Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM121473 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: NMNM137168X/CICADA UNIT 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone CICADA UNIT 101H 2. Name of Operator 9. API Well No. CHEVRON USA INCORPORATED 30-015-56694 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PO BOX 1392, BAKERSFIELD, CA 93302 (661) 633-4000 WELCH/BONE SPRING 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 3/T26S/R27E/NMP At surface SWSE / 1077 FSL / 2473 FEL / LAT 32.066886 / LONG -104.17783 At proposed prod. zone SWSE / 20 FSL / 1633 FEL / LAT 32.034897 / LONG -104.174702 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13 State **EDDY** NM 11.5 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 1077 feet location to nearest property or lease line, ft. 640.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 8114 feet / 19108 feet FED: ES0022 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3271 feet 08/28/2025 147 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date NICOLE TAYLOR / Ph: (432) 687-7866 (Electronic Submission) 09/03/2024 Title Regulatory Coordinator Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 02/28/2025 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field 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



Phone: General Phone:	l Information (505) 629-62	441 Fax: (55) 4 1 116	76-3462		Energy, Min	e of New Mexico nerals & Natural Ro Department ERVATION DIV			St	C-10 evised July 9, 202 ubmit Electronica a OCD Permitting	
Online https://v	Phone Direction www.emnrd.	tory Visit: nm.gov/ocd/co	ntact-us/					Submittal	☑ Initial Su	ıbmittal	
				ļ				Type:	☐ Amende	☐ Amended Report	
					WELL LOCA	TION INFORMATIO	N		AS DITTE	<u> </u>	
API N	umber		Pool Code			Pool Name	, TN				
	ING <mark>30-0</mark> 1 ty Code	15-56694	64010 Property Na	omo	,	WELCH: BONE SPRIN	NG		Well Numb	or.	
325142	2		CICADA U	JNIT					101H		
OGRII 4323	D No.		Operator N CHEVRON		INC.				Ground Lev 3271'	el Elevation	
Surface	e Owner: 🗆	State □ Fee □] Tribal ⊠ F	ederal		Mineral Owner:	☐ State ☐ Fe	e □ Tribal 🛭	☑ Federal		
					Surf	ace Location					
UL O	Section 3	Township 26 SOUTH	Range 27 EAST, N.M.P.M.	Lot N/A	Ft. from N/S 1077' SOUTH	Ft. from E/W 2473' EAST	Latitude 32.066886		ongitude 04.177830° W	County EDDY	
					Bottom	Hole Location					
UL O	Section 15	Township 26 SOUTH	Range 27 EAST, N.M.P.M.	Lot N/A	Ft. from N/S 20' SOUTH	Ft. from E/W 1633' EAST	Latitude 32.03489		ongitude)4.174702° W	County EDDY	
Dedica 640	ated Acres	Infill or Defi	ning Well		ng Well API 5-50182	Overlapping Spacin	on Code				
Order :	Numbers. R-	-22488		Į.		Well setbacks are t	ınder Commo	n Ownership	: □Yes □No	⊠N/A	
					Kick O	off Point (KOP)					
UL O	Section 3	Township 26 SOUTH	Range 27 EAST, N.M.P.M.	Lot N/A	Ft. from N/S 0' SOUTH	Ft. from E/W 1701' EAST	Latitude 32.063894		ongitude 4.175412° W	County EDDY	
UL	Section	Township	Range	Lot	Ft. from N/S	Ake Point (FTP) Ft. from E/W	Latitude	Т.	ongitude	County	
В	10	26 SOUTH	27 EAST, N.M.P.M.	N/A	100' NORTH	1633' EAST	32.06361)4.175187° W	EDDY	
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	L	ongitude	County	
0	15	26 SOUTH	27 EAST, N.M.P.M.	N/A	100' SOUTH	1633' EAST	32.03511		04.174702° W	EDDY	
		rea of Uniform MNM 1056940		Spacin	g Unit Type 🛭 Hor	rizontal Vertical	Grov 327	und Floor Ele I'	evation:		
OPER.	ATOR CER	TIFICATIONS				SURVEYOR CERTI	FICATIONS				
best of i that this the land at this l unlease	my knowledge s organization d including the location pursu ed mineral inte	and belief, and, a either owns a wo	if the well is a vorking interest of a hole location with an owner with an pooling a	vertical or or unlease or has a r of a worki	d mineral interest in right to drill this well ing interest or	I hereby certify that the vactual surveys made by to the best of my belief. See Sheet 2 of 2 for plat.	me or under my	supervision, a	nd that the same		
the cons mineral the well	sent of at least l interest in ea	t one lessee or ow ch tract (in the ta interval will be lo	rner of a workinget pool or for cated or obtain	ng interest rmation) i ned a comp	n which any part of		Last	2300	06) 04/10/20	25	
Signatu	re		<u>Pl Adl</u> Date	wi_	7/ 17/ 2023	Signature and Seal of Pro	ofessional Surv	eyor ONAL	SUR!		
Printed		ol Adler				Certificate Number	05/01/20 Date of Sur				
Email A	ca	aroladler@ch	evron.com			Serancate (valide)	Date of Su	,			
		g: 6/8/2025 1									

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

See Sheet 1 of 2 for notes & certification.

PROPOSED KICK OFF POINT/PPP #1

X = 549,073,72' (NAD27 NM E) Y = 386,960.81' LAT. 32.063772' N (NAD27) LONG. 104.174919' W X = 590,257.32' (NAD83/2011 NM E) Y = 387,018.01' LAT. 32.063894' N (NAD83/2011)

PROPOSED FIRST

LONG. 104.175412° W

X = 549,143.41' (NAD27 NM E) Y = 386,859.86' LAT. 32.063494° N (NAD27) LONG. 104.174694° W X = 590,327.02' (NAD83/2011 NM E) Y = 386,917.06' LAT. 32.063616° N (NAD83/2011) LONG. 104.175187° W

PROPOSED MID POINT

X = 549,310.71' (NAD27 NM E) Y = 381,675.80' LAT. 32.049242° N (NAD27) LONG. 104.174179' W X = 590,494.42' (NAD83/2011 NM E) Y = 381,732.90' LAT. 32.049364° N (NAD83/2011) LONG. 104.174672' W

PROPOSED LAST TAKE POINT

X = 549,308.80' (NAD27 NM E) Y = 376,492.90' LAT. 32.034994° N (NAD27) LONG. 104.174210° W X = 590,492.61' (NAD83/2011 NM E) Y = 376,549.91' LAT. 32.035116° N (NAD83/2011) LONG. 104.174702° W

PROPOSED BOTTOM HOLE LOCATION

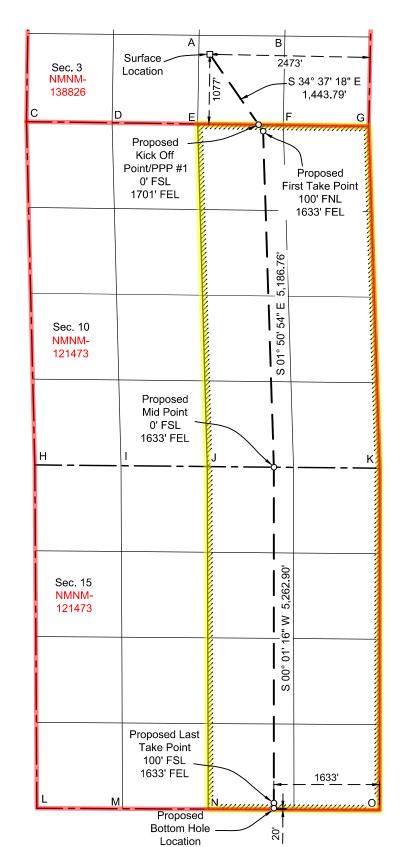
X = 549,308.77' (NAD27 NM E) Y = 376,412.90' LAT. 32.034774° N (NAD27) LONG. 104.174210° W X = 590,492.58' (NAD83/2011 NM E) Y = 376,469.91' LAT. 32.034897° N (NAD83/2011) LONG. 104.174702° W

CORNER COORDINATES TABLE (NAD 27)

A- X= 548,157.44, Y= 386,342.12 B- X= 549,479.62, Y= 388,328.76 C- X= 545,492.91, Y= 387,009.20 D- X= 546,813.37, Y= 386,991.35 E- X= 548,133.83, Y= 386,973.51 F- X= 549,454.29, Y= 386,955.67 G- X= 550,774.76, Y= 386,937.82 H- X= 545,622.05, Y= 381,711.59 I- X= 548,282.84, Y= 381,685.77 J- X= 549,613.24, Y= 381,659.95 L- X= 550,943.63, Y= 381,659.95 L- X= 549,619.70, Y= 376,398.76 M- X= 549,619.70, Y= 376,391.10 O- X= 550,941.76, Y= 376,383.44

CICADA UNIT 101H

X = 548,323.12' (NAD27 NM E) Y = 388,047.98' LAT. 32.066763° N (NAD27) LONG. 104.177337' W X = 589,506.68' (NAD83/2011 NM E) Y = 388,105.19' LAT. 32.066886° N (NAD83/2011) LONG. 104.177830' W



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 <u>Effective May 25, 2021</u>

S O411						
f Other, please describe:						
II. Well(s): Provide the follo e recompleted from a single v				ll or set of wells p	roposed to be drill	ed or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
CICADA UNIT 98H	Pending	UL-O Sec 3 26S 27E	1076' FSL 2533' FEL	BBL/D	MCF/D	BBL/D
CICADA UNIT 99H	Pending	UL-O Sec 3 26S 27E	1076' FSL 2513' FEL	BBL/D	MCF/D	BBL/D
CICADA UNIT 100H	Pending	UL-O Sec 3 26S 27E	1077'FSL 2493' FWL	BBL/D	MCF/D	BBL/D
CICADA UNIT 101H	Pending	UL-O Sec 3 26S 27E	1077'FSL 2473' FEL	BBL/D	MCF/D	BBL/D
CICADA UNIT 102H	Pending	UL-O Sec 3 26S 27E	1077' FSL 2453' FEL	BBL/D	MCF/D	BBL/D
CICADA UNIT 103H	Pending	UL-O Sec 3 26S 27E	1077' FSL 2433' FEL	BBL/D	MCF/D	BBL/D
CICADA UNIT 104H	Pending	UL-O Sec 3 26S 27E	1077' FSL 2413' FEL	BBL/D	MCF/D	BBL/D

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

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
		•	Date	Commencement	Back Date	Date
				Date		
CICADA UNIT 98H	Pending		N/A	N/A	N/A	<u>N/A</u>
CICADA UNIT 99H	Pending		N/A	N/A	N/A	<u>N/A</u>
CICADA UNIT 100H	Pending		N/A	N/A	N/A	N/A
CICADA UNIT 101H	Pending		N/A	N/A	N/A	<u>N/A</u>
CICADA UNIT 102H	Pending		N/A	N/A	<u>N/A</u>	<u>N/A</u>
CICADA UNIT 103H	Pending		N/A	N/A	N/A	N/A
CICADA UNIT 104H	Pending		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.

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	Available Maximum Daily Capacity
1	,		Start Date	of System Segment Tie-in

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

XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.											
XIII. Line Pressure. Operator \Box does \Box does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).											
☐ Attach Operator's plan to manage production in response to the increased line pressure.											
XIV. Confidentiality: ☐ 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											

- (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.

Page 3 of 5

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: Carol Adler											
Printed Name: Carol Adler											
Title: Sr. HSE Regulatory Affairs Coordinator											
E-mail Address: caroladler@chevron.com											
Date: 7/3/2024											
Phone:											
(432) 687-7148											
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.

Well Name: CICADA UNIT Well Number: 101H

to drilling the production lateral sections unless the BOP connection was not broken prior to drilling that hole section (example: drilling straight from production into production liner hole section). A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. Chevron respectfully requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nippled up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC Technologies and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party.

Testing Procedure: The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, production, and production liner will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise (see variance request). Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test pressures and other documented tests may be recorded and documented via utilization of the IPT 'Suretec' Digital BOP Test Method in lieu of the standard test chart. In the event the IPT system is unavailable, the standard test chart will be used.

Choke Diagram Attachment:

BLM_5M_Choke_Manifold_Diagram_20240828120744.pdf

Choke_and_Flex_Hose_COC_7660103_20240828120753.pdf

BOP Diagram Attachment:

BLM_5M_Intermediate_BOP_and_Choke_Manifold_NEW_20240828120804.pdf

1.03___WH___NM_Slim_Hole_DM100312151_20240828120816.pdf

MultiBowl_Wellhead_Specs_20240828120822.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	450	0	450	3272	2822	450	J-55	545	BUTT	5.43	3.57	BUOY	37.0 6	BUOY	34.7 8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2326	0	2309	3272	963	2326	L-80	40	BUTT	2.77	2.6	BUOY	10.2 6	BUOY	9.92
3	INTERMED IATE	8.75	7.0	NEW	API	N	0	7750	0	7650	3272	-4378		P- 110		OTHER - BLUE	2.19	4.55	BUOY	4.19	BUOY	4.19
4	PRODUCTI ON	6.12 5	5.0	NEW	API	N	7550	8200	7450	8050	-4178	-4778		P- 110	1	OTHER - W513	1.81	4.33	BUOY	2.55	BUOY	4
5	PRODUCTI ON	6.12 5	4.5	NEW	API	N	8200	19108	8050	8223	-4778	-4951	10908	P- 110	1	OTHER - W521	1.81	4.33	BUOY	2.55	BUOY	4

Well Name: CICADA UNIT Well Number: 101H

Casing	Attachments

Casing ID: 1

String

SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $13.375 in_BTC_54.5 ppf_J55_20240830092611.pdf$

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

9.625in_BTC_40ppf_L80_20240830092331.pdf

String

Casing ID: 3

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7in_Blue_SD_29ppf_P110_20240830092542.pdf

Well Name: CICADA UNIT Well Number: 101H

Casing Attachments

Casing ID: 4

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $5 in_Wedge_513_18 ppf_P110_20240830092506.pdf$

Casing ID: 5

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

4.5in_Wedge_521_11.6ppf_P110_20240830092428.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	N/A	N/A
SURFACE	Tail		0	450	240	1.63	13.6	391	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	1326	239	2.29	11.5	547	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		1326	2326	263	1.63	12.6	429	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	6750	341	3.52	10.5	1200	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier

Well Name: CICADA UNIT Well Number: 101H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		6750	7750	124	1.52	12.6	188	25		Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		7550	1910 8	895	1.52	12.6	1361	25		Extender, Antifoam, Retarder, Viscosifier

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate. If an open reserve pit is not approved by OCD, a closed system will be used consisting of above ground steel tanks and 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. If an open reserve pit is in place, pit construction, operation, and closure will follow all applicable rules and regulation. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating of E&P waste will follow EPA regulations and accompanying manifests.

Describe the mud monitoring system utilized: A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	450	SPUD MUD	8.3	8.9							
450	2326	SALT SATURATED	8.3	10.6							Saturated brine would be used through salt sections.

Well Name: CICADA UNIT Well Number: 101H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
2326	7750	OTHER : WBM/BRINE	8.3	9.8							
7750	1910 8	OIL-BASED MUD	8.5	10							Due to wellbore instability in the lateral, may exceed the MW window needed to maintain overburden stresses

Section 6 - Test, Logging, Coring

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

a. Production tests are not planned.

b. Logs run include: Gamma Ray Log, Directional Survey

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

GAMMA RAY LOG, DIRECTIONAL SURVEY,

Coring operation description for the well:

c. Coring Operations are not planned.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4279 Anticipated Surface Pressure: 2469

Anticipated Bottom Hole Temperature(F): 143

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Chevron_Standard_H2S_Contingency_Plan_2022_20240828122153.pdf

Well Name: CICADA UNIT Well Number: 101H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Cicada_Unit_101H___9_Point_Plan_20240830093005.pdf DefPlan100ft_CicadaUnitNo.101H_R0_20240830093011.pdf

Other proposed operations facets description:

- a. Batch drilling will be employed whereby the drilling rig may drill a specific hole section on all wells prior to moving to the next hole section.
- b. Shallow rig may be utilized to drill surface or intermediate sections. The production section will not be drilled by the shallow rig.
- c. Wait on cement duration for surface and intermediate string(s) will be based on time for tail slurry to develop 500 psi compressive strength and will follow rules as laid out in Onshore Order 2

Other proposed operations facets attachment:

 ${\tt 3_Operational_Best_Management_Practices_20240828122503.pdf}$

CUSA_Spudder_Rig_Data_20240828122545.pdf

Gas_Management_Plan___CICADA_UNIT___PAD_63_20240828122456.pdf

Visio_Patterson_Mock_Pad_v.2_20240828122603.pdf

WASTE_MINIMIZATION_PLAN___BONE_SPRING_20240828122510.pdf

Other Variance attachment:



Cicada Unit No. 101H R0 mdv 17Jun24 Proposal Geodetic Report

Report Date:

Comments

Castile (CSTL)

Lamar (LMAR)

Bell Canyon (BLCN)

Cherry Canyon (CRCN)

Brushy Canyon (BCN)

Drop 1.5°/100ft

Bone Spring Lime (BSGL) Avalon Upper (AVU)

Avalon Lower (AVL)

First Bone Spring Upper (FBU)

First Bone Spring Lower (FBL)

Second Bone Spring Upper (SBU)

Second Bone Spring Lower (SBL)

Build 10°/100ft

Landing Point FTP Cross

Surface

June 18, 2024 - 04:05 PM (UI Chewron NM, Eddy County (NAD 27 EZ) Chewron HNM Pkg 63 / 101H Cicada Unit No. 101H Unknown / Unknown Cicada Unit No. 101H R0 mdv 17Jun24 June 18, 2024 Tort / AHD / DDI / ERD Ratio Coordinate Reference Syste 116.476 ° / 12036.729 ft / 6.513 / 1.464 NAD27 New Mexico State Plane, Eastern Zone, US Feet 32°4'0.34774"N , 104°10'38.41166"W N 388047.980 ftUS , E 548323.120 ftUS 0.083° Location Lat / Long: Location Grid N/E Y/X CRS Grid Convergence Angle Grid Scale Factor: Version / Patch: 0.99991177(Applied) 2024.2.0.1

MD (ft)

500.00

522.24

600.00 700.00

800.00 900.00 1,000.00 1,100.00 1,200.00 1,300.00

,400.00

1,600.00

1,600.00 1,700.00 1,799.71 1,800.00 1,900.00 2,000.00 2,100.00 2,200.00 2,300.00 2,346.32

2.385.28

2,400.00

2,500.00 2,600.00

2,700.00 2,800.00 2,900.00 3,000.00 3,100.00 3,200.00 3,214.28

3.300.00

3,400.00

3,400.00 3,500.00 3,600.00 3,700.00 3,800.00 4,000.00 4,100.00 4,200.00 4,300.00

4,400.00 4,429.98 4,500.00

4,600.00 4,700.00 4,800.00 4,900.00 5,000.00 5,100.00 5,200.00

5.300.00

5,400.00

5,500.00 5,600.00

5,700.00 5,800.00

5,842.51 5,900.00 6,000.00 6,100.00 6,104.98

6.181.77

6,200.00

6,300.00 6,400.00

6,500.00

6,531.35 6,600.00 6,642.22 6,700.00 6,800.00 6,900.00

6.958.53

7,000.00

7,100.00

7,178.02

7,200.00

7,300.00 7,400.00 7,500.00 7,521.79 7,600.00 7,700.00 7,750.22

7,800.00

7,900.00

7,977.92

8,000.00

8,100.00 8,200.00 8,300.00 8,400.00 8,500.00 8,600.00 8,656.21

8,656.31 8,700.00

4.98 14.98 22.77

24.98

34.98 44.98 54.98 64.98 74.98

84.98 90.60

7,700.00 7,798.36

7,872.03

7,892.22 7,978.74 8,055.27 8,119.49 8,169.46 8,203.66

8,221.04 8,223.21

8,223.21 8,222.75

178.15

178.15 178.15 178.15 178.15 178.15

178.15 178.15

178.15 178.15

4,401.00 4,499.36

4,573.03 4,593.22

4,679.74 4,756.27 4,820.49 4,870.46 4,904.66

4,922.04 4,924.21

4,924.21 4,923.75

641.60

666.78

675.72

725.61 789.77 866.25 952.71 1,046.53

144 87

1.201.00

Survey / DLS Computation: Vertical Section Azimuth: Vertical Section Origin: TVD Reference Datum: TVD Reference Elevation: Seabed / Ground Elevation: Magnetic Declination: Magnetic Declination: Total Gravity Field Strength: Gravity Model: June 18, 2024 - 04:05 PM (UTC 0) Total Magnetic Field Strength: Magnetic Dip Angle:

Declination Date: Magnetic Declination Model:
North Reference:
Grid Convergence Used:
Total Corr Mag North->Grid North:
Local Coord Referenced To:

Minimum Curvature / Lubinsk 179.090 °(GRID North) 0.000 ft, 0.000 ft RKB 3299.000 ft above MSL 3271.000 ft above MSL 6.700° 998.4291mgn (9.80665 Based) GARM

47267.961 nT 59.563 April 10, 2024 HDGM 2024 Grid North

TVD (ft) TVDSS VSEC (ft) Incl (°) Azim (°) NS (ft) EW (ft) DLS (°/100ft) Northing (ftUS) Easting (ftUS) (°) (°) -3,299.00 -3,199.00 -3,099.00 -2,999.00 104.1773365 32.06676326 32.06676326 548,323.12 548,323.12 127.24 127.24 -2,899.00 -2,799.00 0.00 0.00 0.00 388,047.98 388,047.98 32.06676326 500.00 548.323.12 32.06676326 -104.1773365 -2,799.00 -2,776.76 -2,699.00 -2,599.00 -2,499.00 -2,399.00 -2,199.01 -2,099.09 -1,999.31 -1,899.73 -1,800.43 127.24 522.24 0.00 0.00 0.00 388,047.98 548.323.12 32.06676326 -104.1773365 388,047.98 388,047.98 388,047.98 388,047.98 388,047.98 388,047.98 388,047.19 388,044.81 388,040.85 388,035.32 388,028.20 548,323.12 548,323.12 548,323.12 548,323.12 548,323.12 548,323.12 548,324.16 548,327.29 548,332.49 548,339.78 548,349.13 0.00 0.00 0.00 0.00 0.00 0.81 3.23 7.27 32.06676326 32.06676326 700.00 800.00 900.00 1,000.00 1,099.99 1,199.91 1,299.69 1,399.27 1,498.57 1,597.54 32.06676326 32.06676326 32.06676326 32.06676108 0.00 0.00 0.00 1.04 4.17 9.37 0.00 0.00 0.00 -0.79 -3.17 -7.13 -12.66 -19.78 -28.46 -38.71 -50.48 -50.52 -63.09 -75.67 -88.25 -100.83 -110.84 -110.84 0.00 0.00 1.50 1.50 1.50 1.50 1.50 32.06675454 32.06674364 32.06672839 32.06670880 -104.1773231 -104.1773063 6.00 7.50 9.00 16.66 26.01 37.44 12.93 20.19 -104.17728286 -104.17725269 32.06670880 32.06668488 32.0666565 32.06662424 32.06662414 32.06658950 32.06655485 32.06652021 548,360.55 127.24 -1,701.46 29.05 388,019.52 -104.17721586 388,019.52 388,009.27 387,997.50 387,997.47 387,984.89 387,972.31 387,959.74 387,947.16 387,934.58 387,928.76 548,360.55 548,374.03 548,389.51 548,489.56 548,406.11 548,422.65 548,439.19 548,455.74 548,472.28 548,479.94 1,597.54 1,696.09 1,793.88 1,794.16 1,891.98 1,989.80 2,087.61 2,185.43 2,283.25 2,328.55 -1,701.46 -1,602.91 -1,505.12 -1,504.84 -1,407.02 -1,309.20 -1,211.39 -1,113.57 -1,015.75 -970.45 -104.17721586 -104.17717240 -104.17712248 -104.17712232 -104.17706897 -104.17701563 -104.17696228 50.92 66.40 66.45 82.99 1.50 1.50 0.00 0.00 0.00 0.00 0.00 0.00 127.24 127.24 127.24 127.24 127.24 127.24 127.24 127.24 12.00 12.00 12.00 12.00 12.00 12.00 12.00 99.54 116.08 132.63 149.17 156.84 90.08 102.92 115.76 121.71 32.06652021 32.06648557 32.06645093 32.06643489 -104.1768308 12.00 127.24 2.366.66 -932.34 -917.94 126.71 -124.14 163.28 165.72 0.00 387,923.86 387,922.00 548,486.39 548,488.82 32.06642139 -104.17681009 12.00 127.24 2,381.06 128.60 -125.99 0.00 32.06641629 -104.17680224 2,381.06 2,478.88 2,576.69 2,674.51 2,772.33 2,870.14 2,967.96 3,065.78 3,163.59 3,177.56 387,922.00 387,909.43 387,896.85 387,884.27 387,871.70 387,859.12 387,846.54 387,833.96 387,821.39 387,819.59 548,488.82 548,505.37 548,521.91 548,538.46 548,555.00 548,571.54 548,588.09 548,604.63 548,621.17 548,623.54 32.06641629 32.06638165 32.06631236 32.06627772 32.06627772 32.06624308 32.06617380 32.06613916 32.06613916 32.06613421 -917.94 -820.12 -722.31 -624.49 -526.67 -428.86 -331.04 -233.22 -135.41 -121.44 141.44 154.28 167.12 179.96 192.80 205.64 218.48 231.32 233.15 182.26 198.81 -104.17674889 -104.17669554 -163.72 -176.30 -188.88 -201.46 -214.04 -226.61 -228.41 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 127.24 127.24 127.24 127.24 127.24 127.24 127.24 127.24 215.35 231.90 248.45 264.99 281.54 298.08 300.44 -104.17658885 -104.17658885 0.00 0.00 0.00 0.00 0.00 0.00 -104.17637546 -104.1763678 387,819.59 387,808.81 387,796.23 387,783.65 387,771.08 387,758.50 387,745.92 387,733.35 387,720.77 387,708.19 387,695.61 387,683.04 12.00 3,261.41 3,359.23 -37.59 60.23 244.16 -239.19 314.63 0.00 548,637.72 548,654.26 32.06610451 -104.1763221 12.00 127.24 257.00 -251.77 331.17 0.00 32.06606987 32.066003523 32.06590595 32.06593130 32.06589666 32.06582738 32.06579274 32.06575809 32.06606987 -104.1762687 3,359.23 3,457.04 3,554.86 3,652.67 3,750.49 3,848.31 3,946.12 4,043.94 4,141.76 4,239.57 548,654.26 548,670.81 548,687.35 548,703.89 548,720.44 548,736.98 548,753.52 548,770.07 548,786.61 548,803.16 -104.17626877 -104.17621542 -104.17616207 -104.17610873 -104.17605538 -104.17600203 -104.17594869 -104.17589534 347.72 364.26 380.81 397.35 413.90 430.44 446.99 -264.35 -276.93 -289.51 12.00 12.00 158.04 255.86 353.67 451.49 549.31 647.12 744.94 842.76 940.57 269.84 282.68 295.52 308.36 321.20 334.04 346.88 359.72 372.56 463.53 480.08 -104.17584199 -104.17578865 12.00 127.24 4.337.39 1.038.39 385.39 -377.56 496.62 0.00 387,670,46 548,819,70 32.06572345 -104.17573530 4,366.71 4,435.21 1,067.71 1,136.21 389.24 398.23 501.58 513.17 387,666.69 387,657.88 548,824.66 548,836.24 32.06571307 32.06568881 387,657.88 387,645.30 387,632.73 387,620.15 387,607.57 387,595.00 387,582.42 387,569.84 548,836.24 548,852.79 548,869.33 548,885.87 548,902.42 548,918.96 548,935.51 548,952.05 32.06568881 32.06565417 32.06561953 32.06558488 32.06555024 32.06551560 32.06548096 32.06544632 4,533.02 4,630.84 4,728.65 4,826.47 4,924.29 5,022.10 5,119.92 -402.71 -415.29 -427.87 -440.45 -453.03 -465.60 -478.18 513.17 529.71 546.26 562.80 579.35 595.90 612.44 628.99 12.00 12.00 127.24 127.24 1,234.02 1,331.84 411.07 423.91 0.00 -104.17562861 -104.17557526 12.00 12.00 12.00 12.00 12.00 127.24 127.24 127.24 127.24 127.24 1,429.65 1,527.47 1,625.29 1,723.10 1,820.92 436.75 449.59 462.43 475.27 488.11 -104.17552192 -104.17546857 -104.17541522 -104.17536188 -104.17530853 548,952.05 548,968.59 548,985.14 549,001.68 549,018.22 549,034.77 549,051.31 549,067.52 549,081.86 549,094.16 549,094.71 12.00 5.217.74 1.918.74 500.95 -490.76 645.53 0.00 387.557.26 32.06541167 -104.17525519 12.00 127.24 5,315.55 2,016.55 513.79 -503.34 662.08 0.00 387,544.69 32.06537703 -104.17520184 387,544.69 387,532.11 387,519.53 387,506.95 387,494.38 387,489.03 387,482.06 387,471.15 387,461.38 12.00 12.00 5,413.37 5,511.19 2,114.37 2,212.19 526.63 539.47 -515.92 -528.50 678.62 695.17 32.06534239 32.06530775 -104.17514849 -104.17509515 32.06530775 32.06527310 32.06523846 32.06522373 32.06520453 32.06517449 32.06514875 32.06514758 5,609.00 5,706.82 5,748.40 5,804.72 5,903.08 6,001.88 6,006.81 2,310.00 2,407.82 2,449.40 2,505.72 2,604.08 2,702.88 2,707.81 -104.17504180 -104.17498846 -104.17496578 -104.17493620 -104.17488994 12.00 127.24 127.24 552.31 -541.07 -553.65 711.71 728.26 0.00 12.00 565.15 735.29 744.46 758.81 771.10 771.66 12.00 11.13 9.63 8.13 8.06 570.61 577.73 588.86 598.40 598.83 -559.00 -565.97 -576.88 -586.23 -586.65 0.00 1.50 1.50 1.50 1.50 6.91 127.24 6.082.94 2.783.94 605.01 -592.70 -594.00 779.62 781.33 1.50 1.50 387.455.33 549,102.67 549,104.38 32.06513091 -104.1748228 127.24 6,101.05 2,802.05 606.34 387,454.03 32.06512733 -104.17481732 387,454.03 387,447.83 387,443.20 387,440.16 387,438.55 387,438.55 387,438.55 387,438.55 6,200.52 6,300.22 2,901.52 3,001.22 612.67 617.39 -600.21 -604.83 789.49 795.58 549,112.54 549,118.63 32.06511024 -104.1747910 32.06509750 549,118.63 549,122.63 549,123.46 549,124.55 549,124.74 549,124.74 549,124.74 6,400.09 6,431.43 6,500.06 6,542.28 6,600.06 6,700.06 6,800.06 620.50 621.14 621.99 622.14 622.14 622.14 622.14 -607.88 -608.51 -609.34 -609.48 -609.48 -609.48 2.13 127.24 3,101.09 799.58 1.50 32.06508912 -104.1747584 32.06508912 32.06508739 32.06508510 32.06508471 32.06508471 32.06508471 -104.17475848 -104.17475582 -104.17475229 -104.17475169 -104.17475169 -104.17475169 3,132.43 3,201.06 3,243.28 3,301.06 3,401.06 3,501.06 800.41 801.50 801.69 801.69 801.69 1.66 0.63 0.00 0.00 0.00 0.00 6.858.59 3.559.59 622.14 -609.48 801.69 0.00 387.438.55 549.124.74 32.06508471 -104.17475169 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 549,124.74 0.00 6,900.06 7,000.06 3,601.06 3,701.06 -609.48 -609.48 801.69 801.69 387,438.55 387,438.55 32.06508471 32.06508471 -104.17475169 -104.17475169 127.24 622.14 387,438.55 387,438.55 387,438.55 387,438.55 387,438.55 387,438.55 387,438.55 387,438.55 0.00 127.24 7,078.08 7,100.06 3,779.08 3,801.06 622.14 -609.48 -609.48 801.69 0.00 32.06508471 -104.17475169 0.00 127.24 622.14 801.69 0.00 32.06508471 32.06508471 32.06508471 32.06508471 32.06508471 32.06508471 32.06508471 7,200.06 7,300.06 7,400.06 7,421.85 7,500.06 7,600.06 3,901.06 4,001.06 4,101.06 4,122.85 4,201.06 4,301.06 622.14 622.14 622.14 622.14 622.14 622.14 -609.48 -609.48 -609.48 -609.48 -609.48 801.69 801.69 801.69 801.69 801.69 7.650.28 549,124.74 0.00 4.351.28 622.14 -609.48 801.69 387,438,55 32.06508471 -104.17475169

801.76 802.32

803.13

803.42

805.03 807.10 809.56 812.35 815.38 818.55 820.36

-654.11

-663.04 -712.92 -777.05 -853.50 -939.92 -1,033.71

-1,132.01 -1,188.12

-1,188.23 -1,231.89

387,436.40 387,419.10

387,393.93 387,385.00

387,385.00 387,335.13 387,271.00 387,194.56 387,108.14 387,014.36 386,916.07 386,859.96

386,859.86 386.816.20

10.00

10.00 10.00

549,124.81 549,125.37

549,126.18 549,126.47

549,128.08 549,130.14 549,132.61 549,135.40 549,138.43

549,141.60 549,143.41

549,143.41 549,144.82

32.06507877

32.06503122

32.06496203 32.06493747

32.06480036 32.06462406 32.06441392 32.06417634 32.06391852

32.06364830 32.06349405

32.06349377 32.06337374

-104.1747497

-104.17474725

-104.17474140 -104.17473503 -104.17472743 -104.17471884 -104.17470951

-104.1746997

-104.17469416

-104.17469415 -104.17468981

comments	MD	Incl	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS	EW	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
	8,800.00	90.60	178.15	8,221.70	4,922.70	1,344.77	-1,331.83	(ft) 825.00	0.00	386,716.27	549,148.05		-104.17467987 -104.17466993
	8,900.00 9,000.00	90.60 90.60	178.15 178.15	8,220.66 8,219.61	4,921.66 4,920.61	1,444.75 1,544.73	-1,431.78 -1,531.72	828.23 831.45	0.00	386,616.33 386,516.40	549,151.27 549,154.50	32.06254953	-104.17466000
	9,100.00 9,200.00	90.60 90.60	178.15 178.15	8,218.57 8,217.52	4,919.57 4,918.52	1,644.71 1,744.69	-1,631.66 -1,731.60	834.68 837.90	0.00	386,416.47 386,316.53	549,157.72 549,160.95	32.06200006	-104.17465006 -104.17464013
	9,300.00 9,400.00	90.60 90.60	178.15 178.15	8,216.48 8,215.43	4,917.48 4,916.43	1,844.67 1,944.66	-1,831.55 -1,931.49	841.13 844.35	0.00	386,216.60 386,116.66	549,164.17 549,167.40	32.06145059	-104.17463019 -104.17462025
	9,500.00 9,600.00	90.60 90.60	178.15 178.15	8,214.39 8,213.34	4,915.39 4,914.34	2,044.64 2,144.62	-2,031.43 -2,131.37	847.58 850.80	0.00 0.00	386,016.73 385,916.80	549,170.62 549,173.85	32.06090111	-104.17461032 -104.17460038
	9,700.00 9,800.00	90.60 90.60	178.15 178.15	8,212.30 8,211.25	4,913.30 4,912.25	2,244.60 2,344.58	-2,231.32 -2,331.26	854.03 857.25	0.00 0.00	385,816.86 385,716.93	549,177.07 549,180.30		-104.17459045 -104.17458051
	9,900.00 10,000.00	90.60 90.60	178.15 178.15	8,210.21 8,209.16	4,911.21 4,910.16	2,444.56 2,544.54	-2,431.20 -2,531.14	860.48 863.70	0.00 0.00	385,617.00 385,517.06	549,183.52 549,186.75		-104.17457058 -104.17456064
	10,100.00 10,200.00	90.60 90.60	178.15 178.15	8,208.12 8,207.08	4,909.12 4,908.08	2,644.52 2,744.50	-2,631.09 -2,731.03	866.93 870.16	0.00	385,417.13 385,317.20	549,189.97 549,193.20		-104.17455070 -104.17454077
	10,300.00 10.400.00	90.60 90.60	178.15 178.15	8,206.03 8,204.99	4,907.03 4.905.99	2,844.49 2,944.47	-2,830.97 -2,930.91	873.38 876.61	0.00	385,217.26 385,117.33	549,196.42 549,199.65	32.05897796	-104.17453083 -104.17452090
	10,500.00 10,600.00	90.60 90.60	178.15 178.15	8,203.94 8,202.90	4,904.94 4,903.90	3,044.45 3,144.43	-3,030.86 -3,130.80	879.83 883.06	0.00	385,017.40 384,917.46	549,202.87 549,206.10	32.05842849	-104.17451096 -104.17450103
	10,700.00	90.60 90.60	178.15 178.15	8,201.85 8,200.81	4,902.85 4,901.81	3,244.41 3.344.39	-3,230.74 -3,330.68	886.28 889.51	0.00	384,817.53 384,717.60	549,209.32 549.212.55	32.05787902	-104.17449109 -104.17448116
	10,900.00	90.60 90.60	178.15 178.15	8,199.76 8.198.72	4,900.76 4,899.72	3,444.37 3,544.35	-3,430.63 -3.530.57	892.73 895.96	0.00	384,617.66 384.517.73	549,215.77 549,219.00	32.05732955	-104.17447122 -104.17446129
	11,100.00	90.60	178.15	8,197.67	4,898.67	3,644.33	-3,630.51	899.18	0.00	384,417.80 384,317.86	549,222.22	32.05678007	-104.17445135
	11,200.00 11,300.00	90.60 90.60	178.15 178.15	8,196.63 8,195.58	4,897.63 4,896.58	3,744.32 3,844.30	-3,730.45 -3,830.40	902.41 905.63	0.00	384,217.93	549,225.45 549,228.67	32.05623060	-104.17444142 -104.17443148
	11,400.00 11,500.00	90.60 90.60	178.15 178.15	8,194.54 8,193.49	4,895.54 4,894.49	3,944.28 4,044.26	-3,930.34 -4,030.28	908.86 912.08	0.00	384,117.99 384,018.06	549,231.90 549,235.12	32.05568113	-104.17442155 -104.17441161
	11,600.00 11,700.00	90.60 90.60	178.15 178.15	8,192.45 8,191.40	4,893.45 4,892.40	4,144.24 4,244.22	-4,130.22 -4,230.17	915.31 918.53	0.00 0.00	383,918.13 383,818.19	549,238.35 549,241.57	32.05513166	-104.17440168 -104.17439174
	11,800.00 11,900.00	90.60 90.60	178.15 178.15	8,190.36 8,189.31	4,891.36 4,890.31	4,344.20 4,444.18	-4,330.11 -4,430.05	921.76 924.99	0.00 0.00	383,718.26 383,618.33	549,244.80 549,248.02		-104.17438181 -104.17437187
	12,000.00 12,100.00	90.60 90.60	178.15 178.15	8,188.27 8,187.22	4,889.27 4,888.22	4,544.17 4,644.15	-4,529.99 -4,629.94	928.21 931.44	0.00 0.00	383,518.39 383,418.46	549,251.25 549,254.47		-104.17436194 -104.17435200
	12,200.00 12,300.00	90.60 90.60	178.15 178.15	8,186.18 8,185.13	4,887.18 4,886.13	4,744.13 4,844.11	-4,729.88 -4,829.82	934.66 937.89	0.00 0.00	383,318.53 383,218.59	549,257.70 549,260.92		-104.17434207 -104.17433213
	12,400.00 12,500.00	90.60 90.60	178.15 178.15	8,184.09 8,183.04	4,885.09 4,884.04	4,944.09 5,044.07	-4,929.76 -5,029.71	941.11 944.34	0.00	383,118.66 383,018.73	549,264.15 549,267.37	32.05320851	-104.17432220 -104.17431227
	12,600.00 12,700.00	90.60 90.60	178.15 178.15	8,182.00 8.180.95	4,883.00 4.881.95	5,144.05 5,244.03	-5,129.65 -5,229.59	947.56 950.79	0.00	382,918.79 382.818.86	549,270.60 549,273.82	32.05265903	-104.17430233 -104.17429240
	12,800.00	90.60	178.15	8,179.91	4,880.91	5,344.01	-5,329.53	954.01	0.00	382,718.93	549,277.05	32.05210956	-104.17428246
	12,900.00 13,000.00	90.60 90.60	178.15 178.15	8,178.86 8,177.82	4,879.86 4,878.82	5,444.00 5,543.98	-5,429.48 -5,529.42	957.24 960.46	0.00	382,618.99 382,519.06	549,280.27 549,283.50	32.05156009	-104.17427253 -104.17426260
	13,100.00 13,200.00	90.60 90.60	178.15 178.15	8,176.77 8,175.73	4,877.77 4,876.73	5,643.96 5,743.94	-5,629.36 -5,729.30	963.69 966.91	0.00 0.00	382,419.13 382,319.19	549,286.72 549,289.95	32.05101062	-104.17425266 -104.17424273
	13,300.00 13,400.00	90.60 90.60	178.15 178.15	8,174.68 8,173.64	4,875.68 4,874.64	5,843.92 5,943.90	-5,829.25 -5,929.19	970.14 973.36	0.00 0.00	382,219.26 382,119.33	549,293.17 549,296.40		-104.17423279 -104.17422286
	13,500.00 13,600.00	90.60 90.60	178.15 178.15	8,172.59 8,171.55	4,873.59 4,872.55	6,043.88 6,143.86	-6,029.13 -6,129.07	976.59 979.82	0.00 0.00	382,019.39 381,919.46	549,299.62 549,302.85		-104.17421293 -104.17420299
	13,700.00 13,800.00	90.60 90.60	178.15 178.15	8,170.50 8,169.46	4,871.50 4.870.46	6,243.84 6.343.83	-6,229.02 -6,328.96	983.04 986.27	0.00	381,819.52 381,719.59	549,306.07 549,309.30	32.04963693	-104.17419306 -104.17418313
Tum 2°/100ft	13,843.82 13,900.00	90.60 90.60	178.15 179.28	8,169.00 8.168.41	4,870.00 4.869.41	6,387.64 6.443.81	-6,372.76 -6.428.92	987.68 988.94	0.00 2.00	381,675.80 381,619.64	549,310.71 549.311.97	32.04924181	-104.17417877 -104.17417497
to TD	13,938.14 14,000.00	90.60 90.60	180.04 180.04	8,168.01 8,167.36	4,869.01 4,868.36	6,481.94 6,543.80	-6,467.05 -6,528.91	989.17 989.13	2.00 0.00	381,581.51 381,519.66	549,312.20 549,312.16	32.04898261	-104.17417441 -104.17417484
	14,100.00	90.60	180.04	8,166.31	4,867.31	6,643.78	-6,628.90	989.06	0.00	381,419.67	549,312.09	32.04853769	-104.17417553
	14,200.00 14,300.00	90.60 90.60	180.04 180.04	8,165.26 8,164.20	4,866.26 4,865.20	6,743.76 6,843.74	-6,728.90 -6,828.89	989.00 988.93	0.00 0.00	381,319.69 381,219.70	549,312.03 549,311.96	32.04798796	-104.17417622 -104.17417691
	14,400.00 14,500.00	90.60 90.60	180.04 180.04	8,163.15 8,162.10	4,864.15 4,863.10	6,943.72 7,043.70	-6,928.89 -7,028.88	988.86 988.80	0.00 0.00	381,119.72 381,019.73	549,311.89 549,311.83	32.04743823	-104.17417760 -104.17417829
	14,600.00 14,700.00	90.60 90.60	180.04 180.04	8,161.05 8,160.00	4,862.05 4,861.00	7,143.68 7,243.66	-7,128.88 -7,228.87	988.73 988.66	0.00 0.00	380,919.75 380,819.76	549,311.76 549,311.69	32.04688850	-104.17417898 -104.17417967
	14,800.00 14,900.00	90.60 90.60	180.04 180.04	8,158.94 8,157.89	4,859.94 4,858.89	7,343.64 7,443.62	-7,328.87 -7,428.86	988.60 988.53	0.00 0.00	380,719.78 380,619.79	549,311.63 549,311.56		-104.17418036 -104.17418105
	15,000.00 15,100.00	90.60 90.60	180.04 180.04	8,156.84 8,155.79	4,857.84 4,856.79	7,543.60 7,643.58	-7,528.85 -7,628.85	988.46 988.40	0.00 0.00	380,519.80 380,419.82	549,311.50 549,311.43		-104.17418174 -104.17418243
	15,200.00 15,300.00	90.60 90.60	180.04 180.04	8,154.74 8,153.68	4,855.74 4.854.68	7,743.57 7,843.55	-7,728.84 -7,828.84	988.33 988.27	0.00	380,319.83 380,219.85	549,311.36 549,311.30	32.04551417	-104.17418312 -104.17418381
	15,400.00 15,500.00	90.60 90.60	180.04 180.04	8,152.63 8,151.58	4,853.63 4.852.58	7,943.53 8.043.51	-7,928.83 -8.028.83	988.20 988.13	0.00	380,119.86 380,019.88	549,311.23 549,311.16	32.04496444	-104.17418450 -104.17418519
	15,600.00 15,700.00	90.60 90.60	180.04 180.04	8,150.53 8,149.48	4,851.53 4,850.48	8,143.49 8,243.47	-8,128.82 -8,228.82	988.07 988.00	0.00	379,919.89 379,819.91	549,311.10 549,311.03	32.04441470	-104.17418588 -104.17418657
	15,800.00	90.60	180.04	8,148.42	4,849.42	8,343.45	-8,328.81	987.93	0.00	379,719.92	549,310.96	32.04386497	-104.17418726
	15,900.00 16,000.00	90.60 90.60	180.04 180.04	8,147.37 8,146.32	4,848.37 4,847.32	8,443.43 8,543.41	-8,428.80 -8,528.80	987.87 987.80	0.00	379,619.94 379,519.95	549,310.90 549,310.83	32.04331524	-104.17418795 -104.17418864
	16,100.00 16,200.00	90.60 90.60	180.04 180.04	8,145.27 8,144.22	4,846.27 4,845.22	8,643.39 8,743.37	-8,628.79 -8,728.79	987.73 987.67	0.00 0.00	379,419.97 379,319.98	549,310.77 549,310.70	32.04276551	-104.17418932 -104.17419001
	16,300.00 16,400.00	90.60 90.60	180.04 180.04	8,143.16 8,142.11	4,844.16 4,843.11	8,843.35 8,943.33	-8,828.78 -8,928.78	987.60 987.54	0.00 0.00	379,219.99 379,120.01	549,310.63 549,310.57	32.04221578	-104.17419070 -104.17419139
	16,500.00 16,600.00	90.60 90.60	180.04 180.04	8,141.06 8,140.01	4,842.06 4,841.01	9,043.32 9,143.30	-9,028.77 -9,128.77	987.47 987.40	0.00	379,020.02 378,920.04	549,310.50 549,310.43		-104.17419208 -104.17419277
	16,700.00 16.800.00	90.60 90.60	180.04 180.04	8,138.96 8,137.90	4,839.96 4.838.90	9,243.28 9.343.26	-9,228.76 -9.328.75	987.34 987.27	0.00	378,820.05 378,720.07	549,310.37 549,310.30		-104.17419346 -104.17419415
	16,900.00 17,000.00	90.60 90.60	180.04 180.04	8,136.85 8,135.80	4,837.85 4,836.80	9,443.24 9,543.22	-9,428.75 -9,528.74	987.20 987.14	0.00	378,620.08 378,520.10	549,310.23 549,310.17	32.04084145	-104.17419484 -104.17419553
	17,100.00	90.60	180.04	8,134.75	4,835.75	9,643.20	-9,628.74	987.07	0.00	378,420.11	549,310.10	32.04029171	-104.17419622
	17,200.00 17,300.00	90.60 90.60	180.04 180.04	8,133.70 8,132.64	4,834.70 4,833.64	9,743.18 9,843.16	-9,728.73 -9,828.73	987.00 986.94	0.00	378,320.13 378,220.14	549,310.04 549,309.97	32.03974198	-104.17419691 -104.17419760
	17,400.00 17,500.00	90.60 90.60	180.04 180.04	8,131.59 8,130.54	4,832.59 4,831.54	9,943.14 10,043.12	-9,928.72 -10,028.72	986.87 986.81	0.00 0.00	378,120.15 378,020.17	549,309.90 549,309.84		-104.17419829 -104.17419898
	17,600.00 17,700.00	90.60 90.60	180.04 180.04	8,129.49 8,128.44	4,830.49 4,829.44	10,143.10 10,243.08	-10,128.71 -10,228.70	986.74 986.67	0.00	377,920.18 377,820.20	549,309.77 549,309.70	32.03891738 32.03864252	-104.17419967 -104.17420036
	17,800.00 17,900.00	90.60 90.60	180.04 180.04	8,127.38 8,126.33	4,828.38 4,827.33	10,343.07 10,443.05	-10,328.70 -10,428.69	986.61 986.54	0.00	377,720.21 377,620.23	549,309.64 549,309.57	32.03836765 32.03809278	-104.17420105 -104.17420174
	18,000.00 18,100.00	90.60 90.60	180.04 180.04	8,125.28 8,124.23	4,826.28 4.825.23	10,543.03 10,643.01	-10,528.69 -10,628.68	986.47 986.41	0.00	377,520.24 377,420.26	549,309.50 549,309.44		-104.17420243 -104.17420312
	18,200.00 18,300.00	90.60 90.60	180.04 180.04	8,123.18 8,122.12	4,824.18 4.823.12	10,742.99 10.842.97	-10,728.68 -10.828.67	986.34 986.27	0.00	377,320.27 377,220.29	549,309.37 549,309.31	32.03726818	-104.17420381 -104.17420450
	18,400.00	90.60 90.60	180.04 180.04	8,121.07	4,822.07	10,942.95	-10,928.67	986.21 986.14	0.00	377,120.30	549,309.24	32.03671845	-104.17420519 -104.17420587
	18,500.00 18,600.00	90.60	180.04	8,120.02 8,118.97	4,821.02 4,819.97	11,042.93 11,142.91	-11,028.66 -11,128.65	986.08	0.00	377,020.32 376,920.33	549,309.17 549,309.11	32.03616872	-104.17420656
	18,700.00 18,800.00	90.60 90.60	180.04 180.04	8,117.92 8,116.86	4,818.92 4,817.86	11,242.89 11,342.87	-11,228.65 -11,328.64	986.01 985.94	0.00	376,820.34 376,720.36	549,309.04 549,308.97		-104.17420725 -104.17420794
	18,900.00 19,000.00	90.60 90.60	180.04 180.04	8,115.81 8,114.76	4,816.81 4,815.76	11,442.85 11,542.83	-11,428.64 -11,528.63	985.88 985.81	0.00 0.00	376,620.37 376,520.39	549,308.91 549,308.84	32.03506925	-104.17420863 -104.17420932
Cross	19,027.51 19,100.00	90.60 90.60	180.04 180.04	8,114.47 8,113.71	4,815.47 4,814.71	11,570.34 11,642.82	-11,556.14 -11,628.63	985.79 985.74	0.00	376,492.88 376,420.40	549,308.82 549,308.77	32.03479439	-104.17420951 -104.17421001
da Unit No. 101H BHL	19,107.50	90.60	180.04	8,113.63	4,814.63	11,650.32	-11,636.13	985.74	0.00	376,412.90	549,308.77	32.03477376	-104.17421006
ey Type:	Def	Plan											
rey Error Model: rey Program:	WP	TS Rev 0.											
Description		Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Co	ode	Vendor	/ Tool	Borehole / Survey
		1	0.000	19,406.198	1/100.000	_	_	В	001Mb_MWD+HRGM			(Cicada Unit No. 101H / Cicada Unit No.
lefault hole/casing size was used fo	or A/C calculation bed	•		.,									
Geometry:			(C-1)		(C-)								
MD (ft)		Hole Size	(in)	Casing Siz	ze (in)		Name						

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: CHEVRON USA INCORPORATED
WELL NAME & NO.: CICADA UNIT 101H
SURFACE HOLE FOOTAGE: 1077'/S & 2473'/E
BOTTOM HOLE FOOTAGE 20'/S & 1633'/E

LOCATION: Section 3, T.26 S., R.27 E., NMP COUNTY: Eddy County, New Mexico

COA

H2S	• Yes	O No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	C Low	• Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	• Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	☐ Capitan Reef	\square WIPP
Other	Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	☐ Primary Cement
	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	\square COM	Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	✓ Break Testing	□ Offline	☐ Casing
Variance		Cementing	Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 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

Primary Casing Design:

1. The 13-3/8 inch surface casing shall be set at approximately 450 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable

fresh water) and cemented to the surface. The surface hole shall be **16 inch or 17 1/2** inch in diameter.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> 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.

Operator is approved to use contingency cementing for the Intermediate and Production section. Operator shall notify the BLM before proceeding with contingency operation.

- 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 Medium Cave/Karst 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 intermediate casing is:
 - Cement should tie-back at least 200 feet into previous casing string.
 Operator shall provide method of verification.
 Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Liner casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 4. The minimum required fill of cement behind the $5 \times 4-1/2$ inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

Page 2 of 8

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

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 13-3/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system) BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.

Page 3 of 8

- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- 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 (575-706-2779) 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. (200' TVD tolerance between intermediate shoes is allowable).
- 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.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220.

BLM_NM_CFO_DrillingNotifications@BLM.GOV (575) 361-2822

- 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

- i. Notify the BLM when moving in and removing the Spudder Rig.
- ii. 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.
- iii. BOP/BOPE test to be conducted per **43 CFR 3172** 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.
- For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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 <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing 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-Q 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 **43 CFR 3172**.
- 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:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. 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.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. 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.
 - i. 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 cement), 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).
 - ii. 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e.

- against the casing) pursuant to **43 CFR 3172** 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 **43 CFR 3172**.

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.

JS 11/18/2024



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.
 - a. Note: Employees who work at sites that participate in the Chevron Respirator User program will require separate respirator training as required by the MCBU Respiratory Protection Program.
- 5. Basic overview of emergency rescue techniques, first aid, CPR and medical evaluation procedures. Employees who may be required to perform "standby" duties are required to receive additional first aid and CPR training, which is not covered in the Advanced Level H₂S training.
- 6. Proficiency examination covering all course material.

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



H₂S Training Certification

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

Briefing Area

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

H₂S Equipment

Respiratory Protection

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

Visual Warning System

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

H₂S Detection and Monitoring System

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



Well Control Equipment

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

Mud Program

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

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

Public Safety - Emergency Assistance

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

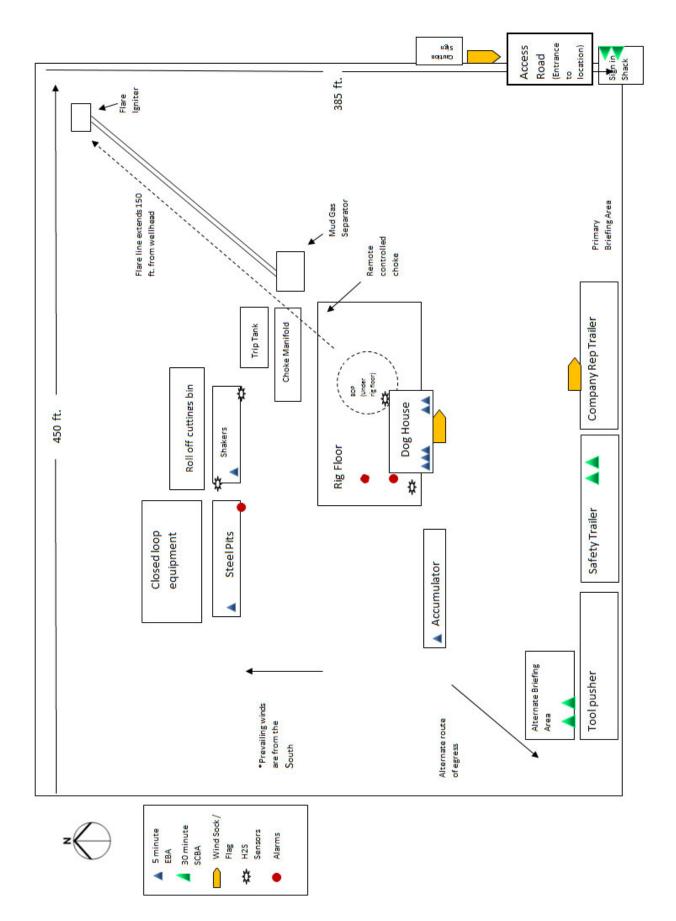


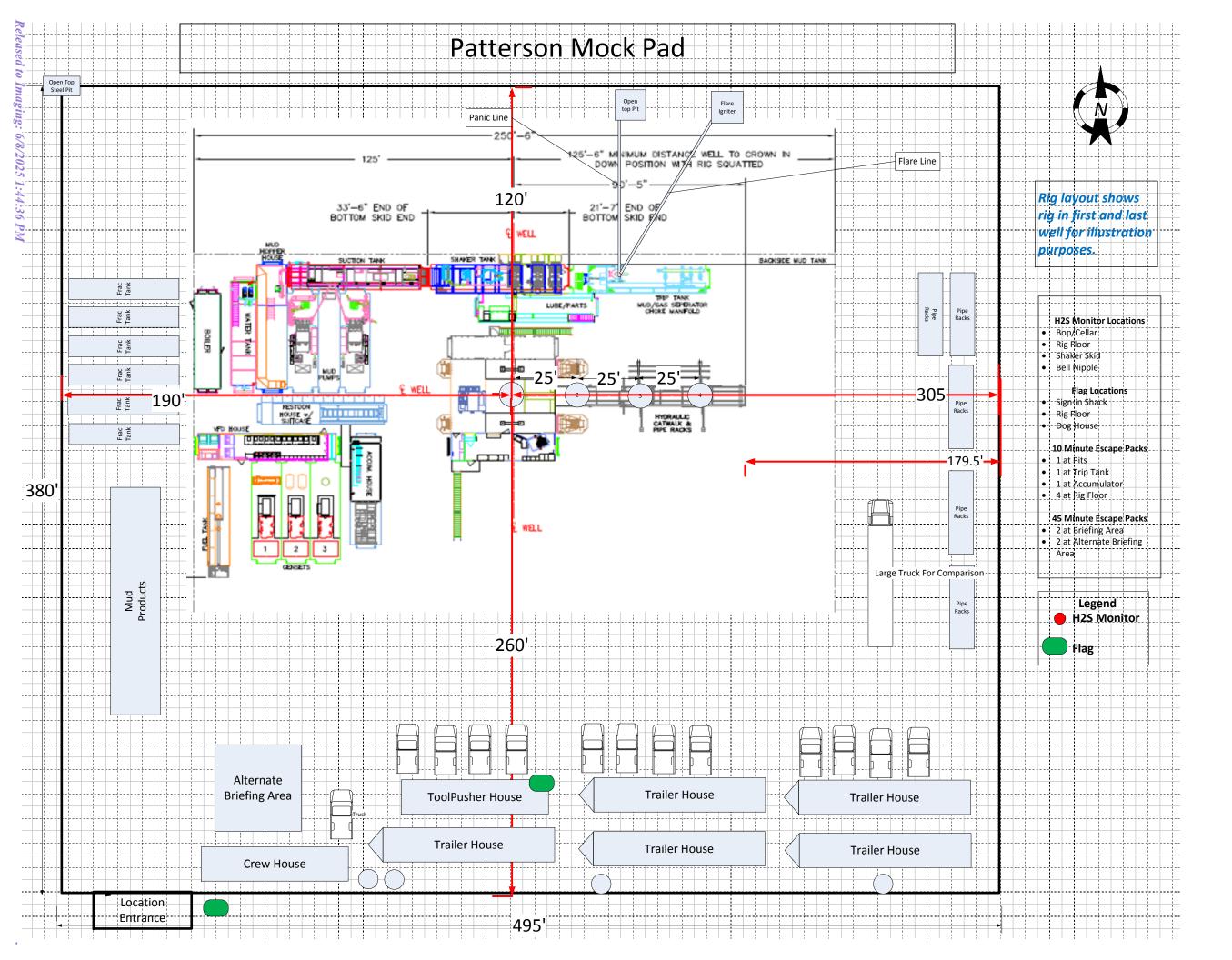
Chevron MCBU D&C Emergency Notifications

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

	Name	Title	Office Number	Cell Phone
1.	ТВО	Drilling Engineer		
2.	Ian McWilliam	Superintendent	(661) 770-6030	
3.	Matt Madson	Superintendent	(713) 206-1493	
4.	Nicholas Duhe	Superintendent	(713) 302-2674	
5.	Dennis McHugh	Drilling Manager	(713) 372-4496	
6.	Jay Gagneaux	Operations Manager	(713) 306-1082	
7.	TBD	Wells HSE		
8.	TBD	Completion Engineer		









APD ID: 10400100782

Well Name: CICADA UNIT

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

Drilling Plan Data Report

Submission Date: 09/03/2024

Operator Name: CHEVRON USA INCORPORATED

Well Number: 101H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15124129	RUSTLER	3272	28	28	SANDSTONE	NONE	N
15124130	TOP OF SALT	3244	28	28	ANHYDRITE, SALT	NONE	N
15124131	BASE OF SALT	2750	522	522	ANHYDRITE, SALT	NONE	N
15124132	LAMAR	943	2329	2346	LIMESTONE, SHALE	NONE	N
15124133	BELL CANYON	905	2367	2385	LIMESTONE, SILTSTONE	NONE	N
15124134	CHERRY CANYON	94	3178	3214	LIMESTONE, SANDSTONE	NONE	N
15124135	BRUSHY CANYON	-1095	4367	4430	LIMESTONE, SANDSTONE	NONE	N
15124136	BONE SPRING LIME	-2735	6007	6105	SHALE, SILTSTONE	NONE	N
15124137	AVALON SAND	-2811	6083	6531	SHALE	NATURAL GAS, OIL	N
15124138	BONE SPRING 1ST	-3587	6859	7178	SANDSTONE, SHALE	NATURAL GAS, OIL	N
15124139	BONE SPRING 2ND	-4150	7422	7978	SANDSTONE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 8223

Equipment: Chevron will have a minimum of a 5,000 psi rig stack for drill out below surface casing

Requesting Variance? YES

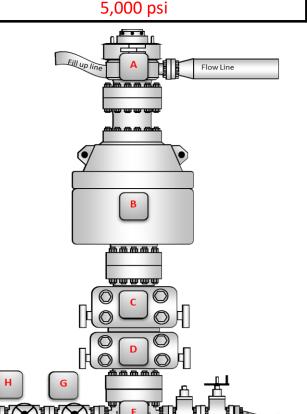
Variance request: Chevron respectfully request to vary from the Onshore Order 2 where it states: (A full BOP Test) shall be performed: when initially installed and whenever any seal subject to test pressure is broken. We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. No BOP components nor any break will ever surpass 21 days between testing. A break test will consist of a 250 psi low / 5,000 psi high for 10 min each test against the connection that was broken when skidding the rig. Upon the first nipple up of the pad a full BOP test will be performed. A full BOP test will be completed prior

BLOWOUT PREVENTER SCHEMATIC

Operation: Intermediate(s)

Minimum System operation pressure

	BOP Stack							
Part	Size	Pressure Rating	Description					
Α	13-5/8"	N/A	Rotating Head/Bell nipple					
В	13-5/8"	5,000	Annular					
С	13-5/8"	5,000	Blind Ram					
D	13-5/8"	5,000	Pipe Ram					
E	13-5/8"	5,000	Mud Cross					
F	13-5/8"	5,000	Pipe Ram					
		<u>Kill Line</u>						
Part	Size	Pressure Rating	Description					
G	2"	5,000	Inside Kill Line Valve (gate valve)					
Н	2"	5,000	Outside Kill Line Valve (gate valve)					
I	2"	5,000	Kill Line Check valve					



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

The kill line and choke line will be straight unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and reduce vibration.

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.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 452431

CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	452431
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
carol adler	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/15/2025
carol adler	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/15/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/8/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/8/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	6/8/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	6/8/2025
ward.rikala	Operator can not produce this well until they are in compliance with Rule 5.9.	6/8/2025