



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 01/31/2018
Tracking No.: 183726

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.: 42-383-38225 County: REAGAN
Well No.: 2703H 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 4.85 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: 07/11/2017

Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 03/03/2017 823478
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 09/18/2013 Date of first production after rig released: 07/11/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 04/11/2017 Date plug back, deepening, recompletion, or drilling operation ended: 05/09/2017
Number of producing wells on this lease in this field (reservoir) including this well: 19 Distance to nearest well in lease & reservoir (ft.): 1316.0
Total number of acres in lease: 7906.26 Elevation (ft.): 2722 GL
Total depth TVD (ft.): 7912 Total depth MD (ft.): 16480
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):
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? Yes Multiple completion? No
Type(s) of electric or other log(s) run: None
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease : No
of lease on which this well is located: 7564.0 Feet from the South Line and
7905.0 Feet from the East Line of the
UNIVERSITY 10 Lease.

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.):	750.0	Date: 02/12/2013
SWR 13 Exception	Depth (ft.):		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION		
Date of test: 07/26/2017		Production method: Pumping
Number of hours tested: 24		Choke size: 34
Was swab used during this test?	No	Oil produced prior to test: 1312.00
PRODUCTION DURING TEST PERIOD:		
Oil (BBLS): 261.00		Gas (MCF): 0
Gas - Oil Ratio: 0		Flowing Tubing Pressure: 400.00
Water (BBLS): 1990		
CALCULATED 24-HOUR RATE		
Oil (BBLS): 261.0		Gas (MCF): 0
Oil Gravity - API - 60.:	52.1	Casing Pressure: 250.00
Water (BBLS): 1990		

CASING RECORD											
Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage 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	855			C	870	1523.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	6657			H & C	605	1202.0	4477	Calculation
3	Intermediate	9 5/8	12 1/4	6657	4477		C	1530	3492.0	50	Calculation
4	Conventional Production	5 1/2	8 3/4	16477			H	2645	4590.0	5450	Calculation

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			
<u>Row</u>	<u>Size (in.)</u>	<u>Depth Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	2 7/8	7795	7800 /

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 8100	16373.0

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:		8500		
Actual maximum pressure (PSIG) during hydraulic fracturing:		8500		
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	385053 BBLS SLICKWATER, 1396900# 100 MESH, 6044360# 40/70, 8473280# 30/50		8100 16373

FORMATION RECORD					
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
YATES	Yes	1764.0	1764.0	Yes	
SEVEN RIVERS	Yes	1916.0	1916.0	Yes	
SAN ANDRES	Yes	2840.0	2840.0	Yes	
SPRABERRY	Yes	5860.0	5860.0	Yes	
WOLFCAMP	Yes	7413.0	7413.0	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 2018-01-18 17:12:57.108] EDL=8173 feet, max acres=320, LIN (WOLFCAMP) oil well	
CASING RECORD :	
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: 01/31/2018

L [Cementer: Fill in shaded areas.

Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

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

TR. # 115307

1. Operator's Name (As shown on Form P-5, Organization Report) Devon Energy Production Co., L.P.	2. RRC Operator No. 216378	3. RRC District No. 7C	4. County of Well Site Reagan
5. Field Name (Wildcat or exactly as shown on RRC Records) LIN (Wolfcamp)	6. API No. 42-382-38225	7. Drilling Permit No. 756394	
8. Lease Name University 10	9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 17844	11. Well No. #2703H

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		9-21-13					
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.)		855'					
17. Number of centralizers used		10					
18. Hrs. Waiting on cement before drill-out		8 +					
1 st Slurry	19. API cement used: No. of sacks ▶	870					
	Class ▶	"C"					
	Additives ▶	#22					
2 nd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	1523					
	Height (ft.) ▶	2193					
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	1523					
	Height (ft.) ▶	2193					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing ?		YES					
Remark: SLURRY: C+ 2% CaCl2+ 0.125 #/sk Cello Flake+ 4% Bentonite+ 0.01% Static Free. Well Did circulate cement to the surface 137bbls of Class C 13.5ppg Yield 1.75 or 438 sacks. No temp survey was ordered							

Tr. # 115307

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.

GREGG L UNDERWOOD SERV. SUP.

Name and title of cementer's representative

BAKER HUGHES CO.

Cementing Company

Signature

P.O. Box 1135

Address

Eldorado

City,

Texas

State,

76936

Zip Code

(325) 853-2553

Tel: Area Code

Number

9 / 21 / 2013

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

9/15/14

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementor: Fill in
Operator: Fill in other

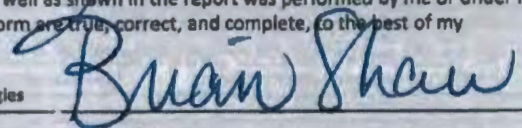
OPERATOR INFORMATION					
Operator Name: FDL Operating			Operator P-5 No.: 263924		
Cementor Name: Crest Pumping Technologies			Cementor P-5 No.: 189898		
WELL INFORMATION					
District No.: 7C			County: Reagan		
Well No.: 2703H			API No.: 42-383-38225		Drilling Permit No.: 823478
Lease Name: University 10			Lease No.: 17844		
Field Name: Lin (Wolfcamp)			Field No.: 53613750		
I. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> 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? <input type="checkbox"/> YES <input type="checkbox"/> 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: 04/22/17	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
Total					
II. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 12 1/4		Depth of drilled hole (ft.): 6657		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 9 5/8		Casing weight (lbs/ft) and grade: 40 L80		No. of centralizers used: 76	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper: Lower:		Upper: Lower:			
Tapered string size of casing in O.D.(in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper: Lower:		Upper: Lower:		Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.				Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out: +/- 12		Calculated top of cement (ft.): 4477		Cementing date: 04/22/17	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	395	Class H	See Remarks	952	3,040
2	210	Class C	See Remarks	250	798
Total	605			1,202	3,838
III. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input checked="" type="checkbox"/> Multi-stage cement/DV Tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 12 1/4		Depth of drilled hole (ft.): 6657		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 9 5/8		Casing weight (lbs/ft) and grade: 40 L80		No. of centralizers used: 76	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper: Lower:		Upper: Lower:			
Tapered string size of casing in O.D.(in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper: Lower:		Upper: Lower:		Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.				Setting depth shoe (ft.): 4477	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.): 50		Cementing date:	
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)							

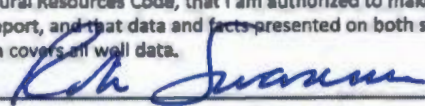
REMARKS

5 b/w 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 b/w 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.

Brian Shaw/Cementer	Crest Pumping Technologies	
Name and title of cementer's representative	Cementing Company	Signature
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	04/21/2017
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	12/2/2017
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 cements 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](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

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

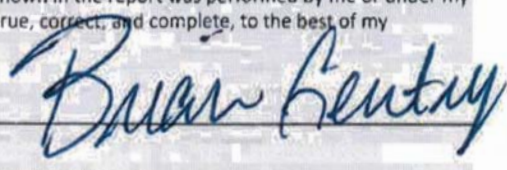
Cementer: Fill in
Operator: Fill in other

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.: 2703H			API No.: 42-383-38225		Drilling Permit No.: 823478
Lease Name: University 10			Lease No.: 17844		
Field Name: Lin (Wolfcamp)			Field No.: 53613750		
I. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input checked="" type="checkbox"/> Production					
Drilled hole size (in.): 8 3/4		Depth of drilled hole (ft.): 16480 MD		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: 75	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.			Setting depth shoe (ft.): 16477		Top of liner (ft.):
					Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: +/-72		Calculated top of cement (ft.): 5450		Cementing date: 05/07/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	810	Class H	See Remarks	1,636	6,477
2	1835	Class H	See Remarks	2,954	11,695
Total	2,645			4,590	18,172
II. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> 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.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> 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: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input type="checkbox"/> Multi-stage cement/DV Tool <input type="checkbox"/> 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.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> 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					

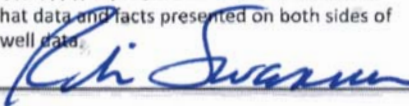
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount 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							

5 bww Sodium Chloride, 2 % Bentonite Gel, 1 % CPT-19, 0.4 % CPT-503P, 4 lbs/sk Kol Seal, 0.1 % CPT-20A,
 3 bww Sodium Chloride, 1 % Bentonite Gel, 0.7 % 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.

Brian Gentry/Cementer	Dusty Tholl/Cementer	Crest Pumping Technologies	
Name and title of cementer's representative	Cementing Company	Signature	
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	05/08/2017	
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 75860	(903) 930-1632	12/2/2017
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?si=RA&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&p_pg=1&p_tac=@ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?si=RA&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&p_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.

Tracking No.: 183726

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: 07/11/2017
Field Name LIN (WOLFCAMP)	Drilling Permit No. 823478	
Lease Name UNIVERSITY 10	Lease/ID No. 17844	Well No. 2703H
County REAGAN	API No. 42- 383-38225	

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

12/11/2017

Date

-FOR RAILROAD COMMISSION USE ONLY-



RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1

Rev. 01/2016

Acres Designation

SECTION I. OPERATOR INFORMATION

Operator Name: FDL Operating, LLC Operator P-5 No.: 263824
Operator Address: 909 Lake Carolyn Parkway, Suite 500 Irving, TX 75039

SECTION II. WELL INFORMATION

District No.: 7C	County: Reagan	Purpose of Filing: <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> Completion Report (Form G-1/W-2)
Well No.: 2703H	API No.: 38338225	
Total Lease Acres: 7906.26	Drilling Permit No.: 823478	
Lease Name: University 10	Lease No.: 17844	
Field Name: Lin (Wolfcamp)	Field No.: 53813750	

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	3801H	H	University 10	38337818	320	N	
17844	2802H	H	University 10	38337911	320	N	
17844	3802H	H	University 10	38338152	320	N	
17844	3803H	H	University 10	38338153	320	N	
17844	3804H	H	University 10	38338154	320	N	
17844	3805H	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
< Total Remaining Horiz. Acreage
< B. Total Assigned Vert./Dir. Acreage
< Total Remaining Vert./Dir. Acreage

< C. Total Assigned Acreage
< Total Remaining 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

Robin Swanner - Consultant
Name and title (type or print)

robinswanner@sbcglobal.net

Email (include email address only if you affirmatively consent to its public release)

P.O. Box 472
Address

Judson TX 75660
City, State, Zip Code

903
Tel: Area Code

930-1532
Number

10/02/2017
Date: mo. day yr.

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date February 12, 2013

GAU File No.: SC- 11286

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

API Number 38338225

Attention: ANNETTE RAINES

RRC Lease No. 000000

SC_216378_38338225_000000_11286.pdf

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

--Measured--

2630 ft FEL

2235 ft FSL

MRL:SECTION

P-5# 216378

Digital Map Location:

X-coord/Long 101.52614

Y-coord/Lat 31.23525

Datum 83 Zone

County REAGAN

Lease & Well No. UNIVERSITY 10 #2703H&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 750 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,



Digitally signed by Jack Oswalt
DN: c=US, st=TEXAS, ln=Austin,
o=Railroad Commission of Texas,
cn=Jack Oswalt,
email=jack.oswalt@rrc.state.tx.us
Date: 2013.02.12 13:16:04 -06'00'

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 2/12/2013
Note: Alteration of this electronic document will invalidate the digital signature.

Block 10, University Land Survey Reagan County, Texas

14
GRID N: (Y) 530888.900
GRID E: (X) 1624862.764

16
GRID N: 580782.102
GRID E: 1630137.235



N 01°09'14" E 5327.48'

23
GRID N: (Y) 575562.573
GRID E: (X) 1624755.489

21
GRID N: 575455.244
GRID E: 1630029.650

26
27

28

N 01°11'23" E 5330.42'

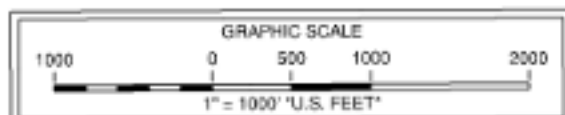
S 01°10'48" W 5329.79'

35
GRID N: 570233.302
GRID E: 1624644.819

33
GRID N: 570126.586
GRID E: 1629923.170

34

33



Surface Hole Location (SHL)
GRID N: (Y) 572413.757
GRID E: (X) 1627337.356
NAD83 Lat/Long
Lat: +31°14'05.907" N
Lon: -101°31'34.108" W

Penetration Point (PP)
First Take Point (FTP)
GRID N: (Y) 572410.666
GRID E: (X) 1626344.931
NAD83 Lat/Long
Lat: 31°14'05.771" N
Long: 101°31'45.539" W

Last Take Point (LTP)
GRID N: (Y) 580666.726
GRID E: (X) 1626466.156
NAD83 Lat/Long
Lat: 31°15'28.496" N
Long: 101°31'45.142" W

Bottom Hole Location (BHL)
GRID N: (Y) 580775.563
GRID E: (X) 1626462.325
NAD83 Lat/Long
Lat: 31°15'29.573" N
Long: 101°31'45.222" 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°33'52.08";
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: Well bore location determined from survey report provided by client.
Location of surface hole is as-staked and was not re-surveyed for this plat.
Note: Coordinates shown herein are on The Texas Coordinate System of 1927, Central Zone.
Latitudes and Longitudes shown are on NAD83 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.

WELL BORE LENGTHS

SHL - PP/FTP	1312.25'
PP/FTP - LTP	8265.41'
LTP - BHL	108.00'
SHL - BHL	9686.66'

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

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

August 09, 2017

170809K-KRM

Scale: 1" = 1000'



Stephen P. Marlowe
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

P.O. Box 51887, Midland, Texas 79710 (432) 262-0931 Fax (432) 262-0679 Firm #100201-00