

API No. <u>42-383-39597</u> Drilling Permit # <u>814404</u> SWR Exception Case/Docket No. _____	RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <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>	FORM W-1 07/2004 Permit Status: Approved
---	--	---

1. RRC Operator No. 017996	2. Operator's Name (as shown on form P-5, Organization Report) AMERICAN ENERGY-PERM BASIN, LLC	3. Operator Address (include street, city, state, zip): PO BOX 13710 OKLAHOMA CITY, OK 73113-0000
4. Lease Name UNIVERSITY 10 RE		5. Well No. 0606HS

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"/> Amended		<input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)		<input type="checkbox"/> Field Transfer	
<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					
7. Wellbore Profile (mark ALL appropriate boxes):					
8. Total Depth 7700		9. Do you have the right to develop the minerals under any right-of-way ?		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)?	
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

SURFACE LOCATION AND ACREAGE INFORMATION					
11. RRC District No. 7C		12. County REAGAN		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>6.74</u> miles in a <u>N</u> direction from <u>Big Lake</u> which is the nearest town in the county of the well site.					
15. Section 6		16. Block 10		17. Survey UNIVERSITY LANDS	
				18. Abstract No. A-	
				19. Distance to nearest lease line: 100 ft.	
				20. Number of contiguous acres in lease, pooled unit, or unitized tract: 630.9	
21. Lease Perpendiculars: <u>674</u> ft from the <u>SOUTH</u> line and <u>1282</u> ft from the <u>EAST</u> line.					
22. Survey Perpendiculars: <u>674</u> ft from the <u>SOUTH</u> line and <u>1282</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		

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	32. Number of Wells on this lease in this Reservoir
7C	53613750	LIN (WOLFCAMP)	Oil or Gas Well	7700	319.00	3

BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)

Remarks
 [RRC STAFF Mar 15, 2016 2:14 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Mar 15, 2016 3:32 PM]: Problems identified with this permit are resolved.; [RRC STAFF Mar 16, 2016 7:44 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Mar 16, 2016 7:46 AM]: Problems identified with this permit are resolved.; [RRC STAFF Mar 16, 2016 7:46 AM]: This permit is in the Lin (wolfcamp) field and the 2H is in the Spraberry field.

Certificate:

I certify that information stated in this application is true and complete, to the best of my knowledge.

Rena Carter, Senior Regulatory Specialist

Name of filer: _____ Date submitted: **Mar 15, 2016**

Phone: **(405)6075559** E-mail Address (OPTIONAL): **rena.carter@aep-lp.com**

RRC Use Only Data Validation Time Stamp: Mar 16, 2016 11:10 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 # **814404**
Approved Date: **Mar 16, 2016**

1. RRC Operator No. 017996	2. Operator's Name (exactly as shown on form P-5, Organization Report) AMERICAN ENERGY-PERM BASIN, LLC	3. Lease Name UNIVERSITY 10 RE	4. Well No. 0606HS
--------------------------------------	--	--	------------------------------

Lateral Drainhole Location Information

5. Field as shown on Form W-1 **LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)**

6. Section 1	7. Block	8. Survey GC&SF RR CO	9. Abstract 163	10. County of BHL REAGAN
------------------------	----------	-------------------------------------	---------------------------	------------------------------------

11. Terminus Lease Line Perpendiculars 15 ft. from the north line. and 969 ft. from the west line
12. Terminus Survey Line Perpendiculars 15 ft. from the north line. and 1607 ft. from the east line
13. Penetration Point Lease Line Perpendiculars 15 ft. from the south line. and 969 ft. from the west line

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

REAGAN (383) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
GRAYBURG	1,500	2,500		1	12/17/2013
QUEEN	1,900	2,500		2	12/17/2013
SAN ANDRES	2,000	5,000	saltwater flow, possibly heavy	3	12/17/2013
CLEARFORK	3,300	4,000		4	12/17/2013
SPRABERRY	3,300	10,000		5	12/17/2013
STRAWN	9,300	10,200		6	12/17/2013
FUSSELMAN	8,800	11,000		7	12/17/2013
ELLENBURGER	8,700	10,500		8	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:	14 March 2016	GAU Number:	152286
Attention:	AMERICAN ENERGY-PERM PO BOX 13710 OKLAHOMA CITY, OK 73113	API Number:	
Operator No.:	017996	County:	REAGAN
		Lease Name:	University 10 RE
		Lease Number:	
		Well Number:	0620HD
		Total Vertical Depth:	13000
		Latitude:	31.288955
		Longitude:	-101.470382
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UL; Block-10; Section-6

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 a depth of 550 feet must be protected.

This recommendation is applicable to all wells within a radius of 500 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 03/14/2016. 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
Rev. 02/2014

NAD 27, Central Zone 4203
 Surface Hole Location (SEC. 6)
 Latitude: 31.288955° N
 Longitude: 101.470382° W
 X=1644839.60
 Y=591819.33
 Elev.=2538'
 674' FSL & 1282' FEL

Point of Penetration (SEC. 6)
 Latitude: 31.287153° N
 Longitude: 101.471524° W
 X=1644476.24
 Y=591167.59
 15' FSL & 1636' FEL

First Take Point (SEC. 6)
 Latitude: 31.287387° N
 Longitude: 101.471522° W
 X=1644477.71
 Y=591252.58
 100' FSL & 1636' FEL

Last Take Point (SEC. 32)
 Latitude: 31.316015° N
 Longitude: 101.471286° W
 X=1644657.78
 Y=601663.80
 100' FNL & 1607' FEL

Bottom Hole Location (SEC. 32)
 Latitude: 31.316249° N
 Longitude: 101.471285° W
 X=1644659.25
 Y=601748.79
 15' FNL & 1607' FEL

Tract	Lessor	Called Acreage	% of Total
1	University Lands	313.1000 Acres	49.6275
2	University Lands	317.8000 Acres	50.3725
Total		630.9000 Acres	100.0000

G. C. & S. F. RR CO Survey
 Section 1, A-163
 X=1646265.93
 Y=601732.22
 Found Concr. Marker

Unit Boundary Distance	
SHL	674' FSL & 1282' FEL
PP	15' FSL & 969' FWL
FTP	100' FSL & 969' FWL
LTP	100' FNL & 969' FWL
BHL	15' FNL & 969' FWL

University Lands
 Block 58, Sec. 31

University Lands
 Block 10, Sec. 5

University Lands
 Block 58, Sec. 32

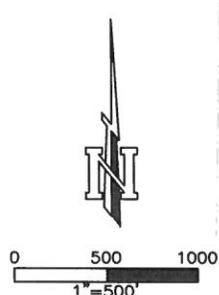
UNIVERSITY 10 LEASE
 CALLED 630.9000 ACRES

X=1646189.60
 Y=596449.02
 Found Concrete Marker

X=1643599.96
 Y=596501.08

University Lands
 Block 10, Sec. 6

University Lands
 Block 10, Sec. 7





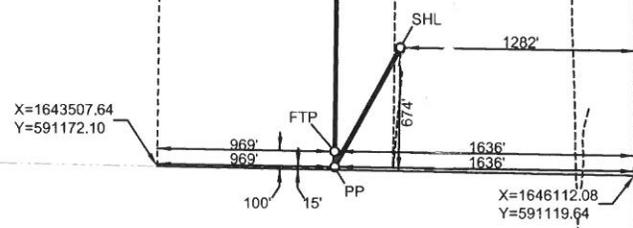
**AMERICAN ENERGY
 PERMIAN BASIN**
 Well Name
 UNIVERSITY 10 RE 0606HS
 Drilling Field
 LIN (WOLFCAMP) FIELD
 Nearest Town
 6.74 MILES NORTH OF BIG LAKE, TEXAS



NOTE: This Plat does not, in anyway represent a "Boundary Survey", and does not comply with the current T.B.P.L.S. Minimum Standards of Procedures for Boundary Survey. Shown Acreages were furnished by others. The information contained on this plat is intended for the sole use of AMERICAN ENERGY - PERM BASIN, LLC.

NOTE: Bearings and coordinates refer to the Texas Coordinate System of 1927, Central Zone (4203), as observed by GPS observations

I, **Damian M. Jagers** do hereby certify that the above described well location was surveyed on the ground under my supervision, as shown.
Damian M. Jagers 03/15/2016
Damian M. Jagers
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NO. 6269





XTS
 CROSS TIMBERS SURVEYING, LLC
 1503 Dartmouth St. Longview, TX 75601
 Phone: 254-965-8886
 email: crest@cross-timbers-surveying.com
 web: www.cts-surveying.net

Well Plat
 for
 American Energy-Perm Basin, LLC

UNIVERSITY 10 RE 0606HS
 University Lands Block 10, Section 6
 University Lands Block 58, Section 32
 Reagan County, Texas