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 [332088] 2. Name of Operator 9. API Well No. 30-025-49722 [4323] 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory **97964/96715** XXXXXXX 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) Name (Printed/Typed) Date 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 01/18/2022 APPROVED WITH CONDITIONS SL (Continued on page 2) \*(Instructions on page 2)

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 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

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

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

☐ AMENDED REPORT

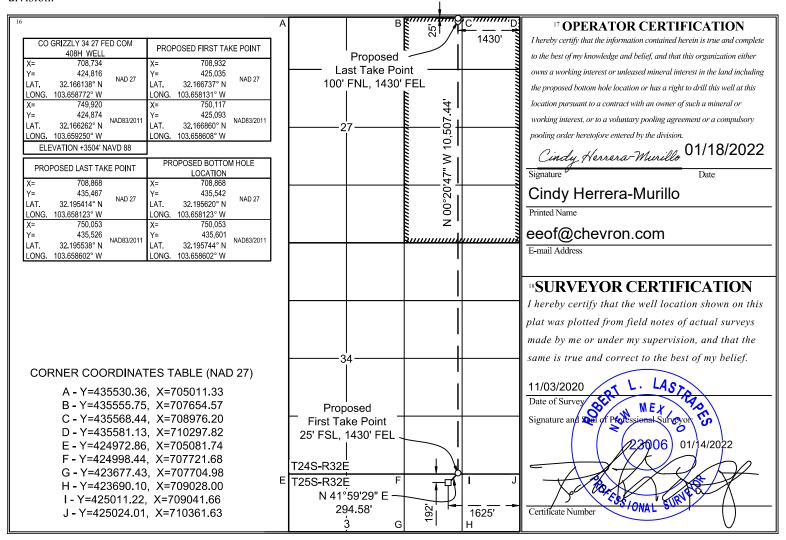
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

<sup>1</sup> API Number		<sup>2</sup> Pool Code			
30-025-49722		97964	NE SPRING		
<sup>4</sup> Property Code <b>332088</b>		<sup>5</sup> Pr	operty Name	6 Well Number	
332088		CO GRIZZI	LY 34 27 FED COM	408H	
<sup>7</sup> OGRID No.		<sup>8</sup> Or	<sup>9</sup> Elevation		
4323		CHEVR	3504'		

				10 Sur	tace Locat	ion			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	3	25 SOUTH	32 EAST, N.M.P.M.		192'	NORTH	1625'	EAST	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
В	27	24 SOUTH	32 EAST, N.M.P.M.		25'	NORTH	1430'	EAST	LEA
12 Dedicated A	ted Acres 13 Joint or Infill		<sup>14</sup> Consolidation Code	<sup>5</sup> Order No.					
320	Defining								

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.



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

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

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

<sup>1</sup> API Number		<sup>2</sup> Pool Code		
30-025-49722		96715	SPRING	
<sup>4</sup> Property Code		<sup>5</sup> Pr	operty Name	6 Well Number
332088		CO GRIZZI	408H	
<sup>7</sup> OGRID No.		<sup>8</sup> O <sub>r</sub>	perator Name	<sup>9</sup> Elevation
4323		CHEVR	3504'	

#### <sup>10</sup> Surface Location

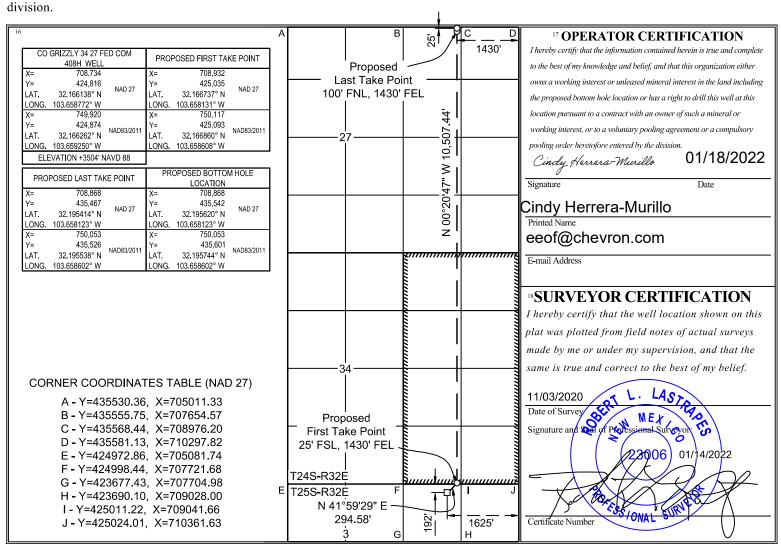
				~ 0,1	race Eccar				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	3	25 SOUTH	32 EAST, N.M.P.M.		192'	NORTH	1625'	EAST	LEA
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	27	24 SOUTH	32 EAST, N.M.P.M.		25'	NORTH	1430'	EAST	LEA

Defining

12 Dedicated Acres 320 Defining

13 Joint 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



# 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				
II. Type: ⊠ Original □ A	Amendment	due to □ 19.15.2	7.9.D(6)(a) NMA	C □ 19.15.27.9.D	(6)(b) NMAC □	Other.		
If Other, please describe: _								
<b>III. Well(s):</b> 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		
CO Grizzly 3 10 FED 416H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,675' FEL	2,000	3,570	1,990		
CO Grizzly 3 34 FED 417H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,650' FEL	2,000	3,570	1,990		
CO Grizzly 3 34 FED 418H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,600' FEL	2,000	3,570	1,990		
CO Grizzly 34 27 FED COM 407H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,700' FEL	2,000	3,570	1,990		
CO Grizzly 34 27 FED COM 408H 30	Pending <b>)-025-497</b>	UL:H, SEC 3, 725S- R32E	192' FNL, 1,625' FEL	2,000	3,570	1,990		
CO Grizzly 34 27 FED COM 409H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,575' FEL	2,000	3,570	1,990		
IV. Central Delivery Poin	t Name:	Cotton Dr	raw Sec #3 CTB		[See 19.15.27.9	(D)(1) NMAC]		
V. Anticipated Schedule: proposed to be recompleted					vell or set of well	s proposed to be drilled o		

Page 1 of 5

Well Name	API	Spud Date	TD Reached	Completion	Initial Flow	First Production	
VV OII I (dille	1111	Space Batte	Date	Commencement	Back Date	Date	
				Date	Buon Built	2	
	Pending	August 28, 2022	N/A	N/A	N/A	N/A	
CO Grizzly 3 10							
FED 416H							
	Pending	September 15, 2022	N/A	N/A	N/A	N/A	
CO Grizzly 3 10							
FED 417H	D 1:	0 1 2 2022	37/4	37/4	37/4	37/4	
	Pending	October 3, 2022	N/A	N/A	N/A	N/A	
CO Grizzly 3 34							
FED 418H							
	Pending	November 8, 2022	N/A	N/A	N/A	N/A	
CO Grizzly 34 27							
FED COM 407H							
	Pending	November 26, 2022	N/A	N/A	N/A	N/A	
30	0-025-4972	2					
CO Glizzly 34 27	7023-4712						
FED COM 408H	D 1:	D 1 14 2022	37/4	37/4	27/4	37/4	
	Pending	December 14, 2022	N/A	N/A	N/A	N/A	
GO G : 1 2425							
CO Grizzly 34 27							
FED COM 409H							

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.

VIII. Best Management Practices: 

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

# Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

#### IX. Anticipated Natural Gas Production:

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

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

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

<b>XI. Map.</b> □ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.
XII. Line Capacity. The natural gas gathering system $\square$ will $\square$ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.
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).
$\square$ Attach Operator's plan to manage production in response to the increased line pressure.
XIV. Confidentiality: □ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

(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: CNDY HERRERA-MURILLO
Title: SR REGULATORY AFFAIRS COORDINATOR
E-mail Address: eeof@chevron.com
Date: 1/12/2022
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: CO GRIZZLY 34 27 FED COM Well Number: 408H

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

Testing Procedure: Stack will be tested as specified in the attached testing requirements. Test BOP from 250 psi to 6,650 psi in Ram and Annular (annular and BOP will be 10M); BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. A full BOP test will be performed unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad. BOP test will be conducted by a third party.

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

BLM\_Choke\_Hose\_Test\_Specs\_Pressure\_Test\_20200616142852.pdf

BLM\_5M\_Choke\_Manifold\_Diagram\_20200616143140.pdf

Grizzly\_Break\_Test\_Variance\_20210223113359.pdf

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

BLM\_5M\_Annular\_10M\_Rams\_Test\_Plan\_20200616142927.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	13.375	NEW	API	N	0	900	0	900	3504	2604	900	J-55	54.5	ST&C	2.44	1.7	DRY	4.72	DRY	4.72
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4600	0	4600	3503	-1096	4600	L-80	-	OTHER - BTC	1.78	1.34	DRY	2.7	DRY	2.7
	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8750	0	8750	3157	-5246	8750	OTH ER		OTHER - BLUE	5.82	1.15	DRY	2.77	DRY	2.77
4	LINER	6.12 5	4.5	NEW	API	Y	8450	21665	8450	10814	-4947	-7310	13215	P- 110		OTHER - W- 521	1.32	1.11	DRY	1.38	DRY	1.38

#### Casing Attachments

Operator Name: CHEVRON USA INCORPORATED	
Well Name: CO GRIZZLY 34 27 FED COM We	ell Number: 408H
<u> </u>	
Casing Attackments	
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_20210223114424.pdf	
Casing ID: 2 String Type: INTERMEDIATE	
Inspection Document:	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	
9.625_40ppf_L80_ICY_BTC_20210223133808.pdf	
Casing ID: 3 String Type: PRODUCTION	
Inspection Document:	
Snoo Dogumenti	
Spec Document:	
Tapered String Spec:	
Casing Design Assumptions and Worksheet(s):	

7\_29ppf\_P110\_TSH\_Blue\_20200616144815.pdf

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

#### **Casing Attachments**

Casing ID: 4

String Type:LINER

**Inspection Document:** 

**Spec Document:** 

# **Tapered String Spec:**

 $CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_9pt\_Drilling\_Plan\_20210223133841.pdf\\ 4.5\_11.6ppf\_P110\_TSH\_W521\_20200616145927.pdf$ 

Casing Design Assumptions and Worksheet(s):

# **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	900	421	1.34	14.5	564	100	Class C	Extender Antifoam Retarder

INTERMEDIATE	Lead	0	3600	902	2.5	11.5	2255	100	CLASS C	Extender, Antifoam, Retarder
INTERMEDIATE	Tail	3600	4600	336	1.4	14.5	470	50	Class C	Extender, Antifoam, Retarder
PRODUCTION	Lead	4100	7750	329	2.5	11.5	823	50	Class C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Tail	7750	8750	134	1.4	14.5	188	25	Class C	Extender, Antifoam, Retarder, Viscosifier
LINER	Lead	8450	2166 5	845	1.84	13.2	1556	25	Class C	Extender, Antifoam, Retarder, Viscosifier

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

# **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 by utilized 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.

**Describe the mud monitoring system utilized:** A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume 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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	900	SPUD MUD	8.3	10.3							VIS: 26-36 FILTRATE: 15-25
900	4600	OTHER : BRINE	8.3	10.6							VIS: 26-36 FILTRATE: 15-25
4600	8750	OTHER : WBM/Brine	8.7	10.6							Viscosity: 26-36 Filtrate: 15-25
8750	2166 5	OIL-BASED MUD	8.7	10.5							Viscosity: 50-70 Filtrate: 5-10

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

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

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

Type Logs Interval Timing

Mudlogs - 2 man mudlog - Surf csg shoe through prod hole TD - Drillout of Int Csg

LWD - MWD Gamma - Int. and Prod. Hole - While Drilling

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

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

Coring operation description for the well:

Conventional whole core samples are not planned. A Directional Survey will be run.

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5398 Anticipated Surface Pressure: 3018

Anticipated Bottom Hole Temperature(F): 180

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

Describe:

Contingency Plans geoharzards description:

**Contingency Plans geohazards attachment:** 

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations plan:

# **Section 8 - Other Information**

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

CO\_Grizzly\_3\_27\_FED\_Gas\_Capture\_Plan\_20210223121030.pdf

CO Grizzly Pad Rig layout 20200629123353.pdf

H2S\_Summary\_20200626110454.pdf

CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_Directional\_20210223134131.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 follow Onshore Order 2 Section B Casing and Cementing Requirements to wait to 500 psi compressive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at sufficient strength prior to performing a shoe test and drilling ahead through the next hole section.

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

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

# Other proposed operations facets attachment:

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

Grizzly\_WOC\_Variance\_20210223121110.pdf CUSA\_Spudder\_Rig\_Data\_20190802085518.pdf

#### Schlumberger

# CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20 Proposal Geodetic Report



#### (Def Plan)

Report Date: January 05, 2021 - 11:32 AM Client: Chevron

Field: NM Lea County (NAD 27)

Structure / Slot: Chevron Cotton Draw Grizzly Pad 1 / 408H CO Grizzly 34 27 Fed Com 408H Well: Borehole: CO Grizzly 34 27 Fed Com 408H UWI / API#: Unknown / Unknown

Survey Name: CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20

Survey Date: Tort / AHD / DDI / ERD Ratio:

January 04, 2021 113.067 ° / 11551.093 ft / 6.417 / 1.067 NAD27 New Mexico State Plane, Eastern Zone, US Feet Coordinate Reference System:

Location Lat / Long: N 32° 9' 58.09602", W 103° 39' 31.58629" Location Grid N/E Y/X: N 424816.000 ftUS, E 708734.000 ftUS

CRS Grid Convergence Angle: 0.3591° Grid Scale Factor: 0.99995899 Version / Patch: 2.10.824.0

Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 359.640 ° (Grid North) 0.000 ft, 0.000 ft Vertical Section Origin: TVD Reference Datum: RKB = 28ft TVD Reference Elevation: 3532.000 ft above MSL Seabed / Ground Elevation: 3504.000 ft above MSL Magnetic Declination: 6.491°

Total Gravity Field Strength: 998.4286mgn (9.80665 Based) GARM 47679.591 nT

Gravity Model:
Total Magnetic Field Strength: Magnetic Dip Angle: Declination Date: Magnetic Declination Model: North Reference:

Grid North Grid Convergence Used: Total Corr Mag North->Grid 0.3591° 6.1315° Well Head

Local Coord Referenced To:

59.759° January 04, 2021 HDGM 2020

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	424816.00	708734.00		W 103 39 31.59
	100.00	0.00	139.80	100.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	200.00	0.00	139.80	200.00	0.00	0.00	0.00	0.00	424816.00	708734.00	N 32 9 58.10	W 103 39 31.59
	300.00	0.00	139.80	300.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	400.00	0.00	139.80	400.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	500.00	0.00	139.80	500.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	600.00	0.00	139.80	600.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	700.00	0.00	139.80	700.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	800.00	0.00	139.80	800.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
Rustler	890.00	0.00	139.80	890.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
9 5/8" Casing	900.00	0.00	139.80	900.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	1000.00	0.00	139.80	1000.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	1100.00	0.00	139.80	1100.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	424816.00			W 103 39 31.59 W 103 39 31.59
	1200.00 1300.00	0.00	139.80 139.80	1200.00 1300.00	0.00	0.00	0.00	0.00	424816.00 424816.00			W 103 39 31.59
	1400.00	0.00	139.80	1400.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
	1500.00	0.00	139.80	1500.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
Build 1.5°/100ft	1600.00	0.00	139.80	1600.00	0.00	0.00	0.00	0.00	424816.00			W 103 39 31.59
Dulia 1.5 / 1001t	1700.00	1.50	139.80	1699.99	-1.01	-1.00	0.84	1.50	424815.00			W 103 39 31.58
	1800.00	3.00	139.80	1799.91	-4.02	-4.00	3.38	1.50	424812.00			W 103 39 31.55
	1900.00	4.50	139.80	1899.69	-9.04	-8.99	7.60	1.50	424807.01			W 103 39 31.50
	2000.00	6.00	139.80	1999.27	-16.07	-15.98	13.51	1.50	424800.02			W 103 39 31.43
	2100.00	7.50	139.80	2098.57	-25.09	-24.96	21.09	1.50	424791.04			W 103 39 31.34
Hold	2133.12	8.00	139.80	2131.39	-28.52	-28.37	23.97	1.50	424787.63			W 103 39 31.31
	2200.00	8.00	139.80	2197.62	-35.66	-35.48	29.98	0.00	424780.53			W 103 39 31.24
	2300.00	8.00	139.80	2296.65	-46.35	-46.10	38.96	0.00	424769.90			W 103 39 31.14
	2400.00	8.00	139.80	2395.68	-57.03	-56.73	47.94	0.00	424759.27	708781.94	N 32 9 57.53	W 103 39 31.03
	2500.00	8.00	139.80	2494.70	-67.71	-67.35	56.92	0.00	424748.65	708790.92	N 32 9 57.43	W 103 39 30.93
	2600.00	8.00	139.80	2593.73	-78.39	-77.98	65.90	0.00	424738.02		N 32 9 57.32	W 103 39 30.83
	2700.00	8.00	139.80	2692.76	-89.07	-88.60	74.88	0.00	424727.40			W 103 39 30.72
	2800.00	8.00	139.80	2791.79	-99.76	-99.23	83.86	0.00	424716.77			W 103 39 30.62
	2900.00	8.00	139.80	2890.81	-110.44	-109.86	92.84	0.00	424706.15			W 103 39 30.51
	3000.00	8.00	139.80	2989.84	-121.12	-120.48	101.82	0.00	424695.52			W 103 39 30.41
	3100.00	8.00	139.80	3088.87	-131.80	-131.11	110.80	0.00	424684.90			W 103 39 30.31
	3200.00	8.00	139.80	3187.90	-142.48	-141.73	119.77	0.00	424674.27		N 32 9 56.69	W 103 39 30.20
	3300.00	8.00	139.80	3286.92	-153.17	-152.36	128.75	0.00	424663.65			W 103 39 30.10
	3400.00	8.00	139.80	3385.95	-163.85	-162.98	137.73	0.00	424653.02			W 103 39 30.00
	3500.00	8.00	139.80	3484.98	-174.53	-173.61	146.71	0.00	424642.40			W 103 39 29.89
	3600.00 3700.00	8.00 8.00	139.80 139.80	3584.01 3683.03	-185.21 -195.89	-184.24 -194.86	155.69 164.67	0.00 0.00	424631.77 424621.15			W 103 39 29.79 W 103 39 29.68
	3800.00	8.00	139.80	3782.06	-195.69	-205.49	173.65	0.00	424621.15			W 103 39 29.56 W 103 39 29.58
	3900.00	8.00	139.80	3881.09	-206.57 -217.26	-205.49 -216.11	182.63	0.00	424510.52			W 103 39 29.48
Castile	3904.96	8.00	139.80	3886.00	-217.79	-216.64	183.08	0.00	424599.37		N 32 9 55.94	
Castile	4000.00	8.00	139.80	3980.12	-227.94	-226.74	191.61	0.00	424589.27			W 103 39 29.37
	4100.00	8.00	139.80	4079.14	-238.62	-237.36	200.59	0.00	424578.65			W 103 39 29.27
	4200.00	8.00	139.80	4178.17	-249.30	-247.99	209.57	0.00	424568.02			W 103 39 29.17
	4300.00	8.00	139.80	4277.20	-259.98	-258.62	218.55	0.00	424557.40			W 103 39 29.06
	4400.00	8.00	139.80	4376.23	-270.67	-269.24	227.53	0.00	424546.77			W 103 39 28.96
	4500.00	8.00	139.80	4475.26	-281.35	-279.87	236.51	0.00	424536.14			W 103 39 28.86
	4600.00	8.00	139.80	4574.28	-292.03	-290.49	245.49	0.00	424525.52			W 103 39 28.75
Drop .75°/100ft	4673.10	8.00	139.80	4646.67	-299.84	-298.26	252.05	0.00	424517.75			W 103 39 28.68
	4700.00	7.80	139.80	4673.32	-302.68	-301.08	254.44	0.75	424514.93	708988.43	N 32 9 55.10	W 103 39 28.65
	4800.00	7.05	139.80	4772.48	-312.59	-310.95	262.77	0.75	424505.07			W 103 39 28.55
Lamar	4804.56	7.01	139.80	4777.00	-313.02	-311.37	263.13	0.75	424504.64			W 103 39 28.55
Bell Canyon	4847.86	6.69	139.80	4820.00	-316.98	-315.32	266.46	0.75	424500.70			W 103 39 28.51
	4900.00	6.30	139.80	4871.80	-321.51	-319.82	270.27	0.75	424496.20			W 103 39 28.47
	5000.00	5.55	139.80	4971.27	-329.43	-327.70	276.93	0.75	424488.32			W 103 39 28.39
	5100.00	4.80	139.80	5070.86	-336.35	-334.58	282.74	0.75	424481.44			W 103 39 28.32
	5200.00	4.05	139.80	5170.56	-342.27	-340.46	287.72	0.75	424475.55			W 103 39 28.26
	5300.00	3.30	139.80	5270.36	-347.18	-345.35	291.85	0.75	424470.66			W 103 39 28.22
	5400.00	2.55	139.80	5370.23	-351.09	-349.24	295.14	0.75	424466.77			W 103 39 28.18
	5500.00	1.80	139.80	5470.15	-354.00	-352.14	297.58	0.75	424463.88			W 103 39 28.15
	5600.00	1.05	139.80	5570.12	-355.90	-354.03	299.18	0.75	424461.99			W 103 39 28.13
	5700.00	0.30	139.80	5670.11	-356.80	-354.92	299.93	0.75	424461.09			W 103 39 28.12
Cherry Canyon	5737.89	0.01	139.80	5708.00	-356.88	-355.00	300.00	0.75	424461.02		N 32 9 54.56	
Hold Vertical	5739.34	0.00	139.80	5709.45	-356.88	-355.00	300.00	0.75	424461.02			W 103 39 28.12
	5800.00	0.00	139.80	5770.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	5900.00	0.00	139.80	5870.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6000.00	0.00	139.80	5970.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6100.00	0.00	139.80	6070.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6200.00	0.00	139.80	6170.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6300.00	0.00	139.80	6270.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6400.00 6500.00	0.00	139.80 139.80	6370.11 6470.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02			W 103 39 28.12 W 103 39 28.12
	6600.00	0.00	139.80	6570.11	-356.88	-355.00 -355.00	300.00	0.00	424461.02 424461.02			W 103 39 28.12 W 103 39 28.12
				0370.11	-330.00	-300.00	300.00	0.00	424401.02	109033.99	IN JZ 9 J4.50	
	6700.00	0.00	139.80	6670.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99	N 32 9 54.56	

...CO Grizzly 34 27 Fed Com 408H\CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting Latitude Longitud (ftUS) (N/S ° ' ") (E/W ° ' "
	6800.00	0.00	139.80	6770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	6900.00 7000.00	0.00 0.00	139.80 139.80	6870.11 6970.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7100.00	0.00	139.80	7070.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Brushy Canyon	7120.89 7200.00	0.00 0.00	139.80 139.80	7091.00 7170.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7300.00	0.00	139.80	7270.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	7400.00	0.00	139.80	7370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7500.00 7600.00	0.00	139.80 139.80	7470.11 7570.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7700.00	0.00	139.80	7670.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7800.00	0.00	139.80	7770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7900.00 8000.00	0.00	139.80 139.80	7870.11 7970.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	8100.00	0.00	139.80	8070.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	8200.00 8300.00	0.00 0.00	139.80 139.80	8170.11 8270.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	8400.00	0.00	139.80	8370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	8500.00	0.00	139.80	8470.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	8600.00 8700.00	0.00 0.00	139.80 139.80	8570.11 8670.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.13 709033.99 N 32 9 54.56 W 103 39 28.13
Bone Spring	8749.89	0.00	139.80	8720.00	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
Unner Avelen	8800.00	0.00	139.80	8770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Upper Avalon	8844.89 8900.00	0.00 0.00	139.80 139.80	8815.00 8870.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.13
	9000.00	0.00	139.80	8970.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	9100.00 9200.00	0.00	139.80 139.80	9070.11 9170.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	9300.00	0.00	139.80	9270.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	9400.00	0.00	139.80	9370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	9500.00 9600.00	0.00 0.00	139.80 139.80	9470.11 9570.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	9700.00	0.00	139.80	9670.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
First Bone	9766.89	0.00	139.80	9737.00	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
Spring	9800.00	0.00	139.80	9770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
	9900.00	0.00	139.80	9870.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	10000.00	0.00	139.80	9970.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
7" Casing	10100.00 10129.89	0.00 0.00	139.80 139.80	10070.11 10100.00	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
-	10200.00	0.00	139.80	10170.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Build 10°/100ft	10252.34	0.00	139.80	10222.45	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	10300.00 10400.00	4.77 14.77	354.79 354.79	10270.06 10368.48	-354.90 -338.02	-353.03 -336.16	299.82 298.28	10.00 10.00	424462.99 424479.86	709033.81 N 32 9 54.58 W 103 39 28.12 709032.27 N 32 9 54.75 W 103 39 28.14
Second Bone	10424.46	17.21	354.79	10392.00	-331.31	-329.44	297.67	10.00	424486.57	709031.66 N 32 9 54.82 W 103 39 28.15
Spring	10500.00	24.77	354.79	10462.47	-304.37	-302.52	295.21	10.00	424513.49	709029.20 N 32 9 55.08 W 103 39 28.1
Bone Spring 2										
Target 2 Second Bone	10529.58	27.72	354.79	10489.00	-291.34	-289.49	294.03	10.00	424526.52	709028.01 N 32 9 55.21 W 103 39 28.19
Spring 1st Carbonate	10597.36	34.50	354.79	10547.00	-256.45	-254.63	290.85	10.00	424561.38	709024.84 N 32 9 55.56 W 103 39 28.22
	10600.00 10700.00	34.77 44.77	354.79 354.79	10549.17 10625.94	-254.96 -191.31	-253.14 -189.52	290.71 284.91	10.00 10.00	424562.87 424626.49	709024.70 N 32 9 55.57 W 103 39 28.2 709018.90 N 32 9 56.20 W 103 39 28.2
	10800.00	54.77	354.79 354.79	10625.94	-191.31	-113.59	277.99	10.00	424626.49	709011.98 N 32 9 56.95 W 103 39 28.36
	10900.00	64.77	354.79	10740.73	-29.35	-27.66	270.15	10.00	424788.34	709004.14 N 32 9 57.81 W 103 39 28.49
	11000.00 11100.00	74.77 84.77	354.79 354.79	10775.28 10793.02	64.02 161.95	65.66 163.54	261.64 252.72	10.00 10.00	424881.66 424979.54	708995.63 N 32 9 58.73 W 103 39 28.5 708986.71 N 32 9 59.70 W 103 39 28.6
FTP Point	11155.84	90.35	354.79	10795.40	217.52	219.08	247.65	10.00	425035.07	708981.64 N 32 10 0.25 W 103 39 28.69
Landing Point										
	11200.00 11300.00	90.35 90.35	354.79 354.79	10795.13 10794.52	261.52 361.16	263.06 362.64	243.64 234.56	0.00 0.00	425079.05 425178.63	708977.63 N 32 10 0.68 W 103 39 28.7 708968.55 N 32 10 1.67 W 103 39 28.8
	11400.00	90.35	354.79	10793.90	460.80	462.23	225.48	0.00	425278.21	708959.47 N 32 10 2.66 W 103 39 28.93
	11500.00 11600.00	90.35 90.35	354.79 354.79	10793.29 10792.68	560.44 660.08	561.81 661.40	216.40 207.32	0.00 0.00	425377.79 425477.37	708950.39 N 32 10 3.64 W 103 39 29.03 708941.31 N 32 10 4.63 W 103 39 29.13
Turn 2°/100ft	11621.69	90.35	354.79	10792.55	681.69	682.99	205.35	0.00	425498.96	708939.34 N 32 10 4.84 W 103 39 29.19
	11700.00	90.35	356.36	10792.07	759.80	761.07	199.31	2.00	425577.04	708933.30 N 32 10 5.61 W 103 39 29.2
Hold	11800.00 11864.18	90.35 90.35	358.36 359.64	10791.45 10791.06	859.72 923.89	860.96 925.13	194.70 193.57	2.00 2.00	425676.92 425741.09	708928.69 N 32 10 6.60 W 103 39 29.20 708927.57 N 32 10 7.24 W 103 39 29.2
	11900.00	90.35	359.64	10790.84	959.71	960.94	193.35	0.00	425776.90	708927.34 N 32 10 7.59 W 103 39 29.2
	12000.00 12100.00	90.35 90.35	359.64 359.64	10790.22 10789.60	1059.71 1159.70	1060.94 1160.93	192.72 192.09	0.00 0.00	425876.89 425976.88	708926.71 N 32 10 8.58 W 103 39 29.2 708926.08 N 32 10 9.57 W 103 39 29.2
	12200.00	90.35	359.64	10788.98	1259.70	1260.93	191.46	0.00	426076.88	708925.46 N 32 10 10.56 W 103 39 29.2
	12300.00	90.35	359.64	10788.36	1359.70	1360.93	190.84	0.00	426176.87	708924.83 N 32 10 11.55 W 103 39 29.2
	12400.00 12500.00	90.35	359.64	10787.75	1459.70 1559.70	1460.92 1560.92	190.21	0.00	426276.86 426376.85	708924.20 N 32 10 12.54 W 103 39 29.2
		90.35	359.h4	10/0/.13			109.50	0.00		708923.57 N 32 10 13.53 W 103 39 29 2
	12600.00	90.35	359.64 359.64	10787.13 10786.51	1659.69	1660.91	189.58 188.95	0.00	426476.84	708923.57 N 32 10 13.53 W 103 39 29.2 708922.94 N 32 10 14.52 W 103 39 29.2
	12600.00 12700.00	90.35 90.35	359.64 359.64	10786.51 10785.89	1659.69 1759.69	1660.91 1760.91	188.95 188.32	0.00 0.00	426476.84 426576.83	708922.94 N 32 10 14.52 W 103 39 29.2 708922.31 N 32 10 15.51 W 103 39 29.2
	12600.00 12700.00 12800.00	90.35 90.35 90.35	359.64 359.64 359.64	10786.51 10785.89 10785.27	1659.69 1759.69 1859.69	1660.91 1760.91 1860.91	188.95 188.32 187.69	0.00 0.00 0.00	426476.84 426576.83 426676.83	708922.94 N 32 10 14.52 W 103 39 29.2° 708922.31 N 32 10 15.51 W 103 39 29.2° 708921.69 N 32 10 16.50 W 103 39 29.2°
IFP1, Drop	12600.00 12700.00 12800.00 12900.00	90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64	10786.51 10785.89 10785.27 10784.66	1659.69 1759.69 1859.69 1959.69	1660.91 1760.91 1860.91 1960.90	188.95 188.32 187.69 187.07	0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82	708922.94 N 32 10 14.52 W 103 39 29.2' 708922.31 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18	90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64	10786.51 10785.89 10785.27 10784.66 10784.60	1659.69 1759.69 1859.69 1959.69 1968.87	1660.91 1760.91 1860.91 1960.90	188.95 188.32 187.69 187.07	0.00 0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2'
	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25	90.35 90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64 359.64 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15	188.95 188.32 187.69 187.07 187.01 186.72	0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708921.01 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91	0.00 0.00 0.00 0.00 0.00 2.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426876.81 426976.80	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426876.81 426976.80 427076.79	708922.94 N 32 10 14.52 W 103 39 29.2 708921.69 N 32 10 16.50 W 103 39 29.2 708921.69 N 32 10 17.49 W 103 39 29.2 708921.00 N 32 10 17.49 W 103 39 29.2 708921.00 N 32 10 17.58 W 103 39 29.2 708920.71 N 32 10 18.05 W 103 39 29.2 708919.90 N 32 10 18.48 W 103 39 29.2 708919.90 N 32 10 19.47 W 103 39 29.2 708919.33 N 32 10 20.46 W 103 39 29.2
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2359.67 2459.66	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.05 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.31 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13300.00 13400.00 13500.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45	1659,69 1759,69 1859,69 1959,69 1968,87 2016,93 2059,69 2159,68 2259,67 2359,67 2459,66 2559,66	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.83 426676.83 426676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77 427276.76	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45	1659, 69 1759, 69 1859, 69 1959, 69 1968, 87 2016, 93 2059, 69 2159, 68 2259, 67 2359, 67 2459, 66 2559, 66 2659, 65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05	0.00 0.00 0.00 0.00 0.00 2.00 0.00 0.00	426476.84 426576.83 42676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13600.00 13600.00 13700.00 13700.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.67 2459.67 2459.66 2659.65 2659.65 2759.65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426876.00 426834.06 426976.81 426976.80 427076.79 427276.76 427376.75 427376.75 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 32.34 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 25.40 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13200.00 13200.00 13300.00 13500.00 13600.00 13700.00 13800.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10790.5 10790.5 10793.63	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2359.67 2459.66 2559.66 2559.65 2759.65 2759.65 2859.64	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426834.06 426976.80 427076.79 427176.77 427276.76 427376.75 427376.75 427476.74 427576.73 427676.72	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708917.62 N 32 10 21.45 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 24.41 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.39 W 103 39 29.2' 708915.91 N 32 10 25.39 W 103 39 29.2' 708915.34 N 32 10 27.38 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13600.00 13600.00 13700.00 13700.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.67 2459.67 2459.66 2659.65 2659.65 2759.65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426876.00 426834.06 426976.81 426976.80 427076.79 427276.76 427376.75 427376.75 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 32.34 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 25.40 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13600.00 13800.00 13800.00 13800.00 1400.00 14100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10796.81 10796.81	1659. 69 1759. 69 1859. 69 1859. 69 1859. 69 1968. 87 2016. 63 2059. 69 2159. 67 2359. 67 2459. 66 2559. 66 2559. 66 2559. 63 3059. 63 3159. 63 3159. 63 3259. 63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426876.81 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427976.68 427976.68	708922.94 N 32 10 14.52 W 103 39 29.2' 708923.1 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.48 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708916.64 N 32 10 22.44 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708914.70 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 32.36 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13600.00 13600.00 13700.00 13800.00 13900.00 1400.00 14100.00 14200.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10794.69 10794.69 10796.81 10796.81	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.69 2259.67 2459.66 2659.65 2759.65 2659.63 3059.63 3159.62 3359.62	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426884.06 426876.81 426976.80 427076.79 427276.76 427376.75 427476.74 427576.73 427576.73 427576.73 427576.73 4276.69 427976.68 428076.67	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.01 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708915.81 N 32 10 22.44 W 103 39 29.2' 708915.84 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.91 N 32 10 22.89 W 103 39 29.2' 708915.91 N 32 10 22.89 W 103 39 29.2' 708915.91 N 32 10 22.87 W 103 39 29.2' 708913.63 N 32 10 29.36 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13600.00 13800.00 13800.00 13800.00 1400.00 14100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10796.81 10796.81	1659. 69 1759. 69 1859. 69 1859. 69 1959. 69 1968. 87 2016. 63 2059. 69 2159. 67 2359. 67 2459. 66 2559. 66 2559. 66 2559. 63 3059. 63 3159. 63 3159. 63 3259. 63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426876.81 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427976.68 427976.68	708922.94 N 32 10 14.52 W 103 39 29.2' 708923.1 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.48 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708916.64 N 32 10 22.44 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708914.70 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 32.36 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2'
2°/100ft Hold	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13900.00 14000.00 14100.00 14200.00 14300.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10797.87 10799.89	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2459.66 2559.65 2759.65 2659.65 2759.63 3059.63 3059.63 3159.62 3259.62 3259.63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2460.87 2560.86 260.85 2760.85 2760.85 2860.84 2960.83 3060.83 3160.82 3260.81 3360.80	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.65 182.48 181.91 181.34 180.77 180.20 179.63 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426976.80 427076.79 427176.77 427276.76 427376.75 427376.75 427376.75 427376.73 4276.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.00 N 32 10 19.47 W 103 39 29.2' 708918.70 N 32 10 21.45 W 103 39 29.2' 708918.71 N 32 10 22.44 W 103 39 29.2' 708916.72 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 24.41 W 103 39 29.2' 708916.48 N 32 10 24.41 W 103 39 29.2' 708915.34 N 32 10 25.40 W 103 39 29.2' 708914.77 N 32 10 28.37 W 103 39 29.2' 708914.78 N 32 10 25.39 W 103 39 29.2' 708914.79 N 32 10 29.36 W 103 39 29.2' 708914.70 N 32 10 29.36 W 103 39 29.2' 708914.70 N 32 10 29.36 W 103 39 29.2' 708913.63 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708912.48 N 32 10 31.34 W 103 39 29.2' 708912.48 N 32 10 31.34 W 103 39 29.2'
2º/100ft Hold	12600.00 12700.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13400.00 13600.00 13600.00 13700.00 13800.00 13900.00 14000.00 14100.00 14200.00 14300.00 14300.00 14500.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10795.75 10796.81 10799.81	1659. 69 1759. 69 1859. 69 1959. 69 1968. 87 2016. 93 2059. 69 2159. 67 2359. 67 2459. 66 2659. 65 2659. 65 2659. 63 3059. 63 3159. 62 3259. 63 3359. 61 3459. 61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80 3460.80	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426786.00 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 42766.72 427776.71 427876.69 427976.68 428276.65	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.07 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.30 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 25.40 W 103 39 29.2' 708915.34 N 32 10 25.40 W 103 39 29.2' 708914.20 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 27.38 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708911.91 N 32 10 33.32 W 103 39 29.2' 708911.91 N 32 10 33.32 W 103 39 29.2'
2°/100ft Hold	12600.00 12700.00 12700.00 12800.00 12909.18 12957.25 13000.00 13100.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13600.00 13700.00 13900.00 14000.00 14100.00 14200.00 14300.00 14500.00 14500.00 14660.38	90.35 90.35 90.35 90.35 90.35 90.35 90.35 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10795.75 10796.81 10797.87 10799.98 10801.04 10802.10	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2459.66 2559.65 2759.65 2659.65 2759.63 3059.63 3159.63 3359.61 3459.61 3559.61 3559.61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3060.83 3160.82 3260.81 3360.80 3460.80 3560.79 3660.78	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49 177.92 177.35	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 4268834.06 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427876.69 428076.67 428276.65 428276.65 428376.64 428476.62	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708916.76 N 32 10 22.44 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.84 N 32 10 25.40 W 103 39 29.2' 708916.85 N 32 10 26.39 W 103 39 29.2' 708914.77 N 32 10 26.39 W 103 39 29.2' 708914.70 N 32 10 27.38 W 103 39 29.2' 708913.63 N 32 10 32.37 W 103 39 29.2' 708913.63 N 32 10 33.32 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.60 N 32 10 31.34 W 103 39 29.2' 708913.61 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 31.34 W 103 39 29.2' 708913.64 N 32 10 33.34 W 103 39 29.2' 708913.67 N 32 10 33.34 W 103 39 29.2' 708913.68 N 32 10 33.34 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708910.92 N 32 10 34.91 W 103 39 29.2'
2º/100ft Hold IFP2, Build 2º/100ft	12600.00 12700.00 12700.00 12800.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13700.00 13800.00 13700.00 1400.00 14400.00 14400.00 14400.00 14500.00 14600.00 14600.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10794.69 10795.75 10796.81 10797.87 10799.89 10799.89 10799.98	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.66 2259.67 2459.66 2559.67 2459.65 2599.63 3059.63 3159.62 3359.63 3459.61 3459.61 3459.61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80 3460.80 3560.79	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49 177.92 177.35	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426884.06 426876.81 426976.80 427076.79 427276.76 427376.75 427376.73 427376.73 427576.73 427576.73 427576.63 427976.68 428076.67 428276.65 428276.65 428276.65	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.58 W 103 39 29.2' 708921.06 N 32 10 17.58 W 103 39 29.2' 708921.07 N 32 10 17.58 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.30 N 32 10 20.46 W 103 39 29.2' 708919.31 N 32 10 22.45 W 103 39 29.2' 708918.76 N 32 10 22.45 W 103 39 29.2' 708918.78 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.49 W 103 39 29.2' 708915.81 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.34 N 32 10 22.40 W 103 39 29.2' 708915.37 N 32 10 28.37 W 103 39 29.2' 708915.38 N 32 10 28.37 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.64 N 32 10 33.34 W 103 39 29.2' 708913.06 N 32 10 33.34 W 103 39 29.2' 708913.07 N 32 10 33.34 W 103 39 29.2' 708913.08 N 32 10 33.34 W 103 39 29.2' 708913.09 N 32 10 33.34 W 103 39 29.2' 708913.40 N 32 10 33.34 W 103 39 29.2' 708913.41 N 32 10 33.32 W 103 39 29.2' 708913.41 N 32 10 33.32 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2'

...CO Grizzly 34 27 Fed Com 408H\CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20

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 ° ' ")
	15000.00	89.65	359.64	10804.87	4059.59	4060.76	174.88	0.00	428876.59	708908.87	N 32 10 38.27	
	15100.00	89.65	359.64	10805.49	4159.58	4160.76	174.25	0.00	428976.58	708908.24	N 32 10 39.26	
	15200.00	89.65	359.64	10806.11	4259.58	4260.76	173.62	0.00	429076.57	708907.61		W 103 39 29.26
	15300.00	89.65	359.64	10806.73	4359.58	4360.75	172.99	0.00	429176.57	708906.99		W 103 39 29.26
	15400.00	89.65	359.64	10807.34	4459.58	4460.75	172.37	0.00	429276.56	708906.36		W 103 39 29.26
	15500.00	89.65	359.64	10807.96	4559.58	4560.75	171.74	0.00	429376.55	708905.73		W 103 39 29.26
	15600.00	89.65	359.64	10808.58	4659.57	4660.74	171.74	0.00	429476.54	708905.10	N 32 10 43.22 N 32 10 44.21	W 103 39 29.26 W 103 39 29.26
	15700.00	89.65	359.64	10809.20	4759.57	4760.74	170.48	0.00	429576.53	708904.47	N 32 10 45.19	
	15800.00	89.65	359.64	10809.82	4859.57	4860.73	169.85	0.00	429676.52	708903.85		W 103 39 29.26
	15900.00	89.65	359.64	10810.44	4959.57	4960.73	169.23	0.00	429776.52	708903.22		W 103 39 29.26
	16000.00	89.65	359.64	10811.06	5059.57	5060.73	168.60	0.00	429876.51	708902.59		W 103 39 29.26
	16100.00	89.65	359.64	10811.68	5159.56	5160.72	167.97	0.00	429976.50	708901.96		W 103 39 29.26
	16200.00	89.65	359.64	10812.29	5259.56	5260.72	167.34	0.00	430076.49	708901.33		W 103 39 29.26
	16300.00	89.65	359.64	10812.91	5359.56	5360.71	166.71	0.00	430176.48	708900.71	N 32 10 51.13	
	16400.00	89.65	359.64	10813.53	5459.56	5460.71	166.09	0.00	430276.48	708900.08	N 32 10 52.12	W 103 39 29.26
IFP3, Drop	16412.53	89.65	359.64	10813.61	5472.08	5473.24	166.01	0.00	430289.00	708900.00	N 32 10 52.25	W 103 30 20 26
2°/100ft												
Hold	16413.56	89.62	359.64	10813.62	5473.12	5474.27	166.00	2.00	430290.04	708899.99	N 32 10 52.26	
	16500.00	89.62	359.64	10814.18	5559.56	5560.71	165.46	0.00	430376.47	708899.45		W 103 39 29.26
	16600.00	89.62	359.64	10814.84	5659.55	5660.70	164.83	0.00	430476.46	708898.82		W 103 39 29.26
	16700.00	89.62	359.64	10815.49	5759.55	5760.70	164.20	0.00	430576.45	708898.19	N 32 10 55.09	W 103 39 29.26
	16800.00	89.62	359.64	10816.15	5859.55	5860.69	163.57	0.00	430676.44	708897.57	N 32 10 56.08	W 103 39 29.26
	16900.00	89.62	359.64	10816.80	5959.55	5960.69	162.94	0.00	430776.43	708896.94	N 32 10 57.07	W 103 39 29.26
	17000.00	89.62	359.64	10817.46	6059.55	6060.69	162.32	0.00	430876.42	708896.31		W 103 39 29.26
	17100.00	89.62	359.64	10818.11	6159.54	6160.68	161.69	0.00	430976.42	708895.68		W 103 39 29.26
	17200.00	89.62	359.64	10818.77	6259.54	6260.68	161.06	0.00	431076.41	708895.05		W 103 39 29.26
	17300.00	89.62	359.64	10819.42	6359.54	6360.67	160.43	0.00	431176.40	708894.43		W 103 39 29.26
	17400.00	89.62	359.64	10820.08	6459.54	6460.67	159.80	0.00	431276.39	708893.80		W 103 39 29.26
	17500.00	89.62	359.64	10820.73	6559.54	6560.66	159.18	0.00	431376.38	708893.17		W 103 39 29.26
	17600.00	89.62	359.64	10821.39	6659.53	6660.66	158.55	0.00	431476.37	708892.54		W 103 39 29.26
	17700.00	89.62	359.64	10822.04	6759.53	6760.66	157.92	0.00	431576.37	708891.91	N 32 11 4.99	
	17800.00	89.62	359.64	10822.70	6859.53	6860.65	157.29	0.00	431676.36	708891.28		W 103 39 29.26
	17900.00	89.62	359.64	10823.35	6959.53	6960.65	156.66	0.00	431776.35	708890.66		W 103 39 29.26
	18000.00	89.62						0.00		708890.03		W 103 39 29.26 W 103 39 29.26
			359.64	10824.01	7059.52 7159.52	7060.64 7160.64	156.03 155.41	0.00	431876.34	708889.40		
IEDA D. III	18100.00	89.62	359.64	10824.66		7 100.04		0.00	431976.33	700009.40	N 32 11 8.94	W 103 39 29.20
IFP4, Build 2°/100ft	18163.67	89.62	359.64	10825.08	7223.19	7224.31	155.01	0.00	432040.00	708889.00	N 32 11 9.57	W 103 39 29.26
	18188.11	90.11	359.67	10825.14	7247.63	7248.75	154.86	2.00	432064.44	708888.85	N 32 11 9.82	W 402 20 20 26
Hold												
	18200.00	90.11	359.67	10825.11	7259.52	7260.64	154.79	0.00	432076.32	708888.79		W 103 39 29.26
	18300.00	90.11	359.67	10824.92	7359.52	7360.63	154.22	0.00	432176.32	708888.22		W 103 39 29.25
	18400.00	90.11	359.67	10824.72	7459.52	7460.63	153.65	0.00	432276.31	708887.64	N 32 11 11.91	
	18500.00	90.11	359.67	10824.52	7559.52	7560.63	153.08	0.00	432376.31	708887.07		W 103 39 29.25
	18600.00	90.11	359.67	10824.33	7659.52	7660.63	152.51	0.00	432476.30	708886.50		W 103 39 29.25
	18700.00	90.11	359.67	10824.13	7759.52	7760.63	151.94	0.00	432576.29	708885.93		W 103 39 29.25
	18800.00	90.11	359.67	10823.94	7859.52	7860.63	151.37	0.00	432676.29	708885.36		W 103 39 29.25
	18900.00	90.11	359.67	10823.74	7959.52	7960.62	150.80	0.00	432776.28	708884.79		W 103 39 29.25
	19000.00	90.11	359.67	10823.54	8059.52	8060.62	150.23	0.00	432876.28	708884.22	N 32 11 17.85	
	19100.00	90.11	359.67	10823.35	8159.52	8160.62	149.66	0.00	432976.27	708883.65		W 103 39 29.25
	19200.00	90.11	359.67	10823.15	8259.52	8260.62	149.09	0.00	433076.26	708883.08		W 103 39 29.25
	19300.00	90.11	359.67	10822.96	8359.52	8360.62	148.51	0.00	433176.26	708882.51	N 32 11 20.82	W 103 39 29.25
	19400.00	90.11	359.67	10822.76	8459.52	8460.61	147.94	0.00	433276.25	708881.94	N 32 11 21.81	W 103 39 29.25
	19500.00	90.11	359.67	10822.56	8559.52	8560.61	147.37	0.00	433376.24	708881.37	N 32 11 22.80	W 103 39 29.25
	19600.00	90.11	359.67	10822.37	8659.52	8660.61	146.80	0.00	433476.24	708880.80	N 32 11 23.79	W 103 39 29.25
	19700.00	90.11	359.67	10822.17	8759.52	8760.61	146.23	0.00	433576.23	708880.23	N 32 11 24.78	
	19800.00	90.11	359.67	10821.98	8859.52	8860.61	145.66	0.00	433676.23	708879.66	N 32 11 25.77	W 103 39 29.24
	19900.00	90.11	359.67	10821.78	8959.52	8960.61	145.09	0.00	433776.22	708879.08	N 32 11 26.76	
IFP5, Build	19914.78	90.11	359.67	10821.75	8974.30	8975.39	145.01	0.00	433791.00	708879.00	N 32 11 26.90	
2°/100ft												
Hold	19922.16	90.26	359.64	10821.73	8981.68	8982.76	144.96	2.00	433798.38	708878.96	N 32 11 26.97	
	20000.00	90.26	359.64	10821.38	9059.52	9060.60	144.47	0.00	433876.21	708878.47		W 103 39 29.24
	20100.00	90.26	359.64	10820.93	9159.52	9160.60	143.84	0.00	433976.21	708877.84	N 32 11 28.73	
	20200.00	90.26	359.64	10820.48	9259.51	9260.60	143.22	0.00	434076.20	708877.21		W 103 39 29.24
	20300.00	90.26	359.64	10820.04	9359.51	9360.59	142.59	0.00	434176.19	708876.58		W 103 39 29.24
	20400.00	90.26	359.64	10819.59	9459.51	9460.59	141.96	0.00	434276.18	708875.95	N 32 11 31.70	
	20500.00	90.26	359.64	10819.14	9559.51	9560.59	141.33	0.00	434376.18	708875.33		W 103 39 29.24 W 103 39 29.24
	20600.00	90.26	359.64	10818.70	9659.51	9660.59	140.70	0.00	434476.17	708874.70		W 103 39 29.24 W 103 39 29.24
	20700.00	90.26	359.64	10818.25	9759.51	9760.58	140.70	0.00	434576.16	708874.07		W 103 39 29.24 W 103 39 29.24
	20800.00	90.26	359.64	10817.80	9859.51	9860.58	139.45	0.00	434676.16	708873.44		W 103 39 29.24 W 103 39 29.24
	20900.00	90.26	359.64	10817.35	9959.51	9960.58	138.82	0.00	434776.15	708872.81	N 32 11 35.66 N 32 11 36.65	
	21000.00	90.26	359.64	10816.91	10059.51	10060.57	138.19	0.00	434876.14	708872.18		W 103 39 29.24
	21100.00	90.26	359.64	10816.46	10159.51	10160.57	137.56	0.00	434976.13	708871.56		W 103 39 29.24
	21200.00	90.26	359.64	10816.01	10259.50	10260.57	136.93	0.00	435076.13	708870.93		W 103 39 29.24
	21300.00	90.26	359.64	10815.57	10359.50	10360.56	136.30	0.00	435176.12	708870.30		W 103 39 29.24
	21400.00	90.26	359.64	10815.12	10459.50	10460.56	135.68	0.00	435276.11	708869.67		W 103 39 29.24
	21500.00	90.26	359.64	10814.67	10559.50	10560.56	135.05	0.00	435376.10	708869.04	N 32 11 42.59	
LTP Point	21590.92	90.26	359.64	10814.27	10650.42	10651.48	134.48	0.00	435467.02		N 32 11 43.49	
	21600.00	90.26	359.64	10814.22	10659.50	10660.56	134.42	0.00	435476.10	708868.41	N 32 11 43.58	W 103 39 29.24
CO Grizzly 34												
27 Fed Com	21665.91	90.26	359.64	10813.93	10725.41	10726.46	134.01	0.00	435542.00	708868.00	N 32 11 44.23	W 103 39 29.24
408H - BHL												

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	28.000	1/100.000	12.250	9.625		B001Mb_MWD+HRGM-Depth Only	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20
	1	28.000	900.000	1/100.000	12.250	9.625		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H
	1	900.000	10129.886	1/100.000	8.750	7.000		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H
	2	10120.400	21665.908	1/100.000	6.000	4.500		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H



# Application for Permit to Drill

# U.S. Department of the Interior Bureau of Land Management

# **APD Package Report**

Date Printed:

APD ID: Well Status:

APD Received Date: Well Name:

Operator: Well Number:

#### **APD Package Report Contents**

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
  - -- Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
  - -- Blowout Prevention Choke Diagram Attachment: 3 file(s)
  - -- Blowout Prevention BOP Diagram Attachment: 1 file(s)
  - -- Casing Taperd String Specs: 2 file(s)
  - -- Casing Design Assumptions and Worksheet(s): 3 file(s)
  - -- Proposed horizontal/directional/multi-lateral plan submission: 4 file(s)
  - -- Other Variances: 2 file(s)
- SUPO Report
- SUPO Attachments
  - -- Existing Road Map: 1 file(s)
  - -- New Road Map: 1 file(s)
  - -- Attach Well map: 1 file(s)
  - -- Production Facilities map: 1 file(s)
  - -- Water source and transportation map: 1 file(s)
  - -- Well Site Layout Diagram: 1 file(s)
  - -- Recontouring attachment: 4 file(s)
  - -- Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments
  - -- None
- Bond Report

- Bond Attachments
  - -- None

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 2. Name of Operator 9. API Well No. 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 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



(Continued on page 2)

\*(Instructions on page 2)

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The Privacy Act of 1974 and regulation in 43 CFR 2.48( d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

# **Additional Operator Remarks**

#### **Location of Well**

0. SHL: LOT 2 / 192 FNL / 1625 FEL / TWSP: 25S / RANGE: 32E / SECTION: 3 / LAT: 32.166262 / LONG: -103.65925 ( TVD: 0 feet, MD: 0 feet ) PPP: SWSE / 25 FSL / 1430 FEL / TWSP: 24S / RANGE: 32E / SECTION: 34 / LAT: 32.16686 / LONG: -103.658608 ( TVD: 10795 feet, MD: 11155 feet ) BHL: NWNE / 25 FNL / 1430 FEL / TWSP: 24S / RANGE: 32E / SECTION: 27 / LAT: 32.195744 / LONG: -103.658602 ( TVD: 10814 feet, MD: 21665 feet )

#### **BLM Point of Contact**

Name: Candy Vigil

Title: LIE

Phone: (575) 234-5982 Email: cvigil@blm.gov

# **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

# CHEVRON U.S.A. INC Lee County, NM Lease Number NMLC0061936

#### CO Grizzly 34 27 FED COM 407H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1700' FEL Bottom Hole Location: Sec. 27, T. 24 S., R. 32 E., 25' FNL & 2310' FEL

# CO Grizzly 34 27 FED COM 408H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1625' FEL Bottom Hole Location: Sec. 27, T. 24 S., R. 32 E., 25' FNL & 1430' FEL

#### CO Grizzly 34 27 FED COM 409H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1575' FEL Bottom Hole Location: Sec. 27, T. 24 S., R. 32 E., 25' FNL & 550' FEL

#### CO Grizzly 34 27 FED COM 416H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1675' FEL Bottom Hole Location: Sec. 10, T. 25S., R. 32 E., 25' FSL & 2310' FEL

#### CO Grizzly 34 27 FED COM 417H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1650' FEL Bottom Hole Location: Sec. 10, T. 25S., R. 32 E., 25' FSL & 1430' FEL

# CO Grizzly 34 27 FED COM 418H

Surface Hole Location: Sec. 3, T. 25 S., R. 32 E., 192' FNL & 1600' FEL Bottom Hole Location: Sec. 10, T. 25S., R. 32 E., 25' FSL & 550' FEL

# **TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

<b>☐</b> General Provisions
□ Permit Expiration
Archaeology, Paleontology, and Historical Sites
■ Noxious Weeds
⊠ Special Requirements
Hydrology
180 Day Temporary Water Line
Wildlife
☐ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
☑ Production (Post Drilling)
Well Structures & Facilities
Pipelines
Electric Lines
Interim Reclamation
Final Abandonment & Reclamation

#### I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

#### II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

# III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

#### IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for

acceptable weed control methods, which include following EPA and BLM requirements and policies.

# V. SPECIAL REQUIREMENT(S)

# <u>Hydrology</u>

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

#### TANK BATTERY:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

# **BURIED/SURFACE LINE(S):**

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the

ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

# **ELECTRIC LINE(S):**

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

# **TEMPORARY USE FRESH WATER FRAC LINE(S):**

Once the temporary use exceeds the timeline of 180 days and/or with a 90 day extension status; further analysis will be required if the applicant pursues to turn the temporary ROW into a permanent ROW.

#### Wildlife:

# Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

# **Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat

Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

# **Ground-level Abandoned Well Marker to avoid raptor perching:**

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

#### B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

# F. EXCLOSURE FENCING (CELLARS & PITS)

#### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### G. ON LEASE ACCESS ROADS

#### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

# Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

# **Ditching**

Ditching shall be required on both sides of the road.

#### **Turnouts**

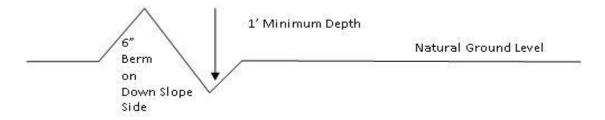
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

# **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

# Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

#### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

# Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

# Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

# **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

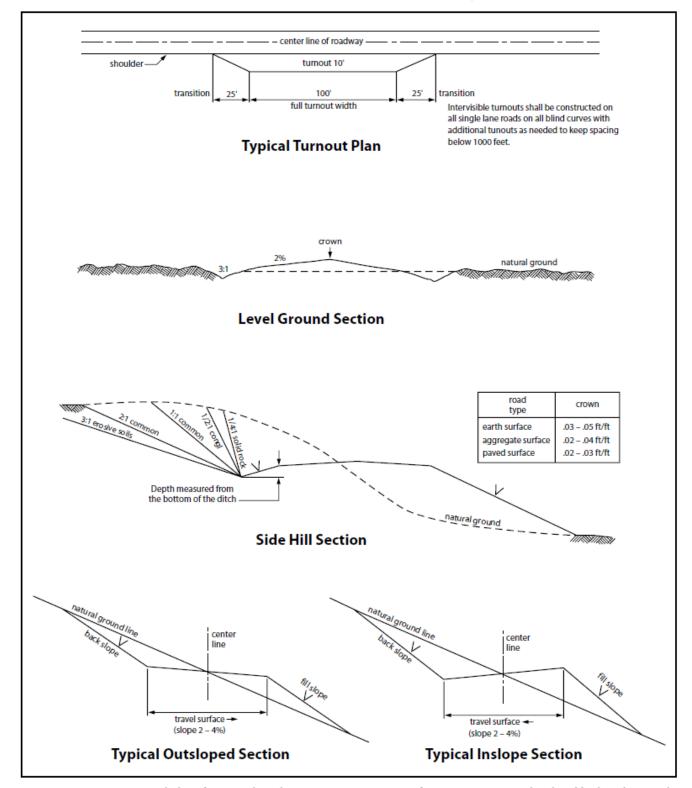


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

# VII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### B. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval
  prior to pipeline installation. The method could incorporate gauges to detect pressure
  drops, situating values and lines so they can be visually inspected periodically or
  installing electronic sensors to alarm when a leak is present. The leak detection plan will
  incorporate an automatic shut off system that will be installed for proposed pipelines to
  minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

### CONDITIONS OF APPROVAL FOR TEMPORARY FRESHWATER PIPELINES

Subject to the terms and conditions which are shown below, is hereby approved:

- Surface pipelines 6.5 inch to 16 inch OD may be in place for no more than 180 days not including installation.
- Surface pipeline will be in operation for no more than 180 days; a maximum of seven (7) days authorized for installation of the lay flat poly line prior to operation.
- Surface pipelines larger than 6.5 inch to-16-inch OD may be in place for no more than 180 days from date of authorization; 5/1/2018, unless a SF-299 is submitted within 30 days of this decision expiring requesting a long term buried fresh water pipeline, and processing of the SF-299 is not yet complete at the end of 30 days, in which case the line(s) may be left in place until a decision is made on the SF-299.
- All lines will be removed when no longer in use.
- · Width of authorized use is 15-feet.
- No blading and/or earthwork will be allowed in order to place the pipeline except burying the line under crossings.
- The pipeline will be buried under all intersecting routes, including BLM-designated trails and access roads into caliche pits, rancher watering stations, etc. All such buried crossings will be removed when the pipeline is removed, unless otherwise approved by the Authorized Officer. Pipelines larger than 6.5-inch OD may utilize other crossing methodologies (but any fill placed over pipeline must be brought in from off-site).
- Pipeline crossings of fences should be avoided where possible. If a crossing is necessary, contact fence owner [usually the grazing permittee] prior to installation, and install by threading pipeline under the lowest wire of the fence; pipeline should never cross on top of any fence wires.

- The pipeline shall stay within 10 feet maximum of existing disturbance (e.g. lease road, pipeline right-of-way etc.); placement should be within 5 feet whenever possible.
- Placement of pumps or other high-maintenance equipment shall be installed along maintained lease roads.
- Gas or diesel pumps, generators, or compressors shall be placed on visquen matting [or 20 mil plastic] and in a containment structure capable of containing all potentially released fuels. Containments must be protected against wildlife deaths in accordance with oilfield best management practices.
- Due to potential damage to natural resources, no work is allowed during inclement weather.
- Pipeline will be marked with your company's name and contact number, at beginning and ending points, at all public-road crossings, and at intervals not exceeding every 0.6 mile, unless otherwise approved by the Authorized Officer.
- Should unforeseen damage occur to resources, BLM will require reclamation of the impacted land
- No water may be released into the environment without BLM consent.
- Placement of surface pipelines along or under public roadways may require permits from the road authority.
- This authorization is limited to lands under BLM jurisdiction. If your proposed pipeline crosses lands under private ownership or under other agency jurisdiction, you are responsible for obtaining all necessary permits and approvals from those parties.

#### **BURIED PIPELINE STIPULATIONS**

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline. any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized right-of-way.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:
  - Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.)
  - Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
  - The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
- 9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the

owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

- 10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

seeding requirements, using the following seed mix.	
Seed Mixture 1	
Seed Mixture 2	
☐ Seed Mixture 2/LPC	
☐ Seed Mixture 3	
☐ Seed Mixture 4	
☐ Seed Mixture Aplomado Falcon Mixture	

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached

- 13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2.
- 14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.
- 16. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

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OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 17 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

- 17. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."
- 18. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 19. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 20. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

# STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.
- 4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
  - a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
  - b. Activities of other parties including, but not limited to:
    - (1) Land clearing
    - (2) Earth-disturbing and earth-moving work
    - (3) Blasting
    - (4) Vandalism and sabotage;
  - c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

- 5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.
- 6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **30** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.
- 7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.
- 8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.
- 9. The pipeline shall be buried with a minimum of  $\underline{\mathbf{6}}$  inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder.

The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 16 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

- 16. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."
- 17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 18. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 19. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

#### C. **ELECTRIC LINES**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

## STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-ofway grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

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- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 10. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 11 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

11. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

12. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### 13. Special Stipulations:

For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.

## STIPULATIONS FOR BURIED FIBER OPTIC LINES

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

- 1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this authorization.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the Holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the powerline route or on facilities authorized. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way Holder's activity on the pipeline). This agreement applies without regard to whether a release is caused by the Holder, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of the Holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the Holder. Such action by the Authorized Officer shall not relieve the Holder of any liability or responsibility.
- 5. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the Holder, or any person working on the Holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The Holder shall suspend all operations in the

immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The Holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

- 6. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."
- 7. The holder shall be held responsible if noxious weeds become established within the area. Evaluation of growth of the noxious weeds shall be made upon discovery. Weed control will be required on the disturbed lands resulting from this actions, which include the roads, pads and associated pipelines and on adjacent lands affected by the establishment of weeds due to this action.

The holder shall insure that the equipment and or vehicles that will be used to construct, maintain and administer the access roads, well pad, and resulting well are not polluted with invasive and noxious weed seeds. Transporting of invasive and noxious weed seeds could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to construction, maintenance and administration of the access roads, well pad, and resulting well.

The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods, which include following EPA and BLM requirements and policy.

- 8. The holder shall be responsible for maintaining the site in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment.
- 9. The holder shall conduct all activities associated with the construction, operation and termination of the powerline within the authorized limits.
- 10. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
- 11. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair impacted improvements to at least their former state. The holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence will be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 12. Construction trenches left open over night shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.

- 13. The holder shall evenly spread the excess soil excavated from trench in the immediate vicinity of the trench structure.
- 14. The BLM serial number assigned to this right-of-way grant shall be posted in a permanent, conspicuous manner, and be maintained in a legible condition for the term of the right-of-way at all major road crossings and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 15. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 16. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facilities or within 180 days of abandonment, relinquishment, or termination of this grant, whichever comes first. This will not apply where the power line extends to serve an active, adjoining facility or facilities.
- 17. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches that are not otherwise fenced, screened, or netted to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
  - c. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
  - d. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.
- 18. The construction of this project will consist of digging a trench to a depth of at least 40 inches. Then installing the power line and covering with backfill dirt. After completing construction of the buried power line, the line shall be marked with underground power line warning signs at least every 1,000 feet.

## VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

## **Seed Mixture 1 for Loamy Sites**

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

#### Species

	<u>lb/acre</u>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

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\*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

## Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

#### <u>Species</u>

<del></del>	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | CHEVRON USA INC.

LEASE NO.: NMLC061936

**LOCATION:** Section. 3., T25S., R.32E., NMP

**COUNTY:** Lea County, New Mexico

WELL NAME & NO.: CO GRIZZLY 34 27 FED COM 407H

**SURFACE HOLE FOOTAGE:** 192'/N & 1700'/E **BOTTOM HOLE FOOTAGE** 25'/N & 2310'/E

WELL NAME & NO.: CO GRIZZLY 34 27 FED COM 408H

**SURFACE HOLE FOOTAGE:** 192'/N & 1625'/E **BOTTOM HOLE FOOTAGE** 25'/N & 1430'/E

WELL NAME & NO.: CO GRIZZLY 34 27 FED COM 409H

**SURFACE HOLE FOOTAGE:** 192'/N & 1575'/E **BOTTOM HOLE FOOTAGE** 25'/N & 550'/E

## COA

H2S	Yes	O No	
Potash	None	Secretary	© R-111-P
Cave/Karst Potential	• Low	Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	© 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 **Double X** 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 **950** 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 **4785** 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.

## **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.
- 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 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.

# **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)
- 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 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 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.

NMK06242021



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

# Operator Certification Data Report

# **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: KAYLA MCCONNELL	Signed on: 02/23/2021
-----------------------	-----------------------

Title: Permitting Specialist

Street Address: 6301 Deauville Blvd

City: Midland State: TX Zip: 79706

Phone: (432)687-7375

Email address: EEOF@CHEVRON.COM

# **Field Representative**

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		



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

# Application Data Report

**APD ID:** 10400069679 **Submission Date:** 02/23/2021

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most

recent changes
Show Final Text

# **Section 1 - General**

BLM Office: Carlsbad User: KAYLA MCCONNELL Title: Permitting Specialist

Federal/Indian APD: FED Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMLC0061936 Lease Acres:

Surface access agreement in place? Allotted? Reservation:

Agreement in place? NO Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? N

Permitting Agent? NO APD Operator: CHEVRON USA INCORPORATED

Operator letter of designation:

## **Operator Info**

Operator Organization Name: CHEVRON USA INCORPORATED

Operator Address: 6301 Deauville Blvd.

Zip: 79706

**Operator PO Box:** 

Operator City: Midland State: TX

**Operator Phone:** (432)687-7866

**Operator Internet Address:** 

# **Section 2 - Well Information**

Well in Master Development Plan? NO Master Development Plan name:

Well in Master SUPO? NO Master SUPO name:

Well in Master Drilling Plan? NO Master Drilling Plan name:

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: COTTON DRAW Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: CO Number: 407H, 408H, 409H,

Well Class: HORIZONTAL

GRIZZLY 34 27 FED COM
416H, 417H, 418H

Number of Legs: 1

Well Work Type: Drill Well Type: OIL WELL

Describe Well Type: Well sub-Type: INFILL

Describe sub-type:

Distance to town: 29 Miles Distance to nearest well: 600 FT Distance to lease line: 192 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_C\_102\_R7\_Cert111820\_20210223131907.pdf

Well work start Date: 08/31/2021 Duration: 130 DAYS

## **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL	192	FNL	162	FEL	25S	32E	3	Lot	32.16626		LEA	1		F	NMLC0	350	0	0	Υ
Leg			5					2	2	103.6592			MEXI		061936	4			
#1										5		CO	CO						
KOP	192	FNL	162	FEL	25S	32E	3	Lot	32.16626	-	LEA	NEW	NEW	F	NMLC0	350	0	0	Υ
Leg			5					2	2	103.6592		MEXI	MEXI		061936	4			
#1										5		CO	CO						
PPP	25	FSL	143	FEL	24S	32E	34	Aliquot	32.16686	-	LEA	NEW	NEW	F	NMLC0	-	111	107	Υ
Leg			0					SWSE		103.6586		MEXI	I		061936	729	55	95	
#1-1										08		co	СО			1			

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT Leg #1	100	FNL	143 0	FEL	24S	32E		Aliquot NWNE	32.19553 8	- 103.6586 02	LEA	NEW MEXI CO	ı	F	NMNM 120907	- 731 0	215 90	108 14	Y
BHL Leg #1	25	FNL	143 0	FEL	24S	32E	l <del> </del>	Aliquot NWNE	32.19574 4	- 103.6586 02	LEA	NEW MEXI CO	ı	F	NMNM 120907	- 731 0	216 65	108 14	Y

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

Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.

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

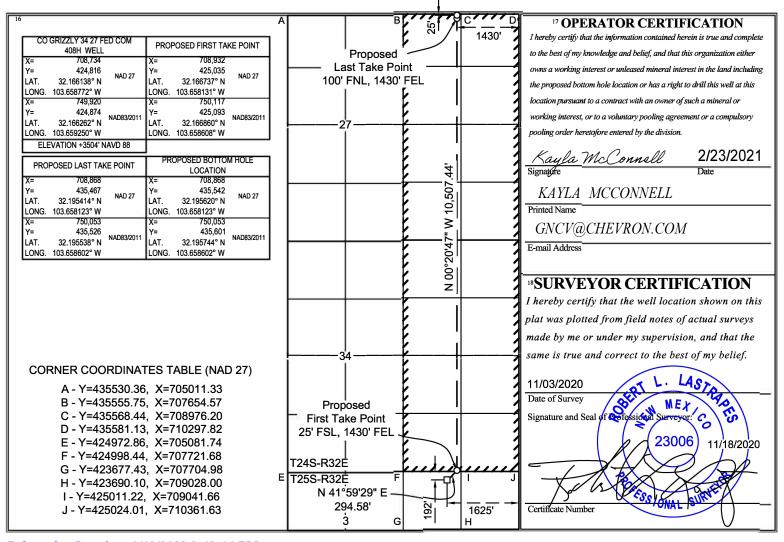
■ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

	<sup>1</sup> API 1	Numbe	er	<sup>2</sup> Pool	Code			<sup>3</sup> Pool Nat	ne					
				13	3367		COT	TON DRAW; B	ONE SPR	ING				
<sup>4</sup> Proper	ty Code			**	<sup>5</sup> Pr	operty Name	-	6	Well Number					
CO GRIZZLY 34 27 FED COM											408H			
<sup>7</sup> OGRID No. <sup>8</sup> Operator Name <sup>9</sup> Elevation														
				CHEVRON U.S.A. INC. 3504										
3	□ Surface Location													
UL or lot no.	Sect	ion To	ownship	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County			
В	3	25	5 SOUTH	32 EAST, N.M.P.M	32 EAST, N.M.P.M. 192' NORTH 1625' F						LEA			
				<sup>11</sup> Bottom	Hole Locati	ion If Diffe	erent From S	Surface			-			
UL or lot no.	Sect	ion	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/V	West line	County			
В	27	24 SOUTH 32 EAST, N.M.P.M. 25' NORTH 1430' E									AST LEA			
12 Dedicated A	cres 13	Joint o	or Infill	<sup>4</sup> Consolidation Code	15 Order No.									
640	640													

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.





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

# Drilling Plan Data Report

01/10/2022

APD ID: 10400069679

Submission Date: 02/23/2021

Highlighted data reflects the most recent changes

**Operator Name: CHEVRON USA INCORPORATED** Well Name: CO GRIZZLY 34 27 FED COM

Well Number: 408H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1616784	RUSTLER	3503	890	890	DOLOMITE	NONE	N
1616785	CASTILE	-383	3886	3916	ANHYDRITE	NONE	N
1616786	LAMAR	-1274	4777	4807	LIMESTONE	NONE	N
1616787	BELL CANYON	-1317	4820	4850	SANDSTONE	NONE	N
1616788	CHERRY CANYON	-2205	5708	5738	SANDSTONE	NONE	N
1616789	BRUSHY CANYON	-3588	7091	7121	SANDSTONE	NONE	N
1616790	BONE SPRING	-5217	8720	8750	LIMESTONE	NONE	N
1616791	UPPER AVALON SHALE	-5312	8815	8845	LIMESTONE, SANDSTONE, SHALE	NONE	N
1616792	BONE SPRING 1ST	-6234	9737	9766	SANDSTONE	NONE	N
1616793	BONE SPRING 2ND	-7311	10814	21665	SANDSTONE	NONE	Y

## **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M Rating Depth: 10814

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. BOP test will be conducted by a 3rd party.

Requesting Variance? YES

Variance request: Chevron requests the following variances: - Variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. - Variance to use an 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 3rd party. - Variance from the Onshore Order 2 where it states: "(A full BOP

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

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

Testing Procedure: Stack will be tested as specified in the attached testing requirements. Test BOP from 250 psi to 6,650 psi in Ram and Annular (annular and BOP will be 10M); BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. A full BOP test will be performed unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad. BOP test will be conducted by a third party.

## **Choke Diagram Attachment:**

BLM Choke Hose Test Specs Pressure Test 20200616142852.pdf

BLM\_5M\_Choke\_Manifold\_Diagram\_20200616143140.pdf

Grizzly\_Break\_Test\_Variance\_20210223113359.pdf

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

BLM\_5M\_Annular\_10M\_Rams\_Test\_Plan\_20200616142927.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	13.375	NEW	API	N	0	900	0	900	3504	2604	900	J-55	54.5	ST&C	2.44	1.7	DRY	4.72	DRY	4.72
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	4600	0	4600	3503	-1096	4600	L-80	-	OTHER - BTC	1.78	1.34	DRY	2.7	DRY	2.7
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8750	0	8750	3157	-5246	l	OTH ER		OTHER - BLUE	5.82	1.15	DRY	2.77	DRY	2.77
4	LINER	6.12 5	4.5	NEW	API	Υ	8450	21665	8450	10814	-4947	-7310	13215	P- 110	_	OTHER - W- 521	1.32	1.11	DRY	1.38	DRY	1.38

#### **Casing Attachments**

**Operator Name: CHEVRON USA INCORPORATED** Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H **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\_20210223114424.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): 9.625\_40ppf\_L80\_ICY\_BTC\_20210223133808.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s):

7\_29ppf\_P110\_TSH\_Blue\_20200616144815.pdf

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

## **Casing Attachments**

Casing ID: 4

String Type:LINER

**Inspection Document:** 

**Spec Document:** 

# **Tapered String Spec:**

 $CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_9pt\_Drilling\_Plan\_20210223133841.pdf\\ 4.5\_11.6ppf\_P110\_TSH\_W521\_20200616145927.pdf$ 

Casing Design Assumptions and Worksheet(s):

# **Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	900	421	1.34	14.5	564	100	Class C	Extender Antifoam Retarder

INTERMEDIATE	Lead	0	3600	902	2.5	11.5	2255	100	CLASS C	Extender, Antifoam, Retarder
INTERMEDIATE	Tail	3600	4600	336	1.4	14.5	470	50	Class C	Extender, Antifoam, Retarder
PRODUCTION	Lead	4100	7750	329	2.5	11.5	823	50	Class C	Extender, Antifoam, Retarder, Viscosifier
PRODUCTION	Tail	7750	8750	134	1.4	14.5	188	25	Class C	Extender, Antifoam, Retarder, Viscosifier
LINER	Lead	8450	2166 5	845	1.84	13.2	1556	25	Class C	Extender, Antifoam, Retarder, Viscosifier

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

# **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 by utilized 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.

**Describe the mud monitoring system utilized:** A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume 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)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	900	SPUD MUD	8.3	10.3							VIS: 26-36 FILTRATE: 15-25
900	4600	OTHER : BRINE	8.3	10.6							VIS: 26-36 FILTRATE: 15-25
4600	8750	OTHER : WBM/Brine	8.7	10.6							Viscosity: 26-36 Filtrate: 15-25
8750	2166 5	OIL-BASED MUD	8.7	10.5							Viscosity: 50-70 Filtrate: 5-10

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

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

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

Type Logs Interval Timing

Mudlogs - 2 man mudlog - Surf csg shoe through prod hole TD - Drillout of Int Csg

LWD - MWD Gamma - Int. and Prod. Hole - While Drilling

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

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

Coring operation description for the well:

Conventional whole core samples are not planned. A Directional Survey will be run.

# **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5398 Anticipated Surface Pressure: 3018

Anticipated Bottom Hole Temperature(F): 180

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

Describe:

Contingency Plans geoharzards description:

**Contingency Plans geohazards attachment:** 

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations plan:

# **Section 8 - Other Information**

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

CO\_Grizzly\_3\_27\_FED\_Gas\_Capture\_Plan\_20210223121030.pdf

CO Grizzly Pad Rig layout 20200629123353.pdf

H2S\_Summary\_20200626110454.pdf

CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_Directional\_20210223134131.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 follow Onshore Order 2 Section B Casing and Cementing Requirements to wait to 500 psi compressive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at sufficient strength prior to performing a shoe test and drilling ahead through the next hole section.

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

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

# Other proposed operations facets attachment:

## **Other Variance attachment:**

Grizzly\_WOC\_Variance\_20210223121110.pdf CUSA\_Spudder\_Rig\_Data\_20190802085518.pdf

# Ontinental &

CONTITECH RUBBER Industrial Kft.

No: QC-DB-617 / 2015 8/71 Page:

ContiTech

# Hose Data Sheet

CRI Order No.	541802
Customer	ContTech Oil & Marine Corp.
Customer Order No	4500606483 COM757207
Item No.	-
Hose Type	Flexible Hose
Standard	API SPEC 16 C - TSL
Inside dia in inches	6
Length	45 ft
Type of caupling one end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE C/W BX155ST/ST INLAID R.GR. SOUR
Type of coupling other end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE C/W BX155 ST/ST INLAID R.GR. SOUR
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St steel outer wrap
Internal stripwound tube	No
Lining	OIL + GAS RESISTANT SOUR
Safety clamp	Yes
Lifting collar	Yes
Element C	Yes
Safety chain	No
Safety wire rope	Yes
Max.design temperature [°C]	100
Min.design temperature (°C)	-20
Min. Bend Radius operating [m]	06'0
Min. Bend Radius storage [m]	06'0
Electrical continuity	The Hose is electrically continuous
Type of packing	WOODEN CRATE ISPM-15

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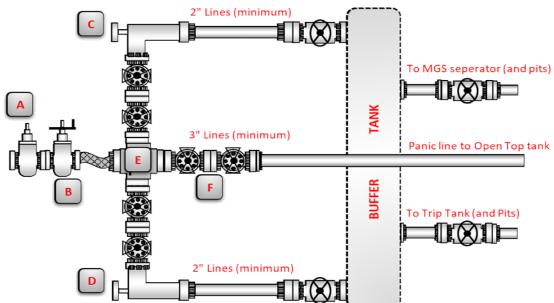
# **CHOKE MANIFOLD SCHEMATIC**

Operation: Intermediate & Production

Minimum System operation pressure

5,000 psi

Choke Manifold						
Part	Size	Pressure Rating	Description			
Α	3"	10,000 HCR (remotely operated)				
В	3"	10,000	HCR (manually operated)			
С	2"	10,000	Remotely operated choke			
D	2"	10,000	Adjustable choke			
E	3"	10,000	Crown valve with pressure gage			
F	3"	10,000	Panic line valves			



Choke Manifold 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.

Adjustable chokes may be remotely operated but will have backup hand pump for hydraulic actuation in case of loss of rig air or power.

Flare and panic lines will terminate a minimum of 150' from the wellhead. These lines will terminate at a location as per approved APD.

All valves (except chokes) on choke line, kill line and choke manifold will be full opening and will allow straight through flow. This excludes any valves between the mud gas separator and shale shakers.

All manual valves will have hand wheels installed.

Flare systems will have an effective method for ignition.

All connections will be flanged, welded or clamped

If buffer tank is used, a valve will be used on all lines at any entry or exit point to or from the buffer tank.

# Delaware Basin Variance/Sundry for Federal Well



# **Well Names:**

Well Name					
CO Grizzly 3 10 Fed	416H				
CO Grizzly 3 10 Fed	417H				
CO Grizzly 3 10 Fed	418H				
CO Grizzly 34 27 Fed Com	407H				
CO Grizzly 34 27 Fed Com	408H				
CO Grizzly 34 27 Fed Com	409H				

# **CVX CONTACT**:

Phillipe Salanova Drilling Engineer MCBU D&C; New Mexico psalanova@chevron.com 713-372-1373 (office)

# Summary of Changes to APD Submission or APD Variance

#### Full BOP test for all connection/seal breaks:

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  $/ \ge 5,000$  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 break test will not be performed on our last production section. A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized. We will test seals that have been broken individually between full BOP tests. Time between tests for a single test or full test will not exceed 21 days.

See drilling sequence below in <u>red</u> where it indicates the **potential/example** hole sections break testing can be performed given, they meet the above criteria.

Well names & Skid order ex.	416	417	418	407	<u>408</u>	409
Surface	1	2	3	4	5	6
Intermediate	7	<u>8</u>	9	<u>10</u>	<u>11</u>	<u>12</u>
Production	13	14	15	16	17	18

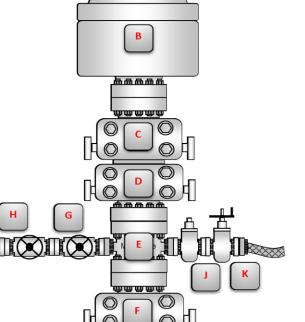
# **BLOWOUT PREVENTER SCHEMATIC**

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

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

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

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

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

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

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

BLOWOUT PREVENTER SCHEMATIC					
Operation: Intermediate & Production					
Minimum System operation pressure		5,000 psi			

	Minimum Requirements						
		Closing Unit a	nd Accumulat	tor Checklist			
				ed off at least once pe d after 6 months on the		•	
	Precharge pressure for with nitrogen gas only. through the end of the w	Tested precharge pres	sures must be recor	ded for each individual	bottle and kept on loc		
one ti appli		Minimum acceptable operating pressure	Desired precharge pressure	Maximum acceptable precharge pressure	Minimum acceptable precharge pressure		
	1500 psi	1500 psi	750 psi	800 psi	700 psi		
	2000 psi	2000 psi	1000 psi	1100 psi	900 psi		
	3000 psi	3000 psi	1000 psi	1100 psi	900 psi		
	Accumulator fluid reserve will be maintained at ma be recorded. Reservoir location through the end Closing unit system will	nnufacturer's recomme fluid level will be recor I of the well.	ndations. Usable flu ded along with man	id volume will be reco ufacturer's recommend	ded. Reservior capac ation. All will be kept	ity will	
	preventers.						
	Power for the closing un when the closing valve r accumulator pump is "O	nanifold pressure decr	eases to the pre-set				
	With accumulator bottle (if used) plus close the a psi above maximum acc closing time will be reco	nnular preventer on the eptable precharge pre-	e smallest size drill ssure (see table abo	pipe within 2 minutes a ve) on the closing man	and obtain a minimum	of 200	
	Master controls for the E all preventer and the ch			lator and will be capal	ole of opening and clos	ing	
	Remote controls for the floor (not in the dog house				and located on the rig		
	Record accumulator tes	ts in drilling reports an	d IADC sheet				

BLOWOUT PREVENTER SCHEMATIC					
Operation: Intermediate & Production					
Minimum System opera	ation pressure	5,000 psi			

# **BOPE 5K Test Checklist**

BOTE SK TEST CHECKHST
The following items must be checked off prior to beginning test:
BLM will be given at least 4 hour notice prior to beginning BOPE testing.  Valve on casing head below test plug will be open.  Test will be performed using clear water.
The following items must be performed during the BOPE testing:
BOPE will be pressure tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs, and at a minimum of 30 day intervals. <b>Test pressure and times will be recorded by a 3<sup>rd</sup> party on a test charge and kept on location through the end of the well.</b>
Test plug will be used.  Ram type preventer and all related well control equipment will be tested to 250 psi (low) and 5,000 psi (high).
Annular type preventer will be tested to 250 psi (low) and 3,500 psi (high).
Valves will be tested fromt eh working pressure side with all downstream valves open. The check valve will be held open to test the kill line valve(s).
Each pressure test will be held for 10 minutes with no allowable leak off.
Master controls and remote controls to the closing unit (accumulator) must be function tested as part of the BOPE test.
Record BOP tests and pressures in drilling reports and IADC sheet.

Wedge 521® Printed on: 05/09/2019



Min. Wall 87.5% **Outside Diameter** 4.500 in. Thickness (\*) Grade P110 Connection OD **REGULAR** Wall Thickness 0.250 in. COUPLING Option Body: White 1st Band: White P110\* Grade Drift **API Standard** 1st Band: -2nd Band: -2nd Band: -3rd Band: -3rd Band: -4th Band: -Туре Casing

PIPE BODY DATA					
GEOMETRY					
Nominal OD	<b>4.500</b> in.	Nominal Weight	11.60 lbs/ft	Drift	3.875 in.
Nominal ID	<b>4.000</b> in.	Wall Thickness	<b>0.250</b> in.	Plain End Weight	11.36 lbs/ft
OD Tolerance	API				
PERFORMANCE					
Body Yield Strength	<b>367</b> x1000 lbs	Internal Yield	<b>10690</b> psi	SMYS	<b>110000</b> psi
Collapse	<b>7580</b> psi				
CONNECTION DATA	\				
GEOMETRY					
Connection OD	<b>4.695</b> in.	Connection ID	<b>3.960</b> in.	Make-up Loss	<b>3.620</b> in.
Threads per in	3.36	Connection OD Option	REGULAR		
PERFORMANCE					
Tension Efficiency	64.2 %	Joint Yield Strength	<b>235.614</b> x1000 lbs	Internal Pressure Capacity	<b>10690.000</b> psi
Compression Efficiency	84.8 %	Compression Strength	<b>311.216</b> x1000 lbs	Max. Allowable Bending	<b>71.9</b> °/100 ft
External Pressure Capacity	<b>7580.000</b> psi				
MAKE-UP TORQUES	S				
Minimum	3600 ft-lbs	Optimum	4300 ft-lbs	Maximum	<b>6300</b> ft-lbs
OPERATION LIMIT	TORQUES			I.	
Operating Torque	14000 ft-lbs	Yield Torque	21000 ft-lbs		

#### **Notes**

This connection is fully interchangeable with:

Wedge 521® - 4.5 in. - 10.5 / 11 / 12.6 / 13.5 lbs/ft

Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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Lea County, NM

#### Pad Summary: CO Grizzly Pad 1

The table below lists all the wells for the given pad and their respective name and TVD's (ft) for their production target intervals:

Well Name(s)	Target TVD	Formation Desc.
CO Grizzly 3 10 Fed 416H	10,400	Second Bonespring Upper
CO Grizzly 3 10 Fed 417H	10,750	Second Bonespring Lower
CO Grizzly 3 10 Fed 418H	10,450	Second Bonespring Upper
CO Grizzly 34 27 Fed Com 407H	10,525	Second Bonespring Upper
CO Grizzly 34 27 Fed Com 408H	10,800	Second Bonespring Lower
CO Grizzly 34 27 Fed Com 409H	10,500	Second Bonespring Upper
	1	
	1	

#### 1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

Flevation: 3503 ft

Elevation. 3003 it							
FORMATION	SUB-SEA TVD	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION	
Rustler (RSLR)	2642	890	890	Dolomite	N/A		
Castile (CSTL)	-354	3,886	3,916	Anhydrite	N/A		
Lamar (LMAR)	-1245	4,777	4,807	Limestone	N/A		
Bell Canyon (BLCN)	-1288	4,820	4,850	Sandstone	N/A		
Cherry Canyon (CRCN)	-2176	5,708	5,738	Sandstone	N/A		
Brushy Canyon (BCN)	-3559	7,091	7,121	Sandstone	N/A		
Bone Spring (BSGL)	-5188	8,720	8,750	Limestone	Oil		
Upper Avalon (AVU)	-5283	8,815	8,845	LS/SH/SS	Oil		
First Bone Spring (FBS)	-6205	9,737	9,766	Sandstone	Oil		
Second Bone Spring (SBU)	-6860	10,392	10,424	SS/LS	Oil		
SBSG Target	-7311	10,814	21,665	SS/LS	Oil	yes	

	WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
	SHL	3503	-	
Г	KOP	-6719	10,222	10,252
	FTP	-7292	10,795	11,155
Г	LTP	-7311	10,814	21,590

#### 2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expe	500	
Oil/Gas	Upper Avalon (AVU)	8,815
Oil/Gas	First Bone Spring (FBS)	9,737
Oil/Gas	Second Bone Spring (SBU)	10,392

All shows of fresh water and minerals will be reported and protected.

#### 3. BOP 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.

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.

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

Received by OCD: 1/11/2022 10:21:08 AM ONSHORE ORDER NO. 1 Chevron CO Grizzly 34 27 Fed Com 408H

CONFIDENTIAL -- TIGHT HOLE DRILLING PLAN PAGE:

#### 4. CASING PROGRAM

Lea County, NM

a. The proposed casing program will be as follows:

a. The propose	a casing pr	ogram will k	oc as ionows.						
Purpose	From	То	(TVD)	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	900'	900'	16"	13-3/8"	54.5 #	J-55	STC	New
Intermediate	0'	4,600'	4,600'	12-1/4"	9-5/8"	40#	L-80	BTC	New
Prod/Intermediate 2	0'	8,750'	8,750'	8-3/4"	7"	29.0 #	P/TN-110	BLUE	New
Production Liner	8,450'	21,665'	10,814'	6-1/8"	5** x 4-1/2"	18 x 11.6	P-110	W513 x W521	New

\*\*5" casing ran from TOL to ~45 deg. Max OD at connection is 5.00 inches

- $\ensuremath{\mathrm{a}}_{\cdot}$  Casing design subject to revision based on geologic conditions encountered.
- A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a b. particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.
- C. Chevon will keep casing fluid filled at all times and while RIH. Chevron will check casing at a minimum of every 20 jts (~840') while running intermediate and production casing in order to maintain collapse SF.

SF Calculations based on the foll	casing design:		
Surface	1,000'	ftTVD	max depths
Intermediate	5,000'	ftTVD	max depths
Prod/Intermediate 2	10,000'	ftTVD	max depths
Production Liner	21,000'	ftMD	max depths

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.70	2.44	4.72	1.80
Intermediate	1.34	1.78	2.70	1.63
Prod/Intermediate 2	1.15	5.82	2.77	1.24
Production Liner	1.11	1.32	1.38	1.16

#### The following worst case load cases were considered for calculation of the above Min. Safety Factors:

Burst Design	Surf	Int	Int 2	Prod Lnr
Pressure Test- Surface, Prod Csg, Prod Liner				
P external: Mud weight above TOC, PP below	X	X	x	Х
P internal: Test psi + next section heaviest mud in csg				
Displace to Gas				
P external: Mud weight above TOC, PP below	X	X	x	X
P internal: Dry Gas from Next Csg Point				
Gas over mud (60/40) - Prod Csg				
P external: Mud weight above TOC, PP below		X	x	Х
P internal: 60% gas over 40% mud from hole TD PP				
Stimulation (Frac) Pressures-				
P external: Mud weight above TOC, PP below			x	X
P internal: Max inj pressure w/ heaviest injected fluid				
Tubing leak- Prod Csg (packer at KOP)				
P external: Mud weight above TOC, PP below		X	X	X
P internal: Leak just below surf, 8.45 ppg packer fluid				
Collapse Design	Surf	Prod	Prod	Prod
Full Evacuation				
P external: Mud weight gradient	X	X	X	Х
P internal: none				
Cementing- Surf, Int, Prod Csg				
P external: Wet cement	X	X	X	Х
P internal: displacement fluid - water				
Tension Design	Surf	Prod	Prod	Prod
50-100k lb overpull				
	X	X	X	Х

CONFIDENTIAL -- TIGHT HOLE DRILLING PLAN PAGE: 3

Chevron CO Grizzly 34 27 Fed Com 408H Lea County, NM

#### 5. **CEMENTING PROGRAM**

Slurry	Туре	Тор	Bottom	Sacks	Yield	Density	%Excess	Water	Volume cuft	Additives
Surface Csg 13-3/8"									-	
Tail	Class C	0'	900'	421	1.34	14.5	100	6.40	564	Extender, Antifoam, Retarder
Intermediate Csg 9-5/8"										
Tail	Class C	0'	3,600'	902	2.5	11.5	100	14.60	2255	Extender, Antifoam, Retarder
Tail	Class C	3,600'	4,600'	336	1.4	14.5	50	6.50	470	Extender, Antifoam, Retarder
Intermediate-2 7"	•									
	1		Planned	single stage	cement job					1
Lead	Class C	4,100'	7,750'	329	2.5	11.5	50	14.60	823	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	7,750'	8,750'	134	1.4	14.5	25	6.50	188	Extender, Antifoam, Retarder, Viscosifier
	•		<u>Cc</u>	ntingency: T	op Job	•	'		•	•
Tail	Class C	0'	6,000'	805	1.4	14.5	25	6.50	1128	Extender, Antifoam, Retarder, Viscosifier
Production Liner 5" x 4-	1/2"									
Lead	Class C	8,450'	21,665'	845	1.84	13.2	25	9.86	1556	Extender, Antifoam, Retarder, Viscosifier

<sup>1.</sup> Final cement volumes will be determined by caliper.

<sup>2.</sup> Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.

<sup>3.</sup> Production casing will have one solid body or bow spring type centralizer on every joint in the lateral, then every other joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing and surface.

CONFIDENTIAL -- TIGHT HOLE DRILLING PLAN PAGE: 4

Chevron CO Grizzly 34 27 Fed Com 408H Lea County, NM

#### 6. MUD PROGRAM

From	То	Туре	Weight	Weight at TD	Viscosity	Filtrate	Notes
0'	900'	Spud mud	8.3 - 8.9	8.9	26-36	15-25	
0'	4,600'	Brine	8.3 - 10.6	10.0	26-36	15-25	
4,600'	8,750'	WBM/Brine	8.7 - 10.6	9.0	26-36	15-25	
8,750'	21,665'	ОВМ	8.7 - 10.5	9.6	50-70	5-10	

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 porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transportating of E&P waste will follow EPA regulations and accompanying manifests.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

#### 7. TESTING, LOGGING, AND CORING

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	While drilling or circulating
		through prod hole TD	
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling

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

#### 8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a.	No abnormal	pressure or	temperatures	are expected.	Estimated BHP is:

**5,398** psi

b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered



# Casing and Tubing Performance Data

# PIPE BODY DATA

# **GEOMETRY**

Outside Diameter	13.375 in	Wall Thickness	0.380 in	API Drift Diameter	40.450 in
			0.000 111	AFT DITT DIAMETER	12.459 in
Nominal Weight	54.50 lbs/ft	Nominal ID	12.615 in	Alternative Drift Diameter	n.a.
Plain End Weight	52.79 lbs/ft	Nominal cross section	15.513 in		
		PEF	RFORMANCE		
Steel Grade	J55	Minimum Yield	55,000 psi	Minimum Ultimate	75,000 psi
Tension Yield	853,000 in	Internal Pressure Yield	2,730 psi	Collapse Pressure	1,130 psi
Available Seamless	Yes	Available Welded	Yes		
		CONN	ECTION DA	ГА	
TYPE: STC		G	EOMETRY		
Coupling Reg OD	14.375 in	Threads per in	8	Thread turns make up	3.5
		PEF	RFORMANCE		
Steel Grade	J55	Coupling Min Yield	55,000 psi	Coupling Min Ultimate	75,000 psi
Joint Strength	514,000 lbs			Internal Pressure Resistance	2,730 psi

For the latest performance data, always visit our website: www.tenaris.com

Blue®



87.5% **Outside Diameter** 7.000 in. (\*) Grade P110 Thickness Connection OD REGULAR **0.408** in. Wall Thickness COUPLING PIPE BODY Option Body: White 1st Band: White **API Standard** Drift Grade 1st Band: -2nd Band: -2nd Band: -3rd Band: -Casing 3rd Band: -4th Band: -Type

GEOMETRY					
Nominal OD	<b>7.000</b> in.	Nominal Weight	29.00 lbs/ft	Drift	<b>6.059</b> in.
Nominal ID	<b>6.184</b> in.	Wall Thickness	<b>0.408</b> in.	Plain End Weight	28.75 lbs/ft
OD Tolerance	API				
PERFORMANCE					
Body Yield Strength	<b>929</b> x1000 lbs	Internal Yield	<b>11220</b> psi	SMYS	<b>110000</b> psi
Collapse	<b>8530</b> psi				
CONNECTION DATA	<b>L</b>	1		1	
GEOMETRY					
Connection OD	<b>7.677</b> in.	Coupling Length	<b>10.551</b> in.	Connection ID	<b>6.118</b> in.
Make-up Loss	<b>4.480</b> in.	Threads per in	4	Connection OD Option	REGULAR
PERFORMANCE		1		ı	
Tension Efficiency	100.0 %	Joint Yield Strength	<b>929.000</b> x1000 lbs	Internal Pressure Capacity	<b>11220.000</b> psi
Compression Efficiency	100 %	Compression Strength	<b>929.000</b> x1000 lbs	Max. Allowable Bending	<b>72</b> °/100 ft
External Pressure Capacity	<b>8530.000</b> psi	Coupling Face Load	<b>433000</b> lbs		
MAKE-UP TORQUES	<u> </u>	1		ı	
Minimum	10480 ft-lbs	Optimum	11640 ft-lbs	Maximum	12800 ft-lbs
SHOULDER TORQU	ES				
Minimum	1750 ft-lbs	Maximum	9890 ft-lbs		
OPERATION LIMIT T	ORQUES	1		I	
Operating Torque	29100 ft-lbs	Yield Torque	36380 ft-lbs		

#### Notes

This connection is fully interchangeable with:

Blue\$ - 7 in. - 23 / 24.75 / 26 / 32 / 35 / 38 / 41 / 44 lbs/ft

Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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# **Data Sheet**

**TH DS-19.0248** 13 May 19 Rev 00

# API BTC 9 5/8" 40.00 ppf L80-ICY

# (USC Units)

		PIPE BOI	DY DATA		
		GEON	METRY		
Nominal OD	9.625 in.	Nominal Weight	40.00 lbs/ft	Standard Drift Diameter	8.679 in.
Nominal ID	8.835 in.	Wall Thickness	0.395 in.	Special Drift Diameter	8.750 in.
Plain End Weight	38.97 lbs/ft				
		PERFOR	MANCE		
Body Yield Strength	sody Yield Strength 974 x 1000 lbs		6100 psi	Collapse	3870 psi
		CONNECT	ION DATA		
		GEON	METRY		
Coupling OD	10.625 in.	Threads per inch	5	Hand-Tight Standoff Thread Turns	1.00
		PERFORM	MANCE <sup>(1)</sup>		
Joint Strength	968 x 1000 lbs	Internal Pressure Resistance	6100 psi		

<sup>(1)</sup> Non API size / grade combination for BTC.

This product is threaded on API-enhanced Steel Grade pipe. Geometrical features according to API Standards 5CT and 5B

Performance calculated as per API Technical Report 5C3 (Sections 9 & 10).

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original to Appropriate District Office

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

GAS CAPTI	URL	$\Gamma L$	
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X Original	Operator & OGRID No.:	CHEVRON U S A INC 4323	
Amended	•	Date:	1/8/2021
Reaso	on for Amendment:		

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: A C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule 19.15.18.12.A

# Well(s)/Production Facility - Cotton Draw CTB 3

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
CO Grizzly 3 10 FED 416H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,675' FEL	5,000	0	
CO Grizzly 3 10 FED 417H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,650' FEL	5,000	0	
CO Grizzly 3 34 FED 418H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,600' FEL	5,000	0	
CO Grizzly 3 34 FED COM 407H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,700' FEL	5,000	0	
CO Grizzly 3 34 FED COM 408H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,625' FEL	5,000	0	
CO Grizzly 3 34 FED COM 409H	Pending	UL:H, SEC 3, T25S- R32E	192' FNL, 1,575' FEL	5,000	0	

#### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Targa Delaware, LLC ("Targa") and connected to Targa's high pressure gathering system located in Lea County, New Mexico. Chevron will periodically provide Targa a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Chevron and Targa will have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Falcon Gas Plant North located in the south ½ of Sec.4, Block 58-T1, Culberson County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

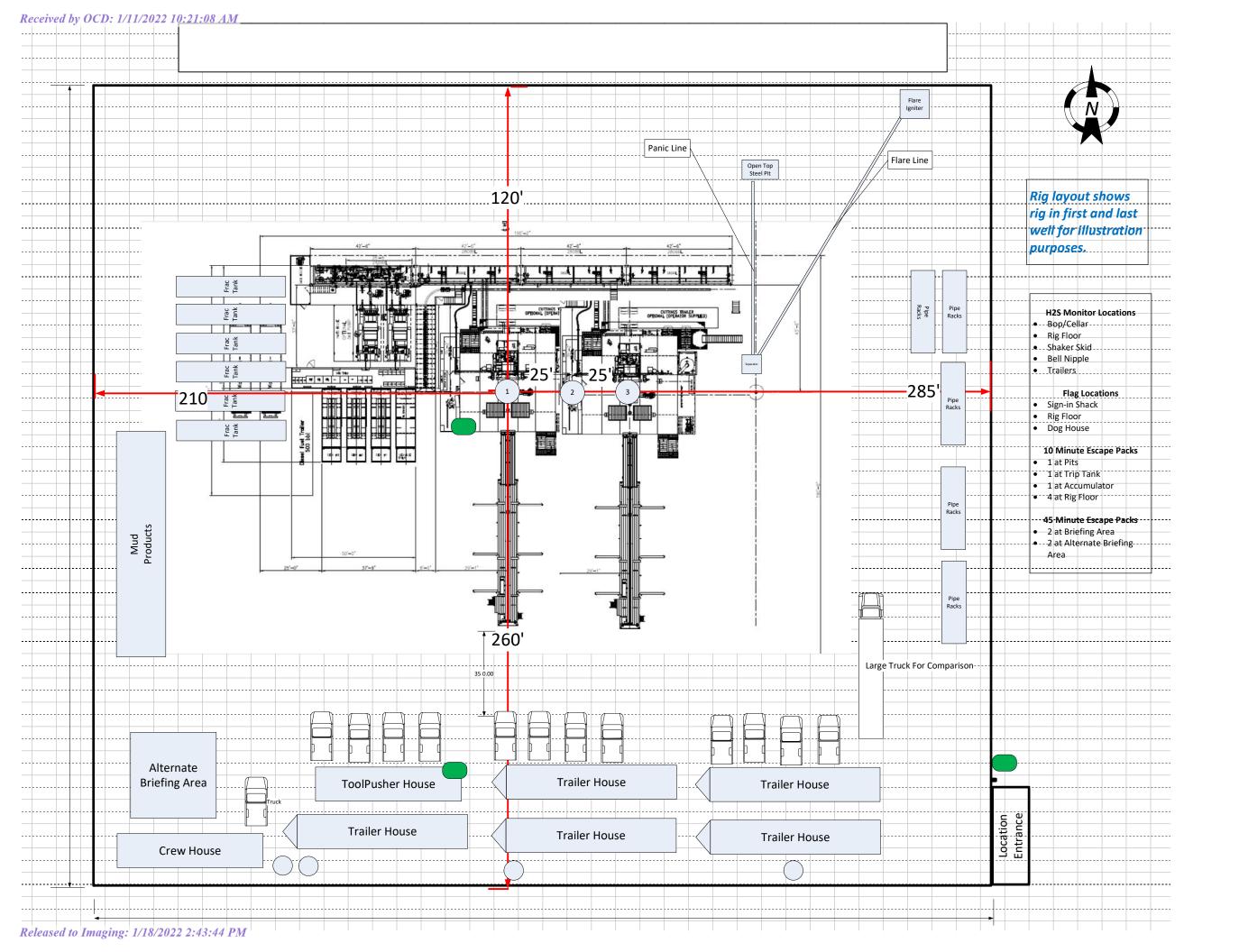
After the fracture treatment/completion operations, wells will be turned to permanent production facilities. Wells will have temporary sand catchers that will be installed at the well location to prevent sand from getting into the flowlines. These sand separators will be blown down periodically which will result in minimal venting of gas. Gas sales will start as soon as the wells start flowing through the production facilities, unless there are operational issues on Targa's system at that time. Based on current information, it is Chevron's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

# **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



# H<sub>2</sub>S Preparedness and Contingency Plan Summary



# CO Grizzly 3 34 Fed 404H, 405H, 406H

# **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 Preparedness and Contingency Plan Summary



# 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.

Page 2 of 4

# H<sub>2</sub>S Preparedness and Contingency Plan Summary



# **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**

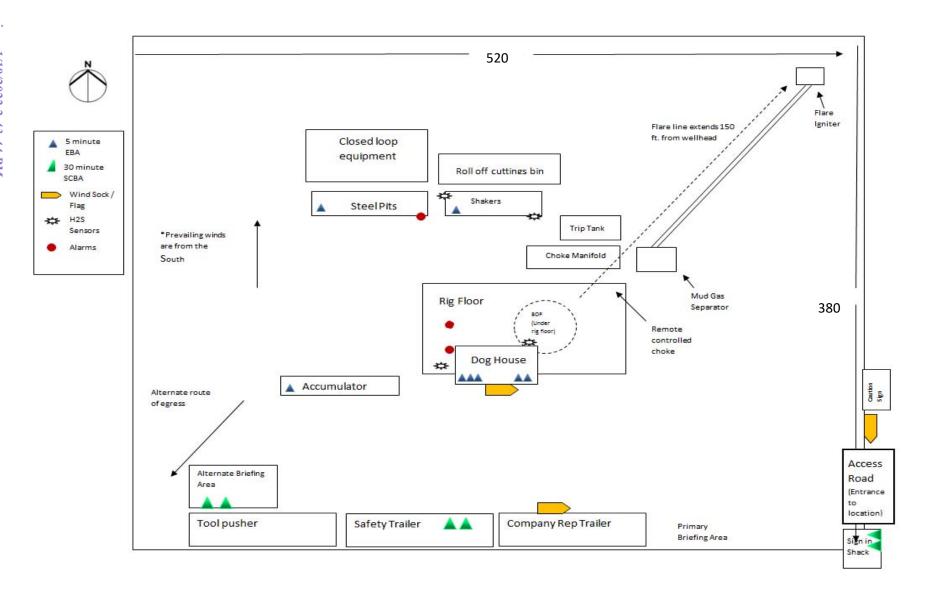
<u>Agency</u>	Telephone Number
Eddy County Sheriff's Department	575-887-7551
Carlsbad Fire Department	575-885-3125
Carlsbad Medical Center	575-887-4100
Eddy County Emergency Management	575-885-3581
Poison Control Center	800-222-1222

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Received by OCD: 1/11/2022 10:21:08 AM

# H<sub>2</sub>S Preparedness and Contingency Plan Summary





Page **4** of **4** 

#### Schlumberger

# CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20 Proposal Geodetic Report



#### (Def Plan)

Report Date: January 05, 2021 - 11:32 AM Client: Chevron

Field: NM Lea County (NAD 27)

Structure / Slot: Chevron Cotton Draw Grizzly Pad 1 / 408H CO Grizzly 34 27 Fed Com 408H Well: Borehole: CO Grizzly 34 27 Fed Com 408H UWI / API#: Unknown / Unknown

Survey Name: CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20

Survey Date: Tort / AHD / DDI / ERD Ratio:

January 04, 2021 113.067 ° / 11551.093 ft / 6.417 / 1.067 NAD27 New Mexico State Plane, Eastern Zone, US Feet Coordinate Reference System:

Location Lat / Long: N 32° 9' 58.09602", W 103° 39' 31.58629" Location Grid N/E Y/X: N 424816.000 ftUS, E 708734.000 ftUS

CRS Grid Convergence Angle: 0.3591° Grid Scale Factor: 0.99995899 Version / Patch: 2.10.824.0

Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 359.640 ° (Grid North) 0.000 ft, 0.000 ft **Vertical Section Origin:** TVD Reference Datum: RKB = 28ft TVD Reference Elevation: 3532.000 ft above MSL Seabed / Ground Elevation: 3504.000 ft above MSL Magnetic Declination: 6.491°

Total Gravity Field Strength: 998.4286mgn (9.80665 Based) GARM 47679.591 nT

Gravity Model:
Total Magnetic Field Strength: Magnetic Dip Angle: 59.759° Declination Date: Magnetic Declination Model: North Reference: Grid Convergence Used: Total Corr Mag North->Grid

January 04, 2021 HDGM 2020 Grid North 0.3591° 6.1315 Well Head

Local Coord Referenced To:

Surface  Rustler 9 5/8* Casing  Build 1.5°/100ft	(ff) 0.00 100.00 200.00 200.00 400.00 600.00 600.00 700.00 800.00 800.00 1000.00 1100.00 1300.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1500.00 1200.00 1200.00 1300.00 1200.00 1300.00 1200.00 1300.00 1200.00 1300.00 1200.00 1300.00	(*) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80	(ft) 0.00 100.00 200.00 300.00 400.00 500.00 600.00 700.00 800.00 900.00 1100.00 1100.00 1400.00 1400.00 1500.00 1609.99 1799.91	(ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	(ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	(ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	(*/100ft) N/A 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	(ftUS) 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00	708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00	N 32 9 58.10 N 32 9 58.10	(EMV ° ' ') W 103 39 31.59 W 103 39 31.59
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9 5/8" Casing Build 1.5°/100ft	600.00 700.00 800.00 890.00 990.00 1000.00 1100.00 1300.00 1400.00 1500.00 1600.00 1700.00 1800.00 1900.00 2100.00 2100.00 2133.12 2200.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80	600.00 700.00 800.00 890.00 900.00 1000.00 1100.00 1200.00 1300.00 1500.00 1600.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00 424816.00	708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00 708734.00	N 32 9 58.10 N 32 9 58.10 N 32 9 58.10 V 32 9 58.10 N 32 9 58.10 N 32 9 58.10 N 32 9 58.10 N 32 9 58.10	W 103 39 31.59 W 103 39 31.59
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9 5/8" Casing Build 1.5°/100ft	890.00 900.00 1100.00 1100.00 1200.00 1300.00 1400.00 1500.00 1500.00 1700.00 1800.00 1900.00 2000.00 2100.00 2133.12 2200.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80 139.80	890.00 900.00 1000.00 1100.00 1200.00 1300.00 1400.00 1500.00 1600.00 1699.99	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	424816.00 424816.00 424816.00 424816.00 424816.00	708734.00 708734.00 708734.00 708734.00 708734.00	V 32 9 58.10 N 32 9 58.10 N 32 9 58.10 N 32 9 58.10 N 32 9 58.10	W 103 39 31.59 W 103 39 31.59 W 103 39 31.59 W 103 39 31.59 W 103 39 31.59
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	1400.00 1500.00 1600.00 1700.00 1800.00 1900.00 2000.00 2100.00 2133.12 2200.00	0.00 0.00 0.00 1.50 3.00 4.50 6.00	139.80 139.80 139.80 139.80 139.80 139.80	1400.00 1500.00 1600.00 1699.99	0.00 0.00	0.00				708734.00		W 103 39 31.59
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Hold	1800.00 1900.00 2000.00 2100.00 2133.12 2200.00	3.00 4.50 6.00	139.80 139.80		-1.01	-1.00	0.84	1.50	424815.00			W 103 39 31.58
Hold	2000.00 2100.00 2133.12 2200.00	6.00		1799.91	-4.02	-4.00	3.38	1.50	424812.00			W 103 39 31.55
Hold	2100.00 2133.12 2200.00			1899.69	-9.04	-8.99	7.60	1.50	424807.01			W 103 39 31.50
Hold	2133.12 2200.00	7.50	139.80	1999.27	-16.07	-15.98	13.51	1.50	424800.02			W 103 39 31.43
Hold	2200.00		139.80	2098.57	-25.09	-24.96	21.09	1.50	424791.04			W 103 39 31.34
		8.00	139.80	2131.39	-28.52	-28.37	23.97	1.50	424787.63			W 103 39 31.31
		8.00	139.80	2197.62	-35.66	-35.48	29.98	0.00	424780.53			W 103 39 31.24
	2400.00	8.00 8.00	139.80 139.80	2296.65 2395.68	-46.35 -57.03	-46.10 -56.73	38.96 47.94	0.00	424769.90 424759.27			W 103 39 31.14 W 103 39 31.03
	2500.00	8.00	139.80	2494.70	-67.71	-67.35	56.92	0.00	424748.65			W 103 39 31.03 W 103 39 30.93
	2600.00	8.00	139.80	2593.73	-78.39	-77.98	65.90	0.00	424738.02			W 103 39 30.83
	2700.00	8.00	139.80	2692.76	-89.07	-88.60	74.88	0.00	424727.40			W 103 39 30.72
	2800.00	8.00	139.80	2791.79	-99.76	-99.23	83.86	0.00	424716.77			W 103 39 30.62
	2900.00	8.00	139.80	2890.81	-110.44	-109.86	92.84	0.00	424706.15	708826.83	N 32 9 57.00	W 103 39 30.51
	3000.00	8.00	139.80	2989.84	-121.12	-120.48	101.82	0.00	424695.52			W 103 39 30.41
	3100.00	8.00	139.80	3088.87	-131.80	-131.11	110.80	0.00	424684.90			W 103 39 30.31
	3200.00	8.00	139.80	3187.90	-142.48	-141.73	119.77	0.00	424674.27			W 103 39 30.20
	3300.00	8.00	139.80	3286.92	-153.17	-152.36	128.75	0.00	424663.65			W 103 39 30.10
	3400.00 3500.00	8.00 8.00	139.80 139.80	3385.95 3484.98	-163.85 -174.53	-162.98 -173.61	137.73 146.71	0.00	424653.02 424642.40			W 103 39 30.00 W 103 39 29.89
	3600.00	8.00	139.80	3584.01	-174.53	-173.61	155.69	0.00	424631.77			W 103 39 29.89 W 103 39 29.79
	3700.00	8.00	139.80	3683.03	-195.89	-194.86	164.67	0.00	424621.15			W 103 39 29.68
	3800.00	8.00	139.80	3782.06	-206.57	-205.49	173.65	0.00	424610.52			W 103 39 29.58
	3900.00	8.00	139.80	3881.09	-217.26	-216.11	182.63	0.00	424599.90			W 103 39 29.48
Castile	3904.96	8.00	139.80	3886.00	-217.79	-216.64	183.08	0.00	424599.37	708917.07	V 32 9 55.94	W 103 39 29.47
	4000.00	8.00	139.80	3980.12	-227.94	-226.74	191.61	0.00	424589.27			W 103 39 29.37
	4100.00	8.00	139.80	4079.14	-238.62	-237.36	200.59	0.00	424578.65		N 32 9 55.73	W 103 39 29.27
	4200.00	8.00	139.80	4178.17	-249.30	-247.99	209.57	0.00	424568.02			W 103 39 29.17
	4300.00	8.00	139.80	4277.20	-259.98	-258.62	218.55	0.00	424557.40			W 103 39 29.06
	4400.00 4500.00	8.00 8.00	139.80 139.80	4376.23 4475.26	-270.67 -281.35	-269.24 -279.87	227.53 236.51	0.00 0.00	424546.77 424536.14			W 103 39 28.96 W 103 39 28.86
	4600.00	8.00	139.80	4475.26 4574.28	-201.35	-279.87	245.49	0.00	424525.52			W 103 39 28.75
Drop .75°/100ft	4673.10	8.00	139.80	4646.67	-299.84	-290.49	252.05	0.00	424517.75			W 103 39 28.68
DIOP .70 / 10010	4700.00	7.80	139.80	4673.32	-302.68	-301.08	254.44	0.75	424514.93			W 103 39 28.65
	4800.00	7.05	139.80	4772.48	-312.59	-310.95	262.77	0.75	424505.07			W 103 39 28.55
Lamar	4804.56	7.01	139.80	4777.00	-313.02	-311.37	263.13	0.75	424504.64			W 103 39 28.55
Bell Canyon	4847.86	6.69	139.80	4820.00	-316.98	-315.32	266.46	0.75	424500.70	709000.45	V 32 9 54.96	W 103 39 28.51
	4900.00	6.30	139.80	4871.80	-321.51	-319.82	270.27	0.75	424496.20			W 103 39 28.47
	5000.00	5.55	139.80	4971.27	-329.43	-327.70	276.93	0.75	424488.32			W 103 39 28.39
	5100.00	4.80	139.80	5070.86	-336.35	-334.58	282.74	0.75	424481.44			W 103 39 28.32
	5200.00	4.05	139.80	5170.56	-342.27	-340.46	287.72	0.75	424475.55			W 103 39 28.26
	5300.00	3.30 2.55	139.80	5270.36	-347.18 -351.09	-345.35 -349.24	291.85	0.75 0.75	424470.66 424466.77			W 103 39 28.22 W 103 39 28.18
	5400.00 5500.00	1.80	139.80 139.80	5370.23 5470.15	-354.00	-352.14	295.14 297.58	0.75	424463.88			W 103 39 28.15
	5600.00	1.05	139.80	5570.12	-355.90	-354.03	299.18	0.75	424461.99			W 103 39 28.13
	5700.00	0.30	139.80	5670.12	-356.80	-354.92	299.93	0.75	424461.09			W 103 39 28.12
Cherry Canyon	5737.89	0.01	139.80	5708.00	-356.88	-355.00	300.00	0.75	424461.02			W 103 39 28.12
Hold Vertical	5739.34	0.00	139.80	5709.45	-356.88	-355.00	300.00	0.75	424461.02		N 32 9 54.56	W 103 39 28.12
	5800.00	0.00	139.80	5770.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	5900.00	0.00	139.80	5870.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6000.00	0.00	139.80	5970.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6100.00	0.00	139.80	6070.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6200.00	0.00	139.80	6170.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6300.00	0.00	139.80	6270.11	-356.88	-355.00	300.00	0.00	424461.02			W 103 39 28.12
	6400.00 6500.00	0.00	139.80	6370.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00	424461.02 424461.02			W 103 39 28.12
	6500.00 6600.00	0.00 0.00	139.80 139.80	6470.11 6570.11	-356.88 -356.88	-355.00 -355.00	300.00	0.00 0.00	424461.02 424461.02			W 103 39 28.12 W 103 39 28.12
	6700.00	0.00	139.80	6670.11	-356.88	-355.00	300.00	0.00	424461.02		N 32 9 54.56	
	0700.00	0.00	139.00	0070.11	-550.00	-000.00	500.00	0.00	424401.02	103033.99	14 02 3 04.00	** 100 00 20.12

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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting Latitude Longitud (ftUS) (N/S ° ' ") (E/W ° ' "
	6800.00	0.00	139.80	6770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	6900.00 7000.00	0.00 0.00	139.80 139.80	6870.11 6970.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7100.00	0.00	139.80	7070.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Brushy Canyon	7120.89 7200.00	0.00 0.00	139.80 139.80	7091.00 7170.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7300.00	0.00	139.80	7270.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	7400.00	0.00	139.80	7370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7500.00 7600.00	0.00	139.80 139.80	7470.11 7570.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	7700.00	0.00	139.80	7670.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7800.00	0.00	139.80	7770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	7900.00 8000.00	0.00	139.80 139.80	7870.11 7970.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	8100.00	0.00	139.80	8070.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	8200.00 8300.00	0.00 0.00	139.80 139.80	8170.11 8270.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	8400.00	0.00	139.80	8370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	8500.00	0.00	139.80	8470.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	8600.00 8700.00	0.00 0.00	139.80 139.80	8570.11 8670.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.13 709033.99 N 32 9 54.56 W 103 39 28.13
Bone Spring	8749.89	0.00	139.80	8720.00	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
Unner Avelen	8800.00	0.00	139.80	8770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Upper Avalon	8844.89 8900.00	0.00 0.00	139.80 139.80	8815.00 8870.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.13
	9000.00	0.00	139.80	8970.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	9100.00 9200.00	0.00	139.80 139.80	9070.11 9170.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	9300.00	0.00	139.80	9270.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	9400.00	0.00	139.80	9370.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.11
	9500.00 9600.00	0.00 0.00	139.80 139.80	9470.11 9570.11	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
	9700.00	0.00	139.80	9670.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
First Bone	9766.89	0.00	139.80	9737.00	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
Spring	9800.00	0.00	139.80	9770.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12
	9900.00	0.00	139.80	9870.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	10000.00	0.00	139.80	9970.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
7" Casing	10100.00 10129.89	0.00 0.00	139.80 139.80	10070.11 10100.00	-356.88 -356.88	-355.00 -355.00	300.00 300.00	0.00 0.00	424461.02 424461.02	709033.99 N 32 9 54.56 W 103 39 28.12 709033.99 N 32 9 54.56 W 103 39 28.12
-	10200.00	0.00	139.80	10170.11	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
Build 10°/100ft	10252.34	0.00	139.80	10222.45	-356.88	-355.00	300.00	0.00	424461.02	709033.99 N 32 9 54.56 W 103 39 28.13
	10300.00 10400.00	4.77 14.77	354.79 354.79	10270.06 10368.48	-354.90 -338.02	-353.03 -336.16	299.82 298.28	10.00 10.00	424462.99 424479.86	709033.81 N 32 9 54.58 W 103 39 28.12 709032.27 N 32 9 54.75 W 103 39 28.14
Second Bone	10424.46	17.21	354.79	10392.00	-331.31	-329.44	297.67	10.00	424486.57	709031.66 N 32 9 54.82 W 103 39 28.15
Spring	10500.00	24.77	354.79	10462.47	-304.37	-302.52	295.21	10.00	424513.49	709029.20 N 32 9 55.08 W 103 39 28.1
Bone Spring 2										
Target 2 Second Bone	10529.58	27.72	354.79	10489.00	-291.34	-289.49	294.03	10.00	424526.52	709028.01 N 32 9 55.21 W 103 39 28.19
Spring 1st Carbonate	10597.36	34.50	354.79	10547.00	-256.45	-254.63	290.85	10.00	424561.38	709024.84 N 32 9 55.56 W 103 39 28.22
	10600.00 10700.00	34.77 44.77	354.79 354.79	10549.17 10625.94	-254.96 -191.31	-253.14 -189.52	290.71 284.91	10.00 10.00	424562.87 424626.49	709024.70 N 32 9 55.57 W 103 39 28.2 709018.90 N 32 9 56.20 W 103 39 28.2
	10800.00	54.77	354.79 354.79	10625.94	-191.31	-113.59	277.99	10.00	424626.49	709011.98 N 32 9 56.95 W 103 39 28.36
	10900.00	64.77	354.79	10740.73	-29.35	-27.66	270.15	10.00	424788.34	709004.14 N 32 9 57.81 W 103 39 28.49
	11000.00 11100.00	74.77 84.77	354.79 354.79	10775.28 10793.02	64.02 161.95	65.66 163.54	261.64 252.72	10.00 10.00	424881.66 424979.54	708995.63 N 32 9 58.73 W 103 39 28.5 708986.71 N 32 9 59.70 W 103 39 28.6
FTP Point	11155.84	90.35	354.79	10795.40	217.52	219.08	247.65	10.00	425035.07	708981.64 N 32 10 0.25 W 103 39 28.69
Landing Point										
	11200.00 11300.00	90.35 90.35	354.79 354.79	10795.13 10794.52	261.52 361.16	263.06 362.64	243.64 234.56	0.00 0.00	425079.05 425178.63	708977.63 N 32 10 0.68 W 103 39 28.7 708968.55 N 32 10 1.67 W 103 39 28.8
	11400.00	90.35	354.79	10793.90	460.80	462.23	225.48	0.00	425278.21	708959.47 N 32 10 2.66 W 103 39 28.93
	11500.00 11600.00	90.35 90.35	354.79 354.79	10793.29 10792.68	560.44 660.08	561.81 661.40	216.40 207.32	0.00 0.00	425377.79 425477.37	708950.39 N 32 10 3.64 W 103 39 29.03 708941.31 N 32 10 4.63 W 103 39 29.13
Turn 2°/100ft	11621.69	90.35	354.79	10792.55	681.69	682.99	205.35	0.00	425498.96	708939.34 N 32 10 4.84 W 103 39 29.15
	11700.00	90.35	356.36	10792.07	759.80	761.07	199.31	2.00	425577.04	708933.30 N 32 10 5.61 W 103 39 29.2
Hold	11800.00 11864.18	90.35 90.35	358.36 359.64	10791.45 10791.06	859.72 923.89	860.96 925.13	194.70 193.57	2.00 2.00	425676.92 425741.09	708928.69 N 32 10 6.60 W 103 39 29.20 708927.57 N 32 10 7.24 W 103 39 29.2
	11900.00	90.35	359.64	10790.84	959.71	960.94	193.35	0.00	425776.90	708927.34 N 32 10 7.59 W 103 39 29.2
	12000.00 12100.00	90.35 90.35	359.64 359.64	10790.22 10789.60	1059.71 1159.70	1060.94 1160.93	192.72 192.09	0.00 0.00	425876.89 425976.88	708926.71 N 32 10 8.58 W 103 39 29.2 708926.08 N 32 10 9.57 W 103 39 29.2
	12200.00	90.35	359.64	10788.98	1259.70	1260.93	191.46	0.00	426076.88	708925.46 N 32 10 10.56 W 103 39 29.2
	12300.00	90.35	359.64	10788.36	1359.70	1360.93	190.84	0.00	426176.87	708924.83 N 32 10 11.55 W 103 39 29.2
	12400.00 12500.00	90.35	359.64	10787.75	1459.70 1559.70	1460.92 1560.92	190.21	0.00	426276.86 426376.85	708924.20 N 32 10 12.54 W 103 39 29.2
		90.35	359.h4	10/0/.13			109.50	0.00		708923.57 N 32 10 13.53 W 103 39 29 2
	12600.00	90.35	359.64 359.64	10787.13 10786.51	1659.69	1660.91	189.58 188.95	0.00	426476.84	708923.57 N 32 10 13.53 W 103 39 29.2 708922.94 N 32 10 14.52 W 103 39 29.2
	12600.00 12700.00	90.35 90.35	359.64 359.64	10786.51 10785.89	1659.69 1759.69	1660.91 1760.91	188.95 188.32	0.00 0.00	426476.84 426576.83	708922.94 N 32 10 14.52 W 103 39 29.2 708922.31 N 32 10 15.51 W 103 39 29.2
	12600.00 12700.00 12800.00	90.35 90.35 90.35	359.64 359.64 359.64	10786.51 10785.89 10785.27	1659.69 1759.69 1859.69	1660.91 1760.91 1860.91	188.95 188.32 187.69	0.00 0.00 0.00	426476.84 426576.83 426676.83	708922.94 N 32 10 14.52 W 103 39 29.2° 708922.31 N 32 10 15.51 W 103 39 29.2° 708921.69 N 32 10 16.50 W 103 39 29.2°
IFP1, Drop	12600.00 12700.00 12800.00 12900.00	90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64	10786.51 10785.89 10785.27 10784.66	1659.69 1759.69 1859.69 1959.69	1660.91 1760.91 1860.91 1960.90	188.95 188.32 187.69 187.07	0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82	708922.94 N 32 10 14.52 W 103 39 29.2' 708922.31 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18	90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64	10786.51 10785.89 10785.27 10784.66 10784.60	1659.69 1759.69 1859.69 1959.69 1968.87	1660.91 1760.91 1860.91 1960.90	188.95 188.32 187.69 187.07	0.00 0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2'
	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25	90.35 90.35 90.35 90.35 90.35	359.64 359.64 359.64 359.64 359.64 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15	188.95 188.32 187.69 187.07 187.01 186.72	0.00 0.00 0.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708921.01 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91	0.00 0.00 0.00 0.00 0.00 2.00 0.00	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426876.81 426976.80	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426876.81 426976.80 427076.79	708922.94 N 32 10 14.52 W 103 39 29.2 708921.69 N 32 10 16.50 W 103 39 29.2 708921.69 N 32 10 17.49 W 103 39 29.2 708921.00 N 32 10 17.49 W 103 39 29.2 708921.00 N 32 10 17.58 W 103 39 29.2 708920.71 N 32 10 18.05 W 103 39 29.2 708919.90 N 32 10 18.48 W 103 39 29.2 708919.90 N 32 10 19.47 W 103 39 29.2 708919.33 N 32 10 20.46 W 103 39 29.2
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2359.67 2459.66	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.05 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.31 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13400.00 13500.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45	1659,69 1759,69 1859,69 1959,69 1968,87 2016,93 2059,69 2159,68 2259,67 2359,67 2459,66 2559,66	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.83 426676.83 426676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77 427276.76	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45	1659, 69 1759, 69 1859, 69 1959, 69 1968, 87 2016, 93 2059, 69 2159, 68 2259, 67 2359, 67 2459, 66 2559, 66 2659, 65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05	0.00 0.00 0.00 0.00 0.00 2.00 0.00 0.00	426476.84 426576.83 42676.82 426786.00 426834.06 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13600.00 13600.00 13700.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.67 2459.67 2459.66 2659.65 2659.65 2759.65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426876.00 426834.06 426976.81 426976.80 427076.79 427276.76 427376.75 427376.75 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 32.34 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 25.40 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13200.00 13200.00 13300.00 13500.00 13600.00 13700.00 13800.00 13800.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10790.5 10790.5 10793.63	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2359.67 2459.66 2559.66 2559.65 2759.65 2759.65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426834.06 426976.80 427076.79 427176.77 427276.76 427376.75 427376.75 427476.74 427576.73 427676.72	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708917.62 N 32 10 21.45 W 103 39 29.2' 708917.65 N 32 10 22.44 W 103 39 29.2' 708917.65 N 32 10 24.41 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.39 W 103 39 29.2' 708915.91 N 32 10 25.39 W 103 39 29.2' 708915.34 N 32 10 27.38 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13600.00 13600.00 13700.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.67 2459.67 2459.66 2659.65 2659.65 2759.65	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426876.00 426834.06 426976.81 426976.80 427076.79 427276.76 427376.75 427376.75 427376.75	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 32.34 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 22.44 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.8 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 24.41 W 103 39 29.2' 708916.9 N 32 10 25.40 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13600.00 13800.00 13800.00 13800.00 1400.00 14100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10796.81 10796.81	1659. 69 1759. 69 1859. 69 1859. 69 1959. 69 1968. 87 2016. 63 2059. 69 2159. 67 2359. 67 2459. 66 2559. 66 2559. 66 2559. 63 3059. 63 3159. 63 3159. 63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426876.81 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427976.68 427976.68	708922.94 N 32 10 14.52 W 103 39 29.2' 708923.1 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708916.48 N 32 10 22.44 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708914.77 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13400.00 13600.00 13700.00 13700.00 13800.00 13700.00 13800.00 13400.00 14400.00 14400.00 14200.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10794.69 10794.69 10796.81 10796.81	1659.69 1759.69 1859.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.69 2259.67 2459.66 2659.65 2759.65 2659.63 3059.63 3159.62 3359.62	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426884.06 426876.81 426976.80 427076.79 427276.76 427376.75 427476.74 427576.73 427576.73 427576.73 427576.73 4276.69 427976.68 428076.67	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.01 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.33 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708915.81 N 32 10 22.44 W 103 39 29.2' 708915.84 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.91 N 32 10 22.89 W 103 39 29.2' 708915.91 N 32 10 22.89 W 103 39 29.2' 708915.91 N 32 10 22.87 W 103 39 29.2' 708913.63 N 32 10 29.36 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2'
2°/100ft	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13600.00 13800.00 13800.00 13800.00 1400.00 14100.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10796.81 10796.81	1659. 69 1759. 69 1859. 69 1859. 69 1959. 69 1968. 87 2016. 63 2059. 69 2159. 67 2359. 67 2459. 66 2559. 66 2559. 66 2559. 63 3059. 63 3159. 63 3159. 63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426876.81 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427976.68 427976.68	708922.94 N 32 10 14.52 W 103 39 29.2' 708923.1 N 32 10 15.51 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.62 N 32 10 22.44 W 103 39 29.2' 708916.48 N 32 10 22.44 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.91 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 25.40 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708915.94 N 32 10 27.38 W 103 39 29.2' 708914.77 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 28.37 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 38.37 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2'
2°/100ft Hold	12600.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13900.00 14000.00 14100.00 14200.00 14300.00	90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10797.87 10799.89	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2459.66 2559.65 2759.65 2659.65 2759.63 3059.63 3059.63 3159.62 3259.62 3259.63	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2460.87 2560.86 260.85 2760.85 2760.85 2860.84 2960.83 3060.83 3160.82 3260.81 3360.80	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.65 182.48 181.91 181.34 180.77 180.20 179.63 179.63	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.83 426776.82 426786.00 426834.06 426976.80 427076.79 427176.77 427276.76 427376.75 427376.75 427376.75 427376.73 4276.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76 427376.76	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.00 N 32 10 17.49 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.00 N 32 10 19.47 W 103 39 29.2' 708918.70 N 32 10 21.45 W 103 39 29.2' 708918.71 N 32 10 22.44 W 103 39 29.2' 708916.72 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 24.41 W 103 39 29.2' 708916.48 N 32 10 24.41 W 103 39 29.2' 708915.34 N 32 10 25.40 W 103 39 29.2' 708914.77 N 32 10 28.37 W 103 39 29.2' 708914.78 N 32 10 25.39 W 103 39 29.2' 708914.79 N 32 10 29.36 W 103 39 29.2' 708914.70 N 32 10 29.36 W 103 39 29.2' 708914.70 N 32 10 29.36 W 103 39 29.2' 708913.63 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708912.48 N 32 10 31.34 W 103 39 29.2' 708912.48 N 32 10 31.34 W 103 39 29.2'
2º/100ft Hold	12600.00 12700.00 12700.00 12800.00 12900.00 12909.18 12957.25 13000.00 13100.00 13200.00 13300.00 13400.00 13600.00 13600.00 13700.00 13800.00 13900.00 14000.00 14100.00 14200.00 14300.00 14300.00 14400.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10788.34 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10795.75 10796.81 10799.81	1659. 69 1759. 69 1859. 69 1959. 69 1968. 87 2016. 93 2059. 69 2159. 67 2359. 67 2459. 66 2659. 65 2659. 65 2659. 63 3059. 63 3159. 62 3259. 63 3359. 61 3459. 61 3459. 61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80 3460.80	188.95 188.32 187.69 187.07 187.01 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426776.82 426786.00 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 42766.72 427776.71 427876.69 427976.68 428276.65	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 15.51 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.49 W 103 39 29.2' 708921.07 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.30 N 32 10 20.46 W 103 39 29.2' 708918.76 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 22.44 W 103 39 29.2' 708917.05 N 32 10 25.40 W 103 39 29.2' 708915.34 N 32 10 25.40 W 103 39 29.2' 708914.20 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 25.40 W 103 39 29.2' 708914.30 N 32 10 27.38 W 103 39 29.2' 708914.30 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 30.35 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708913.06 N 32 10 31.34 W 103 39 29.2' 708911.91 N 32 10 33.32 W 103 39 29.2' 708911.91 N 32 10 33.32 W 103 39 29.2'
2°/100ft Hold	12600.00 12700.00 12700.00 12800.00 12909.18 12957.25 13000.00 13100.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13600.00 13700.00 13900.00 14000.00 14100.00 14200.00 14300.00 14500.00 14500.00 14660.38	90.35 90.35 90.35 90.35 90.35 90.35 90.35 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10793.63 10794.69 10795.75 10796.81 10797.87 10799.98 10801.04 10802.10	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.68 2259.67 2459.66 2559.65 2759.65 2659.65 2759.63 3059.63 3159.63 3359.63 3459.61 3559.61 3559.61 3559.61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3060.83 3160.82 3260.81 3360.80 3460.80 3560.79 3660.78	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49 177.92 177.35	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 4268834.06 426876.81 426976.80 427076.79 427176.77 427276.76 427376.75 427476.74 427576.73 427676.72 427776.61 427876.69 428076.67 428276.65 428276.65 428376.64 428476.62	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 16.50 W 103 39 29.2' 708921.00 N 32 10 17.58 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.71 N 32 10 18.05 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.30 N 32 10 19.47 W 103 39 29.2' 708918.76 N 32 10 21.45 W 103 39 29.2' 708918.79 N 32 10 22.44 W 103 39 29.2' 708916.76 N 32 10 22.44 W 103 39 29.2' 708916.81 N 32 10 22.44 W 103 39 29.2' 708916.84 N 32 10 25.40 W 103 39 29.2' 708916.85 N 32 10 26.39 W 103 39 29.2' 708914.77 N 32 10 26.39 W 103 39 29.2' 708914.70 N 32 10 27.38 W 103 39 29.2' 708913.63 N 32 10 32.37 W 103 39 29.2' 708913.63 N 32 10 33.32 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.60 N 32 10 31.34 W 103 39 29.2' 708913.61 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 31.34 W 103 39 29.2' 708913.64 N 32 10 33.34 W 103 39 29.2' 708913.67 N 32 10 33.34 W 103 39 29.2' 708913.68 N 32 10 33.34 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.94 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708913.95 N 32 10 34.31 W 103 39 29.2' 708910.92 N 32 10 34.91 W 103 39 29.2'
2º/100ft Hold IFP2, Build 2º/100ft	12600.00 12700.00 12700.00 12800.00 12909.18 12957.25 13000.00 13100.00 13200.00 13400.00 13500.00 13600.00 13700.00 13700.00 13800.00 13700.00 1400.00 14400.00 14400.00 14400.00 14500.00 14600.00 14600.00	90.35 90.35 90.35 90.35 90.35 90.35 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39 89.39	359.64 359.64 359.64 359.64 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67 359.67	10786.51 10785.89 10785.27 10784.66 10784.60 10784.71 10785.16 10786.22 10787.28 10789.39 10790.45 10791.51 10792.57 10794.69 10795.75 10796.81 10797.87 10799.89 10799.89 10799.98	1659.69 1759.69 1859.69 1959.69 1968.87 2016.93 2059.69 2159.66 2259.67 2459.66 2559.67 2459.65 2599.63 3159.62 3359.63 3159.62 3359.63 3459.61 3459.61 3459.61	1660.91 1760.91 1860.91 1960.90 1970.08 2018.15 2060.90 2160.89 2260.88 2360.88 2460.87 2560.86 2660.85 2760.85 2860.84 2960.83 3160.82 3260.81 3360.80 3460.80 3560.79	188.95 188.32 187.69 187.07 187.01 186.72 186.48 185.91 185.34 184.77 184.20 183.62 183.05 182.48 181.91 181.34 180.77 180.20 179.63 179.06 178.49 177.92 177.35	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	426476.84 426576.83 426676.82 426776.82 426786.00 426884.06 426876.81 426976.80 427076.79 427276.76 427376.75 427376.73 427376.73 427576.73 427576.73 427576.63 427976.68 428076.67 428276.65 428276.65 428276.65	708922.94 N 32 10 14.52 W 103 39 29.2' 708921.69 N 32 10 16.50 W 103 39 29.2' 708921.06 N 32 10 17.58 W 103 39 29.2' 708921.06 N 32 10 17.58 W 103 39 29.2' 708921.07 N 32 10 17.58 W 103 39 29.2' 708920.47 N 32 10 18.48 W 103 39 29.2' 708919.90 N 32 10 19.47 W 103 39 29.2' 708919.30 N 32 10 20.46 W 103 39 29.2' 708919.31 N 32 10 22.45 W 103 39 29.2' 708918.76 N 32 10 22.45 W 103 39 29.2' 708918.78 N 32 10 22.44 W 103 39 29.2' 708918.79 N 32 10 22.49 W 103 39 29.2' 708915.81 N 32 10 22.49 W 103 39 29.2' 708915.91 N 32 10 22.40 W 103 39 29.2' 708915.34 N 32 10 22.40 W 103 39 29.2' 708915.37 N 32 10 28.37 W 103 39 29.2' 708915.38 N 32 10 28.37 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.63 N 32 10 33.34 W 103 39 29.2' 708913.64 N 32 10 33.34 W 103 39 29.2' 708913.06 N 32 10 33.34 W 103 39 29.2' 708913.07 N 32 10 33.34 W 103 39 29.2' 708913.08 N 32 10 33.34 W 103 39 29.2' 708913.09 N 32 10 33.34 W 103 39 29.2' 708913.40 N 32 10 33.34 W 103 39 29.2' 708913.41 N 32 10 33.32 W 103 39 29.2' 708913.41 N 32 10 33.32 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2' 708911.34 N 32 10 34.31 W 103 39 29.2'

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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 ° ' ")
	15000.00	89.65	359.64	10804.87	4059.59	4060.76	174.88	0.00	428876.59	708908.87	N 32 10 38.27	
	15100.00	89.65	359.64	10805.49	4159.58	4160.76	174.25	0.00	428976.58	708908.24	N 32 10 39.26	W 103 33 23 26
	15200.00	89.65	359.64	10806.11	4259.58	4260.76	173.62	0.00	429076.57	708907.61		W 103 39 29.26 W 103 39 29.26
	15300.00	89.65	359.64	10806.73	4359.58	4360.75	172.99	0.00	429176.57	708906.99	N 32 10 41.24	W 103 39 29.26
	15400.00	89.65	359.64	10807.34	4459.58	4460.75	172.37	0.00	429276.56	708906.36		W 103 39 29.26
	15500.00	89.65	359.64	10807.96	4559.58	4560.75	171.74	0.00	429376.55	708905.73		W 103 39 29.26
	15600.00	89.65	359.64	10808.58	4659.57	4660.74	171.11	0.00	429476.54	708905.10	N 32 10 44.21	
	15700.00	89.65	359.64	10809.20	4759.57	4760.74	170.48	0.00	429576.53	708904.47		W 103 39 29.26
	15800.00	89.65	359.64	10809.82	4859.57	4860.73	169.85	0.00	429676.52	708903.85	N 32 10 46.18	W 103 39 29.26
	15900.00	89.65	359.64	10810.44	4959.57	4960.73	169.23	0.00	429776.52	708903.22	N 32 10 47.17	W 103 39 29.26
	16000.00	89.65	359.64	10811.06	5059.57	5060.73	168.60	0.00	429876.51	708902.59	N 32 10 48.16	W 103 39 29.26
	16100.00	89.65	359.64	10811.68	5159.56	5160.72	167.97	0.00	429976.50	708901.96		W 103 39 29.26
	16200.00	89.65	359.64	10812.29	5259.56	5260.72	167.34	0.00	430076.49	708901.33		W 103 39 29.26
	16300.00	89.65	359.64	10812.91	5359.56	5360.71	166.71	0.00	430176.48	708900.71	N 32 10 51.13	
	16400.00	89.65	359.64	10813.53	5459.56	5460.71	166.09	0.00	430276.48	708900.08	N 32 10 52.12	W 103 30 20 26
IFP3, Drop												
2°/100ft	16412.53	89.65	359.64	10813.61	5472.08	5473.24	166.01	0.00	430289.00	708900.00	N 32 10 52.25	W 103 39 29.26
	16413.56	89.62	359.64	10813.62	5473.12	5474.27	166.00	2.00	430290.04	708899.99	N 32 10 52.26	W 103 39 29.26
Hold												
	16500.00	89.62	359.64	10814.18	5559.56	5560.71	165.46	0.00	430376.47	708899.45		W 103 39 29.26
	16600.00	89.62	359.64	10814.84	5659.55	5660.70	164.83	0.00	430476.46	708898.82	N 32 10 54.10	
	16700.00	89.62	359.64	10815.49	5759.55	5760.70	164.20	0.00	430576.45	708898.19		W 103 39 29.26
	16800.00	89.62	359.64	10816.15	5859.55	5860.69	163.57	0.00	430676.44	708897.57	N 32 10 56.08	
	16900.00	89.62	359.64	10816.80	5959.55	5960.69	162.94	0.00	430776.43	708896.94		W 103 39 29.26
	17000.00	89.62	359.64	10817.46	6059.55	6060.69	162.32	0.00	430876.42	708896.31		W 103 39 29.26
	17100.00	89.62	359.64	10818.11	6159.54	6160.68	161.69	0.00	430976.42	708895.68	N 32 10 59.05	W 103 39 29.26
	17200.00	89.62	359.64	10818.77	6259.54	6260.68	161.06	0.00	431076.41	708895.05	N 32 11 0.04	W 103 39 29.26
	17300.00	89.62	359.64	10819.42	6359.54	6360.67	160.43	0.00	431176.40	708894.43		W 103 39 29.26
	17400.00	89.62	359.64	10820.08	6459.54	6460.67	159.80	0.00	431276.39	708893.80		W 103 39 29.26
	17500.00	89.62	359.64	10820.73	6559.54	6560.66	159.18	0.00	431376.38	708893.17		W 103 39 29.26
	17600.00	89.62	359.64	10821.39	6659.53	6660.66	158.55	0.00	431476.37	708892.54		W 103 39 29.26
	17700.00	89.62	359.64	10822.04	6759.53	6760.66	157.92	0.00	431576.37	708891.91		W 103 39 29.26 W 103 39 29.26
	17800.00	89.62	359.64	10822.70	6859.53	6860.65	157.29	0.00	431676.36	708891.28		W 103 39 29.26 W 103 39 29.26
	17900.00	89.62	359.64	10823.35	6959.53	6960.65	156.66	0.00	431776.35	708890.66		W 103 39 29.26
	18000.00	89.62	359.64	10824.01	7059.52	7060.64	156.03	0.00	431876.34	708890.03	N 32 11 7.95	W 103 39 29.26
	18100.00	89.62	359.64	10824.66	7159.52	7160.64	155.41	0.00	431976.33	708889.40	N 32 11 8.94	W 103 39 29.26
IFP4, Build	18163.67	89.62	359.64	10825.08	7223.19	7224.31	155.01	0.00	432040.00	708889.00	N 32 11 9.57	W 103 39 29 26
2°/100ft												
Hold	18188.11	90.11	359.67	10825.14	7247.63	7248.75	154.86	2.00	432064.44	708888.85	N 32 11 9.82	W 103 39 29.26
	18200.00	90.11	359.67	10825.11	7259.52	7260.64	154.79	0.00	432076.32	708888.79		W 103 39 29.26
	18300.00	90.11	359.67	10824.92	7359.52	7360.63	154.22	0.00	432176.32	708888.22		W 103 39 29.25
	18400.00	90.11	359.67	10824.72	7459.52	7460.63	153.65	0.00	432276.31	708887.64	N 32 11 11.91	
	18500.00	90.11	359.67	10824.52	7559.52	7560.63	153.08	0.00	432376.31	708887.07	N 32 11 12.90	W 103 39 29.25
	18600.00	90.11	359.67	10824.33	7659.52	7660.63	152.51	0.00	432476.30	708886.50	N 32 11 13.89	W 103 39 29.25
	18700.00	90.11	359.67	10824.13	7759.52	7760.63	151.94	0.00	432576.29	708885.93	N 32 11 14.88	W 103 39 29.25
	18800.00	90.11	359.67	10823.94	7859.52	7860.63	151.37	0.00	432676.29	708885.36		W 103 39 29.25
	18900.00	90.11	359.67	10823.74	7959.52	7960.62	150.80	0.00	432776.28	708884.79	N 32 11 16.86	
	19000.00	90.11	359.67	10823.54	8059.52	8060.62	150.23	0.00	432876.28	708884.22	N 32 11 17.85	
	19100.00	90.11	359.67	10823.35	8159.52	8160.62	149.66	0.00	432976.27	708883.65		W 103 39 29.25
	19200.00	90.11	359.67	10823.15	8259.52	8260.62	149.09	0.00	433076.26	708883.08		W 103 39 29.25
	19300.00	90.11	359.67	10822.96	8359.52	8360.62	148.51	0.00	433176.26	708882.51	N 32 11 20.82	
					8459.52		147.94					
	19400.00	90.11 90.11	359.67	10822.76		8460.61		0.00	433276.25	708881.94	N 32 11 21.81 N 32 11 22.80	W 103 39 29.25
	19500.00		359.67	10822.56	8559.52	8560.61	147.37		433376.24	708881.37		
	19600.00	90.11	359.67	10822.37	8659.52	8660.61	146.80	0.00	433476.24	708880.80		W 103 39 29.25
	19700.00	90.11	359.67	10822.17	8759.52	8760.61	146.23	0.00	433576.23	708880.23	N 32 11 24.78	
	19800.00	90.11	359.67	10821.98	8859.52	8860.61	145.66	0.00	433676.23	708879.66		W 103 39 29.24
	19900.00	90.11	359.67	10821.78	8959.52	8960.61	145.09	0.00	433776.22	708879.08	N 32 11 26.76	W 103 39 29.24
IFP5, Build	19914.78	90.11	359.67	10821.75	8974.30	8975.39	145.01	0.00	433791.00	708879.00	N 32 11 26.90	W 103 39 29.24
2°/100ft												
Hold	19922.16	90.26	359.64	10821.73	8981.68	8982.76	144.96	2.00	433798.38		N 32 11 26.97	
	20000.00	90.26	359.64	10821.38	9059.52	9060.60	144.47	0.00	433876.21	708878.47		W 103 39 29.24
	20100.00	90.26	359.64	10820.93	9159.52	9160.60	143.84	0.00	433976.21	708877.84	N 32 11 28.73	
	20200.00	90.26	359.64	10820.48	9259.51	9260.60	143.22	0.00	434076.20	708877.21		W 103 39 29.24
	20300.00	90.26	359.64	10820.04	9359.51	9360.59	142.59	0.00	434176.19	708876.58	N 32 11 30.71	W 103 39 29.24
	20400.00	90.26	359.64	10819.59	9459.51	9460.59	141.96	0.00	434276.18	708875.95	N 32 11 31.70	W 103 39 29.24
	20500.00	90.26	359.64	10819.14	9559.51	9560.59	141.33	0.00	434376.18	708875.33	N 32 11 32.69	W 103 39 29.24
	20600.00	90.26	359.64	10818.70	9659.51	9660.59	140.70	0.00	434476.17	708874.70	N 32 11 33.68	
	20700.00	90.26	359.64	10818.25	9759.51	9760.58	140.07	0.00	434576.16	708874.07		W 103 39 29.24
	20800.00	90.26	359.64	10817.80	9859.51	9860.58	139.45	0.00	434676.16	708873.44		W 103 39 29.24
	20900.00	90.26	359.64	10817.35	9959.51	9960.58	138.82	0.00	434776.15	708872.81		W 103 39 29.24
	21000.00	90.26	359.64	10816.91	10059.51	10060.57	138.19	0.00	434876.14	708872.18	N 32 11 37.64	
	21100.00	90.26	359.64	10816.46	10159.51	10160.57	137.56	0.00	434976.13	708871.56	N 32 11 37.64 N 32 11 38.63	
		90.26						0.00		708870.93	N 32 11 36.63 N 32 11 39.62	
	21200.00		359.64	10816.01	10259.50	10260.57	136.93		435076.13			
	21300.00	90.26	359.64	10815.57	10359.50	10360.56	136.30	0.00	435176.12	708870.30		W 103 39 29.24
	21400.00	90.26	359.64	10815.12	10459.50	10460.56	135.68	0.00	435276.11		N 32 11 41.60	
	21500.00	90.26	359.64	10814.67	10559.50	10560.56	135.05	0.00	435376.10		N 32 11 42.59	
LTP Point	21590.92	90.26	359.64	10814.27	10650.42	10651.48	134.48	0.00	435467.02		N 32 11 43.49	
	21600.00	90.26	359.64	10814.22	10659.50	10660.56	134.42	0.00	435476.10	708868.41	N 32 11 43.58	W 103 39 29.24
CO Grizzly 34												
27 Fed Com	21665.91	90.26	359.64	10813.93	10725.41	10726.46	134.01	0.00	435542.00	708868.00	N 32 11 44.23	W 103 39 29.24
408H - BHL												

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	28.000	1/100.000	12.250	9.625		B001Mb_MWD+HRGM-Depth Only	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H R0 mdv 17Dec20
	1	28.000	900.000	1/100.000	12.250	9.625		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H
	1	900.000	10129.886	1/100.000	8.750	7.000		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H
	2	10120.400	21665.908	1/100.000	6.000	4.500		B001Mb_MWD+HRGM	CO Grizzly 34 27 Fed Com 408H / CO Grizzly 34 27 Fed Com 408H

# Delaware Basin Variance/Sundry for Federal Well



# **Well Names:**

Well Name	
CO Grizzly 3 10 Fed	416H
CO Grizzly 3 10 Fed	417H
CO Grizzly 3 10 Fed	418H
CO Grizzly 34 27 Fed Com	407H
CO Grizzly 34 27 Fed Com	408H
CO Grizzly 34 27 Fed Com	409H

# **CVX CONTACT**:

Phillipe Salanova Drilling Engineer MCBU D&C; New Mexico psalanova@chevron.com 713-372-1373 (office)

# Request for execution

Chevron would like to formally request to follow Onshore Order 2 Section "B - Casing and Cementing Requirements" to wait to 500 psi compressive strength (CS) of the tail cement slurry, for primary cement operations in both the Surface and Intermediate casing string(s). WOC time is considered the time between bumping the plug (cement in place), until beginning to drill the shoe track. This will ensure that cement will be at suffucient strength prior to performing a shoe test and drilling ahead through the next hole section.

Sample engineering lab tests may be seen below, as provided by the cementing provider. Note: these numbers will vary slightly based on actual casing set depths and finlized cement lab tests for the particular slurry. Finalized 500 psi compressive strength times will be found on location with the Chevron Drill Site Representative via the cementing labs, Drilling Program and/or POA's (Plan of Action).

B			Contract to the second	Ceme	AN R ent L	ab R	epoi		3					
	14.24.5 (11.45 (11.11			Ph	one: (620	1) 262-2.	244				(*8/4) (*)			
	Number:									Tes	t Date:			
Report	Number:		WE	LL I	NFOR	MAT	TION							
	Operator: Ch	evron						Cour	nty:					
	<b>API</b> #:							S	tate:	NM				
	ell Name:							Re	-	ed By:				
	lurry Type: Ta								TVI	100	MD:			
	lend Type: Fie					100	D1 6 0	THE PERSON	rict:	Odessa	(0) 115			
(	Comments: 10	SEC: .	22 10MIN	1: 23		101	RPM: 3	4		10RPI	M@141F: 3	32		
			TEST I	DATA	AND	SCI	IEDU	JLE						
Time 7	Γο Temp (min):	1	37			M	lud De	nsity	(lb/ga	1):	9			
	tial Press (psi):		10		M	ix Wa	ter De				8.34			
	inal Press (psi):			Mix Water Type: Rig Water Surf Temp (deg F): 80										
	BHST (deg F):						Surf		,	-	80			
	BHCT (deg F):		41 30F to 155F in 4h	rs An	nly full	PSI fro	om star				rmediate			
	musu es promi e <mark>n l</mark> a contra cama capación.		SLURE											
Vendor: Slurry: /sk Static	Class 'C' + 0.1	0% FL-	66 + 0.30% CD3.	2A + 0	.05% A	SA-30	1 + 0.7	70% S	SMS +	0.75% F	R-21 + 0.00	5 gps F	P-6L + (	0.00
	Density: 14.8				Pump 7									
	Yield: 1.33				Pump 7				50					
2025	ix Water: 6.28	4 gal/sl	x (55.76%)		Pump 7	Time (	100 B	:):						
		0 1/-1	C.						-		O Anala)			
Total Mi	x Liquid: 6.28	-			Fr	ee Wa	ter (m	D. 0	110					
Total Mi		-			Fr	ee Wa	ter (m	l): 0	(Tes	sted at 45	Aligie)			
Total Mi Fl	x Liquid: 6.28 duid Loss: cc/3	0 min	Rheolo		Fron PL=Pov						( Aligie)			
Total Mi Fl Compres Femp	x Liquid: 6.28 duid Loss: cc/3 ssive Strength Time Streng	0 min	Rheolo ype Temp	600	PL=Pov	ver Lav	v, BP=	Bing 6	am Pl	astic) <b>n'</b>	k'	Yp	Pv	1000
Total Mi Fl Compres Femp 155	x Liquid: 6.28 luid Loss: cc/3 ssive Strength Time Streng 4:47	0 min th T 50 U	Rheologype Temp	600 102	PL=Pov 300 67	ver Lav 200 55	w, BP= 100 42	Bing 6 27	am Pl 3 22	astic) n' 0.216	<b>k'</b> 0.168	29.0	40.5	В
Total Mi Fl Compres Femp 155 155	x Liquid: 6.28 luid Loss: cc/3 ssive Strength Time Streng 4:47 5:03 2	0 min  th T; 50 U	Rheologype Temp CA 80 CA 80	600 102 102	PL=Pow 300 67 65	ver Lav 200 55 53	v, BP= 100 42 40	Bing 6 27 26	am Pl 3 22 21	astic) n' 0.216 0.217	<b>k'</b> 0.168 0.161	29.0 27.6	40.5 39.6	В
Total Mi Fl Compres Temp 155	x Liquid: 6.28 uid Loss: cc/3 ssive Strength Time Streng 4:47 5:03 2 5:26 5	0 min  th T; 50 U 50 U	Rheologype Temp CA 80 CA 80	600 102	PL=Pov 300 67	ver Lav 200 55	w, BP= 100 42 40 41	Bing 6 27	3 22 21 22	astic) n' 0.216	<b>k'</b> 0.168	29.0	40.5	В

# Chevron U.S.A. Inc. (CUSA) SUNDRY ATTACHMENT: SPUDDER RIG

**DATA OPERATOR NAME:** Chevron U.S.A. Inc.

#### 1. SUMMARY OF REQUEST:

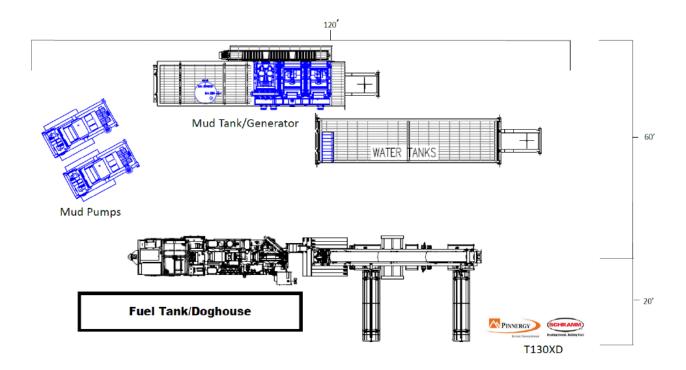
CUSA respectfully requests approval for the following operations for the surface hole in the drill plan:

1. Utilize a spudder rig to pre-set surface casing for time and cost savings.

#### 2. Description of Operations

- 1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
  - **a.** After drilling the surface hole section, the spudder rig will run casing and cement following all the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
  - **b.** The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
- 2. The wellhead will be installed and then tested offline after the WOC time has been reached.
- **3.** An abandonment cap at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on one wing-valve.
  - **a.** A means for intervention will be maintained while the drilling rig is not over the well.
- **4.** Spudder rig operations are expected to take 2-3 days per well on the pad.
- 5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
- **6.** Drilling operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.
  - **a.** The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
  - **b.** The BLM will be contacted / notified 24 hours before the larger rig moves back on the pre-set locations.
- 7. CUSA will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- **8.** Once the rig is removed, CUSA will secure the wellhead area by placing a guard rail around the cellar area.

# Surface Rig Layout





U.S. Department of the Interior BUREAU OF LAND MANAGEMENT SUPO Data Repor

APD ID: 10400069679

Submission Date: 02/23/2021

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM

Well Type: OIL WELL

Well Number: 408H

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

# **Section 1 - Existing Roads**

Will existing roads be used? YES

**Existing Road Map:** 

CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_Road\_Plat\_R1\_CERT\_12\_16\_2020\_20210223134159.pdf

Row(s) Exist? NO Existing Road Purpose: ACCESS,FLUID TRANSPORT

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

**Existing Road Improvement Attachment:** 

# Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

**New Road Map:** 

CO\_Grizzly\_34\_27\_Fed\_Com\_408H\_Well\_Plat\_R5\_Cert012521\_20210223134230.pdf

New road type: LOCAL

**Length: 3481** Feet Width (ft.): 25

Max slope (%): 2 Max grade (%): 3

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 25

New road access erosion control: Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area. Drainage control system shall be constructed on the entire length of road using any ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

New road access plan or profile prepared? N

New road access plan attachment:

Access road engineering design? N

Access road engineering design attachment:

**Turnout?** N

Access surfacing type: NONE

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 0

Offsite topsoil source description:

Onsite topsoil removal process: None needed

Access other construction information: The road shall conform to cross section and plans for typical road construction found in the BLM Gold Book. Turnouts: 50-60'. Major Cuts and Fills: 2:1 during drilling and completions. Cuts and fills taken back to 3:1 at interim.

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

# **Drainage Control**

New road drainage crossing: CULVERT, OTHER

**Drainage Control comments:** Drainage control system shall be constructed on the entire length of road by the use of any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings. **Road Drainage Control Structures (DCS) description:** Ditching will be constructed on both sides of road.

Road Drainage Control Structures (DCS) attachment:

#### **Access Additional Attachments**

# **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

Attach Well map:

Offset\_wells\_20210223121730.pdf

# Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

**Production Facilities description:** Existing Facilities: o An existing CTB production site is in Sec. 3, T26S-R32E where oil and gas sales will take place. o An existing Compressor Station is located approximately .5 miles south of the above-

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

referenced CTB Production Facility in Sec. 3, T26S-R32E where oil and gas sales will take place. o An existing Frac Pond is in the NE4 of Sec. 9, T25S-R32E. Open top tanks or open containments will be netted. Open vent exhaust stacks will be modified to prevent birds or bats from entering, discourage perching, roosting, and nesting. Facilities will have a secondary containment 1.5 times the holding capacity of largest storage tank. All above ground structures will be painted non-reflective shale green for blending with surrounding environment. Location of Proposed ROW (Work Area Detail Map Attached) Flowline Cluster: 5 - 4 buried flowlines, approximately 4,429.51 in length, will be laid from well pad to the CTB production facility south of the well site. o All construction activity will be confined to the approved ROW. Gas Lift Line: 2 - 4 buried gas lift pipelines, approximately 6,179.14 in length, will be laid from the well site running adjacent to the lease road to the Compressor facility in Sec. 3, T26S-R32E. o All construction activity will be confined to the approved ROW. o Pipeline will run parallel to existing disturbances and will stay within approved ROW. Power/Fiber Line: A pole-suspended powerline, approximately 3,403.28 in length, will be installed from the existing powerline running along the Orla Road in Section 10 and will be routed along the lease road to the proposed well site.

**Production Facilities map:** 

Cotton\_Draw\_Grizzly\_Pad\_and\_Facilities\_AerialDetail\_R5\_Cert012221\_20210223121918.pdf

# **Section 5 - Location and Types of Water Supply**

#### **Water Source Table**

Water source type: OTHER

Describe type: Frac pond

Water source use type: SURFACE CASING

**STIMULATION** 

INTERMEDIATE/PRODUCTION

CASING

Source latitude: Source longitude:

Source datum:

Water source permit type: OTHER

PRIVATE CONTRACT

Water source transport method: TRUCKING

**PIPELINE** 

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 16666.666667 Source volume (acre-feet): 2.148223

Source volume (gal): 700000

Received by OCD: 1/11/2022 10:21:08 AM

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Operator Name: CHEVRON USA INCORPORATED

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

#### Water source and transportation map:

Cotton\_Draw\_Grizzly\_Pad\_Temp\_Water\_Lines\_R3\_CERT\_12\_16\_2020\_20210223122012.pdf

Water source comments: Temporary Water Lines: Two surface 12 lay-flat water lines, 12,706.54 in length, will run from the well pad to the frac pond located in the NE corner of Section 9 as well as the NGL ROTF facility located in Section 10, 1.5 miles south of the well pad. o This will cross lease lines and an SF-299 easement will be applied for through the BLM. o All construction activity will be confined to the approved ROW. o Power line will run parallel to the road and will stay within approved ROW. An existing Frac Pond is in the NE4 of Sec. 9, T25S-R32E. and will be utilized for fresh water and recycled water. Fresh water will be obtained from a private water source.

New water well? N

#### **New Water Well Info**

Well latitude: Well Longitude: Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft): Est thickness of aquifer:

**Aquifer comments:** 

**Aquifer documentation:** 

Well depth (ft): Well casing type:

Well casing outside diameter (in.): Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method: Drill material:

Grout material: Grout depth:

Casing length (ft.): Casing top depth (ft.):

Well Production type: Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

# **Section 6 - Construction Materials**

Using any construction materials: YES

**Construction Materials description:** Caliche will be used to construct well pad and roads. Material will be purchased from the private land owners (Oliver Kiehne) caliche pit located in Sec 27, T26, R33E, Lea County, NM. The proposed source of construction material will be located and purchased by Chevron U.S.A. Inc. Notification shall be given to BLM at (575) 234-5909 at least 3 working days prior to commencing construction of access road and/or well pad.

**Construction Materials source location attachment:** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

## **Section 7 - Methods for Handling Waste**

Waste type: GARBAGE

Waste content description: Drilling fluids, garbage, human waste.

Amount of waste: 200 pounds

Waste disposal frequency: Daily

**Safe containment description:** Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal. Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility. Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: STATE

**FACILITY** 

Disposal type description:

Disposal location description: STATE APPROVED FACILITY

#### **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

## **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? Y

**Description of cuttings location** Drill cutting will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

**WCuttings** area liner

Cuttings area liner specifications and installation description

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

## **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: N

**Ancillary Facilities attachment:** 

#### Comments:

## **Section 9 - Well Site Layout**

#### **Well Site Layout Diagram:**

Cotton\_Draw\_Grizzly\_Pad\_Pad\_Plat\_R5\_Cert012221\_20210223122159.pdf

Comments: Well Plat o Exterior well pad dimensions are 380 x 590. o Interior well pad dimensions from point of entry (well head) of the easternmost well are N-120, S-260, E-345, W-245. The length to the west includes 25 spacing for next well on multi-well pad (five wells). Total disturbance area needed for construction of well pad will be 5.15 acres. o Topsoil placement is on the east where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices. Reserve Pit o Exterior Reserve Pit dimensions are 333 x 264 2.02 Ac. o Reserve Pit adjacent spoils area dimensions are 115 x 264 0.70 Ac.

### **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: CO GRIZZLY 34 27 FED COM

Multiple Well Pad Number: 407H, 408H, 409H, 416H, 417H, 418H

#### Recontouring attachment:

Cotton\_Draw\_Grizzly\_Pad\_1\_Pipeline\_EDS\_Fiber\_ROW\_SUP\_R1\_CERT\_12\_16\_2020\_20210223122350.pdf

Cotton\_Draw\_Grizzly\_Pad\_1\_Pipeline\_EDS\_Fiber\_SUP\_R1\_CERT\_12\_16\_2020\_20210223122455.pdf

Cotton\_Draw\_Grizzly\_Pad\_CutFill\_Pad\_Sloped\_R4\_Cert012221\_20210223122528.pdf

Cotton\_Draw\_Grizzly\_Pad\_IR\_Plat\_R4\_Cert012221\_20210223122619.pdf

Drainage/Erosion control construction: Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

Drainage/Erosion control reclamation: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible.

Well pad proposed disturbance

(acres): 5.15

Road proposed disturbance (acres):

Powerline proposed disturbance

(acres): 1.56

Pipeline proposed disturbance

(acres): 6.1

Other proposed disturbance (acres):

0.41

Total proposed disturbance: 14.82

Well pad interim reclamation (acres):

Road interim reclamation (acres): 0

Powerline interim reclamation (acres): Powerline long term disturbance

Pipeline interim reclamation (acres): 0

Other interim reclamation (acres): 0.41 (acres): 6.1

Total interim reclamation: 2.21

Well pad long term disturbance

(acres): 3.35

Road long term disturbance (acres):

(acres): 0.79

Pipeline long term disturbance

Other long term disturbance (acres): 0

Total long term disturbance: 11.84

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

#### **Disturbance Comments:**

**Reconstruction method:** Within 6 months, Chevron will contact BLM Surface Management Specialists to devise the best strategies to reduce the size of the location. Current plans for interim reclamation include reducing the pad size to approximately 5.63 acres from the proposed size of 8.04 acres. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production. A plan will be submitted showing where interim reclamation will be completed in order to allow for safe operations, protection of the environment outside of drilled well, and following best management practices found in the BLM Gold Book.

**Topsoil redistribution:** Topsoil will be evenly re-spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM #2), free of noxious weeds, will be used.

**Soil treatment:** After all the disturbed areas have been properly prepared; the areas will be seeded with the proper BLM seed mixture (BLM #2), free of noxious weeds.

**Existing Vegetation at the well pad:** Vegetation present in surrounding area includes mesquite, shrubs, and grass (needlegrass, burro grass, dropseed).

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: mesquite, shrubs, and grass

**Existing Vegetation Community at the road attachment:** 

Existing Vegetation Community at the pipeline: mesquite, shrubs, and grass

**Existing Vegetation Community at the pipeline attachment:** 

Existing Vegetation Community at other disturbances: mesquite, shrubs, and grass

**Existing Vegetation Community at other disturbances attachment:** 

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

**Seed Summary** 

Total pounds/Acre:

Seed Type

Pounds/Acre

Seed reclamation attachment:

**Operator Contact/Responsible Official Contact Info** 

First Name: Last Name:

Phone: Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

**Existing invasive species treatment attachment:** 

Weed treatment plan description: Treat with BLM seed mixture (BLM #2) free of noxious weeds.

Weed treatment plan attachment:

Monitoring plan description: The interim reclamation will be monitored periodically to ensure that vegetation has

reestablished.

Monitoring plan attachment:

Success standards: As per BLM requirements

Pit closure description: None

Pit closure attachment:

## **Section 11 - Surface Ownership**

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

Well Name: CO GRIZZLY 34 27 FED COM	Well Number: 408H
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:
Disturbance type: NEW ACCESS ROAD  Describe:	
Surface Owner: BUREAU OF LAND MANAGEMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:
Disturbance type: PIPELINE	
Describe:	
Surface Owner: BUREAU OF LAND MANAGEMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	

**COE Local Office:** 

**DOD Local Office:** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS** Ranger District:

Disturbance type: OTHER

Describe: FLOWLINES, SATELLITE PIPELINES, SATELLITE EDS LINE, EDS LINES, FIBER LINE

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

**Military Local Office:** 

**USFWS Local Office:** 

**Other Local Office:** 

**USFS** Region:

**USFS Forest/Grassland:** 

**USFS Ranger District:** 

**Section 12 - Other Information** 

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

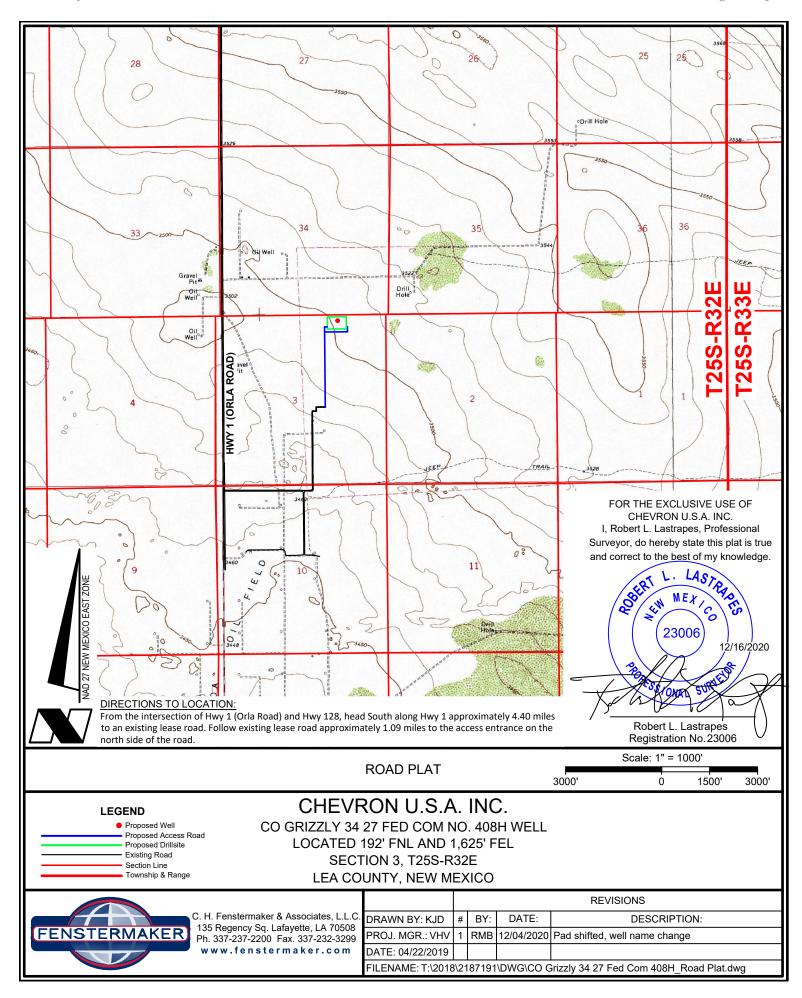
## **SUPO Additional Information:**

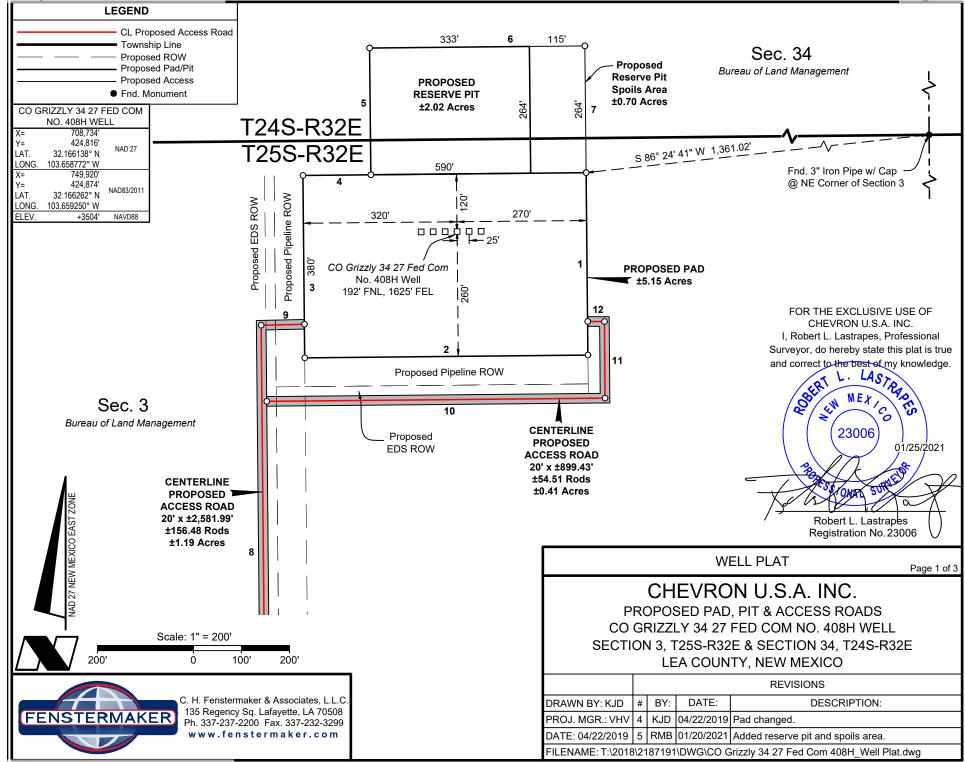
Use a previously conducted onsite? Y

Previous Onsite information: On-site performed by BLM NRS: Paul Murphy 3/17/2020

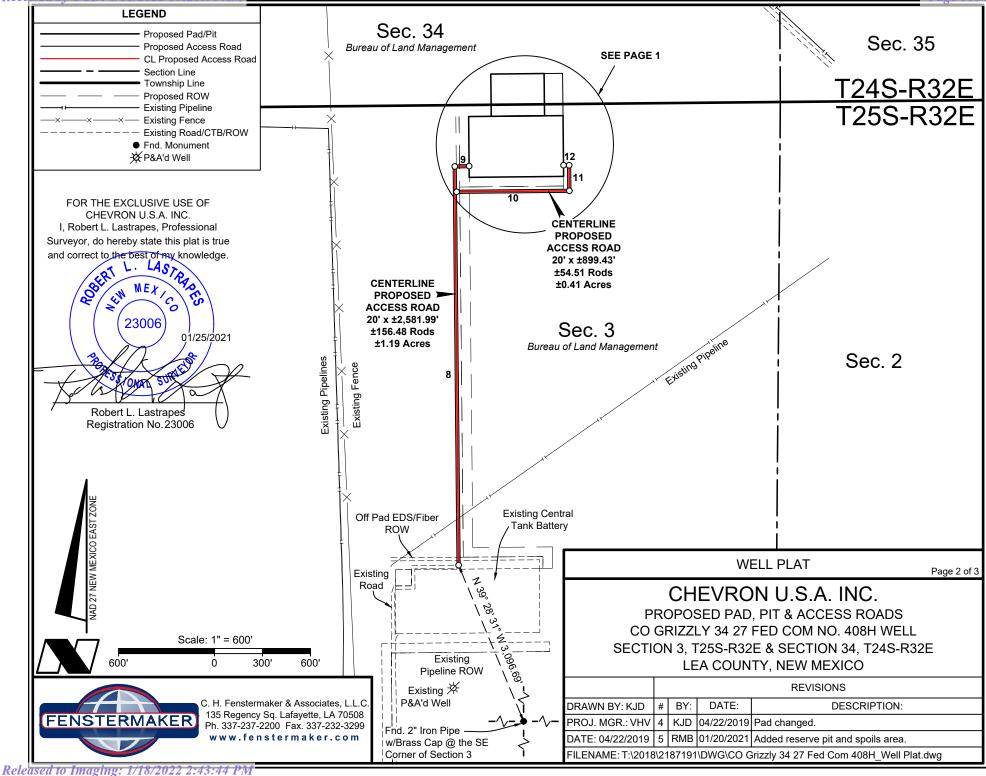
## **Other SUPO Attachment**

CO\_GRIZZLY\_34\_27\_Fed\_Com\_408H\_SUPO\_20210223134342.pdf





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	SPOILS AREA CO RESERVE PIT COP		NE	SPOILS AREA CO	ORNER
X=	708,885'		X=	709,001'	
Y=	425,202'	NAD 27	Y=	425,203'	NAD 27
LAT.	32.167196° N	INAU 21	LAT.	32.167196° N	INAU 21
LONG.	103.658278° W		LONG.	103.657904° W	
X=	750,070'		X=	750,186'	
Y=	425,260'	NAD83/2011	Y=	425,261'	NAD83/2011
LAT.	32.167319° N	NAD83/2011	LAT.	32.167320° N	NAD83/2011
LONG.	103.658755° W		LONG.	103.658382° W	
	SW SPOILS AREA CORNER/SW RESERVE PIT CORNER		SE SPOILS AREA CORNER		
			SE	SPOILS AREA CO	ORNER
			SE X=	SPOILS AREA CO	ORNER
F	RESERVE PIT COR	RNER			
X= Y=	RESERVE PIT COF 708,888'		X= Y=	709,003'	ORNER NAD 27
X= Y=	RESERVE PIT COP 708,888' 424,938' 32.166470° N	RNER	X= Y=	709,003' 424,939' 32.166471° N	
X= Y= LAT.	RESERVE PIT COP 708,888' 424,938' 32.166470° N	RNER	X= Y= LAT.	709,003' 424,939' 32.166471° N	
X= Y= LAT. LONG.	708,888' 424,938' 32.166470° N 103.658275° W	NAD 27	X= Y= LAT. LONG.	709,003' 424,939' 32.166471° N 103.657901° W	NAD 27
X= Y= LAT. LONG.	708,888' 424,938' 32.166470° N 103.658275° W 750,073'	RNER	X= Y= LAT. LONG. X=	709,003' 424,939' 32.166471° N 103.657901° W 750,188'	

NW RESERVE PIT CORNER	NE RESERVE PIT CORNER/NW			
	SPOILS AREA CORNER			
X= 708,552'	X= 708,885'			
Y= 425,198' NAD 27	Y= 425,202' NAD 27			
LAT. 32.167192° N	LAT. 32.167196° N			
LONG. 103.659354° W	LONG. 103.658278° W			
X= 749,737'	X= 750,070'			
Y= 425,257' NAD83/201:	Y= 425,260' NAD83/2011			
LAT. 32.167316° N	LAT. 32.167319° N			
LONG. 103.659831° W	LONG. 103.658755° W			
SW RESERVE PIT CORNER	SE RESERVE PIT CORNER/SW			
SW RESERVE PIT CORNER	SPOILS AREA CORNER			
X= 708,555'	X= 708,888'			
Y= 424,934'	Y= 424,938'			
LAT. 32.166467° N NAD 27	LAT. 32.166470° N			
LONG. 103.659351° W	LONG. 103.658275° W			
X= 749,740'	X= 750,073'			
Y= 424,993'	Y= 424,996' NAD22/2044			
LAT. 32.166590° N NAD83/201	LAT. 32.166594° N NAD83/2011			
LONG. 103.659828° W	LONG. 103.658752° W			

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.



C. H. Fenstermaker & Associates, L.L.C. 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

				NE PAD CORNE	-R/
	NW PAD CORNI	ER	SE SPOILS AREA CORNER		
X=	708,413'		X=	709,003'	
Y=	424,933'	NAD 27	Y=	424,939'	NAD 27
LAT.	32.166465° N	NAD 21	LAT.	32.166471° N	NAD 21
LONG.	103.659808° W		LONG.	103.657901° W	
X=	749,598'		X=	750,188'	
Y=	424,991'	NAD83/2011	Y=	424,997'	NAD83/2011
LAT.	32.166589° N	NAD03/2011	LAT.	32.166594° N	NAD03/2011
LONG.	103.660285° W		LONG.	103.658379° W	
ELEV.	+3502'	NAVD88	ELEV.	+3507'	NAVD88
	SW PAD CORNI	ER		SE PAD CORNE	ER
X=	SW PAD CORNI 708,417'	ER	X=	SE PAD CORNE 709,007'	ΞR
X= Y=			X= Y=		
Y=	708,417'	ER NAD 27	Y=	709,007'	ER NAD 27
Y=	708,417' 424,553' 32.165421° N		Y=	709,007' 424,559' 32.165426° N	
Y= LAT.	708,417' 424,553' 32.165421° N		Y= LAT.	709,007' 424,559' 32.165426° N	
Y= LAT. LONG.	708,417' 424,553' 32.165421° N 103.659804° W	NAD 27	Y= LAT. LONG.	709,007' 424,559' 32.165426° N 103.657897° W 750,192'	NAD 27
Y= LAT. LONG. X= Y=	708,417' 424,553' 32.165421° N 103.659804° W 749,602'		Y= LAT. LONG. X= Y=	709,007' 424,559' 32.165426° N 103.657897° W 750,192'	
Y= LAT. LONG. X= Y=	708,417' 424,553' 32.165421° N 103.659804° W 749,602' 424,611' 32.165544° N	NAD 27	Y= LAT. LONG. X= Y=	709,007' 424,559' 32.165426° N 103.657897° W 750,192' 424,617' 32.165550° N	NAD 27

PROPOSED PAD, RESERVE PIT & SPOILS AREA					
COURSE BEARING DISTANC					
1	S 00° 33' 20" E	380.00'			
2	S 89° 26' 41" W	590.00'			
3	N 00° 33' 19" W	380.00'			
4	N 89° 26' 42" E	141.50'			
5	N 00° 34' 15" W	264.00'			
6	N 89° 26' 42" E	448.50'			
7	S 00° 34' 15" E	264.00'			

CENTERLINE PROPOSED ACCESS ROAD				
COURSE	BEARING DISTANCE			
8	N 00° 33' 18" W	2491.86'		
9	N 88° 43' 46" E	90.13'		
10	N 89° 26' 42" E	704.85'		
11	N 00° 27' 04" W	159.56'		
12	N 89° 50' 24" W	35.02'		

#### NOTE:

Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

#### NOTE:

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org

#### **WELL PLAT**

Page 3 of 3

## CHEVRON U.S.A. INC.

PROPOSED PAD, PIT & ACCESS ROADS CO GRIZZLY 34 27 FED COM NO. 408H WELL SECTION 3, T25S-R32E & SECTION 34, T24S-R32E LEA COUNTY. NEW MEXICO

Į			REVISIONS							
1	TRAWN BY: KJD	#	BY:	DATE:	DESCRIPTION:					
	PROJ. MGR.: VHV	4	KJD	04/22/2019	Pad changed.					
	DATE: 04/22/2019	5	RMB	01/20/2021	Added reserve pit and spoils area.					
	FILENAME: T:\2018	3\21	87191	\DWG\CO G	Grizzly 34 27 Fed Com 408H_Well Plat.dwg					

## FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

correct to-thre best of my knowledge

LASTR

MEX

23006

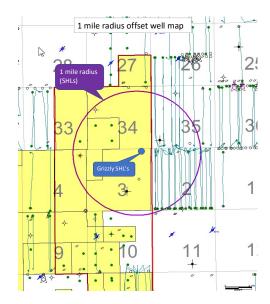
01/25/2021

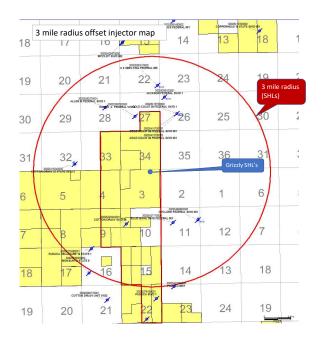
Robert L. Lastrapes Registration No. 23006

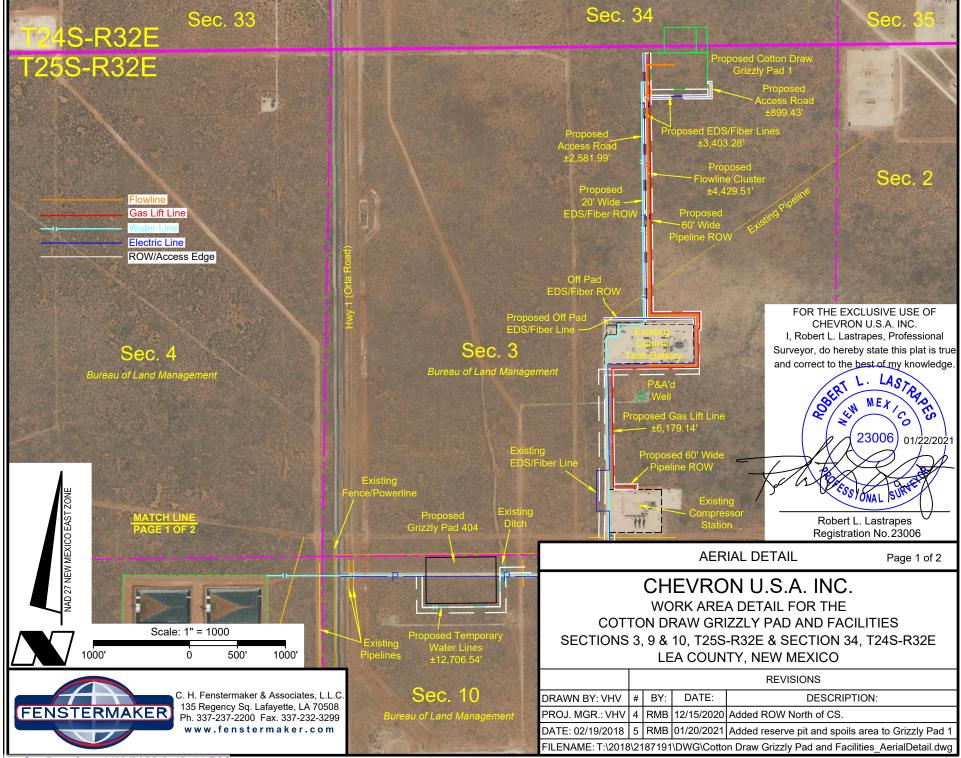
		WELL NUMBER	OPERATOR	PERMITTED FIELD		DATUM ELEVATION	
30025081650000 D			RICHARDSON SID W INC	WILDCAT	ABANDONED OIL	3524	4979
	COTTON DRAW UNIT-FE		TEXACO INC	PADUCA	ABANDONED OIL	3485	4890
	COTTON DRAW UNIT		TEXACO EXPL&PROD INC	PADUCA	OIL	3464	4896
	COTTON DRAW UNIT		POGO PRODUCING CO	PADUCA	OIL	3462	
	COTTON DRAW UNIT		POGO PRODUCING CO	PADUCA	DRY HOLE	3462	4791
	F RAY-FEDERA NCT-2		? TEXACO INC	PADUCA	OIL	3472	
30025081780000 E			B DEVON ENERGY PROD	PADUCA	OIL	3478	4815
	COTTON DRAW UNIT		3 TEXACO INC	PADUCA	TEMPORARILY ABANE		4910
	COTTON DRAW UNIT		MESQUITE SWD INC	WILDCAT	ABANDONED GAS	3480	15769
	COTTON DRAW SWD		MESQUITE SWD INC	SWD	INJECTION	3480	15769
	COTTON DRAW UNIT		SAHARA OPERATING CO	PADUCA NORTH	OIL	3519	4937
	COTTON DRAW UNIT		SAHARA OPERATING CO	PADUCA NORTH	OIL	3506	
	COTTON DRAW UNIT		TEXACO INC	PADUCA NORTH	DRY HOLE	3521	4850
30025227380000 C	COTTON DRAW UNIT	72	SAHARA OPERATING CO	PADUCA NORTH	OIL	3511	4850
30025227380001 C	COTTON DRAW UNIT	72	SAHARA OPERATING CO	PADUCA NORTH	OIL	3511	4850
30025228820000 C	COTTON DRAW UNIT	73	S SAHARA OPERATING CO	PADUCA NORTH	GAS	3501	4870
30025228820001 C	COTTON DRAW UNIT	73	S SAHARA OPERATING CO	PADUCA	OIL	3490	4870
30025271860000 C	COTTON DRAW UNIT	74	SAHARA OPERATING CO	PADUCA NORTH	OIL	3522	4967
30025282020000 E	XXON `A` FEDERAL	WD-2	3 KNIGHTS OPER LLC	DOUBLE X	INJECTION	3554	4977
30025286540000 E	XXON `A` FEDERAL	4	F TEMPO ENERGY INC	DOUBLE X	OIL	3534	4872
30025287210000 Y	'EAGER `YW` FEDERAL	1	YATES PETROLEUM CORP	PADUCA NORTH	ABANDONED	3491	0
30025292120000 J	ACKSON FEDERAL	4	EXXON CORP	DOUBLE X	DRY HOLE	3547	5100
30025292510000 J	ACKSON FEDERAL	3	B EXXON CORP	DOUBLE X	ABANDONED	3567	0
30025375980000 C	OTTON DRAW UNIT	102	SAHARA OPERATING CO	PADUCA	OIL	3473	5000
30025377760000 C	COTTON DRAW UNIT	109	POGO PRODUCING CO	PADUCA	ABANDONED	3456	0
30025404080000 U	INDAUNTED BSD STATE	1H	EOG RESOURCES INC	UNNAMED	OIL	3540	15464
30025404087000 U	INDAUNTED BSD STATE	1H	EOG RESOURCES INC	UNNAMED	PILOT	3540	11100
30025418130000 E	IDER FEDERAL	2H	COG PRODUCTION LLC	UNNAMED	OIL	3565	20774
30025419880000 B	SASILISK BQS STATE C	3H	YATES PETROLEUM CORP	UNNAMED	ABANDONED	3556	0
30025422910000 G	SADWALL 35 FEDERAL	5H	COG PRODUCTION LLC	UNNAMED	OIL	3570.9	15438
30025425160000 P	AINT 33 FEDERAL	1H	DEVON ENERGY PRODUCT	UNNAMED	OIL	3489.5	15432
30025425910000 P	AINT '33' FEDERAL	2H	DEVON ENERGY PRODUCT	UNNAMED	OIL	3518	15405
30025426330000 P	ADUCA BREAKS 9 FEDE	1H	DEVON ENERGY PROD	PADUCA	ABANDONED	3466.3	0
30025426340000 P	ADUCA BREAKS 9 FEDE	2H	DEVON ENERGY PROD	PADUCA	ABANDONED	3466.1	0
30025427170000 B	SLUE QUAIL SWD FEDER	1	MESQUITE SWD INC	SWD	INJECTION	3504	6280
30025431180000 U	INDAUNTED BSD STATE	003H	EOG Y RESCS INC	UNNAMED	ABANDONED	3523	0
		002H	EOG Y RESCS INC	UNNAMED	ABANDONED	3506	0
30025437440000 D	OOS XX 27 FEDERAL CO	003H	COG PROD LLC	DOUBLE X	PERMIT	3545.7	15599
		701H	EOG RESOURCES INC	UNNAMED	OIL	3583	17183
		702H	EOG RESOURCES INC	UNNAMED	OIL	3582	17752
30025446280000 E		301H	COG PRODUCTION LLC	UNNAMED	OIL	3545.3	17104
30025446290000 E		101H	COG PRODUCTION LLC	UNNAMED	OIL	3545.7	16504
30025446300000 E		102H	COG PRODUCTION LLC	UNNAMED	OIL	3546.3	16466
30025446310000 E		103H	COG PRODUCTION LLC	UNNAMED	OIL	3551.4	16560
30025446320000 E		104H	COG PRODUCTION LLC	UNNAMED	OIL	3552.1	16583
30025446330000 E		106H	COG PROD LLC	UNNAMED	PERMIT	3530.1	0
30025446350000 E		203H	COG PRODUCTION LLC	UNNAMED	OIL	3551.8	16764
30025446360000 E		204H	COG PRODUCTION LLC	UNNAMED	OIL	3551.7	16835
30025446370000 E		302H	COG PRODUCTION LLC	UNNAMED	OIL	3545.4	16879
30025446380000 E		303H	COG PRODUCTION LLC	UNNAMED	OIL	3552.2	
30025446390000 E		304H	COG PRODUCTION LLC	UNNAMED	OIL	3552.7	17046
30025448190000 C		004H	XTO ENERGY INC	PADUCA NORTH	ABANDONED	3526	0
30025448200000 C		005H	XTO ENERGY INC	PADUCA NORTH	ABANDONED	3528	0
30025448760000 E		105H	COG PROD LLC	UNNAMED	PERMIT	3530	0
30025448770000 E		107H	COG PROD LLC	UNNAMED	ABANDONED	3550.8	0
30025448780000 E		108H	COG PROD LLC	UNNAMED	PERMIT	3551.7	0
30025448790000 E		205H	COG PROD LLC	UNNAMED	PERMIT	3530	0
30025448800000 E		206H	COG PROD LLC	UNNAMED	AT-TD	3529.9	20003
30025448810000 E		207H	COG PROD LLC	UNNAMED	PERMIT	3550.3	0
30025448820000 E		305H	COG PROD LLC COG PROD LLC	UNNAMED	START	3529.9	0
30025448830000 E		306H	COG PROD LLC	UNNAMED	START	3529.7	0
30025448840000 E		601H		UNNAMED	PERMIT	3551.3	
30025448910000 E		307H	COG PROD LLC	UNNAMED	PERMIT	3551.9	0
30025448920000 E		401H	COG PROD LLC	UNNAMED	PERMIT	3551	12022
		101H	EOG RESOURCES INC	UNNAMED	OIL	3538	
		201H	EOG RESOURCES INC	UNNAMED	OIL	3538	14222
		301H	EOG RESOURCES INC	UNNAMED	OIL	3539	14681
		501H	EOG RESOURCES INC	UNNAMED	OIL	3541	15370
		701H	EOG RESOURCES INC	UNNAMED	PILOT	3540	13125
		701H	EOG RESOURCES INC	UNNAMED	OIL	3540	17200
		741H	EOG RESOURCES INC	WILDCAT	ABANDONED	3516	0
		051H	CHEVRON U.S.A.INC	UNNAMED	PERMIT	3494	0
30025454850100 C	O GRIZZLY 3 10 FED	051H	CHEVRON U S A INC	UNNAMED	PERMIT	3494	0

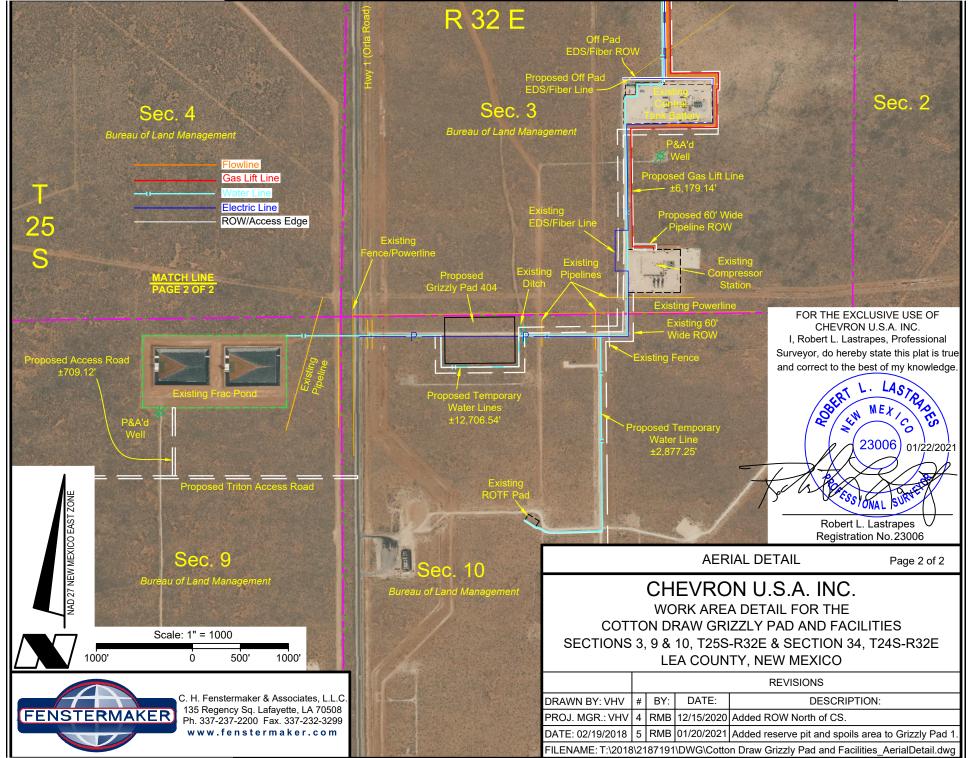
30025454860000 CO GRIZZLY 3 10 FEDE	052H	CHEVRON U S A INC	UNNAMED	PERMIT		3495	0
30025454870000 CO GRIZZLY 3 10 FEDE	055H	CHEVRON U S A INC	UNNAMED	PERMIT		3494	0
30025454880000 CO GRIZZLY 3 34 FEDE	057H	CHEVRON U S A INC	UNNAMED	PERMIT		3494	0
30025454890000 CO GRIZZLY 3 34 FEDE	510H	CHEVRON U S A INC	UNNAMED	PERMIT		3494	0
30025456710000 SAVAGE 2 STATE COM	502H	EOG RESOURCES INC	UNNAMED	OIL		3545	15927
30025456720000 SAVAGE 2 STATE COM	503H	EOG RESOURCES INC	UNNAMED	OIL		3545	15414
30025456730000 SAVAGE 2 STATE COM	504H	EOG RESOURCES INC	UNNAMED	OIL		3545	15780
30025456920000 SAVAGE 2 STATE COM	505H	EOG RESOURCES INC	UNNAMED	DRY HOLE		3529	9866
30025456930000 SAVAGE 2 STATE COM	506H	EOG RESOURCES INC	UNNAMED	OIL		3555	15443
30025456940000 SAVAGE 2 STATE COM	507H	EOG RESOURCES INC	UNNAMED	OIL		3569	15936
30025456950000 SAVAGE 2 STATE COM	508H	EOG RESOURCES INC	UNNAMED	OIL		3567	15653
30025458140000 SAVAGE 2 STATE COM	505Y	EOG RESOURCES INC	UNNAMED	OIL		3555	15506
30025458380000 LIPPIZZAN 4 FEDERAL	002H	DEVON ENERGY PRODUCT	UNNAMED	OIL		3523	15527
30025463320000 SAVAGE 2 STATE COM	702H	EOG RESOURCES INC	WILDCAT	TREATD		3520	17107
30025463330000 SAVAGE 2 STATE COM	704H	EOG RESOURCES INC	WILDCAT	TREATD		3528	17197
30025463370000 SAVAGE 2 STATE COM	708H	EOG RESOURCES INC	UNNAMED	TREATD		3535	17275
30025463380000 SAVAGE 2 STATE COM	721H	EOG RESOURCES INC	UNNAMED	TREATD		3520	17490
30025463390000 SAVAGE 2 STATE COM	722H	EOG RESOURCES INC	UNNAMED	TREATD		3529	17476
30025463400000 SAVAGE 2 STATE COM	723H	EOG RESOURCES INC	UNNAMED	TREATD		3535	17483
30025463410000 SAVAGE 2 STATE COM	741H	EOG RESOURCES INC	UNNAMED	TREATD		3520	17681
30025463420000 SAVAGE 2 STATE COM	705H	EOG RESOURCES INC	UNNAMED	TREATD		3528	17201
30025463430000 SAVAGE 2 STATE COM	726H	EOG RESOURCES INC	UNNAMED	AT-TD		3544	17589
30025463480000 SAVAGE 2 STATE COM	707H	EOG RESOURCES INC	UNNAMED	AT-TD		3543	17250
30025466040000 PYTHON 36 STATE COM	501H	EOG RESOURCES INC	UNNAMED	AT-TD		3557	15865
30025466050000 PYTHON 36 STATE COM	502H	EOG RESOURCES INC	UNNAMED	AT-TD		3557	15675
30025473140000 PYTHON 36 STATE COM	101H	EOG RESOURCES INC	UNNAMED	PERMIT		3557	0
30025473650000 SAVAGE 2 STATE COM	202H	EOG RESOURCES INC	UNNAMED	PERMIT		3520	0
30025473660000 SAVAGE 2 STATE COM	203H	EOG RESOURCES INC	UNNAMED	PERMIT		3521	0
30025473670000 SAVAGE 2 STATE COM	204H	EOG RESOURCES INC	UNNAMED	PERMIT		3521	0
30025473680000 SAVAGE 2 STATE COM	207H	EOG RESOURCES INC	UNNAMED	PERMIT		3540	0
30025473690000 SAVAGE 2 STATE COM	208H	EOG RESOURCES INC	UNNAMED	PERMIT		3540	0
30025763400000 SAVAGE 2 STATE COM	723H	EOG RESOURCES INC	UNNAMED	PERMIT		3535	0
30025292510000 JACKSON FEDERAL	3	EXXON CORPORATION	ABANDON LOCATION	1		9635	9660
30025081950000 COTTON DRAW UNIT	10	TEXACO INCORPORATED	OIL PRODUCER		4836	9935	9910
30025081880000 COTTON DRAW UNIT	17	TEXACO INCORPORATED	ABD-OW		4774	9955	9950
30025282020000 EXXON 'A' FEDERAL	WD-2	JUBILEE ENERGY CORPORAT	I SWDOP		4977	10165	10155
30025282020000 EXXON `A` FEDERAL	WD-2	JUBILEE ENERGY CORPORAT	I SWDOP		4977	10165	10155
30025081830000 COTTON DRAW UNIT	2	TEXACO INCORPORATED	ABD-OW		4811	10190	10180
30025081830001 COTTON DRAW UNIT	2	TEXACO INCORPORATED	OIL-WO		4811	10190	10180
30025379120000 PADUCA DELAWARE 16 ST	A 5	PRIDE ENERGY COMPANY	OIL PRODUCER		4940	10205	10175
30025448970000 OUTRIDER FEDERAL	003H	XTO ENERGY INCORPORATE				10250	10220
30025081810000 ORA HILL-FED 14	1	HILL & MEEKER	D&A-G		4843	10315	10320
30025444500000 PADUCA 16 STATE	202H	PRIDE ENERGY COMPANY	WELL PERMIT		.0.0	10405	10375
30025444540000 PADUCA 16 STATE	702H	PRIDE ENERGY COMPANY	WELL PERMIT			10420	10390
30025444520000 PADUCA 16 STATE	502H	PRIDE ENERGY COMPANY	WELL PERMIT			10435	10405
30025295770000 PADUCA UNIT	3	YATES PETROLEUM CORPOR				10560	10575
30025311770000 PADUCA 'AIU' FEDERAL	1	YATES PETROLEUM CORPOR		•	8870	10560	10570
30025311770001 PADUCA AIU FEDERAL SW	D I	CIMAREX ENERGY COMPAN			8870	10560	10570
30025081900000 COTTON DRAW UNIT	12		ABD-OW		4743	10565	10550
30025446270000 EIDER FEDERAL	202H	COG PRODUCTION LLC	TREATD		16787	10620	10630
30025415700000 GOLD COAST 26 FEDERAL		COG OPERATING LLC	SWDOP		7200	10795	10810
30025415700000 GOLD COAST 26 FEDERAL		COG OPERATING LLC	SWDOP		7200	10795	10810
30025376590000 COTTON DRAW UNIT	94	POGO PRODUCING COMPA		I		10850	10840
30025289350000 JACKSON FEDERAL	2	EXXON CORPORATION	DRY & ABANDONED		5100	10875	10895
30025081940000 COTTON DRAW UNIT	3	TEXACO INCORPORATED	OIL PRODUCER		4778	11110	11090
30025081840000 GE JORDAN NCT-1	10	TEXACO INCORPORATED	ABD-OW		4780	11115	11110
30025263600000 WRIGHT FEDERAL	2	WILLIAMSON RALPH E	ABD-OW		4885	11215	11210
30025455140000 GOLD COAST 26 FEDERAL	S' 3	OWL SWD OPERATING LLC	WELL PERMIT			11220	11240
30025280690000 EXXON`A`FEDERAL	1	JUBILEE ENERGY CORPORAT	I OIL PRODUCER		4905	11395	11385
30025081850000 JORDAN G E FEDERAL NCT	-12	TEXACO INCORPORATED	ABD-OW		4730	11455	11445
30025278630000 DUNCAN FED	1	SUPERIOR OIL COMPANY TH	E ABANDON LOCATION	I		11570	11585
30025373080001 PADUCA DELAWARE 16 ST	A 1	PRIDE ENERGY COMPANY	W-INJW		5020	11650	11615
30025214740000 CONTINENTAL-STATE	1	SHORELINE EXPLORATIONS	1 D&A-O		4714	11665	11640
30025081930000 COTTON DRAW UNIT	13	TEXACO INCORPORATED	ABD-OW		4796	11755	11730
30025081920000 COTTON DRAW UNIT	22	TEXACO INCORPORATED	ABD-OW		4774	11805	11790
30025081920001 COTTON DRAW UNIT	22	TEXACO INCORPORATED	OIL-WO		4774	11805	11790
30025376600000 COTTON DRAW UNIT	95	POGO PRODUCING COMPAI		ı		12140	12130
30025081960000 MONSANTO-STATE	1	TENNESSEE GAS TRANSMISS		•	4771	12140	12130
30025249480000 WRIGHT FEDERAL					4937	12525	
	1	WILLIAMSON RALPH E	ABD-OW				12525
30025224300000 FEDERAL O	2	ONEILL JOSEPH I JR	DRY & ABANDONED		4896	12535	12560
30025282420001 JACKSON FEDERAL SWD	1	YATES PETROLEUM CORPOR			9350	12630	12640
30025282420000 JACKSON FEDERAL	1	EXXON CORPORATION	DRY & ABANDONED		9350	12630	12640
30025282420001 JACKSON FEDERAL SWD	1	YATES PETROLEUM CORPOR			9350	12630	12640
30025284790000 EXXON `A` FEDERAL	3	JUBILEE ENERGY CORPORAT	II OIL PRODUCER		4883	12695	12685

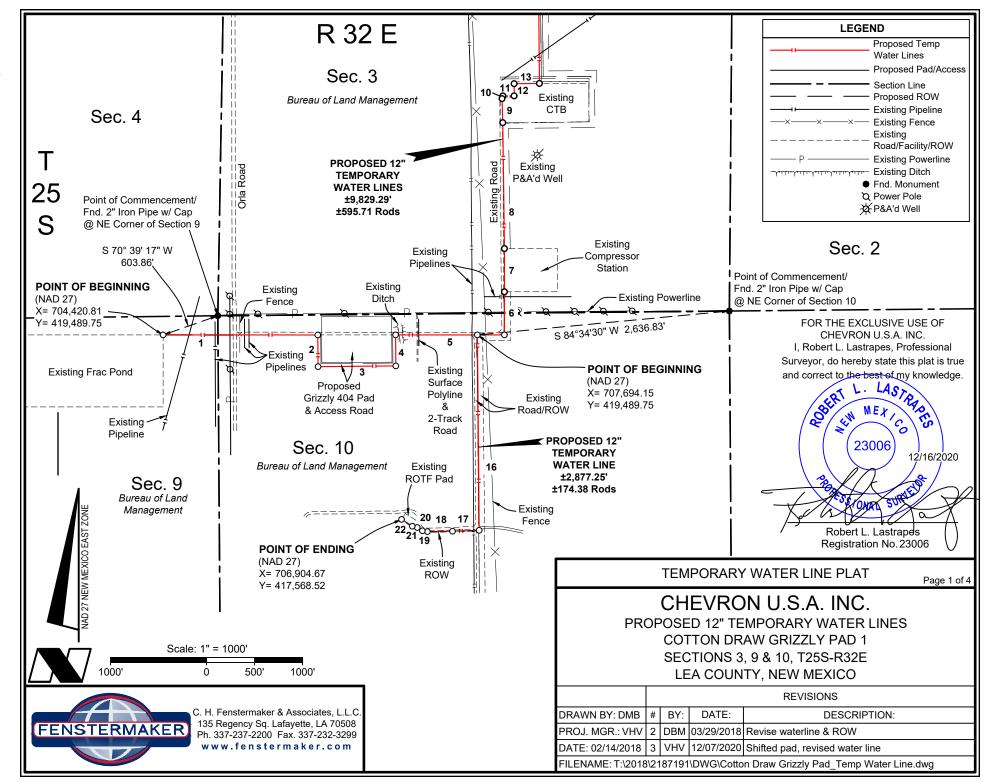
30025081870000 COTTON DRAW UNIT	11	TEXACO INCORPORATED ABI	D-OW	4727	12745	12735
30025282370001 ALLEN B FEDERAL SWD	1	YATES PETROLEUM CORPOR/ SW	VD-WO	8715	12760	12735
30025282370000 ALLEN `B` FEDERAL	1	EXXON CORPORATION DRY	RY & ABANDONED	8715	12760	12735
30025282370001 ALLEN B FEDERAL SWD	1	YATES PETROLEUM CORPOR/ SW	VD-WO	8715	12760	12735
30025400900000 DOS XX `27` FEDERAL COM	1H	COG PRODUCTION LLC OIL	L PRODUCER	13679	12775	12780
30025374210000 MONSANTO STATE	10	POGO PRODUCING COMPAN OIL	L PRODUCER	5000	12785	12770
30025270150000 FEDERAL `27`	1	WOODS PETROLEUM CORPO DRY	RY & ABANDONED	4979	12985	12970
30025205190000 MONSANTO-STATE	5	TENNECO OIL COMPANY ABI	D-OW	4792	13010	12990
30025378020000 COTTON DRAW UNIT	107	POGO PRODUCING COMPAN ABA	ANDON LOCATION		13050	13035
30025431750000 DOS XX 27 FED COM	004H	COG PRODUCTION LLC WE	ELL PERMIT		13050	13045
30025431750100 DOS XX 27 FED COM	4H	COG PRODUCTION LLC WE	ELL PERMIT		13050	13045
30025431620000 DOS XX 27 FEDERAL COM	002H	COG PRODUCTION LLC WE	ELL PERMIT		13060	13055
30025081820000 COTTON DRAW UNIT	1	TEXACO INCORPORATED ABI	D-OW	4805	13065	13050
30025429320000 OUTRIDER FEDERAL	6H	XTO ENERGY INCORPORATED PILO	LOT HOLE	12760	13190	13180
30025429320100 OUTRIDER FEDERAL	6H	XTO ENERGY INCORPORATED OIL	L-WO	15276	13190	13180
30025429310000 OUTRIDER FEDERAL	005H	XTO ENERGY INCORPORATED ABA	ANDON LOCATION		13495	13485
30025081970000 MONSANTO-STATE	2	TENNESSEE GAS TRANSMISSI ABI	D-OW	4768	13500	13485
30025423030000 FUGGLES 14 FEDERAL COM	1 002H	CIMAREX ENERGY COMPANY ABA	ANDON LOCATION		13590	13610
30025423030100 FUGGLES 14 FEDERAL COM	1 002H	CIMAREX ENERGY COMPANY CAN	NCEL		13590	13610
30025435140000 EIDER FEDERAL	13H	COG PRODUCTION LLC WE	ELL PERMIT		13600	13615
30025221370000 FEDERAL O	1	ONEILL JOSEPH I JR OIL	L PRODUCER	4904	13720	13745
30025422580000 PADUCA FEDERAL SWD	3Y	MESQUITE SWD INCORPORA SW	VDCOM	7300	13785	13795
30025428720000 CAZADOR FEDERAL	004H	XTO ENERGY INCORPORATED ABA	ANDON LOCATION		13950	13930
30025081980000 MONSANTO-STATE	3	TENNESSEE GAS TRANSMISSI ABI	D-OW	4736	14045	14025
30025428680000 OUTRIDER FEDERAL	004H	XTO ENERGY INCORPORATED ABA	ANDON LOCATION		14155	14135
30025081610002 U S SMELTING FEDERAL	5	GRAHAM BILL J SW	VDOP-WO	4995	14200	14200
30025428710000 CAZADOR FEDERAL	3H	XTO ENERGY INCORPORATED ABA	SANDON LOCATION		14460	14440
30025428670000 OUTRIDER FEDERAL	003H	XTO ENERGY INCORPORATED ABA	SANDON LOCATION		14665	14640
30025276160001 PADUCA SWD	1	MESQUITE SWD INCORPORA W-I	-INJW	15850	15130	15135
30025082170001 COTTON DRAW UNIT	WI23	TEXACO INCORPORATED W-I	-INJW	4747	16485	16465
30025408130000 PADUCA FEDERAL SWD	2	MESQUITE SWD INCORPORA' SW	VDCOM	6628	17930	17925
30025452050000 MARWARI 28-16 STATE FE	D 236H	DEVON ENERGY PRODUCTIO TRE	EATD	20843	19710	19695
30025429470000 MCCLOY SWD	2	OWL SWD OPERATING LLC SW	VDCOM	18776	20420	20410
30025427590000 MCCLOY SWD	1	OWL SWD OPERATING LLC ABI	D-SWD	5810	20510	20500
30025082310001 COTTON DRAW UNIT	47	TEXACO INCORPORATED W-I	-INJW	4750	20660	20645

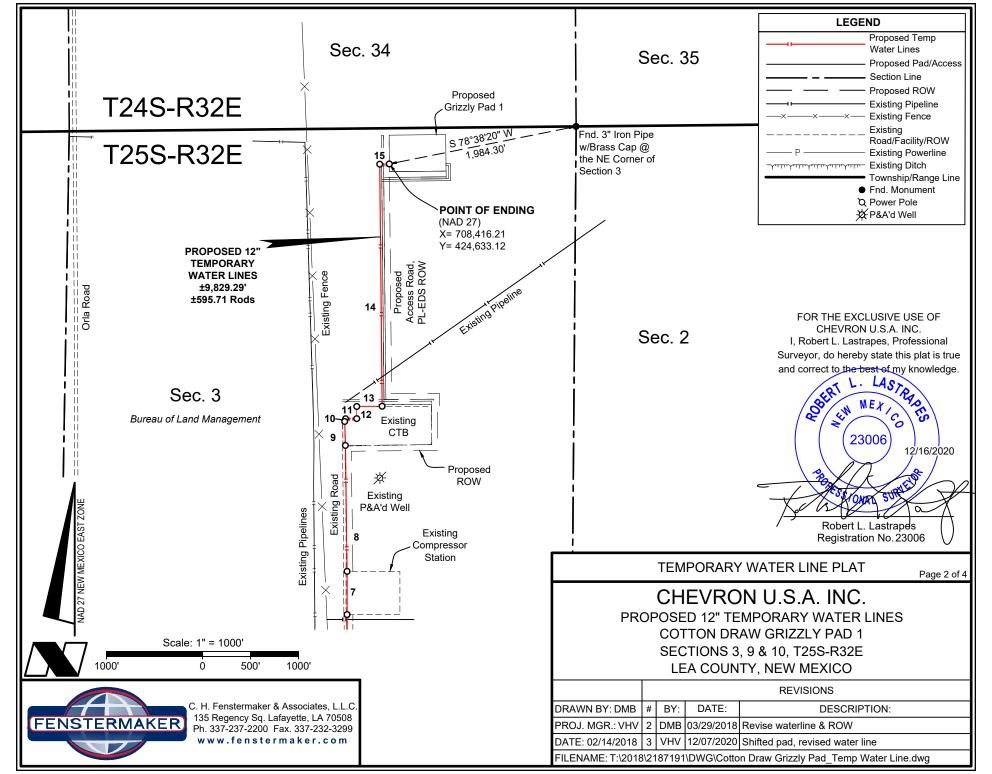












#### METES AND BOUNDS DESCRIPTION OF PROPOSED 12" TEMPORARY WATER LINES SECTIONS 3, 9 AND 10 OF TOWNSHIP 25 SOUTH RANGE 32 EAST LEA COUNTY, NEW MEXICO

Survey of proposed 12" temporary water lines 9,829.29 feet or 595.71 rods crossing Bureau of Land Management land in Sections 3, 9 and 10 of Township 25 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 2" Iron Pipe with Cap at the Northeast Corner of said Section 9; Thence South 70 degrees 39 minutes 17 seconds West 603.86 feet to the **POINT OF BEGINNING** having the following coordinates: X=704,420.81 and Y=419,489.75 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence South 89 degrees 59 minutes 49 seconds East 1,611.12 feet to a point; Thence South 00 degrees 31 minutes 47 seconds East 330.26 feet to a point; Thence North 89 degrees 26 minutes 42 seconds East 810.00 feet to a point; Thence North 00 degrees 31 minutes 47 seconds West 322.45 feet to a point; Thence North 89 degrees 59 minutes 50 seconds East 1,134.26 feet to a point; Thence North 00 degrees 00 minutes 17 seconds West 449.35 feet to a point; Thence North 00 degrees 00 minutes 18 seconds East 450.03 feet to a point; Thence North 00 degrees 45 minutes 58 seconds West 1,311.57 feet to a point; Thence North 01 degrees 42 minutes 34 seconds West 250.63 feet to a point; Thence North 17 degrees 54 minutes 53 seconds East 29.18 feet to a point; Thence North 89 degrees 25 minutes 01 seconds East 118.07 feet to a point; Thence North 00 degrees 33 minutes 53 seconds West 126.68 feet to a point; Thence North 89 degrees 26 minutes 41 seconds East 263.95 feet to a point; Thence North 89 degrees 33 minutes 41 seconds West 2,521.73 feet to a point;

Thence North 88 degrees 43 minutes 46 seconds East 100.01 feet to the **POINT OF ENDING** having the following coordinates: X=708,416.21 and Y=424,633.12 (New Mexico State Plane Coordinate System, East Zone, NAD 27)

The bearings recited hereon are oriented to NAD 27 New Mexico East Zone.

This description represents a survey made on the ground of proposed temporary water lines and intended solely for that purpose. This description does not represent a boundary survey.

#### METES AND BOUNDS DESCRIPTION OF A PROPOSED 12" TEMPORARY WATER LINE SECTION 10 OF TOWNSHIP 25 SOUTH RANGE 32 EAST LEA COUNTY, NEW MEXICO

Survey of a proposed 12" temporary water line 2,877.25 feet or 174.38 rods crossing Bureau of Land Management land in Section 10 of Township 25 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 2" Iron Pipe with Cap at the Northeast Corner of said Section 10; Thence South 84 degrees 34 minutes 30 seconds West 2,636.83 feet to the **POINT OF BEGINNING** having the following coordinates: X=707,694.15 and Y=419,489.75 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence South 00 degrees 32 seconds 10 minutes East 2,035.23 feet to a point; Thence South 88 degrees 04 seconds 08 minutes West 277.53 feet to a point; Thence South 89 degrees 02 seconds 18 minutes West 261.68 feet to a point; Thence North 80 degrees 22 seconds 38 minutes West 53.04 feet to a point; Thence North 57 degrees 26 seconds 59 minutes West 63.35 feet to a point; Thence North 76 degrees 00 seconds 27 minutes West 53.27 feet to a point;

Thence North 57 degrees 21 seconds 44 minutes West 133.15 feet to the **POINT OF ENDING** having the following coordinates: X=706,904.67 and Y=417,568.52 (New Mexico State Plane Coordinate System, East Zone, NAD 27)

The bearings recited hereon are oriented to NAD 27 New Mexico East Zone.

This description represents a survey made on the ground of a proposed temporary water line and intended solely for that purpose. This description does not represent a boundary survey.

## FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.



TEMPORARY WATER LINE PLAT

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Released to Imaging: 1/18/2022 2:43:44

## CHEVRON U.S.A. INC.

PROPOSED 12" TEMPORARY WATER LINES COTTON DRAW GRIZZLY PAD 1 SECTIONS 3, 9 & 10, T25S-R32E LEA COUNTY. NEW MEXICO

FENSTERMAKER	C 1

C. H. Fenstermaker & Associates, L.L.C. 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

Robert L. Lastrapes Registration No.23006

			REVISIONS						
4	<del>D</del> RAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:				
	PROJ. MGR.: VHV	2	DMB	03/29/2018	Revise waterline & ROW				
	DATE: 02/14/2018	3	VHV	12/07/2020	Shifted pad, revised water line				
FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad_Temp Water Line.dwg									

Released to Imaging: 1/18/2022 2:43:44 PM

PROPOSED 12" TEMPORARY WATER LINES						
COURSE	BEARING	DISTANCE				
1	S 89° 59' 49" E	1611.12'				
2	S 00° 31' 47" E	330.26'				
3	N 89° 26' 42" E	810.00'				
4	N 00° 31' 47" W	322.45'				
5	N 89° 59' 50" E	1134.26'				
6	N 00° 00' 17" W	449.35'				
7	N 00° 00' 18" E	450.03'				
8	N 00° 45' 58" W	1311.57'				
9	N 01° 42' 34" W	250.63'				
10	N 17° 54' 53" E	29.18'				
11	N 89° 25' 01" E	118.07'				
12	N 00° 33' 53" W	126.68'				
13	N 89° 26' 41" E	263.95'				
14	N 00° 33' 41" W	2521.73'				
15	N 88° 43' 46" E	100.01'				

PROPOSED 12" TEMPORARY WATER LINE					
COURSE	DISTANCE				
16	S 00° 32' 10" E	2035.23'			
17	S 88° 04' 08" W	277.53'			
18	S 89° 02' 18" W	261.68'			
19	N 80° 22' 38" W	53.04'			
20	N 57° 26' 59" W	63.35'			
21	N 76° 00' 27" W	53.27'			
22	N 57° 21' 44" W	133.15'			

#### NOTE

Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

#### NOTE:

Received by OCD: 1/11/2022 10:21:08 AM

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nmonecall.org



C. H. Fenstermaker & Associates, L.L. 5.

135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional
Surveyor, do hereby state this plat is true
and correct to the best of my knowledge.

23006 12/16/2020

Robert L. Lastrapes
Registration No. 23006

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

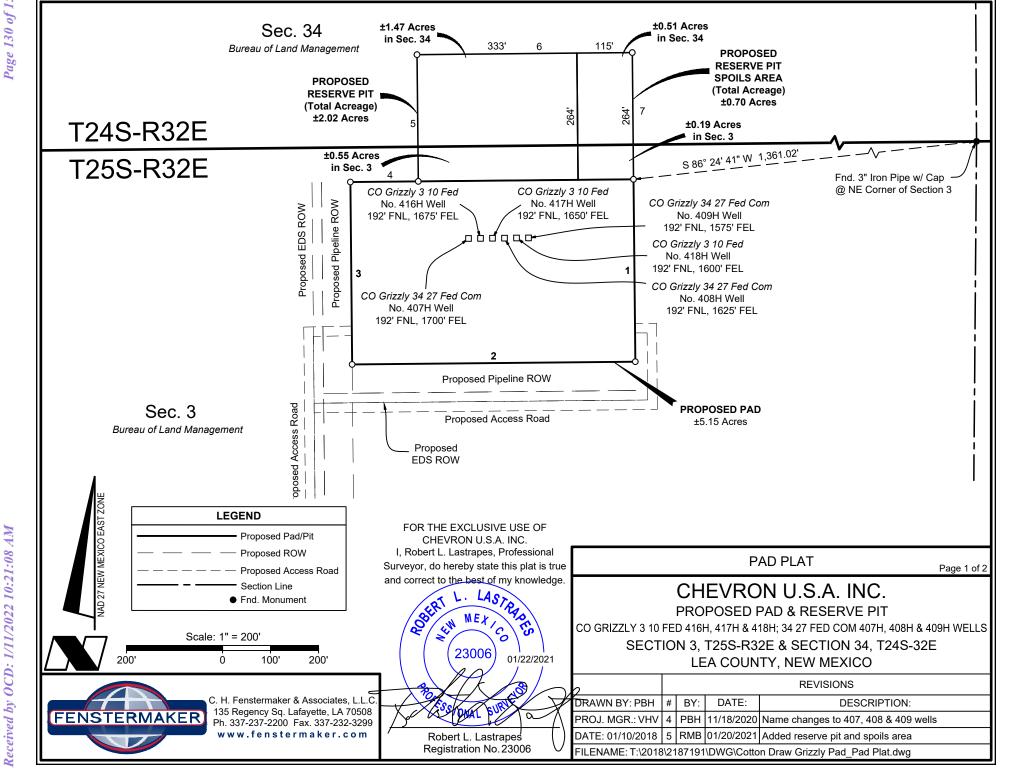
#### TEMPORARY WATER LINE PLAT

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## CHEVRON U.S.A. INC.

PROPOSED 12" TEMPORARY WATER LINES COTTON DRAW GRIZZLY PAD 1 SECTIONS 3, 9 & 10, T25S-R32E LEA COUNTY, NEW MEXICO

			REVISIONS					
H	DRAWN BY: DMB	#	# BY: DATE: DESCRIPTION:					
	PROJ. MGR.: VHV	2	DMB	03/29/2018	Revise waterline & ROW			
١	DATE: 02/14/2018	3	VHV	12/07/2020	Shifted pad, revised water line			
'	FILENAME: T:\2018	3\21	87191	\DWG\Cotto	n Draw Grizzly Pad_Temp Water Line.dwg			



	SPOILS AREA CO RESERVE PIT COF		NE	SPOILS AREA CO	ORNER
X=	708,885'		X=	709,001'	
Y=	425,202'	NAD 27	Y=	425,203'	NAD 27
LAT.	32.167196° N	NAD 21	LAT.	32.167196° N	NAD 21
LONG.	103.658278° W		LONG.	103.657904° W	
X=	750,070'		X=	750,186'	
Y=	425,260'	NAD83/2011	Y=	425,261'	NAD83/2011
LAT.	32.167319° N	NAD03/2011	LAT.	32.167320° N	NAD03/2011
LONG.	103.658755° W		LONG.	103.658382° W	
SW S	SPOILS AREA CO	RNER/SW	0	COOII C ADEA C	ODNED
	SPOILS AREA COF RESERVE PIT COF		SE	SPOILS AREA CO	ORNER
			SE X=	SPOILS AREA CO 709,003'	ORNER
F	RESERVE PIT COR	RNER		709,003'	
X= Y=	RESERVE PIT COF 708,888'		X= Y=	709,003'	ORNER NAD 27
X= Y=	RESERVE PIT COP 708,888' 424,938' 32.166470° N	RNER	X= Y=	709,003' 424,939' 32.166471° N	
X= Y= LAT.	RESERVE PIT COP 708,888' 424,938' 32.166470° N	RNER	X= Y= LAT.	709,003' 424,939' 32.166471° N	
X= Y= LAT. LONG.	708,888' 424,938' 32.166470° N 103.658275° W	NAD 27	X= Y= LAT. LONG.	709,003' 424,939' 32.166471° N 103.657901° W	NAD 27
X= Y= LAT. LONG. X= Y=	708,888' 708,888' 424,938' 32.166470° N 103.658275° W 750,073'	RNER	X= Y= LAT. LONG. X= Y=	709,003' 424,939' 32.166471° N 103.657901° W 750,188'	

l NW	RESERVE PIT C	ORNER	NE RESERVE PIT CORNER/NW		
			SPOILS AREA CORNER		
X=	708,552'		X=	708,885'	
Y=	425,198'	NAD 27	Y=	425,202'	NAD 27
LAT.	32.167192° N	NAD 21	LAT.	32.167196° N	NAD 21
LONG.	103.659354° W		LONG.	103.658278° W	
X=	749,737'		X=	750,070'	
Y=	425,257'	NAD83/2011	Y=	425,260'	NAD83/2011
LAT.	32.167316° N	NAD03/2011	LAT.	32.167319° N	NAD03/2011
LONG.	103.659831° W		LONG.	103.658755° W	
CIV	RESERVE PIT C	ODNED	SE R	ESERVE PIT COF	RNER/SW
311	NESERVE FII C	ORNER	S	SPOILS AREA COF	RNER
X=	708,555'		X=	708,888'	
Y=	424,934'	NAD 27	Y=	424,938'	NAD 07
LAT.	32.166467° N	NAD 21	LAT.	32.166470° N	NAD 27
LONG.	103.659351° W		LONG.	103.658275° W	
X=	749,740'		X=	750,073'	
Y=	424,993'	NA D02/0044	Y=	424,996'	NAD00/0044
LAT.	32.166590° N	NAD83/2011	LAT.	32.166594° N	NAD83/2011
LONG.	103.659828° W		LONG.	103.658752° W	

	NW PAD CORN	ED	NE PAD CORNER/		
	NW FAD CORN	LIX	SE SPOILS AREA CORNER		
X=	708,413'		X=	709,003'	
Y=	424,933'	NAD 07	Y=	424,939'	NAD 07
LAT.	32.166465° N	NAD 27	LAT.	32.166471° N	NAD 27
LONG.	103.659808° W		LONG.	103.657901° W	
X=	749,598'		X=	750,188'	
Y=	424,991'	NA D02/0044	Y=	424,997'	NAD00/0044
LAT.	32.166589° N	NAD83/2011	LAT.	32.166594° N	NAD83/2011
LONG.	103.660285° W		LONG.	103.658379° W	
ELEV.	+3502'	NAVD88	ELEV.	+3507'	NAVD88
	SW PAD CORN	ER		SE PAD CORNI	ER
X=	SW PAD CORN 708,417'	ER	X=	SE PAD CORNI 709,007'	ΞR
X= Y=			X= Y=		
1	708,417'	ER NAD 27		709,007' 424,559'	ER NAD 27
Y=	708,417' 424,553' 32.165421° N		Y=	709,007' 424,559' 32.165426° N	
Y= LAT.	708,417' 424,553' 32.165421° N		Y= LAT.	709,007' 424,559' 32.165426° N	
Y= LAT. LONG.	708,417' 424,553' 32.165421° N 103.659804° W	NAD 27	Y= LAT. LONG.	709,007' 424,559' 32.165426° N 103.657897° W	NAD 27
Y= LAT. LONG. X=	708,417' 424,553' 32.165421° N 103.659804° W 749,602'		Y= LAT. LONG. X=	709,007' 424,559' 32.165426° N 103.657897° W 750,192'	
Y= LAT. LONG. X= Y=	708,417' 424,553' 32.165421° N 103.659804° W 749,602' 424,611' 32.165544° N	NAD 27	Y= LAT. LONG. X= Y=	709,007' 424,559' 32.165426° N 103.657897° W 750,192' 424,617' 32.165550° N	NAD 27

PROPOSED PAD, RESERVE PIT &						
SPOILS AREA						
COURSE	BEARING	DISTANCE				
1	S 00° 33' 20" E	380.00'				
2	S 89° 26' 41" W	590.00'				
3	N 00° 33' 19" W	380.00'				
4	N 89° 26' 42" E	141.50'				
5	N 00° 34' 15" W	264.00'				
6	N 89° 26' 42" E	448.50'				
7	S 00° 34' 15" E	264.00'				

#### NOTE:

Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be  $100\,\%$  effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

#### NOTE:

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org

#### PAD PLAT

Page 2 of 2

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## CHEVRON U.S.A. INC.

PROPOSED PAD & RESERVE PIT

CO GRIZZLY 3 10 FED 416H, 417H & 418H; 34 27 FED COM 407H, 408H & 409H WELLS SECTION 3, T25S-R32E & SECTION 34, T24S-32E LEA COUNTY, NEW MEXICO

٦,	2		REVISIONS				
p	DRAWN BY: PBH	#	BY:	DATE:	DESCRIPTION:		
\	PROJ. MGR.: VHV	4	PBH	11/18/2020	Name changes to 407, 408 & 409 wells		
)	DATE: 01/10/2018	5	RMB	01/20/2021	Added reserve pit and spoils area		
	FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad_Pad Plat.dwg						
	· ·			·			

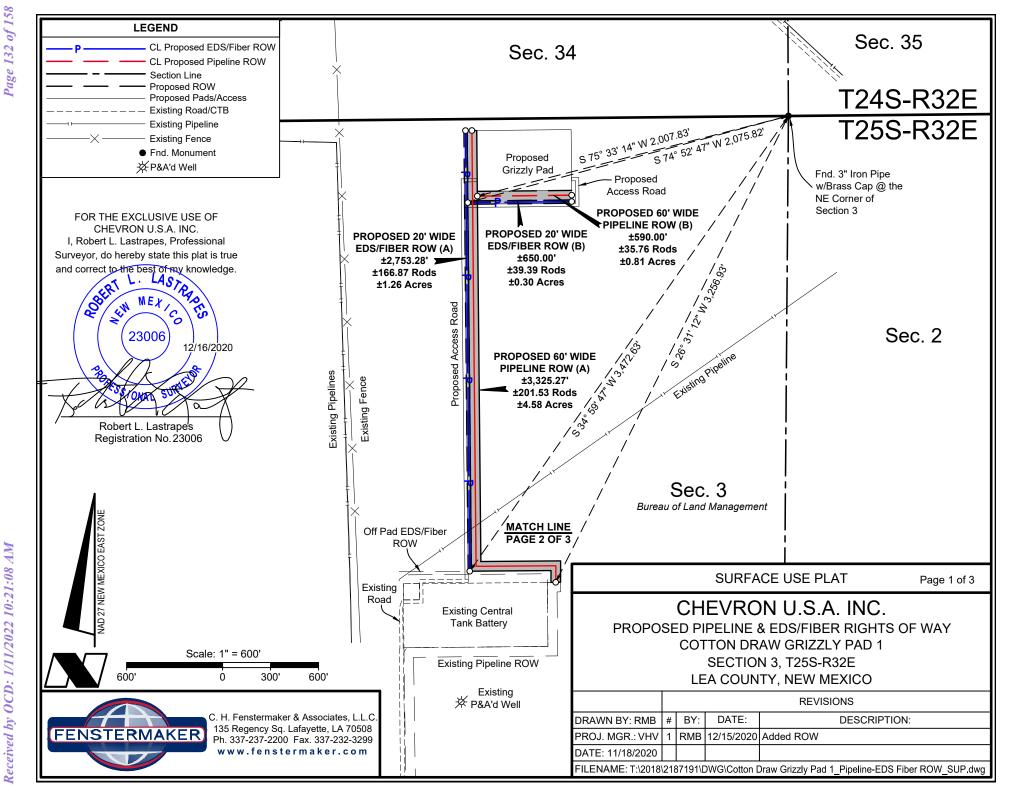
DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

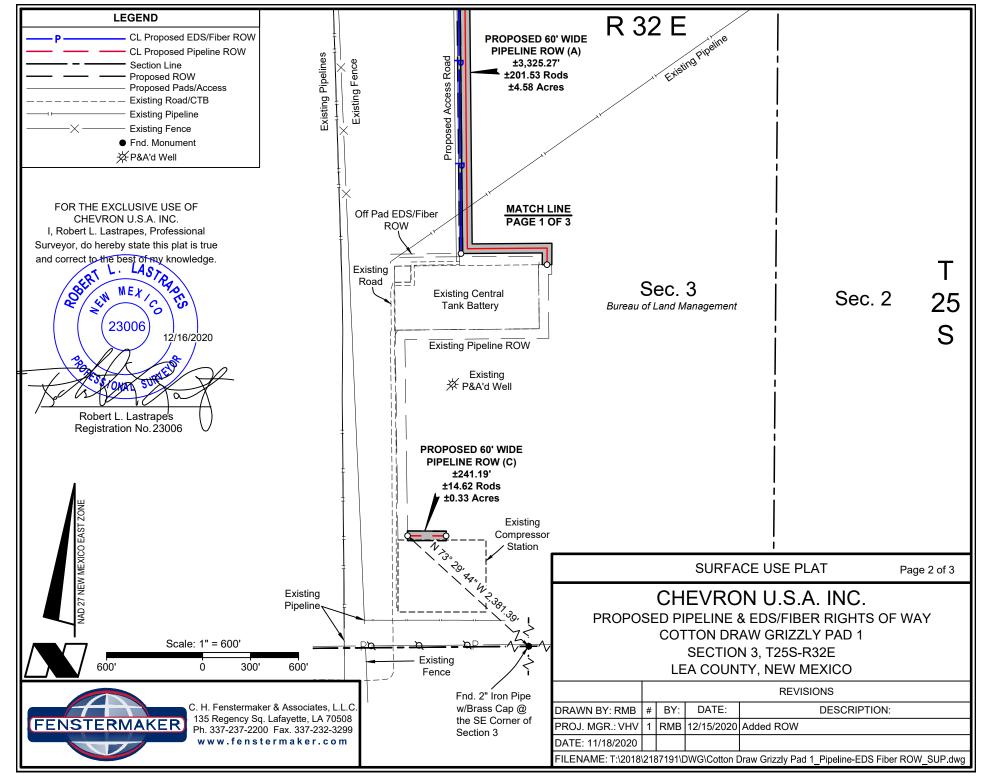


C. H. Fenstermaker & Associates, L.L.C. 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

Robert L. Lastrapes
Registration No. 23006





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	POINT OF BEGINN	NING	POINT OF ENDING		
	PIPELINE ROW	(A)		PIPELINE ROW	(A)
X=	708,907'		X=	708,383'	
Y=	422,110'	NAD 07	Y=	424,933'	NAD 07
LAT.	32.158696° N	NAD 27	LAT.	32.166465° N	NAD 27
LONG.	103.658269° W		LONG.	103.659905° W	
X=	750,093'		X=	749,568'	
Y=	422,168'	NAD83/2011	Y=	424,991'	NA D02/0044
LAT.	32.158820° N	NAD03/2011	LAT.	32.166589° N	NAD83/2011
LONG.	103.658745° W		LONG.	103.660382° W	

	POINT OF BEGINN	NING		POINT OF ENDI	NG
	PIPELINE ROW	(B)		PIPELINE ROW	(B)
X=	708,417'		X=	709,007'	
Y=	424,523'	NAD 07	Y=	424,529'	NAD 07
LAT.	32.165338° N	NAD 27	LAT.	32.165344° N	NAD 27
LONG.	103.659803° W		LONG.	103.657897° W	
X=	749,602'		X=	750,192'	
Y=	424,581'	NAD83/2011	Y=	424,587'	NAD83/2011
LAT.	32.165462° N	NAD03/2011	LAT.	32.165467° N	NAD03/2011
LONG.	103.660281° W		LONG.	103.658374° W	

	POINT OF BEGINI	VING	POINT OF ENDING		
	EDS/FIBER ROW	(A)		EDS/FIBER ROW	(A)
X=	708,370'		X=	708,343'	
Y=	422,179'	NAD 27	Y=	424,932'	NAD 27
LAT.	32.158896° N	NAD 21	LAT.	32.166465° N	NAD 21
LONG.	103.660004° W		LONG.	103.660034° W	
X=	749,555'		X=	749,528'	
Y=	422,237'	NAD83/2011	Y=	424,991'	NAD83/2011
LAT.	32.159020° N	NAD03/2011	LAT.	32.166588° N	NAD03/2011
LONG.	103.660480° W		LONG.	103.660511° W	

	POINT OF BEGINI	VING	POINT OF BEGINNING		
	EDS/FIBER ROW	(B)	EDS/FIBER ROW (B)		
X=	708,358'		X=	709,008'	
Y=	424,483'	NAD 27	Y=	424,489'	NAD 07
LAT.	32.165228° N	NAD 27	LAT.	32.165234° N	NAD 27
LONG.	103.659997° W		LONG.	103.657896° W	
X=	749,543'		X=	750,193'	
Y=	424,541'	NAD83/2011	Y=	424,547'	NAD83/2011
LAT.	32.165351° N	NAD83/2011	LAT.	32.165357° N	NAD83/2011
LONG.	103.660474° W		LONG.	103.658373° W	

	F	POINT OF BEGINI	NING	POINT OF ENDING		
		PIPELINE ROW	(C)	PIPELINE ROW (C)		
X=		708,036'		X=	708,277'	
Y=		420,416'	NAD 27	Y=	420,415'	NAD 27
LA	T.	32.154054° N	NAD 21	LAT.	32.154048° N	NAD 21
LO	NG.	103.661119° W		LONG.	103.660339° W	
X=		749,221'		X=	749,462'	
Y=		420,474'	NAD83/2011	Y=	420,473'	NAD83/2011
LA	T.	32.154178° N	NAD03/2011	LAT.	32.154172° N	NAD03/2011
LO	NG.	103.661595° W		LONG.	103.660816° W	

#### NOTE

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#### NOTE:

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org



C. H. Fenstermaker & Associates, L.E.C 135 Regency Sq. Lafayette, LA 70508-Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

## FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

23006) 12/16/2020

Robert L. Lastrapes Registration No.23006 DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

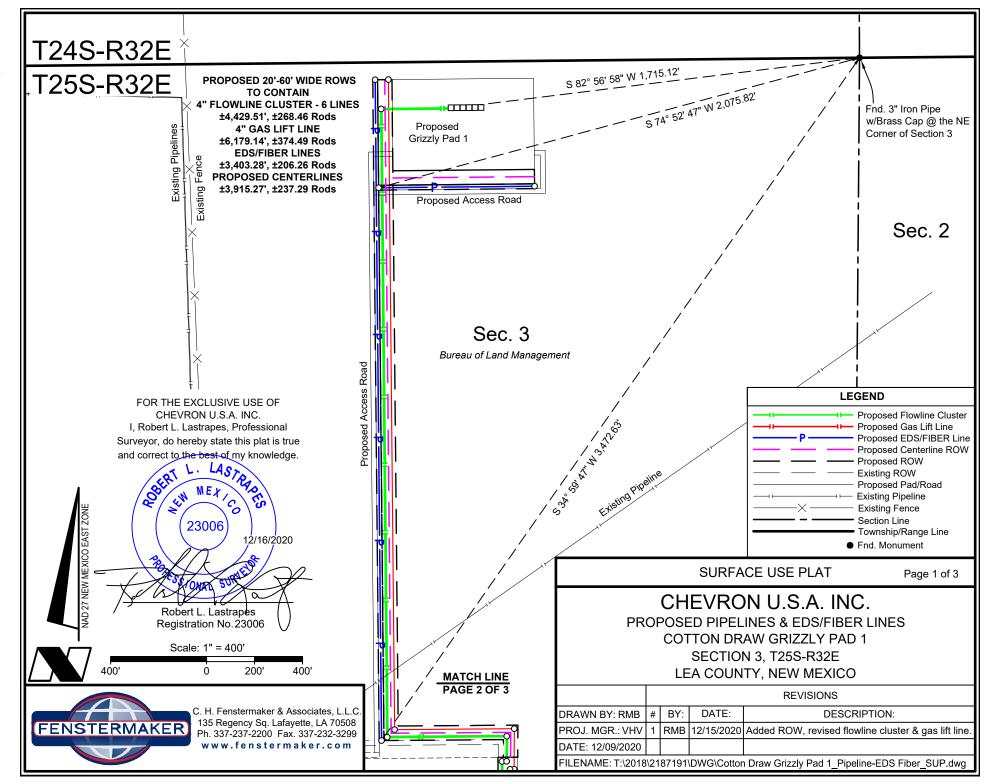
SURFACE USE PLAT

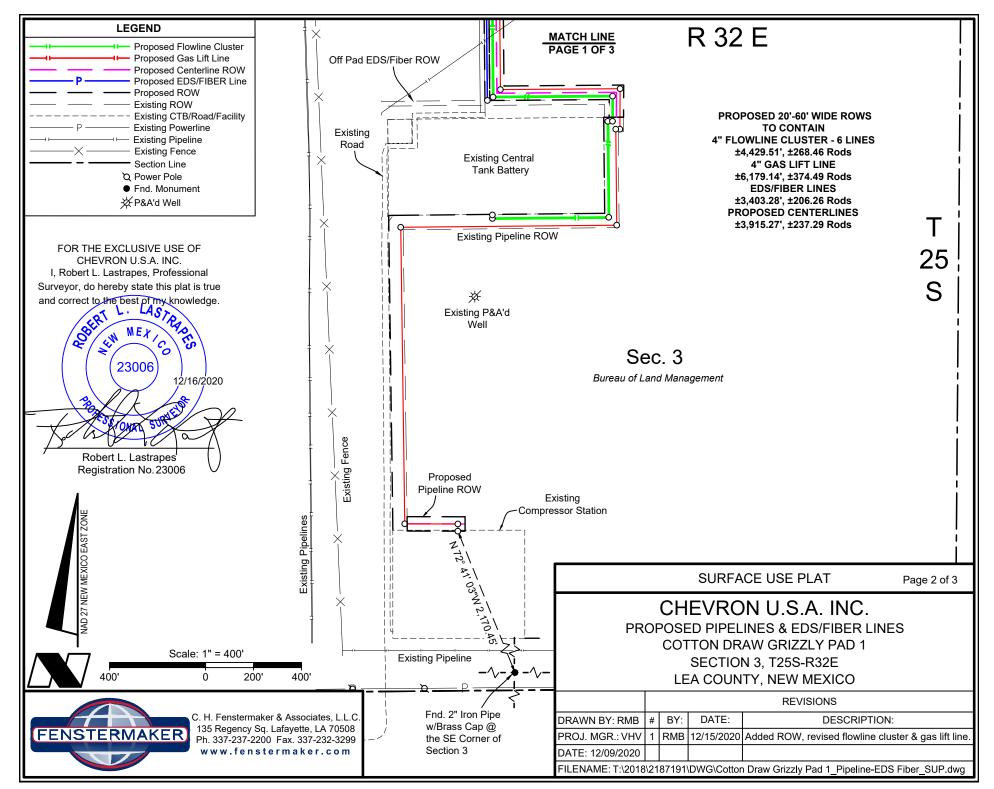
Page 3 of 3

## CHEVRON U.S.A. INC.

PROPOSED PIPELINE & EDS/FIBER RIGHTS OF WAY
COTTON DRAW GRIZZLY PAD 1
SECTION 3, T25S-R32E
LEA COUNTY, NEW MEXICO

			REVISIONS						
4	ĐRAWN BY: RMB	#	BY:	DATE:	DESCRIPTION:				
	PROJ. MGR.: VHV	1	RMB	12/15/2020	Added ROW				
	DATE: 11/18/2020								
	FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad 1 Pipeline-EDS Fiber ROW SUP.dw								





	POINT OF BEGIN	NING	POINT OF ENDING		
PROF	POSED EDS/FIBER	R LINE (A)	PROPOSED EDS/FIBER LINE (A)		
X=	708,370'		X=	708,343'	
Y=	422,179'	NAD 27	Y=	424,932'	NAD 27
LAT.	32.158896° N	NAD 21	LAT.	32.166465° N	NAD 21
LONG.	103.660004° W		LONG.	103.660034° W	
X=	749,555'		X=	749,528'	
Y=	422,237'	NAD83/2011	Y=	424,991'	NA D02/0044
LAT.	32.159020° N	NAD83/2011	LAT.	32.166588° N	NAD83/2011
LONG.	103.660480° W		LONG.	103.660511° W	

	POINT OF BEGINN	NING	POINT OF ENDING		
PROF	POSED EDS/FIBER	R LINE (B)	PROPOSED EDS/FIBER LINE (B)		
X=	708,358'		X=	709,008'	
Y=	424,483'	NAD 27	Y=	424,489'	NAD 27
LAT.	32.165228° N	NAD 21	LAT.	32.165234° N	NAD 21
LONG.	103.659997° W		LONG.	103.657896° W	
X=	749,543'		X=	750,193'	
Y=	424,541'	NAD83/2011	Y=	424,547'	NAD83/2011
LAT.	32.165351° N	NAD83/2011	LAT.	32.165357° N	NAD83/2011
LONG.	103.660474° W		LONG.	103.658373° W	

Р	OINT OF BEGIN	NING	POINT OF ENDING			
PRO	POSED GAS LI	FT LINE	PR(	PROPOSED GAS LIFT LINE		
X=	708,247'		X=	708,398'		
Y=	420,385'	NAD 27	Y=	424,933'	NAD 27	
LAT.	32.153966° N	NAD 21	LAT.	32.166465° N	NAU 21	
LONG.	103.660437° W		LONG.	103.659856° W		
X=	749,432'		X=	749,583'		
Y=	420,443'	NAD83/2011	Y=	424,991'	NAD83/2011	
LAT.	32.154090° N	NAD03/2011	LAT.	32.166589° N	NAD03/2011	
LONG.	103.660914° W		LONG.	103.660334° W		

	POINT OF BEGINN	NING	POINT OF ENDING		
PROP	OSED FLOWLINE	CLUSTER	PROPOSED FLOWLINE CLUSTER		
X=	708,659'		X=	708,391'	
Y=	424,813'	NAD 07	Y=	421,702'	NAD 07
LAT.	32.166132° N	NAD 27	LAT.	32.157585° N	NAD 27
LONG.	103.659015° W		LONG.	103.659945° W	
X=	749,845'		X=	749,576'	
Y=	424,872'	NAD83/2011	Y=	421,760'	NA D02/0044
LAT.	32.166256° N	NAD83/2011	LAT.	32.157709° N	NAD83/2011
LONG.	103.659492° W		LONG.	103.660422° W	

#### NOTE

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#### NOTE:

Received by OCD: 1/11/2022 10:21:08 AM

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C. H. Fenstermaker & Associates, L. ... 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

## FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.



Robert L. Lastrapes Registration No. 23006 DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

#### SURFACE USE PLAT

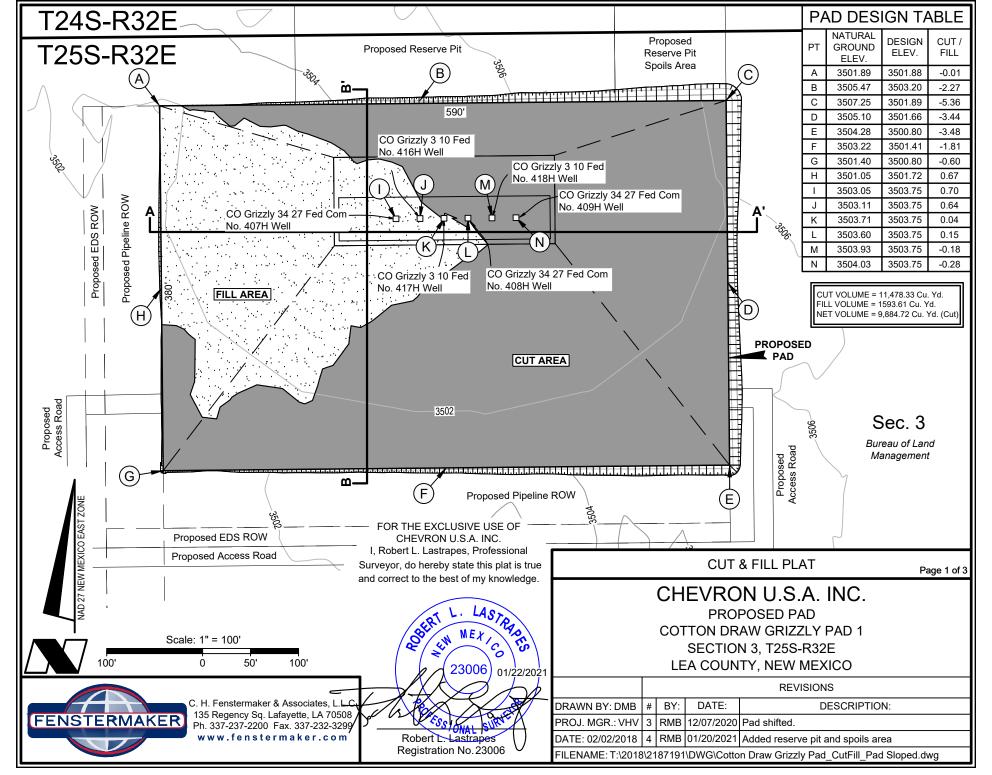
Page 3 of 3

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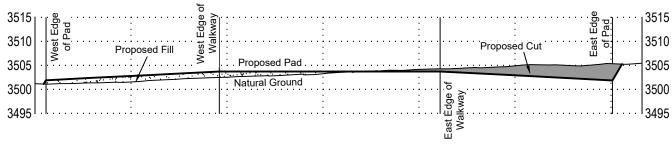
## CHEVRON U.S.A. INC.

PROPOSED PIPELINES & EDS/FIBER LINES COTTON DRAW GRIZZLY PAD 1 SECTION 3, T25S-R32E LEA COUNTY, NEW MEXICO

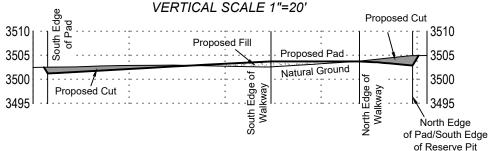
			REVISIONS							
4	ÐRAWN BY: RMB	#	BY:	DATE:	DESCRIPTION:					
	PROJ. MGR.: VHV	1	RMB	12/15/2020	Added ROW, revised flowline cluster & gas lift line.					
	DATE: 12/09/2020									
	FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad 1_Pipeline-EDS Fiber_SUP.dwg									



## **CROSS SECTION A-A'** HORIZONTAL SCALE 1"=100' VERTICAL SCALE 1"=20"



## **CROSS SECTION B-B'** HORIZONTAL SCALE 1"=100'



#### FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

Robert L. Lastrapes

**CUT & FILL PLAT** 

Page 2 of 3

## CHEVRON U.S.A. INC.

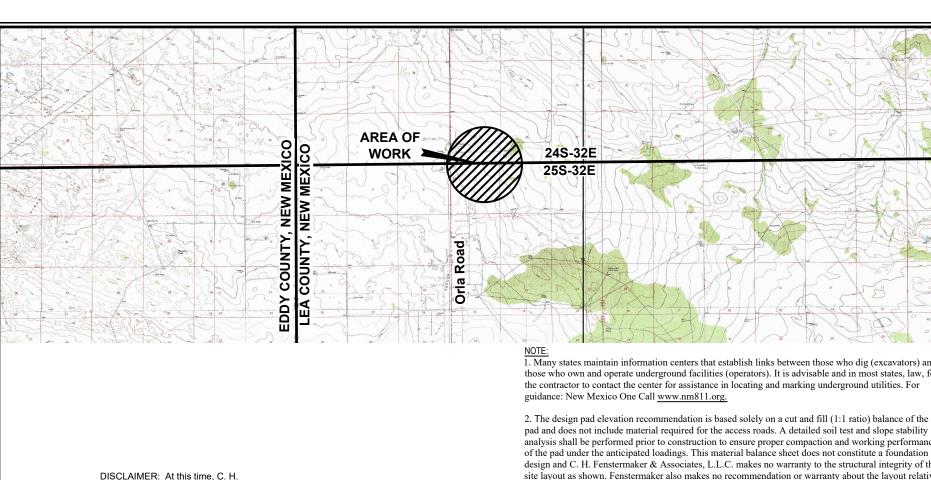
PROPOSED PAD **COTTON DRAW GRIZZLY PAD 1** SECTION 3, T25S-R32E LEA COUNTY, NEW MEXICO

		REVISIONS					
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:			
PROJ. MGR.: VHV	3	RMB	12/07/2020	Pad shifted.			
DATE: 02/02/2018	DATE: 02/02/2018 4 RMB 01/20/2021 Added reserve pit and spoils area						
FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad_CutFill_Pad Sloped.dwg							



C. H. Fenstermaker & Associates, L.L 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

Registration No. 23006



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this information shall do so at their own risk.

Scale: 1" = 10,000 5,000' 10,000'

C. H. Fenstermaker & Associates, L.L 135 Regency Sq. Lafayette, LA 7050 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

#### FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.

23006

Robert L. Lastrapes Registration No. 23006 1. Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for

2. The design pad elevation recommendation is based solely on a cut and fill (1:1 ratio) balance of the analysis shall be performed prior to construction to ensure proper compaction and working performance of the pad under the anticipated loadings. This material balance sheet does not constitute a foundation design and C. H. Fenstermaker & Associates, L.L.C. makes no warranty to the structural integrity of the site layout as shown. Fenstermaker also makes no recommendation or warranty about the layout relative to flood hazards, erosion control, or soil stability issues. Elevations refer to the North American Vertical Datum of 1988.

3. Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

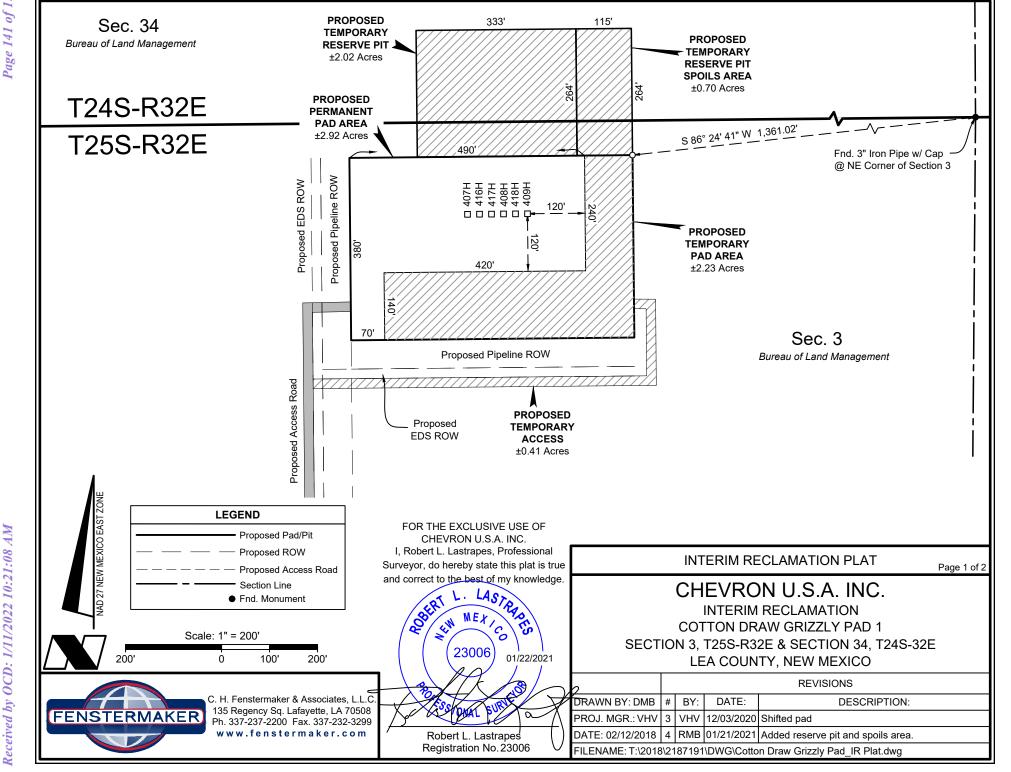
#### **CUT & FILL PLAT**

Page 3 of 3

## CHEVRON U.S.A. INC.

PROPOSED PAD **COTTON DRAW GRIZZLY PAD 1** SECTION 3. T25S-R32E LEA COUNTY, NEW MEXICO

-			REVISIONS					
	DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:			
	PROJ. MGR.: VHV	3	RMB	12/07/2020	Pad shifted.			
	DATE: 02/02/2018	4	RMB	01/20/2021	Added reserve pit and spoils area			
	FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad_CutFill_Pad Sloped.dwg							



C. H. Fenstermaker & Associates, I
FENSTERMAKER  135 Regency Sq. Lafayette, LA 70 Ph. 337-237-2200 Fax. 337-232-3 www.fenstermaker.co

ordinances and regulations. Accordingly, Fenstermaker makes no

	SPOILS AREA CORESERVE PIT COR		NE	SPOILS AREA CO	ORNER	
X=	708,885'		X=	709,001'		
Y=	425,202'	NAD 27	Y=	425,203'	NAD 27	
LAT.	32.167196° N	NAD 27	LAT.	32.167196° N	NAD 27	
LONG.	103.658278° W		LONG.	103.657904° W		
X=	750,070'		X=	750,186'		
Y=	425,260'	NAD83/2011	Y=	425,261'	NAD83/2011	
LAT.	32.167319° N	NAD03/2011	LAT.	32.167320° N	NAD03/2011	
LONG.	103.658755° W		LONG.	103.658382° W		
	POILS AREA COF		SE SPOILS AREA CORNER			
F	RESERVE PIT COP	RNER	5	OF OILO AINLA OF	SINILIN	
X=	708,888'		X=	709,003'		
Y=	424,938'	NAD 27	Y=	424,939'	NAD 27	
LAT.	32.166470° N	NAD ZI	LAT.	32.166471° N	INAD 21	
LONG.	103.658275° W		LONG.	103.657901° W		
X=	750,073'		X=	750,188'		
Y=	424,996'	NAD83/2011	Y=	424,997'	NAD83/2011	
LAT.	32.166594° N	NAD03/2011	LAT.	32.166594° N	NAD03/2011	
LONG.	103.658752° W		LONG.	103.658379° W		

NW	RESERVE PIT C	ORNER	NE RESERVE PIT CORNER/NW		
	TRECERVETITO	OTTIVETO	SPOILS AREA CORNER		
X=	708,552'		X=	708,885'	
Y=	425,198'	NAD 27	Y=	425,202'	NAD 27
LAT.	32.167192° N	NAD 21	LAT.	32.167196° N	NAU 21
LONG.	103.659354° W		LONG.	103.658278° W	
X=	749,737'	NAD83/2011	X=	750,070'	
Y=	425,257'		Y=	425,260'	NAD83/2011
LAT.	32.167316° N	NAD03/2011	LAT.	32.167319° N	NAD03/2011
LONG.	103.659831° W		LONG.	103.658755° W	
CIA	, DECEDI/E DIT C	ODNED	SE F	RESERVE PIT COF	RNER/SW
SW	RESERVE PIT C	ORNER		RESERVE PIT COF SPOILS AREA COI	
SW X=	/ RESERVE PIT C	ORNER			
				SPOILS AREA CO	RNER
X= Y=	708,555'	ORNER NAD 27	X= Y=	SPOILS AREA COI 708,888'	
X= Y=	708,555' 424,934' 32.166467° N		X= Y=	6POILS AREA COI 708,888' 424,938' 32.166470° N	RNER
X= Y= LAT.	708,555' 424,934' 32.166467° N		X= Y= LAT.	6POILS AREA COI 708,888' 424,938' 32.166470° N	RNER
X= Y= LAT. LONG.	708,555' 424,934' 32.166467° N 103.659351° W	NAD 27	X= Y= LAT. LONG.	FOILS AREA COI 708,888' 424,938' 32.166470° N 103.658275° W 750,073'	NAD 27
X= Y= LAT. LONG. X= Y=	708,555' 424,934' 32.166467° N 103.659351° W 749,740'		X= Y= LAT. LONG. X= Y=	FOILS AREA COI 708,888' 424,938' 32.166470° N 103.658275° W 750,073'	RNER
X= Y= LAT. LONG. X= Y=	708,555' 424,934' 32.166467° N 103.659351° W 749,740' 424,993'	NAD 27	X= Y= LAT. LONG. X= Y=	3POILS AREA COI 708,888' 424,938' 32.166470° N 103.658275° W 750,073' 424,996' 32.166594° N	NAD 27

DISCLAIMER: At this time, C. H. Fenstermaker & Associates, L.L.C. has not performed nor was asked to perform any type of engineering. hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws,

> C. H. Fenstermaker & Associates, L.L.C. 135 Regency Sq. Lafayette, LA 70508 Ph. 337-237-2200 Fax. 337-232-3299 www.fenstermaker.com

FOR THE EXCLUSIVE USE OF CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional Surveyor, do hereby state this plat is true and correct to the best of my knowledge.



Robert L. Lastrapes Registration No. 23006

	NW PAD CORNI	ER	NE PAD CORNER/ SE SPOILS AREA CORNER		
X=	708,413'		X=	709,003'	JINIVEIN
Y=	424,933'	NAD 07	Y=	424,939'	NAD 07
LAT.	32.166465° N	NAD 27	LAT.	32.166471° N	NAD 27
LONG.	103.659808° W		LONG.	103.657901° W	
X=	749,598'		X=	750,188'	
Y=	424,991'	NAD83/2011	Y=	424,997'	NAD83/2011
LAT.	32.166589° N		LAT.	32.166594° N	
LONG.	103.660285° W		LONG.	103.658379° W	
ELEV.	+3502'	NAVD88	ELEV.	+3507'	NAVD88
	SW PAD CORNI	ĒR		SE PAD CORNE	ĒR
X=	SW PAD CORNI 708,417'	ΞR	X=	SE PAD CORNE 709,007'	ER .
X= Y=			X= Y=		
	708,417'	ER NAD 27		709,007'	ER NAD 27
Y=	708,417' 424,553'		Y=	709,007' 424,559'	
Y= LAT.	708,417' 424,553' 32.165421° N		Y= LAT.	709,007' 424,559' 32.165426° N	
Y= LAT. LONG.	708,417' 424,553' 32.165421° N 103.659804° W	NAD 27	Y= LAT. LONG.	709,007' 424,559' 32.165426° N 103.657897° W	NAD 27
Y= LAT. LONG. X= Y=	708,417' 424,553' 32.165421° N 103.659804° W 749,602'		Y= LAT. LONG. X=	709,007' 424,559' 32.165426° N 103.657897° W 750,192'	
Y= LAT. LONG. X= Y=	708,417' 424,553' 32.165421° N 103.659804° W 749,602' 424,611'	NAD 27	Y= LAT. LONG. X= Y=	709,007' 424,559' 32.165426° N 103.657897° W 750,192' 424,617'	NAD 27

#### NOTE:

Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

#### NOTE:

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance, New Mexico One Call www.nm811.org

#### INTERIM RECLAMATION PLAT

Page 2 of 2

Released to Imaging: 1/18/2022 2:43:44 PM

## CHEVRON U.S.A. INC.

INTERIM RECLAMATION **COTTON DRAW GRIZZLY PAD 1** SECTION 3, T25S-R32E & SECTION 34, T24S-32E LEA COUNTY, NEW MEXICO

٦,	م		REVISIONS				
p	DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:		
\	PROJ. MGR.: VHV	3	VHV	12/03/202	Shifted pad		
)	DATE: 02/12/2018	4	RMB	01/21/2021	Added reserve pit and spoils area		
/	FILENAME: T:\2018\2187191\DWG\Cotton Draw Grizzly Pad_IR Plat.dwg						

CHEVRON U.S.A. Inc.

CO GRIZZLY 34 27 FED COM 407H

USA NMLC 061936 & USA NMLC 061936-A

SECTION 3, T25S-R32E SECTION 27, T24S, R32E

SHL 192' FNL & 1,625' FEL BHL 25' FNL & 1,430' FEL

## APD Surface Use Plan of Operations

## **Existing Roads** (Road Plat Attached)

- The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair potholes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.
- Driving Directions From Jal, New Mexico. The location is approximately 29 miles from the nearest town, which is Jal, New Mexico. From Jal, proceed west on Highway 128 approximately 27 miles and turn left (South) onto CR1 (Orla Hwy) and go approximately 2 miles on CR1 until the road reaches a lease road on the left. Turn left (east) onto lease road (Chevron has an agreement and easement for use of this road) and travel easterly approximately .5 miles, then bear left (north) approximately .5 miles on lease road to the well location.

## New or Reconstructed Access Roads (Well Plat Attached)

- There will be **3,481.42' of new road construction** for the well pad and facilities.
- Road Width: The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed 20'. The maximum width of surface disturbance shall not exceed 25'.
- Maximum Grade: 3%
- Crown Design: Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2%. The road shall conform to cross section and plans for typical road construction found in the BLM Gold Book.
- Turnouts: 50-60'
- Ditch Design: Ditching will be constructed on both sides of road.
- Cattle guards: None suggestion
- Major Cuts and Fills: 2:1 during drilling and completions. Cuts and fills taken back to 3:1 at interim.

CHEVRON U.S.A. Inc. CO GRIZZLY 34 27 FED COM 407H USA NMLC 061936 & USA NMLC 061936-A

SECTION 3, T25S-R32E SECTION 27, T24S, R32E SHL 192' FNL & 1,625' FEL BHL 25' FNL & 1,430' FEL

• Type of Surfacing Material: Caliche. The road will also have a dust abatement polymer coating to decrease dust as well as help maintain the road, Envirotac II.

## **Location of Existing Wells (Diagram Attached)**

1-Mile radius map is attached

# **Location of Existing and/or Proposed Production Facilities (Work Area Detail Map Attached)**

- Existing Facilities:
  - An existing CTB production site is in Sec. 3, T26S-R32E where oil and gas sales will take place.
  - An existing Compressor Station is located approximately .5 miles south of the above-referenced CTB Production Facility in Sec. 3, T26S-R32E where oil and gas sales will take place.
  - o An existing **Frac Pond** is in the NE4 of Sec. 9, T25S-R32E.

Open top tanks or open containments will be netted.

Open vent exhaust stacks will be modified to prevent birds or bats from entering, discourage perching, roosting, and nesting.

Facilities will have a secondary containment 1.5 times the holding capacity of largest storage tank.

All above ground structures will be painted non-reflective shale green for blending with surrounding environment.

## **Location of Proposed ROW** (Work Area Detail Map Attached)

- **Flowline Cluster**: 5 4" buried flowlines, approximately **4,429.51'** in length, will be laid from well pad to the CTB production facility south of the well site.
  - o All construction activity will be confined to the approved ROW.
- **Gas Lift Line**: 2 4" buried gas lift pipelines, approximately **6,179.14'** in length, will be laid from the well site running adjacent to the lease road to the Compressor facility in Sec. 3, T26S-R32E.
  - o All construction activity will be confined to the approved ROW.
  - Pipeline will run parallel to existing disturbances and will stay within approved ROW.
- **Power/Fiber Line**: A pole-suspended powerline, approximately **3,403.28'** in length, will be installed from the existing powerline running along the Orla Road in Section 10 and will be routed along the lease road to the proposed well site.

SECTION 3, T25S-R32E SECTION 27, T24S, R32E SHL 192' FNL & 1,625' FEL BHL 25' FNL & 1,430' FEL

## **Location and Types of Water Supply (Work Area Detail Map Attached)**

- **Temporary Water Lines**: Two surface 12" lay-flat water lines, **12,706.54'** in length, will run from the well pad to the frac pond located in the NE corner of Section 9 as well as the NGL ROTF facility located in Section 10, 1.5 miles south of the well pad.
  - This will cross lease lines and an SF-299 easement will be applied for through the BLM.
  - All construction activity will be confined to the approved ROW.
  - o Power line will run parallel to the road and will stay within approved ROW.
- An existing **Frac Pond** is in the NE4 of Sec. 9, T25S-R32E. and will be utilized for fresh water and recycled water.
- Fresh water will be obtained from a private water source.

#### **Construction Material**

- Caliche will be used to construct well pad and roads. Material will be purchased from the private landowner's (Oliver Kiehne) caliche pit located in Sec 27, T26, R33E, Lea County, NM.
- The proposed source of construction material will be located and purchased by Chevron U.S.A. Inc.
  - Notification shall be given to BLM at (575) 234-5909 at least 3 working days prior to commencing construction of access road and/or well pad.

# **Methods for Handling Waste**

- Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other
  waste material will be removed and disposed of properly at a state approved
  disposal facility.
- The well will be drilled utilizing a closed loop system. Drill cutting will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

 SECTION 3, T25S-R32E
 SECTION 27, T24S, R32E

 SHL 192' FNL & 1,625' FEL
 BHL 25' FNL & 1,430' FEL

**Ancillary Facilities** 

None

# Well Site Layout (Well Plat Attached)

- Well Plat
  - Exterior well pad dimensions are 380' x 590'.
  - o Interior well pad dimensions from point of entry (well head) of the easternmost well are N-120', S-260', E-270', W-320'. The length to the west includes 25' spacing for next well on multi-well pad (five wells). Total disturbance area needed for construction of well pad will be 5.15 acres.
  - Topsoil placement is on the east where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices.
- Reserve Pit
  - Exterior Reserve Pit dimensions are 333' x 264' 2.02 Ac.
  - Reserve Pit adjacent spoils area dimensions are 115'  $\times$  264' 0.70 Ac.

# Proposed Pad Cut & Fill (Plat Attached)

o Cut and fill for both well pad and reserve pit will be minimal.

# Rig Layout (Attached)

# Plans for Surface Reclamation (Pad Plat Attached)

#### **Reclamation Objectives**

- The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.
- The long-term objective of final reclamation is to return the land to a condition similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.
- The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.
- If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on the location has been completed or plugged. We will gain written permission from the BLM if more time is needed.

SECTION 3, T25S-R32E SECTION 27, T24S, R32E SHL 192' FNL & 1,625' FEL BHL 25' FNL & 1,430' FEL

• Reclamation will be performed by using the following procedures:

#### **Interim Reclamation Procedures**

- Within 6 months, Chevron will contact BLM Surface Management Specialists to
  devise the best strategies to reduce the size of the location. Current plans for interim
  reclamation include reducing the well pad to 2.92 acres from the proposed size of
  5.15 acres.
- The entire **2.72-acre** area of the **Reserve Pit** will be reclaimed.
- The **eastern pad driveway**, consisting of **0.41 Ac.** Will be reclaimed.
- Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production. A plan will be submitted showing where interim reclamation will be completed in order to allow for safe operations, protection of the environment outside of drilled well, and following best management practices found in the BLM "Gold Book".
- In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling but will be recontoured to the above ratios during interim reclamation.
- Topsoil will be evenly re-spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM #2), free of noxious weeds, will be used.
- Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.
- The interim reclamation will be monitored periodically to ensure that vegetation has reestablished

#### Final Reclamation (well pad, buried pipelines, and power lines, etc.)

- Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.
- All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends in distinguishably with the surrounding

SECTION 3, T25S-R32E SECTION 27, T24S, R32E SHL 192' FNL & 1,625' FEL BHL 25' FNL & 1,430' FEL

landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

- After all the disturbed areas have been properly prepared; the areas will be seeded with the proper BLM seed mixture (BLM #2), free of noxious weeds.
- Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

# **Surface Ownership**

- All subject property and infrastructure are on Federal Surface.
- Nearest Post Office: Jal Post Office; 29 Miles East

### Other Information

- On-site performed by BLM NRS: Paul Murphy 3/17/2020
- Cultural report attached: **N/A** Participating Agreement attached: **Yes**
- Erosion / Drainage: Drainage control system shall be constructed on the entire length of road by the use of any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.
- Exclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation. Fencing will remain in place while no activity is present and until backfilling takes place.
- Terrain: Landscape is flat
- Soil: Sandy loam
- Vegetation: Vegetation present in surrounding area includes mesquite, shrubs, and grass (needle-grass, burro grass, dropseed).
- Wildlife: No wildlife observed, but it is likely that deer, rabbits, coyotes, and rodents pass through the area.
- Surface Water: No surface water concerns.
- Cave Karst: Low Karst area with no caves or visual signs of caves found.
- Watershed Protection: The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminates from leaving the well pad.
- Water wells: No known water wells within the 1- mile radius.
- Residences and Buildings: No dwellings within the immediate vicinity of the proposed location.
- Well Signs: Well signs will be in compliance per federal and state requirements and specifications.

 SECTION 3, T25S-R32E
 SECTION 27, T24S, R32E

 SHL 192' FNL & 1,625' FEL
 BHL 25' FNL & 1,430' FEL

**Chevron Representatives** 

Primary point of contact: W Mark Woodard 432 687 7999

#### **Chevron Functional Contacts**

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79706

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U.S. Department of the Interior BUREAU OF LAND MANAGEMENT PWD Data Report

PWD disturbance (acres):

**APD ID:** 10400069679 **Submission Date:** 02/23/2021

Operator Name: CHEVRON USA INCORPORATED

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Well Type: OIL WELL Well Work Type: Drill

#### **Section 1 - General**

Would you like to address long-term produced water disposal? NO

# **Section 2 - Lined Pits**

Would you like to utilize Lined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

**Lined pit Monitor description:** 

**Lined pit Monitor attachment:** 

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

# **Section 3 - Unlined Pits**

Would you like to utilize Unlined Pit PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD disturbance (acres): PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

**Unlined pit Monitor attachment:** 

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

**TDS lab results:** 

Geologic and hydrologic evidence:

State authorization:

**Unlined Produced Water Pit Estimated percolation:** 

Unlined pit: do you have a reclamation bond for the pit?

**Operator Name: CHEVRON USA INCORPORATED** 

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

**Section 4 - Injection** 

Would you like to utilize Injection PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: Injection well name:

Assigned injection well API number? Injection well API number:

Injection well new surface disturbance (acres):

**Minerals protection information:** 

Mineral protection attachment:

**Underground Injection Control (UIC) Permit?** 

**UIC Permit attachment:** 

**Section 5 - Surface Discharge** 

Would you like to utilize Surface Discharge PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

**Surface Discharge NPDES Permit?** 

**Surface Discharge NPDES Permit attachment:** 

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

**Produced Water Disposal (PWD) Location:** 

PWD surface owner: PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Operator Name: CHEVRON USA INCORPORATED

Well Name: CO GRIZZLY 34 27 FED COM Well Number: 408H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



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

# Bond Info Data Report

APD ID: 10400069679

Operator Name: CHEVRON USA INCORPORATED

Well Name: CO GRIZZLY 34 27 FED COM

Well Type: OIL WELL

Submission Date: 02/23/2021

Highlighted data reflects the most recent changes

Well Number: 408H

Well Work Type: Drill

**Show Final Text** 

### **Bond Information**

Federal/Indian APD: FED

**BLM Bond number: ES0022** 

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

**BLM** reclamation bond number:

Forest Service reclamation bond number:

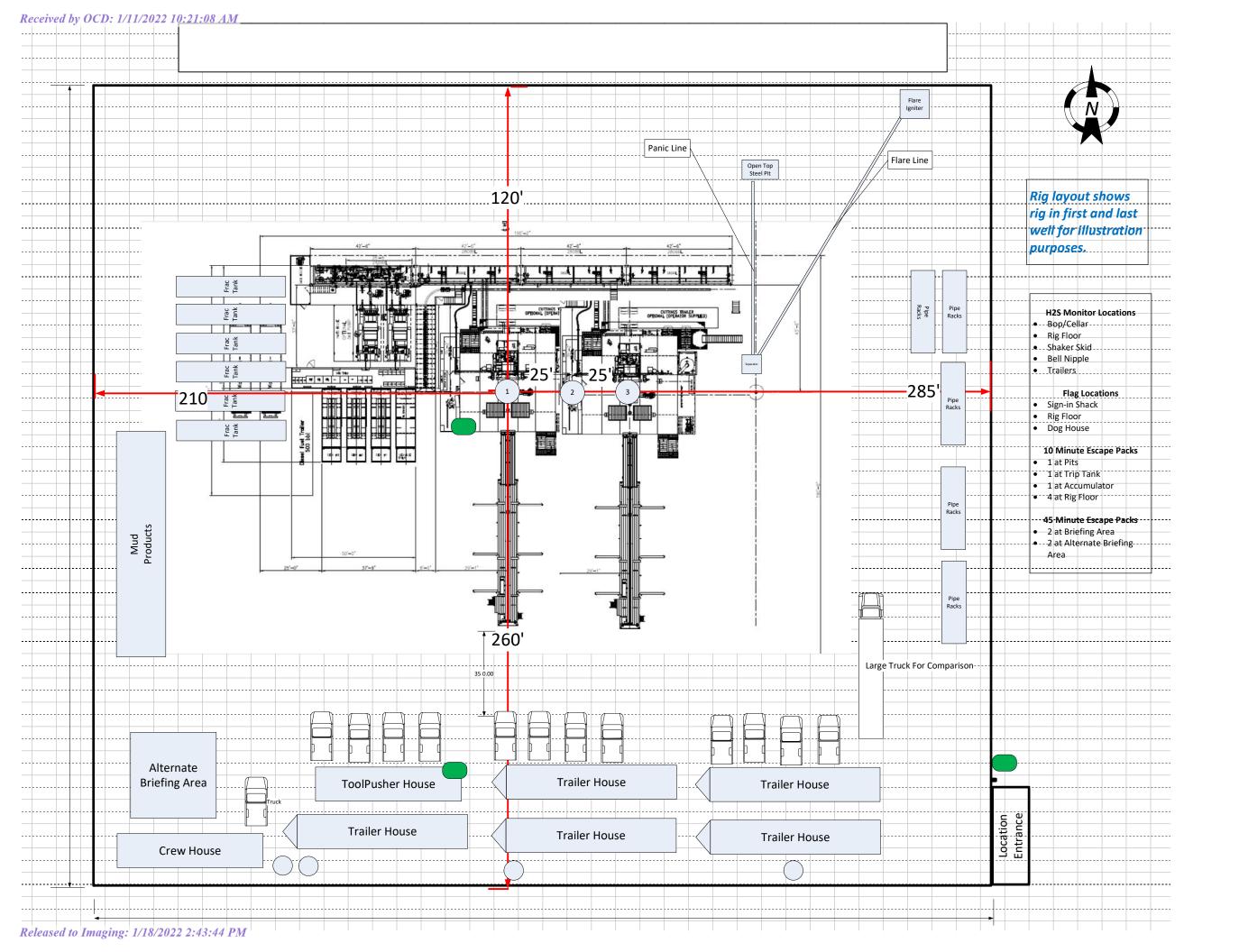
Forest Service reclamation bond attachment:

**Reclamation bond number:** 

**Reclamation bond amount:** 

**Reclamation bond rider amount:** 

Additional reclamation bond information attachment:





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

# Drilling Plan Data Report

01/10/2022

APD ID: 10400069679

Submission Date: 02/23/2021

Highlighted data reflects the most recent changes

**Operator Name: CHEVRON USA INCORPORATED** 

Well Number: 408H

**Show Final Text** 

Well Name: CO GRIZZLY 34 27 FED COM

Well Work Type: Drill

Well Type: OIL WELL

# **Section 1 - Geologic Formations**

Formation	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1616784	RUSTLER	3503	890	890	DOLOMITE	NONE	N
1616785	CASTILE	-383	3886	3916	ANHYDRITE	NONE	N
1616786	LAMAR	-1274	4777	4807	LIMESTONE	NONE	N
1616787	BELL CANYON	-1317	4820	4850	SANDSTONE	NONE	N
1616788	CHERRY CANYON	-2205	5708	5738	SANDSTONE	NONE	N
1616789	BRUSHY CANYON	-3588	7091	7121	SANDSTONE	NONE	N
1616790	BONE SPRING	-5217	8720	8750	LIMESTONE	NONE	N
1616791	UPPER AVALON SHALE	-5312	8815	8845	LIMESTONE, SANDSTONE, SHALE	NONE	N
1616792	BONE SPRING 1ST	-6234	9737	9766	SANDSTONE	NONE	N
1616793	BONE SPRING 2ND	-7311	10814	21665	SANDSTONE	NONE	Y

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

Pressure Rating (PSI): 5M Rating Depth: 10814

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. BOP test will be conducted by a 3rd party.

Requesting Variance? YES

Variance request: Chevron requests the following variances: - Variance to use a CoFlex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. - Variance to use an 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 3rd party. - Variance from the Onshore Order 2 where it states: "(A full BOP

# **BLOWOUT PREVENTER SCHEMATIC**

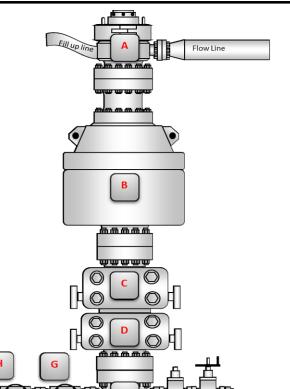
Operation: Intermediate & Production Drilling Operations

#### **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

Minimum System operation pressure

<u>KIII LIIIE</u>				
Part Siz	Size	Pressure	Description	
	3120	Rating	Description	
G	2"	10,000	Inside Kill Line Valve (gate	
١	2	10,000	valve)	
н	2"	10.000	Outside Kill Line Valve	
		10,000	(gate valve)	
I	2"	10,000	Kill Line Check valve	
			•	





<u>Choke line</u>					
Part	Size	Pressure	B		
		Rating	Description		
٦	3"	10,000	HCR (gate valve)		
K	3"	10,000	Manual HCR (gate valve)		
<u>Wellhead</u>					
Part	Size	Pressure Rating	Description		
L	13-5/8"	5,000	FMC Multibowl wellhead		



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

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

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

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

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

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

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

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

CONDITIONS

Action 71540

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	71540
	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	1/18/2022
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	1/18/2022
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	1/18/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	1/18/2022