



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) & 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.):	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.)
1	2 7/8	10674	
			Packer Depth (ft.)/Type
			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	
<b>PUBLIC COMMENTS:</b> [RRC Staff 2017-11-20 11:47:46.509] EDL=4916 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well	
<b>CASING RECORD :</b>	
<b>TUBING RECORD:</b>	
<b>PRODUCING/INJECTION/DISPOSAL INTERVAL :</b> KOP: 10,635'	
<b>ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :</b>	
<b>POTENTIAL TEST DATA:</b>	

OPERATOR'S CERTIFICATION	
<b>Printed Name:</b> Heather Dahlgren	<b>Title:</b> Felix Admin Services
<b>Telephone No.:</b> (720) 974-2069	<b>Date Certified:</b> 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.: 265322  
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: ☐ Conductor ☒ Surface ☐ Intermediate ☐ Liner ☐ 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? ☒ Yes ☐ No If no for surface casing, explain in Remarks.  
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: ☒ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ 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? ☐ 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					

## III. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings  
Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:  
Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:  
Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)  
Upper: Lower: Upper: Lower:  
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used  
Upper: Lower: Upper: Lower: Upper: Lower:  
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ Yes ☐ No Setting depth tool (ft.):  
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

## SLURRY

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



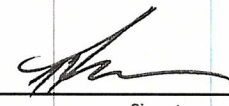
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON								
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	
Cementing Date								
Size of hole or pipe (in.)								
Depth to bottom of tubing or drill pipe (ft.)								
Cement retainer setting depth (ft.)								
CIBP setting depth (ft.)		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

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

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				ENGINEER			
Typed or printed name of operator's representative				Title		Signature	
1530 16th St Ste 500 Denver CO 80202				920-974-2071		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.

- 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 78711- 2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission. To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.





## 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:	Scalumberger	Cementor P-5 No.:	754900

## WELL INFORMATION

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

## I. CASING CEMENTING DATA

Type of casing:	<input type="checkbox"/> Conductor	<input type="checkbox"/> Surface	<input checked="" type="checkbox"/> Intermediate	<input type="checkbox"/> Liner	<input type="checkbox"/> Production
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
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.):	Top of liner (ft.):	
			5008	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

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	886	35/65POZ:C	Remarks	1789.7	4400
2	253	50/50POZ:C	Remarks	326.4	600
3					
Total	1139			2116.1	5000

## II. CASING CEMENTING DATA

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

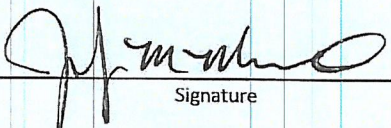


CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON								
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	
Cementing Date								
Size of hole or pipe (in.)								
Depth to bottom of tubing or drill pipe (ft.)								
Cement retainer setting depth (ft.)								
CIBP setting depth (ft.)								
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 (YES/NO)								


#### REMARKS

#1: 61ppsD903+26ppsD35+8%D44+0.13ppsD130+4%D20+0.1%D65+0.1%D13+0.02gpsD47  
 #2: 47ppsD903+37ppsD35+5%D44+0.13ppsD130+1%D20+0.25%D13+0.1%D65+0.02gpsD47  
 #3:  
 #4:

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>Johnny M. Mares, FS3</u>				<u>Schlumberger</u>			
Name and title of cementer's representative				Cementing Company		Signature	
<u>7104 W County Rd 114</u>	<u>Midland</u>	<u>TX</u>	<u>79706</u>	<u>(432) 681-1100</u>		<u>March 17, 2017</u>	
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.

<u>Robert Thurman</u>				<u>ENGINEER</u>			
Typed or printed name of operator's representative				Title		Signature	
<u>1530 16th St SE</u>	<u>Denver</u>	<u>CO</u>	<u>80202</u>	<u>720 974-2071</u>		<u>7/19/17</u>	
Address	City,	State,	Zip Code	Tel: Area Code	Number	Date: mo. day yr.	

#### Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.  
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.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).
- 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.
- 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 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:		
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:		
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 40BBLs=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 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

Typed or printed name of operator's representative Title Signature

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.

- 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 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.  
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.





## 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.:	WELFAKER BOY 18-17	API No.:	4247537204	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 type="checkbox"/> Surface	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Liner	<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If no for surface casing, explain in Remarks.		
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

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	1020		1* (REMARKS)	1224	10860
2					
3					
Total	1020			1224	10860

## 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.)	
Tapered string size of casing in O.D. (in.)	Upper:		Lower:		Tapered string no. of centralizers used	
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.)	Upper:		Lower:		Tapered string depth of drilled hole (ft.)	
Tapered string size of casing in O.D. (in.)	Upper:		Lower:		Tapered string no. of centralizers used	
Was cement circulated to ground surface (or bottom of cellar) outside casing?	<input type="checkbox"/> Yes		<input type="checkbox"/> No		Setting depth tool (ft.):	


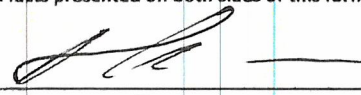


Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1					
2					
3					
Total					
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON					
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5
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.

JOSE RODRIGUEZ, FS1				Schlumberger			
Name and title of cementer's representative				Cementing Company		Signature	
1105 W BENDER	HOBBS	NM	88240	(575) 393-6186		April 14, 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.

				ENGINEER			
Typed or printed name of operator's representative				Title		Signature	
15300 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
- 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

## 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: 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: 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 slurry <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 720-974-2009

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 78712967).

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&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.

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.

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

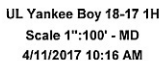
Phone

10/25/2017

Date

-FOR RAILROAD COMMISSION USE ONLY-





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

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

**Operator 2:** Jonathan Larkin

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.



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>
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) <i>(see instruction E)</i> <b>1H</b>		
			10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other <i>(see instruction A)</i>		11. Effective Date <b>06/03/2017</b>
12. Purpose of Filing. (Complete section a or b below.) <i>(See instructions B and G)</i>					
<b>a. Change of:</b> <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 _____					
<b>OR</b> <b>b. New RRC Number for:</b> <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <b>Due to:</b> <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"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)					
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). <i>(See instruction G).</i>					
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
X	X	TARGA DELAWARE LLC(836022)			Full-well stream
14. Authorized OIL or CONDENSATE Gatherer(s). <i>(See instruction G).</i>					
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
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"/> <b>Authorized Employee of previous operator</b> <input type="checkbox"/> <b>Authorized agent of previous operator</b> <i>(see instruction G)</i>		
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"/> <b>Authorized Employee of current operator</b> <input type="checkbox"/> <b>Authorized agent of current operator</b> <i>(see instruction G)</i>		
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 _____		





## RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1

Rev. 01/2016

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

<b>Operator Name:</b> Felix Energy Holdings II, LLC	<b>Operator P-5 No.:</b> 265322
<b>Operator Address:</b> 1530 16th Street, Suite 500, Denver, CO 80202	

## SECTION II. WELL INFORMATION

<b>District No.:</b> 08	<b>County:</b> Ward	<b>Purpose of Filing:</b> <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> Completion Report (Form G-1/W-2)
<b>Well No.:</b> 1H	<b>API No.:</b> 42-475-37204	
<b>Total Lease Acres:</b> 320.40	<b>Drilling Permit No.:</b> 823434	
<b>Lease Name:</b> UL Yankee Boy 18-17	<b>Lease No.:</b>	
<b>Field Name:</b> Phantom (Wolfcamp)	<b>Field No.:</b> 71052900	

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

**SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER**

[illegible]

Total Well Count >	1	320.40	< A. Total Assigned Horiz. Acreage	320.40	< C. Total Assigned Acreage
		0	< Total Remaining Horiz. Acreage	0	< Total Remaining Acreage
		0	< B. Total Assigned Vert./Dir. Acreage		
		0	< Total Remaining Vert./Dir. Acreage		

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

[illegible]

Attach Additional Pages As Needed. ☒ No additional pages ☐ Additional Pages: \_\_\_\_\_ (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Signature	Heather Dahlgren Eng Tech			heatherd@felix-energy.com	
	Name and title (type or print)			Email (include email address only if you affirmatively consent to its public release)	
1530 16th Street, Suite 500	Denver	CO	80202	720	974-2069
Address	City,	State,	Zip Code	Tel: Area Code	Number
					02/05/2018
					Date: mo. day yr.

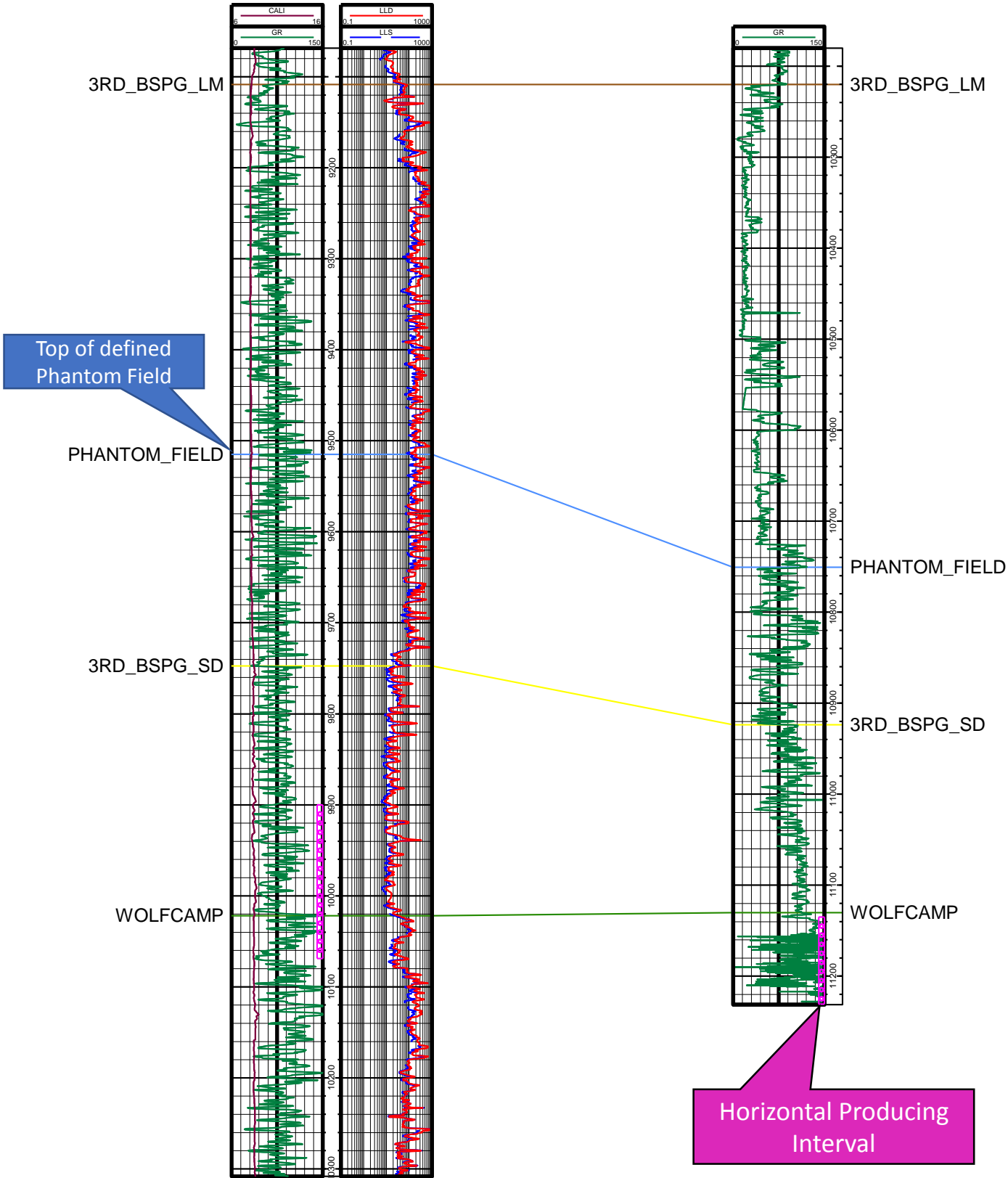
Felix - UL Yankee Boy - Producing Field



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**Attention:** FELIX ENERGY HOLDINGS II,  
FELIX ENERGY  
DENVER, CO 80202**Operator No.:** 265322**API Number:**  
**County:** WARD  
**Lease Name:** UL Yankee Boy 18-17  
**Lease Number:**  
**Well Number:** 1H  
**Total Vertical Depth:** 14000  
**Latitude:** 31.564683  
**Longitude:** -103.174926  
**Datum:** 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 Allurossa, which is estimated to occur at a depth between 1050 and 1100 feet, must be protected.

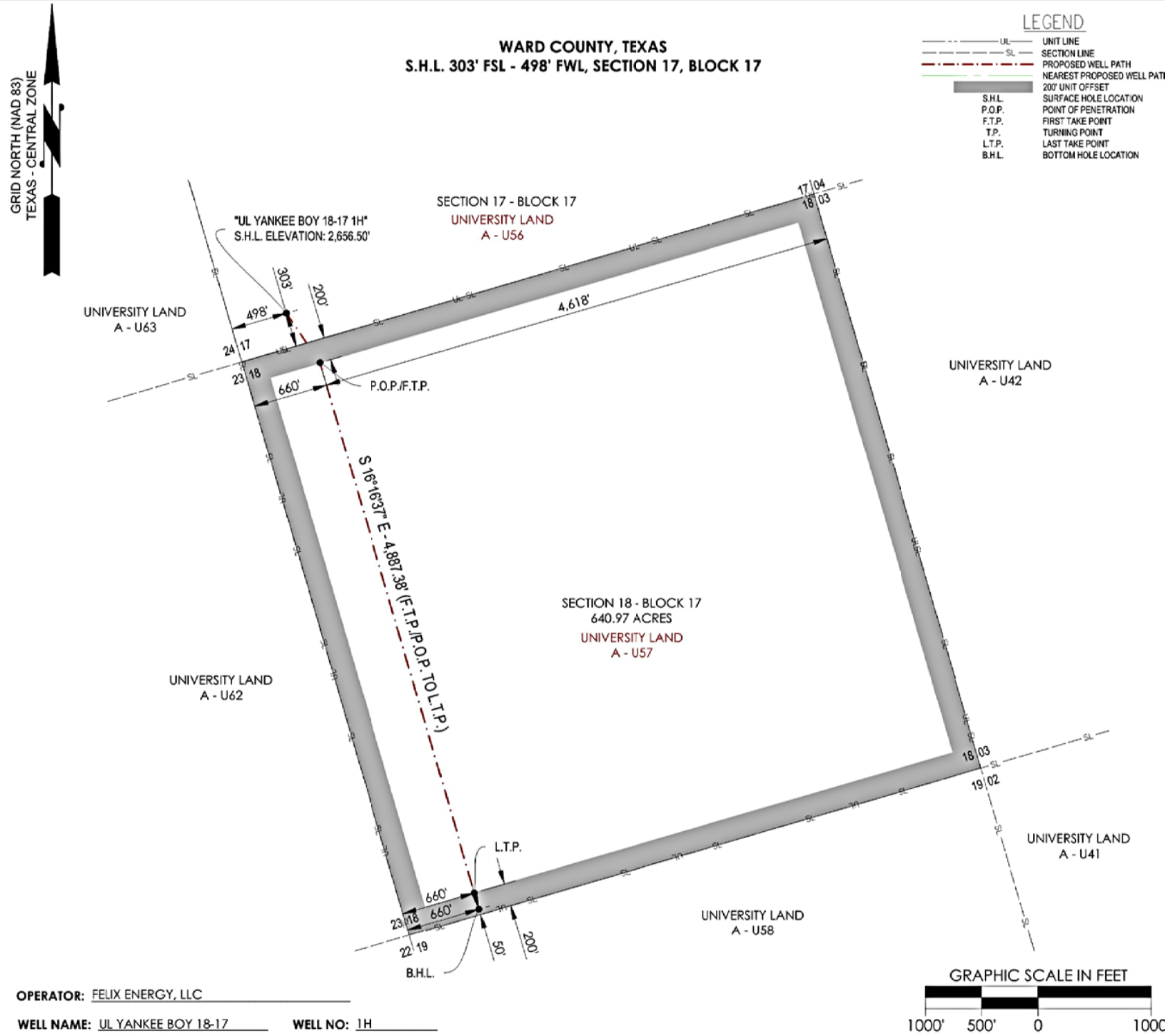
This recommendation is applicable to all wells within a radius of 2000 feet of this location.

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



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°

**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°

**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°

**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°

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)

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.

UNIT CORNERS		
LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32038)	GEOGRAPHIC (4267)
NW CORNER 18-17	N = 701154.49 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 = 1116151.86	LAT: 31.54962627° LONG: -103.17089037°



CONTACT INFORMATION

Shannon D. Ozment  
Crafton Tull (10193715)  
1000 Ledgeview Dr.  
Conway, AR 72034

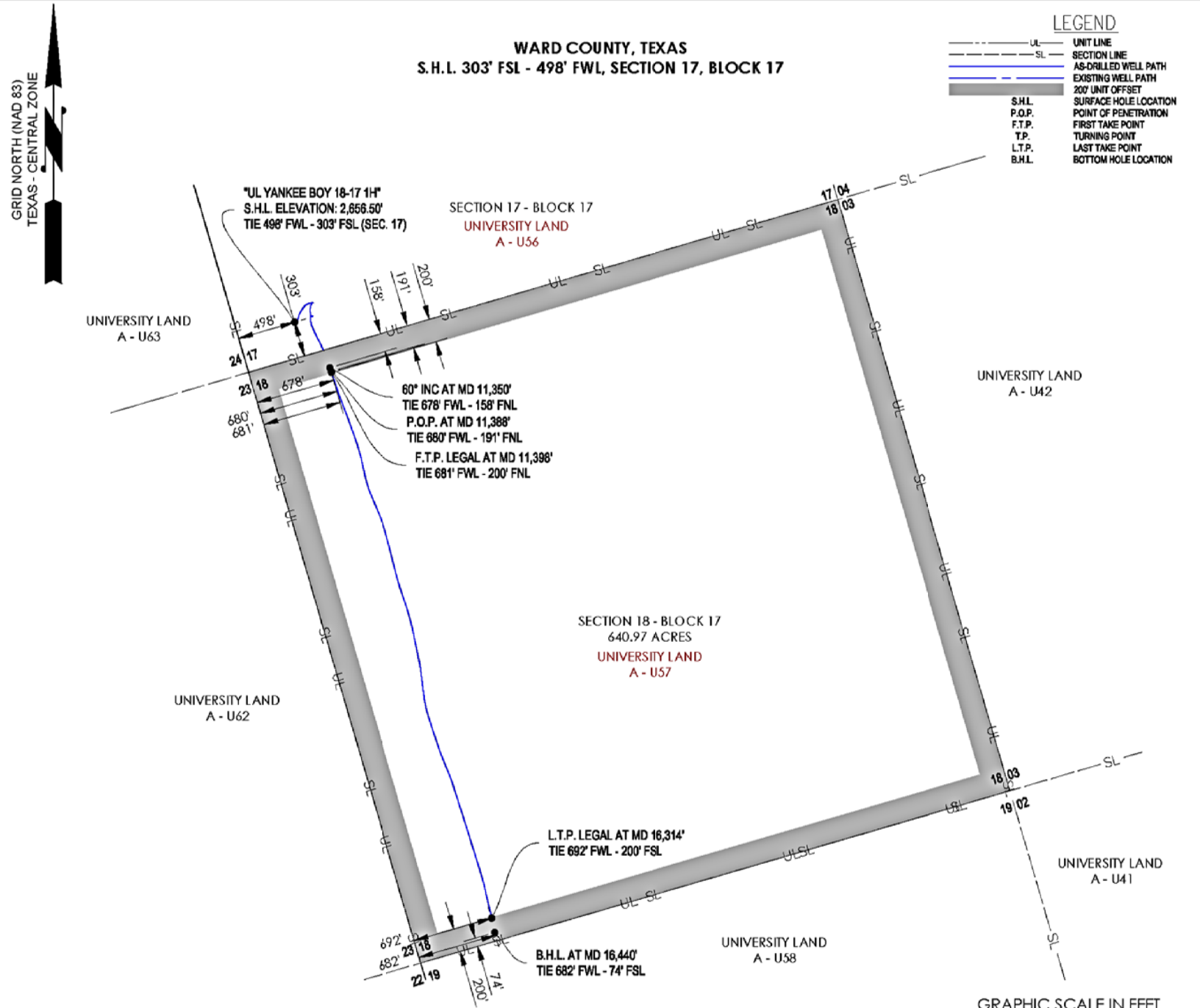
1000 Ledgeview Dr  
Conway, Arkansas 72034

**Crafton Tull**  
surveying

501.328.3316 | 501.328.3325 f  
www.craftontull.com

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





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°

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32039)	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: 31.58790654° LONG: -103.16001619°
SE CORNER 18-17	N = 697589.76 E = 1121218.65	LAT: 31.55404800° LONG: -103.15484061°
SW CORNER 18-17	N = 698039.80 E = 1116151.66	LAT: 31.54982627° LONG: -103.17089037°

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. - 0.999928949

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 Ledgecawn Dr  
Conway, Arkansas 72034

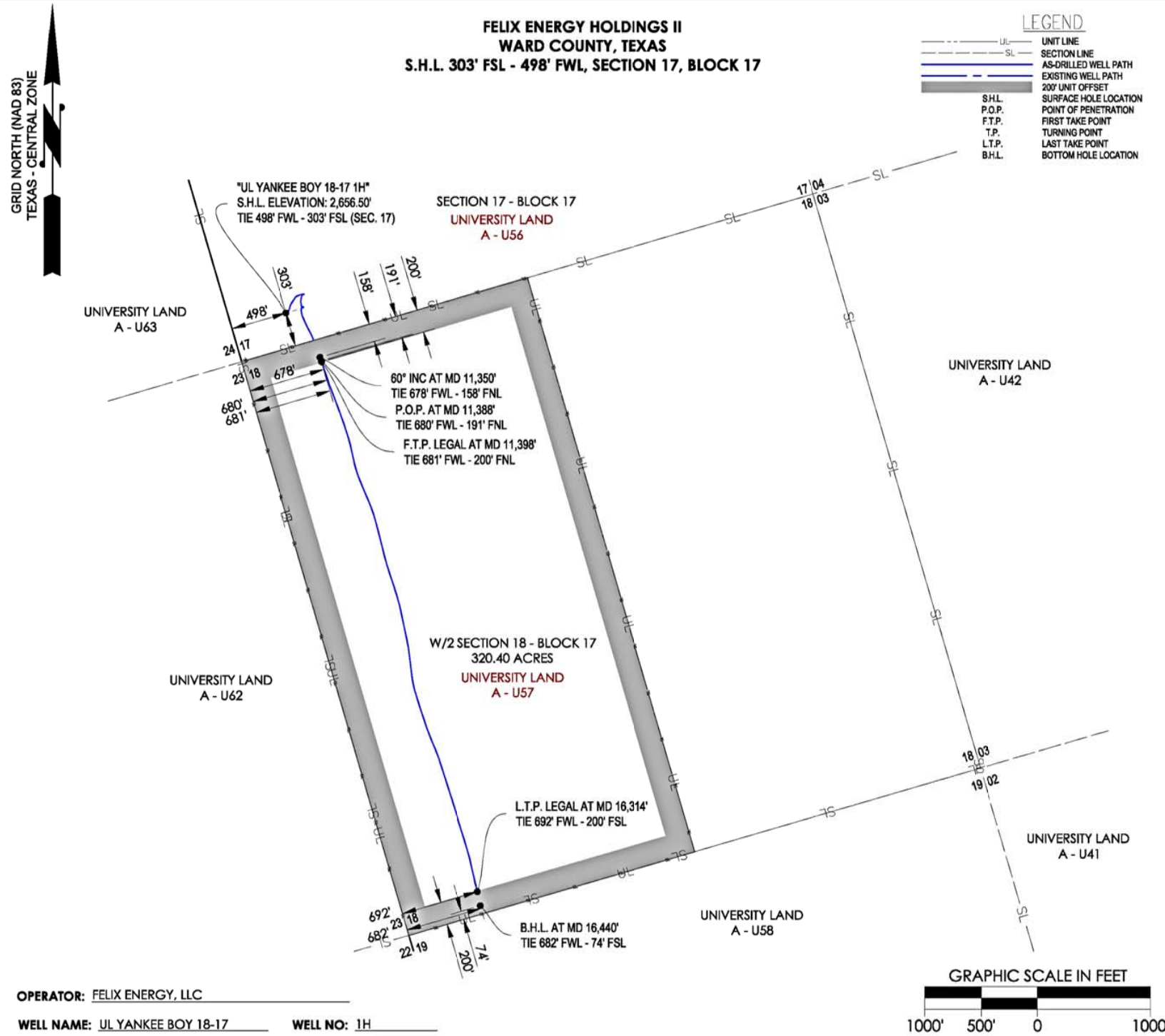
**Crafton Tull**  
surveying

501.328.3316 f 501.328.3325 f  
www.craftontull.com

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

C:\809-1 FELIX ENERGY\8901SV0042 UL YANKEE BOY 18-17 1H\UL YANKEE BOY 18-17 1H BASE & PLATS.DWG 4/12/2017 1:44:16 PM JB1296





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°

**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°

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.

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32039)	GEOGRAPHIC (4267)
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 = 1118885.24	LAT: 31.55183738° LONG: -103.16291068°
SW CORNER 18-17	N = 696089.80 E = 1116151.86	LAT: 31.54962627° LONG: -103.17098037°

CONTACT INFORMATION:  
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Conway, AR 72034



1000 LedgeLawn Dr  
Conway, Arkansas 72034

**Crafton Tull**  
surveying

501.328.331 f 501.328.3325 f  
www.craftontull.com

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

