Form 3160-3 (June 2015)				OMB No.	PPROVED 1004-0137 uary 31, 2018	
UNITED STATES DEPARTMENT OF THE II BUREAU OF LAND MANA	5. Lease Serial No. NMNM121473					
APPLICATION FOR PERMIT TO D		6. If Indian, Allotee or Tribe Name				
	EENTER			7. If Unit or CA Agre	ement, Name and No.	
	ther	<b>-</b>		8. Lease Name and W	/ell No.	
1c. Type of Completion: Hydraulic Fracturing Si	ngle Zone	Multiple Zone		CICADA UNIT		
				100H		
2. Name of Operator CHEVRON USA INCORPORATED				9. API Well No.	)15-56693	
3a. Address PO BOX 1392, BAKERSFIELD, CA 93302	3b. Phone N (661) 633-4	lo. <i>(include area cod</i> 1000	le)	10. Field and Pool, or WELCH/BONE SPF	r Exploratory	
4. Location of Well (Report location clearly and in accordance w	with any State	requirements.*)			Blk. and Survey or Area	
At surface SWSE / 1077 FSL / 2493 FEL / LAT 32.066	886 / LONG	-104.177895		SEC 3/T26S/R27E/I	NMP	
At proposed prod. zone SESW / 20 FSL / 2558 FWL / LA	AT 32.034918	8 / LONG -104.178	243			
14. Distance in miles and direction from nearest town or post office 11.5 miles	ice*			12. County or Parish EDDY	13. State NM	
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. Spacin           640.0			ng Unit dedicated to this well		
<ol> <li>18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> <li>100 feet</li> </ol>	19. Propose 8102 feet /	-	20. BLM/ FED: ES	BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)         3272 feet	22. Approxi 08/28/2025	mate date work will	start*	23. Estimated duratio	n	
	24. Attac	hments				
The following, completed in accordance with the requirements of (as applicable)	f Onshore Oil	and Gas Order No. 1	l, and the H	Hydraulic Fracturing rul	le per 43 CFR 3162.3-3	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover th Item 20 above).	e operation	s unless covered by an	existing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office		<ul><li>5. Operator certific</li><li>6. Such other site sp BLM.</li></ul>		mation and/or plans as r	nay be requested by the	
25. Signature (Electronic Submission)		(Printed/Typed) LE TAYLOR / Ph:	(432) 687		Date 09/03/2024	
Title Regulatory Coordinator						
Approved by (Signature) (Electronic Submission)		(Printed/Typed) 1 LAYTON / Ph: (5	75) 234-59		Date 02/28/2025	
Title Assistant Field Manager Lands & Minerals	Office Carlst	ad Field Office				
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	nt holds legal of	or equitable title to the	nose rights	in the subject lease whi	ich would entitle the	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n of the United States any false, fictitious or fraudulent statements of					ny department or agency	



\*(Instructions on page 2)

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(Continued on page 2)

Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116 Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/contact-us/					Energy, Mir	te of New Mexico nerals & Natural R Department SERVATION DI	<u>C-10</u> Revised July 9, 20 Submit Electronica via OCD Permittin ∑ulmital Submittal					
							Submittal Type:	□ Amende □ As Drille	-			
					WELL LOCA	TION INFORMATIO	DN					
	umber	15-56693	Pool Code 64010			Pool Name WELCH: BONE SPRI	NC					
Proper 325142	rty Code	10-00090	Property N CICADA U			WELCH. BONE SPRI	no		Well Numb 100H	er		
OGRII 4323	D No.		Operator N CHEVRON		INC.				Ground Lev 3272'	el Elevation		
	e Owner: 🗆	State 🗆 Fee 🗆				Mineral Owner:	□ State □ Fe	ee 🗆 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 2493' EAST	Latitude 32.06688		Longitude 04.177895° W	County EDDY		
			11.111.1.111		Botton	n Hole Location						
UL N	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 2558' WEST	Latitude 32.03491		Longitude 04.178243° W	County EDDY		
Dedica 640	ated Acres	Infill or Defi INFILL	ning Well	Definin 30-015-	g Well API -49000	Overlapping Spacing Unit (Y/N) Consolidation Code NO U						
Order	Numbers. R-	-22488				Well setbacks are under Common Ownership: □Yes □No ⊠N/A						
					Kick (	Off Point (KOP)						
UL N	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 2583' WEST	Latitude 32.06393	5° N 1	Longitude 04.178633° W	County EDDY		
	-	-				ake Point (FTP)						
UL C	Section 10	Township 26 SOUTH	Range 27 EAST, N.M.P.M.	Lot N/A	Ft. from N/S 100' NORTH	Ft. from E/W 2558' WEST	Latitude 32.06366		Longitude 04.178701° W	County EDDY		
UL	Section	Township	Range	Lot	Last Ta	ake Point (LTP) Ft. from E/W	Latitude		Longitude	County		
N	15	26 SOUTH	27 EAST, N.M.P.M.	N/A	100' SOUTH	2558' WEST	32.03513		04.178245° W	EDDY		
		rea of Uniform		Spacing	g Unit Type 🛛 Ho	rizontal 🗆 Vertical	Gro 327	und Floor E	levation:			
	DA OIII, I		020				521	2				
OPER.	ATOR CER	TIFICATIONS				SURVEYOR CERT	FICATIONS					
best of i that this the land at this l unlease	my knowledge is organization d including the location pursu ed mineral inte		if the well is a w orking interest of n hole location with an owner ntary pooling a	vertical or a or unleasea or has a ri <sub>i</sub> of a workin	directional well, l mineral interest in ght to drill this well ig interest or	I hereby certify that the actual surveys made by to the best of my belief. See Sheet 2 of 2 for plan	me or under my	v supervision,		is true and correct		
the con: mineral the well order fr	sent of at least l interest in ea l's completed rom the divisio	t one lessee or ow ch tract (in the ta interval will be lo	vner of a workin urget pool or fo	ng interest rmation) in 1ed a comp	which any part of		Kan	230				
Signatu			Date			Signature and Seal of P	rotessional Surv	reyor				
( Printed	Carol Adler					Certificate Number	05/01/20 Date of Su					
(	caroladler	@chevron.cc	om									

#### ACREAGE DEDICATION PLATS

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 = 548,076.04' (NAD27 NM E) Y = 386,974.29' LAT. 32.063813° N (NAD27) LONG. 104.178139° W X = 589,259.62' (NAD83/2011 NM E) Y = 387,031.48' LAT. 32.063935' N (NAD83/2011) LONG. 104.178633° W

#### PROPOSED FIRST TAKE POINT

YAKE POINT X = 548,054.95' (NAD27 NM E) Y = 388,874.57' LAT. 32.063539° N (NAD27) LONG. 104.178208° W X = 589,238.53' (NAD83/2011 NM E) Y = 386,931.75' LAT. 32.063661° N (NAD83/2011) LONG. 104.178701° W

#### PROPOSED MID POINT

X = 548,179.94' (NAD27 NM E) Y = 381,686.77' LAT. 32.049276° N (NAD27) LONG. 104.177828° W X = 589,363.62' (NAD83/2011 NM E) Y = 381,743.86' LAT. 32.049399° N (NAD83/2011) LONG. 104.178321° W

#### PROPOSED LAST TAKE POINT

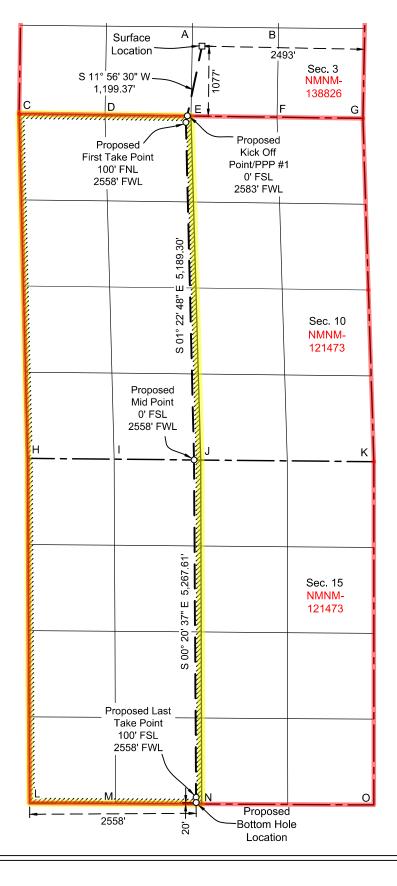
YALE FOW X = 548,211.06' (NAD27 NM E) Y = 376,499.26' LAT. 32.035016° N (NAD27) LONG. 104.177752° W X = 589,394.84' (NAD83/2011 NM E) Y = 376,556.26' LAT. 32.035138° N (NAD83/2011) LONG. 104.178245° W

#### PROPOSED BOTTOM HOLE LOCATION

X = 548,211.54' (NAD27 NM E) Y = 376,419.26' LAT. 32.034796° N (NAD27) LONG. 104.177751° W X = 589,395.32' (NAD83/2011 NM E) Y = 376,476.26' LAT. 32.034918° N (NAD83/2011) LONG. 104.178243° W

CORNER COORDINATES
TABLE (NAD 27)
A- X= 548,157.44, Y= 388,342.12
B- X= 549,479.62, Y= 388,328.76
C- X= 545,492.91, Y= 387,009.20
D- X= 546,813.37, Y= 386,991.36
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= 546,952.45, Y= 381,698.68
J- X= 548,282.84, Y= 381,685.77
K- X= 550,943.63, Y= 381,659.95
L- X= 545,653 53, Y= 376,414.09
M- X= 546,975.58, Y= 376,406.42
N- X= 548,297.64, Y= 376,398.76
O- X= 550,941.76, Y= 376,383.44

CICADA UNIT 100H X = 548,303.12' (NAD27 NM E) Y = 388,047.98' LAT. 32.066763° N (NAD27) LONG. 104.177401° W X = 589,486.68' (NAD83/2011 NM E) Y = 388,105.19' LAT. 32.066886° N (NAD83/2011) LONG. 104.177895° W



CICADA UNIT 104H

ived by OCD: 4/15/2025 2:43	3:38 PM					Page
	Energy, 1	State of Minerals and Na	New Mexico utural Resource	s Department		nit Electronically E-permitting
		1220 South	vation Divisio St. Francis D , NM 87505			
	NATU	RAL GAS N	MANAGEM	IENT PLAN		
This Natural Gas Managemer	nt Plan must be s	ubmitted with eac	h Application fo	r Permit to Drill (A	APD) for a new or	recompleted well
		<u>Section 1 –</u> <u>Effectiv</u>	Plan Descri e May 25, 2021	iption		
I. Operator: <u>Chevron US</u>	A Inc		OGRID: <u>432</u>	23	Date: _7_/3/_2	2024
If Other, please describe: III. Well(s): Provide the follo be recompleted from a single v	wing informatio	n for each new or	recompleted we		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	1077' FSL	BBL/D	MCF/D	BBL/D

26S 27E

26S 27E

Pending

IV. Central Delivery Point Name: \_\_\_\_\_ Central Tank Battery 10

UL-O Sec 3

2433' FEL

1077' FSL

2413' FEL

BBL/D

Page 1 of 5

# Page 4 of 34

BBL/D

MCF/D

[See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
			Date	Commencement	Back Date	Date
				Date		
CICADA UNIT 98H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
CICADA UNIT 99H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
CICADA UNIT 100H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
CICADA UNIT 101H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
CICADA UNIT 102H	Pending		<u>N/A</u>	<u>N/A</u>	<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:**  $\boxtimes$  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.

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

#### IX. Anticipated Natural Gas Production:

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

#### X. Natural Gas Gathering System (NGGS):

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

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

**XII. Line Capacity.** The natural gas gathering system  $\Box$  will  $\Box$  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII.** Line Pressure. Operator  $\Box$  does  $\Box$  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

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

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

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

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

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

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

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

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

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

## Section 4 - Notices

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

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 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.

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

Well Name: CICADA UNIT

Well Number: 100H

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

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	Ν	0	450	0	450	3272	2822	450	J-55	545	BUTT	5.43	3.58	BUOY	37.0 6	BUOY	34.7 8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2313	0	2305	3272	967	2313	L-80	40	BUTT	2.78	2.6	BUOY	10.2 7	BUOY	9.94
3	INTERMED IATE	8.75	7.0	NEW	API	N	0	7666	0	7630	3272	-4358	7666	P- 110	-	OTHER - BLUE	2.19	4.56	BUOY	4.2	BUOY	4.2
4	PRODUCTI ON	6.12 5	5.0	NEW	API	N	7466	8116	7430	8030	-4158	-4758		P- 110	-	OTHER - W513	1.82	4.34	BUOY	2.55	BUOY	4.01
5	PRODUCTI ON	6.12 5	4.5	NEW	API	N	8116	19030	8030	8203	-4758	-4931	10914	P- 110	-	OTHER - W521	1.82	4.34	BUOY	2.55	BUOY	4.01

#### Section 3 - Casing

Received by OCD: 4/15/2025 2:43:38 PM

## Operator Name: CHEVRON USA INCORPORATED

Well Name: CICADA UNIT

Well Number: 100H

#### **Casing Attachments**

Casing ID: 1 String SURFACE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
13.375in_BTC_54.5ppf_J55_20240830090855.pdf	
Casing ID: 2 String INTERMEDIATE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
9.625in_BTC_40ppf_L80_20240830090647.pdf	
Casing ID: 3 String INTERMEDIATE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
ימטרינע טווווא טעבט.	
Casing Design Assumptions and Worksheet(s):	

7in\_Blue\_SD\_29ppf\_P110\_20240828121157.pdf

Received by OCD: 4/15/2025 2:43:38 PM

Operator Name: CHEVRON USA INCORPORATED

Well Name: CICADA UNIT

Well Number: 100H

#### **Casing Attachments**

Casing ID: 4 String	PRODUCTION
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and We	orksheet(s):
5in_Wedge_513_18ppf_P110_2	0240828121308.pdf
Casing ID: 5 String	PRODUCTION
Casing ID: 5 String Inspection Document:	PRODUCTION

Tapered String Spec:

#### Casing Design Assumptions and Worksheet(s):

4.5in\_Wedge\_521\_11.6ppf\_P110\_20240830090724.pdf

Section	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	1313	237	2.29	11.5	542	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		1313	2313	263	1.63	12.6	429	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	6666	337	3.52	10.5	1185	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier

## Section 4 - Cement

#### Operator Name: CHEVRON USA INCORPORATED

Well Name: CICADA UNIT

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		6666	7666	124	1.52	12.6	188	25		Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		7466	1903 0	896	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**

O Top Depth	Bottom Depth 720	ed F Pn W SPUD MUD	8 Win Weight (Ibs/gal)	ຜ ຜ	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	H	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
450	2313	SALT SATURATED	8.3	10.6							Saturated brine would be used through salt sections.

#### Operator Name: CHEVRON USA INCORPORATED

Well Name: CICADA UNIT

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
231	3 7666	OTHER : WBM/BRINE	8.3	9.8							
766	6 1903 0	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: 4266

Anticipated Surface Pressure: 2461

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

#### Operator Name: CHEVRON USA INCORPORATED

Well Name: CICADA UNIT

Well Number: 100H

#### **Section 8 - Other Information**

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

Cicada\_Unit\_100H\_\_\_9\_Point\_Plan\_20240830091333.pdf

DefPlan100ft\_CicadaUnitNo.100H\_R0\_20240830091339.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:

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. 100H R0 mdv 17Jun24 Proposal Geodetic Report Def Plan

Report Date: Client: Field: Structure / Slot: Well: UBH/ A / PIF: Survey Date: Tor/ AHD / DI / ERD Ratio: Coordinate Reference System: Location Carl / Long: Location Grid NE Y/X: CRS Grid Convergence Angle: Grid Scale Factor: Version / Patch:	Chev NM, Chev Cica Unkr Cica June 104. NAD 32*4 N 38 0.08	Eddy County (NAI vron HNM Pkg 63 / da Unit No. 100H da Unit No. 100H nown / Unknown da Unit No. 100H 9 18, 2024 553 ° / 11686.703 1/27 New Mexico Str 0.348037N, 104° 18047.980 ftUS , E	D 27 EZ) / 100H R0 mdv 17Jun24 ft / 6.453 / 1.425 ate Plane, Easter 10'38.64409''W	n Zone, US Feet	Ver Ver TVi Sei Ma Tot Gra Tot Ma Der Ma Noi Gri Tot	vey / DLS Comput tical Section Azim tical Section Azim D Reference Datun D Reference Eleval partic Declination: al Gravity Field Str uity Model: al Magnetic Field Angle: clination Date: gnetic Dp Angle: clination Date: gnetic Declination th Reference: d Convergence Us al Corr Mag North- al Coord Reference	uth: 1: ion: ation: ength: ength: strength: Model: ed: >Grid North:	Minimum Curvature / Lut 179:140 '(GRID North) 0.000 ft, 0.000 ft KKB 3300.0000 ft above MSL 6.700° 998.425mg (9.80665 bt GARM 47267.935 nT 59.563° 47267.935 nT 59.565 47267.935 nT 59.565 47267.955 nT 59.565 4757.555 nT 59.555 nT 59.55				
Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude Longitude (°) (°)
Surface	0.00 100.00	0.00	203.35 203.77	0.00 100.00	-3,300.00 -3,200.00	0.00 0.00	0.00		0.00	388,047.98 388,047.98	548,303.12 548,303.12	32.06676334 -104.17740114 32.06676334 -104.17740114
	200.00 300.00	0.00	203.77 203.77	200.00	-3,100.00 -3,000.00	0.00	0.00	0.00	0.00	388,047.98 388,047.98	548,303.12 548,303.12	32.06676334 -104.17740114 32.06676334 -104.17740114
	400.00	0.00	203.77 203.77	400.00	-2,900.00	0.00	0.00	0.00	0.00	388,047.98 388.047.98	548,303.12 548,303.12	32.06676334 -104.17740114 32.06676334 -104.17740114
Castile (CSTL)	523.40 600.00	0.00	203.77 203.77	523.40 600.00	-2,776.60	0.00	0.00	0.00	0.00	388,047.98 388.047.98	548,303.12 548.303.12	32.06676334 -104.17740114 32.06676334 -104.17740114
D. 314 59/4004	700.00	0.00	203.77	700.00	-2,600.00	0.00	0.00	0.00	0.00	388,047.98	548,303.12	32.06676334 -104.17740114
Build 1.5°/100ft	800.00 900.00	0.00 1.50	203.77 203.77	800.00 899.99	-2,500.00 -2,400.01	0.00	0.00	-0.53	0.00 1.50	388,047.98 388,046.78	548,303.12 548,302.59	32.06676005 -104.17740285
	1,000.00 1,100.00	3.00 4.50	203.77 203.77	999.91 1,099.69	-2,300.09 -2,200.31	4.76 10.70	-4.79 -10.78	-4.75	1.50 1.50	388,043.19 388,037.20	548,301.01 548,298.37	32.06675018 -104.17740797 32.06673374 -104.17741651
Hold	1,200.00 1,233.21	6.00 6.50	203.77 203.77	1,199.27 1,232.28	-2,100.73 -2,067.72	19.02 22.31	-19.15 -22.46	-9.89	1.50 1.50	388,028.83 388,025.52	548,294.69 548,293.23	32.06671074 -104.17742845 32.06670165 -104.17743317
	1,300.00 1,400.00	6.50 6.50	203.77 203.77	1,298.64 1,398.00	-2,001.36 -1,902.00	29.18 39.47	-29.38 -39.73	-17.50	0.00	388,018.61 388,008.25	548,290.18 548,285.62	32.06668264 -104.17744303 32.06665419 -104.17745780
	1,500.00 1,600.00	6.50 6.50	203.77 203.77	1,497.36 1,596.72	-1,802.64 -1,703.28	49.75 60.04	-50.09 -60.45		0.00	387,997.89 387,987.54	548,281.06 548,276.50	32.06662574 -104.17747258 32.06659729 -104.17748735
	1,700.00 1,800.00	6.50 6.50	203.77 203.77	1,696.07 1,795.43	-1,603.93 -1,504.57	70.33 80.62	-70.80 -81.16		0.00	387,977.18 387,966.83	548,271.94 548,267.38	32.06656884 -104.17750212 32.06654039 -104.17751689
	1,900.00 2,000.00	6.50 6.50	203.77 203.77	1,894.79 1,994.15	-1,405.21 -1,305.85	90.90 101.19	-91.52 -101.88	-40.30	0.00	387,956.47 387,946.11	548,262.82 548,258.26	32.06651193 -104.17753166 32.06648348 -104.17754643
	2,100.00	6.50 6.50	203.77 203.77	2,093.50 2,192.86	-1,206.50	111.48 121.77	-112.23 -122.59	-49.43	0.00	387,935.76 387,925.40	548,253.70 548,249.14	32.06645503 -104.17756121 32.06642658 -104.17757598
Lamar (LMAR)	2,300.00 2,332.51	6.50 6.50	203.77 203.77	2,292.22 2,324.52	-1,007.78 -975.48	132.05 135.40	-132.95	-58.55	0.00	387,915.04 387,911.68	548,244.58 548,243.09	32.06639813 -104.17759075 32.06638888 -104.17759555
Bell Canyon (BLCN)	2,366.31 2,400.00	6.50 6.50	203.77 203.77	2,358.10 2,391.58	-941.90 -908.42	138.87 142.34	-139.81 -143.30	-61.57	0.00	387,908.18 387,904.69	548,241.55 548,240.01	32.06637926 -104.17760054 32.06636968 -104.17760552
	2,500.00 2,600.00	6.50 6.50	203.77 203.77	2,490.93	-809.07	152.63	-153.66	-67.67	0.00	387,894.33 387,883.98	548,235.45 548,230.89	32.06634122 -104.17762029 32.06631277 -104.17763506
	2,700.00	6.50	203.77	2,689.65	-610.35	173.20	-174.38	-76.79	0.00	387,873.62	548,226.33	32.06628432 -104.17764983
	2,800.00 2,900.00	6.50 6.50	203.77 203.77	2,789.01 2,888.36	-510.99 -411.64	183.49 193.78	-184.73 -195.09	-85.92	0.00	387,863.26 387,852.91	548,221.77 548,217.21	32.06622742 -104.17767938
	3,000.00 3,100.00	6.50 6.50	203.77 203.77	2,987.72 3,087.08	-312.28 -212.92	204.07 214.35	-205.45 -215.80	-95.04	0.00	387,842.55 387,832.20	548,212.65 548,208.09	32.06619897 -104.17769415 32.06617051 -104.17770892
Cherry Canyon (CRCN)	3,173.96 3,200.00	6.50 6.50	203.77 203.77	3,160.56 3,186.44	-139.44 -113.56	221.96 224.64	-223.46 -226.16	-99.60	0.00	387,824.54 387,821.84	548,204.72 548,203.53	32.06614947 -104.17771984 32.06614206 -104.17772369
	3,300.00 3,400.00	6.50 6.50	203.77 203.77	3,285.79 3,385.15	-14.21 85.15	234.93 245.22	-236.52 -246.88		0.00	387,811.48 387,801.13	548,198.97 548,194.41	32.06611361 -104.17773846 32.06608516 -104.17775323
	3,500.00 3,600.00	6.50 6.50	203.77 203.77	3,484.51 3,583.87	184.51 283.87	255.50 265.79	-257.23 -267.59		0.00	387,790.77 387,780.41	548,189.85 548,185.28	32.06605671 -104.17776801 32.06602826 -104.17778278
	3,700.00 3.800.00	6.50 6.50	203.77 203.77	3,683.22 3,782.58	383.22 482.58	276.08 286.37	-277.95 -288.30		0.00	387,770.06 387,759.70	548,180.72 548,176.16	32.06599980 -104.17779755 32.06597135 -104.17781232
	3,900.00 4,000.00	6.50 6.50	203.77 203.77	3,881.94 3,981.30	581.94 681.30	296.65 306.94	-298.66 -309.02	-131.53	0.00	387,749.35 387,738.99	548,171.60 548,167.04	32.06594290 -104.17782709 32.06591445 -104.17784186
	4,100.00 4,200.00	6.50 6.50	203.77 203.77	4,080.65	780.65 880.01	317.23 327.52	-319.38	-140.65	0.00	387,728.63 387,718.28	548,162.48 548,157.92	32.06588600 -104.17785663 32.06585754 -104.17787140
Develop Consume (DONI)	4,300.00 4,385.91	6.50 6.50	203.77	4,279.37	979.37 1.064.73	337.80	-340.09 -348.99	-149.77	0.00	387,707.92	548,153.36 548,149.44	32.06583734 -104.17787140 32.06582909 -104.17788618 32.06580465 -104.17789887
Brushy Canyon (BCN)	4,400.00	6.50	203.77 203.77	4,364.73 4,378.73	1,078.73	346.64 348.09 358.38	-350.45	-154.34	0.00	387,699.02 387,697.56	548,148.80	32.06580064 -104.17790095
	4,500.00 4,600.00	6.50 6.50	203.77 203.77	4,478.08 4,577.44	1,178.08 1,277.44	368.67	-360.80 -371.16	-163.46	0.00	387,687.21 387,676.85	548,144.24 548,139.68	32.06574374 -104.17793049
	4,700.00 4,800.00	6.50 6.50	203.77 203.77	4,676.80 4,776.16	1,376.80 1,476.16	378.95 389.24	-381.52 -391.88	-172.58	0.00 0.00	387,666.50 387,656.14	548,135.12 548,130.55	32.06571529 -104.17794526 32.06568683 -104.17796003
	4,900.00 5,000.00	6.50 6.50	203.77 203.77	4,875.51 4,974.87	1,575.51 1,674.87	399.53 409.82	-402.23 -412.59	-181.70	0.00	387,645.78 387,635.43	548,125.99 548,121.43	32.06565838 -104.17797480 32.06562993 -104.17798957
	5,100.00 5,200.00	6.50 6.50	203.77 203.77	5,074.23 5,173.59	1,774.23 1,873.59	420.10 430.39	-422.95 -433.30	-190.83	0.00	387,625.07 387,614.71	548,116.87 548,112.31	32.06560148 -104.17800435 32.06557303 -104.17801912
	5,300.00 5,400.00	6.50 6.50	203.77 203.77	5,272.95 5,372.30	1,972.95 2,072.30	440.68 450.97	-443.66 -454.02		0.00	387,604.36 387,594.00	548,107.75 548,103.19	32.06554458 -104.17803389 32.06551612 -104.17804866
	5,500.00 5,600.00	6.50 6.50	203.77 203.77	5,471.66 5,571.02	2,171.66 2,271.02	461.25 471.54	-464.38 -474.73		0.00	387,583.65 387,573.29	548,098.63 548,094.07	32.06548767 -104.17806343 32.06545922 -104.17807820
	5,700.00 5,800.00	6.50 6.50	203.77 203.77	5,670.38 5,769.73	2,370.38 2,469.73	481.83 492.12	-485.09 -495.45	-213.63	0.00	387,562.93 387,552.58	548,089.51 548,084.95	32.06543077 -104.17809297 32.06540232 -104.17810774
	5,900.00 6,000.00	6.50 6.50	203.77 203.77	5,869.09 5,968.45	2,569.09 2,668.45	502.40 512.69	-505.80 -516.16	-222.75	0.00 0.00	387,542.22 387,531.86	548,080.39 548,075.82	32.06537387 -104.17812252 32.06534541 -104.17813729
Bone Spring Lime (BSGL) Avalon Upper (AVU)	6,010.98 6.096.79	6.50 6.50	203.77 203.77	5,979.36 6,064.62	2,679.36	513.82 522.65	-517.30	-227.82	0.00	387,530.73 387.521.84	548,075.32 548,071.41	32.06534229 -104.17813891 32.06531787 -104.17815158
	6,100.00 6,200.00	6.50 6.50	203.77 203.77 203.77	6,067.81 6,167.16	2,767.81 2,867.16	522.05 522.98 533.27	-526.52 -536.88	-231.88	0.00	387,521.84 387,521.51 387,511.15	548,071.26 548,066.70	32.06531787 -104.17815158 32.06531696 -104.17815206 32.06528851 -104.17816683
Drop 0 75%/100ft	6,300.00	6.50	203.77	6,266.52	2,966.52	543.55	-547.23	-241.00	0.00	387,500.80	548,062.14	32.06526006 -104.17818160
Drop 0.75°/100ft	6,329.36 6,400.00	6.50 5.97	203.77 203.77	6,295.69 6,365.91	2,995.69 3,065.91	546.57 553.55	-550.27	-245.43	0.00	387,497.76 387,490.74	548,060.80 548,057.71	32.06525170 -104.17818594 32.06523242 -104.17819595 32.06522558 -104.17819950
Avalon Lower (AVL)	6,426.61 6,500.00	5.77 5.22	203.77 203.77	6,392.38 6,465.44	3,092.38 3,165.44	556.02 562.41	-559.78 -566.21	-249.36	0.75 0.75	387,488.25 387,481.82	548,056.62 548,053.78	32.06520792 -104.17820867
	6,600.00 6,700.00	4.47 3.72	203.77 203.77	6,565.08 6,664.82	3,265.08 3,364.82	570.08 576.57	-573.94 -580.47	-255.64	0.75 0.75	387,474.09 387,467.56	548,050.38 548,047.50	32.06518669 -104.17821969 32.06516875 -104.17822901
First Bone Spring Upper (FBU)	6,800.00 6,875.52	2.97 2.40	203.77 203.77	6,764.65 6,840.09	3,464.65 3,540.09	581.87 585.09	-585.81 -589.05		0.75 0.75	387,462.22 387,458.99	548,045.15 548,043.73	32.06515409 -104.17823662 32.06514519 -104.17824123
	6,900.00 7,000.00	2.22 1.47	203.77 203.77	6,864.55 6,964.50	3,564.55 3,664.50	585.98 588.91	-589.95 -592.89		0.75 0.75	387,458.08 387,455.14	548,043.33 548,042.03	32.06514271 -104.17824252 32.06513462 -104.17824672
First Bone Spring Lower (FBL)	7,100.00 7,100.56	0.72 0.71	203.77 203.77	7,064.48 7,065.04	3,764.48 3,765.04	590.64 590.65	-594.64 -594.65	-261.88	0.75 0.75	387,453.39 387,453.39	548,041.27 548,041.26	32.06512983 -104.17824921 32.06512981 -104.17824922
Hold Vertical	7,195.77	0.00	203.77 203.77	7,160.25 7,164.48	3,860.25 3,864.48	591.19 591.19	-595.19 -595.19	-262.12	0.75	387,452.84 387,452.84	548,041.02 548,041.02	32.06512832 -104.17824999 32.06512832 -104.17824999
	7,300.00 7,400.00	0.00	203.77 203.77	7,264.48 7,364.48	3,964.48 4,064.48	591.19 591.19	-595.19	-262.12	0.00	387,452.84 387,452.84 387,452.84	548,041.02 548,041.02	32.06512832 -104.17824999 32.06512832 -104.17824999
Second Bone Spring Upper (SBU)	7,445.23 7,500.00	0.00	203.77 203.77 203.77	7,409.71 7,464.48	4,109.71 4,164.48	591.19 591.19 591.19	-595.19	-262.12	0.00	387,452.84 387,452.84 387,452.84	548,041.02 548,041.02 548,041.02	32.06512832 -104.17824999 32.06512832 -104.17824999 32.06512832 -104.17824999
Build 10°/100ft	7,600.00 7,665.77	0.00	203.77 203.77	7,564.48	4,264.48 4,330.25	591.19 591.19 591.19	-595.19	-262.12	0.00	387,452.84 387,452.84 387,452.84	548,041.02 548,041.02 548.041.02	32.06512832 -104.17824999 32.06512832 -104.17824999 32.06512832 -104.17824999
Build TO / TOUR	7,700.00	3.42	178.62	7,630.25 7,664.46	4,364.46	592.21	-596.21	-262.10	10.00	387,451.82	548,041.05	32.06512551 -104.17824992
Second Bone Spring Lower (SBL)	7,800.00 7,893.87	13.42 22.81	178.62 178.62	7,763.25 7,852.37	4,463.25 4,552.37	606.84 635.99	-610.84 -639.98		10.00 10.00	387,437.20 387,408.05	548,041.40 548,042.10	32.06508531 -104.17824885 32.06500518 -104.17824672
	7,900.00 8,000.00	23.42 33.42	178.62 178.62	7,858.01 7,945.84	4,558.01 4,645.84	638.40 685.93	-642.39 -689.91	-259.84	10.00 10.00	387,405.65 387,358.13	548,042.16 548,043.31	32.06499857 -104.17824654 32.06486794 -104.17824307
	8,100.00 8,200.00	43.42 53.42	178.62 178.62	8,024.09 8,090.37	4,724.09 4,790.37	748.00 822.71	-751.96 -826.65	-256.54	10.00 10.00	387,296.09 387,221.40	548,044.80 548,046.60	32.06469737 -104.17823853 32.06449206 -104.17823307
	8,300.00 8,400.00	63.42 73.42	178.62 178.62	8,142.66 8,179.39	4,842.66 4,879.39	907.79 1,000.66	-911.71 -1,004.56	-254.49	10.00 10.00	387,136.35 387,043.51	548,048.65 548,050.89	32.06425823 -104.17822685 32.06400300 -104.17822006
Landing Point	8,500.00 8,571.33	83.42 90.56	178.62 178.62	8,199.44 8,203.18	4,899.44 4,903.18	1,098.50 1,169.67	-1,102.37	-249.90	10.00	386,945.71 386,874.56	548,053.24 548,054.96	32.06373413 -104.17821291 32.06353851 -104.17820770
FTP Cross	8,571.43	90.56	178.62	8,203.18	4,903.18	1,169.78	-1,173.64		0.00	386,874.45	548,054.96	32.06353823 -104.17820770

#### Released to Imaging: 6/8/2025 1:33:33 PM

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Comments	MD (ft)	Inci (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	8,800.00 8,900.00	90.56 90.56	178.62 178.62	8,200.97 8,200.00	4,900.97 4,900.00	1,398.33 1,498.32	-1,402.13 -1,502.10	-242.68 -240.27	0.00	386,645.98 386,546.02	548,060.46 548,062.87	32.06291012	-104.17819099 -104.17818368
	9,000.00	90.56	178.62	8,199.03	4,899.03	1,598.31	-1,602.06	-237.86	0.00	386,446.06	548,065.28	32.06236053	-104.17817637
	9,100.00 9,200.00	90.56 90.56	178.62 178.62	8,198.06 8,197.09	4,898.06 4,897.09	1,698.30 1,798.29	-1,702.03 -1,801.99	-235.45 -233.05	0.00	386,346.11 386,246.15	548,067.69 548,070.10	32.06181093	-104.17816906 -104.17816175
	9,300.00 9,400.00	90.56 90.56	178.62 178.62	8,196.12 8,195.15	4,896.12 4,895.15	1,898.28 1,998.28	-1,901.96 -2,001.93	-230.64 -228.23	0.00	386,146.19 386,046.23	548,072.50 548,074.91	32.06126133	-104.17815444 -104.17814713
	9,500.00 9,600.00	90.56 90.56	178.62 178.62	8,194.18 8,193.22	4,894.18 4,893.22	2,098.27 2,198.26	-2,101.89 -2,201.86	-225.82 -223.41	0.00 0.00	385,946.28 385,846.32	548,077.32 548,079.73		-104.17813982 -104.17813251
	9,700.00 9.800.00	90.56 90.56	178.62 178.62	8,192.25 8,191.28	4,892.25 4.891.28	2,298.25 2,398.24	-2,301.83 -2.401.79	-221.00 -218.60	0.00	385,746.36 385.646.40	548,082.14 548.084.54		-104.17812520 -104.17811789
	9,900.00 10,000.00	90.56 90.56	178.62 178.62	8,190.31 8,189.34	4,890.31 4,889.34	2,498.23 2,598.22	-2,501.76 -2,601.72	-216.19 -213.78	0.00	385,546.45 385,446.49	548,086.95 548,089.36		-104.17811058 -104.17810327
	10,100.00	90.56	178.62	8,188.37	4,888.37	2,698.21	-2,701.69	-211.37	0.00	385,346.53	548,091.77	32.05933775	-104.17809596
	10,200.00 10,300.00	90.56 90.56	178.62 178.62	8,187.40 8,186.43	4,887.40 4,886.43	2,798.20 2,898.20	-2,801.66 -2,901.62	-208.96 -206.55	0.00	385,246.58 385,146.62	548,094.18 548,096.59	32.05878815	-104.17808865 -104.17808134
	10,400.00 10,500.00	90.56 90.56	178.62 178.62	8,185.46 8,184.50	4,885.46 4,884.50	2,998.19 3,098.18	-3,001.59 -3,101.56	-204.14 -201.74	0.00 0.00	385,046.66 384,946.70	548,098.99 548,101.40		-104.17807403 -104.17806672
	10,600.00 10,700.00	90.56 90.56	178.62 178.62	8,183.53 8,182.56	4,883.53 4,882.56	3,198.17 3.298.16	-3,201.52 -3,301.49	-199.33 -196.92	0.00 0.00	384,846.75 384,746,79	548,103.81 548,106.22		-104.17805942 -104.17805211
	10,800.00	90.56 90.56	178.62 178.62	8,181.59 8,180.62	4,881.59 4,880.62	3,398.15 3,498.14	-3,401.45 -3.501.42	-194.51 -192.10	0.00	384,646.83 384,546.87	548,108.63 548,111.03	32.05741417	-104.17804480 -104.17803749
	11,000.00	90.56	178.62	8,179.65	4,879.65	3,598.13	-3,601.39	-189.69	0.00	384,446.92	548,113.44	32.05686457	-104.17803018
	11,100.00 11,200.00	90.56 90.56	178.62 178.62	8,178.68 8,177.71	4,878.68 4,877.71	3,698.13 3,798.12	-3,701.35 -3,801.32	-187.29 -184.88	0.00	384,346.96 384,247.00	548,115.85 548,118.26	32.05631497	-104.17802287 -104.17801556
	11,300.00 11,400.00	90.56 90.56	178.62 178.62	8,176.75 8,175.78	4,876.75 4,875.78	3,898.11 3,998.10	-3,901.29 -4,001.25	-182.47 -180.06	0.00 0.00	384,147.05 384,047.09	548,120.67 548,123.08		-104.17800825 -104.17800094
	11,500.00 11,600.00	90.56 90.56	178.62 178.62	8,174.81 8,173.84	4,874.81 4,873.84	4,098.09 4,198.08	-4,101.22 -4,201.19	-177.65 -175.24	0.00	383,947.13 383,847.17	548,125.48 548,127.89		-104.17799363 -104.17798633
	11,700.00	90.56	178.62	8,172.87 8.171.90	4,872.87	4,298.07	-4,301.15	-172.84	0.00	383,747.22	548,130.30	32.05494098	-104.17797902
	11,800.00 11,900.00	90.56	178.62	8,170.93	4,870.93	4,398.06 4,498.06	-4,401.12 -4,501.08	-170.43 -168.02	0.00	383,647.26 383,547.30	548,132.71 548,135.12	32.05439139	-104.17796440
	12,000.00 12,100.00	90.56 90.56	178.62 178.62	8,169.96 8,168.99	4,869.96 4,868.99	4,598.05 4,698.04	-4,601.05 -4,701.02	-165.61 -163.20	0.00 0.00	383,447.34 383,347.39	548,137.52 548,139.93		-104.17795709 -104.17794978
	12,200.00 12,300.00	90.56 90.56	178.62 178.62	8,168.03 8,167.06	4,868.03 4,867.06	4,798.03 4,898.02	-4,800.98 -4,900.95	-160.79 -158.39	0.00	383,247.43 383,147.47	548,142.34 548,144,75		-104.17794247 -104.17793516
	12,400.00 12,500.00	90.56 90.56	178.62 178.62	8,166.09 8,165.12	4,866.09	4,998.01 5,098.00	-5,000.92 -5,100.88	-155.98 -153.57	0.00	383,047.52 382,947.56	548,147.16 548,149.57	32.05301740	-104.17792786 -104.17792055
	12,600.00	90.56	178.62	8,164.15	4,864.15	5,197.99	-5,200.85	-151.16	0.00	382,847.60	548,151.97	32.05246780	-104.17791324
	12,700.00 12,800.00	90.56 90.56	178.62 178.62	8,163.18 8,162.21	4,863.18 4,862.21	5,297.98 5,397.98	-5,300.81 -5,400.78	-148.75 -146.34	0.00	382,747.64 382,647.69	548,154.38 548,156.79	32.05191820	-104.17790593 -104.17789862
	12,900.00 13,000.00	90.56 90.56	178.62 178.62	8,161.24 8,160.28	4,861.24 4,860.28	5,497.97 5,597.96	-5,500.75 -5,600.71	-143.94 -141.53	0.00	382,547.73 382,447.77	548,159.20 548,161.61	32.05164341	-104.17789131 -104.17788401
	13,100.00	90.56 90.56	178.62 178.62	8,159.31 8,158.34	4,859.31	5,697.95 5,797.94	-5,700.68	-139.12 -136.71	0.00	382,347.81 382,247.86	548,164.01 548,166.42	32.05109381	-104.17787670 -104.17786939
	13,300.00	90.56	178.62	8,157.37	4,857.37	5,897.93	-5,900.61	-134.30	0.00	382,147.90	548,168.83	32.05054421	-104.17786208
	13,400.00 13,500.00	90.56 90.56	178.62 178.62	8,156.40 8,155.43	4,856.40 4,855.43	5,997.92 6,097.91	-6,000.58 -6,100.54	-131.89 -129.48	0.00	382,047.94 381,947.99	548,171.24 548,173.65	32.04999462	-104.17785477 -104.17784747
	13,600.00 13,700.00	90.56 90.56	178.62 178.62	8,154.46 8,153.49	4,854.46 4,853.49	6,197.91 6.297.90	-6,200.51 -6,300.48	-127.08 -124.67	0.00	381,848.03 381,748.07	548,176.05 548,178.46		-104.17784016 -104.17783285
IP, Turn 2°/100ft	13,761.33 13,800.00	90.56 90.56	178.62 179.39	8,152.90 8,152.53	4,852.90 4,852.53	6,359.22 6,397.89	-6,361.78 -6,400.45	-123.19 -122.52	0.00 2.00	381,686.77 381,648.11	548,179.94 548,180.61	32.04927649	-104.17782837 -104.17782638
old to TD	13,813.40	90.56	179.66	8,152.40	4,852.40	6,411.29	-6,413.85	-122.41	2.00	381,634.71	548,180.72	32.04913337	-104.17782609
	13,900.00 14,000.00	90.56 90.56	179.66 179.66	8,151.56 8,150.59	4,851.56 4,850.59	6,497.88 6,597.87	-6,500.44 -6,600.44	-121.90 -121.31	0.00	381,548.12 381,448.14	548,181.23 548,181.82	32.04862048	-104.17782484 -104.17782340
	14,100.00 14,200.00	90.56 90.56	179.66 179.66	8,149.62 8,148.65	4,849.62 4,848.65	6,697.86 6,797.85	-6,700.43 -6,800.42	-120.72 -120.13	0.00 0.00	381,348.16 381,248.17	548,182.41 548,183.01		-104.17782196 -104.17782051
	14,300.00 14,400.00	90.56 90.56	179.66 179.66	8,147.68 8,146.71	4,847.68 4,846.71	6,897.84 6,997.84	-6,900.42 -7,000.41	-119.53 -118.94	0.00	381,148.19 381,048.20	548,183.60 548,184.19	32.04779588	-104.17781907 -104.17781763
	14,500.00	90.56 90.56	179.66	8,145.74 8,144.77	4,845.74	7,097.83	-7,100.40	-118.35	0.00	380,948.22 380,848.23	548,184.78 548,185.37	32.04724615	-104.17781619 -104.17781475
	14,700.00	90.56	179.66	8,143.80	4,843.80	7,297.81	-7,300.39	-117.17	0.00	380,748.25	548,185.96	32.04669641	-104.17781330
	14,800.00 14,900.00	90.56 90.56	179.66 179.66	8,142.83 8,141.86	4,842.83 4,841.86	7,397.80 7,497.79	-7,400.38 -7,500.38	-116.58 -115.99	0.00 0.00	380,648.26 380,548.28	548,186.55 548,187.14		-104.17781186 -104.17781042
	15,000.00 15,100.00	90.56 90.56	179.66 179.66	8,140.89 8,139.92	4,840.89 4,839.92	7,597.78 7,697.77	-7,600.37 -7,700.36	-115.40 -114.81	0.00	380,448.29 380,348.31	548,187.73 548,188.32		-104.17780898 -104.17780754
	15,200.00 15,300.00	90.56 90.56	179.66 179.66	8,138.95 8,137.98	4,838.95 4,837.98	7,797.77 7,897.76	-7,800.36 -7,900.35	-114.22 -113.63	0.00	380,248.33 380,148.34	548,188.91 548,189.50	32.04532208	-104.17780609 -104.17780465
	15,400.00	90.56	179.66	8,137.01	4,837.01	7,997.75	-8,000.35	-113.04	0.00	380,048.36	548,190.09	32.04477235	-104.17780321
	15,500.00 15,600.00	90.56 90.56	179.66 179.66	8,136.04 8,135.07	4,836.04 4,835.07	8,097.74 8,197.73	-8,100.34 -8,200.33	-112.44 -111.85	0.00 0.00	379,948.37 379,848.39	548,190.69 548,191.28	32.04422262	-104.17780177 -104.17780032
	15,700.00 15,800.00	90.56 90.56	179.66 179.66	8,134.10 8,133.13	4,834.10 4,833.13	8,297.72 8,397.71	-8,300.33 -8,400.32	-111.26 -110.67	0.00 0.00	379,748.40 379,648.42	548,191.87 548,192.46		-104.17779888 -104.17779744
	15,900.00 16.000.00	90.56 90.56	179.66 179.66	8,132.16 8,131.19	4,832.16 4.831.19	8,497.70 8,597.69	-8,500.31 -8,600.31	-110.08 -109.49	0.00	379,548.43 379,448.45	548,193.05 548,193.64		-104.17779600 -104.17779456
	16,100.00	90.56 90.56	179.66	8,130.22	4,830.22	8,697.69	-8,700.30	-108.90	0.00	379,348.46	548,194.23	32.04284829	-104.17779311 -104.17779167
	16,200.00 16,300.00	90.56	179.66 179.66	8,129.25 8,128.28	4,829.25 4,828.28	8,797.68 8,897.67	-8,800.29 -8,900.29	-108.31 -107.72	0.00	379,248.48 379,148.50	548,194.82 548,195.41	32.04229855	-104.17779023
	16,400.00 16,500.00	90.56 90.56	179.66 179.66	8,127.31 8,126.34	4,827.31 4,826.34	8,997.66 9,097.65	-9,000.28 -9,100.27	-107.13 -106.54	0.00 0.00	379,048.51 378,948.53	548,196.00 548,196.59		-104.17778879 -104.17778735
	16,600.00 16,700.00	90.56 90.56	179.66 179.66	8,125.37 8,124.40	4,825.37 4,824.40	9,197.64 9,297.63	-9,200.27 -9,300.26	-105.94 -105.35	0.00	378,848.54 378,748.56	548,197.18 548,197.78		-104.17778590 -104.17778446
	16,800.00 16,900.00	90.56 90.56	179.66 179.66	8,123.43 8,122.46	4,823.43 4,822.46	9,397.62 9,497.61	-9,400.26 -9,500.25	-104.76 -104.17	0.00	378,648.57 378,548.59	548,198.37 548,198.96	32.04092422	-104.17778302 -104.17778158
	17,000.00	90.56	179.66	8,121.49	4,821.49	9,597.61	-9,600.24	-103.58	0.00	378,448.60	548,199.55	32.04037449	-104.17778014
	17,100.00 17,200.00	90.56 90.56	179.66 179.66	8,120.52 8,119.55	4,820.52 4,819.55	9,697.60 9,797.59	-9,700.24 -9,800.23	-102.99 -102.40	0.00	378,348.62 378,248.64	548,200.14 548,200.73	32.03982476	-104.17777869 -104.17777725
	17,300.00 17,400.00	90.56 90.56	179.66 179.66	8,118.58 8,117.61	4,818.58 4,817.61	9,897.58 9,997.57	-9,900.22 -10,000.22	-101.81 -101.22	0.00	378,148.65 378,048.67	548,201.32 548,201.91	32.03954989	
	17,500.00 17,600.00	90.56 90.56	179.66 179.66	8,116.64 8,115.67	4,816.64 4,815.67	10,097.56 10,197.55	-10,100.21 -10,200.20	-100.63 -100.04	0.00	377,948.68 377,848.70	548,202.50 548,203.09	32.03900016	-104.17777293
	17,700.00	90.56	179.66	8,114.70	4,814.70	10,297.54	-10,300.20	-99.44	0.00	377,748.71	548,203.68	32.03845043	-104.17777004
	17,800.00 17,900.00	90.56 90.56	179.66 179.66	8,113.73 8,112.76	4,813.73 4,812.76	10,397.54 10,497.53	-10,400.19 -10,500.18	-98.85 -98.26	0.00	377,648.73 377,548.74	548,204.27 548,204.87	32.03790069	-104.17776716
	18,000.00 18,100.00	90.56 90.56	179.66 179.66	8,111.79 8,110.82	4,811.79 4,810.82	10,597.52 10,697.51	-10,600.18 -10,700.17	-97.67 -97.08	0.00	377,448.76 377,348.77	548,205.46 548,206.05	32.03762583 32.03735096	-104.17776572 -104.17776427
	18,200.00 18,300.00	90.56 90.56	179.66 179.66	8,109.85 8,108.88	4,809.85 4,808.88	10,797.50 10,897.49	-10,800.16 -10,900.16	-96.49 -95.90	0.00	377,248.79 377,148.81	548,206.64 548,207.23	32.03707609	-104.17776283 -104.17776139
	18,400.00	90.56	179.66	8,107.91	4,807.91	10,997.48	-11,000.15	-95.31	0.00	377,048.82	548,207.82	32.03652636	-104.17775995 -104.17775851
	18,500.00 18,600.00	90.56 90.56	179.66 179.66	8,106.94 8,105.97	4,806.94 4,805.97	11,097.47 11,197.46	-11,100.15 -11,200.14	-94.72 -94.13	0.00	376,848.85	548,208.41 548,209.00	32.03597663	-104.17775706
	18,700.00 18,800.00	90.56 90.56	179.66 179.66	8,105.00 8,104.03	4,805.00 4,804.03	11,297.46 11,397.45	-11,300.13 -11,400.13	-93.54 -92.95	0.00	376,748.87 376,648.88	548,209.59 548,210.18		-104.17775418
TP Cross	18,900.00 18,949.64	90.56 90.56	179.66 179.66	8,103.06 8,102.58	4,803.06 4,802.58	11,497.44 11,547.07	-11,500.12 -11,549.76	-92.35 -92.06	0.00	376,548.90 376,499.27	548,210.77 548,211.07	32.03515203	-104.17775274
cada Unit No. 100H BHL	19,000.00 19,029.66	90.56 90.56	179.66 179.66	8,102.09 8,101.80	4,802.09 4,801.80	11,597.43 11,627.08	-11,600.11 -11,629.77	-92.00 -91.76 -91.59	0.00	376,448.91 376,419.26	548,211.36 548,211.54	32.03487716	-104.17775130 -104.17775087
Cada UnitiNo. TOUH BHL	19,029.66	90.56	179.00	8,101.80	4,801.80	11,027.08	-11,629.77	-91.59	0.00	376,419.26	546,211.54	32.03479564	-104.17775087
rvey Type:	Def	Plan											
urvey Error Model:	WP	TS Rev 0.											
urvey Program: Description		Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size C (in)	asing Diameter (in)	Expected Max Inclination	Survey Tool C	ode	Vendor	/ Tool	Borehole / Survey
			.,				.,	(deg)					
default hole/casing size was	for A/C calculation -	1	0.000	19,407.198	1/100.000	-	-	В0	01Mb_MWD+HRGM				Cicada Unit No. 100H / Cicada Unit
default hole/casing size was used DU Geometry:	TOT ANG CAICULATION DE	cause trie Wellbol	re size is not def	mea conectiy.									
nd MD (ft)		Hole Size	(in)	Casing Siz	re (in)		Name						

End MD (ft) Hole Size (in) Casing Size (in) Name

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON USA INCORPORATED
WELL NAME & NO.:	CICADA UNIT 100H
SURFACE HOLE FOOTAGE:	1077'/S & 2493'/E
BOTTOM HOLE FOOTAGE	20'/S & 2558'/E
LOCATION:	Section 3, T.26 S., R.27 E., NMP
COUNTY:	Eddy County, New Mexico

## COA

H2S	• Yes	C No	
Potash	None	C Secretary	© R-111-P
Cave/Karst Potential	C Low	• Medium	C High
Cave/Karst Potential	Critical		
Variance	C None	Itex Hose	C Other
Wellhead	C Conventional	• Multibowl	C Both
Wellhead Variance	C Diverter		
Other	□4 String	Capitan Reef	□WIPP
Other	Fluid Filled	🗆 Pilot Hole	Open Annulus
Cementing	Contingency	EchoMeter	Primary Cement
	Cement Squeeze		Squeeze
Special Requirements	Water Disposal	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  $17 \frac{1}{2}$  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>
   <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

#### 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 <u>Medium Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 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.

#### 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.

- 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

#### Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 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.
- Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
- BOP/BOPE test to be conducted per 43 CFR 3172 as soon as 2<sup>nd</sup> 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. 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

- 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.
- 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 <u>8</u> 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. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until

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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.

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- 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.

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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.

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## Training

MCBU Drilling and Completions H<sub>2</sub>S 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 H<sub>2</sub>S.

## **Awareness Level**

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of  $H_2S$ , who are not required to perform work in  $H_2S$  areas, will be provided with an awareness level of  $H_2S$  training prior to entering any  $H_2S$  areas. At a minimum, awareness level training will include:

- 1. Physical and chemical properties of H<sub>2</sub>S
- 2. Health hazards of H<sub>2</sub>S
- 3. Personal protective equipment
- 4. Information regarding potential sources of H<sub>2</sub>S
- 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 H<sub>2</sub>S Training

Employees and contractors required to work in areas that may contain H<sub>2</sub>S will be provided with Advanced Level H<sub>2</sub>S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H<sub>2</sub>S training will include:

- 1.  $H_2S$  safe work practice procedures.
- 2. Emergency contingency plan procedures.
- 3. Methods to detect the presence or release of H<sub>2</sub>S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H<sub>2</sub>S equipment.
- 4. Basic overview of respiratory protective equipment suitable for use in H<sub>2</sub>S 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 H<sub>2</sub>S training.
- 6. Proficiency examination covering all course material.

Advanced H<sub>2</sub>S training courses will be instructed by personnel who have successfully completed an appropriate H<sub>2</sub>S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.



# H<sub>2</sub>S Training Certification

All employees and visitors will be issued an H<sub>2</sub>S training certification card (or certificate) upon successful completion of the appropriate H<sub>2</sub>S training course. Personnel working in an H<sub>2</sub>S environment will carry a current H<sub>2</sub>S 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.

# H<sub>2</sub>S 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.

## H<sub>2</sub>S Detection and Monitoring System

- a) H<sub>2</sub>S 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**

Agency	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

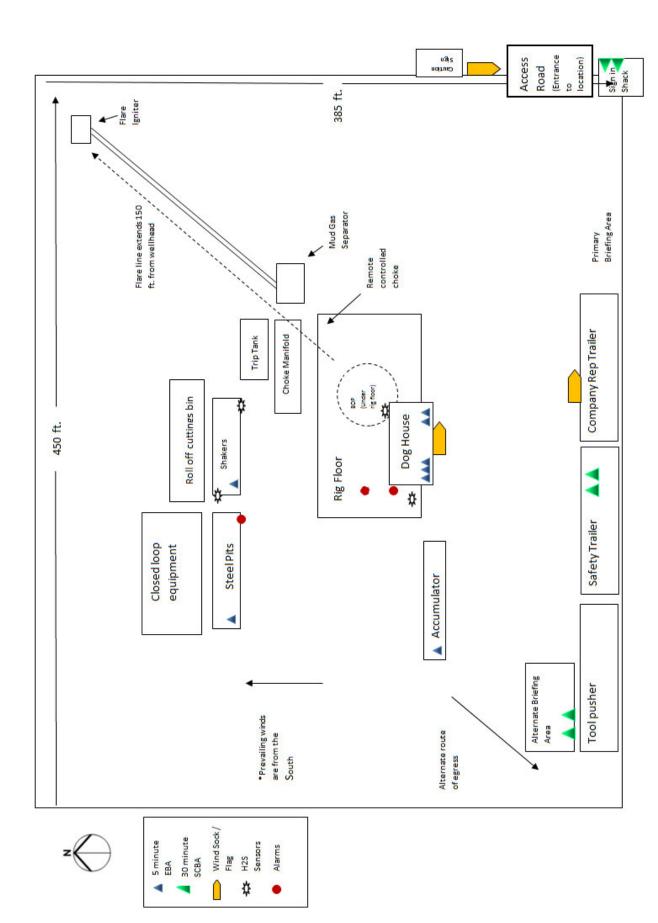


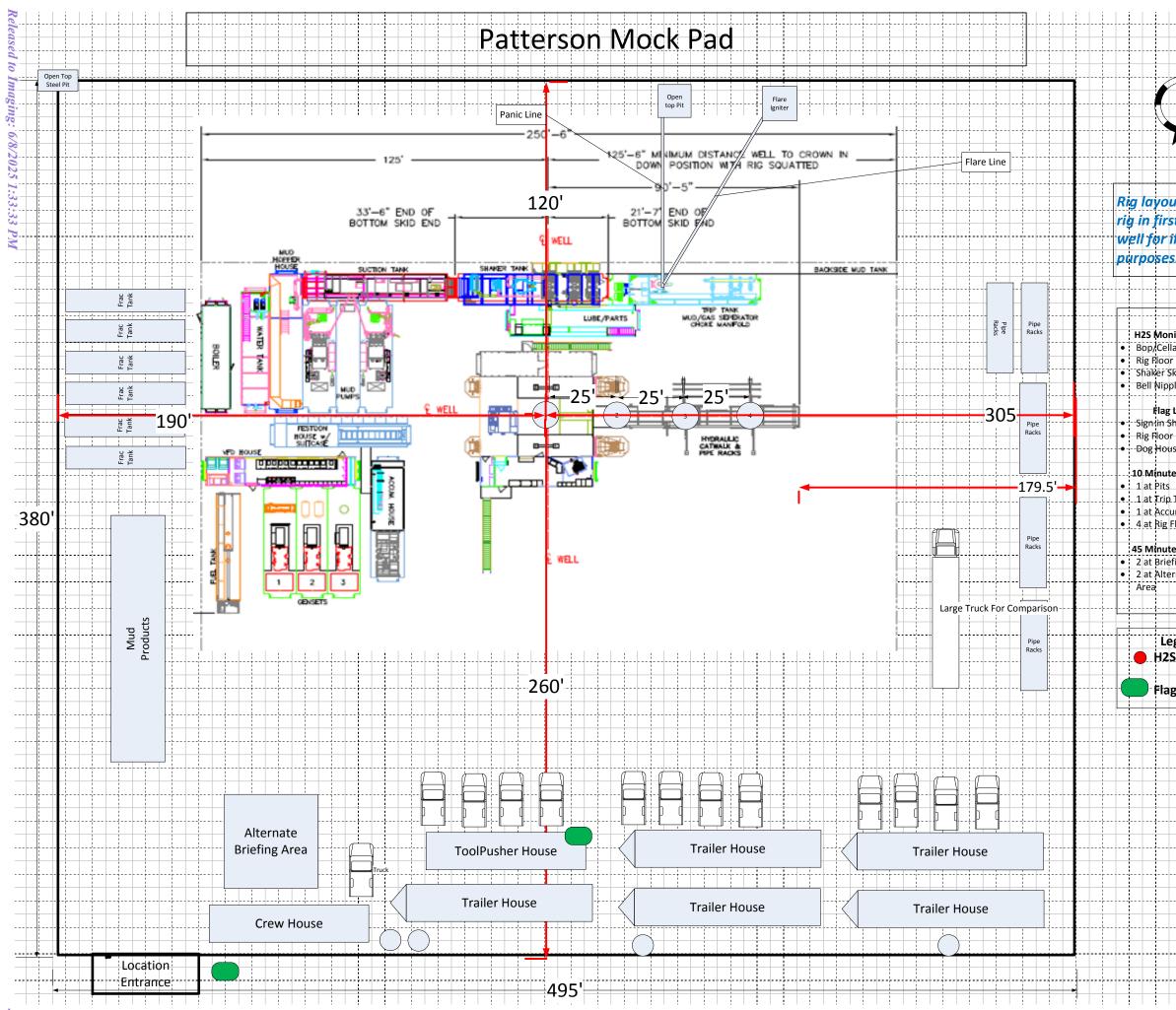
# **Chevron MCBU D&C Emergency Notifications**

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

	Name	Title	Office Number	Cell Phone
1.	TBD	Drilling Engineer		
2.	lan 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		







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## **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15124118	RUSTLER	3272	28	28	SANDSTONE	NONE	N
15124119	TOP OF SALT	3244	28	28	ANHYDRITE, SALT	NONE	N
15124120	BASE OF SALT	2749	523	523	ANHYDRITE, SALT	NONE	N
15124121	LAMAR	947	2325	2333	LIMESTONE, SHALE	NONE	N
15124122	BELL CANYON	914	2358	2366	LIMESTONE, SILTSTONE	NONE	N
15124123	CHERRY CANYON	111	3161	3174	LIMESTONE, SANDSTONE	NONE	N
15124124	BRUSHY CANYON	-1093	4365	4386	LIMESTONE, SANDSTONE	NONE	N
15124125	BONE SPRING LIME	-2707	5979	6011	SHALE, SILTSTONE	NONE	N
15124126	AVALON SAND	-2793	6065	6427	SHALE	NATURAL GAS, OIL	N
15124127	BONE SPRING 1ST	-3568	6840	7101	SANDSTONE, SHALE	NATURAL GAS, OIL	N
15124128	BONE SPRING 2ND	-4138	7410	7894	SANDSTONE, SHALE	NATURAL GAS, OIL	Y

#### **Section 2 - Blowout Prevention**

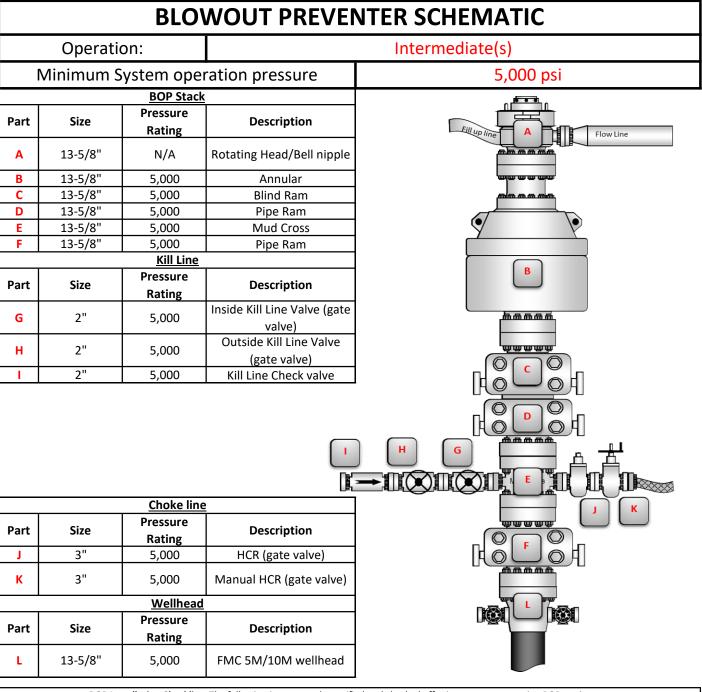
#### Pressure Rating (PSI): 5M

Rating Depth: 8203

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



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

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	452427
	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

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