

**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 # **814374**
Approved Date: **Mar 14, 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. 0632HE
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Lateral Drainhole Location Information

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

6. Section 32	7. Block 58	8. Survey UNIVERSITY LANDS	9. Abstract	10. County of BHL REAGAN
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11. Terminus Lease Line Perpendiculars 15 ft. from the north line. and 1288 ft. from the east line
12. Terminus Survey Line Perpendiculars 15 ft. from the north line. and 1288 ft. from the east line
13. Penetration Point Lease Line Perpendiculars 15 ft. from the south line. and 1317 ft. from the east 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:
County: REAGAN
Lease Name: University 10 RE

Operator No.: 017996

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
 Rev. 02/2014

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

512-463-2741

Internet address: www.rrc.texas.gov

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 & 1283' FEL

Point of Penetration (SEC. 6)
 Latitude: 31.287144° N
 Longitude: 101.470502° W
 X=1644795.37
 Y=591161.16
 15' FSL & 1317' FEL

First Take Point (SEC. 6)
 Latitude: 31.287378° N
 Longitude: 101.470500° W
 X=1644796.85
 Y=591246.15
 100' FSL & 1317' FEL

Last Take Point (SEC. 32)
 Latitude: 31.316007° N
 Longitude: 101.470264° W
 X=1644976.91
 Y=601657.53
 100' FNL & 1288' FEL

Bottom Hole Location (SEC. 32)
 Latitude: 31.316241° N
 Longitude: 101.470262° W
 X=1644978.38
 Y=601742.52
 15' FNL & 1288' 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 Concrete Marker

X=1643691.13
 Y=601782.81

University Lands
 Block 58, Sec. 32

UNIVERSITY 10 LEASE
 CALLED 630.9000 ACRES

SF-15650

Unit Boundary Distance	
SHL	674' FSL & 1283' FEL
PP	15' FSL & 1317' FEL
FTP	100' FSL & 1317' FEL
LTP	100' FNL & 1288' FEL
BHL	15' FNL & 1288' FEL

University Lands
 Block 58, Sec. 31

University Lands
 Block 10, Sec. 5

University Lands
 Block 10, Sec. 6

X=1643599.96
 Y=596501.08



0 500 1000
 1"=1000'



AMERICAN ENERGY
 PERMIAN BASIN

Well Name
 University 10 RE 0632HE
 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

X=1643507.64
 Y=591172.10

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 03/11/2016
 DATE

Damian M. Jagers
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NO. 6269

University Lands
 Block 10, Sec. 7



1503 Darrmouth St. Longview, TX 75601
 Phone: 254-965-8686
 email: cross@xtssurvey.com
 web: www.xtssurvey.net

Well Plat
 for
 American Energy-Perm Basin, LLC

University 10 RE 0632HE
 University Lands Block 10, Section 6,
 Reagan County, Texas