

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-015-49148
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 12/7/2021

(Continued on page 2)

*(Instructions on page 2)

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 30-015-49148		² Pool Code 13367	COTTON DRAW; BONE SPRING
⁴ Property Code 331700	⁵ Property Name SND 9 16 FED COM 002 P351		⁶ Well Number 402H
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.		⁹ Elevation 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	1840'	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	990'	WEST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
640	Definin Well		

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.

<p>¹⁶</p> <p>SND 9 16 FED COM 002 P351 NO. 402H WELL</p> <p>X= 669,579' Y= 450,479' LAT. 32.237295° N LONG. 103.784881° W NAD 27</p> <p>X= 710,763' Y= 450,538' LAT. 32.237418° N LONG. 103.785366° W NAD83/2011</p> <p>ELEVATION +3442' NAVD 88</p>	<p>Proposed First Take Point 100' FNL, 990' FWL</p>	<p>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.</p> <p><i>Cindy Herrera-Murillo</i> 12/6/2021 Date</p> <p>Cindy Herrera-Murillo Printed Name</p> <p>eeof@chevron.com Signature</p> <p>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.</p> <p>07/05/2019 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>ROBERT L. LASTRAPES NEW MEXICO 23006 11/07/2019 PROFESSIONAL SURVEYOR</p> <p>Certificate Number</p>
<p>PROPOSED FIRST TAKE POINT</p> <p>X= 668,726' Y= 450,993' LAT. 32.238718° N LONG. 103.787632° W NAD 27</p> <p>X= 709,909' Y= 451,052' LAT. 32.238842° N LONG. 103.788117° W NAD83/2011</p>	<p>PROPOSED LAST TAKE POINT</p> <p>X= 668,785' Y= 440,633' LAT. 32.210240° N LONG. 103.787612° W NAD 27</p> <p>X= 709,969' Y= 440,692' LAT. 32.210363° N LONG. 103.788095° W NAD83/2011</p>	
<p>PROPOSED BOTTOM HOLE LOCATION</p> <p>X= 668,785' Y= 440,558' LAT. 32.210033° N LONG. 103.787611° W NAD 27</p> <p>X= 709,969' Y= 440,617' LAT. 32.210157° N LONG. 103.788095° W NAD83/2011</p>	<p>Proposed Last Take Point 100' FSL, 990' FWL</p>	

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

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	<i>Pending</i>	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	<i>Pending</i>	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	<i>Pending</i>	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	<i>Pending</i>	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	<i>Pending</i>	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 402H	<i>Pending</i>	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 403H	<i>Pending</i>	June 2023	N/A	N/A	N/A	N/A
SND 9 16 FED COM 002 P351 404H	<i>Pending</i>	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: <i>Cindy Herrera-Murillo</i>
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:



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

Drilling Plan Data Report

10/22/2021

APD ID: 10400054123

Submission Date: 02/11/2020

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351

Well Number: 402H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
657277	RUSTLER	3442	541	541	DOLOMITE	NONE	N
657294	CASTILE	717	2725	2725	ANHYDRITE	NONE	N
657296	LAMAR	-838	4280	4280	LIMESTONE	NONE	N
657278	BELL CANYON	-890	4332	4332	SANDSTONE	NONE	N
657280	CHERRY CANYON	-1782	5224	5224	SANDSTONE	NONE	N
657281	BRUSHY CANYON	-3022	6464	6464	SANDSTONE	NONE	N
657282	BONE SPRING LIME	-4706	8148	8148	LIMESTONE	NONE	N
657292	UPPER AVALON SHALE	-4773	8215	8215	LIMESTONE, SHALE	NONE	N
657284	BONE SPRING 1ST	-5712	9154	9330	SANDSTONE	NONE	N
657285	BONE SPRING 2ND	-6373	9815	10030	SANDSTONE	NONE	N
657295	BONE SPRING	-6555	9997	20962	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 9997

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 nipped 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:** 402H

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	20962	9100	9997	-5658	-6555	11862	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:** 402H**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_20201023151135.pdf



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	GilbjosI
Scale	0.999942	Report Generated	21-Jan-20 at 11:29:47 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	25.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"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. 402H)	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. 402H_prelim1

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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	335.000	0.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
30.00	0.000	335.000	30.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	Tie On
130.00†	0.000	335.000	130.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
230.00†	0.000	335.000	230.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
330.00†	0.000	335.000	330.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
430.00†	0.000	335.000	430.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
530.00†	0.000	335.000	530.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
630.00†	0.000	335.000	630.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
730.00†	0.000	335.000	730.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
830.00†	0.000	335.000	830.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
930.00†	0.000	335.000	930.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	
1000.00	0.000	335.000	1000.00	0.00	0.00	0.00	669579.00	450479.00	32°14'14.2571"N	103°47'5.5730"W	0.00	0.00	0.00	End of Tangent
1030.00†	0.450	335.000	1030.00	-0.11	0.11	-0.05	669578.95	450479.11	32°14'14.2581"N	103°47'5.5736"W	1.50	1.50	0.00	
1130.00†	1.950	335.000	1129.97	-2.01	2.00	-0.93	669578.07	450481.00	32°14'14.2770"N	103°47'5.5838"W	1.50	1.50	0.00	
1230.00†	3.450	335.000	1229.86	-6.29	6.27	-2.93	669576.07	450485.27	32°14'14.3193"N	103°47'5.6067"W	1.50	1.50	0.00	
1330.00†	4.950	335.000	1329.59	-12.94	12.91	-6.02	669572.98	450491.91	32°14'14.3851"N	103°47'5.6424"W	1.50	1.50	0.00	
1430.00†	6.450	335.000	1429.09	-21.97	21.91	-10.22	669568.78	450500.91	32°14'14.4744"N	103°47'5.6907"W	1.50	1.50	0.00	
1530.00†	7.950	335.000	1528.30	-33.36	33.27	-15.51	669563.49	450512.27	32°14'14.5871"N	103°47'5.7517"W	1.50	1.50	0.00	
1630.00†	9.450	335.000	1627.15	-47.10	46.98	-21.91	669557.09	450525.98	32°14'14.7231"N	103°47'5.8253"W	1.50	1.50	0.00	
1730.00†	10.950	335.000	1725.56	-63.19	63.03	-29.39	669549.61	450542.02	32°14'14.8823"N	103°47'5.9115"W	1.50	1.50	0.00	
1800.00	12.000	335.000	1794.16	-75.85	75.65	-35.28	669543.73	450554.64	32°14'15.0074"N	103°47'5.9792"W	1.50	1.50	0.00	12 Degrees
1830.00†	12.000	335.000	1823.51	-81.51	81.30	-37.91	669541.09	450560.30	32°14'15.0635"N	103°47'6.0096"W	0.00	0.00	0.00	
1930.00†	12.000	335.000	1921.32	-100.40	100.15	-46.70	669532.30	450579.14	32°14'15.2504"N	103°47'6.1108"W	0.00	0.00	0.00	
2030.00†	12.000	335.000	2019.14	-119.30	118.99	-55.49	669523.52	450597.98	32°14'15.4373"N	103°47'6.2119"W	0.00	0.00	0.00	
2130.00†	12.000	335.000	2116.95	-138.19	137.83	-64.27	669514.73	450616.82	32°14'15.6242"N	103°47'6.3131"W	0.00	0.00	0.00	
2230.00†	12.000	335.000	2214.77	-157.08	156.68	-73.06	669505.95	450635.67	32°14'15.8111"N	103°47'6.4143"W	0.00	0.00	0.00	
2330.00†	12.000	335.000	2312.58	-175.97	175.52	-81.85	669497.16	450654.51	32°14'15.9980"N	103°47'6.5155"W	0.00	0.00	0.00	
2430.00†	12.000	335.000	2410.40	-194.86	194.36	-90.63	669488.37	450673.35	32°14'16.1849"N	103°47'6.6166"W	0.00	0.00	0.00	
2530.00†	12.000	335.000	2508.21	-213.76	213.20	-99.42	669479.59	450692.19	32°14'16.3718"N	103°47'6.7178"W	0.00	0.00	0.00	
2630.00†	12.000	335.000	2606.03	-232.65	232.05	-108.21	669470.80	450711.03	32°14'16.5587"N	103°47'6.8190"W	0.00	0.00	0.00	



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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
2730.00†	12.000	335.000	2703.84	-251.54	250.89	-116.99	669462.01	450729.88	32°14'16.7456"N	103°47'6.9202"W	0.00	0.00	0.00	
2830.00†	12.000	335.000	2801.66	-270.43	269.73	-125.78	669453.23	450748.72	32°14'16.9325"N	103°47'7.0213"W	0.00	0.00	0.00	
2930.00†	12.000	335.000	2899.47	-289.32	288.58	-134.57	669444.44	450767.56	32°14'17.1194"N	103°47'7.1225"W	0.00	0.00	0.00	
3030.00†	12.000	335.000	2997.29	-308.22	307.42	-143.35	669435.66	450786.40	32°14'17.3063"N	103°47'7.2237"W	0.00	0.00	0.00	
3130.00†	12.000	335.000	3095.10	-327.11	326.26	-152.14	669426.87	450805.24	32°14'17.4933"N	103°47'7.3249"W	0.00	0.00	0.00	
3230.00†	12.000	335.000	3192.92	-346.00	345.11	-160.93	669418.08	450824.09	32°14'17.6802"N	103°47'7.4260"W	0.00	0.00	0.00	
3330.00†	12.000	335.000	3290.73	-364.89	363.95	-169.71	669409.30	450842.93	32°14'17.8671"N	103°47'7.5272"W	0.00	0.00	0.00	
3430.00†	12.000	335.000	3388.54	-383.78	382.79	-178.50	669400.51	450861.77	32°14'18.0540"N	103°47'7.6284"W	0.00	0.00	0.00	
3530.00†	12.000	335.000	3486.36	-402.68	401.64	-187.29	669391.72	450880.61	32°14'18.2409"N	103°47'7.7296"W	0.00	0.00	0.00	
3630.00†	12.000	335.000	3584.17	-421.57	420.48	-196.07	669382.94	450899.45	32°14'18.4278"N	103°47'7.8308"W	0.00	0.00	0.00	
3730.00†	12.000	335.000	3681.99	-440.46	439.32	-204.86	669374.15	450918.30	32°14'18.6147"N	103°47'7.9319"W	0.00	0.00	0.00	
3830.00†	12.000	335.000	3779.80	-459.35	458.17	-213.65	669365.37	450937.14	32°14'18.8016"N	103°47'8.0331"W	0.00	0.00	0.00	
3930.00†	12.000	335.000	3877.62	-478.24	477.01	-222.43	669356.58	450955.98	32°14'18.9885"N	103°47'8.1343"W	0.00	0.00	0.00	
4030.00†	12.000	335.000	3975.43	-497.14	495.85	-231.22	669347.79	450974.82	32°14'19.1754"N	103°47'8.2355"W	0.00	0.00	0.00	
4130.00†	12.000	335.000	4073.25	-516.03	514.70	-240.01	669339.01	450993.67	32°14'19.3623"N	103°47'8.3366"W	0.00	0.00	0.00	
4230.00†	12.000	335.000	4171.06	-534.92	533.54	-248.79	669330.22	451012.51	32°14'19.5492"N	103°47'8.4378"W	0.00	0.00	0.00	
4330.00†	12.000	335.000	4268.88	-553.81	552.38	-257.58	669321.44	451031.35	32°14'19.7361"N	103°47'8.5390"W	0.00	0.00	0.00	
4430.00†	12.000	335.000	4366.69	-572.70	571.23	-266.37	669312.65	451050.19	32°14'19.9230"N	103°47'8.6402"W	0.00	0.00	0.00	
4530.00†	12.000	335.000	4464.51	-591.60	590.07	-275.15	669303.86	451069.03	32°14'20.1099"N	103°47'8.7414"W	0.00	0.00	0.00	
4630.00†	12.000	335.000	4562.32	-610.49	608.91	-283.94	669295.08	451087.88	32°14'20.2968"N	103°47'8.8425"W	0.00	0.00	0.00	
4730.00†	12.000	335.000	4660.14	-629.38	627.76	-292.73	669286.29	451106.72	32°14'20.4837"N	103°47'8.9437"W	0.00	0.00	0.00	
4830.00†	12.000	335.000	4757.95	-648.27	646.60	-301.51	669277.50	451125.56	32°14'20.6706"N	103°47'9.0449"W	0.00	0.00	0.00	
4930.00†	12.000	335.000	4855.77	-667.16	665.44	-310.30	669268.72	451144.40	32°14'20.8575"N	103°47'9.1461"W	0.00	0.00	0.00	
5030.00†	12.000	335.000	4953.58	-686.06	684.28	-319.09	669259.93	451163.24	32°14'21.0444"N	103°47'9.2472"W	0.00	0.00	0.00	
5130.00†	12.000	335.000	5051.40	-704.95	703.13	-327.87	669251.15	451182.09	32°14'21.2313"N	103°47'9.3484"W	0.00	0.00	0.00	
5230.00†	12.000	335.000	5149.21	-723.84	721.97	-336.66	669242.36	451200.93	32°14'21.4182"N	103°47'9.4496"W	0.00	0.00	0.00	
5330.00†	12.000	335.000	5247.03	-742.73	740.81	-345.45	669233.57	451219.77	32°14'21.6051"N	103°47'9.5508"W	0.00	0.00	0.00	
5430.00†	12.000	335.000	5344.84	-761.62	759.66	-354.23	669224.79	451238.61	32°14'21.7920"N	103°47'9.6520"W	0.00	0.00	0.00	
5435.00	12.000	335.000	5349.73	-762.57	760.60	-354.67	669224.35	451239.55	32°14'21.8014"N	103°47'9.6570"W	0.00	0.00	0.00	Hold
5530.00†	11.287	335.000	5442.78	-779.99	777.98	-362.78	669216.25	451256.93	32°14'21.9737"N	103°47'9.7503"W	0.75	-0.75	0.00	



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
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WELLPATH DATA (227 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
5630.00†	10.537	335.000	5540.97	-797.19	795.13	-370.78	669208.25	451274.09	32°14'22.1439"N	103°47'9.8425"W	0.75	-0.75	0.00	
5730.00†	9.788	335.000	5639.40	-813.22	811.12	-378.23	669200.79	451290.08	32°14'22.3025"N	103°47'9.9283"W	0.75	-0.75	0.00	
5830.00†	9.037	335.000	5738.05	-828.08	825.95	-385.15	669193.88	451304.90	32°14'22.4495"N	103°47'10.0079"W	0.75	-0.75	0.00	
5930.00†	8.288	335.000	5836.91	-841.77	839.60	-391.51	669187.51	451318.55	32°14'22.5849"N	103°47'10.0812"W	0.75	-0.75	0.00	
6030.00†	7.537	335.000	5935.96	-854.28	852.07	-397.33	669181.70	451331.02	32°14'22.7087"N	103°47'10.1482"W	0.75	-0.75	0.00	
6130.00†	6.787	335.000	6035.17	-865.61	863.37	-402.60	669176.43	451342.32	32°14'22.8207"N	103°47'10.2089"W	0.75	-0.75	0.00	
6230.00†	6.037	335.000	6134.55	-875.76	873.50	-407.32	669171.71	451352.44	32°14'22.9211"N	103°47'10.2632"W	0.75	-0.75	0.00	
6235.00	6.000	335.000	6139.52	-876.23	873.97	-407.54	669171.49	451352.92	32°14'22.9259"N	103°47'10.2658"W	0.75	-0.75	0.00	6 Degrees
6330.00†	6.000	335.000	6234.00	-885.26	882.97	-411.74	669167.29	451361.92	32°14'23.0151"N	103°47'10.3141"W	0.00	0.00	0.00	
6430.00†	6.000	335.000	6333.45	-894.75	892.44	-416.15	669162.87	451371.39	32°14'23.1091"N	103°47'10.3650"W	0.00	0.00	0.00	
6530.00†	6.000	335.000	6432.90	-904.25	901.92	-420.57	669158.45	451380.86	32°14'23.2031"N	103°47'10.4158"W	0.00	0.00	0.00	
6630.00†	6.000	335.000	6532.36	-913.75	911.39	-424.99	669154.04	451390.34	32°14'23.2970"N	103°47'10.4667"W	0.00	0.00	0.00	
6730.00†	6.000	335.000	6631.81	-923.25	920.86	-429.41	669149.62	451399.81	32°14'23.3910"N	103°47'10.5176"W	0.00	0.00	0.00	
6830.00†	6.000	335.000	6731.26	-932.75	930.34	-433.82	669145.20	451409.28	32°14'23.4850"N	103°47'10.5684"W	0.00	0.00	0.00	
6930.00†	6.000	335.000	6830.71	-942.24	939.81	-438.24	669140.79	451418.75	32°14'23.5789"N	103°47'10.6193"W	0.00	0.00	0.00	
7030.00†	6.000	335.000	6930.17	-951.74	949.28	-442.66	669136.37	451428.23	32°14'23.6729"N	103°47'10.6702"W	0.00	0.00	0.00	
7130.00†	6.000	335.000	7029.62	-961.24	958.76	-447.08	669131.95	451437.70	32°14'23.7669"N	103°47'10.7210"W	0.00	0.00	0.00	
7230.00†	6.000	335.000	7129.07	-970.74	968.23	-451.49	669127.53	451447.17	32°14'23.8608"N	103°47'10.7719"W	0.00	0.00	0.00	
7330.00†	6.000	335.000	7228.52	-980.24	977.70	-455.91	669123.12	451456.65	32°14'23.9548"N	103°47'10.8228"W	0.00	0.00	0.00	
7430.00†	6.000	335.000	7327.97	-989.73	987.18	-460.33	669118.70	451466.12	32°14'24.0488"N	103°47'10.8736"W	0.00	0.00	0.00	
7530.00†	6.000	335.000	7427.43	-999.23	996.65	-464.75	669114.28	451475.59	32°14'24.1427"N	103°47'10.9245"W	0.00	0.00	0.00	
7630.00†	6.000	335.000	7526.88	-1008.73	1006.13	-469.16	669109.86	451485.07	32°14'24.2367"N	103°47'10.9754"W	0.00	0.00	0.00	
7730.00†	6.000	335.000	7626.33	-1018.23	1015.60	-473.58	669105.45	451494.54	32°14'24.3306"N	103°47'11.0263"W	0.00	0.00	0.00	
7830.00†	6.000	335.000	7725.78	-1027.73	1025.07	-478.00	669101.03	451504.01	32°14'24.4246"N	103°47'11.0771"W	0.00	0.00	0.00	
7930.00†	6.000	335.000	7825.23	-1037.22	1034.55	-482.42	669096.61	451513.48	32°14'24.5186"N	103°47'11.1280"W	0.00	0.00	0.00	
8030.00†	6.000	335.000	7924.69	-1046.72	1044.02	-486.83	669092.19	451522.96	32°14'24.6125"N	103°47'11.1789"W	0.00	0.00	0.00	
8130.00†	6.000	335.000	8024.14	-1056.22	1053.49	-491.25	669087.78	451532.43	32°14'24.7065"N	103°47'11.2297"W	0.00	0.00	0.00	
8230.00†	6.000	335.000	8123.59	-1065.72	1062.97	-495.67	669083.36	451541.90	32°14'24.8005"N	103°47'11.2806"W	0.00	0.00	0.00	
8330.00†	6.000	335.000	8223.04	-1075.22	1072.44	-500.09	669078.94	451551.38	32°14'24.8944"N	103°47'11.3315"W	0.00	0.00	0.00	
8430.00†	6.000	335.000	8322.50	-1084.71	1081.91	-504.50	669074.53	451560.85	32°14'24.9884"N	103°47'11.3823"W	0.00	0.00	0.00	



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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
8530.00†	6.000	335.000	8421.95	-1094.21	1091.39	-508.92	669070.11	451570.32	32°14'25.0824"N	103°47'11.4332"W	0.00	0.00	0.00	
8585.00	6.000	335.000	8476.65	-1099.44	1096.60	-511.35	669067.68	451575.53	32°14'25.1341"N	103°47'11.4612"W	0.00	0.00	0.00	Hold Through Brushy Canyon
8630.00†	5.662	335.000	8521.41	-1103.59	1100.74	-513.28	669065.75	451579.67	32°14'25.1752"N	103°47'11.4834"W	0.75	-0.75	0.00	
8730.00†	4.912	335.000	8620.99	-1111.96	1109.09	-517.18	669061.85	451588.03	32°14'25.2580"N	103°47'11.5283"W	0.75	-0.75	0.00	
8830.00†	4.162	335.000	8720.67	-1119.15	1116.26	-520.52	669058.51	451595.20	32°14'25.3291"N	103°47'11.5668"W	0.75	-0.75	0.00	
8930.00†	3.412	335.000	8820.45	-1125.15	1122.25	-523.31	669055.72	451601.18	32°14'25.3885"N	103°47'11.5989"W	0.75	-0.75	0.00	
9030.00†	2.663	335.000	8920.31	-1129.97	1127.05	-525.55	669053.48	451605.98	32°14'25.4361"N	103°47'11.6247"W	0.75	-0.75	0.00	
9130.00†	1.912	335.000	9020.23	-1133.60	1130.67	-527.24	669051.79	451609.60	32°14'25.4720"N	103°47'11.6441"W	0.75	-0.75	0.00	
9230.00†	1.162	335.000	9120.20	-1136.03	1133.10	-528.37	669050.66	451612.03	32°14'25.4961"N	103°47'11.6572"W	0.75	-0.75	0.00	
9330.00†	0.413	335.000	9220.19	-1137.28	1134.35	-528.95	669050.08	451613.28	32°14'25.5085"N	103°47'11.6639"W	0.75	-0.75	0.00	
9385.00	0.000	236.000	9275.19	-1137.46	1134.53	-529.04	669049.99	451613.46	32°14'25.5103"N	103°47'11.6648"W	0.75	-0.75	0.00	End of Drop
9426.11	0.000	236.000	9316.30	-1137.46	1134.53	-529.04	669049.99	451613.46	32°14'25.5103"N	103°47'11.6648"W	0.00	0.00	0.00	KOP
9430.00†	0.389	236.000	9320.19	-1137.46	1134.52	-529.05	669049.98	451613.45	32°14'25.5102"N	103°47'11.6650"W	10.00	10.00	0.00	
9530.00†	10.389	236.000	9419.62	-1132.25	1129.27	-536.82	669042.21	451608.21	32°14'25.4587"N	103°47'11.7558"W	10.00	10.00	0.00	
9630.00†	20.389	236.000	9515.91	-1117.56	1114.45	-558.80	669020.24	451593.39	32°14'25.3131"N	103°47'12.0125"W	10.00	10.00	0.00	
9730.00†	30.389	236.000	9606.14	-1093.81	1090.51	-594.30	668984.74	451569.44	32°14'25.0780"N	103°47'12.4272"W	10.00	10.00	0.00	
9826.11	40.000	236.000	9684.59	-1063.13	1059.57	-640.17	668938.87	451538.50	32°14'24.7741"N	103°47'12.9631"W	10.00	10.00	0.00	40 Degrees
9830.00†	40.181	235.466	9687.56	-1061.73	1058.16	-642.24	668936.80	451537.10	32°14'24.7603"N	103°47'12.9873"W	10.00	4.66	-13.74	
9930.00†	45.582	223.065	9760.94	-1017.52	1013.67	-693.33	668885.71	451492.61	32°14'24.3226"N	103°47'13.5847"W	10.00	5.40	-12.40	
10030.00†	52.085	212.950	9826.83	-958.44	954.32	-739.28	668839.76	451433.27	32°14'23.7377"N	103°47'14.1233"W	10.00	6.50	-10.12	
10130.00†	59.308	204.562	9883.22	-886.27	881.93	-778.71	668800.33	451360.88	32°14'23.0234"N	103°47'14.5866"W	10.00	7.22	-8.39	
10230.00†	66.992	197.379	9928.40	-803.21	798.70	-810.41	668768.64	451277.65	32°14'22.2013"N	103°47'14.9606"W	10.00	7.68	-7.18	
10330.00†	74.965	190.987	9960.99	-711.78	707.14	-833.42	668745.63	451186.10	32°14'21.2964"N	103°47'15.2339"W	10.00	7.97	-6.39	
10430.00†	83.104	185.063	9980.02	-614.76	610.04	-847.04	668732.01	451089.01	32°14'20.3363"N	103°47'15.3981"W	10.00	8.14	-5.92	
10523.37	90.768	179.718	9985.01	-521.74	516.99	-850.91	668728.14	450995.96	32°14'19.4158"N	103°47'15.4487"W	10.00	8.21	-5.72	EOC/FTP
10530.00†	90.768	179.718	9984.92	-515.11	510.36	-850.87	668728.18	450989.33	32°14'19.3502"N	103°47'15.4487"W	0.00	0.00	0.00	
10630.00†	90.768	179.718	9983.58	-415.11	410.37	-850.38	668728.67	450889.35	32°14'18.3607"N	103°47'15.4489"W	0.00	0.00	0.00	
10730.00†	90.768	179.718	9982.24	-315.12	310.38	-849.89	668729.16	450789.36	32°14'17.3712"N	103°47'15.4491"W	0.00	0.00	0.00	
10830.00†	90.768	179.718	9980.90	-215.13	210.39	-849.40	668729.65	450689.38	32°14'16.3818"N	103°47'15.4493"W	0.00	0.00	0.00	
10930.00†	90.768	179.718	9979.56	-115.14	110.40	-848.91	668730.14	450589.40	32°14'15.3923"N	103°47'15.4494"W	0.00	0.00	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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†	90.768	179.718	9978.22	-15.15	10.41	-848.41	668730.64	450489.41	32°14'14.4029"N	103°47'15.4496"W	0.00	0.00	0.00	
11130.00†	90.768	179.718	9976.88	84.84	-89.58	-847.92	668731.13	450389.43	32°14'13.4134"N	103°47'15.4498"W	0.00	0.00	0.00	
11230.00†	90.768	179.718	9975.54	184.83	-189.57	-847.43	668731.62	450289.44	32°14'12.4240"N	103°47'15.4500"W	0.00	0.00	0.00	
11330.00†	90.768	179.718	9974.20	284.82	-289.56	-846.94	668732.11	450189.46	32°14'11.4345"N	103°47'15.4502"W	0.00	0.00	0.00	
11430.00†	90.768	179.718	9972.86	384.81	-389.55	-846.45	668732.61	450089.48	32°14'10.4451"N	103°47'15.4504"W	0.00	0.00	0.00	
11530.00†	90.768	179.718	9971.52	484.80	-489.54	-845.95	668733.10	449989.49	32°14'9.4556"N	103°47'15.4506"W	0.00	0.00	0.00	
11630.00†	90.768	179.718	9970.18	584.80	-589.53	-845.46	668733.59	449889.51	32°14'8.4661"N	103°47'15.4507"W	0.00	0.00	0.00	
11730.00†	90.768	179.718	9968.84	684.79	-689.52	-844.97	668734.08	449789.52	32°14'7.4767"N	103°47'15.4509"W	0.00	0.00	0.00	
11830.00†	90.768	179.718	9967.50	784.78	-789.51	-844.48	668734.57	449689.54	32°14'6.4872"N	103°47'15.4511"W	0.00	0.00	0.00	
11930.00†	90.768	179.718	9966.16	884.77	-889.50	-843.98	668735.07	449589.56	32°14'5.4978"N	103°47'15.4513"W	0.00	0.00	0.00	
12030.00†	90.768	179.718	9964.82	984.76	-989.49	-843.49	668735.56	449489.57	32°14'4.5083"N	103°47'15.4515"W	0.00	0.00	0.00	
12130.00†	90.768	179.718	9963.48	1084.75	-1089.48	-843.00	668736.05	449389.59	32°14'3.5189"N	103°47'15.4517"W	0.00	0.00	0.00	
12230.00†	90.768	179.718	9962.14	1184.74	-1189.47	-842.51	668736.54	449289.61	32°14'2.5294"N	103°47'15.4518"W	0.00	0.00	0.00	
12330.00†	90.768	179.718	9960.80	1284.73	-1289.46	-842.02	668737.03	449189.62	32°14'1.5399"N	103°47'15.4520"W	0.00	0.00	0.00	
12430.00†	90.768	179.718	9959.46	1384.72	-1389.45	-841.52	668737.53	449089.64	32°14'0.5505"N	103°47'15.4522"W	0.00	0.00	0.00	
12530.00†	90.768	179.718	9958.12	1484.71	-1489.44	-841.03	668738.02	448989.65	32°13'59.5610"N	103°47'15.4524"W	0.00	0.00	0.00	
12630.00†	90.768	179.718	9956.78	1584.71	-1589.42	-840.54	668738.51	448889.67	32°13'58.5716"N	103°47'15.4526"W	0.00	0.00	0.00	
12730.00†	90.768	179.718	9955.44	1684.70	-1689.41	-840.05	668739.00	448789.69	32°13'57.5821"N	103°47'15.4528"W	0.00	0.00	0.00	
12830.00†	90.768	179.718	9954.10	1784.69	-1789.40	-839.56	668739.50	448689.70	32°13'56.5927"N	103°47'15.4529"W	0.00	0.00	0.00	
12930.00†	90.768	179.718	9952.76	1884.68	-1889.39	-839.06	668739.99	448589.72	32°13'55.6032"N	103°47'15.4531"W	0.00	0.00	0.00	
13030.00†	90.768	179.718	9951.42	1984.67	-1989.38	-838.57	668740.48	448489.74	32°13'54.6138"N	103°47'15.4533"W	0.00	0.00	0.00	
13130.00†	90.768	179.718	9950.08	2084.66	-2089.37	-838.08	668740.97	448389.75	32°13'53.6243"N	103°47'15.4535"W	0.00	0.00	0.00	
13135.75	90.768	179.718	9950.00†	2090.41	-2095.13	-838.05	668741.00	448384.00	32°13'53.5674"N	103°47'15.4535"W	0.00	0.00	0.00	TP1
13172.22	90.039	179.692	9949.74	2126.88	-2131.59	-837.86	668741.19	448347.53	32°13'53.2065"N	103°47'15.4535"W	2.00	-2.00	-0.07	TL
13230.00†	90.039	179.692	9949.70	2184.66	-2189.37	-837.55	668741.50	448289.76	32°13'52.6348"N	103°47'15.4533"W	0.00	0.00	0.00	
13330.00†	90.039	179.692	9949.64	2284.66	-2289.37	-837.02	668742.04	448189.77	32°13'51.6452"N	103°47'15.4529"W	0.00	0.00	0.00	
13430.00†	90.039	179.692	9949.57	2384.66	-2389.37	-836.48	668742.57	448089.78	32°13'50.6557"N	103°47'15.4526"W	0.00	0.00	0.00	
13530.00†	90.039	179.692	9949.50	2484.66	-2489.37	-835.94	668743.11	447989.78	32°13'49.6661"N	103°47'15.4523"W	0.00	0.00	0.00	
13630.00†	90.039	179.692	9949.43	2584.66	-2589.36	-835.40	668743.65	447889.79	32°13'48.6766"N	103°47'15.4519"W	0.00	0.00	0.00	
13730.00†	90.039	179.692	9949.37	2684.66	-2689.36	-834.87	668744.18	447789.80	32°13'47.6870"N	103°47'15.4516"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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†	90.039	179.692	9949.30	2784.66	-2789.36	-834.33	668744.72	447689.81	32°13'46.6975"N	103°47'15.4512"W	0.00	0.00	0.00	
13930.00†	90.039	179.692	9949.23	2884.66	-2889.36	-833.79	668745.26	447589.81	32°13'45.7079"N	103°47'15.4509"W	0.00	0.00	0.00	
14030.00†	90.039	179.692	9949.16	2984.66	-2989.36	-833.26	668745.79	447489.82	32°13'44.7184"N	103°47'15.4506"W	0.00	0.00	0.00	
14130.00†	90.039	179.692	9949.09	3084.66	-3089.36	-832.72	668746.33	447389.83	32°13'43.7289"N	103°47'15.4502"W	0.00	0.00	0.00	
14230.00†	90.039	179.692	9949.03	3184.66	-3189.36	-832.18	668746.87	447289.84	32°13'42.7393"N	103°47'15.4499"W	0.00	0.00	0.00	
14330.00†	90.039	179.692	9948.96	3284.66	-3289.35	-831.64	668747.41	447189.84	32°13'41.7498"N	103°47'15.4496"W	0.00	0.00	0.00	
14430.00†	90.039	179.692	9948.89	3384.66	-3389.35	-831.11	668747.94	447089.85	32°13'40.7602"N	103°47'15.4492"W	0.00	0.00	0.00	
14530.00†	90.039	179.692	9948.82	3484.66	-3489.35	-830.57	668748.48	446989.86	32°13'39.7707"N	103°47'15.4489"W	0.00	0.00	0.00	
14630.00†	90.039	179.692	9948.76	3584.66	-3589.35	-830.03	668749.02	446889.86	32°13'38.7811"N	103°47'15.4485"W	0.00	0.00	0.00	
14730.00†	90.039	179.692	9948.69	3684.66	-3689.35	-829.50	668749.55	446789.87	32°13'37.7916"N	103°47'15.4482"W	0.00	0.00	0.00	
14830.00†	90.039	179.692	9948.62	3784.66	-3789.35	-828.96	668750.09	446689.88	32°13'36.8020"N	103°47'15.4479"W	0.00	0.00	0.00	
14930.00†	90.039	179.692	9948.55	3884.66	-3889.35	-828.42	668750.63	446589.89	32°13'35.8125"N	103°47'15.4475"W	0.00	0.00	0.00	
15030.00†	90.039	179.692	9948.48	3984.66	-3989.34	-827.88	668751.17	446489.89	32°13'34.8229"N	103°47'15.4472"W	0.00	0.00	0.00	
15130.00†	90.039	179.692	9948.42	4084.66	-4089.34	-827.35	668751.70	446389.90	32°13'33.8334"N	103°47'15.4468"W	0.00	0.00	0.00	
15230.00†	90.039	179.692	9948.35	4184.66	-4189.34	-826.81	668752.24	446289.91	32°13'32.8439"N	103°47'15.4465"W	0.00	0.00	0.00	
15330.00†	90.039	179.692	9948.28	4284.66	-4289.34	-826.27	668752.78	446189.92	32°13'31.8543"N	103°47'15.4462"W	0.00	0.00	0.00	
15430.00†	90.039	179.692	9948.21	4384.66	-4389.34	-825.74	668753.31	446089.92	32°13'30.8648"N	103°47'15.4458"W	0.00	0.00	0.00	
15530.00†	90.039	179.692	9948.15	4484.66	-4489.34	-825.20	668753.85	445989.93	32°13'29.8752"N	103°47'15.4455"W	0.00	0.00	0.00	
15630.00†	90.039	179.692	9948.08	4584.66	-4589.34	-824.66	668754.39	445889.94	32°13'28.8857"N	103°47'15.4451"W	0.00	0.00	0.00	
15730.00†	90.039	179.692	9948.01	4684.66	-4689.33	-824.12	668754.93	445789.95	32°13'27.8961"N	103°47'15.4448"W	0.00	0.00	0.00	
15743.95	90.039	179.692	9948.00 ²	4698.61	-4703.28	-824.05	668755.00	445776.00	32°13'27.7581"N	103°47'15.4447"W	0.00	0.00	0.00	TP2
15772.42	89.470	179.670	9948.12	4727.07	-4731.75	-823.89	668755.16	445747.53	32°13'27.4764"N	103°47'15.4446"W	2.00	-2.00	-0.08	TL
15830.00†	89.470	179.670	9948.65	4784.66	-4789.33	-823.56	668755.49	445689.96	32°13'26.9066"N	103°47'15.4441"W	0.00	0.00	0.00	
15930.00†	89.470	179.670	9949.58	4884.65	-4889.32	-822.98	668756.06	445589.97	32°13'25.9171"N	103°47'15.4434"W	0.00	0.00	0.00	
16030.00†	89.470	179.670	9950.51	4984.65	-4989.32	-822.41	668756.64	445489.98	32°13'24.9276"N	103°47'15.4426"W	0.00	0.00	0.00	
16130.00†	89.470	179.670	9951.43	5084.64	-5089.31	-821.83	668757.21	445389.99	32°13'23.9381"N	103°47'15.4418"W	0.00	0.00	0.00	
16230.00†	89.470	179.670	9952.36	5184.64	-5189.31	-821.26	668757.79	445290.01	32°13'22.9486"N	103°47'15.4410"W	0.00	0.00	0.00	
16330.00†	89.470	179.670	9953.28	5284.63	-5289.30	-820.68	668758.36	445190.02	32°13'21.9591"N	103°47'15.4402"W	0.00	0.00	0.00	
16430.00†	89.470	179.670	9954.21	5384.63	-5389.29	-820.11	668758.94	445090.03	32°13'20.9696"N	103°47'15.4394"W	0.00	0.00	0.00	
16530.00†	89.470	179.670	9955.13	5484.63	-5489.29	-819.53	668759.51	444990.04	32°13'19.9801"N	103°47'15.4387"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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†	89.470	179.670	9956.06	5584.62	-5589.28	-818.96	668760.09	444890.05	32°13'18.9906"N	103°47'15.4379"W	0.00	0.00	0.00	
16730.00†	89.470	179.670	9956.98	5684.62	-5689.28	-818.38	668760.67	444790.06	32°13'18.0011"N	103°47'15.4371"W	0.00	0.00	0.00	
16830.00†	89.470	179.670	9957.91	5784.61	-5789.27	-817.81	668761.24	444690.08	32°13'17.0116"N	103°47'15.4363"W	0.00	0.00	0.00	
16930.00†	89.470	179.670	9958.83	5884.61	-5889.26	-817.23	668761.82	444590.09	32°13'16.0221"N	103°47'15.4355"W	0.00	0.00	0.00	
17030.00†	89.470	179.670	9959.76	5984.60	-5989.26	-816.66	668762.39	444490.10	32°13'15.0325"N	103°47'15.4347"W	0.00	0.00	0.00	
17130.00†	89.470	179.670	9960.68	6084.60	-6089.25	-816.08	668762.97	444390.11	32°13'14.0430"N	103°47'15.4340"W	0.00	0.00	0.00	
17230.00†	89.470	179.670	9961.61	6184.60	-6189.25	-815.51	668763.54	444290.12	32°13'13.0535"N	103°47'15.4332"W	0.00	0.00	0.00	
17330.00†	89.470	179.670	9962.53	6284.59	-6289.24	-814.93	668764.12	444190.14	32°13'12.0640"N	103°47'15.4324"W	0.00	0.00	0.00	
17430.00†	89.470	179.670	9963.46	6384.59	-6389.23	-814.36	668764.69	444090.15	32°13'11.0745"N	103°47'15.4316"W	0.00	0.00	0.00	
17530.00†	89.470	179.670	9964.38	6484.58	-6489.23	-813.78	668765.27	443990.16	32°13'10.0850"N	103°47'15.4308"W	0.00	0.00	0.00	
17630.00†	89.470	179.670	9965.31	6584.58	-6589.22	-813.21	668765.84	443890.17	32°13'9.0955"N	103°47'15.4300"W	0.00	0.00	0.00	
17730.00†	89.470	179.670	9966.23	6684.57	-6689.22	-812.63	668766.42	443790.18	32°13'8.1060"N	103°47'15.4293"W	0.00	0.00	0.00	
17830.00†	89.470	179.670	9967.16	6784.57	-6789.21	-812.06	668766.99	443690.20	32°13'7.1165"N	103°47'15.4285"W	0.00	0.00	0.00	
17930.00†	89.470	179.670	9968.08	6884.57	-6889.21	-811.48	668767.57	443590.21	32°13'6.1270"N	103°47'15.4277"W	0.00	0.00	0.00	
18030.00†	89.470	179.670	9969.01	6984.56	-6989.20	-810.91	668768.14	443490.22	32°13'5.1375"N	103°47'15.4269"W	0.00	0.00	0.00	
18130.00†	89.470	179.670	9969.93	7084.56	-7089.19	-810.33	668768.72	443390.23	32°13'4.1480"N	103°47'15.4261"W	0.00	0.00	0.00	
18230.00†	89.470	179.670	9970.86	7184.55	-7189.19	-809.76	668769.29	443290.24	32°13'3.1585"N	103°47'15.4253"W	0.00	0.00	0.00	
18330.00†	89.470	179.670	9971.78	7284.55	-7289.18	-809.18	668769.87	443190.26	32°13'2.1690"N	103°47'15.4246"W	0.00	0.00	0.00	
18353.26	89.470	179.670	9972.00 ³	7307.81	-7312.44	-809.05	668770.00	443167.00	32°13'1.9388"N	103°47'15.4244"W	0.00	0.00	0.00	TP3
18354.20	89.451	179.671	9972.01	7308.75	-7313.38	-809.04	668770.01	443166.06	32°13'1.9295"N	103°47'15.4244"W	2.00	-2.00	0.00	TL
18430.00†	89.451	179.671	9972.74	7384.54	-7389.18	-808.61	668770.44	443090.27	32°13'1.1795"N	103°47'15.4238"W	0.00	0.00	0.00	
18530.00†	89.451	179.671	9973.69	7484.54	-7489.17	-808.03	668771.02	442990.28	32°13'0.1900"N	103°47'15.4230"W	0.00	0.00	0.00	
18630.00†	89.451	179.671	9974.65	7584.53	-7589.16	-807.46	668771.59	442890.29	32°12'59.2005"N	103°47'15.4222"W	0.00	0.00	0.00	
18730.00†	89.451	179.671	9975.61	7684.53	-7689.16	-806.88	668772.17	442790.30	32°12'58.2110"N	103°47'15.4214"W	0.00	0.00	0.00	
18830.00†	89.451	179.671	9976.57	7784.53	-7789.15	-806.31	668772.74	442690.32	32°12'57.2215"N	103°47'15.4206"W	0.00	0.00	0.00	
18930.00†	89.451	179.671	9977.53	7884.52	-7889.14	-805.73	668773.32	442590.33	32°12'56.2320"N	103°47'15.4199"W	0.00	0.00	0.00	
19030.00†	89.451	179.671	9978.48	7984.52	-7989.14	-805.16	668773.89	442490.34	32°12'55.2425"N	103°47'15.4191"W	0.00	0.00	0.00	
19130.00†	89.451	179.671	9979.44	8084.51	-8089.13	-804.58	668774.47	442390.35	32°12'54.2530"N	103°47'15.4183"W	0.00	0.00	0.00	
19230.00†	89.451	179.671	9980.40	8184.51	-8189.13	-804.01	668775.04	442290.37	32°12'53.2635"N	103°47'15.4175"W	0.00	0.00	0.00	
19330.00†	89.451	179.671	9981.36	8284.50	-8289.12	-803.43	668775.61	442190.38	32°12'52.2740"N	103°47'15.4167"W	0.00	0.00	0.00	



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

WELLPATH DATA (227 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†	89.451	179.671	9982.32	8384.50	-8389.11	-802.86	668776.19	442090.39	32°12'51.2845"N	103°47'15.4160"W	0.00	0.00	0.00	
19530.00†	89.451	179.671	9983.27	8484.49	-8489.11	-802.28	668776.76	441990.40	32°12'50.2950"N	103°47'15.4152"W	0.00	0.00	0.00	
19630.00†	89.451	179.671	9984.23	8584.49	-8589.10	-801.71	668777.34	441890.41	32°12'49.3055"N	103°47'15.4144"W	0.00	0.00	0.00	
19730.00†	89.451	179.671	9985.19	8684.48	-8689.09	-801.13	668777.91	441790.43	32°12'48.3160"N	103°47'15.4136"W	0.00	0.00	0.00	
19830.00†	89.451	179.671	9986.15	8784.48	-8789.09	-800.56	668778.49	441690.44	32°12'47.3264"N	103°47'15.4128"W	0.00	0.00	0.00	
19930.00†	89.451	179.671	9987.11	8884.48	-8889.08	-799.98	668779.06	441590.45	32°12'46.3369"N	103°47'15.4120"W	0.00	0.00	0.00	
20030.00†	89.451	179.671	9988.06	8984.47	-8989.08	-799.41	668779.64	441490.46	32°12'45.3474"N	103°47'15.4113"W	0.00	0.00	0.00	
20130.00†	89.451	179.671	9989.02	9084.47	-9089.07	-798.83	668780.21	441390.48	32°12'44.3579"N	103°47'15.4105"W	0.00	0.00	0.00	
20230.00†	89.451	179.671	9989.98	9184.46	-9189.06	-798.26	668780.79	441290.49	32°12'43.3684"N	103°47'15.4097"W	0.00	0.00	0.00	
20330.00†	89.451	179.671	9990.94	9284.46	-9289.06	-797.68	668781.36	441190.50	32°12'42.3789"N	103°47'15.4089"W	0.00	0.00	0.00	
20430.00†	89.451	179.671	9991.90	9384.45	-9389.05	-797.11	668781.94	441090.51	32°12'41.3894"N	103°47'15.4081"W	0.00	0.00	0.00	
20530.00†	89.451	179.671	9992.86	9484.45	-9489.04	-796.53	668782.51	440990.52	32°12'40.3999"N	103°47'15.4074"W	0.00	0.00	0.00	
20630.00†	89.451	179.671	9993.81	9584.44	-9589.04	-795.96	668783.09	440890.54	32°12'39.4104"N	103°47'15.4066"W	0.00	0.00	0.00	
20730.00†	89.451	179.671	9994.77	9684.44	-9689.03	-795.38	668783.66	440790.55	32°12'38.4209"N	103°47'15.4058"W	0.00	0.00	0.00	
20830.00†	89.451	179.671	9995.73	9784.43	-9789.03	-794.81	668784.24	440690.56	32°12'37.4314"N	103°47'15.4050"W	0.00	0.00	0.00	
20930.00†	89.451	179.671	9996.69	9884.43	-9889.02	-794.23	668784.81	440590.57	32°12'36.4419"N	103°47'15.4042"W	0.00	0.00	0.00	
20962.58	89.451	179.671	9997.00‡	9917.01	-9921.59	-794.05	668785.00	440558.00	32°12'36.1196"N	103°47'15.4040"W	0.00	0.00	0.00	PBHL (25' FSBL)

HOLE & CASING SECTIONS

- Ref Wellbore: SND 9 16 Fed Com 002 P351 No. 402H Ref Wellpath: SND 9 16 Fed Com 002 P351 No. 402H_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	8256.55	8226.55	30.00	8150.00	0.00	0.00	1065.48	-496.84
8.5in Casing Production	30.00	20962.58	20932.58	30.00	9997.00	0.00	0.00	-9921.59	-794.05



Planned Wellpath Report

SND 9 16 Fed Com 002 P351 No. 402H_prelim1
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Well	SND 9 16 Fed Com 002 P351 No. 402H
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. 402H
Slot	SND 9 16 Fed Com 002 P351 No. 402H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) SND 9 16 Fed Com P351 No. 402H TP2	15743.95	9948.00	-4703.28	-824.05	668755.00	445776.00	32°13'27.7581"N	103°47'15.4447"W	point
1) SND 9 16 Fed Com P351 No. 402H TP1	13135.75	9950.00	-2095.13	-838.05	668741.00	448384.00	32°13'53.5674"N	103°47'15.4535"W	point
3) SND 9 16 Fed Com P351 No. 402H TP3	18353.26	9972.00	-7312.44	-809.05	668770.00	443167.00	32°13'1.9388"N	103°47'15.4244"W	point
SND 9 16 Fed Com P351 No. 402H FTP	N/A	9985.00	514.03	-853.05	668726.00	450993.00	32°14'19.3866"N	103°47'15.4738"W	point
SND 9 16 Fed Com P351 No. 402H LTP	N/A	9997.00	-9846.59	-794.05	668785.00	440633.00	32°12'36.8618"N	103°47'15.3995"W	point
4) SND 9 16 Fed Com P351 No. 402H PBHL	20962.58	9997.00	-9921.59	-794.05	668785.00	440558.00	32°12'36.1196"N	103°47'15.4040"W	point

SURVEY PROGRAM - Ref Wellbore: SND 9 16 Fed Com 002 P351 No. 402H					Ref Wellpath: SND 9 16 Fed Com 002 P351 No. 402H_prelim1	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
30.00	9442.00	OWSG MWD rev2 + HRGM			SND 9 16 Fed Com 002 P351 No. 402H	
9442.00	20983.84	BH AutoTrak Curve/eXpress (2019) (Standard)			SND 9 16 Fed Com 002 P351 No. 402H	

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Chervon
LEASE NO.:	NMNM0063757
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
LOCATION:	Section 9, T.24 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

Break Testing	<input checked="" type="radio"/> Yes	<input type="radio"/> No
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A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **780** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 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 casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **7** inch production casing is:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Contingency

Operator has proposed to pump down 13-3/8" X 9-5/8" annulus. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to BLM.

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. 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. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - a. 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.

- b. Manufacturer representative shall install the test plug for the initial BOP test.
- c. 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.
- d. 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 (Note: For 5M BOPE or less)

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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

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. **Operator is approve 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.

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

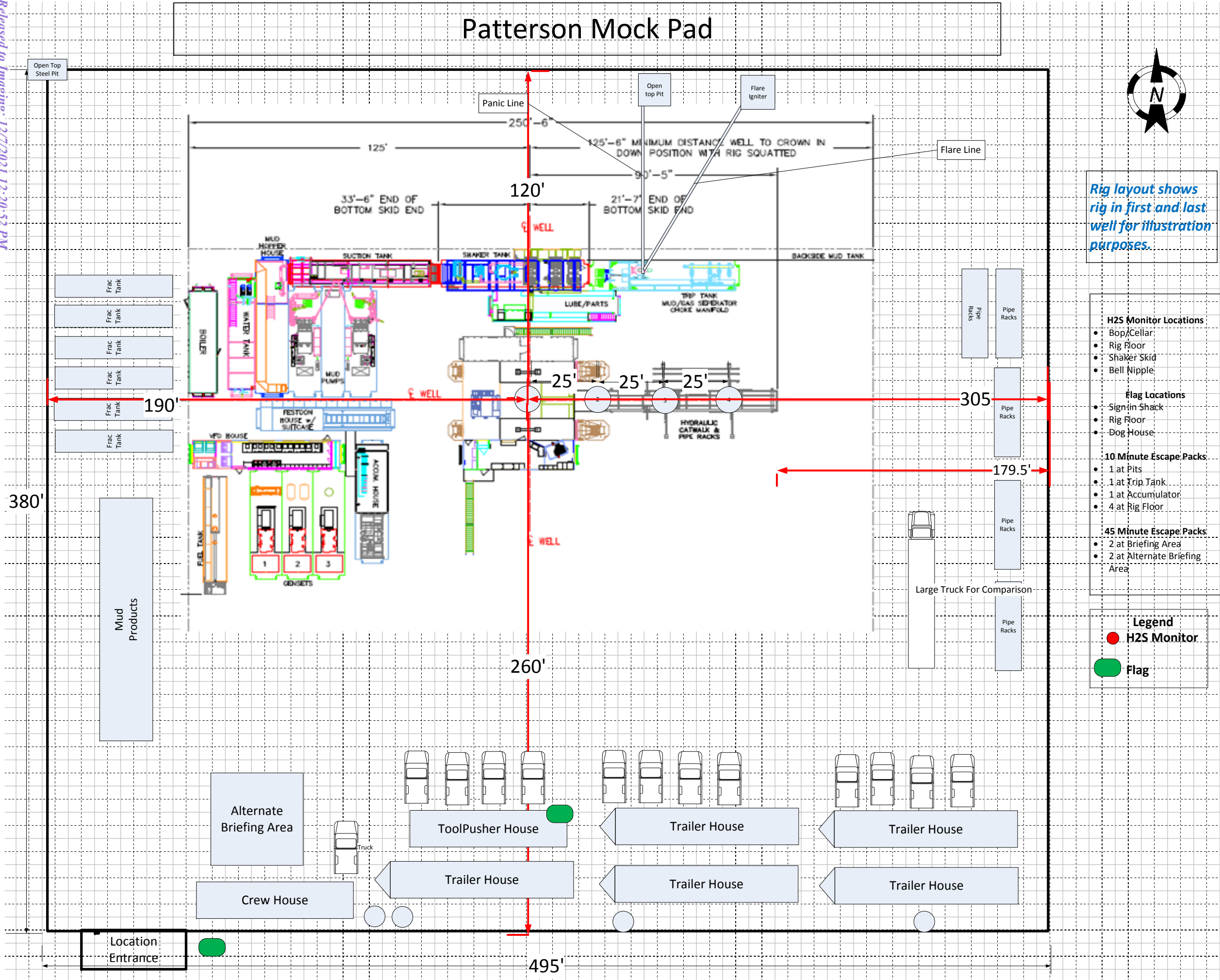
Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

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.

ZS100121





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

Drilling Plan Data Report

10/22/2021

APD ID: 10400054123

Submission Date: 02/11/2020

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SND 9 16 FED COM 002 P351

Well Number: 402H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
657277	RUSTLER	3442	541	541	DOLOMITE	NONE	N
657294	CASTILE	717	2725	2725	ANHYDRITE	NONE	N
657296	LAMAR	-838	4280	4280	LIMESTONE	NONE	N
657278	BELL CANYON	-890	4332	4332	SANDSTONE	NONE	N
657280	CHERRY CANYON	-1782	5224	5224	SANDSTONE	NONE	N
657281	BRUSHY CANYON	-3022	6464	6464	SANDSTONE	NONE	N
657282	BONE SPRING LIME	-4706	8148	8148	LIMESTONE	NONE	N
657292	UPPER AVALON SHALE	-4773	8215	8215	LIMESTONE, SHALE	NONE	N
657284	BONE SPRING 1ST	-5712	9154	9330	SANDSTONE	NONE	N
657285	BONE SPRING 2ND	-6373	9815	10030	SANDSTONE	NONE	N
657295	BONE SPRING	-6555	9997	20962	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 9997

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 nipped 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

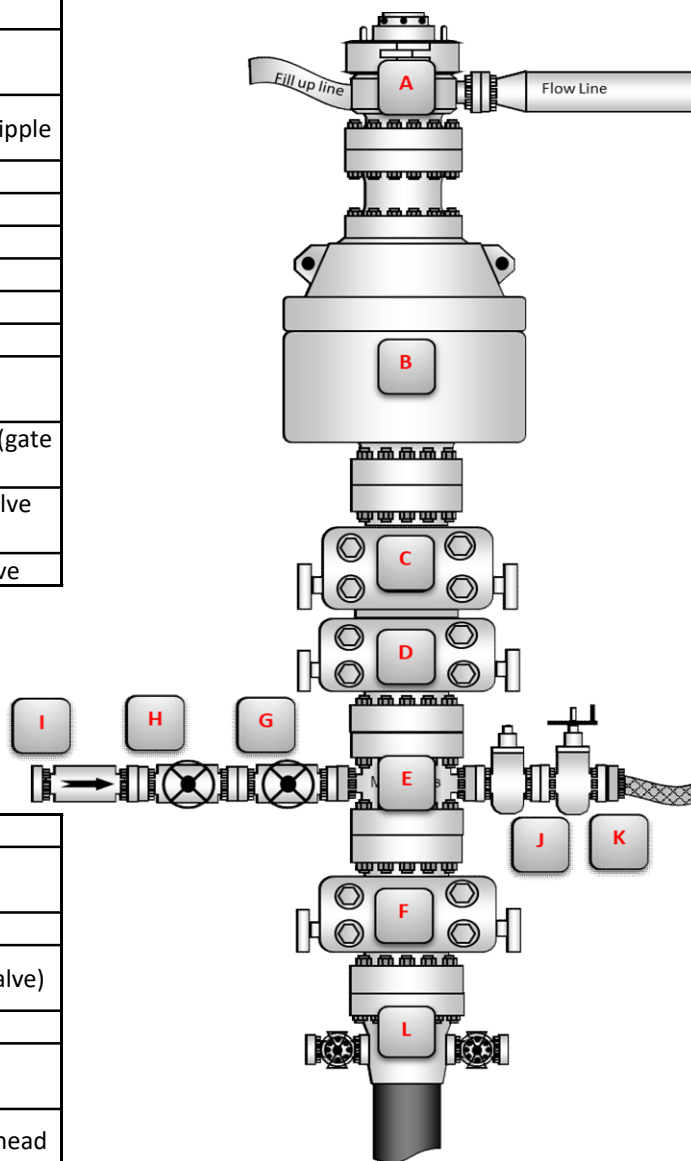
Part	Size	Pressure Rating	Description
G	2"	10,000	Inside Kill Line Valve (gate valve)
H	2"	10,000	Outside Kill Line Valve (gate valve)
I	2"	10,000	Kill Line Check valve

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 installed on all manual valves on the choke and kill line.

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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 60279

COMMENTS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 60279
	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

District I

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CONDITIONS

Created By	Condition	Condition Date
dmccclure	Notify OCD 24 hours prior to casing & cement	12/7/2021
dmccclure	Notify OCD 24 hours prior to spudding	12/7/2021
dmccclure	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/7/2021
dmccclure	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
dmccclure	Cement is required to circulate on both surface and intermediate1 strings of casing	12/7/2021
dmccclure	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