

API No. <u>42-301-33110</u> Drilling Permit # <u>820301</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> 07/2004 Permit Status: <b>Approved</b>	
1. RRC Operator No. <b>020528</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>ANADARKO E&amp;P ONSHORE LLC</b>		3. Operator Address (include street, city, state, zip): <b>ATTN FRANK A. DAVIS</b> <b>PO BOX 1330</b> <b>HOUSTON, TX 77251-1330</b>			
4. Lease Name <b>YELLOWJACKET UL UNIT 19-3</b>		5. Well No. <b>14H</b>					
<b>GENERAL INFORMATION</b>							
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 <b>13000</b>		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			
<b>SURFACE LOCATION AND ACREAGE INFORMATION</b>							
11. RRC District No. <b>08</b>		12. County <b>LOVING</b>		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>10.8</u> miles in a <u>NE</u> direction from <u>MENTONE</u> which is the nearest town in the county of the well site.							
15. Section <b>3</b>	16. Block <b>19</b>	17. Survey <b>UL</b>		18. Abstract No. <b>A-U3</b>	19. Distance to nearest lease line: <b>200</b> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>967.62</b>	
21. Lease Perpendiculars: <u>330</u> ft from the <u>SOUTH</u> line and <u>670</u> ft from the <u>EAST</u> line. 22. Survey Perpendiculars: <u>2313</u> ft from the <u>NORTH</u> line and <u>670</u> ft from the <u>EAST</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			
<b>FIELD INFORMATION    List all fields of anticipated completion including Wildcat. List one zone per line.</b>							
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	330.00	
<b>BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)</b>							
<b>Remarks</b> [FILER Nov 10, 2016 6:12 PM]: Anadarko owns or controls the development rights of all leased and pooled tracts in the unit.; [RRC STAFF Nov 28, 2016 5:21 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Nov 29, 2016 12:11 PM]: Problems identified with this permit are resolved.; [RRC STAFF Nov 29, 2016 12:11 PM]: Per Laura Caskey, the P-12 tracts are 100% pooled and leased, so therefore there is no internal lease line Rule 37.				<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;"> <div> <u>Laura Caskey, Regulatory Analyst I</u>            Name of filer   <u>(832)6361677</u>            Phone         </div> <div> <u>Nov 11, 2016</u>            Date submitted   <u>laura.caskey@anadarko.com</u>            E-mail Address (OPTIONAL)         </div> </div>			
<b>RRC Use Only</b>							
Data Validation Time Stamp: Dec 6, 2016 8:16 AM( Current Version )							

Permit Status: <b>Approved</b>  <i>The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.</i>
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**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION**

**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 #	820301
Approved Date:	Nov 29, 2016

1. RRC Operator No. <b>020528</b>	2. Operator's Name (exactly as shown on form P-5, Organization Report) <b>ANADARKO E&amp;P ONSHORE LLC</b>	3. Lease Name <b>YELLOWJACKET UL UNIT 19-3</b>	4. Well No. <b>14H</b>
<b>Lateral Drainhole Location Information</b>			
5. Field as shown on Form W-1 <b>PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)</b>			
6. Section <b>46</b>	7. Block <b>29</b>	8. Survey <b>PSL / FERGUSON, J L</b>	9. Abstract <b>1047</b>
10. County of BHL <b>LOVING</b>			
11. Terminus Lease Line Perpendiculars <b>60</b> ft. from the <b>N</b> line. and <b>903</b> ft. from the <b>E</b> line			
12. Terminus Survey Line Perpendiculars <b>60</b> ft. from the <b>N</b> line. and <b>903</b> ft. from the <b>E</b> line			
13. Penetration Point Lease Line Perpendiculars <b>330</b> ft. from the <b>S</b> line. and <b>670</b> ft. from the <b>E</b> line			

**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 align="center">820301</div>	DATE PERMIT ISSUED OR AMENDED <div align="center">Nov 29, 2016</div>	DISTRICT <div align="center">* 08</div>																
API NUMBER <div align="center">42-301-33110</div>	FORM W-1 RECEIVED <div align="center">Nov 11, 2016</div>	COUNTY <div align="center">LOVING</div>																
TYPE OF OPERATION <div align="center">NEW DRILL</div>	WELLBORE PROFILE(S) <div align="center">Horizontal</div>	ACRES <div align="center">967.62</div>																
OPERATOR <div align="center">ANADARKO E&amp;P ONSHORE LLC</div> <div align="center">ATTN FRANK A. DAVIS PO BOX 1330 HOUSTON, TX 77251-1330</div>		020528	NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. <b>District Office Telephone No:</b> <div align="center">(432) 684-5581</div>															
LEASE NAME <div align="center">YELLOWJACKET UL UNIT 19-3</div>		WELL NUMBER <div align="center">14H</div>																
LOCATION <div align="center">10.8 miles NE direction from MENTONE</div>		TOTAL DEPTH <div align="center">13000</div>																
Section, Block and/or Survey <div>           SECTION ◀ 3                      BLOCK ◀ 19                      ABSTRACT ◀ U3            SURVEY ◀ UL         </div>																		
DISTANCE TO SURVEY LINES <div align="center">2313 ft. NORTH    670 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div align="center">200 ft.</div>																
DISTANCE TO LEASE LINES <div align="center">330 ft. SOUTH    670 ft. EAST</div>		DISTANCE TO NEAREST WELL ON LEASE <div align="center">See FIELD(s) Below</div>																
FIELD(s) and LIMITATIONS: <div align="center">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</div>																		
<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">FIELD NAME LEASE NAME</th> <th style="width:10%;">ACRES NEAREST LEASE</th> <th style="width:10%;">DEPTH</th> <th style="width:10%;">WELL # NEAREST WE</th> <th style="width:10%;">DIST</th> </tr> </thead> <tbody> <tr> <td>PHANTOM (WOLFCAMP)</td> <td align="center">967.62</td> <td align="center">13,000</td> <td align="center">14H</td> <td align="center">08</td> </tr> <tr> <td>YELLOWJACKET UL UNIT 19-3</td> <td align="center">200</td> <td></td> <td align="center">330</td> <td></td> </tr> </tbody> </table>				FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH	WELL # NEAREST WE	DIST	PHANTOM (WOLFCAMP)	967.62	13,000	14H	08	YELLOWJACKET UL UNIT 19-3	200		330	
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH	WELL # NEAREST WE	DIST														
PHANTOM (WOLFCAMP)	967.62	13,000	14H	08														
YELLOWJACKET UL UNIT 19-3	200		330															
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.  <div>           Lateral: TH1            Penetration Point Location                Lease Lines:            330.0 F S L                                             670.0 F E L             Terminus Location                BH County: LOVING                Section: 46              Block: 29                      Abstract: 1047                Survey: PSL / FERGUSON, J L                Lease Lines:            60.0 F N L                                             903.0 F E L                Survey Lines:        60.0 F N L                                             903.0 F E L         </div>																		
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS																		

**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;">820301</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Nov 29, 2016</div>	DISTRICT <div style="text-align: center;">* 08</div>
API NUMBER <div style="text-align: right;">42-301-33110</div>	FORM W-1 RECEIVED <div style="text-align: center;">Nov 11, 2016</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;">967.62</div>
OPERATOR <div style="text-align: right;">020528</div> <div style="text-align: center;">ANADARKO E&amp;P ONSHORE LLC</div> <div style="text-align: center;">ATTN FRANK A. DAVIS PO BOX 1330 HOUSTON, TX 77251-1330</div>		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. <b>District Office Telephone No:</b> <div style="text-align: center;">(432) 684-5581</div>
LEASE NAME <div style="text-align: center;">YELLOWJACKET UL UNIT 19-3</div>		WELL NUMBER <div style="text-align: center;">14H</div>
LOCATION <div style="text-align: center;">10.8 miles NE 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 ◀ 3</div> <div>BLOCK ◀ 19</div> <div>ABSTRACT ◀ U3</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY ◀ UL</div> <div></div> <div></div> </div>		
DISTANCE TO SURVEY LINES <div style="text-align: center;">2313 ft. NORTH 670 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">200 ft.</div>
DISTANCE TO LEASE LINES <div style="text-align: center;">330 ft. SOUTH 670 ft. EAST</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 *</div>		
<div style="display: flex; justify-content: space-between;"> <div>FIELD NAME</div> <div>ACRES</div> <div>DEPTH</div> <div>WELL #</div> <div>DIST</div> </div> <div style="display: flex; justify-content: space-between;"> <div>LEASE NAME</div> <div>NEAREST LEASE</div> <div>NEAREST WE</div> <div></div> <div></div> </div>		
<p>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.</p> <p>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.</p>		

**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 Issued:** 15 November 2016**GAU Number:** 163186**Attention:** ANADARKO E&P ONSHORE  
ATTN FRANK A. DAVIS  
HOUSTON, TX 77251**Operator No.:** 020528**API Number:**  
**County:** LOVING  
**Lease Name:** YELLOWJACKET UL UNIT 19-3  
**Lease Number:**  
**Well Number:** 14H  
**Total Vertical Depth:** 13000  
**Latitude:** 31.719983  
**Longitude:** -103.415409  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UNIVERSITY LAND; Abstract-NONE; Block-19; Section-3

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

The interval from the land surface to the base of the Rustler, which is estimated to occur at a depth of 1000 feet, must be protected.

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

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 11/11/2016. 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    Internet address: [www.rrc.texas.gov](http://www.rrc.texas.gov)  
Rev. 02/2014

(FILE: 134521)

(FILE: 134520)

(FILE: 134688)

**BLOCK 29  
SECTION 46  
PUBLIC SCHOOL LAND  
A-1047  
(FILE: 135707)**

(FILE: 135706)

(FILE: 152687)

YELLOWJACKET UL UNIT 19-3 14H SURFACE  
LOCATION AND POINT OF PENETRATION  
NAD 27 TX-CENTRAL ZONE 4203  
NAD 27 X=1,041,754.27'  
NAD 27 Y=760,058.83'  
NAD 27 LAT.=31°43'11.942"  
NAD 27 LONG.=103°24'55.475"  
NAD 27 LAT.=31.7199838°  
NAD 27 LONG.=103.4154098°  
NAD 83(2011) X=1,338,218.51'  
NAD 83(2011) Y=10,602,635.39'  
NAD 83 LAT.=31°43'12.406"  
NAD 83 LONG.=103°24'57.104"  
NAD 83 LAT.=31.7201129°  
NAD 83 LONG.=103.4158623°  
SHL-2313' FNL, 670' FEL-SECTION 3  
ELEV.=2769.86'

"YELLOWJACKET UL UNIT 19-3"

TRACT	ACREAGE	MINERAL OWNERSHIP
1	647.27	Harrison, et al
2	320.35	University Lands
TOTAL	967.62	

**"YELLOWJACKET UL UNIT 19-3"  
967.62 ACRES**

S73°42'11"W-5281.88' (\*\*Section Line)

PROPOSED BORE SUMMARY  
YELLOWJACKET UL UNIT 19-3 14H WELL  
SHL TO TTP=N43°50'08"W-503.25'  
SHL TO BTP=N18°08'46"W-7449.85'  
SHL TO BHL=N18°06'50"W-7589.79'  
TTP TO BTP=N16°21'37"W-6999.75'  
BTP TO BHL=N16°23'26"W-140.00'

**UNIVERSITY LAND SURVEY  
BLOCK 19, SECTION 3  
BOOK "U T", VOL. 2, PAGE 130**

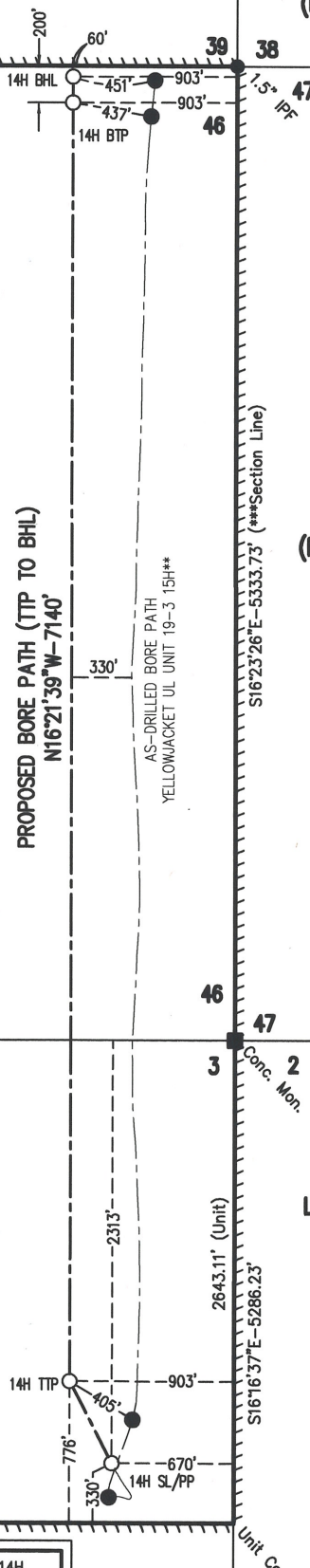
Half Section Line  
S73°42'20"W-5281.88'

YELLOWJACKET UL UNIT 19-3 14H  
TOP TAKE POINT  
NAD 27 TX-CENTRAL ZONE 4203  
NAD 27 X=1,041,405.73'  
NAD 27 Y=760,421.84'  
NAD 27 LAT.=31°43'15.437"  
NAD 27 LONG.=103°24'59.625"  
NAD 27 LAT.=31.7209548°  
NAD 27 LONG.=103.4165626°  
NAD 83(2011) X=1,337,869.96'  
NAD 83(2011) Y=10,602,998.40'  
NAD 83 LAT.=31°43'15.902"  
NAD 83 LONG.=103°25'01.255"  
NAD 83 LAT.=31.7210838°  
NAD 83 LONG.=103.4170152°  
TTP-776' FSL, 903' FEL-YELLOWJACKET  
UL UNIT 19-3

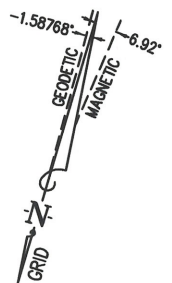
YELLOWJACKET UL UNIT 19-3 14H  
BOTTOM TAKE POINT  
NAD 27 TX-CENTRAL ZONE 4203  
NAD 27 X=1,039,434.16'  
NAD 27 Y=767,138.05'  
NAD 27 LAT.=31°44'21.338"  
NAD 27 LONG.=103°25'24.602"  
NAD 27 LAT.=31.7392606°  
NAD 27 LONG.=103.4235006°  
NAD 83(2011) X=1,335,898.30'  
NAD 83(2011) Y=10,609,714.72'  
NAD 83 LAT.=31°44'21.802"  
NAD 83 LONG.=103°25'26.233"  
NAD 83 LAT.=31.7393893°  
NAD 83 LONG.=103.4239538°  
BTP-200' FNL, 903' FEL-YELLOWJACKET  
UL UNIT 19-3

YELLOWJACKET UL UNIT 19-3 14H  
BOTTOM HOLE LOCATION  
NAD 27 TX-CENTRAL ZONE 4203  
NAD 27 X=1,039,394.65'  
NAD 27 Y=767,272.36'  
NAD 27 LAT.=31°44'22.656"  
NAD 27 LONG.=103°25'25.103"  
NAD 27 LAT.=31.7396267°  
NAD 27 LONG.=103.4236396°  
NAD 83(2011) X=1,335,858.79'  
NAD 83(2011) Y=10,609,849.03'  
NAD 83 LAT.=31°44'23.119"  
NAD 83 LONG.=103°25'26.734"  
NAD 83 LAT.=31.7397554°  
NAD 83 LONG.=103.4240928°  
BHL-60' FNL, 903' FEL-SECTION 46

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



**UNIVERSITY  
LAND SURVEY**

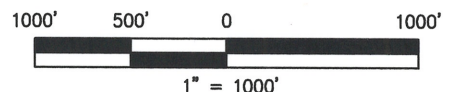


☒ PROPOSED STAKING ☐ AS-DRILLED  
AFE#2104225.PDE, ID 7803 Surface location is  
approximately 10.8 miles ENE of Mentone, Tx.  
"SODA LAKE NW" Quadrangle  
\*\* As-Drilled information shown hereon  
provided by Anadarko Petroleum Corp.

\*\*\* Section Lines per 2005-2006 PSL Survey  
by Michel J. Newton. Rolled Sketch 13. Texas  
GLO Map No. 83650.

DATE SURVEYED: 10/20/2016

**WELL LOCATION PLAT  
ANADARKO E&P ONSHORE LLC  
YELLOWJACKET UL UNIT 19-3 14H WELL  
PUBLIC SCHOOL LAND SURVEY, A-1047  
UNIVERSITY LAND SURVEY  
LOVING COUNTY, TEXAS**



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: October 28, 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.