

OCD Hobbs

FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM118722	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name	
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.	
2. Name of Operator CHEVRON USA INCORPORATED (4327)		8. Lease Name and Well No. SD 14 23 FED P19 (325138) 17H	
3a. Address 6301 Deauville Blvd. Midland TX 79706		9. API Well No. 30-024-45706 (98085)	
3b. Phone No. (include area code) (432)687-7866		10. Field and Pool, or Exploratory WC025G09S263327G / UPPER WOLFC	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNE / 455 FNL / 1455 FEL / LAT 32.049055 / LONG -103.641696 At proposed prod. zone SWSE / 180 FSL / 1640 FEL / LAT 32.021391 / LONG -103.642338		11. Sec., T. R. M. or Blk. and Survey or Area SEC 14 / T26S / R32E / NMP	
14. Distance in miles and direction from nearest town or post office* 33 miles		12. County or Parish LEA	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330 feet	16. No of acres in lease 3080	17. Spacing Unit dedicated to this well 640	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 4730 feet	19. Proposed Depth 12200 feet / 22356 feet	20. BLM/BIA Bond No. in file FED: CA0329	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3217 feet	22. Approximate date work will start* 09/05/2019	23. Estimated duration 146 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM.            |

25. Signature (Electronic Submission)	Name (Printed/Typed) Laura Becerra / Ph: (432)687-7665	Date 06/14/2018
Title Permitting Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 01/30/2019
Title Assistant Field Manager Lands & Minerals		

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.

GCP Rec 03/08/19

APPROVED WITH CONDITIONS

KZ  
03/11/19

(Continued on page 2)

\*(Instructions on page 2)

Approval Date: 01/30/2019

Double sided

## 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 1:** 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 well, 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 directionally 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 well 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 will 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 connects this information to allow 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 Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## **Additional Operator Remarks**

### **Location of Well**

1. SHL: NWNE / 455 FNL / 1455 FEL / TWSP: 26S / RANGE: 32E / SECTION: 14 / LAT: 32.049055 / LONG: -103.641696 ( TVD: 0 feet, MD: 0 feet )  
PPP: NWNE / 330 FNL / 1640 FEL / TWSP: 26S / RANGE: 32E / SECTION: 14 / LAT: 32.049398 / LONG: -103.642293 ( TVD: 12200 feet, MD: 12200 feet )  
BHL: SWSE / 180 FSL / 1640 FEL / TWSP: 26S / RANGE: 32E / SECTION: 23 / LAT: 32.021391 / LONG: -103.642338 ( TVD: 12200 feet, MD: 22356 feet )

## **BLM Point of Contact**

Name: Katrina Ponder

Title: Geologist

Phone: 5752345969

Email: kponder@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 DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Chevron USA Incorporated</b>
<b>LEASE NO.:</b>	<b>NMNM118722</b>
<b>WELL NAME &amp; NO.:</b>	<b>SD 14 23 Fed P19 17H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>455'/N &amp; 1455'/E</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>180'/S &amp; 1640'/E</b>
<b>LOCATION:</b>	<b>Section 14, T.26 S., R.32 E., NMPM</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** 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

1. The 13-3/8 inch surface casing shall be set at approximately **800** feet (a minimum of 25 feet 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.

**Operator shall filled 50% casing with fluid while running intermediate casing to maintain collapse safety factor.**

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
  - Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.
    - a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
    - b. Second stage above DV tool: Cement to surface. If cement does not circulate, contact the appropriate BLM office.

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

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the 5-1/2 inch intermediate liner is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

### **C. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**.
3. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - a. 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.
  - b. Manufacturer representative shall install the test plug for the initial BOP test.

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

## 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)

☒ Chaves and Roosevelt Counties  
 Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.  
 During office hours call (575) 627-0272.  
 After office hours call (575)

☒ Eddy County  
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
 (575) 361-2822

☒ Lea County  
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
 393-3612

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. **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.
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.
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: 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.
  - 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.

**ZS 013019**

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

**OPERATOR'S NAME: Chevron USA Incorporated  
LEASE NO: NMNM118722  
LOCATION: Section 14, T.26 S., R.32 E., NMPM**

**SD 14 23 FED P18 9H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1380' FWL**

**Bottom Hole Location: Sec. 14, SWSW, T. 26 S., R. 32 E., 180' FSL & 330' FWL**

**SD 14 23 FED P18 10H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1405' FWL**

**Bottom Hole Location: Sec. 14, SWSW, T. 26 S., R. 32 E., 180' FSL & 740' FWL**

**SD 14 23 FED P18 11H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1430' FWL**

**Bottom Hole Location: Sec. 14, SWSW, T. 26 S., R. 32 E., 180' FSL & 11500' FWL**

**SD 14 23 FED P18 12H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1455' FWL**

**Bottom Hole Location: Sec. 14, SESW, T. 26 S., R. 32 E., 180' FSL & 1560' FWL**

**SD 14 23 FED P18 13H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1480' FWL**

**Bottom Hole Location: Sec. 14, SESW, T. 26 S., R. 32 E., 180' FSL & 1970' FWL**

**SD 14 23 FED P18 14H**

**Surface Hole Location: Sec. 14, NENW, T. 26 S., R. 32 E., 455' FNL & 1505' FWL**

**Bottom Hole Location: Sec. 14, SESW, T. 26 S., R. 32 E., 180' FSL & 2380' FWL**

**SD 14 23 FED P19 15H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1505' FEL**

**Bottom Hole Location: Sec. 14, SWSE, T. 26 S., R. 32 E., 180' FSL & 2440' FEL**

**SD 14 23 FED P19 16H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1480' FEL**

**Bottom Hole Location: Sec. 14, SWSE, T. 26 S., R. 32 E., 180' FSL & 2040' FEL**

**SD 14 23 FED P19 17H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1455' FEL**

**Bottom Hole Location: Sec. 14, SWSE, T. 26 S., R. 32 E., 180' FSL & 1640' FEL**

**SD 14 23 FED P19 18H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1430' FEL**

**Bottom Hole Location: Sec. 14, SESE, T. 26 S., R. 32 E., 180' FSL & 1240' FEL**

**SD 14 23 FED P19 19H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1405' FEL**

**Bottom Hole Location: Sec. 14, SESE, T. 26 S., R. 32 E., 180' FSL & 840' FEL**

**SD 14 23 FED P19 20H**

**Surface Hole Location: Sec. 14, NWNE, T. 26 S., R. 32 E., 455' FNL & 1380' FEL**

**Bottom Hole Location: Sec. 14, SESE, T. 26 S., R. 32 E., 180' FSL & 440' 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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Hydrology
  - Cave/Karst
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- ☐ **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)**

### **Hydrology:**

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). 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 integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad 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. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

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.

Electric Lines: 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.

### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production:

#### **Construction:**

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

**No Blasting:**

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

**Pad Berming:**

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

**Tank Battery Liners and Berms:**

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

**Leak Detection System:**

A method of detecting leaks is required. The method could incorporate gauges to measure loss, siting valves and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

**Automatic Shut-off Systems:**



Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

#### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

#### **Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

#### **FLOWLINES (SURFACE):**

- Flowlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize the possibility of leaks and spills from entering karst systems.
- 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.

- 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.

## **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

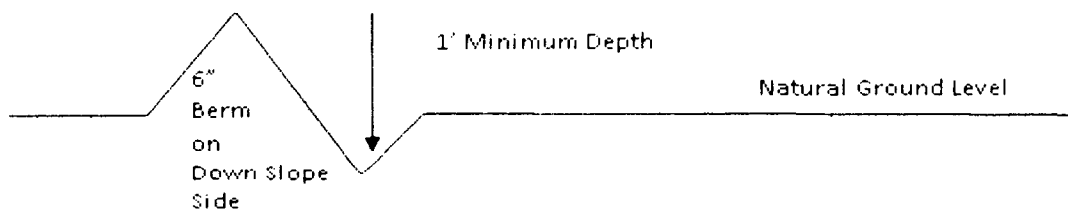
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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:

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

**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.

**Livestock Watering Requirement**

During the operations throughout the life of the well, any damage to structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

**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
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

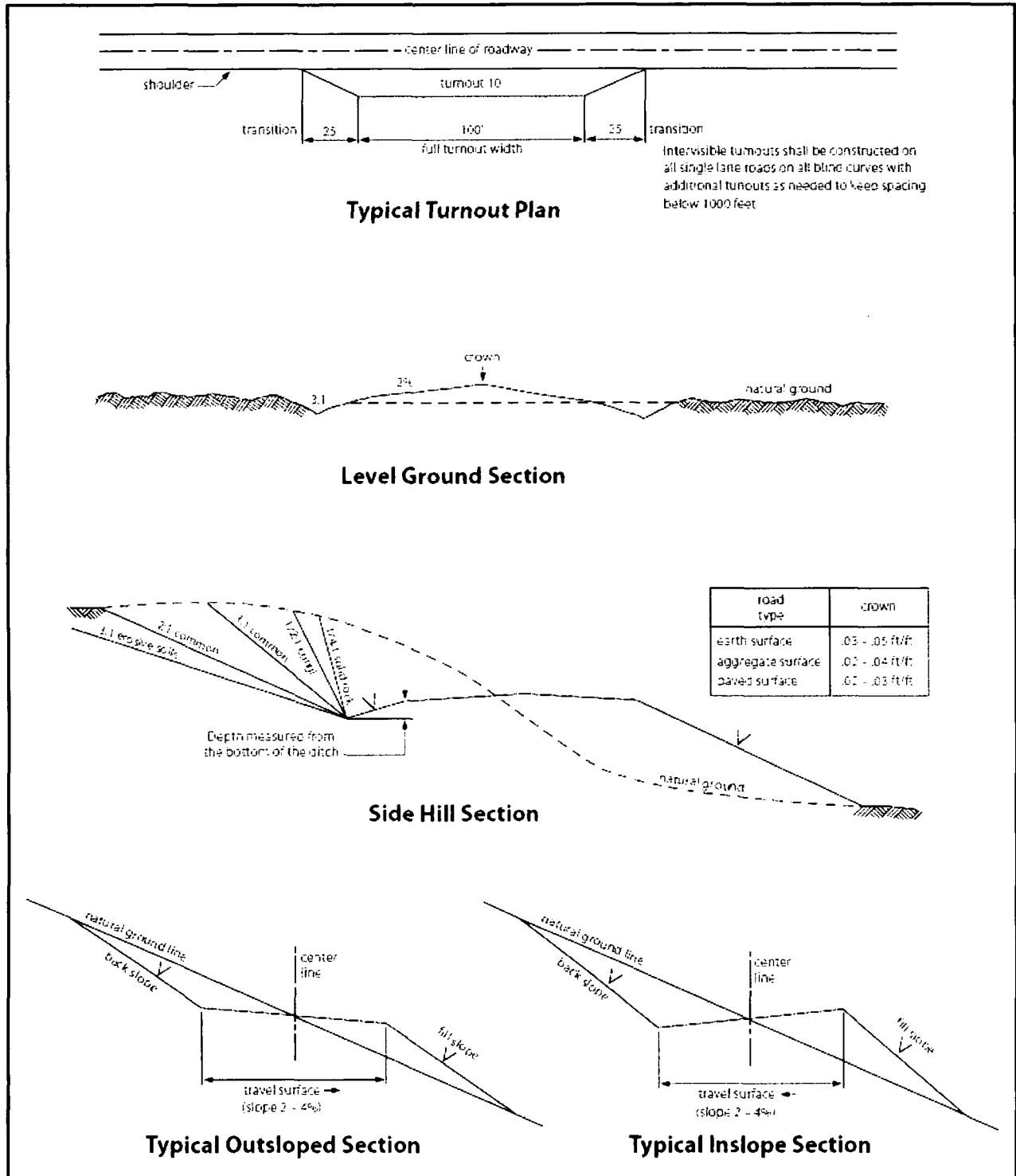


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## **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**

### **STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES**

**A copy of the application (Grant, Sundry Notice, APD) and attachments, including stipulations, 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.
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 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 agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The 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 the 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 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 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 the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized

right-of-way width of 20 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must 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 must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The 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 or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 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 and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. 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 cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. 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.

17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

**18. Special Stipulations:**

- Flowlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize the possibility of leaks and spills from entering karst systems.
- 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.
- 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.

**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.
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.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

<input checked="" type="checkbox"/> seed mixture 1	<input type="checkbox"/> seed mixture 3
<input type="checkbox"/> seed mixture 2	<input type="checkbox"/> seed mixture 4
<input type="checkbox"/> seed mixture 2/LPC	<input type="checkbox"/> Aplomado Falcon Mixture

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 and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. 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.

18. Escape Ramps - 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.

19. Special Stipulations:

- 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, siting 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.

- 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.

### **C. ELECTRIC LINES**

#### **STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES**

**A copy of the grant and attachments, including stipulations, 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.
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.

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 and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

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

## **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).

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.

### **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:

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

\*Pounds of pure live seed:

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



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



*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:** Laura Becerra

**Signed on:** 06/14/2018

**Title:** Permitting Specialist

**Street Address:** 6301 Deauville Blvd., S2211

**City:** Midland

**State:** TX

**Zip:** 79706

**Phone:** (432)687-7665

**Email address:** LBecerra@Chevron.com

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**



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

## Application Data Report

02/14/2019

APD ID: 10400031174

Submission Date: 06/14/2018

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD 14 23 FED P19

Well Number: 17H

Well Type: OIL WELL

Well Work Type: Drill



[Show Final Text](#)

APD ID: 10400031174

Tie to previous NOS? 10400019749

Submission Date: 06/14/2018

BLM Office: CARLSBAD

User: Laura Becerra

Title: Permitting Specialist

Federal/Indian APD: FED

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

Lease number: NMNM118722

Lease Acres: 3080

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

APD Operator: CHEVRON USA INCORPORATED

Operator letter of designation:

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:

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: SD 14 23 FED P19

Well Number: 17H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name:  
WC025G09S263327G

Pool Name: UPPER  
WOLFCAMP

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

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Describe other minerals:**

**Is the proposed well in a Helium production area?** N **Use Existing Well Pad?** NO **New surface disturbance?**

**Type of Well Pad:** MULTIPLE WELL

**Multiple Well Pad Name:** SD 14 **Number:**

23 FED P19

15H,16H,17H,18H,19H,20H

**Well Class:** HORIZONTAL

**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:** 33 Miles

**Distance to nearest well:** 4730 FT

**Distance to lease line:** 330 FT

**Reservoir well spacing assigned acres Measurement:** 640 Acres

**Well plat:** SD\_14\_23\_Fed\_P19\_17H\_Pad\_Plat\_20180614154149.pdf

SD\_14\_23\_Fed\_P19\_17H\_C\_102\_20180614154241.pdf

**Well work start Date:** 09/05/2019

**Duration:** 146 DAYS

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83

**Vertical Datum:** NAVD88

**Survey number:**

	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
SHL Leg #1	455	FNL	145 5	FEL	26S	32E	14	Aliquot NWNE	32.04905 5	- 103.6416 96	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118722	521 77	122 00	402 00
KOP Leg #1	455	FNL	145 5	FEL	26S	32E	14	Aliquot NWNE	32.04905 5	- 103.6416 96	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118722	521 77	122 00	402 00
PPP Leg #1	330	FNL	164 0	FEL	26S	32E	14	Aliquot NWNE	32.04939 8	- 103.6422 93	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118722	523 68	122 00	402 00

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

	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
EXIT Leg #1	330	FSL	164 0	FEL	26S	32E	23	Aliquot SWSE	32.02180 3	- 103.6423 37	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118722			
BHL Leg #1	180	FSL	164 0	FEL	26S	32E	23	Aliquot SWSE	32.02139 1	- 103.6423 38	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118722			

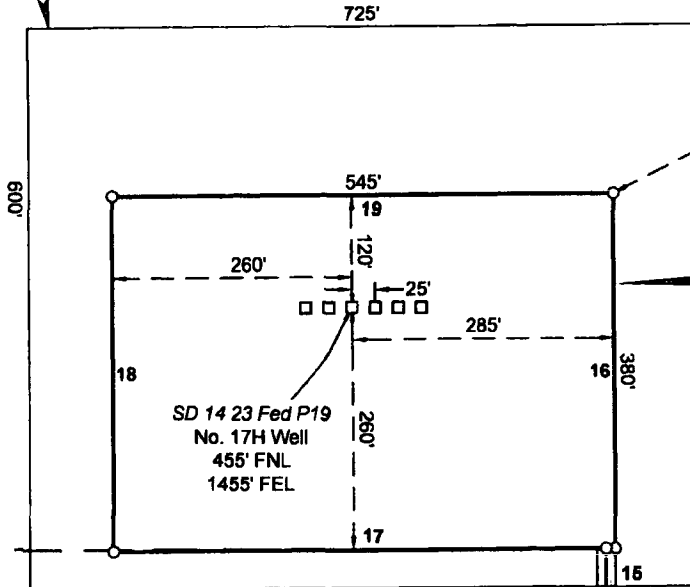


R 32 E

Sec. 11  
Bureau of Land Management

PROPOSED  
ARCHAEOLOGICAL  
AREA  
±5.24 ACRES

PROPOSED 64'  
ROW CONTAINING  
6 FLOWLINES,  
GAS LIFT LINE, 15'  
EDS LINE &  
TEMPORARY  
WATER LINE  
±6,854.25'  
±415.41 Rods



PROPOSED PAD  
±4.75 ACRES

Sec. 14

Bureau of Land Management

T  
26  
S

CENTERLINE PROPOSED  
ACCESS ROAD  
20' x ±6,912.54'  
±418.94 Rods  
±3.17 Acres

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.

SD 14 23 FED P19 NO. 17H WELL		
X=	714,438	NAD 27
Y=	382,213	
LAT.	32.048930	
LONG.	103.641226	
X=	755,625	NAD83
Y=	382,271	
LAT.	32.049055	
LONG.	103.641696	
ELEVATION +3217' NAVD 88		

LEGEND	
---	Existing ROW
-X-	Existing Fence
---	Section Line
---	Proposed Pad
---	CL Proposed Access
---	Proposed ROW
●	Fnd Monument

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

WELL PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 1 of 3

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD 14 23 FED P19 NO. 17H WELL  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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

REVISIONS				
DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/19/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				

# LEGEND

- Proposed Pad
- Existing Pipeline
- Section Line
- Proposed ROW
- CL Proposed Road
- Existing Ditch
- Existing Road/Pad
- Existing ROW
- Existing Fence
- Fnd. Monument

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

7-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

Sec. 15

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe w/ Cap @  
the NW Corner of Section 23

Sec. 22

Bureau of Land Management

R 32 E

Sec. 11

Bureau of Land Management

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

PROPOSED 64' ROW  
CONTAINING 6 FLOWLINES,  
GAS LIFT LINE, 15' EDS LINE  
& TEMPORARY WATER LINE  
±6,854.25'  
±415.41 Rods

Existing  
Pipeline

Sec. 14

Bureau of Land Management

CENTERLINE  
PROPOSED  
ACCESS ROAD  
20' x ±6,912.64'  
±418.94 Rods  
±3.17 Acres

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

S 81° 42' 09" E 1,988.56'

Existing  
CBT 23

Existing Lease Road

Sec. 23

Bureau of Land Management

T  
26  
S

WELL PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 2 of 3

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD 14 23 FED P19 NO. 17H WELL  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



C. H. Fenstermaker & Associates, L.L.C.  
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## REVISIONS

DRAWN BY:	DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:	VHV				
DATE:	01/19/2018				
FILENAME:	T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				



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

# Drilling Plan Data Report

02/14/2019

APD ID: 10400031174

Submission Date: 06/14/2018

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD 14 23 FED P19

Well Number: 17H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data  
reflects the most  
recent changes

Show Final Text

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	FOUNTAIN	527	527	527	SANDSTONE	NONE	NO
2	CASOLE	526	526	526	SANDSTONE	NONE	NO
3	CLAWSON	525	525	525	SANDSTONE	NONE	NO
4	HYDE CANYON	524	524	524	SANDSTONE	NONE	NO
5	CHERRY CANYON	523	523	523	SANDSTONE	NONE	NO
6	BUSHY CANYON	522	522	522	SANDSTONE	NONE	NO
7	COLEMAN CANYON	521	521	521	SANDSTONE	NONE	NO
8	UPPER WALTON SHALE	520	520	520	LIMESTONE SHALE	NONE	NO
9	LOCHMERE CANYON	519	519	519	SANDSTONE	NONE	NO
10	LOCHMERE CANYON	518	518	518	SANDSTONE	NONE	NO
11	LOCHMERE CANYON	517	517	517	SANDSTONE	NONE	NO
12	WALTON CANYON	516	516	516	LIMESTONE SHALE	NONE	NO
13	WALTON CANYON	515	515	515	LIMESTONE SHALE	NONE	NO

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD 14 23 FED P19

Well Number: 17H

Pressure Rating (PSI): 10M

Rating Depth: 12200

**Equipment:** Will have a minimum of a 10000 psi rig stack for drill out below intermediate casing (Wolfcamp is not exposed until drillout of the intermediate casing). Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM is received otherwise.

**Requesting Variance? YES**

Variance request: Chevron requests a variance to use a PWC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOP will be tripped up and tested with standard operating procedures. Subsequent tests will be performed as needed, not to exceed 30 days. The field reported PWC and BOP test information will be provided in a subsequent report after completion of the well. Please see the attached wellhead schematic. An intermediate pressure has been placed on the wellhead and the intermediate pressure has been changed from previous submittal. CoFlex choke has been placed for all wells on the pad (see attached variance request form).

Results of the survey: The BOP test was up to 7,500 psi in flow and 250 psi to 300 psi in annular (annular will be set with test of 200 psi per previous discussion with BLM). BOP/BOPF will be tested by tripping and in service equipment to 250 psi flow and the high pressure indicated above per OSHA Code 2 requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from the BLM is received otherwise. CoFlex choke has been placed with a metal pressure setting will be used for all wells on the pad (see attached specs). BOP test will be conducted by a third party.

**Choke Diagram Attachment:**

CoFlex\_Hose\_Variance\_Request\_20181130124338.pdf

Choke\_Flex\_Hose\_Specs\_20181130124350.pdf

**BOP Diagram Attachment:**

10K\_BOP\_and\_Choke\_Schematic\_20181130124404.pdf

BOPE\_Choke\_Testing\_Procedures\_20181130124418.pdf

UHS\_Multibowl\_Wellhead\_Specs\_20181130124434.pdf

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	800	0	800			800	J-55	54.5	STC	3.12	1.36	DRY	3.38	DRY	3.38
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	10845	0	10845			10845	L-80	43.5	LTC	1.44	1.24	DRY	1.93	DRY	1.93
3	PRODUCTION	8.5	5.5	NEW	API	Y	0	22356	0	12200			22356	P-110	20	OTHER - TXP BTC	1.37	1.11	DRY	2.02	DRY	2.02

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

#### Casing Attachments

---

**Casing ID:** 1      **String Type:** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

13\_3\_8\_casing\_spec\_sheet\_20180913153837.pdf

---

**Casing ID:** 2      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

9.625\_L80IC\_Collapse\_4830\_20181130124529.pdf

---

**Casing ID:** 3      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

5.5\_20lb\_TXP\_P110ICY\_20180612135107.pdf

**Casing Design Assumptions and Worksheet(s):**

SD\_14\_23\_FED\_P19\_17H\_9pt\_v2\_20181130125504.pdf

---

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD 14 23 FED P19

Well Number: 17H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	NONE	NONE
SURFACE	Tail		0	800	872	1.33	14.8	206	100	CLASS C	Extender/Anticomp Hardener
PRODUCTION	Lead		0	0	0	0	0	0		N/A	NONE
PRODUCTION	Tail		1007 5	2235 6	3131	1.2	15.6	669	35	CLASS H	Anticomp/Extender Fluid Loss Reducer Viscosifier
INTERMEDIATE	Lead	4360	0	4360	1496	2.43	11.9	647	200	50/50 P&Z CLASS C	Anticomp/Extender Salt Extender/Viscosifier
INTERMEDIATE	Tail		4360	4660	106	1.33	14.8	25	50	CLASS C	Anticomp/Extender Viscosifier
INTERMEDIATE	Lead		4660	1034 5	1099	2.43	11.9	475	50	50/50 P&Z CLASS C	Anticomp/Extender Viscosifier
INTERMEDIATE	Tail		1034 5	1084 5	205	1.33	14.8	49	50	CLASS C	Anticomp/Extender DP agent

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

**Describe what will be on location to control well or mitigate other conditions:** A closed system will be 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 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.

**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.

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1084 5	2235 6	OIL-BASED MUD	9.5	14.1							F VIS: 70-75 FILTRATE: 25-30
0	800	SPUD MUD	8.3	8.7							F VIS: 32-34 FILTRATE: NC-NC
800	1084 5	OIL-BASED MUD	9.5	11.1							F VIS: 28-30 FILTRATE: 25-30

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

Drill stem tests are not planned.

The logging program will be as follows:

Type: Mudlogs Logs: 2 Man Mudlog Interval: Int Csg to TD Timing: Drillout of Csg Vendor : TBD

Type: LWD Logs: MDW Gamma Interval: Int & Prod Hole Timing: While Drilling Vendor : TBD

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

GR,MWD,MUDLOG

**Coring operation description for the well:**

Conventional whole core samples are not planned, a directional survey will be run and logs will be submitted.

**Anticipated Bottom Hole Pressure:** 7686

**Anticipated Surface Pressure:** 5002

**Anticipated Bottom Hole Temperature(F):** 150

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

H2S\_Summary\_20180612150846.pdf

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

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

Rig\_Layout\_20180612151015.pdf

SD\_14\_23\_FED\_P19\_17H\_Prelim\_Plot\_20180614160457.pdf

SD\_14\_23\_FED\_P19\_17H\_Prelim\_Wellpath\_20180614161037.pdf

SD\_14\_23\_FED\_P19\_Gas\_Capture\_Plan\_20181130134933.pdf

**Other proposed operations facets description:**

Chevron requests authorization to use the Spudder Rig to spud the well and set surface casing. The drilling rig will move to less than 90 days to continue drilling operations. Rig layout attached.

**Other proposed operations facets attachment:**

CUSA\_Spudder\_Rig\_Data\_20181130134722.pdf

**Other Variance attachment:**



# Delaware Basin

## Changes to APD for Federal Well



### **CHEVRON CONTACT:**

TONY BACON  
DRILLING ENGINEER  
1400 SMITH ST.  
HOUSTON, TX 77002

DESK: HOU140/43-014  
CELL: 406-989-0415  
EMAIL: TONYBACON@CHEVRON.COM

### **Summary of Changes to MPD Submission**

**BOP Equipment – CoFlex Hose (Section 3 of 9 Point Drilling Plan in MPD)**

### **BOP Equipment – CoFlex Hose**

**Summary:** Variance to use a CoFlex hose between BOP and choke manifold not requested in original submittal.

<b>As Defined in MPD:</b>	<b>As Planned on Well:</b>
Variance to use CoFlex hose not requested.	Chevron requests a variance to use a CoFlex hose with a <u>metal protective covering</u> that will be utilized between the BOP and Choke manifold. Please refer to the attached testing and specification documents.



ContiTech

# Hose Data Sheet

CRI Order No.	538332
Customer	ContiTech Oil & Marine Corp
Customer Order No	4500412631 CBC544771, CBC544769, CBC544767, CBC544763, CBC544768, CBC544745, CBC544744, CBC544746
Item No.	1
Hose Type	Flexible Hose
<b>Standard</b>	<b>API SPEC 16 C</b>
Inside dia in inches	3
Length	45 ft
Type of coupling one end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE SOURC/W BX155 ST/ST INLAID R.GR.
Type of coupling other end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE SOURC/W BX155 ST/ST INLAID R.GR.
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	Yes
Safety wire rope	No
Max. design temperature [°C]	100
Min. design temperature [°C]	-20
Min. Bend Radius operating [m]	0,90
Min. Bend Radius storage [m]	0,90
Electrical continuity	The Hose is electrically continuous
Type of packing	WOODEN CRATE ISPM-15



ContiTech

CONTITECH RUBBER  
Industrial Kft.

No: QC-DB- 231/ 2014  
Page: 10 / 119

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 594	
PURCHASER: ContiTech Oil & Marine Corp.				P.O. N°: 4500412631	
CONTITECH ORDER N°: 538332		HOSE TYPE: 3" ID		Choke & Kill Hose	
HOSE SERIAL N°: 67349		NOMINAL / ACTUAL LENGTH:		13,72 m / 13,85 m	
W.P. 68,9 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
<p>Pressure test with water at ambient temperature</p> <p style="text-align: center;">See attachment. ( 1 page )</p> <p>↑ 10 mm = 10 Min. → 10 mm = 25 MPa</p>					
COUPLINGS Type		Serial N°		Quality	
3" coupling with 4 1/16" 10K API Swivel Flange end Hub		1435 1436		AISI 4130 AISI 4130 AISI 4130	
				Heat N° A1258U 034939 A1045N	
<b>Not Designed For Well Testing</b>				<b>API Spec 16 C</b>	
<b>Tag No.: 66 – 1198</b>				<b>Temperature rate: "B"</b>	
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
Date:  03. April 2014.		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept. 	



# **10M BLOWOUT PREVENTER SCHEMATIC**

Minimum Requirements

**OPERATION:** Wolfcamp Wells in Salado Draw

**Minimum System Pressure Rating: 10,000 PSI**

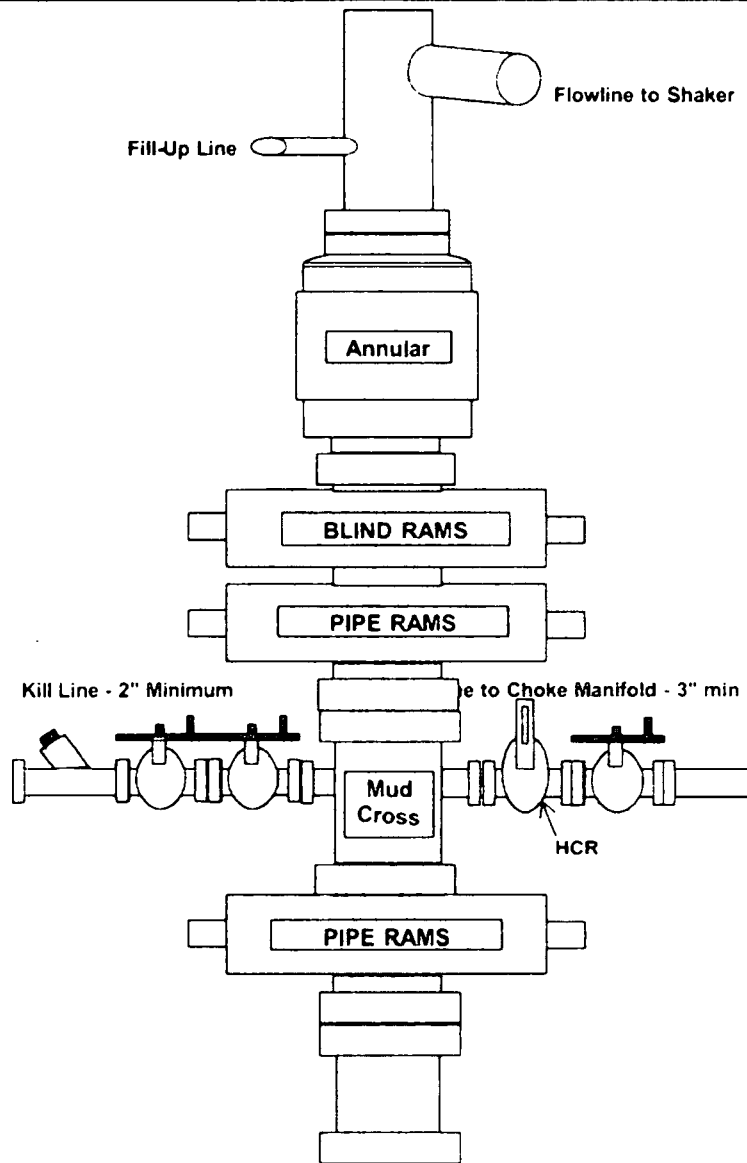


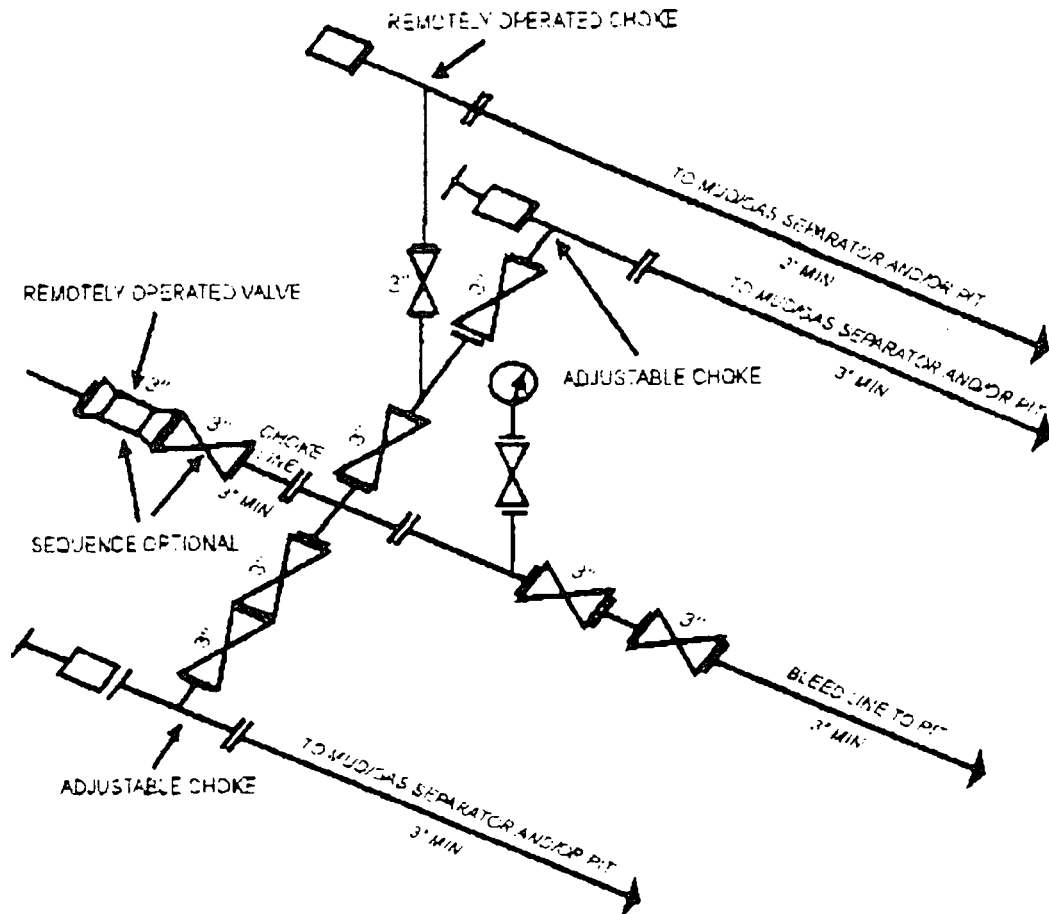
Diagram C

# 10M Choke Manifold SCHEMATIC

Minimum Requirements

**OPERATION:** Production and Open Hole Sections

**Minimum System Pressure Rating: 10,000 PSI**



10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
[53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]

Diagram D

# Chevron BOPE Testing – 5K and 10K Systems

## Minimum Requirements

### Closing Unit and Accumulator Checklist

The following item must be performed, verified, and checked off at least once per well prior to low/high pressure testing of BOP equipment. This must be repeated after 6 months on the same well.

- ☐ Precharge pressure for each accumulator bottle must fall within the range below. Bottles may be further charged with nitrogen gas only. Tested precharge pressures must be recorded for each individual bottle and kept on location through the end of the well. Test will be conducted prior to connecting unit to BOP stack.

Check one that applies	Accumulator working pressure rating	Minimum acceptable operating pressure	Desired precharge pressure	Maximum acceptable precharge pressure	Minimum acceptable precharge pressure
<input type="checkbox"/>	1500 psi	1500 psi	750 psi	800 psi	700 psi
<input type="checkbox"/>	2000 psi	2000 psi	1000 psi	1100 psi	900 psi
<input type="checkbox"/>	3000 psi	3000 psi	1000 psi	1100 psi	900 psi

- ☐ Accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if used), close all rams, close the annular preventer, and retain a minimum of 200 psi above the maximum acceptable precharge pressure (see table above) on the closing manifold without the use of the closing pumps. This test will be performed with test pressure recorded and kept on location through the end of the well.
- ☐ Accumulator fluid reservoir will be double the usable fluid volume of the accumulator system capacity. Fluid level will be maintained at manufacturer's recommendations. Usable fluid volume will be recorded. Reservoir capacity will be recorded. Reservoir fluid level will be recorded along with manufacturer's recommendation. All will be kept on location through the end of the well.
- ☐ Closing unit system will have two independent power sources (not counting accumulator bottles) to close the preventers.
- ☐ Power for the closing unit pumps will be available to the unit at all times so that the pumps will automatically start when the closing valve manifold pressure decreases to the pre-set level. It is recommended to check that air line to accumulator pump is "ON" during each tour change.
- ☐ With accumulator bottles isolated, closing unit will be capable of opening the hydraulically-operated choke line valve (if used) plus close the annular preventer on the smallest size drill pipe within 2 minutes and obtain a minimum of 200 psi above maximum acceptable precharge pressure (see table above) on the closing manifold. Test pressure and closing time will be recorded and kept on location through the end of the well.
- ☐ Master controls for the BOPE system will be located at the accumulator and will be capable of opening and closing all preventer and the choke line valve (if used)
- ☐ Remote controls for the BOPE system will be readily accessible (clear path) to the driller and located on the rig floor (not in the dog house). Remote controls will be capable of closing all preventers.
- ☐ Record accumulator tests in drilling reports and IADC sheet

## **BOPE 5K Test Checklist**

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. 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.
- ☐ 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 from the 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.



## **BOPE 10K (with 5K annular) Test Checklist**

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:

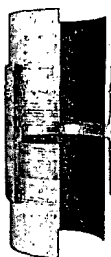
- ☐ BOPE will be pressure tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs, and at a minimum of 30 day intervals. Test pressure and times will be recorded by a 3<sup>rd</sup> party on a test charge and kept on location through the end of the well.
- ☐ Test plug will be used.
- ☐ Ram type preventer and all related well control equipment will be tested to 250 psi (low) and 7,500 psi (high).
- ☐ Annular type preventer will be tested to 250 psi (low) and 5,000 psi (high).
- ☐ Valves will be tested from the 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.

6630 PSI UH-S  
CHEVRON  
20 X 13 3/8 X 9 5/8 X 5 1/2

For the latest performance data, always visit our website: [www.tenaris.com](http://www.tenaris.com)

TXP® BTC

Printed on: 05/25/2017



Outside Diameter	5.500 in.	Min. Wall Thickness	87.5%	(*) Grade P110-ICY	
Wall Thickness	0.361 in.	Connection OD Option	REGULAR	COUPLING	PIPE BODY
Grade	P110-ICY*	Drift	API Standard	Body: White	1st Band: White
		Type	Casing	1st Band: Pale Green	2nd Band: Pale Green
				2nd Band: -	3rd Band: Pale Green
				3rd Band: -	4th Band: -

## PIPE BODY DATA

## GEOMETRY

Nominal OD	5.500 in.	Nominal Weight	20 lbs/ft	Drift	4.653 in.
Nominal ID	4.778 in.	Wall Thickness	0.361 in.	Plain End Weight	19.83 lbs/ft
OD Tolerance	API				

## PERFORMANCE

Body Yield Strength	729 x1000 lbs	Internal Yield	14360 psi	SMYS	125000 psi
Collapse	12100 psi				

## CONNECTION DATA

## GEOMETRY

Connection OD	6.100 in.	Coupling Length	9.45 in.	Connection ID	4.766 in.
Make-up Loss	4.204 in.	Threads per in	5	Connection OD Option	REGULAR

## PERFORMANCE

Tension Efficiency	100 %	Joint Yield Strength	729,000 x1000 lbs	Internal Pressure Capacity [1]	14360,000 psi
Compression Efficiency	100 %	Compression Strength	729,000 x1000 lbs	Max. Allowable Bending	104 °/100 ft
External Pressure Capacity	12100,000 psi				

## MAKE-UP TORQUES

Minimum	11540 ft-lbs	Optimum	12820 ft-lbs	Maximum	14100 ft-lbs
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## OPERATION LIMIT TORQUES

Operating Torque	22700 ft-lbs	Yield Torque	25250 ft-lbs
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## Notes

This connection is fully interchangeable with:

TXP® BTC - 5.5 in. - 15.5 / 17 / 23 / 26 lbs/ft

[1] Internal Pressure Capacity related to structural resistance only. Internal pressure leak resistance as per section 10.3 API 5C3 / ISO 10400 - 2007.

### 1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Rustler		662	
Castile		2838	
Lamar		4615	
Bell Canyon		4674	
Cherry Canyon		5647	
Brushy Canyon		7237	
Bone Spring Limestone		8843	
Upr. Avalon		8883	
Top Bone Spring 1		9727	
Top Bone Spring 2		10336	
SBSG 3rd Carb		10785	
Top Bone Spring 3		11475	
Wolfcamp		11905	
Lateral TD (Wolfcamp A1)		12,148	

### 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 Expected Base of Fresh Water		750
Water	Rustler	662
Water	Bell Canyon	4674
Water	Cherry Canyon	5647
Oil/Gas	Brushy Canyon	7237
Oil/Gas	Bone Spring Limestone	8843
Oil/Gas	Upr. Avalon	8883
Oil/Gas	Top Bone Spring 1	9727
Oil/Gas	Top Bone Spring 2	10336
Oil/Gas	Top Bone Spring 3	11475
Oil/Gas	Wolfcamp	11905
Oil/Gas		
Oil/Gas		

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

### 3. BOP EQUIPMENT

Will have a minimum of a 10000 psi rig stack (see proposed schematic) for drill out below intermediate casing (Wolfcamp is not exposed until drillout of the intermediate casing). Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM

Chevron requests a variance to use a FMC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC 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.

#### 4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	800'	17-1/2"	13-3/8"	55 #	J55	STC	New
Intermediate	0'	10,910'	12-1/4"	9-5/8"	43.5#	L80	LTC	New
Production	0'	22,386'	8-1/2"	5-1/2"	20.0 #	P-110-ICY	TXP BTC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. \*\*\*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 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.

d. Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.

#### SF Calculations based on the following "Worst Case" casing design:

Surface Casing: 800'  
Intermediate Casing: 10,800' TVD  
Production Casing: 22,386' MD/12,148' TVD (10,071' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.36	3.12	3.38	1.70
Intermediate	1.24	1.44	1.93	1.50
Production	1.11	1.37	2.02	1.37

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
<b>Burst Design</b>			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 16 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
<b>Collapse Design</b>			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
<b>Tension Design</b>			
100k lb overpull	X	X	X

## 5. CEMENTING PROGRAM

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Tail	Class C	0'	800'	14.8	1.33	100	872	6.38
Intermediate								
Stage 2 Lead	50:50 Poz Class C	0'	4330	11.9	2.43	200	1484	13.75
Stage 2 Tail	Class C	4330	4630	14.8	1.33	50	106	6.36
Stage 1 Lead	50:50 Poz Class C	4,630'	10,410'	11.9	2.43	50	1118	13.75
Stage 1 Tail	Class C	10,410'	10,910'	14.8	1.33	50	205	6.36
Production								
Tail	Class H	10,075'	22,386'	15.6	1.2	35	3126	5.05

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing.

## 6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	800'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
800'	10,910'	Oil Based Mud	9.5-11.1	28 - 30	25 - 30
10,910'	22,386'	Oil Based Mud	9.5-14.1	70 - 75	25 - 30

A closed system will be 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 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.

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	Vendor
Mudlogs	2 Man mudlog	Int Csg to TD	Drillout of Csg	TBD
LWD	MWD Gamma	Int and Prod Hole	While Drilling	TBD

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

**8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

- a. No abnormal pressures or temperatures are expected. Estimated BHP is: 7653 psi
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

### 1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Rustler		661	
Castile		2839	
Lamar		4617	
Bell Canyon		4671	
Cherry Canyon		5656	
Brushy Canyon		7244	
Bone Spring Limestone		8853	
Upr. Avalon		8893	
Top Bone Spring 1		9738	
Top Bone Spring 2		10345	
SBSG 3rd Carb		10800	
Top Bone Spring 3		11483	
Wolfcamp		11912	
Lateral TD (Wolfcamp A1)		12,200	22,356

### 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 Expected Base of Fresh Water		750
Water	Rustler	661
Water	Bell Canyon	4671
Water	Cherry Canyon	5656
Oil/Gas	Brushy Canyon	7244
Oil/Gas	Bone Spring Limestone	8853
Oil/Gas	Upr. Avalon	8893
Oil/Gas	Top Bone Spring 1	9738
Oil/Gas	Top Bone Spring 2	10345
Oil/Gas	Top Bone Spring 3	11483
Oil/Gas	Wolfcamp	11912
Oil/Gas		
Oil/Gas		

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

### 3. BOP EQUIPMENT

Will have a minimum of a 10000 psi rig stack (see proposed schematic) for drill out below intermediate casing (Wolfcamp is not exposed until drillout of the intermediate casing). Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM is received otherwise.

Chevron requests a variance to use a FMC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC 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. CoFlex choke hose will be used for all wells on the pad (see attached variance request and specs)



#### 4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	800'	17-1/2"	13-3/8"	54.5 #	J55	STC	New
Intermediate	0'	10,845'	12-1/4"	9-5/8"	43.5#	L80	LTC	New
Production	0'	22,356'	8-1/2"	5-1/2"	20.0 #	P-110-ICY	TXP BTC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. \*\*\*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 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.

d. Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.

#### SF Calculations based on the following "Worst Case" casing design:

Surface Casing: 800'  
Intermediate Casing: 10,815' TVD  
Production Casing: 22,356' MD/12,200' TVD (10,065' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.36	3.12	3.38	1.70
Intermediate	1.24	1.44	1.93	1.50
Production	1.11	1.37	2.02	1.37

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
<b>Burst Design</b>			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 16 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
<b>Collapse Design</b>			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
<b>Tension Design</b>			
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water	Additives
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk	
Tail	Class C	0'	800'	14.8	1.33	100	872	6.38	Extender Antifoam Retarder
<b>Intermediate</b>									
Stage 2 Lead	50:50 Poz Class C	0'	4360	11.9	2.43	200	1496	13.75	Antifoam Extender Salt Retarder Viscosifier
Stage 2 Tail	Class C	4360	4660	14.8	1.33	50	106	6.36	Antifoam Retarder Viscosifier
Stage 1 Lead	50:50 Poz Class C	4,660'	10,345'	11.9	2.43	50	1099	13.75	Antifoam Retarder Viscosifier
Stage 1 Tail	Class C	10,345'	10,845'	14.8	1.33	50	205	6.36	Antifoam Retarder Dispersent
<b>Production</b>									
Tail	Class H	10,075'	22,356'	15.6	1.2	35	3131	5.05	Antifoam Dispersent Fluid Loss Retarder Viscosifier

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing.

## 6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	800'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
800'	10,845'	Oil Based Mud	9.5-11.1	28 - 30	25 - 30
10,845'	22,356'	Oil Based Mud	9.5-14.1	70 - 75	25 - 30

A closed system will be 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 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.

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:

- Drill stem tests are not planned.
- The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 Man mudlog	Int Csg to TD	Drillout of Csg	TBD
LWD	MWD Gamma	Int and Prod Hole	While Drilling	TBD

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

## 8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- No abnormal pressures or temperatures are expected. Estimated BHP is: **7686** psi
- 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	<b>13.375 in</b>	Wall Thickness	<b>0.380 in</b>	API Drift Diameter	<b>12.459 in</b>
Nominal Weight	<b>54.50 lbs/ft</b>	Nominal ID	<b>12.615 in</b>	Alternative Drift Diameter	<b>n.a.</b>
Plain End Weight	<b>52.79 lbs/ft</b>	Nominal cross section	<b>15.513 in</b>		

#### PERFORMANCE

Steel Grade	<b>J55</b>	Minimum Yield	<b>55,000 psi</b>	Minimum Ultimate	<b>75,000 psi</b>
Tension Yield	<b>853,000 in</b>	Internal Pressure Yield	<b>2,730 psi</b>	Collapse Pressure	<b>1,130 psi</b>
Available Seamless	<b>Yes</b>	Available Welded	<b>Yes</b>		

### CONNECTION DATA

#### TYPE: STC

#### GEOMETRY

Coupling Reg OD	<b>14.375 in</b>	Threads per in	<b>8</b>	Thread turns make up	<b>3.5</b>
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#### PERFORMANCE

Steel Grade	<b>J55</b>	Coupling Min Yield	<b>55,000 psi</b>	Coupling Min Ultimate	<b>75,000 psi</b>
Joint Strength	<b>514,000 lbs</b>			Internal Pressure Resistance	<b>2,730 psi</b>

**TH DS-12.0880 12 Dec 13**  
**Rev 00**

Product Description

(LTC Units)

Product Description

<b>Nominal OD</b>	9.625 in.	<b>Nominal Weight</b>	43.50 lbs/ft	<b>Standard Drift Diameter</b>	8.599 in.
<b>Nominal ID</b>	8.755 in.	<b>Wall Thickness</b>	0.435 in.	<b>Special Drift Diameter</b>	8.625 in.
<b>Plain End Weight</b>	42.73 lbs/ft				
<b>Body Yield Strength</b>	1005 x 1000 lbs	<b>Internal Yield</b>	6330 psi	<b>Collapse</b>	4830 psi
<b>Coupling Regular OD</b>	10.625 in.	<b>Threads per Inch</b>	8	<b>Hand-Tight Standoff Thread Turns</b>	3.5
<b>Joint Strength</b>	813 x 1000 lbs.	<b>Internal Pressure Resistance</b>	6330 psi		

(1) Non API size/grade combination for LTC.

Performance calculated according to API Standards 5CT and 5B and API Technical Report 5C3.

Joint Strength as per API TR 5C3 1st Edition/ISO 10400:2007 - Section 9

Internal Pressure Resistance as per API TR 5C3 1st Edition/ISO 10400:2007 - Section 10

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



**SD 14 23 FED P19 15H, 16H, 17H, 18H, 19H, 20H**

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.

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.

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



All employees and visitors will be issued an H<sub>2</sub>S training certification card (or certificate) upon successful completion of the appropriate H<sub>2</sub>S training course. Personnel working in an H<sub>2</sub>S environment will carry a current H<sub>2</sub>S training certification card as proof of having received the proper training on their person at all times.

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.

- 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.
- 
- 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.
- 
- 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.

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



- a) Flare Line 150' from wellhead with igniter.
- b) Choke manifold with a remotely operated choke.
- c) Mud / gas separator

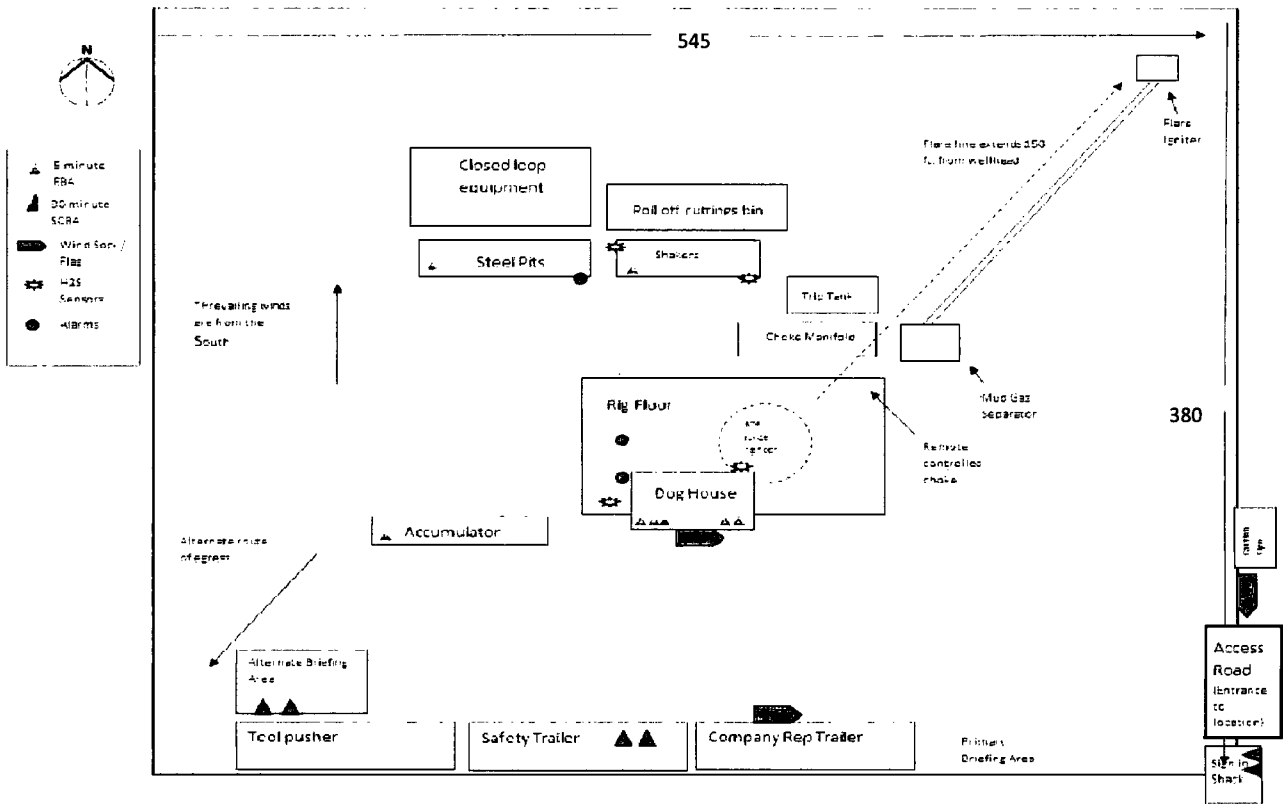
In the event of drilling, completions, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater the following shall be considered:

- 1. Use of a degasser
- 2. Use of a zinc based mud treatment
- 3. Increasing mud weight

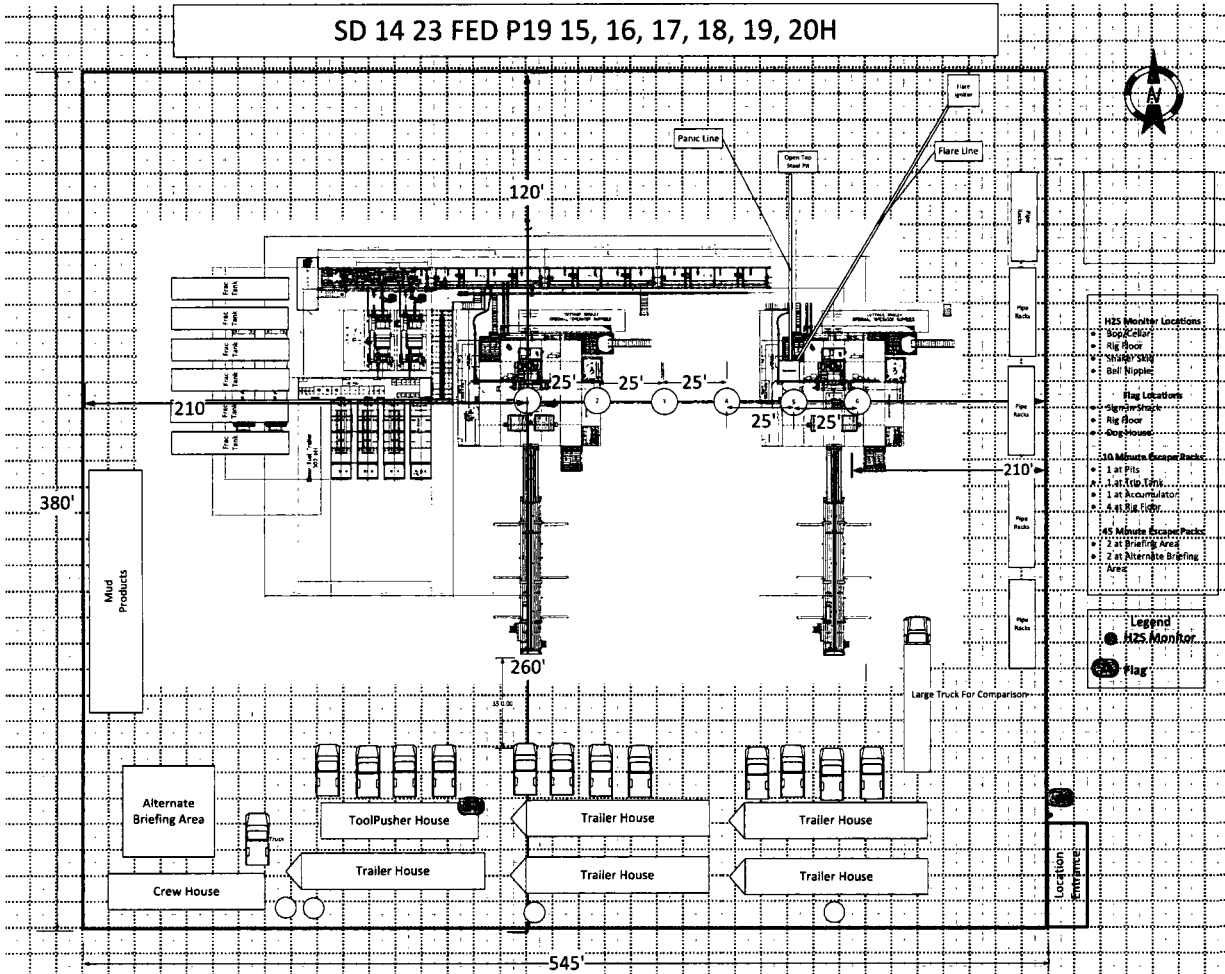
<u>Agency</u>	<u>Telephone Number</u>
Eddy County Sheriff's Department	575-887-7551
Carlsbad Fire Department	575-885-3125
Carlsbad Medical Center	575-887-4100
Eddy County Emergency Management	575-885-3581
Poison Control Center	800-222-1222



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



# SD 14 23 FED P19 15, 16, 17, 18, 19, 20H



# Chevron U.S.A. Inc.

Location: Lea County, NM  
Field: Bone Spring (Lea County, NM) NAD 27  
Facility: Salado Draw Pad 19

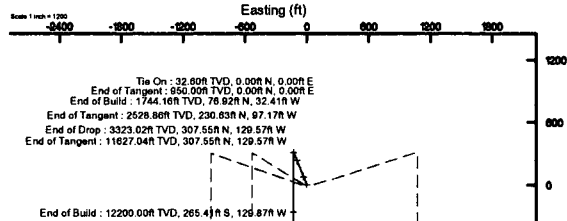
Slot: SD 14 23 FED P19 17H  
Well: SD 14 23 FED P19 17H  
Wellbore: SD 14 23 FED P19 17H

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	32.80	0.000	337.154	32.80	0.00	0.00	0.00	0.00
End of Tangent	950.00	0.000	337.154	950.00	0.00	0.00	0.00	0.00
End of Build	1750.00	12.000	337.154	1744.18	76.92	-32.41	1.50	-76.90
End of Tangent	2552.23	12.000	337.154	2528.86	230.63	-97.17	0.00	-230.58
End of Drop	3352.23	0.000	180.030	3323.02	307.55	-129.57	1.50	-307.48
End of Tangent	11656.24	0.000	180.030	11627.04	307.55	-129.57	0.00	-307.48
End of Build	12556.24	90.000	180.030	12200.00	-265.41	-129.87	10.00	265.47
End of Tangent	22356.24	90.000	180.030	12200.00	-10065.40	-135.01	0.00	10065.47

## Bottom Hole Location

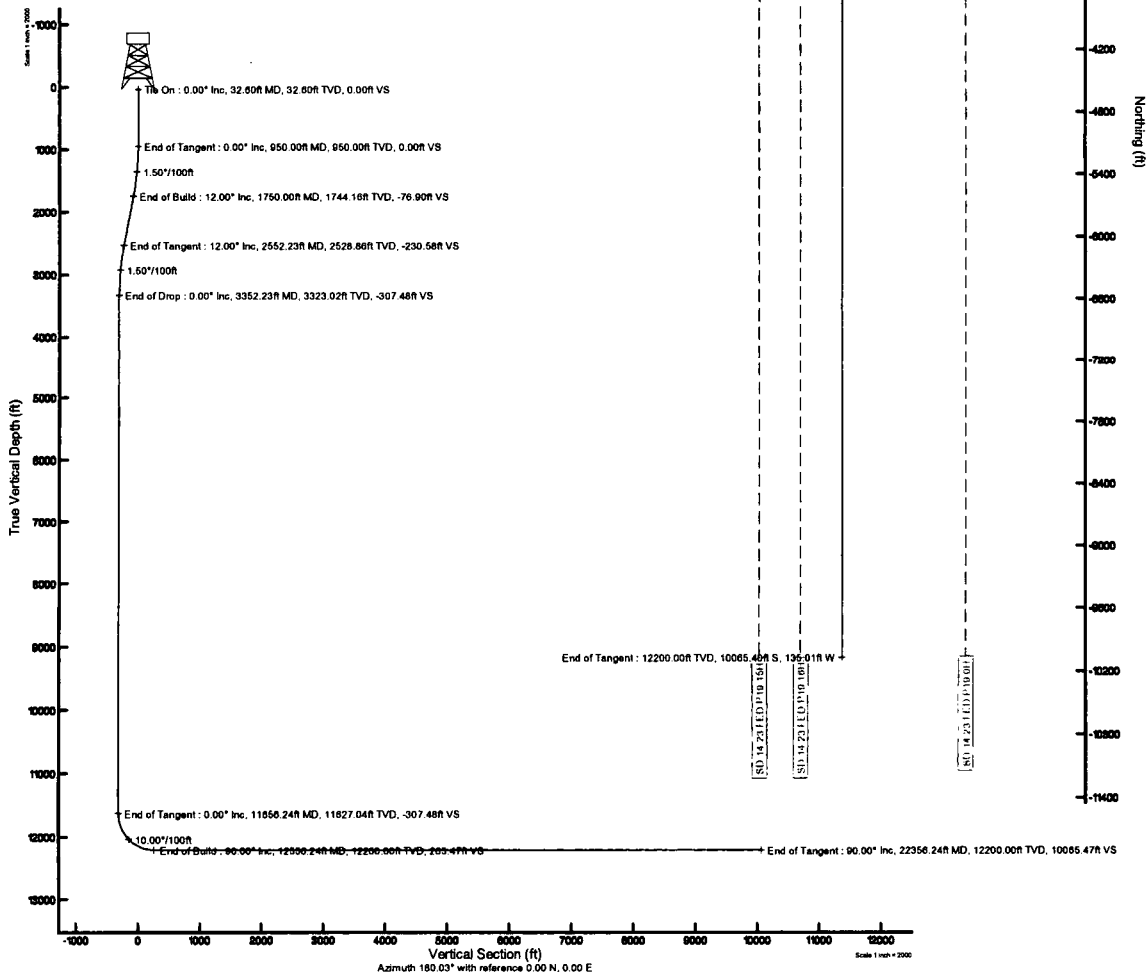
MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
22356.24	90.000	180.030	12200.00	-10065.40	-135.01	714303.00	372148.00	32°01'16.551"N	103°38'30.729"W



Plot reference wellbore is SD 14 23 FED P19 17H Profile 1	Grid System: NAD27 / The state plane SP, Eastern Zone (2011) US foot
True vertical depths are referenced to LVL (mean sea level)	Wells are transformed from a different geoid datum
Measured depths are referenced to LVL (mean sea level)	North Reference: Grid north
Latitudes are referenced to LVL (mean sea level)	Scale: True distance
Mean Sea Level is defined as 2.291 ft below the datum	Depth are in feet
Coordinates are in feet referenced to DAT	Created by system on 2018-09-01
	Drawn by: W.A. McDaniel

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Salado Draw Pad 19	714303.00	372148.00	32°01'16.551"N	103°38'30.729"W	
Well	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
SD 14 23 FED P19 17H	0.00	0.00	714303.00	372148.00	32°01'16.551"N
Latitudes are referenced to LVL (mean sea level)					
Mean Sea Level is defined as 2.291 ft below the datum					
Coordinates are in feet referenced to DAT					



PLANNED WELLPATH REPORT (CSV version)  
Prepared by Baker Hughes  
Software System: WellArchitect® 5.0

REFERENCE WELLPATH IDENTIFICATION

Operator Chevron U.S.A. Inc.  
Area Lea County, NM  
Field Bone Spring (Lea County, NM) NAD 27  
Facility Salado Draw Pad 19  
Slot SD 14 23 FED P19 17H  
Well SD 14 23 FED P19 17H  
Wellbore SD 14 23 FED P19 17H  
Wellpath SD 14 23 FED P19 17H Prelim 1  
Sidetrack (none)

REPORT SETUP INFORMATION

Projection System NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet  
North Reference Grid  
Scale 0.999962  
Convergence at slot 0.37° East  
Software System WellArchitect® 5.0  
User Tranlam  
Report Generated 5/1/2018 at 9:35:53 AM  
DataBase/Source file WA\_Midland/ev90.xml

WELLPATH LOCATION	Local North [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Location	0	50	714438	382213	32°02'56.145"N	103°38'28.412"W
Facility Reference Pt			714388	382213	32°02'56.148"N	103°38'28.993"W
Field Reference Pt			152400.3	0	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM

Calculation method	Minimum curvature
Horizontal Reference Point	Slot
Vertical Reference Point	Unknown rig (KB)
MD Reference Point	Unknown rig (KB)
Field Vertical Reference	Mean Sea Level
Unknown rig (KB) to Facility Vertical Datum	3250.60ft
Unknown rig (KB) to Mean Sea Level	3250.60ft
Unknown rig (KB) to Ground Level at Slot (SD 14 23 FED P19 17H)	32.60ft
Section Origin	N 0.00, E 0.00 ft
Section Azimuth	180.03°

WELLPATH DATA † = interpolated/extrapolated station

	MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate	Comments
	[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[°/100ft]	[°/100ft]	[°/100ft]	
†	0	0	337.154	0	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	32.6	0	337.154	32.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	Tie On
†	132.6	0	337.154	132.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	232.6	0	337.154	232.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	332.6	0	337.154	332.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	432.6	0	337.154	432.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	532.6	0	337.154	532.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	632.6	0	337.154	632.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	732.6	0	337.154	732.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	832.6	0	337.154	832.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	932.6	0	337.154	932.6	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	
†	950	0	337.154	950	0	0	0	714438	382213	32°02'56.145"N	103°38'28.412"W	0	0	0	End of Tangent
†	1032.6	1.239	337.154	1032.59	-0.82	0.82	-0.35	714437.7	382213.8	32°02'56.153"N	103°38'28.416"W	1.5	1.5	-27.66	
†	1132.6	2.739	337.154	1132.53	-4.02	4.02	-1.69	714436.3	382217	32°02'56.185"N	103°38'28.432"W	1.5	1.5	0	
†	1232.6	4.239	337.154	1232.34	-9.63	9.63	-4.06	714433.9	382222.6	32°02'56.240"N	103°38'28.459"W	1.5	1.5	0	
†	1332.6	5.739	337.154	1331.96	-17.64	17.64	-7.43	714430.6	382230.6	32°02'56.320"N	103°38'28.497"W	1.5	1.5	0	
†	1432.6	7.239	337.154	1431.32	-28.05	28.06	-11.82	714426.2	382241.1	32°02'56.423"N	103°38'28.547"W	1.5	1.5	0	
†	1532.6	8.739	337.154	1530.34	-40.86	40.87	-17.22	714420.8	382253.9	32°02'56.550"N	103°38'28.609"W	1.5	1.5	0	
†	1632.6	10.239	337.154	1628.97	-56.05	56.06	-23.62	714414.4	382269.1	32°02'56.701"N	103°38'28.682"W	1.5	1.5	0	
†	1732.6	11.739	337.154	1727.14	-73.61	73.62	-31.02	714407	382286.6	32°02'56.875"N	103°38'28.767"W	1.5	1.5	0	
†	1750	12	337.154	1744.16	-76.9	76.92	-32.41	714405.6	382289.9	32°02'56.908"N	103°38'28.783"W	1.5	1.5	0	End of Build
†	1832.6	12	337.154	1824.96	-92.73	92.75	-39.08	714398.9	382305.7	32°02'57.065"N	103°38'28.859"W	0	0	0	
†	1932.6	12	337.154	1922.77	-111.88	111.91	-47.15	714390.9	382324.9	32°02'57.255"N	103°38'28.952"W	0	0	0	
†	2032.6	12	337.154	2020.59	-131.04	131.07	-55.22	714382.8	382344.1	32°02'57.445"N	103°38'29.044"W	0	0	0	
†	2132.6	12	337.154	2118.4	-150.21	150.23	-63.29	714374.7	382363.2	32°02'57.635"N	103°38'29.136"W	0	0	0	
†	2232.6	12	337.154	2216.22	-169.35	169.39	-71.36	714366.6	382382.4	32°02'57.826"N	103°38'29.229"W	0	0	0	
†	2332.6	12	337.154	2314.03	-188.51	188.55	-79.44	714358.6	382401.5	32°02'58.016"N	103°38'29.321"W	0	0	0	
†	2432.6	12	337.154	2411.85	-207.66	207.71	-87.51	714350.5	382420.7	32°02'58.206"N	103°38'29.413"W	0	0	0	
†	2532.6	12	337.154	2509.66	-226.82	226.87	-95.58	714342.4	382439.9	32°02'58.396"N	103°38'29.506"W	0	0	0	
†	2552.23	12	337.154	2528.86	-230.58	230.63	-97.17	714340.8	382443.6	32°02'58.433"N	103°38'29.524"W	0	0	0	End of Tangent
†	2632.6	10.794	337.154	2607.65	-245.21	245.27	-103.33	714334.7	382458.3	32°02'58.578"N	103°38'29.594"W	1.5	-1.5	0	
†	2732.6	9.294	337.154	2706.11	-261.28	261.34	-110.1	714327.9	382474.3	32°02'58.738"N	103°38'29.672"W	1.5	-1.5	0	
†	2832.6	7.794	337.154	2805	-274.97	275.03	-115.87	714322.1	382488	32°02'58.874"N	103°38'29.738"W	1.5	-1.5	0	
†	2932.6	6.294	337.154	2904.24	-286.27	286.33	-120.63	714317.4	382499.3	32°02'58.986"N	103°38'29.792"W	1.5	-1.5	0	
†	3032.6	4.794	337.154	3003.77	-295.17	295.23	-124.39	714313.6	382508.2	32°02'59.074"N	103°38'29.835"W	1.5	-1.5	0	
†	3132.6	3.294	337.154	3103.52	-301.67	301.73	-127.12	714310.9	382514.7	32°02'59.139"N	103°38'29.867"W	1.5	-1.5	0	
†	3232.6	1.794	337.154	3203.42	-305.76	305.83	-128.85	714309.2	382518.8	32°02'59.179"N	103°38'29.886"W	1.5	-1.5	0	
†	3332.6	0.294	337.154	3303.4	-307.44	307.5	-129.55	714308.5	382520.5	32°02'59.196"N	103°38'29.894"W	1.5	-1.5	0	
†	3352.23	0	180.03	3323.02	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	1.5	-1.5	116.4	End of Drop
†	3432.6	0	180.03	3403.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	3532.6	0	180.03	3503.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	3632.6	0	180.03	3603.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	3732.6	0	180.03	3703.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	3832.6	0	180.03	3803.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	3932.6	0	180.03	3903.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4032.6	0	180.03	4003.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4132.6	0	180.03	4103.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4232.6	0	180.03	4203.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4332.6	0	180.03	4303.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4432.6	0	180.03	4403.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	
†	4532.6	0	180.03	4503.4	-307.48	307.55	-129.57	714308.4	382520.5	32°02'59.196"N	103°38'29.895"W	0	0	0	

[illegible]

T	14532.6	90	180.03	12200	2241.83	-2241.76	-130.91	714307.1	379871.3	32°02'33.90"N	103°38'30.100"W	0	0	0
†	14632.6	90	180.03	12200	2341.83	-2341.76	-130.96	714307.1	379871.3	32°02'32.980"N	103°38'30.108"W	0	0	0
†	14732.6	90	180.03	12200	2441.83	-2441.76	-131.01	714307.1	379771.3	32°02'31.991"N	103°38'30.116"W	0	0	0
†	14832.6	90	180.03	12200	2541.83	-2541.76	-131.07	714306.9	379671.3	32°02'31.001"N	103°38'30.124"W	0	0	0
†	14932.6	90	180.03	12200	2641.83	-2641.76	-131.12	714306.9	379571.3	32°02'30.011"N	103°38'30.132"W	0	0	0
†	15032.6	90	180.03	12200	2741.83	-2741.76	-131.17	714306.8	379471.4	32°02'29.021"N	103°38'30.140"W	0	0	0
†	15132.6	90	180.03	12200	2841.83	-2841.76	-131.22	714306.8	379371.4	32°02'28.031"N	103°38'30.148"W	0	0	0
†	15232.6	90	180.03	12200	2941.83	-2941.76	-131.28	714306.7	379271.4	32°02'27.041"N	103°38'30.156"W	0	0	0
†	15332.6	90	180.03	12200	3041.83	-3041.76	-131.33	714306.7	379171.4	32°02'26.051"N	103°38'30.164"W	0	0	0
†	15432.6	90	180.03	12200	3141.83	-3141.76	-131.38	714306.6	379071.4	32°02'25.061"N	103°38'30.172"W	0	0	0
†	15532.6	90	180.03	12200	3241.83	-3241.76	-131.43	714306.6	378971.4	32°02'24.071"N	103°38'30.180"W	0	0	0
†	15632.6	90	180.03	12200	3341.83	-3341.76	-131.48	714306.5	378871.4	32°02'23.081"N	103°38'30.188"W	0	0	0
†	15732.6	90	180.03	12200	3441.83	-3441.76	-131.54	714306.5	378771.4	32°02'22.091"N	103°38'30.196"W	0	0	0
†	15832.6	90	180.03	12200	3541.83	-3541.76	-131.59	714306.4	378671.4	32°02'21.101"N	103°38'30.205"W	0	0	0
†	15932.6	90	180.03	12200	3641.83	-3641.76	-131.64	714306.4	378571.4	32°02'20.111"N	103°38'30.213"W	0	0	0
†	16032.6	90	180.03	12200	3741.83	-3741.76	-131.69	714306.3	378471.4	32°02'19.121"N	103°38'30.221"W	0	0	0
†	16132.6	90	180.03	12200	3841.83	-3841.76	-131.75	714306.3	378371.4	32°02'18.131"N	103°38'30.229"W	0	0	0
†	16232.6	90	180.03	12200	3941.83	-3941.76	-131.81	714306.2	378271.4	32°02'17.141"N	103°38'30.237"W	0	0	0
†	16332.6	90	180.03	12200	4041.83	-4041.76	-131.85	714306.1	378171.4	32°02'16.151"N	103°38'30.245"W	0	0	0
†	16432.6	90	180.03	12200	4141.83	-4141.76	-131.91	714306.1	378071.4	32°02'15.161"N	103°38'30.253"W	0	0	0
†	16532.6	90	180.03	12200	4241.83	-4241.76	-131.96	714306.1	377971.4	32°02'14.171"N	103°38'30.261"W	0	0	0
†	16632.6	90	180.03	12200	4341.83	-4341.76	-132.01	714306.0	377871.4	32°02'13.181"N	103°38'30.269"W	0	0	0
†	16732.6	90	180.03	12200	4441.83	-4441.76	-132.06	714305.9	377771.4	32°02'12.191"N	103°38'30.277"W	0	0	0
†	16832.6	90	180.03	12200	4541.83	-4541.76	-132.11	714305.9	377671.4	32°02'11.201"N	103°38'30.285"W	0	0	0
†	16932.6	90	180.03	12200	4641.83	-4641.76	-132.17	714305.8	377571.4	32°02'10.211"N	103°38'30.293"W	0	0	0
†	17032.6	90	180.03	12200	4741.83	-4741.76	-132.21	714305.8	377471.4	32°02'09.221"N	103°38'30.301"W	0	0	0
†	17132.6	90	180.03	12200	4841.83	-4841.76	-132.27	714305.7	377371.4	32°02'08.241"N	103°38'30.309"W	0	0	0
†	17232.6	90	180.03	12200	4941.83	-4941.76	-132.31	714305.7	377271.4	32°02'07.251"N	103°38'30.317"W	0	0	0
†	17332.6	90	180.03	12200	5041.83	-5041.76	-132.38	714305.6	377171.4	32°02'06.261"N	103°38'30.325"W	0	0	0
†	17432.6	90	180.03	12200	5141.83	-5141.76	-132.43	714305.6	377071.5	32°02'05.271"N	103°38'30.333"W	0	0	0
†	17532.6	90	180.03	12200	5241.83	-5241.76	-132.48	714305.5	376971.5	32°02'04.281"N	103°38'30.341"W	0	0	0
†	17632.6	90	180.03	12200	5341.83	-5341.76	-132.53	714305.5	376871.5	32°02'03.291"N	103°38'30.349"W	0	0	0
†	17732.6	90	180.03	12200	5441.83	-5441.76	-132.58	714305.4	376771.5	32°02'02.301"N	103°38'30.357"W	0	0	0
†	17832.6	90	180.03	12200	5541.83	-5541.76	-132.64	714305.3	376671.5	32°02'01.311"N	103°38'30.365"W	0	0	0
†	17932.6	90	180.03	12200	5641.83	-5641.76	-132.69	714305.3	376571.5	32°02'00.321"N	103°38'30.374"W	0	0	0
†	18032.6	90	180.03	12200	5741.83	-5741.76	-132.75	714305.2	376471.5	32°01'59.331"N	103°38'30.382"W	0	0	0
†	18132.6	90	180.03	12200	5841.83	-5841.76	-132.79	714305.2	376371.5	32°01'58.341"N	103°38'30.390"W	0	0	0
†	18232.6	90	180.03	12200	5941.83	-5941.76	-132.85	714305.1	376271.5	32°01'57.351"N	103°38'30.398"W	0	0	0
†	18332.6	90	180.03	12200	6041.83	-6041.76	-132.91	714305.1	376171.5	32°01'56.361"N	103°38'30.406"W	0	0	0
†	18432.6	90	180.03	12200	6141.83	-6141.76	-132.95	714305.1	376071.5	32°01'55.371"N	103°38'30.414"W	0	0	0
†	18532.6	90	180.03	12200	6241.83	-6241.76	-133.01	714305.0	375971.5	32°01'54.381"N	103°38'30.422"W	0	0	0
†	18632.6	90	180.03	12200	6341.83	-6341.76	-133.06	714305.0	375871.5	32°01'53.391"N	103°38'30.430"W	0	0	0
†	18732.6	90	180.03	12200	6441.83	-6441.76	-133.11	714304.9	375771.5	32°01'52.401"N	103°38'30.438"W	0	0	0
†	18832.6	90	180.03	12200	6541.83	-6541.76	-133.16	714304.8	375671.5	32°01'51.411"N	103°38'30.446"W	0	0	0
†	18932.6	90	180.03	12200	6641.83	-6641.76	-133.21	714304.8	375571.5	32°01'50.421"N	103°38'30.454"W	0	0	0
†	19032.6	90	180.03	12200	6741.83	-6741.76	-133.27	714304.7	375471.5	32°01'49.431"N	103°38'30.462"W	0	0	0
†	19132.6	90	180.03	12200	6841.83	-6841.76	-133.32	714304.6	375371.5	32°01'48.441"N	103°38'30.470"W	0	0	0
†	19232.6	90	180.03	12200	6941.83	-6941.76	-133.37	714304.6	375271.5	32°01'47.451"N	103°38'30.478"W	0	0	0
†	19332.6	90	180.03	12200	7041.83	-7041.76	-133.42	714304.6	375171.5	32°01'46.471"N	103°38'30.486"W	0	0	0
†	19432.6	90	180.03	12200	7141.83	-7141.76	-133.47	714304.5	375071.5	32°01'45.481"N	103°38'30.494"W	0	0	0
†	19532.6	90	180.03	12200	7241.83	-7241.76	-133.53	714304.5	374971.5	32°01'44.491"N	103°38'30.502"W	0	0	0
†	19632.6	90	180.03	12200	7341.83	-7341.76	-133.58	714304.4	374871.5	32°01'43.501"N	103°38'30.510"W	0	0	0
†	19732.6	90	180.03	12200	7441.83	-7441.76	-133.63	714304.4	374771.5	32°01'42.511"N	103°38'30.518"W	0	0	0
†	19832.6	90	180.03	12200	7541.83	-7541.76	-133.68	714304.3	374671.5	32°01'41.521"N	103°38'30.526"W	0	0	0
†	19932.6	90	180.03	12200	7641.83	-7641.76	-133.74	714304.3	374571.5	32°01'40.531"N	103°38'30.534"W	0	0	0
†	20032.6	90	180.03	12200	7741.83	-7741.76	-133.79	714304.2	374471.6	32°01'39.541"N	103°38'30.542"W	0	0	0
†	20132.6	90	180.03	12200	7841.83	-7841.76	-133.84	714304.2	374371.6	32°01'38.551"N	103°38'30.550"W	0	0	0
†	20232.6	90	180.03	12200	7941.83	-7941.76	-133.89	714304.1	374271.6	32°01'37.561"N	103°38'30.559"W	0	0	0
†	20332.6	90	180.03	12200	8041.83	-8041.76	-133.95	714304.1	374171.6	32°01'36.571"N	103°38'30.567"W	0	0	0
†	20432.6	90	180.03	12200	8141.83	-8141.76	-134.01	714304.0	374071.6	32°01'35.581"N	103°38'30.575"W	0	0	0
†	20532.6	90	180.03	12200	8241.83	-8241.76	-134.05	714304.0	373971.6	32°01'34.591"N	103°38'30.583"W	0	0	0
†	20632.6	90	180.03	12200	8341.83	-8341.76	-134.11	714303.9	373871.6	32°01'33.601"N	103°38'30.591"W	0	0	0
†	20732.6	90	180.03	12200	8441.83	-8441.76	-134.16	714303.9	373771.6	32°01'32.611"N	103°38'30.599"W	0	0	0
†	20832.6	90	180.03	12200	8541.83	-8541.76	-134.21	714303.8	373671.6	32°01'31.621"N	103°38'30.607"W	0	0	0
†	20932.6	90	180.03	12200	8641.83	-8641.76	-134.26	714303.8	373571.6	32°01'30.631"N	103°38'30.615"W	0	0	0
†	21032.6	90	180.03	12200	8741.83	-8741.76	-134.31	714303.7	373471.6	32°01'29.641"N	103°38'30.623"W	0	0	0
†	21132.6	90	180.03	12200	8841.83	-8841.76	-134.36	714303.6	373371.6	32°01'28.651"N	103°38'30.631"W	0	0	0
†	21232.6	90	180.03	12200	8941.83	-8941.76	-134.42	714303.5	373271.6	32°01'27.670"N	103°38'30.639"W	0	0	0
†	21332.6	90	180.03	12200	9041.83	-9041.76	-134.47	714303.5	373171.6	32°01'26.680"N	103°38'30.647"W	0	0	0
†	21432.6	90	180.03	12200	9141.83	-9141.76	-134.52	714303.5	373071.6	32°01'25.691"N	103°38'30.655"W	0	0	0
†	21532.6	90	180.03	12200	9241.83	-9241.76	-134.57	714303.4	372971.6	32°01'24.701"N	103°38'30.663"W	0	0	0
†	21632.6	90	180.03	12200	9341.83	-9341.76	-134.63	714303.4	372871.6	32°01'23.711"N	103°38'30.671"W	0	0	0
†	21732.6	90	180.03	12200	9441.83	-9441.76	-134.68	714303.3	372771.6	32°01'22.721"N	103°38'30.679"W	0	0	0
†	21832.6	90	180.03	12200	9541.83	-9541.76	-134.73	714303.						

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

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

**1. SUMMARY OF REQUEST:**

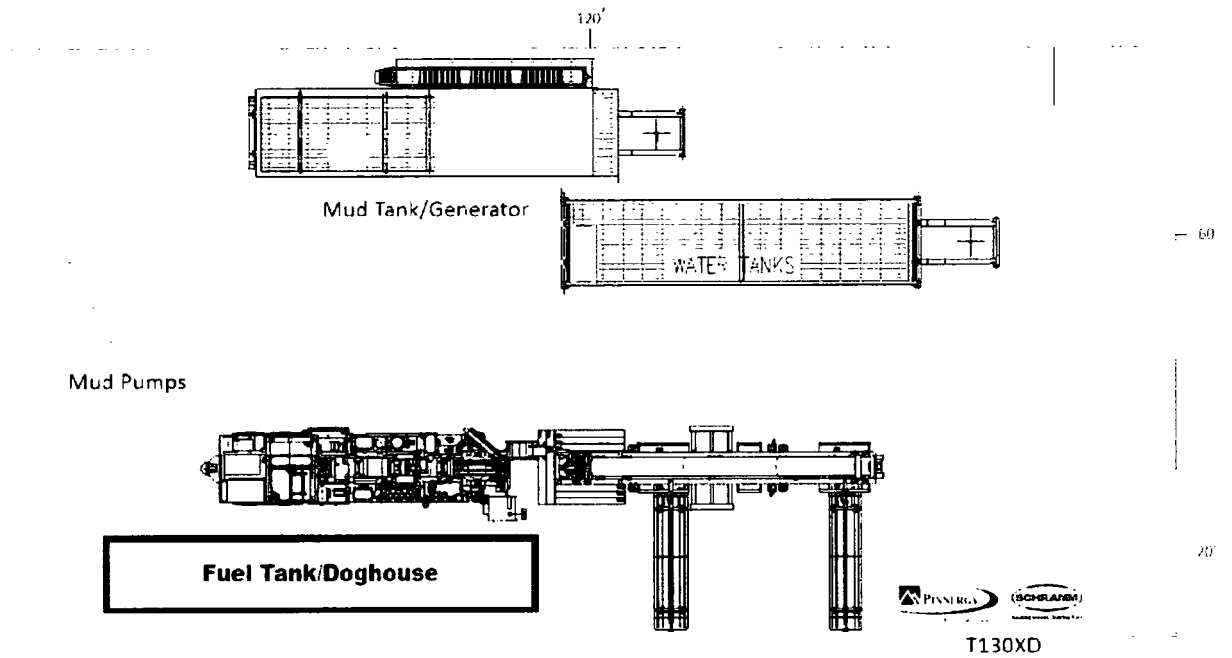
CUSA respectfully requests approval for the following operations for the surface hole in the drill plan:

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 nipped 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





**APD ID:** 10400031174

**Submission Date:** 06/14/2018

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Well Type:** OIL WELL

**Well Work Type:** Drill



[Show Final Text](#)

**Will existing roads be used?** YES

**Existing Road Map:**

SD\_14\_23\_Fed\_P19\_17H\_Road\_Plat\_20180614161211.pdf

**Existing Road Purpose:** ACCESS,FLUID TRANSPORT

**Row(s) Exist?** NO

**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:**

**Will new roads be needed?** YES

**New Road Map:**

SD\_14\_23\_Fed\_P19\_17H\_Cut\_Fill\_20180614161245.pdf

SD\_14\_23\_Fed\_P19\_17H\_New\_Roads\_Plat\_20180614161246.pdf

**New road type:** LOCAL

**Length:** 6913

Feet

**Width (ft.):** 64

**Max slope (%):** 2

**Max grade (%):** 3

**Army Corp of Engineers (ACOE) permit required?** NO

**ACOE Permit Number(s):**

**New road travel width:** 20

**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:** SD 14 23 FED P19

**Well Number:** 17H

**New road access plan or profile prepared?** NO

**New road access plan attachment:**

**Access road engineering design?** NO

**Access road engineering design attachment:**

**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:** Pipelines: 12 - 4" buried pipelines, approximately 7,694', will be laid from well running to lease road then adjacent to lease road to production facility in Section 23. -A ROW will not be required for these pipelines. -All construction activity will be confined to the approved ROW. -Pipeline will run parallel to the road and will stay within approved ROW. Pipelines: 2 - 4" buried gas lift pipelines, approximately 6,900', will be laid from well to the existing lease road and tie into the existing gas lift line running to Compressor facility in Section 23. -A ROW will not be required for these pipelines. -All construction activity will be confined to the approved ROW. -Pipeline will run parallel to existing disturbances and will stay within approved ROW. Power lines: A powerline, approximately measuring approximately 6,709' in length, will be installed from the existing powerline on the lease road and will be routed to the proposed well. -A ROW will not be required for this EDS line. -All construction activity will be confined to the approved ROW. -Power line will run parallel to the road and will stay within approved ROW.

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

**New road drainage crossing:** CULVERT,OTHER

**Drainage Control comments:** Sediment traps (hay bales suggested by BLM). We don't use every time but keep handy.

**Road Drainage Control Structures (DCS) description:** Ditching will be constructed on both sides of road.

**Road Drainage Control Structures (DCS) attachment:**

**Additional Attachment(s):**

**Existing Wells Map?** YES

**Attach Well map:**

SD\_14\_23\_Fed\_P19\_17H\_1\_Mile\_Radius\_20180614161352.pdf

**Existing Wells description:**

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Submit or defer a Proposed Production Facilities plan?** DEFER

**Estimated Production Facilities description:** Existing production facilities (CTB 23) are in the S2 of Sec. 23, T26S-R32E where oil and gas sales will take place. Gas purchaser pipeline is existing at the tank battery. 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. The tank battery will be connected to the existing water gathering system in the field for permanent water disposal.

**Water source use type:** INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

**Water source type:** OTHER

**Describe type:** Frac ponds

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** OTHER,PRIVATE CONTRACT

**Source land ownership:** FEDERAL

**Water source transport method:** PIPELINE,TRUCKING

**Source transportation land ownership:** FEDERAL

**Water source volume (barrels):** 16666.666

**Source volume (acre-feet):** 2.1482182

**Source volume (gal):** 700000

**Water source and transportation map:**

SD\_14\_23\_Fed\_P19\_17H\_Aerial\_Detail\_20180614161430.pdf

SD\_14\_23\_Fed\_P19\_17H\_Temp\_Water\_Line\_Plat\_20180614161431.pdf

**Water source comments:** Existing frac ponds in Section 23, T26S-R32E will be utilized for fresh water and Section 13 T26S-R32E for recycled water. Fresh water will also be obtained from a private water source. A temporary 10" expanding water transfer line will run south along the proposed lease road then west along existing lease road a total of approx. 10,322' from the well location to the existing frac pond in Sec 23. Fresh water line will run parallel to the existing lease road, then north within an existing pipeline right of way. A BLM ROW will not be required for the water transfer line.

**New water well?** NO

**Well latitude:**

**Well Longitude:**

**Well datum:**

**Well target aquifer:**

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

**Est thickness of aquifer:**

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**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:**

**Construction Materials description:** Caliche will be used to construct well pad and roads. Material will be purchased from the private land owners (Oliver Kiehne) or the caliche pit located in Sec 27, T26, R33E, Lea County, NM. The proposed sources 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:**

**Waste type:** GARBAGE

**Waste content 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. 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.

**Amount of waste:** 200 pounds

**Waste disposal frequency :** Daily

**Safe containment description:** 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 containmant attachment:**

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

**Disposal type description:**

**Disposal location description:** STATE APPROVED FACILITY

**Reserve Pit being used?** NO

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Temporary disposal of produced water into reserve pit?**

**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 being used? NO**

**Are you storing cuttings on location? YES**

**Description of cuttings location** 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.

**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**

**Are you requesting any Ancillary Facilities?: NO**

**Ancillary Facilities attachment:**

**Comments:**

**Well Site Layout Diagram:**

**SD\_14\_23\_Fed\_P19\_17H\_Well\_Plat\_20180614161758.pdf**

**Comments:** Exterior well pad dimensions are 380' x 545'. Interior well pad dimensions from point of entry (well head) of the westernmost well are N-120', S-260', W-210', E-335'. The length to the east includes 25' spacing for next well on multi-well pad (six wells). Total disturbance area needed for construction of well pad will be 4.75 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.

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:** SD 14 23 FED P19

**Multiple Well Pad Number:** 15H,16H,17H,18H,19H,20H

**Recontouring attachment:**

SD\_14\_23\_Fed\_P19\_17H\_APD\_SUPO\_20180614161855.pdf

SD\_14\_23\_Fed\_P19\_17H\_EDS\_Line\_20180614161926.pdf

SD\_14\_23\_Fed\_P19\_17H\_Flowlines\_20180614161928.pdf

SD\_14\_23\_Fed\_P19\_17H\_Gas\_Lift\_Line\_Plat\_20180614161929.pdf

SD\_14\_23\_Fed\_P19\_17H\_Pad\_IR\_Plat\_20180614161930.pdf

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

**Drainage/Erosion control reclamation:** Well pad, road, and surrounding area will be cleared of material, trash, and equipment. 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 landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. 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.

**Well pad proposed disturbance (acres):** 2.73

**Road proposed disturbance (acres):** 3.97

**Powerline proposed disturbance (acres):** 2.31

**Pipeline proposed disturbance (acres):** 0

**Other proposed disturbance (acres):** 22.6

**Total proposed disturbance:** 31.61

**Well pad interim reclamation (acres):** 2.02

**Road interim reclamation (acres):** 3.97

**Powerline interim reclamation (acres):** 2.31

**Pipeline interim reclamation (acres):** 0

**Other interim reclamation (acres):** 22.6

**Total interim reclamation:** 30.9

**Well pad long term disturbance (acres):** 2.73

**Road long term disturbance (acres):** 3.17

**Powerline long term disturbance (acres):** 2.31

**Pipeline long term disturbance (acres):** 0

**Other long term disturbance (acres):** 6.7

**Total long term disturbance:** 14.91

**Disturbance Comments:**

**Reconstruction method:** All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. Reduce the pad size to approximately 2.01 acres from the proposed size of 2.74 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 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:** 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.

**Soil treatment:** Seed the area, the proper BLM mixture free of noxious weeds will be used.

**Existing Vegetation at the well pad:** Mesquite, shrubs, grass

**Existing Vegetation at the well pad attachment:**

**Existing Vegetation Community at the road:** Mesquite, shrubs, grass

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

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

**Existing Vegetation Community at the pipeline:** Mesquite, shrubs, grass

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

**Existing Vegetation Community at other disturbances:** Mesquite, shrubs, grass

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

**Non native seed used?** NO

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** NO

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** NO

**Seed harvest description:**

**Seed harvest description attachment:**

**Seed type:**

**Seed source:**

**Seed name:**

**Source name:**

**Source address:**

**Source phone:**

**Seed cultivar:**

**Seed use location:**

**PLS pounds per acre:**

**Proposed seeding season:**

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

**First Name:** Mark

**Last Name:** Woodard

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Phone:** (432)687-7999

**Email:** MarkWoodard@chevron.com

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species?** NO

**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 re-established.

**Monitoring plan attachment:**

**Success standards:** As per BLM requirements

**Pit closure description:** None

**Pit closure attachment:**

**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:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**



**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**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:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Operator Name:** CHEVRON USA INCORPORATED

**Well Name:** SD 14 23 FED P19

**Well Number:** 17H

**Disturbance type:** OTHER

**Describe:** Flowline, gas line, EDS Line, power lines

**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:**

**Right of Way needed?** YES

**Use APD as ROW?** YES

**ROW Type(s):** 281001 ROW - ROADS,288101 ROW – O&G Facility Sites,289001 ROW- O&G Well Pad,Other

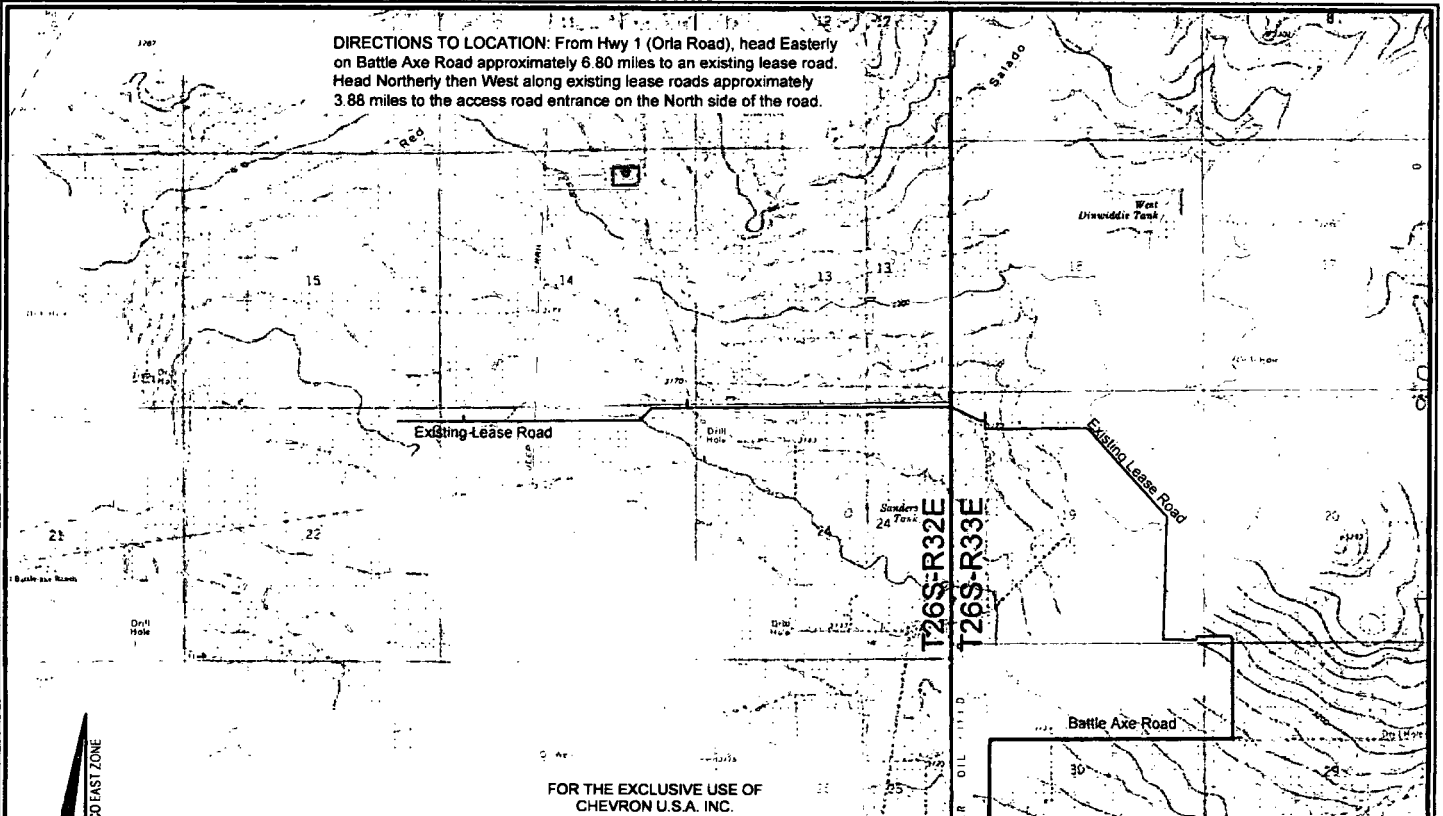
**SUPO Additional Information:** ROW will not be required for buried pipelines or EDS line. Compressor facility pipelines will run parallel to existing disturbances and will stay within approved ROW. Power line will run parallel to the road and will stay within approved ROW.

**Use a previously conducted onsite?** YES

**Previous Onsite information:** On-site performed by BLM NRS: Paul Murphy 9/29/2017.

SD\_14\_23\_Fed\_P19\_17H\_APD\_SUPO\_20180614162533.pdf

**DIRECTIONS TO LOCATION:** From Hwy 1 (Orla Road), head Easterly on Battle Axe Road approximately 6.80 miles to an existing lease road. Head Northerly then West along existing lease roads approximately 3.88 miles to the access road entrance on the North side of the road.



**LEGEND**

- Proposed Well
- Proposed Access Road
- Proposed Drillsite
- Existing Road
- Section Line

Scale: 1" = 3,000'

3,000' 0 1,500' 3,000'

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

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

**ROAD PLAT**

**CHEVRON U.S.A. INC.**  
SD 14 23 FED P19 NO. 17H WELL  
LOCATED 455' FNL & 1455' FEL  
SECTION 14, T26S-R32E  
LEA COUNTY, NEW MEXICO

**REVISIONS**

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR:	VHV			
DATE:	01/19/2018			

FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H\_Road Plat.dwg

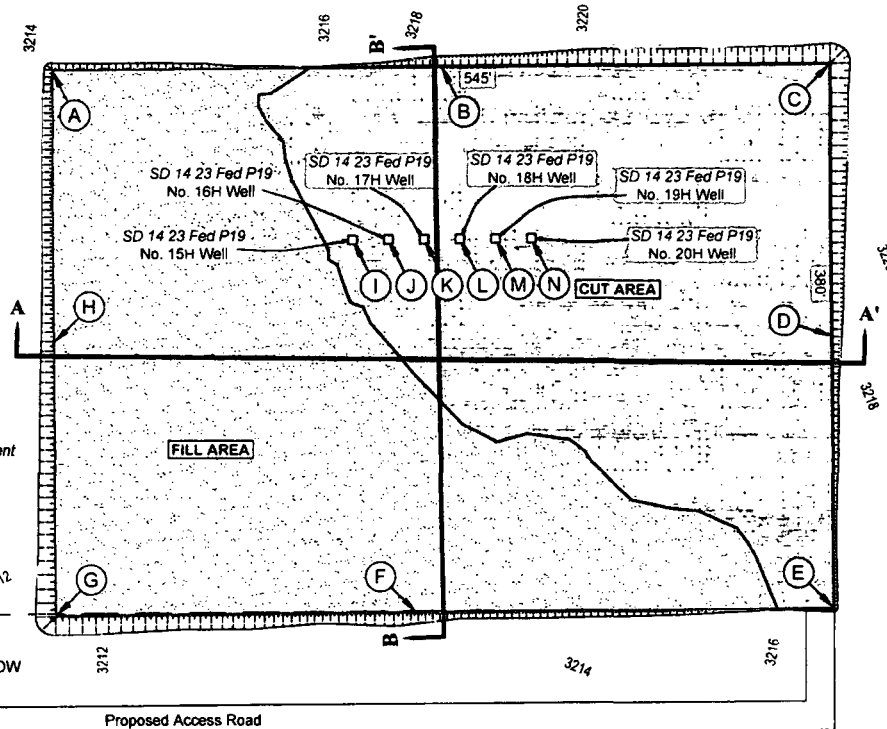


C. H. Fenstermaker & Associates, L.L.C.  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax 337-232-3299  
www.fenstermaker.com

# PAD DESIGN TABLE

PT	NATURAL GROUND ELEV.	DESIGN ELEV.	CUT / FILL
A	3214.46	3216.12	1.66
B	3218.47	3216.12	-2.35
C	3220.89	3216.12	-4.77
D	3218.26	3216.12	-2.14
E	3216.86	3216.12	-0.74
F	3213.60	3216.12	2.52
G	3212.08	3216.12	4.04
H	3213.18	3216.12	2.94
I	3217.25	3216.12	-1.13
J	3216.93	3216.12	-0.81
K	3217.30	3216.12	-1.18
L	3218.18	3216.12	-2.06
M	3217.89	3216.12	-1.77
N	3217.91	3216.12	-1.79

R 32 E



Existing Fence

T  
26  
S

Sec. 14  
Bureau of Land Management

Proposed 64' ROW

Proposed Access Road

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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.

CUT VOLUME = 6,371.74 Cu Yd  
FILL VOLUME = 6,371.74 Cu Yd  
NET VOLUME = 0.00 Cu Yd

Scale: 1" = 100'

100' 0 50' 100'



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## CUT AND FILL PLAT

PAGE 1 OF 3

CHEVRON U.S.A. INC.

PROPOSED PAD

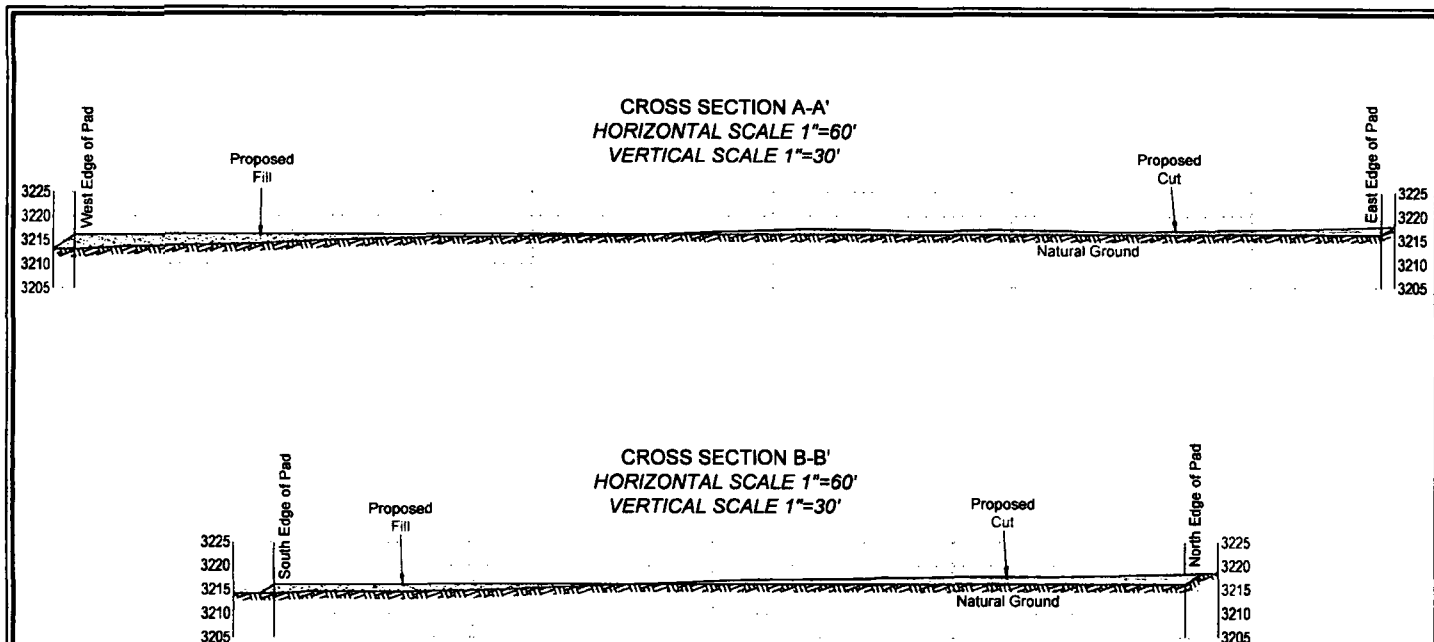
SD 14 23 FED P19 NOS. 15H-20H WELLS

SECTION 14, T26S-R32E

LEA COUNTY, NEW MEXICO

### REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:	VHV			
DATE:	01/18/2018			
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Cut Fill.dwg				



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Surveyor, do hereby state this plat is true  
and correct to the best of my knowledge.

2-8-2018



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# CUT AND FILL PLAT

PAGE 2 OF 3

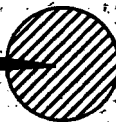
## CHEVRON U.S.A. INC.

PROPOSED PAD  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTION 14, T26S-R32E  
LEA COUNTY, NEW MEXICO

### REVISIONS

DRAWN BY:	BOR	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:	VHV				
DATE:	01/18/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Cut Fill.dwg					

AREA OF  
WORK



**NOTE:**

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 the contractor to contact the center for assistance in locating and marking underground utilities. For guidance: New Mexico One Call [www.nmonecall.org](http://www.nmonecall.org).

2 The design pad elevation recommendation is based solely on a cut and fill (1:1 ratio) balance of the pad and does not include material required for the access roads. A detailed soil test and slope stability 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.

**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.

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Surveyor, do hereby state this plat is true  
and correct to the best of my knowledge

**CUT AND FILL PLAT**

PAGE 3 OF 3

**CHEVRON U.S.A. INC.**

**PROPOSED PAD**

**SD 14 23 FED P19 NOS. 15H-20H WELLS**

**SECTION 14, T26S-R32E**

**LEA COUNTY, NEW MEXICO**

**REVISIONS**

DRAWN BY: BOR	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR: VHV				
DATE: 01/18/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Cut Fill.dwg				



MD 27 NEW MEXICO EAST ZONE

Scale: 1" = 10,000'

10,000' 0 5,000' 10,000'



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Registration No. 23006

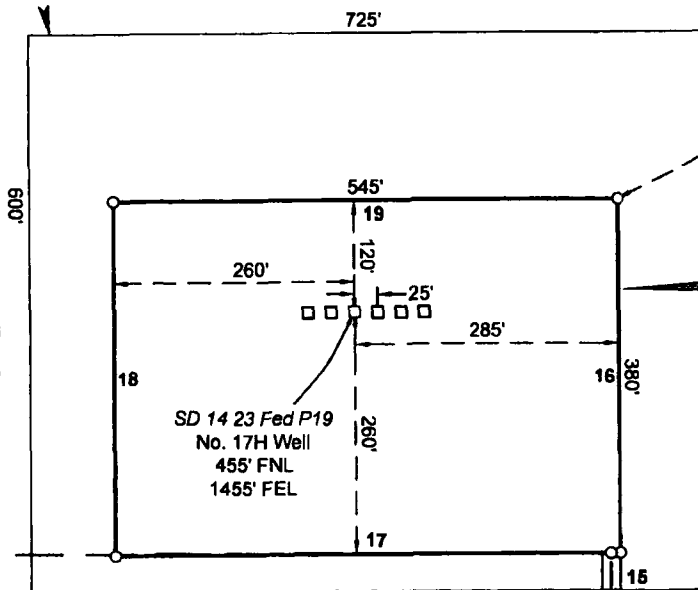
2-8-2018

# R 32 E

**Sec. 11**  
Bureau of Land Management

**PROPOSED  
ARCHAEOLOGICAL  
AREA  
±5.24 ACRES**

**PROPOSED 64'  
ROW CONTAINING  
6 FLOWLINES,  
GAS LIFT LINE, 15'  
EDS LINE &  
TEMPORARY  
WATER LINE  
±6,854.25'  
±415.41 Rods**



**PROPOSED PAD  
±4.75 ACRES**

**Sec. 14**  
Bureau of Land Management

**T  
26  
S**

**CENTERLINE PROPOSED  
ACCESS ROAD  
20' x ±6,912.54'  
±418.94 Rods  
±3.17 Acres**

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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.

NAD 27 NEW MEXICO EAST ZONE

SD 14 23 FED P19 NO. 17H WELL		
X=	714,438	NAD 27
Y=	382,213	
LAT.	32.048930	
LONG.	103.641226	
X=	755,625	NAD83
Y=	382,271	
LAT.	32.049055	
LONG.	103.641696	
ELEVATION +3217' NAVD 88		

## LEGEND

---	Existing ROW
-X-	Existing Fence
- - -	Section Line
---	Proposed Pad
---	CL Proposed Access
---	Proposed ROW
●	Fnd Monument

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

## WELL PLAT

Scale: 1" = 200'

200' 0 100' 200'

**CHEVRON U.S.A. INC.**  
**PROPOSED PAD & ACCESS ROAD**  
**SD 14 23 FED P19 NO. 17H WELL**  
**SECTIONS 14 & 23, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



C H Fenstermaker & Associates, L.L.C.  
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## REVISIONS

DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/19/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				

# LEGEND

- Proposed Pad
- Existing Pipeline
- Section Line
- Proposed ROW
- CL Proposed Road
- Existing Ditch
- Existing Road/Pad
- Existing ROW
- Existing Fence
- Fnd. Monument

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I, Robert L. Lastrapes, Professional  
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and correct to the best of my knowledge.

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

## Sec. 15

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe w/ Cap @  
the NW Corner of Section 23

## Sec. 22

Bureau of Land Management

R 32 E

## Sec. 11

Bureau of Land Management

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

PROPOSED 64' ROW  
CONTAINING 6 FLOWLINES,  
GAS LIFT LINE, 15' EDS LINE  
& TEMPORARY WATER LINE  
±6,854.25'  
±415.41 Rods

## Sec. 14

Bureau of Land Management

CENTERLINE  
PROPOSED  
ACCESS ROAD  
20' x ±6,912.54'  
±418.94 Rods  
±3.17 Acres

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

Existing  
CBT 23

S 81° 42' 09" E 1,988.56'

Existing Lease Road

## Sec. 23

Bureau of Land Management

T  
26  
S

## WELL PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 2 of 3

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD 14 23 FED P19 NO. 17H WELL  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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

## REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:				
DATE:				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				



CENTERLINE PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
1	N 04° 23' 43" E	200.38'
2	N 02° 16' 06" E	202.77'
3	N 02° 12' 12" E	323.63'
4	N 01° 44' 36" E	470.28'
5	N 02° 21' 04" E	299.31'
6	N 02° 08' 00" E	483.86'
7	N 01° 24' 42" E	333.54'
8	N 00° 29' 22" E	287.50'
9	N 02° 43' 01" E	450.30'
10	N 02° 10' 55" E	475.05'
11	N 02° 14' 55" E	543.91'
12	N 02° 44' 25" E	411.97'
13	N 01° 01' 03" E	380.57'
14	N 89° 37' 01" E	1975.44'
15	N 00° 17' 31" W	74.02'

PROPOSED PAD		
COURSE	BEARING	DISTANCE
16	S 00° 34' 15" E	380.00'
17	S 89° 25' 45" W	545.00'
18	N 00° 34' 15" W	380.00'
19	N 89° 25' 45" E	545.00'

NW ARCH. AREA CORNER		NE ARCH. AREA CORNER	
X=	714,085 NAD 27	X=	714,810 NAD 27
Y=	382,510	Y=	382,517
LAT.	32.049751	LAT.	32.049757
LONG.	103.642358	LONG.	103.640018
X=	755,272 NAD83	X=	755,997 NAD83
Y=	382,567	Y=	382,574
LAT.	32.049876	LAT.	32.049882
LONG.	103.642828	LONG.	103.640488
ELEVATION +3213' NAVD 88		ELEVATION +3224' NAVD 88	
SW ARCH. AREA CORNER		SE ARCH. AREA CORNER	
X=	714,091 NAD 27	X=	714,816 NAD 27
Y=	381,910	Y=	381,917
LAT.	32.048102	LAT.	32.048108
LONG.	103.642353	LONG.	103.640013
X=	755,278 NAD83	X=	756,003 NAD83
Y=	381,967	Y=	381,974
LAT.	32.048227	LAT.	32.048233
LONG.	103.642823	LONG.	103.640483
ELEVATION +3211' NAVD 88		ELEVATION +3217' NAVD 88	

NW PAD CORNER		NE PAD CORNER	
X=	714,177 NAD 27	X=	714,722 NAD 27
Y=	382,331	Y=	382,336
LAT.	32.049257	LAT.	32.049263
LONG.	103.642066	LONG.	103.640307
X=	755,364 NAD83	X=	755,909 NAD83
Y=	382,388	Y=	382,393
LAT.	32.049382	LAT.	32.049388
LONG.	103.642536	LONG.	103.640777
ELEVATION +3214' NAVD 88		ELEVATION +3221' NAVD 88	
SW PAD CORNER		SE PAD CORNER	
X=	714,181 NAD 27	X=	714,725 NAD 27
Y=	381,951	Y=	381,956
LAT.	32.048213	LAT.	32.048218
LONG.	103.642062	LONG.	103.640303
X=	755,368 NAD83	X=	755,913 NAD83
Y=	382,008	Y=	382,013
LAT.	32.048338	LAT.	32.048343
LONG.	103.642532	LONG.	103.640773
ELEVATION +3212' NAVD 88		ELEVATION +3217' NAVD 88	

#### 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.

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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.

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

#### WELL PLAT

Page 3 of 3

**CHEVRON U.S.A. INC.**  
**PROPOSED PAD & ACCESS ROAD**  
**SD 14 23 FED P19 NO. 17H WELL**  
**SECTIONS 14 & 23, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



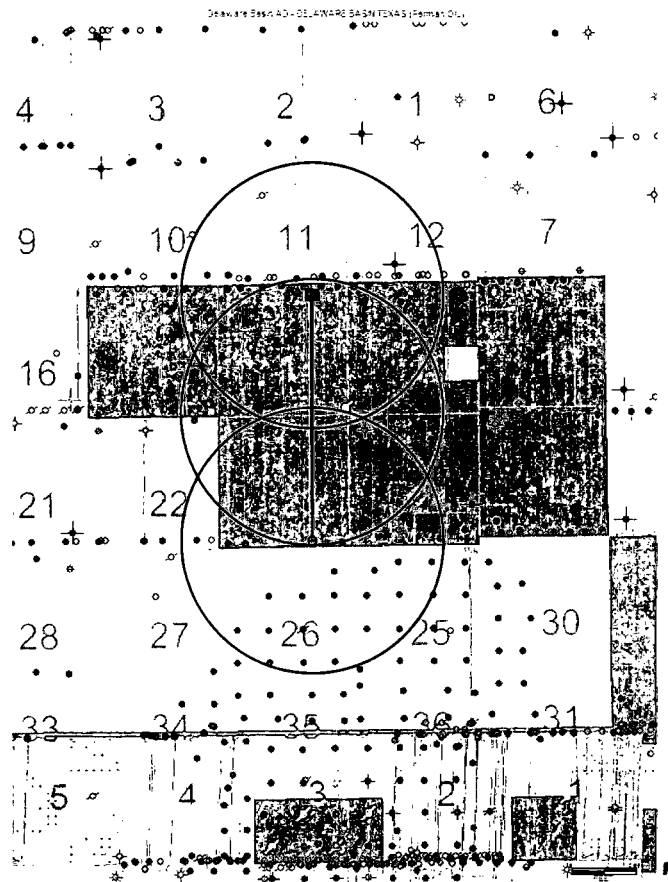
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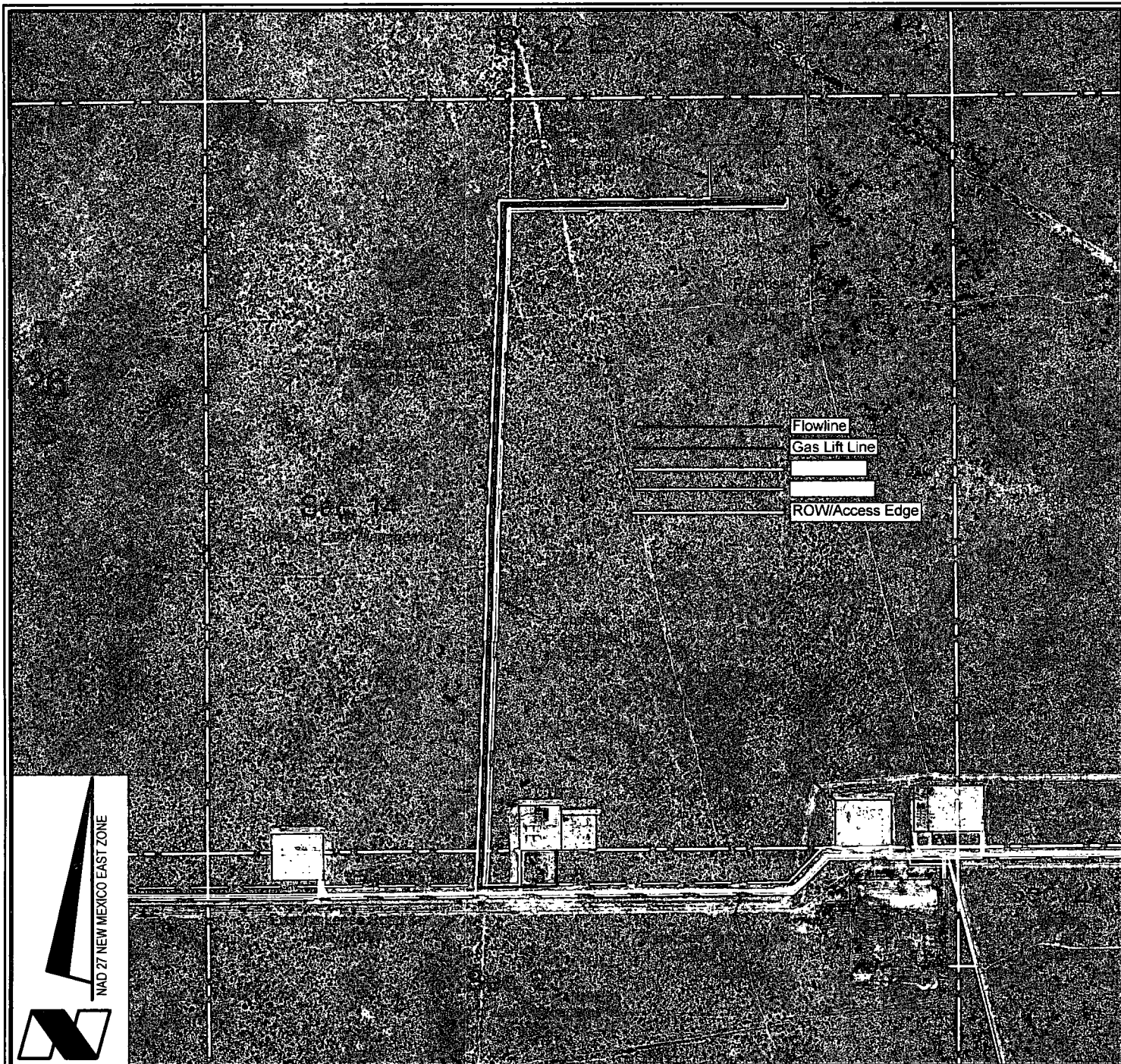
REVISIONS			
DRAWN BY:	#	BY:	DATE:
PROJ. MGR.:	VHV		
DATE:	01/19/2018		
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg			

30025082550000 CUFFORD 1 HOMESTEAD OIL & GAS  
30025082560000 BEN-FEDERAL 1 BROWN TONARIUS WALTER  
30025082680000 FED-LITTLEFIELD DR 1 CONTINENTAL OIL COMPANY  
30025082770000 GULF-FEDERAL 2 HILL & MEERER  
30025082730000 WILDER-FEDERAL 25 1 CONTINENTAL OIL COMPANY  
30025082740000 WILDER-FEDERAL 2 CONTINENTAL OIL COMPANY  
30025082750000 WILDER-FEDERAL 3 CONTINENTAL OIL COMPANY  
30025082760000 WILDER-FEDERAL 4 CONTINENTAL OIL COMPANY  
30025082770000 WILDER-FEDERAL 6 CONTINENTAL OIL COMPANY  
30025082780000 WILDER-FEDERAL 7 CONTINENTAL OIL COMPANY  
30025082790000 WILDER-FEDERAL 8 CONTINENTAL OIL COMPANY  
30025082800000 WILDER-FEDERAL 9X CONTINENTAL OIL COMPANY  
30025082820000 WILDER-FEDERAL 11 CONTINENTAL OIL COMPANY  
30025082850000 WILDER-FEDERAL 14 CONTINENTAL OIL COMPANY  
30025082860000 WILDER-FEDERAL 15 CONTINENTAL OIL COMPANY  
30025082870000 WILDER-FEDERAL 23 CONTINENTAL OIL COMPANY  
30025082880000 WILDER-FEDERAL 5 CONTINENTAL OIL COMPANY  
30025082890000 WILDER-FEDERAL 16 CONTINENTAL OIL COMPANY  
30025082900000 WILDER-FEDERAL 17 CONTINENTAL OIL COMPANY  
30025082910000 WILDER 18 CONTINENTAL OIL COMPANY  
30025082920000 WILDER-FEDERAL 19 CONTINENTAL OIL COMPANY  
30025082930000 WILDER-FEDERAL 20 CONTINENTAL OIL COMPANY  
30025082930001 EL MAR NORTH UNIT 26 SAHARA OPERATING COMPANY  
30025082940000 WILDER-FEDERAL 21 CONTINENTAL OIL COMPANY  
30025082950000 WILDER-FEDERAL 22 CONTINENTAL OIL COMPANY  
30025082960000 WILDER-FEDERAL 24 CONTINENTAL OIL COMPANY  
30025082970000 WILDER-FEDERAL 25 CONTINENTAL OIL COMPANY  
30025082980000 WILDER-FEDERAL 26 CONTINENTAL OIL COMPANY  
30025082990000 WILDER-FEDERAL 27 CONTINENTAL OIL COMPANY  
30025083000000 ELLIOTT-FEDERAL 3 TEXACO INCORPORATED  
30025204480000 LITTLEFIELD-FRAN DR 2 GULF OIL CORPORATION  
30025401920000 BATTLE AXE FEDERAL 1H CONOCOPHILLIPS COMPANY  
30025404230000 BUFFLEHEAD '10' FEDERAL 1H CDG OPERATING LIMITED LIABILITY CORP  
30025404230100 BUFFLEHEAD '10' FEDERAL 1H CDG OPERATING LIMITED LIABILITY CORP  
30025405840000 BUFFLEHEAD 10 FEDERAL 2H CDG PRODUCTION LLC  
30025406080000 RED HILLS WEST '22' AP FEDERAL COM 1H MEWBOURNE OIL COMPANY  
30025412890100 MESA 8105 JV-P 2H BTA OIL PRODUCERS LLC  
30025413250000 BUFFLEHEAD 10 FEDERAL SWD 001 CDG OPERATING LIMITED LIABILITY CORP  
30025423540000 SALADO DRAW SWD 13 001 CHEVRON U.S.A INCORPORATED  
30025425570000 WAR HAMMER 25 FEDERAL COM 12H CONOCOPHILLIPS COMPANY  
30025425580000 WAR HAMMER 25 FEDERAL COM W1 13H CONOCOPHILLIPS COMPANY  
30025425590000 WAR HAMMER 25 FEDERAL COM W3 009H CONOCOPHILLIPS COMPANY  
30025425600000 ZIA HILLS 25E FEDERAL COM 401H CONOCOPHILLIPS COMPANY  
30025425610000 WAR HAMMER 25 FEDERAL COM W2 10H CONOCOPHILLIPS COMPANY

30025428000000 SD WE 14 FEDERAL P5  
30025428010000 SD WE 14 FEDERAL P5  
30025428020000 SD WE 23 FEDERAL P5  
30025428030000 SD WE 23 FEDERAL P5  
30025428410000 MESA 8105 JV-P  
30025428420000 MESA 8105 JV-P  
30025428430000 MESA 8105 JV-P  
30025428440000 MESA 8105 JV-P  
30025428450000 MESA 8105 JV-P  
30025428460000 MESA 8105 JV-P  
30025428470000 MESA 8105 JV-P  
30025428480000 MESA 8105 JV-P  
30025428550000 MESA 8105 JV-P  
30025428560000 MESA 8105 JV-P  
30025428570000 MESA 8105 JV-P  
30025428590000 BATTLE AXE 27 FEDERAL COM  
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30025430790000 MESA 8105 JV-P  
30025430860000 SD WE 14 FEDERAL P7  
30025430870000 SD WE 14 FEDERAL P7  
30025430880000 SD WE 23 FEDERAL P7  
30025430890000 SD WE 23 FEDERAL P7  
30025430960000 SD WE 24 FED P23  
30025431970000 SD WE 24 FED P23  
30025432980000 SD WE 24 FED P23  
30025433180000 SD WE 24 FEDERAL P23  
30025433630000 ZIA HILLS 25E FEDERAL COM  
30025433640000 ZIA HILLS 25E FEDERAL COM  
30025433770000 ZIA HILLS 25E FEDERAL COM  
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30025434610000 SD WE 23 FED P25  
30025434620000 SD WE 23 FED P25  
30025434630000 SD WE 23 FEDERAL P25  
30025434640000 SD WE 15 FEDERAL P9  
300254346420000 SD WE 15 FEDERAL P9  
300254346480000 SD WE 15 FED P9  
30025436740000 SD WE 24 FEDERAL P24  
30025436770000 RED HILLS WEST 22 AZAP FEDERAL COM  
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30025437250000 MESA 8105 JV-P  
30025437260000 MESA 8105 JV-P

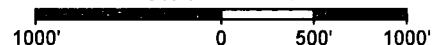
1H CHEVRON U.S.A INCORPORATED  
2H CHEVRON U.S.A INCORPORATED  
1H CHEVRON U.S.A INCORPORATED  
2H CHEVRON U.S.A INCORPORATED  
001W BTA OIL PRODUCERS LLC  
4H BTA OIL PRODUCERS LLC  
005H BTA OIL PRODUCERS LLC  
6H BTA OIL PRODUCERS LLC  
007H BTA OIL PRODUCERS LLC  
008H BTA OIL PRODUCERS LLC  
11H BTA OIL PRODUCERS LLC  
012H BTA OIL PRODUCERS LLC  
020H BTA OIL PRODUCERS LLC  
021H BTA OIL PRODUCERS LLC  
22H BTA OIL PRODUCERS LLC  
003H CONOCOPHILLIPS COMPANY  
2H CONOCOPHILLIPS COMPANY  
024H BTA OIL PRODUCERS LLC  
010H BTA OIL PRODUCERS LLC  
023H BTA OIL PRODUCERS LLC  
9H CHEVRON U.S.A INCORPORATED  
3H CHEVRON U.S.A INCORPORATED  
3H CHEVRON U.S.A INCORPORATED  
4H CHEVRON U.S.A INCORPORATED  
2H CHEVRON U.S.A INCORPORATED  
3H CHEVRON U.S.A INCORPORATED  
4H CHEVRON U.S.A INCORPORATED  
1H CHEVRON U.S.A INCORPORATED  
404H CONOCOPHILLIPS COMPANY  
402H CONOCOPHILLIPS COMPANY  
403H CONOCOPHILLIPS COMPANY  
001H CHEVRON U.S.A INCORPORATED  
006H CHEVRON U.S.A INCORPORATED  
003H CHEVRON U.S.A INCORPORATED  
4H CHEVRON U.S.A INCORPORATED  
005H CHEVRON U.S.A INCORPORATED  
006H CHEVRON U.S.A INCORPORATED  
007H CHEVRON U.S.A INCORPORATED  
008H CHEVRON U.S.A INCORPORATED  
005H CHEVRON U.S.A INCORPORATED  
002H MEWBOURNE OIL COMPANY  
029H BTA OIL PRODUCERS LLC  
032H BTA OIL PRODUCERS LLC  
032H BTA OIL PRODUCERS LLC





DETAIL

Scale: 1" = 1000'



**CHEVRON U.S.A. INC.**  
 WORK AREA DETAIL FOR THE  
 SD 14 23 FED P19 15H-20H WELLS  
 SECTIONS 14, 23 & 24, T26S-R32E  
 LEA COUNTY, NEW MEXICO



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

REVISIONS				
DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV	1	VHV	01/30/18	Updated flowline length.
DATE: 01/19/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H Pad_Aerial Detail.dwg				

# LEGEND

- Proposed Temporary Water Line
- Section Line
- Fence Line
- Proposed/Existing ROW
- Proposed Pad/Access
- Existing Pipeline
- Existing Ditch
- Existing Road/Pad/Pond
- End Monument

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.

2-8-2018  
Robert L. Lastrapes  
Registration No. 23006

R 32 E

Point of Commencement/  
Fnd. 1 1/2" Iron Pipe w/Cap @  
the NE Corner of Section 14

Sec. 11

Bureau of Land Management

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

POINT OF ENDING  
(NAD 27)  
X= 714,705.48  
Y= 381,956.04

SEE PAGE  
2 OF 3

PROPOSED  
TEMPORARY  
WATER LINE  
±11,339.29'  
±687.23 Rods

Sec. 14

Bureau of Land Management

T  
26  
S

Sec. 15

Bureau of Land Management

Sec. 24

Bureau of Land Management

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

Existing  
CTB 23

Existing  
Pipeline ROW

Existing Lease Road

Fnd. 1 1/2" Iron Pipe w/Cap @  
the NE Corner of Section 23

S 04° 15' 21" W 858.16'

Existing  
Frac  
Pond

POINT OF BEGINNING  
(NAD 27)  
X= 715,858.35  
Y= 376,482.74

Sec. 22

Bureau of Land Management

Sec. 23

Bureau of Land Management

## TEMPORARY WATER LINE PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 1 of 3

CHEVRON U.S.A. INC.

PROPOSED TEMPORARY WATER LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14, 23 & 24, T26S-R32E  
LEA COUNTY, NEW MEXICO



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### REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\217622\DWG\SD 14 23 Fed P19 15H-20H_Temp Water Line.dwg				

R 32 E

Sec. 11

Bureau of Land Management

Sec. 14

Bureau of Land Management

Edge of  
Existing ROW

Edge of  
Existing ROW

Existing Fence

T  
26  
S

PROPOSED  
PIPELINE ROW

Proposed  
SD 14 23 Fed P19  
Nos. 15H-20H Wells  
Pad & Access Road

POINT OF ENDING  
(NAD 27)  
X= 714,705.48  
Y= 381,956.04

PROPOSED  
TEMPORARY  
WATER LINE  
±11,339.29'  
±687.23 Rods

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2-8-2013

Robert L. Lastrapes  
Registration No. 23006

LEGEND

	Proposed Temporary Water Line
	Section Line
	Fence Line
	Proposed/Existing ROW
	Proposed Pad/Access

TEMPORARY WATER LINE PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 2 of 3

CHEVRON U.S.A. INC.  
PROPOSED TEMPORARY WATER LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14, 23 & 24, T26S-R32E  
LEA COUNTY, NEW MEXICO



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REVISIONS

DRAWN BY: BOR	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Temp Water Line.dwg				

**METES AND BOUNDS DESCRIPTION OF  
PROPOSED TEMPORARY WATER LINE  
SECTIONS 14, 23 AND 24 OF TOWNSHIP 26 SOUTH RANGE 32 EAST  
LEA COUNTY, NEW MEXICO**

Survey of a proposed temporary water line 11,339.29 feet or 687.23 rods crossing Bureau of Land Management land in Sections 14, 23, and 24 of Township 26 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 1 1/2" Iron Pipe with Cap at the Northeast Corner of said Section 23; Thence South 04 degrees 15 minutes 21 seconds West 858.16 feet to the **POINT OF BEGINNING** having the following coordinates: X=715,858.35 and Y=376,482.74 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence East 196.50 feet to a point;  
Thence North 14 degrees 17 minutes 41 seconds West 829.15 feet to a point;  
Thence South 89 degrees 30 minutes 50 seconds West 104.07 feet to a point;  
Thence South 89 degrees 30 minutes 56 seconds West 751.60 feet to a point;  
Thence South 44 degrees 30 minutes 19 seconds West 349.62 feet to a point;  
Thence South 89 degrees 29 minutes 55 seconds West 1,925.05 feet to a point;  
Thence South 89 degrees 29 minutes 55 seconds West 272.27 feet to a point;  
Thence North 02 degrees 00 minutes 24 seconds East 2,600.34 feet to a point;  
Thence North 02 degrees 27 minutes 06 seconds East 1,881.26 feet to a point;  
Thence North 01 degrees 01 minutes 03 seconds East 390.18 feet to a point;  
Thence North 89 degrees 37 minutes 01 seconds East 1,975.22 feet to a point;

Thence North 00 degrees 17 minutes 31 seconds West 64.03 feet to the **POINT OF ENDING** having the following coordinates: X=714,705.48 and Y=381,956.04 (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.

PROPOSED TEMPORARY WATER LINE		
COURSE	BEARING	DISTANCE
1	EAST	196.50'
2	N 14° 17' 41" W	829.15'
3	S 89° 30' 50" W	104.07'
4	S 89° 30' 56" W	751.60'
5	S 44° 30' 19" W	349.62'
6	S 89° 29' 55" W	1925.05'
7	S 89° 29' 55" W	272.27'
8	N 02° 00' 24" E	2600.34'
9	N 02° 27' 06" E	1881.26'
10	N 01° 01' 03" E	390.18'
11	N 89° 37' 01" E	1975.22'
12	N 00° 17' 31" W	64.03'

**NOTE:**

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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.

2-8-2018  
*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

**TEMPORARY WATER LINE PLAT**

Page 3 of 3

**CHEVRON U.S.A. INC.**  
**PROPOSED TEMPORARY WATER LINE**  
**SD 14 23 FED P19 NOS. 15H-20H WELLS**  
**SECTIONS 14, 23 & 24, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



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Ph. 337-237-2200 Fax 337-232-3299  
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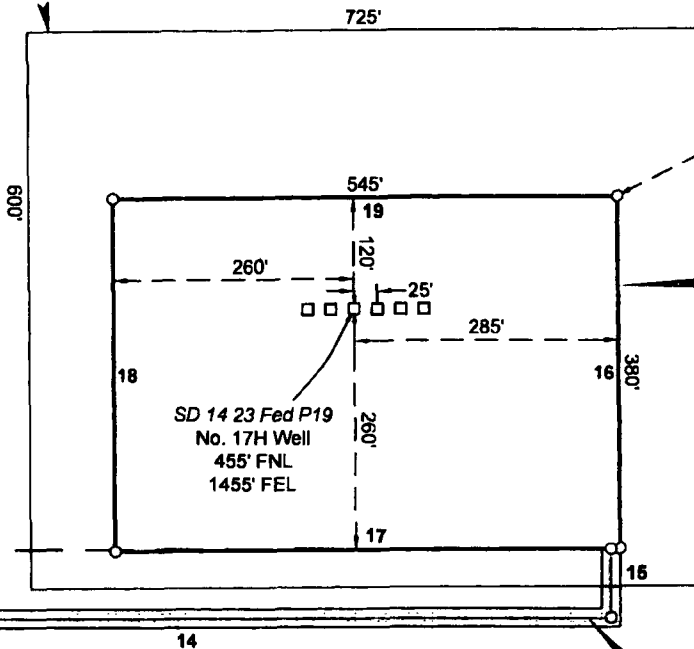
REVISIONS			
DRAWN BY:	#	BY:	DATE:
PROJ. MGR.:	VHV		
DATE:	01/29/2018		
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Temp Water Line.dwg			

R 32 E

Sec. 11  
Bureau of Land Management

PROPOSED  
ARCHAEOLOGICAL  
AREA  
±5.24 ACRES

PROPOSED 64'  
ROW CONTAINING  
6 FLOWLINES,  
GAS LIFT LINE, 15'  
EDS LINE &  
TEMPORARY  
WATER LINE  
±6,854.25'  
±415.41 Rods



PROPOSED PAD  
±4.75 ACRES

Sec. 14  
Bureau of Land Management

T  
26  
S

CENTERLINE PROPOSED  
ACCESS ROAD  
20' x ±6,912.54'  
±418.94 Rods  
±3.17 Acres

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

SD 14 23 FED P19 NO. 17H WELL		
X=	714,438	NAD 27
Y=	382,213	
LAT.	32.048930	
LONG.	103.641226	
X=	755,625	NAD83
Y=	382,271	
LAT.	32.049055	
LONG.	103.641696	
ELEVATION +3217' NAVD 88		

LEGEND	
---	Existing ROW
-X-	Existing Fence
- - -	Section Line
=====	Proposed Pad
-----	CL Proposed Access
-----	Proposed ROW
●	Fnd Monument

2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

WELL PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 1 of 3

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD 14 23 FED P19 NO. 17H WELL  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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

REVISIONS				
DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/19/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				

# LEGEND

- Proposed Pad
- Existing Pipeline
- Section Line
- Proposed ROW
- CL Proposed Road
- Existing Ditch
- Existing Road/Pad
- Existing ROW
- Existing Fence
- Fnd. Monument

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.

7-8-2018

Robert L. Lastrapes  
Registration No. 23006

## Sec. 15

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe w/ Cap @  
the NW Corner of Section 23

## Sec. 22

Bureau of Land Management

R 32 E

## Sec. 11

Bureau of Land Management

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

PROPOSED 64' ROW  
CONTAINING 6 FLOWLINES,  
GAS LIFT LINE, 15' EDS LINE  
& TEMPORARY WATER LINE  
±6,854.25'  
±415.41 Rods

## Sec. 14

Bureau of Land Management

CENTERLINE  
PROPOSED  
ACCESS ROAD  
20' x ±6,912.54'  
±418.94 Rods  
±3.17 Acres

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

Existing  
CBT 23

Existing Lease Road

## Sec. 23

Bureau of Land Management

T  
26  
S

## WELL PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD 14 23 FED P19 NO. 17H WELL  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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## REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:				
DATE:	01/19/2018			
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg				



CENTERLINE PROPOSED ACCESS ROAD		
COURSE	BEARING	DISTANCE
1	N 04° 23' 43" E	200.39'
2	N 02° 16' 06" E	202.77'
3	N 02° 12' 12" E	323.63'
4	N 01° 44' 36" E	470.28'
5	N 02° 21' 04" E	299.31'
6	N 02° 08' 00" E	483.86'
7	N 01° 24' 42" E	333.54'
8	N 00° 29' 22" E	287.50'
9	N 02° 43' 01" E	450.30'
10	N 02° 10' 55" E	475.05'
11	N 02° 14' 55" E	543.91'
12	N 02° 44' 25" E	411.97'
13	N 01° 01' 03" E	380.57'
14	N 89° 37' 01" E	1975.44'
15	N 00° 17' 31" W	74.02'

PROPOSED PAD		
COURSE	BEARING	DISTANCE
16	S 00° 34' 15" E	380.00'
17	S 89° 25' 45" W	545.00'
18	N 00° 34' 15" W	380.00'
19	N 89° 25' 45" E	545.00'

NW ARCH. AREA CORNER		NE ARCH. AREA CORNER	
X=	714,085 NAD 27	X=	714,810 NAD 27
Y=	382,510	Y=	382,517
LAT.	32.049751	LAT.	32.049757
LONG.	103.642358	LONG.	103.640018
X=	755,272 NAD83	X=	755,997 NAD83
Y=	382,567	Y=	382,574
LAT.	32.049876	LAT.	32.049882
LONG.	103.642828	LONG.	103.640488
ELEVATION +3213' NAVD 88		ELEVATION +3224' NAVD 88	
SW ARCH. AREA CORNER		SE ARCH. AREA CORNER	
X=	714,091 NAD 27	X=	714,816 NAD 27
Y=	381,910	Y=	381,917
LAT.	32.048102	LAT.	32.048108
LONG.	103.642353	LONG.	103.640013
X=	755,278 NAD83	X=	756,003 NAD83
Y=	381,967	Y=	381,974
LAT.	32.048227	LAT.	32.048233
LONG.	103.642823	LONG.	103.640483
ELEVATION +3211' NAVD 88		ELEVATION +3217' NAVD 88	

NW PAD CORNER		NE PAD CORNER	
X=	714,177 NAD 27	X=	714,722 NAD 27
Y=	382,331	Y=	382,336
LAT.	32.048257	LAT.	32.049263
LONG.	103.642066	LONG.	103.640307
X=	755,364 NAD83	X=	755,909 NAD83
Y=	382,388	Y=	382,393
LAT.	32.049382	LAT.	32.049388
LONG.	103.642536	LONG.	103.640777
ELEVATION +3214' NAVD 88		ELEVATION +3221' NAVD 88	
SW PAD CORNER		SE PAD CORNER	
X=	714,181 NAD 27	X=	714,725 NAD 27
Y=	381,951	Y=	381,956
LAT.	32.048213	LAT.	32.048218
LONG.	103.642062	LONG.	103.640303
X=	755,368 NAD83	X=	755,913 NAD83
Y=	382,008	Y=	382,013
LAT.	32.048338	LAT.	32.048343
LONG.	103.642532	LONG.	103.640773
ELEVATION +3212' NAVD 88		ELEVATION +3217' NAVD 88	

**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.nmonecall.org](http://www.nmonecall.org)

**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.

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.

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

**WELL PLAT**

**CHEVRON U.S.A. INC.**  
**PROPOSED PAD & ACCESS ROAD**  
**SD 14 23 FED P19 NO. 17H WELL**  
**SECTIONS 14 & 23, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



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REVISIONS			
DRAWN BY:	#	BY:	DATE:
PROJ. MGR.:	VHV		
DATE:	01/19/2018		
DESCRIPTION:			
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 17H_Well Plat.dwg			

CHEVRON U.S.A. Inc.  
SD 14 23 FED P19 17H  
NMNM 118722  
NMNM 118723  
SECTION 14, T26S-R32E  
SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

## APD Surface Use Plan of Operations

- 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.
- Driving Directions – From Jal, New Mexico. The location is approximately 33 miles from the nearest town, which is Jal, New Mexico. From Jal, proceed west on Highway 128 approximately 14 miles and turn left (South) onto CR2 and go approximately 13 miles on CR2 until the road reaches the intersection with Dinwiddie Rd (stop sign with “private road” signage). Turn right (west) onto Dinwiddie Rd (Chevron has an agreement and easement for use of this road) and travel west approximately .3 miles, then bear left (south) onto Battle Axe Road (a continuation of CR2). Travel 5 miles on Battle Axe Road, following its bends, until you reach the Chevron lease road into Salado Development Area. Turn right (Northwesterly) and travel 8 miles on lease road to the well location.
- There will be approximately 6,912.54' 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'. (see “Road Cut/Fill” plat attached.)
- 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.

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SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

- 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.
- 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.
  
- 1-Mile radius map is attached
  
- Facilities:
  - Existing production facilities (CTB 23) are in the S2 of Sec. 23, T26S-R32E where oil and gas sales will take place.
  - Gas purchaser pipeline is existing at the tank battery.
  - 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.
  - The tank battery will be connected to the existing water gathering system in the field for permanent water disposal.
  
- Pipelines: 12 - 4" buried pipelines, approximately 7,694.17', will be laid from well running to lease road then adjacent to lease road to production facility in Section 23.
  - A ROW will not be required for these pipelines.
  - All construction activity will be confined to the approved ROW.
  - Pipeline will run parallel to the road and will stay within approved ROW.
- Pipelines: 2 - 4" buried gas lift pipelines, approximately 6,900.30', will be laid from well to the existing lease road and tie into the existing gas lift line running to Compressor facility in Section 23.
  - A ROW will not be required for these pipelines.

CHEVRON U.S.A. Inc.  
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NMNM 118722

NMNM 118723

SECTION 14, T26S-R32E  
SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

- All construction activity will be confined to the approved ROW.
  - Pipeline will run parallel to existing disturbances and will stay within approved ROW.
- Power lines: A powerline, approximately measuring approximately 6,708.89' in length, will be installed from the existing powerline on the lease road and will be routed to the proposed well.
  - A ROW will not be required for this EDS line.
  - All construction activity will be confined to the approved ROW.
  - Power line will run parallel to the road and will stay within approved ROW.
- Existing frac ponds in Section 23, T26S-R32E will be utilized for fresh water and Section 13 T26S-R32E for recycled water.
- Fresh water will be obtained from a private water source.
- A temporary 10" expanding water transfer line will run south along the proposed lease road then west along existing lease road a total of approx. 10,321.65' from the well location to the existing frac pond in Section 23.
  - Fresh water line will run parallel to the existing lease road, then north within an existing pipeline right of way.
  - A BLM ROW will not be required for the water transfer line.
- 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.
- 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.

CHEVRON U.S.A. Inc.  
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NMNM 118722

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SECTION 14, T26S-R32E

SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E

BHL 180' FSL & 1,640' FEL

- 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.

None

- Well Plat
  - Exterior well pad dimensions are 380' x 545'.
  - Interior well pad dimensions from point of entry (well head) of the westernmost well are N-120', S-260', W-260', E-285'. The length to the east includes 25' spacing for next well on multi-well pad (six wells). Total disturbance area needed for construction of well pad will be 4.75 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.
  - Cut and fill: will be minimal.

#### **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

CHEVRON U.S.A. Inc.  
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SECTION 14, T26S-R32E  
SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

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.
- 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 pad size to approximately 2.01 acres from the proposed size of 2.74 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 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.)**

CHEVRON U.S.A. Inc.  
SD 14 23 FED P19 17H  
NMNM 118722

NMNM 118723

SECTION 14, T26S-R32E

SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E

BHL 180' FSL & 1,640' FEL

- 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 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.
- 
- Well pad and all other infrastructure is on Federal Surface.
  - **Nearest Post Office:** Jal Post Office; 33 Miles East
- 
- On-site performed by BLM NRS: Paul Murphy 9/29/2017
  - Cultural report attached: N/A Participating Agreement attached: **Yes**
  - Erosion / Drainage: Drainage control system shall be constructed on the entire length of road using any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.
  - Enclosure 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 contaminants from leaving the well pad.

CHEVRON U.S.A. Inc.

SD 14 23 FED P19 17H

NMNM 118722

NMNM 118723

SECTION 14, T26S-R32E

SECTION 23, T26S, R32E

SHL 455' FNL & 1,455' FEL

BHL 180' FSL & 1,640' FEL

- 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 complying per federal and state requirements and specifications.

## **Chevron Representatives**

Primary point of contact:

W Mark Woodard

432-687-7999



CHEVRON U.S.A. Inc.  
SD 14 23 FED P19 17H  
NMNM 118722  
NMNM 118723  
SECTION 14, T26S-R32E  
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SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

<p>Name: Sam Storrick</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (432) 687-7769</p> <p>Email:</p>	<p>Name: Kristen Drain</p> <p>Address: 1400 Smith Street Houston, TX 77002</p> <p>Phone: (713) 372-6003</p> <p>Email:</p>
<p>Name: W Mark Woodard</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (432) 687-7999</p> <p>Email:</p>	<p>Name: Max Vilmar</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (432) 687-7327</p> <p>Email:</p>
<p>Name: Michael Smerilli</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (713) 687-7887</p> <p>Email:</p>	<p>Name: Laura Becerra</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Office: (432) 687-7665</p> <p>Email:</p>

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SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

R 32 E

Sec. 11

Bureau of Land Management

Sec. 14

Bureau of Land Management

T  
26  
S

POINT OF BEGINNING  
(NAD 27)  
X= 714,170.50  
Y= 382,201.93

Proposed  
SD 14 23 Fed P19  
Nos. 15H-20H Wells  
Pad & Access Road

PROPOSED  
PIPELINE ROW

PROPOSED  
EDS LINE  
 $\pm 6,708.89'$   
 $\pm 406.60$  Rods

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.

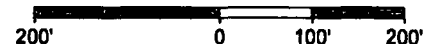


LEGEND	
— p —	Proposed EDS Line
— — —	Section Line
— X —	Fence Line
— — —	Proposed/Existing ROW
— — —	Proposed Pad/Access

2-8-2018  
  
Robert L. Lastrapes  
Registration No. 23006

EDS LINE PLAT

Scale: 1" = 200'



Page 1 of 3

**CHEVRON U.S.A. INC.**  
PROPOSED EDS LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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REVISIONS				
DRAWN BY:	BOR	#	BY:	DATE:
PROJ. MGR.:	VHV			
DATE:	01/29/2018			
DESCRIPTION:				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_EDS Line.dwg				

# LEGEND

- P — Proposed EDS Line
- P — Existing Powerline
- Section Line
- X — Fence Line
- Proposed/Existing ROW
- Proposed Pad/Access
- Existing Pipeline
- Existing Ditch
- Existing Road/Pad/Pond
- Fnd. Monument

FOR THE EXCLUSIVE USE OF  
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I, Robert L. Lastrapes, Professional  
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2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

Sec. 15

Bureau of Land Management

NAD 27 NEW MEXICO EAST ZONE



Sec. 22

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe  
w/Cap @ the NW  
Corner of Section 23

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

S 80° 40' 49" E 1,924.56'

POINT OF ENDING @  
EXISTING LINE

(NAD 27)  
X= 712,493.54  
Y= 376,984.80

R 32 E

Sec. 11

Bureau of Land Management

Point of Commencement/  
Fnd. 1 1/2" Iron Pipe w/Cap @  
the NE Corner of Section 14

POINT OF BEGINNING  
(NAD 27)

X= 714,170.50  
Y= 382,201.93

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

PROPOSED  
EDS LINE  
±6,708.89'  
±406.60 Rods

Sec. 14

Bureau of Land Management

T  
26  
S

Existing  
CTB 23

Existing Pipeline ROW  
Existing Powerline

Sec. 23

Bureau of Land Management

EDS LINE PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 2 of 3

CHEVRON U.S.A. INC.

PROPOSED EDS LINE

SD 14 23 FED P19 NOS. 15H-20H WELLS

SECTIONS 14 & 23, T26S-R32E

LEA COUNTY, NEW MEXICO



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

## REVISIONS

DRAWN BY: BOR	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_EDS Line.dwg				

**METES AND BOUNDS DESCRIPTION OF  
PROPOSED EDS LINE  
SECTIONS 14 AND 23 OF TOWNSHIP 26 SOUTH RANGE 32 EAST  
LEA COUNTY, NEW MEXICO**

Survey of a proposed EDS line 6,708.89 feet or 406.60 rods crossing Bureau of Land Management land in Sections 14 and 23 of Township 26 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 1 1/2" Iron Pipe with Cap at the Northeast Corner of said Section 14; Thence South 74 degrees 32 minutes 59 seconds West 1,784.13 feet to the **POINT OF BEGINNING** having the following coordinates: X=714,170.50 and Y=382,201.93 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence South 00 degrees 34 minutes 15 seconds East 256.96 feet to point;  
Thence South 89 degrees 36 minutes 59 seconds West 1,497.98 feet to point;  
Thence South 01 degrees 01 minutes 03 seconds West 444.47 feet to point;  
Thence South 02 degrees 44 minutes 25 seconds West 411.26 feet to point;  
Thence South 02 degrees 14 minutes 55 seconds West 544.24 feet to point;  
Thence South 02 degrees 10 minutes 55 seconds West 474.77 feet to point;  
Thence South 02 degrees 43 minutes 01 seconds West 451.29 feet to point;  
Thence South 02 degrees 29 minutes 22 seconds West 288.26 feet to point;  
Thence South 01 degrees 24 minutes 42 seconds West 332.58 feet to point;  
Thence South 02 degrees 08 minutes 00 seconds West 483.32 feet to point;  
Thence South 02 degrees 21 minutes 04 seconds West 299.54 feet to point;  
Thence South 01 degrees 44 minutes 36 seconds West 470.37 feet to point;  
Thence South 02 degrees 12 minutes 12 seconds West 323.32 feet to point;  
Thence South 02 degrees 16 minutes 06 seconds West 201.50 feet to point;

Thence South 04 degrees 23 minutes 43 seconds West 229.03 feet to the **POINT OF ENDING** having the following coordinates: X=712,493.54 and Y=376,984.80 (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 EDS line and intended solely for that purpose. This description does not represent a boundary survey.

PROPOSED EDS LINE		
COURSE	BEARING	DISTANCE
1	S 00° 34' 15" E	256.96'
2	S 89° 36' 59" W	1497.98'
3	S 01° 01' 03" W	444.47'
4	S 02° 44' 25" W	411.26'
5	S 02° 14' 55" W	544.24'
6	S 02° 10' 55" W	474.77'
7	S 02° 43' 01" W	451.29'
8	S 00° 29' 22" W	288.26'
9	S 01° 24' 42" W	332.58'
10	S 02° 08' 00" W	483.32'
11	S 02° 21' 04" W	299.54'
12	S 01° 44' 36" W	470.37'
13	S 02° 12' 12" W	323.32'
14	S 02° 16' 06" W	201.50'
15	S 04° 23' 43" W	229.03'

**NOTE:**

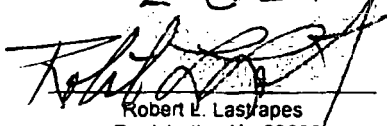
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, 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.nmonecall.org](http://www.nmonecall.org)

**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.

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.

Z-8-2018  
  
Robert L. Lastrapes  
Registration No. 23006

**EDS LINE PLAT**

Page 3 of 3

**CHEVRON U.S.A. INC.**

PROPOSED EDS LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



C. H. Fenstermaker & Associates, L.L.C.  
135 Regency Sq Lafayette, LA 70508  
Ph. 337-237-2200 Fax 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

REVISIONS				DESCRIPTION:
DRAWN BY: BOR	#	BY:	DATE:	
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H EDS Line.dwg				

R 32 E

Sec. 11

Bureau of Land Management

Sec. 14

Bureau of Land Management

T  
26  
S

PROPOSED  
PIPELINE ROW

Proposed  
SD 14 23 Fed P19  
Nos. 15H-20H Wells  
Pad & Access Road

POINT OF BEGINNING  
(NAD 27)  
X= 714,700.48  
Y= 381,956.02

PROPOSED  
FLOWLINES (6)  
±7,694.17'  
±466.31 Rods

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.

LEGEND

	Proposed Flowline
	Section Line
	Fence Line
	Proposed/Existing ROW
	Proposed Pad/Access

Scale: 1" = 200'

FLOWLINE PLAT

Page 1 of 3

CHEVRON U.S.A. INC.  
PROPOSED FLOWLINES  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



C. H. Fenstermaker & Associates, L.L.C.  
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www.fenstermaker.com

REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Flowlines.dwg				

# LEGEND

- Proposed Flowline
- Section Line
- Fence Line
- X — Proposed/Existing ROW
- Proposed Pad/Access
- Existing Pipeline
- Existing Ditch
- Existing Road/Pad
- Fnd. Monument

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.

2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

## Sec. 15

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe w/Cap @  
the NW Corner of Section 23

## Sec. 22

Bureau of Land Management

# R 32 E

## Sec. 11

Bureau of Land Management

Point of Commencement/  
Fnd. 1 1/2" Iron Pipe w/Cap @  
the NE Corner of Section 14

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

PROPOSED  
FLOWLINES (6)  
±7,694.17'  
±466.31 Rods

POINT OF BEGINNING  
(NAD 27)  
X= 714,700.48  
Y= 381,956.02

SEE PAGE  
1 OF 3

## Sec. 14

Bureau of Land Management

T  
26  
S

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
CTB 23  
POINT OF ENDING  
(NAD 27)  
X= 713,076.16  
Y= 377,316.07

Existing  
Pad 5

## Sec. 23

Bureau of Land Management

Existing Pipeline ROW  
Existing Lease Road

## FLOWLINE PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 2 of 3

# CHEVRON U.S.A. INC.

PROPOSED FLOWLINES  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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## REVISIONS

DRAWN BY:	BOR	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.:	VHV				
DATE:	01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Flowlines.dwg					

**METES AND BOUNDS DESCRIPTION OF  
PROPOSED FLOWLINES  
SECTIONS 14 AND 23 OF TOWNSHIP 26 SOUTH RANGE 32 EAST  
LEA COUNTY, NEW MEXICO**

Survey of proposed flowlines 7,694.17 feet or 466.31 rods crossing Bureau of Land Management land in Sections 14 and 23 of Township 26 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 1 1/2" Iron Pipe with Cap at the Northeast Corner of said Section 14; Thence South 58 degrees 46 minutes 30 seconds West 1,391.21 feet to the **POINT OF BEGINNING** having the following coordinates: X=714,700.48 and Y=381,956.02 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence South 00 degrees 17 minutes 31 seconds East 35.01 feet to a point;  
Thence South 89 degrees 36 minutes 58 seconds West 1,992.56 feet to a point;  
Thence South 01 degrees 01 minutes 03 seconds West 418.29 feet to a point;  
Thence South 02 degrees 44 minutes 25 seconds West 411.62 feet to a point;  
Thence South 02 degrees 14 minutes 55 seconds West 544.07 feet to a point;  
Thence South 02 degrees 10 minutes 55 seconds West 474.91 feet to a point;  
Thence South 02 degrees 43 minutes 01 seconds West 450.79 feet to a point;  
Thence South 00 degrees 29 minutes 22 seconds West 287.88 feet to a point;  
Thence South 01 degrees 24 minutes 42 seconds West 333.06 feet to a point;  
Thence South 02 degrees 08 minutes 00 seconds West 483.59 feet to a point;  
Thence South 02 degrees 21 minutes 04 seconds West 299.42 feet to a point;  
Thence South 01 degrees 44 minutes 36 seconds West 470.32 feet to a point;  
Thence South 02 degrees 12 minutes 12 seconds West 323.48 feet to a point;  
Thence South 02 degrees 16 minutes 06 seconds West 202.14 feet to a point;  
Thence South 04 degrees 23 minutes 43 seconds West 162.94 feet to a point;  
Thence North 88 degrees 58 minutes 29 seconds East 546.53 feet to a point;

Thence North 00 degrees 31 minutes 09 seconds West 257.56 feet to the **POINT OF ENDING** having the following coordinates: X=713,076.16 and Y=377,316.07 (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 flowlines and intended solely for that purpose. This description does not represent a boundary survey.

**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.nmonecall.org](http://www.nmonecall.org)

**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.

PROPOSED FLOWLINES		
COURSE	BEARING	DISTANCE
1	S 00° 17' 31" E	35.01'
2	S 89° 36' 58" W	1992.56'
3	S 01° 01' 03" W	418.29'
4	S 02° 44' 25" W	411.62'
5	S 02° 14' 55" W	544.07'
6	S 02° 10' 55" W	474.91'
7	S 02° 43' 01" W	450.79'
8	S 00° 29' 22" W	287.88'
9	S 01° 24' 42" W	333.06'
10	S 02° 08' 00" W	483.59'
11	S 02° 21' 04" W	299.42'
12	S 01° 44' 36" W	470.32'
13	S 02° 12' 12" W	323.48'
14	S 02° 16' 06" W	202.14'
15	S 04° 23' 43" W	162.94'
16	N 88° 58' 29" E	546.53'
17	N 00° 31' 09" W	257.56'

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.

2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23806

**FLOWLINE PLAT**

Page 3 of 3

**CHEVRON U.S.A. INC.**  
**PROPOSED FLOWLINES**  
**SD 14 23 FED P19 NOS. 15H-20H WELLS**  
**SECTIONS 14 & 23, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



C. H. Fenstermaker & Associates, L.L.C.  
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REVISIONS				
DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Flowlines.dwg				



R 32 E

Sec. 11

Bureau of Land Management

Sec. 14

Bureau of Land Management

T  
26  
S

PROPOSED  
PIPELINE ROW

Proposed  
SD 14 23 Fed P19  
Nos. 15H-20H Wells  
Pad & Access Road

POINT OF BEGINNING  
(NAD 27)  
X= 714,690.48  
Y= 381,955.97

PROPOSED  
GAS LIFT LINE  
±6,900.30'  
±418.20 Rods

Edge of  
Existing ROW  
Edge of  
Existing ROW  
Edge of  
Existing ROW

Existing Fence

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.

7-8-2018

Robert L. Lastrapes  
Registration No. 23006

LEGEND

	Proposed Gas Lift Line
	Section Line
	Fence Line
	Proposed/Existing ROW
	Proposed Pad/Access

GAS LIFT LINE PLAT

Scale: 1" = 200'

200' 0 100' 200'

Page 1 of 3

CHEVRON U.S.A. INC.  
PROPOSED GAS LIFT LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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135 Regency Sq. Lafayette, LA 70508  
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REVISIONS				
DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Gas Lift Line.dwg				

# LEGEND

- Proposed Gas Lift Line
- Section Line
- Fence Line
- Proposed/Existing ROW
- Proposed Pad/Access
- Existing Pipeline
- Existing Ditch
- Existing Road/Pad
- Fnd Monument

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.

2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23006

## Sec. 15

Bureau of Land Management

Fnd. 1 1/2" Iron Pipe w/Cap @  
the NW Corner of Section 23

## Sec. 22

Bureau of Land Management

R 32 E

## Sec. 11

Bureau of Land Management

Point of Commencement/  
Fnd. 1 1/2" Iron Pipe w/Cap @  
the NE Corner of Section 14

Existing Ditch/  
Abandoned  
Road

Existing  
Pipeline

Existing  
Pipeline

Existing  
Pipeline

PROPOSED  
GAS LIFT LINE  
±6,900.30'  
±418.20 Rods

POINT OF BEGINNING  
(NAD 27)  
X= 714,690.48  
Y= 381,955.97

SEE PAGE  
1 OF 3

## Sec. 14

Bureau of Land Management

T  
26  
S

Existing Abandoned Road/Ditch  
to be Upgraded for Access Road

Existing  
Pad 5

Existing  
CTB 23

S 82° 38' 41" E 1,932.53'

Existing Pipeline ROW  
Existing Lease Road

POINT OF ENDING @  
EXISTING LINE  
(NAD 27)  
X= 712,511.02  
Y= 377,049.06

## Sec. 23

Bureau of Land Management

### GAS LIFT LINE PLAT

Scale: 1" = 1000'

1000' 0 500' 1000'

Page 2 of 3

## CHEVRON U.S.A. INC.

PROPOSED GAS LIFT LINE  
SD 14 23 FED P19 NOS. 15H-20H WELLS  
SECTIONS 14 & 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



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### REVISIONS

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/29/2018				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Gas Lift Line.dwg				

**METES AND BOUNDS DESCRIPTION OF  
PROPOSED GAS LIFT LINE  
SECTIONS 14 AND 23 OF TOWNSHIP 26 SOUTH RANGE 32 EAST  
LEA COUNTY, NEW MEXICO**

Survey of a proposed gas lift line 6,900.30 feet or 418.20 rods crossing Bureau of Land Management land in Sections 14 and 23 of Township 26 South Range 32 East, N.M.P.M. Lea County, New Mexico.

**COMMENCING** at a Found 1 1/2" Iron Pipe with Cap at the Northeast Corner of said Section 14; Thence South 58 degrees 59 minutes 07 seconds West 1,399.80 feet to the **POINT OF BEGINNING** having the following coordinates: X=714,690.48 and Y=381,955.97 (New Mexico State Plane Coordinate System, East Zone, NAD 27);

Thence South 00 degrees 17 minutes 31 seconds East 20.02 feet to a point;  
Thence South 89 degrees 36 minutes 59 seconds West 2,003.22 feet to a point;  
Thence South 01 degrees 01 minutes 03 seconds West 432.46 feet to a point;  
Thence South 02 degrees 44 minutes 25 seconds West 411.39 feet to a point;  
Thence South 02 degrees 14 minutes 55 seconds West 544.18 feet to a point;  
Thence South 02 degrees 10 minutes 55 seconds West 474.82 feet to a point;  
Thence South 02 degrees 43 minutes 01 seconds West 451.10 feet to a point;  
Thence South 00 degrees 29 minutes 22 seconds West 288.12 feet to a point;  
Thence South 01 degrees 24 minutes 42 seconds West 332.76 feet to a point;  
Thence South 02 degrees 08 minutes 00 seconds West 483.42 feet to a point;  
Thence South 02 degrees 21 minutes 04 seconds West 299.49 feet to a point;  
Thence South 01 degrees 44 minutes 36 seconds West 470.35 feet to a point;  
Thence South 02 degrees 12 minutes 12 seconds West 323.38 feet to a point;  
Thence South 02 degrees 16 minutes 06 seconds West 201.74 feet to a point;

Thence South 04 degrees 23 minutes 43 seconds West 163.85 feet to the **POINT OF ENDING** having the following coordinates: X=712,511.02 and Y=377,049.06 (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 gas lift line and intended solely for that purpose. This description does not represent a boundary survey.

PROPOSED GAS LIFT LINE		
COURSE	BEARING	DISTANCE
1	S 00° 17' 31" E	20.02'
2	S 89° 36' 59" W	2003.22'
3	S 01° 01' 03" W	432.46'
4	S 02° 44' 25" W	411.39'
5	S 02° 14' 55" W	544.18'
6	S 02° 10' 55" W	474.82'
7	S 02° 43' 01" W	451.10'
8	S 00° 29' 22" W	288.12'
9	S 01° 24' 42" W	332.76'
10	S 02° 08' 00" W	483.42'
11	S 02° 21' 04" W	299.49'
12	S 01° 44' 36" W	470.35'
13	S 02° 12' 12" W	323.38'
14	S 02° 16' 06" W	201.74'
15	S 04° 23' 43" W	163.85'

**NOTE:**

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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.

2-8-2018

*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No 23006

**GAS LIFT LINE PLAT**

Page 3 of 3

**CHEVRON U.S.A. INC.**  
**PROPOSED GAS LIFT LINE**  
**SD 14 23 FED P19 NOS. 15H-20H WELLS**  
**SECTIONS 14 & 23, T26S-R32E**  
**LEA COUNTY, NEW MEXICO**



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REVISIONS				
DRAWN BY:	BOR	#	BY:	DATE:
PROJ. MGR.:	VHV			
DATE:	01/29/2018			
DESCRIPTION:				
FILENAME: T:\2017\2176220\DWG\SD 14 23 Fed P19 15H-20H_Gas Lift Line.dwg				

**R 32 E**

**Sec. 11**  
Bureau of Land Management

**T 26 S**

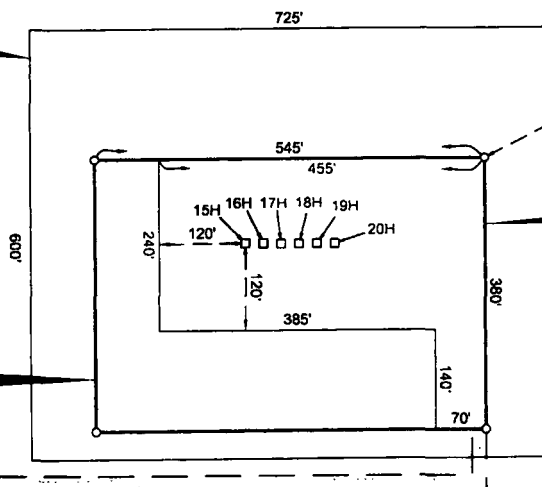
**PROPOSED  
ARCHAEOLOGICAL  
AREA**  
±5.24 ACRES

**PROPOSED  
TEMPORARY  
PAD AREA**  
±2.02 ACRES

**PROPOSED  
PERMANENT  
PAD AREA**  
±2.73 ACRES

**Sec. 14**

Bureau of Land Management



Point of Commencement/  
Fnd. 1 1/2" Iron Pipe w/  
2" Brass Cap @ the NE  
Corner of Section 14

1/4D 27 NEW MEXICO EAST ZONE

**LEGEND**

---	Existing ROW
-X-	Existing Fence
- - -	Proposed Access
- - -	Section Line
●	Fnd Monument

Scale: 1" = 200'

200' 0 100' 200'

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.

2-8-2018

Robert L. Lastrapes  
Registration No. 23006

**INTERIM RECLAMATION PLAT**

Page 1 of 2

**CHEVRON U.S.A. INC.**

INTERIM RECLAMATION  
SD 14 23 FED P19 NO. 15H-20H WELLS  
SECTION 14, T26S-R32E  
LEA COUNTY, NEW MEXICO

**REVISIONS**

DRAWN BY:	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: VHV				
DATE: 01/18/2018				

FILENAME: T:\2017\217622\DWG\SD 14 23 Fed P19 15H-20H Pad\_IR Plat.dwg



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

**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.

**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.nmonecall.org](http://www.nmonecall.org)

NW ARCH. AREA CORNER	NE ARCH. AREA CORNER
X= 714,085 NAD 27	X= 714,810 NAD 27
Y= 382,510	Y= 382,517
LAT. 32.049751	LAT. 32.049757
LONG. 103.642358	LONG. 103.640018
X= 755,272 NAD83	X= 755,987 NAD83
Y= 382,567	Y= 382,574
LAT. 32.049876	LAT. 32.049882
LONG. 103.642828	LONG. 103.640488
ELEVATION +3213' NAVD 88	ELEVATION +3224' NAVD 88
SW ARCH. AREA CORNER	SE ARCH. AREA CORNER
X= 714,091 NAD 27	X= 714,816 NAD 27
Y= 381,910	Y= 381,917
LAT. 32.048102	LAT. 32.048108
LONG. 103.642353	LONG. 103.640013
X= 755,278 NAD83	X= 755,003 NAD83
Y= 381,987	Y= 381,974
LAT. 32.048227	LAT. 32.048233
LONG. 103.642823	LONG. 103.640483
ELEVATION +3211' NAVD 88	ELEVATION +3217' NAVD 88

NW PAD CORNER	NE PAD CORNER
X= 714,177 NAD 27	X= 714,722 NAD 27
Y= 382,331	Y= 382,336
LAT. 32.049257	LAT. 32.049263
LONG. 103.642066	LONG. 103.640307
X= 755,364 NAD83	X= 755,909 NAD83
Y= 382,388	Y= 382,393
LAT. 32.049382	LAT. 32.049388
LONG. 103.642536	LONG. 103.640777
ELEVATION +3214' NAVD 88	ELEVATION +3221' NAVD 88
SW PAD CORNER	SE PAD CORNER
X= 714,181 NAD 27	X= 714,725 NAD 27
Y= 381,951	Y= 381,956
LAT. 32.048213	LAT. 32.048218
LONG. 103.642062	LONG. 103.640303
X= 755,368 NAD83	X= 755,913 NAD83
Y= 382,008	Y= 382,013
LAT. 32.048338	LAT. 32.048343
LONG. 103.642532	LONG. 103.640773
ELEVATION +3212' NAVD 88	ELEVATION +3217' NAVD 88

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.

2-8-2018



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*Robert L. Lastrapes*  
Robert L. Lastrapes  
Registration No. 23008

INTERIM RECLAMATION PLAT

Page 2 of 2

**CHEVRON U.S.A. INC.**  
INTERIM RECLAMATION  
SD 14 23 FED P19 NO. 15H-20H WELLS  
SECTION 14, T26S-R32E  
LEA COUNTY, NEW MEXICO

REVISIONS

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CHEVRON U.S.A. Inc.  
SD 14 23 FED P19 17H  
NMNM 118722  
NMNM 118723  
SECTION 14, T26S-R32E  
SHL 455' FNL & 1,455' FEL

SECTION 23, T26S, R32E  
BHL 180' FSL & 1,640' FEL

## APD Surface Use Plan of Operations

- 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.
- Driving Directions – From Jal, New Mexico. The location is approximately 33 miles from the nearest town, which is Jal, New Mexico. From Jal, proceed west on Highway 128 approximately 14 miles and turn left (South) onto CR2 and go approximately 13 miles on CR2 until the road reaches the intersection with Dinwiddie Rd (stop sign with “private road” signage). Turn right (west) onto Dinwiddie Rd (Chevron has an agreement and easement for use of this road) and travel west approximately .3 miles, then bear left (south) onto Battle Axe Road (a continuation of CR2). Travel 5 miles on Battle Axe Road, following its bends, until you reach the Chevron lease road into Salado Development Area. Turn right (Northwesterly) and travel 8 miles on lease road to the well location.
- There will be approximately 6,912.54' 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'. (see “Road Cut/Fill” plat attached.)
- 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.

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- 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.
- 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.
  
- 1-Mile radius map is attached
  
- Facilities:
  - Existing production facilities (CTB 23) are in the S2 of Sec. 23, T26S-R32E where oil and gas sales will take place.
  - Gas purchaser pipeline is existing at the tank battery.
  - 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.
  - The tank battery will be connected to the existing water gathering system in the field for permanent water disposal.
  
- Pipelines: 12 - 4" buried pipelines, approximately 7,694.17', will be laid from well running to lease road then adjacent to lease road to production facility in Section 23.
  - A ROW will not be required for these pipelines.
  - All construction activity will be confined to the approved ROW.
  - Pipeline will run parallel to the road and will stay within approved ROW.
- Pipelines: 2 - 4" buried gas lift pipelines, approximately 6,900.30', will be laid from well to the existing lease road and tie into the existing gas lift line running to Compressor facility in Section 23.
  - A ROW will not be required for these pipelines.

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- All construction activity will be confined to the approved ROW.
  - Pipeline will run parallel to existing disturbances and will stay within approved ROW.
- Power lines: A powerline, approximately measuring approximately 6,708.89' in length, will be installed from the existing powerline on the lease road and will be routed to the proposed well.
  - A ROW will not be required for this EDS line.
  - All construction activity will be confined to the approved ROW.
  - Power line will run parallel to the road and will stay within approved ROW.
- Existing frac ponds in Section 23, T26S-R32E will be utilized for fresh water and Section 13 T26S-R32E for recycled water.
- Fresh water will be obtained from a private water source.
- A temporary 10" expanding water transfer line will run south along the proposed lease road then west along existing lease road a total of approx. 10,321.65' from the well location to the existing frac pond in Section 23.
  - Fresh water line will run parallel to the existing lease road, then north within an existing pipeline right of way.
  - A BLM ROW will not be required for the water transfer line.
- 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.
- 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.



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- 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.

None

- Well Plat
  - Exterior well pad dimensions are 380' x 545'.
  - Interior well pad dimensions from point of entry (well head) of the westernmost well are N-120', S-260', W-260', E-285'. The length to the east includes 25' spacing for next well on multi-well pad (six wells). Total disturbance area needed for construction of well pad will be 4.75 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.
  - Cut and fill: will be minimal.

#### **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

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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.
- 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 pad size to approximately 2.01 acres from the proposed size of 2.74 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 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.)**

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- 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 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.
- 
- Well pad and all other infrastructure is on Federal Surface.
  - **Nearest Post Office:** Jal Post Office; 33 Miles East
- 
- On-site performed by BLM NRS: Paul Murphy 9/29/2017
  - Cultural report attached: N/A Participating Agreement attached: **Yes**
  - Erosion / Drainage: Drainage control system shall be constructed on the entire length of road using any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.
  - Enclosure 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 contaminants from leaving the well pad.

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- 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 complying per federal and state requirements and specifications.

## Chevron Representatives

Primary point of contact:  
W Mark Woodard  
432-687-7999

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<p>Name: Sam Storrick</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (432) 687-7769</p> <p>Email:</p>	<p>Name: Kristen Drain</p> <p>Address: 1400 Smith Street Houston, TX 77002</p> <p>Phone: (713) 372-6003</p> <p>Email:</p>
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<p>Name: Michael Smerilli</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Phone: (713) 687-7887</p> <p>Email:</p>	<p>Name: Laura Becerra</p> <p>Address: 6301 Deauville Midland, Texas 79706</p> <p>Office: (432) 687-7665</p> <p>Email:</p>

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

## PWD Data Report

02/14/2019

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

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

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:

Describe 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:

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:

**Would you like to utilize Unlined Pit PWD options? NO**

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Unlined pit PWD on or off channel:**

**Unlined pit PWD discharge volume (bbl/day):**

**Unlined pit specifications:**

**Precipitated solids disposal:**

**Describe 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?**

**Is the reclamation bond a rider under the BLM bond?**

**Unlined pit bond number:**

**Unlined pit bond amount:**

**Additional bond information attachment:**

**Would you like to utilize Injection PWD options? NO**

**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:**

**Would you like to utilize Surface Discharge PWD options? NO**

**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:**

**Would you like to utilize Other PWD options? NO**

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

**PWD surface owner:**

**PWD disturbance (acres):**

**Other PWD discharge volume (bbl/day):**

**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

02/14/2019

**Federal/Indian APD:** FED

**BLM Bond number:** CA0329

**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:**