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. NMNM116028 **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: NMNM 137168A 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 58H 2. Name of Operator 9. API Well No. CHEVRON USA INCORPORATED 30-015-49471 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P O BOX 1635, HOUSTON, TX 77251 (661) 654-7256 PURPLE SAGE/WOLFCAMP GAS 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 13/T26S/R27E/NMP At surface NWNW / 270 FNL / 1152 FWL / LAT 32.048959 / LONG -104.148568 At proposed prod. zone NENW / 50 FNL / 1650 FWL / LAT 32.078794 / LONG -104.147055 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State **EDDY** NM 11 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 270 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, 500 feet 9292 feet / 19687 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 3180 feet 01/09/2022 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 Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the BLM. 25. Signature Name (Printed/Typed) Date KAYLA MCCONNELL / Ph: (432) 687-7866 (Electronic Submission) 07/20/2021 Title Permitting Specialist Approved by (Signature) Date Name (Printed/Typed)

(Electronic Submission) Cody Layton / Ph: (575) 234-5959 04/14/2022 Title Office Carlsbad Field Office Assistant Field Manager Lands & Minerals

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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



Section Township

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
<u>District II</u>

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u>

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

UL or lot no.

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

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

East/West line

☐ AMENDED REPORT

County

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Numbe	r	<sup>2</sup> Pool Code						
30-015-49471		98220	PURPLE SAGE WOLFCAMP (GAS)					
<sup>4</sup> Property Code 325142		<sup>5</sup> Pr	<sup>5</sup> Property Name <sup>6</sup> We					
325142		CIC	ADA UNIT	58H				
<sup>7</sup> OGRID No.		8 O <sub>I</sub>	perator Name	<sup>9</sup> Elevation				
4323		CHEVR	ON U.S.A. INC.	3180'				
		10 Sur	face Location					

D	13	26 SOUTH	27 EAST, N.M.P.M.		270'	NORTH	1152'	WEST	EDDY	ĺ
			11 Bottom H	ole Locat	ion If Diffe	erent From S	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	l
С	1	26 SOUTH	27 EAST, N.M.P.M.		50'	NORTH	1650'	WEST	EDDY	l

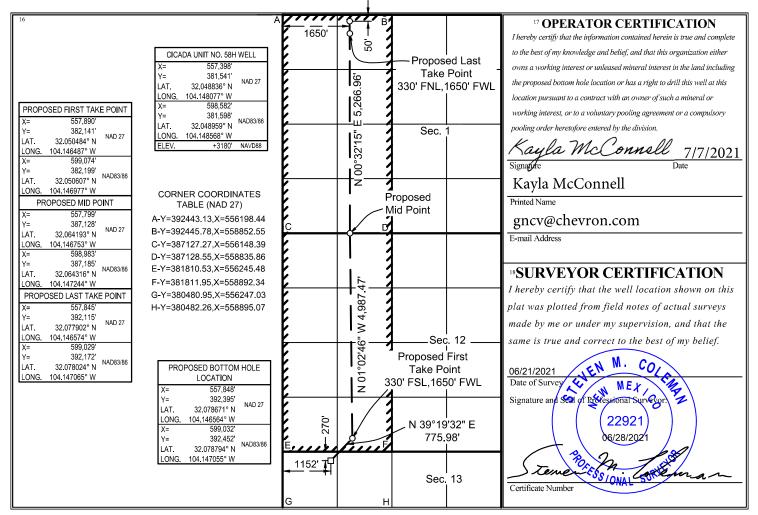
Feet from the North/South line Feet from the

Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.

DEFINING R-14459, NMNM 137168A

Range

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



# State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

# NATURAL GAS MANAGEMENT PLAN

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

# Section 1 – Plan Description Effective May 25, 2021

I. Operator: <u>C</u>	Chevron USA Inc		OGRID:	4323		Da	te: <u>03</u>	<u>3_/_17_/_2022_</u>
II. Type: ⊠ Origin	nal   Amendment	t due to □ 19.15.27.9	.D(6)(a) NMA	.C □ 19.15.27.9.D	0(6)(b) ]	NMAC □	Other.	
If Other, please des	cribe:							
•								
		formation for each ne or connected to a ce			wells p	roposed to	, be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		icipated MCF/D	P	Anticipated roduced Water BBL/D
CICADA UNIT 56H	H Pending	UL:D Sec 13, T268 - R27E	270' FNL, 1112' FWL	BBL/D	MC	F/D	BBL	L/D
CICADA UNIT 57H	I Pending	UL:D,Sec 13, T268 - R27E	3 270' FNL, 1132' FWL	BBL/D	MCF	T/D	BBL	/D
CICADA UNIT 58H	H Pending	UL:D,Sec 13, T268 - R27E	270' FNL, 1152' FWL	BBL/D	MCF	T/D	BBL	/D
CICADA UNIT 59H	H Pending	UL:D,Sec 13, T268 - R27E	270' FNL, 1172' FWL	BBL/D	MCF	T/D	BBL	/D
IV. Central Delive	ry Point Name: _	HHNM CTI	B 12	[See ]	9.15.27	7.9(D)(1) 1	NMAC	·]
		e following information			well or s	set of well	s propo	osed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencemen		Initial I Back I		First Production Date
CICADA UNIT 56H	H Pending		N/A	N/A		N/A		N/A
CICADA UNIT 57H			N/A	N/A		N/A		N.A
CICADA UNIT 58H			N/A	N/A		N/A		N/A
CICADA UNIT 59H			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 E of 10.15.27.8 NMAC.

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												
	2022, an operator that complete this section.		with its statewide natural ga	as capture requirement for the applicable									
	s that it is not require for the applicable rep		ction because Operator is in c	compliance with its statewide natural gas									
IX. Anticipated Na	tural Gas Productio	n:											
W	ell	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF									
X. Natural Gas Ga	thering System (NG	GS):											
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in									
		1											
production operation the segment or porti	ns to the existing or plon of the natural gas gath. The natural gas gath	lanned interconnect of t gathering system(s) to	the natural gas gathering syste which the well(s) will be conf	nticipated pipeline route(s) connecting the em(s), and the maximum daily capacity of nected.  gather 100% of the anticipated natural gas									
	-	-	- , ,	ted to the same segment, or portion, of the n line pressure caused by the new well(s).									
☐ Attach Operator'	s plan to manage prod	duction in response to t	the increased line pressure.										
Section 2 as provide	d in Paragraph (2) of		.27.9 NMAC, and attaches a f	SA 1978 for the information provided in full description of the specific information									

(i)

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

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: power generation on lease: (a) power generation for grid; (b) compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

# **Section 4 - Notices**

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

other alternative beneficial uses approved by the division.

- (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:	ndy Herrera-M	turillo
Printed Name:	Cindy Herrera-Murillo	
Title:	Sr HSE Regulatory affairs C	oordinator
E-mail Address:	eeof@chevron.com	
Date:	03/17/2022	
Phone:	575-263-0431	
	(Only a	OIL CONSERVATION DIVISION pplicable when submitted as a standalone form)
Approved By:		
Title:		
Approval Date:		
Conditions of Approva	al:	

#### 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 Type: CONVENTIONAL GAS WELL



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

# Drilling Plan Data Report

04/18/2022

APD ID: 10400077665

Submission Date: 07/20/2021

Highlighted data reflects the most recent changes

**Operator Name: CHEVRON USA INCORPORATED** 

Well Number: 58H

**Show Final Text** 

Well Name: CICADA UNIT

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
6629112	SALADO	3180	0	0	ANHYDRITE	NONE	N
6629124	CASTILE	2599	581	581	ANHYDRITE	NONE	N
6629114	LAMAR	846	2334	2334	SANDSTONE	NONE	N
6629115	BELL CANYON	810	2370	2370	SANDSTONE	NONE	N
6629116	CHERRY CANYON	-76	3256	3256	SANDSTONE	NONE	N
6629117	BRUSHY CANYON	-1289	4469	4469	SHALE	NONE	N
6629118	BONE SPRING LIME	-2881	6061	6061	SHALE	NONE	N
6629119	AVALON SAND	-2986	6166	6166	SHALE	NONE	N
6629120	BONE SPRING 1ST	-3761	6941	6941	SANDSTONE, SHALE	NONE	N
6629121	BONE SPRING 2ND	-4282	7462	7462	SANDSTONE, SHALE	NONE	N
6629122	BONE SPRING 3RD	-5354	8534	8534	SHALE	NONE	N
6629123	WOLFCAMP	-6112	9292	19687	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

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

Pressure Rating (PSI): 5M Rating Depth: 9292

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

Requesting Variance? YES

Variance request: Chevron is requesting the following variances: -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

Well Name: CICADA UNIT Well Number: 58H

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. -A variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please refer to the attached testing and specification documents. -A variance from the Onshore Order 2 where it states: "(A full BOP Test) shall be performed: when initially installed and whenever any seal subject to test pressure is broken." We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. No BOP components nor any break will ever surpass 21 days between testing. A break test will consist of a 250 psi low / 5,000 psi high for 10 min each test against the connection that was broken when skidding the rig. Upon the first nipple up of the pad a full BOP test will be performed. A full BOP test will be completed prior to drilling the production liner hole sections, unless the BOP connection was not broken prior to drilling that hole section (example: drilling straight from production into production liner hole section). A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized.

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

#### **Choke Diagram Attachment:**

BLM\_5M\_Choke\_Manifold\_Diagram\_20201023110238.pdf

## **BOP Diagram Attachment:**

BLM\_5M\_Annular\_10M\_Rams\_Stackup\_and\_Test\_Plan\_20201023110321.pdf

BLM\_Choke\_Hose\_Test\_Specs\_and\_Pressure\_Test\_Continental\_20201023110337.pdf

NM\_Slim\_Hole\_Wellhead\_6650\_psi\_UH\_S\_20201023110414.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	3180	2730	450	J-55	54.5	BUTT	2.13	1.43	DRY	4.07	DRY	4.07
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2334	0	2334	3143	846	2334	L-80	_	OTHER - BTC/LTC	1.24	1.64	DRY	2.78	DRY	2.78
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8534	0	8534	3143	-5354	8534	P- 110	_	OTHER - BLUE	1.63	1.15	DRY	2.39	DRY	2.39
4	LINER	6.12 5	5.0	NEW	API	Y	8234	9034	8234	9034	-5054	-5854	800	P- 110	_	OTHER - W513	1.39	1.1	DRY	1.32	DRY	1.32
1	PRODUCTI ON	6.12 5	4.5	NEW	API	N	9034	19687	9034	9292	-5854	-6112	10653	P- 110		OTHER - W521	1.39	1.1	DRY	1.32	DRY	1.32

**Operator Name: CHEVRON USA INCORPORATED** Well Name: CICADA UNIT Well Number: 58H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): 13.375\_54.5ppf\_J55\_BTC\_20210719112510.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): 9.625\_40.0ppf\_L80IC\_BTC\_20210719103701.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s):

7.0\_29.0ppf\_P110\_TSH\_Blue\_20210719103743.pdf

Well Name: CICADA UNIT Well Number: 58H

#### **Casing Attachments**

Casing ID: 4

String Type:LINER

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

 $Cicada\_Unit\_No.58H\_9pt\_Drilling\_Plan\_20210719112655.pdf$ 

Casing Design Assumptions and Worksheet(s):

5.0\_18.0ppf\_P110\_W513\_20210719103823.pdf

Casing ID: 5

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $4.5\_11.6ppf\_P110\_TSH\_W521\_20210719103924.pdf$ 

# **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		N/A	N/A
SURFACE	Tail		0	450	259	1.33	14.8	344	10	CLASS C	Extender, Antifoam, Retarder
INTERMEDIATE	Lead		0	1334	185	2.49	11.9	460	10	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		1334	2334	287	1.33	14.8	382	10	CLASS C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		0	7534	559	2.2	11.9	1230	10	CLASS C	Extender, Antifoam, Retarder, Viscosifier

Well Name: CICADA UNIT Well Number: 58H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		7534	8534	118	1.4	14.5	165	10		Extender, Antifoam, Retarder, Viscosifier
LINER	Lead		8334	1968 7	639	1.84	13.2	1176	10	1	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 closed system will be used consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical portatoilet and then hauled to an approved sanitary landfill. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And 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. A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

# **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	450	SPUD MUD	8.3	9.1							VISCOSITY: 28-30 FILTRATE: N/C
450	2334	OTHER : BRINE	8.9	10.5							VISCOSITY: 26-36 FILTRATE: 15-25
2334	8534	OTHER : WBM/BRINE	8.7	9.6							VISCOSITY: 26-36 FILTRATE: 15-25

Well Name: CICADA UNIT Well Number: 58H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
8534	1968 7	OIL-BASED MUD	8.7	13							VISCOSITY: 50-70 FILTRATE: 5-10 Due to wellbore stability, the mud program may exceed the MW weight window needed to maintain overburden of pore pressure.

# Section 6 - Test, Logging, Coring

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

Drill stem tests are not planned

The logging program will be as follows:

Mudlogs Logs: 2 man mudlog Interval: Surf csg shoe through Prod hole TD Timing: While drilling or circulating

LWD Logs: MWD gamma Interval: Int. and Prod. Hole Timing: While drilling

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

GAMMA RAY LOG, DIRECTIONAL SURVEY, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

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

#### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5508 Anticipated Surface Pressure: 3463

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

**Contingency Plans geoharzards description:** 

**Contingency Plans geohazards attachment:** 

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S\_Contingency\_Plan\_20211201070154.pdf

Well Name: CICADA UNIT Well Number: 58H

# **Section 8 - Other Information**

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

CicadaUnit58H\_Directional\_20210719114846.pdf Cicada\_Unit\_No.58H\_9pt\_Drilling\_Plan\_20211201070326.pdf

#### Other proposed operations facets description:

Chevron formally requests authorization to use the spudder rig to spud the well and set surface and intermediate casing. The drilling rig will move in less than 90 days to continue drilling operations. Rig layouts attached.

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

#### Other proposed operations facets attachment:

Rig\_Layout\_20201023120702.pdf

#### **Other Variance attachment:**

HHNM\_Pkg\_19\_\_\_20\_\_\_APD\_Variance\_20210719065839.pdf CUSA\_Spudder\_Rig\_Data\_20201023121533.pdf

#### Schlumberger

#### Cicada Unit 58H R0 mdv 09Jun21 Proposal Geodetic Report



Easting

Latitude

Lonaitude

(Def Plan)

VSEC

Report Date: Client: Field: Structure / Slot: Borehole:

UWI / API#: Survey Name: Survey Date:

Tort / AHD / DDI / ERD Ratio: Coordinate Reference System: Location Lat / Long: Location Grid N/E Y/X: CRS Grid Convergence Angle: Grid Scale Factor: Version / Patch:

June 17, 2021 - 04:43 PM Chevron NM, Eddy County (NAD 27 EZ)

Chevron Cicada Unit Pkg 19 / 58H Cicada Unit 58H Cicada Unit 58H

Unknown / Unknown Cicada Unit 58H R0 mdv 09Jun21 June 09, 2021

Incl

107.926 \*/ 11333.109 ft / 6.419 / 1.222 NAD27 New Mexico State Plane, Eastern Zone, US Feet N 32° 2' 55.81028", W 104° 8' 53.08025"

Azim Grid

TVD

N 381541.150 ftUS, E 557397.800 ftUS 0.0983 ° 0.99991286 2.10.825.0

MD

Survey / DLS Computation: Vertical Section Azimuth: Vertical Section Origin: TVD Reference Datum: TVD Reference Elevation: Seabed / Ground Elevation: Magnetic Declination: Total Gravity Field Strength: Gravity Model:

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:

NS

Minimum Curvature / Lubinski 359.770 ° (Grid North) 0.000 ft, 0.000 ft RKB 3208.000 ft above MSL 3180.000 ft above MSL 6.861° 998.4344mgn (9.80665 Based) GARM

47592.759 nT 59.633 ° June 09, 2021 HDGM 2021 Grid North 0.0983 ° 6 7623 °

DLS

Northina

Well Head

EW

Comments	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
Surface	(ft) 0.00	(°) 0.00	(°) 0.00	(ft) 0.00	(ft) 0.00	(ft) 0.00	(ft) 0.00	(°/100ft) N/A	(ftUS) 381541.15	(ftUS) 557397.80	(N/S ° ' ") N 32 2 55.81 V	(E/W°'")
Guriaco	100.00	0.00	87.01	100.00	0.00	0.00	0.00	0.00	381541.15	557397.80		N 104 8 53.08
	200.00	0.00	87.01	200.00	0.00	0.00	0.00	0.00	381541.15	557397.80	N 32 2 55.81 V	
	300.00	0.00	87.01	300.00	0.00	0.00	0.00	0.00	381541.15	557397.80		
	400.00	0.00	87.01	400.00	0.00	0.00	0.00	0.00	381541.15	557397.80	N 32 2 55.81 V	N 104 8 53.08
	500.00	0.00	87.01	500.00	0.00	0.00	0.00	0.00	381541.15	557397.80	N 32 2 55.81 V	N 104 8 53.08
	600.00	0.00	87.01	600.00	0.00	0.00	0.00	0.00	381541.15	557397.80		
Castile (CSTL)	609.00	0.00	87.01	609.00	0.00	0.00	0.00	0.00	381541.15	557397.80		
Build 1.5°/100ft	700.00	0.00	87.01	700.00	0.00	0.00	0.00	0.00	381541.15	557397.80		
	800.00	1.50	87.01	799.99	0.06	0.07	1.31	1.50	381541.22		N 32 2 55.81 V	
	900.00	3.00	87.01	899.91	0.25	0.27	5.23	1.50	381541.42		N 32 2 55.81 V	
	1000.00 1100.00	4.50 6.00	87.01 87.01	999.69 1099.27	0.57 1.01	0.61 1.09	11.76 20.90	1.50 1.50	381541.76 381542.24	557418.69	N 32 2 55.82 V N 32 2 55.82 V	
	1200.00	7.50	87.01	1198.57	1.57	1.70	32.63	1.50	381542.85	557430.43		
Hold	1233.34	8.00	87.01	1231.61	1.79	1.94	37.12	1.50	381543.09		N 32 2 55.83 V	
11014	1300.00	8.00	87.01	1297.62	2.24	2.42	46.39	0.00	381543.57		N 32 2 55.83 V	
	1400.00	8.00	87.01	1396.65	2.91	3.15	60.29	0.00	381544.30	557458.08		
	1500.00	8.00	87.01	1495.67	3.58	3.88	74.19	0.00	381545.02	557471.98	N 32 2 55.85 V	N 104 8 52.22
	1600.00	8.00	87.01	1594.70	4.25	4.60	88.08	0.00	381545.75	557485.88	N 32 2 55.85 V	
	1700.00	8.00	87.01	1693.73	4.92	5.33	101.98	0.00	381546.48	557499.77		
	1800.00	8.00	87.01	1792.75	5.59	6.05	115.88	0.00	381547.20		N 32 2 55.87 V	
	1900.00	8.00	87.01	1891.78	6.26	6.78	129.78	0.00	381547.93		N 32 2 55.88 V	
	2000.00	8.00	87.01	1990.81 2089.83	6.93 7.60	7.51	143.68 157.58	0.00	381548.65 381549.38	557541.47 557555.36	N 32 2 55.88 V	
	2100.00 2200.00	8.00 8.00	87.01 87.01	2188.86	7.60 8.27	8.23 8.96	171.47	0.00	381550.11	557569.26		
	2300.00	8.00	87.01	2287.89	8.94	9.68	185.37	0.00	381550.83		N 32 2 55.90 V	
Lamar (LMAR)	2324.73	8.00	87.01	2312.38	9.11	9.86	188.81	0.00	381551.01		N 32 2 55 90 V	
Bell Canyon (BLCN)	2361.14	8.00	87.01	2348.43	9.35	10.13	193.87	0.00	381551.28	557591.65		
, , , ,	2400.00	8.00	87.01	2386.91	9.61	10.41	199.27	0.00	381551.56		N 32 2 55.91 V	
	2500.00	8.00	87.01	2485.94	10.28	11.14	213.17	0.00	381552.28	557610.95	N 32 2 55.92 V	N 104 8 50.60
	2600.00	8.00	87.01	2584.97	10.95	11.86	227.07	0.00	381553.01	557624.85		
	2700.00	8.00	87.01	2683.99	11.62	12.59	240.97	0.00	381553.74		N 32 2 55.93 V	
	2800.00	8.00	87.01	2783.02	12.29	13.31	254.87	0.00	381554.46		N 32 2 55.94 V	
	2900.00	8.00	87.01	2882.05	12.96	14.04	268.76	0.00	381555.19	557666.54		
	3000.00	8.00	87.01	2981.08	13.63	14.77	282.66	0.00	381555.91	557680.44		
	3100.00	8.00 8.00	87.01 87.01	3080.10	14.30 14.97	15.49	296.56 310.46	0.00	381556.64	557694.34	N 32 2 55.96 V	
Cherry Canyon (CRCN)	3200.00 3254.98	8.00	87.01	3179.13 3233.57	15.34	16.22 16.62	310.46	0.00	381557.37 381557.77		N 32 2 55.97 V	
Cherry Carryon (CNCN)	3300.00	8.00	87.01	3278.16	15.64	16.94	324.36	0.00	381558.09		N 32 2 55.97 V	
	3400.00	8.00	87.01	3377.18	16.31	17.67	338.26	0.00	381558.82		N 32 2 55 98 V	
	3500.00	8.00	87.01	3476.21	16.98	18.40	352.16	0.00	381559.54	557749.92	N 32 2 55.99 V	N 104 8 48.99
	3600.00	8.00	87.01	3575.24	17.65	19.12	366.05	0.00	381560.27	557763.82		
	3700.00	8.00	87.01	3674.26	18.32	19.85	379.95	0.00	381561.00	557777.72	N 32 2 56.00 V	N 104 8 48.67
	3800.00	8.00	87.01	3773.29	18.99	20.57	393.85	0.00	381561.72	557791.62	N 32 2 56.01 V	N 104 8 48.50
	3900.00	8.00	87.01	3872.32	19.66	21.30	407.75	0.00	381562.45	557805.51		
	4000.00	8.00	87.01	3971.34	20.33	22.03	421.65	0.00	381563.17	557819.41		
Drop .75°/100ft	4048.96	8.00	87.01	4019.82	20.66	22.38	428.45	0.00	381563.53	557826.21	N 32 2 56.02 V	
	4100.00 4200.00	7.62 6.87	87.01 87.01	4070.39 4169.59	21.00 21.60	22.74 23.40	435.38 447.97	0.75 0.75	381563.89 381564.55		N 32 2 56.03 V N 32 2 56.03 V	
	4300.00	6.12	87.01	4268.95	22.15	23.99	459.26	0.75	381565.14		N 32 2 56.03 V	
	4400.00	5.37	87.01	4368.45	22.63	24.51	469.25	0.75	381565.66		N 32 2 56.04 V	
Brushy Canyon (BCN)	4478.95	4.78	87.01	4447.09	22.96	24.88	476.22	0.75	381566.02	557873.98	N 32 2 56.05 V	
, , . ,	4500.00	4.62	87.01	4468.07	23.05	24.97	477.94	0.75	381566.11	557875.70		
	4600.00	3.87	87.01	4567.80	23.40	25.35	485.33	0.75	381566.50		N 32 2 56.05 V	
	4700.00	3.12	87.01	4667.61	23.70	25.67	491.41	0.75	381566.82		N 32 2 56.06 V	
	4800.00	2.37	87.01	4767.49	23.93	25.92	496.19	0.75	381567.07		N 32 2 56.06 V	
	4900.00	1.62	87.01	4867.43	24.10	26.10	499.66	0.75	381567.25		N 32 2 56.06 V	
	5000.00	0.87	87.01 87.01	4967.41 5067.40	24.20	26.21	501.83	0.75 0.75	381567.36	557899.58		
Hold Vertical	5100.00 5115.64	0.12	87.01 87.01	5067.40	24.24 24.24	26.26 26.26	502.68 502.70	0.75	381567.41 381567.41		N 32 2 56.06 V N 32 2 56.06 V	
riold Vertical	5200.00	0.00	87.01	5167.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	5300.00	0.00	87.01	5267.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	5400.00	0.00	87.01	5367.40	24.24	26.26	502.70	0.00	381567.41	557900.45		
	5500.00	0.00	87.01	5467.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	5600.00	0.00	87.01	5567.40	24.24	26.26	502.70	0.00	381567.41	557900.45	N 32 2 56.06 V	N 104 8 47.24
	5700.00	0.00	87.01	5667.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	5800.00	0.00	87.01	5767.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	5900.00	0.00	87.01	5867.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
Daniel Carlos Line (2001)	6000.00	0.00	87.01	5967.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
Bone Spring Lime (BSGL)	6071.55	0.00	87.01	6038.95	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
A	6100.00	0.00	87.01	6067.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
Avalon Upper (AVU)	6177.01	0.00 0.00	87.01 87.01	6144.41 6167.40	24.24 24.24	26.26	502.70 502.70	0.00 0.00	381567.41		N 32 2 56.06 V N 32 2 56.06 V	
	6200.00 6300.00	0.00	87.01 87.01	6267.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00	381567.41 381567.41		N 32 256.06 V	
	6400.00	0.00	87.01 87.01	6367.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	6500.00	0.00	87.01	6467.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
Avalon Lower (AVL)	6577.86	0.00	87.01	6545.26	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	6600.00	0.00	87.01	6567.40	24.24	26.26	502.70	0.00	381567.41		N 32 2 56.06 V	
	6700.00	0.00	87.01	6667.40	24.24	26.26	502.70	0.00	381567.41	557900.45	N 32 2 56.06 V	N 104 8 47.24
	6800.00	0.00	87.01	6767.40	24.24	26.26	502.70	0.00	381567.41	557900.45	N 32 2 56.06 V	N 104 8 47.24

Drilling Office 2.10.825.0 ...Chevron Cicada Unit Pkg 19\Cicada Unit 58H\Cicada Unit 58H\Cicada Unit 58H R0 mdv 09Jun21 17/06/2021 04:46 p. m. Page 1 of 3

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting Latitude Longitude (ftUS) (N/S ° ' ') (E/W ° ' ')
First Bone Spring (FBS)	6900.00 6951.40	0.00	87.01 87.01	6867.40 6918.80	24.24 24.24	26.26 26.26	502.70 502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
riist buile spriiig (Fbs)	7000.00	0.00	87.01	6967.40	24.24	26.26	502.70	0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
First Bone Spring Shale (FBS_SH)	7100.00 7175.53	0.00 0.00	87.01 <i>87.01</i>	7067.40 7142.93	24.24 24.24	26.26 26.26	502.70 502.70	0.00 0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
	7200.00	0.00	87.01	7167.40	24.24	26.26	502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
	7300.00 7400.00	0.00	87.01 87.01	7267.40 7367.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00 0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
Second Bone Spring Upper (SBU)	7472.94	0.00	87.01	7440.34	24.24	26.26	502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
	7500.00 7600.00	0.00	87.01 87.01	7467.40 7567.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
	7700.00	0.00	87.01	7667.40	24.24	26.26	502.70	0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
	7800.00 7900.00	0.00	87.01 87.01	7767.40 7867.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
Second Bone Spring Lower (SBL)	7965.41 8000.00	0.00 0.00	87.01 87.01	7932.81 7967.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00 0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
	8100.00	0.00	87.01	8067.40	24.24	26.26	502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
	8200.00 8300.00	0.00	87.01 87.01	8167.40 8267.40	24.24 24.24	26.26 26.26	502.70 502.70	0.00 0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
	8400.00	0.00	87.01	8367.40	24.24	26.26	502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
Third Bone Spring First Carb (TB1C)	8500.00 8545.08	0.00 0.00	87.01 87.01	8467.40 8512.48	24.24 24.24	26.26 26.26	502.70 502.70	0.00 0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
, , ,	8600.00	0.00	87.01	8567.40	24.24	26.26	502.70	0.00	381567.41	557900.45 N 32 2 56.06 W 104 8 47.24
KOP, Build 10°/100ft	8700.00 8730.64	0.00	87.01 87.01	8667.40 8698.04	24.24 24.24	26.26 26.26	502.70 502.70	0.00	381567.41 381567.41	557900.45 N 32 2 56.06 W 104 8 47.24 557900.45 N 32 2 56.06 W 104 8 47.24
Third Bone Spring (TBS)	8757.29 8800.00	2.66 6.94	358.95 358.95	8724.68 8767.23	24.86 28.43	26.88 30.45	502.69 502.62	10.00 10.00	381568.03 381571.60	557900.44 N 32 2 56.07 W 104 8 47.24 557900.38 N 32 2 56.10 W 104 8 47.24
	8900.00	16.94	358.95	8864.95	49.09	51.11	502.25	10.00	381592.25	557900.00 N 32 2 56.31 W 104 8 47.24
	9000.00 9100.00	26.94 36.94	358.95 358.95	8957.59 9042.35	86.40 139.22	88.41 141.23	501.57 500.60	10.00 10.00	381629.55 381682.37	557899.32 N 32 2 56.68 W 104 8 47.25 557898.36 N 32 2 57.20 W 104 8 47.26
Wolfcamp A (WCA)	9148.20	41.76	358.95	9079.61	169.77	171.78	500.04	10.00	381712.91	557897.80 N 32 2 57.50 W 104 8 47.27
	9200.00 9300.00	46.94 56.94	358.95 358.95	9116.64 9178.22	205.96 284.58	207.97 286.59	499.38 497.95	10.00 10.00	381749.10 381827.71	557897.14 N 32 2 57.86 W 104 8 47.27 557895.71 N 32 2 58.64 W 104 8 47.29
	9400.00	66.94	358.95	9225.20	372.71	374.70	496.34	10.00	381915.82	557894.10 N 32 2 59.51 W 104 8 47.31
	9500.00 9600.00	76.94 86.94	358.95 358.95	9256.17 9270.18	467.65 566.52	469.64 568.51	494.61 492.81	10.00 10.00	382010.75 382109.61	557892.37 N 32 3 0.45 W 104 8 47.32 557890.56 N 32 3 1.43 W 104 8 47.34
Wolfcamp A Target 4	9601.16	87.05	358.95	9270.24	567.69	569.67	492.79	10.00	382110.77	557890.54 N 32 3 1.44 W 104 8 47.34
Landing Point FTP Cross	9631.39 9631.54	90.07 90.07	358.95 358.95	9271.00 9271.00	597.89 598.05	599.87 600.03	492.23 492.23	10.00 0.00	382140.97 382141.13	557889.99 N 32 3 1.74 W 104 8 47.35 557889.99 N 32 3 1.74 W 104 8 47.35
	9700.00	90.07	358.95	9270.91	666.50	668.47	490.98	0.00	382209.57	557888.74 N 32 3 2.42 W 104 8 47.36
	9800.00 9900.00	90.07 90.07	358.95 358.95	9270.78 9270.65	766.49 866.48	768.46 868.44	489.16 487.34	0.00	382309.54 382409.51	557886.92 N 32 3 3.41 W 104 8 47.38 557885.09 N 32 3 4.40 W 104 8 47.40
	10000.00	90.07	358.95	9270.52	966.47	968.42	485.51	0.00	382509.49	557883.27 N 32 3 5.39 W 104 8 47.42
	10100.00 10200.00	90.07 90.07	358.95 358.95	9270.38 9270.25	1066.46 1166.45	1068.41 1168.39	483.69 481.86	0.00	382609.46 382709.44	557881.44 N 32 3 6.37 W 104 8 47.44 557879.62 N 32 3 7.36 W 104 8 47.46
Wolfcamp A Target 4	10210.38 10300.00	90.07 90.07	358.95 358.95	9270.24 9270.12	1176.83 1266.44	1178.77 1268.37	481.67 480.04	0.00 0.00	382719.81 382809.41	557879.43 N 32 3 7.47 W 104 8 47.46 557877.80 N 32 3 8.35 W 104 8 47.48
	10400.00	90.07	358.95	9269.99	1366.43	1368.36	478.22	0.00	382909.39	557875.97 N 32 3 9.34 W 104 8 47.50
	10500.00 10600.00	90.07 90.07	358.95 358.95	9269.86 9269.73	1466.42 1566.41	1468.34 1568.32	476.39 474.57	0.00	383009.36 383109.33	557874.15 N 32 3 10.33 W 104 8 47.52 557872.32 N 32 3 11.32 W 104 8 47.54
	10700.00	90.07	358.95	9269.60	1666.40	1668.31	472.74	0.00	383209.31	557870.50 N 32 3 12.31 W 104 8 47.55
	10800.00 10900.00	90.07 90.07	358.95 358.95	9269.47 9269.34	1766.39 1866.38	1768.29 1868.27	470.92 469.10	0.00	383309.28 383409.26	557868.68 N 32 3 13.30 W 104 8 47.57 557866.85 N 32 3 14.29 W 104 8 47.59
	11000.00	90.07	358.95	9269.21	1966.37	1968.26	467.27	0.00	383509.23	557865.03 N 32 3 15.28 W 104 8 47.61
	11100.00 11200.00	90.07 90.07	358.95 358.95	9269.08 9268.95	2066.36 2166.35	2068.24 2168.22	465.45 463.62	0.00 0.00	383609.21 383709.18	557863.21 N 32 3 16.27 W 104 8 47.63 557861.38 N 32 3 17.26 W 104 8 47.65
	11300.00	90.07	358.95	9268.81	2266.34	2268.21	461.80	0.00	383809.16	557859.56 N 32 3 18.25 W 104 8 47.67
	11400.00 11500.00	90.07 90.07	358.95 358.95	9268.68 9268.55	2366.33 2466.31	2368.19 2468.17	459.97 458.15	0.00	383909.13 384009.10	557857.73 N 32 3 19.24 W 104 8 47.69 557855.91 N 32 3 20.23 W 104 8 47.71
	11600.00 11700.00	90.07 90.07	358.95 358.95	9268.42 9268.29	2566.30 2666.29	2568.16 2668.14	456.33 454.50	0.00	384109.08 384209.05	557854.09 N 32 3 21.22 W 104 8 47.73 557852.26 N 32 3 22.21 W 104 8 47.75
	11800.00	90.07	358.95	9268.16	2766.28	2768.12	452.68	0.00	384309.03	557850.44 N 32 3 23.20 W 104 8 47.77
	11900.00 12000.00	90.07 90.07	358.95 358.95	9268.03 9267.90	2866.27 2966.26	2868.11 2968.09	450.85 449.03	0.00 0.00	384409.00 384508.98	557848.61 N 32 3 24.18 W 104 8 47.78 557846.79 N 32 3 25.17 W 104 8 47.80
	12100.00	90.07	358.95	9267.77	3066.25	3068.07	447.21	0.00	384608.95	557844.97 N 32 3 26.16 W 104 8 47.82
	12200.00 12300.00	90.07 90.07	358.95 358.95	9267.64 9267.51	3166.24 3266.23	3168.06 3268.04	445.38 443.56	0.00	384708.92 384808.90	557843.14 N 32 3 27.15 W 104 8 47.84 557841.32 N 32 3 28.14 W 104 8 47.86
	12400.00	90.07	358.95	9267.38	3366.22	3368.02	441.73	0.00	384908.87	557839.50 N 32 3 29.13 W 104 8 47.88
	12500.00 12600.00	90.07 90.07	358.95 358.95	9267.25 9267.11	3466.21 3566.20	3468.01 3567.99	439.91 438.09	0.00	385008.85 385108.82	557837.67 N 32 3 30.12 W 104 8 47.90 557835.85 N 32 3 31.11 W 104 8 47.92
	12700.00 12800.00	90.07	358.95 358.95	9266.98 9266.85	3666.19 3766.18	3667.97 3767.96	436.26 434.44	0.00	385208.80 385308.77	557834.02 N 32 3 32.10 W 104 8 47.94 557832.20 N 32 3 33.09 W 104 8 47.96
	12900.00	90.07 90.07	358.95	9266.72	3866.17	3867.94	434.44	0.00	385408.75	557830.38 N 32 3 34.08 W 104 8 47.98
	13000.00 13100.00	90.07 90.07	358.95 358.95	9266.59 9266.46	3966.16 4066.15	3967.92 4067.91	430.79 428.97	0.00 0.00	385508.72 385608.69	557828.55 N 32 3 35.07 W 104 8 48.00 557826.73 N 32 3 36.06 W 104 8 48.01
	13200.00	90.07	358.95	9266.33	4166.14	4167.89	427.14	0.00	385708.67	557824.90 N 32 3 37.05 W 104 8 48.03
	13300.00 13400.00	90.07 90.07	358.95 358.95	9266.20 9266.07	4266.13 4366.12	4267.87 4367.86	425.32 423.49	0.00	385808.64 385908.62	557823.08 N 32 3 38.04 W 104 8 48.05 557821.26 N 32 3 39.03 W 104 8 48.07
	13500.00	90.07	358.95	9265.94	4466.11	4467.84	421.67	0.00	386008.59	557819.43 N 32 3 40.02 W 104 8 48.09
	13600.00 13700.00	90.07 90.07	358.95 358.95	9265.81 9265.68	4566.10 4666.09	4567.82 4667.81	419.85 418.02	0.00	386108.57 386208.54	557817.61 N 32 3 41.00 W 104 8 48.11 557815.79 N 32 3 41.99 W 104 8 48.13
	13800.00	90.07	358.95	9265.54	4766.08	4767.79	416.20	0.00	386308.51	557813.96 N 32 3 42.98 W 104 8 48.15
	13900.00 14000.00	90.07 90.07	358.95 358.95	9265.41 9265.28	4866.07 4966.06	4867.77 4967.76	414.37 412.55	0.00	386408.49 386508.46	557812.14 N 32 3 43.97 W 104 8 48.17 557810.31 N 32 3 44.96 W 104 8 48.19
	14100.00 14200.00	90.07 90.07	358.95 358.95	9265.15 9265.02	5066.05 5166.04	5067.74 5167.72	410.73 408.90	0.00	386608.44 386708.41	557808.49 N 32 3 45.95 W 104 8 48.21 557806.67 N 32 3 46.94 W 104 8 48.23
IFP1, Drop 2°/100ft	14216.59	90.07	358.95	9265.02	5182.63	5184.31	408.60	0.00	386725.00	557806.36 N 32 3 47.11 W 104 8 48.23
Hold	14223.14 14300.00	89.94 89.94	358.95 358.95	9265.00 9265.07	5189.18 5266.03	5190.86 5267.71	408.48 407.07	2.00 0.00	386731.55 386808.39	557806.24 N 32 3 47.17 W 104 8 48.23 557804.84 N 32 3 47.93 W 104 8 48.25
	14400.00	89.94	358.95	9265.17	5366.02	5367.69	405.24	0.00	386908.36	557803.00 N 32 3 48.92 W 104 8 48.26
	14500.00 14600.00	89.94 89.94	358.95 358.95	9265.27 9265.37	5466.01 5566.00	5467.67 5567.66	403.41 401.57	0.00 0.00	387008.33 387108.31	557801.17 N 32 3 49.91 W 104 8 48.28 557799.34 N 32 3 50.90 W 104 8 48.30
MP, Turn 2°/100ft	14624.34	89.94	358.95	9265.39	5590.34	5591.99	401.13	0.00	387132.65	557798.89 N 32 3 51.14 W 104 8 48.31
Hold	14700.00 14704.36	89.94 89.94	0.46 0.55	9265.46 9265.47	5665.99 5670.35	5667.65 5672.01	400.74 400.78	2.00 2.00	387208.29 387212.65	557798.50 N 32 3 51.89 W 104 8 48.31 557798.54 N 32 3 51.93 W 104 8 48.31
	14800.00	89.94	0.55	9265.56	5765.98	5767.64	401.70	0.00	387308.28	557799.46 N 32 3 52.88 W 104 8 48.30
	14900.00 15000.00	89.94 89.94	0.55 0.55	9265.66 9265.76	5865.97 5965.97	5867.64 5967.63	402.66 403.62	0.00	387408.27 387508.25	557800.42 N 32 3 53.87 W 104 8 48.28 557801.38 N 32 3 54.86 W 104 8 48.27
	15100.00	89.94	0.55	9265.85	6065.96	6067.63	404.58	0.00	387608.24	557802.34 N 32 3 55.85 W 104 8 48.26
	15200.00 15300.00	89.94 89.94	0.55 0.55	9265.95 9266.05	6165.95 6265.94	6167.62 6267.62	405.54 406.50	0.00	387708.22 387808.21	557803.30 N 32 3 56.84 W 104 8 48.24 557804.26 N 32 3 57.83 W 104 8 48.23
	15400.00	89.94	0.55	9266.14	6365.93	6367.62	407.46	0.00	387908.20	557805.22 N 32 3 58.82 W 104 8 48.22
	15500.00 15600.00	89.94 89.94	0.55 0.55	9266.24 9266.34	6465.92 6565.91	6467.61 6567.61	408.42 409.38	0.00 0.00	388008.18 388108.17	557806.18 N 32 3 59.80 W 104 8 48.21 557807.14 N 32 4 0.79 W 104 8 48.19
	15700.00 15800.00	89.94 89.94	0.55 0.55	9266.43 9266.53	6665.90 6765.89	6667.60 6767.60	410.34 411.30	0.00	388208.16 388308.14	557808.11 N 32 4 1.78 W 104 8 48.18 557809.07 N 32 4 2.77 W 104 8 48.17
	15900.00	89.94 89.94	0.55	9266.63	6865.88	6867.59	411.30	0.00	388408.13	557810.03 N 32 4 3.76 W 104 8 48.17

0	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
Comments	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(ftUS)	(ftUS)	(N/S ° ' ")	(E/W ° ' ")
	16000.00	89.94	0.55	9266.72	6965.87	6967.59	413.22	0.00	388508.12		32 4 4.75 W	
	16100.00	89.94	0.55	9266.82	7065.86	7067.58	414.18	0.00	388608.10	557811.95 N	32 4 5.74 W	104 8 48.13
	16200.00	89.94	0.55	9266.92	7165.85	7167.58	415.14	0.00	388708.09		32 4 6.73 W	
IFP2, Build 2°/100ft	16285.92	89.94	0.55	9267.00	7251.77	7253.50	415.97	0.00	388794.00		32 4 7.58 W	
Hold	16291.89	90.06	0.55	9267.00	7257.73	7259.46	416.03	2.00	388799.96	557813.79 N	32 4 7.64 W	104 8 48.10
	16300.00	90.06	0.55	9266.99	7265.84	7267.57	416.10	0.00	388808.08		32 4 7.72 W	
	16400.00	90.06	0.55	9266.88	7365.84	7367.57	417.06	0.00	388908.06		32 4 8.71 W	
	16500.00	90.06	0.55	9266.77	7465.83	7467.56	418.01	0.00	389008.05		32 4 9.70 W	
	16600.00	90.06	0.55	9266.66	7565.82	7567.56	418.96	0.00	389108.03		32 4 10.69 W	
	16700.00	90.06	0.55	9266.55	7665.81	7667.55	419.91	0.00	389208.02		32 4 11.68 W	
	16800.00	90.06	0.55	9266.43	7765.80	7767.55	420.86	0.00	389308.01		32 4 12.67 W	
	16900.00	90.06	0.55	9266.32	7865.79	7867.55	421.81	0.00	389407.99		32 4 13.66 W	
	17000.00	90.06	0.55	9266.21	7965.78	7967.54	422.76	0.00	389507.98		32 4 14.65 W	
	17100.00	90.06	0.55	9266.10	8065.77	8067.54	423.72	0.00	389607.97		32 4 15.64 W	
	17200.00	90.06	0.55	9265.99	8165.76	8167.53	424.67	0.00	389707.95		32 4 16.63 W	
	17300.00	90.06	0.55	9265.88	8265.75	8267.53	425.62	0.00	389807.94		32 4 17.62 W	
	17400.00	90.06	0.55	9265.77	8365.74	8367.52	426.57	0.00	389907.93		32 4 18.61 W	
	17500.00	90.06	0.55	9265.66	8465.73	8467.52	427.52	0.00	390007.91		32 4 19.60 W	
	17600.00	90.06	0.55	9265.54	8565.72	8567.51	428.47	0.00	390107.90		32 4 20.58 W	
	17700.00	90.06	0.55	9265.43	8665.72	8667.51	429.43	0.00	390207.89		32 4 21.57 W	
	17800.00	90.06	0.55	9265.32	8765.71	8767.50	430.38	0.00	390307.87		32 4 22.56 W	
	17900.00	90.06	0.55	9265.21	8865.70	8867.50	431.33	0.00	390407.86		32 4 23.55 W	
	18000.00	90.06	0.55	9265.10	8965.69	8967.50	432.28	0.00	390507.85		32 4 24.54 W	
	18100.00	90.06	0.55	9264.99	9065.68	9067.49	433.23	0.00	390607.83		32 4 25.53 W	
	18200.00	90.06	0.55	9264.88	9165.67	9167.49	434.18	0.00	390707.82		32 4 26.52 W	
	18300.00	90.06	0.55	9264.77	9265.66	9267.48	435.13	0.00	390807.81		32 4 27.51 W	
	18400.00	90.06	0.55	9264.65	9365.65	9367.48	436.09	0.00	390907.79		32 4 28.50 W	
	18500.00	90.06	0.55	9264.54	9465.64	9467.47	437.04	0.00	391007.78		32 4 29.49 W	
	18600.00	90.06	0.55	9264.43	9565.63	9567.47	437.99	0.00	391107.76		32 4 30.48 W	
	18700.00	90.06	0.55	9264.32	9665.62	9667.46	438.94	0.00	391207.75		32 4 31.47 W	
	18800.00	90.06	0.55	9264.21	9765.61	9767.46	439.89	0.00	391307.74		32 4 32.46 W	
	18900.00	90.06	0.55	9264.10	9865.60	9867.45	440.84	0.00	391407.72		32 4 33.45 W	
	19000.00	90.06	0.55	9263.99	9965.60	9967.45	441.80	0.00	391507.71		32 4 34.44 W	
	19100.00	90.06	0.55	9263.88	10065.59	10067.44	442.75	0.00	391607.70		32 4 35.43 W	
	19200.00	90.06	0.55	9263.76	10165.58	10167.44	443.70	0.00	391707.68		32 4 36.42 W	
	19300.00	90.06	0.55	9263.65	10265.57	10267.44	444.65	0.00	391807.67		32 4 37.41 W	
	19400.00	90.06	0.55	9263.54	10365.56	10367.43	445.60	0.00	391907.66		32 4 38.40 W	
	19500.00	90.06	0.55	9263.43	10465.55	10467.43	446.55	0.00	392007.64		32 4 39.39 W	
	19600.00	90.06	0.55	9263.32	10565.54	10567.42	447.51	0.00	392107.63		32 4 40.37 W	
LTP Cross	19607.38	90.06	0.55	9263.31	10572.92	10574.80	447.58	0.00	392115.01		32 4 40.45 W	
	19700.00	90.06	0.55	9263.21	10665.53	10667.42	448.46	0.00	392207.62		32 4 41.36 W	
Cicada Unit EQUI DUI	19800.00	90.06	0.55	9263.10	10765.52	10767.41	449.41	0.00	392307.60		32 4 42.35 W	
Cicada Unit 58H BHL	19887.41	90.06	0.55	9263.00	10852.92	10854.82	450.24	0.00	392395.00	357848.00 N	32 4 43.22 W	104 8 47.63

Survey Type:

Def Plan

Survey Error Model: Survey Program:

ISCWSA Rev 3 \*\*\* 3-D 97.071% Confidence 3.0000 sigma

Survey Program:									
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Cas (in)	sing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM-Depth Only	Cicada Unit 58H / Cicada Unit 58H R0 mdv 09Jun21
	1	28.000	450.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM	Cicada Unit 58H / Cicada Unit 58H R0 mdv 09Jun21
	1	450.000	2211.243	1/100.000	12.250	9.625		B001Mb_MWD+HRGM	Cicada Unit 58H / Cicada Unit 58H R0 mdv 09Jun21
	1	2211.243	9268.297	1/100.000	8.750	7.000		B001Mb_MWD+HRGM	Cicada Unit 58H / Cicada Unit 58H R0 mdv 09Jun21
	1	9268.297	19887.409	1/100.000	6.125	4.500		B001Mb_MWD+HRGM	Cicada Unit 58H / Cicada Unit 58H R0 mdv 09Jun21

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: CHEVRON USA INCORPORATED

LEASE NO.: NMNM116028

LOCATION: Section 13, T.26 S., R.27 E., NMP

COUNTY: Eddy County, New Mexico

WELL NAME & NO.: CICADA UNIT 56H
SURFACE HOLE FOOTAGE: 270'/N & 1112'/W
BOTTOM HOLE FOOTAGE 50'/N & 330'/W

WELL NAME & NO.: CICADA UNIT 57H
SURFACE HOLE FOOTAGE: 270'/N & 1132'/W
BOTTOM HOLE FOOTAGE 50'/N & 990'/W

WELL NAME & NO.: CICADA UNIT 58H
SURFACE HOLE FOOTAGE: 270'/N & 1152'/W
BOTTOM HOLE FOOTAGE 50'/N & 1650'/W

WELL NAME & NO.: CICADA UNIT 59H
SURFACE HOLE FOOTAGE: 270'/N & 1172'/W
BOTTOM HOLE FOOTAGE 50'/N & 2310'/W

COA

H2S	© Yes	⊙ No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	C Low	O Medium	• High
Cave/Karst Potential	Critical Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	© Multibowl	O Both
Other	☐ 4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	✓ Unit

#### A. HYDROGEN SULFIDE

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

#### **B. CASING**

### **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 and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 2334 feet. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

#### **Option 1 (Single Stage):**

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

#### Option 2:

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

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

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

- ❖ In <u>High 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 production casing is:

# **Option 1 (Single Stage):**

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

#### Option 2:

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
- 4. The minimum required fill of cement behind the 5 X 4-1/2 inch production liner is:
  - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

#### C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

#### **Option 1:**

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.

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

#### Option 2:

- 1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

#### D. SPECIAL REQUIREMENT (S)

#### **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.

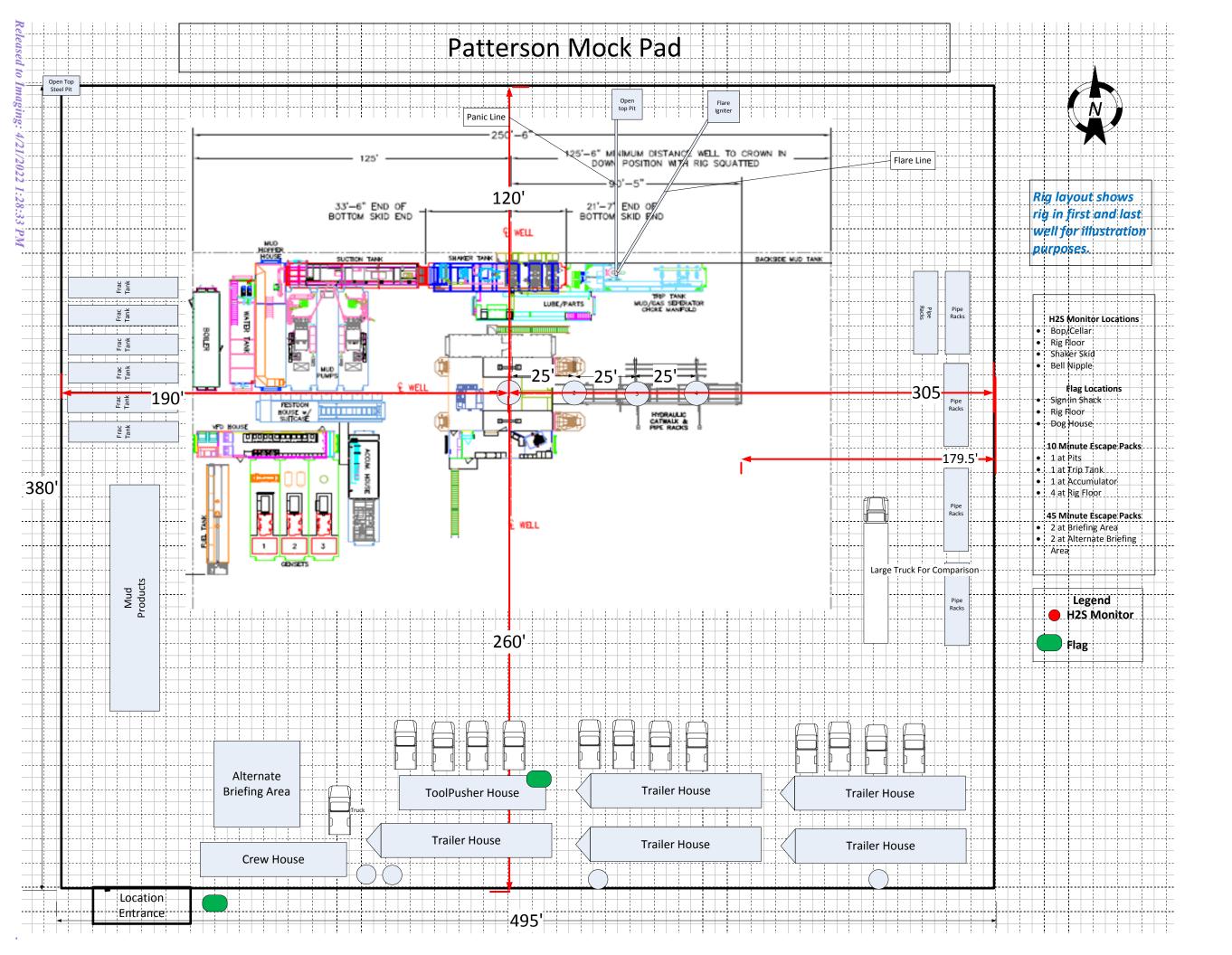
#### **Commercial Well Determination**

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

#### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.



2"

# **BLOWOUT PREVENTER SCHEMATIC**

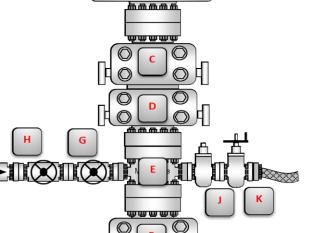
Operation: Intermediate & Production Drilling Operations

#### Minimum System operation pressure **BOP Stack Pressure Part** Size Description Rating 13-5/8" N/A Rotating Head/Bell nipple 13-5/8" 5,000 Annular В 13-5/8" C 10,000 Blind Ram 13-5/8" 10,000 D Pipe Ram Ē 13-5/8" 10,000 **Mud Cross** F 13-5/8" 10,000 Pipe Ram **Kill Line Pressure Part** Size Description Rating Inside Kill Line Valve (gate 2" G 10,000 valve) Outside Kill Line Valve 2" 10,000 (gate valve)

10,000

5,000 psi

Flow Line



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

BOP Installation Checklist: The following items must be verified and checked off prior to pressure testing BOP equipment

The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.

All valves on the kill line and choke line will be full opening and will allow straight flow through.

Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be install on all manual valves on the choke and

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.

Kill Line Check valve

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 99724

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	99724
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	4/21/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/21/2022
kpickford	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	4/21/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	4/21/2022
kpickford	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	4/21/2022