RAILROAD COMMISSION OF TEXAS

Form W-2

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 06/29/2018
Tracking No.: 193492

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: FDL OPERATING, LLC **Operator No.:** 263924
Operator Address: ATTN ROBIN SWANNER PO BOX 472 JUDSON, TX 75660-0000

WELL INFORMATION

API No.: 42-383-38227 **County:** REAGAN
Well No.: 2702H **RRC District No.:** 7C
Lease Name: UNIVERSITY 10 **Field Name:** LIN (WOLFCAMP)
RRC Lease No.: 17844 **Field No.:** 53613750
Location: Section: 27, Block: 10, Survey: UL, Abstract: U233

Latitude: **Longitude:**
This well is located 4.59 **miles in a** NW **direction from** BIG LAKE, **which is the nearest town in the county.**

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: Other/Recompletion
Well Type: Producing **Completion or Recompletion Date:** 12/20/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	03/06/2017	823477
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 08/24/2013 **Date of first production after rig released:** 12/20/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 05/21/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 10/17/2017
Number of producing wells on this lease in this field (reservoir) including this well: 20 **Distance to nearest well in lease & reservoir (ft.):** 1320.0
Total number of acres in lease: 7906.26 **Elevation (ft.):** 2715 GL
Total depth TVD (ft.): 8230 **Total depth MD (ft.):** 16315
Plug back depth TVD (ft.): **Plug back depth MD (ft.):**
Was directional survey made other than inclination (Form W-12)? Yes **Rotation time within surface casing (hours):** 300.0
Is Cementing Affidavit (Form W-15) attached? No
Recompletion or reclass? Yes **Multiple completion?** No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:

Location of well, relative to nearest lease boundaries of lease on which this well is located: 7564.0 **Feet from the** South **Line and** 6187.0 **Feet from the** East **Line of the** UNIVERSITY 10 **Lease.** **Off Lease :** No

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type

PACKET: N/A

W2: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination **Depth (ft.):** 700.0 **Date:** 02/12/2013

SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 01/02/2018 **Production method:** Flowing

Number of hours tested: 24 **Choke size:** 35

Was swab used during this test? No **Oil produced prior to test:** 4607.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLS): 369.00 **Gas (MCF):** 306

Gas - Oil Ratio: 829 **Flowing Tubing Pressure:** 540.00

Water (BBLS): 800

CALCULATED 24-HOUR RATE

Oil (BBLS): 369.0 **Gas (MCF):** 306

Oil Gravity - API - 60.: 52.0 **Casing Pressure:** 380.00

Water (BBLS): 800

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Tool Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	814			C	820	1435.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	7524			H & C	840	1768.0	4484	Calculation
3	Intermediate	9 5/8	12 1/4	7524		4484	C	1530	3492.0	0	Circulated to Surface
4	Conventional Production	5 1/2	8 3/4	16317			H	2575	4509.0	0	Circulated to Surface

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By

N/A

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	8262	8247 /

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 8420	16205.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 8000

Actual maximum pressure (PSIG) during hydraulic fracturing: 7652

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? Yes

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)	
1	Fracture	338,622 BBLS SLICKWATER; 4,414,187# 100 MESH; 9,710,470# 40/70 SAND	8420	16205

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
YATES	Yes	1766.0	1766.0	Yes	ESTIMATED
SEVEN RIVERS	Yes	1919.0	1919.0	Yes	ESTIMATED
GRAYBURG	Yes	2585.0	2585.0	Yes	ESTIMATED
SAN ANDRES	Yes	2842.0	2842.0	Yes	ESTIMATED
SPRABERRY	Yes	5862.0	5862.0	Yes	ESTIMATED
WOLFCAMP	Yes	7415.0	7415.0	Yes	

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)? No

Is the completion being downhole commingled (SWR 10)? No

REMARKS

KOP 7374'

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-06-20 14:28:02.718] W-15s are attached.

CASING RECORD :

SURFACE CASING SET 8/29/2013. SEE TRACKING #113044 FOR W15.

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed Name: Robin Swanner **Title:** Consulting Agent

Telephone No.: (903) 930-1532 **Date Certified:** 06/02/2018

Cementer: Fill in shaded areas.
Operator: Fill in other items.

TR. # 113044

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-15
Cementing Report
Rev. 4/1/83
483-045

1. Operator's Name (As shown on Form P-5, Organization Report)	2. RRC Operator No.	3. RRC District No.	4. County of Well Site
DEVON ENERGY PROD. CO., L.P.	216378	7C	REAGAN

5. Field Name (Wildcat or exactly as shown on RRC Records)	6. API No.	7. Drilling Permit No.
LIN (WOLFCAMP)	42-383-38227	756381

8. Lease Name	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No.
UNIVERSITY 10		17844	2702H

CASING CEMENTING DATA:	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date	8/29/13					
13. • Drilled Hole Size	17 1/2"					
• Est. % wash or hole enlargement						
14. Size of casing (in. O.D.)	13 3/8"					
15. Top of liner (ft.)						
16. Setting depth (ft.)	814'					
17. Number of centralizers used	10					
18. Hrs. Waiting on cement before drill-out	8+					
1st Slurry — 19. API cement used: No. of sacks	820					
1st Slurry — Class	"C"					
1st Slurry — Additives	#22					
2nd Slurry — No. of sacks						
2nd Slurry — Class						
2nd Slurry — Additives						
3rd Slurry — No. of sacks						
3rd Slurry — Class						
3rd Slurry — Additives						
1st — 20. Slurry pumped: Volume (cu. ft.)	1435					
1st — Height (ft.)	2066					
2nd — Volume (cu. ft.)						
2nd — Height (ft.)						
3rd — Volume (cu. ft.)						
3rd — Height (ft.)						
Total — Volume (cu. ft.)	1435					
Total — Height (ft.)	2066					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing ?	YES					

Remar LEAD;"C"+4%GEL+2%CACL2+.125 PPSCELLOFLAKE+.01% STATIC FREE. CIRCULATED 120 BBLS, 385 SACKS

TR #113044

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu. ft.)								
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lb/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalties in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this Certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my Supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

LEVANDOWSKI, Service Supervisor — Name and title of cementer's representative

BAKER HUGHES — Cementing Company

Signature

P.O. Box 1135 — Address

Eldorado City, **Texas** State, **76936** Zip Code

(325) 853-2553 Tel: Area Code Number

8/29/13 Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form Are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Annette Raines — Typed or printed name of operator's representative

Sr. Reg. Specialist — Title

Annette Raines — Signature

333 W. Sheridan Ave. — Address

OKC City, OK State, 73102 Zip Code

405-228-8217 Tel.: Area Code Number

8/19/14 Date: mo. day yr.

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c) .

A. What to file. An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following.

- An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rates;
- Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- Form W-3, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

B. Where to file. The appropriate Commission District Office for the county in which the well is located.

C. Surface Casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Committee.

D. Centralizers. Surface Casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In Non-deviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.

F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (3) and (4).

G. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three foot below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations, Cementing companies, service companies or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

CEMENTING REPORT

Form W-15
Rev. 08/2014

Cementer: Fill in
Operator:Fill in other

OPERATOR INFORMATION	
Operator Name: FDL Operating	**Operator P-5 No.:** 263924
Cementer Name: Crest Pumping Technologies	**Cementer P-5 No.:** 189898

WELL INFORMATION		
District No.: 7C	**County:** Reagan	
Well No.: 2702H	**API No.:** 42-383-38227	**Drilling Permit No.:** 823477
Lease Name: University 10	**Lease No.:** 17844	
Field Name: Lin (Wolfcamp)	**Field No.:** 53613750	

I. CASING CEMENTING DATA

Type of Casing: ☐ Conductor ☐ Surface ☐ Intermediate ☐ Liner ☐ Production

Drilled hole size (in.):	**Depth of drilled hole (ft.):**	**Est. % wash-out or hole enlargement:**
Size of casing in O.D. (in.):	**Casing weight (lbs/ft) and grade:**	**No. of centralizers used:**
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO If no for surface casing, explain in Remarks.	**Setting depth shoe (ft.):**	**Top of liner (ft.):** / **Setting depth liner (ft.):**
Hrs. waiting on cement before drill-out:	**Calculated top of cement (ft.):**	**Cementing date:** 06/02/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
Total					

II. CASING CEMENTING DATA

Type of Casing: ☐ Surface ☑ Intermediate ☐ Production ☐ Tapered Production ☑ Multi-stage cement shoe ☐ Multiple parallel strings

Drilled hole size (in.): 12 1/4	**Depth of drilled hole (ft.):** 7524	**Est. % wash-out or hole enlargement:** 20
Size of casing in O.D. (in.): 9 5/8	**Casing weight (lbs/ft) and grade:** 40# N80	**No. of centralizers used:** 61
Tapered string drilled hole size (in.) Upper: Lower:	**Tapered string depth of drilled hole (ft.)** Upper: Lower:	
Tapered string size of casing in O.D.(in.) Upper: Lower:	**Tapered string casing weight(lbs/ft) and grade** Upper: Lower:	**Tapered string no. of centralizers used** Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☑ NO If no for surface casing, explain in Remarks.		**Setting depth shoe (ft.):** 7524
Hrs. waiting on cement before drill-out: +/-12	**Calculated top of cement (ft.):** 4484	**Cementing date:** 06/02/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	630	Class H	See Remarks	1,518	4,847
2	210	Class C	See Remarks	250	798
Total	840			1,768	5,645

III. CASING CEMENTING DATA

Type of Casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered Production ☑ Multi-stage cement/DV Tool ☐ Multiple parallel strings

Drilled hole size (in.): 12 1/4	**Depth of drilled hole (ft.):** 7524	**Est. % wash-out or hole enlargement:** 20
Size of casing in O.D. (in.): 9 5/8	**Casing weight (lbs/ft) and grade:** 40# N80	**No. of centralizers used:** 61
Tapered string drilled hole size (in.) Upper: Lower:	**Tapered string depth of drilled hole (ft.)** Upper: Lower:	
Tapered string size of casing in O.D.(in.) Upper: Lower:	**Tapered string casing weight(lbs/ft) and grade** Upper: Lower:	**Tapered string no. of centralizers used** Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☑ NO If no for surface casing, explain in Remarks.		**Setting depth shoe (ft.):** 4484
Hrs. waiting on cement before drill-out: +/-12	**Calculated top of cement (ft.):** 0	**Cementing date:** 06/02/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1370	Class C	See Remarks	3,302	10,543
2	160	Class C	See Remarks	190	607
Total	1,530			3,492	11,150

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

5 bwow Sodium Chloride, 7 % Bentonite Gel, 0.5 % CPT-4, 1.5 % CPT-45, 0.4 % CPT-503P, 4 lbs/sk Kol Seal, 0.6 % CPT-16A, 0.3 % CD-3, 0.25 % CPT-503P, 0.1 % CPT-20A,

5 bwow Sodium Chloride, 7 % Bentonite Gel, 0.5 % CPT-4, 1.5 % CPT-45, 0.4 % CPT-503P, 4 lbs/sk Kol Seal, 0.6 % CPT-16A, 0.3 % CD-3, 0.25 % CPT-503P,

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

James West/Cementer	Crest Pumping Technologies		
Name and title of cementer's representative	Cementing Company	Signature	
P.O. Box 117 Jacksboro, TX 76458		940-567-3392	06/02/2017
Address City, State, Zip Code		Tel: Area Code Number	Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Robin Swanner - Consultant			
Typed or printed name of operator's representative	Title	Signature	
P.O. Box 472 Judson, TX 75660		903-930-1532	06/01/2018
Address City, State, Zip Code		Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

A. What to file: An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.

The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

B. How to file: An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (https://webapps.rrc.state.tx.us/security/login.do) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).

C. Surface casing: An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

D. Estimated % wash-out: If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.

E. Multi-stage cement: An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool. and Multi-stage cement shoe. The operator must

F. Multiple parallel strings: An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.

G. Slurry data: If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

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CEMENTING REPORT

Form W-15
Rev. 08/2014

Cementer: Fill in
Operator:Fill in other

OPERATOR INFORMATION

Operator Name: FDL Energy	**Operator P-5 No.:** 263924
Cementer Name: Crest Pumping Technologies	**Cementer P-5 No.:** 189898

WELL INFORMATION

District No.: 7C	**County:** Reagan	
Well No.: 2702H	**API No.:** 42-383-38227	**Drilling Permit No.:** 823477
Lease Name: University 10	**Lease No.:**	
Field Name: Lin (Wolfcamp)	**Field No.:** 53613750	

I. CASING CEMENTING DATA

Type of Casing: ☐ Conductor ☐ Surface ☐ Intermediate ☐ Liner ☑ Production

Drilled hole size (in.): 8 3/4	**Depth of drilled hole (ft.):** 16317	**Est. % wash-out or hole enlargement:** 20
Size of casing in O.D. (in.): 5 1/2	**Casing weight (lbs/ft) and grade:** 17# P110	**No. of centralizers used:** 80
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☑ YES ☐ NO If no for surface casing, explain in Remarks.	**Setting depth shoe (ft.):** 16317	**Top of liner (ft.):** / **Setting depth liner (ft.):**
Hrs. waiting on cement before drill-out: +/- 72	**Calculated top of cement (ft.):** 0	**Cementing date:** 10/16/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	925	Class H	See Remarks	1,869	7,399
2	1650	Class H	See Remarks	2,640	10,452
Total	2,575			4,509	17,851

II. CASING CEMENTING DATA

Type of Casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered Production ☐ Multi-stage cement shoe ☐ Multiple parallel strings

Drilled hole size (in.):	**Depth of drilled hole (ft.):**	**Est. % wash-out or hole enlargement:**
Size of casing in O.D. (in.):	**Casing weight (lbs/ft) and grade:**	**No. of centralizers used:**
Tapered string drilled hole size (in.) Upper: Lower:	**Tapered string depth of drilled hole (ft.)** Upper: Lower:	
Tapered string size of casing in O.D.(in.) Upper: Lower:	**Tapered string casing weight(lbs/ft) and grade** Upper: Lower:	**Tapered string no. of centralizers used** Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO If no for surface casing, explain in Remarks.		**Setting depth shoe (ft.):**
Hrs. waiting on cement before drill-out:	**Calculated top of cement (ft.):**	**Cementing date:**

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
Total					

III. CASING CEMENTING DATA

Type of Casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered Production ☐ Multi-stage cement/DV Tool ☐ Multiple parallel strings

Drilled hole size (in.):	**Depth of drilled hole (ft.):**	**Est. % wash-out or hole enlargement:**
Size of casing in O.D. (in.):	**Casing weight (lbs/ft) and grade:**	**No. of centralizers used:**
Tapered string drilled hole size (in.) Upper: Lower:	**Tapered string depth of drilled hole (ft.)** Upper: Lower:	
Tapered string size of casing in O.D.(in.) Upper: Lower:	**Tapered string casing weight(lbs/ft) and grade** Upper: Lower:	**Tapered string no. of centralizers used** Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO If no for surface casing, explain in Remarks.		**Setting depth shoe (ft.):**
Hrs. waiting on cement before drill-out:	**Calculated top of cement (ft.):**	**Cementing date:**

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

0.1 gal/bbl CPT-503L, 2 lb/bbl CFS-1, 119.49 lb/bbl Barite, 1 gal/bbl Plexaid 830L,
5 bwow Sodium Chloride, 2 % Bentonite Gel, 1 % CPT-19, 0.4 % CPT-503P, 4 lbs/sk Kol Seal, 0.15 % CPT-20A,
3 bwow Sodium Chloride, 1 % Bentonite Gel, 0.5 % CPT-19, 0.3 % CD-3, 0.25 % CPT-503P, 0.25 % CPT-20A,

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

Roberto Garcia/Cementer	Crest Pumping Technologies	Roberto Garcia
Name and title of cementer's representative	Cementing Company	Signature

P.O. Box 117 Jacksboro, TX 76458	940-567-3392	10/16/2017
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Robin Swanner - Consultant		Robin Swanner
Typed or printed name of operator's representative	Title	Signature

P.O. Box 472 Judson, TX 75660	903-930-1532	06/01/2018
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

A. What to file: An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

B. How to file: An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (https://webapps.rrc.state.tx.us/security/login.do) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).

C. Surface casing: An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

D. Estimated % wash-out: If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.

E. Multi-stage cement: An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool. and Multi-stage cement shoe. The operator must

F. Multiple parallel strings: An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.

G. Slurry data: If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

ELECTRIC LOG STATUS REPORT

FORM L-1

Tracking No.: 193492

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

When to File Form L-1:
- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:
- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:
- with the appropriate Commission district office

Filling out Form L-1:
- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:
- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

Operator Name: FDL OPERATING, LLC	District No. 7C	Completion Date: 12/20/2017
Field Name LIN (WOLFCAMP)	Drilling Permit No. 823477	
Lease Name UNIVERSITY 10	Lease/ID No. 17844	Well No. 2702H
County REAGAN	API No. **42-** 383-38227	

SECTION II. LOG STATUS (Complete either A or B)

☐ A. BASIC ELECTRIC LOG NOT RUN

☒ B. BASIC ELECTRIC LOG RUN. (Select one)

☒ 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.

☐ 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).

☐ 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).

☐ 4. Log attached to (select one):

☐ (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: _____

Check here if attached log is being submitted after being held confidential. ☐

☐ (b) Form P-7, Application for Discovery Allowable and New Field Designation.

☐ (c) Form W-4, Application for Multiple Completion:

Lease or ID No(s). _____

Well No(s). _____

Robin Swanner
Signature

_____
Name (print)

Consulting Agent
Title

(903) 930-1532
Phone

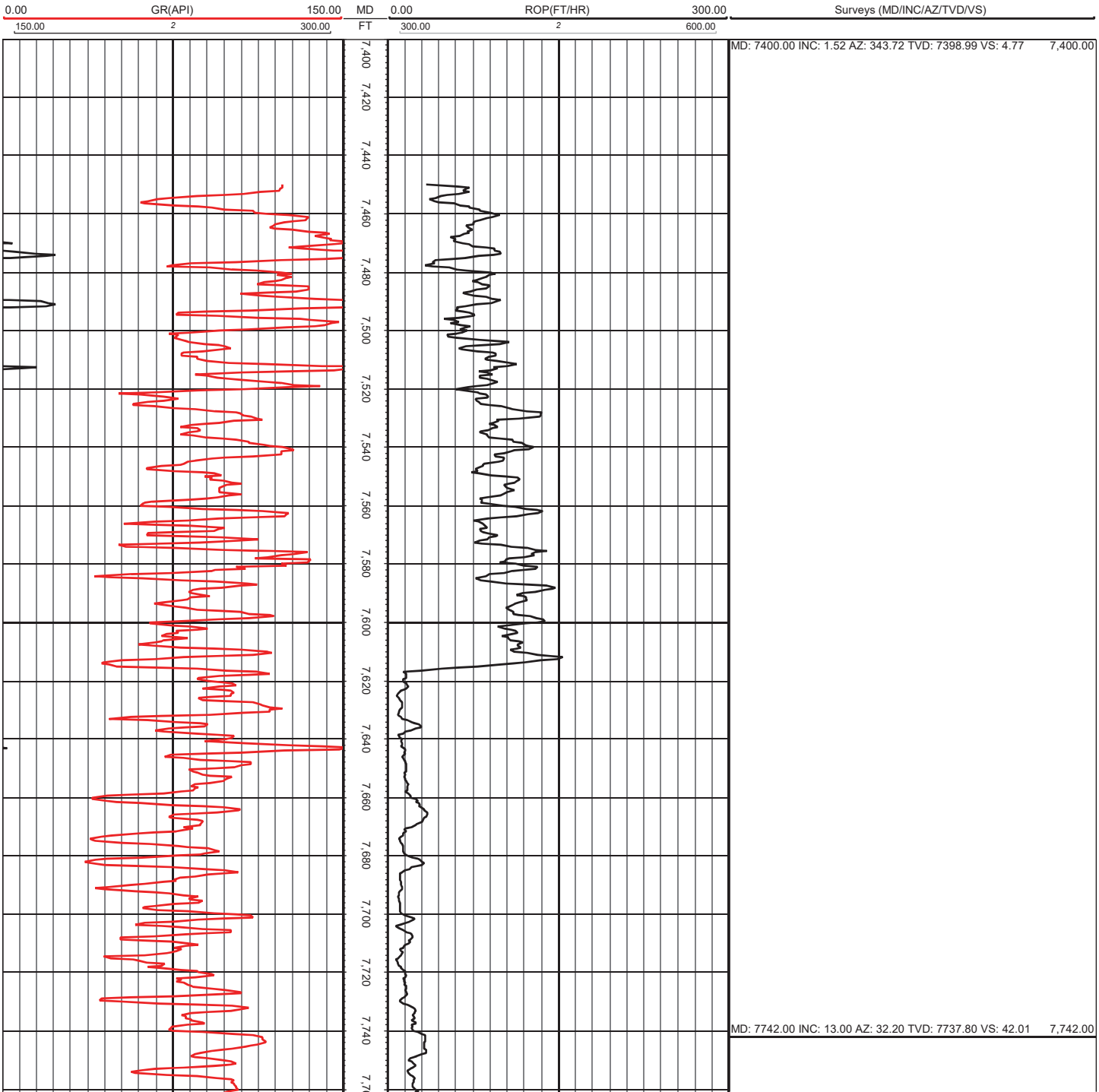
06/01/2018
Date

-FOR RAILROAD COMMISSION USE ONLY-

Integrity Directional Services

University 10 2702-ST01
Scale 2":100' - MD
10/15/2017 4:54 AM

Oper. Company:	Fleur de Lis Energy	**State:**	Texas
Well:	University 10 2702 H	**County:**	Reagan
Field:	Permian	**Country:**	USA
Rig:	Trinidad 101	**Location:**	Big Lake
Well ID:	42-383-38227	**Start Date:**	10/05/2017 14:00:00
Job Number:	TX17313FL	**End Date:**	



RAILROAD COMMISSION OF TEXAS
Oil and Gas Division
PO Box 12967
Austin TX 78711-2967
www.rrc.texas.gov

CERTIFICATE OF COMPLIANCE AND TRANSPORTATION AUTHORITY

P-4

This facsimile P-4 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 193492

1. Field name exactly as shown on proration schedule	2. Lease name as shown on proration schedule			
LIN (WOLFCAMP)	UNIVERSITY 10			
3. Current operator name exactly as shown on P-5 Organization Report	4. Operator P-5 no.	5. Oil Lse/Gas ID no	6. County	7. RRC district
FDL OPERATING, LLC	263924	17844	REAGAN	7C
8. Operator address including city, state, and zip code	9. Well no(s) *(see instruction E)*			
ATTN ROBIN SWANNER PO BOX 472 JUDSON, TX 75660	2702H			
	10. Classification: ☒ Oil ☐ Gas ☐ Other *(see instruction A)*			11. Effective Date: 12/20/2017

12. Purpose of Filing. (Complete section a or b below.) *(See instructions B and G)*

a. Change of: ☐ operator ☐ oil or condensate gatherer ☐ gas gatherer ☐ gas purchaser ☐ gas purchaser system code
☐ field name from _____
☐ lease name from _____

OR

b. New RRC Number for: ☒ oil lease ☐ gas well ☐ other well (specify) _____ **Due to:** ☒ new completion or recompletion ☐ reclass oil to gas ☐ reclass gas to oil ☐ consolidation, unitization, or subdivision (oil lease only)

13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). *(See instruction G).*

Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left *(Attach an additional sheet in same format if more space is needed)*	Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		DCP OPERATING COMPANY, LP(195959)		100.0	
	X	COKINOS ENERGY, L.L.C.(167016)	0001	100.0	

14. Authorized OIL or CONDENSATE Gatherer(s). *(See instruction G).*

Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First *(Attach an additional sheet in same format if more space is needed)*	Percent of Take
PLAINS PIPELINE L.P.(667884)	90.0
SHELL TRADING (US) COMPANY(774715)	10.0

RRC USE ONLY: Reviewer's initials: RRC Staff Approval date: 06/29/2018

15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.

Name of Previous Operator

Signature

Name (print)

☐ **Authorized Employee of previous operator**

☐ **Authorized agent of previous operator** *(see instruction G)*

Title

Date

Phone with area code

16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.

Name (print): Consulting Agent

Signature: Robin Swanner

Title

☐ **Authorized Employee of current operator**

☒ **Authorized agent of current operator** *(see instruction G)*

E-mail Address (optional): robinswanner@sbcglobal.net

Date: 06/01/2018

Phone with area code: (903) 930-1532

RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Form P-16
Page 1
Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION

Operator Name: FDL Operating, LLC	**Operator P-5 No.:** 263924
Operator Address: 909 Lake Carolyn Parkway, Suite 500 Irving, TX 75039	

SECTION II. WELL INFORMATION

District No.: 7C	**County:** Reagan	**Purpose of Filing:**
Well No.: 2702H	**API No.:** 38338227	☐ Drilling Permit Application (Form W-1)
Total Lease Acres: 7906.26	**Drilling Permit No.:** 823477	☒ Completion Report (Form G-1/W-2)
Lease Name: University 10	**Lease No.:** 17844	
Field Name: Lin (Wolfcamp)	**Field No.:** 53613750	

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

RRC ID No. or Lease No.	Well No.	H-Horizontal D-Directional V-Vertical	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
17844	2801HR	H	University 10	38337619	280	N	
17844	3601H	H	University 10	38337818	320	N	
17844	2802H	H	University 10	38337911	320	N	
17844	3602H	H	University 10	38338152	320	N	
17844	3603H	H	University 10	38338153	320	N	
17844	3604H	H	University 10	38338154	320	N	
17844	3605H	H	University 10	38338155	320	N	
17844	2803H	H	University 10	38338215	320	N	
17844	2804H	H	University 10	38338216	320	N	
17844	2805H	H	University 10	38338217	320	N	
17844	2806H	H	University 10	38338218	320	N	
17844	2807H	H	University 10	38338219	320	N	
17844	2808H	H	University 10	38338220	320	N	
17844	2701H	V	University 10	38338224	40	N	
17844	2703H	H	University 10	38338225	320	N	
17844	2704H	H	University 10	38338226	320	N	
17844	2702H	H	University 10	38338227	280	N	

Total Well Count >			**< A. Total Assigned Horiz. Acreage**		**< C. Total Assigned Acreage**
			< Total Remaining Horiz. Acreage		**< Total Remaining Acreage**
			< B. Total Assigned Vert./Dir. Acreage		
			< Total Remaining Vert./Dir. Acreage		

SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

Attach Additional Pages As Needed. ☐ No additional pages ☒ Additional Pages: 1 (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Signature	Name and title (type or print)	Email (include email address *only* if you affirmatively consent to its public release)
	Robin Swanner - Consultant	robinswanner@sbcglobal.net

Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.
P.O. Box 472	Judson TX 75660	903 930-1532	06/01/2018

RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Acreage Designation Attachment

Form P-16
Attachment
Page 1A
Rev. 01/2016

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III (CONTINUED). LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

RRC ID No. or Lease No.	Well No.	H-Horizontal D-Directional V-Vertical	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
17844	2706H	V	University 10	38338228	40	N	
17844	2705H	V	University 10	38338230	40	N	
17844	3606HR	H	University 10	38338405	320	N	

Total Well Count >	20	5360	< A. Total Assigned Horiz. Acreage	5480	< C. Total Assigned Acreage
		2546.26	< Total Remaining Horiz. Acreage	10332.52	< Total Remaining Acreage
		120	< B. Total Assigned Vert./Dir. Acreage		
		7786.26	< Total Remaining Vert./Dir. Acreage		

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date: February 12, 2013

GAU File No.: SC- 11285

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

API Number: 38338224

Attention: ANNETTE RAINES

RRC Lease No. 000000

SC_216378_38338224_000000_11285.pdf

DEVON ENERGY PRODUCTION CO LP
333 W SHERIDAN AVE
OKLAHOMA CITY OK 73102

--Measured--
870 ft FEL
2235 ft FSL
MRL:SECTION

Digital Map Location:
X-coord/Long: 101.52051
Y-coord/Lat: 31.23521
Datum: 83 Zone:

P-5# 216378

County: REAGAN Lease & Well No.: UNIVERSITY 10 #2701H&PAD Purpose: ND

Location: SUR-UL,BLK-10,SEC-27,--[TD=6800],[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 700 feet must be protected.

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

University 10 #2702H

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,

Digitally signed by Jack Oswalt
DN: c=US, st=TEXAS, l=Austin, o=Railroad Commission of Texas, cn=Jack Oswalt, email=jack.oswalt@rrc.state.tx.us
Date: 2013.02.12 13:12:18 -06'00'

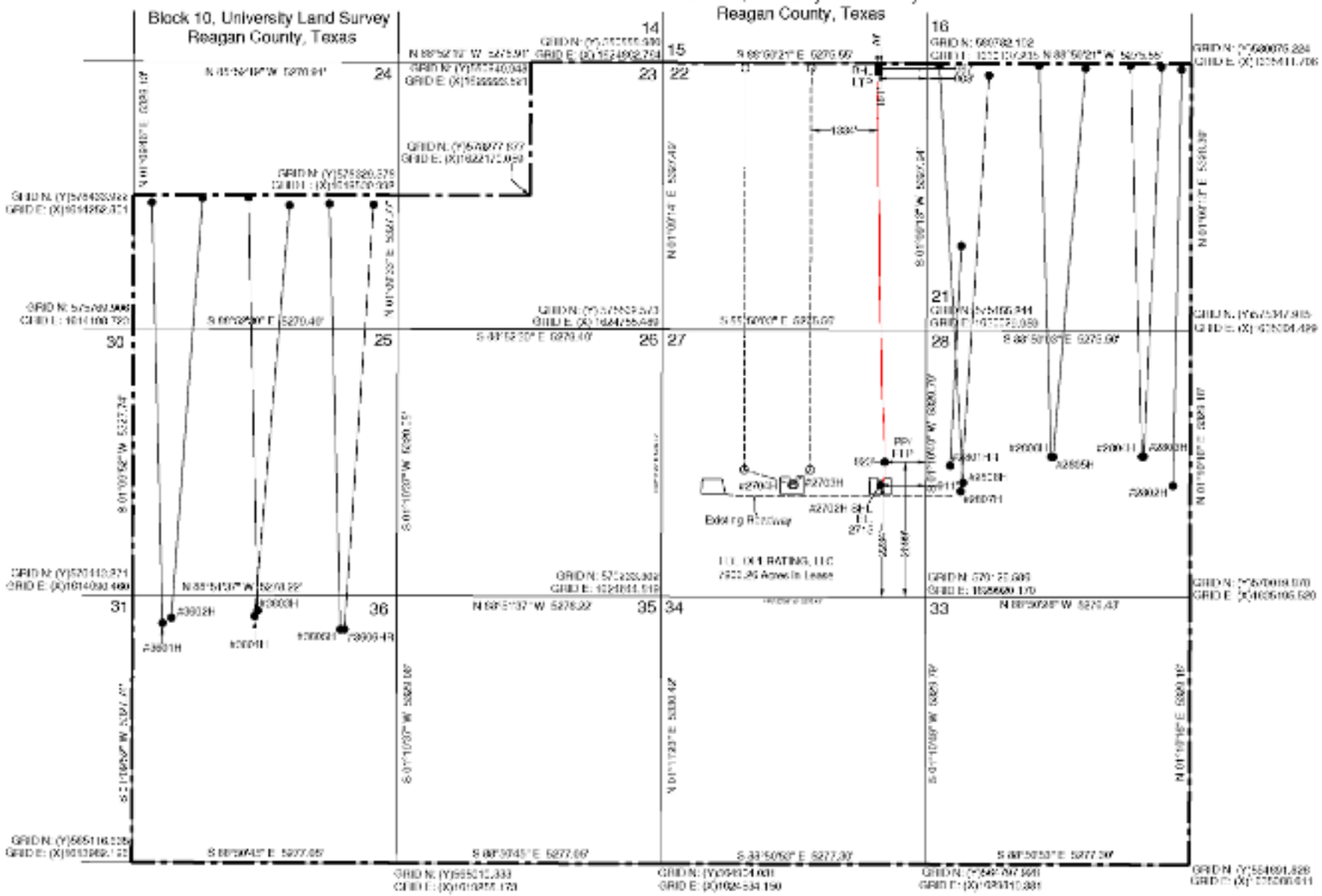
Jack M. Oswalt, P.G.

Geologist, Groundwater Advisory Unit
Oil & Gas Division

GEOLOGIST SEAL

STATE OF TEXAS
Jack M. Oswalt
Geology
897
LICENSED
PROFESSIONAL GEOSCIENTIST

The seal appearing on this document was authorized by Jack M. Oswalt on 2/12/2013
Note: Alteration of this electronic document will invalidate the digital signature.



Surface Hole Location (SHL)
GRID N: (Y)672378.584
GRID E: (X)1533061.920
NAD83 Lat/Long
Lat: +31°19'49.7xx" N
Lon: -101°31'14.3?" W
/564' to South Lease Line

Penetration Point (PP) /
First Take Point (FTP)
GRID N: (Y)672941.430
GRID E: (X)1534152.630
NAD83 Lat/Long
Lat: +31°19'55.???" N
Lon: -101°31'03.282"W
8029' to South Lease Line

Last Take Point (LTP)
GRID N: (Y)680620.431
GRID E: (X)1534105.928
NAD83 Lat/Long
Lat: +31°20'23.324"N
Lon: -101°31'04.000"W

Bottom Hole Location (BHL)
GRID N: (Y)680621.130
GRID E: (X)1529168.560
NAD83 Lat/Long
Lat: +31°20'23.493" N
Lon: -101°31'14.235"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 lease road at Lat: 31°19'44.56", Long: 101°33'32.56".
Turn right (North) on to lease road, drive 2.0 miles to lease road at Lat: 31°19'04.77", Long: 101°33'44.13".
Turn right (East) on to lease road, drive 0.5 miles to Lat: 31°19'01.99", Long: 101°31'14.37".
Location is (E) (North) 220 feet.

GRAPHIC SCALE
1000 0 500 1000 2000
1" = 1000' (US SURVEY FEET)

WELLBORE LENGTHS	
SHL - PP/FTP	672.55
PP/FTP - LTP	7781.13
LTP BHL	110.97
SHL - BHL	8405.25

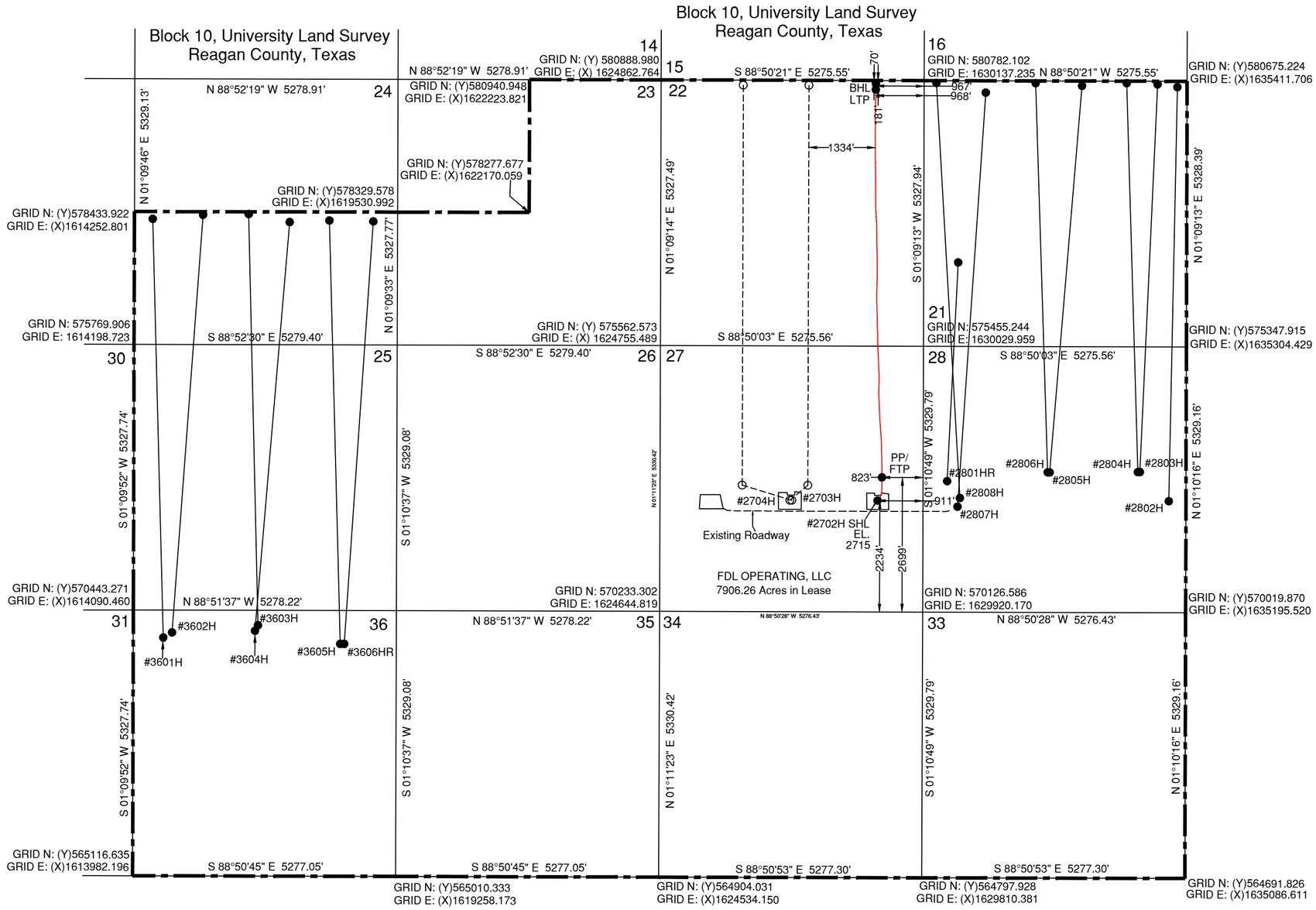
Note: Well is located 4.7 miles Northwest of the city of Big Lake, Texas.
Note: Survey Reconstruction Bearings are on The Texas Coordinate System of 1927, Central Zone.
Lat/Longs and Longitudes shown are on NAD83 Datum.
Note: The existing as-drilled wells shown herein were not surveyed on the field. Their positions were supplied in the form of Lat/Longs by FDL Operating.
Note: Bearings and distances are based on The Texas Coordinate System of 1927, Central Zone.

PENNELL & MARLOWE
LAND SURVEYORS, INC.
ALL TYPES OF SURVEYS
RESIDENTIAL OILFIELD &

STATE OF TEXAS
REGISTERED
STEPHEN P. MARLOWE
5176
LAND SURVEYOR

USGS Quadrangle Sheet: Gardener Draw, Tex.
USGS Quadrangle Sheet: Boat, Tex.
Railroad Commission Permit Plat

FDL OPERATING, LLC
University 10 #2702-H (Final As-Drilled)
2234' FROM SOUTH LINE
811' FROM EAST LINE
of Section 27, Block 10
University 10 Lease
7908.26 Acres in Lease



Surface Hole Location (SHL)
GRID N: (Y)572378.884
GRID E: (X)1629054.903
NAD'83 Lat/Long
Lat: +31°14'06.744" N
Lon: -101°31'14.321" W
7564' to South Lease Line

Penetration Point (PP)/
First Take Point (FTP)
GRID N: (Y)572841.433
GRID E: (X)1629152.630
NAD'83 Lat/Long
Lat: +31°14'11.332"N
Lon: -101°31'13.252"W
8029' to South Lease Line

Last Take Point (LTP)/
GRID N: (Y)580620.431
GRID E: (X)1629165.878
NAD'83 Lat/Long
Lat: +31°15'28.324"N
Lon: -101°31'14.055"W

Bottom Hole Location (BHL)
GRID N: (Y)580731.370
GRID E: (X)1629168.593
NAD'83 Lat/Long
Lat: +31°15'29.422"N
Lon: -101°31'14.038"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 0.5 miles to Lat: 31°14'04.60", Long: 101°31'14.24";
Location is left (North) 220 feet.

WELL BORE LENGTHS

SHL - PP/FTP	572.59
PP/FTP - LTP	7781.69
LTP - BHL	110.97
SHL - BHL	8465.25

GRAPHIC SCALE
1000 0 500 1000 2000
1" = 1000' *U.S. FEET*

PENNELL & MARLOWE
RESIDENTIAL, OILFIELD & LAND SURVEYORS, INC.
ALL TYPES OF SURVEYS

STATE OF TEXAS
REGISTERED
STEPHEN P. MARLOWE
5715
PROFESSIONAL LAND SURVEYOR

Stephen P. Marlowe
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

Note: Well is located 4.7 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: The existing as-drilled wells shown herein were not surveyed in the field. Their positions were supplied in the form of Lat/Longs by FDL Operating.
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.
Note: Well bore location determined from survey report provided by client.
Note: Location of surface hole is as-staked and was not re-surveyed for this plat.

March 12, 2018
180312M-BCL

USGS Quadrangle Sheet: Gardener Draw, Tex.
USGS Quadrangle Sheet: Best, Tex.
Railroad Commission Permit Plat

FDL OPERATING, LLC
University 10 #2702H (Final As-Drilled)
2234' FROM SOUTH LINE
911' FROM EAST LINE
of Section 27, Block 10
University 10 Lease
7906.26 Acres in Lease
Block 10, University Lands Survey
Reagan County, Texas

Scale: 1" = 2000'

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