

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. <div style="text-align: center; font-weight: bold; font-size: 1.2em;">[332343]</div>
2. Name of Operator <div style="text-align: center; font-weight: bold; font-size: 1.2em;">[4323]</div>		9. API Well No. 30-025-49758
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory [96715] XXX XXXXXXXX
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.

NGMP Rec 02/08/2022

SL

(Continued on page 2)



Approval Date: 02/02/2022

KZ
02/10/2022

*(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 30-025-49758	² Pool Code 96715	³ Pool Name WC-025 G-05 S253209L;BONE SPRING
⁴ Property Code 332343	⁵ Property Name CO VIPER 4 33 FED	⁶ Well Number 403H
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3474'

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
J	4	25 SOUTH	32 EAST, N.M.P.M.		1821'	SOUTH	2241'	EAST	LEA

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
A	33	24 SOUTH	32 EAST, N.M.P.M.		25'	NORTH	550'	EAST	LEA

¹² Dedicated Acres 560	¹³ Joint or Infill INFILL	¹⁴ Consolidation Code	¹⁵ Order No.
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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>CO VIPER 4 33 FED NO. 403H WELL</p> <p>X= 702,780' Y= 421,485' NAD 27 LAT. 32.157082° N LONG. 103.678080° W</p> <p>X= 743,965' Y= 421,543' NAD83/2011 LAT. 32.157206° N LONG. 103.678557° W</p> <p>ELEVATION +3474' NAVD 88</p> <p>PROPOSED MID-POINT</p> <p>X= 704,532' Y= 424,967' NAD 27 LAT. 32.166624° N LONG. 103.672350° W</p> <p>X= 745,717' Y= 425,025' NAD83/2011 LAT. 32.166748° N LONG. 103.672828° W</p> <p>PROPOSED FIRST TAKE POINT</p> <p>X= 704,486' Y= 422,351' NAD 27 LAT. 32.159435° N LONG. 103.672549° W</p> <p>X= 745,672' Y= 422,409' NAD83/2011 LAT. 32.159558° N LONG. 103.673026° W</p> <p>PROPOSED LAST TAKE POINT</p> <p>X= 704,497' Y= 430,146' NAD 27 LAT. 32.180861° N LONG. 103.672359° W</p> <p>X= 745,682' Y= 430,204' NAD83/2011 LAT. 32.180985° N LONG. 103.672838° W</p> <p>CORNER COORDINATES TABLE (NAD 27)</p> <p>A - Y=430198.06, X=699760.40 B - Y=424915.87, X=699799.62 C - Y=419627.04, X=699671.73 D - Y=430224.84, X=702403.47 E - Y=420979.90, X=702358.53 F - Y=430251.61, X=705046.53 G - Y=424972.86, X=705081.74 H - Y=421010.55, X=705013.37 I - Y=419689.78, X=704990.58</p>		<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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> 02/4/2022 Signature Date</p> <p>Cindy Herrera-Murillo Printed Name</p> <p>eeof@chevron.com E-mail Address</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>02/18/2020 Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>ROBERT L. LASTRAPES 23006 02/04/2022 PROFESSIONAL SURVEYOR</p> <p>Certificate Number</p>
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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Chevron USA Inc **OGRID:** 4323 **Date:** 1 / 14 / 2022

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
CO VIPER 4 33 FED 401H	Pending	UL:J-4-25S-32E	1821' FSL, 2291' FEL	1830 BBL/D	3530 MCF/D	2720 BBL/D
CO VIPER 4 33 FED 402H	Pending	UL:J-4-25S-32E	1821' FSL, 2266' FEL	1830 BBL/D	3530 MCF/D	2720 BBL/D
CO VIPER 4 33 FED 403H 30-025-49758	Pending	UL:J-4-25S-32E	1821' FNL, 2241' FEL	1830 BBL/D	3530 MCF/D	2720 BBL/D

IV. Central Delivery Point Name: Cotton Draw CTB #3 [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
CO VIPER 4 33 FED 401H	Pending	9/6/2023	N/A	N/A	N/A	N/A
CO VIPER 4 33 FED 402H	Pending	9/24/2023	N/A	N/A	N/A	N/A
CO VIPER 4 33 FED 403H 30-025-49758	Pending	10/12/2023	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:
Printed Name: Cindy Herrera-Murillo
Title: Senior HSE Regulatory Affairs Coordinator
E-mail Address: eeof@chevron.com
Date: 02/3//2022
Phone: 575-263-0431
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

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.

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H

be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party. A variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please refer to the attached testing and specification documents. - A variance from the Onshore Order 2 where it states: "A full BOP Test shall be performed: when initially installed and whenever any seal subject to test pressure is broken." We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. No BOP components nor any break will ever surpass 21 days between testing. A break test will consist of a 250 psi low / 5,000 psi high for 10 min each test against the connection that was broken when skidding the rig. Upon the first nipple up of the pad a full BOP test will be performed. A break test will NOT be performed on our last production section. A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. We will test seals that have been broken individually between full BOP tests. Time between tests for a single test or full test will not exceed 21 days.

Testing Procedure: Stack will be tested as specified in the attached testing requirements, upon NU and not to exceed 30 days. Test BOP from 250 psi to 5000 psi in Ram and 250 psi to 3500 psi in annular. BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from the BLM is received otherwise. Flex choke hose will be used for all wells on the pad. BOP test will be conducted by a third party.

Choke Diagram Attachment:

Choke_Flex_Hose_2_20200326061721.pdf

CoFlex_Hose_Variance_Salanova_20200326061802.pdf

NM_Slim_Hole_Wellhead_6650_psi_UH_S_20210203125420.pdf

BOP Diagram Attachment:

BLM_5M_Annular_10M_Stack_BOP_Choke_Schematic_20200326062158.pdf

UHS_Multibowl_Wellhead_2017_20200506094824.pdf

Break_Testing_Sundry_Viper_20210923110800.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	16	13.375	NEW	API	N	0	1033	0	1033	3474	2441	1033	J-55	54.5	BUTT	2.13	1.43	DRY	4.07	DRY	4.07
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4692	0	4692	3554	-1218	4692	L-80	40	OTHER - BTC	1.24	1.64	DRY	2.78	DRY	2.78
3	PRODUCTION	8.75	7.0	NEW	API	N	0	10055	0	10055	3474	-6581	10055	P-110	29	OTHER - BLUE	1.63	1.15	DRY	2.39	DRY	2.39
4	LINER	6.125	5.0	NEW	API	N	9755	10555	9755	10555	-6281	-7081	800	P-110	18	OTHER - W513	1.39	1.1	DRY	1.32	DRY	1.32
5	LINER	6.125	4.5	NEW	API	N	10555	10555	10555	18818	-7081	-15344	0	P-110	11.6	OTHER - W521	1.39	1.1	DRY	1.32	DRY	1.32

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H**Casing Attachments**

Casing ID: 1 **String Type:** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**13_3_8_casing_spec_sheet_20210923070235.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_20210923070517.pdf

Casing ID: 3 **String Type:** PRODUCTION**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**7in_Blue_vs_BlueSD_20210923070819.pdf

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H**Casing Attachments****Casing ID:** 4 **String Type:** LINER**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

5_18ppf_P110_Flush_W513_20210923071351.pdf

Casing ID: 5 **String Type:** LINER**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

4.5_11.6ppf_P110_TSH_W521_20210923071642.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	1003	483	1.34	14.8	647	100	Class C	Extender, Antifoam, Retarder

INTERMEDIATE	Lead		0	3692	1156	2	13.2	2313	100	Class C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		3692	4692	336	1.4	14.8	470	50	Class C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		4192	9055	548	2	13.2	1097	50	Class C	Extender, Antifoam, Retarder, Viscosifier

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		9055	1005 5	134	1.4	14.8	188	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
LINER	Lead		9755	1881 8	580	1.84	13.2	1067	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier

Section 5 - Circulating Medium

Mud System Type: Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: 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. Transportation 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.

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
1005 5	1881 8	OIL-BASED MUD	8.7	10.5							Viscosity: 50-70 Filtrate: 5-10
0	1033	SPUD MUD	8.3	8.9							Viscosity: 26-36 Filtrate: 15-25
0	4692	SALT SATURATED	8.3	10.6							Viscosity: 26-36 Filtrate: 15-25

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H

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
4692	1005 5	OTHER : WBM/BRINE	8.7	10.6							Viscosity: 26-36 Filtrate: 15-25 Due to wellbore stability in the lateral well, MW will be adjusted as needed to ensure the hole doesn't collapse.

Section 6 - Test, Logging, Coring

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

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

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

DIRECTIONAL SURVEY, GAMMA RAY LOG,

Coring operation description for the well:

Conventional whole core samples are not planned, a directional survey will be run and logs will be submitted.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5220

Anticipated Surface Pressure: 2919

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Contingency_Plan_20210923073509.pdf

Operator Name: CHEVRON USA INCORPORATED**Well Name:** CO VIPER 4 33 FED**Well Number:** 403H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Patterson_Rig_Layout_20200608132530.pdf

CO_Viper_4_33_FED_Gas_Capture_Plan_20210203133413.pdf

Cotton_Draw_Viper_403H_Directional_Plan_20210203133430.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.

- Authorization to follow Onshore Order 2 Section B - Casing and Cementing Requirements to wait to 500 psi comprehensive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at sufficient strength prior to performing a shoe test and drilling ahead through the next hole section.

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

Other proposed operations facets attachment:

WOC_Sundry_Variance_Viper_20210203133445.pdf

Other Variance attachment:

CUSA_Spudder_Rig_Data_20200507145808.pdf

CO_Viper_403_9_point_r3_20210923105759.pdf



Chevron CO Viper 4 33 Fed No. 403H Rev0 CVS 04Jun20 Proposal Geodetic Report (Non-Def Plan)



Report Date:	June 05, 2020 - 02:50 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Chevron	Vertical Section Azimuth:	0.081 ° (Grid North)
Field:	NM Lea County (NAD 27)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Chevron CO Viper 4 33 Fed Pad / 403H	TVD Reference Datum:	RKB
Well:	CO Viper 4 33 Fed No. 403H	TVD Reference Elevation:	3504.000 ft above MSL
Borehole:	CO Viper 4 33 Fed No. 403H	Seabed / Ground Elevation:	3474.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	6.557 °
Survey Name:	Chevron CO Viper 4 33 Fed No. 403H Rev0 CVS 04Jun20	Total Gravity Field Strength:	998.4282mgn (9.80665 Based)
Survey Date:	June 05, 2020	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	132.239 ° / 10153.794 ft / 6.383 / 0.971	Total Magnetic Field Strength:	47733.208 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.767 °
Location Lat / Long:	N 32° 9' 25.49705", W 103° 40' 41.08717"	Declination Date:	June 05, 2020
Location Grid N/E Y/X:	N 421485.000 ftUS, E 702780.000 ftUS	Magnetic Declination Model:	HDGM 2020
CRS Grid Convergence Angle:	0.3488 °	North Reference:	Grid North
Grid Scale Factor:	0.99995619	Grid Convergence Used:	0.3488 °
Version / Patch:	2.10.811.0	Total Corr Mag North->Grid North:	6.2085 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	100.00	0.00	79.73	100.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	200.00	0.00	79.73	200.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	300.00	0.00	79.73	300.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	400.00	0.00	79.73	400.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	500.00	0.00	79.73	500.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	600.00	0.00	79.73	600.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	700.00	0.00	79.73	700.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	800.00	0.00	79.73	800.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
	803.00	0.00	79.73	803.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
Rustler	900.00	0.00	79.73	900.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
9-5/8" Casing	980.00	0.00	79.73	980.00	0.00	0.00	0.00	0.00	421485.00	702780.00	N 32 9 25.50	W 103 40 41.09
Build 1.5"/100ft	1000.00	0.30	79.73	1000.00	0.01	0.01	0.05	1.50	421485.01	702780.05	N 32 9 25.50	W 103 40 41.09
	1100.00	1.80	79.73	1099.98	0.34	0.34	1.85	1.50	421485.34	702781.85	N 32 9 25.50	W 103 40 41.07
	1200.00	3.30	79.73	1199.88	1.14	1.13	6.23	1.50	421486.13	702786.23	N 32 9 25.51	W 103 40 41.01
	1300.00	4.80	79.73	1299.63	2.41	2.39	13.18	1.50	421487.39	702793.18	N 32 9 25.52	W 103 40 40.93
	1400.00	6.30	79.73	1399.15	4.14	4.11	22.70	1.50	421489.11	702802.70	N 32 9 25.54	W 103 40 40.82
	1500.00	7.80	79.73	1498.40	6.35	6.30	34.77	1.50	421491.30	702814.77	N 32 9 25.56	W 103 40 40.68
	1600.00	9.30	79.73	1597.28	9.02	8.95	49.40	1.50	421493.95	702829.40	N 32 9 25.58	W 103 40 40.51
	1700.00	10.80	79.73	1695.74	12.16	12.06	66.57	1.50	421497.06	702846.57	N 32 9 25.61	W 103 40 40.31
	1800.00	12.30	79.73	1793.72	15.75	15.63	86.27	1.50	421500.63	702866.27	N 32 9 25.65	W 103 40 40.08
	1900.00	13.80	79.73	1891.13	19.81	19.66	108.49	1.50	421504.66	702888.49	N 32 9 25.69	W 103 40 39.82
	2000.00	15.30	79.73	1987.92	24.32	24.14	133.21	1.50	421509.14	702913.21	N 32 9 25.73	W 103 40 39.54
	2100.00	16.80	79.73	2084.02	29.29	29.07	160.42	1.50	421514.06	702940.41	N 32 9 25.78	W 103 40 39.22
	2200.00	18.30	79.73	2179.36	34.71	34.44	190.09	1.50	421519.44	702970.08	N 32 9 25.83	W 103 40 38.87
	2300.00	19.80	79.73	2273.88	40.57	40.26	222.20	1.50	421525.26	703002.19	N 32 9 25.88	W 103 40 38.50
Hold	2380.01	21.00	79.73	2348.87	45.59	45.23	249.64	1.50	421530.23	703029.63	N 32 9 25.93	W 103 40 38.18
	2400.00	21.00	79.73	2367.54	46.87	46.51	256.69	0.00	421531.51	703036.68	N 32 9 25.94	W 103 40 38.10
	2500.00	21.00	79.73	2460.89	53.31	52.90	291.95	0.00	421537.90	703071.94	N 32 9 26.00	W 103 40 37.69
	2600.00	21.00	79.73	2554.25	59.75	59.29	327.22	0.00	421544.29	703107.20	N 32 9 26.06	W 103 40 37.28
	2700.00	21.00	79.73	2647.61	66.19	65.68	362.48	0.00	421550.67	703142.46	N 32 9 26.13	W 103 40 36.87
	2800.00	21.00	79.73	2740.97	72.63	72.07	397.74	0.00	421557.06	703177.72	N 32 9 26.19	W 103 40 36.46
	2900.00	21.00	79.73	2834.33	79.07	78.46	433.01	0.00	421563.45	703212.99	N 32 9 26.25	W 103 40 36.05
	3000.00	21.00	79.73	2927.68	85.51	84.85	468.27	0.00	421569.84	703248.25	N 32 9 26.31	W 103 40 35.63
	3100.00	21.00	79.73	3021.04	91.95	91.23	503.53	0.00	421576.23	703283.51	N 32 9 26.37	W 103 40 35.22
	3200.00	21.00	79.73	3114.40	98.39	97.62	538.79	0.00	421582.62	703318.77	N 32 9 26.43	W 103 40 34.81
	3300.00	21.00	79.73	3207.76	104.82	104.01	574.06	0.00	421589.01	703354.03	N 32 9 26.49	W 103 40 34.40
	3400.00	21.00	79.73	3301.12	111.26	110.40	609.32	0.00	421595.40	703389.29	N 32 9 26.55	W 103 40 33.99
	3500.00	21.00	79.73	3394.47	117.70	116.79	644.58	0.00	421601.79	703424.55	N 32 9 26.61	W 103 40 33.58
	3600.00	21.00	79.73	3487.83	124.14	123.18	679.85	0.00	421608.18	703459.81	N 32 9 26.67	W 103 40 33.17
	3700.00	21.00	79.73	3581.19	130.58	129.57	715.11	0.00	421614.56	703495.08	N 32 9 26.74	W 103 40 32.76
	3800.00	21.00	79.73	3674.55	137.02	135.96	750.37	0.00	421620.95	703530.34	N 32 9 26.80	W 103 40 32.35
	3900.00	21.00	79.73	3767.91	143.46	142.35	785.63	0.00	421627.34	703565.60	N 32 9 26.86	W 103 40 31.94
	4000.00	21.00	79.73	3861.26	149.90	148.74	820.90	0.00	421633.73	703600.86	N 32 9 26.92	W 103 40 31.53
	4100.00	21.00	79.73	3954.62	156.34	155.13	856.16	0.00	421640.12	703636.12	N 32 9 26.98	W 103 40 31.12
Castile	4118.61	21.00	79.73	3972.00	157.54	156.32	862.72	0.00	421641.31	703642.68	N 32 9 26.99	W 103 40 31.04
	4200.00	21.00	79.73	4047.98	162.78	161.52	891.42	0.00	421646.51	703671.38	N 32 9 27.04	W 103 40 30.71
	4300.00	21.00	79.73	4141.34	169.22	167.91	926.69	0.00	421652.90	703706.64	N 32 9 27.10	W 103 40 30.30
	4400.00	21.00	79.73	4234.70	175.66	174.30	961.95	0.00	421659.29	703741.90	N 32 9 27.16	W 103 40 29.89
	4500.00	21.00	79.73	4328.05	182.09	180.68	997.21	0.00	421665.68	703777.17	N 32 9 27.22	W 103 40 29.48
	4600.00	21.00	79.73	4421.41	188.53	187.07	1032.47	0.00	421672.07	703812.43	N 32 9 27.29	W 103 40 29.06
	4700.00	21.00	79.73	4514.77	194.97	193.46	1067.74	0.00	421678.45	703847.69	N 32 9 27.35	W 103 40 28.65
	4800.00	21.00	79.73	4608.13	201.41	199.85	1103.00	0.00	421684.84	703882.95	N 32 9 27.41	W 103 40 28.24
Lamar	4872.70	21.00	79.73	4676.00	206.09	204.50	1128.64	0.00	421689.49	703908.58	N 32 9 27.45	W 103 40 27.94
	4900.00	21.00	79.73	4701.49	207.85	206.24	1138.26	0.00	421691.23	703918.21	N 32 9 27.47	W 103 40 27.83
Bell Canyon	4924.12	21.00	79.73	4724.00	209.40	207.78	1146.77	0.00	421692.77	703926.71	N 32 9 27.48	W 103 40 27.73
	5000.00	21.00	79.73	4794.84	214.29	212.63	1173.53	0.00	421697.62	703953.47	N 32 9 27.53	W 103 40 27.42
	5100.00	21.00	79.73	4888.20	220.73	219.02	1208.79	0.00	421704.01	703988.73	N 32 9 27.59	W 103 40 27.01
	5200.00	21.00	79.73	4981.56	227.17	225.41	1244.05	0.00	421710.40	704023.99	N 32 9 27.65	W 103 40 26.60
	5300.00	21.00	79.73	5074.92	233.61	231.80	1279.31	0.00	421716.79	704059.26	N 32 9 27.71	W 103 40 26.19
	5400.00	21.00	79.73	5168.28	240.05	238.19	1314.58	0.00	421723.18	704094.52	N 32 9 27.77	W 103 40 25.78
	5500.00	21.00	79.73	5261.63	246.49	244.58	1349.84	0.00	421729.57	704129.78	N 32 9 27.84	W 103 40 25.37
	5600.00	21.00	79.73	5354.99	252.92	250.97	1385.10	0.00	421735.96	704165.04	N 32 9 27.90	W 103 40 24.96
	5700.00	21.00	79.73	5448.35	259.36	257.36	1420.36	0.00	421742.34	704200.30	N 32 9 27.96	W 103 40 24.55
Drop 1.5"/100ft	5775.30	21.00	79.73	5518.65	264.21	262.17	1446.92	0.00	421747.16	704226.85	N 32 9 28.00	W 103 40 24.24
	5800.00	20.63	79.73	5541.74	265.79	263.73	1455.55	1.50	421748.72	704235.49	N 32 9 28.02	W 103 40 24.14
Cherry Canyon	5859.94	19.73	79.73	5598.00	269.51	267.42	1475.90	1.50	421752.41	704255.83	N 32 9 28.05	W 103 40 23.90
	5900.00	19.13	79.73	5635.77	271.90	269.79	1489.01	1.50	421754.78	704268.94	N 32 9 28.08	W 103 40 23.75
	6000.00	17.63	79.73	5730.67	277.56	275.42	1520.04	1.50	421760.40	704299.97	N 32 9 28.13	W 103 40 23.39

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6800.00	5.63	79.73	6512.82	306.49	304.12	1678.43	1.50	421789.10	704458.36	N 32 9 28.40	W 103 40 21.54
	6900.00	4.13	79.73	6612.45	308.02	305.63	1686.80	1.50	421790.62	704466.72	N 32 9 28.42	W 103 40 21.45
	7000.00	2.63	79.73	6712.27	309.08	306.68	1692.60	1.50	421791.67	704472.52	N 32 9 28.43	W 103 40 21.38
	7100.00	1.13	79.73	6812.22	309.66	307.27	1695.83	1.50	421792.25	704475.75	N 32 9 28.44	W 103 40 21.34
Hold Vertical	7175.31	0.00	79.73	6887.52	309.80	307.40	1696.56	1.50	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7200.00	0.00	79.73	6912.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
Brushy Canyon	7227.79	0.00	79.73	6940.00	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7300.00	0.00	79.73	7012.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7400.00	0.00	79.73	7112.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7500.00	0.00	79.73	7212.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7600.00	0.00	79.73	7312.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7700.00	0.00	79.73	7412.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7800.00	0.00	79.73	7512.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	7900.00	0.00	79.73	7612.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8000.00	0.00	79.73	7712.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8100.00	0.00	79.73	7812.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8200.00	0.00	79.73	7912.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8300.00	0.00	79.73	8012.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8400.00	0.00	79.73	8112.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8500.00	0.00	79.73	8212.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8600.00	0.00	79.73	8312.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8700.00	0.00	79.73	8412.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8800.00	0.00	79.73	8512.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
Bone Spring	8853.79	0.00	79.73	8566.00	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	8900.00	0.00	79.73	8612.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
Upper Avalon	8934.79	0.00	79.73	8647.00	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
7" Casing	8937.79	0.00	79.73	8650.00	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9000.00	0.00	79.73	8712.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9100.00	0.00	79.73	8812.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9200.00	0.00	79.73	8912.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9300.00	0.00	79.73	9012.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9400.00	0.00	79.73	9112.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9500.00	0.00	79.73	9212.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9600.00	0.00	79.73	9312.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9700.00	0.00	79.73	9412.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9800.00	0.00	79.73	9512.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	9900.00	0.00	79.73	9612.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
Top Bone Spring 1	9906.79	0.00	79.73	9619.00	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	10000.00	0.00	79.73	9712.21	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
KOP, Build 10"/100ft	10055.01	0.00	79.73	9767.22	309.80	307.40	1696.56	0.00	421792.39	704476.48	N 32 9 28.44	W 103 40 21.33
	10100.00	4.50	1.00	9812.17	311.56	309.17	1696.59	10.00	421794.15	704476.51	N 32 9 28.45	W 103 40 21.33
	10200.00	14.50	1.00	9910.67	328.04	325.65	1696.88	10.00	421810.63	704476.80	N 32 9 28.62	W 103 40 21.33
	10300.00	24.50	1.00	10004.81	361.38	358.98	1697.46	10.00	421843.96	704477.38	N 32 9 28.95	W 103 40 21.32
	10400.00	34.50	1.00	10091.74	410.55	408.15	1698.32	10.00	421893.13	704478.24	N 32 9 29.43	W 103 40 21.30
	10500.00	44.50	1.00	10168.81	474.07	471.66	1699.43	10.00	421956.64	704479.35	N 32 9 30.06	W 103 40 21.29
Top Bone Spring 2	10585.33	53.03	1.00	10225.00	538.17	535.77	1700.55	10.00	422020.74	704480.48	N 32 9 30.70	W 103 40 21.27
	10600.00	54.50	1.00	10233.67	550.00	547.60	1700.76	10.00	422032.57	704480.68	N 32 9 30.81	W 103 40 21.27
	10700.00	64.50	1.00	10284.36	636.04	633.64	1702.27	10.00	422118.61	704482.19	N 32 9 31.66	W 103 40 21.24
	10800.00	74.50	1.00	10319.34	729.58	727.17	1703.90	10.00	422212.14	704483.82	N 32 9 32.59	W 103 40 21.22
Bone Spring 2 Target 2	10818.53	76.35	1.00	10324.00	747.51	745.10	1704.21	10.00	422230.07	704484.14	N 32 9 32.77	W 103 40 21.21
	10900.00	84.50	1.00	10337.54	827.77	825.36	1705.62	10.00	422310.32	704485.54	N 32 9 33.56	W 103 40 21.19
FTP Cross Landing Point	10940.78	88.58	1.00	10340.00	868.45	866.04	1706.33	10.00	422351.00	704486.25	N 32 9 33.96	W 103 40 21.18
	11000.00	88.58	1.00	10341.47	927.65	925.24	1707.36	0.00	422410.20	704487.29	N 32 9 34.55	W 103 40 21.16
	11100.00	88.58	1.00	10343.96	1027.61	1025.19	1709.11	0.00	422510.15	704489.03	N 32 9 35.54	W 103 40 21.13
	11200.00	88.58	1.00	10346.44	1127.56	1125.15	1710.86	0.00	422610.09	704490.78	N 32 9 36.53	W 103 40 21.11
	11300.00	88.58	1.00	10348.92	1227.52	1225.10	1712.61	0.00	422710.04	704492.53	N 32 9 37.52	W 103 40 21.08
	11400.00	88.58	1.00	10351.41	1327.48	1325.05	1714.36	0.00	422809.99	704494.28	N 32 9 38.51	W 103 40 21.05
	11500.00	88.58	1.00	10353.89	1427.43	1425.01	1716.10	0.00	422909.94	704496.03	N 32 9 39.49	W 103 40 21.02
	11600.00	88.58	1.00	10356.37	1527.39	1524.96	1717.85	0.00	423009.89	704497.77	N 32 9 40.48	W 103 40 21.00
	11700.00	88.58	1.00	10358.86	1627.35	1624.92	1719.60	0.00	423109.84	704499.52	N 32 9 41.47	W 103 40 20.97
	11800.00	88.58	1.00	10361.34	1727.30	1724.87	1721.35	0.00	423209.79	704501.27	N 32 9 42.46	W 103 40 20.94
	11900.00	88.58	1.00	10363.82	1827.26	1824.82	1723.10	0.00	423309.74	704503.02	N 32 9 43.45	W 103 40 20.91
	12000.00	88.58	1.00	10366.31	1927.21	1924.78	1724.84	0.00	423409.69	704504.77	N 32 9 44.44	W 103 40 20.89
	12100.00	88.58	1.00	10368.79	2027.17	2024.73	1726.59	0.00	423509.64	704506.51	N 32 9 45.43	W 103 40 20.86
	12200.00	88.58	1.00	10371.27	2127.13	2124.69	1728.34	0.00	423609.59	704508.26	N 32 9 46.42	W 103 40 20.83
	12300.00	88.58	1.00	10373.76	2227.08	2224.64	1730.09	0.00	423709.54	704510.01	N 32 9 47.41	W 103 40 20.80
	12400.00	88.58	1.00	10376.24	2327.04	2324.59	1731.84	0.00	423809.49	704511.76	N 32 9 48.39	W 103 40 20.78
	12500.00	88.58	1.00	10378.72	2427.00	2424.55	1733.58	0.00	423909.44	704513.51	N 32 9 49.38	W 103 40 20.75
	12600.00	88.58	1.00	10381.21	2526.95	2524.50	1735.33	0.00	424009.39	704515.25	N 32 9 50.37	W 103 40 20.72
	12700.00	88.58	1.00	10383.69	2626.91	2624.45	1737.08	0.00	424109.33	704517.00	N 32 9 51.36	W 103 40 20.69
	12800.00	88.58	1.00	10386.17	2726.86	2724.41	1738.83	0.00	424209.28	704518.75	N 32 9 52.35	W 103 40 20.67
	12900.00	88.58	1.00	10388.66	2826.82	2824.36	1740.58	0.00	424309.23	704520.50	N 32 9 53.34	W 103 40 20.64
	13000.00	88.58	1.00	10391.14	2926.78	2924.32	1742.32	0.00	424409.18	704522.24	N 32 9 54.33	W 103 40 20.61
	13100.00	88.58	1.00	10393.62	3026.73	3024.27	1744.07	0.00	424509.13	704523.99	N 32 9 55.32	W 103 40 20.58
	13200.00	88.58	1.00	10396.11	3126.69	3124.22	1745.82	0.00	424609.08	704525.74	N 32 9 56.31	W 103 40 20.56
	13300.00	88.58	1.00	10398.59	3226.65	3224.18	1747.57					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
IFP1, Build 2"/100ft Hold	15600.00	89.43	359.61	10426.09	5526.35	5523.90	1739.03	0.00	427008.64	704518.95	N 32 10 20.05	W 103 40 20.46
	15700.00	89.43	359.61	10427.09	5626.34	5623.89	1738.35	0.00	427108.63	704518.27	N 32 10 21.04	W 103 40 20.47
	15800.00	89.43	359.61	10428.09	5726.33	5723.88	1737.66	0.00	427208.62	704517.58	N 32 10 22.03	W 103 40 20.47
	15900.00	89.43	359.61	10429.10	5826.33	5823.88	1736.97	0.00	427308.61	704516.89	N 32 10 23.02	W 103 40 20.47
	16000.00	89.43	359.61	10430.10	5926.32	5923.87	1736.28	0.00	427408.60	704516.20	N 32 10 24.01	W 103 40 20.47
	16100.00	89.43	359.61	10431.10	6026.31	6023.86	1735.59	0.00	427508.58	704515.52	N 32 10 25.00	W 103 40 20.47
	16189.43	89.43	359.61	10432.00	6115.73	6113.28	1734.98	0.00	427598.00	704514.90	N 32 10 25.89	W 103 40 20.47
	16190.87	89.45	359.61	10432.01	6117.17	6114.72	1734.97	2.00	427599.44	704514.89	N 32 10 25.90	W 103 40 20.47
	16200.00	89.45	359.61	10432.10	6126.30	6123.85	1734.91	0.00	427608.57	704514.83	N 32 10 25.99	W 103 40 20.47
	16300.00	89.45	359.61	10433.05	6226.29	6223.85	1734.23	0.00	427708.56	704514.15	N 32 10 26.98	W 103 40 20.47
	16400.00	89.45	359.61	10434.01	6326.28	6323.84	1733.54	0.00	427808.55	704513.46	N 32 10 27.97	W 103 40 20.47
	16500.00	89.45	359.61	10434.96	6426.28	6423.83	1732.86	0.00	427908.54	704512.78	N 32 10 28.96	W 103 40 20.47
	16600.00	89.45	359.61	10435.91	6526.27	6523.83	1732.18	0.00	428008.53	704512.10	N 32 10 29.95	W 103 40 20.47
	16700.00	89.45	359.61	10436.87	6626.26	6623.82	1731.50	0.00	428108.52	704511.42	N 32 10 30.94	W 103 40 20.47
	16800.00	89.45	359.61	10437.82	6726.25	6723.81	1730.81	0.00	428208.50	704510.73	N 32 10 31.93	W 103 40 20.47
	16900.00	89.45	359.61	10438.77	6826.24	6823.81	1730.13	0.00	428308.49	704510.05	N 32 10 32.92	W 103 40 20.48
	17000.00	89.45	359.61	10439.73	6926.24	6923.80	1729.45	0.00	428408.48	704509.37	N 32 10 33.91	W 103 40 20.48
	17100.00	89.45	359.61	10440.68	7026.23	7023.79	1728.77	0.00	428508.47	704508.69	N 32 10 34.90	W 103 40 20.48
	17200.00	89.45	359.61	10441.63	7126.22	7123.78	1728.08	0.00	428608.46	704508.00	N 32 10 35.88	W 103 40 20.48
	17300.00	89.45	359.61	10442.58	7226.21	7223.78	1727.40	0.00	428708.45	704507.32	N 32 10 36.87	W 103 40 20.48
	17400.00	89.45	359.61	10443.54	7326.20	7323.77	1726.72	0.00	428808.44	704506.64	N 32 10 37.86	W 103 40 20.48
	17500.00	89.45	359.61	10444.49	7426.20	7423.76	1726.04	0.00	428908.42	704505.96	N 32 10 38.85	W 103 40 20.48
	17600.00	89.45	359.61	10445.44	7526.19	7523.76	1725.35	0.00	429008.41	704505.28	N 32 10 39.84	W 103 40 20.48
	17700.00	89.45	359.61	10446.40	7626.18	7623.75	1724.67	0.00	429108.40	704504.59	N 32 10 40.83	W 103 40 20.48
	17800.00	89.45	359.61	10447.35	7726.17	7723.74	1723.99	0.00	429208.39	704503.91	N 32 10 41.82	W 103 40 20.48
	17900.00	89.45	359.61	10448.30	7826.16	7823.74	1723.31	0.00	429308.38	704503.23	N 32 10 42.81	W 103 40 20.48
	18000.00	89.45	359.61	10449.25	7926.16	7923.73	1722.62	0.00	429408.37	704502.55	N 32 10 43.80	W 103 40 20.48
	18100.00	89.45	359.61	10450.21	8026.15	8023.72	1721.94	0.00	429508.35	704501.86	N 32 10 44.79	W 103 40 20.48
	18200.00	89.45	359.61	10451.16	8126.14	8123.72	1721.26	0.00	429608.34	704501.18	N 32 10 45.78	W 103 40 20.49
	18300.00	89.45	359.61	10452.11	8226.13	8223.71	1720.58	0.00	429708.33	704500.50	N 32 10 46.77	W 103 40 20.49
	18400.00	89.45	359.61	10453.07	8326.13	8323.70	1719.90	0.00	429808.32	704499.82	N 32 10 47.76	W 103 40 20.49
	18500.00	89.45	359.61	10454.02	8426.12	8423.70	1719.21	0.00	429908.31	704499.13	N 32 10 48.75	W 103 40 20.49
	18600.00	89.45	359.61	10454.97	8526.11	8523.69	1718.53	0.00	430008.30	704498.45	N 32 10 49.74	W 103 40 20.49
	18700.00	89.45	359.61	10455.93	8626.10	8623.68	1717.85	0.00	430108.29	704497.77	N 32 10 50.73	W 103 40 20.49
	18737.72	89.45	359.61	10456.29	8663.82	8661.40	1717.59	0.00	430146.00	704497.51	N 32 10 51.10	W 103 40 20.49
	18800.00	89.45	359.61	10456.88	8726.09	8723.67	1717.17	0.00	430208.27	704497.09	N 32 10 51.72	W 103 40 20.49
CO Viper 4 33 Fed No. 403H - PBHL	18812.73	89.45	359.61	10457.00	8738.82	8736.40	1717.08	0.00	430221.00	704497.00	N 32 10 51.84	W 103 40 20.49

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 3 *** 3-D 97.071% Confidence 3.0000 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	30.000	1/100.000	30.000	30.000		B001Mb_MWD+HRGM-Depth Only	CO Viper 4 33 Fed No. 403H / Chevron CO Viper 4 33 Fed No. 403H Rev0 CVS 04Jun20
	1	30.000	18812.727	1/100.000	30.000	30.000		B001Mb_MWD+HRGM	CO Viper 4 33 Fed No. 403H / Chevron CO Viper 4 33 Fed No.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON USA INCORPORATED
LEASE NO.:	NMNM054031
LOCATION:	SECTION 4, T25S, R32E, NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	CO VIPER 4 33 FED 401H
SURFACE HOLE FOOTAGE:	1821'S & 2291'E
BOTTOM HOLE FOOTAGE:	25'N & 2310'E

WELL NAME & NO.:	CO VIPER 4 33 FED 402H
SURFACE HOLE FOOTAGE:	1821'S & 2266'E
BOTTOM HOLE FOOTAGE:	25'N & 1430'E

WELL NAME & NO.:	CO VIPER 4 33 FED 403H
SURFACE HOLE FOOTAGE:	1821'S & 2241'E
BOTTOM HOLE FOOTAGE:	25'N & 550'E

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input 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 type="radio"/> Multibowl	<input checked="" 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 type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Group** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **1033** feet (a minimum of **25 feet (Lea 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 **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **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.

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

Option 1 (Single Stage):

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

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 should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

Operator has proposed to pump down 9-5/8" X 7" annulus. Operator must run a CBL from TD of the 7" 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.

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)

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 (**575-393-3612 Lea 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 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

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.

NMK01242022



H₂S Preparedness and Contingency Plan Summary

Training

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

Awareness Level

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

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

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

Advanced Level H₂S Training

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

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

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



H₂S Preparedness and Contingency Plan Summary

H₂S Training Certification

All employees and visitors will be issued an H₂S training certification card (or certificate) upon successful completion of the appropriate H₂S training course. Personnel working in an H₂S environment will carry a current H₂S training certification card as proof of having received the proper training on their person at all times.

Briefing Area

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

H₂S Equipment

Respiratory Protection

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

Visual Warning System

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

H₂S Detection and Monitoring System

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



H₂S Preparedness and Contingency Plan Summary

Well Control Equipment

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

Mud Program

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

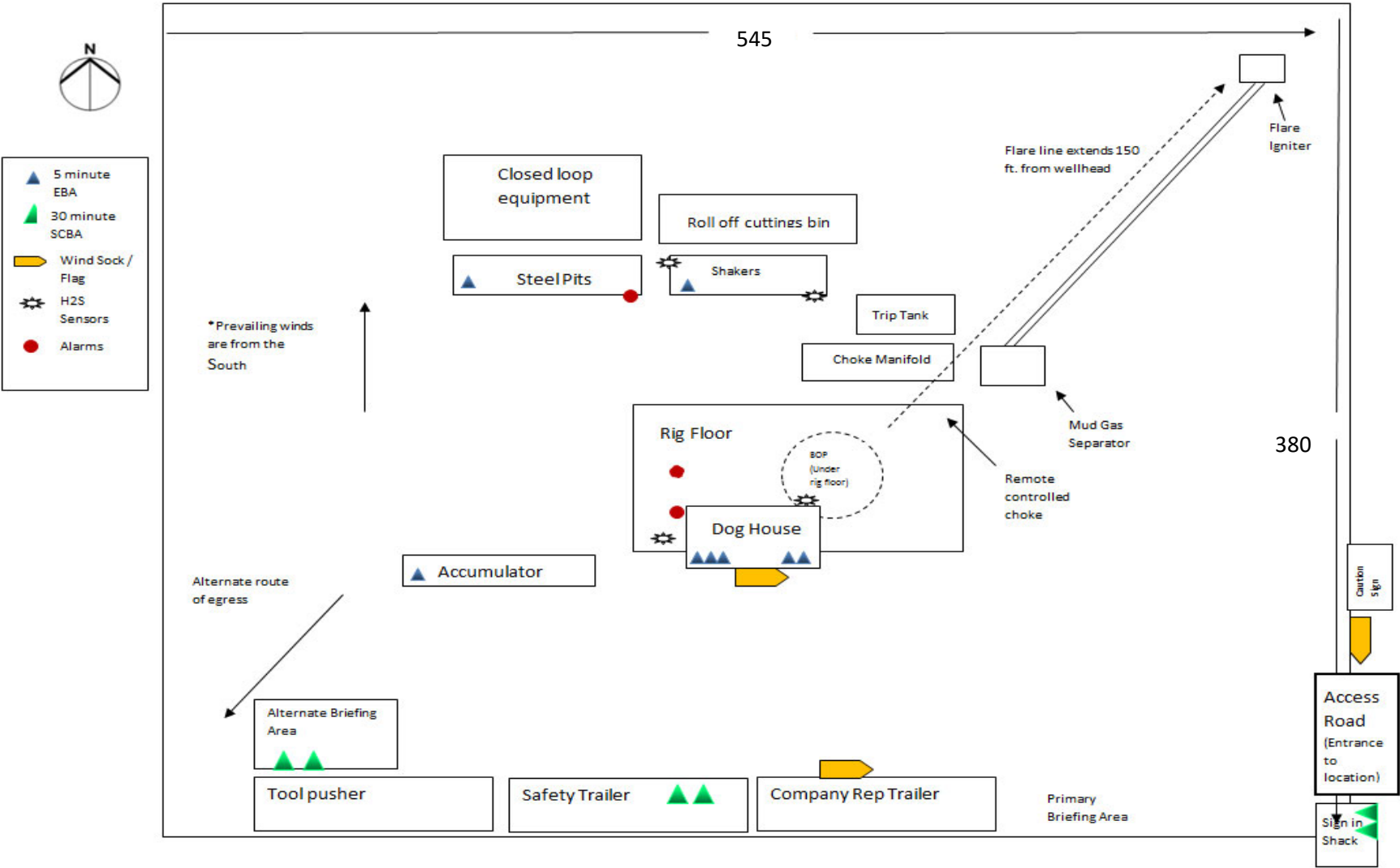
- 1. Use of a degasser
- 2. Use of a zinc based mud treatment
- 3. Increasing mud weight

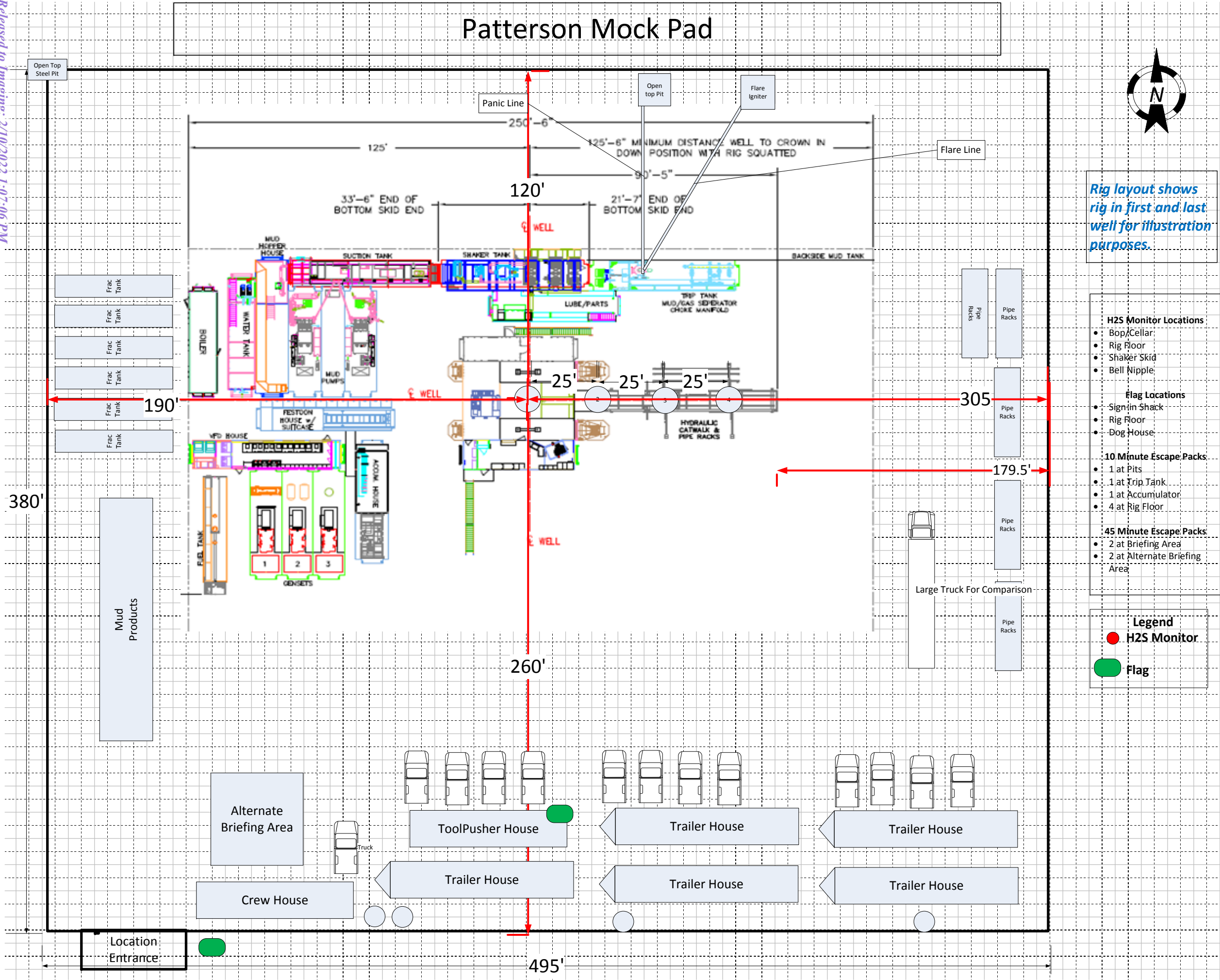
Public Safety - Emergency Assistance

<u>Agency</u>	<u>Telephone Number</u>
Eddy County Sheriff's Department	575-887-7551
Carlsbad Fire Department	575-885-3125
Carlsbad Medical Center	575-887-4100
Eddy County Emergency Management	575-885-3581
Poison Control Center	800-222-1222



H₂S Preparedness and Contingency Plan Summary







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

Drilling Plan Data Report

02/03/2022

APD ID: 10400061417

Submission Date: 02/04/2021

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: CO VIPER 4 33 FED

Well Number: 403H

[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
855089	RUSTLER	3474	779	779	DOLOMITE	NONE	N
855090	RUSTLER	2466	1008	1008	MUDSTONE, SANDSTONE	NONE	N
855091	SALADO	2346	1128	1128	HALITE	NONE	N
855092	CASTILE	-498	3972	3988	ANHYDRITE	NONE	N
855093	LAMAR	-1202	4676	4692	LIMESTONE	NONE	N
855095	BELL CANYON	-1250	4724	4740	SANDSTONE	NONE	N
855096	CHERRY CANYON	-2124	5598	5614	SANDSTONE	NONE	N
855100	BRUSHY CANYON	-3466	6940	6956	SANDSTONE	NATURAL GAS, OIL	N
1543957	BONE SPRING	-5092	8566	8582	LIMESTONE	NATURAL GAS, OIL	Y
1543958	UPPER AVALON SHALE	-5173	8647	8663	LIMESTONE, SHALE	NATURAL GAS, OIL	Y
7014604	BONE SPRING 1ST	-6145	9619	9635	SANDSTONE	NATURAL GAS, OIL	Y
7014605	BONE SPRING 2ND	-6751	10225	18818	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 10460

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

Page 1 of 7

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

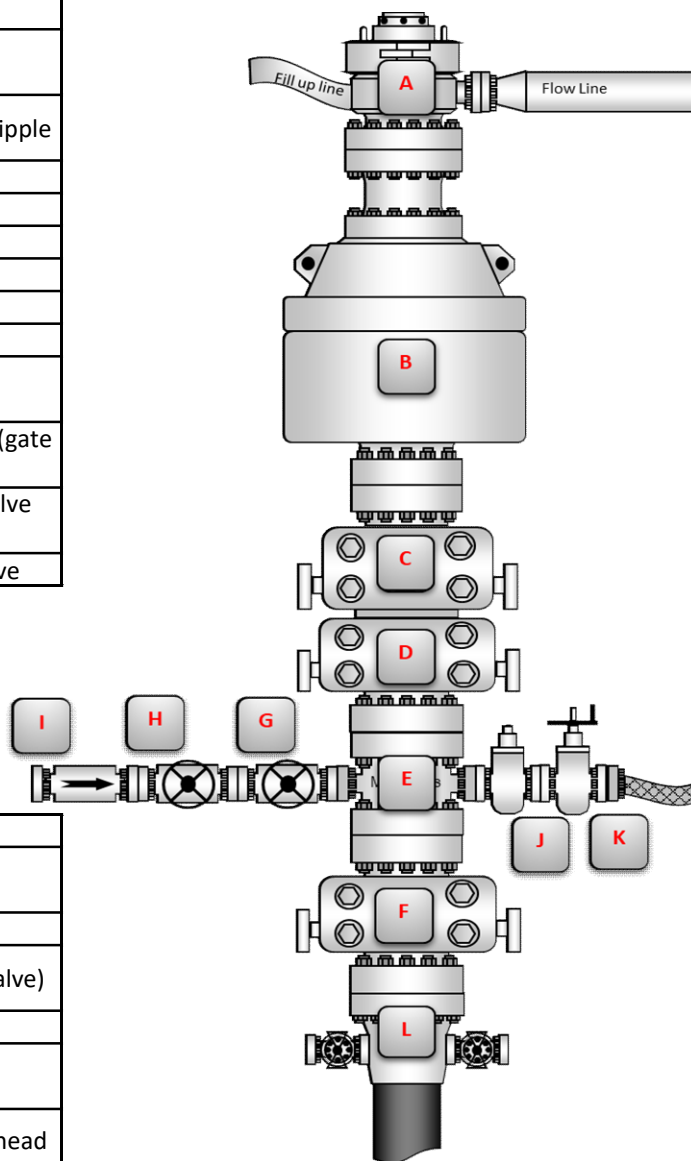
Part	Size	Pressure Rating	Description
G	2"	10,000	Inside Kill Line Valve (gate valve)
H	2"	10,000	Outside Kill Line Valve (gate valve)
I	2"	10,000	Kill Line Check valve

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.

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

CONDITIONS

Action 79590

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 79590
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	2/10/2022
pkautz	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	2/10/2022
pkautz	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	2/10/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	2/10/2022