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. **BUREAU OF LAND MANAGEMENT** NMNM109756 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: 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 SCREWBALL 30 19 FEDERAL COM 461H 2. Name of Operator 9. API Well No. CHEVRON USA INCORPORATED 30-015-56133 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PURPLE SAGE/(WOLFCAMP) GAS PO BOX 1392, BAKERSFIELD, CA 93302 (661) 633-4000 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 31/T25S/R27E/NMP At surface NENE / 747 FNL / 929 FEL / LAT 32.091538 / LONG -104.223747 At proposed prod. zone NENE / 25 FNL / 385 FEL / LAT 32.122669 / LONG -104.222146 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 389 feet location to nearest property or lease line, ft. 1280.0 (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 8853 feet / 19615 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 147 days 3233 feet 11/23/2024 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) CAROL ADLER / Ph: (432) 687-7866 10/10/2023 Sr Regulatory Affairs Coordinator Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 11/22/2024 CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



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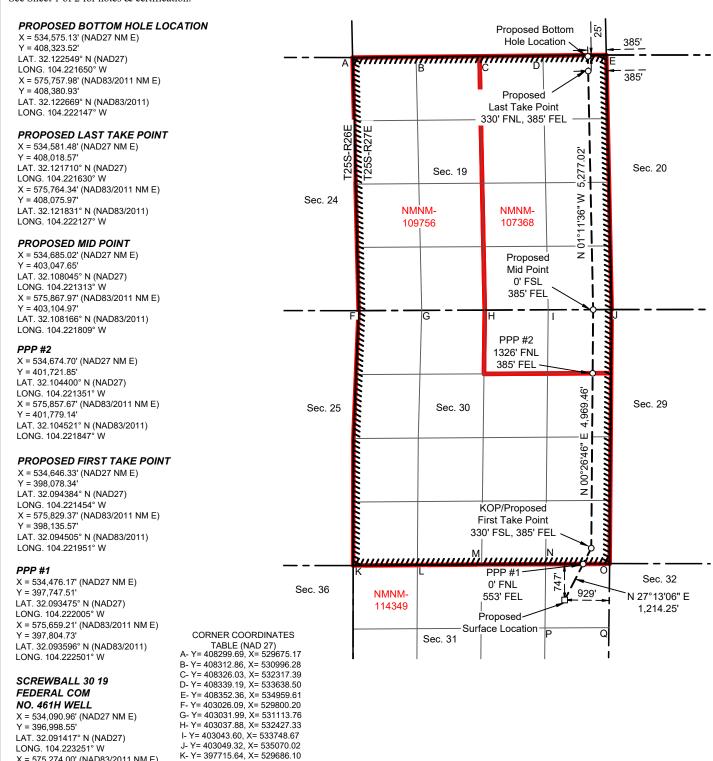
Phone: General Phone: Online	Information (505) 629-61 Phone Direct	141 Fax: (55) 4 1 116			Stat Energy, Min OIL CONS	nerals & Departr	nent		Submit Electronic						
					WELL LOCA	TION INI	FORMATION	N							
API Nu	mber 0	15-56133		ool Code		Pool Name		34 <b>1</b> 4 <b>D</b> (G16	7)						
				3220 roperty Na		PURPLE	SAGE WOLFO	CAMP (GAS	S)	Well Numb	er				
	ty Code 33687	78	SC	CREWBAI	LL 30 19 FEDERAL	COM				461H					
OGRII 4323	) No.			perator Na HEVRON	me U.S.A. INC.					Ground Lev 3233'	el Elevation				
Surface	e Owner: 🗆	State ☐ Fee ☐	☐ Tribal 🛛	I Federal		Mine	eral Owner: 🗆	State   Fe	e 🗌 Tribal	⊠ Federal					
					Surf	ace Locati	ion								
UL A	Section 31	Township 25 SOUTH	Range 27 EAST N.M.P.M		Ft. from N/S		om E/W	Latitude 32.091538	3° N	Longitude 104.223748° W	County EDDY				
			11.111.1	v1.	Botton	ı Hole Loc	cation								
UL A	Section 19	Township 25 SOUTH	Range 27 EAST N.M.P.N		Ft. from N/S 25' NORTH	Ft. fro 385' E	om E/W EAST	Latitude 32.122669		Longitude 104.222147° W	County EDDY				
1280	nted Acres	Infill or Defi INFILL	ning Well	PENI SCRE	ing Well API- DING-DEFINING W EWBALL 30 19 FED 458H	I NO I F									
					Kick C	off Point (	KOP)								
UL P	Section 30	Township 25 SOUTH	Range 27 EAST N.M.P.M		Ft. from N/S	Ft. from E/W 385' EAST		Latitude 32.094505		Longitude 104.221951° W	County EDDY				
	T a .:	l	Damas	T T		ake Point	<u>` .                                   </u>		T 12 1 T						
UL P	Section 30	Township 25 SOUTH	Range 27 EAST N.M.P.M		Ft. from N/S 330' SOUTH	385' E	Latitude			Longitude 104.221951° W	County EDDY				
		1	р	T .		ake Point		T	Γ.	T 1. 1					
UL A	Section 19	Township 25 SOUTH	Range 27 EAST N.M.P.N		Ft. from N/S 330' NORTH	385' E	om E/W EAST	Latitude 32.121831° N		Longitude 104.222127° W	County EDDY				
Unitize PEND		rea of Uniform	Interest	Spaci	ng Unit Type 🛭 Ho	orizontal □ Vertical Ground Floor Elevation: 3233'									
OPER	ATOR CER	TIFICATIONS				SURVE	YOR CERTIF	ICATIONS							
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  See Sheet 2 of 2 for plat.  Signature and Seaf of Professional Surveyor ONAL Surveyor O															
caroladler@chevron.com Email Address															

### 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.



X = 575,274.00' (NAD83/2011 NM E)

LAT. 32.091538° N (NAD83/2011)

Y = 397.055.75'

LONG. 104.223748° W

L- Y= 397726.43, X= 531024.38

M- Y= 397737.22, X= 532362.65

N- Y= 397743.71, X= 533695.71

O- Y= 397750 20 X= 535028 77 P- Y= 396416.15, X= 533682.36 Q- Y= 396422.81, X= 535013.79

### 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:Che	vron USA_		OGRID:	4323		Date:06/09/2023		
II. Type: ⊠ Original [	☐ Amendm	ent due to □ 19.15	5.27.9.D(6)(a) NMA	AC □ 19.15.27.9	.D(6)(b) NMAC	☐ Other.		
If Other, please describe: _								
III. Well(s): Provide the for be recompleted from a sing					wells proposed to	o be drilled or proposed to		
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D		
SCREWBALL 30 19 FEDERAL COM 458H	Pending	UL:P, Sec 30, T25S-R27E	603' FSL, 534' FEL	1250 BBL/D	3600 MCF/D	6000 BBL/D		
SCREWBALL 30 19 FEDERAL COM 459H	Pending	UL:P, Sec 30, T25S-R27E	603' FSL, 514' FEL	1250 BBL/D	3600 MCF/D	6000 BBL/D		
SCREWBALL 30 19 FEDERAL COM 460H	Pending	UL:P, Sec 30, T25S-R27E	603' FSL, 494' FEL	1250 BBL/D	3600 MCF/D	6000 BBL/D		
SCREWBALL 30 19 FEDERAL COM 461H	Pending	UL:P, Sec 30, T25S-R27E	603' FSL, 474' FEL	1250 BBL/D	3600 MCF/D	6000 BBL/D		

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

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
			Date	Commencement Date	Back Date	Date
SCREWBALL 30 19	Pending	March 2025	N/A	N/A	N/A	N/A
FEDERAL COM 458H	1 chang	1,141011 2023	1071	11/11	1071	1011
SCREWBALL 30 19	Pending	March 2025	N/A	N/A	N/A	N/A
FEDERAL COM 459H						
SCREWBALL 30 19	Pending	March 2025	N/A	N/A	N/A	N/A
FEDERAL COM 460H						
SCREWBALL 30 19	Pending	March 2025	N/A	N/A	N/A	N/A
FEDERAL COM 461H						

VI. Separation Equipment: ⊠ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

[See 19.15.27.9(D)(1) NMAC]

IV. Central Delivery Point Name: Hayhurst NM CTB 29

VII. Operational Practices: ⊠ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: 

Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

### Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

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

### IX. Anticipated Natural Gas Production:

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

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

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

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

XII. Line Capacity. The natural gas gathering systen	$\square$ will $\square$ will not have	capacity to gather 100%	of the anticipated natural gas
production volume from the well prior to the date of fi	rst production.		

XIII. Line Pressure. Operator	☐ does ☐ does not antic	cipate that its existing	g well(s) connected to	the same segment,	or portion, o	of the
atural gas gathering system(s)	described above will cor	ntinue to meet anticip	pated increases in line	pressure caused by	the new we	ll(s).

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XIV. Confidentiality: $\square$ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provides	ded 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 of the	nation
for which confidentiality is asserted and the basis for such assertion.	

# Section 3 - Certifications Effective May 25, 2021

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

🖂 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.  $\square$  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) liquids removal on lease; (d) reinjection for underground storage; (e) reinjection for temporary storage;

> reinjection for enhanced oil recovery; (g)

**(f)** 

- fuel cell production; and (h)
- other alternative beneficial uses approved by the division. (i)

### Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- 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
- 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: 6/29/2023
Phone: (432) 687-7148
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

### VI. Separation Equipment:

Separation equipment installed at each Chevron facility is designed for maximum anticipated throughput and pressure to minimize waste. Separation equipment is designed and built according to ASME Sec VIII Div I to ensure gas is separated from liquid streams according to projected production.

### VII./VIII. Operational & Best Management Practices:

- 1. General Requirements for Venting and Flaring of Natural Gas:
  - In all circumstances, Chevron will flare rather than vent unless flaring is technically infeasible and venting of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or the environment.
  - Chevron installs and operates vapor recovery units (VRUs) in new facilities to minimize venting and flaring.
     If a VRU experiences operating issues, it is quickly assessed so that action can be taken to return the VRU to operation or, if necessary, facilities are shut-in to reduce the venting or flaring of natural gas.

### 2. During Drilling Operations:

- Flare stacks will be located a minimum of 110 feet from the nearest surface hole location.
- If an emergency or malfunction occurs, gas will be flared or vented to avoid a risk of an immediate and substantial adverse impact on public health, safety or the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Natural gas is captured or combusted if technically feasible using best industry practices and control technologies, such as the use of separators (e.g., Sand Commanders) during normal drilling and completions operations.

### 3. During Completions:

- Chevron typically does not complete traditional flowback, instead Chevron will flow produced oil, water, and gas to a centralized tank battery and continuously recover salable quality gas. If Chevron completes traditional flowback, Chevron conducts reduced emission completions as required by 40 CFR 60.5375a by routing gas to a gas flow line as soon as practicable once there is enough gas to operate a separator.
   Venting does not occur once there is enough gas to operate a separator
- Normally, during completions a flare is not on-site. A Snubbing Unit will have a flare on-site, and the flare volume will be estimated.
- If natural gas does not meet pipeline quality specification, the gas is sampled twice per week until the gas meets the specifications.

### 4. During Production:

- An audio, visual and olfactory (AVO) inspection will be performed daily (at minimum) for active wells and facilities to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will be available upon request by the division.
- Monitor manual liquid unloading for wells on-site, takes all reasonable actions to achieve a stabilized rate
  and pressure at the earliest practical time and takes reasonable actions to minimize venting to the
  maximum extent practicable.
- In all circumstances, Chevron will flare rather than vent unless flaring is technically infeasible and venting
  of natural gas will avoid a risk of an immediate and substantial adverse impact on safety, public health, or
  the environment.
- Chevron's design for new facilities utilizes air-activated pneumatic controllers and pumps.
- If natural gas does not meet pipeline quality specification, the gas is sampled twice per week until the gas meets the specifications.
- Chevron does not produce oil or gas until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.

### 5. Performance Standards

- Equipment installed at each facility is designed for maximum anticipated throughput and pressure to minimize waste. Tank pressure relief systems utilize a soft seated or metal seated PSVs, as appropriate, which are both designed to not leak.
- Flare stack has been designed for proper size and combustion efficiency. New flares will have a
  continuous pilot and will be located at least 100 feet from the well and storage tanks and will be securely
  anchored.
- New tanks will be equipped with an automatic gauging system.
- An audio, visual and olfactory (AVO) inspection will be performed daily (at minimum) for active wells and
  facilities to confirm that all production equipment is operating properly and there are no leaks or releases
  except as allowed in Subsection D of 19.15.27.8 NMAC. Inactive, temporarily abandoned, or shut-in wells
  and facilities will be inspected weekly. Inspection records will be kept for a minimum of five years and will
  be available upon request by the division.

### 6. Measurement or Estimation of Vented and Flared Natural Gas

- Chevron estimates or measures the volume of natural gas that is vented, flared, or beneficially used during drilling, operations, regardless of the reason or authorization for such venting or flaring.
- Where technically practicable, Chevron will install meters on flares installed after May 25, 2021. Meters
  will conform to industry standards. Bypassing the meter will only occur for inspecting and servicing of the
  meter.

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

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\_20230209092858.pdf

BLM\_Choke\_Hose\_Test\_Specs\_and\_Pressure\_Test\_Continental\_20230209092929.pdf

### **BOP Diagram Attachment:**

1.03 WH NM Slim Hole DM100312151 20230209093010.pdf

BLM 5M Intermediate BOP and Choke Manifold NEW 20240429070927.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	3233	2783	450	J-55	54.5	BUTT	5.43	4.46	BUOY	37.0 6	BUOY	34.7 8
2	I	12.2 5	9.625	NEW	API	N	0	2066	0	2040	3143	1193	2066	L-80		OTHER - BTC/LTC	3.33	2.57	BUOY	11.6	BUOY	11.2 2
	INTERMED IATE	8.75	7.0	NEW	API	N	0	8239	0	8179	3143	-4946	8239	P- 110		OTHER - BLUE	2.11	3.14	BUOY	3.92	BUOY	3.92
1	PRODUCTI ON	6.12 5	5.0	NEW	API	Υ	8039	8689	7979	8579	-4746	-5346	650	P- 110		OTHER - W513	1.42	2.99	BUOY	2.39	BUOY	3.76
1	PRODUCTI ON	6.12 5	4.5	NEW	API	N	8689	19615	8579	8853	-5346	-5620	10926	P- 110		OTHER - W521	1.42	2.99	BUOY	2.39	BUOY	3.76

### **Casing Attachments**

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

Casing	Attack	ıments
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Casing ID: 1

String

SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

13.375\_casing\_spec\_sheet\_20220629085358.pdf

Casing ID: 2

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

9.625\_40.0lb\_L80IC\_BTC\_20220629085438.pdf

Casing ID: 3

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

7in\_Blue\_vs\_BlueSD\_20220629085517.pdf

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

### **Casing Attachments**

Casing ID: 4

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

 $5 in \_18 ppf \_TSH \_W513 \_box \_x \_4.5 in \_11.6 ppf \_TSH \_W521 \_pin \_\_Stewart \_Tubular \_May \_13 \_\_2021 \_\_20230919144636.pdf$ 

Casing Design Assumptions and Worksheet(s):

5.0\_18.0ppf\_P110\_W513\_20210927174906.pdf

Casing ID: 5

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

4.5\_W521\_Spec\_Sheet\_20220629085331.pdf

### **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МD	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	240	1.63	13.6	391	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFIER
INTERMEDIATE  Released to Imaging	Lead	025 2:2	0 28:45 P	1066 M	194	2.29	11.5	445	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFER

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		1066	2066	263	1.63	12.6	429	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFER
INTERMEDIATE	Lead		0	7239	369	3.52	10.5	1300	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFER
INTERMEDIATE	Tail		7239	8239	124	1.52	12.6	188	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFER
PRODUCTION	Lead		8039	1961 5	806	1.69	13.2	1363	25	CLASS H	EXTENDER, ANTIFOAM, RETARDER, VISCOSIFER

### **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**

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

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	8.9							VISCOSITY: 26-36 FILTRATE: N/C
450	2066	OTHER : BRINE	8.9	10							Saturated brine would be used through salt sections. VISCOSITY: 26-36 FILTRATE: 15-25
2066	8239	OTHER : WBM/BRINE	8.5	9.5							VISCOSITY: 26-36 FILTRATE: 15-25
8239	1961 5	OIL-BASED MUD	8.5	12							VISCOSITY: 50-70 FILTRATE: 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; DIRECTIONAL SURVEY

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

GAMMA RAY LOG, DIRECTIONAL SURVEY,

Coring operation description for the well:

CORING OPERATIONS ARE NOT PLANNED

### **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5550 Anticipated Surface Pressure: 3593

**Anticipated Bottom Hole Temperature(F): 155** 

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Pressure ramp begins in the bottom of the Third Bone Spring formation

**Contingency Plans geoharzards description:** 

- Casing design accounts for pressure ramp- Mud weighting agents available on location to increase drilling fluid density-BOP, choke, and well control drills- BOP functioned and pressure tested **Contingency Plans geohazards** 

Well Name: SCREWBALL 30 19 FEDERAL COM Well Number: 461H

### Hydrogen Sulfide drilling operations plan required? YES

### Hydrogen sulfide drilling operations

Chevron\_Standard\_H2S\_Contingency\_Plan\_v2\_20210927175659.pdf

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

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

Hayhurst\_NM\_Pad\_51\_Gas\_Management\_Plan\_\_\_NMOCD\_20230929140833.pdf
DefPlan100ft\_Screwball3019FederalComNo.461H\_R0\_20231005100907.pdf
9\_Point\_Plan\_\_\_Screwball\_30\_19\_Federal\_Com\_461H\_20231005104502.pdf

### Other proposed operations facets description:

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.

Shallow rig may be utilized to drill surface or intermediate sections. The production section will not be drilled by the shallow rig.

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:

Operational\_Best\_Management\_Practices\_V2\_20210927175955.pdf CUSA\_Spudder\_Rig\_Data\_20230209095823.pdf Visio\_Patterson\_Mock\_Pad\_v.2\_20230209095817.pdf

### Other Variance attachment:

<sup>\*\*\*</sup>Drilling plan attached contains a contingency cement program.



### Screwball 30 19 Federal Com No. 461H R0 mvd 01Aug23 Proposal Geodetic

Report Def Plan

Report Date:
Client:
First Client:
First Client:
Foreign First Cli

August 01, 2023 - 09:20 PM (UTC 0) Chevron NM, Eddy County (NAD 27 EZ) Unew Uni Firth Pag 31 (Octowalin) / Octow

NM. Eddy County (NAD 27 EZ)

11 To 12 (1997) A 1997 A 1997

 Vertical Section Azimuth:
 398,800 (GRID North)

 Vertical Section Azimuth:
 398,800 (GRID North)

 Vertical Section Origin:
 0.000 ft, 0.000 ft

 TVD Reference Elevation:
 325,000 ft above MSL

 Rapeate Declination:
 223,000 ft above MSL

 Total Gravity Field Strength:
 6,846°

 Gravity Model:
 4,846°

 Total Magnetic Field Strength:
 47372-98 in T

 Magnetic Dip Angle:
 56.6°

 Declination Date
 1HDGM 2023

 Magnetic Declination Model:
 1HDGM 2023

 Marketic Declination Model:
 0.0595°

 Total Corneregence Used:
 0.7901°

 Total Corneregence Used:
 0.7901°

 Well Head

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	56.73 56.73	0.00 100.00	-3,261.00 -3,161.00	0.00	0.00	0.00	0.00	396,998.55 396,998.55	534,090.96 534,090.96	32°5'29.101519"N	104°13'23.704608"W 104°13'23.704608"W
	200.00	0.00	56.73	200.00	-3,061.00	0.00	0.00	0.00	0.00	396,998.55	534,090.96	32°5'29.101519"N	104°13'23.704608"W
Build 1.5°/100ft	300.00 400.00	0.00	56.73 56.73	300.00 400.00	-2,961.00 -2,861.00	0.00	0.00	0.00	0.00 0.00	396,998.55 396,998.55	534,090.96 534,090.96		104°13'23.704608"W 104°13'23.704608"W
Castile (CSTL)	432.03 500.00	0.48 1.50	56.73 56.73	432.03 499.99	-2,828.97 -2,761.01	0.07 0.71	0.07 0.72	0.11 1.09	1.50 1.50	396,998.62 396,999.27	534,091.07 534,092.05	32°5'29.102247"N	104°13'23.703302"W 104°13'23.691879"W
	600.00	3.00	56.73	599.91	-2,661.09	2.84	2.87	4.38	1.50	397,001.42	534,095.34	32°5'29.129894"N	104°13'23.653702"W
	700.00 800.00	4.50 6.00	56.73 56.73	699.69 799.27	-2,561.31 -2,461.73	6.39 11.36	6.46 11.48	9.84 17.49	1.50 1.50	397,005.01 397,010.03	534,100.80 534,108.45		104°13'23.590101"W 104°13'23.501122"W
	900.00 1,000.00	7.50 9.00	56.73 56.73	898.57 997.54	-2,362.43 -2,263.46	17.74 25.52	17.93 25.80	27.32 39.32	1.50 1.50	397,016.48 397,024.35	534,118.28 534,130.27		104°13'23.386824"W 104°13'23.247286"W
	1,100.00	10.50	56.73	1,096.09	-2,164.91	34.72	35.09	53.48	1.50	397,033.64	534,144.43	32°5'29.448224"N	104°13'23.082605"W
Hold	1,200.00 1,300.00	12.00 12.00	56.73 56.73	1,194.16 1,291.98	-2,066.84 -1,969.02	45.31 56.59	45.79 57.20	69.79 87.17	1.50 0.00	397,044.34 397,055.74	534,160.74 534,178.12	32°5'29.553970"N 32°5'29.666668"N	104°13'22.892891"W 104°13'22.690704"W
	1,400.00 1,500.00	12.00 12.00	56.73 56.73	1,389.79	-1,871.21 -1,773.39	67.87 79.16	68.61 80.01	104.55 121.94	0.00	397,067.15 397,078.56	534,195.50 534,212.88	32°5'29.779367"N	104°13'22.488517"W 104°13'22.286329"W
	1,600.00	12.00	56.73	1,585.42	-1,675.58	90.44	91.42	139.32	0.00	397,089.96	534,230.27	32°5'30.004764"N	104°13'22.084142"W
	1,700.00 1,800.00	12.00 12.00	56.73 56.73	1,683.24 1,781.05	-1,577.76 -1,479.95	101.73 113.01	102.83 114.23	156.70 174.08	0.00 0.00	397,101.37 397,112.77	534,247.65 534,265.03		104°13'21.881954"W 104°13'21.679766"W
	1,900.00 2,000.00	12.00 12.00	56.73 56.73	1,878.87 1,976.68	-1,382.13 -1,284.32	124.30 135.58	125.64 137.05	191.47 208.85	0.00	397,124.18 397,135.58	534,282.41 534,299.79	32°5'30.342858"N	104°13'21.477578"W 104°13'21.275390"W
Lamar (LMAR)	2,085.63	12.00	56.73	2,060.44	-1,200.56	145.25	146.81	223.73	0.00	397,145.35	534,314.67	32°5'30.552058"N	104°13'21.102258"W
Bell Canvon (BLCN)	2,100.00 2,140.14	12.00 12.00	56.73 56.73	2,074.50 2,113.76	-1,186.50 -1,147.24	146.87 151.40	148.45 153.03	226.23 233.21	0.00 0.00	397,146.99 397,151.57	534,317.17 534,324.15		104°13'21.073201"W 104°13'20.992043"W
	2,200.00 2,300.00	12.00 12.00	56.73 56.73	2,172.31 2,270.13	-1,088.69 -990.87	158.15 169.44	159.86 171.26	243.62 261.00	0.00	397,158.39 397,169.80	534,334.55 534,351.93		104°13'20.871013"W 104°13'20.668824"W
	2,400.00	12.00	56.73	2,367.94	-893.06	180.72	182.67	278.38	0.00	397,181.20	534,369.32	32°5'30.906347"N	104°13'20.466636"W
	2,500.00 2,600.00	12.00 12.00	56.73 56.73	2,465.76 2,563.57	-795.24 -697.43	192.01 203.29	194.08 205.48	295.76 313.15	0.00 0.00	397,192.61 397,204.02	534,386.70 534,404.08	32°5'31.019045"N 32°5'31.131742"N	104°13'20.264447"W 104°13'20.062258"W
	2,700.00 2,800.00	12.00 12.00	56.73 56.73	2,661.39 2,759.20	-599.61 -501.80	214.58 225.86	216.89 228.30	330.53 347.91	0.00 0.00	397,215.42 397,226.83	534,421.46 534,438.84	32°5'31.244440"N	104°13'19.860069"W 104°13'19.657879"W
	2,900.00	12.00	56.73	2,857.02	-403.98	237.15	239.70	365.30	0.00	397,238.23	534,456.22	32°5'31.469834"N	104°13'19.455690"W
Cherry Canyon (CRCN)	2,978.23 3,000.00	12.00 12.00	56.73 56.73	2,933.54 2,954.83	-327.46 -306.17	245.98 248.43	248.63 251.11	378.90 382.68	0.00	397,247.15 397,249.64	534,469.82 534,473.60		104°13'19.297508"W 104°13'19.253500"W
Drop .75°/100ft	3,100.00 3,158.60	12.00 12.00	56.73 56.73	3,052.64 3,109.96	-208.36 -151.04	259.72 266.33	262.52 269.20	400.06 410.25	0.00 0.00	397,261.04 397,267.73	534,490.99 534,501.17	32°5'31.695228"N	104°13'19.051311"W 104°13'18.932833"W
Diop .75 7100it	3,200.00	11.69	56.73	3,150.48	-110.52	270.94	273.86	417.35	0.75	397,272.39	534,508.27	32°5'31.807330"N	104°13'18.850189"W
	3,300.00 3,400.00	10.94 10.19	56.73 56.73	3,248.54 3,346.84	-12.46 85.84	281.59 291.54	284.63 294.68	433.76 449.08	0.75 0.75	397,283.15 397,293.21	534,524.68 534,540.00		104°13'18.659395"W 104°13'18.481100"W
	3,500.00 3,600.00	9.44 8.69	56.73 56.73	3,445.38 3.544.13	184.38 283.13	300.79 309.35	304.04 312.68	463.34 476.51	0.75 0.75	397,302.56 397,311.20	534,554.25 534,567.42	32°5'32.105448"N	104°13'18.315334"W 104°13'18.162124"W
	3,700.00	7.94	56.73	3,643.08	382.08	317.19	320.61	488.60	0.75	397,319.13	534,579.51	32°5'32.269225"N	104°13'18.021498"W
	3,800.00 3,900.00	7.19 6.44	56.73 56.73	3,742.21 3,841.50	481.21 580.50	324.34 330.78	327.83 334.34	499.60 509.52	0.75 0.75	397,326.35 397,332.86	534,590.52 534,600.44		104°13'17.893480"W 104°13'17.778091"W
	4,000.00	5.69	56.73	3,940.94	679.94	336.51	340.14	518.36	0.75	397,338.66	534,609.27	32°5'32.462160"N	104°13'17.675351"W 104°13'17.585278"W
Brushy Canyon (BCN)	4,100.00 4,108.13	4.94 4.88	56.73 56.73	4,040.51 4,048.61	779.51 787.61	341.54 341.92	345.22 345.60	526.10 526.68	0.75 0.75	397,343.74 397,344.12	534,617.01 534,617.59	32°5'32.516136"N	104°13'17.578511"W
	4,200.00 4,300.00	4.19 3.44	56.73 56.73	4,140.19 4,239.97	879.19 978.97	345.86 349.47	349.59 353.24	532.75 538.32	0.75 0.75	397,348.11 397,351,76	534,623.67 534.629.23	32°5'32.555500"N 32°5'32.591560"N	104°13'17.507887"W 104°13'17.443192"W
	4,400.00	2.69	56.73	4,339.82	1,078.82	352.37	356.17	542.79	0.75	397,354.69	534,633.70	32°5'32.620537"N	104°13'17.391204"W
	4,500.00 4,600.00	1.94 1.19	56.73 56.73	4,439.74 4,539.70	1,178.74 1,278.70	354.56 356.05	358.39 359.88	546.16 548.45	0.75 0.75	397,356.90 397,358.40	534,637.07 534,639.36		104°13'17.351931"W 104°13'17.325381"W
Hold Vertical	4,700.00 4,758.60	0.44 0.00	56.73 56.73	4,639.69 4,698.29	1,378.69 1,437.29	356.82 356.94	360.66 360.79	549.63 549.82	0.75 0.75	397,359.18 397,359.30	534,640.54 534,640.73	32°5'32.664930"N	104°13'17.311557"W 104°13'17.309372"W
riola voltadi	4,800.00	0.00	56.73	4,739.69	1,478.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	4,900.00 5,000.00	0.00	56.73 56.73	4,839.69 4,939.69	1,578.69 1,678.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
	5,100.00 5,200.00	0.00	56.73 56.73	5,039.69 5,139.69	1,778.69 1,878.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
	5,300.00	0.00	56.73	5,239.69	1,978.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	5,400.00 5,500.00	0.00	56.73 56.73	5,339.69 5,439.69	2,078.69 2,178.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
	5,600.00 5,700.00	0.00	56.73 56.73	5,539.69 5,639.69	2,278.69 2,378.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
Bone Spring Lime (BSGL)	5,720.13	0.00	56.73	5,659.82	2,398.82	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
Avalon Upper (AVU)	5,800.00 5,836.60	0.00	56.73 56.73	5,739.69 5,776.29	2,478.69 2,515.29	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
	5,900.00 6,000.00	0.00	56.73 56.73	5,839.69 5,939.69	2,578.69 2,678.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
	6,100.00	0.00	56.73	6,039.69	2,778.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
Avalon Lower (AVL)	6,167.81 6,200.00	0.00	56.73 56.73	6,107.50 6,139.69	2,846.50 2,878.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
	6,300.00 6,400.00	0.00	56.73 56.73	6,239.69 6,339.69	2,978.69 3.078.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
	6,500.00	0.00	56.73	6,439.69	3,178.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
First Bone Spring Upper (FBU)	6,600.00 6,600.93	0.00	56.73 56.73	6,539.69 6,540.62	3,278.69 3,279.62	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
,	6,700.00 6,800.00	0.00	56.73 56.73	6,639.69 6,739.69	3,378.69 3,478.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
First Bone Spring Lower (FBL)	6,805.45	0.00	56.73	6,745.14	3,484.14	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	6,900.00 7,000.00	0.00	56.73 56.73	6,839.69 6,939.69	3,578.69 3,678.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N 32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
Second Bone Spring Upper (SBL	7,100.00 7,115.80	0.00	56.73 56.73	7,039.69 7,055.49	3,778.69 3,794.49	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534.640.73		104°13'17.309372"W 104°13'17.309372"W
Second Bone Spring Opper (SBC	7,200.00	0.00	56.73	7,139.69	3,878.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	7,300.00 7,400.00	0.00	56.73 56.73	7,239.69 7,339.69	3,978.69 4,078.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73		104°13'17.309372"W 104°13'17.309372"W
	7,500.00 7,600.00	0.00	56.73 56.73	7,439.69 7,539.69	4,178.69 4,278.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00 0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
Second Bone Spring Lower (SBL	7,612.51	0.00	56.73	7,552.20	4,291.20	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	7,700.00 7,800.00	0.00	56.73 56.73	7,639.69 7,739.69	4,378.69 4,478.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534.640.73		104°13'17.309372"W 104°13'17.309372"W
	7,900.00	0.00	56.73	7,839.69	4,578.69	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
	8,000.00 8,100.00	0.00	56.73 56.73	7,939.69 8,039.69	4,678.69 4,778.69	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N	104°13'17.309372"W
Third Bone 1st Carbonate (TB1C	8,200.00 8,219.30	0.00	56.73 56.73	8,139.69 8,158.99	4,878.69 4.897.99	356.94 356.94	360.79 360.79	549.82 549.82	0.00	397,359.30 397,359.30	534,640.73 534,640.73	32°5'32.666148"N 32°5'32.666148"N	104°13'17.309372"W 104°13'17.309372"W
Build 8°/100ft	8,239.07	0.00	56.73	8,178.76	4,917.76	356.94	360.79	549.82	0.00	397,359.30	534,640.73	32°5'32.666148"N	104°13'17.309372"W
	8,300.00 8,400.00	4.87 12.87	0.45 0.45	8,239.62 8,338.34	4,978.62 5,077.34	359.53 374.94	363.38 378.79	549.84 549.96	8.00 8.00	397,361.89 397,377.31	534,640.75 534,640.87	32°5'32.844317"N	104°13'17.309106"W 104°13'17.307525"W
Third Bone Spring (TBS)	8,463.11 8,500.00	17.92 20.87	0.45 0.45	8,399.17 8,433.96	5,138.17 5,172.96	391.70 403.94	395.55 407.80	550.09 550.19	8.00 8.00	397,394.06 397,406.31	534,641.00 534,641.10		104°13'17.305807"W 104°13'17.304550"W
	8,600.00	28.87	0.45	8,524.61	5,263.61	445.97	449.82	550.51	8.00	397,448.33	534,641.42	32°5'33.547216"N	104°13'17.300240"W
	8,700.00 8,800.00	36.87 44.87	0.45 0.45	8,608.53 8,684.08	5,347.53 5,423.08	500.20 565.58	504.06 569.44	550.94 551.45	8.00 8.00	397,502.56 397,567.94	534,641.85 534,642.36	32°5'34.730928"N	104°13'17.294677"W 104°13'17.287971"W
Wolfcamp A (WCA)	8,891.13 8,900.00	52.17 52.87	0.45 0.45	8,744.40 8,749.80	5,483.40 5,488.80	633.80 640.84	637.67 644.71	551.98 552.03	8.00 8.00	397,636.16 397,643.20	534,642.89 534,642.94	32°5'35.406081"N	104°13'17.280973"W 104°13'17.280251"W
	9,000.00	60.87	0.45	8,804.40	5,543.40	724.51	728.38	552.68	8.00	397,726.87	534,643.59	32°5'36.303743"N	104°13'17.271669"W
	9,100.00 9,200.00	68.87 76.87	0.45 0.45	8,846.82 8.876.25	5,585.82 5.615.25	814.96 910.44	818.85 914.33	553.39 554.13	8.00 8.00	397,817.32 397,912.80	534,644.30 534.645.04		104°13'17.262391"W 104°13'17.252597"W
Londing Daint	9,300.00	84.87	0.45	8,892.09	5,631.09	1,009.08	1,012.98	554.90	8.00	398,011.44	534,645.81	32°5'39.120015"N	104°13'17.242478"W
Landing Point FTP Cross	9,366.99 9,367.09	90.23 90.23	0.45 0.45	8,894.95 8,894.95	5,633.95 5,633.95	1,075.99 1,076.08	1,079.89 1,079.99	555.42 555.42	8.00 0.00	398,078.34 398,078.44	534,646.33 534,646.33	32°5'39.783044"N	104°13'17.235616"W 104°13'17.235606"W
	9,400.00 9,500.00	90.23 90.23	0.45 0.45	8,894.82 8,894.41	5,633.82 5,633.41	1,108.99 1,208.98	1,112.89 1,212.89	555.68 556.46	0.00	398,111.34 398,211.33	534,646.59 534,647.37	32°5'40.108695"N	104°13'17.232231"W 104°13'17.221974"W
	0,000.00	50.25	0.40	0,034.41	0,000.41	1,200.00	1,414.05	550.40	0.00	000,211,00	004,047.07	JE 0 71.0502 13 N	10 11.22 1514 W

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude Lone	gitude (° ' ")
	9,600.00	90.23 90.23	0.45 0.45	8,894.00 8,893.59	5,633.00 5,632.59	1,308.96	1,312.89 1,412.88	557.24 558.01	0.00	398,311.32 398,411.30	534,648.14 534,648.92	32°5'42.087735"N 104°13'17.2117 32°5'43.077255"N 104°13'17.2014	
	9,800.00	90.23	0.45	8,893.18	5,632.18	1,508.94	1,512.88	558.79	0.00	398,511.29	534,649.70	32°5'44.066775"N 104°13'17.1912	04"W
	9,900.00 10,000.00	90.23 90.23	0.45	8,892.77 8,892.36	5,631.77 5,631.36	1,608.93	1,612.88 1,712.87	559.57 560.35	0.00	398,611.28 398,711.26	534,650.48 534,651.26	32°5'45.056295"N 104°13'17.1809 32°5'46.045815"N 104°13'17.1706	47"W
	10,100.00	90.23	0.45	8,891.95	5,630.95	1,808.91	1.812.87	561.13	0.00	398.811.25	534,652.04	32°5'47.035335"N 104°13'17.1604	33"W
	10,200.00 10,300.00	90.23 90.23	0.45 0.45	8,891.55 8,891.14	5,630.55 5,630.14	1,908.89 2,008.88	1,912.86 2,012.86	561.91 562.69	0.00	398,911.24 399,011.23	534,652.82 534,653.59	32°5'48.024855"N 104°13'17.1501 32°5'49.014374"N 104°13'17.1399 32°5'50.003894"N 104°13'17.1296	76"W 119"W
	10,400.00 10,500.00	90.23 90.23	0.45 0.45	8,890.73 8,890.32	5,629.73 5,629.32	2,108.87 2,208.86	2,112.86 2,212.85	563.46 564.24	0.00	399,111.21 399,211.20	534,654.37 534,655.15	32°5′50.003894″N 104°13′17.1296 32°5′50.993413″N 104°13′17.1194	.62"W
	10,600.00	90.23	0.45	8,889.91	5,628.91	2,308.85	2,312.85	565.02	0.00	399,311.19	534,655.93	32°5'51.982933"N 104°13'17.1091	47"W
	10,700.00 10,800.00	90.23 90.23	0.45 0.45	8,889.50 8,889.09	5,628.50 5,628.09	2,408.84 2,508.82	2,412.84 2,512.84	565.80 566.58	0.00	399,411.17 399,511.16	534,656.71 534,657.49	32°5'52.972453"N 104°13'17.0988 32°5'53.961972"N 104°13'17.0886	
	10,900.00	90.23	0.45	8,888.69	5,627.69	2,608.81	2,612.84	567.36	0.00	399,611,15	534,658.27	32°5'54.951492"N 104°13'17.0783	375"W
	11,000.00 11,100.00	90.23 90.23	0.45 0.45	8,888.28 8,887.87	5,627.28 5,626.87	2,708.80 2,808.79	2,712.83 2,812.83	568.14 568.91	0.00	399,711.13 399,811.12	534,659.04 534,659.82	32°5'55.941011"N 104°13'17.0681 32°5'56.930530"N 104°13'17.0578	860"W
	11,200.00	90.23 90.23	0.45 0.45	8,887.46 8,887.05	5.626.46	2,908.78 3,008.77	2.912.83	569.69 570.47	0.00	399.911.11	534,660.60 534,661.38	32°5'57.920050"N 104°13'17.0476	02"W
	11,300.00 11,400.00	90.23	0.45	8,886.64	5,626.05 5,625.64	3,108.75	3,012.82 3,112.82	571.25	0.00	400,011.10 400,111.08	534,662.16	32°5′58.909569"N 104°13'17.0373 32°5′59.899088"N 104°13'17.0270	086"W
	11,500.00 11,600.00	90.23 90.23	0.45 0.45	8,886.23 8,885.83	5,625.23 5,624.83	3,208.74 3,308.73	3,212.81 3,312.81	572.03 572.81	0.00	400,211.07 400,311.06	534,662.94 534,663.71	32°6'0.888607"N 104°13'17.0168	28"W
	11,700.00	90.23	0.45	8,885.42	5,624.42	3,408.72	3,412.81	572.81 573.59	0.00	400,411.04	534,664.49	32°6'1.878126"N 104°13'17.0065 32°6'2.867645"N 104°13'16.9963	12"W
	11,800.00 11,900.00	90.23 90.23	0.45 0.45	8,885.01 8,884.60	5,624.01 5,623.60	3,508.71 3,608.69	3,512.80 3,612.80	574.36 575.14	0.00	400,511.03 400,611.02	534,665.27 534,666.05	32°6'3.857164"N 104°13'16.9860 32°6'4.846683"N 104°13'16.9757	'96"W
	12,000.00 12,100.00	90.23 90.23	0.45 0.45	8,884.19 8,883.78	5,623.19 5,622.78	3,708.68 3,808.67	3,712.79 3,812.79	575.92 576.70	0.00	400,711.00 400,810.99	534,666.83 534,667.61	32°6'5.836202"N 104°13'16.9655 32°6'6.825721"N 104°13'16.9552	38"W
	12,200.00	90.23	0.45	8,883.37	5,622.37	3,908.66	3,912.79	577.48	0.00	400,910.98	534,668.39	32°6'7.815240"N 104°13'16.9450	21"W
	12,300.00 12,400.00	90.23 90.23	0.45 0.45	8,882.97 8.882.56	5,621.97 5,621.56	4,008.65 4,108.64	4,012.78 4,112.78	578.26 579.04	0.00	401,010.97 401,110.95	534,669.16 534,669.94	32°6'8.804759"N 104°13'16.9347 32°6'9.794278"N 104°13'16.9245	62"W
	12,500.00	90.23	0.45	8,882.15	5,621.15	4,208.62	4,212.77	579.81	0.00	401,210.94	534,670.72	32°6'10.783797"N 104°13'16.9142	45"W
	12,600.00 12,700.00	90.23 90.23	0.45 0.45	8,881.74 8.881.33	5,620.74 5.620.33	4,308.61 4.408.60	4,312.77 4.412.77	580.59 581.37	0.00	401,310.93 401,410.91	534,671.50 534.672.28	32°6'11.773315"N 104°13'16.9039 32°6'12.762834"N 104°13'16.8937	86"W
	12,800.00	90.23	0.45	8,880.92	5,619.92	4,508.59	4,512.76	582.15	0.00	401,510.90	534,673.06	32°6'13.752353"N 104°13'16.8834	69"W
	12,900.00 13,000.00	90.23 90.23	0.45 0.45	8,880.51 8,880.10	5,619.51 5,619.10	4,608.58 4,708.57	4,612.76 4,712.76	582.93 583.71	0.00	401,610.89 401,710.87	534,673.84 534,674.61	32°6'14.741871"N 104°13'16.8732 32°6'15.731390"N 104°13'16.8629	951"W
PPP2	13,010.98	90.23	0.45	8,880.06	5,619.06	4,719.54	4,723.73	583.79	0.00	401,721.85	534,674.70	32°6'15.840013"N 104°13'16.8618	24"W
Hold	13,010.99 13,100.00	90.23 90.23	0.45 0.45	8,880.06 8,879.70	5,619.06 5,618.70	4,719.55 4,808.55	4,723.74 4,812.75	583.79 584.49	2.00 0.00	401,721.86 401,810.86	534,674.70 534,675.39	32°6'15.840093"N 104°13'16.8618 32°6'16.720908"N 104°13'16.8526	94"W
	13,200.00 13,300.00	90.23 90.23	0.45 0.45	8,879.29 8,878.88	5,618.29 5,617.88	4,908.54 5,008.53	4,912.75 5,012.74	585.26 586.04	0.00	401,910.85 402,010.83	534,676.17 534,676.95	32°6'17.710427"N 104°13'16.8424 32°6'18.699945"N 104°13'16.8321	38"W
	13,400.00	90.23	0.45	8,878.47	5,617.47 5,617.06	5,108.52	5,112.74 5,112.74 5,212.74	586.82	0.00	402,110.82	534,677.73	32°6'19.689463"N 104°13'16.8219 32°6'20.678982"N 104°13'16.8116	25"W
	13,500.00 13,600.00	90.23 90.23	0.45 0.45	8,878.06 8,877.65	5,617.06 5,616.65	5,208.51 5,308.50	5,212.74 5,312.73	587.60 588.38	0.00	402,210.81 402,310.80	534,678.51 534,679.28	32°6'20.678982"N 104°13'16.8116 32°6'21.668500"N 104°13'16.8014	69"W
	13,700.00	90.23	0.45	8,877.24	5,616.24	5,408.48	5,412.73	589.16	0.00	402,410.78	534,680.06	32°6'22.658018"N 104°13'16.7911 32°6'23.647536"N 104°13'16.7808	55"W
	13,800.00 13,900.00	90.23 90.23	0.45 0.45	8,876.83 8,876.43	5,615.83 5,615.43	5,508.47 5,608.46	5,512.72 5,612.72	589.93 590.71	0.00	402,510.77 402,610.76	534,680.84 534,681.62	32°6'23.647536"N 104°13'16.7808 32°6'24.637054"N 104°13'16.7706	99"W 42"W
	14,000.00	90.23 90.23	0.45	8,876.02	5,615.02	5,708.45 5,808.44	5,712.72	591.49 592.27	0.00	402,710.74	534,682.40 534,683.18	32°6'25.626573"N 104°13'16.7603	885"W
	14,100.00 14,200.00	90.23	0.45	8,875.61 8,875.20	5,614.61 5,614.20	5,908.42	5,812.71 5,912.71	593.05	0.00	402,810.73 402,910.72	534,683.95	32°6'26.616091"N 104°13'16.7501 32°6'27.605609"N 104°13'16.7398	371"W
MP, Turn 2°/100ft	14,300.00 14,336.95	90.23 90.23	0.45 0.45	8,874.79	5,613.79	6,008.41	6,012.71 6.049.65	593.83 594.11	0.00	403,010.70 403,047.65	534,684.73 534,685.02	32°6'28.595127"N 104°13'16.7296	.14"W
	14,400.00	90.23	359.18	8,874.64 8,874.38	5,613.64 5,613.38	6,108.41	6,112.70	593.91	2.00	403,110.69	534.684.82	32°6'28.960754"N 104°13'16.7258 32°6'29.584655"N 104°13'16.7274	23"W
Hold to TD	14,419.56 14,500.00	90.23 90.23	358.79 358.79	8,874.30 8,873.97	5,613.30 5,612.97	6,127.96 6,208.40	6,132.25 6,212.68	593.57 591.87	2.00	403,130.24 403,210.66	534,684.47 534,682.78	32°6'29.778148"N 104°13'16.7311	97"W
	14,600.00	90.23	358.79	8.873.56	5.612.56	6,308.39	6.312.66	589.77	0.00	403,310.63	534.680.67	32°6'30.574025"N 104°13'16.7499 32°6'31.563383"N 104°13'16.7731	75"W
	14,700.00 14,800.00	90.23 90.23	358.79 358.79	8,873.16 8,872.75	5,612.16 5,611.75	6,408.38 6,508.36	6,412.63 6,512.61	587.66 585.56	0.00	403,410.60 403,510.56	534,678.57 534,676.46	32°6'32.552741"N 104°13'16.7964 32°6'33.542099"N 104°13'16.8197	'04"W
	14,900.00 15,000.00	90.23 90.23	358.79 358.79	8,872.34 8,871.93	5,611.34 5,610.93	6,608.35 6,708.34	6,612.59 6,712.57	583.45 581.35	0.00	403,610.53 403,710.50	534,674.36 534,672.26	32°6'34.531457"N 104°13'16.8429 32°6'35.520815"N 104°13'16.8662	968"W
	15,100.00	90.23	358.79	8,871.52	5,610.52	6,808.33	6.812.54	579.24	0.00	403,810,47	534,670.15	32°6'36.510173"N 104°13'16.8894	97"W
	15,200.00 15,300.00	90.23 90.23	358.79 358.79	8,871.11 8,870.70	5,610.11 5,609.70	6,908.32 7,008.31	6,912.52 7,012.50	577.14 575.03	0.00	403,910.44 404,010.40	534,668.05 534,665.94	32°6'37.499531"N 104°13'16.9127 32°6'38.488889"N 104°13'16.9360	62"W
	15,400.00	90.23	358.79 358.79	8,870.30	5,609.30	7,108.30	7.112.47	572.93 570.82	0.00	404,110.37	534,663.84	32°6'39.478247"N 104°13'16.9592	92"W
	15,500.00 15,600.00	90.23 90.23	358.79	8,869.89 8,869.48	5,608.89 5,608.48	7,208.29 7,308.28	7,212.45 7,312.43	568.72	0.00	404,210.34 404,310.31	534,661.73 534,659.63	32°6'40.467605"N 104°13'16.9825 32°6'41.456962"N 104°13'17.0058	23"W
	15,700.00 15,800.00	90.23 90.23	358.79 358.79	8,869.07 8,868.66	5,608.07 5,607.66	7,408.27 7,508.26	7,412.40 7,512.38	566.61 564.51	0.00 0.00	404,410.28 404,510.24	534,657.52 534,655.42	32°6'42.446320"N 104°13'17.0290 32°6'43.435678"N 104°13'17.0523	89"W
	15,900.00	90.23	358.79	8.868.25	5.607.25	7,608,25	7.612.36	562.40	0.00	404.610.21	534,653,31	32°6'44.425035"N 104°13'17.0756	320"W
	16,000.00 16,100.00	90.23 90.23	358.79 358.79	8,867.84 8,867.43	5,606.84 5,606.43	7,708.24 7,808.22	7,712.34 7,812.31	560.30 558.19	0.00	404,710.18 404,810.15	534,651.21 534,649.10	32°6'45.414393"N 104°13'17.0988 32°6'46.403751"N 104°13'17.1221	86"W
	16,200.00	90.23	358.79	8,867.03	5 606 03	7.908.21	7,912.29	556.09	0.00	404,910.11 405,010.08	534,647.00	32°6'47 393108"N 104°13'17 1454	18"W
	16,300.00 16,400.00	90.23 90.23	358.79 358.79	8,866.62 8,866.21	5,605.62 5,605.21	8,008.20 8,108.19	8,012.27 8,112.24	553.98 551.88	0.00	405,010.08 405,110.05	534,644.89 534,642.79	32°6'48.382466"N 104°13'17.1686 32°6'49.371823"N 104°13'17.1919	84"W 51"W
	16,500.00 16,600.00	90.23 90.23	358.79 358.79	8,865.80 8.865.39	5,604.80 5.604.39	8,208.18 8,308.17	8,212.22 8,312.20	549.77 547.67	0.00	405,210.02 405,309.99	534,640.68 534,638.58	32°6'50.361180"N 104°13'17.2152 32°6'51.350538"N 104°13'17.2384	217"W
	16,700.00	90.23	358.79	8,864.98	5,603.98	8,408.16	8,412.17	545.56	0.00	405,409.95	534,636.47	32°6'52.339895"N 104°13'17.2617	51"W
	16,800.00 16,900.00	90.23 90.23	358.79 358.79	8,864.57 8.864.16	5,603.57 5,603.16	8,508.15 8.608.14	8,512.15 8,612.13	543.46 541.35	0.00	405,509.92 405.609.89	534,634.37 534,632.26	32°6'53.329252"N 104°13'17.2850 32°6'54.318609"N 104°13'17.3082	18"W
	17,000.00	90.23	358.79	8,863.76	5,602.76	8,708.13	8,712.11	539.25	0.00	405,709.86	534,630.16	32°6'55.307966"N 104°13'17.3315	552"W
	17,100.00 17,200.00	90.23 90.23	358.79 358.79	8,863.35 8,862.94	5,602.35 5,601.94	8,808.12 8,908.11	8,812.08 8,912.06	537.14 535.04	0.00	405,809.83 405,909.79	534,628.05 534.625.95	32°6'56.297324"N 104°13'17.3548 32°6'57.286681"N 104°13'17.3780	19"W
	17,300.00	90.23	358.79	8,862.53	5,601.53	9,008.10	9.012.04	532.93	0.00	406,009.76	534,623.85	32°6'58.276038"N 104°13'17.4013	354"W
	17,400.00 17,500.00	90.23 90.23	358.79 358.79	8,862.12 8,861.71	5,601.12 5,600.71	9,108.09 9,208.07	9,112.01 9,211.99	530.83 528.72	0.00	406,109.73 406,209.70	534,621.74 534,619.64	32°6'59.265395"N 104°13'17.4246 32°7'0.254751"N 104°13'17.4478	22"W 90"W
	17,600.00	90.23 90.23	358.79 358.79	8,861.30	5,600.30	9,308.06	9,211.99 9,311.97	526.62	0.00	406,309.66	534,617.53	32°7'0.254751"N 104°13'17.4478 32°7'1.244108"N 104°13'17.4711	58"W
	17,700.00 17,800.00	90.23	358.79	8,860.89 8,860.49	5,599.89 5,599.49	9,408.05 9,508.04	9,411.94 9,511.92	524.51 522.41	0.00	406,409.63 406,509.60	534,615.43 534,613.32	32°7'2.233465"N 104°13'17.4944 32°7'3.222822"N 104°13'17.5176 32°7'4.212179"N 104°13'17.5409	26"W 94"W
	17,900.00 18,000.00	90.23 90.23	358.79 358.79	8,860.08 8,859.67	5,599.08 5,598.67	9,608.03 9,708.02	9,611.90 9,711.88	520.30 518.20	0.00	406,609.57 406,709.54	534,611.22 534,609.11	32°7'4.212179"N 104°13'17.5409 32°7'5.201535"N 104°13'17.5642	63"W
	18,100.00	90.23	358.79	8,859.26	5,598.26	9,808.01	9,811.85	516.09	0.00	406,809.50	534,607.01	32°7'6.190892"N 104°13'17.5875	00"W
	18,200.00 18,300.00	90.23 90.23	358.79 358.79	8,858.85 8,858.44	5,597.85 5,597.44	9,908.00 10,007.99	9,911.83 10,011.81	513.99 511.88	0.00	406,909.47 407,009.44	534,604.90 534,602.80	32°7'7.180249"N 104°13'17.6107 32°7'8.169605"N 104°13'17.6340	69"W
	18,400.00	90.23	358.79	8,858.03	5,597.03	10,107.98	10,111.78	509.78	0.00	407,109,41	534,600.69	32°7'9.158962"N 104°13'17.6573	307"W
	18,500.00 18,600.00	90.23 90.23	358.79 358.79	8,857.63 8,857.22	5,596.63 5,596.22	10,207.97 10,307.96	10,211.76 10,311.74	507.67 505.57	0.00	407,209.38 407,309.34	534,598.59 534,596.48	32°7'10.148318"N 104°13'17.6805 32°7'11.137675"N 104°13'17.7038	/6"W 45"W
	18,700.00	90.23	358.79	8,856.81	5,595.81	10,407.95	10,411.71	503.46	0.00	407,409.31	534,594.38	32°7'12.127031"N 104°13'17.7271	14"W
	18,800.00 18,900.00	90.23 90.23	358.79 358.79	8,856.40 8,855.99	5,595.40 5,594.99	10,507.94 10,607.92	10,511.69 10,611.67	501.36 499.25	0.00	407,509.28 407,609.25	534,592.27 534,590.17	32°7'13.116387"N 104°13'17.7503 32°7'14.105744"N 104°13'17.7736	84"W 54"W
	19,000.00	90.23	358.79 358.79	8,855.58	5,594.58	10,707.91	10,711.65	497.15 495.04	0.00	407,709.21	534,588.06	32°7'15.095100"N 104°13'17.7969	24"W
	19,100.00 19,200.00	90.23 90.23	358.79	8,855.17 8,854.76	5,594.17 5,593.76	10,807.90 10,907.89	10,811.62 10,911.60	492.94	0.00	407,809.18 407,909.15	534,585.96 534,583.85	32°7'16.084456"N 104°13'17.8201 32°7'17.073812"N 104°13'17.8434	64"W
LTP Cross	19,300.00 19,309.49	90.23 90.23	358.79 358.79	8,854.36 8,854.32	5,593.36 5,593.32	11,007.88 11,017.37	11,011.58 11,021.06	490.83 490.63	0.00	408,009.12 408,018.60	534,581.75 534,581.55	32°7'18.063168"N 104°13'17.8667 32°7'18.157058"N 104°13'17.8689	34"W
E11 01055	19,400.00	90.23	358.79	8,853.95	5,592.95	11,107.87	11,111.55	488.73	0.00	408,109.09	534,579,64	32°7'19.052525"N 104°13'17.8900	04"W
	19,500.00 19,600.00	90.23 90.23	358.79 358.79	8,853.54 8,853.13	5,592.54 5,592.13	11,207.86 11,307.85	11,211.53 11.311.51	486.62 484.52	0.00	408,209.05 408,309.02	534,577.54 534,575,44	32°7'20.041881"N 104°13'17.9132 32°7'21.031237"N 104°13'17.9365	75"W 45"W
Screwball 30 19 Federal Com No	19,614.50	90.23	358.79	8,853.07	5,592.07	11,322.35	11,326.01	484.21	0.00	408,323.52	534,575.13	32°7'21.174724"N 104°13'17.9399	20"W

Survey Type: Def Plan

Survey Error Model: ISCWSA0 3 sigma
Survey Program:

Description Part MD From MD To EOU Freq Hole Size Casing Diameter Expected Max
(ft) (ft) (ft) (in) (in) (in) (deg)
(deg)

0.000 20,062,244 1/100,00025 – 8.75 – 6.125 9.01Mb\_MWD+HRGM 01Aug/23 019 Federal Com No. 461H / Screwball 30 19 Federal Com No. 461H / Screwball 30 19 Federal Com No. 461H R0 mvd

 Eod Geometry:
 End MD (ft)
 Hole Size (in)
 Casing Size (in)
 Name

 540.031
 17.500
 13.375

 2,422.552
 12.250
 9.625

 8,617.700
 8,750
 7.000

 19,614.503
 6.125

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Chervon

LEASE NO.: NMNM109756

LOCATION: Sec. 31, T.25 S, R 27 E

COUNTY: Eddy County, New Mexico ▼

WELL NAME & NO.: Screwball 30 19 Fed Com 461H

SURFACE HOLE FOOTAGE: 747'/N & 929'/E

BOTTOM HOLE FOOTAGE: 25'/N & 385'/E

COA

H <sub>2</sub> S	•	No	0	Yes
Potash /	None	<ul><li>Secretary</li></ul>	O R-111-Q	☐ Open Annulus
WIPP	Choose	e an option (including bla	nk option.)	$\square$ WIPP
Cave / Karst	○ Low	<ul><li>Medium</li></ul>	• High	<ul><li>Critical</li></ul>
Wellhead	<ul><li>Conventional</li></ul>	<ul><li>Multibowl</li></ul>	O Both	O Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	✓ COM	☐ Unit
Waste Prev.	○ Self-Certification	C Waste Min. Plan	• APD Submitted	prior to 06/10/2024
Additional	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	Break Testing
Language	$\square$ Four-String	☐ Offline Cementing	☐ Fluid-Filled	

### 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 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 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.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the

lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch 1st 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.

- ❖ 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 2<sup>nd</sup> Intermediate casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

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

- 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.

### 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. 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 43 CFR 3172 must be followed.

### D. SPECIAL REQUIREMENT (S)

### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 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 43 CFR 3172.
- 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)

### **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (575) 361-2822.

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 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

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

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- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

### **B. PRESSURE CONTROL**

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

### C. DRILLING MUD

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

### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be

disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**Approved by Zota Stevens on 6/20/2024** 575-234-5998 / zstevens@blm.gov



### **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<sub>2</sub>S, who are not required to perform work in H<sub>2</sub>S areas, will be provided with an awareness level of H<sub>2</sub>S training prior to entering any H<sub>2</sub>S 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<sub>2</sub>S 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  $H_2S$  training certification card (or certificate) upon successful completion of the appropriate  $H_2S$  training course. Personnel working in an  $H_2S$  environment will carry a current  $H_2S$  training certification card as proof of having received the proper training on their person at all times.

### **Briefing Area**

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

### 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**

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

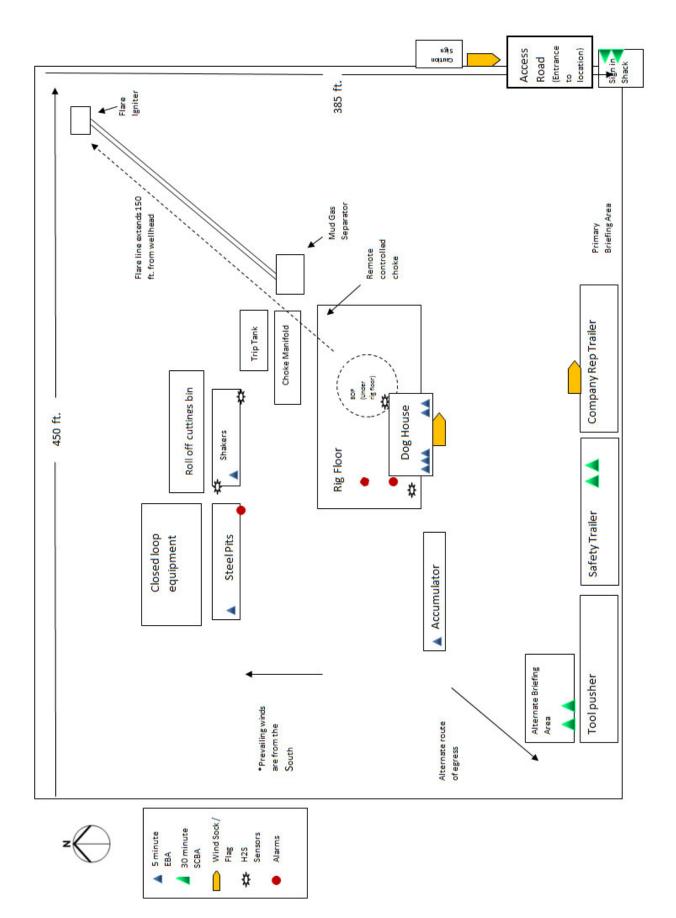


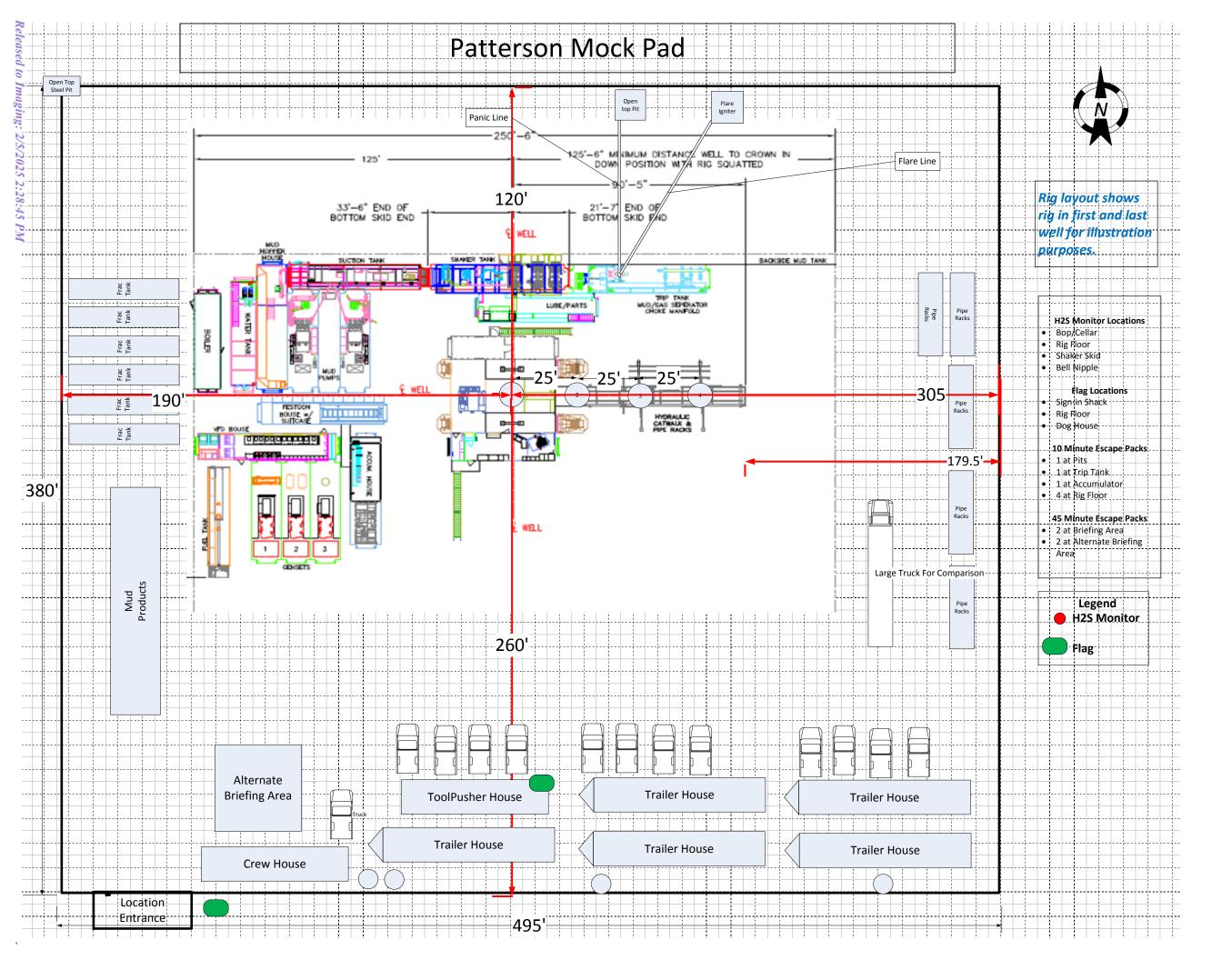
# **Chevron MCBU D&C Emergency Notifications**

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

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









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

# Drilling Plan Data Report

12/19/2024

**APD ID:** 10400094961

Submission Date: 10/10/2023

Highlighted data reflects the most recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Number: 461H

Well Name: SCREWBALL 30 19 FEDERAL COM

Well Work Type: Drill

**Show Final Text** 

Well Type: CONVENTIONAL GAS WELL

### **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14548721	SALADO	3231	28	28	ANHYDRITE, SALT	NONE	N
14548733	CASTILE	2799	432	432	ANHYDRITE, SALT	NONE	N
14548723	LAMAR	1171	2060	2086	LIMESTONE, SHALE	NONE	N
14548724	DELAWARE	1117	2114	2140	LIMESTONE, SHALE	NONE	N
14548727	BONE SPRING LIME	-2429	5660	5720	SHALE, SILTSTONE	NONE	N
14548728	AVALON SAND	-2545	5776	5837	SHALE	NONE	N
14548729	BONE SPRING 1ST	-3310	6541	6601	SANDSTONE, SHALE	NATURAL GAS, OIL	N
14548734	BONE SPRING 2ND	-3824	7055	7116	SANDSTONE, SHALE	NATURAL GAS, OIL	N
14548735	BONE SPRING 3RD	-4928	8159	8219	SANDSTONE, SHALE	NATURAL GAS, OIL	N
14548736	WOLFCAMP	-5513	8744	8891	SANDSTONE, SHALE	OIL	Y

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

Pressure Rating (PSI): 5M Rating Depth: 8895

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 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 to the page of the p

### **BLOWOUT PREVENTER SCHEMATIC**

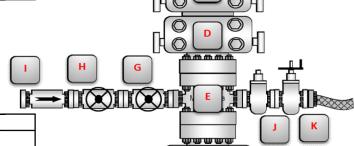
Operation: Intermediate(s)

Minimum System operation pressure

5,000 psi

Flow Line

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



<u>Choke line</u>						
Part	Size	Pressure	Description			
Part	3126	Rating	Description			
J	3"	5,000	HCR (gate valve)			
K	3"	5,000	Manual HCR (gate valve)			
<u>Wellhead</u>						
Part S	Size	Pressure	Description			
	Size	Rating	Description			
L	13-5/8"	5,000	FMC 5M/10M wellhead			

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

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

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

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

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

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

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

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

General Information Phone: (505) 629-6116

Online Phone Directory <a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

CONDITIONS

Action 420375

### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	420375
	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.	1/14/2025
carol adler	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/14/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	2/5/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/5/2025
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.	2/5/2025
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.	2/5/2025
ward.rikala	Well can not be produced until operator is in compliance with Rule 5.9.	2/5/2025