

API No. <u>42-383-39202</u> Drilling Permit # <u>797056</u> SWR Exception Case/Docket No. _____		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <small>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.</small>				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 09		5. Well No. 0806H					
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 9000		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. 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>11.2</u> miles in a <u>NW</u> direction from <u>Big Lake</u> which is the nearest town in the county of the well site.							
15. Section 8		16. Block 9		17. Survey UL		18. Abstract No. A-U178	
				19. Distance to nearest lease line: 100 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 4522.29	
21. Lease Perpendiculars: <u>7417.7</u> ft from the <u>W</u> line and <u>7195</u> ft from the <u>N</u> line. 22. Survey Perpendiculars: <u>2138</u> ft from the <u>W</u> line and <u>1864</u> ft from the <u>N</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	
7C	53613750	LIN (WOLFCAMP)		Oil or Gas Well	9000	330.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
<u>Remarks</u> See W1 Comments attached				<u>Certificate:</u> 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>Bill Spencer, Consultant</u> Name of filer <u>(512)9181062</u> Phone </div> <div> <u>Sep 25, 2014</u> Date submitted <u>bill@spencerconsulting.org</u> E-mail Address (OPTIONAL) </div> </div>			
RRC Use Only Data Validation Time Stamp: Oct 7, 2014 1:57 PM('As Approved' Version)							

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

Form W-1H
Supplemental Horizontal Well Information

07/2004

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

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Permit #	797056
Approved Date:	Oct 07, 2014

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 09	4. Well No. 0806H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 5	7. Block 9	8. Survey UL	9. Abstract
		10. County of BHL REAGAN	
11. Terminus Lease Line Perpendiculars 50 ft. from the N line. and 330 ft. from the E line			
12. Terminus Survey Line Perpendiculars 50 ft. from the N line. and 2969 ft. from the E line			
13. Penetration Point Lease Line Perpendiculars 7095 ft. from the N line. and 7588.9 ft. from the W line			

Permit Status: **Approved**

The RRC has not approved this application.
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the user's own risk.

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

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

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W-1 Comments

Permit # **797056**

Approved Date: **Oct 07, 2014**

[FILER Sep 25, 2014 10:38 AM]: Stacked Lateral Well with the 0802H; Permit # 749882 cancelled and well count adjusted; [RRC STAFF Sep 30, 2014 11:23 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Sep 30, 2014 11:41 AM]: Change nearest town distance per plat. Update SHL/BHL abstract/survey info per GIS.; [RRC STAFF Oct 1, 2014 8:58 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Oct 2, 2014 1:49 PM]: Attached revised P12 sent in by Chris Spencer.; [RRC STAFF Oct 2, 2014 4:23 PM]: Per Cameron: I have confirmed that the well count is 52 prior to filing any of the permit applications listed below.

Please find the well count for each application.

University 09 0802H (53)

University 09 0806H (53)

University 09 0804H (54)

University 09 0813H (54)

University 09 0812H (55)

University 09 0811H (55); [RRC STAFF Oct 2, 2014 4:24 PM]: Changed well count per email.; [RRC STAFF Oct 2, 2014 4:24 PM]: Problems identified with this permit are resolved.; [RRC STAFF Oct 3, 2014 12:49 PM]: All of these (6) P12s have district 3 instead of the required 7C on the permit. Please resubmit all (can be in same email) in .TIF.; [RRC STAFF Oct 3, 2014 1:00 PM]: Attached Revised P12.

**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;">797056</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Oct 07, 2014</div>	DISTRICT <div style="text-align: center;">* 7C</div>																																								
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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;">4522.29</div>																																								
OPERATOR <div style="text-align: right;">017996</div> <div style="text-align: center;"> AMERICAN ENERGY-PERM BASIN, LLC PO BOX 13710 OKLAHOMA CITY, OK 73113-0000 </div>		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: <div style="text-align: center;">(325) 657-7450</div>																																								
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LOCATION <div style="text-align: center;">11.2 miles NW direction from BIG LAKE</div>		TOTAL DEPTH <div style="text-align: center;">9000</div>																																								
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RESTRICTIONS: <div style="margin-left: 20px;"> Lateral: TH1 Penetration Point Location Lease Lines: 7095.0 F N L 7588.9 F W L Terminus Location BH County: REAGAN Section: 5 Block: 9 Abstract: Survey: UL Lease Lines: 50.0 F N L 330.0 F E L Survey Lines: 50.0 F N L 2969.0 F E L </div>																																										
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.																																										

**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;">797056</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Oct 07, 2014</div>	DISTRICT <div style="text-align: center;">* 7C</div>										
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FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									
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 & 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.state.tx.us/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Date **October 2, 2014**

GAU File No.: **12079**

***** EXPEDITED APPLICATION *****

API Number **38300000**

Attention: **CAMERON HUGHES**

RRC Lease No. **000000**

SC_017996_38300000_000000_12079.pdf

AMERICAN ENERGY PERM BASIN LLC
P O BOX 13710
OKLAHOMA CITY TX 73113

--Measured--

2103 ft FWL

1864 ft FNL

MRL:SECTION

P-5# 017996

Digital Map Location:

X-coord/Long **1606035**

Y-coord/Lat **590061**

Datum **27** Zone **N**

County **REAGAN**

Lease & Well No. **UNIVERSITY 09 #0802H&PAD**

Purpose **ND**

Location **SUR-UL,BLK-9,SEC-8,--[TD=9000],[RRC 7C],**

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 525 feet must be protected.

This recommendation is applicable to all wells drilled on this pad.

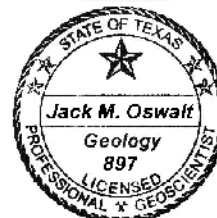
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form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

If you have any questions, please contact us at 512-463-2741, gau@rrc.state.tx.us, or by mail.

Sincerely,

Jack M. Oswalt, P.G.

GEOLOGIST SEAL



Geologist, Groundwater Advisory Unit
Oil & Gas Division

The seal appearing on this document was authorized by Jack M. Oswalt on 10/2/2014
Note: Alteration of this electronic document will invalidate the digital signature.

0 1500 3000 6000
1 INCH = 3000 FT.

LINE	BEARING	DISTANCE
L1	N 60°52'22" E	198.29'



THIS MAP WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY PERFORMED UNDER MY SUPERVISION ON SEPTEMBER 10, 2014.

LARRY W. SMITH
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS NO. 4279

BEARINGS AND COORDINATES SHOWN ON THIS MAP ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 27.

LATITUDES AND LONGITUDES SHOWN ON THIS MAP ARE BASED ON WGS 84.

THIS MAP WAS PREPARED FOR AREA COMPUTATIONS OF MINERAL OWNERSHIP AND DOES NOT REPRESENT A CURRENT OWNERSHIP BOUNDARY SURVEY.

RECORDS RESEARCH WAS PROVIDED BY THE CLIENT OR CLIENT'S REPRESENTATIVES. CLIENTS REPRESENTATIVE DIRECT THE SURVEYOR TO EXTEND THE MINERAL DEEDS TO THE CENTERLINE OF THE RIGHT-OF-WAY WHEN MINERAL DEEDS ARE NOT PROVIDED, THE SURVEYOR PERFORMED NO ADDITIONAL RESEARCH.

LESSOR NAMES ARE PROVIDED BY THE CLIENTS REPRESENTATIVE AND NOT BY THE SURVEYOR.

UNIVERSITY 09, #0806H SURFACE HOLE LOCATION BEARS N 53°11' W 11.2 MILES FROM BIG LAKE, TX.
\$ = APPROXIMATE SURVEY ABSTRACT LINE
FTP = FIRST TAKE POINT
LTP = LAST TAKE POINT
LL = LEASE LINE
BH = BOTTOM HOLE LOCATION
SL = SURVEY LINE

AMERICAN ENERGY-PERMIAN BASIN, L.L.C.
UNIVERSITY 09,
#0806H WELL
BOTTOM HOLE LOCATION
X=1,606,386.13
Y=597,200.29
LAT=31°18'09.93"
LON=101°35'38.67"

AMERICAN ENERGY-PERMIAN BASIN, L.L.C.
UNIVERSITY 09,
#0806H WELL
LAST TAKE POINT
X=1,606,385.12
Y=597,150.31
LAT=31°18'09.44"
LON=101°35'38.67"

TRACT	LEASE #	CALLED ACREAGE	MEASURED ACREAGE	MEASURED PCT.
1	UNIVERSITY LANDS 113331	322.90 ACRES	322.994 ACRES	7.142
2	UNIVERSITY LANDS 113333	645.80 ACRES	645.988 ACRES	14.285
3	UNIVERSITY LANDS 113334	484.35 ACRES	484.491 ACRES	10.713
4	UNIVERSITY LANDS 113335	565.075 ACRES	565.399 ACRES	12.503
5	UNIVERSITY LANDS 113337	322.90 ACRES	323.079 ACRES	7.144
6	UNIVERSITY LANDS 113338	322.90 ACRES	322.985 ACRES	7.142
7	UNIVERSITY LANDS 113339	565.075 ACRES	565.270 ACRES	12.500
8	UNIVERSITY LANDS 113340	322.90 ACRES	323.031 ACRES	7.143
9	UNIVERSITY LANDS 78414	161.45 ACRES	161.497 ACRES	3.571
10	UNIVERSITY LANDS 111020	322.90 ACRES	323.071 ACRES	7.144
11	UNIVERSITY LANDS 111021	322.90 ACRES	322.998 ACRES	7.142
12	UNIVERSITY LANDS 107981	80.725 ACRES	80.774 ACRES	1.786
13	UNIVERSITY LANDS 108484	80.725 ACRES	80.708 ACRES	1.785
TOTAL			4522.285 ACRES	100.000

AMERICAN ENERGY-PERMIAN BASIN, L.L.C.
UNIVERSITY 09,
#0806H WELL
PENETRATION POINT/FTP
X=1,606,243.63
Y=590,158.47
LAT=31°17'00.23"
LON=101°35'39.39"

FINAL
AMERICAN ENERGY-PERMIAN BASIN, L.L.C.
UNIVERSITY 09,
#0806H WELL
4522.285 ACRES
REAGAN COUNTY, TEXAS
PERCHERON

SURVEY, L.L.C.
15411 Vantage Pkwy West
Suite 205
Houston, Texas 77032
(281) 447-6230
Texas Surveying Firm License
No. 10020700
SEPTEMBER 23, 2014
PROJECT 140.0006.003

SHEET 1 OF 1