Form 3160-3 (June 2015)	_				APPROV o. 1004-0 inuary 31	137
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANA	NTERIO			5. Lease Serial No.		
APPLICATION FOR PERMIT TO D	RILL O	R REENTER		6. If Indian, Allotee	or Tribe	Name
	EENTER			7. If Unit or CA Agr	reement, 1	Name and No.
	ther ngle Zone	Multiple Zone		8. Lease Name and	Well No.	
,, , <u>,</u> , , , , , , , , , , , , , , , ,						
2. Name of Operator				9. API Well No.	0-015	-53797
3a. Address	3b. Phone	e No. (include area cod	le)	10. Field and Pool, o	or Explor	atory
4. Location of Well (Report location clearly and in accordance w	vith any Sto	ute requirements.*)		11. Sec., T. R. M. or	Blk. and	Survey or Area
At surface						
At proposed prod. zone						10.00
14. Distance in miles and direction from nearest town or post offi	.ce*			12. County or Parish	h	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of	acres in lease	17. Spaci	ng Unit dedicated to the	his well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Propo	osed Depth	20. BLM	/BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Appro	oximate date work will	start*	23. Estimated durati	ion	
	24. Att	achments				
The following, completed in accordance with the requirements of (as applicable)	Onshore (	Dil and Gas Order No.	1, and the I	Hydraulic Fracturing r	ule per 43	3 CFR 3162.3-3
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office)</li> </ol>		Item 20 above).  5. Operator certific	cation.	ns unless covered by ar rmation and/or plans as		
25. Signature	Nai	me (Printed/Typed)			Date	
Title						
Approved by (Signature)	Nai	me (Printed/Typed)			Date	
Title	Off	ice				
Application approval does not warrant or certify that the applican applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	t holds leg	al or equitable title to the	hose rights	in the subject lease w	hich wou	ld entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mof the United States any false, fictitious or fraudulent statements of					any depar	tment or agency
			-010			

APPROVED WITH CONDITIONS Released to Imaging: 5/22/2023 3:25:32 PM Approval Date: 05/17/2023

\*(Instructions 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

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

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

640

Infill

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

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

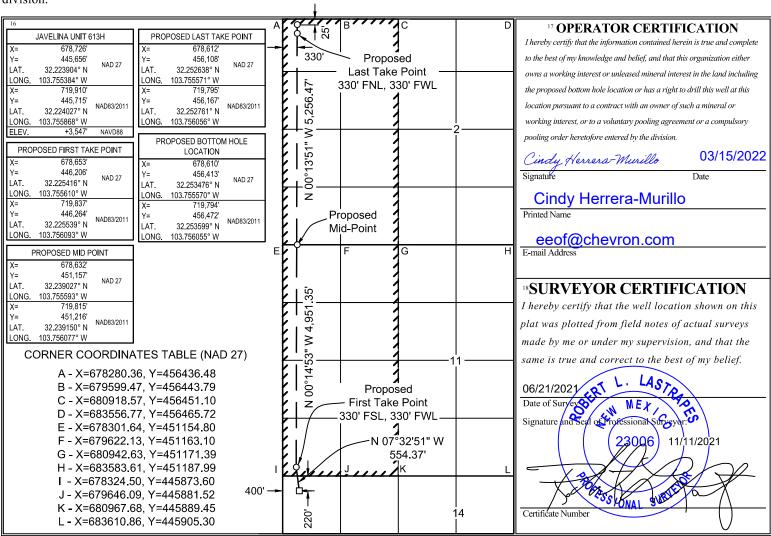
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Numbe		<sup>2</sup> Pool Code				
30-015-53	3797	98220	(GAS)			
<sup>4</sup> Property Code		<sup>5</sup> Pr	roperty Name	6 Well Number		
332905		JAVI	ELINA UNIT	613H		
<sup>7</sup> OGRID No.		8 OI	perator Name	<sup>9</sup> Elevation		
4323		CHEVR	ON U.S.A. INC.	3547'		

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County				
D	14	24 SOUTH	31 EAST, N.M.P.M.		220'	NORTH	400'	WEST	EDDY				
	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				
D	2	24 SOUTH	31 EAST, N.M.P.M.		25'	NORTH	330'	WEST	EDDY				
12 Dedicated A	cres 13 Ioir	ot or Infill	14 Consolidation Code 15	Order No									

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: Che	vron USA_		OGRID: _	4323		Date: <u>3 / 15 /22</u>
II. Type: ⊠ Original □	☐ Amendme	ent due to □ 19.15	5.27.9.D(6)(a) NM	AC □ 19.15.27.9	0.D(6)(b) NMAC	☐ Other.
If Other, please describe: _						
III. Well(s): Provide the fobe 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
JAVELINA UNIT 509H	Pending	UL:D, Sec 14, T24S-317E	220'FNL, 425' FWL	1120 BBL/D	2690 MCF/D	2170 BBL/D
JAVELINA UNIT 510H	Pending	UL D,Sec 14, T24S-R31E	220'FNL, 475' FWL	1120 BBL/D	2690 MCF/D	2170 BBL/D
JAVELINA UNIT 613H	Pending	UL:D, Sec14, T24S-R31E	220'FNL, 400' FWL	1120 BBL/D	2690 MCF/D	2170 BBL/D
JAVELINA UNIT 614H	Pending	UL:D Sec14, T24S-R31E	220'FNL, 450 FWL	1120 BBL/D	2690 MCF/D	2170 BBL/D
JAVELINA UNIT 615H	Pending	UL:D, Sec14 T24S-R31E	221' FNL 500 FWL	1120 BBL/D	2690 MCF/D	2170 BBL/D

IV. Central Delivery Point Name: Sand Dunes CTB 10 [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production
			Date	Commencement Date	Back Date	Date
JAVELINA UNIT 509H	Pending	07/02/2023	N/A	N/A	N/A	N/A
JAVELINA UNIT 510H	Pending	07/20/2023	N/A	N/A	N/A	N/A
JAVELINA UNIT 613H	Pending	08/07/2023	N/A	N/A	N/A	N/A
JAVALINA UNIT 614H	Pending	08/25/2023	N/A	N/A	N/A	N/A
JAVELINA UNIT 615H	Pending	09/12/2023	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

VIII. Best Management Practices: 

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

			Enhanced Plan E APRIL 1, 2022										
	2022, an operator the complete this section		with its statewide natural ga	as capture requirement for the applicable									
-	es that it is not requi t for the applicable re	-	tion because Operator is in o	compliance with its statewide natural gas									
IX. Anticipated Na	atural Gas Producti	on:											
W	/ell	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF									
X. Natural Gas Ga	nthering System (NO	GGS):											
Operator	Operator System ULSTR of Tie-in Anticipated Gathering Available Maximum Daily Capacity Start Date of System Segment Tie-in												
production operation the segment or port	ns to the existing or join of the natural gas	planned interconnect of to s gathering system(s) to	the natural gas gathering syste which the well(s) will be com-										
• •		o the date of first produc		ather 100% of the anticipated natural gas									
				ted to the same segment, or portion, of the a line pressure caused by the new well(s).									
☐ Attach Operator	's plan to manage pro	oduction in response to t	he increased line pressure.										
Section 2 as provide	ed in Paragraph (2) o	• •	27.9 NMAC, and attaches a f	SA 1978 for the information provided in full description of the specific information									

(i)

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

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🗵 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan. 

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease: (a) **(b)** power generation for grid; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

#### **Section 4 - Notices**

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

other alternative beneficial uses approved by the division.

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

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

Signature: Cindy Herrera-Murillo  Printed Name: Cindy Herrera-Murillo
Printed Name: Cindy Herrera-Murillo
Title: Sn Regulatory Affairs Coordinator
E-mail Address: eeof@chevron.com
Date: 03/15/2022
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: JAVELINA UNIT Well Number: 613H

Pressure Rating (PSI): 10M Rating Depth: 11788

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

#### Requesting Variance? YES

Variance request: Chevron will have a minimum of a 5,000 psi rig stack for drill out below surface casing. The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, production, and production liner will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise (see variance request ). 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. Chevron respectfully request to vary from the Onshore Order 2 where it states: "(A full BOP Test) shall be performed: when initially installed and whenever any seal subject to test pressure is broken." We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. No BOP components nor any break will ever surpass 21 days between testing. A break test will consist of a 250 psi low / 5,000 psi high for 10 min each test against the connection that was broken when skidding the rig. Upon the first nipple up of the pad a full BOP test will be performed. A full BOP test will be completed prior to drilling the production lateral sections unless the BOP connection was not broken prior to drilling that hole section (example: drilling straight from production into production liner hole section). A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. Chevron respectfully requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nippled up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC Technologies and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party.

**Testing Procedure:** The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, production, and production liner will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise (see variance request). Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test pressures and other documented tests may be recorded and documented via utilization of the IPT 'Suretec' Digital BOP Test Method in lieu of the standard test chart. In the event the IPT system is unavailable, the standard test chart will be used. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed each hole section unless approval from the BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs). BOP test will be conducted by a third party.

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

D2.1a\_BLM\_5M\_Choke\_Manifold\_Diagram\_20210823122058.pdf
D2.2a\_BLM\_Choke\_Hose\_Test\_Specs\_and\_Pressure\_Test\_Continental\_20210823122144.pdf
BLM\_10M\_Choke\_Manifold\_Diagram\_20221212093725.pdf

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

D2.1b\_NM\_Slim\_Hole\_Wellhead\_6650\_psi\_UH\_S\_20210823122152.pdf
D2.3a\_BLM\_5M\_Annular\_10M\_Rams\_Stackup\_and\_Test\_Plan\_20210823122216.pdf
Sundry\_Break\_Testing\_and\_WOC\_500\_psi\_SND\_Pad613\_20220315112732.pdf

Well Name: JAVELINA UNIT Well Number: 613H

# **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	13.375	NEW	API	N	0	450	0	450	3547	3097	450	J-55	54.5	BUTT	8.22	2.11	BUOY	37.0 6	BUOY	34.7 8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4418	0	4307	3544	-760	4418	L-80	40	BUTT	2.39	1.88	BUOY	5.5	BUOY	5.32
3	INTERMED IATE	8.75	7.0	NEW	API	N	0	11319	0	11153	3544	-7606	11319	OTH ER		OTHER - BLUE	2.35	2.4	BUOY	2.87	BUOY	2.87
4	PRODUCTI ON	6.12 5	5.0	NEW	API	N	11019	11769	10769	11553	-7222	-8006	1	P- 110		OTHER - W513	1.59	2.29	BUOY	1.77	BUOY	2.79
5	PRODUCTI ON	6.12 5	4.5	NEW	API	N	11769	21902	11553	11788	-8006	-8241	10133	P- 110		OTHER - W521	1.59	2.29	DRY	1.77	DRY	2.79

#### **Casing Attachments**

Casing ID: 1 String SURFACE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $D3\_13.375\_54.5ppf\_J55\_STC\_20210823123505.pdf$ 

Well Name: JAVELINA UNIT Well Number: 613H

Casing ID: 2

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $9.625\_40.0ppf\_L80IC\_BTC\_20220315113001.pdf$ 

Casing ID: 3

String

INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

7.0\_29.0ppf\_P110\_TSH\_Blue\_20220315113041.pdf

Casing ID: 4

**String** 

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

5.0\_18.0ppf\_P110\_W513\_20220315113141.pdf

Well Name: JAVELINA UNIT Well Number: 613H

#### **Casing Attachments**

Casing ID: 5

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

 $4.5\_11.6ppf\_P110IC\_W521\_20220315113229.pdf$ 

# **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	С	NONE
SURFACE	Tail		0	450	292	1.34	14.8	391	25	CLASS C	EXTENDER, ANTIFOAM, RETARDER
INTERMEDIATE	Lead		0	3418	597	2.29	11.5	1366	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		3418	4418	263	1.63	13.6	429	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Lead		0	1031 9	685	2.64	11.5	1809	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
INTERMEDIATE	Tail		1031 9	1131 9	134	1.4	14.5	188	25	CLASS C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Lead		1101 9	2190 2	758	1.69	13.2	1281	25	Class H	Extender, Antifoam, Retarder, Viscosifier

Well Name: JAVELINA UNIT Well Number: 613H

#### **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: 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 transporting of E&P waste will follow EPA regulations and accompanying manifests.

Describe the mud monitoring system utilized: A mud test shall be performed every 24 hours after muddling 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 PVT, stroke counter, flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume in compliance with Onshore Order #2. A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

#### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1131	2190	OIL-BASED MUD	10	12							Viscosity 50-70 Filtrate 5-10 -Due to wellbore instability in the lateral, may exceed the MW weight window needed to maintain overburden stresses
4418	1131 9	OTHER : WBM/SALT- STURATED	8.7	9.5							Viscosity: 26-36 Filtrate: 15-25
0	450	SPUD MUD	8.3	8.9							Viscosity: 26-36 Filtrate: 15-25
450	4418	SALT SATURATED	8.9	10							Viscosity: 26-36 Filtrate: 15-25 10# MIN WILL BE UTILIZED IN THE SALT ZONE

Well Name: JAVELINA UNIT Well Number: 613H

#### 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

Coring Operations are not planned.

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

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

#### Coring operation description for the well:

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

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

Anticipated Bottom Hole Pressure: 7356 Anticipated Surface Pressure: 4762

Anticipated Bottom Hole Temperature(F): 203

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"

Hydrogen sulfide gas is not anticipated: However the H2S Contingency plan is attached with this APD in the event that H2S is encountered

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

D8.1\_H2S\_Contingency\_Plan\_20210823132430.pdf

Well Name: JAVELINA UNIT Well Number: 613H

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

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

DefPlan100ft\_JavelinaUnit613H\_R1\_20220315114212.pdf SND\_Javelina\_Unit\_P613\_613H\_\_\_9\_Point\_Plan\_20230118091304.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.
- Authorization to batch drill all 4 sections. Surface, Intermediate, Production, and production (liner) sections.
- \*\*\*Drilling plan attached contains a contingency cement program.

  Batch drilling will be employed whereby the drilling rig may drill a specific hole section on all wells prior to moving to the next hole section.

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

Wait on cement duration for surface and intermediate string(s) will be based on time for tail slurry to develop 500 psi compressive strength and will follow rules as laid out in Onshore Order 2

#### Other proposed operations facets attachment:

CUSA\_Spudder\_Rig\_Data\_20210916120314.pdf
D8.2\_Rig\_layout\_20210823132532.pdf

Operational Best Management Practices V2 20210916120237.pdf

Gas\_Management\_Plan\_\_\_Pad\_613\_20220315114322.pdf

#### Other Variance attachment:

#### Schlumberger

#### Javelina Unit 613H R1 mdv 02Dec21 Proposal Geodetic Report

#### (Def Plan)

 Report Date:
 December 02, 2021 - 04:40 PM

 Client:
 Chevron

 Field:
 NM, Eddy County (NAD 27 EZ)

 Structure / Slot:
 Chevron Javelina Unit Pad 613 / 613H

 Well:
 Javelina Unit 613H

 Borehole:
 Javelina Unit 613H

 UW / API#:
 Unknown / Unknown

 Survey Name:
 Javelina Unit 613H R1 mdv 02Dec21

 Survey Name:
 Javelina Unit 613H R1 mdv 02Dec21

 Survey Date:
 December 02, 2021

 Tort / AHD / DDI / ERD Ratio:
 99.763 ° / 10855.226 ft / 6.310 / 0.916

 Coordinate Reference System:
 NAD27 New Mexico State Plane, Eastern Zone, US Feet

 Location Lat / Long:
 N 32\* 13' 26.05464\*, W 103\* 45' 19.38015"

 Location Grid N/E Y/X:
 N 445656.000 ftUS, E 678726.000 ftUS

CRS Grid Convergence Angle: 0.3082 ° Grid Scale Factor: 0.99994568

Version / Patch: 2.10.826.8

 Survey / DLS Computation:
 Minimum Curvature / Lubinski

 Vertical Section Azimuth:
 359 760 ° (Grid North)

 Vertical Section Origin:
 0.000 ft, 0.000 ft

 TVD Reference Datum:
 RKB = 28ft

 TVD Reference Elevation:
 3575 000 ft above MSL

 Seabed / Ground Elevation:
 3547.000 ft above MSL

 Magnetic Declination:
 6.492 °

 Total Gravity Field Strength:
 998.4298mgn (9.80665 Based)

HDGM 2021

North Reference: Grid North
Grid Convergence Used: 0.3082 °

Total Corr Mag North>Grid North: 6.1834 °

Local Coord Referenced To: Well Head

Magnetic Declination Model:

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°'")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445656.00		N 32 13 26.05	
	100.00	0.00	251.73	100.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
	200.00	0.00	251.73	200.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
	300.00 400.00	0.00	251.73 251.73	300.00 400.00	0.00 0.00	0.00 0.00	0.00	0.00	445656.00 445656.00		N 32 13 26.05 N 32 13 26.05	
	500.00	0.00	251.73	500.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
	600.00	0.00	251.73	600.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
	700.00	0.00	251.73	700.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
Rustler (RSLR)	701.00	0.00	251.73	701.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
	800.00	0.00	251.73	800.00 900.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
Rustler Los Medaños Member	900.00 921.00	0.00	251.73 251.73	900.00	0.00	0.00 0.00	0.00	0.00 0.00	445656.00 445656.00		N 32 13 26.05 N 32 13 26.05	
Build 1.5°/100ft	1000.00	0.00	251.73	1000.00	0.00	0.00	0.00	0.00	445656.00		N 32 13 26.05	
Saldo (SLDO)	1027.00	0.41	251.73	1027.00	-0.03	-0.03	-0.09	1.50	445655.97		N 32 13 26.05	
	1100.00	1.50	251.73	1099.99	-0.41	-0.41	-1.24	1.50	445655.59		N 32 13 26.05	
	1200.00	3.00	251.73	1199.91	-1.62	-1.64	-4.97	1.50	445654.36		N 32 13 26.04	
Hold	1266.61	4.00	251.73	1266.40	-2.88	-2.92	-8.83	1.50	445653.08		N 32 13 26.03	
	1300.00 1400.00	4.00 4.00	251.73 251.73	1299.70 1399.46	-3.60 -5.76	-3.65 -5.83	-11.04 -17.67	0.00 0.00	445652.35 445650.17		N 32 13 26.02 N 32 13 26.00	
	1500.00	4.00	251.73	1499.22	-7.92	-8.02	-24.29	0.00	445647.98		N 32 13 25.98	
	1600.00	4.00	251.73	1598.97	-10.08	-10.21	-30.91	0.00	445645.79		N 32 13 25.96	
	1700.00	4.00	251.73	1698.73	-12.24	-12.39	-37.53	0.00	445643.61		N 32 13 25.93	
	1800.00	4.00	251.73	1798.48	-14.40	-14.58	-44.16	0.00	445641.42		N 32 13 25.91	
	1900.00	4.00	251.73	1898.24	-16.55	-16.77	-50.78	0.00	445639.23		N 32 13 25.89	
Drop .75°/100ft	1931.08	4.00	251.73	1929.25	-17.23	-17.45	-52.84	0.00	445638.55		N 32 13 25.88	
	2000.00 2100.00	3.48 2.73	251.73 251.73	1998.02 2097.87	-18.62 -20.30	-18.86 -20.56	-57.11 -62.25	0.75 0.75	445637.14 445635.44		N 32 13 25.87 N 32 13 25.85	
	2200.00	1.98	251.73	2197.79	-21.57	-21.85	-66.16	0.75	445634.15		N 32 13 25.84	
	2300.00	1.23	251.73	2297.75	-22.44	-22.73	-68.82	0.75	445633.28		N 32 13 25.83	
	2400.00	0.48	251.73	2397.73	-22.90	-23.20	-70.24	0.75	445632.81		N 32 13 25.83	
Hold Vertical	2464.31	0.00	251.73	2462.04	-22.98	-23.28	-70.50	0.75	445632.72		N 32 13 25.83	
	2500.00	0.00	251.73	2497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	2600.00 2700.00	0.00	251.73 251.73	2597.73 2697.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	2800.00	0.00	251.73	2797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	2900.00	0.00	251.73	2897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
Castile (CSTL)	2933.27	0.00	251.73	2931.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3000.00	0.00	251.73	2997.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	3100.00	0.00	251.73	3097.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3200.00	0.00	251.73	3197.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3300.00 3400.00	0.00	251.73 251.73	3297.73 3397.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	3500.00	0.00	251.73	3497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3600.00	0.00	251.73	3597.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3700.00	0.00	251.73	3697.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	3800.00	0.00	251.73	3797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	3900.00	0.00	251.73	3897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	4000.00 4100.00	0.00 0.00	251.73 251.73	3997.73 4097.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	4200.00	0.00	251.73	4197.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
	4300.00	0.00	251.73	4297.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	4400.00	0.00	251.73	4397.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
Lamar (LMAR)	4499.27	0.00	251.73	4497.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	4500.00	0.00	251.73	4497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
Bell Canyon (BLCN)	4551.27 4600.00	0.00	251.73 251.73	4549.00 4597.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83	
	4700.00	0.00	251.73	4697.73	-22.98	-23.28 -23.28	-70.50	0.00	445632.72		N 32 13 25.83 N 32 13 25.83	
	4800.00	0.00	251.73	4797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	4900.00	0.00	251.73	4897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5000.00	0.00	251.73	4997.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5100.00	0.00	251.73	5097.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5200.00	0.00	251.73	5197.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5300.00	0.00	251.73	5297.73	-22.98 -22.98	-23.28	-70.50 -70.50	0.00	445632.72		N 32 13 25.83 N 32 13 25.83	
Cherry Canyon (CRCN)	5400.00 5422.27	0.00	251.73 251.73	5397.73 5420.00	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
s.io., Junyon (ortory)	5500.00	0.00	251.73	5497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5600.00	0.00	251.73	5597.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5700.00	0.00	251.73	5697.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	5800.00	0.00	251.73	5797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	5900.00	0.00	251.73	5897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	6000.00	0.00	251.73	5997.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	6100.00 6200.00	0.00	251.73 251.73	6097.73 6197.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	6300.00	0.00	251.73	6297.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	6400.00	0.00	251.73	6397.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	6500.00	0.00	251.73	6497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	

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°'"
	6600.00	0.00	251.73	6597.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
Brushy Canyon (BCN)	6676.27	0.00	251.73	6674.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	6700.00 6800.00	0.00 0.00	251.73 251.73	6697.73 6797.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72			W 103 45 20.20 W 103 45 20.20
	6900.00	0.00	251.73	6897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	7000.00	0.00	251.73	6997.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	7100.00 7200.00	0.00 0.00	251.73 251.73	7097.73 7197.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	7300.00	0.00	251.73	7297.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
	7400.00	0.00	251.73	7397.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	7500.00	0.00	251.73	7497.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	7600.00 7700.00	0.00 0.00	251.73 251.73	7597.73 7697.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	7800.00	0.00	251.73	7797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	7900.00	0.00	251.73	7897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	8000.00 8100.00	0.00 0.00	251.73 251.73	7997.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72		N 32 13 25.83 N 32 13 25.83	W 103 45 20.20
	8200.00	0.00	251.73	8097.73 8197.73	-22.98	-23.28	-70.50	0.00	445632.72 445632.72		N 32 13 25.83	
	8300.00	0.00	251.73	8297.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
one Spring (BSGL)	8371.27	0.00	251.73	8369.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
oper Avalon (AVN)	8400.00 8430.27	0.00 0.00	251.73 251.73	8397.73 8428.00	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	W 103 45 20.20
oper Avaiori (AVIV)	8500.00	0.00	251.73	8497.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20 W 103 45 20.20
	8600.00	0.00	251.73	8597.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	8700.00	0.00	251.73	8697.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	8800.00	0.00	251.73	8797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
ower Avalon (AVL)	8900.00 8900.27	0.00 0.00	251.73 251.73	8897.73 8898.00	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	9000.00	0.00	251.73	8997.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
	9100.00	0.00	251.73	9097.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	9200.00	0.00	251.73	9197.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	9300.00 9400.00	0.00 0.00	251.73 251.73	9297.73 9397.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
rst Bone Spring Upper (FBS)	9411.27	0.00	251.73 251.73	9409.00	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00	445632.72		N 32 13 25.83 N 32 13 25.83	
3 -FF (1.55)	9500.00	0.00	251.73	9497.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50	N 32 13 25.83	W 103 45 20.20
	9600.00	0.00	251.73	9597.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
st Bone Spring Lower (FBL)	9679.27	0.00 0.00	251.73	9677.00	-22.98 -22.98	-23.28	-70.50 70.50	0.00	445632.72		N 32 13 25.83	
	9700.00 9800.00	0.00	251.73 251.73	9697.73 9797.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	9900.00	0.00	251.73	9897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	10000.00	0.00	251.73	9997.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
cond Bone Spring Upper (SBU)	10011.27	0.00	251.73	10009.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	10100.00 10200.00	0.00 0.00	251.73 251.73	10097.73 10197.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	10300.00	0.00	251.73	10297.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	10400.00	0.00	251.73	10397.73	-22.98	-23.28	-70.50	0.00	445632.72	678655.50		W 103 45 20.20
	10500.00	0.00	251.73	10497.73	-22.98	-23.28	-70.50	0.00	445632.72			W 103 45 20.20
econd Bone Spring Lower (SBL)	10522.27 10600.00	0.00 0.00	251.73 251.73	10520.00 10597.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72		N 32 13 25.83 N 32 13 25.83	
	10700.00	0.00	251.73	10697.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	10800.00	0.00	251.73	10797.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	10900.00	0.00	251.73	10897.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	11000.00 11100.00	0.00 0.00	251.73 251.73	10997.73 11097.73	-22.98 -22.98	-23.28 -23.28	-70.50 -70.50	0.00 0.00	445632.72 445632.72			W 103 45 20.20 W 103 45 20.20
	11200.00	0.00	251.73	11197.73	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
nird Bone Spring (TBS)	11241.27	0.00	251.73	11239.00	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
ild 10°/100ft	11245.31	0.00	251.73	11243.04	-22.98	-23.28	-70.50	0.00	445632.72		N 32 13 25.83	
	11300.00 11400.00	5.47 15.47	359.76 359.76	11297.65 11395.86	-20.38 -2.23	-20.67 -2.52	-70.51 -70.59	10.00 10.00	445635.33 445653.48		N 32 13 25.85 N 32 13 26.03	W 103 45 20.20 W 103 45 20.20
	11500.00	25.47	359.76	11489.43	32.70	32.40	-70.74	10.00	445688.40			W 103 45 20.20 W 103 45 20.20
	11600.00	35.47	359.76	11575.51	83.34	83.04	-70.95	10.00	445739.04	678655.05	N 32 13 26.88	
	11700.00	45.47	359.76	11651.49	148.16	147.87	-71.23	10.00	445803.86		N 32 13 27.52	
nird Bone Spring Target 1 'olfcamp A (WCA)	11725.56 11794.65	48.03 54.93	359.76 359.76	11669.00 11712.00	166.78 220.80	166.48 220.50	-71.31 -71.54	10.00 10.00	445822.47 445876.49		N 32 13 27.71 N 32 13 28.24	
oncamp A (WCA)	11800.00	55.47	359.76	11715.06	225.19	224.90	-71.55	10.00	445880.88		N 32 13 28.28	
	11900.00	65.47	359.76	11764.28	312.09	311.79	-71.92	10.00	445967.78	678654.08	N 32 13 29.14	W 103 45 20.20
	12000.00	75.47	359.76	11797.67	406.22	405.92	-72.32	10.00	446061.90		N 32 13 30.08	
ading Point	12100.00 12145.86	85.47 90.05	359.76 359.76	11814.21 11816.00	504.71 550.52	504.41 550.22	-72.74 -72.94	10.00 10.00	446160.38 446206.19		N 32 13 31.05 N 32 13 31.50	
nding Point P Cross	12145.86 12145.88	90.05	359.76 359.76	11816.00 11816.00	550.52 550.55	550.22 550.25	-72.94 -72.94	0.00	446206.19		N 32 13 31.50 N 32 13 31.50	
	12200.00	90.05	359.76	11815.95	604.67	604.36	-73.17	0.00	446260.33		N 32 13 32.04	
	12300.00	90.05	359.76	11815.85	704.67	704.36	-73.59	0.00	446360.32	678652.41	N 32 13 33.03	W 103 45 20.1
	12400.00	90.05 90.05	359.76	11815.75	804.67	804.36	-74.02 -74.44	0.00	446460.32		N 32 13 34.02	
	12500.00 12600.00	90.05	359.76 359.76	11815.66 11815.56	904.67 1004.67	904.36 1004.36	-74.44 -74.87	0.00	446560.31 446660.30		N 32 13 35.01 N 32 13 36.00	
	12700.00	90.05	359.76	11815.47	1104.67	1104.36	-75.29	0.00	446760.30		N 32 13 36.99	
	12800.00	90.05	359.76	11815.37	1204.67	1204.36	-75.72	0.00	446860.29	678650.29	N 32 13 37.98	W 103 45 20.1
	12900.00	90.05	359.76	11815.28	1304.67	1304.36	-76.14	0.00	446960.28		N 32 13 38.97	
	13000.00 13100.00	90.05 90.05	359.76 359.76	11815.18 11815.08	1404.67 1504.67	1404.36 1504.36	-76.57 -76.99	0.00 0.00	447060.28 447160.27		N 32 13 39.96 N 32 13 40.94	
	13200.00	90.05	359.76	11814.99	1604.67	1604.36	-77.42	0.00	447260.26		N 32 13 41.93	
	13300.00	90.05	359.76	11814.89	1704.67	1704.35	-77.84	0.00	447360.26		N 32 13 42.92	
	13400.00	90.05	359.76	11814.80	1804.67	1804.35	-78.27	0.00	447460.25		N 32 13 43.91	
	13500.00 13600.00	90.05 90.05	359.76 359.76	11814.70 11814.60	1904.67 2004.67	1904.35 2004.35	-78.69 -79.12	0.00	447560.25 447660.24		N 32 13 44.90 N 32 13 45.89	
	13700.00	90.05	359.76	11814.51	2104.67	2104.35	-79.12 -79.54	0.00	447760.23		N 32 13 46.88	
	13800.00	90.05	359.76	11814.41	2204.67	2204.35	-79.97	0.00	447860.23		N 32 13 47.87	
	13900.00	90.05	359.76	11814.32	2304.67	2304.35	-80.39	0.00	447960.22	678645.61	N 32 13 48.86	W 103 45 20.
	14000.00	90.05	359.76	11814.22	2404.67	2404.35	-80.82	0.00	448060.21		N 32 13 49.85	
	14100.00 14200.00	90.05 90.05	359.76 359.76	11814.13 11814.03	2504.67 2604.67	2504.35 2604.35	-81.24 -81.67	0.00	448160.21 448260.20		N 32 13 50.84 N 32 13 51.83	
21, Drop 2°/100ft	14230.80	90.05	359.76	11814.00	2635.47	2635.15	-81.80	0.00	448291.00		N 32 13 51.83	
ld	14260.18	89.47	359.76	11814.12	2664.85	2664.53	-81.93	2.00	448320.38	678644.08	N 32 13 52.43	W 103 45 20.
	14300.00	89.47	359.76	11814.49	2704.66	2704.34	-82.09	0.00	448360.19		N 32 13 52.82	
	14400.00	89.47	359.76	11815.42	2804.66	2804.34	-82.52 92.05	0.00	448460.18		N 32 13 53.81	
	14500.00 14600.00	89.47 89.47	359.76 359.76	11816.35 11817.28	2904.65 3004.65	2904.33 3004.33	-82.95 -83.37	0.00	448560.17 448660.16		N 32 13 54.80 N 32 13 55.79	
	14700.00	89.47	359.76	11818.21	3104.65	3104.32	-83.80	0.00	448760.15		N 32 13 56.78	
	14800.00	89.47	359.76	11819.14	3204.64	3204.32	-84.22	0.00	448860.14	678641.78	N 32 13 57.77	W 103 45 20.1
	14900.00	89.47	359.76	11820.07	3304.64	3304.31	-84.65	0.00	448960.13		N 32 13 58.76	
							-85.08	0.00	449060.11			
	15000.00 15100.00	89.47 89.47	359.76 359.76	11821.00 11821.93	3404.63 3504.63	3404.31 3504.30	-85.50	0.00	449160.10		N 32 13 59.75 N 32 14 0.74	

1,000.00   1,000.00	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°'")
1,490.00   10					11823.79	3704.62							
1900000   1947   29576   118250   29648   29642   42620   40642   40													
1970000   197000		15500.00											
1500 00 66-7		15600.00	89.47	359.76	11826.58	4004.61	4004.27	-87.63	0.00	449660.05	678638.37 N	32 14 5.68	W 103 45 20.15
1500000   66.77   353.76   1159.27   434.52   436.52						4104.60							
1000000   66-77   359-78   1100-300   4-01-5													
1909.00   86.47   305.76   1181.23   4664.29   490.75   400.00   400.00   400.00   67800.00   10.00													
162010 0   64.7   359.76   1162.16   406.58   406.24   -20.16   0.00   5855958   785552   78.25   70.16   70.06   50.06   785552   78.25   78.25   78.25   79.25   7													
1,000,00   6,47   369,76   1183,369   470-18   409-24   -40-91   0.00   4509987   7879553   N. 22 1128   W196-25   140-94   140													
160000 60 47 305 75 115400 9 200 40 40 40 40 40 40 40 40 40 40 40 40 4													
1900   10   10   10   10   10   10   1													
1670.00   18.47   39.76   1189.81   519.45   519.42   42.31   0.00   4577.83   78.31   18.77   78.31													
1980,00   9-7   39-76   1190,77   1924-85   200-21   49-72   0.00   4-389-90   1790,201   1.00   1		16600.00	89.47	359.76	11835.88	5004.56	5004.22	-91.89	0.00	450659.94	678634.12 N	32 14 15.58	W 103 45 20.14
16000   1600		16700.00	89.47	359.76	11836.81	5104.56		-92.31	0.00		678633.69 N	32 14 16.57	W 103 45 20.14
ME 1707.1 B 847 3957 1981800 5404.55 5404.20 48.59 00 0 4519500 0 078052.1 N 32 14 193.4 W 103.4 20 M 104.4 M 104.5 M													
MP (1797-11)													
Held (1707 Ad) (89.47   395.76   1794.05) (5901.49   49.01   200   45115.29   6788.05) N 32.14 20.03 N 103.45 2	MD												
171000													
170000   99.47   39.97   1941-49   5904-54   5904-19   -94.44   0.00   4512598   797831-57   N 32 14-22   N 1014-29   1940-1	noid												
1700.00   69.47   399.76   11942.37   5704.59   5704.59   5704.59   5.00   49159.88   576831.51   N. 22.14.22.59   V103.4.20   1707.00   1707.00   189.47   399.76   11942.27   5904.52   5904.18   -9.6.20   0.00   49159.89   576830.73   N. 32.14.22.48   V103.4.20   1707.00   1707.00   1707.00   194.47   399.76   11944.07   1194.00   1707.00   1707.00   194.47   399.76   11944.07   1194.00   1707.00   1707.00   194.47   399.76   11944.07   1194.00   1707.00   1707.00   194.47   399.76   11944.07   1194.00   1194.00   1194.00   1707.00   1707.00   194.47   399.76   1194.00													
1400.00													
1760000   98.47   397.6   11846.22   5904.52   5904.18   -86.69   0.00   451599.84   678630.32   N 32 14.24.49   103.46.20   103.40   10													
1700.00   89.47   399.76   11946.07   10104.22   10104.77   399.76   11946.07   11946.													
1780000   88-47   396-76   11846-99   2004-51   5004-16   -96-94   -97-36   0.00   45199-98   0.72   427-45   W1014-52   0.00   45199-98   0.00   4519-98   0.00   45199-98		17600.00	89.47	359.76	11845.14	6004.52	6004.17	-96.11	0.00	451659.83	678629.90 N	32 14 25.47	W 103 45 20.12
FF2_Build 27100ft													
FF22_Buildy 27/100th   17986 22   98.47   358.76   11846.00   6313.71   6313.36   -97.46   0.00   451969.00   67828.08   N 2 21 42.85 3 W 103 45.26   Held   17966 22   90.59   356.76   11847.61   6404.50   6404.51   -47.78   0.00   4520248   1.00   420249.70   67828.23   N 2 21 42.04 W 1014.52   Held   18000 00   90.59   356.76   11846.51   6604.50   6604.51   640.50													
Hedd  1986.02 9 0.59 9 39.76 11847.97 1860.00 1860.00 9 0.59 1897.61 1846.29 1860.00 1850.00 1													
1800.00   90.59   359.76   11847.61   6404.50   6604.15   4.97.86   0.00   4.57586.72   678627.81   3214.30.24   W103.45.20   1800.00   90.59   359.76   11846.56   5604.49   6704.13   4.96.62   0.00   4.57586.77   678627.81   3214.30.24   W103.45.20   1800.00   90.59   359.76   11844.54   6704.49   6704.13   4.96.62   0.00   4.57586.77   678627.81   3214.32.34   W103.45.20   1800.00   90.59   359.76   11845.51   6804.48													
18100.00	Hold												
18200.00 9.59 389.76 11845.56 6604.49 6604.11 -98.62 0.00 452259.77 678627.39 N 32 143.24 N 103.4526 1830.00 1850.00 9.59 359.76 11843.51 6804.49 6704.31 -98.64 0.00 45259.76 678628.57 N 32 143.24 N 103.4526 1850.00 1850.0													
18800.00													
18400.00   90.59   359.76   11942.51   6804.48   6904.13   -99.45   0.00   452459.74   67862.95   73   7214.33 9 W 103.45 20   18600.00   90.59   359.76   11941.46   7004.47   7704.11   -100.79   0.00   452659.73   67862.51 3 N 32 14.33 8 W 103.45 20   18600.00   90.59   359.76   11941.46   7004.47   7704.11   -100.71   0.00   452659.73   67862.51 N 3 21.45 3.57 W 103.45 20   18600.00   90.59   359.76   1183.94 2   7204.46   7204.10   -1011.3   0.00   452659.73   67862.48 N 3 21.45 7.35 W 103.45 20   19600.00   90.59   359.76   1183.93   7304.46   7304.10   -101.55   0.00   452696.98   67862.48 N 3 21.45 7.35 W 103.45 20   19600.00   90.59   359.76   1183.73 Y   7404.45   7404.00   -101.27   0.00   452696.98   67862.48 N 3 21.45 7.35 W 103.45 20   19600.00   90.59   359.76   1183.73 Y   7404.45   7404.00   -101.27   0.00   452696.98   67862.48 N 3 21.49 3.33 W 103.45 20   19600.00   90.59   359.76   1183.73 Y   7404.45   7404.00   -101.27   0.00   452596.98   67862.48 N 3 21.49 3.33 W 103.45 20   19600.00   90.59   359.76   1183.23 Y   7404.45   7404.00   -101.27   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1183.22   7704.44   7704.07   -103.64   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1183.22   7704.44   7704.07   -103.64   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1183.22   7704.44   7704.07   -103.64   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1183.22   7704.44   7704.07   -103.64   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1183.12   8004.42   8004.05   -104.06   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1182.91   8004.42   8004.05   -104.06   0.00   453596.86   67862.25 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   1182.91   8004.42   8004.05   -104.06   0.00   453596.86   67862.15 N 3 21.44 2.28 W 103.45 20   19600.00   90.59   359.76   11													
18800 00 99.99 39.76 11841.46 700.447 700.411 -100.29 0.00 452598.72 67882.571 N 32 148.58 W 103.45 20 1800.00 99.59 359.76 11830.42 704.47 704.41 -100.29 0.00 452598.71 N 32 148.58 W 103.45 20 1800.00 99.59 359.76 11830.42 720.4.46 720.4.10 -101.15 0.00 452598.70 67882.48 N 32 148.73 € W 103.45 20 1800.00 99.59 359.76 11838.39 70.704.45 740.40 -101.15 0.00 452598.80 76.7882.40 N 32 148.32 W 103.45 20 1800.00 99.59 359.76 11838.39 70.740.45 740.40 9 -101.97 0.00 452598.80 76.7882.40 N 32 148.32 W 103.45 20 1800.00 99.59 359.76 11838.32 77.404.45 740.40 9 -101.97 0.00 452598.80 76.7882.20 N 32 14.40.22 W 103.45 20 1800.00 99.59 359.76 11838.32 77.404.45 740.40 9 -101.97 0.00 452598.80 76.7882.20 N 32 14.40.22 W 103.45 20 1800.00 99.59 359.76 11838.32 77.404.45 740.40 9 -101.97 0.00 452598.80 76.7882.20 N 32 14.40.22 W 103.45 20 1800.00 99.59 359.76 11838.32 77.404.45 740.40 9 -102.80 0.00 452598.80 76.7882.20 N 32 14.40.22 W 103.45 20 1800.00 99.59 359.76 11833.22 77.404.45 740.40 9 -102.80 0.00 452598.80 76.7882.20 N 32 14.41.22 W 103.45 20 1800.00 99.59 359.76 11833.21 44.22 W 103.45 20 1800.00 99.59 359.76 11833.22 77.404.45 740.40 9 -100.60 453598.80 67.7882.20 N 32 14.44.22 W 103.45 20 1800.00 99.59 359.76 11830.19 810.44 28 800.40 5 -100.48 0.00 453598.60 67882.15 N 32 14.44.22 W 103.45 20 1800.00 99.59 359.76 11830.19 810.44 28 800.40 5 -100.48 0.00 453598.60 67882.11 N 32 14.45.28 W 103.45 20 1800.00 99.59 359.76 11820.10 800.42 800.42 800.40 800.4													
1870 00 99.59 359.76 11840.42 7104.47 7104.11 -100.71 0.00 45259.57 0 7682.50 N 32 14 35.8 W 1004.52 1800.00 90.59 359.76 11838.32 7304.46 7304.10 -101.55 0.00 45259.68 67682.46 N 32 14 35.8 W 1004.52 1800.00 90.59 359.76 11838.32 7304.46 7304.10 -101.55 0.00 45259.68 67682.46 N 32 14 35.8 W 1004.52 1800.00 90.59 359.76 11838.32 7304.46 7504.08 -102.39 0.00 45359.66 7682.20 N 32 14 35.3 W 1004.52 1800.00 90.59 359.76 11838.32 7504.45 7504.08 -102.39 0.00 45359.66 7682.20 N 32 14 35.3 W 1004.52 1800.00 90.59 359.76 11838.32 7704.45 7504.08 -102.39 0.00 45359.66 7682.20 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.45 7504.08 -102.39 0.00 45359.66 7682.20 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.44 7704.07 -103.22 0.00 45359.66 67682.20 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.43 7704.07 -103.22 0.00 45359.66 67682.20 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.43 7704.07 -103.22 0.00 45359.66 67682.20 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.22 7704.43 7704.07 -103.22 0.00 45359.60 67682.15 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.43 7704.07 -103.24 0.00 45359.60 67682.15 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.32 7704.43 7704.07 -103.24 0.00 45359.60 67682.15 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11838.12 8 8004.42 8104.03 -104.60 0.00 45359.60 67682.15 N 32 14 43.2 W 1004.52 1800.00 90.59 359.76 11820.10 8104.00 80.00 80.59 359.76 11820.10 80.00 80.00 80.00 80.59 359.76 11820.10 80.00 80.00 80.00 80.59 359.76 11820.10 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.00 80.00 80.59 359.76 11820.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.		18500.00	90.59	359.76	11842.49	6904.48	6904.12	-99.87	0.00	452559.73	678626.13 N	32 14 34.38	W 103 45 20.11
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	Javelina Unit 613H - BHL	22353.72	90.59	359.76	11803.00	10758.00	10757.61	-116.01	0.00	456413.00			

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 Ca	sing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.000	1/100.000	30.000	30.000		B001Mb_MWD+HRGM-Depth Only	Javelina Unit 613H / Javelina Unit 613H R1 mdv 02Dec21
	1	28.000	22353.721	1/100.000	30.000	30.000		B001Mb_MWD+HRGM	Javelina Unit 613H / Javelina Unit

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
NMNM141882
LOCATION:
COUNTY:
Section 14, T.24 S., R.31 E., NMPM
Eddy County, New Mexico

WELL NAME & NO.: Javelina Unit 613H
SURFACE HOLE FOOTAGE: 220'/S & 400'/W
BOTTOM HOLE FOOTAGE 25'/N & 330'/W

COA

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

#### A. HYDROGEN SULFIDE

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

#### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 946 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 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.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

- ❖ In <u>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.
- 3. The minimum required fill of cement behind the 7 inch production casing is:
  - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.
- 4. The minimum required fill of cement behind the 5x 4-1/2 inch production liner is:
  - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

#### C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

#### D. SPECIAL REQUIREMENT (S)

#### **Unit Wells**

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

#### **Commercial Well Determination**

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

#### **BOPE Break Testing Variance (Note: For 5M BOPE or less)**

- 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 (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

# 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

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- Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - 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  $\underline{24}$  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 test.
  - 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 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).
  - 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 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.)
  - c. 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 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. **ZS050123** 



### **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. 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 dog house 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

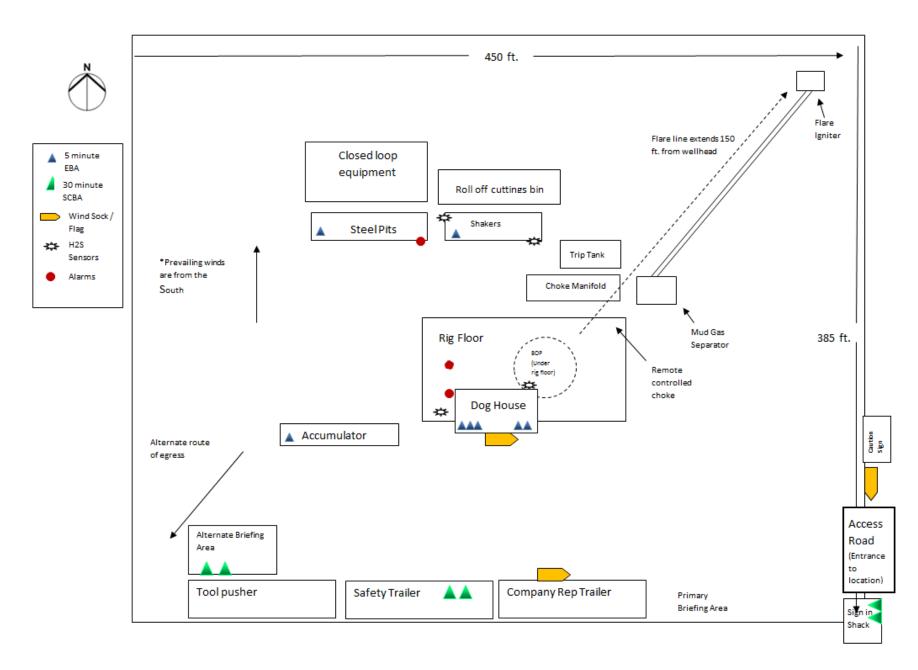


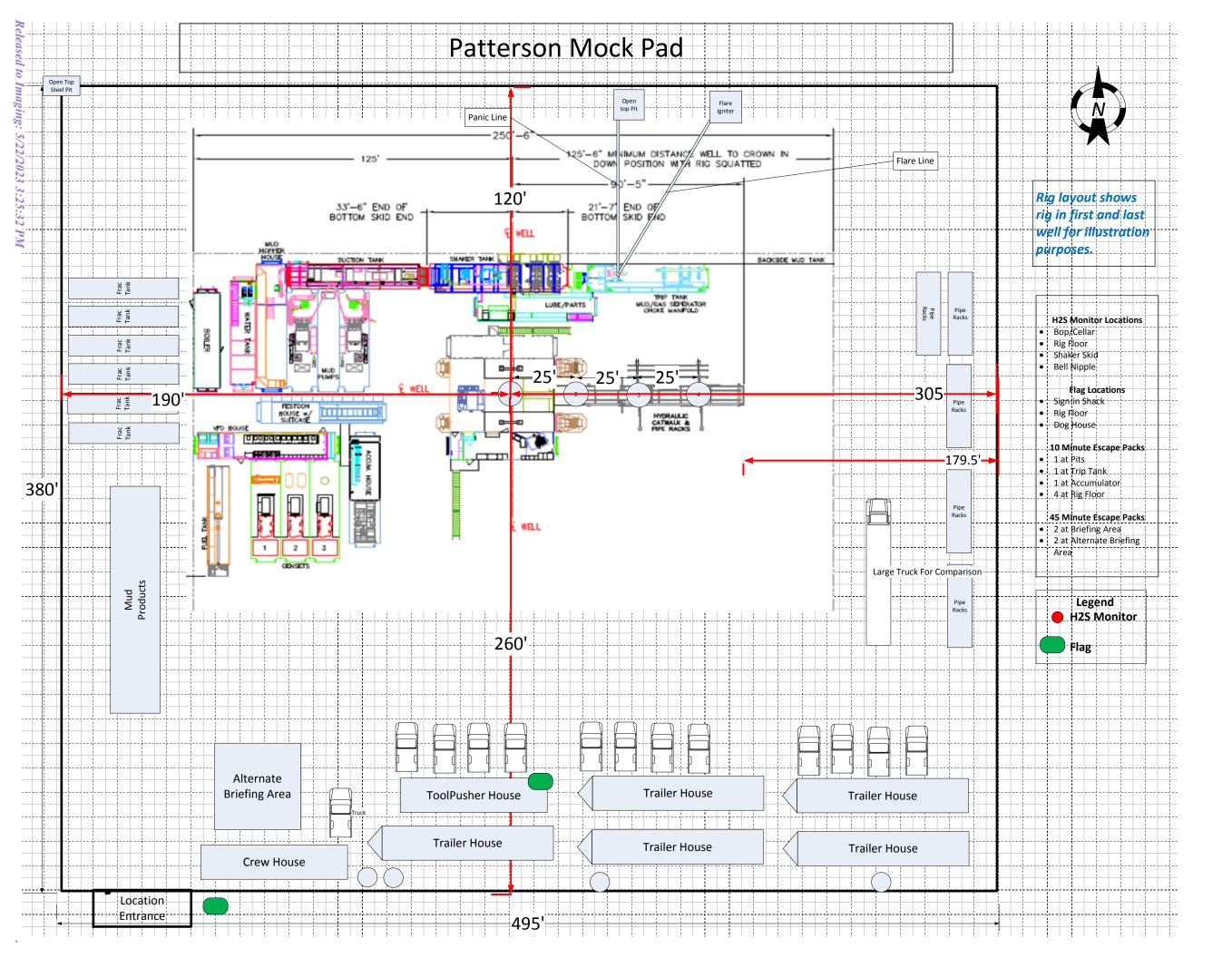
# **Chevron MCBU D&C Emergency Notifications**

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

	Name	Title	Office Number	Cell Phone
1.	TBD	Drilling Engineer		
2.	Sergio Hernandez	Superintendent	713 372 1402	
5.	Dennis Mchugh	Drilling Manager	(713) 372-4496	
6.	Kyle Eastman	Operations Manager	713-372-5863	
7.	TBD	D&C HES		
8.	TBD	Completion Engineer		







Inten	t	As Dril	led										
API#	:												
Ope	rator Nai	me:				Property N	ame:					Well Number	
Kick (	Off Point	(KOP)											
UL	Section	Township	Range	Lot	Feet	From N	I/S	Feet	F	rom E/W	County		
Latitu	ıde				Longitu	ıde					NAD		
First T	Take Poir	nt (FTP)	Range	Lot	Feet	From N	I/S	Feet	F	rom E/W	County		
Latitu		Township	ge	200	Longitu		., 3	1000				NAD	
					8								
Last T	ake Poin	t (LTP)											
UL	Section	Township	Range	Lot	Feet	From N/S	Feet		From E/\	V Cour	nty		
Latitu	ude				Longitu	ıde				NAD			
Is this	s well the	defining v	vell for th	e Hori	zontal S <sub>l</sub>	pacing Unit?			]	1			
Is this	s well an	infill well?											
	ll is yes p ng Unit.	lease provi	de API if	availal	ole, Ope	rator Name	and v	vell nu	umber fo	or Defini	ing well fo	or Horizontal	
API#													
Ope	rator Nai	me:	ı			Property N	lame:					Well Number	
												<u> </u>	

KZ 06/29/2018



**APD ID:** 10400083335

Well Name: JAVELINA UNIT

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

# Drilling Plan Data Report 05/17/2023

**Submission Date:** 03/21/2022

Operator Name: CHEVRON USA INCORPORATED

Well Number: 613H

Well Type: OIL WELL 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
8154572	RUSTLER	3572	546	546	SANDSTONE	NONE	N
8154593	SALADO	2688	884	885	ANHYDRITE, SALT	NONE	N
8154589	CASTILE	830	2742	2798	ANHYDRITE, SALT	NONE	N
8154591	LAMAR	-755	4327	4438	LIMESTONE, SHALE	NONE	N
8154573	BELL CANYON	-804	4376	4489	LIMESTONE, SANDSTONE	NONE	N
8154577	CHERRY CANYON	-1701	5273	5418	SANDSTONE, SILTSTONE	NATURAL GAS, OIL	N
8154579	BRUSHY CANYON	-2946	6518	6683	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
8154587	BONE SPRING LIME	-4626	8198	8364	SHALE, SILTSTONE	NATURAL GAS, OIL	N
8154580	UPPER AVALON SHALE	-4656	8228	8918	SHALE	NATURAL GAS, OIL	Y
8336166	BONE SPRING 1ST	-5657	9229	9661	SANDSTONE, SHALE	NATURAL GAS, OIL	N
8336167	BONE SPRING 2ND	-6291	9863	10494	SANDSTONE, SHALE	NATURAL GAS, OIL	N
9737791	BONE SPRING 3RD	-7494	11066	11232	SANDSTONE, SHALE	NATURAL GAS, OIL	N
9737792	WOLFCAMP	-7928	11500	11692	SANDSTONE, SHALE	NATURAL GAS, OIL	Y

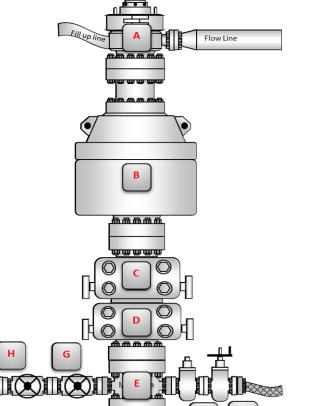
#### **Section 2 - Blowout Prevention**

# **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

5,000 psi



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

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

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

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

Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be install on all manual valves on the choke and 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 217835

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	217835
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
john.harrison	Notify OCD 24 hours prior to casing & cement	5/22/2023
john.harrison	Will require a File As Drilled C-102 and a Directional Survey with the C-104	5/22/2023
john.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	5/22/2023
john.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing	5/22/2023
john.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	5/22/2023