

Railroad Commission of Texas

PERMIT TO DRILL, RE-COMPLETE, OR RE-ENTER ON REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

CONDITIONS AND INSTRUCTIONS

Permit Invalidation. It is the operator's responsibility to make sure that the permitted location complies with Commission density and spacing rules in effect on the spud date. The permit becomes invalid automatically if, because of a field rule change or the drilling of another well, the stated location is not in compliance with Commission field rules on the spud date. If this occurs, application for an exception to Statewide Rules 37 and 38 must be made and a special permit granted prior to spudding. Failure to do so may result in an allowable not being assigned and/or enforcement procedures being initiated.

Notice Requirements. Per H.B 630, signed May 8, 2007, the operator is required to provide notice to the surface owner no later than the 15th business day after the Commission issues a permit to drill. Please refer to subchapter Q Sec. 91.751-91.755 of the Texas Natural Resources Code for applicability.

Permit expiration. This permit expires two (2) years from the date of issuance shown on the original permit. The permit period will not be extended.

Drilling Permit Number. The drilling permit number shown on the permit **MUST** be given as a reference with any notification to the district (see below), correspondence, or application concerning this permit.

Rule 37 Exception Permits. This Statewide Rule 37 exception permit is granted under either provision Rule 37 (h)(2)(A) or 37(h)(2)(B). Be advised that a permit granted under Rule 37(h)(2)(A), notice of application, is subject to the General Rules of Practice and Procedures and if a protest is received under Section 1.3, "Filing of Documents," and/or Section 1.4, "Computation of Time," the permit may be deemed invalid.

Before Drilling

Fresh Water Sand Protection. The operator must set and cement sufficient surface casing to protect all usable-quality water, as defined by the Railroad Commission of Texas (RRC) Groundwater Advisory Unit (GWAU). Before drilling a well, the operator must obtain a letter from the Railroad Commission of Texas stating the depth to which water needs protection, Write: Railroad Commission of Texas, Groundwater Advisory Unit (GWAU), P.O. Box 12967, Austin, TX 78711-3087. File a copy of the letter with the appropriate district office.

Accessing the Well Site. If an OPERATOR, well equipment TRANSPORTER or WELL service provider must access the well site from a roadway on the state highway system (Interstate, U.S. Highway, State Highway, Farm-to-Market Road, Ranch-to-Market Road, etc.), an access permit is required from TxDOT. Permit applications are submitted to the respective TxDOT Area Office serving the county where the well is located.

Water Transport to Well Site. If an operator intends to transport water to the well site through a temporary pipeline laid above ground on the state's right-of-way, an additional TxDOT permit is required. Permit applications are submitted to the respective TxDOT Area Office serving the county where the well is located.

*NOTIFICATION

The operator is **REQUIRED** to notify the district office when setting surface casing, intermediate casing, and production casing, or when plugging a dry hole. The district office **MUST** also be notified if the operator intends to re-enter a plugged well or re-complete a well into a different regulatory field. Time requirements are given below. The drilling permit number **MUST** be given with such notifications.

During Drilling

Permit at Drilling Site. A copy of the Form W-1 Drilling Permit Application, the location plat, a copy of Statewide Rule 13 alternate surface casing setting depth approval from the district office, if applicable, and this drilling permit must be kept at the permitted well site throughout drilling operations.

***Notification of Setting Casing.** The operator **MUST** call in notification to the appropriate district office (phone number shown on permit) a minimum of eight (8) hours prior to the setting of surface casing, intermediate casing, AND production casing. The individual giving notification **MUST** be able to advise the district office of the drilling permit number.

***Notification of Re-completion/Re-entry.** The operator MUST call in notification to the appropriate district office (phone number shown on permit) a minimum of eight (8) hours prior to the initiation of drilling or re-completion operations. The individual giving notification MUST be able to advise the district office of the drilling permit number.

Completion and Plugging Reports

Hydraulic Fracture Stimulation using Diesel Fuel: Most operators in Texas do not use diesel fuel in hydraulic fracturing fluids. Section 322 of the Energy Policy Act of 2005 amended the Underground Injection Control (UIC) portion of the federal Safe Drinking Water Act (42 USC 300h(d)) to define "underground injection" to *EXCLUDE* " ...the underground injection of fluids or propping agents (*other than diesel fuels*) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities." (italic and underlining added.) Therefore, hydraulic fracturing may be subject to regulation under the federal UIC regulations if diesel fuel is injected or used as a propping agent. EPA defined "diesel fuel" using the following five (5) Chemical Abstract Service numbers: 68334-30-5 Primary Name: Fuels, diesel; 68476-34-6 Primary Name: Fuels, diesel, No. 2; 68476-30-2 Primary Name: Fuel oil No. 2; 68476-31-3 Primary Name: Fuel oil, No. 4; and 8008-20-6 Primary Name: Kerosene. As a result, an injection well permit would be required before performing hydraulic fracture stimulation using diesel fuel as defined by EPA on any well in Texas. Hydraulic fracture stimulation using diesel fuel as defined by EPA on a well in Texas without an injection well permit could result in enforcement action.

Producing Well. Statewide Rule 16 states that the operator of a well shall file with the Commission the appropriate completion report within ninety (90) days after completion of the well or within one hundred and fifty (150) days after the date on which the drilling operation is completed, whichever is earlier. Completion of the well in a field authorized by this permit voids the permit for all other fields included in the permit unless the operator indicates on the initial completion report that the well is to be a dual or multiple completion and promptly submits an application for multiple completion. All zones are required to be completed before the expiration date on the existing permit. Statewide Rule 40(d) requires that upon successful completion of a well in the same reservoir as any other well previously assigned the same acreage, proration plats and P-15s or P-16s (if required) or a lease plat and P-16 must be submitted with no double assignment of acreage unless authorized by rule.

Dry or Noncommercial Hole. Statewide Rule 14(b)(2) prohibits suspension of operations on each dry or non-commercial well without plugging unless the hole is cased and the casing is cemented in compliance with Commission rules. If properly cased, Statewide Rule 14(b)(2) requires that plugging operations must begin within a period of one (1) year after drilling or operations have ceased. Plugging operations must proceed with due diligence until completed. An extension to the one-year plugging requirement may be granted under the provisions stated in Statewide Rule 14(b)(2).

Intention to Plug. The operator must file a Form W-3A (Notice of Intention to Plug and Abandon) with the district office at least five (5) days prior to beginning plugging operations. If, however, a drilling rig is already at work on location and ready to begin plugging operations, the district director or the director's delegate may waive this requirement upon request, and verbally approve the proposed plugging procedures.

***Notification of Plugging a Dry Hole.** The operator MUST call in notification to the appropriate district office (phone number shown on permit) a minimum of four (4) hours prior to beginning plugging operations. The individual giving the notification MUST be able to advise the district office of the drilling permit number and all water protection depths for that location as stated in the Groundwater Advisory Unit letter.

DIRECT INQUIRIES TO: DRILLING PERMIT SECTION, OIL AND GAS DIVISION

PHONE
(512) 463-6751

MAIL:
PO Box 12967
Austin, Texas, 78711-2967

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

| | | | | | |
|---|--|--|---------------------|----------------------|--------------------|
| PERMIT NUMBER <div style="text-align: right;">896197</div> | DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Jan 03, 2024</div> | DISTRICT <div style="text-align: center;">* 08</div> | | | |
| API NUMBER <div style="text-align: right;">42-301-36699</div> | FORM W-1 RECEIVED <div style="text-align: center;">Dec 28, 2023</div> | COUNTY <div style="text-align: center;">LOVING</div> | | | |
| TYPE OF OPERATION <div style="text-align: center;">NEW DRILL</div> | WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div> | ACRES <div style="text-align: center;">1600.7</div> | | | |
| OPERATOR <div style="text-align: right;">020528</div> <div style="text-align: center;">ANADARKO E&P ONSHORE LLC</div> <div style="text-align: center;">ATTN REGULATORY DEPARTMENT 5 GREENWAY PLAZA STE 110 HOUSTON, TX 77046</div> | | NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: <div style="text-align: center;">(432) 684-5581</div> | | | |
| LEASE NAME <div style="text-align: center;">HELGA 19-0-4-40 A</div> | | WELL NUMBER <div style="text-align: center;">11H</div> | | | |
| LOCATION <div style="text-align: center;">9.8 miles E direction from MENTONE</div> | | TOTAL DEPTH <div style="text-align: center;">13000</div> | | | |
| Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION ⚡ 4</div> <div>BLOCK ⚡ 19</div> <div>ABSTRACT ⚡ U4</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY ⚡ UL</div> </div> | | | | | |
| DISTANCE TO SURVEY LINES <div style="text-align: center;">388 ft. S 1440 ft. E</div> | | DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">ft.</div> | | | |
| DISTANCE TO LEASE LINES <div style="text-align: center;">388 ft. S 1440 ft. E</div> | | DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: center;">See FIELD(s) Below</div> | | | |
| FIELD(s) and LIMITATIONS: <div style="text-align: center;"> * SEE FIELD DISTRICT FOR REPORTING PURPOSES * ** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) ** CASE NO. 0343622 </div> | | | | | |
| FIELD NAME LEASE NAME | | ACRES NEAREST LEASE | DEPTH NEAREST WE | WELL # NEAREST WE | DIST NEAREST WE |
| ** PHANTOM (WOLFCAMP) HELGA 19-0-4-40 A | | 1600.70 | 13,000 | 11H 588 | 08 |
| ----- WELLBORE PROFILE(s) FOR FIELD: Horizontal ----- | | | | | |
| RESTRICTIONS: This is a hydrogen sulfide field. Hydrogen Sulfide Fields with perforations must be isolated and tested per State Wide Rule 36 and a Form H-9 filed with the district office. Fields with SWR 10 authority to downhole commingle must be isolated and tested individually prior to commingling production. Lateral: TH1 Penetration Point Location <div style="display: flex; justify-content: space-between;"> <div>Lease Lines: 400.0 F N L</div> <div>2320.0 F E L</div> </div> Terminus Location BH County: LOVING Section: 40 Block: 29 Abstract: 963 Survey: PSL / AVANT, B Lease Lines: 10.0 F S L <div style="display: flex; justify-content: space-between;"> <div>2320.0 F E L</div> </div> Survey Lines: 2625.0 F S L <div style="display: flex; justify-content: space-between;"> <div>2320.0 F E L</div> </div> | | | | | |
| ' ** ' PRECEDING FIELD NAME INDICATES RULE (R37) | | | | | |
| THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS | | | | | |

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

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**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

LOVING (301) County

| Formation | Remarks | Geological Order | Effective Date |
|-----------------------------------|---------------|------------------|----------------|
| RED BLUFF | | 1 | 02/09/2020 |
| DELAWARE | | 2 | 02/09/2020 |
| BELL CANYON | | 3 | 02/09/2020 |
| CHERRY CANYON | | 4 | 02/09/2020 |
| BRUSHY CANYON | | 5 | 02/09/2020 |
| BONE SPRING | | 6 | 02/09/2020 |
| WOLFCAMP | | 7 | 02/09/2020 |
| PENNSYLVANIAN | | 8 | 02/09/2020 |
| STRAWN | | 9 | 02/09/2020 |
| ATOKA | high pressure | 10 | 02/09/2020 |
| MORROW | | 11 | 02/09/2020 |
| DEVONIAN | | 12 | 02/09/2020 |
| FUSSELMAN | | 13 | 02/09/2020 |
| ELLENBURGER | | 14 | 02/09/2020 |
| PRECAMBRIAN (UNDIFFERENTIATED) | | 15 | 02/09/2020 |

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. The listing order of the Formation information reflects the general stratigraphic order and relative geologic age. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>