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. NMNM96244 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: 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 DL 4 33 FEDERAL COM 603H 2. Name of Operator 9. API Well No. CHEVRON USA INCORPORATED 30-025-55434 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory WC-025 G-10 S2133280/WOLFCAMP 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 4/T22S/R33E/NMP At surface SENW / 2535 FNL / 2628 FWL / LAT 32.42112 / LONG -103.577748 At proposed prod. zone NENW / 25 FNL / 2310 FWL / LAT 32.44252 / LONG -103.57852 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13 State LEA NM 46.92 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 2535 feet location to nearest property or lease line, ft. 480.0 (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, 200 feet 12175 feet / 20556 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 3640 feet 01/01/2027 180 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) CINDY HERRERA-MURILLO / Ph: (432) 687-7866 10/10/2024 Title Permitting Specialist Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 08/08/2025 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



(Continued on page 2)

\*(Instructions on page 2)

	2 Electronically Permitting	у	Energ			ew Mexico al Resources Depa TION DIVISION	rtment			Revised July 9, 2024 ubmittal			
								Submittal Type:	☐ Amende	d Report			
						☐ As Drilled							
ADIA			Pool Code		WELL LOCAT	TION INFORMATION							
30-025-55434						Pool Name WC-025 G-10 S2133280;WOLFCAMP							
1333030					FEDERAL COM			Well Numb	<sup>er</sup> 603H				
OGRID	No. 4323		Operator N	lame	CHEVE	RON U.S.A. INC.			-	vel Elevation 3640'			
Surface	Owner:	State □ Fee	ribal ∑	Federal		Mineral C	)wner: □ Stat	te 🗆 Fee	☐ Tribal 🏻 F	ederal			
					Sur	face Location							
UL	Section	Township	Range Lot Ft. from North				Latitude	L	ongitude	County			
F	4	22S	33E	N/A	2535	2628	32.42	112 -	103.57748	LEA			
					Botton	n Hole Location	1						
UL	Section	Township	Range	Lot	Ft. from North		Latitude		ongitude	County			
С	33	21S	33E	N/A	25	2310	32.442	252 -	103.57852	LEA			
Dedicated Acres Infill or Defining Well Defining Well API PENDING- INFILL Defining Well API PENDING- DI 4 33 Fodoral Com 600					Overlapping Spacir YES	ng Unit (Y/N)	Consolida	tion Code					
Order Numbers. N/A				DL 4 33	Federal Com 602	2H	under Comm	an Ournarah	•	No			
Order N	numbers.		N/A			Well setbacks are	under Comm	on Ownersi	nip. ⊔ res⊠i	NO			
				•		Off Point (KOP)							
UL F	Section 4	Township 22S	Range 33E	Lot N/A	Ft. from North 2615	Ft. from West 2310	Latitude 32.420		ongitude 103.57851	County LEA			
	4	223	33⊑	IN/A			32.420	-	103.37631	LEA			
UL	Section	Township	Range	Lot	Ft. from North	ake Point (FTP)  Ft. from West	Latitude	11	ongitude	County			
F	4	22S	33E	N/A	2615	2310		32.42090		LEA			
					<u>I</u> Last T	ake Point (LTP)							
UL	Section	Township	Range	Lot	Ft. from North	<u>``</u>	Latitude	L	ongitude	County			
С	33	21S	33E	N/A	100	2310	32.442	232 -	103.57852	LEA			
							,						
Unitized		rea of Uniform ENDING	Interest	Spacing	Unit Type ⊠ H	orizontal □ Vertical	Grou	nd Floor Ele	evation:	3640'			
OPERA	ATOR CER	TIFICATIONS				SURVEYOR CERTIF	FICATIONS						
I hereby	certify that th	ne information co	ontained hereir	n is true and	complete to	I hereby certify that the	well location sh	own on this p	olat was plotted	from field notes			
the best	of my knowle	edge and belief, ation either own	and, if the wel	l is a vertica	al or directional	of actual surveys made	by me or under						
		cluding the prop location pursua					•						
working	interest or ur	nleased mineral oulsory pooling o	interest, or to	a voluntary	pooling	CHAD L. HA,	CRO						
		,, ,			•	CHA MEX	(c)						
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						\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7)   8						
any part	of the well's	completed inter	vaÌ will be loca	ted or obtai	ined a <sup>′</sup>	1002/20			121				
		order from the di	Nurille	, 10 	/9/2024	10/02/20	<u> </u>	<u> </u>	ed Ha	www			
Signatur	•			ate		Signature and Seas of P	ndessional Sur	veyor					
Cii	ndy Her	rera-Muri	llo				CHAE	) HARCR	OW				
Printed N						Certificate Number	Date of Sur	vey					
e	eof@ch	evron.con	n			17777		0	6/18/2024				
Email Ad	ddress												

Note: 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.

#### 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.

(NAD 27 NM E)

DL 4 33 FEDERAL COM NO. 603H WELL X=733.385.57 Y=517,698.74 LAT.32.42100°N

TAKE POINT/KOP X=733.068.09 Y=517,616.51 LAT.32.42078°N LONG.103.57803°W

**PPP** #2

PROPOSED FIRST

**PPP #1** X=733.060.70 Y=518.910.02

LONG.103.57700°W

X=733,053.15 Y=520,231.48 LAT.32.42433°N LAT.32.42797°N LONG.103.57802°W LONG.103.57802°W

PROPOSED LAST **TAKE POINT** 

X=733.010.17 Y=525.407.95 LAT.32.44219°N LONG.103.57804°W

PROPOSED BOTTOM **HOLE LOCATION** 

X=733,009.55 Y=525,482.95 LAT.32.44240°N LONG.103.57804°W

(NAD 83/2011 NM E)

DL 4 33 FEDERAL COM NO. 603H WELL

X=774,567.85 Y=517,758.88 LAT.32.42112°N LONG.-103.57748°W PROPOSED FIRST TAKE POINT/KOP

X=774,250.37 Y=517,676.66 LAT.32.42090°N LONG.-103.57851°W

**PPP #1** 

X=774,242.95 Y=518,970.20 LAT.32.42445°N LONG.-103.57851°W PPP #2

X=774,235.36 Y=520,291.68 LAT.32.42809°N LONG.-103.57850°W

PROPOSED LAST **TAKE POINT** 

X=774,192.25 Y=525,468.28 LAT.32.44232°N LONG.-103.57852°W PROPOSED BOTTOM **HOLE LOCATION** 

X=774,191.63 Y=525,543.28 LAT.32.44252°N LONG.-103.57852°W

#### **CORNER COORDINATES** (NAD 27 NM E)

A - X=730699.35, Y=525497.70 IP w/ CAP "1913"

B - X=732017.08, Y=525503.55

C - X=733334.82, Y=525509.39 IP w/ CAP "1913"

D - X=735970.87, Y=525522.62 IP w/ CAP "1913"

E - X=730743.16, Y=520220.86 REBAR "EES 2019"

F - X=732063.10, Y=520226.93

G - X=733383.05, Y=520232.97 IP w/ CAP "1913"

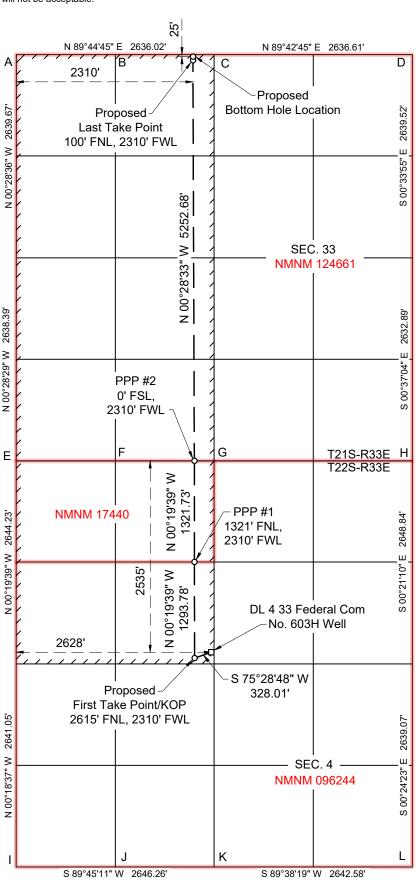
H - X=736025.30, Y=520251.52

I - X=730772.58, Y=514936.70 IP w/ CAP "1913"

J - X=732095.44, Y=514942.40

K - X=733418.30, Y=514948.10 IP w/ CAP "1913"

L - X=736060.31, Y=514964.76 IP w/ CAP "1913"



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

Submit Electronically Via E-permitting

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

#### NATURAL GAS MANAGEMENT PLAN

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

#### Section 1 – Plan Description Effective May 25, 2021

I. Operator:Chevron USA	<u> Inc</u>		OGRID:4	323	Date:09_ /_10_	/_2024_						
II. Type: ⊠ Original □ An	nendment due to	⊃ □ 19.15.27.9.	.D(6)(a) NMAC	C □ 19.15.27.9.D(6)(b	) NMAC   Other	:						
If Other, please describe:												
II. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.												
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D						
DL 4 33 FED COM 601H	Pending	UL-F Sec 4 22S 33E	2534' FNL 2548' FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
DL 4 33 FED COM 602H	Pending	UL-F Sec 4 22S 33E	2535' FNL 2588" FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
DL 4 33 FED COM 603H	Pending	UL-F Sec 4 22S 33E	2535' FNL 2628' FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
DL 4 9 FED COM 613H	Pending	UL-F Sec 4 22S 33E	2534' FNL 2568' FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
DL 49 FED COM 614H	Pending	UL-F Sec 4 22S 33E	2535' FNL 2608' FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
DL 4 9 FED COM 615H	Pending	UL-F Sec 4 22S 33E	2535' FNL 2636' FEL	1260 BBL/D	1790 MCF/D	6760 BBL/D						
IV. Central Delivery Point Na	<u>Σ</u>	Dagger Lake Ce	entral Tank Batt	eery #[So	ee 19.15.27.9(D)(1	) NMAC]						

Page 1 of 4

**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	API Spud Date		Completion	Initial Flow	First Production
			Date	Date Commencement		Date
				Date		
DL 4 33 FED COM 601H	Pending		N/A	N/A	N/A	N/A
DL 4 33 FED COM 602H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
DL 4 33 FED COM 603H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
DL 4 9FED COM 613H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
DL 4 9 FED COM 614H	Pending		<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
DL 4 9 FED COM 615H	Pending		<u>N/A</u>	<u>N/A</u>	N/A	<u>N/A</u>

VI. Separation Equipment: 

Attach a complete description of how Operator will size separation equipment to optimize gas capture.

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	system $\square$	will □ will	not have	capacity to	o gather	100% of t	the anticipate	d natural	gas
produ	action volume fi	rom the well	prior to the dat	e of first p	roduction.							

XIII. Line Pressure. O <sub>l</sub>	perator $\square$ does $\square$ does	not anticipate that its	existing well(s) con	nnected to the same s	segment, or portion,	of the
natural gas gathering sys	stem(s) described above	will continue to mee	t anticipated increas	ses in line pressure ca	aused by the new we	ell(s).

」Attach Operator's plan to manage pro	duction in response to	the increased line	pressure
---------------------------------------	------------------------	--------------------	----------

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

# Section 3 - Certifications Effective May 25, 2021

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

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

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

Well Shut-In. 

Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan.  $\square$  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;
- power generation for grid; (b)
- (c) compression on lease;
- liquids removal on lease; (d)
- (e) reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- reinjection for enhanced oil recovery; (g)
- 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: Cindy Herrera-Murillo
Printed Name: Cindy Herrera-Murillo
Title: Senior Regulatory Affairs Coordinator
E-mail Address: EEOF@chevron.com
Date: 10/09/2024
Phone:
575-263-0431
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

#### VI. Separation Equipment:

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

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

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

#### 2. During Drilling Operations:

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

#### 3. During Completions:

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

#### 4. During Production:

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

#### 5. Performance Standards

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

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

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

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

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

#### Requesting Variance? NO

#### Variance request:

**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\_10M\_Choke\_Manifold\_Diagram\_20241118143816.pdf

Choke\_and\_Flex\_Hose\_COC\_7660103\_PF3PJ851\_20241118143850.pdf

#### **BOP Diagram Attachment:**

1.03\_\_\_WH\_\_\_NM\_Slim\_Hole\_DM100312151\_20241009091652.pdf

MultiBowl\_Wellhead\_Specs\_20241009091726.pdf

APD\_STANDARD\_BOP\_10M\_20241118143914.pdf

Digital\_BOP\_Testing\_RV2\_20241118143921.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	1401	0	1396	3641	2245	1401	J-55	54.5	BUTT	1.75	1.7	BUOY	11.9 5	BUOY	11.2
- 1	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4932	0	4849	3641	-1208	4932	L-80	40	BUTT	1.32	1.73	BUOY	4.88	BUOY	4.72
- 1	INTERMED IATE	8.75	7.0	NEW	API	N	0	11553	0	11459	3641	-7818	11553	P- 110	-	OTHER - BLUE	1.46	2.28	BUOY	2.8	BUOY	2.8
4	PRODUCTI ON	6.12 5	5.0	NEW	API	N	11353	12003	11259	11859	-7618	-8218		P- 110	-	OTHER - W513	1.02	2.17	BUOY	1.73	BUOY	2.72
5	PRODUCTI ON	6.12 5	4.5	NEW	API	N	12003	20556	11859	12175	-8218	-8534		P- 110		OTHER - w521	1.02	2.17	BUOY	1.73	BUOY	1.73

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

Casino	r Δttac	hments
Casili	4 Allac	1111161163

Casing ID: 1

String

**SURFACE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $13.375 in\_BTC\_54.5 ppf\_J55\_20241009092022.pdf$ 

Casing ID: 2

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

9.625in\_BTC\_40ppf\_L80\_20241009092230.pdf

Casing ID: 3

**String** 

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

7in\_Blue\_SD\_29ppf\_P110\_20241009092446.pdf

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

#### **Casing Attachments**

Casing ID: 4

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $5 in\_Wedge\_513\_18 ppf\_P110\_20241009092638.pdf$ 

Casing ID: 5

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

4.5in\_Wedge\_521\_11.6ppf\_P110\_20241009092910.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	0	N/A	N/A
SURFACE	Tail		0	1401	747	1.63	13.6	1217	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	3932	710	2.29	11.5	1626	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		3932	4932	263	1.63	12.6	429	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	1055 3	522	3.52	10.5	1838	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		1055 3	1155 3	124	1.52	12.6	188	25	1	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		1135 3	2055 6	730	2.29	11.5	1673	25	1	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Tail		4051	5051	713	1.52	12.6	1083	25		Extender, Antifoam, Retarder, Viscosifier

#### **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: 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:** 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 mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

#### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1401	SPUD MUD	8.3	8.9							
1401	4932	SALT SATURATED	8.3	10.6							Saturated brine would be used through salt sections.
4932	1155 3	WATER-BASED MUD	8.5	9.8							

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1155 3	2055 6	OIL-BASED MUD	8.5	12							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:

Production tests are not planned.

Logs run include: Gamma Ray Log, Directional Survey

Exemption to forego acquiring a neutron log approved by C. Armistead (BLM) on 08/20/2024

Coring Operations are not planned.

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

DIRECTIONAL SURVEY, GAMMA RAY LOG,

#### Coring operation description for the well:

Production tests are not planned.

Logs run include: Gamma Ray Log, Directional Survey

Exemption to forego acquiring a neutron log approved by C. Armistead (BLM) on 08/20/2024

Coring Operations are not planned.

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

Anticipated Bottom Hole Pressure: 7597 Anticipated Surface Pressure: 4918

Anticipated Bottom Hole Temperature(F): 212

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

Hydrogen Sulfide drilling operations plan required? YES

Well Name: DL 4 33 FEDERAL COM Well Number: 603H

#### Hydrogen sulfide drilling operations

Chevron\_Standard\_H2S\_Contingency\_Plan\_2022\_20241009094438.pdf

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

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

DefPlan100ft\_DL433FederalComNo.603H\_R0\_20241009145138.pdf
DL\_4\_33\_Federal\_Com\_603H\_9\_Point\_Plan\_19Sep24\_20241009145148.pdf

#### Other proposed operations facets description:

#### Other proposed operations facets attachment:

3 Operational Best Management Practices 20241009094639.pdf

CUSA\_Spudder\_Rig\_Data\_20241009094813.pdf

Closed\_Loop\_layout\_20241009094725.pdf

Gas\_Management\_Plan\_\_\_DL\_P601\_20241009094630.pdf

MultiBowl\_Wellhead\_Specs\_20241009094710.pdf

Pit\_Requirements\_20241009094734.pdf

Visio\_6\_well\_rig\_layout\_20241009094826.pdf

1\_Waste\_Minimization\_Plan\_Cover\_Sheet\_20241010073114.pdf

4a\_\_\_LEA\_County\_\_\_Wolfcamp\_Production\_20241010073122.pdf

Other Variance request(s)?:

Other Variance attachment:



#### DL 4 33 Federal Com No. 603H R0 mdv 16Sept24 Proposal Geodetic Report



Report Date:
Client:
Field:
Well:
Well:
Borehole:
UBHI / APIE:
Survey Name:
Survey Nate:
Tort / AHD / DDI / ERD Ratio:
Coordinate Reference System:
Location Lat / Long:
Location Grid Mix TyX:
CRS Grid Convergence Angle:
Grid Scale Pactor:
Version / Patch:

September 17, 2024 - 03:59 PM (UTC 0 )
Chevron
MI, Lea County (NAD 27 EZ)
Chevron DL Past 801 / 603H
DL 43 5 Federal Com No. 603H
DL September 17, 2024 - 03:59 PM (UTC 0)

Survey / DLS Computation:
Vertical Section Azimuth:
Vertical Section Azimuth:
Vertical Section Origin:
TVD Reference Datum:
TVD Reference Elevation:
Seabod / Ground Elevation:
Magnetic Declination:
Magnetic Declination Total Gravity Heid Strength:
Gravity Model:
Total Magnetic Field Strength:
Magnetic Dip Angle:
Declination Date:
Magnetic Dip Angle:
Magnetic Declination Model:
Moth Reference
Grid Convergence Used:
Total Corr Mag North->Grid North:
Local Coord Referenced To: Minimum Curvature / Lubinski 359.570 "(GRID North) 0.000 ft, 0.000 ft RKB 368.000 ft above MSL 364.0000 ft above MSL 6.308" 998.4619mgn (9.80665 Based) GAPKM 47552.449 nT 59.821" Ochober 24, 2022 HDGM 2022 Grid North 0.406" 5.903"

	MD	Incl	Azim	TVD	TVDSS	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
Comments	(ft) 0.00	(°) 0.00	(°) 201.43	(ft) 0.00	(ft) -3,668.00	(ft) 0.00	(ft) 0.00	(ft) 0.00	(°/100ft)	(ftUS) 517,698.74	(ftUS) 733,385.57	(°) 32.42099709	-103.57699699
Surface	100.00	0.00	216.26	100.00	-3,568.00	0.00	0.00	0.00	0.00	517,698.74	733,385.57	32.42099709	-103.57699699
	200.00 300.00	0.00	216.26 216.26	200.00 300.00	-3,468.00 -3,368.00	0.00	0.00	0.00	0.00	517,698.74 517,698.74	733,385.57 733,385.57	32.42099709 32.42099709	-103.57699699 -103.57699699
	400.00 500.00	0.00	216.26 216.26	400.00 500.00	-3,268.00 -3,168.00	0.00 0.00	0.00	0.00	0.00 0.00	517,698.74 517,698.74	733,385.57 733,385.57	32.42099709 32.42099709	-103.57699699 -103.57699699
Build 1.5°/100ft	600.00 700.00	0.00 1.50	216.26 216.26	600.00 699.99	-3,068.00 -2,968.01	0.00 -1.05	0.00 -1.06	0.00 -0.77	0.00 1.50	517,698.74 517,697.68	733,385.57 733,384.80	32.42099709 32.42099420	-103.57699699 -103.57699952
	800.00 900.00	3.00 4.50	216.26 216.26	799.91 899.69	-2,868.09 -2,768.31	-4.20 -9.44	-4.22 -9.49	-3.10 -6.96	1.50 1.50	517,694.52 517,689.25	733,382.47 733,378.61	32.42098554 32.42097112	-103.57700712 -103.57701977
	1,000.00 1,100.00	6.00 7.50	216.26 216.26	999.27 1,098.57	-2,668.73 -2,569.43	-16.78 -26.20	-16.87 -26.35	-12.38 -19.33	1.50 1.50	517,681.87 517,672.39	733,373.20 733,366.24	32.42095095 32.42092504	-103.57703748 -103.57706022
	1,200.00 1,300.00	9.00 10.50	216.26 216.26	1,197.54 1,296.09	-2,470.46 -2,371.91	-37.71 -51.29	-37.92 -51.58	-27.81 -37.83	1.50 1.50	517,660.82 517,647.17	733,357.76 733,347.74	32.42089340 32.42085606	-103.57708798 -103.57712075
Rustler (RSLR) Hold	1,381.44 1,399.87	11.72 12.00	216.26 216.26	1,376.00 1,394.04	-2,292.00 -2,273.96	-63.88 -66.91	-64.23 -67.29	-47.11 -49.35	1.50 1.50	517,634.51 517,631.46	733,338.46 733,336.22	32.42082146 32.42081311	-103.57715111 -103.57715844
	1,400.00 1,500.00	12.00 12.00	216.26 216.26	1,394.16 1,491.98	-2,273.84 -2,176.02	-66.94 -83.60	-67.31 -84.07	-49.37 -61.66	0.00	517,631.43 517,614.67	733,336.21 733,323.91	32.42081305 32.42076721	-103.57715849 -103.57719872
	1,600.00 1,700.00	12.00 12.00	216.26 216.26	1,589.80 1,687.61	-2,078.20 -1,980.39	-100.27 -116.94	-100.83 -117.60	-73.95 -86.25	0.00	517,597.91 517,581.15	733,311.62 733,299.32	32.42072138 32.42067554	-103.57723894 -103.57727916
Saldo (SLDO)	1,784.23 1,800.00	12.00 12.00	216.26 216.26	1,770.00	-1,898.00 -1.882.57	-130.99 -133.61	-131.71 -134.36	-96.60 -98.54	0.00	517,567.03 517,564.39	733,288.97 733,287.03	32.42063694 32.42062971	-103.57731304 -103.57731938
	1,900.00	12.00	216.26	1,883.24	-1,784.76	-150.28	-151.12	-110.84	0.00	517,547.62 517,530.86	733,274.74	32.42058388	-103.57735960 -103.57739983
	2,000.00 2,100.00 2,200.00	12.00 12.00 12.00	216.26 216.26 216.26	1,981.06 2,078.87 2,176.69	-1,686.94 -1,589.13 -1.491.31	-166.95 -183.62 -200.29	-167.88 -184.65 -201.41	-123.13 -135.43 -147.72	0.00 0.00 0.00	517,530.60 517,514.10 517.497.34	733,262.44 733,250.15 733.237.85	32.42053804 32.42049221 32.42044637	-103.57744005 -103.57748027
	2,300.00	12.00	216.26	2,274.50	-1,393.50	-216.96	-218.17	-160.01	0.00	517,480.58	733,225.56	32.42040054	-103.57752049
	2,400.00 2,500.00	12.00 12.00	216.26 216.26	2,372.32 2,470.13	-1,295.68 -1,197.87	-233.63 -250.30	-234.93 -251.70	-172.31 -184.60	0.00	517,463.81 517,447.05	733,213.27 733,200.97	32.42035470 32.42030887	-103.57756071 -103.57760094
	2,600.00 2,700.00	12.00 12.00	216.26 216.26	2,567.95 2,665.77	-1,100.05 -1,002.23	-266.97 -283.64	-268.46 -285.22	-196.90 -209.19	0.00 0.00	517,430.29 517,413.53	733,188.68 733,176.39	32.42026304 32.42021720	-103.57764116 -103.57768138
	2,800.00 2,900.00	12.00 12.00	216.26 216.26	2,763.58 2,861.40	-904.42 -806.60	-300.31 -316.98	-301.98 -318.75	-221.49 -233.78	0.00 0.00	517,396.77 517,380.00	733,164.09 733,151.80	32.42017137 32.42012553	-103.57772160 -103.57776182
	3,000.00 3,100.00	12.00 12.00	216.26 216.26	2,959.21 3,057.03	-708.79 -610.97	-333.65 -350.32	-335.51 -352.27	-246.07 -258.37	0.00 0.00	517,363.24 517,346.48	733,139.50 733,127.21	32.42007970 32.42003386	-103.57780204 -103.57784227
	3,200.00 3,300.00	12.00 12.00	216.26 216.26	3,154.84 3,252.66	-513.16 -415.34	-366.99 -383.66	-369.03 -385.80	-270.66 -282.96	0.00 0.00	517,329.72 517,312.96	733,114.92 733,102.62	32.41998803 32.41994219	-103.57788249 -103.57792271
Castile (CSTL)	3,400.00 3,437.34	12.00 12.00	216.26 216.26	3,350.47 3,387.00	-317.53 -281.00	-400.33 -406.56	-402.56 -408.82	-295.25 -299.84	0.00	517,296.19 517,289.93	733,090.33 733,085.74	32.41989636 32.41987924	-103.57796293 -103.57797795
oublie (0012)	3,500.00 3.600.00	12.00 12.00	216.26 216.26	3,448.29 3.546.10	-219.71 -121.90	-417.00 -433.67	-419.32 -436.08	-307.54 -319.84	0.00	517,279.43 517,262.67	733,078.03 733,065.74	32.41985052 32.41980469	-103.57800315 -103.57804337
	3,700.00 3,800.00	12.00 12.00	216.26 216.26	3,643.92 3,741.74	-24.08 73.74	-450.34 -467.01	-452.85 -469.61	-332.13 -344.43	0.00	517,245.91 517,229.15	733,053.45 733,041.15	32.41975886 32.41971302	-103.57808359 -103.57812382
	3,900.00	12.00	216.26	3,839.55	171.55	-483.68	-486.37	-356.72	0.00	517,212.38	733,028.86	32.41966719	-103.57816404
	4,000.00 4,100.00	12.00 12.00	216.26 216.26	3,937.37 4,035.18	269.37 367.18	-500.35 -517.02	-503.13 -519.90	-369.02 -381.31	0.00	517,195.62 517,178.86	733,016.57 733,004.27	32.41962135 32.41957552	-103.57820426 -103.57824448
	4,200.00 4,300.00	12.00 12.00	216.26 216.26	4,133.00 4,230.81	465.00 562.81	-533.69 -550.36	-536.66 -553.42	-393.60 -405.90	0.00 0.00	517,162.10 517,145.33	732,991.98 732,979.68	32.41952968 32.41948385	-103.57828470 -103.57832492
	4,400.00 4,500.00	12.00 12.00	216.26 216.26	4,328.63 4,426.44	660.63 758.44	-567.03 -583.70	-570.18 -586.95	-418.19 -430.49	0.00 0.00	517,128.57 517,111.81	732,967.39 732,955.10	32.41943801 32.41939218	-103.57836514 -103.57840536
	4,600.00 4,700.00	12.00 12.00	216.26 216.26	4,524.26 4,622.07	856.26 954.07	-600.37 -617.04	-603.71 -620.47	-442.78 -455.08	0.00	517,095.05 517,078.29	732,942.80 732,930.51	32.41934634 32.41930051	-103.57844559 -103.57848581
	4,800.00 4,900.00	12.00 12.00	216.26 216.26	4,719.89 4,817.71	1,051.89 1,149.71	-633.71 -650.38	-637.23 -654.00	-467.37 -479.66	0.00 0.00	517,061.52 517,044.76	732,918.21 732,905.92	32.41925467 32.41920884	-103.57852603 -103.57856625
Drop .75°/100ft Lamar (LMAR)	4,913.31 4,952.42	12.00 11.70	216.26 216.26	4,830.73 4,869.00	1,162.73 1,201.00	-652.60 -659.04	-656.23 -662.71	-481.30 -486.05	0.00 0.75	517,042.53 517,036.05	732,904.28 732,899.53	32.41920274 32.41918503	-103.57857160 -103.57858714
, ,	5,000.00 5,100.00	11.35 10.60	216.26 216.26	4,915.62 5,013.79	1,247.62 1,345.79	-666.66 -681.93	-670.37 -685.72	-491.67 -502.93	0.75 0.75	517,028.39 517,013.04	732,893.91 732,882.65	32.41916407 32.41912210	-103.57860554 -103.57864237
Bell Canyon (BEL)	5,104.28 5,200.00	10.57 9.85	216.26 216.26	5,018.00 5,112.20	1,350.00 1,444.20	-682.56 -696.16	-686.35 -700.03	-503.40 -513.43	0.75 0.75	517,012.41 516,998.73	732,882.19 732,872.16	32.41912037 32.41908297	-103.57864389 -103.57867670
	5,300.00 5,400.00	9.10 8.35	216.26 216.26	5,210.84 5,309.68	1,542.84 1,641.68	-709.36 -721.52	-713.30 -725.53	-523.16 -532.13	0.75 0.75	516,985.46 516,973.23	732,862.43 732,853.46	32.41904668 32.41901324	-103.57870855 -103.57873789
	5,500.00 5,600.00	7.60 6.85	216.26 216.26	5,408.72 5,507.92	1,740.72 1,839.92	-732.64 -742.72	-736.72 -746.85	-540.33 -547.77	0.75 0.75	516,962.05 516,951.91	732,845.25 732,837.82	32.41898266 32.41895494	-103.57876473 -103.57878905
	5,700.00 5,800.00	6.10 5.35	216.26 216.26	5,607.28 5,706.78	1,939.28 2,038.78	-751.76 -759.76	-755.94 -763.99	-554.44 -560.33	0.75 0.75	516,942.82 516,934.78	732,831.15 732.825.25	32.41893008 32.41890809	-103.57881086 -103.57883016
Cherry Canyon (CHR)	5,888.56	4.68	216.26	5,795.00	2,127.00	-765.97	-770.23	-564.91	0.75	516,928.53	732,820.67	32.41889102	-103.57884514
	5,900.00 6,000.00	4.60 3.85	216.26 216.26	5,806.41 5,906.13	2,138.41 2,238.13	-766.71 -772.62	-770.98 -776.91	-565.46 -569.82	0.75 0.75	516,927.79 516,921.85	732,820.13 732,815.77	32.41888898 32.41887275	-103.57884693 -103.57886118
	6,100.00 6,200.00	3.10 2.35	216.26 216.26	6,005.95 6,105.84	2,337.95 2,437.84	-777.47 -781.28	-781.80 -785.63	-573.40 -576.21	0.75 0.75	516,916.97 516,913.14	732,812.19 732,809.38	32.41885939 32.41884891	-103.57887290 -103.57888209
	6,300.00 6,400.00	1.60 0.85	216.26 216.26	6,205.78 6,305.75	2,537.78 2,637.75	-784.04 -785.75	-788.40 -790.13	-578.24 -579.51	0.75 0.75	516,910.36 516,908.64	732,807.34 732,806.08	32.41884132 32.41883662	-103.57888875 -103.57889288
Hold Vertical	6,500.00 6,513.05	0.10 0.00	216.26 216.26	6,405.75 6,418.80	2,737.75 2,750.80	-786.42 -786.42	-790.79 -790.80	-579.99 -580.00	0.75 0.75	516,907.97 516,907.96	732,805.59 732,805.59	32.41883480 32.41883477	-103.57889447 -103.57889450
	6,600.00 6,700.00	0.00	216.26 216.26	6,505.75 6,605.75	2,837.75 2,937.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	6,800.00 6,900.00	0.00	216.26 216.26	6,705.75 6,805.75	3,037.75 3,137.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	7,000.00 7,100.00	0.00	216.26 216.26	6,905.75 7,005.75	3,237.75 3,337.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
Brushy Canyon (BCN)	7,163.25 7,200.00	0.00	216.26 216.26	7,069.00 7,105.75	3,401.00 3,437.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	7,300.00 7,400.00	0.00	216.26 216.26	7,205.75 7,305.75	3,537.75 3,637.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	7,500.00 7,600.00	0.00	216.26 216.26	7,405.75 7,505.75	3,737.75 3,837.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	7,700.00 7,800.00	0.00	216.26 216.26	7,605.75 7,705.75	3,937.75 4,037.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	7,900.00 7,900.00 8.000.00	0.00	216.26 216.26 216.26	7,805.75 7,805.75 7.905.75	4,137.75 4,237.75	-786.42 -786.42	-790.80 -790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59 732.805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	8,100.00	0.00	216.26	8,005.75	4,337.75	-786.42	-790.80	-580.00	0.00	516,907.96	732,805.59	32.41883477	-103.57889450
	8,200.00 8,300.00	0.00	216.26 216.26	8,105.75 8,205.75	4,437.75 4,537.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	8,400.00 8,500.00	0.00	216.26 216.26	8,305.75 8,405.75	4,637.75 4,737.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	8,600.00 8,700.00	0.00	216.26 216.26	8,505.75 8,605.75	4,837.75 4,937.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	8,800.00 8,900.00	0.00	216.26 216.26	8,705.75 8,805.75	5,037.75 5,137.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
Upper Avalon (AVU)	9,000.00 9,082.25	0.00	216.26 216.26	8,905.75 8,988.00	5,237.75 5,320.00	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
, , ,	9,100.00 9,200.00	0.00	216.26 216.26	9,005.75 9,105.75	5,337.75 5,437.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	9,300.00 9,400.00	0.00	216.26 216.26	9,205.75 9.305.75	5,537.75 5,637.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	9,500.00 9,600.00	0.00	216.26 216.26	9,405.75 9,505.75	5,737.75 5,837.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96 516,907.96	732,805.59 732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
Lower Avalon (AVL)	9,611.25	0.00	216.26	9,517.00	5,849.00	-786.42	-790.80	-580.00	0.00	516,907.96	732,805.59	32.41883477	-103.57889450
	9,700.00 9,800.00	0.00	216.26 216.26	9,605.75 9,705.75	5,937.75 6,037.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	9,900.00 10,000.00	0.00	216.26 216.26	9,805.75 9,905.75	6,137.75 6,237.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
First Bone Spring Upper (FBU)	10,083.25 10,100.00	0.00	216.26 216.26	9,989.00 10,005.75	6,321.00 6,337.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450
	10,200.00	0.00	216.26	10,105.75	6,437.75	-786.42	-790.80	-580.00	0.00	516,907.96	732,805.59	32.41883477	-103.57889450

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	
	10,300.00 10,400.00	0.00 0.00	216.26 216.26	10,205.75 10,305.75	6,537.75 6,637.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
	10,500.00 10,600.00	0.00	216.26 216.26	10,405.75 10,505.75	6,737.75 6.837.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516.907.96	732,805.59 732.805.59	32.41883477	-103.57889450 -103.57889450	
Second Bone Spring Upper (SBU)	10,694.25	0.00	216.26	10,600.00	6,932.00	-786.42	-790.80	-580.00	0.00	516,907.96	732,805.59	32.41883477	-103.57889450	
	10,700.00 10,800.00	0.00	216.26 216.26	10,605.75 10,705.75	6,937.75 7,037.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
	10,900.00 11,000.00	0.00	216.26 216.26	10,805.75 10.905.75	7,137.75 7.237.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516.907.96	732,805.59 732.805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
econd Bone Spring Lower (SBL)	11,100.00 11,196.25	0.00	216.26 216.26	11,005.75 11,102.00	7,337.75 7,434.00	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
econd Bone Spring Lower (SBL)	11,200.00	0.00	216.26	11,105.75	7,437.75	-786.42	-790.80	-580.00	0.00	516,907.96	732,805.59	32.41883477	-103.57889450	
	11,300.00 11,400.00	0.00	216.26 216.26	11,205.75 11,305.75	7,537.75 7,637.75	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00 0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
uild 8°/100ft	11,500.00 11,553.05	0.00	216.26 216.26	11,405.75 11,458.80	7,737.75 7,790.80	-786.42 -786.42	-790.80 -790.80	-580.00 -580.00	0.00	516,907.96 516,907.96	732,805.59 732,805.59	32.41883477 32.41883477	-103.57889450 -103.57889450	
alid 6 / 100it	11,600.00	3.76	8.72	11,505.72	7,837.72	-784.91	-789.28	-579.77	8.00	516,909.48	732,805.82	32.41883895	-103.57889371	
	11,700.00 11,800.00	11.76 19.76	8.72 8.72	11,604.72 11,700.88	7,936.72 8,032.88	-771.59 -744.81	-775.95 -749.13	-577.72 -573.61	8.00 8.00	516,922.81 516,949.63	732,807.87 732,811.98	32.41887554 32.41894918	-103.57888678 -103.57887283	
nird Bone Spring (TBS)	11,813.99 11,900.00	20.87 27.76	8.72 8.72	11,714.00 11,792.34	8,046.00 8,124.34	-740.01 -705.07	-744.33 -709.35	-572.87 -567.51	8.00 8.00	516,954.43 516,989.42	732,812.71 732,818.08	32.41896235 32.41905841	-103.57887034 -103.57885215	
	12,000.00	35.76	8.72	11,877.30	8,209.30	-653.15	-657.37	-559.53	8.00	517,041.39	732,826.05	32.41920113	-103.57882513	
	12,100.00 12,200.00	43.76 51.76	8.72 8.72	11,954.11 12,021.29	8,286.11 8,353.29	-590.06 -517.03	-594.21 -521.09	-549.85 -538.63	8.00 8.00	517,104.55 517,177.66	732,835.74 732,846.95	32.41937455 32.41957529	-103.57879230 -103.57875429	
olfcamp A (WCA)	12,219.25 12,300.00	53.30 59.76	8.72 8.72	12,033.00 12,077.51	8,365.00 8,409.51	-501.95 -435.49	-505.99 -439.45	-536.32 -526.11	8.00 8.00	517,192.77 517,259.30	732,849.27 732,859.47	32.41961675 32.41979945	-103.57874644 -103.57871184	
	12,400.00 12,500.00	67.76 75.76	8.72 8.72	12,121.70 12,152.98	8,453.70 8,484.98	-347.01 -253.32	-350.87 -257.07	-512.53 -498.14	8.00 8.00	517,347.89 517,441.68	732,873.06 732,887.45	32.42004266 32.42030020	-103.57866579 -103.57861703	
	12,600.00	83.76	8.72	12,170.75	8,502.75	-156.25	-159.88	-483.23	8.00	517,538.87	732,902.35	32.42056704	-103.57856650	
Inding Point IP Cross	12,678.05 12,678.50	90.00 90.00	8.72 8.72	12,175.00 12,175.00	8,507.00 8,507.00	-79.34 -78.90	-82.88 -82.44	-471.42 -471.36	8.00 0.00	517,615.86 517,616.31	732,914.16 732,914.23	32.42077844 32.42077966	-103.57852648 -103.57852624	
	12,700.00 12,800.00	90.00 90.00	8.72 8.72	12,175.00 12,175.00	8,507.00 8,507.00	-57.67 41.06	-61.19 37.66	-468.10 -452.94	0.00	517,637.56 517,736.40	732,917.49 732,932.65	32.42083801 32.42110940	-103.57851520 -103.57846381	
	12,900.00	90.00	8.72	12,175.00	8,507.00	139.78	136.50	-437.78	0.00	517,835.24	732,947.81	32.42138079	-103.57841242	
	13,000.00 13,100.00	90.00 90.00	8.72 8.72	12,175.00 12,175.00	8,507.00 8,507.00	238.51 337.24	235.35 334.19	-422.62 -407.46	0.00 0.00	517,934.08 518,032.92	732,962.97 732,978.13	32.42165217 32.42192356	-103.57836104 -103.57830965	
	13,200.00 13,300.00	90.00 90.00	8.72 8.72	12,175.00 12,175.00	8,507.00 8,507.00	435.97 534.70	433.04 531.88	-392.30 -377.14	0.00	518,131.76 518,230.60	732,993.29 733,008.45	32.42219495 32.42246633	-103.57825826 -103.57820687	
um 2°/400ft	13,400.00	90.00	8.72	12,175.00	8,507.00	633.42	630.72	-361.98	0.00	518,329.44	733,023.60	32.42273772	-103.57815548 -103.57813989	
um 2°/100ft	13,430.34 13,500.00	90.00 90.00	8.72 7.33	12,175.00 12,175.00	8,507.00 8,507.00	663.38 732.28	660.71 729.69	-357.38 -347.65	0.00 2.00	518,359.43 518,428.41	733,028.20 733,037.93	32.42282006 32.42300946	-103.57810681	
	13,600.00 13,700.00	90.00 90.00	5.33 3.33	12,175.00 12,175.00	8,507.00 8,507.00	831.58 931.23	829.08 928.79	-336.64 -329.09	2.00 2.00	518,527.79 518,627.50	733,048.95 733,056.49	32.42328242 32.42355633	-103.57806882 -103.57804210	
old	13,800.00 13,882.63	90.00	1.33 359.67	12,175.00 12,175.00	8,507.00 8,507.00	1,031.11 1,113.72	1,028.70	-325.03 -324.31	2.00	518,727.41 518,810.02	733,060.55 733,061.27	32.42383087 32.42405794	-103.57802665 -103.57802242	
	13,900.00	90.00	359.67	12,175.00	8,507.00	1,131.09	1,128.69	-324.41	0.00	518,827.40	733,061.17	32.42410570	-103.57802235	
PP1	13,982.63 14,000.00	90.00 90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8,507.00	1,213.72 1,231.09	1,211.32 1,228.69	-324.88 -324.98	0.00	518,910.02 518,927.39	733,060.70 733,060.60	32.42433281 32.42438056	-103.57802198 -103.57802190	
	14,100.00 14,200.00	90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8,507.00	1,331.09 1,431.09	1,328.69	-325.55 -326.12	0.00	519,027.39 519,127.38	733,060.03 733.059.46	32.42465543 32.42493029	-103.57802145 -103.57802101	
	14,300.00	90.00	359.67	12,175.00	8,507.00	1,531.09	1,528.69	-326.69	0.00	519,227.38	733,058.89	32.42520516	-103.57802056	
	14,400.00 14,500.00	90.00 90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8,507.00	1,631.09 1,731.09	1,628.68 1,728.68	-327.26 -327.83	0.00 0.00	519,327.37 519,427.37	733,058.32 733,057.75	32.42548002 32.42575489	-103.57802012 -103.57801968	
	14,600.00 14,700.00	90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8.507.00	1,831.09 1,931.09	1,828.68 1.928.68	-328.40 -328.97	0.00	519,527.36 519,627.36	733,057.18 733.056.61	32.42602975 32.42630462	-103.57801924 -103.57801880	
	14,800.00	90.00	359.67	12,175.00	8,507.00	2,031.09	2,028.68	-329.54	0.00	519,727.36	733,056.04	32.42657948	-103.57801836	
	14,900.00 15,000.00	90.00 90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8,507.00	2,131.09 2,231.09	2,128.68 2,228.67	-330.11 -330.69	0.00	519,827.35 519,927.35	733,055.47 733,054.89	32.42685435 32.42712921	-103.57801792 -103.57801749	
	15,100.00 15,200.00	90.00	359.67 359.67	12,175.00 12,175.00	8,507.00 8.507.00	2,331.09 2.431.09	2,328.67 2.428.67	-331.26 -331.83	0.00	520,027.34 520,127.34	733,054.32 733.053.75	32.42740408 32.42767894	-103.57801705 -103.57801662	
200 T 0011000	15,300.00	90.00	359.67	12,175.00	8,507.00	2,531.09	2,528.67	-332.41	0.00	520,227.33	733,053.17	32.42795381	-103.57801619	
PP2, Turn 2°/100ft old to TD	15,304.15 15,311.50	90.00 90.00	359.67 359.52	12,175.00 12,175.00	8,507.00 8,507.00	2,535.24 2,542.60	2,532.82 2,540.17	-332.43 -332.48	0.00 2.00	520,231.48 520,238.83	733,053.15 733,053.10	32.42796521 32.42798542	-103.57801617 -103.57801617	
	15,400.00 15.500.00	90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8.507.00	2,631.09 2,731.09	2,628.67 2.728.66	-333.22 -334.05	0.00	520,327.33 520,427.32	733,052.36 733.051.53	32.42822867 32.42850354	-103.57801652 -103.57801692	
	15,600.00	90.00	359.52	12,175.00	8,507.00	2,831.09	2,828.66	-334.88	0.00	520,527.31	733,050.70	32.42877840	-103.57801732	
	15,700.00 15,800.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	2,931.09 3,031.09	2,928.66 3,028.65	-335.71 -336.54	0.00	520,627.31 520,727.30	733,049.87 733,049.04	32.42905327 32.42932813	-103.57801772 -103.57801812	
	15,900.00 16.000.00	90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8.507.00	3,131.09 3.231.09	3,128.65 3.228.65	-337.37 -338.20	0.00	520,827.29 520,927.29	733,048.21 733,047.38	32.42960300 32.42987786	-103.57801852 -103.57801892	
	16,100.00	90.00	359.52	12,175.00	8,507.00	3,331.09	3,328.64	-339.03	0.00	521,027.28	733,046.55	32.43015272	-103.57801932	
	16,200.00 16,300.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	3,431.09 3,531.09	3,428.64 3,528.63	-339.86 -340.69	0.00	521,127.27 521,227.27	733,045.72 733,044.89	32.43042759 32.43070245	-103.57801972 -103.57802012	
	16,400.00 16.500.00	90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8.507.00	3,631.09 3,731.09	3,628.63 3,728.63	-341.52 -342.35	0.00	521,327.26 521,427.25	733,044.06 733,043.23	32.43097732 32.43125218	-103.57802052 -103.57802092	
	16,600.00	90.00	359.52	12,175.00	8,507.00	3,831.09	3,828.62	-343.18	0.00	521,527.25	733,042.40	32.43152705	-103.57802132	
	16,700.00 16,800.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	3,931.09 4,031.09	3,928.62 4,028.62	-344.01 -344.84	0.00 0.00	521,627.24 521,727.23	733,041.57 733,040.74	32.43180191 32.43207678	-103.57802172 -103.57802212	
	16,900.00 17,000.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8.507.00	4,131.09 4,231.09	4,128.61 4,228.61	-345.67 -346.50	0.00	521,827.23 521.927.22	733,039.91 733.039.08	32.43235164 32.43262651	-103.57802252 -103.57802292	
	17,100.00	90.00	359.52 359.52	12,175.00	8,507.00	4,331.09	4,328.61	-347.33 -348.16	0.00	522,027.21	733,038.25	32.43290137	-103.57802332	
	17,200.00 17,300.00	90.00 90.00	359.52	12,175.00 12,175.00	8,507.00 8,507.00	4,431.09 4,531.09	4,428.60 4,528.60	-348.99	0.00	522,127.21 522,227.20	733,037.42 733,036.59	32.43317624 32.43345110	-103.57802372 -103.57802412	
	17,400.00 17,500.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	4,631.09 4,731.09	4,628.60 4,728.59	-349.82 -350.65	0.00 0.00	522,327.20 522,427.19	733,035.76 733,034.93	32.43372597 32.43400083	-103.57802452 -103.57802492	
	17,600.00 17,700.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	4,831.09 4,931.09	4,828.59 4,928.59	-351.49 -352.32	0.00	522,527.18 522,627.18	733,034.10 733,033.27	32.43427569 32.43455056	-103.57802532 -103.57802572	
	17,800.00	90.00	359.52	12,175.00	8,507.00	5,031.09	5,028.58	-353.15	0.00	522,727.17	733,032.43	32.43482542	-103.57802612	
	17,900.00 18,000.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	5,131.09 5,231.09	5,128.58 5,228.58	-353.98 -354.81	0.00	522,827.16 522,927.16	733,031.60 733,030.77	32.43510029 32.43537515	-103.57802652 -103.57802692	
	18,100.00 18,200.00	90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	5,331.09 5,431.09	5,328.57 5,428.57	-355.64 -356.47	0.00	523,027.15 523,127.14	733,029.94 733,029.11	32.43565002 32.43592488	-103.57802732 -103.57802772	
	18,300.00	90.00	359.52	12,175.00	8,507.00	5,531.09	5,528.57	-357.30	0.00	523,227.14	733,028.28	32.43619975	-103.57802812	
	18,400.00 18,500.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	5,631.09 5,731.09	5,628.56 5,728.56	-358.13 -358.96	0.00	523,327.13 523,427.12	733,027.45 733,026.62	32.43647461 32.43674948	-103.57802852 -103.57802892	
	18,600.00 18,700.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	5,831.09 5,931.09	5,828.56 5,928.55	-359.79 -360.62	0.00	523,527.12 523,627.11	733,025.79 733,024.96	32.43702434 32.43729920	-103.57802932 -103.57802972	
	18,800.00	90.00	359.52	12,175.00	8,507.00	6,031.09	6,028.55	-361.45	0.00	523,727.10	733,024.13	32.43757407	-103.57803012	
	18,900.00 19,000.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	6,131.09 6,231.09	6,128.55 6,228.54	-362.28 -363.11	0.00	523,827.10 523,927.09	733,023.30 733,022.47	32.43784893 32.43812380	-103.57803052 -103.57803092	
	19,100.00 19,200.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	6,331.09 6,431.09	6,328.54 6,428.53	-363.94 -364.77	0.00	524,027.08 524,127.08	733,021.64 733,020.81	32.43839866 32.43867353	-103.57803132 -103.57803172	
	19,300.00	90.00	359.52	12,175.00	8,507.00	6,531.09	6,528.53	-365.60	0.00	524,227.07	733,019.98	32.43894839	-103.57803212	
	19,400.00 19,500.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	6,631.09 6,731.09	6,628.53 6,728.52	-366.43 -367.26	0.00	524,327.07 524,427.06	733,019.15 733,018.32	32.43922325 32.43949812		
	19,600.00 19,700.00	90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	6,831.09 6,931.09	6,828.52 6,928.52	-368.09 -368.92	0.00	524,527.05 524,627.05	733,017.49 733,016.66	32.43977298 32.44004785	-103.57803331 -103.57803371	
	19,800.00	90.00	359.52	12,175.00	8,507.00	7,031.09	7,028.51	-369.75	0.00	524,727.04	733,015.83	32.44032271	-103.57803411	
	19,900.00 20,000.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	7,131.09 7,231.09	7,128.51 7,228.51	-370.58 -371.41	0.00	524,827.03 524,927.03	733,015.00 733,014.17	32.44059758 32.44087244	-103.57803451 -103.57803491	
	20,100.00 20,200.00	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	7,331.09 7,431.09	7,328.50 7,428.50	-372.25 -373.08	0.00	525,027.02 525,127.01	733,013.34 733,012.51	32.44114730 32.44142217	-103.57803531 -103.57803571	
	20,300.00	90.00	359.52	12,175.00	8,507.00	7,531.09	7,528.50	-373.91	0.00	525,227.01	733,011.68	32.44169703	-103.57803611	
TP Cross	20,400.00 20,480.94	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8,507.00	7,631.09 7,712.03	7,628.49 7,709.43	-374.74 -375.41	0.00 0.00	525,327.00 525,407.94	733,010.85 733,010.17	32.44197190 32.44219437	-103.57803651 -103.57803683	
4 33 Federal Com No. 603H BHL	20,500.00 20,555.96	90.00 90.00	359.52 359.52	12,175.00 12,175.00	8,507.00 8.507.00	7,731.09 7,787.05	7,728.49 7,784.45	-375.57 -376.03	0.00	525,426.99 525,482.95	733,010.01 733,009.55	32.44224676 32.44240058	-103.57803691 -103.57803713	
		ef Plan	230.02	, 0.00	-,	.,	. ,. 04.40	0.00	0.00	, 102.00	,500.00			
urvey Type:														
urvey Error Model: urvey Program:	IS	CWSA0 3 - D 95 % 0	Confidence 2.79	55 sigma										
Description		Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Cas	ing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Co	ode	Vendor	/ Tool	Borehole / Sur	vey
		1	0.000	20,532.045	1/100.000.25	- 8.75 - 6.125 9.625	5 – 7 – 6.125	B001	Mb_MWD+HRGM				DL 4 33 Federal Com	No. 603H / DL 4 33 Fede
OU Geometry:		Hole Size (i		Casing Size			Name							
264.344		17.500	,	13.375	····/		Name							
.264.344 .922.791		17.500		13.375 9.625										
,278.251		8.750		7.000										
0,555.960		6.125												

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: CHEVRON USA INCORPORATED
WELL NAME & NO.: DL 4 33 FED COM 603H
SURFACE HOLE FOOTAGE: 2535'/N & 2628'/W
BOTTOM HOLE FOOTAGE 25'/N & 2310'/W
LOCATION: Section 4, T.22 S., R.33 E., NMP
COUNTY: Lea County, New Mexico

COA

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

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### B. CASING

#### **Primary Casing Design:**

1. The 13-3/8 inch surface casing shall be set at approximately 1401 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. The surface hole shall be 16 or 17.5 inch in diameter.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> hours in the Potash Area or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

- 2. The 9-5/8 inch intermediate casing shall be set at approximately 4790 feet per BLM Geologist. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
  - ❖ In <u>Secretary Potash 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.
  - ❖ In <u>Capitan Reef 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.
  - ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
    - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
    - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-

Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

- 3. The minimum required fill of cement behind the 7 inch intermediate casing is:
  - Cement should tie-back at least 50 feet on top of Capitan Reef top or 200 feet into the previous casing, whichever is greater. 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.
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.
- 4. The minimum required fill of cement behind the 5 X 4-1/2 inch production liner is:
  - Cement should tie-back 200 feet into the previous casing. Operator shall provide method of verification.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

#### C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 13-3/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) 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 3170.
- 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.

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

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3170.

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - **Eddy County**

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

**BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV** (575) 361-2822

✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - 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.
- 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.

JS 11/21/2024



#### **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



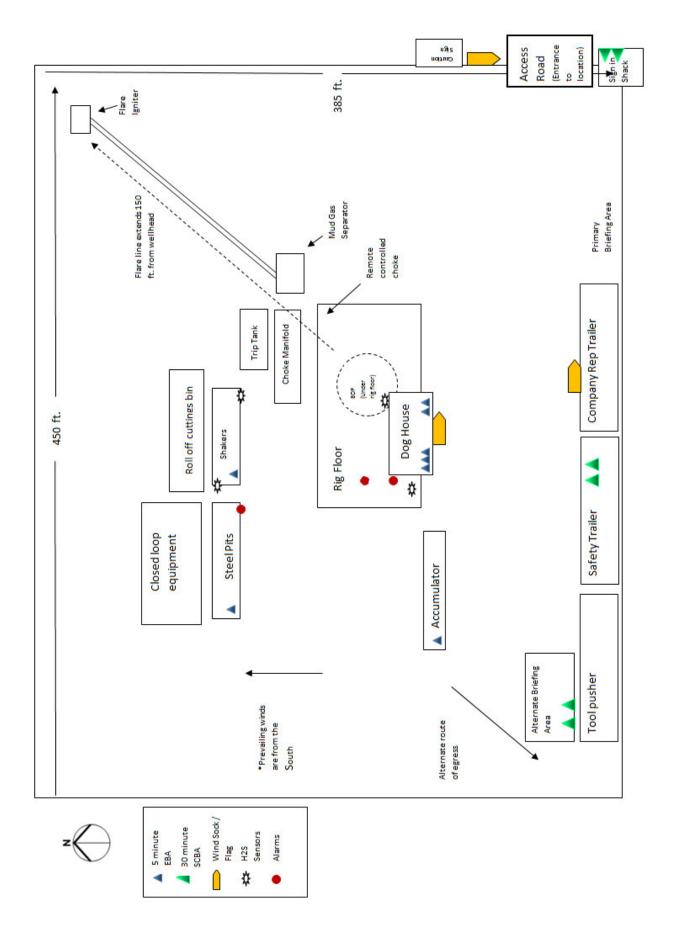


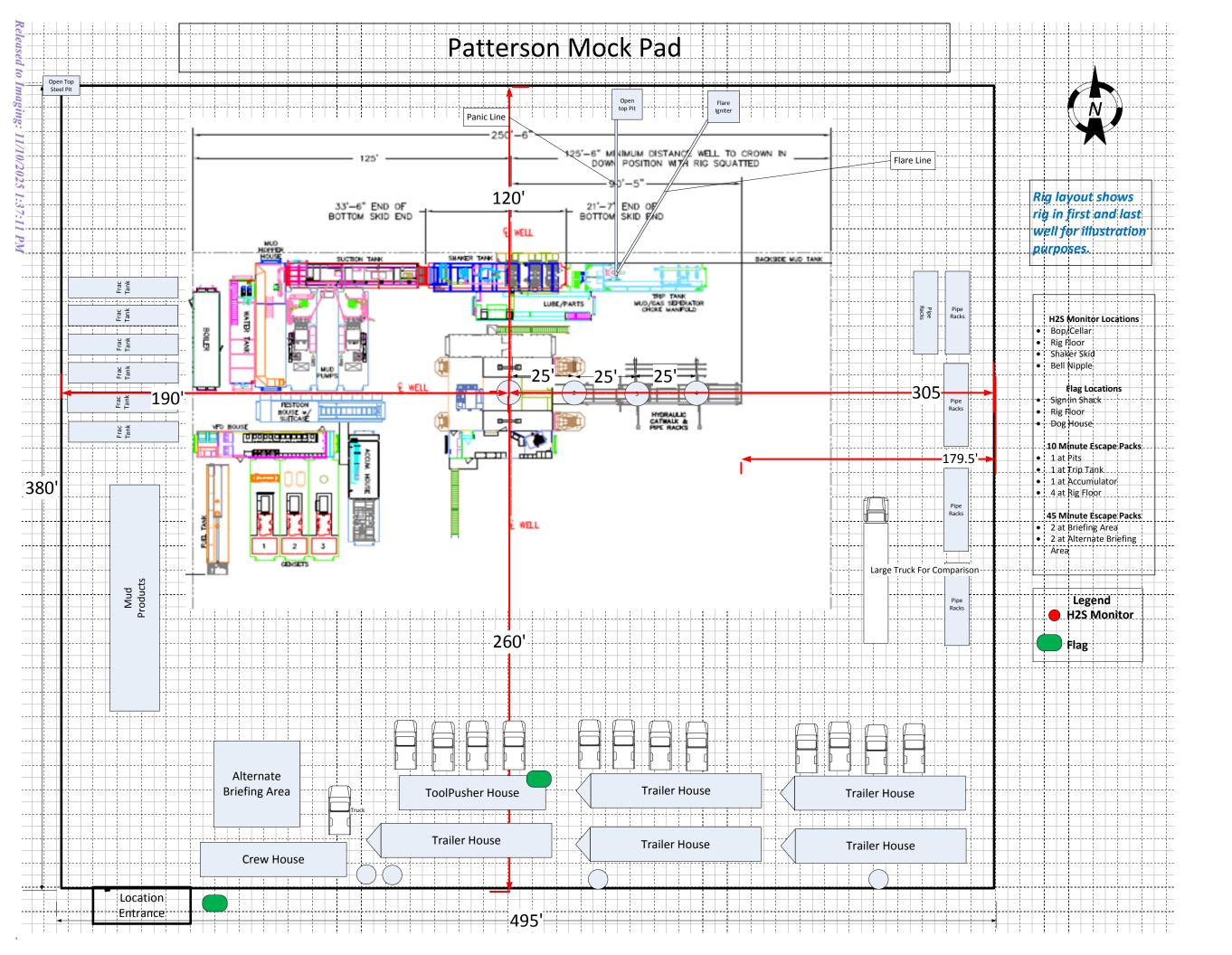
# **Chevron MCBU D&C Emergency Notifications**

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

### Drilling Plan Data Report 08/11/2025

BUREAU OF LAND MANAGEMENT

Well Name: DL 4 33 FEDERAL COM

Submission Date: 10/10/2024

Operator Name: CHEVRON USA INCORPORATED

Well Number: 603H

Well Type: OIL WELL

**APD ID:** 10400101442

Well Work Type: Drill

Highlighted data reflects the most recent changes

**Show Final Text** 

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

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
16190673	RUSTLER	3641	1376	1381	SANDSTONE	NONE	N
16190674	SALADO	1871	1770	1784	ANHYDRITE, SALT	NONE	N
16190675	CASTILE	254	3387	3437	ANHYDRITE, SALT	NONE	N
16190676	LAMAR	-1228	4869	4952	LIMESTONE, SHALE	NONE	N
16190677	BELL CANYON	-1377	5018	5104	LIMESTONE, SANDSTONE	NONE	N
16190678	CHERRY CANYON	-2154	5795	5889	SANDSTONE, SILTSTONE	NONE	N
16190679	BRUSHY CANYON	-3428	7069	7163	LIMESTONE, SANDSTONE	NONE	N
16190680	AVALON SAND	-5347	8988	9082	SHALE, SILTSTONE	NONE	N
16190681	BONE SPRING 1ST	-6348	9989	10083	SHALE	NONE	N
16190682	BONE SPRING 2ND	-6959	10600	11196	SANDSTONE, SHALE	NONE	N
16190683	BONE SPRING 3RD	-8073	11714	11814	SHALE	NONE	N
16190684	WOLFCAMP	-8392	12033	12219	SHALE	NATURAL GAS, OIL, USEABLE WATER	Y

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

Pressure Rating (PSI): 10M Rating Depth: 12175

Equipment: "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

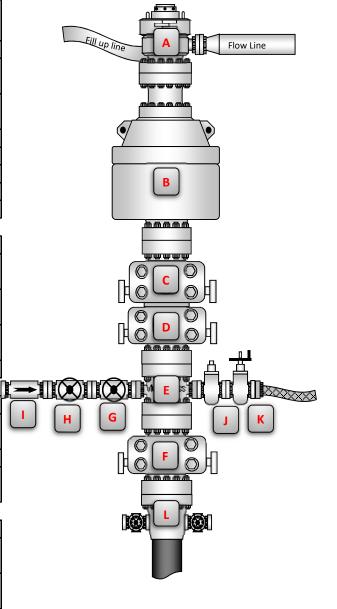
#### **BLOWOUT PREVENTER SCHEMATIC**

Opera	Operation: Intermediate/Production Hole Section								
	Minimum S	ystem	10 000:						
o	peration p	10,000 psi							
		<b>BOP Stack</b>	<u> </u>						
Dout	Size	Pressure	Description						
Part	Size	Rating	Description						
Α	13-5/8"	N/A	Rotating Head/Bell						
A	15-5/6	IN/A	nipple						
В	13-5/8"	10,000	Annular						
С	13-5/8"	10,000	Blind Ram						
D	13-5/8"	10,000	Pipe Ram						
E	13-5/8"	10,000	Mud Cross						
F	13-5/8"	10,000	Pipe Ram						

<u>Kill Line</u>			
Part	Size	Pressure	Description
		Rating	
G	2"	10,000	Inside Kill Line Valve
			(gate valve)
Н	2"	10,000	Outside Kill Line Valve
			(gate valve)
I	2"	10,000	Kill Line Check valve

Choke line			
Part	Size	Pressure	Doscription
Part	3126	Rating	Description
J	3"	10,000	HCR (gate valve)
К	3"	10,000	Manual HCR (gate
N	3	10,000	valve)

<u>Wellhead</u>			
Part	Size	Pressure Rating	Description
L	13-5/8"	10,000	FMC 5M/10M wellhead



#### Installation Checklist

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

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

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

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

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

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

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

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

General Information Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 505349

#### **ACKNOWLEDGMENTS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	505349
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### ACKNOWLEDGMENTS

I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Action 505349

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	505349
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
aprentice	Cement is required to circulate on both surface and intermediate1 strings of casing.	9/11/2025
aprentice	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	9/11/2025
jeffrey.harrison	Administrative order required for non-standard location prior to production.	11/10/2025
jeffrey.harrison	This well is within the Capitan Reef aquifer zone. The first intermediate casing string shall be set and cemented back to surface immediately below the Capitan Reef.	11/10/2025
jeffrey.harrison	NSP required if not included in an existing order or not an infill to an appropriate defining well in the same pool and spacing unit.	11/10/2025
jeffrey.harrison	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.	11/10/2025
jeffrey.harrison	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.	11/10/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	11/10/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	11/10/2025