\*(Instructions on page 2)

Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT 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 332807 2. Name of Operator 9. API Well No. [4323] 30-025-50087 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory [97955] 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 At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (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, applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 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 Title Approved by (Signature) Date Name (Printed/Typed) Title 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. NGMP Rec 04/20/2022 APPROVED WITH CONDITIONS SL

Released to Imaging: 5/2/2022 11:04:10 AM Approval Date: 04/13/2022

(Continued on page 2)

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

District IV

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

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

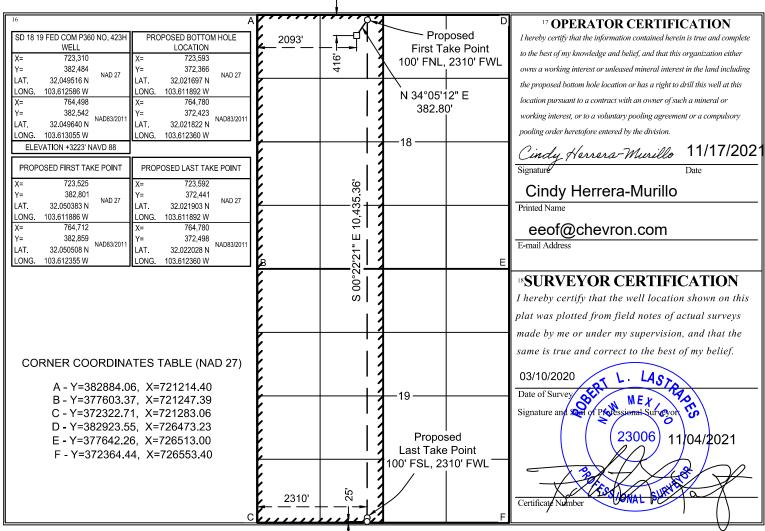
☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-50087		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name		
		97955	SPRING		
<sup>4</sup> Property Code		<sup>5</sup> Property Name		6 Well Number	
332807		SD 18 19	FED COM P360	423H	
<sup>7</sup> OGRID No.		<sup>8</sup> Operator Name <sup>9</sup> Elevation			
4323		CHEVRON U.S.A. INC. 3223'			

				10 Sur	tace Locat	ıon			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	18	26 SOUTH	33 EAST, N.M.P.M.		416'	NORTH	2093'	WEST	LEA
	<sup>11</sup> Bottom Hole Location If Different From Surface								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	19	26 SOUTH	33 EAST, N.M.P.M.		25'	SOUTH	2310'	WEST	LEA
<sup>12</sup> Dedicated Acres <sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code	<sup>5</sup> Order No.						
640	] ]	NFILL							

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



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

Submit Electronically Via E-permitting

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

### NATURAL GAS MANAGEMENT PLAN

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

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

I. Operator: <u>Che</u>	vron USA_		OGRID: _	4323		Date: _4 <u>/3</u> /_22
II. Type: ⊠ Original □ A	Amendment	due to □ 19.15.2	7.9.D(6)(a) NMAC	C □ 19.15.27.9.D	(6)(b) NMAC □	Other.
If Other, please describe: _						
<b>III. Well(s):</b> Provide the for the recompleted from a sing					wells proposed to	be drilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
SD 18 19 Fed Com P360 421H	Pending	UL:C, SEC 18, T26S- R33E	416' FNL, 2043' FWL	1753 BBL/D	4973 MCF/D	2781 BBL/D
SD 18 19 Fed Com P360 422H	Pending	UL:C, SEC 18, T26S- R33E	416' FNL, 2068' FWL	1753 BBL/D	4973 MCF/D	2781 BBL/D
SD 18 19 Fed Com P360 423H 3	Pending <b>0-025-5008</b>	UL:C, SEC 18, 7T26S- R33E	416' FNL, 2093' FWL	1753 BBL/D	4973 MCF/D	2781 BBL/D
IV. Central Delivery Poin	t Name: _	Satellite #	±18_	[Se	ee 19.15.27.9(D)	(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
SD 18 19 Fed Com P360 421H	Pending	12/23/2023	N/A	N/A	N/A	N/A
SD 18 19 Fed Com P360 422H	Pending	1/10/2024	N/A	N/A	N/A	N/A
SD 18 19 Fed Com P360 423H <b>30-0</b>	Pending <b>25-50087</b>	1/28/2024	N/A	N/A	N/A	N/A

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

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

Page 1 of 4

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

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

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

### IX. Anticipated Natural Gas Production:

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

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

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

XI. Map.   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 $\square$ wi	ill □ will not have	capacity to gather	100% of the anticipated	l natural gas
production volume from the well	prior to the date of first prod	duction.			

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

_								
$\Box$	A 44 1 /	<b>^</b>	, 1 ,		1 4	•	4 41 .	ised line pressure
	ATTACH	Inerator	e nian ta	า เกลเกลเลย	nrodiiction	in rechange	TO THE INCRES	icea line nrecciire

XIV. Co	onfidentiality: $\square$ Operator ass	erts confidentiality	pursuant to	Section 71-2	2-8 NMSA	1978 for the	e information	provided in
Section	2 as provided in Paragraph (2) o	f Subsection D of 19	9.15.27.9 NM	IAC, and att	taches a full	description	of the specific	information
for whic	h confidentiality is asserted and	the basis for such as	ssertion.					

# **Section 3 - Certifications**

#### Effective May 25, 2021

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

one hundred percer	t of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of into account the cur	the able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking rent and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. this box, Operator will select one of the following:
<b>Well Shut-In.</b> □ Op D of 19.15.27.9 NM	perator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection IAC; or
	<b>ng Plan.</b> □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential uses for the natural gas until a natural gas gathering system is available, including:
(8	
(t	, 1
(d	, 1
(d	
(6	
(f	
(8	
(l	
(i	other alternative beneficial uses approved by the division.

## **Section 4 - Notices**

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

#### 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: SD 18 19 FED COM P360 Well Number: 423H

manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party.

**Testing Procedure:** 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 liner hole sections, unless the BOP connection was not broken prior to drilling that hole section (example: drilling straight from production into production liner hole section). A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized.

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

BLM\_Choke\_Hose\_Test\_Specs\_and\_Pressure\_Test\_Continental\_20210317115529.pdf
BLM\_5M\_Choke\_Manifold\_Diagram\_20211117142827.pdf

NM\_Slim\_Hole\_Wellhead\_6650\_psi\_UH\_S\_20211117142855.pdf

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

BLM\_5M\_Annular\_10M\_Rams\_Stackup\_and\_Test\_Plan\_20210317115609.pdf Sundry\_Break\_Testing\_and\_WOC\_SD\_P360\_20211117142920.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	16	13.625	NEW	API	N	0	720	0	720	3227	2507	720	J-55	54.5	ST&C	2.13	1.43	DRY	4.07	DRY	4.07
	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4718	0	4698	3202	-1471	4718	L-80	_	OTHER - BTC	1.24	1.64	DRY	2.78	DRY	2.78
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	10255	0	10275	3202	-7048	10255	OTH ER		OTHER - BLUE	1.63	1.15	DRY	2.39	DRY	2.39
	PRODUCTI ON	6.18	4.5	NEW	API	N	9955	21088	9955	10826	-6728	-7599	11133	P- 110		OTHER - W- 521	1.39	1.1	DRY	1.32	DRY	1.32

#### **Casing Attachments**

**Operator Name: CHEVRON USA INCORPORATED** Well Name: SD 18 19 FED COM P360 Well Number: 423H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): 13.375\_54.5ppf\_J55\_STC\_20210317120619.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): 9.625\_40.0lb\_L80IC\_BTC\_20210317120907.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

7\_29ppf\_TN110SS\_TSH\_Blue\_20210317121147.pdf

Well Name: SD 18 19 FED COM P360 Well Number: 423H

### **Casing Attachments**

Casing ID: 4

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

## Casing Design Assumptions and Worksheet(s):

5\_18ppf\_P110\_Flush\_W513\_20210317121345.pdf

 $4.5\_11.6ppf\_P110\_TSH\_W521\_20210317121358.pdf$ 

## **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	720	336	1.34	14.8	451	100	CLASS C	EXTENDER, ANTIFOAM,RETARDE R

INTERMEDIATE	Lead		0	3718	1164	2	13.2	2329	100	CLASS C	EXTENDER, ANTIFOAM, RETARDER,VISCOSIFI ER
INTERMEDIATE	Tail		3718	4718	336	1.4	14.8	470	50	CLASS C	EXTENDER, ANTIFORM, RETARDER,VISCOSIFI ER
PRODUCTION	Lead	4	4218	9255	568	2	13.2	1136	50	CLASS C	EXTENDER, ANTIFOAM, RETARDER,VISCOSIFI ER
PRODUCTION	Tail	9	9255	1025 5	134	1.4	14.8	188	50	CLASS C	EXTENDER, ANTIFOAM, RETARDER,VISCOSIFI ER
PRODUCTION	Lead	(	9955	2108 8	712	1.84	13.2	1311	25	Class C	EXTENDER, ANTIFOAM, RETARDER,

Well Name: SD 18 19 FED COM P360 Well Number: 423H

String Type

Stage Tool
Depth
Top MD

Cu Ft
Excess%

Excess%

Additives

ISCOSIFIER

# **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: A closed system will be used consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical portatoilet and then hauled to an approved sanitary landfill. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating of E&P waste will follow EPA regulations and accompanying manifests. A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

**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.

# **Circulating Medium Table**

Ton Denth		Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	HA	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
72	0 4718	OTHER : BRINE	8.3	8.9							Viscosity 26-36 Filtration15-25
0	720	SPUD MUD	8.3	8.9							Viscosity 26-36 Filtration15-25
47′	8 1025 5	OTHER : WBM/BRINE	8.7	10.6							Viscosity 26-36 Filtration 15-25

Well Name: SD 18 19 FED COM P360 Well Number: 423H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1025 5	2108 8	OTHER : OBM	8.7	10.5							Viscosity 50-70 Filtration 5-10

# **Section 6 - Test, Logging, Coring**

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

The anticipated type and amount of testing, logging, and coring are as follows:

a. Drill stem tests are not planned.

b. The logging program will be as follows:

TYPE Logs Interval Timing

Mudlogs 2 man mudlog Surface casing shoe through prod hole TD While drilling or

circulating

LWD MWD Gamma Int. and Prod. Hole While Drilling

- c. Conventional whole core samples are not planned.
- d. A directional survey will be run.

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

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

Coring operation description for the well:

No coring

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

Anticipated Bottom Hole Pressure: 5398 Anticipated Surface Pressure: 3016

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geoharzards description:

**Contingency Plans geohazards attachment:** 

Hydrogen Sulfide drilling operations plan required? YES

Well Name: SD 18 19 FED COM P360 Well Number: 423H

### Hydrogen sulfide drilling operations plan:

SD\_18\_19\_Fed\_Com\_\_H2S\_Contingency\_Plan\_20211117145642.pdf

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

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

SD1819FedComP360421H\_R0\_20210318145541.pdf

#### Other proposed operations facets description:

Chevron formally requests the variances below:

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

### Other proposed operations facets attachment:

 $SD\_18\_19\_FED\_COM\_P360\_Gas\_Capture\_Plan\_20210317122926.pdf$ 

SD\_P360\_3\_well\_20210317123025.pdf

Surface\_Rig\_\_\_Request\_20210317122954.pdf

SD1819FedComP360423H\_R0\_20211117143806.pdf

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

Sundry\_Break\_Testing\_and\_WOC\_SD\_P360\_20210317123339.pdf SD\_18\_19\_Fed\_Com\_P360\_423H\_Revised\_20211117144140.pdf

#### Schlumberger

### SD 18 19 Fed Com P360 423H R0 mdv 04Mar21 Proposal Geodetic Report



(Def Plan)

VSEC

Report Date: Client: Field: Structure / Slot: Well: Borehole: UWI / API#: Survey Name: Survey Date:

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

March 05, 2021 - 12:06 PM Chevron NM Lea County (NAD 27)

Incl

Chevron SD 18 19 Fed Com P360 Pad / 423H SD 18 19 Fed Com P360 423H SD 18 19 Fed Com P360 423H

Unknown / Unknown SD 18 19 Fed Com P360 423H R0 mdv 04Mar21 March 04, 2021

natron U4, 2U21 101.502 ° / 10911.672 ft / 6.332 / 1.005 NAD27 New Mexico State Plane, Eastern Zone, US Feet N 32° 2' 58.25215", W 103° 36' 45.31289" N 382484.000 ftUS, E 723310.000 ftUS 0.3825 ° 0.99996621

Azim Grid

TVD

2.10.825.0

MD

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

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

NS

Minimum Curvature / Lubinski 179.630 ° (Grid North) 0.000 ft, 0.000 ft RKB = 30ft (TBD) 3253.000 ft above MSL 3223.000 ft above MSL 6.461° 998.4360mgn (9.80665 Based) GARM 47523.620 nT 59.604 ° March 04, 2021 HDGM 2020 Grid North 0.3825 °

DLS

Northing

Easting

Latitude

Longitude

6.0786 Well Head

EW

Comments	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting Latitude	Longitude
Surface	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(ftUS)	(ftUS) (N/S ° ' ")	(E/W°'")
Marker MudLine	0.00 30.00	0.00 0.00	0.00 30.34	0.00 30.00	0.00 0.00	0.00 0.00	0.00 0.00	N/A 0.00	382484.00 382484.00	723310.00 N 32 2 58.25 W 723310.00 N 32 2 58.25 W	
Marker MudLine											
	100.00 200.00	0.00	30.34 30.34	100.00 200.00	0.00	0.00	0.00	0.00	382484.00 382484.00	723310.00 N 32 2 58.25 W 723310.00 N 32 2 58.25 W	
	300.00	0.00	30.34	300.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
	400.00	0.00	30.34	400.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
	500.00	0.00	30.34	500.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
	600.00	0.00	30.34	600.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
	700.00	0.00	30.34	700.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
Rustler (RSLR)	746.00	0.00	30.34	746.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
13 3/8" Casing	800.00	0.00	30.34	800.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
Build 1.5°/100ft	900.00	0.00	30.34	900.00	0.00	0.00	0.00	0.00	382484.00	723310.00 N 32 2 58.25 W	
Build 1.5 / 100k	1000.00	1.50	30.34	999.99	-1.13	1.13	0.66	1.50	382485.13	723310.66 N 32 2 58.26 W	
	1100.00	3.00	30.34	1099.91	-4.50	4.52	2.64	1.50	382488.52	723312.64 N 32 2 58.30 W	
	1200.00	4.50	30.34	1199.69	-10.12	10.16	5.95	1.50	382494.16	723315.95 N 32 2 58.35 W	
Hold	1266.75	5.50	30.34	1266.19	-15.13	15.18	8.89	1.50	382499.18	723318.89 N 32 2 58.40 W	
	1300.00	5.50	30.34	1299.28	-17.87	17.94	10.50	0.00	382501.93	723320.50 N 32 2 58.43 W	/ 103 36 45.19
	1400.00	5.50	30.34	1398.82	-26.11	26.21	15.34	0.00	382510.21	723325.34 N 32 2 58.51 W	
	1500.00	5.50	30.34	1498.36	-34.35	34.48	20.18	0.00	382518.48	723330.18 N 32 2 58.59 W	
	1600.00	5.50	30.34	1597.90	-42.59	42.76	25.02	0.00	382526.76	723335.02 N 32 2 58.67 W	/ 103 36 45.02
	1700.00	5.50	30.34	1697.44	-50.84	51.03	29.86	0.00	382535.03	723339.86 N 32 2 58.76 W	
	1800.00	5.50	30.34	1796.98	-59.08	59.31	34.71	0.00	382543.30	723344.71 N 32 2 58.84 W	/ 103 36 44.91
	1900.00	5.50	30.34	1896.52	-67.32	67.58	39.55	0.00	382551.58	723349.55 N 32 2 58.92 W	/ 103 36 44.85
	2000.00	5.50	30.34	1996.06	-75.57	75.85	44.39	0.00	382559.85	723354.39 N 32 2 59.00 W	
	2100.00	5.50	30.34	2095.60	-83.81	84.13	49.23	0.00	382568.12	723359.23 N 32 2 59.08 W	/ 103 36 44.73
	2200.00	5.50	30.34	2195.14	-92.05	92.40	54.07	0.00	382576.40	723364.07 N 32 2 59.16 W	
	2300.00	5.50	30.34	2294.68	-100.29	100.68	58.92	0.00	382584.67	723368.91 N 32 2 59.24 W	/ 103 36 44.62
	2400.00	5.50	30.34	2394.22	-108.54	108.95	63.76	0.00	382592.95	723373.76 N 32 2 59.33 W	
	2500.00	5.50	30.34	2493.76	-116.78	117.22	68.60	0.00	382601.22	723378.60 N 32 2 59.41 W	/ 103 36 44.51
	2600.00	5.50	30.34	2593.30	-125.02	125.50	73.44	0.00	382609.49	723383.44 N 32 2 59.49 W	/ 103 36 44.45
	2700.00	5.50	30.34	2692.84	-133.26	133.77	78.29	0.00	382617.77	723388.28 N 32 2 59.57 W	/ 103 36 44.39
	2800.00	5.50	30.34	2792.37	-141.51	142.05	83.13	0.00	382626.04	723393.12 N 32 2 59.65 W	/ 103 36 44.34
	2900.00	5.50	30.34	2891.91	-149.75	150.32	87.97	0.00	382634.31	723397.97 N 32 2 59.73 W	
Castile (CSTL)	2927.21	5.50	30.34	2919.00	-151.99	152.57	89.29	0.00	382636.57	723399.28 N 32 2 59.76 W	103 36 44.26
	3000.00	5.50	30.34	2991.45	-157.99	158.59	92.81	0.00	382642.59	723402.81 N 32 2 59.82 W	/ 103 36 44.22
	3100.00	5.50	30.34	3090.99	-166.23	166.87	97.65	0.00	382650.86	723407.65 N 32 2 59.90 W	/ 103 36 44.17
	3200.00	5.50	30.34	3190.53	-174.48	175.14	102.50	0.00	382659.14	723412.49 N 32 2 59.98 W	/ 103 36 44.11
	3300.00	5.50	30.34	3290.07	-182.72	183.42	107.34	0.00	382667.41	723417.33 N 32 3 0.06 W	/ 103 36 44.05
	3400.00	5.50	30.34	3389.61	-190.96	191.69	112.18	0.00	382675.68	723422.18 N 32 3 0.14 W	/ 103 36 43.99
	3500.00	5.50	30.34	3489.15	-199.20	199.96	117.02	0.00	382683.96	723427.02 N 32 3 0.22 W	
	3600.00	5.50	30.34	3588.69	-207.45	208.24	121.86	0.00	382692.23	723431.86 N 32 3 0.30 W	/ 103 36 43.88
	3700.00	5.50	30.34	3688.23	-215.69	216.51	126.71	0.00	382700.50	723436.70 N 32 3 0.39 W	/ 103 36 43.82
	3800.00	5.50	30.34	3787.77	-223.93	224.79	131.55	0.00	382708.78	723441.54 N 32 3 0.47 W	
	3900.00	5.50	30.34	3887.31	-232.17	233.06	136.39	0.00	382717.05	723446.39 N 32 3 0.55 W	
	4000.00	5.50	30.34	3986.85	-240.42	241.33	141.23	0.00	382725.33	723451.23 N 32 3 0.63 W	/ 103 36 43.65
	4100.00	5.50	30.34	4086.39	-248.66	249.61	146.07	0.00	382733.60	723456.07 N 32 3 0.71 W	
	4200.00	5.50	30.34	4185.93	-256.90	257.88	150.92	0.00	382741.87	723460.91 N 32 3 0.79 W	
	4300.00	5.50	30.34	4285.47	-265.14	266.16	155.76	0.00	382750.15	723465.75 N 32 3 0.88 W	
	4400.00	5.50	30.34	4385.01	-273.39	274.43	160.60	0.00	382758.42	723470.59 N 32 3 0.96 W	
	4500.00	5.50	30.34	4484.54	-281.63	282.70	165.44	0.00	382766.69	723475.44 N 32 3 1.04 W	
	4600.00	5.50	30.34	4584.08	-289.87	290.98	170.28	0.00	382774.97	723480.28 N 32 3 1.12 W	
	4700.00	5.50	30.34	4683.62	-298.11	299.25	175.13	0.00	382783.24		/ 103 36 43.26
9 5/8" Casing	4716.45	5.50	30.34	4700.00	-299.47	300.61	175.92	0.00	382784.60	723485.92 N 32 3 1.22 W	
Lamar (LMAR)	4740.56	5.50	30.34	4724.00	-301.46	302.61	177.09	0.00	382786.60	723487.08 N 32 3 1.23 W	
Bell Canyon (BLCN)	4775.73	5.50	30.34	4759.00	-304.36	305.52	178.79	0.00	382789.51	723488.79 N 32 3 1.26 W	
	4800.00	5.50	30.34	4783.16	-306.36	307.53	179.97	0.00	382791.51	723489.96 N 32 3 1.28 W	
	4900.00	5.50	30.34	4882.70	-314.60	315.80	184.81	0.00	382799.79	723494.80 N 32 3 1.36 W	
	5000.00	5.50	30.34	4982.24	-322.84	324.07	189.65	0.00	382808.06	723499.65 N 32 3 1.45 W	
	5100.00	5.50	30.34	5081.78	-331.09	332.35	194.49	0.00	382816.34	723504.49 N 32 3 1.53 W	
Natural Drop .75°/100ft	5156.61	5.50	30.34	5138.13	-335.75	337.03	197.24	0.00	382821.02	723507.23 N 32 3 1.57 W	
	5200.00	5.18	30.34	5181.33	-339.22	340.52	199.27	0.75	382824.50	723509.27 N 32 3 1.61 W	
	5300.00	4.43	30.34	5280.98	-346.42	347.74	203.50	0.75	382831.73		/ 103 36 42.92
	5400.00	3.68	30.34	5380.73	-352.49	353.84	207.07	0.75	382837.82	723517.06 N 32 3 1.74 W	
	5500.00	2.93	30.34	5480.56	-357.44	358.81	209.98	0.75	382842.79	723519.97 N 32 3 1.79 W	
	5600.00	2.18	30.34	5580.46	-361.27	362.65	212.23	0.75	382846.63	723522.22 N 32 3 1.83 W	
	5700.00	1.43	30.34	5680.41	-363.97	365.36	213.81	0.75	382849.35	723523.81 N 32 3 1.85 W	
	5800.00	0.68	30.34	5780.40	-365.55	366.94	214.74	0.75	382850.93	723524.73 N 32 3 1.87 W	
Cherry Canyon (CRCN)	5839.61	0.38	30.34	5820.00	-365.86	367.26	214.92	0.75	382851.24	723524.92 N 32 3 1.87 W	
Hold Vertical	5890.11	0.00	30.34	5870.50	-366.00	367.40	215.01	0.75	382851.39	723525.00 N 32 3 1.87 W	
	5900.00	0.00	30.34	5880.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6000.00	0.00	30.34	5980.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6100.00	0.00	30.34	6080.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	/ 103 36 42.79
	6200.00	0.00	30.34	6180.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6300.00	0.00	30.34	6280.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	/ 103 36 42.79
	6400.00	0.00	30.34	6380.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6500.00	0.00	30.34	6480.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	/ 103 36 42.79
	6600.00	0.00	30.34	6580.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	/ 103 36 42.79
	6700.00	0.00	30.34	6680.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6800.00	0.00	30.34	6780.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
		0.00	30.34	6880.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W	
	6900.00	0.00	30.34			307.40	213.01				100 00 42.79

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting Latitude Longitude (ftUS) (N/S ° ' ') (E/W ° ' '')
	7000.00	0.00	30.34	6980.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	7100.00 7200.00	0.00	30.34 30.34	7080.39 7180.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	7300.00	0.00	30.34	7280.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
Brushy Canyon (BCN)	7388.61 7400.00	0.00 0.00	30.34 30.34	7369.00 7380.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	7500.00	0.00	30.34	7480.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	7600.00	0.00	30.34	7580.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	7700.00 7800.00	0.00	30.34 30.34	7680.39 7780.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	7900.00	0.00	30.34	7880.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	8000.00 8100.00	0.00 0.00	30.34 30.34	7980.39 8080.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	8200.00	0.00	30.34	8180.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	8300.00 8400.00	0.00	30.34 30.34	8280.39 8380.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	8500.00	0.00	30.34	8480.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	8600.00	0.00	30.34	8580.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	8700.00 8800.00	0.00	30.34 30.34	8680.39 8780.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	8900.00	0.00	30.34	8880.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
Bone Spring (BSGL)	8951.61 9000.00	0.00 0.00	30.34 30.34	8932.00 8980.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
Upper Avalon (AVN)	9017.61	0.00	30.34	8998.00	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	9100.00	0.00	30.34	9080.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	9200.00 9300.00	0.00	30.34 30.34	9180.39 9280.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	9400.00	0.00	30.34	9380.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	9500.00 9600.00	0.00 0.00	30.34 30.34	9480.39 9580.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	9700.00	0.00	30.34	9680.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
Ton Pone Spring 1 (EBS)	9800.00	0.00	30.34	9780.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
Top Bone Spring 1 (FBS)	9866.61 9900.00	0.00 0.00	30.34 30.34	9847.00 9880.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
7" Casing	9919.61	0.00	30.34	9900.00	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
	10000.00 10100.00	0.00 0.00	30.34 30.34	9980.39 10080.39	-366.00 -366.00	367.40 367.40	215.01 215.01	0.00 0.00	382851.39 382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	10200.00	0.00	30.34	10180.39	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79
KOP, Build 10°/100ft	10275.11	0.00 2.49	30.34 179.63	10255.50	-366.00	367.40	215.01	0.00	382851.39	723525.00 N 32 3 1.87 W 103 36 42.79 723525.00 N 32 3 1.87 W 103 36 42.79
	10300.00 10400.00	12.49	179.63	10280.39 10379.41	-365.46 -352.45	366.86 353.84	215.01 215.09	10.00 10.00	382850.85 382837.83	723525.00 N 32 3 1.87 W 103 36 42.79 723525.09 N 32 3 1.74 W 103 36 42.79
	10500.00	22.49	179.63	10474.66	-322.43	323.83	215.29	10.00	382807.82	723525.28 N 32 3 1.44 W 103 36 42.79
Top Bone Spring 2 (SBU) FTP Cross	10515.61 10517.23	24.05 24.21	179.63 179.63	10489.00 10490.48	-316.27 -315.60	317.66 317.00	215.33 215.33	10.00 10.00	382801.65 382800.99	723525.32 N 32 3 1.38 W 103 36 42.79 723525.32 N 32 3 1.37 W 103 36 42.79
6.666	10600.00	32.49	179.63	10563.26	-276.33	277.73	215.58	10.00	382761.72	723525.57 N 32 3 0.99 W 103 36 42.79
	10700.00	42.49 52.49	179.63	10642.51	-215.55 -141.92	216.95 143.33	215.97 216.44	10.00	382700.94 382627.32	723525.96 N 32 3 0.38 W 103 36 42.79 723526.43 N 32 2 59.66 W 103 36 42.79
	10800.00 10900.00	62.49	179.63 179.63	10709.99 10763.67	-57.70	59.10	216.98	10.00 10.00	382543.10	723526.43 N 32 2 59.66 W 103 36 42.79 723526.97 N 32 2 58.82 W 103 36 42.79
	11000.00	72.49	179.63	10801.91	34.56	-33.16	217.57	10.00	382450.84	723527.56 N 32 2 57.91 W 103 36 42.79
Landing Point	11100.00 11170.05	82.49 89.49	179.63 179.63	10823.54 10828.44	132.06 201.90	-130.66 -200.49	218.19 218.64	10.00 10.00	382353.35 382283.52	723528.18 N 32 2 56.94 W 103 36 42.79 723528.63 N 32 2 56.25 W 103 36 42.79
<del></del>	11200.00	89.49	179.63	10828.70	231.85	-230.44	218.83	0.00	382253.57	723528.82 N 32 2 55.96 W 103 36 42.79
	11300.00 11400.00	89.49 89.49	179.63 179.63	10829.58 10830.47	331.84 431.84	-330.43 -430.43	219.47 220.11	0.00 0.00	382153.58 382053.59	723529.46 N 32 2 54.97 W 103 36 42.79 723530.10 N 32 2 53.98 W 103 36 42.79
	11500.00	89.49	179.63	10831.35	531.84	-530.42	220.75	0.00	381953.60	723530.74 N 32 2 52.99 W 103 36 42.79
	11600.00	89.49	179.63	10832.23	631.83	-630.41	221.39	0.00	381853.61	723531.38 N 32 2 52.00 W 103 36 42.79
	11700.00 11800.00	89.49 89.49	179.63 179.63	10833.11 10834.00	731.83 831.82	-730.41 -830.40	222.03 222.66	0.00 0.00	381753.62 381653.63	723532.02 N 32 2 51.01 W 103 36 42.79 723532.66 N 32 2 50.02 W 103 36 42.79
	11900.00	89.49	179.63	10834.88	931.82	-930.40	223.30	0.00	381553.64	723533.30 N 32 2 49.03 W 103 36 42.79
	12000.00 12100.00	89.49 89.49	179.63 179.63	10835.76 10836.64	1031.82 1131.81	-1030.39 -1130.39	223.94 224.58	0.00 0.00	381453.65 381353.66	723533.93 N 32 2 48.04 W 103 36 42.79 723534.57 N 32 2 47.05 W 103 36 42.79
	12200.00	89.49	179.63	10837.53	1231.81	-1230.38	225.22	0.00	381253.66	723535.21 N 32 2 46.06 W 103 36 42.79
Cooned Bono Carina Torque	12300.00 12366.83	89.49 89.49	179.63 179.63	10838.41 10839.00	1331.80 1398.63	-1330.37 -1397.20	225.86 226.29	0.00 0.00	381153.67 381086.85	723535.85 N 32 2 45.07 W 103 36 42.79 723536.28 N 32 2 44.41 W 103 36 42.79
Second Bone Spring Target	12400.00	89.49	179.63	10839.29	1431.80	-1430.37	226.50	0.00	381053.68	723536.28 N 32 2 44.41 W 103 36 42.79 723536.49 N 32 2 44.08 W 103 36 42.79
	12500.00	89.49	179.63	10840.18	1531.80	-1530.36	227.14	0.00	380953.69	723537.13 N 32 2 43.09 W 103 36 42.79
	12600.00 12700.00	89.49 89.49	179.63 179.63	10841.06 10841.94	1631.79 1731.79	-1630.36 -1730.35	227.78 228.42	0.00 0.00	380853.70 380753.71	723537.77 N 32 2 42.10 W 103 36 42.79 723538.41 N 32 2 41.11 W 103 36 42.79
	12800.00	89.49	179.63	10842.82	1831.78	-1830.34	229.06	0.00	380653.72	723539.05 N 32 2 40.12 W 103 36 42.79
	12900.00 13000.00	89.49 89.49	179.63 179.63	10843.71 10844.59	1931.78 2031.78	-1930.34 -2030.33	229.70 230.34	0.00 0.00	380553.73 380453.74	723539.69 N 32 2 39.14 W 103 36 42.79 723540.33 N 32 2 38.15 W 103 36 42.79
	13100.00	89.49	179.63	10845.47	2131.77	-2130.33	230.97	0.00	380353.75	723540.97 N 32 2 37.16 W 103 36 42.79
IEDA Dulla 08/4008	13200.00	89.49	179.63	10846.35	2231.77	-2230.32	231.61	0.00	380253.76	723541.61 N 32 2 36.17 W 103 36 42.80
IFP1, Build 2°/100ft Hold	13261.77 13270.06	89.49 89.66	179.63 179.63	10846.90 10846.96	2293.53 2301.83	-2292.08 -2300.38	232.01 232.06	0.00 2.00	380192.00 380183.70	723542.00 N 32 2 35.56 W 103 36 42.80 723542.05 N 32 2 35.47 W 103 36 42.80
	13300.00	89.66	179.63	10847.14	2331.77	-2330.31	232.26	0.00	380153.77	723542.25 N 32 2 35.18 W 103 36 42.80
	13400.00 13500.00	89.66 89.66	179.63 179.63	10847.73 10848.33	2431.76 2531.76	-2430.31 -2530.31	232.91 233.56	0.00 0.00	380053.78 379953.78	723542.90 N 32 2 34.19 W 103 36 42.80 723543.55 N 32 2 33.20 W 103 36 42.80
	13600.00	89.66	179.63	10848.92	2631.76	-2630.30	234.21	0.00	379853.79	723544.20 N 32 2 32.21 W 103 36 42.80
	13700.00 13800.00	89.66 89.66	179.63 179.63	10849.51 10850.11	2731.76 2831.76	-2730.30 -2830.30	234.86 235.52	0.00	379753.80 379653.81	723544.86 N 32 2 31.22 W 103 36 42.80 723545.51 N 32 2 30.23 W 103 36 42.80
	13900.00	89.66	179.63	10850.70	2931.76	-2930.29	236.17	0.00	379553.81	723546.16 N 32 2 29.24 W 103 36 42.80
	14000.00	89.66	179.63	10851.29	3031.75	-3030.29	236.82	0.00	379453.82	723546.81 N 32 2 28.25 W 103 36 42.80
	14100.00 14200.00	89.66 89.66	179.63 179.63	10851.89 10852.48	3131.75 3231.75	-3130.28 -3230.28	237.47 238.12	0.00 0.00	379353.83 379253.84	723547.46 N 32 2 27.26 W 103 36 42.80 723548.11 N 32 2 26.27 W 103 36 42.80
	14300.00	89.66	179.63	10853.07	3331.75	-3330.28	238.78	0.00	379153.84	723548.77 N 32 2 25.28 W 103 36 42.80
	14400.00 14500.00	89.66 89.66	179.63 179.63	10853.67 10854.26	3431.75 3531.74	-3430.27 -3530.27	239.43 240.08	0.00	379053.85 378953.86	723549.42 N 32 2 24.29 W 103 36 42.80 723550.07 N 32 2 23.30 W 103 36 42.80
	14600.00 14600.00	89.66	179.63	10854.26 10854.85	3531.74 3631.74	-3530.27 -3630.26	240.08 240.73	0.00	378953.86 378853.87	723550.07 N 32 2 23.30 W 103 36 42.80 723550.72 N 32 2 22.31 W 103 36 42.80
	14700.00	89.66	179.63	10855.45	3731.74	-3730.26	241.38	0.00	378753.87	723551.37 N 32 2 21.32 W 103 36 42.80
	14800.00 14900.00	89.66 89.66	179.63 179.63	10856.04 10856.63	3831.74 3931.74	-3830.26 -3930.25	242.03 242.69	0.00 0.00	378653.88 378553.89	723552.03 N 32 2 20.33 W 103 36 42.80 723552.68 N 32 2 19.34 W 103 36 42.80
	15000.00	89.66	179.63	10857.23	4031.74	-4030.25	243.34	0.00	378453.90	723553.33 N 32 2 18.35 W 103 36 42.80
	15100.00	89.66	179.63	10857.82	4131.73	-4130.24 4230.24	243.99	0.00	378353.90	723553.98 N 32 2 17.37 W 103 36 42.80
	15200.00 15300.00	89.66 89.66	179.63 179.63	10858.41 10859.01	4231.73 4331.73	-4230.24 -4330.24	244.64 245.29	0.00 0.00	378253.91 378153.92	723554.63 N 32 2 16.38 W 103 36 42.80 723555.28 N 32 2 15.39 W 103 36 42.80
	15400.00	89.66	179.63	10859.60	4431.73	-4430.23	245.95	0.00	378053.93	723555.94 N 32 2 14.40 W 103 36 42.80
	15500.00 15600.00	89.66 89.66	179.63 179.63	10860.19 10860.79	4531.73 4631.73	-4530.23 -4630.23	246.60 247.25	0.00 0.00	377953.93 377853.94	723556.59 N 32 2 13.41 W 103 36 42.80 723557.24 N 32 2 12.42 W 103 36 42.80
	15700.00	89.66	179.63	10861.38	4731.72	-4730.22	247.90	0.00	377753.95	723557.89 N 32 2 11.43 W 103 36 42.80
IFP2, Build 2°/100ft	15800.00 15869.96	89.66 89.66	179.63 179.63	10861.97 10862.39	4831.72 4901.68	-4830.22 -4900.18	248.55 249.01	0.00 0.00	377653.96 377584.00	723558.54 N 32 2 10.44 W 103 36 42.80 723559.00 N 32 2 9.75 W 103 36 42.80
1 Z, Duna Z / 1001t	15900.00	90.26	179.63	10862.39	4901.68	-4900.18 -4930.21	249.20	2.00	377553.96	723559.00 N 32 2 9.75 W 103 36 42.80 723559.20 N 32 2 9.45 W 103 36 42.80
Hold	15902.38	90.31	179.63	10862.40	4934.10	-4932.59 5030.31	249.22	2.00	377551.58	723559.21 N 32 2 9.43 W 103 36 42.80
	16000.00 16100.00	90.31 90.31	179.63 179.63	10861.87 10861.34	5031.72 5131.72	-5030.21 -5130.21	249.86 250.51	0.00 0.00	377453.97 377353.98	723559.85 N 32 2 8.46 W 103 36 42.80 723560.50 N 32 2 7.47 W 103 36 42.80
	16200.00	90.31	179.63	10860.80	5231.72	-5230.20	251.16	0.00	377253.98	723561.15 N 32 2 6.48 W 103 36 42.80

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	16300.00	90.31	179.63	10860.26	5331.71	-5330.20	251.81	0.00	377153.99		32 2 5.49 W	
	16400.00	90.31	179.63	10859.72	5431.71	-5430.20	252.46	0.00	377054.00	723562.45 N		
	16500.00	90.31	179.63	10859.18	5531.71	-5530.19	253.11	0.00	376954.01	723563.11 N		
	16600.00	90.31	179.63	10858.64	5631.71	-5630.19	253.77	0.00	376854.01	723563.76 N		
	16700.00	90.31	179.63	10858.11	5731.71	-5730.19	254.42	0.00	376754.02	723564.41 N		
	16800.00	90.31	179.63	10857.57	5831.71	-5830.18	255.07	0.00	376654.03	723565.06 N		
	16900.00	90.31	179.63	10857.03	5931.71	-5930.18	255.72	0.00	376554.03	723565.71 N	32 1 59.55 W	/ 103 36 42.80
	17000.00	90.31	179.63	10856.49	6031.70	-6030.17	256.37	0.00	376454.04	723566.36 N	32 1 58.56 W	/ 103 36 42.80
	17100.00	90.31	179.63	10855.95	6131.70	-6130.17	257.02	0.00	376354.05	723567.01 N		
	17200.00	90.31	179.63	10855.41	6231.70	-6230.17	257.68	0.00	376254.06	723567.67 N		
	17300.00	90.31	179.63	10854.88	6331.70	-6330.16	258.33	0.00	376154.06	723568.32 N	32 1 55.59 W	/ 103 36 42.80
	17400.00	90.31	179.63	10854.34	6431.70	-6430.16	258.98	0.00	376054.07	723568.97 N		
	17500.00	90.31	179.63	10853.80	6531.70	-6530.16	259.63	0.00	375954.08	723569.62 N	32 1 53.62 W	/ 103 36 42.80
	17600.00	90.31	179.63	10853.26	6631.70	-6630.15	260.28	0.00	375854.08	723570.27 N	32 1 52.63 W	/ 103 36 42.80
	17700.00	90.31	179.63	10852.72	6731.69	-6730.15	260.93	0.00	375754.09	723570.92 N	32 1 51.64 W	/ 103 36 42.80
	17800.00	90.31	179.63	10852.19	6831.69	-6830.15	261.58	0.00	375654.10	723571.58 N	32 1 50.65 W	/ 103 36 42.80
	17900.00	90.31	179.63	10851.65	6931.69	-6930.14	262.24	0.00	375554.11	723572.23 N	32 1 49.66 W	/ 103 36 42.80
	18000.00	90.31	179.63	10851.11	7031.69	-7030.14	262.89	0.00	375454.11	723572.88 N	32 1 48.67 W	/ 103 36 42.80
	18100.00	90.31	179.63	10850.57	7131.69	-7130.14	263.54	0.00	375354.12	723573.53 N	32 1 47.68 W	/ 103 36 42.80
	18200.00	90.31	179.63	10850.03	7231.69	-7230.13	264.19	0.00	375254.13	723574.18 N	32 1 46.69 W	/ 103 36 42.80
	18300.00	90.31	179.63	10849.49	7331.69	-7330.13	264.84	0.00	375154.13	723574.83 N	32 1 45.70 W	/ 103 36 42.80
	18400.00	90.31	179.63	10848.96	7431.68	-7430.12	265.49	0.00	375054.14	723575.48 N	32 1 44.71 W	/ 103 36 42.81
IFP3, Build 2°/100ft	18479.15	90.31	179.63	10848.53	7510.83	-7509.27	266.01	0.00	374975.00	723576.00 N	32 143.93 W	/ 103 36 42.81
Hold	18488.68	90.50	179.63	10848.46	7520.36	-7518.80	266.07	2.00	374965.47	723576.06 N	32 1 43.83 W	/ 103 36 42.81
	18500.00	90.50	179.63	10848.36	7531.68	-7530.12	266.15	0.00	374954.15	723576.14 N	32 1 43.72 W	/ 103 36 42.81
	18600.00	90.50	179.63	10847.49	7631.68	-7630.11	266.80	0.00	374854.16	723576.79 N		
	18700.00	90.50	179.63	10846.62	7731.67	-7730.11	267.45	0.00	374754.17	723577.44 N		
	18800.00	90.50	179.63	10845.75	7831.67	-7830.10	268.10	0.00	374654.18	723578.09 N	32 1 40.75 W	/ 103 36 42.81
	18900.00	90.50	179.63	10844.88	7931.67	-7930.10	268.75	0.00	374554.19	723578.74 N	32 1 39.76 W	/ 103 36 42.81
	19000.00	90.50	179.63	10844.01	8031.66	-8030.09	269.40	0.00	374454.20	723579.39 N	32 1 38.77 W	/ 103 36 42.81
	19100.00	90.50	179.63	10843.14	8131.66	-8130.09	270.05	0.00	374354.21	723580.05 N	32 1 37.78 W	/ 103 36 42.81
	19200.00	90.50	179.63	10842.27	8231.66	-8230.08	270.71	0.00	374254.22	723580.70 N	32 1 36.79 W	/ 103 36 42.81
	19300.00	90.50	179.63	10841.40	8331.65	-8330.07	271.36	0.00	374154.22	723581.35 N	32 1 35.80 W	/ 103 36 42.81
	19400.00	90.50	179.63	10840.53	8431.65	-8430.07	272.01	0.00	374054.23	723582.00 N	32 1 34.81 W	/ 103 36 42.81
	19500.00	90.50	179.63	10839.65	8531.64	-8530.06	272.66	0.00	373954.24	723582.65 N	32 1 33.82 W	/ 103 36 42.81
Second Bone Spring Target	19575.15	90.50	179.63	10839.00	8606.79	-8605.20	273.15	0.00	373879.11	723583.14 N	32 1 33.08 W	103 36 42.81
	19600.00	90.50	179.63	10838.78	8631.64	-8630.06	273.31	0.00	373854.25	723583.30 N	32 1 32.84 W	/ 103 36 42.81
	19700.00	90.50	179.63	10837.91	8731.64	-8730.05	273.96	0.00	373754.26	723583.95 N	32 1 31.85 W	/ 103 36 42.81
	19800.00	90.50	179.63	10837.04	8831.63	-8830.04	274.62	0.00	373654.27	723584.61 N	32 1 30.86 W	/ 103 36 42.81
	19900.00	90.50	179.63	10836.17	8931.63	-8930.04	275.27	0.00	373554.28	723585.26 N	32 1 29.87 W	/ 103 36 42.81
	20000.00	90.50	179.63	10835.30	9031.63	-9030.03	275.92	0.00	373454.29	723585.91 N	32 1 28.88 W	/ 103 36 42.81
	20100.00	90.50	179.63	10834.43	9131.62	-9130.03	276.57	0.00	373354.30	723586.56 N	32 1 27.89 W	/ 103 36 42.81
	20200.00	90.50	179.63	10833.56	9231.62	-9230.02	277.22	0.00	373254.31	723587.21 N	32 1 26.90 W	/ 103 36 42.81
	20300.00	90.50	179.63	10832.69	9331.61	-9330.01	277.87	0.00	373154.32	723587.86 N	32 1 25.91 W	/ 103 36 42.81
	20400.00	90.50	179.63	10831.82	9431.61	-9430.01	278.52	0.00	373054.33	723588.51 N	32 1 24.92 W	/ 103 36 42.81
	20500.00	90.50	179.63	10830.94	9531.61	-9530.00	279.18	0.00	372954.34	723589.17 N	32 1 23.93 W	/ 103 36 42.81
	20600.00	90.50	179.63	10830.07	9631.60	-9630.00	279.83	0.00	372854.35	723589.82 N	32 1 22.94 W	/ 103 36 42.81
	20700.00	90.50	179.63	10829.20	9731.60	-9729.99	280.48	0.00	372754.36	723590.47 N		
	20800.00	90.50	179.63	10828.33	9831.60	-9829.98	281.13	0.00	372654.37	723591.12 N		
	20900.00	90.50	179.63	10827.46	9931.59	-9929.98	281.78	0.00	372554.38	723591.77 N		
	21000.00	90.50	179.63	10826.59	10031.59	-10029.97	282.43	0.00	372454.39	723592.42 N		
LTP Cross	21013.49	90.50	179.63	10826.47	10045.08	-10043.46	282.52	0.00	372440.90	723592.51 N		
SD 18 19 Fed Com P360 423H - BHL	21088.39	90.50	179.63	10825.82	10119.98	-10118.36	283.01	0.00	372366.00	723593.00 N		

Survey Type:

Def Plan

Survey Error Model: Survey Program: ISCWSA Rev 3 \*\*\* 3-D 97.071% Confidence 3.0000 sigma

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Cas (in)	ing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	30.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM-Depth Only	SD 18 19 Fed Com P360 423H / SD 18 19 Fed Com P360 423H R0 mdv 04Mar21
	1	30.000	800.000	1/100.000	17.500	13.375		B001Mb_MWD+HRGM	SD 18 19 Fed Com P360 423H / SD 18 19 Fed Com P360 423H
	1	800.000	4716.452	1/100.000	12.250	9.625		B001Mb_MWD+HRGM	SD 18 19 Fed Com P360 423H / SD 18 19 Fed Com P360 423H
	1	4716.452	9919.606	1/100.000	8.750	7.000		B001Mb_MWD+HRGM	SD 18 19 Fed Com P360 423H / SD 18 19 Fed Com P360 423H
	1	9919.606	21088.395	1/100.000	6.125	4.500		B001Mb_MWD+HRGM	SD 18 19 Fed Com P360 423H / SD 18 19 Fed Com P360 423H

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** Chevron USA Incorporated

LEASE NO.: NMNM

**LOCATION:** | Section 18, T.26 S., R.33 E., NMPM

**COUNTY:** Lea County, New Mexico

**WELL NAME & NO.:** | SD 18 19 FED COM P360 421H

**SURFACE HOLE FOOTAGE:** 416'/N & 2043'/W **BOTTOM HOLE FOOTAGE** 25'/S & 550'/W

**WELL NAME & NO.:** | SD 18 19 FED COM P360 422H

**SURFACE HOLE FOOTAGE:** 416'/N & 2068'/W **BOTTOM HOLE FOOTAGE** 25'/S & 1430'/W

**WELL NAME & NO.:** | SD 18 19 FED COM P360 423H

**SURFACE HOLE FOOTAGE:** 416'/N & 2093'/W **BOTTOM HOLE FOOTAGE** 25'/S & 2310'/W

#### COA

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

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated **500** feet prior to drilling into the **Red Hills** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 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**

#### **Casing Design:**

- 1. The 13-3/8 inch surface casing shall be set at approximately 900 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The **9-5/8** inch intermediate casing shall be set at approximately **4698** feet. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

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

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

### **Option 2:**

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

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

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash. ❖ In <u>Medium Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

# Operator has proposed to pump down 13-3/8" X 9-5/8" annulus. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to BLM.

3. The minimum required fill of cement behind the 7 inch production casing is:

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

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

#### Option 2:

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

# Operator has proposed to pump down 9-5/8" X 7" annulus. <u>Operator must run a</u> <u>CBL from TD of the 7" casing to surface. Submit results to BLM.</u>

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

## C. PRESSURE CONTROL

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

#### Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000** (**3M**) psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000** (**5M**) psi.

## Option 2:

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

#### D. SPECIAL REQUIREMENT (S)

#### **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.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted (575-393-3612 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 Onshore Oil and Gas Order No. 2.

# 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
    Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### 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, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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 intergrity 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-P 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 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:
  - 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
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. 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.
  - a. 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 when specified), 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).
- b. 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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 Onshore Order No. 2.

## 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.

*NMK - 3-30-2022* 



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

Well Name: SD 18 19 FED COM P360

# Drilling Plan Data Report

Submission Date: 03/24/2021

Operator Name: CHEVRON USA INCORPORATED

Well Number: 423H

recent changes
Show Final Text

Highlighted data reflects the most

Well Type: OIL WELL

APD ID: 10400071096

Well Work Type: Drill

## **Section 1 - Geologic Formations**

Formation			True Vertical				Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1756215	RUSTLER	3227	720	720	DOLOMITE	NONE	N
1756225	TOP SALT	947	2280	2300	ANHYDRITE	NONE	N
1756226	CASTILE	334	2893	2913	ANHYDRITE	NONE	N
1756227	LAMAR	-1471	4698	4718	LIMESTONE	NONE	N
1756232	BELL CANYON	-1506	4733	4753	SANDSTONE	NONE	N
1756233	CHERRY CANYON	-2567	5794	5814	SANDSTONE	NONE	N
1756234	BRUSHY CANYON	-4116	7343	7363	SANDSTONE	NONE	N
1756229	BONE SPRING	-5679	8906	8926	LIMESTONE	NONE	N
1756235	AVALON	-5745	8972	8992	LIMESTONE, SHALE	NONE	N
7818394	BONE SPRING 1ST	-6594	9821	9841	LIMESTONE, SHALE	NATURAL GAS, OIL	Y
7818395	BONE SPRING 2ND	-7236	10463	21088	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	Y

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

Pressure Rating (PSI): 5M Rating Depth: 10826

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

Requesting Variance? YES

Variance request: Chevron 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

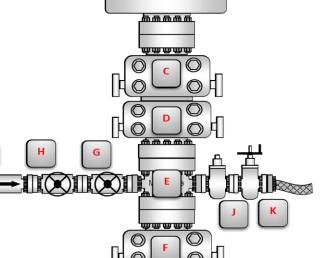
# **BLOWOUT PREVENTER SCHEMATIC**

Operation: Intermediate & Production Drilling Operations

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



Flow Line



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

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

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

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

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

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

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

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

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

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

CONDITIONS

Action 100221

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	100221
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	5/2/2022
pkautz	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	5/2/2022
pkautz	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	5/2/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	5/2/2022