



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Submitted
Date: 07/29/2021
Tracking No.: 253336

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	42-003-38951	County:	ANDREWS
Well No.:	12	RRC District	08
Lease	UNIVERSITY 'I'	Field	FUHRMAN-MASCHO
RRC Lease		Field No.:	33176001
Location	Section: 32, Block: 13, Survey: UL, Abstract: 000000		
Latitude		Longitud	
This well is 11 miles in a NW direction from ANDREWS, which is the nearest town in the			

FILING INFORMATION			
Purpose of	Well Record Only		
Type of	Plug Back		
Well Type:	Shut-In Producer	Completion or Recompletion	07/29/2021
Type of Permit	Date	Permit No.	
Permit to Drill, Plug Back, or Rule 37 Exception	02/01/2012	732275	
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	01/27/2002	Date of first production after rig	07/29/2021
Date plug back, deepening, drilling operation	07/26/2021	Date plug back, deepening, recompletion, drilling operation	07/29/2021
Number of producing wells on this lease this field (reservoir) including this	1	Distance to nearest well in lease & reservoir	0.0
Total number of acres in	320.00	Elevation	3294 GL
Total depth TVD	10896	Total depth MD	
Plug back depth TVD	4355	Plug back depth MD	
Was directional survey made other inclination (Form W-	No	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	No
Recompletion or	No	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	330.0 Feet from the	Off Lease :	No
	800.0 Feet from the	South Line and	
		West Line of the	
		UNIVERSITY 'I' Lease.	

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease	Well No.	Prior Service Type
W2:	N/A		

PACKET	FULLERTON, SOUTH (ELLENBURGER)	01784	12	Producing
	FUHRMAN-MASCHO	42267	12	Producing
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:				
GAU Groundwater Protection Determination		Depth	1625.0	Date 02/12/2021
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											
Ro	Type of Casing	Casing	Hole	Setting	Multi -	Multi -	Cement	Cement	Slurry	Top of	TOC
		Size (in.)	Size	Depth	Stage Tool	Stage Shoe	Class	Amoun	Volume (cu.)	Cement (ft.)	Determined By
1	Surface	13 3/8	17 1/2	254			C	250	403.0	SURF	Circulated to Surface
2	Intermediate	8 5/8	12 1/4	4002			C	1000	2029.0	SURF	Circulated to Surface
3	Conventional Production	5 1/2	7 7/8	10896			H & C	1350	1018.0	3500	Calculation
4	Conventional Production	5 1/2	7 7/8	4468			C	1	1.0	4467	Calculation

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 Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	2 7/8	4348	/

PRODUCING/INJECTION/DISPOSAL INTERVAL			
<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L 4405	4468.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment		No	
Is well equipped with a downhole sleeve?		No	
Production casing test pressure (PSIG) during hydraulic fracturing		If yes, actuation pressure 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>
N/A			

FORMATION RECORD					
<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
N/A					
Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm					No
Is the completion being downhole commingled					No

REMARKS
CIBP WAS SET AT 4355' 7/27/2021 W-15 ATTACHED

RRC REMARKS
PUBLIC COMMENTS:
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	Rebecca Greer	Title:	
Telephone	(432) 523-1021	Date	07/29/2021



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.: 12	API No.: 4200338951	Drilling Permit No.: 732275
Lease Name: University I	Lease No.: 42267	
Field Name: FUHRMAN-MASCHO	Field No.: 33176001	

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

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:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> 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: <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:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> 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					

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	7-27-21						
Size of hole or pipe (in.)	5.50						
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)	4355						
Amount of cement on top of CIBP (ft.)							
Sacks of cement used	3						
Slurry volume pumped (cu. ft.)	3.3						
Calculated top of plug (ft.)	4325						
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)	16.0						
Class/type of cement	Class H						
Perforate and squeeze (YES/NO)							

REMARKS

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.

Gary Cain VP The Wireline Group, Inc. Gary Cain Digitally signed by Gary Cain
 Name and title of cementer's representative Cementing Company Signature Date: 2019.12.23 10:36:53 -06'00'

PO Box 60018 Midland, Texas 79711 432 561-9356 7-28-21

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.

REBECCA GREER REGULATORY TECH Rebecca Greer

Typed or printed name of operator's representative Title Signature

5221 N O'Connor Blvd #1100, Irving, TX 75039 432-523-1021 7/29/2021

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.

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

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 12 February 2021**GAU Number:** 296325**Attention:** FDL OPERATING, LLC
ATTN ROBIN SWANNER
JUDSON, TX 75660**Operator No.:** 263924**API Number:** 00337144
County: ANDREWS
Lease Name: UNIVERSITY -I-
Lease Number: 19795
Well Number: 11
Total Vertical: 7250
Latitude: 32.348944
Longitude: -102.775379
Datum: NAD27**Purpose:** Test On Inactive Well (H-15)**Location:** Survey-UL; Abstract-U424; Block-13; Section-32

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 1625 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 1050 feet to 1625 feet must be isolated from water in overlying and underlying beds.

This recommendation is applicable for all wells drilled in this Section 32.

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 02/09/2021. 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