



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 08/31/2021
Tracking No.: 254472

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION			
Operator	FDL OPERATING, LLC	Operator	263924
Operator	ATTN ROBIN SWANNER PO BOX 472 JUDSON, TX 75660-0000		

WELL INFORMATION			
API	42-003-37804	County:	ANDREWS
Well No.:	1	RRC District	08
Lease	UNIVERSITY "O"	Field	FUHRMAN-MASCHO
RRC Lease	34991	Field No.:	33176001
Location	Section: 20, Block: 13, Survey: U.L., Abstract: 000000		
Latitude		Longitud	
This well is 12 miles in a W direction from ANDREWS, which is the nearest town in the			

FILING INFORMATION			
Purpose of	Well Record Only		
Type of	Other/Recompletion		
Well Type:	Shut-In Producer	Completion or Recompletion	08/21/2021
Type of Permit	Date	Permit No.	
Permit to Drill, Plug Back, or Rule 37 Exception	02/21/1996	445030	
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	02/22/1996	Date of first production after rig	08/21/2021
Date plug back, deepening, drilling operation	08/18/2021	Date plug back, deepening, recompletion, drilling operation	08/21/2021
Number of producing wells on this lease this field (reservoir) including this	4	Distance to nearest well in lease & reservoir	1420.0
Total number of acres in	640.00	Elevation	3299 GR
Total depth TVD	4550	Total depth MD	
Plug back depth TVD	4482	Plug back depth MD	
Was directional survey made other inclination (Form W-	No	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	Yes
Recompletion or	Yes	Multiple	No
Type(s) of electric or other log(s)	None		
Electric Log Other Description:			
Location of well, relative to nearest lease of lease on which this well is	2073.0 Feet from the	Off Lease :	No
	767.0 Feet from the	South Line and	
		West Line of the	
		UNIVERSITY "O" Lease.	

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease	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	1600.0	Date 04/21/2021
SWR 13 Exception	Depth		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION		
Date of		Production
Number of hours	24	Choke
Was swab used during this	No	Oil produced prior to
PRODUCTION DURING TEST PERIOD:		
Oil		Gas
Gas - Oil	0	Flowing Tubing
Water		
CALCULATED 24-HOUR RATE		
Oil		Gas
Oil Gravity - API - 60.:		Casing
Water		

CASING RECORD											
<u>Ro</u>	<u>Type of Casing</u>	<u>Casing Size (in.)</u>	<u>Hole Size</u>	<u>Setting Depth</u>	<u>Multi - Stage Tool</u>	<u>Multi - Stage Shoe</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined By</u>
1	Conductor	8 5/8	12 1/4	271			PBCZ	130	210.0	SURF	Circulated to Surface
2	Conventional Production	5 1/2	7 7/8	4550			PP	1250	2262.0	SURF	Circulated to Surface

LINER RECORD									
<u>Ro</u>	<u>Liner Size</u>	<u>Hole Size</u>	<u>Liner Top</u>	<u>Liner Bottom</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined</u>
N/A									

TUBING RECORD			
<u>Ro</u>	<u>Size (in.)</u>	<u>Depth</u>	<u>Size (ft.)</u>
1	2 7/8	4320	
		<u>Packer Depth (ft.)/Type</u>	
		/	

PRODUCING/INJECTION/DISPOSAL INTERVAL			
<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
		L	
N/A			

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment		No	
Is well equipped with a downhole sleeve?		No	
		If yes, actuation pressure	
Production casing test pressure (PSIG) during hydraulic fracturing		Actual maximum pressure (PSIG) during fracturin	
Has the hydraulic fracturing fluid disclosure been		No	
<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>
1	Cast Iron Bridge Plug	CIBP WITH 20 FEET OF CEMENT ABOVE PLUG CLASS H CEMENT	2810 2830



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 shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: FDL Operating, LLC

Operator P-5 No.: 263924

Cementer Name: The Wireline Group Inc.

Cementer P-5 No.: 851506

WELL INFORMATION

District No.: 8

County: Andrews

Well No.: 1

API No.: 4200337804

Drilling Permit No.: 445030

Lease Name: University "O"

Lease No.: 34991

Field Name: FUHRMAN-MASCHO

Field No.: 33176001

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:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

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.)

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? ☐ YES ☐ NO

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.)
1					
2					
3					
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.)

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? ☐ YES ☐ NO

Setting depth tool (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.)
1					
2					
3					
Total					

REMARKS	

Gary Cain VP

The Wireline Group, Inc. Gary Cain

Name and title of cementer's representative

Cementing Company

Signature

PO Box 60018 Midland, Texas 79711

432 561-9356

8-21-21

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

REBECCA GREER

REGULATORY TECH

Rebecca Duer

Typed or printed name of operator's representative

Title

Signature

5221 N O'Connor Blvd #1100, Irving, TX 75039

432-523-1021

8/23/2021

Address

City,	State,	Zip Code
-------	--------	----------

Tel: Area Code

Number

Date: mo. day yr.

- 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.texas.gov/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](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.
- 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

FORM H-9

OIL AND GAS DIVISION

12/12/77

CERTIFICATE OF COMPLIANCE STATEWIDE RULE 36

1. Operator FDL OPERATING, LLC		2. Operator Number 263924		3. RRC Dist. 08	
4. Street or P.O. Box No. ATTN ROBIN SWANNER		5. City JUDSON		6. State TX	
7. Zip Code 75660		8. Name of Lease, Facility or Operation Multiple Operations listed. See Attachment.		9. Field or Area Name FUHRMAN-MASCHO	
10. County ANDREWS		11. General Operation Type Oil Field Production		Other Explanation	
12. RRC ID of Operation(s) to be Covered by this Certificate. Multiple Operations listed. See Attachment.		Type of Operation		Storage	
13. Hydrogen Sulfide 1363 PPM		14. Maximum Escape Volume 25 MCF/Day		15. 100 PPM Radius of Exposure 12 Ft.	
16. 500 PPM Radius of Exposure 16 Ft.		17. Operation Existing		18. Modification Resulting in Certificate No	
19. Workover or Drilling Well with 100 PPM ROE Greater than 3000 feet on Rule 36 Certified				No	
20. Previous Certificate Number if					
21. The 100 PPM ROE includes any part of a public area except a public road.				No	
22. The 500 PPM ROE includes any part of a public road				No	
23. Injection of fluid containing Hydrogen Sulfide				No	
24. Date(or Depth) of Compliance with all applicable provisions of Rule 36 Depth of Compliance for Drilling Operations				09/21/2020 Ft. from Surface	
25. Contingency Plan and Location of Contingency		Has been prepared		No	
26. Location of data used to prepare this certificate. FDL OPERATING, LLC 1602 WEST BROADWAY ANDREWS TX					
Test Company LEGACY SAFETY AND Company Name		(623) 414-1248 Phone			

This operation and the equipment used therein is approved on the basis of the above certification and is subject to further Commission audit for compliance with the required provisions of Statewide Rule 36. This approval may be canceled if investigation determines that the operation does not comply with the provisions of Statewide Rule 36.

Approved By: Andie Landis Date Approved: 10/06/2020

Certification 116059 Date Terminated: _____

RAILROAD COMMISSION OF TEXAS

FORM H-9

OIL AND GAS DIVISION

12/12/77

CERTIFICATE OF COMPLIANCE STATEWIDE RULE 36

RRC ID# of Operation(s)	Operation Name	Type	Storage Facility Only
34991	UNIVERSITY "O"	Oil Lease Number	Yes
34988	UNIVERSITY "DD"	Oil Lease Number	Yes

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 21 April 2021**GAU Number:** 303167**Attention:** FDL OPERATING, LLC
ATTN ROBIN SWANNER
JUDSON, TX 75660**API Number:** 00337811
County: ANDREWS
Lease Name: UNIVERSITY "W"**Operator No.:** 263924**Lease Number:** 34992
Well Number: 1
Total Vertical 4550
Latitude: 32.371438
Longitude: -102.783719
Datum: NAD27**Purpose:** Test On Inactive Well (H-15)**Location:** Survey-UL; Abstract-U412; Block-13; Section-20

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

The base of usable-quality water that must be protected is estimated to occur at a depth of 1600 feet below the land surface. Moreover, the interval from the land surface to a depth of 250 feet and the fresh water contained in the zone from a depth of 1100 feet to 1600 feet must be isolated from water in overlying and underlying beds.

This recommendation is applicable for all wells drilled in this Section 20.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Unless stated otherwise, this recommendation is for normal drilling, production, and plugging operations only.

This determination is based on information provided when the application was submitted on 04/20/2021. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Form GW-2 P.O. Box 12967 Austin, Texas 78771-2967 512-463-2741 Internet address: www.rrc.texas.
Rev. 02/2014