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Form 3160-3
(June 2015)

JAN 3 0 2019

DISTRICT II-ARTESIA O.C.D.

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

5. Lease Serial No.
NMNM016331

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
CB HAYS 10 3 FED COM 005
2H 324924

2. Name of Operator
CHEVRON USA INCORPORATED 4323

9. API Well No.
30-015-45667

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
6301 Deauville Blvd. Midland TX 79706	(432)687-7866	PURPLE-SAGE WOLFCAMP GAS

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface NENE / 519 FNL / 1330 FEL / LAT 32.311358 / LONG -104.070952

At proposed prod. zone NENE / 100 FNL / 1254 FEL / LAT 32.341674 / LONG -104.070584

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 15 / T23S / R28E / NMP

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
2.1 miles	EDDY	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
100 feet	519.74	640
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. in file**
150 feet	9565 feet / 20185 feet	FED: CA0329

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
2992 feet	11/05/2019	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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Kayla McConnell / Ph: (432)687-7375	07/02/2018

Title
Permitting Specialist

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	01/24/2019
Title	**Office**	
Assistant Field Manager Lands & Minerals	CARLSBAD	

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

Approval Date: 01/24/2019

RWP 1-31-19

*(Instructions on page 2)

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

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Additional Operator Remarks

Location of Well

1. SHL: NENE / 519 FNL / 1330 FEL / TWSP: 23S / RANGE: 28E / SECTION: 15 / LAT: 32.311358 / LONG: -104.070952 (TVD: 0 feet, MD: 0 feet)
   PPP: SESE / 0 FSL / 1254 FEL / TWSP: 23S / RANGE: 28E / SECTION: 3 / LAT: 32.327279 / LONG: -104.070873 (TVD: 0 feet, MD: 0 feet)
   PPP: SESE / 330 FSL / 1254 FEL / TWSP: 23S / RANGE: 28E / SECTION: 10 / LAT: 32.313696 / LONG: -104.070712 (TVD: 0 feet, MD: 0 feet)
   BHL: NENE / 100 FNL / 1254 FEL / TWSP: 23S / RANGE: 28E / SECTION: 3 / LAT: 32.341674 / LONG: -104.070584 (TVD: 9565 feet, MD: 20185 feet)

BLM Point of Contact

Name: Priscilla Perez
Title: Legal Instruments Examiner
Phone: 5752345934
Email: pperez@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

OPERATOR'S NAME:	CHEVRON USA INC.
LEASE NO.:	NMNM013233
WELL NAME & NO.:	2H- CB HAYS 10-3 FED COM 005
SURFACE HOLE FOOTAGE:	519'/N & 1330'/E
BOTTOM HOLE FOOTAGE	100'/N & 1254'/E
LOCATION:	Section. 15.,T23S.,R.28E., NMP
COUNTY:	EDDY County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

A. Hydrogen Sulfide

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **450** 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. **Excess calculates to -6% - additional cement might be required.**

    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The 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. **Excess calculates to 8% - additional cement might be required.**

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to 8% - additional cement might be required.**

3. The minimum required fill of cement behind the **7-5/8** inch intermediate liner is:

- Cement should tie-back **100** feet into the previous casing. Operator shall provide method of verification. **Excess calculates to 4% - additional cement might be required.**

4. The minimum required fill of cement behind the **5 1/2 X 5** inch production casing 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.

Option 1:

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

Option 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 5,000 (5M) psi.

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT(S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ 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. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd 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 (one log per well pad is acceptable) run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days

from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a

larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

   b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

   c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.

   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. 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.

   f. 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. This test shall be performed prior to the test at full stack pressure.

   g. 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.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

NMK12419

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON USA INC.
LEASE NO.:	NMNM013233
WELL NAME & NO.:	2H- CB HAYS 10-3 FED COM 005
SURFACE HOLE FOOTAGE:	519'/N & 1330'/E
BOTTOM HOLE FOOTAGE	100'/N & 1254'/E
LOCATION:	Section. 15.,T23S.,R.28E., NMP
COUNTY:	EDDY County, New Mexico

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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.

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)

Cave Karst

Construction Mitigation

In order to mitigate the impacts from construction activities on cave and karst resources, the following Conditions of Approval will apply to this APD:

- In the event that any underground voids are encountered during construction activities, construction activities will be halted and the BLM will be notified immediately.
- No Blasting to prevent geologic structure instabilities.
- Pad Berming to minimize effects of any spilled contaminates.

Drilling Mitigation

Federal regulations and standard Conditions of Approval applied to all APDs require that adequate measures are taken to prevent contamination to the environment. Due to the extreme sensitivity of the cave and karst resources in this project area, the following additional Conditions of Approval will be added to this APD.

To prevent cave and karst resource contamination the following will be required.

Closed Mud System Using Steel Tanks with All Fluids and Cuttings Hauled Off.

- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional Drilling allowed after at least 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost Circulation zones logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See Drilling COAs.

Production Mitigation

In order to mitigate the impacts from production activities and due to the nature of karst terrain, the following Conditions of Approval will apply to this APD:

- Tank battery liners and berms to minimize the impact resulting from leaks.
- Leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of line failures used in production or drilling.

Residual and Cumulative Mitigation

- Nontoxic fluorescent dyes will be added to the drilling fluid when the hole is spudded and will be circulated to the bottom of the karst layers. This provides data as part of a long-term monitoring study.
- Annual pressure monitoring will be performed by the operator. If the test results indicate a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Plugging and Abandonment Mitigation

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.

Watershed

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

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

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

G. ON LEASE ACCESS ROADS

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

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

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

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

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

Ditching
Ditching shall be required on both sides of the road.

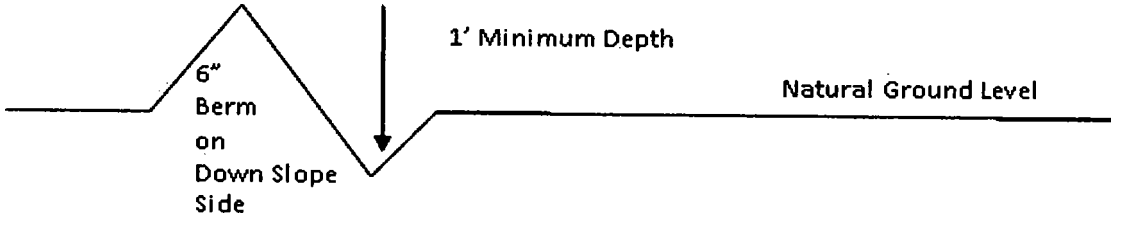
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

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

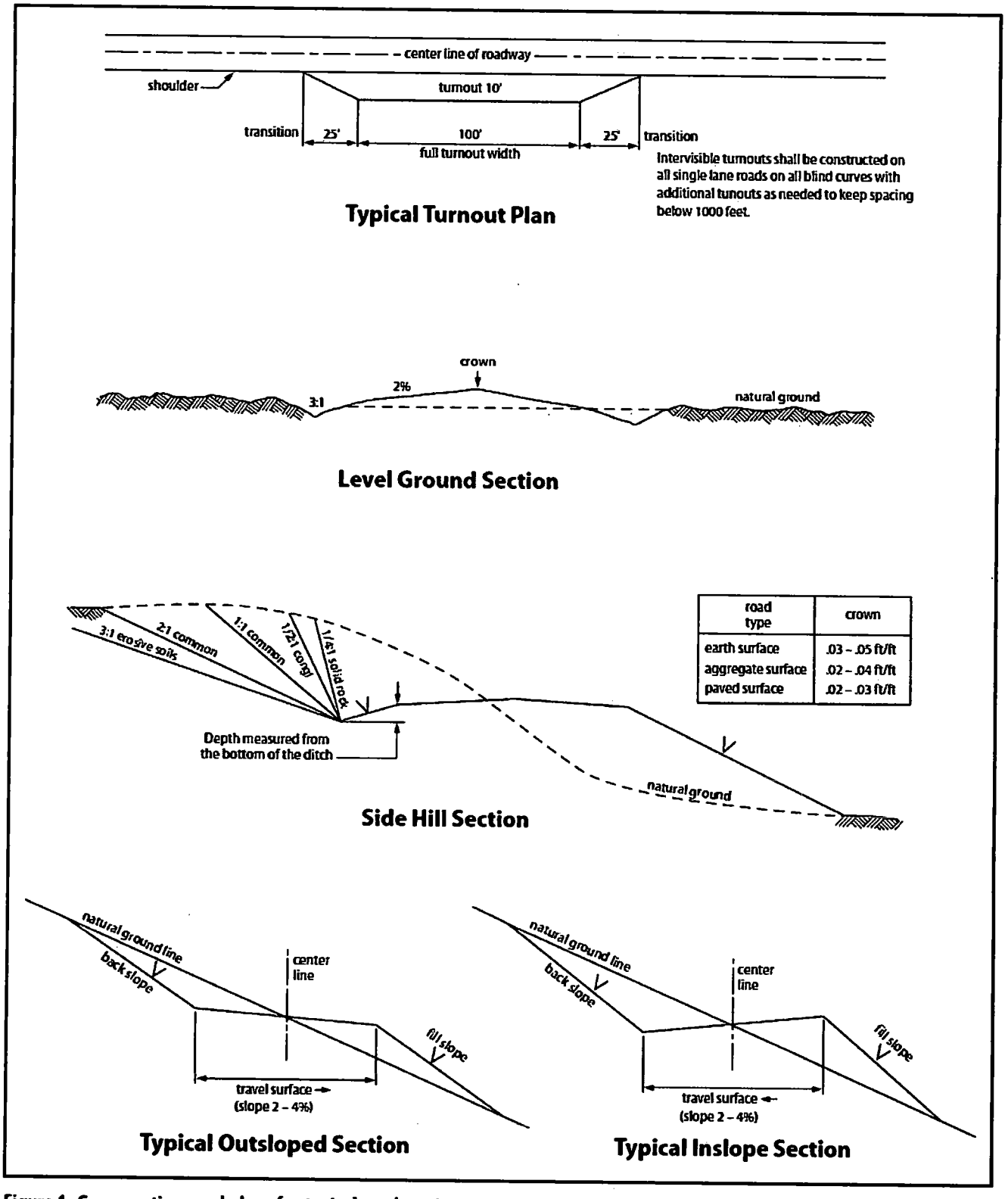


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

Seed Mixture 1 for Loamy Sites

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

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

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

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

*Pounds of pure live seed:

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

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BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

01/29/2019

Operator Certification

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

NAME: Kayla McConnell **Signed on:** 06/28/2018

Title: Permitting Specialist

Street Address: 6301 Deauville Blvd

City: Midland **State:** TX **Zip:** 79706

Phone: (432)687-7375

Email address: kaylamcconnell@chevron.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

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BUREAU OF LAND MANAGEMENT

Application Data Report

01/29/2019

APD ID: 10400031506 **Submission Date:** 07/02/2018

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Well Type: OIL WELL **Well Work Type:** Drill

[redacted]

Show Final Text

Section 1 - General

APD ID: 10400031506 **Tie to previous NOS?** **Submission Date:** 07/02/2018

BLM Office: CARLSBAD **User:** Kayla McConnell **Title:** Permitting Specialist

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

Lease number: NMNM016331 **Lease Acres:** 519.74

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

K p application confidential? YES

Permitting Agent? NO **APD Operator:** CHEVRON USA INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: CHEVRON USA INCORPORATED

Operator Address: 6301 Deauville Blvd.

Zip: 79706

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)687-7866

Operator Internet Address:

Section 2 - Well Information

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

Well in Master SUPO? NO **Master SUPO name:**

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

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H **Well API Number:**

F ld/Pool or Exploratory? Field and Pool **Field Name:** PURPLE-SAGE WOLFCAMP GAS **Pool Name:**

Is the proposed ll in an area containing other mineral r ources? USEABLE WATER

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

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:** CB HAYS 10 3 FED COM 005 **Number:** 1H, 2H, 3H

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: 2.1 Miles **Distance to nearest well:** 150 FT **Distance to lease line:** 100 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: CB_HAYS_10_3_FED_COM_005_2H_C102_20180628083023.pdf

Well work start Date: 11/05/2019 **Duration:** 146 DAYS

Section 3 - Well Location Table

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	519	FNL	1330	FEL	23S	28E	15	Aliquot NENE	32.311358	-104.070952	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	2992	0	0
KOP Leg #1	519	FNL	1330	FEL	23S	28E	15	Aliquot NENE	32.311358	-104.070952	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	2992	0	0
PPP Leg #1	330	FSL	1254	FEL	23S	28E	10	Aliquot SESE	32.313696	-104.070712	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	2992	0	0

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

	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
PPP Leg #1	0	FSL	1254	FEL	23S	28E	3	Aliquot SESE	32.327279	-104.070873	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 013233	2992	0	0
EXIT Leg #1	330	FNL	1254	FEL	23S	28E	3	Aliquot NENE	32.341042	-104.070597	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 016331	2992	0	0
BHL Leg #1	100	FNL	1254	FEL	23S	28E	3	Aliquot NENE	32.341674	-104.070584	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 016331	-6573	20185	9565

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

Drilling Plan Data Report

01/29/2019

APD ID: 10400031506

Submission Date: 07/02/2018

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005

Well Number: 2H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	RUSTLER	2823	169	169	DOLOMITE	NONE	No
2	CASTILE	1796	1027	1027	ANHYDRITE	NONE	No
3	BELL CANYON	186	2637	2637	SANDSTONE	NONE	No
4	CHERRY CANYON	-659	3482	3482	SANDSTONE	NATURAL GAS,OIL	No
5	BRUSHY CANYON	-1859	4682	4682	SANDSTONE	NATURAL GAS,OIL	No
6	BONE SPRING LIME	-3360	6183	6183	LIMESTONE,SHALE	NONE	No
7	UPPER AVALON SHALE	-3410	6233	6233	LIMESTONE,SHALE	NONE	No
8	BONE SPRING 1ST	-4534	7357	7357	SANDSTONE	NONE	No
9	BONE SPRING 2ND	-5855	8678	8678	SANDSTONE	NONE	No
10	WOLFCAMP	-6660	9483	20185	LIMESTONE,SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 9565

Equipment: Will have a minimum of a 5000 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 FMC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipple 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. Chevron requests a variance to use a CoFlex Choke hose with a metal protective covering that will be utilized between the BOP and Choke manifold (see attached specs).

Testing Procedure: Stack will be tested as specified in the attached testing requirements, upon NU and not to exceed 30

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

days. Test BOP from 250 psi to 5000 psi in Ram and 250 psi to 3500 psi in annular. BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. Flex choke hose will be used for all wells on the pad (see attached specs). BOP test will be conducted by a third party.

Choke Diagram Attachment:

5K_Choke_Manifold_Schematic_20180620071231.pdf

TEST_CERTIFICATES_CHOKE___KILL_20181106115101.PDF

CB_HAYS_10_3_005_Wellhead_Schematic_20180702101147_20181107083648.pdf

CoFlex_Hose_Variance_20181107083801.pdf

BOP Diagram Attachment:

5K_BOPE_Diagram___Testing__20181107083338.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	450	0	450			450	J-55	54.5	STC	6.97	1.43	DRY	2.77	DRY	1.7
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	6300	0	6300			6300	L-80	43.5	LTC	2.32	1.85	DRY	2.32	DRY	2.27
3	INTERMEDIATE	8.5	7.625	NEW	API	N	6000	9000	6000	9000			3000	P-110	29.7	OTHER - TSH513	3	2.81	DRY	3.4	DRY	2.56
4	PRODUCTION	6.625	5.5	NEW	API	N	0	20185	0	20185			20185	P-110	20	OTHER - txp	1.52	1.11	DRY	1.21	DRY	2

Casing Attachments

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Prod_Casing_Specs_20180516145204.pdf

Casing Design Assumptions and Worksheet(s):

CB_HAYS_10_3_FED_COM_005_2H_9PT_DRL_PLAN_V2_20181106114324.PDF

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

9.625_Intermediate_Casing_Specs_20181115070309.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

7.625_29.7lb_P_110IC_Casing_Specs__20181115070329.pdf

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Casing Attachments

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Prod_Casing_Specs_20181115071332.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	450	257	1.33	14.8	61	10	CLASS C	Class C, Accelerator
INTERMEDIATE	Lead	2600	0	1600	218	2.57	11.9	100	10	CLASS C	50/50 Poz, Class C, Salt, Retarder, Defoamer, Stability Control
INTERMEDIATE	Tail		1600	2600	258	1.33	14.8	61	10	CLASS C	Class C, Retarder
INTERMEDIATE	Lead		2600	5300	362	2.57	11.9	166	10	CLASS C	50/50 Poz, Class C, Salt, Retarder, Defoamer, Stability Control
INTERMEDIATE	Tail		5300	6300	258	1.33	14.8	61	10	CLASS C	Class C, Retarder, Dispersant
PRODUCTION	Lead	19221	0	8000	744	2.47	11.9	327	10	Class C	50/50 Poz, Class C, Salt, Retarder, Defoamer, Stability Control
PRODUCTION	Tail		8000	19221	940	1.34	14.8	224	10	Class C	Class C, Fluid Loss, Retarder, Defoamer
INTERMEDIATE	Lead		6000	9000	193	1.34	14.8	46	10	Class C	Class C, Retarder, Defoamer, Fluid Loss

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		19221	20185	57	2.19	15	22	10	Class H	Class H, Fluid Loss, Retarder, Defoamer, Calcium Carbonate

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: A closed system will by utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical 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.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
9000	20185	OIL-BASED MUD	9.5	13							
6300	9000	SALT SATURATED	8.8	10							
0	450	SPUD MUD	8.3	8.7							
450	6300	SALT SATURATED	8.8	10							

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Section 6 - Test, Logging, Coring

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.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6878 **Anticipated Surface Pressure:** 4773.7

Anticipated Bottom Hole Temperature(F): 150

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Summary_20180621082132.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Rig_Layout_CB_20180621144514.pdf
CB_HAYS_10_3_FED_COM_005_2H_Wellpath_20180702090518.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

CB_HAYS_10_3_FED_COM_005_GCP_20181115070403.PDF

Other Variance attachment:

CHOKE MANIFOLD SCHEMATIC

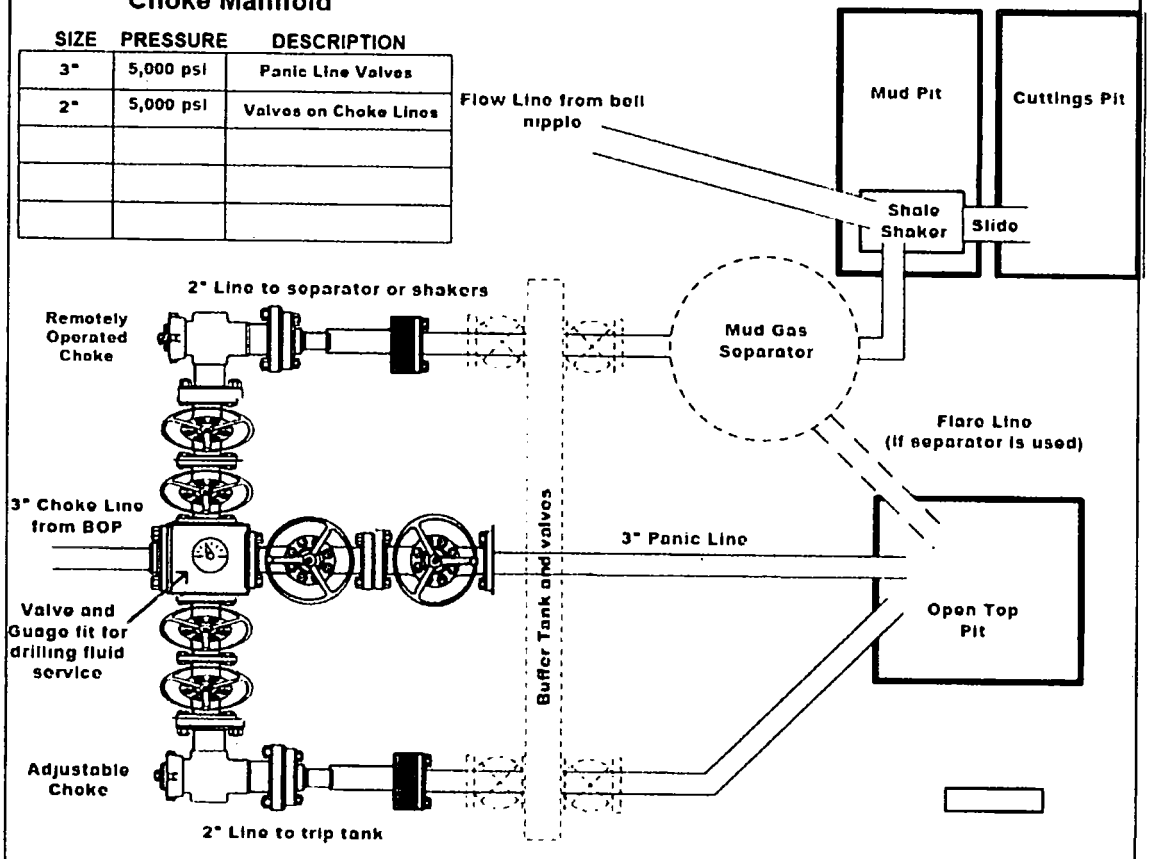
Minimum Requirements

OPERATION : Intermediate and Production Hole Sections

Minimum System Pressure Rating : 5,000 psi

Choke Manifold

SIZE	PRESSURE	DESCRIPTION
3"	5,000 psi	Panic Line Valves
2"	5,000 psi	Valves on Choke Lines



Installation Checklist

The following item must be verified and checked off prior to pressure testing of BOP equipment.

- ☐ The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.
- ☐ Adjustable Chokes may be Remotely Operated but will have backup hand pump for hydraulic actuation in case of loss of rig air pressure or power.
- ☐ Flare and Panic lines will terminate a minimum of 150' from the wellhead. These lines will terminate at a location as per approved APD.
- ☐ The choke line, kill line, and choke manifold lines will be straight unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and reduce vibration. This excludes the line between mud gas separator and shale shaker.
- ☐ All valves (except chokes) on choke line, kill line, and choke manifold will be full opening and will allow straight through flow. This excludes any valves between mud gas separator and shale shakers.
- ☐ All manual valves will have hand wheels installed.
- ☐ If used, flare system will have effective method for ignition
- ☐ All connections will be flanged, welded, or clamped (no threaded connections like hammer unions)
- ☐ If buffer tank is used, a valve will be used on all lines at any entry or exit point to or from the buffer tank.

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer

Wellname: _____

Representative: _____

Date: _____

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	**PATTERSON UTI**	*Hose Assembly Type*	**Choke & Kill**
MWH Sales Representative	**ABYGAIL LOGAN**	*Certification*	**API 7K/FSL LEVEL2**
Date Assembled	**1/11/2018**	*Hose Grade*	**RED**
Location Assembled	**OKC**	*Hose Working Pressure*	**10000**
Sales Order #	**356503**	*Hose Lot # and Date Code*	**12860-09/17**
Customer Purchase Order #	**PO43901 RIG 257**	*Hose I.D. (Inches)*	**3.0"**
Assembly Serial # (Pick Ticket #)	**441774-1**	*Hose O.D. (Inches)*	**5.36"**
Hose Assembly Length	**60'**	*Armor (yes/no)*	NO

Fittings

End A		End B	
Stem (Part and Revision #)	**R3.0X64AWB**	*Stem (Part and Revision #)*	**R3.0X64AWB**
Stem (Heat #)	**MM17710**	*Stem (Heat #)*	**MM17710**
Ferrule (Part and Revision #)	**RF3.0X5125**	*Ferrule (Part and Revision #)*	**RF3.0X5125**
Ferrule (Heat #)	**60864472**	*Ferrule (Heat #)*	**60864472**
Connection . Flange Hammer Union Part	**4-1/16 10K**	*Connection (Part #)*	**4-1/16 10K**
Connection (Heat #)		*Connection (Heat #)*	
Nut (Part #)		*Nut (Part #)*	
Nut (Heat #)		*Nut (Heat #)*	
Dies Used	**5.37"**	*Dies Used*	**5.37"**

Hydrostatic Test Requirements

Test Pressure (psi)	**15,000**	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	**16 1/4**	

Date Tested	*Tested By*	*Approved By*
1/11/2018		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON UTI**	*Customer P.O.#* **PO43901 RIG 257**
Sales Order # **356503**	*Date Assembled:* **1/11/2018**

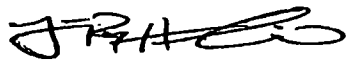
Specifications

Hose Assembly Type:	**Choke & Kill**	*Rig #*	**257**
Assembly Serial #	**441774-1**	*Hose Lot # and Date Code*	**12860-09/17**
Hose Working Pressure (psi)	**10000**	*Test Pressure (psi)*	**15000**
Hose Assembly Description:	**CKRED48-10K-6410K-6410K-60.00' FT-W/LIFTERS**		

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

Approved By	*Date*
	**1/11/2018**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

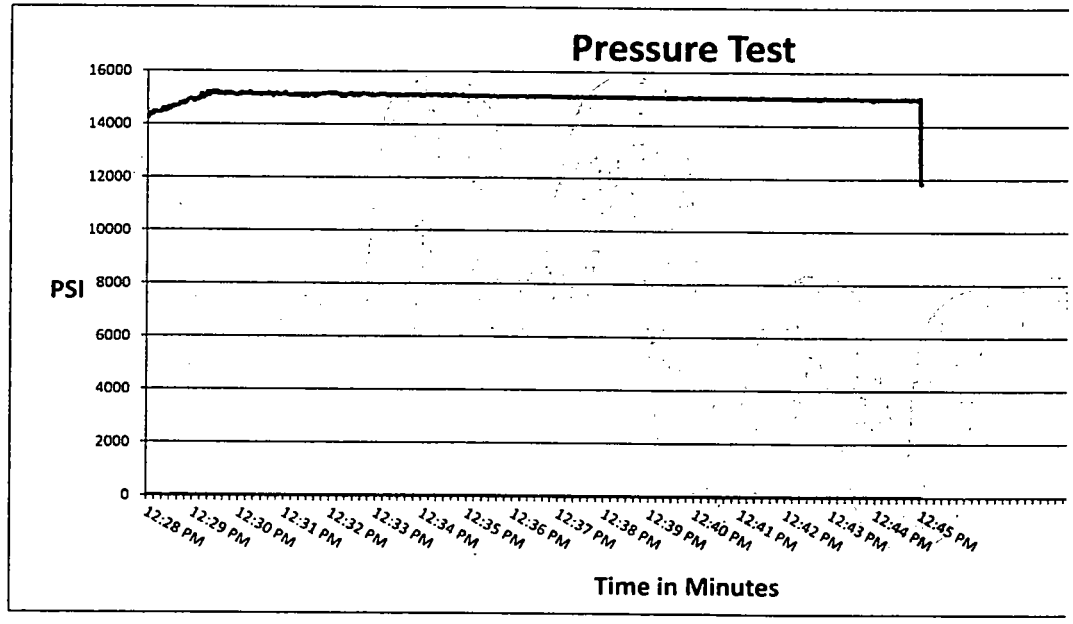
Customer: Patterson

Pick Ticket #: 441774

Hose Specifications

Hose Type	Length	Type of Fitting	Cou
C&K	60'	4 1/16 10K	
I.D.	O.D.	Die Size	
3"	4.84"	5.37"	
Working Pressure	Burst Pressure	Hose Serial #	Hose A
10000 PSI	Standard Safety Multiplier Applies	12860	

Verification



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure
15000 PSI	16 1/4 Minutes	

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Zach Tillman*

x

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	**PATTERSON UTI**	*Hose Assembly Type*	**Choke & Kill**
MWH Sales Representative	**ABYGAIL LOGAN**	*Certification*	**API 7K/FSL LEVEL2**
Date Assembled	**1/11/2018**	*Hose Grade*	**RED**
Location Assembled	**OKC**	*Hose Working Pressure*	**10000**
Sales Order #	**356503**	*Hose Lot # and Date Code*	**12860-09/17**
Customer Purchase Order #	**PO43901 RIG 257**	*Hose I.D. (Inches)*	**3.0"**
Assembly Serial # (Pick Ticket #)	**441774-2**	*Hose O.D. (Inches)*	**5.36"**
Hose Assembly Length	**15'**	*Armor (yes/no)*	NO

Fittings

End A		End B	
Stem (Part and Revision #)	**R3.0X64AWB**	*Stem (Part and Revision #)*	**R3.0X64AWB**
Stem (Heat #)	**MM17710**	*Stem (Heat #)*	**MM17710**
Ferrule (Part and Revision #)	**R3.0X5125**	*Ferrule (Part and Revision #)*	**R3.0X5125**
Ferrule (Heat #)	**60864472**	*Ferrule (Heat #)*	**60864472**
Connection . Flange Hammer Union Part	**4-1/16 10K**	*Connection (Part #)*	**4-1/16 10K**
Connection (Heat #)		*Connection (Heat #)*	
Nut (Part #)		*Nut (Part #)*	
Nut (Heat #)		*Nut (Heat #)*	
Dies Used	**5.37"**	*Dies Used*	**5.37"**

Hydrostatic Test Requirements

Test Pressure (psi)	**15,000**	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	**15 1/2**	

Date Tested	*Tested By*	*Approved By*
1/11/2018		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **PATTERSON UTI**	*Customer P.O.#* **PO43901 RIG 257**
Sales Order # **356503**	*Date Assembled:* **1/11/2018**

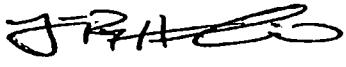
Specifications

Hose Assembly Type:	**Choke & Kill**	*Rig #*	**257**
Assembly Serial #	**441774-2**	*Hose Lot # and Date Code*	**12860-09/17**
Hose Working Pressure (psi)	**10000**	*Test Pressure (psi)*	**15000**
Hose Assembly Description:	**CKRED48-10K-6410-6410K-15.00' FT-W/LIFTERS**		

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

Approved By	*Date*
	**1/11/2018**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Patterson

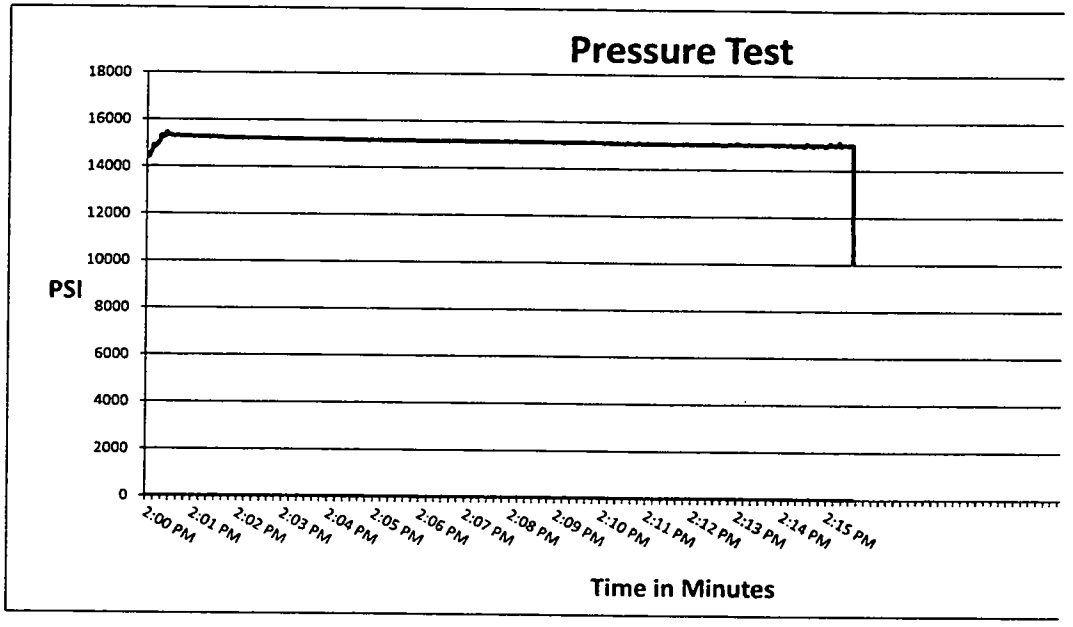
Pick Ticket #: 441774

Hose Specifications

Hose Type	Length
C&K	15'
I.D.	**O.D.**
3"	4.82"
Working Pressure	**Burst Pressure**
10000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Cou
4 1/16 10K	
Die Size	
5.37"	
Hose Serial #	**Hose A**
12860	

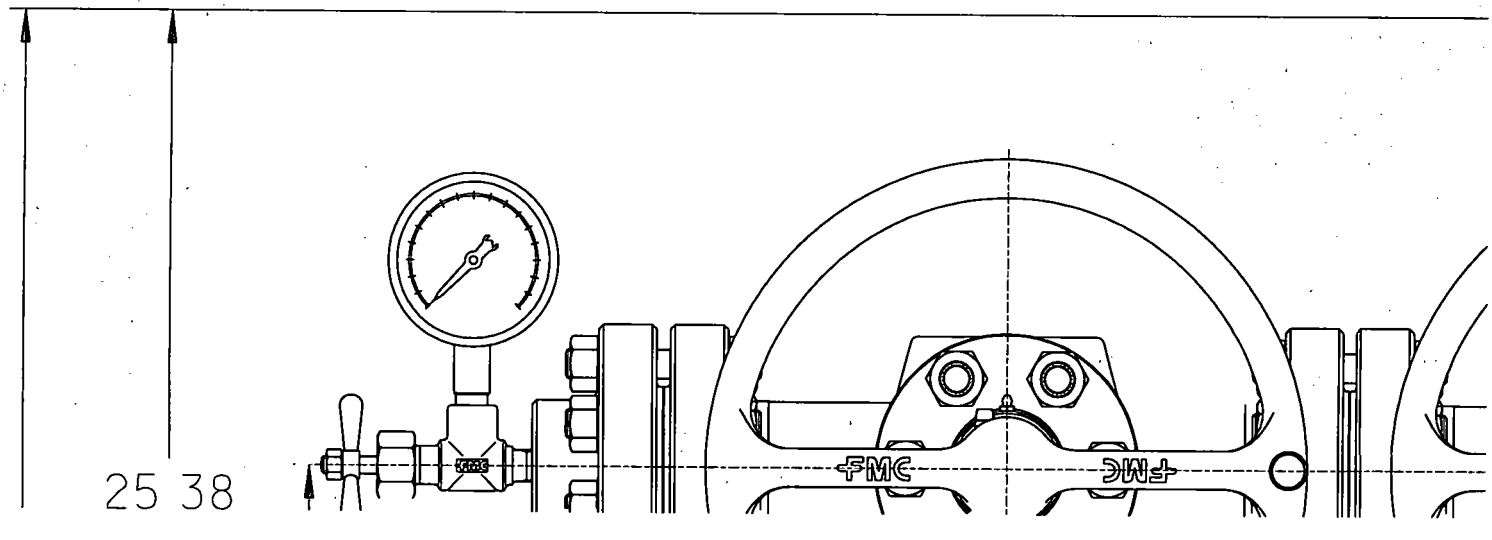


Test Pressure	Time Held at Test Pressure	Actual Burst Pressure
15000 PSI	15 2/4 Minutes	

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Zach Tillman*

X


FMC
FMC

Delaware Basin
Changes to APD for Federal Well

CHEVRON CONTACT:

MARKQUALE FIELDS
DRILLING ENGINEER
1400 SMITH ST.
HOUSTON, TX 77002

DESK: HOU140/43RD FLOOR
CELL: 281-844-9091
EMAIL: MARKQUALEFIELDS@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.

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

BOPE Testing

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
☐	1500 psi	1500 psi	750 psi	800 psi	700 psi
☐	2000 psi	2000 psi	1000 psi	1100 psi	900 psi
☐	3000 psi	3000 psi	1000 psi	1100 psi	900 psi

☐ **Accumulator 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. Reservior 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 Test Checklist

The following item 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 item must be performed during the BOPE testing and then checked off

☐ **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 days intervals. Test pressure and times will be recorded by a 3rd party on a test chart 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 down stream 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 BOP testing**

☐ **Record BOP tests and pressures in drilling reports and IADC sheet**

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer along with any/all BOP and accumulator test charts and reports from 3rd parties.

Wellname: _____

Representative: _____

Date: _____

BLOWOUT PREVENTOR SCHEMATIC

Minimum Requirements

OPERATION : Intermediate and Production Hole Sections

Minimum System Pressure Rating : 5,000 psi

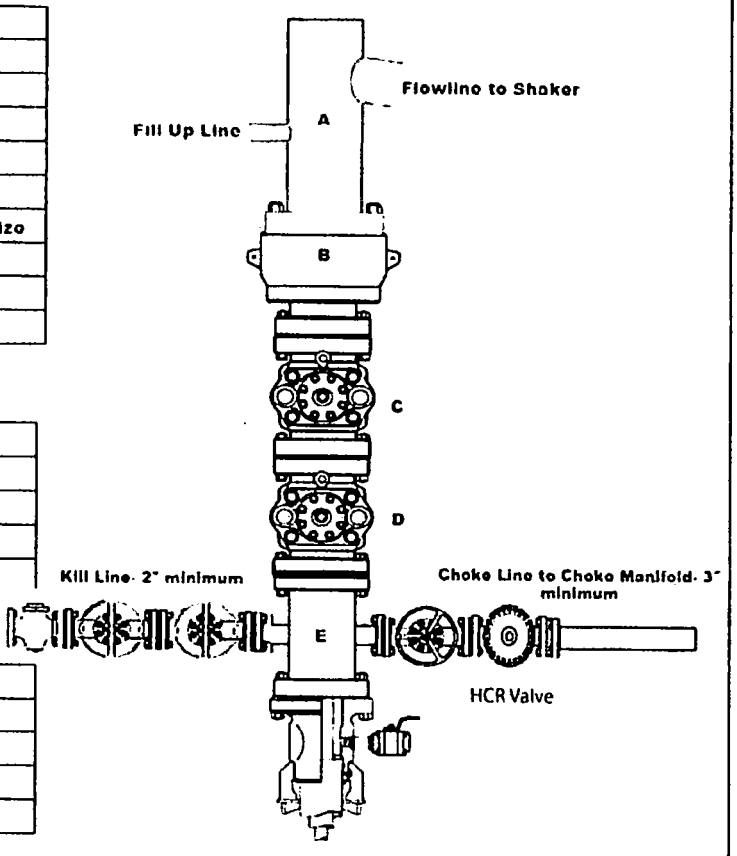
	SIZE	PRESSURE	DESCRIPTION
A		N/A	Bell Nipple
B	13 5/8"	5,000 psi	Annular
C	13 5/8"	5,000 psi	Pipe Ram
D	13 5/8"	5,000 psi	Blind Ram
E	13 5/8"	5,000 psi	Mud Cross
F			
DSA		As required for each hole size	
C-Sec			
B-Sec		13-5/8" 5K x 11" 5K	
A-Sec		13-3/8" SOW x 13-5/8" 5K	

Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000 psi	Gate Valve
2"	5,000 psi	Gate Valve
2"	5,000 psi	Check Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
3"	5,000 psi	Gate Valve
3"	5,000 psi	HCR Valve



Installation Checklist

The following item must be verified and checked off prior to pressure testing of BOP equipment.

- ☐ The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.
- ☐ All valves on the kill line and choke line will be full opening and will allow straight though flow.
- ☐ The kill line and choke line will be straight unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and reduce vibration.
- ☐ Manual (hand wheels) or automatic locking devices will be installed on all ram preventers. Hand wheels will also be installed on all manual valves on the choke line and kill line.
- ☐ A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will remain open unless accumulator is inoperative.
- ☐ Upper kelly cock valve with handle will be available on rig floor along with safety valve and subs to fit all drill string connections in use.

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer

Wellname: _____

Representative: _____

Date: _____

For the latest performance data, always visit our website: 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: Pale Green 2nd Band: - 3rd Band: -**	**1st Band: White 2nd Band: Pale Green 3rd Band: Pale Green 4th Band: -**
		Type	**Casing**		

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**

OPERATION LIMIT TORQUES

Operating Torque	**22700 ft-lbs**	Yield Torque	**25250 ft-lbs**

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.

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

May 22 2016

Tenaris

Connection: TenarisXP® BTC
Casing/Tubing: CAS
Coupling Option: REGULAR

Size: 5.500 in.
Wall: 0.361 in.
Weight: 20.00 lbs/ft
Grade: P110
Min. Wall Thickness: 90.0 %

PIPE BODY DATA

GEOMETRY

Nominal OD	**5.500** in.	Nominal Weight	**20.00** lbs/ft	Standard Drift Diameter	**4.653** in.
Nominal ID	**4.778** in.	Wall Thickness	**0.361** in.	Special Drift Diameter	**N/A**
Plain End Weight	**19.83** lbs/ft				

PERFORMANCE

Body Yield Strength	**641** x 1000 lbs	Internal Yield	**13000** psi	SMYS	**110000** psi
Collapse	**11100** psi				

TENARISXP® BTC CONNECTION DATA

GEOMETRY

Connection OD	**6.100** in.	Coupling Length	**9.450** in.	Connection ID	**4.766** in.
Critical Section Area	**5.828** sq. in.	Threads per in.	**5.00**	Make-Up Loss	**4.204** in.

PERFORMANCE

Tension Efficiency	**100** %	Joint Yield Strength	**641** x 1000 lbs	Internal Pressure Capacity(1)	**13000** psi
Structural Compression Efficiency	**100** %	Structural Compression Strength	**641** x 1000 lbs	Structural Bending(2)	**92** °/100 ft
External Pressure Capacity	**11100** psi				

ESTIMATED MAKE-UP TORQUES(3)

Minimum	**11270** ft-lbs	Optimum	**12520** ft-lbs	Maximum	**13770** ft-lbs

OPERATIONAL LIMIT TORQUES

Operating Torque	**21500** ft-lbs	Yield Torque	**23900** ft-lbs		

BLANKING DIMENSIONS

Blanking Dimensions

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

(2) Structural rating, pure bending to yield (i.e no other loads applied)

(3) Torque values calculated for API Modified thread compounds with Friction Factor=1. For other thread compounds please contact us at licensees@oilfield.tenaris.com. Torque values may be further reviewed.

For additional information, please contact us at contact-tenarishydril@tenaris.com

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

June 17 2015

TenarisHydril

Size: 7.625 in.
Wall: 0.375 in.
Weight: 29.70 lbs/ft
Grade: P110-IC
Min. Wall Thickness: 87.5 %

Connection: Wedge 513™
Casing/Tubing: CAS

PIPE BODY DATA

GEOMETRY

Nominal OD	**7.625** in.	Nominal Weight	**29.70** lbs/ft	Standard Drift Diameter	**6.750** in.
Nominal ID	**6.875** in.	Wall Thickness	**0.375** in.	Special Drift Diameter	**N/A**
Plain End Weight	**29.06** lbs/ft				

PERFORMANCE

Body Yield Strength	**940** x 1000 lbs	Internal Yield	**9470** psi	SMYS	**110000** psi
Collapse	**7150** psi				

WEDGE 513™ CONNECTION DATA

GEOMETRY

Connection OD	**7.625** in.	Connection ID	**6.800** in.	Make-Up Loss	**4.420** in.
Critical Section Area	**5.125** sq. in.	Threads per in.	**3.29**		

PERFORMANCE

Tension Efficiency	**60.0** %	Joint Yield Strength	**564** x 1000 lbs	Internal Pressure Capacity	**9470** psi
Compression Strength	**707** x 1000 lbs	Compression Efficiency	**75.2** %	Bending	**40** °/100 ft
External Pressure Capacity	**7150** psi				

MAKE-UP TORQUES

Minimum	**9000** ft-lbs	Optimum	**10800** ft-lbs	Maximum (*)	**15800** ft-lbs

OPERATIONAL LIMIT TORQUES

Operating Torque	**47000** ft-lbs	Yield Torque	**70000** ft-lbs		

BLANKING DIMENSIONS

Blanking Dimensions

* If you need to use torque values that are higher than the maximum indicated, please contact a local Tenaris technical sales representative.

BOP Schemat
Bocntdfs1.boc.che vrontexaco.net\

Wellhead Sch
Bocntdfs1.boc.che vrontexaco.net\

Choke Hose S
O:\NAU\MC

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	TVD	MD
Castille	1917	1103	
Lamar	435	2585	
Bell	398	2622	
Cherry	-414	3434	
Brushy	-1638	4658	
Bone Spring Lime	-3140	6160	
Avalon	-3547	6567	
First Bone Spring	-4272	7292	
Second Bone Spring	-5004	8024	
Third Bone Spring	-6108	9128	
Wolfcamp A	-6443	9463	
Lateral TVD Wolfcamp A	-6545	9565	20185

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		450
Water	Castille	1103
Water	Cherry Canyon	3434
Oil/Gas	Brushy Canyon	4658
Oil/Gas	First Bone Spring	7292
Oil/Gas	Second Bone Spring	8024
Oil/Gas	Third Bone Spring	9128
Oil/Gas	Wolfcamp A	9463

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

3. BOP EQUIPMENT

Stack will be tested as specified in the attached testing requirements, upon NU and not to exceed 30 days. Test BOP from 250 psi to 5000 psi in Ram and 250 psi to 3500 psi in annular. BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. 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. Flex choke hose will be used for all wells on the pad (see attached specs). BOP test will be conducted by a third party.

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

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	450'	17-1/2"	13-3/8"	54.5 #	J-55	STC	New
Intermediate	0'	6,300'	12-1/4"	9-5/8"	43.5#	L-80	LTC	New
Intermediate 2	6,000'	9,000'	8-1/2"	7-5/8"	29.7 #	P-110	TSH513	New
Production	0'	20,185'	6-3/4"	5-1/2"x5"	20# x 18#	P-110 x P-110IC	TXP x Wedge 521	New

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

5. **CEMENTING PROGRAM**

Slurry	Type	Cemnent Top	Cement Bottom	Weight	Yield	OH %Excess	Sacks	Water	
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk	
Tail	Class C	0'	450'	14.8	1.336	10	257	6.423	
Intermediate									
Stage 2 Lead	Class C	0'	1,600'	11.9	2.57	10	218	14.73	
Stage 2 Tail	Class C	1,600'	2,600'	14.8	1.337	10	258	6.42	
DV Tool		2,600'							
Stage 1 Lead	Class C	2,600'	5,300'	11.9	2.57	10	362	14.73	
Stage 1 Tail	Class C	5,300'	6,300'	14.8	1.337	10	258	6.42	
Intermediate Liner									
Tail	Class C	6,000'	9,000'	14.8	1.342	10	199	6.35	C
Production									
Lead	Class C	0'	8,000'	11.9	2.466	10	744	14.12	
Tail	Class C	8,000'	19,221'	14.8	1.341	10	946	6.39	C
Acid Soluable Tail	Class H	19,185'	20,185'	15	2.189	10	57	9.57	Cl

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'	450'	Spud Mud	8.3 - 10	32 - 34	NC - NC
450'	6,300'	Brine	8.8 - 10	50 -70	5.0 - 10
6,300'	9,000'	Brine	8.8 - 10	50 -70	5.0 - 10
9,000'	20,185'	OBM	9.5 - 13	50 -70	5.0 - 10

A closed system will by utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical 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

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

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:

U. S. Steel Tubular Products

9.625 40/0.395 L80 HC

9/29/2015 7:34:21 AM

MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	80,000	--	--	--	psi
Maximum Yield Strength	95,000	--	--	--	psi
Minimum Tensile Strength	95,000	--	--	--	psi

DIMENSIONS	Pipe	BTC	LTC	STC	
Outside Diameter	9.625	10.625	10.625	--	in.
Wall Thickness	0.395	--	--	--	in.
Inside Diameter	8.835	8.835	8.835	--	in.
Standard Drift	8.679	8.679	8.679	--	in.
Alternate Drift	8.750	8.750	8.750	--	in.
Nominal Linear Weight, T&C	40.00	--	--	--	lbs/ft
Plain End Weight	38.97	--	--	--	lbs/ft

PERFORMANCE	Pipe	BTC	LTC	STC	
Minimum Collapse Pressure	3,870	3,870	3,870	--	psi
Minimum Internal Yield Pressure	5,750	5,750	5,750	--	psi
Minimum Pipe Body Yield Strength	916,000.00	--	--	--	lbs
Joint Strength	--	947	727	--	1000 lbs
Reference Length	--	15,785	12,119	--	ft

MAKE-UP DATA	Pipe	BTC	LTC	STC	
Make-Up Loss	--	4.81	4.75	--	in.
Minimum Make-Up Torque	--	--	5,450	--	ft-lbs
Maximum Make-Up Torque	--	--	9,090	--	ft-lbs

U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

H_2S Preparedness and Contingency Plan Summary

Chevron

Training

MCBU Drilling and Completions H_2S 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_2S.

Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H_2S, who are not required to perform work in H_2S areas, will be provided with an awareness level of H_2S training prior to entering any H_2S areas. At a minimum, awareness level training will include:

1. Physical and chemical properties of H_2S
2. Health hazards of H_2S
3. Personal protective equipment
4. Information regarding potential sources of H_2S
5. Alarms and emergency evacuation procedures

Awareness level training will be developed and conducted by personnel who are qualified either by specific training, educational experience and/or work-related background.

Advanced Level H_2S Training

Employees and contractors required to work in areas that may contain H_2S will be provided with Advanced Level H_2S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H_2S training will include:

1. H_2S safe work practice procedures;
2. Emergency contingency plan procedures;
3. Methods to detect the presence or release of H_2S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H_2S equipment.
4. Basic overview of respiratory protective equipment suitable for use in H_2S 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_2S training;
6. Proficiency examination covering all course material.

Advanced H_2S training courses will be instructed by personnel who have successfully completed an appropriate H_2S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.

H_2S Training Certification

All employees and visitors will be issued an H_2S training certification card (or certificate) upon successful completion of the appropriate H_2S training course. Personnel working in an H_2S environment will carry a current H_2S training certification card as proof of having received the proper training on their person at all times.

Briefing Area

A minimum of two briefing areas will be established in locations that at least one area will be up-wind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated upwind briefing areas for instructions.

H_2S Equipment

Respiratory Protection

a) Six 30 minute SCBAs – 2 at each briefing area and 2 in the Safety Trailer.

b) Eight 5 minute EBAs – 5 in the dog house at the rig floor, 1 at the accumulator, 1 at the shale shakers and 1 at the mud pits.

Visual Warning System

a) One color code sign, displaying all possible conditions, will be placed at the entrance to the location with a flag displaying the current condition.

b) Two windsocks will be on location, one on the dog house and one on the Drill Site Manager's Trailer.

H_2S Detection and Monitoring System

a) H_2S monitoring system (sensor head, warning light and siren) placed throughout rig.

- Drilling Rig Locations: at a minimum, in the area of the Shale shaker, rig floor, and bell nipple.
- Workover Rig Locations: at a minimum, in the area of the Cellar, rig floor and circulating tanks or shale shaker.

Well Control Equipment

a) Flare Line 150' from wellhead with igniter.

b) Choke manifold with a remotely operated choke.

c) Mud / gas separator

Mud Program

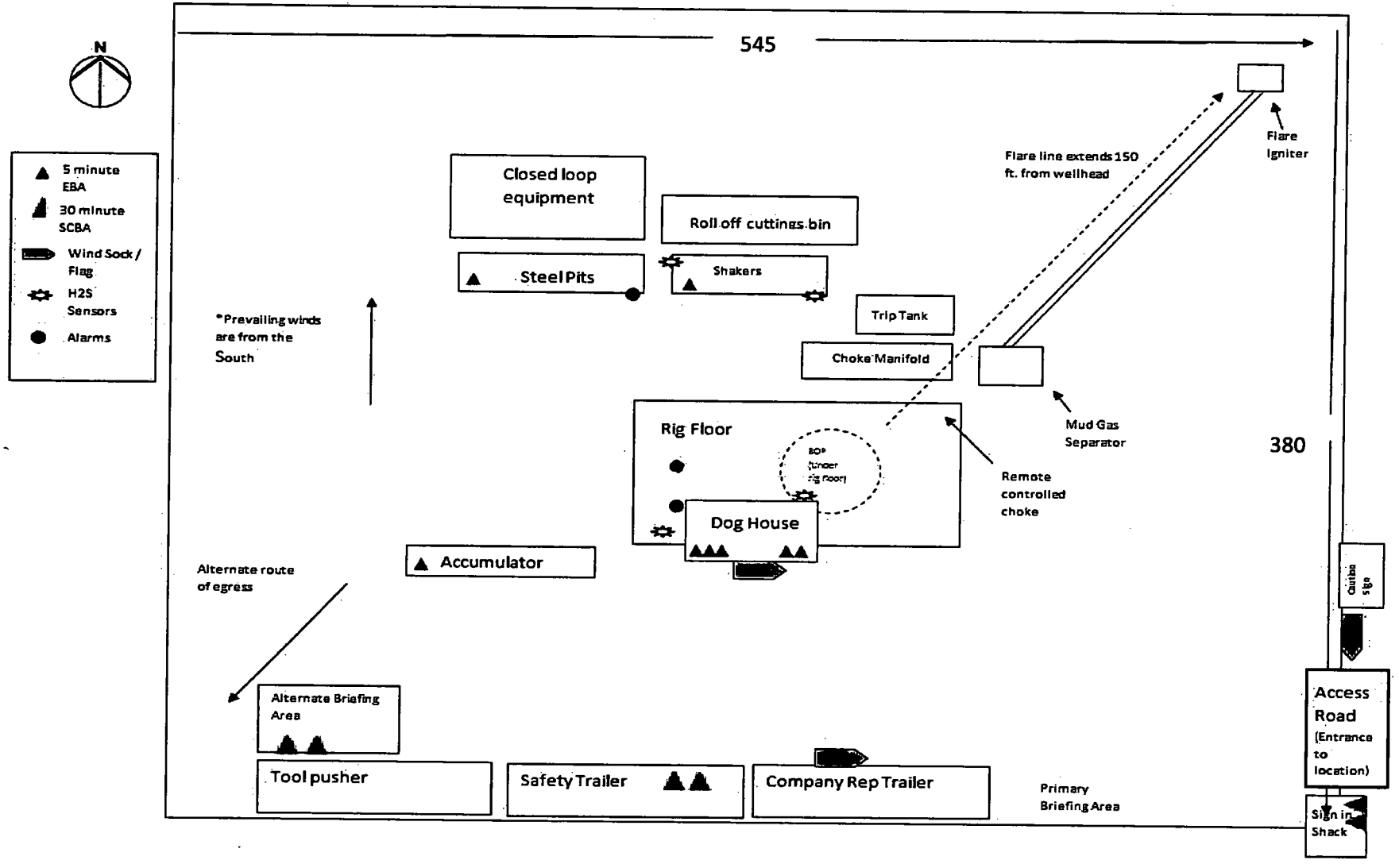
In the event of drilling, completions, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater the following shall be considered:

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

Public Safety - Emergency Assistance

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

H_2S Preparedness and Contingency Plan Summary



Pump
OBM
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Diesel

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Brine
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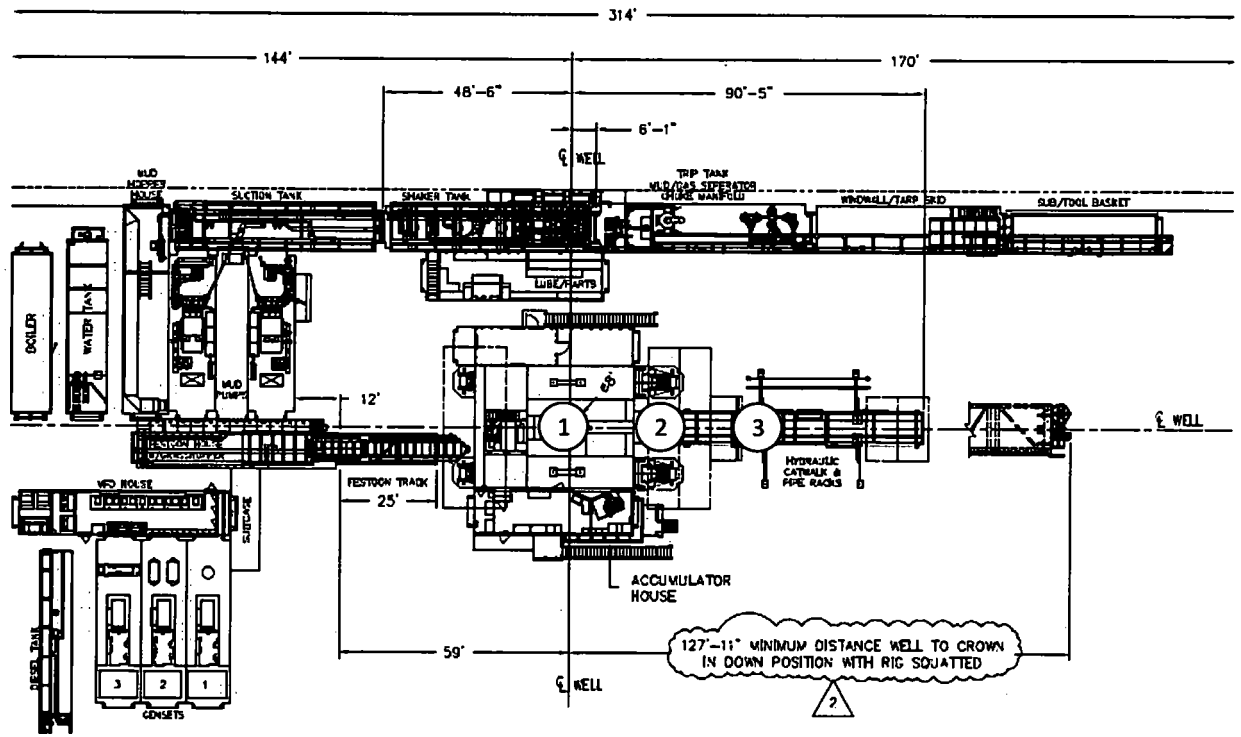
Trash
Trash



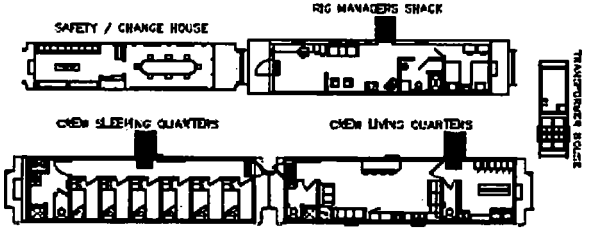
North

Directional

Mud Logger

Mud Engineer

Parts House



DSM

Safety

DSM #2

Gym

Entrance

Planned Wellpath Report

CB HAYS 10 3 FED COM **005 2H**
Rev B.0 Page 1 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Tranlam
Scale	0.999917	Report Generated	5/23/2018 at 1:40:53 PM
Convergence at slot	0.15° East	Database/Source file	WA_Midland/CB_NE_10_3_005_2H_Rev_B.0.xml

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1.00	50.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W
Facility Reference Pt			581164.00	477045.00	32°18'40.463"N	104°04'14.227"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Patterson 257 (KB) to Facility Vertical Datum	3020.00ft
Horizontal Reference Pt	Slot	Patterson 257 (KB) to Mean Sea Level	3020.00ft
Vertical Reference Pt	Patterson 257 (KB)	Patterson 257 (KB) to Ground Level at Slot (CB NE 10 3 005 2H)	28.00ft
MD Reference Pt	Patterson 257 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.08°

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
Rev B.0 Page 2 of 10

BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00†	0.000	56.500	0.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
28.00	0.000	56.500	28.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	Tie On
128.00†	0.000	56.500	128.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
228.00†	0.000	56.500	228.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
328.00†	0.000	56.500	328.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
428.00†	0.000	56.500	428.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
528.00†	0.000	56.500	528.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
628.00†	0.000	56.500	628.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
728.00†	0.000	56.500	728.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
828.00†	0.000	56.500	828.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
928.00†	0.000	56.500	928.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
1000.00	0.000	56.500	1000.00	0.00	0.00	0.00	581214.00	477044.00	32°18'40.452"N	104°04'13.644"W	0.00	0.00	0.00	
1028.00†	0.420	56.500	1028.00	0.06	0.06	0.09	581214.09	477044.06	32°18'40.452"N	104°04'13.643"W	1.50	1.50	201.79	End of Tangent
1128.00†	1.920	56.500	1127.98	1.19	1.18	1.79	581215.79	477045.18	32°18'40.463"N	104°04'13.623"W	1.50	1.50	0.00	
1228.00†	3.420	56.500	1227.86	3.76	3.75	5.67	581219.67	477047.75	32°18'40.489"N	104°04'13.578"W	1.50	1.50	0.00	
1328.00†	4.920	56.500	1327.60	7.78	7.77	11.74	581225.74	477051.77	32°18'40.528"N	104°04'13.507"W	1.50	1.50	0.00	
1428.00†	6.420	56.500	1427.10	13.25	13.22	19.97	581233.97	477057.22	32°18'40.582"N	104°04'13.411"W	1.50	1.50	0.00	
1528.00†	7.920	56.500	1526.32	20.15	20.11	30.38	581244.38	477064.11	32°18'40.650"N	104°04'13.290"W	1.50	1.50	0.00	
1533.33	8.000	56.500	1531.60	20.56	20.52	31.00	581245.00	477064.52	32°18'40.654"N	104°04'13.283"W	1.50	1.50	0.00	End of Build
1628.00†	8.000	56.500	1625.35	27.85	27.79	41.98	581255.98	477071.79	32°18'40.725"N	104°04'13.154"W	0.00	0.00	0.00	
1728.00†	8.000	56.500	1724.37	35.55	35.47	53.59	581267.59	477079.47	32°18'40.801"N	104°04'13.019"W	0.00	0.00	0.00	
1828.00†	8.000	56.500	1823.40	43.24	43.15	65.20	581279.19	477087.15	32°18'40.877"N	104°04'12.883"W	0.00	0.00	0.00	
1928.00†	8.000	56.500	1922.43	50.94	50.83	76.80	581290.79	477094.83	32°18'40.953"N	104°04'12.748"W	0.00	0.00	0.00	
2028.00†	8.000	56.500	2021.45	58.64	58.52	88.41	581302.40	477102.51	32°18'41.028"N	104°04'12.613"W	0.00	0.00	0.00	
2128.00†	8.000	56.500	2120.48	66.34	66.20	100.01	581314.00	477110.19	32°18'41.104"N	104°04'12.477"W	0.00	0.00	0.00	
2228.00†	8.000	56.500	2219.51	74.03	73.88	111.62	581325.61	477117.87	32°18'41.180"N	104°04'12.342"W	0.00	0.00	0.00	
2328.00†	8.000	56.500	2318.54	81.73	81.56	123.22	581337.21	477125.55	32°18'41.256"N	104°04'12.206"W	0.00	0.00	0.00	
2428.00†	8.000	56.500	2417.56	89.43	89.24	134.83	581348.82	477133.23	32°18'41.331"N	104°04'12.071"W	0.00	0.00	0.00	
2528.00†	8.000	56.500	2516.59	97.13	96.92	146.43	581360.42	477140.91	32°18'41.407"N	104°04'11.935"W	0.00	0.00	0.00	
2628.00†	8.000	56.500	2615.62	104.82	104.60	158.04	581372.03	477148.59	32°18'41.483"N	104°04'11.800"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
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BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
2728.00†	8.000	56.500	2714.64	112.52	112.29	169.64	581383.63	477156.28	32°18'41.558"N	104°04'11.665"W	0.00	0.00	0.00	
2828.00†	8.000	56.500	2813.67	120.22	119.97	181.25	581395.23	477163.96	32°18'41.634"N	104°04'11.529"W	0.00	0.00	0.00	
2928.00†	8.000	56.500	2912.70	127.92	127.65	192.86	581406.84	477171.64	32°18'41.710"N	104°04'11.394"W	0.00	0.00	0.00	
3028.00†	8.000	56.500	3011.72	135.62	135.33	204.46	581418.44	477179.32	32°18'41.786"N	104°04'11.258"W	0.00	0.00	0.00	
3128.00†	8.000	56.500	3110.75	143.31	143.01	216.07	581430.05	477187.00	32°18'41.861"N	104°04'11.123"W	0.00	0.00	0.00	
3228.00†	8.000	56.500	3209.78	151.01	150.69	227.67	581441.65	477194.68	32°18'41.937"N	104°04'10.987"W	0.00	0.00	0.00	
3328.00†	8.000	56.500	3308.80	158.71	158.37	239.28	581453.26	477202.36	32°18'42.013"N	104°04'10.852"W	0.00	0.00	0.00	
3428.00†	8.000	56.500	3407.83	166.41	166.06	250.88	581464.86	477210.04	32°18'42.089"N	104°04'10.716"W	0.00	0.00	0.00	
3528.00†	8.000	56.500	3506.86	174.10	173.74	262.49	581476.47	477217.72	32°18'42.164"N	104°04'10.581"W	0.00	0.00	0.00	
3628.00†	8.000	56.500	3605.88	181.80	181.42	274.09	581488.07	477225.40	32°18'42.240"N	104°04'10.446"W	0.00	0.00	0.00	
3728.00†	8.000	56.500	3704.91	189.50	189.10	285.70	581499.67	477233.08	32°18'42.316"N	104°04'10.310"W	0.00	0.00	0.00	
3828.00†	8.000	56.500	3803.94	197.20	196.78	297.30	581511.28	477240.76	32°18'42.391"N	104°04'10.175"W	0.00	0.00	0.00	
3928.00†	8.000	56.500	3902.96	204.89	204.46	308.91	581522.88	477248.45	32°18'42.467"N	104°04'10.039"W	0.00	0.00	0.00	
3991.29	8.000	56.500	3965.64	209.77	209.33	316.26	581530.23	477253.31	32°18'42.515"N	104°04'09.953"W	0.00	0.00	0.00	End of Tangent
4028.00†	7.449	56.500	4002.01	212.50	212.05	320.37	581534.34	477256.03	32°18'42.542"N	104°04'09.905"W	1.50	-1.50	0.00	
4128.00†	5.949	56.500	4101.33	218.95	218.49	330.10	581544.07	477262.47	32°18'42.605"N	104°04'09.792"W	1.50	-1.50	0.00	
4228.00†	4.449	56.500	4200.91	223.96	223.49	337.65	581551.63	477267.47	32°18'42.655"N	104°04'09.704"W	1.50	-1.50	0.00	
4328.00†	2.949	56.500	4300.70	227.53	227.05	343.03	581557.01	477271.03	32°18'42.690"N	104°04'09.641"W	1.50	-1.50	0.00	
4428.00†	1.449	56.500	4400.63	229.65	229.17	346.23	581560.21	477273.15	32°18'42.711"N	104°04'09.604"W	1.50	-1.50	0.00	
4524.63	0.000	320.000	4497.24	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	1.50	-1.50	-58.47	End of Drop
4528.00†	0.000	320.000	4500.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
4628.00†	0.000	320.000	4600.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
4728.00†	0.000	320.000	4700.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
4828.00†	0.000	320.000	4800.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
4928.00†	0.000	320.000	4900.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5028.00†	0.000	320.000	5000.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5128.00†	0.000	320.000	5100.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5228.00†	0.000	320.000	5200.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5328.00†	0.000	320.000	5300.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5428.00†	0.000	320.000	5400.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
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BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
5528.00†	0.000	320.000	5500.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5628.00†	0.000	320.000	5600.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5728.00†	0.000	320.000	5700.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5828.00†	0.000	320.000	5800.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
5928.00†	0.000	320.000	5900.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6028.00†	0.000	320.000	6000.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6128.00†	0.000	320.000	6100.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6228.00†	0.000	320.000	6200.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6328.00†	0.000	320.000	6300.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6428.00†	0.000	320.000	6400.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6528.00†	0.000	320.000	6500.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6628.00†	0.000	320.000	6600.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6728.00†	0.000	320.000	6700.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6828.00†	0.000	320.000	6800.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
6928.00†	0.000	320.000	6900.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7028.00†	0.000	320.000	7000.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7128.00†	0.000	320.000	7100.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7228.00†	0.000	320.000	7200.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7328.00†	0.000	320.000	7300.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7428.00†	0.000	320.000	7400.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7528.00†	0.000	320.000	7500.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7628.00†	0.000	320.000	7600.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7728.00†	0.000	320.000	7700.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7828.00†	0.000	320.000	7800.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
7928.00†	0.000	320.000	7900.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8028.00†	0.000	320.000	8000.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8128.00†	0.000	320.000	8100.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8228.00†	0.000	320.000	8200.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8328.00†	0.000	320.000	8300.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8428.00†	0.000	320.000	8400.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
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BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8528.00†	0.000	320.000	8500.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8628.00†	0.000	320.000	8600.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8728.00†	0.000	320.000	8700.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8828.00†	0.000	320.000	8800.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8928.00†	0.000	320.000	8900.62	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	
8965.34	0.000	320.000	8937.95	230.33	229.84	347.25	581561.22	477273.82	32°18'42.717"N	104°04'09.592"W	0.00	0.00	0.00	End of Tangent
9028.00†	6.266	320.000	9000.49	232.95	232.46	345.05	581559.02	477276.45	32°18'42.743"N	104°04'09.617"W	10.00	10.00	-63.83	
9128.00†	16.266	320.000	9098.44	247.88	247.41	332.51	581546.48	477291.39	32°18'42.892"N	104°04'09.763"W	10.00	10.00	0.00	
9228.00†	26.266	320.000	9191.51	275.59	275.16	309.23	581523.20	477319.14	32°18'43.167"N	104°04'10.034"W	10.00	10.00	0.00	
9328.00†	36.266	320.000	9276.88	315.26	314.87	275.91	581489.88	477358.84	32°18'43.561"N	104°04'10.421"W	10.00	10.00	0.00	
9428.00†	46.266	320.000	9351.95	365.66	365.33	233.56	581447.54	477409.30	32°18'44.061"N	104°04'10.913"W	10.00	10.00	0.00	
9465.34	50.000	320.000	9376.86	386.93	386.63	215.70	581429.68	477430.59	32°18'44.272"N	104°04'11.120"W	10.00	10.00	0.00	End of Build
9528.00†	53.971	326.158	9415.47	426.36	426.10	186.13	581400.11	477470.06	32°18'44.663"N	104°04'11.463"W	10.00	6.34	9.83	
9628.00†	60.868	334.764	9469.36	499.58	499.38	144.88	581358.87	477543.33	32°18'45.389"N	104°04'11.942"W	10.00	6.90	8.61	
9728.00†	68.245	342.252	9512.34	583.48	583.33	112.02	581326.01	477627.28	32°18'46.221"N	104°04'12.322"W	10.00	7.38	7.49	
9828.00†	75.924	348.990	9543.11	675.52	675.39	88.54	581302.54	477719.34	32°18'47.133"N	104°04'12.593"W	10.00	7.68	6.74	
9928.00†	83.777	355.285	9560.74	772.89	772.78	75.16	581289.16	477816.72	32°18'48.097"N	104°04'12.747"W	10.00	7.85	6.29	
10006.53	90.000	0.084	9565.00†	851.17	851.07	72.01	581286.00	477895.00	32°18'48.871"N	104°04'12.781"W	10.00	7.92	6.11	End of 3D Arc
10028.00†	90.000	0.084	9565.00	872.64	872.54	72.04	581286.03	477916.47	32°18'49.084"N	104°04'12.780"W	0.00	0.00	0.00	
10128.00†	90.000	0.084	9565.00	972.64	972.54	72.19	581286.18	478016.46	32°18'50.073"N	104°04'12.775"W	0.00	0.00	0.00	
10228.00†	90.000	0.084	9565.00	1072.64	1072.54	72.33	581286.33	478116.45	32°18'51.063"N	104°04'12.771"W	0.00	0.00	0.00	
10328.00†	90.000	0.084	9565.00	1172.64	1172.54	72.48	581286.47	478216.44	32°18'52.052"N	104°04'12.766"W	0.00	0.00	0.00	
10428.00†	90.000	0.084	9565.00	1272.64	1272.54	72.63	581286.62	478316.43	32°18'53.042"N	104°04'12.762"W	0.00	0.00	0.00	
10528.00†	90.000	0.084	9565.00	1372.64	1372.54	72.77	581286.77	478416.43	32°18'54.031"N	104°04'12.757"W	0.00	0.00	0.00	
10628.00†	90.000	0.084	9565.00	1472.64	1472.54	72.92	581286.92	478516.42	32°18'55.021"N	104°04'12.753"W	0.00	0.00	0.00	
10728.00†	90.000	0.084	9565.00	1572.64	1572.54	73.07	581287.06	478616.41	32°18'56.010"N	104°04'12.748"W	0.00	0.00	0.00	
10828.00†	90.000	0.084	9565.00	1672.64	1672.54	73.22	581287.21	478716.40	32°18'57.000"N	104°04'12.743"W	0.00	0.00	0.00	
10928.00†	90.000	0.084	9565.00	1772.64	1772.54	73.36	581287.36	478816.39	32°18'57.990"N	104°04'12.739"W	0.00	0.00	0.00	
11028.00†	90.000	0.084	9565.00	1872.64	1872.54	73.51	581287.51	478916.38	32°18'58.979"N	104°04'12.734"W	0.00	0.00	0.00	
11128.00†	90.000	0.084	9565.00	1972.64	1972.54	73.66	581287.65	479016.37	32°18'59.969"N	104°04'12.730"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
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BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
11228.00†	90.000	0.084	9565.00	2072.64	2072.54	73.81	581287.80	479116.37	32°19'00.958"N	104°04'12.725"W	0.00	0.00	0.00	
11328.00†	90.000	0.084	9565.00	2172.64	2172.54	73.95	581287.95	479216.36	32°19'01.948"N	104°04'12.721"W	0.00	0.00	0.00	
11428.00†	90.000	0.084	9565.00	2272.64	2272.54	74.10	581288.09	479316.35	32°19'02.937"N	104°04'12.716"W	0.00	0.00	0.00	
11528.00†	90.000	0.084	9565.00	2372.64	2372.54	74.25	581288.24	479416.34	32°19'03.927"N	104°04'12.711"W	0.00	0.00	0.00	
11628.00†	90.000	0.084	9565.00	2472.64	2472.54	74.40	581288.39	479516.33	32°19'04.916"N	104°04'12.707"W	0.00	0.00	0.00	
11728.00†	90.000	0.084	9565.00	2572.64	2572.54	74.54	581288.54	479616.32	32°19'05.906"N	104°04'12.702"W	0.00	0.00	0.00	
11828.00†	90.000	0.084	9565.00	2672.64	2672.54	74.69	581288.68	479716.31	32°19'06.895"N	104°04'12.698"W	0.00	0.00	0.00	
11928.00†	90.000	0.084	9565.00	2772.64	2772.54	74.84	581288.83	479816.30	32°19'07.885"N	104°04'12.693"W	0.00	0.00	0.00	
12028.00†	90.000	0.084	9565.00	2872.64	2872.54	74.99	581288.98	479916.30	32°19'08.874"N	104°04'12.688"W	0.00	0.00	0.00	
12128.00†	90.000	0.084	9565.00	2972.64	2972.54	75.13	581289.13	480016.29	32°19'09.864"N	104°04'12.684"W	0.00	0.00	0.00	
12228.00†	90.000	0.084	9565.00	3072.64	3072.54	75.28	581289.27	480116.28	32°19'10.853"N	104°04'12.679"W	0.00	0.00	0.00	
12328.00†	90.000	0.084	9565.00	3172.64	3172.54	75.43	581289.42	480216.27	32°19'11.843"N	104°04'12.675"W	0.00	0.00	0.00	
12428.00†	90.000	0.084	9565.00	3272.64	3272.54	75.57	581289.57	480316.26	32°19'12.832"N	104°04'12.670"W	0.00	0.00	0.00	
12528.00†	90.000	0.084	9565.00	3372.64	3372.54	75.72	581289.72	480416.25	32°19'13.822"N	104°04'12.666"W	0.00	0.00	0.00	
12628.00†	90.000	0.084	9565.00	3472.64	3472.54	75.87	581289.86	480516.24	32°19'14.811"N	104°04'12.661"W	0.00	0.00	0.00	
12728.00†	90.000	0.084	9565.00	3572.64	3572.54	76.02	581290.01	480616.24	32°19'15.801"N	104°04'12.656"W	0.00	0.00	0.00	
12828.00†	90.000	0.084	9565.00	3672.64	3672.54	76.16	581290.16	480716.23	32°19'16.790"N	104°04'12.652"W	0.00	0.00	0.00	
12928.00†	90.000	0.084	9565.00	3772.64	3772.54	76.31	581290.31	480816.22	32°19'17.780"N	104°04'12.647"W	0.00	0.00	0.00	
13028.00†	90.000	0.084	9565.00	3872.64	3872.54	76.46	581290.45	480916.21	32°19'18.770"N	104°04'12.643"W	0.00	0.00	0.00	
13128.00†	90.000	0.084	9565.00	3972.64	3972.54	76.61	581290.60	481016.20	32°19'19.759"N	104°04'12.638"W	0.00	0.00	0.00	
13228.00†	90.000	0.084	9565.00	4072.64	4072.54	76.75	581290.75	481116.19	32°19'20.749"N	104°04'12.634"W	0.00	0.00	0.00	
13328.00†	90.000	0.084	9565.00	4172.64	4172.54	76.90	581290.89	481216.18	32°19'21.738"N	104°04'12.629"W	0.00	0.00	0.00	
13428.00†	90.000	0.084	9565.00	4272.64	4272.54	77.05	581291.04	481316.17	32°19'22.728"N	104°04'12.624"W	0.00	0.00	0.00	
13528.00†	90.000	0.084	9565.00	4372.64	4372.54	77.20	581291.19	481416.17	32°19'23.717"N	104°04'12.620"W	0.00	0.00	0.00	
13628.00†	90.000	0.084	9565.00	4472.64	4472.54	77.34	581291.34	481516.16	32°19'24.707"N	104°04'12.615"W	0.00	0.00	0.00	
13728.00†	90.000	0.084	9565.00	4572.64	4572.54	77.49	581291.48	481616.15	32°19'25.696"N	104°04'12.611"W	0.00	0.00	0.00	
13828.00†	90.000	0.084	9565.00	4672.64	4672.54	77.64	581291.63	481716.14	32°19'26.686"N	104°04'12.606"W	0.00	0.00	0.00	
13928.00†	90.000	0.084	9565.00	4772.64	4772.54	77.79	581291.78	481816.13	32°19'27.675"N	104°04'12.601"W	0.00	0.00	0.00	
14028.00†	90.000	0.084	9565.00	4872.64	4872.54	77.93	581291.93	481916.12	32°19'28.665"N	104°04'12.597"W	0.00	0.00	0.00	
14128.00†	90.000	0.084	9565.00	4972.64	4972.54	78.08	581292.07	482016.11	32°19'29.654"N	104°04'12.592"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM 005 2H
Rev B.0 Page 7 of 10

BAKER HUGHES a GE company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
14228.00†	90.000	0.084	9565.00	5072.64	5072.54	78.23	581292.22	482116.11	32°19'30.644"N	104°04'12.588"W	0.00	0.00	0.00	
14328.00†	90.000	0.084	9565.00	5172.64	5172.54	78.37	581292.37	482216.10	32°19'31.633"N	104°04'12.583"W	0.00	0.00	0.00	
14428.00†	90.000	0.084	9565.00	5272.64	5272.54	78.52	581292.52	482316.09	32°19'32.623"N	104°04'12.579"W	0.00	0.00	0.00	
14528.00†	90.000	0.084	9565.00	5372.64	5372.54	78.67	581292.66	482416.08	32°19'33.612"N	104°04'12.574"W	0.00	0.00	0.00	
14628.00†	90.000	0.084	9565.00	5472.64	5472.54	78.82	581292.81	482516.07	32°19'34.602"N	104°04'12.569"W	0.00	0.00	0.00	
14728.00†	90.000	0.084	9565.00	5572.64	5572.54	78.96	581292.96	482616.06	32°19'35.591"N	104°04'12.565"W	0.00	0.00	0.00	
14828.00†	90.000	0.084	9565.00	5672.64	5672.54	79.11	581293.11	482716.05	32°19'36.581"N	104°04'12.560"W	0.00	0.00	0.00	
14928.00†	90.000	0.084	9565.00	5772.64	5772.54	79.26	581293.25	482816.05	32°19'37.570"N	104°04'12.556"W	0.00	0.00	0.00	
15028.00†	90.000	0.084	9565.00	5872.64	5872.54	79.41	581293.40	482916.04	32°19'38.560"N	104°04'12.551"W	0.00	0.00	0.00	
15128.00†	90.000	0.084	9565.00	5972.64	5972.54	79.55	581293.55	483016.03	32°19'39.550"N	104°04'12.547"W	0.00	0.00	0.00	
15228.00†	90.000	0.084	9565.00	6072.64	6072.54	79.70	581293.69	483116.02	32°19'40.539"N	104°04'12.542"W	0.00	0.00	0.00	
15328.00†	90.000	0.084	9565.00	6172.64	6172.54	79.85	581293.84	483216.01	32°19'41.529"N	104°04'12.537"W	0.00	0.00	0.00	
15428.00†	90.000	0.084	9565.00	6272.64	6272.54	80.00	581293.99	483316.00	32°19'42.518"N	104°04'12.533"W	0.00	0.00	0.00	
15528.00†	90.000	0.084	9565.00	6372.64	6372.54	80.14	581294.14	483415.99	32°19'43.508"N	104°04'12.528"W	0.00	0.00	0.00	
15628.00†	90.000	0.084	9565.00	6472.64	6472.54	80.29	581294.28	483515.98	32°19'44.497"N	104°04'12.524"W	0.00	0.00	0.00	
15728.00†	90.000	0.084	9565.00	6572.64	6572.54	80.44	581294.43	483615.98	32°19'45.487"N	104°04'12.519"W	0.00	0.00	0.00	
15828.00†	90.000	0.084	9565.00	6672.64	6672.54	80.59	581294.58	483715.97	32°19'46.476"N	104°04'12.514"W	0.00	0.00	0.00	
15928.00†	90.000	0.084	9565.00	6772.64	6772.54	80.73	581294.73	483815.96	32°19'47.466"N	104°04'12.510"W	0.00	0.00	0.00	
16028.00†	90.000	0.084	9565.00	6872.64	6872.54	80.88	581294.87	483915.95	32°19'48.455"N	104°04'12.505"W	0.00	0.00	0.00	
16128.00†	90.000	0.084	9565.00	6972.64	6972.54	81.03	581295.02	484015.94	32°19'49.445"N	104°04'12.501"W	0.00	0.00	0.00	
16228.00†	90.000	0.084	9565.00	7072.64	7072.54	81.18	581295.17	484115.93	32°19'50.434"N	104°04'12.496"W	0.00	0.00	0.00	
16328.00†	90.000	0.084	9565.00	7172.64	7172.54	81.32	581295.32	484215.92	32°19'51.424"N	104°04'12.492"W	0.00	0.00	0.00	
16428.00†	90.000	0.084	9565.00	7272.64	7272.54	81.47	581295.46	484315.92	32°19'52.413"N	104°04'12.487"W	0.00	0.00	0.00	
16528.00†	90.000	0.084	9565.00	7372.64	7372.54	81.62	581295.61	484415.91	32°19'53.403"N	104°04'12.482"W	0.00	0.00	0.00	
16628.00†	90.000	0.084	9565.00	7472.64	7472.54	81.76	581295.76	484515.90	32°19'54.392"N	104°04'12.478"W	0.00	0.00	0.00	
16728.00†	90.000	0.084	9565.00	7572.64	7572.54	81.91	581295.91	484615.89	32°19'55.382"N	104°04'12.473"W	0.00	0.00	0.00	
16828.00†	90.000	0.084	9565.00	7672.64	7672.54	82.06	581296.05	484715.88	32°19'56.371"N	104°04'12.469"W	0.00	0.00	0.00	
16928.00†	90.000	0.084	9565.00	7772.64	7772.54	82.21	581296.20	484815.87	32°19'57.361"N	104°04'12.464"W	0.00	0.00	0.00	
17028.00†	90.000	0.084	9565.00	7872.64	7872.54	82.35	581296.35	484915.86	32°19'58.350"N	104°04'12.460"W	0.00	0.00	0.00	
17128.00†	90.000	0.084	9565.00	7972.64	7972.54	82.50	581296.49	485015.86	32°19'59.340"N	104°04'12.455"W	0.00	0.00	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
17228.00†	90.000	0.084	9565.00	8072.64	8072.54	82.65	581296.64	485115.85	32°20'00.329"N	104°04'12.450"W	0.00	0.00	0.00	
17328.00†	90.000	0.084	9565.00	8172.64	8172.54	82.80	581296.79	485215.84	32°20'01.319"N	104°04'12.446"W	0.00	0.00	0.00	
17428.00†	90.000	0.084	9565.00	8272.64	8272.54	82.94	581296.94	485315.83	32°20'02.309"N	104°04'12.441"W	0.00	0.00	0.00	
17528.00†	90.000	0.084	9565.00	8372.64	8372.54	83.09	581297.08	485415.82	32°20'03.298"N	104°04'12.437"W	0.00	0.00	0.00	
17628.00†	90.000	0.084	9565.00	8472.64	8472.54	83.24	581297.23	485515.81	32°20'04.288"N	104°04'12.432"W	0.00	0.00	0.00	
17728.00†	90.000	0.084	9565.00	8572.64	8572.53	83.39	581297.38	485615.80	32°20'05.277"N	104°04'12.427"W	0.00	0.00	0.00	
17828.00†	90.000	0.084	9565.00	8672.64	8672.53	83.53	581297.53	485715.79	32°20'06.267"N	104°04'12.423"W	0.00	0.00	0.00	
17928.00†	90.000	0.084	9565.00	8772.64	8772.53	83.68	581297.67	485815.79	32°20'07.256"N	104°04'12.418"W	0.00	0.00	0.00	
18028.00†	90.000	0.084	9565.00	8872.64	8872.53	83.83	581297.82	485915.78	32°20'08.246"N	104°04'12.414"W	0.00	0.00	0.00	
18128.00†	90.000	0.084	9565.00	8972.64	8972.53	83.98	581297.97	486015.77	32°20'09.235"N	104°04'12.409"W	0.00	0.00	0.00	
18228.00†	90.000	0.084	9565.00	9072.64	9072.53	84.12	581298.12	486115.76	32°20'10.225"N	104°04'12.405"W	0.00	0.00	0.00	
18328.00†	90.000	0.084	9565.00	9172.64	9172.53	84.27	581298.26	486215.75	32°20'11.214"N	104°04'12.400"W	0.00	0.00	0.00	
18428.00†	90.000	0.084	9565.00	9272.64	9272.53	84.42	581298.41	486315.74	32°20'12.204"N	104°04'12.395"W	0.00	0.00	0.00	
18528.00†	90.000	0.084	9565.00	9372.64	9372.53	84.56	581298.56	486415.73	32°20'13.193"N	104°04'12.391"W	0.00	0.00	0.00	
18628.00†	90.000	0.084	9565.00	9472.64	9472.53	84.71	581298.70	486515.73	32°20'14.183"N	104°04'12.386"W	0.00	0.00	0.00	
18728.00†	90.000	0.084	9565.00	9572.64	9572.53	84.86	581298.85	486615.72	32°20'15.172"N	104°04'12.382"W	0.00	0.00	0.00	
18828.00†	90.000	0.084	9565.00	9672.64	9672.53	85.01	581299.00	486715.71	32°20'16.162"N	104°04'12.377"W	0.00	0.00	0.00	
18928.00†	90.000	0.084	9565.00	9772.64	9772.53	85.15	581299.15	486815.70	32°20'17.151"N	104°04'12.372"W	0.00	0.00	0.00	
19028.00†	90.000	0.084	9565.00	9872.64	9872.53	85.30	581299.29	486915.69	32°20'18.141"N	104°04'12.368"W	0.00	0.00	0.00	
19128.00†	90.000	0.084	9565.00	9972.64	9972.53	85.45	581299.44	487015.68	32°20'19.130"N	104°04'12.363"W	0.00	0.00	0.00	
19228.00†	90.000	0.084	9565.00	10072.64	10072.53	85.60	581299.59	487115.67	32°20'20.120"N	104°04'12.359"W	0.00	0.00	0.00	
19328.00†	90.000	0.084	9565.00	10172.64	10172.53	85.74	581299.74	487215.66	32°20'21.109"N	104°04'12.354"W	0.00	0.00	0.00	
19428.00†	90.000	0.084	9565.00	10272.64	10272.53	85.89	581299.88	487315.66	32°20'22.099"N	104°04'12.350"W	0.00	0.00	0.00	
19528.00†	90.000	0.084	9565.00	10372.64	10372.53	86.04	581300.03	487415.65	32°20'23.088"N	104°04'12.345"W	0.00	0.00	0.00	
19628.00†	90.000	0.084	9565.00	10472.64	10472.53	86.19	581300.18	487515.64	32°20'24.078"N	104°04'12.340"W	0.00	0.00	0.00	
19728.00†	90.000	0.084	9565.00	10572.64	10572.53	86.33	581300.33	487615.63	32°20'25.068"N	104°04'12.336"W	0.00	0.00	0.00	
19828.00†	90.000	0.084	9565.00	10672.64	10672.53	86.48	581300.47	487715.62	32°20'26.057"N	104°04'12.331"W	0.00	0.00	0.00	
19928.00†	90.000	0.084	9565.00	10772.64	10772.53	86.63	581300.62	487815.61	32°20'27.047"N	104°04'12.327"W	0.00	0.00	0.00	
20028.00†	90.000	0.084	9565.00	10872.64	10872.53	86.78	581300.77	487915.60	32°20'28.036"N	104°04'12.322"W	0.00	0.00	0.00	
20128.00†	90.000	0.084	9565.00	10972.64	10972.53	86.92	581300.92	488015.60	32°20'29.026"N	104°04'12.317"W	0.00	0.00	0.00	

Planned Wellpath Report

CB HAYS 10 3 FED COM **005 2H**
Rev B.0 Page 9 of 10

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

WELLPATH DATA (211 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
20185.41	90.000	0.084	9565.00	11030.05	11029.94	87.01	581301.00	488073.00	32°20'29.594"N	104°04'12.315"W	0.00	0.00	0.00	End of Tangent

HOLE & CASING SECTIONS - **Ref Wellbore: CB NE 10 3 005 2H** **Ref Wellpath: CB NE 10 3 005 2H Rev B.0**

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.375in Casing	28.00	450.00	422.00	28.00	450.00	0.00	0.00	0.00	0.00
9.625in Casing	28.00	9027.51	8999.51	28.00	9000.00	0.00	0.00	232.42	345.09
5.5in Casing	28.00	20185.41	20157.41	28.00	9565.00	0.00	0.00	11029.94	87.01

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) CB NE 10 3 005 2H FTP		9463.00	851.07	72.01	581286.00	477895.00	32°18'48.871"N	104°04'12.781"W	point
CB NE 10 3 005 2H LTP		9463.00	10799.92	83.01	581297.00	487843.00	32°20'27.318"N	104°04'12.368"W	point
CB NE 10 3 005 2H MP		9463.00	5792.49	10.00	581224.00	482836.00	32°19'37.770"N	104°04'13.362"W	point
2) CB NE 10 3 005 2H PBHL rev 2	20185.41	9565.00	11029.94	87.01	581301.00	488073.00	32°20'29.594"N	104°04'12.315"W	point

REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	CB HAYS 10 3 FED COM 005 2H
Area	Eddy County, NM	Well	CB HAYS 10 3 FED COM 005 2H
Field	Eddy Co., NM NAD 27	Wellbore	CB HAYS 10 3 FED COM 005 2H
Facility	Culebra Bluff Pkg 2 Pad 5		

SURVEY PROGRAM - **Ref Wellbore: CB NE 10 3 005 2H** **Ref Wellpath: CB NE 10 3 005 2H Rev B.0**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
28.00	450.00	BHI NaviTrak (Axial)		CB HAYS 10 3 FED COM 005 2H
450.00	9000.00	BHI NaviTrak (Axial)		CB HAYS 10 3 FED COM 005 2H
9000.00	20185.41	BHI AutoTrak Curve (Axial)		CB HAYS 10 3 FED COM 005 2H

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

☐ Original Operator & OGRID No.: CHEVRON U S A INC 4323
☐ Amended Date: 07/16/2018
Reason for Amendment:

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

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

Wells / Production Facility – CULEBRA BLUFF CTB (SECTION 15)

The wells shown in the table below will be connected to this production facility.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
CB HAYS 10 3 FED COM 005 No. 1H	Pending	UL: B, SEC 15, T23S, R28E	518' FNL, 1380' FEL	2,500	0	
CB HAYS 10 3 FED COM 005 No. 2H	Pending	UL: A, SEC 15, T23S, R28E	519' FNL, 1330' FEL	2,500	0	
CB HAYS 10 3 FED COM 005 No. 3H	Pending	UL: A, SEC 15, T23S, R28E	520' FNL, 1280' FEL	2,500	0	

Gathering System and Pipeline Notification

These Culebra Bluff Hays Pad 5 wells will be connected to Chevron's Culebra Bluff CTB West (Section 15) production facility located in Sec. 15, T23S, R28E, Eddy County, New Mexico during flowback and production. Gas produced from the production facility will be dedicated to Targa Delaware LLC ("Targa") and connected to Targa's high pressure gathering system located in Eddy County, New Mexico. Produced gas will be processed initially at Sendero Carlsbad Midstream LP Processing Plant located in Sec 32, T23S, R28E of Eddy County, New Mexico and other plants operated by Targa which are connected to the high pressure gathering system until approximately 3Q 2019 when it will be routed to Targa's new Falcon Plant located in northeast Culberson County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures. Chevron will periodically provide Targa a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Chevron and Targa will have periodic conference calls to discuss changes to the drilling and completion schedules.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

- Power Generation – On Lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared.
- Compressed Natural Gas – On Lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines.
- NGL Removal – On lease and trucked from condensate tanks
  - Plants are expensive and uneconomical to operate when gas volume declines.
  - Any residue gas that results in the future may be flared.

APD ID: 10400031506 **Submission Date:** 07/02/2018

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Well Type: OIL WELL **Well Work Type:** Drill

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

CB_HAYS_10_3_FED_COM_005_2H_EXISTING_ROAD_PLAT_20180702090746.pdf

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

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

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

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

CB_HAYS_10_3_FED_COM_005_2H_EXISTING_1_MILE_WELL_RADIUS_MAP___WELL_DATA_20180702090804.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: New facilities are proposed adjacent to the subject well pad in Section 15 (Central Tank Battery) and Section 9 (Compressor Station) T23S R28E.

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, SURFACE CASING
Describe type:

Water source type: GW WELL

Source latitude:

Source longitude:

Source datum:

Water source permit type:

Source land ownership:

Water source transport method:

Source transportation land ownership:

Water source volume (barrels): 100000

Source volume (acre-feet): 12.88931

Source volume (gal): 4200000

Water source use type: INTERMEDIATE/PRODUCTION CASING, SURFACE CASING
Describe type:

Water source type: GW WELL

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: PIPELINE

Source transportation land ownership: PRIVATE

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Water source volume (barrels): 700000 **Source volume (acre-feet):** 90.22517

Source volume (gal): 29400000

Water source and transportation map:

CB_HAYS_10_3_FED_COM_005_2H_TOPO_PLAT_20180702092619.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

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

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

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

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

C ing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche will be used to construct well pad and roads. Material will be purchased from Onsurez Private caliche pits in Section 14 & Section 27, T23S R28E. 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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Section 7 - Methods for Handling Waste

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

Reserve Pit being used? NO

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

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

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

CB_HAYS_10_3_FED_COM_005_2H_Well_Plat_20180702091103.pdf

Comments: Exterior well pad dimensions are 380' x 545'. Interior well pad dimensions from point of entry (well head) of the easternmost well are listed on attached well plat. The pad will have a total of 6 wells, 3 of which penetrate BLM lands. Total disturbance area needed for construction of well pad will be 4.75 acres. Topsoil placement is on the west where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: CB HAYS 10 3 FED COM 005

Multiple Well Pad Number: 1H, 2H, 3H

Recontouring attachment:

CB_HAYS_10_3_FED_COM_005_RECLAMATION_20180702091743.pdf

CB_HAYS_10_3_FED_COM_005_Cut___Fill_Plat_20180702091755.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): 4.75

Road proposed disturbance (acres): 0

Powerline proposed disturbance (acres): 6.42

Pipeline proposed disturbance (acres): 6.9

Other proposed disturbance (acres): 0

Total prop d d turbance: 18.07

Well pad interim reclamation (acres): 0

Road interim reclamation (acres): 0

Powerline interim reclamation (acres): 0

Pipeline interim reclamation (acres): 0

Other interim reclamation (acres): 0

Total interim reclamation: 0

Well pad long term disturbance (acres): 0

Road long term disturbance (acres): 0

Powerline long term disturbance (acres): 6.42

Pipeline long term disturbance (acres): 6.9

Other long term disturbance (acres): 0

To long term disturbance: 13.32

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Disturbance Comments: 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.
Reconstruction method: Within 6 months, Chevron will contact BLM Surface Management Specialists to devise the best strategies to reduce the size of the location. Current plans for interim reclamation include reducing the pad size to approximately 1.5 acres from the proposed size of 4.75 acres. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production. A plan will be submitted showing where interim reclamation will be completed in order to allow for safe operations, protection of the environment outside of drilled well, and following best management practices found in the BLM "Gold Book".
Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for allweather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM #2), free of noxious weeds, will be used.
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

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 Management

Seed Table

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary	
Seed Type	**Pounds/Acre**

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Mark

Last Name: Woodard

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.

onitoring plan attachment:

Success standards: As per BLM requirements

Pit closure description: None

Pit closure attachment:

Section 11 - Surface Ownership

Operator Name: CHEVRON USA INCORPORATED

Well Name: CB HAYS 10 3 FED COM 005 **Well Number:** 2H

Disturbance type: WELL PAD

Describe:

Surface Owner: STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

[redacted]

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

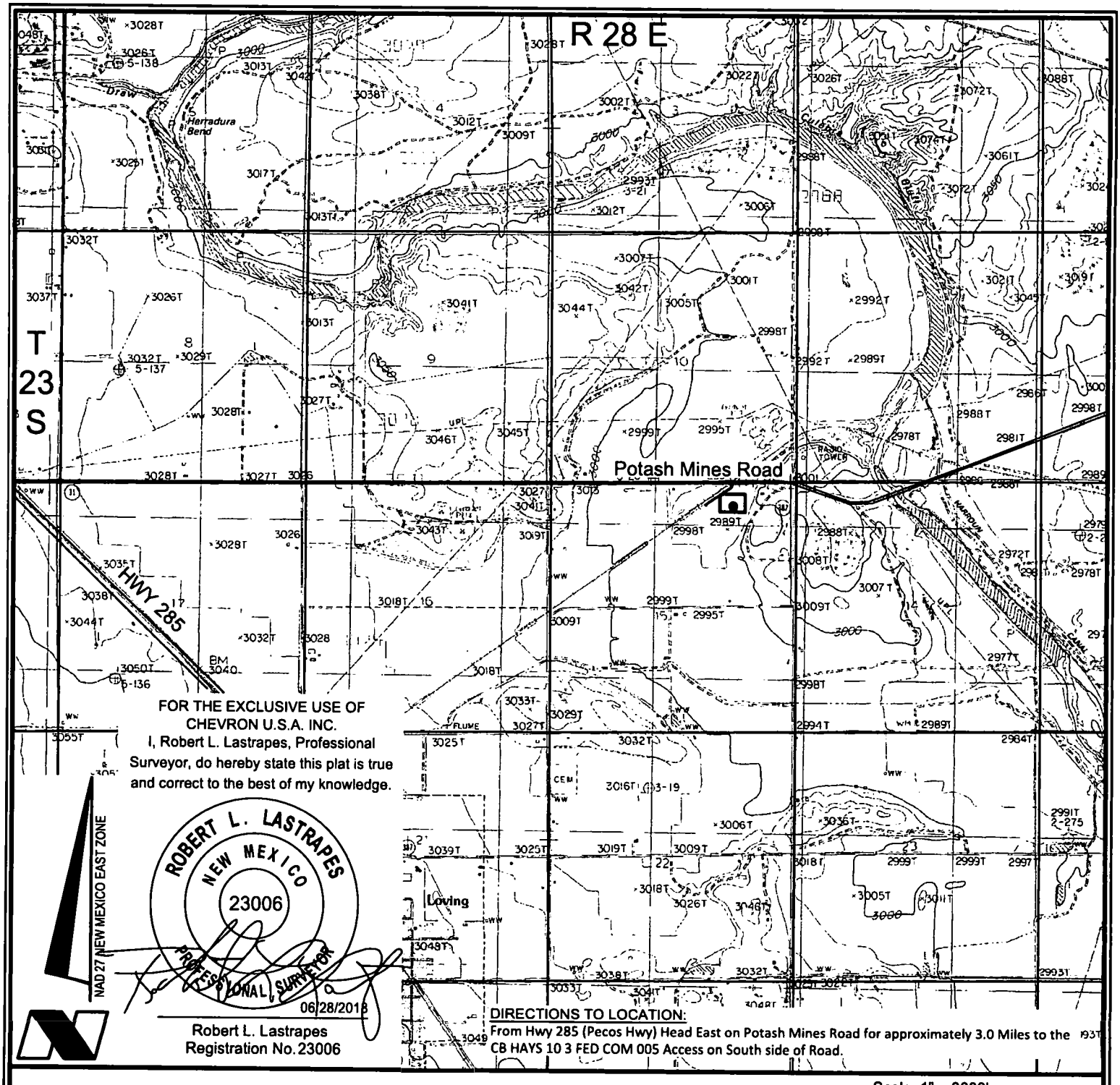
SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: On-site performed by BLM NRS: Paul Murphy 10/13/2017.

Other SUPO Attachment

CB_HAYS_10_3_005_FED_COM_2H_SUPO.pdf_20180702091850.pdf



ROAD PLAT

Scale: 1" = 3000'

3000' 0 1500' 3000'

LEGEND

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

CHEVRON U.S.A. INC.

CB HAYS 10 3 FED COM NO. 2H WELL
LOCATED 519' FNL AND 1330' FEL
SECTION 15, T23S-R28E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
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: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	ADF	06/28/2018	NAME CHANGE
DATE: 04/23/2018				
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CHEVRON U.S.A. INC
CB HAYS 10 3 FED COM 005 2H
NMNM 016331/NMNM 013233
SECTION 15, T23S-R28E

1 MILE RADIUS MAP & WELL DATA

API	Well Name	Operator	SHL to SHL Distance
30015444060000	STRIKER 1 SWD	NGL WATER SOLUTIONS PERMIAN LLC	150
30015264470000	CHAVES	BIRD CREEK RESOURCES INCORPORATED	560
30015263220000	SIEBERT	BIRD CREEK RESOURCES INCORPORATED	930
30015267640000	EAST LOVING `SWD`	BIRD CREEK RESOURCES INCORPORATED	1145
30015267640000	EAST LOVING `SWD`	BIRD CREEK RESOURCES INCORPORATED	1145
30015264430000	KIDD	BENNETT R C	1215
30015264590000	PARDUE FARMS	ORYX ENERGY COMPANY	1205
30015264110000	PARDUE FARMS	ORYX ENERGY COMPANY	1475
30015264710000	WITT	HARKEN EXPLORATION COMPANY	1735
30015265760000	NYMEYER `A`	GRAHAM ROYALTY LIMITED	1830
30015267040000	NYMEYER `A`	GRAHAM ROYALTY LIMITED	1950
30015263300000	TELEDYNE	BIRD CREEK RESOURCES INCORPORATED	2135
30015265370000	URQUIDEZ	POGO PRODUCING COMPANY	1915
30015262770000	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	2355
30015264550000	LEWIS ESTATE	ORYX ENERGY COMPANY	2470
30015263290000	TRACHTA	BIRD CREEK RESOURCES INCORPORATED	2610
30015327480000	PARDUE C 8808 JVP	BTA OIL PRODUCERS	2590
30015266220000	CAVINESS-PAINE	BIRD CREEK RESOURCES INCORPORATED	2580
30015266220001	CAVINESS PAINE	CHESAPEAKE OPERATING INCORPORATED	2580
30015265630000	PARDUE FARMS	ORYX ENERGY COMPANY	2485
30015241510000	YARBRO `A` COM	CITIES SERVICE	2595
30015241510001	YARBRO `A` COM	OXY USA INC	2595
30015389990000	8808 JV-P PARDUE `C`	BTA OIL PRODUCERS LLC	2685
30015236750000	NYMEYER	COQUINA OIL CORPORATION	2630
30015263210000	CAVINESS-PAYNE	BIRD CREEK RESOURCES INCORPORATED	2865
30015266270000	URQUIDEZ	POGO PRODUCING COMPANY	2885
30015263410001	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	3080
30015263410002	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	3080
30015263410000	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	3080
30015263410001	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	3080
30015263410002	PARDUE `C` 8808 JV-P	BTA OIL PRODUCERS	3080
30015389610000	8808 JV-P PARDUE `B`	BTA OIL PRODUCERS LLC	3040
30015265830000	8808 JV-P PARDUE `C`	BTA OIL PRODUCERS	3155
30015266630000	URQUIDEZ	POGO PRODUCING COMPANY	2980
30015326710000	PARDUE C 8808 JVP	BTA OIL PRODUCERS	3170
30015448780000	CB SO 15 22 004	CHEVRON U S A INCORPORATED	3025
30015448770000	CB SO 15 22 004	CHEVRON U S A INCORPORATED	3050
30015448760000	CB SO 15 22 004	CHEVRON U S A INCORPORATED	3075
30015263260000	PARDUE `B`8808 JV-P	BTA OIL PRODUCERS	3305
30015269050000	NEMEYER `A`	TITAN RESOURCES I INCORPORATED	3310
30015262390000	TELEDYNE	BIRD CREEK RESOURCES INCORPORATED	3450
30015262390001	TELEDYNE	BIRD CREEK RESOURCES INCORPORATED	3450
30015263280000	TRACHTA	BIRD CREEK RESOURCES INCORPORATED	3540
30015259640000	8808 JV-P PARDUE	BTA OIL PRODUCERS	3490
30015336380000	PARDUE B 8808 JV-P	BTA OIL PRODUCERS	3565
30015261210000	CARRASCO `14`	BIRD CREEK RESOURCES INCORPORATED	3670
30015265820001	PECOS IRRIGATION CO A	CHESAPEAKE OPERATING INCORPORATED	3550
30015265820000	PECOS IRRIGATION COMPANY `A`	ORYX ENERGY COMPANY	3550
30015227210000	CARRASCO COM	DELTA DRILLING COMPANY	3760
30015264600000	PARDUE FARMS	ORYX ENERGY COMPANY	3855
30015346210000	PARDUE B 8808 JV-P	BTA OIL PRODUCERS	3940
30015266490000	FEDERAL `10`	POGO PRODUCING COMPANY	3855
30015241060000	PECOS IRRIGATION CO	SUN EXPLORATION & PRODUCTION COMPANY	3895
30015262740000	PARDUE `B` 8808 JV-P	BTA OIL PRODUCERS	4055
30015264480000	CAVINESS-PAINE	BIRD CREEK RESOURCES INCORPORATED	4145
30015267550000	URQUIDEZ	POGO PRODUCING COMPANY	3985
30015324930000	PARDUE `B` 8808 JV-P	BTA OIL PRODUCERS	4165
30015238340000	URQUIDEZ COM	POGO PRODUCING COMPANY	4020
30015347310000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4175
30015378130000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4175
30015264860000	CAVINESS-PAINE	BIRD CREEK RESOURCES INCORPORATED	4355
30015264860001	CAVINESS PAINE	CHEVRON U S A INCORPORATED	4355
30015261510000	RGA	BIRD CREEK RESOURCES INCORPORATED	4550
30015233380000	GUITAR COM	DELTA DRILLING COMPANY	4575

CHEVRON U.S.A. INC
CB HAYS 10 3 FED COM 005 2H
NMNM 016331/NMNM 013233
SECTION 15, T23S-R28E

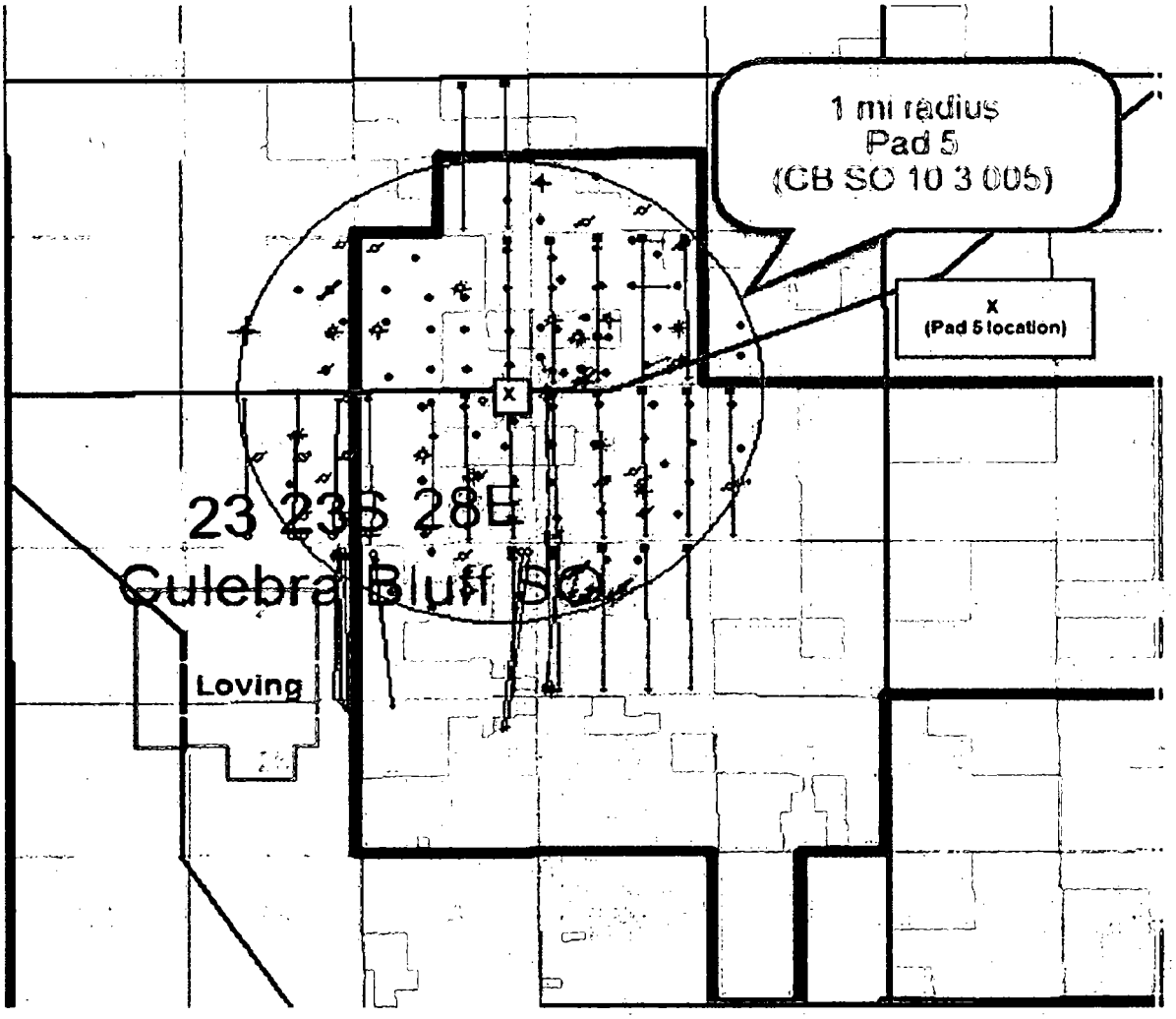
Chevron

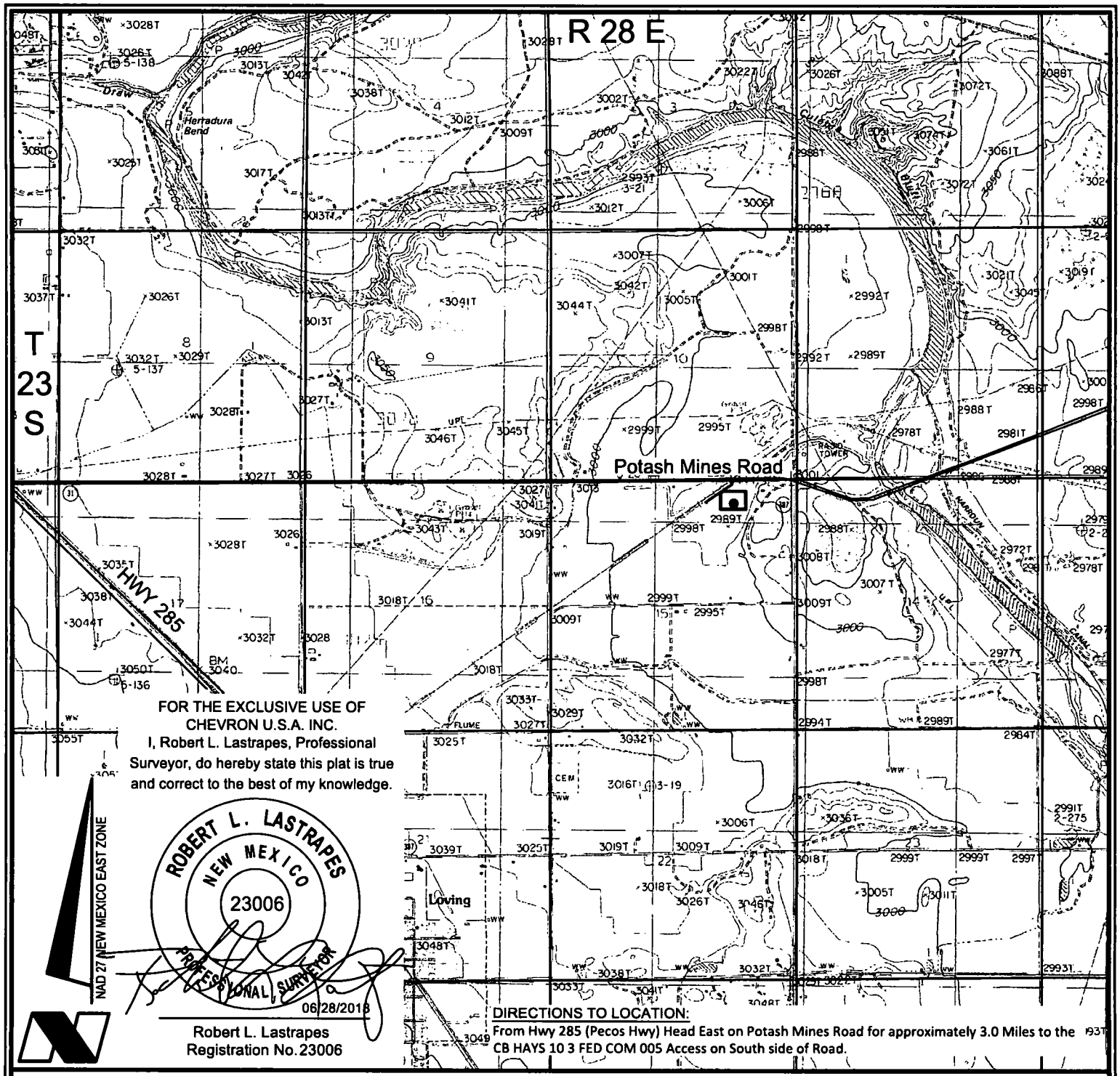
1 MILE RADIUS MAP & WELL DATA

30015263310000	RGA	BIRD CREEK RESOURCES INCORPORATED	4615
30015436530000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4435
30015346220000	PARDUE B 8808 JV-P	BTA OIL PRODUCERS	4620
30015024830000	CP PARDUE	WILLS NEIL	4670
30015354470000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4560
30015413900000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4560
30015413910000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4560
30015378140000	LOVING AIB STATE	YATES PETROLEUM CORPORATION	4585
30015358700000	PARDUE D 8808 JV-P	BTA OIL PRODUCERS	4755
30015440910000	EL TORO INVICTA 14	ROCKCLIFF OPERATING NEW MEXICO LLC	4835
30015440900000	EL TORO GIGANTE 23	ROCKCLIFF OPERATING NEW MEXICO LLC	4840
30015262930000	CARRASCO `14` FEE	RB OPERATING COMPANY	4970
30015262930001	CARRASCO 14	RAM ENERGY INCORPORATED	4970
30015268710000	FEDERAL `10`	POGO PRODUCING COMPANY	4790
30015401660000	HERITAGE 2 15	CHEVRON U S A INCORPORATED	4895
30015401667000	HERITAGE 2 15	CHEVRON U S A INCORPORATED	4895
30015440890000	EL TORO GIGANTE 23	ROCKCLIFF OPERATING NEW MEXICO LLC	5015
30015440890100	EL TORO GIGANTE 23	ROCKCLIFF OPERATING NEW MEXICO LLC	5015
30015440880000	EL TORO INVICTA 14	ROCKCLIFF OPERATING NEW MEXICO LLC	5025
30015244380000	NEL	POGO PRODUCING COMPANY	4850
30015346480000	NEL FEDERAL	POGO PRODUCING COMPANY	4865
30015238110000	STH CULBR BLFF UNT	DELTA DRILLING COMPANY	5095
30015238110001	SOUTH CULEBRA BLUFF	RB OPERATING COMPANY	5095
30015238110002	SOUTH CULEBRA BLUFF	RAM ENERGY INCORPORATED	5095
30015303650000	SOUTH CULEBRA BLUFF `14`	RAM ENERGY INCORPORATED	5200
30015261820000	RGA	BIRD CREEK RESOURCES INCORPORATED	5210
30015269330000	N E L FEDERAL	POGO PRODUCING COMPANY	5020
30015267490000	PARDUE FARMS	ORYX ENERGY COMPANY	5125
30015235250000	NEL COM	POGO PRODUCING COMPANY	5085
30015235250001	NORTHEAST LOVING	POGO PRODUCING COMPANY	5085
30015235250001	NORTHEAST LOVING	POGO PRODUCING COMPANY	5085
30015264720001	ONSUREZ	RAM ENERGY INCORPORATED	5255
30015264720002	ONSUREZ	VANGUARD PERMIAN LIMITED LIABILITY CORP	5255
30015264720000	ONSUREZ	RB OPERATING COMPANY	5255
30015237590000	NEL FEDERAL	POGO PRODUCING COMPANY	5130
30015264060000	PARDUE `D` 8808 JV-P FEE	BTA OIL PRODUCERS	5285

CHEVRON U.S.A. INC
CB HAYS 10 3 005 FED COM 2H
NMNM 016331/NMNM 013233
SECTION 15, T23S-R28E

1 MILE RADIUS MAP & WELL DATA





ROAD PLAT

Scale: 1" = 3000'

3000' 0 1500' 3000'

LEGEND

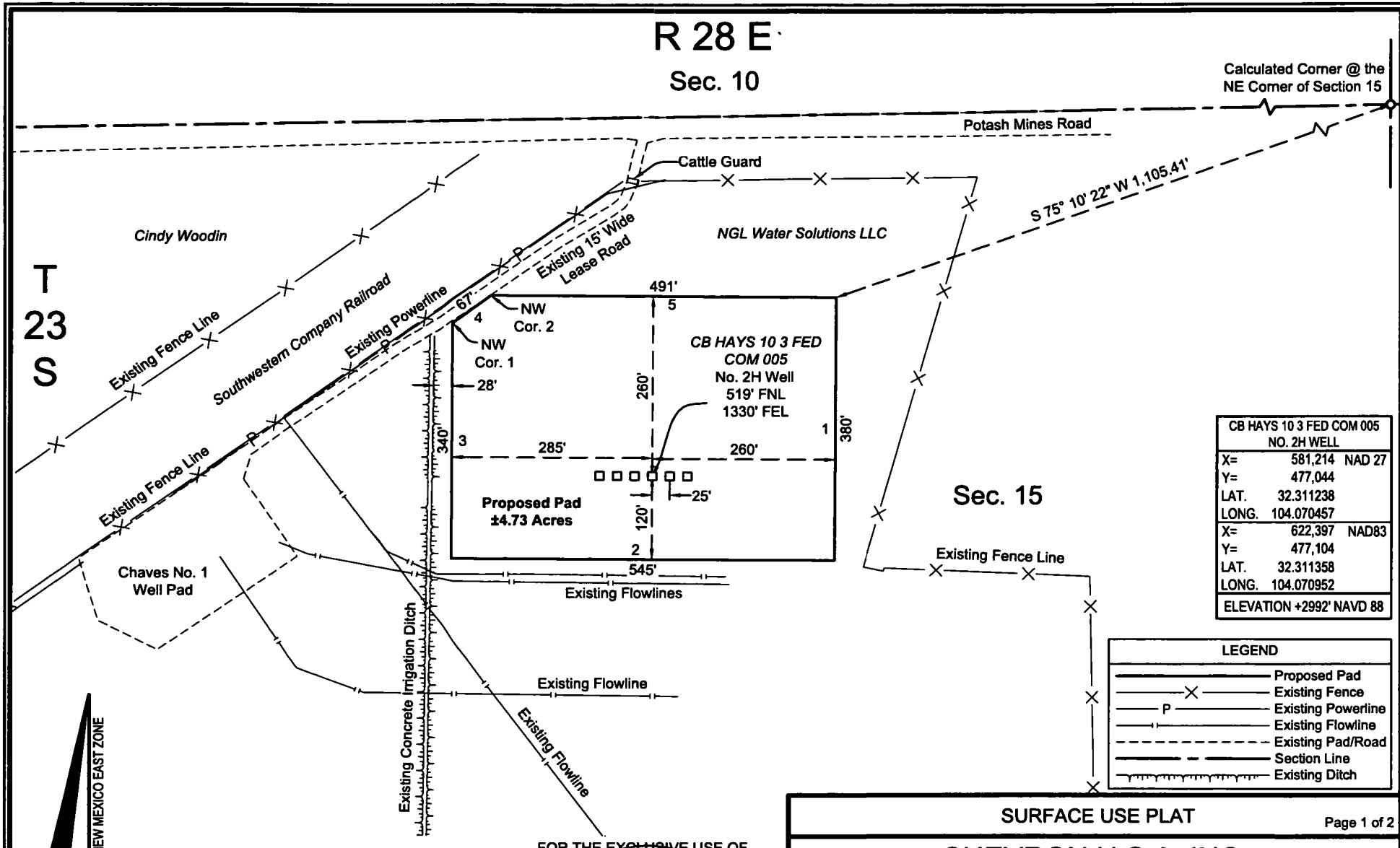
- Proposed Well
- Proposed Access Road
- Proposed Drillsite
- Existing Road
- Section Line

CHEVRON U.S.A. INC.

CB HAYS 10 3 FED COM NO. 2H WELL
LOCATED 519' FNL AND 1330' FEL
SECTION 15, T23S-R28E
EDDY COUNTY, NEW MEXICO

FENSTERMAKER
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: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	ADF	06/28/2018	NAME CHANGE
DATE: 04/23/2018				
FILENAME: T:\2017\2176778\DWG\CB HAYS 10 3 FED COM 005 2H APD.dwg				



CB HAYS 10 3 FED COM 005 NO. 2H WELL		
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Y=	477,044	
LAT.	32.311238	
LONG.	104.070457	
X=	622,397	NAD83
Y=	477,104	
LAT.	32.311358	
LONG.	104.070952	
ELEVATION +2992' NAVD 88		

LEGEND
Proposed Pad
Existing Fence
Existing Powerline
Existing Flowline
Existing Pad/Road
Section Line
Existing Ditch

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

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

ROBERT L. LASTRAPES — NEW MEXICO — 23006 — PROFESSIONAL SURVEYOR — 06/28/2018

Robert L. Lastrapes
Registration No. 23006

SURFACE USE PLAT

Page 1 of 2

CHEVRON U.S.A. INC.

PROPOSED PAD
CB HAYS 10 3 FED COM 005 NO. 2H WELL
SECTION 15, T23S-R28E
EDDY COUNTY, NEW MEXICO

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	ADF	06/28/2018	NAME CHANGE
DATE: 04/20/2018				
FILENAME: T:\2017\2176778\DWG\CB HAYS 10 3 FED COM 005 2H_Well Plat.dwg				

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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.

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PROPOSED PAD		
COURSE	BEARING	DISTANCE
1	S 00° 18' 49" W	380.00'
2	N 89° 41' 11" W	545.00'
3	N 00° 18' 49" E	340.29'
4	N 53° 49' 14" E	66.78'
5	S 89° 41' 11" E	491.31'

NW PAD CORNER 1		NW PAD CORNER 2	
X=	580,930 NAD 27	X=	580,984 NAD 27
Y=	477,266	Y=	477,306
LAT.	32.311849	LAT.	32.311957
LONG.	104.071374	LONG.	104.071199
X=	622,113 NAD83	X=	622,167 NAD83
Y=	477,326	Y=	477,365
LAT.	32.311970	LAT.	32.312078
LONG.	104.071869	LONG.	104.071695
ELEVATION +2993' NAVD 88		ELEVATION +2993' NAVD 88	

NE PAD CORNER		SE PAD CORNER		SW PAD CORNER	
X=	581,475 NAD 27	X=	581,473 NAD 27	X=	580,928 NAD 27
Y=	477,303	Y=	476,923	Y=	476,926
LAT.	32.311946	LAT.	32.310902	LAT.	32.310914
LONG.	104.069609	LONG.	104.069619	LONG.	104.071383
X=	622,658 NAD83	X=	622,656 NAD83	X=	622,111 NAD83
Y=	477,362	Y=	476,982	Y=	476,985
LAT.	32.312067	LAT.	32.311023	LAT.	32.311034
LONG.	104.070104	LONG.	104.070114	LONG.	104.071878
ELEVATION +2992' NAVD 88		ELEVATION +2993' NAVD 88		ELEVATION +2992' 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.

ROBERT L. LASTRAPES
NEW MEXICO
23006
PROFESSIONAL SURVEYOR
06/28/2018

Robert L. Lastrapes
Registration No. 23006

FENSTERMAKER

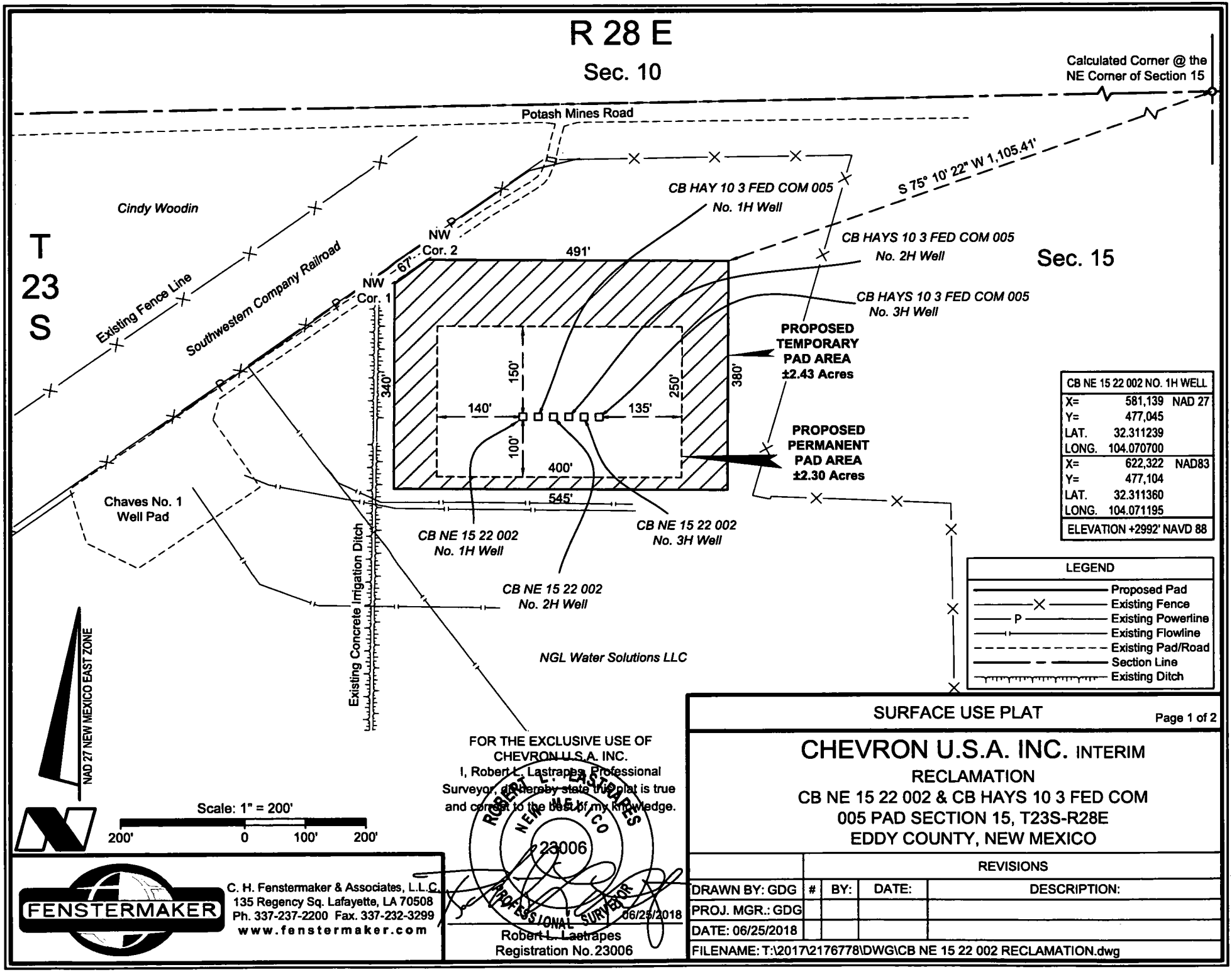
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

SURFACE USE PLAT

CHEVRON U.S.A. INC.

PROPOSED PAD
CB HAYS 10 3 FED COM 005 NO. 2H WELL
SECTION 15, T23S-R28E
EDDY COUNTY, NEW MEXICO

	REVISIONS			
DRAWN BY: DMB	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG	1	ADF	06/28/2018	NAME CHANGE
DATE: 04/20/2018				
FILENAME: T:\2017\2176778\DWG\CB HAYS 10 3 FED COM 005 2H_Well Plat.dwg				



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ROBERT L. LASTRAPES NEW MEXICO 23006 PROFESSIONAL SURVEYOR 06/25/2018

Robert L. Lastrapes
Registration No. 23006

SURFACE USE PLAT

Page 1 of 2

CHEVRON U.S.A. INC. INTERIM RECLAMATION

CB NE 15 22 002 & CB HAYS 10 3 FED COM 005 PAD SECTION 15, T23S-R28E EDDY COUNTY, NEW MEXICO

	REVISIONS			
DRAWN BY: GDG	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 06/25/2018				
FILENAME: T:\2017\2176778\DWG\CB NE 15 22 002 RECLAMATION.dwg				

FENSTERMAKER
C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
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06/25/2018

Robert L. Lastrapes
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SURFACE USE PLAT

CHEVRON U.S.A. INC. INTERIM RECLAMATION

CB NE 15 22 002 & CB HAYS 10 3 FED COM 005
SECTION 15, T23S-R28E
EDDY COUNTY, NEW MEXICO

	REVISIONS			
DRAWN BY: GDG	#	BY:	DATE:	DESCRIPTION:
PROJ. MGR.: GDG				
DATE: 06/25/2018				
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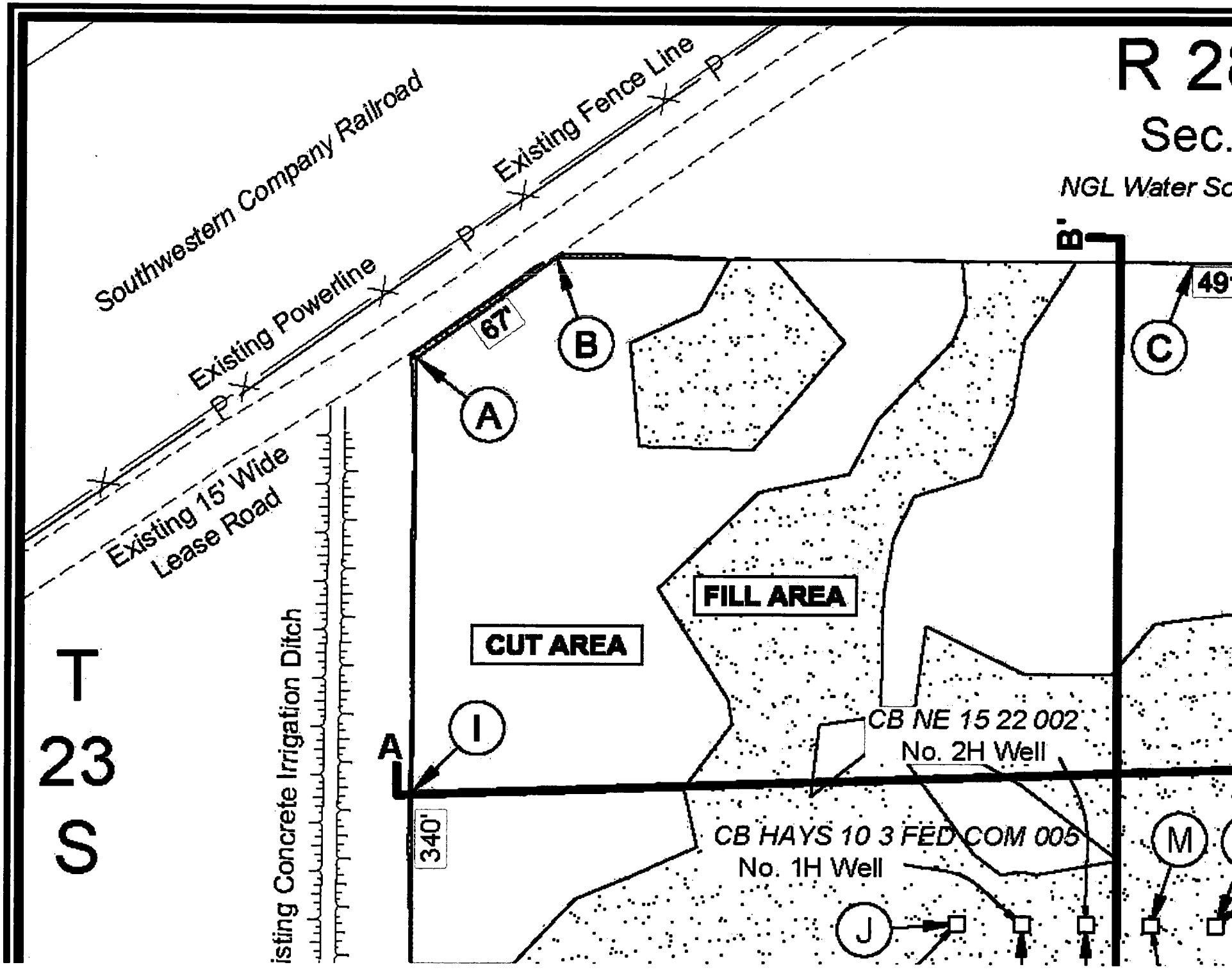
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67'
A
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49
FILL AREA
CUT AREA
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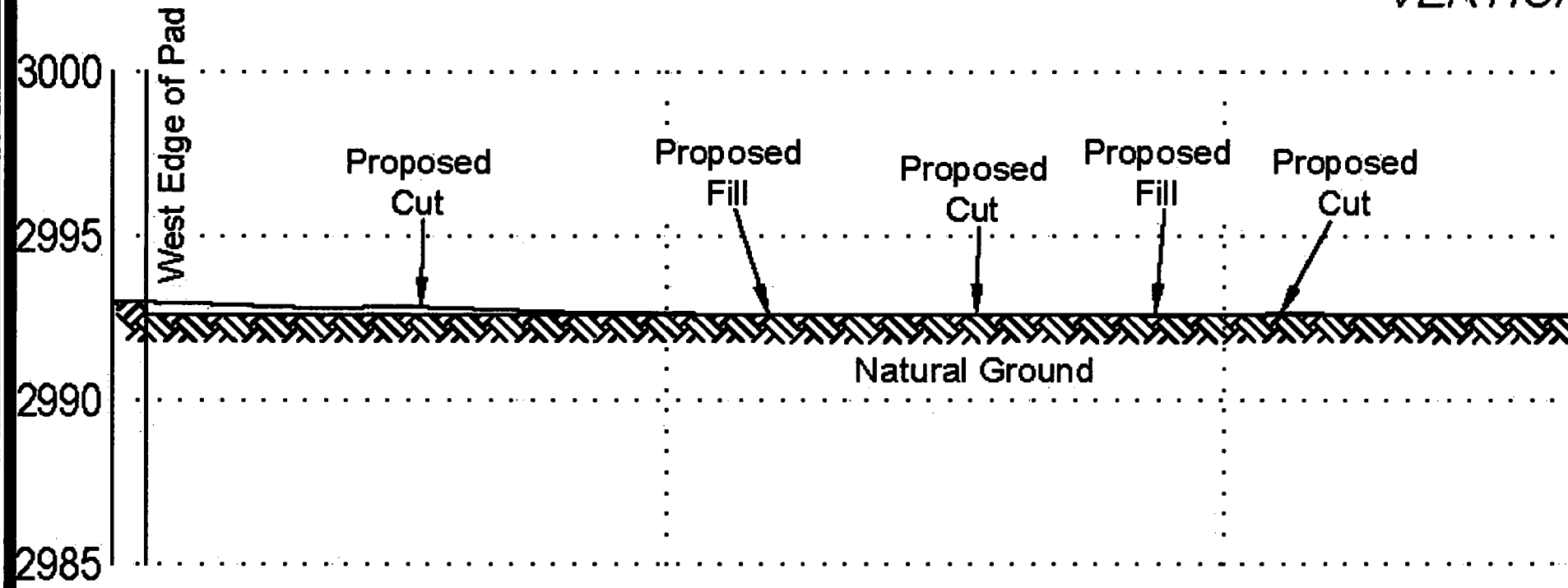
CB NE 15 22 002
No. 2H Well
CB HAYS 10 3 FED COM 005
No. 1H Well
J
M

CROSS
HORIZON
VERTICA



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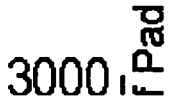

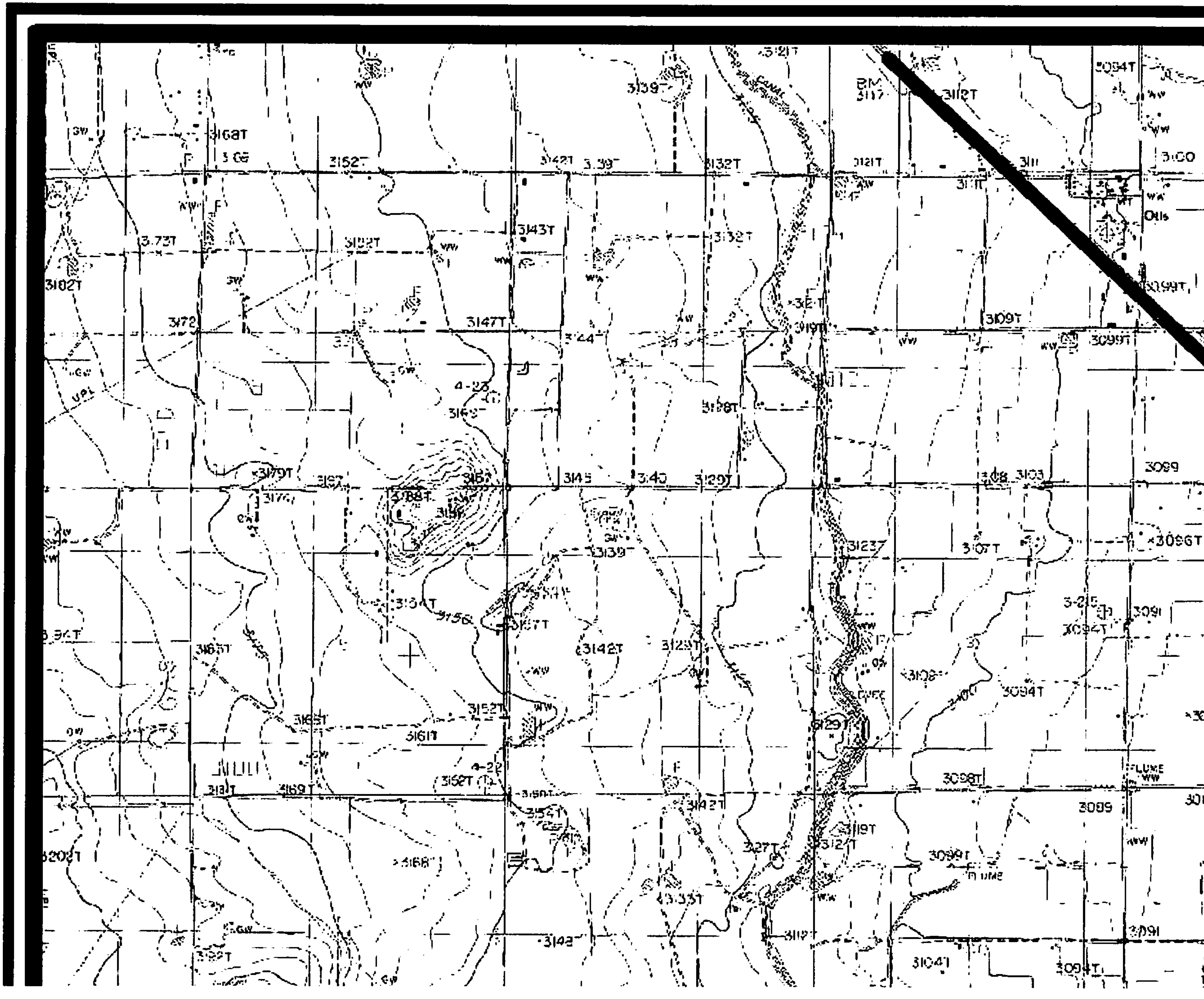

Otis
BM 3117
FLUME
3168T
3152T
3142T
3132T
3121T
3112T
3094T
3143T
3147T
3109T
3099T
3145
3129T
3099
3096T
3123T
3107T
3139T
3091
3094T
3142T
3152T
3161T
3169T
3098T
3089
3119T
3099T
3104T

CHEVRON U.S.A. Inc
CB HAYS 10 3 FED COM 005 1H-3H
NMNM 016331/NMNM 013233
SECTION 15, T23S-R28E
SHL 519' FNL & 1330' FEL

APD Surface Use Plan of Operations

Existing Roads

- 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 Loving, New Mexico. The location is approximately 2.3 miles from the nearest town, which is Loving, New Mexico. From the intersection of HWY 285 (Pecos Highway) and SH 31 (Potash Mines Rd.) head east for 3 miles and turn right onto lease road directly east of train tracks. The location is 100 yards on the left down the lease road.

New or Reconstructed Access Roads – Survey plat

- There will be no new road construction for the well pad.
- Road Width: The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed 20'. The maximum width of surface disturbance shall not exceed 25'.
- Maximum Grade: 3%
- Crown Design: Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2%. The road shall conform to cross section and plans for typical road construction found in the BLM Gold Book.
- Turnouts: none needed
- Ditch Design: Ditching will be constructed on both sides of road.
- Cattle guards: none needed
- 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

Location of Existing Wells

- 1-Mile radius map is attached

Location of Existing and/or Proposed Production Facilities

- Facilities: New facilities are proposed adjacent to the subject well pad in Section 15 (Central Tank Battery) and Section 9 (Compressor Station) T23S R28E.
- Pipelines: Buried pipelines will be laid from well(s) to proposed facilities.
- Powerlines: Power lines to be constructed from an XCEL Energy PME in Section 15 (along Yarbro Rd) to the Facilities.
    - A ROW will be applied for through the BLM (if necessary).
    - All construction activity will be confined to the approved ROW.
    - Pipeline will run parallel to the road and will stay within approved ROW.

Location and Types of Water Supply

- Fresh water will be obtained from a private water source; the specific location of which to be provided upon request.
- A temporary 10" expanding pipe transfer line will run from pond along existing disturbance to well pad.
    - Fresh water line will run parallel to existing disturbance and will stay within 10' of access road.
    - A BLM ROW will be applied for through the BLM by either Chevron or the water provider.

Construction Material

- Caliche will be used to construct well pad and roads. Material will be purchased from the nearest federal, state, or private permitted pit.
- 2 specific locations include:
    - Onsurez Private caliche pits in Section 14 & Section 27, T23S R28E.
- The proposed source of construction material will be located and purchased by construction contractor.
    - Payment shall be made by contractor prior to any removal of federal minerals material by contacting agent at (575) 234-5972.
    - Notification shall be given to BLM at (575) 234-5909 at least 3 working days prior to commencing construction of access road and/or well pad.

Methods for Handling Waste

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

Ancillary Facilities

A delivery point for gas sales is proposed adjacent to the Compressor Station in Section 9, T23S R28E.

Well Site Layout

- Surveyor Plat
    - Exterior well pad dimensions are 380' x 545'.
    - Interior well pad dimensions from point of entry (well head) of the easternmost well are listed on attached well plat. The pad will have a total of 6 wells, 3 of which penetrate BLM lands. Total disturbance area needed for construction of well pad will be 4.75 acres.
    - Topsoil placement is on the west where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices.
    - Cut and fill: will be minimal.

Plans for Surface Reclamation

Reclamation Objectives

- The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.
- The long-term objective of final reclamation is to return the land to a condition

similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

- The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.
- If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on the location has been completed or plugged. We will gain written permission from the BLM if more time is needed.
- 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 1.5 acres from the proposed size of 4.75 acres. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production. A plan will be submitted showing where interim reclamation will be completed in order to allow for safe operations, protection of the environment outside of drilled well, and following best management practices found in the BLM "Gold Book".
- 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 respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM #2), free of noxious weeds, will be used.
- Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.
- The interim reclamation will be monitored periodically to ensure that vegetation

has reestablished

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

- Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.
- All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends in distinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.
- After all the disturbed areas have been properly prepared; the areas will be seeded with the proper BLM seed mixture (BLM #2), free of noxious weeds.
- Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

Surface Ownership

- Private Surface
  - Surface Owner – NGL Water Solutions
- **Nearest Post Office:** Loving Post Office; 3 Miles

Other Information

- On-site performed by BLM NRS: Paul Murphy on 10/13/2017
- Cultural report attached: Complete (@BLM)
- Participating Agreement attached: N/A
- Erosion / Drainage: Drainage control system shall be constructed on the entire length of road by the use of any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.
- Exclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation. Fencing will remain in place while no activity is present and until backfilling takes place.

Chevron Representatives

Primary point of contact:

Kevin Dickerson
kevin.dickerson@chevron.com
M- 432-250-4489

AFMSS

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

PWD Data Report
01/29/2019

Section 1 - General

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

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? 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:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Le 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:

Section 3 - Unlined Pits

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:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? 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:

Section 6 - Other

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:

AFMSS

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

Bond Info Data Report

01/29/2019

Bond Information

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: