

API No. <u>42-301-33031</u>	RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION				FORM W-1 07/2004	
Drilling Permit # <u>818860</u>	APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER				Permit Status: Approved	
SWR Exception Case/Docket No. _____		<i>This facsimile W-1 was generated electronically from data submitted to the RRC. A certification of the automated data is available in the RRC's Austin office.</i>				
1. RRC Operator No. <u>020528</u>	2. Operator's Name (as shown on form P-5, Organization Report) ANADARKO E&P ONSHORE LLC			3. Operator Address (include street, city, state, zip): ATTN FRANK A. DAVIS PO BOX 1330 HOUSTON, TX 77251-1330		
4. Lease Name YOKUM UL UNIT 19-4			5. Well No. 2H			
GENERAL INFORMATION						
6. Purpose of filing (mark ALL appropriate boxes): <input checked="" type="checkbox"/> New Drill <input type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter <input type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)						
7. Wellbore Profile (mark ALL appropriate boxes): <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal (Also File Form W-1H) <input type="checkbox"/> Directional (Also File Form W-1D) <input type="checkbox"/> Sidetrack						
8. Total Depth 13000		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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
SURFACE LOCATION AND ACREAGE INFORMATION						
11. RRC District No. 08		12. County LOVING		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>9.1</u> miles in a <u>E</u> direction from <u>MENTONE</u> which is the nearest town in the county of the well site.						
15. Section 45	16. Block 29	17. Survey PSL/FERGUSON, J L		18. Abstract No. A-1046	19. Distance to nearest lease line: 200 ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: 640.7
21. Lease Perpendiculars: <u>2390</u> ft from the <u>WEST</u> line and <u>777</u> ft from the <u>SOUTH</u> line.						
22. Survey Perpendiculars: <u>2390</u> ft from the <u>WEST</u> line and <u>777</u> ft from the <u>SOUTH</u> line.						
23. Is this a pooled unit? <input checked="" type="checkbox"/> Yes <input 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 List all fields of anticipated completion including Wildcat. List one zone per line.						
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)		29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir
08	71052900	PHANTOM (WOLFCAMP)		Oil or Gas Well	13000	462.00
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)						
Remarks [RRC STAFF Oct 7, 2016 9:54 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Oct 10, 2016 4:15 PM]: Problems identified with this permit are resolved.; [RRC STAFF Oct 10, 2016 4:15 PM]: Fatma Abdallah sent revised plat.; [RRC STAFF Oct 13, 2016 8:25 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Oct 13, 2016 12:06 PM]: Problems identified with this permit are resolved.; [RRC STAFF Oct 13, 2016 12:06 PM]: Revised P16 attached.				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. <u>Fatma Abdallah, Sr. Regulatory Analyst</u> <u>Sep 27, 2016</u> Name of filer Date submitted <u>(832)6363654</u> <u>fatma.abdallah@anadarko.com</u> Phone E-mail Address (OPTIONAL)		
RRC Use Only Data Validation Time Stamp: Oct 18, 2016 8:14 AM(Current Version)						

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

Form W-1H 07/2004
Supplemental Horizontal Well Information

Permit Status: **Approved**
The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

*This facsimile W-1 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.*

Permit # **818860**
Approved Date: **Oct 13, 2016**

1. RRC Operator No. 020528	2. Operator's Name (exactly as shown on form P-5, Organization Report) ANADARKO E&P ONSHORE LLC	3. Lease Name YOKUM UL UNIT 19-4	4. Well No. 2H
--------------------------------------	---	--	--------------------------

Lateral Drainhole Location Information

5. Field as shown on Form W-1 **PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)**

6. Section 4	7. Block 19	8. Survey UNIVERSITY LAND SURVEY	9. Abstract	10. County of BHL LOVING
------------------------	-----------------------	--	-------------	------------------------------------

11. Terminus Lease Line Perpendiculars 60 ft. from the SOUTH line. and 1830 ft. from the WEST line
12. Terminus Survey Line Perpendiculars 60 ft. from the SOUTH line. and 1830 ft. from the WEST line
13. Penetration Point Lease Line Perpendiculars 2390 ft. from the WEST line. and 777 ft. from the SOUTH line

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

LOVING (301) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RED BLUFF	3,900	3,900		1	12/17/2013
BELL CANYON	4,700	4,700		2	12/17/2013
BRUSHY CANYON	6,000	6,000		3	12/17/2013
DELAWARE	3,000	6,500		4	12/17/2013
CHERRY CANYON	3,700	7,800		5	12/17/2013
BONE SPRINGS	8,200	9,800		6	12/17/2013
WOLFCAMP	11,000	12,900		7	12/17/2013
PENNSYLVANIAN	14,900	15,000		8	12/17/2013
STRAWN	14,700	15,000		9	12/17/2013
ATOKA	15,200	16,000	high pressure	10	12/17/2013
MORROW	15,700	17,000		11	12/17/2013
DEVONIAN	17,800	17,800		12	12/17/2013
FUSSELMAN	18,900	19,000		13	12/17/2013
ELLENBURGER	21,000	21,000		14	12/17/2013

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>

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date: 02 July 2015

GAU Number:

10751

Attention: ANADARKO E&P ONSHORE LLC
ATTN FRANK A. DAVIS
HOUSTON, TX 77251

P-5#: 020528

API Number:

County:

LOVING

Lease Name:

YOKUM UL UNIT 19-4

RRC Lease Number:

Well Number:

1H

Total Vertical Depth:

13000

Latitude:

31.721660

Longitude:

-103.441610

Datum:

NAD27

Purpose: New Drill

Location: Survey-PSL; Block-29; Section-45

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

Water-bearing strata from the land surface to a depth of 300 feet and the Rustler, which is estimated to occur from 550 to 1000 feet must be protected.

This recommendation is applicable to all wells within a radius of 200 feet of this location.

This determination is based on information provided when the application was submitted on 06/30/2015. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

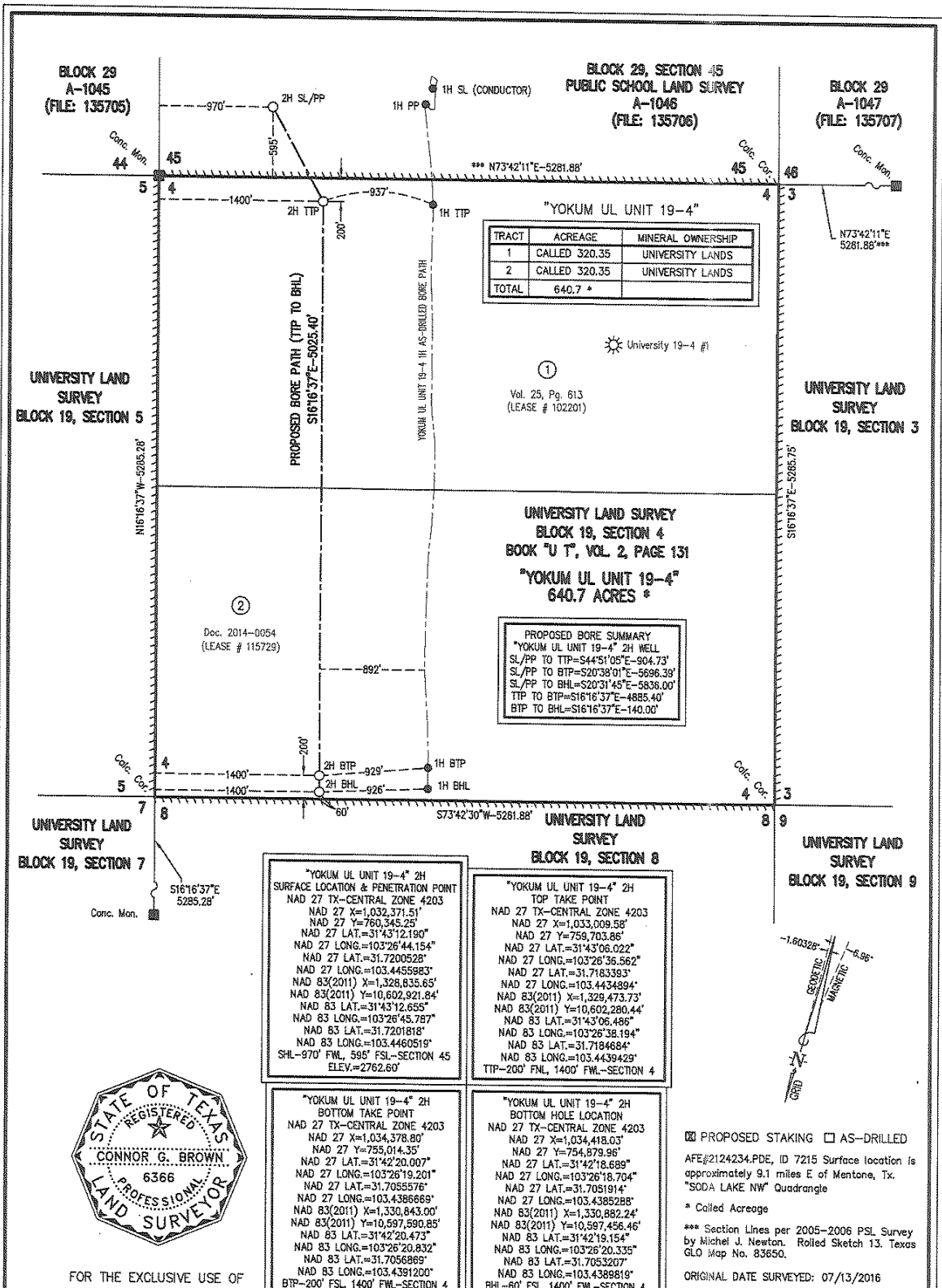
Form GW-2

P.O. Box 12967 Austin, Texas 78771-2967

512-463- 2741

Rev. 02/2014

Internet address: www.rrc.texas.gov



TRACT	ACREAGE	MINERAL OWNERSHIP
1	320.35	UNIVERSITY LANDS
2	320.35	UNIVERSITY LANDS
TOTAL	640.7 *	

PROPOSED BORE SUMMARY
 "YOKUM UL UNIT 19-4" 2H WELL
 SL/PP TO TTP=S44°51'05"E-904.73'
 SL/PP TO BTP=S20°38'01"E-5696.39'
 SL/PP TO BHL=S20°31'45"E-5836.00'
 TTP TO BTP=S16°16'37"E-4885.40'
 BTP TO BHL=S16°16'37"E-140.00'

"YOKUM UL UNIT 19-4" 2H
 SURFACE LOCATION & PENETRATION POINT
 NAD 27 TX-CENTRAL ZONE 4203
 NAD 27 X=1,052,371.51'
 NAD 27 Y=760,345.28'
 NAD 27 LAT.=31°43'12.190"
 NAD 27 LONG.=103°26'44.154"
 NAD 27 LAT.=31.7200528"
 NAD 27 LONG.=103.4455983"
 NAD 83(2011) X=1,328,835.65'
 NAD 83(2011) Y=10,602,921.84'
 NAD 83 LAT.=31°43'12.655"
 NAD 83 LONG.=103°26'45.787"
 NAD 83 LAT.=31.7201818"
 NAD 83 LONG.=103.4460519"
 SHL-970' FWL, 595' FSL-SECTION 45
 ELEV.=2762.60'

"YOKUM UL UNIT 19-4" 2H
 TOP TAKE POINT
 NAD 27 TX-CENTRAL ZONE 4203
 NAD 27 X=1,033,008.59'
 NAD 27 Y=759,703.88'
 NAD 27 LAT.=31°43'06.022"
 NAD 27 LONG.=103°26'36.562"
 NAD 27 LAT.=31.7183393"
 NAD 27 LONG.=103.4434894"
 NAD 83(2011) X=1,329,473.73'
 NAD 83(2011) Y=10,602,280.44'
 NAD 83 LAT.=31°43'06.486"
 NAD 83 LONG.=103°26'38.194"
 NAD 83 LAT.=31.7184684"
 NAD 83 LONG.=103.4439429"
 TTP-200' FNL, 1400' FWL-SECTION 4

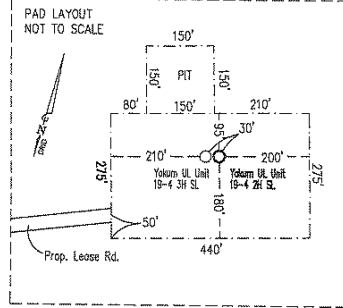
"YOKUM UL UNIT 19-4" 2H
 BOTTOM TAKE POINT
 NAD 27 TX-CENTRAL ZONE 4203
 NAD 27 X=1,034,378.80'
 NAD 27 Y=755,014.35'
 NAD 27 LAT.=31°42'20.007"
 NAD 27 LONG.=103°26'19.201"
 NAD 27 LAT.=31.7095576"
 NAD 27 LONG.=103.4386669"
 NAD 83(2011) X=1,330,843.00'
 NAD 83(2011) Y=10,597,590.85'
 NAD 83 LAT.=31°42'20.473"
 NAD 83 LONG.=103°26'20.832"
 NAD 83 LAT.=31.7095899"
 NAD 83 LONG.=103.4391200"
 BTP-200' FSL, 1400' FWL-SECTION 4

"YOKUM UL UNIT 19-4" 2H
 BOTTOM HOLE LOCATION
 NAD 27 TX-CENTRAL ZONE 4203
 NAD 27 X=1,034,418.03'
 NAD 27 Y=754,879.96'
 NAD 27 LAT.=31°42'18.689"
 NAD 27 LONG.=103°26'18.704"
 NAD 27 LAT.=31.7051914"
 NAD 27 LONG.=103.4385288"
 NAD 83(2011) X=1,330,882.24'
 NAD 83(2011) Y=10,597,456.46'
 NAD 83 LAT.=31°42'19.154"
 NAD 83 LONG.=103°26'20.335"
 NAD 83 LAT.=31.7053297"
 NAD 83 LONG.=103.4386819"
 BHL-60' FSL, 1400' FWL-SECTION 4



FOR THE EXCLUSIVE USE OF
 ANADARKO E&P ONSHORE LLC
 STATE OF TEXAS - COUNTY OF SMITH
 I, Connor G. Brown, Registered Professional Land
 Surveyor, do hereby certify the above plat to be
 true and correct to the best of my knowledge.
 Date: July 20, 2016 Tyler, Texas

E.L.S. SURVEYING & MAPPING, INC.
 HARRY L. JOHNSON & ASSOCIATES
 Registered Professional Land Surveyor No. 6366
 Location is staked from tract lines as evidenced by occupation,
 information obtained from the General Land Office and provided
 deed records. Distances shown are not intended to be definitive
 in establishing actual title boundaries. The deed data, tract acreages
 and unit data shown hereon was furnished by others. This is not
 a title survey. Vesting documents may not have been provided.
 Bearings are based on the Texas State Plane Coordinate
 System, N.A.D. 83 (2011) (Central Zone) Derived from GPS Observations.



PROPOSED STAKING AS-DRILLED
 AFE#2124234.PDE, ID 7215 Surface location is
 approximately 9.1 miles E of Mentone, Tx.
 "SODA LAKE NW" Quadrangle
 * Called Acreage
 *** Section Lines per 2005-2006 PSL Survey
 by Michel J. Newton. Rolled Sketch 13. Texas
 GLO Map No. 83650.

ORIGINAL DATE SURVEYED: 07/13/2016
WELL LOCATION PLAT
 ANADARKO E&P ONSHORE LLC
 YOKUM UL UNIT 19-4 2H WELL
 PUBLIC SCHOOL LAND, A-1046
 UNIVERSITY OF TEXAS LANDS
 LOVING COUNTY, TEXAS
 1000' 500' 0 1000'
 1" = 1000'

From the Office of E.L.S. Surveying & Mapping, Inc.
 Harry L. Johnson & Associates - Tyler, Texas
 2004 W. Grande Blvd. / 903-581-7759