



## RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved  
Date: 03/16/2018  
Tracking No.: 181678

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

## OPERATOR INFORMATION

**Operator Name:** FELIX ENERGY HOLDINGS II, LLC      **Operator No.:** 265322  
**Operator Address:** FELIX ENERGY 1530 16TH ST SUITE 500 DENVER, CO 80202-0000

## WELL INFORMATION

**API No.:** 42-475-37204      **County:** WARD  
**Well No.:** 1H      **RRC District No.:** 08  
**Lease Name:** UL YANKEE BOY 18-17      **Field Name:** PHANTOM (WOLFCAMP)  
**RRC Lease No.:** 49293      **Field No.:** 71052900  
**Location:** Section: 17, Block: 17, Survey: UL, Abstract: U56  
  
**Latitude:** 31.56468      **Longitude:** -103.17492  
**This well is located**      3.43      **miles in a**      NW  
**direction from**      PYOTE,  
**which is the nearest town in the county.**

## FILING INFORMATION

**Purpose of filing:** Initial Potential  
**Type of completion:** New Well  
**Well Type:** Producing      **Completion or Recompletion Date:** 06/03/2017  

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	03/06/2017	823434
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

## COMPLETION INFORMATION

**Spud date:** 03/12/2017      **Date of first production after rig released:** 06/03/2017  
**Date plug back, deepening, recompletion, or drilling operation commenced:** 03/12/2017      **Date plug back, deepening, recompletion, or drilling operation ended:** 04/14/2017  
**Number of producing wells on this lease in this field (reservoir) including this well:** 1      **Distance to nearest well in lease & reservoir (ft.):** 0.0  
**Total number of acres in lease:** 320.40      **Elevation (ft.):** 2656      GL  
**Total depth TVD (ft.):** 11231      **Total depth MD (ft.):** 16440  
**Plug back depth TVD (ft.):**      **Plug back depth MD (ft.):**  
**Was directional survey made other than inclination (Form W-12)?** Yes      **Rotation time within surface casing (hours):** 48.5  
**Recompletion or reclass?** No      **Is Cementing Affidavit (Form W-15) attached?** Yes  
**Type(s) of electric or other log(s) run:** Gamma Ray (MWD)      **Multiple completion?** No  
**Electric Log Other Description:**  
**Location of well, relative to nearest lease boundaries**      **Off Lease :** No  
**of lease on which this well is located:**      303.0 **Feet from the**      South **Line and**  
498.0 **Feet from the**      West **Line of the**  
UL YANKEE BOY 18-17 **Lease.**

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

Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
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PACKET: N/A

W2: N/A

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

**GAU Groundwater Protection Determination**                      **Depth (ft.):** 1100.0                      **Date:** 03/02/2017  
**SWR 13 Exception**    **Depth (ft.):**

**INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION**

**Date of test:** 07/05/2017    **Production method:** Flowing  
**Number of hours tested:** 24    **Choke size:** 22  
**Was swab used during this test?** No    **Oil produced prior to test:** 13122.00

**PRODUCTION DURING TEST PERIOD:**

**Oil (BBLs):** 720.00    **Gas (MCF):** 1041  
**Gas - Oil Ratio:** 1445    **Flowing Tubing Pressure:** 1686.00  
**Water (BBLs):** 1987

**CALCULATED 24-HOUR RATE**

**Oil (BBLs):** 720.0    **Gas (MCF):** 1041  
**Oil Gravity - API - 60.:** 40.8    **Casing Pressure:** 0.00  
**Water (BBLs):** 1987

**CASING RECORD**

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	1205			C	1413	2451.4	0	Circulated to Surface
2	Intermediate	10 3/4	12 1/4	5008			POZ C	1139	2116.1	600	Calculation
3	Intermediate	7 5/8	9 7/8	10608	5101		H	730	1532.0	0	Circulated to Surface
4	Intermediate	7 5/8	9 7/8	10608			C	555	1203.0	520	Calculation
5	Conventional Production	5 1/2	6 3/4	16436			H	1020	1224.0	5000	Calculation

**LINER RECORD**

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

**TUBING RECORD**

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	10674	10655 / AS1-X

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 11398	16314.0

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

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 13485

Actual maximum pressure (PSIG) during hydraulic fracturing: 11880

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

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)	
1	Fracture	13,802,000 LBS PROPPANT; 386,625 BBLs SLICKWTR	11723	16268

**FORMATION RECORD**

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
RUSTLER	Yes	1893.0	1895.0	Yes	
YATES	No			No	NOT PRESENT
SEVEN RIVERS	No			No	NOT PRESENT
QUEEN	No			No	NOT PRESENT
GLORIETA	No			No	NOT PRESENT
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE HOLT	No			No	NOT PRESENT
CLEARFORK	No			No	NOT PRESENT
DELAWARE	Yes	4966.0	4978.0	Yes	
TUBB	No			No	NOT PRESENT
WICHITA ALBANY	No			No	NOT PRESENT
CHERRY CANYON	Yes	5867.0	5880.0	Yes	
WADDELL	No			No	NOT PRESENT
BONE SPRINGS	Yes	8225.0	8242.0	Yes	
WOLFCAMP	Yes	11130.0	11388.0	Yes	
MONTOYA	No			No	NOT DRILLED DEEP
PENNSYLVANIAN	No			No	NOT DRILLED DEEP
ATOKA	No			No	NOT DRILLED DEEP
FUSSELMAN	No			No	NOT DRILLED DEEP
DEVONIAN	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**

## RRC REMARKS

### PUBLIC COMMENTS:

[RRC Staff 2017-11-20 11:47:46.509] EDL=4916 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well

### CASING RECORD :

### TUBING RECORD:

### PRODUCING/INJECTION/DISPOSAL INTERVAL :

KOP: 10,635'

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

### POTENTIAL TEST DATA:

## OPERATOR'S CERTIFICATION

**Printed Name:** Heather Dahlgren

**Title:** Felix Admin Services

**Telephone No.:** (720) 974-2069

**Date Certified:** 02/05/2018



RAILROAD COMMISSION OF TEXAS

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

Form W-15  
 Rev. 08/2014

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

**OPERATOR INFORMATION**

Operator Name: Felix Energy Holdings II, LLC	Operator P-5 No.: 205322
Cementer Name: Schlumberger	Cementer P-5 No.: 754900

**WELL INFORMATION**

District No.: 08	County: + Ward
Well No.: 1H	API No.: 42-475-37204 Drilling Permit No.: 823434
Lease Name: U. Yankee Boy 18-17	Lease No.:
Field Name: Phantom Wolfcamp	Field No.: 71052900

**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.): 7 1/2	Depth of drilled hole (ft.): 1220	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 54.5# J-55	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	Setting depth shoe (ft.): 1205	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 20	Calculated top of cement (ft.): 0	Cementing date: 12-Mar-17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1					
2	1018	C	Remarks	1791.7	900
3	395	C	Remarks	659.7	300
Total	1413			2451.3	419

**II. CASING CEMENTING DATA**

Type of casing: <input checked="" 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.): 17.5	Depth of drilled hole (ft.): 1205	Est. % wash-out or hole enlargement: 200%
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 54.5	No. of centralizers used:
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper: Lower:	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used
Upper: Lower:	Upper: Lower:	Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> Yes <input type="checkbox"/> No	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					

**III. CASING CEMENTING DATA**

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper: Lower:	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Tapered string casing weight (lbs/ft) and grade	Tapered string no. of centralizers used
Upper: Lower:	Upper: Lower:	Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> Yes <input type="checkbox"/> No	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							
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 (Y/N/S/NO)							

**REMARKS**

#2: 2% D079, 2% S001, 0.13lbs D130, 0.02gps D047, 61lbs D903, 26lbs D035  
 #3: 2% D20, 1% S001, 0.13lbs D130, 0.02gps D047, 94lbs D903  
 #4:

CEMENTER'S CERTIFICATION: 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.

Shaun Clark, FS 3 Name and title of cementer's representative	Schlumberger Cementing Company	Signature
7104 W County Rd 116      Midland      TX      79706 Address                      City,                      State,                      Zip Code	(432) 681-1100 Tel: Area Code      Number	March 12, 2017 Date: mo. day yr.

OPERATOR'S 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 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 Herman Typed or printed name of operator's representative	ENGINEER Title	Signature 7/19/17 Date: mo. day yr.
1530 16th St Ste 500 Denver CO 80202 Address                      City,                      State,                      Zip Code	920-974-2071 Tel: Area Code      Number	

**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.



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

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

OPERATOR INFORMATION

Operator Name: Felix Energy Holdings II LLC
Operator P-5 No.: 265322
Cementor Name: Schalumberger
Cementor P-5 No.: 754900

WELL INFORMATION

District No.: 08
Well No.: 1H
Lease Name: UL Yankee Boy 18-17
Field Name: Phantom (Wolfcamp)
County: Ward
API No.: 42-475-37204
Drilling Permit No.: 823434
Lease No.:
Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: Intermediate
Drilled hole size (in.): 12 1/4
Depth of drilled hole (ft.): 5025
Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 10 3/4
Casing weight (lbs/ft) and grade: 45.5 J55
No. of centralizers used: 28
Setting depth shoe (ft.): 5008
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 7.5
Calculated top of cement (ft.): 600'
Cementing date: 17-Mar-17

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)

II. CASING CEMENTING DATA

Type of casing: Surface
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:
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:
Setting depth tool (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)

III. CASING CEMENTING DATA

Type of casing: Surface
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:
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:
Setting depth tool (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)





# RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

## CEMENTING REPORT

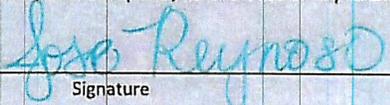
Cementer: Fill in shaded areas.  
 Operator: Fill in other items.

OPERATOR INFORMATION					
Operator Name:		FELIX ENERGY Holdings LLC		Operator P-5 No.: 265322	
Cementer Name:		Trans- Tex Cementing Services, LLC		Cementer P-5 No.: 864412	
WELL INFORMATION					
District No.: 08		County: WARD			
Well No.: 1H		API No.: 42-475-37204		Drilling Permit No.: 823434	
Lease Name: UL YANKEE BOY 18-17		Lease No.:			
Field Name: Phantom (Wellcamp)		Field No.: 71052900			
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 checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 9 7/8		Depth of drilled hole (ft.): 10623		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 7 5/8		Casing weight (lbs/ft) and grade: 29.7 P110		No. of centralizers used: 51	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:		Lower:		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 checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth shoe (ft.): 10608			
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.): 0		Cementing date: 04/01/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	610	TRANS-TEX MULTI H	REMARKS-1	1391	6475
2	120	CLASS H	REMARKS-2	141	656
3					
Total	730			1532	7131
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.): 9 7/8		Depth of drilled hole (ft.): 10623		Est. % wash-out or hole enlargement: 20%	
Size of casing in O.D. (in.): 7 5/8		Casing weight (lbs/ft) and grade: 29.7 P110		No. of centralizers used: 51	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:		Lower:		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.): 5101			
Hrs. waiting on cement before drill-out: 10.5		Calculated top of cement (ft.): 520		Cementing date: 04/02/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	490	TRANS-TEX MULTI C	REMARK-3	1117	5200
2	65	CLASS C	REMARK-4	86	400
3					
Total	555			1203	5600

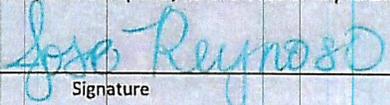
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON								
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	
Cementing Date								
Size of hole or pipe (in.)								
Depth to bottom of tubing or drill pipe (ft.)								
Cement retainer setting depth (ft.)								
CIBP setting depth (ft.)								
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	
REMARK-1: 7%GEL, 3%SALT, 1.5#PHENO, 1/8#CF, .3%CAS-2, .4%CFL-1, .1%CFR-1	NOTE: CIRCULATED CMT ON 1ST STAGE 40BBSL=98SKS
REMARK-2: .3%CFR-1, .4%CFL-1, .1%CR-1	
REMARK-3: 7%GEL, 3%SALT, 1.5#PHENO, 1/8#CF, 3/10%CFL-1, 1%CAS-2	REMARK-4: 2/10%CR-1, 3/10%CFL-1, 2/10%CFR-1

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.

JOSE REYNOSO Service Supervisor Trans- Tex Cementing Services, LLC 

---

Name and title of cementer's representative: Jose Reynoso, Cementing Company, Signature: 

5019 Basin Street Midland, TX 79703 432-694-4900 04/01/2017

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.

Robert Hernandez ENGINEER 

---

1530 16th St Denver CO 80202 720-974-2071 7/19/17

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 cements approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- 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

CEMENTING REPORT

Form W-15

Rev. 08/2014

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

OPERATOR INFORMATION

Operator Name: FELIX ENERGY Holdings II, LLC
Operator P-5 No.: 265322
Cementer Name: Schlumberger
Cementer P-5 No.: 754900

WELL INFORMATION

District No.: 08
County: WARD
Well No.: 08-18-17-1H
API No.: 4247537204
Drilling Permit No.: 823434
Lease Name: Ull Yankee Bay 18-17
Field Name: Phantom (Wolfcamp)
Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: Conductor Surface Intermediate Liner Production
Drilled hole size (in.): 6 3/4
Depth of drilled hole (ft.): 16,440
Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 5 1/2
Casing weight (lbs/ft) and grade: 23# P110
No. of centralizers used: 0
Was cement circulated to ground surface (or bottom of cellar) outside casing? No
Setting depth shoe (ft.): 16,436
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.): 5000'
Cementing date: 14-Apr-17

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)

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:
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:
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

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)

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:
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:
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					

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)							

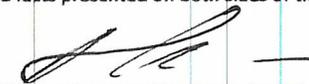
**REMARKS**

1\* 50:50 D035/D909 + .2% D255 + .1% D800 + 2.5% D020 + .05% D208  
 2\*  
 3\*

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.

<u>JOSE RODRIGUEZ, FS1</u> Name and title of cementer's representative	<u>Schlumberger</u> Cementing Company	 Signature
<u>1105 W BENDER</u> <u>HOBBS</u> <u>NM</u> <u>88240</u> Address                      City,                      State,                      Zip Code	<u>(575) 393-6186</u> Tel: Area Code      Number	<u>April 14, 2017</u> 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.

<u>Robert Hernandez</u> Typed or printed name of operator's representative	<u>ENGINEER</u> Title	 Signature
<u>15700 16th St. Denver CO 80202</u> Address                      City,                      State,                      Zip Code	<u>720-974-2071</u> Tel: Area Code      Number	<u>7/19/17</u> 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
  - B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System
  - 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
  - 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
  - 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
  - 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
  - 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.

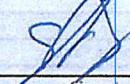
OPERATOR INFORMATION						
Operator Name:	Felix Energy Holdings II LLC		Operator P-5 No.:	265322		
Cementer Name:	TRANS TEX CEMENTING SERVICES, LLC		Cementer P-5 No.:	864412		
WELL INFORMATION						
District No.:	08		County:	Ward		
Well No.:	#1H		API No.:	42-475-37204		
Lease Name:	Yankee Boy 18-17		Lease No.:	#1H		
Field Name:	Phantom (Wellcamp)		Field No.:	71052900		
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.):	0		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.):		
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	<input type="checkbox"/> Multiple parallel strings
Drilled hole size (in.):			Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:		
Size of casing in O.D. (in.):			Casing weight (lbs/ft) and grade:	No. of centralizers used:		
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)				
Upper:	Lower:	Upper:	Lower:			
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used		
Upper:	Lower:	Upper:	Lower:	Upper:	Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO <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? <input type="checkbox"/> 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	3/21/2017						
Size of hole or pipe (in.)	9 7/8						
Depth to bottom of tubing or drill pipe (ft.)	6318						
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used	70						
Slurry volume pumped (cu. ft.)	74.2						
Calculated top of plug (ft.)	6119						
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)	16.5						
Class/type of cement	Class "H"						
Perforate and squeeze (YES/NO)							
REMARKS							
.05%CR-1, .8%CFR-1, 3%CFL-1							
0							
0							

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.

Eloi Ortiz  
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

3/22/2017  
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.

HEATHER DANLQREN  
Typed or printed name of operator's representative

ENG. TECH  
Title

  
Signature

53016th St. Ste. 500 Denver CO 80202  
Address

720-974-2009  
Tel: Area Code Number

02/06/2018  
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.sps.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_floc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&ri=14](http://info.sps.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_floc=&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.

Tracking No.: 181678

*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 ENERGY HOLDINGS II, LLC	District No. 08	Completion Date: 06/03/2017
Field Name PHANTOM (WOLFCAMP)	Drilling Permit No. 823434	
Lease Name UL YANKEE BOY 18-17	Lease/ID No. 49293	Well No. 1H
County WARD	API No. 42- 475-37204	

**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). \_\_\_\_\_

Heather Dahlgren  
 \_\_\_\_\_  
 Signature  
 FELIX ENERGY HOLDINGS II, LLC  
 \_\_\_\_\_  
 Name (print)

Felix Admin Services  
 \_\_\_\_\_  
 Title  
 (720) 974-2069  
 \_\_\_\_\_  
 Phone  
 10/25/2017  
 \_\_\_\_\_  
 Date

-FOR RAILROAD COMMISSION USE ONLY-



Leam Drilling Systems  
2027 A Airport Rd, Conroe, Tx

UL Yankee Boy 18-17 1H  
Scale 1":100' - MD  
4/11/2017 10:16 AM

Oper. Company: Felix Energy  
Well: UL Yankee Boy 18-17 1H  
Field:  
Rig:  
Well ID: 42475372040000  
Job Number: MD-170173

State: Texas  
County: Ward  
Country: USA  
Location: Ward County, Tx  
Start Date: 03/13/2017 16:20:42  
End Date: 04/11/2017 07:23:55

Latitude: 31° 33' 1.116 N  
Longitude: 103° 10' 8.441 W

Elev GL: 2656.5'  
Elev DF: 25'  
Elev KB: 2681.5

Operator 1: Kris Hurt

Operator 2: Jonathan Larkin

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	E1SEX / DG144	E1SEX/DG144	E8230/G1824	E1SEX/DG144	E1714/DG123
Bit Size	17 1/4	12 1/4	12 1/4	12 1/4	9 7/8
Cal Factor	2	2	2	2	2
Survey Offset	60.00	60.00	58.00	58.00	58.00
Gamma Offset	52.00	52.00	50.00	50.00	50.00
Resistivity Offset	0.00	0.00	0.00	0.00	0.00
Start Depth	12220.00	1220.00	1462.00	3076.00	5025.00
StartDate	3/13/2017	3/13/2017	3/13/2017	3/15/2017	3/17/2017
StartTime	16:49	18:00	18:04	18:08	17:12
EndDepth	1220.00	1462.00	3076.00	5025.00	6447.00
EndDate	3/12/2017	3/13/2017	3/15/2017	3/16/2017	3/22/2017
EndTime	00:00	00:00	00:00	00:00	00:00
Mud Type	WBM	WBM	WBM	WBM	WBM
Mud Weight	10	10	10	10	8.8
Funnel Viscosity	29	28	28	29	28
Plastic Viscosity	1	1	1	1	1.2
Yield Point	1	1	1	1	1
Gel Strength	1	1	1	1	1
Solids Content	8	7.5	7	8.5	4
Sand Content	0	0	0	0	0
Mud Alkalinity	.85	.91	.82	.71	.39
Filtrate Alkalinity	.25	.8	.3	.4	.15
Chlorides	130000	130000	127000	154000	48000
Temperature	73	95	138	145	148

Tool Run Data	Run #6	Run #7	Run #8	Run #9	Run #10
Tool S/N	E1SEX/GC2062	E0001/DG60	E1SEX/DG59	E1831/DG09	E1831/DG01
Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8
Cal Factor	2	2	2	2	2
Survey Offset	56.00	58.00	60.00	60.00	57.00
Gamma Offset	48.00	50.00	50.00	50.00	51.00
Resistivity Offset	0.00	0.00	0.00	0.00	0.00
Start Depth	6447.00	6517.00	6864.00	7662.00	8623.00
StartDate	3/22/2017	3/24/2017	3/25/2017	3/27/2017	3/27/2017
StartTime	14:17	14:20	14:23	14:31	15:49
EndDepth	6517.00	6864.00	7662.00	8623.00	8643.00
EndDate	3/24/2017	3/25/2017	3/26/2017	3/28/2017	3/28/2017
EndTime	00:00	00:00	00:00	00:00	00:00
Mud Type	WBM	WBM	WBM	WBM	WBM
Mud Weight	8.8	8.8	8.9	8.8	8.8
Funnel Viscosity	27	29	29	26	26
Plastic Viscosity	1.3	1	1.2	1.3	1.2
Yield Point	1	1	1	1	1
Gel Strength	1	1	1	1	1
Solids Content	4.85	4.4	4.72	4.7	4.8
Sand Content	0	0	0	0	0
Mud Alkalinity	.43	.44	.41	.39	.32
Filtrate Alkalinity	.15	.20	.30	.50	.6
Chlorides	50000	51000	52000	54000	55000
Temperature	148	148	146	146	146

Tool Run Data	Run #11	Run #12	Run #13	Run #14	Run #15
Tool S/N	E1SEX/DG59	E1831/DG01	E1SEX/DG59	BE1831/DG01	E12LX/DG118
Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8
Cal Factor	2	2	2	2	2
Survey Offset	57.00	57.00	57.00	53.00	50.00
Gamma Offset	51.00	51.00	51.00	57.00	54.00
Resistivity Offset	0.00	0.00	0.00	0.00	0.00
Start Depth	8643.00	8866.00	11663.00	13185.00	14232.00
StartDate	3/28/2017	3/29/2017	4/3/2017	4/6/2017	4/8/2017
StartTime	15:53	15:56	15:58	07:15	07:18
EndDepth	8866.00	11663.00	13185.00	14232.00	15100.00
EndDate	3/29/2017	3/31/2017	4/6/2017	4/8/2017	4/9/2017
EndTime	00:00	00:00	00:00	00:00	00:00
Mud Type	WBM	WBM	OBM	OBM	OBM
Mud Weight	8.8	8.8	12.35	12.4	12.5
Funnel Viscosity	25	26	59	61	63
Plastic Viscosity	1.1	1.2	18	20	21
Yield Point	1	1	6	5	6
Gel Strength	1	1	6	5	6
Solids Content	4.9	4.7	24	26	25
Sand Content	0	0	0	0	0
Mud Alkalinity	.38	.45	.6	.7	.6
Filtrate Alkalinity	.5	.5	2.53	2.4	5.50
Chlorides	56000	56500	12000	33000	34000
Temperature	146	160	176	183	

Tool Run Data	Run #16	Run #17	Run #18	Run #19	Run #20
Tool S/N	BE1831/DG01				
Bit Size	9 7/8				
Cal Factor	2				
Survey Offset	48.00				
Gamma Offset	52.00				
Resistivity Offset	0.00				
Start Depth	15100.00				
StartDate	4/9/2017				
StartTime	07:20				
EndDepth	16440.00				
EndDate	4/11/2017				
EndTime	00:00				
Mud Type	OBM				
Mud Weight	12.6				
Funnel Viscosity	64				
Plastic Viscosity	22				
Yield Point	5				
Gel Strength	6				
Solids Content	24				
Sand Content	0				
Mud Alkalinity	.8				
Filtrate Alkalinity	5.6				
Chlorides	33000				

Hole Data

Casing Data

Size	From	To	Size	From	To
17 1/2	0.00	1220.00	13 3/8	0.00	1208.00
12 1/4	1220.00	5025.00	10 3/4	1208.00	5006.00
9 7/8	5025.00	10623.00	9 5/8	5006.00	10614.00
6 3/4	10623.00	16440.00	5 1/2	10614.00	16440.00

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from an interpretation made by any of our officers, agents, or employees.



**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.: 181678

1. Field name exactly as shown on proration schedule <b>PHANTOM (WOLFCAMP)</b>		2. Lease name as shown on proration schedule <b>UL YANKEE BOY 18-17</b>					
3. Current operator name exactly as shown on P-5 Organization Report <b>FELIX ENERGY HOLDINGS II, LLC</b>		4. Operator P-5 no. <b>265322</b>	5. Oil Lse/Gas ID no. <b>49293</b>	6. County <b>WARD</b>	7. RRC district <b>08</b>		
8. Operator address including city, state, and zip code <b>FELIX ENERGY 1530 16TH ST SUITE 500 DENVER, CO 80202</b>		9. Well no(s) (see instruction E) <b>1H</b>			11. Effective Date <b>06/03/2017</b>		
		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
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 checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <input type="checkbox"/> other well (specify) _____ 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 type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X	X	TARGA DELAWARE LLC(836022)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
LION OIL TRADING & TRANS, LLC(501751)						100.0	
<b>RRC USE ONLY:</b> Reviewer's initials: <u>RRC Staff</u> Approval date: <u>03/16/2018</u>							
<b>15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.</b> 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	
<b>16. CURRENT OPERATOR CERTIFICATION.</b> 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.							
FELIX ENERGY HOLDINGS II, LLC				Heather Dahlgren			
Name (print)				Signature			
Felix Admin Services				<input checked="" type="checkbox"/> Authorized Employee of current operator		<input type="checkbox"/> Authorized agent of current operator (see instruction G)	
Title				Date		Phone with area code	
heatherd@felix-energy.com				10/25/2017		(720) 974-2069	
E-mail Address (optional)				Date		Phone with area code	





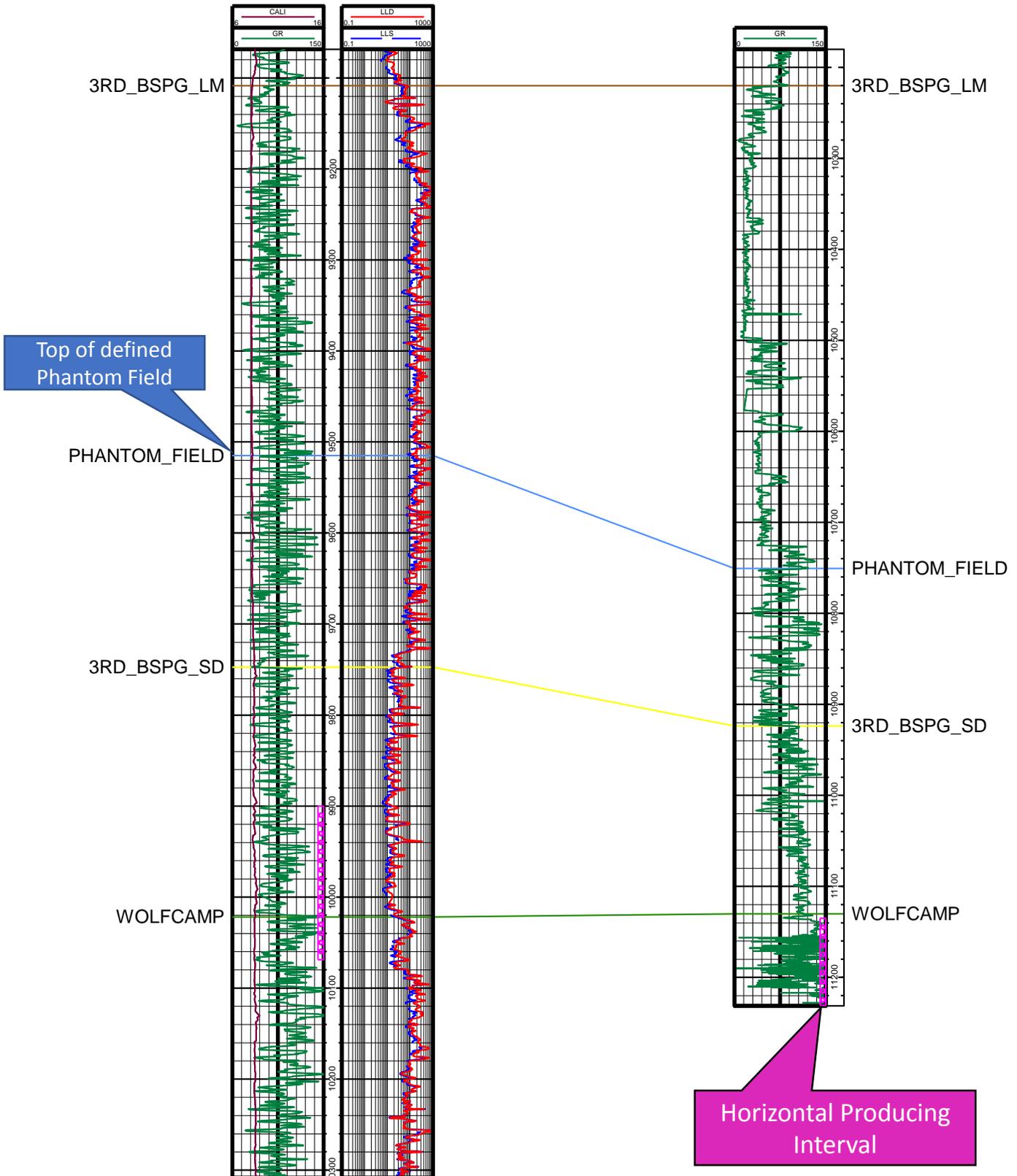
Felix - UL Yankee Boy - Producing Field



SILVERBACK OPER LLC  
OXY FEE `24` 1  
42389326370000



FELIX ENERGY HOLDINGS II, LLC  
UL YANKEE BOY 18-17 1H  
42475372040000



## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 02 March 2017      **GAU Number:** 167622

<b>Attention:</b>	FELIX ENERGY HOLDINGS II, FELIX ENERGY DENVER, CO 80202	<b>API Number:</b>	
<b>Operator No.:</b>	265322	<b>County:</b>	WARD
		<b>Lease Name:</b>	UL Yankee Boy 18-17
		<b>Lease Number:</b>	
		<b>Well Number:</b>	1H
		<b>Total Vertical Depth:</b>	14000
		<b>Latitude:</b>	31.564683
		<b>Longitude:</b>	-103.174926
		<b>Datum:</b>	NAD27

**Purpose:** New Drill  
**Location:** Survey-UL; Abstract-U56; Block-17; Section-17

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 Allurosa, which is estimated to occur at a depth between 1050 and 1100 feet, must be protected.

This recommendation is applicable to all wells within a radius of 2000 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 02/24/2017. 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

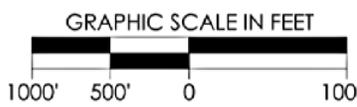
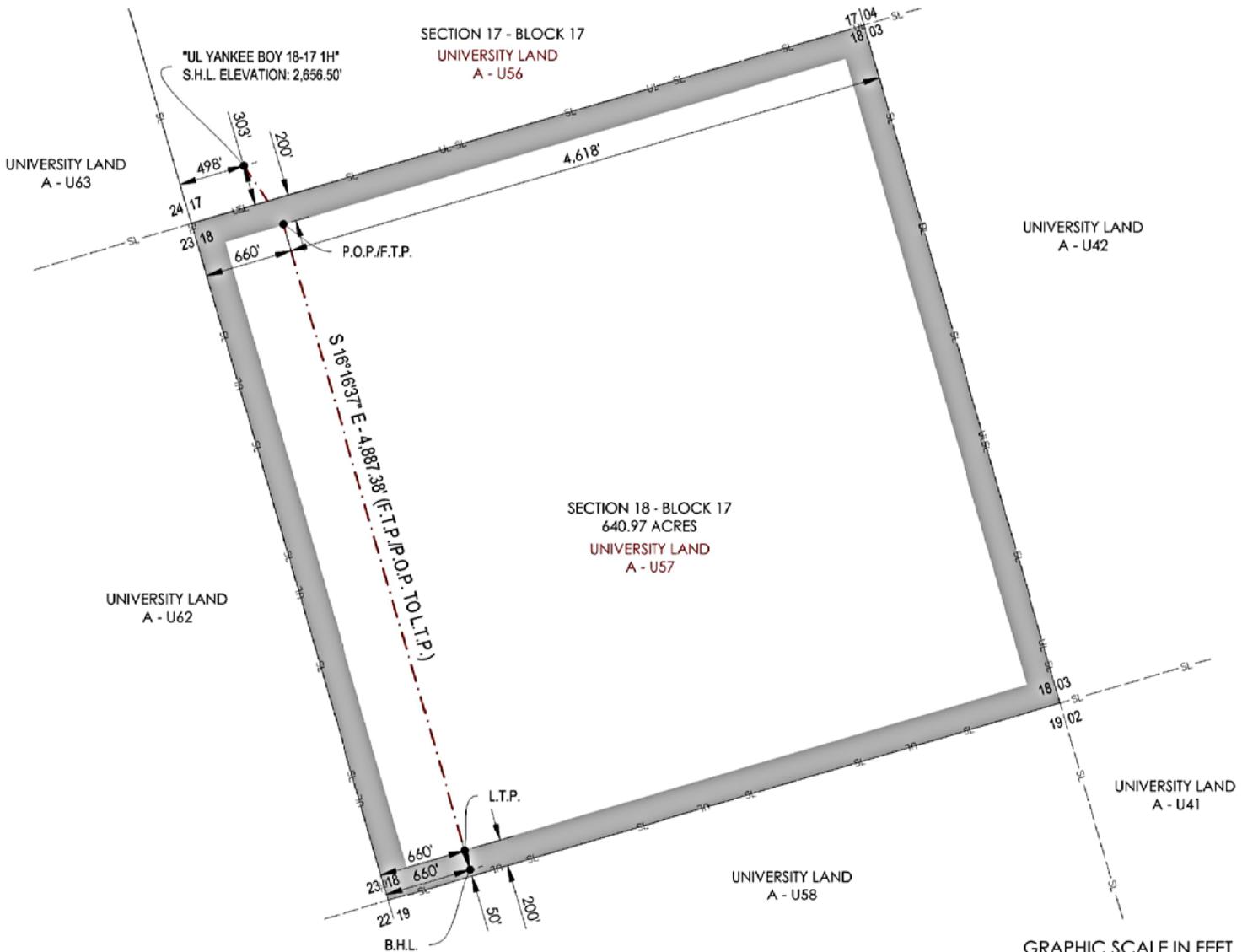
Form GW-2      P.O. Box 12967 Austin, Texas 78771-2967      512-463-2741      Internet address: www.rrc.texas.gov  
Rev. 02/2014



**WARD COUNTY, TEXAS**  
**S.H.L. 303' FSL - 498' FWL, SECTION 17, BLOCK 17**

**LEGEND**

- UNIT LINE
- - - SECTION LINE
- - - PROPOSED WELL PATH
- - - NEAREST PROPOSED WELL PATH
- 200' UNIT OFFSET
- S.H.L. SURFACE HOLE LOCATION
- P.O.P. POINT OF PENETRATION
- F.T.P. FIRST TAKE POINT
- T.P. TURNING POINT
- L.T.P. LAST TAKE POINT
- B.H.L. BOTTOM HOLE LOCATION



**OPERATOR:** FELIX ENERGY, LLC

**WELL NAME:** UL YANKEE BOY 18-17      **WELL NO:** 1H

**TOPOGRAPHIC & VEGETATION:** FLAT LOCATION WITH LOW LYING BRUSH

**GOOD DRILL SITE:** YES

**REFERENCE STAKES OR ALTERNATE LOCATION STAKES SET:** NONE

**BEST ACCESSIBILITY TO LOCATION:** FROM WEST

**WELL PATH DATA**

LINE	BEARING	DISTANCE
S.H.L. TO F.T.P./P.O.P.	S 34°05'59\" E	528.58'
F.T.P./P.O.P. TO L.T.P.	S 16°16'37\" E	4,887.38'
L.T.P. TO B.H.L.	S 16°16'37\" E	150.00'

**CALLS FROM SECTION LINE**

S.H.L.	303' FSL, 498' FWL (SEC. 17)
F.T.P./P.O.P.	200' FNL, 660' FWL (SEC. 18)
L.T.P.	200' FSL, 660' FWL (SEC. 18)
B.H.L.	50' FSL, 660' FWL (SEC. 18)

**DISTANCE & DIRECTION**  
**FROM HWY JCT OR TOWN:** ±3.43 MILES NORTHWEST OF PYOTE, TX  
**FROM THE INTERSECTION OF WALL ST. AND HIGHWAY 2355 IN PYOTE, TEXAS, TAKE HIGHWAY 2355 AND TRAVEL WEST FOR ±2.89 MILES, TURN RIGHT ON AN EXISTING LEASE ROAD AND TRAVEL FOR ±0.94 MILES, TURN RIGHT ON PROPOSED LEASE ROAD AND TRAVEL ±298 FEET TO THE WELL PAD.**

**SURFACE HOLE LOCATION:**  
 303' FSL & 498' FWL (SEC. 17)  
 GROUND ELEVATION: 2,656.50'  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701595.94, EASTING: 1115063.21  
 LATITUDE: N 31.56468260°, LONGITUDE: W -103.17492547°  
**NAD 83 TEXAS CENTRAL ZONE**  
 NORTHING: 10544171.51, EASTING: 1411529.03  
 LATITUDE: N 31.56481504°, LONGITUDE: W -103.17536673°

**LAST TAKE POINT:**  
 200' FSL & 660' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696466.83, EASTING: 1116729.32  
 LATITUDE: N 31.55070294°, LONGITUDE: W -103.16915804°

**FIRST TAKE POINT/POINT OF PENETRATION:**  
 200' FNL & 660' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701158.25, EASTING: 1115359.55  
 LATITUDE: N 31.56350049°, LONGITUDE: W -103.17393847°

**BOTTOM HOLE LOCATION:**  
 50' FSL & 660' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696322.84, EASTING: 1116771.36  
 LATITUDE: N 31.55031017°, LONGITUDE: W -103.16901134°

**UNIT CORNERS**

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32039)	GEOGRAPHIC (4267)
NW CORNER 18-17	N = 701194.49 E = 1114670.18	LAT: 31.56346923° LONG: -103.17615160°
NE CORNER 18-17	N = 702649.94 E = 1119735.10	LAT: 31.56790654° LONG: -103.16001819°
SE CORNER 18-17	N = 697589.76 E = 1121218.65	LAT: 31.55404800° LONG: -103.15484061°
SW CORNER 18-17	N = 696089.80 E = 1116151.96	LAT: 31.54962627° LONG: -103.17098037°



**CONTACT INFORMATION**  
 Shannon D. Ozment  
 Crafton Tull (10193715)  
 1000 Ledgelawn Dr.  
 Conway, AR 72034

**GENERAL NOTES**  
 1. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON REASONABLE VISUAL OBSERVATION. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREIN. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES. BEFORE EXCAVATIONS ARE BEGUN, THE OFFICES OF THE VARIOUS UTILITIES SERVICING THIS AREA SHOULD BE CONTACTED FOR THEIR UTILITY LOCATION.  
 2. BASIS OF BEARINGS: TEXAS STATE PLANE GRID, CENTRAL ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.  
 3. COMBINED SCALE FACTOR AT S.H.L. - 0.999929949  
 4. VERTICAL DATUM IS NAVD 88  
 5. AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.  
 6. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.



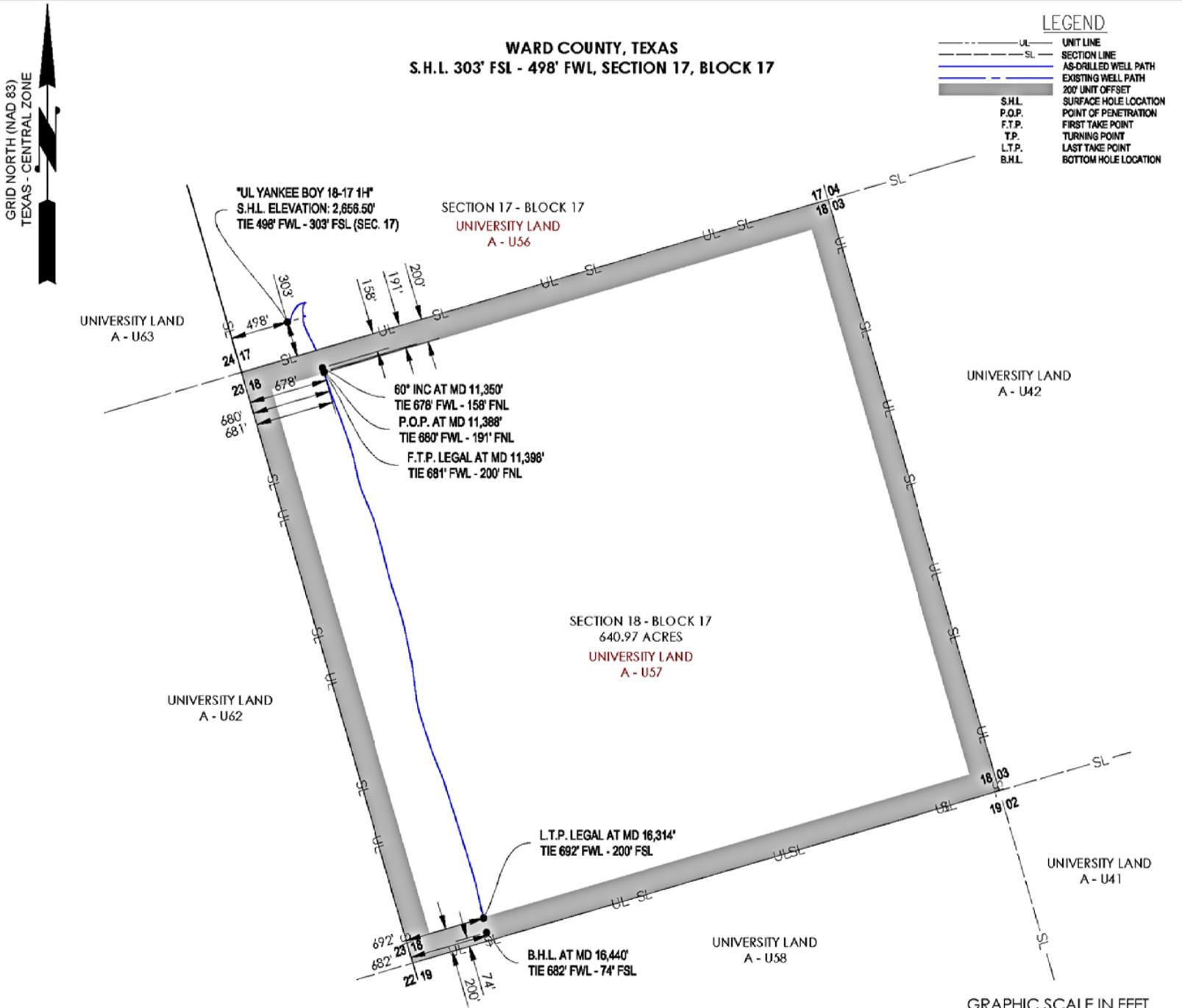
REVISION	<b>"UL YANKEE BOY 18-17 1H"</b>	
	SECTION 18, BLOCK 17 640.97 ACRES PROPOSED DRILL SITE WARD COUNTY, TEXAS	
	SCALE: 1" = 1000' PLOT DATE: 02-16-2017	CHECKED BY: DRAWN BY:
	A.LILEY	APPROVED BY: C.GRAY
		SHEET NO.: 1 OF 1



WARD COUNTY, TEXAS  
S.H.L. 303' FSL - 498' FWL, SECTION 17, BLOCK 17

LEGEND

- UNIT LINE
- - - SECTION LINE
- AS-DRILLED WELL PATH
- EXISTING WELL PATH
- 200' UNIT OFFSET
- S.H.L. SURFACE HOLE LOCATION
- P.O.P. POINT OF PENETRATION
- F.T.P. FIRST TAKE POINT
- T.P. TURNING POINT
- L.T.P. LAST TAKE POINT
- B.H.L. BOTTOM HOLE LOCATION



**OPERATOR:** FELIX ENERGY, LLC  
**WELL NAME:** UL YANKEE BOY 18-17 **WELL NO:** 1H  
**TOPOGRAPHIC & VEGETATION:** FLAT LOCATION WITH LOWLYING BRUSH  
**GOOD DRILL SITE:** YES **REFERENCE STAKES OR ALTERNATE LOCATION STAKES SET:** NONE  
**BEST ACCESSIBILITY TO LOCATION:** FROM WEST



**DISTANCE & DIRECTION**  
**FROM HWY JCT OR TOWN:** ±3.43 MILES NORTHWEST OF PYOTE, TX  
**FROM THE INTERSECTION OF WALL ST. AND HIGHWAY 2355 IN PYOTE, TEXAS, TAKE HIGHWAY 2355 AND TRAVEL WEST FOR ±2.89 MILES, TURN RIGHT ON AN EXISTING LEASE ROAD AND TRAVEL FOR ±0.94 MILES, TURN RIGHT ON PROPOSED LEASE ROAD AND TRAVEL ±298 FEET TO THE WELL PAD.**

**SURFACE HOLE LOCATION:**  
 303' FSL & 498' FWL (SEC. 17)  
 GROUND ELEVATION: 2,656.50'  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701595.94, EASTING: 1115063.21  
 LATITUDE: N 31.56468260°, LONGITUDE: W 103.17492547°  
**NAD 83 TEXAS CENTRAL ZONE**  
 NORTHING: 10544171.51, EASTING: 1411529.03  
 LATITUDE: N 31.56481504°, LONGITUDE: W 103.17536673°

**POINT OF PENETRATION:**  
 191' FNL & 680' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701172.49, EASTING: 1115376.54  
 LATITUDE: N 31.56354083°, LONGITUDE: W 103.17388509°

**LAST TAKE POINT:**  
 200' FSL & 692' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696475.78, EASTING: 1116759.96  
 LATITUDE: N 31.55072969°, LONGITUDE: W 103.16906043°

**FIRST TAKE POINT:**  
 200' FNL & 681' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701164.11, EASTING: 1115379.51  
 LATITUDE: N 31.56351799°, LONGITUDE: W 103.17387485°

**BOTTOM HOLE LOCATION:**  
 74' FSL & 682' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696352.25, EASTING: 1116786.21  
 LATITUDE: N 31.55039203°, LONGITUDE: W 103.16896610°

UNIT CORNERS

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32098)	GEOGRAPHIC (4297)
NW CORNER 18-17	N = 701164.49 E = 1114670.18	LAT: 31.56348923° LONG: -103.17615160°
NE CORNER 18-17	N = 702649.94 E = 1119735.10	LAT: 31.56790654° LONG: -103.16001619°
SE CORNER 18-17	N = 697569.76 E = 1121218.65	LAT: 31.55404800° LONG: -103.15484061°
SW CORNER 18-17	N = 696089.80 E = 1116151.66	LAT: 31.54962627° LONG: -103.17098037°

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 2. BASIS OF BEARINGS: TEXAS STATE PLANE GRID, CENTRAL ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.  
 3. COMBINED SCALE FACTOR AT S.H.L. - 0.999928949  
 4. VERTICAL DATUM IS NAVD 88  
 5. AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.  
 6. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.

1000 LedgeLawn Dr  
Conway, Arkansas 72034

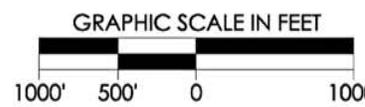
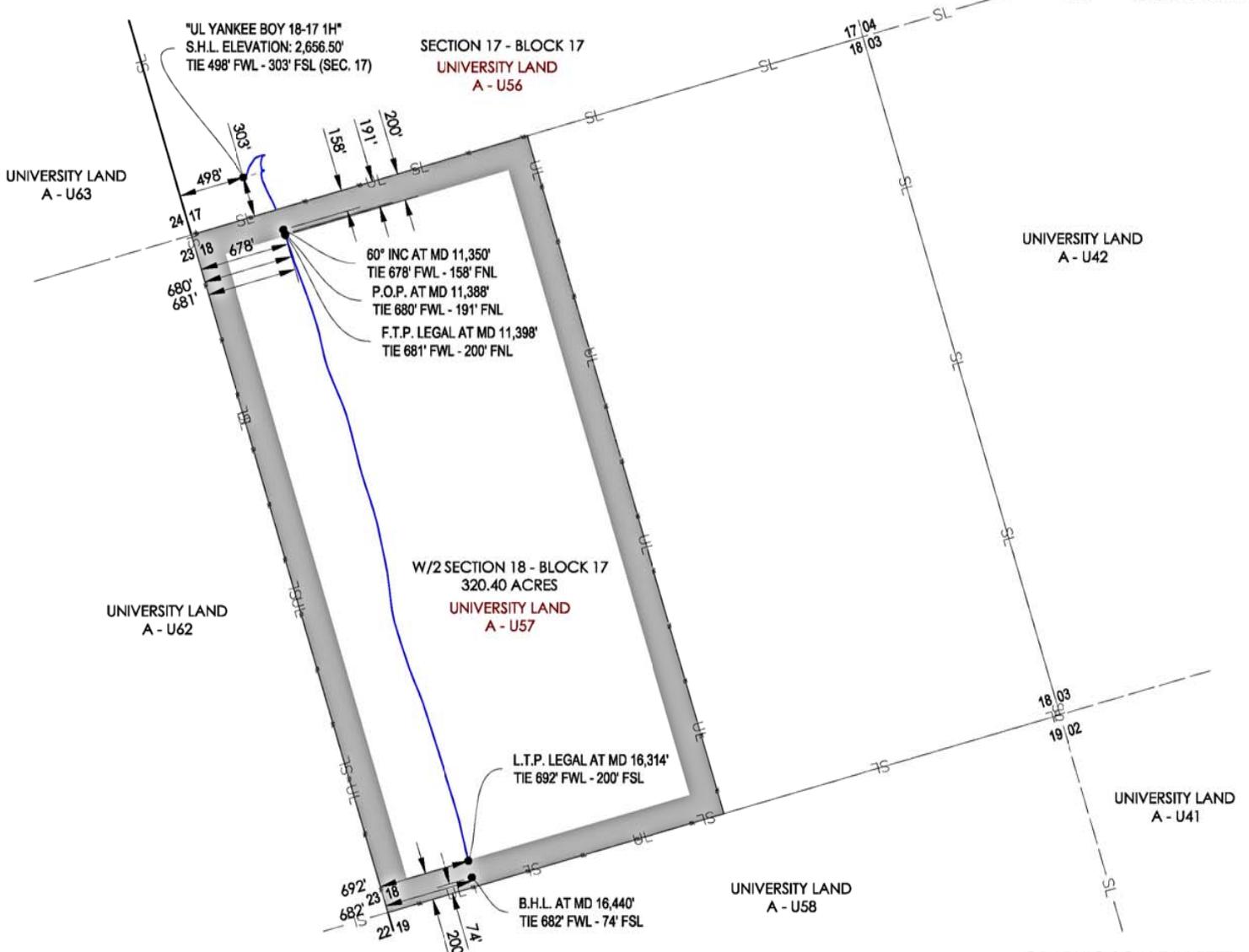
501.328.3316 f 501.328.3325 f  
www.craftontull.com

REVISION	<b>"UL YANKEE BOY 18-17 1H"</b>		
	SECTION 18, BLOCK 17 640.97 ACRES PRELIMINARY AS-DRILLED PLAT WARD COUNTY, TEXAS		
SCALE: 1" = 1000'	CHECKED BY: J.PARKER	APPROVED BY: A.LILE	
PLOT DATE: 04-12-2017	DRAWN BY: JWB	SHEET NO.: 1 OF 1	

**FELIX ENERGY HOLDINGS II  
WARD COUNTY, TEXAS  
S.H.L. 303' FSL - 498' FWL, SECTION 17, BLOCK 17**

**LEGEND**

- UL --- UNIT LINE
- SL --- SECTION LINE
- AS-DRILLED WELL PATH
- EXISTING WELL PATH
- 200' UNIT OFFSET
- S.H.L. SURFACE HOLE LOCATION
- P.O.P. POINT OF PENETRATION
- F.T.P. FIRST TAKE POINT
- T.P. TURNING POINT
- L.T.P. LAST TAKE POINT
- B.H.L. BOTTOM HOLE LOCATION



**OPERATOR:** FELIX ENERGY, LLC

**WELL NAME:** UL YANKEE BOY 18-17      **WELL NO:** 1H

**TOPOGRAPHIC & VEGETATION:** FLAT LOCATION WITH LOW LYING BRUSH

**GOOD DRILL SITE:** YES      **REFERENCE STAKES OR ALTERNATE LOCATION STAKES SET:** NONE

**BEST ACCESSIBILITY TO LOCATION:** FROM WEST

**DISTANCE & DIRECTION**  
**FROM HWY JCT OR TOWN:** ±3.43 MILES NORTHWEST OF PYOTE, TX  
 FROM THE INTERSECTION OF WALL ST. AND HIGHWAY 2355 IN PYOTE, TEXAS, TAKE HIGHWAY 2355 AND TRAVEL WEST FOR ±2.89 MILES, TURN RIGHT ON AN EXISTING LEASE ROAD AND TRAVEL FOR ±0.94 MILES, TURN RIGHT ON PROPOSED LEASE ROAD AND TRAVEL ±298 FEET TO THE WELL PAD.

**SURFACE HOLE LOCATION:**  
 303' FSL & 498' FWL (SEC. 17)  
 GROUND ELEVATION: 2,656.50'  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701595.94, EASTING: 1115063.21  
 LATITUDE: N 31.56468260°, LONGITUDE: W 103.17492547°  
**NAD 83 TEXAS CENTRAL ZONE**  
 NORTHING: 10544171.51, EASTING: 1411529.03  
 LATITUDE: N 31.56481504°, LONGITUDE: W 103.17536673°

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 191' FNL & 680' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701172.49, EASTING: 1115376.54  
 LATITUDE: N 31.56354083°, LONGITUDE: W 103.17388509°

**LAST TAKE POINT:**  
 200' FSL & 692' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696475.78, EASTING: 1116759.96  
 LATITUDE: N 31.55072969°, LONGITUDE: W 103.16906043°

**FIRST TAKE POINT:**  
 200' FNL & 681' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 701164.11, EASTING: 1115379.51  
 LATITUDE: N 31.56351799°, LONGITUDE: W 103.17387485°

**BOTTOM HOLE LOCATION:**  
 74' FSL & 682' FWL (SEC. 18)  
**NAD 27 TEXAS CENTRAL ZONE**  
 NORTHING: 696352.25, EASTING: 1116786.21  
 LATITUDE: N 31.55039203°, LONGITUDE: W 103.16896610°

**UNIT CORNERS**

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32039)	GEOGRAPHIC (4287)
NW CORNER 18-17	N = 701164.49 E = 1114870.18	LAT: 31.56346923° LONG: -103.17615160°
NE CORNER UNIT	N = 701907.23 E = 1117202.62	LAT: 31.56568814° LONG: -103.16808408°
SE CORNER UNIT	N = 696829.80 E = 1118685.24	LAT: 31.55183738° LONG: -103.16291068°
SW CORNER 18-17	N = 696089.80 E = 1116151.86	LAT: 31.54962627° LONG: -103.17098037°

**CONTACT INFORMATION:**  
 Shannon D. Ozment  
 Crafton Tull (10193715)  
 1000 Ledgelawn Dr.  
 Conway, AR 72034



**GENERAL NOTES**  
 1. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON REASONABLE VISUAL OBSERVATION. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREIN. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES. BEFORE EXCAVATIONS ARE BEGUN, THE OFFICES OF THE VARIOUS UTILITIES SERVICING THIS AREA SHOULD BE CONTACTED FOR THEIR UTILITY LOCATION.  
 2. BASIS OF BEARINGS: TEXAS STATE PLANE GRID, CENTRAL ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.  
 3. COMBINED SCALE FACTOR AT S.H.L. - 0.989929949  
 4. VERTICAL DATUM IS NAVD 88  
 5. AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.  
 6. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.



REVISION	<b>"UL YANKEE BOY 18-17 1H"</b>		
	W/2 SECTION 18, BLOCK 17 320.40 ACRES WARD COUNTY, TEXAS		
	SCALE: 1" = 1000' PLOT DATE: 02-01-2018	CHECKED BY: DRAWN BY:	J.PARKER APPROVED BY: JWB SHEET NO.: 1 OF 1