

API No. <u>42-383-38225</u> Drilling Permit # <u>823478</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. 263924		2. Operator's Name (as shown on form P-5, Organization Report) FDL OPERATING, LLC			3. Operator Address (include street, city, state, zip): SUITE 500 909 LAKE CAROLYN PARKWAY IRVING, TX 75039-0000		
4. Lease Name UNIVERSITY 10			5. Well No. 2703H				
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between;"> <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;"> <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;"> <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 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>4.85</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 27		16. Block 10		17. Survey UL		18. Abstract No. A-U233	
				19. Distance to nearest lease line: 100 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 7906.26	
21. Lease Perpendiculars: <u>7564</u> ft from the <u>S</u> line and <u>7905</u> ft from the <u>E</u> line. 22. Survey Perpendiculars: <u>2234</u> ft from the <u>S</u> line and <u>2647</u> ft from the <u>W</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.	27. Field No.	28. Field Name (exactly as shown in RRC records)			29. Well Type	30. Completion Depth	
7C	53613750	LIN (WOLFCAMP)			Oil or Gas Well	9000	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks [FILER Feb 19, 2017 9:01 AM]: Well was completed only to 855' for surface casing. Filing recompletion permit to complete to Lin (Wolfcamp) Field.; [RRC STAFF Feb 27, 2017 12:07 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Feb 27, 2017 12:27 PM]: Well count corrected to 20, to match P-16.; [RRC STAFF Feb 27, 2017 12:36 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Mar 2, 2017 5:41 PM]: Problems identified with this permit are resolved.					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> <u>Robin Swanner, Consulting Agent</u> Name of filer <u>(903)9301532</u> Phone </div> <div> <u>Feb 19, 2017</u> Date submitted <u>robinswanner@sbcglobal.net</u> E-mail Address (OPTIONAL) </div> </div>		
RRC Use Only Data Validation Time Stamp: Apr 3, 2017 12:15 PM(Current Version)							

Permit Status: Approved <i>The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.</i>

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

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

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A certification of the automated data is available in the RRC's Austin office.*

Permit #	823478
Approved Date:	Mar 03, 2017

1. RRC Operator No. 263924	2. Operator's Name (exactly as shown on form P-5, Organization Report) FDL OPERATING, LLC	3. Lease Name UNIVERSITY 10	4. Well No. 2703H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 22	7. Block 10	8. Survey UL / A-U228	9. Abstract
		10. County of BHL REAGAN	
11. Terminus Lease Line Perpendiculars 100 ft. from the n line. and 8902 ft. from the e line			
12. Terminus Survey Line Perpendiculars 100 ft. from the n line. and 1650 ft. from the w line			
13. Penetration Point Lease Line Perpendiculars 7865 ft. from the s line. and 12206 ft. from the w 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 823478	DATE PERMIT ISSUED OR AMENDED 03/03/2017	DISTRICT 7C
API NUMBER 42-383-38225	FORM W-1 RECEIVED 02/19/2017	COUNTY REAGAN
TYPE OF OPERATION Recompletion	WELLBORE PROFILE(S) Horizontal	ACRES 7906.26
OPERATOR FDL OPERATING, LLC SUITE 500 909 LAKE CAROLYN PARKWAY IRVING, TX 75039-0000		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 10		WELL NUMBER 2703H
LOCATION 4.85 miles NW direction from Big Lake		TOTAL DEPTH 9000
Section, Block and/or Survey SECTION 27 BLOCK 10 ABSTRACT U233 SURVEY UL		
DISTANCE TO SURVEY LINES 2234.0 ft S 2647.0 ft W		DISTANCE TO NEAREST LEASE LINE 100.0
DISTANCE TO LEASE LINES 7564.0 ft S 7905.0 ft E		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)	7906.26	9000	2703H	7C
UNIVERSITY 10	100.0		1316.0	
WELLBORE PROFILE(s) FOR FIELD: Horizontal				

Terminus Point: TH1 Section: 22 Block: 10 Abstract: Survey: UL / A-U228 BH County: REAGAN

Lease Lines: 100.0 ft N 8902.0 ft E

Survey Lines: 100.0 ft N 1650.0 ft W

Penetration Lines: 7865.0 ft S 12206.0 ft W

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 natural 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

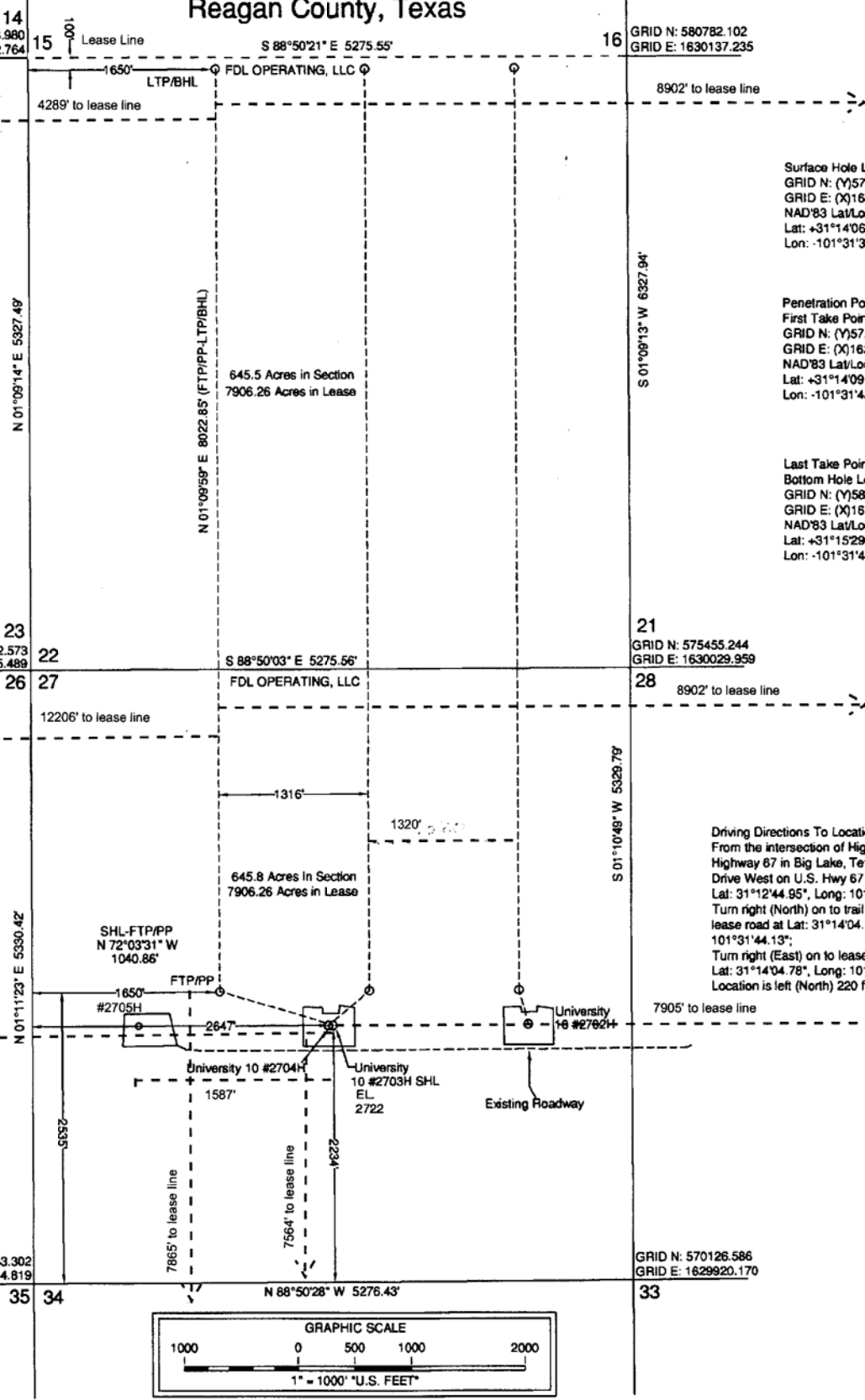


The seal appearing on this document was authorized by Jack M. Oswalt on 10/26/2012.
Note: Alteration of this electronic document will invalidate the digital signature.

Block 10, University Land Survey Reagan County, Texas

14
GRID N: (Y) 580888.960
GRID E: (X) 1624862.764

16
GRID N: 580782.102
GRID E: 1630137.235



Surface Hole Location (SHL)
GRID N: (Y) 572413.757
GRID E: (X) 1627337.356
NAD'83 Lat/Long
Lat: +31°14'06.907" N
Lon: -101°31'34.108" W

Penetration Point (PP)/
First Take Point (FTP)
GRID N: (Y) 572734.385
GRID E: (X) 1626347.113
NAD'83 Lat/Long
Lat: +31°14'09.975" N
Lon: -101°31'45.554" W

Last Take Point (LTP)/
Bottom Hole Location (BHL)
GRID N: (Y) 580755.573
GRID E: (X) 1626510.411
NAD'83 Lat/Long
Lat: +31°15'29.380" N
Lon: -101°31'44.666" W

Driving Directions To Location:
From the intersection of Highway 137 and U.S.
Highway 67 in Big Lake, Texas;
Drive West on U.S. Hwy 67 5.6 miles to trail road at
Lat: 31°12'44.95", Long: 101°33'52.98";
Turn right (North) on to trail road, drive 2.9 miles to
lease road at Lat: 31°14'04.77", Long:
101°31'44.13";
Turn right (East) on to lease road, drive 0.2 miles to
Lat: 31°14'04.78", Long: 101°31'33.91";
Location is left (North) 220 feet.

Note: Well is located 4.9 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.
Latitudes and Longitudes shown are on NAD'83 Datum.
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.



Stephen P. Marlowe
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

January 26, 2017

170126JR1-NRL

P.O. Box 51887, Midland, Texas 79710 (432) 262-0901 Fax (432) 262-0679 Firm #100201-00

Revised: 02/07/2017-KRM
USGS Quadrangle Sheet: Gardener Draw, Tex.
USGS Quadrangle Sheet: Best, Tex.
Railroad Commission Permit Plat

FDL OPERATING, LLC
University 10 #2703H
2234' FROM SOUTH LINE
2647' FROM WEST LINE
Sections 22 & 27, Block 10
University Lands Survey
Reagan County, Texas

Scale: 1" = 1000'