



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 05/23/2018
Tracking No.: 191838

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

OPERATOR INFORMATION

Operator Name: FELIX WATER, LLC Operator No.: 265326
Operator Address: % FELIX ENERGY 1530 16TH ST STE 500 DENVER, CO 80202-0000

WELL INFORMATION

API No.: 42-495-33870 County: WINKLER
Well No.: 1 RRC District No.: 08
Lease Name: UNIVERSITY 2-21 Field Name: WAR-WINK (CHERRY CANYON)
RRC Lease No.: 49907 Field No.: 95122200
Location: Section: 2, Block: 21, Survey: UL, Abstract: U42
Latitude: Longitude:
This well is located 3.3 miles in a NW direction from WINK, which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: New Well
Well Type: Active UIC Completion or Recompletion Date: 01/24/2018
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 06/16/2017 827595
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 11/30/2017 Date of first production after rig released: 01/24/2018
Date plug back, deepening, recompletion, or drilling operation commenced: 11/30/2017 Date plug back, deepening, recompletion, or drilling operation ended: 01/24/2018
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.):
Total number of acres in lease: 640.00 Elevation (ft.): 2808 GL
Total depth TVD (ft.): 7139 Total depth MD (ft.):
Plug back depth TVD (ft.): 7075 Plug back depth MD (ft.):
Was directional survey made other than inclination (Form W-12)? No Rotation time within surface casing (hours): 98.0
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Neutron logs
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease : No
of lease on which this well is located: 231.0 Feet from the South Line and
2396.0 Feet from the East Line of the
UNIVERSITY 2-21 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.):** 1200.0 **Date:** 08/02/2017
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: **Production method:**
Number of hours tested: 24 **Choke size:**
Was swab used during this test? No **Oil produced prior to test:**

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): **Gas (MCF):**
Gas - Oil Ratio: 0 **Flowing Tubing Pressure:**
Water (BBLs):

CALCULATED 24-HOUR RATE

Oil (BBLs): **Gas (MCF):**
Oil Gravity - API - 60.: **Casing Pressure:**
Water (BBLs):

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	9 5/8	12 1/4	1303			C	705	1240.5	SURF ACE	Circulated to Surface
2	Tapered Production	7	8 3/4	7118		7118	NEOCEM/ HALCEM	835	1531.0	4942	Cement Evaluation Log
3	Tapered Production	7	8 3/4	7118	4942		NEOCEM	480	2477.0	SURF ACE	Cement Evaluation Log

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 (ft.)	Packer Depth (ft.)/Type
1	4 1/2	4950	4950 /

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L 5034	7000.0

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

Was hydraulic fracturing treatment performed? No

Is well equipped with a downhole actuation sleeve? No **If yes, actuation pressure (PSIG):**

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: **Actual maximum pressure (PSIG) during hydraulic fracturing:**

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
-----	-------------------	----------------------------------	----------------------

1	Acid	75,012 GAL 15% HCL	5034	7000
2	Cement Squeeze	2070 COMBINED SXS TO BRING CEMENT TO SURFACE	0	1303

FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
RUSTLER - POSSIBLE FLOW; POSSIBLE USABLE QUALITY W COLBY-QUEEN	Yes	1396.0		Yes	
YATES	No			No	FORMATION NOT PRESENT
QUEEN-SEVEN RIVERS	No			No	FORMATION NOT PRESENT
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE	No			No	FORMATION NOT PRESENT
HOLT	No			No	FORMATION NOT PRESENT
DELAWARE	Yes	4867.0		Yes	
GLORIETA	No			No	FORMATION NOT PRESENT
CLEARFORK	No			No	FORMATION NOT PRESENT
WICHITA ALBANY	No			No	FORMATION NOT PRESENT
BRUSHY CANYON	Yes	7018.0		Yes	
CHERRY CANYON	Yes	5783.0		Yes	
CANYON	No			No	NOT DRILLED DEEP
BONE SPRINGS	No			No	NOT DRILLED DEEP
MONTOYA	No			No	NOT DRILLED DEEP
WADDELL	No			No	NOT DRILLED DEEP
WOLFCAMP	No			No	NOT DRILLED DEEP
ATOKA	No			No	NOT DRILLED DEEP
STRAWN	No			No	NOT DRILLED DEEP
PENNSYLVANIAN	No			No	NOT DRILLED DEEP
MISSISSIPPIAN	No			No	NOT DRILLED DEEP
DEVONIAN	No			No	NOT DRILLED DEEP
SILURIAN	No			No	NOT DRILLED DEEP
FUSSELMAN	No			No	NOT DRILLED DEEP
ELLENBURGER	No			No	NOT DRILLED DEEP

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

CAPITAN REEF PRESENT @ 3552

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 Name: Bill Spencer

Title: Consultant

Telephone No.: (512) 918-1062

Date Certified: 05/10/2018



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: XXXXXXXXXXXXXXXXXXXXXXXXXXXX Felix Water LLC	Operator P-5 No.: 265326
Cementer Name: HALLIBURTON ENERGY SEHRVICES	Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08	County: WINKLER	
Well No.: 1 SWD	API No.: 42-495-33870	Drilling Permit No.: 827595
Lease Name: UNIVERSITY 2-21	Lease No.:	
Field Name: War-wink (Cherry Canyon)	Field No.: 95122200	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 12 1/4"	Depth of drilled hole (ft.): 1325'	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 9 5/8"	Casing weight (lbs/ft) and grade: 364 J55	No. of centralizers used: 7
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.): 1303'	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: —	Calculated top of cement (ft.): Surface	Cementing date: 12/01/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	480	C	SEE REMARKS	940.8	3001
2	225	C	SEE REMARKS	299.7	896
3					
Total	705			1240.5	3897

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.) 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? <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	0			0	0

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.) 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? <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	0			0	0

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

LEAD ADDS.- 3 LBM KOL-SEAL, 0.1250 LBM POLY-E-FLAKE TAIL ADDS.- N/A
NO CEMENT CIRCULATED TO SURFACE. CUSTOMER RELEASED HALLIBURTON BEFORE TEMP SURVEY.

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.

Richard Jones - Service Supervisor

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

12/01/2017

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.

Matt Peterson

Operations Manager

Signature

Typed or printed name of operator's representative

Title

1530 16th St., Suite 500

Denver, CO 80202

(720) 974-2085

12/2/17

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](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.



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Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION					
Operator Name: FELIX ENERGY Water LLC		Operator P-5 No.: 265326			
Cementer Name: TRANS TEX CEMENTING SERVICES, LLC		Cementer P-5 No.: 864412			
WELL INFORMATION					
District No.: 08		County: WINKLER			
Well No.: #1SWD		API No.: 42-495-33870		Drilling Permit No.: 827595	
Lease Name: UNIVERSITY 2-21		Lease No.:			
Field Name: War-Wink (Cherry Canyon)		Field No.: 95122200			
I. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 12 7/8"		Depth of drilled hole (ft.): 1325'		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 9 5/8"		Casing weight (lbs/ft) and grade: 36# J-55		No. of centralizers used: 7	
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.): 1303'	
Hrs. waiting on cement before drill-out: —		Calculated top of cement (ft.): Surface		Cementing date: 12/2/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	460	"C"	SEE REMARKS	846	2703
2	120	"C"	SEE REMARK 2	159	509
3					
Total	580			1005	3212
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 s <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? YES <input type="checkbox"/> NO <input type="checkbox"/>				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	0			0	0
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 <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? YES <input type="checkbox"/> NO <input type="checkbox"/>				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	0			0	0



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Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION	
Operator Name:	FELIX ENERGY <i>Water LLC</i>
Cementer Name:	TRANS TEX CEMENTING SERVICES, LLC
Operator P-5 No.:	<i>265326</i>
Cementer P-5 No.:	864412

WELL INFORMATION	
District No.:	<i>08</i>
County:	WINKLER
Well No.:	#15WD
API No.:	<i>42-495-33870</i>
Lease Name:	UNIVERSITY 2-21
Drilling Permit No.:	<i>827595</i>
Field Name:	<i>War-Wink (Cherry Canyon)</i>
Lease No.:	
Field No.:	<i>95122200</i>

I. CASING CEMENTING DATA	
Type of Casing:	<input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production
Drilled hole size (in.):	<i>12 1/4"</i>
Depth of drilled hole (ft.):	<i>1325'</i>
Est. % wash-out or hole enlargement:	<i>20%</i>
Size of casing in O.D. (in.):	<i>9 7/8"</i>
Casing weight (lbs/ft) and grade:	<i>36# J-55</i>
No. of centralizers used:	<i>7</i>
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.):	<i>1303'</i>
Top of liner (ft.):	
Setting depth liner (ft.):	
Hrs. waiting on cement before drill-out:	<i>—</i>
Calculated top of cement (ft.):	<i>Surface</i>
Cementing date:	<i>12/2/2017</i>

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	500	"C"	SEE REMARKS	920	2921
2	120	"C"	SEE REMARK 2	159	509
3					
Total	620			1079	3430

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 <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.)	
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? <input checked="" 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	0			0	0

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 <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.)	
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? <input checked="" 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	0			0	0

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	12/2/2017	12/2/17					
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	828	620					
Slurry volume pumped (cu. ft.)	1079	1079					
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)	12.8/14.8	12.8/14.8					
Class/type of cement	C	"C"					
Perforate and squeeze (YES/NO)		YES					

REMARKS

TRANS TEX DIVERSE "C"+6%GEL+1#GIL+0.25#CF+2%CACL2+1.5%CAS-2+.2% CFL-1
 CLASS "C"
 NO CEMENT TO SURFACE, SHOT PERFS AT 700 FT TRYING TO RAISE CEMENT TO SURFACE PUMPING TROUGH PERFS 9 5/8 CASING
 0 2" cement sgz job after perforating at 700'

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.

TONY BELTRAN
 Name and title of cementer's representative

TRANS TEX CEMENTING
 Cementing Company

[Signature]
 Signature

5019 BASIN ST MIDLAND, TX 79703
 Address City, State, Zip Code

432-694-4900 12/2/2017
 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.

Robert C. Frank
 Typed or printed name of operator's representative

DSM
 Title

[Signature]
 Signature

16825 E Scribner Rd Spokane, WA 99217
 Address City, State, Zip Code

509-953-4538 12/2/17
 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 787112967).
 - 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://wfo.sos.state.tx.us/pls/pub/readtac\\$ext.tacPage?si=1&app=9&p_dlc=&p_rloc=&poloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://wfo.sos.state.tx.us/pls/pub/readtac$ext.tacPage?si=1&app=9&p_dlc=&p_rloc=&poloc=&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

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: FELIX ENERGY <i>Water LLC</i>		Operator P-5 No.: <i>265326</i>			
Cementer Name: TRANS TEX CEMENTING SERVICES, LLC		Cementer P-5 No.: 864412			
WELL INFORMATION					
District No.: <i>08</i>		County: WINKLER			
Well No.: 1SDW		API No.: <i>42-495-33870</i>		Drilling Permit No.: <i>827595</i>	
Lease Name: UNIVERSITY 2-21		Lease No.:			
Field Name: <i>War-Wink (Cherry Canyon)</i>		Field No.: <i>95122200</i>			
I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 12.25		Depth of drilled hole (ft.): <i>1325</i>		Est. % wash-out or hole enlargement: <i>20%</i>	
Size of casing in O.D. (in.): 9.625		Casing weight (lbs/ft) and grade: <i>36# J55</i>		No. of centralizers used: <i>7</i>	
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.): <i>1303'</i>		Top of liner (ft.):
Hrs. waiting on cement before drill-out: <i>—————</i>			Calculated top of cement (ft.): <i>Surface</i>		Cementing date: 12/4/2017
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	550	class C	SEE REMARKS	920	2937
2	120	TRANSTEX DIVERSE "C"	SEE REMARKS	160	511
3					
Total	670			1080	3448
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 sh <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? YES <input type="checkbox"/> NO <input type="checkbox"/>			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 <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? YES <input type="checkbox"/> NO <input type="checkbox"/>			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					

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			12/4/17				
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			670				
Slurry volume pumped (cu. ft.)			1080				
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)			12.8/14.8				
Class/type of cement			"C"				
Perforate and squeeze (YES/NO)			Yes				

REMARKS

TRANS-TEX DIVERSE "C" 6%GEL+2%CACL+2#GILS+1/4#CF+1.5%CAS-2+.2%CF

CLASS "C" 1%CACL-1+1/4#CF+.2%CF

0 3" cement sgr job - job pumped thru sgr holes at 700'

NO CEMENT BACK TO SURFACE

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.

HILARIO GALVAN

Name and title of cementer's representative

TRANS TEX CEMENTING

Cementing Company


Signature

5019 BASIN ST

Address

MIDLAND, TX 79703

City, State, Zip Code

432-694-4900

Tel: Area Code Number

12/2/2017

Date: mo. day yr.

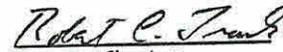
OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are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

Robert C. Frank

Typed or printed name of operator's representative

DSM

Title


Signature

16825 E. Scribner Rd Spokane WA 99212

Address

City, State, Zip Code

509-953-4558

Tel: Area Code Number

12/2/17

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.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 787112967).
 - 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&ri=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&ri=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.



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: FELIX Energy Water LLC		Operator P-5 No.: 265326			
Cementer Name: TRANS TEX CEMENTING SERVICES, LLC		Cementer P-5 No.: 864412			
WELL INFORMATION					
District No.: 08		County: WINKLER			
Well No.: 1SWD		API No.: 42-495-33870		Drilling Permit No.: 827595	
Lease Name: UNIVERSITY 2-21		Lease No.:			
Field Name: War-Wink (Cherry Canyon)		Field No.: 95122200			
I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 12.25		Depth of drilled hole (ft.): 1325 #		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 9.625		Casing weight (lbs/ft) and grade: 36 # J55		No. of centralizers used: 7	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.			Setting depth shoe (ft.): 1303'		Top of liner (ft.):
Hrs. waiting on cement before drill-out: 10			Calculated top of cement (ft.): Surface		Cementing date: 12/4/2017
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	200	CLASS C	SEE REMARKS	266	849
2					
3					
Total	200			266	849
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 sh <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.) 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 <input type="checkbox"/> NO <input type="checkbox"/>				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 <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.) 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 <input type="checkbox"/> NO <input type="checkbox"/>				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					

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				12/4/17			
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				200			
Slurry volume pumped (cu. ft.)				266			
Calculated top of plug (ft.)				Surface			
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)				14.8			
Class/type of cement				"C"			
Perforate and squeeze (YES/NO)				no			
REMARKS							
CLASS C NEAT							
0							
0 Ran 1" + 5g to 100', Pumped 43 bbls cement, 15 bbls circ to surface							
CIRCULATED 15 BBL = 63 SKS BACK TO SURFACE TOP OUT							

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.

HILARIO GALVAN

Name and title of cementer's representative

TRANS TEX CEMENTING

Cementing Company


Signature

5019 BASIN ST

Address

MIDLAND, TX 79703

City, State, Zip Code

432-694-4900

Tel: Area Code Number

12/4/2017

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.

Robert C. Frank

Typed or printed name of operator's representative

DSM

Title


Signature

16825 E Scribner Rd
Address

Spokane, WA 99217
City, State, Zip Code

509-953-4538
Tel: Area Code Number

12/4/17
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.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 787112967).
- 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&ri=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&ri=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.



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: Felix Water LLC	Operator P-5 No.: 265326
Cementer Name: UNIVERSITY ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION	
District No.: 08	County: WINKLER
Well No.: #1 SWD	API No.: 42-495-33870 Drilling Permit No.: 827595
Lease Name: UNIVERSITY 2-31	Lease No.:
Field Name: War-Wink (Cherry Canyon)	Field No.: 95122200

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	0			0	0

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 checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 8 3/4"	Depth of drilled hole (ft.): 7154'		Est. % wash-out or hole enlargement: 20%		
Size of casing in O.D. (in.): 7"	Casing weight (lbs/ft) and grade: 26# L-80		No. of centralizers used: 56		
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			Setting depth shoe (ft.): 7118		
Hrs. waiting on cement before drill-out: —	Calculated top of cement (ft.): 4942		Cementing date: 12/15/2017		
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	310 310	PREM PLUS	REMARKS	363	366'
2	170 170	PREM PLUS	REMARKS	249	246'
3					
Total	480 480			612	742'

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.): 8 3/4"	Depth of drilled hole (ft.): 7154'		Est. % wash-out or hole enlargement: 20%		
Size of casing in O.D. (in.): 7"	Casing weight (lbs/ft) and grade: 26# L-80		No. of centralizers used: 56		
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			Setting depth tool (ft.): 4942		
Hrs. waiting on cement before drill-out: —	Calculated top of cement (ft.): Surface		Cementing date: 12/16/2017		
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	605 605	PREM PLUS	REMARKS	2170	2433'
2	230 230	PREM PLUS	REMARKS	267	264'
3					
Total	835 835			2437	2697'

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							
<small>1ST STAGE LEAD SLURRY (NOCEM)/TAIL SLURRY (NOCEM) 2ND STAGE LEAD SLURRY (NOCEM)/TAIL SLURRY (NEAT) NO RETURN 1ST OR 2ND STAGE (304704866775)</small>							

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.

MANUEL DOMINGUEZ SS III **Halliburton**
 Name and title of cementer's representative Cementing Company
 1301 W. Webb St. Brownfield, Tx, 79316 575-392-0700 12/16/2017
 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.

Matt Peterson **Operations Manager**
 Typed or printed name of operator's representative Title Signature
 1530 16th St., Ste 500 Denver, CO 80202 (720) 974-2085 12/17/17
 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?sect_TacPage=1&app=96p_dir=&p_loc=&p_tloc=&p_ploc=&pg=1&p_toc=&ti=16&pt=1&ch=3&ri=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
OIL AND GAS DIVISION

Form W-12
(1-1-71)
FOD1296

INCLINATION REPORT (One Copy Must Be Filed With Each Completion Report)		6. RRC District 08
		7. RRC Lease Number. (Oil completions only)
1. FIELD NAME (as per RRC Records or Wildcat)	2. LEASE NAME University 2-21	8. Well Number 1
3. OPERATOR Felix Water, LLC % Felix Energy		9. RRC Identification Number (Gas completions only)
4. ADDRESS 1530 16th St., Suite 500 Denver, CO 80202		10. County Winkler
5. LOCATION (Section, Block, and Survey) Section 2, Block 21, Abstract U42, Survey UL		

RECORD OF INCLINATION

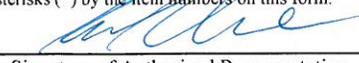
*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle x100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
451	451	1.00	1.75	7.87	7.87
945	494	2.50	4.36	21.55	29.42
1300	355	2.20	3.84	13.63	43.05
1810	510	0.80	1.40	7.12	50.17
2243	433	0.60	1.05	4.53	54.70
2719	476	0.30	0.52	2.49	57.19
3329	610	2.50	4.36	26.61	83.80
4124	795	5.10	8.89	70.67	154.47
4340	216	5.10	8.89	19.20	173.67
4356	16	5.80	10.11	1.62	175.29
4487	131	3.80	6.63	8.68	183.97
4617	130	1.50	2.62	3.40	187.38
4703	86	0.60	1.05	0.90	188.28
5005	302	0.30	0.52	1.58	189.86
5347	342	0.30	0.52	1.79	191.65

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form? yes no
18. Accumulative total displacement of well bore at total depth of 7170 feet = 200.34 feet.
- *19. Inclination measurements were made in - Tubing Casing Open hole Drill Pipe
20. Distance from surface location of well to the nearest lease line..... feet.
21. Minimum distance to lease line as prescribed by field rules..... feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? no
- (If the answer to the above question is "yes," attach written explanation of the circumstances.)

INCLINATION DATA CERTIFICATION

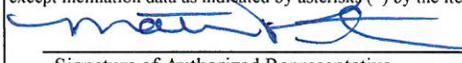
I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.



Signature of Authorized Representative
Kirk Cleere, President
Name of Person and Title (type or print)
Sendero Drilling Company, LLC
Name of Company
Telephone: **325-655-7641**
Area Code

OPERATOR CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.



Signature of Authorized Representative
Matt Peterson Operations Manager
Name of Person and Title (type or print)
Felix Water LLC
Operator
Telephone: **(720) 974-2085**
Area Code

Railroad Commission Use Only:

Approved By: _____ Title: _____ Date: _____

* Designates items certified by company that conducted the inclination surveys.

Tracking No.: 191838

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: FELIX WATER, LLC	District No. 08	Completion Date: 01/24/2018
Field Name WAR-WINK (CHERRY CANYON)	Drilling Permit No. 827595	
Lease Name UNIVERSITY 2-21	Lease/ID No. 49907	Well No. 1
County WINKLER	API No. 42- 495-33870	

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). _____

 Bill Spencer
 Signature

 Name (print)

 Consultant
 Title
 (512) 918-1062
 Phone
 05/04/2018
 Date

-FOR RAILROAD COMMISSION USE ONLY-

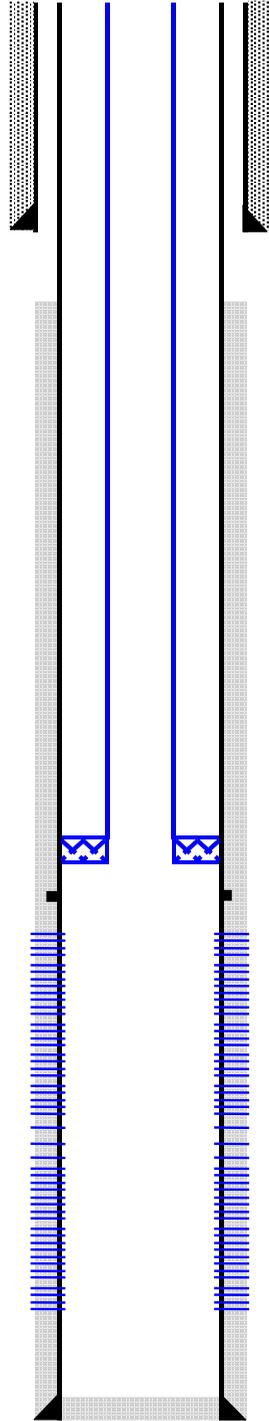
**CERTIFICATE OF COMPLIANCE
 AND TRANSPORTATION AUTHORITY**

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.: 191838

1. Field name exactly as shown on proration schedule WAR-WINK (CHERRY CANYON)		2. Lease name as shown on proration schedule UNIVERSITY 2-21					
3. Current operator name exactly as shown on P-5 Organization Report FELIX WATER, LLC		4. Operator P-5 no. 265326	5. Oil Lse/Gas ID no 49907	6. County WINKLER	7. RRC district 08		
8. Operator address including city, state, and zip code % FELIX ENERGY 1530 16TH ST STE 500 DENVER, CO 80202		9. Well no(s) (see instruction E) 1					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ ----- OR b. New RRC Number for: <input type="checkbox"/> oil lease <input type="checkbox"/> gas well Due to: <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input checked="" type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)		10. Classification <input type="checkbox"/> Oil <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Other (see instruction A)		11. Effective Date 01/24/2018			
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 <i>(Attach an additional sheet in same format if more space is needed)</i>			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First <i>(Attach an additional sheet in same format if more space is needed)</i>					Percent of Take		
N/A							
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>05/23/2018</u>							
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)		<input type="checkbox"/> Authorized Employee of previous operator		<input type="checkbox"/> 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)		Signature					
<u>Consultant</u>		<input type="checkbox"/> Authorized Employee of current operator		<input checked="" type="checkbox"/> Authorized agent of current operator (see instruction G)			
Title		Date		Phone with area code			
<u>bill@spencerconsulting.org</u>		<u>05/04/2018</u>		<u>(512) 918-1062</u>			
E-mail Address (optional)		Date		Phone with area code			

SWD Wellbore Schematic



TOC (9.875) @ Surface

9.875 Surf Csg @ 1303'

TOC (7") @ 1850'

4 1/2" 12.75# L-80 IPC Coated Tbg Injection Packer @ 4830'

DV Tool @ 4942'

Cherry Canyon Top Perf @ 5034'

Cherry Canyon Bottom Perf @ 7000'

7" Production Csg @ 7118'

	WELL NAME: University 2-21	FIELD: War-Wink (Cherry Canyon)	Well #: 1 SWD
	STATE: Texas	COUNTY: Winkler	SRF LOC: SWSE Section 2, Block 21, UL A-U42, 231' FSL, 2396' FEL
	API NO: 42-495-33870	SPUD DATE: 11/30/2017	BHL: SWSE Section 2, Block 21, UL A-U42, 231' FSL, 2396' FEL
	PBTD: 7,075'	TD/RR DATE: 12/13/2017 12/16/2017	FORMATION: Bell-Cherry Canyon
	TD: 7,154'	TVD: 7,139'	CMPL DATE: 1/24/2018

	PIPE RECORD						HOLE DATA			CEMENT DATA				
	OD	GRADE	THD	WEIGHT (ppf)	TOP	BTM	# JTS	BIT SIZE	DEPTH	SX	YIELD (cu ft/sk)	Wt. (ppg)	Lead Class	TOC
Surf Csg	9.875"	J55	BTC	36#	0'	1303'		12.250"	1325'	480	1.96	12.5	Lead Class C	Surface
Production Csg	7"	L-80	BTC	26#	0'	7118'		8 3/4"	7154'	605	3.59	9.0	NeoCem Lead	1850'
					DV Tool	4942'	230			1.33	14.8	HalCem Tail		
							310			2.85	11.0	NeoCem Lead		
Tubing	4 1/2"	L-80	EUE	12.75#	0'	4830'				170	1.47	13.2	NeoCem Tail	

Formation	Top Perf	Btm Perf	Net Feet	JSPF	Holes	Top Perf	Btm Perf	Net Feet	JSPF	Holes	Top Perf	Btm Perf	Net Feet	JSPF	Holes
Bell-Cherry Canyon	5034	5038	4	6	24	6068	6103	35	6	210				6	
Bell-Cherry Canyon	5058	5104	46	6	276	6122	6146	24	6	144				6	
Bell-Cherry Canyon	5112	5142	30	6	180	6158	6182	24	6	144				6	
Bell-Cherry Canyon	5160	5170	10	6	60	6192	6207	15	6	90				6	
Bell-Cherry Canyon	5189	5244	55	6	330	6218	6238	20	6	120				6	
Bell-Cherry Canyon	5248	5274	26	6	156	6245	6340	95	6	570				6	
Bell-Cherry Canyon	5276	5296	20	6	120	6360	6366	6	6	36				6	
Bell-Cherry Canyon	5299	5314	15	6	90	6371	6386	15	6	90				6	
Bell-Cherry Canyon	5326	5346	20	6	120	6401	6421	20	6	120				6	
Bell-Cherry Canyon	5366	5396	30	6	180	6426	6430	4	6	24				6	
Bell-Cherry Canyon	5398	5428	30	6	180	6433	6448	15	6	90				6	
Bell-Cherry Canyon	5432	5442	10	6	60	6458	6473	15	6	90				6	
Bell-Cherry Canyon	5484	5494	10	6	60	6478	6508	30	6	180				6	
Bell-Cherry Canyon	5506	5526	20	6	120	6510	6530	20	6	120				6	
Bell-Cherry Canyon	5532	5550	18	6	108	6532	6542	10	6	60				6	
Bell-Cherry Canyon	5564	5594	30	6	180	6564	6574	10	6	60				6	
Bell-Cherry Canyon	5652	5692	40	6	240	6732	6747	15	6	90				6	
Bell-Cherry Canyon	5718	5738	20	6	120	6756	6771	15	6	90				6	
Bell-Cherry Canyon	5764	5770	6	6	36	6778	6788	10	6	60				6	
Bell-Cherry Canyon	5786	5792	6	6	36	6790	6810	20	6	120				6	
Bell-Cherry Canyon	5825	5829	4	6	24	6812	6818	6	6	36				6	
Bell-Cherry Canyon	5834	5884	50	6	300	6897	6912	15	6	90				6	
Bell-Cherry Canyon	5946	5961	15	6	90	6917	6937	20	6	120				6	
Bell-Cherry Canyon	5966	5998	32	6	192	6970	6976	6	6	36				6	
Bell-Cherry Canyon	6002	6012	10	6	60	6980	7000	20	6	120				6	
Bell-Cherry Canyon	6018	6048	30	6	180	7002	7017	15	6	90				6	0

Totals =	587	3522	Totals =	500	3000	Totals =	0
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TUBING/BHA Detail as of TBD	ID (in)	OD (in)	Jts	Length (ft)	Depth (ft)
KB Correction				18.00	18.00
GE Tbg Hanger w/ 4 1/2" EUE Box Down	3.958	4.500		0.6	18.60
4-1/2" 11.6# L-80 IPC Coated XO (8rd pin x LTC box down)	4.000	4.500		1.0	19.60
4-1/2" 11.6# L-80 IPC Coated LTC (1', 6', 8')	4.000	4.500	3	15.0	34.60
4-1/2" 11.6# L-80 IPC Coated LTC	4.000	4.500	115	4740.43	4775.03
4 1/2" LTC Box x 4 1/2" 8rd EUE Pin Stainless X-Over	4.000	4.500		0.80	4775.83
3.750" Baker Model F Stainless Profile Nipple (8rd EUE Box x 8rd EUE)	3.750	4.500		0.80	4776.63
4 1/2" 8rd EUE Box x 4 1/2" LTC Pin Stainless X-Over	3.958	4.500		0.80	4777.43
4-1/2" 11.6# L-80 IPC Coated LTC	4.000	4.500		42.00	4819.43
4 1/2" LTC Box x 4 1/2" 8rd EUE Stainless X-Over	4.000	4.500		0.80	4820.23
7" X 4 1/2" T-2 On/Off Tool NC w/ Stainless 2.812 "X" Stinger	3.750	5.887		1.77	4822.00
7" X 3 1/2" 26-32# AS1-X Nickel Plated w/ Carbides NC	3.000	5.887		8.00	4830.00
4 ft. X 3 1/2" EUE Nickel Coated Sub	3.958	4.500		4.00	4834.00
2.75" XN Stainless Profile Nipple w/ 2.62" No Go	3.750	5.625		0.90	4834.90
4 1/2" Aluminum Pump-out plug w/ WL entry guide	2.992	5.550		0.50	4835.40
EOT (KB)				4834.90	

Grand Total Net Ft of Perfs =	1087
Grand Total Number of Perf Holes =	6522

Updated by: M. Peterson
5/3/18

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued:	02 August 2017	GAU Number:	176889
Attention:	FELIX WATER, LLC % FELIX ENERGY DENVER, CO 80202	API Number:	49533870
Operator No.:	265326	County:	WINKLER
		Lease Name:	University 2-21
		Lease Number:	
		Well Number:	1
		Total Vertical Depth:	9000
		Latitude:	31.769026
		Longitude:	-103.207660
		Datum:	NAD27

Purpose: Injection into Producing Zone (H1)

Location: Survey-UL; Block-21; Section-2

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

The interval from the land surface to the base of the Santa Rosa, which is estimated to occur at a depth of 1200 feet, must be protected.

The BASE OF UNDERGROUND SOURCES OF DRINKING WATER (USDW) is estimated to occur at a depth of 4850 feet at the site of the referenced well.

This recommendation is applicable to all wells within a radius of 600 feet of this location.

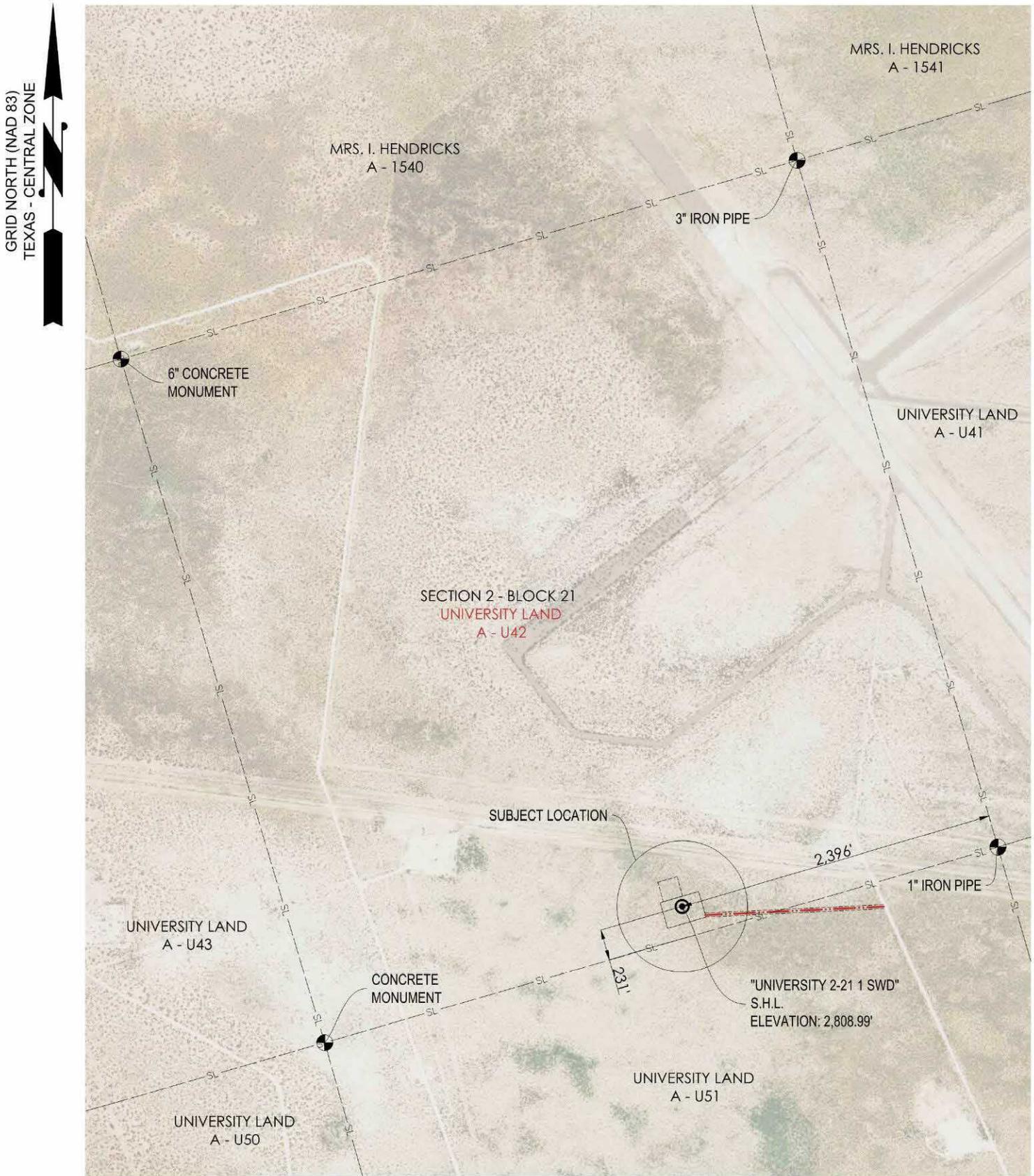
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 08/01/2017. 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.gov
Rev. 02/2014

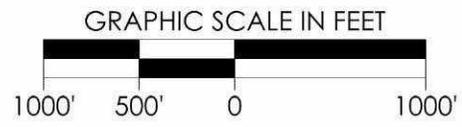
SWD PAD LOCATION OVERVIEW



REFERENCE	ELEVATION	NAD83 (1986)		NAD27	
		STATE PLANE TEXAS CENTRAL (2277)	GEOGRAPHIC (4269)	STATE PLANE TEXAS CENTRAL (32039)	GEOGRAPHIC (4267)
S. H. L.	2,808.99'	N: 10618739.95 E: 1403256.28	LAT: 31.76915447° LONG: -103.20810658°	N: 776163.30 E: 1106791.40	LAT: 31.76902602° LONG: -103.20766057°

CALLS FROM SECTION LINE

S.H.L.	231' FSL, 2,396' FEL (SEC. 2)
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REVISION	"UNIVERSITY 2-21 1 SWD"			
	SECTION 2, BLOCK 21 PROPOSED PAD AND ACCESS EASEMENT SURVEY WINKLER COUNTY, TEXAS			
	SCALE: 1" = 1000' PLOT DATE: 06-07-2017	CHECKED BY: DRAWN BY:	J.PARKER L.DOW	
				JWB