	32°14'24.3912"N	103°47'19.7284"W	0.00	0.00	0.00	
8230.00†	9.600	310.400	8042.99	-1035.46	1028.73	-1208.75	668345.32	451507.67	32°14'24.4988"N	103°47'19.8757"W	0.00	0.00	0.00	
8330.00†	9.600	310.400	8141.58	-1046.34	1039.54	-1221.45	668332.62	451518.48	32°14'24.6064"N	103°47'20.0229"W	0.00	0.00	0.00	
8336.51	9.600	310.400	8148.00	-1047.05	1040.24	-1222.28	668331.79	451519.18	32°14'24.6134"N	103°47'20.0325"W	0.00	0.00	0.00	Hold Through Brushy Canyon

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 5 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8430.00†	8.899	310.400	8240.28	-1056.86	1049.98	-1233.72	668320.35	451528.92	32°14'24.7103"N	103°47'20.1651"W	0.75	-0.75	0.00	
8530.00†	8.149	310.400	8339.17	-1066.52	1059.59	-1245.01	668309.06	451538.52	32°14'24.8060"N	103°47'20.2960"W	0.75	-0.75	0.00	
8630.00†	7.399	310.400	8438.25	-1075.35	1068.35	-1255.31	668298.76	451547.29	32°14'24.8932"N	103°47'20.4154"W	0.75	-0.75	0.00	
8730.00†	6.649	310.400	8537.50	-1083.33	1076.28	-1264.62	668289.45	451555.22	32°14'24.9721"N	103°47'20.5233"W	0.75	-0.75	0.00	
8830.00†	5.899	310.400	8636.90	-1090.45	1083.36	-1272.95	668281.13	451562.30	32°14'25.0426"N	103°47'20.6198"W	0.75	-0.75	0.00	
8930.00†	5.149	310.400	8736.44	-1096.73	1089.60	-1280.28	668273.80	451568.54	32°14'25.1047"N	103°47'20.7048"W	0.75	-0.75	0.00	
9030.00†	4.399	310.400	8836.09	-1102.16	1094.99	-1286.61	668267.46	451573.93	32°14'25.1584"N	103°47'20.7782"W	0.75	-0.75	0.00	
9130.00†	3.649	310.400	8935.84	-1106.74	1099.54	-1291.96	668262.12	451578.48	32°14'25.2037"N	103°47'20.8402"W	0.75	-0.75	0.00	
9230.00†	2.899	310.400	9035.68	-1110.47	1103.24	-1296.31	668257.77	451582.18	32°14'25.2405"N	103°47'20.8906"W	0.75	-0.75	0.00	
9330.00†	2.149	310.400	9135.58	-1113.34	1106.10	-1299.66	668254.42	451585.03	32°14'25.2689"N	103°47'20.9295"W	0.75	-0.75	0.00	
9430.00†	1.399	310.400	9235.53	-1115.36	1108.10	-1302.02	668252.06	451587.04	32°14'25.2889"N	103°47'20.9568"W	0.75	-0.75	0.00	
9530.00†	0.649	310.400	9335.52	-1116.52	1109.26	-1303.38	668250.70	451588.20	32°14'25.3004"N	103°47'20.9726"W	0.75	-0.75	0.00	
9616.51	0.000	213.000	9422.02	-1116.84	1109.58	-1303.75	668250.33	451588.51	32°14'25.3036"N	103°47'20.9769"W	0.75	-0.75	0.00	End of Drop
9630.00†	0.000	213.000	9435.51	-1116.84	1109.58	-1303.75	668250.33	451588.51	32°14'25.3036"N	103°47'20.9769"W	0.00	0.00	0.00	
9730.00†	0.000	213.000	9535.51	-1116.84	1109.58	-1303.75	668250.33	451588.51	32°14'25.3036"N	103°47'20.9769"W	0.00	0.00	0.00	
9830.00†	0.000	213.000	9635.51	-1116.84	1109.58	-1303.75	668250.33	451588.51	32°14'25.3036"N	103°47'20.9769"W	0.00	0.00	0.00	
9860.99	0.000	213.000	9666.50	-1116.84	1109.58	-1303.75	668250.33	451588.51	32°14'25.3036"N	103°47'20.9769"W	0.00	0.00	0.00	KOP
9930.00†	6.901	213.000	9735.35	-1113.37	1106.10	-1306.01	668248.07	451585.03	32°14'25.2693"N	103°47'21.0034"W	10.00	10.00	0.00	
10030.00†	16.901	213.000	9833.07	-1096.16	1088.82	-1317.23	668236.85	451567.76	32°14'25.0989"N	103°47'21.1350"W	10.00	10.00	0.00	
10130.00†	26.901	213.000	9925.74	-1065.03	1057.58	-1337.52	668216.56	451536.52	32°14'24.7907"N	103°47'21.3731"W	10.00	10.00	0.00	
10230.00†	36.901	213.000	10010.53	-1020.93	1013.32	-1366.27	668187.82	451492.26	32°14'24.3542"N	103°47'21.7104"W	10.00	10.00	0.00	
10260.99	40.000	213.000	10034.79	-1004.83	997.16	-1376.76	668177.32	451476.10	32°14'24.1948"N	103°47'21.8335"W	10.00	10.00	0.00	40 Degrees
10330.00†	45.445	206.737	10085.49	-964.35	956.55	-1399.93	668154.16	451435.49	32°14'23.7941"N	103°47'22.1056"W	10.00	7.89	-9.08	
10430.00†	53.810	199.523	10150.26	-894.49	886.52	-1429.52	668124.57	451365.46	32°14'23.1026"N	103°47'22.4543"W	10.00	8.37	-7.21	
10530.00†	62.524	193.735	10202.99	-813.29	805.19	-1453.60	668100.49	451284.14	32°14'22.2990"N	103°47'22.7394"W	10.00	8.71	-5.79	
10630.00†	71.441	188.810	10242.07	-723.23	715.02	-1471.44	668082.65	451193.98	32°14'21.4078"N	103°47'22.9524"W	10.00	8.92	-4.93	
10730.00†	80.473	184.380	10266.32	-627.04	618.77	-1482.49	668071.60	451097.74	32°14'20.4559"N	103°47'23.0867"W	10.00	9.03	-4.43	
10830.00†	89.558	180.181	10275.01	-527.65	519.36	-1486.42	668067.67	450998.33	32°14'19.4723"N	103°47'23.1384"W	10.00	9.08	-4.20	
10841.38	90.593	179.707	10274.99	-516.27	507.97	-1486.41	668067.68	450986.94	32°14'19.3597"N	103°47'23.1389"W	10.00	9.09	-4.16	EOC/FTP
10930.00†	90.593	179.707	10274.07	-427.65	419.36	-1485.96	668068.13	450898.34	32°14'18.4828"N	103°47'23.1389"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
11030.00†	90.593	179.707	10273.04	-327.66	319.37	-1485.45	668068.64	450798.35	32°14'17.4933"N	103°47'23.1388"W	0.00	0.00	0.00	
11130.00†	90.593	179.707	10272.00	-227.67	219.38	-1484.94	668069.15	450698.36	32°14'16.5038"N	103°47'23.1388"W	0.00	0.00	0.00	
11230.00†	90.593	179.707	10270.97	-127.67	119.38	-1484.43	668069.66	450598.38	32°14'15.5143"N	103°47'23.1387"W	0.00	0.00	0.00	
11330.00†	90.593	179.707	10269.93	-27.68	19.39	-1483.91	668070.17	450498.39	32°14'14.5248"N	103°47'23.1386"W	0.00	0.00	0.00	
11430.00†	90.593	179.707	10268.90	72.32	-80.60	-1483.40	668070.69	450398.40	32°14'13.5354"N	103°47'23.1386"W	0.00	0.00	0.00	
11530.00†	90.593	179.707	10267.86	172.31	-180.60	-1482.89	668071.20	450298.41	32°14'12.5459"N	103°47'23.1385"W	0.00	0.00	0.00	
11630.00†	90.593	179.707	10266.83	272.31	-280.59	-1482.38	668071.71	450198.43	32°14'11.5564"N	103°47'23.1385"W	0.00	0.00	0.00	
11730.00†	90.593	179.707	10265.79	372.30	-380.58	-1481.87	668072.22	450098.44	32°14'10.5669"N	103°47'23.1384"W	0.00	0.00	0.00	
11830.00†	90.593	179.707	10264.76	472.30	-480.58	-1481.36	668072.73	449998.45	32°14'9.5774"N	103°47'23.1384"W	0.00	0.00	0.00	
11930.00†	90.593	179.707	10263.72	572.29	-580.57	-1480.85	668073.24	449898.46	32°14'8.5879"N	103°47'23.1383"W	0.00	0.00	0.00	
12030.00†	90.593	179.707	10262.69	672.29	-680.56	-1480.34	668073.75	449798.48	32°14'7.5984"N	103°47'23.1382"W	0.00	0.00	0.00	
12130.00†	90.593	179.707	10261.65	772.28	-780.56	-1479.83	668074.26	449698.49	32°14'6.6089"N	103°47'23.1382"W	0.00	0.00	0.00	
12230.00†	90.593	179.707	10260.62	872.28	-880.55	-1479.32	668074.77	449598.50	32°14'5.6194"N	103°47'23.1381"W	0.00	0.00	0.00	
12330.00†	90.593	179.707	10259.58	972.27	-980.54	-1478.80	668075.28	449498.51	32°14'4.6299"N	103°47'23.1381"W	0.00	0.00	0.00	
12430.00†	90.593	179.707	10258.55	1072.26	-1080.54	-1478.29	668075.80	449398.53	32°14'3.6404"N	103°47'23.1380"W	0.00	0.00	0.00	
12530.00†	90.593	179.707	10257.51	1172.26	-1180.53	-1477.78	668076.31	449298.54	32°14'2.6509"N	103°47'23.1380"W	0.00	0.00	0.00	
12630.00†	90.593	179.707	10256.47	1272.25	-1280.52	-1477.27	668076.82	449198.55	32°14'1.6615"N	103°47'23.1379"W	0.00	0.00	0.00	
12730.00†	90.593	179.707	10255.44	1372.25	-1380.52	-1476.76	668077.33	449098.57	32°14'0.6720"N	103°47'23.1378"W	0.00	0.00	0.00	
12830.00†	90.593	179.707	10254.40	1472.24	-1480.51	-1476.25	668077.84	448998.58	32°13'59.6825"N	103°47'23.1378"W	0.00	0.00	0.00	
12930.00†	90.593	179.707	10253.37	1572.24	-1580.50	-1475.74	668078.35	448898.59	32°13'58.6930"N	103°47'23.1377"W	0.00	0.00	0.00	
13030.00†	90.593	179.707	10252.33	1672.23	-1680.50	-1475.23	668078.86	448798.60	32°13'57.7035"N	103°47'23.1377"W	0.00	0.00	0.00	
13130.00†	90.593	179.707	10251.30	1772.23	-1780.49	-1474.72	668079.37	448698.62	32°13'56.7140"N	103°47'23.1376"W	0.00	0.00	0.00	
13230.00†	90.593	179.707	10250.26	1872.22	-1880.48	-1474.21	668079.88	448598.63	32°13'55.7245"N	103°47'23.1375"W	0.00	0.00	0.00	
13330.00†	90.593	179.707	10249.23	1972.22	-1980.48	-1473.69	668080.39	448498.64	32°13'54.7350"N	103°47'23.1375"W	0.00	0.00	0.00	
13430.00†	90.593	179.707	10248.19	2072.21	-2080.47	-1473.18	668080.90	448398.65	32°13'53.7455"N	103°47'23.1374"W	0.00	0.00	0.00	
13448.66	90.593	179.707	10248.00[1]	2090.87	-2099.13	-1473.09	668081.00	448380.00	32°13'53.5609"N	103°47'23.1374"W	0.00	0.00	0.00	TP1
13496.36	89.640	179.670	10247.90	2138.57	-2146.83	-1472.83	668081.26	448332.30	32°13'53.0889"N	103°47'23.1372"W	2.00	-2.00	-0.08	TL
13530.00†	89.640	179.670	10248.11	2172.21	-2180.47	-1472.64	668081.45	448298.66	32°13'52.7560"N	103°47'23.1369"W	0.00	0.00	0.00	
13630.00†	89.640	179.670	10248.74	2272.21	-2280.46	-1472.06	668082.03	448198.67	32°13'51.7665"N	103°47'23.1361"W	0.00	0.00	0.00	
13730.00†	89.640	179.670	10249.37	2372.20	-2380.46	-1471.48	668082.60	448098.68	32°13'50.7769"N	103°47'23.1353"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 7 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
13830.00†	89.640	179.670	10250.00	2472.20	-2480.46	-1470.91	668083.18	447998.69	32°13'49.7874"N	103°47'23.1345"W	0.00	0.00	0.00	
13930.00†	89.640	179.670	10250.63	2572.20	-2580.45	-1470.33	668083.76	447898.70	32°13'48.7979"N	103°47'23.1337"W	0.00	0.00	0.00	
14030.00†	89.640	179.670	10251.26	2672.20	-2680.45	-1469.76	668084.33	447798.71	32°13'47.8084"N	103°47'23.1329"W	0.00	0.00	0.00	
14130.00†	89.640	179.670	10251.89	2772.20	-2780.45	-1469.18	668084.91	447698.72	32°13'46.8188"N	103°47'23.1321"W	0.00	0.00	0.00	
14230.00†	89.640	179.670	10252.52	2872.19	-2880.44	-1468.61	668085.48	447598.73	32°13'45.8293"N	103°47'23.1313"W	0.00	0.00	0.00	
14330.00†	89.640	179.670	10253.14	2972.19	-2980.44	-1468.03	668086.06	447498.74	32°13'44.8398"N	103°47'23.1304"W	0.00	0.00	0.00	
14430.00†	89.640	179.670	10253.77	3072.19	-3080.43	-1467.45	668086.63	447398.75	32°13'43.8503"N	103°47'23.1296"W	0.00	0.00	0.00	
14530.00†	89.640	179.670	10254.40	3172.19	-3180.43	-1466.88	668087.21	447298.76	32°13'42.8607"N	103°47'23.1288"W	0.00	0.00	0.00	
14630.00†	89.640	179.670	10255.03	3272.19	-3280.43	-1466.30	668087.79	447198.77	32°13'41.8712"N	103°47'23.1280"W	0.00	0.00	0.00	
14730.00†	89.640	179.670	10255.66	3372.18	-3380.42	-1465.73	668088.36	447098.78	32°13'40.8817"N	103°47'23.1272"W	0.00	0.00	0.00	
14830.00†	89.640	179.670	10256.29	3472.18	-3480.42	-1465.15	668088.94	446998.79	32°13'39.8921"N	103°47'23.1264"W	0.00	0.00	0.00	
14930.00†	89.640	179.670	10256.92	3572.18	-3580.42	-1464.58	668089.51	446898.80	32°13'38.9026"N	103°47'23.1256"W	0.00	0.00	0.00	
15030.00†	89.640	179.670	10257.54	3672.18	-3680.41	-1464.00	668090.09	446798.81	32°13'37.9131"N	103°47'23.1248"W	0.00	0.00	0.00	
15130.00†	89.640	179.670	10258.17	3772.18	-3780.41	-1463.42	668090.66	446698.82	32°13'36.9236"N	103°47'23.1239"W	0.00	0.00	0.00	
15230.00†	89.640	179.670	10258.80	3872.17	-3880.41	-1462.85	668091.24	446598.83	32°13'35.9340"N	103°47'23.1231"W	0.00	0.00	0.00	
15330.00†	89.640	179.670	10259.43	3972.17	-3980.40	-1462.27	668091.82	446498.84	32°13'34.9445"N	103°47'23.1223"W	0.00	0.00	0.00	
15430.00†	89.640	179.670	10260.06	4072.17	-4080.40	-1461.70	668092.39	446398.85	32°13'33.9550"N	103°47'23.1215"W	0.00	0.00	0.00	
15530.00†	89.640	179.670	10260.69	4172.17	-4180.39	-1461.12	668092.97	446298.86	32°13'32.9655"N	103°47'23.1207"W	0.00	0.00	0.00	
15630.00†	89.640	179.670	10261.32	4272.17	-4280.39	-1460.55	668093.54	446198.87	32°13'31.9759"N	103°47'23.1199"W	0.00	0.00	0.00	
15730.00†	89.640	179.670	10261.94	4372.16	-4380.39	-1459.97	668094.12	446098.88	32°13'30.9864"N	103°47'23.1191"W	0.00	0.00	0.00	
15830.00†	89.640	179.670	10262.57	4472.16	-4480.38	-1459.39	668094.69	445998.89	32°13'29.9969"N	103°47'23.1183"W	0.00	0.00	0.00	
15930.00†	89.640	179.670	10263.20	4572.16	-4580.38	-1458.82	668095.27	445898.89	32°13'29.0073"N	103°47'23.1174"W	0.00	0.00	0.00	
16030.00†	89.640	179.670	10263.83	4672.16	-4680.38	-1458.24	668095.85	445798.90	32°13'28.0178"N	103°47'23.1166"W	0.00	0.00	0.00	
16056.91	89.640	179.670	10264.00[2]	4699.07	-4707.28	-1458.09	668096.00	445772.00	32°13'27.7516"N	103°47'23.1164"W	0.00	0.00	0.00	TP2
16079.43	90.090	179.693	10264.05	4721.59	-4729.81	-1457.96	668096.13	445749.47	32°13'27.5287"N	103°47'23.1163"W	2.00	2.00	0.10	TL
16130.00†	90.090	179.693	10263.97	4772.16	-4780.37	-1457.69	668096.40	445698.91	32°13'27.0283"N	103°47'23.1161"W	0.00	0.00	0.00	
16230.00†	90.090	179.693	10263.82	4872.16	-4880.37	-1457.15	668096.93	445598.92	32°13'26.0387"N	103°47'23.1157"W	0.00	0.00	0.00	
16330.00†	90.090	179.693	10263.66	4972.16	-4980.37	-1456.62	668097.47	445498.93	32°13'25.0492"N	103°47'23.1154"W	0.00	0.00	0.00	
16430.00†	90.090	179.693	10263.50	5072.16	-5080.37	-1456.08	668098.01	445398.94	32°13'24.0596"N	103°47'23.1150"W	0.00	0.00	0.00	
16530.00†	90.090	179.693	10263.35	5172.16	-5180.37	-1455.55	668098.54	445298.94	32°13'23.0701"N	103°47'23.1147"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Page 8 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
16630.00†	90.090	179.693	10263.19	5272.16	-5280.37	-1455.01	668099.08	445198.95	32°13'22.0806"N	103°47'23.1143"W	0.00	0.00	0.00	
16730.00†	90.090	179.693	10263.03	5372.16	-5380.36	-1454.47	668099.61	445098.96	32°13'21.0910"N	103°47'23.1140"W	0.00	0.00	0.00	
16830.00†	90.090	179.693	10262.88	5472.16	-5480.36	-1453.94	668100.15	444998.97	32°13'20.1015"N	103°47'23.1136"W	0.00	0.00	0.00	
16930.00†	90.090	179.693	10262.72	5572.16	-5580.36	-1453.40	668100.69	444898.97	32°13'19.1119"N	103°47'23.1133"W	0.00	0.00	0.00	
17030.00†	90.090	179.693	10262.56	5672.16	-5680.36	-1452.86	668101.22	444798.98	32°13'18.1224"N	103°47'23.1129"W	0.00	0.00	0.00	
17130.00†	90.090	179.693	10262.41	5772.16	-5780.36	-1452.33	668101.76	444698.99	32°13'17.1328"N	103°47'23.1125"W	0.00	0.00	0.00	
17230.00†	90.090	179.693	10262.25	5872.16	-5880.36	-1451.79	668102.30	444599.00	32°13'16.1433"N	103°47'23.1122"W	0.00	0.00	0.00	
17330.00†	90.090	179.693	10262.09	5972.16	-5980.36	-1451.25	668102.83	444499.00	32°13'15.1537"N	103°47'23.1118"W	0.00	0.00	0.00	
17430.00†	90.090	179.693	10261.94	6072.16	-6080.35	-1450.72	668103.37	444399.01	32°13'14.1642"N	103°47'23.1115"W	0.00	0.00	0.00	
17530.00†	90.090	179.693	10261.78	6172.16	-6180.35	-1450.18	668103.91	444299.02	32°13'13.1746"N	103°47'23.1111"W	0.00	0.00	0.00	
17630.00†	90.090	179.693	10261.62	6272.16	-6280.35	-1449.64	668104.44	444199.03	32°13'12.1851"N	103°47'23.1108"W	0.00	0.00	0.00	
17730.00†	90.090	179.693	10261.47	6372.16	-6380.35	-1449.11	668104.98	444099.03	32°13'11.1955"N	103°47'23.1104"W	0.00	0.00	0.00	
17830.00†	90.090	179.693	10261.31	6472.16	-6480.35	-1448.57	668105.52	443999.04	32°13'10.2060"N	103°47'23.1100"W	0.00	0.00	0.00	
17930.00†	90.090	179.693	10261.15	6572.16	-6580.35	-1448.04	668106.05	443899.05	32°13'9.2165"N	103°47'23.1097"W	0.00	0.00	0.00	
18030.00†	90.090	179.693	10261.00	6672.16	-6680.34	-1447.50	668106.59	443799.06	32°13'8.2269"N	103°47'23.1093"W	0.00	0.00	0.00	
18130.00†	90.090	179.693	10260.84	6772.16	-6780.34	-1446.96	668107.12	443699.06	32°13'7.2374"N	103°47'23.1090"W	0.00	0.00	0.00	
18230.00†	90.090	179.693	10260.68	6872.16	-6880.34	-1446.43	668107.66	443599.07	32°13'6.2478"N	103°47'23.1086"W	0.00	0.00	0.00	
18330.00†	90.090	179.693	10260.53	6972.16	-6980.34	-1445.89	668108.20	443499.08	32°13'5.2583"N	103°47'23.1083"W	0.00	0.00	0.00	
18430.00†	90.090	179.693	10260.37	7072.16	-7080.34	-1445.35	668108.73	443399.09	32°13'4.2687"N	103°47'23.1079"W	0.00	0.00	0.00	
18530.00†	90.090	179.693	10260.21	7172.16	-7180.34	-1444.82	668109.27	443299.09	32°13'3.2792"N	103°47'23.1076"W	0.00	0.00	0.00	
18630.00†	90.090	179.693	10260.06	7272.16	-7280.34	-1444.28	668109.81	443199.10	32°13'2.2896"N	103°47'23.1072"W	0.00	0.00	0.00	
18666.10	90.090	179.693	10260.00[3]	7308.26	-7316.44	-1444.09	668110.00	443163.00	32°13'1.9324"N	103°47'23.1071"W	0.00	0.00	0.00	TP3
18697.15	89.469	179.670	10260.12	7339.30	-7347.48	-1443.91	668110.17	443131.96	32°13'1.6252"N	103°47'23.1069"W	2.00	-2.00	-0.07	TL
18730.00†	89.469	179.670	10260.42	7372.15	-7380.33	-1443.73	668110.36	443099.11	32°13'1.3001"N	103°47'23.1066"W	0.00	0.00	0.00	
18830.00†	89.469	179.670	10261.35	7472.15	-7480.33	-1443.15	668110.94	442999.12	32°13'0.3106"N	103°47'23.1058"W	0.00	0.00	0.00	
18930.00†	89.469	179.670	10262.28	7572.14	-7580.32	-1442.57	668111.51	442899.13	32°12'59.3211"N	103°47'23.1050"W	0.00	0.00	0.00	
19030.00†	89.469	179.670	10263.20	7672.14	-7680.31	-1442.00	668112.09	442799.15	32°12'58.3316"N	103°47'23.1042"W	0.00	0.00	0.00	
19130.00†	89.469	179.670	10264.13	7772.14	-7780.31	-1441.42	668112.66	442699.16	32°12'57.3421"N	103°47'23.1034"W	0.00	0.00	0.00	
19230.00†	89.469	179.670	10265.05	7872.13	-7880.30	-1440.85	668113.24	442599.17	32°12'56.3526"N	103°47'23.1026"W	0.00	0.00	0.00	
19330.00†	89.469	179.670	10265.98	7972.13	-7980.30	-1440.27	668113.81	442499.18	32°12'55.3631"N	103°47'23.1018"W	0.00	0.00	0.00	

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

WELLPATH DATA (230 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
19430.00†	89.469	179.670	10266.91	8072.12	-8080.29	-1439.70	668114.39	442399.19	32°12'54.3736"N	103°47'23.1010"W	0.00	0.00	0.00	
19530.00†	89.469	179.670	10267.83	8172.12	-8180.28	-1439.12	668114.96	442299.21	32°12'53.3841"N	103°47'23.1002"W	0.00	0.00	0.00	
19630.00†	89.469	179.670	10268.76	8272.11	-8280.28	-1438.55	668115.54	442199.22	32°12'52.3945"N	103°47'23.0994"W	0.00	0.00	0.00	
19730.00†	89.469	179.670	10269.69	8372.11	-8380.27	-1437.97	668116.11	442099.23	32°12'51.4050"N	103°47'23.0986"W	0.00	0.00	0.00	
19830.00†	89.469	179.670	10270.61	8472.11	-8480.27	-1437.40	668116.69	441999.24	32°12'50.4155"N	103°47'23.0977"W	0.00	0.00	0.00	
19930.00†	89.469	179.670	10271.54	8572.10	-8580.26	-1436.82	668117.26	441899.25	32°12'49.4260"N	103°47'23.0969"W	0.00	0.00	0.00	
20030.00†	89.469	179.670	10272.46	8672.10	-8680.25	-1436.25	668117.84	441799.27	32°12'48.4365"N	103°47'23.0961"W	0.00	0.00	0.00	
20130.00†	89.469	179.670	10273.39	8772.09	-8780.25	-1435.67	668118.41	441699.28	32°12'47.4470"N	103°47'23.0953"W	0.00	0.00	0.00	
20230.00†	89.469	179.670	10274.32	8872.09	-8880.24	-1435.10	668118.99	441599.29	32°12'46.4575"N	103°47'23.0945"W	0.00	0.00	0.00	
20330.00†	89.469	179.670	10275.24	8972.08	-8980.24	-1434.52	668119.56	441499.30	32°12'45.4680"N	103°47'23.0937"W	0.00	0.00	0.00	
20430.00†	89.469	179.670	10276.17	9072.08	-9080.23	-1433.95	668120.14	441399.31	32°12'44.4785"N	103°47'23.0929"W	0.00	0.00	0.00	
20530.00†	89.469	179.670	10277.10	9172.08	-9180.22	-1433.37	668120.71	441299.33	32°12'43.4890"N	103°47'23.0921"W	0.00	0.00	0.00	
20630.00†	89.469	179.670	10278.02	9272.07	-9280.22	-1432.80	668121.29	441199.34	32°12'42.4995"N	103°47'23.0913"W	0.00	0.00	0.00	
20730.00†	89.469	179.670	10278.95	9372.07	-9380.21	-1432.22	668121.86	441099.35	32°12'41.5100"N	103°47'23.0905"W	0.00	0.00	0.00	
20830.00†	89.469	179.670	10279.87	9472.06	-9480.21	-1431.65	668122.44	440999.36	32°12'40.5205"N	103°47'23.0897"W	0.00	0.00	0.00	
20930.00†	89.469	179.670	10280.80	9572.06	-9580.20	-1431.07	668123.01	440899.37	32°12'39.5310"N	103°47'23.0889"W	0.00	0.00	0.00	
21030.00†	89.469	179.670	10281.73	9672.05	-9680.20	-1430.50	668123.59	440799.39	32°12'38.5415"N	103°47'23.0880"W	0.00	0.00	0.00	
21130.00†	89.469	179.670	10282.65	9772.05	-9780.19	-1429.92	668124.16	440699.40	32°12'37.5520"N	103°47'23.0872"W	0.00	0.00	0.00	
21230.00†	89.469	179.670	10283.58	9872.05	-9880.18	-1429.35	668124.74	440599.41	32°12'36.5625"N	103°47'23.0864"W	0.00	0.00	0.00	
21275.41	89.469	179.670	10284.00[4]	9917.46	-9925.60	-1429.09	668125.00	440554.00	32°12'36.1131"N	103°47'23.0861"W	0.00	0.00	0.00	PBHL (25' FSBL)

HOLE & CASING SECTIONS

- Ref Wellbore: SND 9 16 Fed Com 002 P351 No. 401H Ref Wellpath: SND 9 16 Fed Com 002 P351 No. 401H_prelim1

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
17.5in Casing Surface	30.00	850.00	820.00	30.00	850.00	0.00	0.00	0.00	0.00
12.25in Casing Intermediate	30.00	8338.53	8308.53	30.00	8150.00	0.00	0.00	1040.46	-1222.54
8.5in Casing Production	30.00	21275.00	21245.00	30.00	10284.00	0.00	0.00	-9925.18	-1429.09

Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 401H_prelim1

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Chevron U.S.A. Inc.**	Well	**SND 9 16 Fed Com 002 P351 No. 401H**
Field	**Purple Sage (Eddy Co., NM) NAD 27**	API/Legal	
Facility	**SND 9 16 Fed Com 002 P351**	Wellbore	**SND 9 16 Fed Com 002 P351 No. 401H**
Slot	**SND 9 16 Fed Com 002 P351 No. 401H**		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) SND 9 16 Fed Com 002 P351 No. 401H TP1	13448.66	10248.00	-2099.13	-1473.09	**668081.00**	**448380.00**	32°13'53.5609"N	103°47'23.1374"W	point
3) SND 9 16 Fed Com 002 P351 No. 401H TP3	18666.10	10260.00	-7316.44	-1444.09	**668110.00**	**443163.00**	32°13'1.9324"N	103°47'23.1071"W	point
2) SND 9 16 Fed Com 002 P351 No. 401H TP2	16056.91	10264.00	-4707.28	-1458.09	**668096.00**	**445772.00**	32°13'27.7516"N	103°47'23.1164"W	point
SND 9 16 Fed Com 002 P351 No. 401H FTP	N/A	10275.00	510.03	-1488.09	**668066.00**	**450989.00**	32°14'19.3801"N	103°47'23.1583"W	point
SND 9 16 Fed Com 002 P351 No. 401H LTP	N/A	10284.00	-9850.59	-1429.09	**668125.00**	**440629.00**	32°12'36.8553"N	103°47'23.0817"W	point
4) SND 9 16 Fed Com 002 P351 No. 401H PBHL	21275.41	10284.00	-9925.60	-1429.09	**668125.00**	**440554.00**	32°12'36.1131"N	103°47'23.0861"W	point

SURVEY PROGRAM - Ref Wellbore: SND 9 16 Fed Com 002 P351 No. 401H Ref Wellpath: SND 9 16 Fed Com 002 P351 No. 401H_prelim1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	9860.00	OWSG MWD rev2 + HRGM		SND 9 16 Fed Com 002 P351 No. 401H
9860.00	21275.41	BH AutoTrak Curve (2019) (Axial)		SND 9 16 Fed Com 002 P351 No. 401H

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Chevron USA Incorporated
LEASE NO.:	NMNM063757
LOCATION:	Section 9, T.24 S., R.31 E., NMP
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	SND 9 16 Fed Com 002 P351 401H
SURFACE HOLE FOOTAGE:	619'/N & 1815'/W
BOTTOM HOLE FOOTAGE	25'/S & 330'/W

WELL NAME & NO.:	SND 9 16 Fed Com 002 P351 402H
SURFACE HOLE FOOTAGE:	619'/N & 1840'/W
BOTTOM HOLE FOOTAGE	25'/S & 990'/W

WELL NAME & NO.:	SND 9 16 Fed Com 002 P351 403H
SURFACE HOLE FOOTAGE:	619'/N & 1865'/W
BOTTOM HOLE FOOTAGE	25'/S & 1650'/W

WELL NAME & NO.:	SND 9 16 Fed Com 002 P351 404H
SURFACE HOLE FOOTAGE:	619'/N & 1890'/W
BOTTOM HOLE FOOTAGE	25'/S & 2310'/W

COA

H2S	○ Yes	◉ No	
Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ 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.

 Approval Date: 09/22/2021

B. CASING

Primary Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **900** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **9-5/8** inch intermediate casing shall be set at approximately **4300** feet. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    Option 1 (Single Stage):

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

    Option 2:

    Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

    a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

    b. Second stage above DV tool:

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

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

- ❖ In **R111 Potash Areas** if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **7** inch production casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. The minimum required fill of cement behind the **5 X 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.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

1. 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. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 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 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

NMK07282021

Tenaris

Wedge 513®

Coupling	Pipe Body
Grade: **P110**	Grade: **P110**
Body: **-**	1st Band: **White**
1st Band: **-**	2nd Band: **-**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**

Outside Diameter	5.000 in.	**Wall Thickness**	0.362 in.	**Grade**	P110
Min. Wall Thickness	87.50 %	**Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.000 in.	**Wall Thickness**	0.362 in.	**Body Yield Strength**	580 x1000 lb
Nominal Weight	18 lb/ft	**Plain End Weight**	17.95 lb/ft	**Min. Internal Yield Pressure**	13,940 psi
Drift	4.151 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.276 in.			**Collapse Pressure**	13,470 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5 in.	**Tension Efficiency**	63.70 %	**Minimum**	6500 ft-lb
Connection ID	4.194 in.	**Joint Yield Strength**	369.46 x1000 lb	**Optimum**	7800 ft-lb
Make-up Loss	4.320 in.	**Internal Pressure Capacity**	13,940 psi	**Maximum**	11,400 ft-lb
Threads per inch	3.36	**Compression Efficiency**	73.70 %		
Connection OD Option	Regular	**Compression Strength**	427.46 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	64.30 °/100 ft	**Operating Torque**	19,300 ft-lb
		External Pressure Capacity	13,470 psi	**Yield Torque**	29,000 ft-lb

Notes

For the lastest performance data, always visit our website: www.tenaris.com

ONSHORE ORDER NO. 1
Chevron USA Inc
SND 9 16 FED COM 002 P351 401H
Eddy County, NM

CONFIDENTIAL -- TIGHT HOLE
DRILLING PLAN
PAGE: 1

Pad Summary: SND 9 16 FED COM 002 P351 401H

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 9 16 FED COM 002 P351 401H	10,284	Second Bone Spring
SND 9 16 FED COM 002 P351 402H	9,997	Second Bone Spring
SND 9 16 FED COM 002 P351 403H	10,314	Second Bone Spring
SND 9 16 FED COM 002 P351 404H	10,009	Second Bone Spring

1. **FORMATION TOPS**

The estimated tops of important geologic markers are as follows:
Elevation: 3583 ft

FORMATION	SUB-SEA TVD	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION
Rustler (RSLR)	3042	541	541	ANHYD	N/A	
Castile (CSTL)	858	2,725	2,725	SALT	N/A	
Lamar (LMAR)	-697	4,280	4,280	LIMESTONE	N/A	
Bell Canyon (BLCN)	-749	4,332	4,332	SAND STONE	N/A	
Cherry Canyon (CRCN)	-1641	5,224	5,224	SAND STONE	N/A	
Brushy Canyon (BCN)	-2881	6,464	6,464	SAND STONE	N/A	
Bone Spring (BSGL)	-4565	8,148	8,148	SHALE/LIMESTONE	N/A	
Upper Avalon (AVN)	-4632	8,215	8,215	SHALE	Oil	
Top Bone Spring 1 (FBS)	-5571	9,154	9,350	SHALE	Oil	
Top Bone Spring 2 (SBU)	-6232	9,815	10,010	SHALE	Oil	
Bone Spring 2 Target 2	-6399	9,982	10,200	SHALE	Oil	
Bone Spring 2 Target 1	-6669	10,252	**21,275**	SHALE	Oil	**yes**

WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
SHL	3583	-	-
KOP	-6083	9,666	9,860
FTP	-6691	10,274	10,841
LTP	-6701	10,284	21,200

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 Expected Base of Fresh Water		750
Water	Rustler	541
Water	Castile	2,725
Oil/Gas	Upper Avalon (AVN)	8,215
Oil/Gas	Top Bone Spring 1 (FBS)	9,154
Oil/Gas	Top Bone Spring 2 (SBU)	9,815
Oil/Gas	Bone Spring 2 Target 2	9,982

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 / ≥ 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.

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.

Approval Date: 09/22/2021

4. **CASING PROGRAM**

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition	
Surface	0'	900'	16" or 17.5"	13-3/8"	54.5 #	J55	BTC/LTC	New	Cement to surface
Intermediate	0'	4,300'	12-1/4"	9-5/8"	40#	L-80	BTC/LTC	New	Cement to surface
Production	0'	9,600'	8-3/4"	7"	29.0 #	P/TN-110	BLUE	New	Cement to surface
Production Liner	9,100'	21,275'	6-1/8"	5* / 4-1/2"	18#*/11.6#	P-110	W513*/W521	New	Cement to top of Liner, 500 ft within previous shoe

b. **Casing design subject to revision based on geologic conditions encountered.**

c. **A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.**

d. **Chevron will fill casing at a minimum of every 20 jts (~840') while running for intermediate and production casing in order to maintain collapse SF.**

SF Calculations based on the following "Worst Case" casing design:

Surface Casing:	*1,000'*	*ftTVD*	*max depths*
Intermediate Casing:	*4,600'*	*ftTVD*	*max depths*
Production Casing:	*10,800'*	*ftTVD*	*max depths*
Production Liner:	*23,000'*	*ftMD*	*max depths*

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.72	2.42	5.79	2.14
Intermediate	1.57	1.64	2.31	1.62
Production	1.15	4.30	2.22	1.18
Production Liner	1.10	1.09	1.38	1.16

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

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

5. **CEMENTING PROGRAM**

Slurry	Type	Cement Top	Bottom	*Sacks*	Yield	Density	%Excess	Water	*Volume*	Additives
Surface Casing										
Tail	Class C	0'	900'	565	1.34	14.8	100	6.40	757	Extender, Antifoam, Retarder
Intermediate Casing										
Tail	Class C	0'	3,300'	1543	1.34	14.8	100	6.40	2067	Extender, Antifoam, Retarder
Tail	Class C	3,300'	4,300'	467	1.34	14.8	100	6.40	626	Extender, Antifoam, Retarder
Production Casing										
Planned single stage cement job										
1st Lead	Class C	0'	8,600'	631	2.56	11.9	25	14.66	1616	Extender, Antifoam, Retarder, Viscosifier
1st Tail	Class C	8,600'	9,600'	141	1.33	14.8	25	6.38	188	Extender, Antifoam, Retarder, Viscosifier
Contingency: Top Job (aka braden head squeeze)										
1st Tail	Class C	0'	6,700'	947	1.33	14.8	25	6.38	1259	Extender, Antifoam, Retarder, Viscosifier
Production Liner										
Lead	Class C	9,100'	21,275'	779	1.84	13.2	25	9.86	1433	Extender, Antifoam, Retarder, Viscosifier

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one solid body or bow spring type centralizer on every joint in the lateral, then every other joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing and surface.

6. **MUD PROGRAM**

From	To	Type	Weight	Viscosity	Filtrate	Notes
0'	900'	Freshwater/Spud mud	8.4 - 9.0	26-36	15-25	Target 8.5 ppg
900'	4,300'	Brine	9.5 - 10.6	26-36	15-25	Target 10.1 ppg
4,300'	9,600'	Cut Brine/WBM/OBM	8.9 - 9.6	27 - 55	15-25	Target 9.4 ppg
9,600'	21,275'	OBM	9.0 - 11.0	50-70	5-10	Due to wellbore stability, the mud program may exceed the MW weight window needed to maintain overburden of pore pressure.

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:

a. Drill stem tests are not planned.
b. The logging program will be as follows:

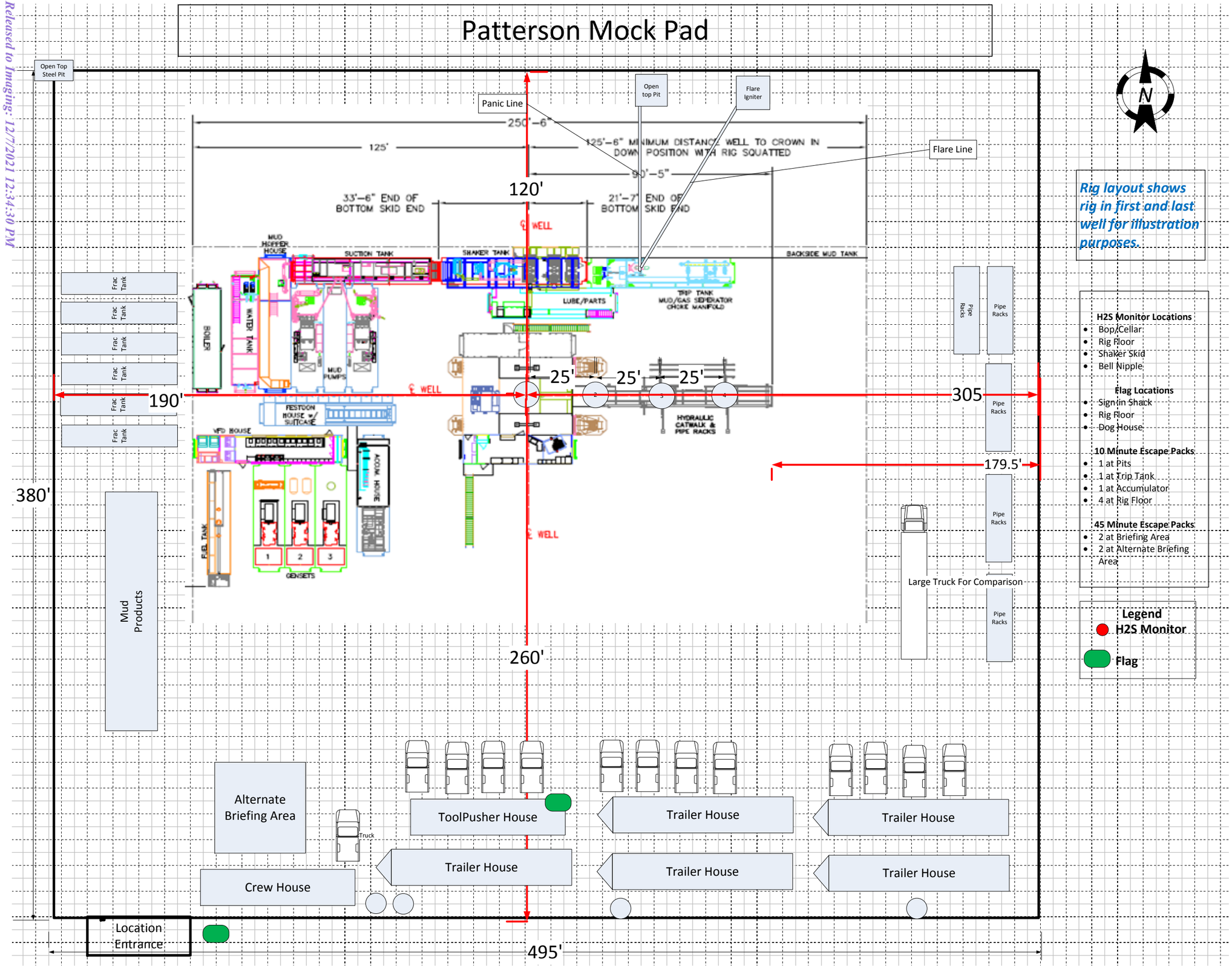
TYPE	Logs	Interval	Timing
Mudlogs	2 man mudlog	Surface casing shoe through prod hole TD	While drilling or circulating
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling

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

8. **ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

a. No abnormal pressure or temperatures are expected. Estimated BHP is: **4,672** psi
b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

Patterson Mock Pad



Rig layout shows rig in first and last well for illustration purposes.

H2S Monitor Locations
- Bop/Cellar
- Rig Floor
- Shaker Skid
- Bell Nipple

Flag Locations
- Sign in Shack
- Rig Floor
- Dog House

10 Minute Escape Packs
- 1 at Pits
- 1 at Trip Tank
- 1 at Accumulator
- 4 at Rig Floor

45 Minute Escape Packs
- 2 at Briefing Area
- 2 at Alternate Briefing Area

Legend
- H2S Monitor
- Flag

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

Drilling Plan Data Report
09/30/2021

APD ID: 10400053933
Submission Date: 02/11/2020
Operator Name: CHEVRON USA INCORPORATED
Well Name: SND 9 16 FED COM 002 P351
Well Number: 401H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
651966	RUSTLER	3442	541	541	DOLOMITE	NONE	N
651983	CASTILE	717	2725	2725	ANHYDRITE	NONE	N
655898	LAMAR	-838	4280	4280	LIMESTONE	NONE	N
651967	BELL CANYON	-890	4332	4332	SANDSTONE	NONE	N
651969	CHERRY CANYON	-1782	5224	5224	SANDSTONE	NONE	N
651970	BRUSHY CANYON	-3022	6464	6464	SANDSTONE	NONE	N
651971	BONE SPRING LIME	-4706	8148	8148	LIMESTONE	NONE	N
651981	UPPER AVALON SHALE	-4773	8215	8215	LIMESTONE, SHALE	NONE	N
651973	BONE SPRING 1ST	-5712	9154	9350	SANDSTONE	NONE	N
651974	BONE SPRING 2ND	-6373	9815	10010	SANDSTONE	NONE	N
651984	BONE SPRING	-6842	10284	21275	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M
Rating Depth: 10284

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

Variance request: Chevron 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

BLOWOUT PREVENTER SCHEMATIC

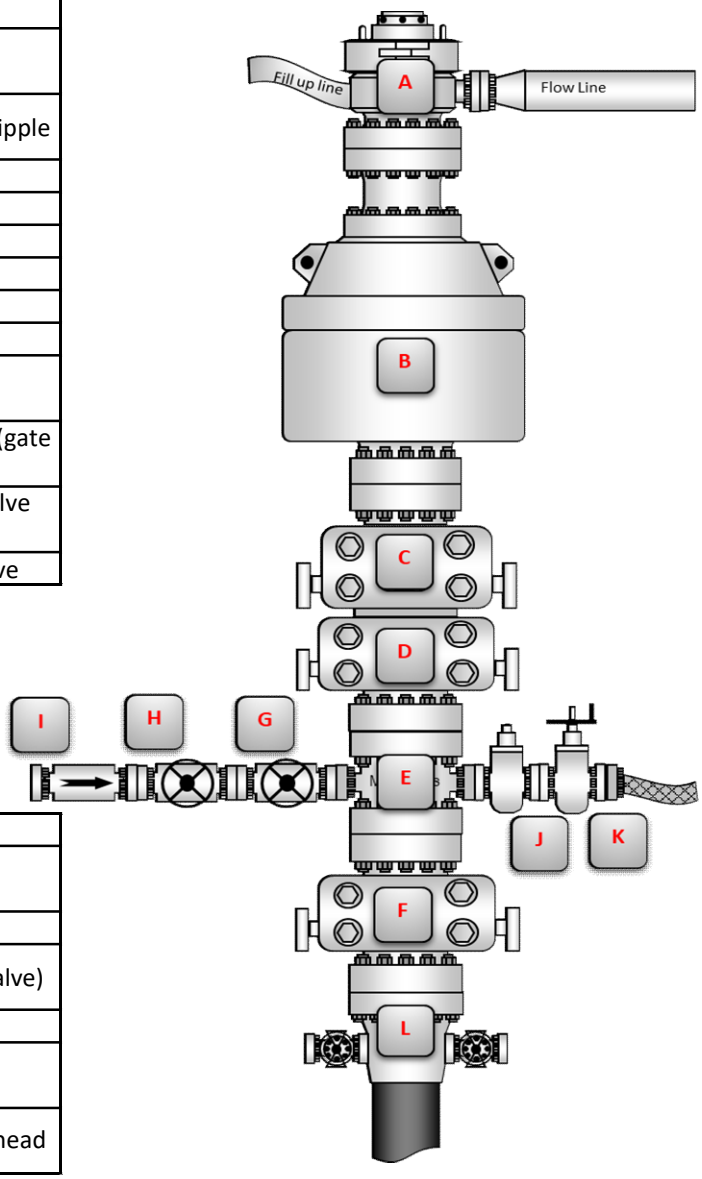
Operation:	Intermediate & Production Drilling Operations
Minimum System operation pressure	5,000 psi

BOP Stack

Part	Size	Pressure Rating	Description
A	13-5/8"	N/A	Rotating Head/Bell nipple
B	13-5/8"	5,000	Annular
C	13-5/8"	10,000	Blind Ram
D	13-5/8"	10,000	Pipe Ram
E	13-5/8"	10,000	Mud Cross
F	13-5/8"	10,000	Pipe Ram

Kill Line

Part	Size	Pressure Rating	Description
G	2"	10,000	Inside Kill Line Valve (gate valve)
H	2"	10,000	Outside Kill Line Valve (gate valve)
I	2"	10,000	Kill Line Check valve



Choke line

Part	Size	Pressure Rating	Description
J	3"	10,000	HCR (gate valve)
K	3"	10,000	Manual HCR (gate valve)

Wellhead

Part	Size	Pressure Rating	Description
L	13-5/8"	5,000	FMC Multibowl wellhead

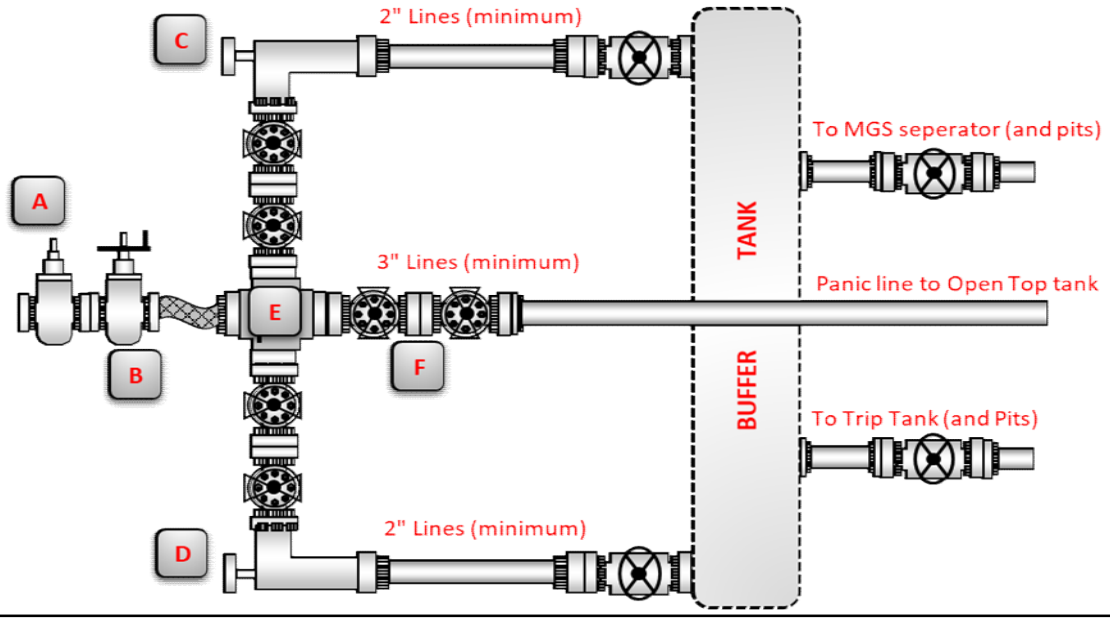
BOP Installation Checklist: *The following items must be verified and checked off prior to pressure testing BOP equipment*
The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.
All valves on the kill line and choke line will be full opening and will allow straight flow through.
Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be install on all manual valves on the choke and kill line.
A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will remain open unless accumulator is inoperative.
Upper kelly cock valve with handle will be available on rig floor along with saved valve and subs to fit all drill string connections in use.

CHOKE MANIFOLD SCHEMATIC

Operation:	Intermediate & Production
Minimum System operation pressure	5,000 psi

Choke Manifold

Part	Size	Pressure Rating	Description
A	3"	10,000	HCR (remotely operated)
B	3"	10,000	HCR (manually operated)
C	2"	10,000	Remotely operated choke
D	2"	10,000	Adjustable choke
E	3"	10,000	Crown valve with pressure gage
F	3"	10,000	Panic line valves



Choke Manifold 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.
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.
- ☐ 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 3rd 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

COMMENTS

Action 60257

COMMENTS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 60257
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 11/12/2021	11/12/2021

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

CONDITIONS

Action 60257

CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	4323
	Action Number: 60257
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Notify OCD 24 hours prior to casing & cement	12/7/2021
dmcclure	Notify OCD 24 hours prior to spudding	12/7/2021
dmcclure	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/7/2021
dmcclure	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/7/2021
dmcclure	Cement is required to circulate on both surface and intermediate1 strings of casing	12/7/2021
dmcclure	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/7/2021