

API No. <u>42-383-38086</u> Drilling Permit # <u>827791</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 Permit Status: Approved	
1. RRC Operator No. <div style="text-align: center;">263924</div>		2. Operator's Name (as shown on form P-5, Organization Report) <div style="text-align: center;">FDL OPERATING, LLC</div>			3. Operator Address (include street, city, state, zip) <div style="text-align: center;">ATTN ROBIN SWANNER PO BOX 472 JUDSON, TX 75660-0000</div>		
4. Lease Name <div style="text-align: center;">UNIVERSITY 9-31</div>			5. Well No. <div style="text-align: center;">9H</div>				
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> New Drill <input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL)(Also File Form W-1D) </div>							
7. Wellbore Profile (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <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 </div>							
8. Total Depth <div style="text-align: center;">9000</div>		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. <div style="text-align: center;">7C</div>		12. County <div style="text-align: center;">REAGAN</div>		13. Surface Location <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore </div>			
14. This well is to be located <u>7.0</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 <div style="text-align: center;">31</div>	16. Block <div style="text-align: center;">9</div>	17. Survey <div style="text-align: center;">UL</div>	18. Abstract No. <div style="text-align: center;">U201</div>	19. Distance to nearest lease line: <div style="text-align: center;">100.0 ft.</div>	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <div style="text-align: center;">1935.3</div>		
21. Lease Perpendiculars: <u>811.0</u> ft. from the <u>EAST</u> line and <u>7476.0</u> ft. from the <u>SOUTH</u> line. 22. Survey Perpendiculars: <u>811.0</u> ft. from the <u>EAST</u> line and <u>501.0</u> ft. from the <u>NORTH</u> line.							
23. Is this a pooled unit? <input type="checkbox"/> Yes <input checked="" 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. <div style="text-align: center;">7C</div>	27. Field No. <div style="text-align: center;">53613750</div>	28. Field Name (exactly as shown in RRC records) <div style="text-align: center;">LIN (WOLFCAMP)</div>	29. Well Type <div style="text-align: center;">Oil or Gas Well</div>	30. Completion Depth <div style="text-align: center;">9000</div>	31. Distance to Nearest Well in this Reservoir <div style="text-align: center;">39.0</div>	32. Number of Wells on this lease in this Reservoir <div style="text-align: center;">10</div>	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS							
Remarks [FILER 06/13/2017 03:18:47 PM]: well was only completed to surface casing depth by previous operator; [RRC STAFF 06/20/2017 04:48:59 PM]: Surface lease line and bottom hole survey line perpendiculars corrected per plat.;				Certificate: 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>RRC User</div> <div>06/13/2017</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Name of filer</div> <div>Date Submitted</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Phone</div> <div>Email Address(OPTIONAL)</div> </div>			
RRC Use Only Date Validation Time Stamp: Mon, 26 Jun 2017 02:37:30							

RAILROAD COMMISSION OF TEXAS

FORM W-1H

Permit Status: **Approved**

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

OIL & GAS DIVISION

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-

*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.*

Supplemental Horizontal Well InformationPermit # **827791**Approved Date: **06/22/2017**

1. RRC Operator No. 263924	2. Operator's Name (as shown on form P-5, Organization Report) FDL OPERATING, LLC	3. Lease Name UNIVERSITY 9-31	4 Well No. 9H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 19	7. Block 9	8. Survey UL / A-U189	9. Abstract REAGAN
11. Terminus Lease Line Perpendiculars 100.0 ft. from the NORTH line and 990.0 ft. from the EAST line			
12. Terminus Survey Line Perpendiculars 2564.0 ft. from the SOUTH line and 990.0 ft. from the EAST line			
13. Penetration Point Lease Line Perpendiculars 990.0 ft. from the EAST line and 7777.0 ft. from the S 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 827791	DATE PERMIT ISSUED OR AMENDED 06/22/2017	DISTRICT 7C
API NUMBER 42-383-38086	FORM W-1 RECEIVED 06/13/2017	COUNTY REAGAN
TYPE OF OPERATION Recompletion	WELLBORE PROFILE(S) Horizontal	ACRES 1935.3
OPERATOR FDL OPERATING, LLC ATTN ROBIN SWANNER PO BOX 472 JUDSON, TX 75660-0000		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: (325) 657-7450
LEASE NAME UNIVERSITY 9-31		WELL NUMBER 9H
LOCATION 7.0 miles NW direction from Big Lake		TOTAL DEPTH 9000
Section, Block and/or Survey SECTION 31 BLOCK 9 ABSTRACT U201 SURVEY UL		
DISTANCE TO SURVEY LINES 811.0 ft EAST 501.0 ft NORTH		DISTANCE TO NEAREST LEASE LINE 100.0
DISTANCE TO LEASE LINES 811.0 ft EAST 7476.0 ft SOUTH		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below

FIELD(s) and LIMITATIONS:

* SEE FIELD DISTRICT FOR REPORTING PURPOSES *

FIELD NAME	ACRES	DEPTH	WELL#	DIST
LEASE NAME	NEAREST LEASE		NEAREST WELL	
-----	-----	-----	-----	-----
LIN (WOLFCAMP)	1935.3	9000	9H	7C
UNIVERSITY 9-31	100.0		39.0	
WELLBORE PROFILE(s) FOR FIELD: Horizontal				

Terminus Point: TH1 Section: 19 Block: 9 Abstract: Survey: UL / A-U189 BH County: REAGAN

Lease Lines: 100.0 ft NORTH 990.0 ft EAST

Survey Lines: 2564.0 ft SOUTH 990.0 ft EAST

Penetration Lines: 990.0 ft EAST 7777.0 ft S

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.

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 and Gas Division
SWR #13 Formation Data
REAGAN (383) COUNTY

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
GRAYBURG	1500	2500		1	01/01/2014
QUEEN	1900	2500		2	01/01/2014
SAN ANDRES	2000	5000	saltwater flow, possibly heavy	3	01/01/2014
CLEARFORK	3300	4000		4	01/01/2014
SPRABERRY	3300	10000		5	01/01/2014
STRAWN	9300	10200		6	01/01/2014
FUSSELMAN	8800	11000		7	01/01/2014
ELLENBURGER	8700	10500		8	01/01/2014

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
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date **October 26, 2012**

GAU File No.: SC- **11134**

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

API Number **36300000**

Attention: **JOHNIE JONES**

RRC Lease No. **000000**

SC_216378_36300000_000000_11134.pdf

**DEVON ENERGY PRODUCTION CO L P
333 W SHERIDAN AVE
OKLAHOMA CITY OK 73102**

--Measured--

850 ft FEL

500 ft FNL

MRL:SECTION

P-5# 216378

Digital Map Location:

X-coord/Long **101.57118**

Y-coord/Lat **31.22808**

Datum **83** Zone

County **REAGAN**

Lease & Well No. **UNIVERSITY 9-31 #8H&PAD**

Purpose **ND**

Location **SUR-UL, BLK-9, SEC-31, --[TD=8165], [RRC 7C],**

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

The interval from the land surface to a depth of 750 feet must be protected.


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

University 9-31 #10H

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 wastewater disposal operation into a nonproductive zone (RRC Form GW-14).

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

Sincerely,


Digitally signed by Jack Oswalt
DN: cn=US, o=TEXAS, ou=Austin, c=United States of America
Email=jack.oswalt@rrc.state.tx.us
Date: 2012.10.26 16:26:58 -0500

Jack M. Oswalt, P.G.

**Geologist, Groundwater Advisory Unit
Oil & Gas Division**

GEOLOGIST SEAL



The seal appearing on this document was authorized by Jack M. Oswalt on 10/26/2012.
Note: Alteration of this electronic document will invalidate the digital signature.

**608 TR Transition Form
Rev. 9/1/2011**

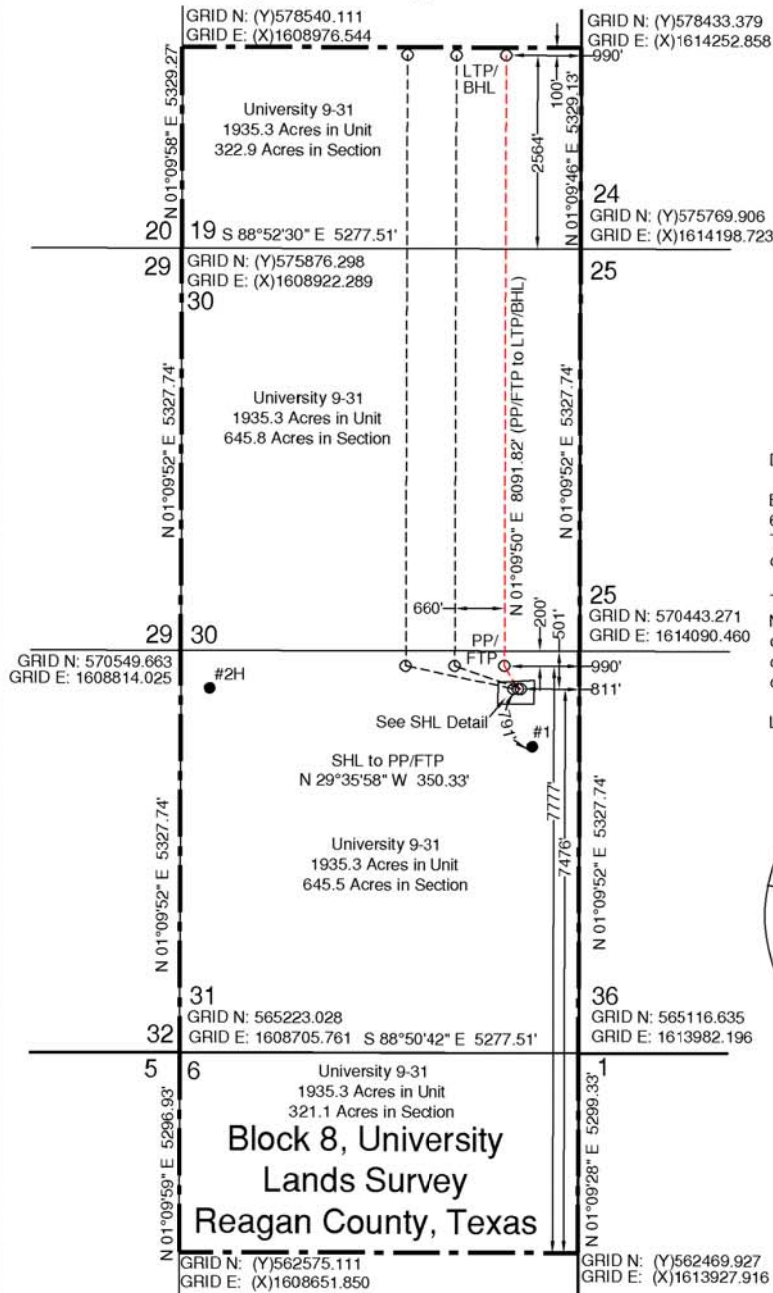
P.O. Box 12667

Austin, Texas 78711-2667

512-463-2741

Internet address: www.rrc.state.tx.us

Block 9, University Lands Survey Reagan County, Texas



Last Take Point/
Bottom Hole Location (LTP/BHL)
GRID N: (Y)578353.423
GRID E: (X)1613260.963
NAD'83 Lat/Long
Lat: 31°15'04.170" N
Long: 101°34'17.006" W

Penetration Point (PP)/ First Take
Point (FTP)
GRID N: (Y)570289.881
GRID E: (X)1611776.865
NAD'83 Lat/Long
Lat: +31°13'44.200"
Long: -101°34'33.066"

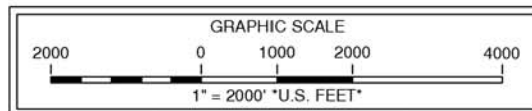
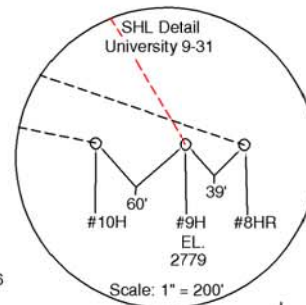
Surface Hole Location (SHL)
GRID N: (Y)569958.548
GRID E: (X)1613269.815
NAD'83 Lat/Long
Lat: +31°13'41.086"
Long: -101°34'15.828"

Driving Directions:

Beginning at the intersection of US Highway
67 & ST Highway 137 in Big Lake, Texas,
Travel West for 6.7 Miles to a lease road at
coordinates 31°12'54.99" N, 101°34'39.02" N.

Turn Right (North) on lease road and travel
North for 1/2 of a mile to the first intersection
of a lease road to the right. Turn right (East) &
continue for a total distance of 1 mile to
coordinates 31°13'34.61" N, 101°34'16.75" W.

Location is 659.5 feet to the left (North).



Note: Well is located 7.0 miles Northwest of the city of Big Lake, Texas.
Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.
Note: Coordinates shown herein are on The Texas Coordinate System of 1927, Central Zone.
Note: Bearings and distances are based on The Texas Coordinate System of 1927, Central Zone.
Note: Example: (S-99999) indicates General Land Office file number.



March 23, 2017

170223 ID1.BLS

Revised: 06/12/17 BLS
USGS Quadrangle Sheet: Best, Tex.

Railroad Commission Permit Plat

FDL OPERATING, LLC.

University 9-31 #9H

501' FROM NORTH LINE

811' FROM EAST LINE

University 9-31 Unit

1935.3 Acres (Called) in Unit

Sections 19, 30 & 31, Block 9, &

Section 6, Block 8

University Lands Survey

Reagan County, Texas