

API No. <u>42-103-33943</u> Drilling Permit # <u>840259</u> SWR Exception Case/Docket No. _____	<b>RAILROAD COMMISSION OF TEXAS</b> <b>OIL &amp; GAS DIVISION</b> <b>APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER</b> <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>	<b>FORM W-1</b> Permit Status: <b>Approved</b>
1. RRC Operator No. <div style="text-align: center;">630591</div>	2. Operator's Name (as shown on form P-5, Organization Report) <div style="text-align: center;">OXY USA INC.</div>	3. Operator Address (include street, city, state, zip) ATTN KELLEY MONTGOMERY 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0000
4. Lease Name <div style="text-align: center;">BLOCK 31 UNIT</div>	5. Well No. <div style="text-align: center;">F 7F</div>	
GENERAL INFORMATION		
6. Purpose of filing (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> New Drill <input type="checkbox"/> Amended</span> <span><input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> Amended as Drilled (BHL)(Also File Form W-1D)</span> <span><input type="checkbox"/> Reclass</span> <span><input type="checkbox"/> Field Transfer</span> <span><input type="checkbox"/> Re-Enter</span> </div>		
7. Wellbore Profile (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input checked="" type="checkbox"/> Vertical</span> <span><input type="checkbox"/> Horizontal (Also File Form W-1H)</span> <span><input type="checkbox"/> Directional (Also File Form W-1D)</span> <span><input type="checkbox"/> Sidetrack</span> </div>		
8. Total Depth <div style="text-align: center;">9300</div>	9. Do you have the right to develop the minerals under any right-of-way? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
SURFACE LOCATION AND ACREAGE INFORMATION		
11. RRC District No. <div style="text-align: center;">08</div>	12. County <div style="text-align: center;">CRANE</div>	13. Surface Location <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore
14. This well is to be located <u>7.8</u> miles in a <u>NW</u> direction from <u>CRANE</u> which is the nearest town in the county of the well site.		
15. Section <u>26</u>	16. Block <u>31</u>	17. Survey <u>UL</u>
18. Abstract No. <u>U74</u>		19. Distance to nearest lease line: <u>4133.0</u> ft.
20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>7520.0</u>		
21. Lease Perpendiculars: <u>4133.0</u> ft. from the <u>EAST</u> line and <u>5380.0</u> ft. from the <u>NORTH</u> line.		
22. Survey Perpendiculars: <u>100.0</u> ft. from the <u>NORTH</u> line and <u>1170.0</u> ft. from the <u>WEST</u> line.		
23. Is this a pooled unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
24. Unitization Docket No:		25. Are you applying for Substandard Acreage Field? <input type="checkbox"/> Yes (attach Form W-1A) <input checked="" type="checkbox"/> No
FIELD INFORMATION <b>List all fields of anticipated completion including Wildcat. List one zone per line.</b>		
26. RRC District No. <div style="text-align: center;">08</div>	27. Field No. <div style="text-align: center;">92505500</div>	28. Field Name (exactly as shown in RRC records) <div style="text-align: center;">UNIVERSITY 31 WEST (U. DEVONIAN)</div>
29. Well Type <div style="text-align: center;">Oil Well</div>	30. Completion Depth <div style="text-align: center;">7100</div>	31. Distance to Nearest Well in this Reservoir <div style="text-align: center;">1496.0</div>
		32. Number of Wells on this lease in this Reservoir <div style="text-align: center;">20</div>
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS		
<b>Remarks</b> [FILER 05/19/2018 10:06:33 AM]: Calls changed slightly due to technological advances since last permit approved 7/10/1989. Horizon Survey is confident calls are accurate based on University Lands data.; [RRC STAFF 05/21/2018 01:21:54 PM]: Well count changed per RRC records.; [RRC STAFF 05/21/2018 01:56:58 PM]: Abstract corrected per plat.;		<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>           RRC User _____            Name of filer _____            Phone _____         </div> <div> <div style="text-align: right;">05/19/2018</div> <div style="text-align: right;">Date Submitted</div> <div style="text-align: right;">Email Address(OPTIONAL)</div> </div> </div>
<b>RRC Use Only</b> Date Validation Time Stamp:      Thu, 30 May 2019 15:08:12		

# Railroad Commission of Texas

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

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### 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 thirty (30) days after completion of the well or within ninety (90) 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 (if required) must be submitted with no double assignment of acreage.

**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 Texas Commission on Environmental Quality 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 840259	DATE PERMIT ISSUED OR AMENDED 05/22/2018	DISTRICT 08
API NUMBER 42-103-33943	FORM W-1 RECEIVED 05/19/2018	COUNTY CRANE
TYPE OF OPERATION Recompletion	WELLBORE PROFILE(S) Vertical	ACRES 7520.0
OPERATOR OXY USA INC. ATTN KELLEY MONTGOMERY 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0000		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: (432) 684-5581
LEASE NAME BLOCK 31 UNIT		WELL NUMBER F 7F
LOCATION 7.8 miles NW direction from CRANE		TOTAL DEPTH 9300
Section, Block and/or Survey SECTION 26 BLOCK 31 ABSTRACT U74 SURVEY UL		
DISTANCE TO SURVEY LINES 100.0 ft NORTH 1170.0 ft WEST		DISTANCE TO NEAREST LEASE LINE 4133.0
DISTANCE TO LEASE LINES 4133.0 ft EAST 5380.0 ft NORTH		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below

FIELD(s) and LIMITATIONS:

\* SEE FIELD DISTRICT FOR REPORTING PURPOSES \*

FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH	WELL# NEAREST WELL	DIST
UNIVERSITY 31 WEST (U. DEVONIAN)	7520.0	7100	F 7F	08
BLOCK 31 UNIT	4133.0		1496.0	

**THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS**

This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.

This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved permit for those formations that have been identified for the county in which you are drilling the well in.

**Railroad Commission of Texas**  
**Oil and Gas Division**  
**SWR #13 Formation Data**  
**CRANE ( 103 ) COUNTY**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	1000	1000		1	01/01/2014
YATES	1200	3000		2	01/01/2014
GRAYBURG	2100	3100	Active CO2 flood	3	01/01/2014
SAN ANDRES	1850	3500	Usable Quality Water/Active CO2 flood	4	01/01/2014
SAN ANGELO	3600	3700		5	01/01/2014
SEVEN RIVERS	1300	3970		6	01/01/2014
GLORIETA	2700	4200		7	01/01/2014
PERMIAN GENERAL	3900	4200		8	01/01/2014
QUEEN	2100	4370		9	01/01/2014
CLEARFORK	2900	4400		10	01/01/2014
MONTOYA	5300	5300		11	01/01/2014
TUBB	3350	5400		12	01/01/2014
WICHITA ALBANY	5400	6000		13	01/01/2014
FUSSELMAN	6400	7400		14	01/01/2014
WOLFCAMP	5000	7500		15	01/01/2014
WADDELL	6100	7600		16	01/01/2014
BEND	7700	7700		17	01/01/2014
PENNSYLVANIAN	7200	8000		18	01/01/2014
CISCO	7400	8500		19	01/01/2014
STRAWN	8600	8600		20	01/01/2014
DEVONIAN	4900	9700	Active CO2 flood	21	01/01/2014
ELLENBURGER	5400	11700		22	01/01/2014

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. 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>