



**RAILROAD COMMISSION OF TEXAS**

**Form W-2**

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

Status: Approved  
Date: 05/07/2018  
Tracking No.: 184608

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

**OPERATOR INFORMATION**

**Operator Name:** FORGE ENERGY, LLC      **Operator No.:** 276868  
**Operator Address:** 15727 ANTHEM PKWY STE 501 SAN ANTONIO, TX 78249-0000

**WELL INFORMATION**

**API No.:** 42-475-37120      **County:** WARD  
**Well No.:** 1H      **RRC District No.:** 08  
**Lease Name:** UL 20 TENSLEEP      **Field Name:** PHANTOM (WOLFCAMP)  
**RRC Lease No.:** 49659      **Field No.:** 71052900  
**Location:** Section: 47, Block: 20, Survey: UNIVERSITY LANDS, Abstract:  
  
**Latitude:** 31.643533      **Longitude:** -103.275684  
**This well is located**      9      **miles in a**      SW  
**direction from**      WINK,  
**which is the nearest town in the county.**

**FILING INFORMATION**

**Purpose of filing:** Initial Potential  
**Type of completion:** New Well  
**Well Type:** Producing      **Completion or Recompletion Date:** 09/06/2017  

<u>Type of Permit</u>	<u>Date</u>	<u>Permit No.</u>
Permit to Drill, Plug Back, or Deepen	05/02/2017	817618
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

**COMPLETION INFORMATION**

**Spud date:** 09/09/2016      **Date of first production after rig released:** 09/06/2017  
**Date plug back, deepening, recompletion, or drilling operation commenced:** 09/09/2016      **Date plug back, deepening, recompletion, or drilling operation ended:** 07/18/2017  
**Number of producing wells on this lease in this field (reservoir) including this well:** 7      **Distance to nearest well in lease & reservoir (ft.):** 137.0  
**Total number of acres in lease:** 1281.40      **Elevation (ft.):** 2760      GR  
**Total depth TVD (ft.):** 11976      **Total depth MD (ft.):** 16515  
**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):** 214.2  
**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:** 495.0 **Feet from the**      West **Line and**  
190.0 **Feet from the**      South **Line of the**  
UL 20 TENSLEEP **Lease.**

**FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.**

Field & Reservoir      Gas ID or Oil Lease No.      Well No.      Prior Service Type

W2:      N/A

PACKET: N/A

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

**GAU Groundwater Protection Determination**                      **Depth (ft.):** 300.0                      **Date:** 08/10/2016  
**SWR 13 Exception**    **Depth (ft.):**

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

**Date of test:** 10/09/2017    **Production method:** Flowing  
**Number of hours tested:** 24    **Choke size:** 18/64  
**Was swab used during this test?** No    **Oil produced prior to test:** 7357.00

**PRODUCTION DURING TEST PERIOD:**

**Oil (BBLs):** 452.00    **Gas (MCF):** 449  
**Gas - Oil Ratio:** 993    **Flowing Tubing Pressure:** 0.00  
**Water (BBLs):** 2578

**CALCULATED 24-HOUR RATE**

**Oil (BBLs):** 452.0    **Gas (MCF):** 449  
**Oil Gravity - API - 60.:** 44.0    **Casing Pressure:** 3179.00  
**Water (BBLs):** 2578

**CASING RECORD**

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	520		C	540	732.0	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5076		C	1350	3762.3	25	Calculation
3	Intermediate	7	8 3/4	11758		C/H	900	1662.0	5050	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
1	4 1/2	6	11073	16508	H	380	457.0	11073	Cement Evaluation Log

**TUBING RECORD**

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
N/A			/

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 12477	16282.0

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

**Was hydraulic fracturing treatment performed?** Yes  
**Is well equipped with a downhole actuation sleeve?** Yes    **If yes, actuation pressure (PSIG):** 9470.0  
**Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:** 7576    **Actual maximum pressure (PSIG) during hydraulic fracturing:** 9821  
**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.)
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## FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
RUSTLER	Yes	798.0	798.0	Yes	ESTIMATE
BELL CANYON	Yes	5092.0	5093.0	Yes	
YATES	No			No	NOT PRESENT IN DELAWARE BASIN
SEVEN RIVERS	No			No	NOT PRESENT IN DELAWARE BASIN
QUEEN	No			No	NOT PRESENT IN DELAWARE BASIN
GLORIETA	No			No	NOT PRESENT IN DELAWARE BASIN
SAN ANDRES - HIGH FLOWS, H2S, CORROSIIVE	No			No	NOT PRESENT IN DELAWARE BASIN
HOLT	No			No	NOT PRESENT IN DELAWARE BASIN
CLEARFORK	No			No	NOT PRESENT IN DELAWARE BASIN
DELAWARE	No			No	NOT PRESENT IN DELAWARE BASIN
TUBB	No			No	NOT PRESENT IN DELAWARE BASIN
WICHITA ALBANY	No			No	NOT PRESENT IN DELAWARE BASIN
CHERRY CANYON	Yes	6008.0	6009.0	Yes	
BRUSHY CANYON	Yes	7403.0	7405.0	Yes	
WADDELL	No			No	BELOW TVD
BONE SPRINGS	Yes	8465.0	8467.0	Yes	
FIRST BONE SPRING CARBONATE	Yes	8652.0	8654.0	Yes	
FIRST BONE SPRING SAND	Yes	9536.0	9539.0	Yes	
SECOND BONE SPRING	Yes	10040.0	10043.0	Yes	
SECOND BONE SPRING SAND	Yes	10291.0	10294.0	Yes	
THIRD BONE SPRING CARBONATE	Yes	10452.0	10455.0	Yes	
THIRD BONE SPRING SHALE	Yes	10927.0	10930.0	Yes	
THIRD BONE SPRING SAND	Yes	11201.0	11205.0	Yes	
WOLFCAMP	Yes	11453.0	11469.0	Yes	
MONTOYA	No			No	BELOW TVD
PENNSYLVANIAN	No			No	BELOW TVD
ATOKA	No			No	BELOW TVD
FUSSELMAN	No			No	BELOW TVD
DEVONIAN	No			No	BELOW TVD
ELLENBURGER	No			No	BELOW TVD

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 2018-01-23 15:34:18.321] EDL=3805 feet, max acres=640, PHANTOM (WOLFCAMP) oil or gas well

### CASING RECORD :

### TUBING RECORD:

6 MONTH FIELD EXCEPTION

### PRODUCING/INJECTION/DISPOSAL INTERVAL :

KOP IS 11,178'

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

### POTENTIAL TEST DATA:

## OPERATOR'S CERTIFICATION

**Printed Name:** Katrina Boyd

**Title:** Operations Assistant

**Telephone No.:** (432) 524-1301

**Date Certified:** 03/20/2018



# RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

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

## CEMENTING REPORT

### OPERATOR INFORMATION

Operator Name: FORGE ENERGY	Operator P-5 No.: 276868
Cementor Name: HALLIBURTON ENERGY SERVICES	Cementor P-5 No.: 347151

### WELL INFORMATION

District No.: 08	County: WARD	
Well No.: 1H	API No.: 475-37120	Drilling Permit No.: 817618
Lease Name: UL 20 TENSLEEP	Lease No.:	
Field Name: Phantom (Wolfacmp)	Field No.: 71052900	

### I. CASING CEMENTING DATA

Type of casing:  Conductor  Surface  Intermediate  Liner  Production

Drilled hole size (in.): 17 1/2	Depth of drilled hole (ft.): 520	Est. % wash-out or hole enlargement: 25%
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 54.5 J-55	No. of centralizers used: 5
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 520	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 0	Calculated top of cement (ft.): 0	Cementing date: 9-10-16

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	540	C	SEE REMARKS	732	999
2					
3					
<b>Total</b>	540			732	999

### 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.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>	0			0	0

### 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.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>	0			0	0

**CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON**

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

**REMARKS**

CEMENT= CALCIUM CHLORIDE, KOL-SEAL CEMENT TO SURFACE 60 BBLS 248 SACKS

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.

**LOUIS GENOVESI SERVICE SUPERVISOR**

**Halliburton**



Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

9-10-16

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.

**Katrina Boyd**

**Operations Assistant II**



Typed or printed name of operator's representative

Title

Signature

15727 ANTHEM PARKWAY, SUITE 501 SAN ANTONIO, TX 78249

432-219-3638

01/09/2018

Address City, State, Zip Code Tel: Area Code Number Date: mo. day yr.

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

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

- A. **What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.  
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. **Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.  
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



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## Form W-15

Rev. 08/2014

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

### CEMENTING REPORT

OPERATOR INFORMATION	
Operator Name: FORGE ENERGY	Operator P-5 No.: 276868
Cementer Name: HALLIBURTON	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.: 08	County: WARD	
Well No.: 1H	API No.: 475-37120	Drilling Permit No.: 817618
Lease Name: UL 20 TENSLEEP	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 checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.): 5088	Est. % wash-out or hole enlargement: 25%
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40 HCL-80	No. of centralizers used: 39
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 5076	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 4	Calculated top of cement (ft.): 25	Cementing date: 6-6-17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1195	C	SEE COMMENT	3555.56	4488
2	155	C	SEE COMMENT	206.77	599
3					
Total	1350			3762.33	5087

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

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
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SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

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	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
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Slurry volume pumped (cu. ft.)							
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Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

**REMARKS**

FORGE ENERGY LLC-EBUS UL 20 Tensleep 1H SO# 0904079467  
LEAD NEOCEM TAIL .15%HR-800 91 BBLS 182 SKS TO SURFACE

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**ERNIE BALDERAS**

**Halliburton**

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

6-6-17

Address

City, State, Zip Code

Tel: Area Code Number

Date: mo. day yr.

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**Katrina Boyd**

**Operations Assistant II**

*Katrina Boyd*

Typed or printed name of operator's representative

Title

Signature

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City, State, Zip Code

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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

## Form W-15

Rev. 08/2014

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

### CEMENTING REPORT

#### OPERATOR INFORMATION

Operator Name: FORGE ENERGY	Operator P-5 No.: 276868
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

#### WELL INFORMATION

District No.: 08	County: WARD	
Well No.: 1H	API No.: 475-37120	Drilling Permit No.: 817618
Lease Name: UL 20 TENSLEEP	Lease No.:	
Field Name: Phantom (Wolfacmp)	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.): 8 3/4	Depth of drilled hole (ft.): 11777	Est. % wash-out or hole enlargement: 25%
Size of casing in O.D. (in.): 7	Casing weight (lbs/ft) and grade: 32 HCP-110	No. of centralizers used: 25
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.): 11758	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): 5050	Cementing date: 6/16/17

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	355	C	NEOCEM TM	1010	6366
2	545	H	HALAD(R)-9/SA-1015/HR-601	652	4328
3					
<b>Total</b>	900			1662	10694

#### II. CASING CEMENTING DATA

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

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>	0			0	0

#### III. CASING CEMENTING DATA

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

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>	0			0	0

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

**REMARKS**

SO: 904087904

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.

**Christopher Peacock - Service Supervisor**

**Halliburton**

Name and title of cementer's representative

Cementing Company

6155 W. Murphy St.

Odessa, TX, 79763

*Christopher Peacock*  
Signature

432-571-8600

6/16/17

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.

**Katrina Boyd**

**Operations Assistant II**

*Katrina Boyd*  
Signature

Typed or printed name of operator's representative

Title

Signature

15727 ANTHEM PARKWAY, SUITE 501 SAN ANTONIO, TX 78249

432-219-3638

01/09/2018

Address City, State, Zip Code Tel: Area Code Number Date: mo. day yr.

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

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

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.  
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.  
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
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# RAILROAD COMMISSION OF TEXAS

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

## Form W-15

Rev. 08/2014

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

### CEMENTING REPORT

#### OPERATOR INFORMATION

Operator Name: FORGE ENERGY LLC-EBUS	Operator P-5 No.: 276868
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

#### WELL INFORMATION

District No.: 08	County: WARD	
Well No.: 1H	API No.: 475-37120	Drilling Permit No.: 817618
Lease Name: UL 20 TENSLEEP	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 checked="" type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 6	Depth of drilled hole (ft.): 16515	Est. % wash-out or hole enlargement: 25%
Size of casing in O.D. (in.): 4 1/2	Casing weight (lbs/ft) and grade: 13.5 p-110	No. of centralizers used: 17
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.): 16510	Top of liner (ft.): 11073
Hrs. waiting on cement before drill-out: 0	Calculated top of cement (ft.): 11073	Setting depth liner (ft.): 16508
		Cementing date: 7/16/2017

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	380	H	40% HALAD-344/ 0250%SA-1015/35%HR-601	457	5276
2					
3					
Total	380			457	5276

#### II. CASING CEMENTING DATA

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

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

#### III. CASING CEMENTING DATA

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

#### SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

**CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON**

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

**REMARKS**

S.O.# 0904109969

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**GUSTAVO GARZA SERVICE SUPERVISOR**

**Halliburton**

*Gustavo Garza*

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

7/16/2017

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

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**Katrina Boyd**

**Operations Assistant II**

*Katrina Boyd*

Typed or printed name of operator's representative

Title

Signature

15727 ANTHEM PARKWAY, SUITE 501 SAN ANTONIO, TX 78249

432-219-3638

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- 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.
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- 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.: 184608

*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: <b>FORGE ENERGY, LLC</b>	District No. <b>08</b>	Completion Date: <b>09/06/2017</b>
Field Name <b>PHANTOM (WOLFCAMP)</b>	Drilling Permit No. <b>817618</b>	
Lease Name <b>UL 20 TENSLEEP</b>	Lease/ID No. <b>49659</b>	Well No. <b>1H</b>
County <b>WARD</b>	API No. <b>42- 475-37120</b>	

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

Katrina Boyd  
 Signature  
FORGE ENERGY, LLC  
 Name (print)

Operations Assistant  
 Title  
(432) 524-1301      01/09/2018  
 Phone      Date

-FOR RAILROAD COMMISSION USE ONLY-



# Gamma Ray

LWD

Recorded  
MD

## Final Print

1:1200 / 1:240

Company : <b>Forge Energy</b> Well : <b>UL 20 Tensleep 1H</b> Field : <b>Phantom (Wolfcamp)</b> County : <b>Ward</b> State : <b>Texas</b> Country : <b>United States</b>	Company : <b>Forge Energy</b>		Well : <b>UL 20 Tensleep 1H</b>		Field : <b>Phantom (Wolfcamp)</b>		Rig : <b>H&amp;P 602</b>		County : <b>Ward</b>		State : <b>Texas</b>		Country : <b>United States</b>		API # : <b>42-475-37120</b>	
	Location	Latitude : <b>31° 38' 36.72" N</b>		Longitude : <b>103° 16' 32.46" W</b>		+N / -S : <b>731,082.82 ft</b>		+E / -W : <b>1,084,450.47 ft</b>								
		Other Services : <b>Directional, Temperature, IncSonde, and Rotary Steerable System</b>														
		Permanent Datum : <b>Mean Sea Level</b>		Elevation : <b>0 ft</b>		<b>above Mean Sea Level</b>		Elevation		K.B. : <b>Top Drive</b>						
Log Measured From : <b>Drill Floor</b>		Elevation : <b>2785 ft</b>		<b>above Perm. Datum</b>		D.F. : <b>2785 ft</b>										
Depth Reference : <b>Driller's Pipe Tally</b>		Total Depth MD : <b>16515 ft</b>		G.L. : <b>2760 ft</b>												
Date Logged : <b>05-Jun-17</b>		To : <b>14-Jul-17</b>		Total Depth TVD : <b>11976 ft</b>		W.D. : <b>N / A</b>										
Borehole Record				Casing Record												
Hole Size (in.)	From (MD, ft)	To (MD, ft)	Casing Size (in.)	Weight (lbm/ft)	From (MD, ft)	To (MD, ft)										
24.000	0	40	20.000	0.00	0	40										
17.500	40	520	13.375	68.00	0	520										
12.250	520	5088	9.625	40.00	0	5088										
8.750	5088	11777	7.000	32.00	0	11758										
6.000	11777	16515														
WFT Job Number		<b>12546727</b>		WFT Base		<b>Midland</b>										

### DISCLAIMER

In interpreting, communicating or providing information and/or making recommendations, either written or oral, based upon data, samples or information, or upon inferences from measurements and empirical relationships and assumptions (collectively "Analytical Services"), Contractor will give Company the benefit of Contractor's best judgment based on its experience and will perform all such Analytical Service in accordance with standard industry practices. Contractor makes no other warranty with respect to the Analytical Services, hereby disclaiming any warranty as to the adequacy, sufficiency or completeness of any data, reports, estimates, analyses, interpretations, modeling, predictions, opinions or recommendations provided in connection with the Analytical Services, all of which shall be considered advisory only. Any interpretation or test or other data, and any recommendations or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ.

**ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE ANALYTICAL SERVICES WILL BE AT THE SOLE RISK OF COMPANY. THE ANALYTICAL SERVICES, THEREFORE, SHOULD NOT BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION, OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS BASED ON THE ANALYTICAL SERVICES.**

### RUN SUMMARY

Run Number	02	03	04	05	06
Bit Type	PDC	PDC	Tri Cone	PDC	PDC
Bit Size	12.250 in.	8.750	8.750	8.750	8.750

**RAILROAD COMMISSION OF TEXAS  
OIL AND GAS DIVISION  
CERTIFICATE OF COMPLIANCE STATEWIDE RULE 36**

FORM H-9  
12/12/77

FILE WITH  
DISTRICT OFFICE  
IN TRIPLICATE

1. Operator <b>FORGE ENERGY, LLC.</b>			2. Operator Number (See Instruction 13) <b>276868</b>			3. RRC Dist. <b>08</b>				
4. Street or P. O. Box No. <b>10999 IH 10 WEST, SUITE 900</b>			5. City <b>SAN ANTONIO</b>			6. State <b>TX</b>		7. Zip Code <b>78230</b>		
8. Name of Lease, Facility or Operation <b>UL 20 TENSLEEP</b>			9. Field or Area Name <b>PHANTOM (WOLFCAMP)</b>			10. County <b>WINKLER</b>				
11. General Operation Type - Circle One: A - Oil Field Production      B - Gas Field Production C - Pipeline or Gathering Sys.      D - Gasoline Plant E - Drilling or Workover      F - Sweetening Unit G - Combination (explain)      H - Other (explain)				Other Explanation <b>NEW DRILL</b>						
12. RRC ID# of Operation(s) to be Covered by This Certificate <b>817618</b>			Type ID Code (See Instruction 12) <b>5</b>	Indicate if Filing for Storage Facility Only YES      NO <input type="checkbox"/> <input checked="" type="checkbox"/>		13. Hydrogen Sulfide Concentration <b>25000</b> PPM		14. Maximum Escape Volume <b>20</b> MCF/Day		
					15. 100 PPM Radius of Exposure (ROE) <b>65</b> Ft.		16. 500 PPM Radius of Exposure (ROE) <b>30</b> Ft.			
					17. Operation is Existing <input type="checkbox"/> New <input checked="" type="checkbox"/>		18. Modification Resulting in Certificate Change Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
					19. Workover or Drilling Well with 100 PPM ROE Greater than 3000' feet on Rule 36 Certified Well/Lease <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
					20. Previous Certificate Number if Available (For Amended Certificates)					
					21. The 100 PPM ROE includes any part of a public area except a public road			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
					22. The 500 PPM ROE includes any part of a public road			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
					23. Injection of fluid containing Hydrogen Sulfide (See Instruction 14)			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
					24. Date (or Depth) of Compliance with all applicable provisions of Rule 36 ____/____/19____ Mo      Day      Year <b>300</b> Ft. from Surface					
25. Contingency Plan Location of Plan (See Instruction 15)						Has been prepared			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
26. Location of data used to prepare this certificate (See Instruction 15) <b>SAME AS ABOVE</b>										
<b>CERTIFICATE</b>										
I declare under penalties prescribed in Section 91.143, Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision, and that I am qualified to make this certification by virtue of my training and experience, and by my analysis of the operation being certified, or by the analysis of qualified person working under my supervision, and that the data and facts stated therein are true, correct, and complete, to the best of my knowledge.										
<i>Katharina Benzel</i> Representative of Company			OPERATIONS ASSISTANT			(432) 524-1301		08/15/16		
			Title			Phone No.		Date		

**RAILROAD COMMISSION USE ONLY**

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

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

REMARKS: \_\_\_\_\_ CERTIFICATION NUMBER: \_\_\_\_\_

**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.: 184608

1. Field name exactly as shown on proration schedule <b>PHANTOM (WOLFCAMP)</b>	2. Lease name as shown on proration schedule <b>UL 20 TENSLEEP</b>			
3. Current operator name exactly as shown on P-5 Organization Report <b>FORGE ENERGY, LLC</b>	4. Operator P-5 no. <b>276868</b>	5. Oil Lse/Gas ID no <b>49659</b>	6. County <b>WARD</b>	7. RRC district <b>08</b>
8. Operator address including city, state, and zip code <b>15727 ANTHEM PKWY STE 501                  SAN ANTONIO, TX 78249</b>	9. Well no(s) (see instruction E) <b>1H</b>			11. Effective Date <b>09/06/2017</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:**  operator  oil or condensate gatherer  gas gatherer  gas purchaser  gas purchaser system code  
 field name from \_\_\_\_\_  
 lease name from \_\_\_\_\_

----- OR -----

**b. New RRC Number for:**  oil lease  gas well  other well (specify) \_\_\_\_\_ **Due to:**  new completion or recompletion  reclass oil to gas  reclass gas to oil  
 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 <i>(Attach an additional sheet in same format if more space is needed)</i>	Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
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 <i>(Attach an additional sheet in same format if more space is needed)</i>	Percent of Take
TARGA DELAWARE LLC(836022)	100.0

**RRC USE ONLY:** Reviewer's initials: RRC Staff Approval date: 05/07/2018

**15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.** Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.

Name of Previous Operator _____ Name (print) _____ Title _____	Signature <input type="checkbox"/> <b>Authorized Employee of previous operator</b> <input type="checkbox"/> <b>Authorized agent of previous operator (see instruction G)</b> _____ Date _____ Phone with area code _____
---	---

**16. CURRENT OPERATOR CERTIFICATION.** By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.

FORGE ENERGY, LLC _____ Name (print) <u>Operations Assistant</u> _____ Title <u>kboyd@forenergy.com</u> _____ E-mail Address (optional)	Katrina Boyd _____ Signature <input checked="" type="checkbox"/> <b>Authorized Employee of current operator</b> <input type="checkbox"/> <b>Authorized agent of current operator (see instruction G)</b> _____ Date <u>01/09/2018</u> _____ Phone with area code _____ _____
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# RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 2

Rev. 01/2016

## Acreage Designation

Filer is the owner or lessee of all or an undivided portion of the minerals under each tract listed below and has the legal right to drill on each tract traversed by the well that will have perforations or other take points open in the interval of the applied-for field(s). All tracts listed will actually be traversed by the wellbore or the filer has pooling authority or other contractual authority, such as a production sharing agreement, authorizing inclusion of the non-drillsite tract in the acreage assigned to the well.

SECTION V. LISTING OF ALL TRACTS CONTRIBUTING ACREAGE TO AN RRC DESIGNATED DRILLSITE DEVELOPMENTAL UNIT THAT IS NOT A SINGLE LEASE, POOLED UNIT, OR GROUP OF TRACTS UNITIZED BY CONTRACT FOR PURPOSES OF SECONDARY RECOVERY					
RRC ID No. or Lease No.	Lease Name	Beginning Lease Acreage	Allocated Lease Acreage	Ending Lease Acreage	Operator Name and Operator No. (if different from filing operator)
Total Allocated Acreage >					< Total Lease Acreage

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.

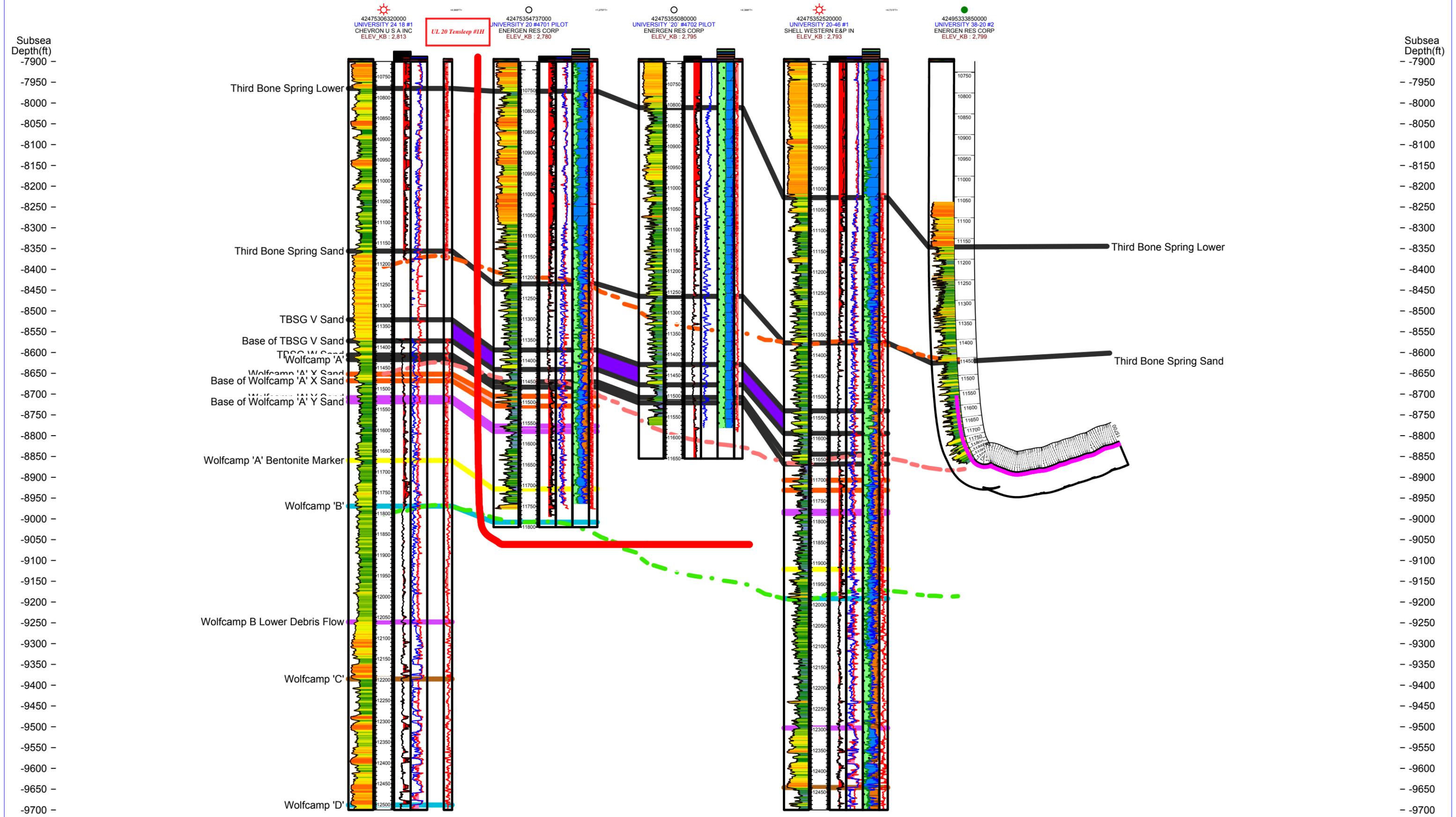
SECTION VI. LISTING OF ALL WELLS IN THE APPLIED FOR FIELD ON THE SAME ACREAGE AS THE LEASE OR POOLED UNIT DESIGNATED FOR THE TRACTS LISTED IN SECTION V BY FILER									
RRC ID No. or Lease No.	Well No.	Acres Assigned	SWR 38 Except. (Y/N)	H-Horizontal D-Directional V-Vertical	RRC ID No. or Lease No.	Well No.	Acres Assigned	SWR 38 Except. (Y/N)	H-Horizontal D-Directional V-Vertical
A. Total Wells & Acreage >					A. Total Wells & Acreage >				
B. Total Assigned Horiz. Acreage >					B. Total Assigned Horiz. Acreage >				
C. Total Assigned Vert./Dir. Acreage >					C. Total Assigned Vert./Dir. Acreage >				

**SECTION VII. REMARKS**

FORGE - PERMIAN BASIN

A

A



## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 10 August 2016 **GAU Number:** 158518

<b>Attention:</b>	FORGE ENERGY, LLC 10999 IH 10 WEST SUITE 900 SAN ANTONIO, TX 78230	<b>API Number:</b>	
<b>Operator No.:</b>	276868	<b>County:</b>	WARD
		<b>Lease Name:</b>	UL 20 TENSLEEP
		<b>Lease Number:</b>	
		<b>Well Number:</b>	1H
		<b>Total Vertical Depth:</b>	12900
		<b>Latitude:</b>	31.643533
		<b>Longitude:</b>	-103.275684
		<b>Datum:</b>	NAD27

**Purpose:** New Drill  
**Location:** Survey-UL; Block-20; Section-47

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 Alluvium, which is estimated to occur at a depth of 300 feet, must be protected.

Please send Gamma Ray/Porosity log of this well when it is available.

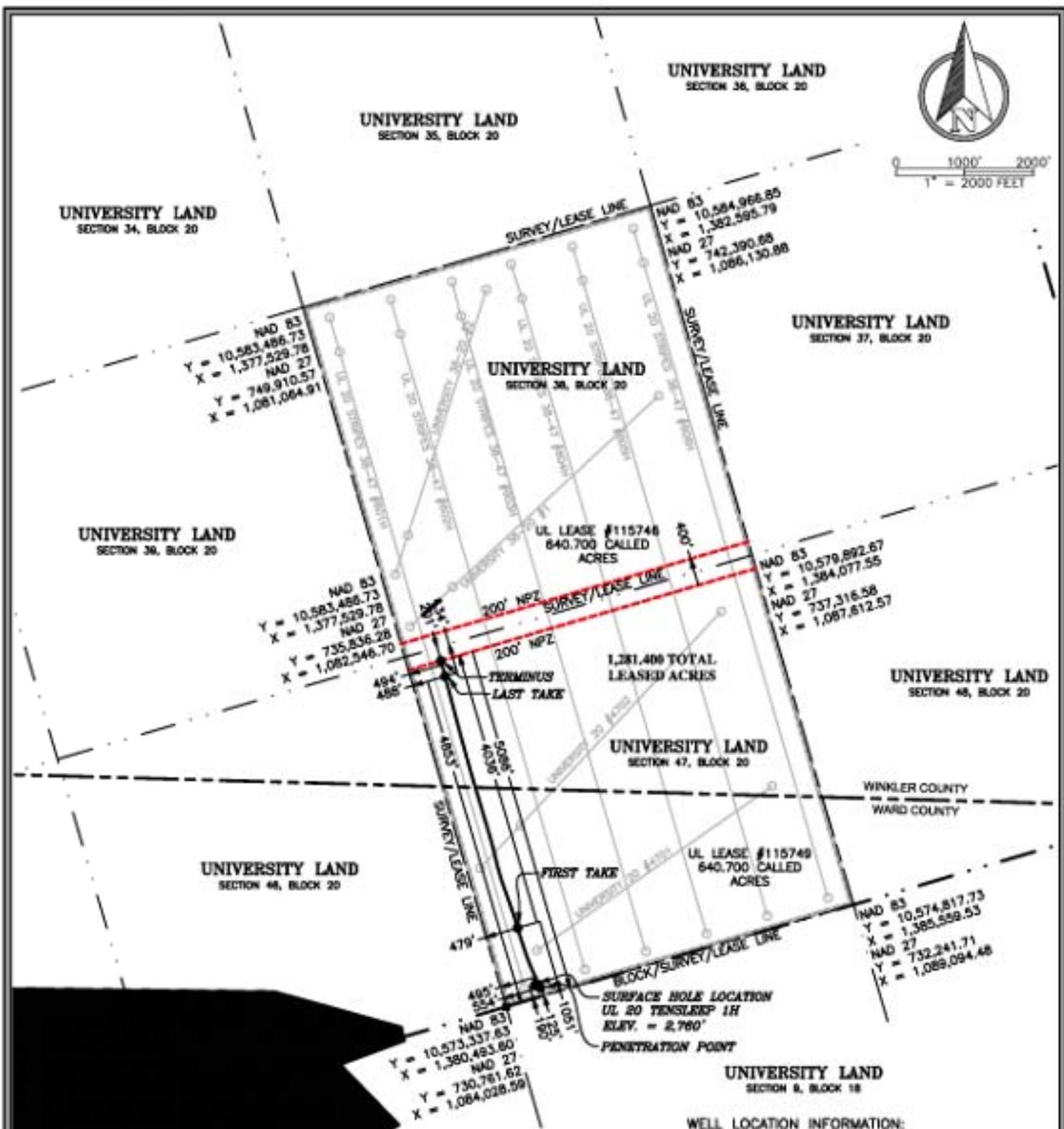
This recommendation is applicable for all wells drilled in this Section 47 on this Lease.

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

This determination is based on information provided when the application was submitted on 08/09/2016. 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



**LEGEND**

- SURVEY LINE
- - - LEASE LINE
- - - COUNTY LINE
- - - 200' NO PERF ZONE
- EXISTING ENERGEN LATERALS

**DRIVING DIRECTIONS TO LOCATION:**

FROM THE INTERSECTION OF STATE HIGHWAY 115 AND FM 1232 IN WINK, HEAD SOUTH ON STATE HIGHWAY 115 FOR 5.1 MILES. TURN RIGHT (SOUTHWEST) ONTO LITTLE JOE ROAD FOR 2.8 MILES AND TURN LEFT (WEST) ON A LEASE ROAD. HEAD WEST ON LEASE ROAD FOR 5.5 MILES AND THE LOCATION WILL BE APPROXIMATELY 0.3 MILES ON THE RIGHT (NORTHWEST).

I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.

*[Signature]*  
 MARK DILLON HARP  
 REGISTERED PROFESSIONAL LAND SURVEYOR  
 STATE OF TEXAS NO. 6445



**WELL LOCATION INFORMATION:**

<b>SURFACE HOLE LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,573,658.63, X = 1,380,915.04 LAT: N 31.64366°, LONG: W 103.27613° SHL: 495' FWL & 130' FSL	<b>BOTTOM PERF LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,578,132.48, X = 1,379,601.06 LAT: N 31.65585°, LONG: W 103.28073° BP: 485' FSL & 48' FWL
<b>NAD 22, TEXAS CENTRAL ZONE COORD'S</b> Y = 731,082.82, X = 1,084,450.47 LAT: N 31.64353°, LONG: W 103.27568°	<b>NAD 22, TEXAS CENTRAL ZONE COORD'S</b> Y = 735,556.61, X = 1,083,136.55 LAT: N 31.65573°, LONG: W 103.28029°
<b>PENETRATION POINT:</b> NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,573,612.93, X = 1,380,989.36 LAT: N 31.64354°, LONG: W 103.27589° PP: 554' FWL & 125' FSL	<b>BOTTOM HOLE LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,578,357.60, X = 1,379,541.54 LAT: N 31.65648°, LONG: W 103.28004° SHL: 508' FSL & 84' FWL BP: 201' FNL & 49' FWL
<b>NAD 22, TEXAS CENTRAL ZONE COORD'S</b> Y = 731,037.12, X = 1,084,524.79 LAT: N 31.64341°, LONG: W 103.27544°	<b>NAD 27, TEXAS CENTRAL ZONE COORD'S</b> Y = 735,781.73, X = 1,083,077.03 LAT: N 31.65635°, LONG: W 103.28050°
<b>TOP PERF LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,574,480.55, X = 1,380,658.66 LAT: N 31.64587°, LONG: W 103.27705° TP: 479' FWL & 305' FSL	
<b>NAD 22, TEXAS CENTRAL ZONE COORD'S</b> Y = 731,904.73, X = 1,084,194.10 LAT: N 31.64577°, LONG: W 103.27658°	

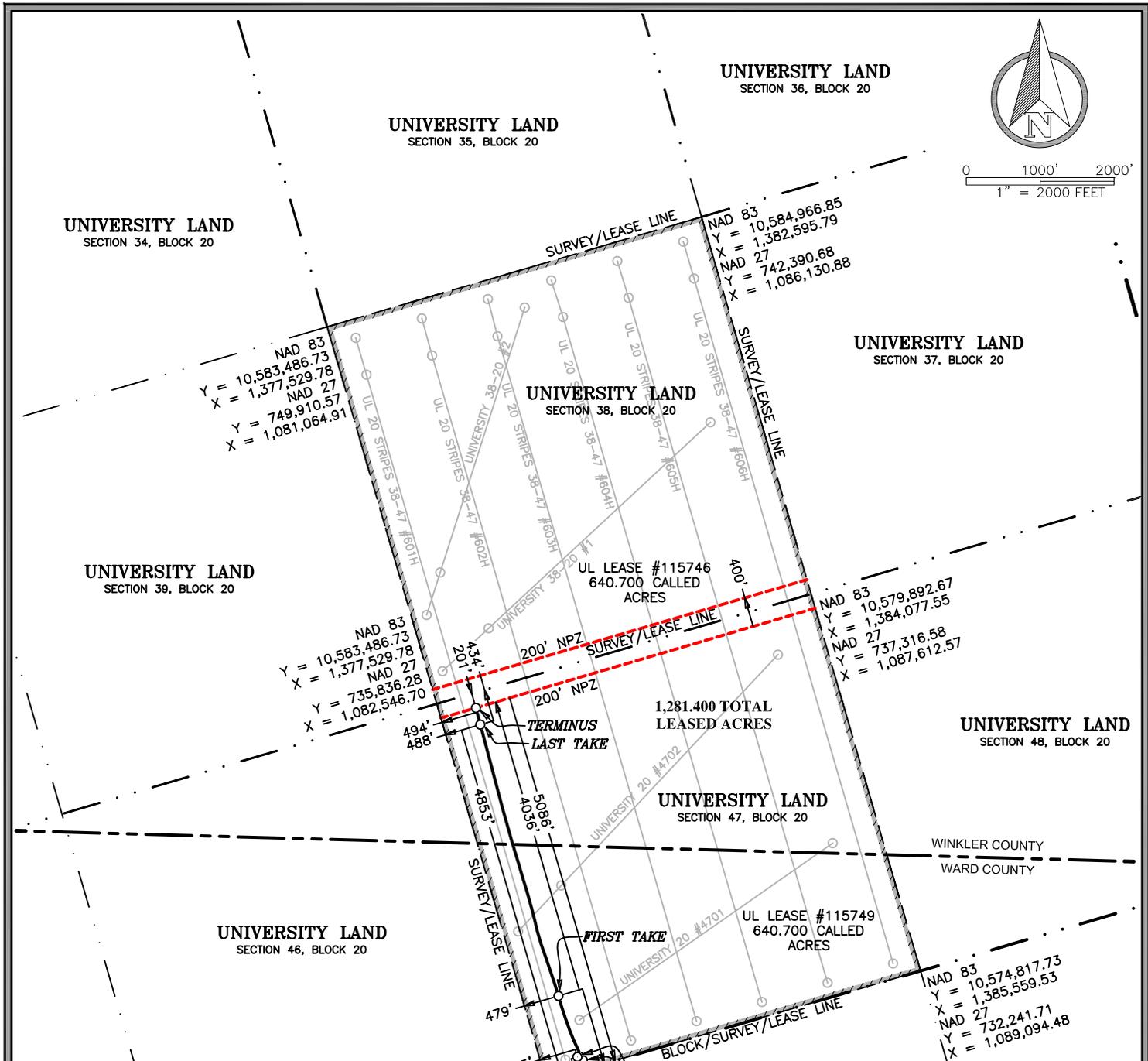
**PLAT OF:**  
 AN AS-DRILL WELL LOCATION FOR:  
**FORGE ENERGY**  
 UL 20 TENSLEEP 1H

SITUATED IN THE UNIVERSITY LAND, SECTION 47, BLOCK 20, AND BEING APPROXIMATELY 9.0 MILES SOUTHWEST OF WINK IN WINKLER AND WARD COUNTIES, TEXAS.



550 Bailey Ave., 205 - Fort Worth, TX 76107  
 Ph: 817.349.9800 - Fax: 979.732.5271  
 TBP# Firm 17957 | TBP#S Firm 10193887  
 www.fbcinc.net

DATE: 10-24-2017  
 DRAWN BY: AP/MP/CHVAI  
 CHECKED BY: CH  
 FIELD CRW: SK  
 PROJECT NO: 2016080608  
 SCALE: 1" = 2000'  
 SHEET: 1 OF 1  
 REVISION: 3



**GENERAL NOTES**

- COORDINATES SHOWN ARE BASED ON TEXAS PLANE COORDINATE SYSTEM OF NAD 27, TEXAS CENTRAL ZONE 4203
- VERTICAL DATUM IS NAVD 88
- LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN
- AREA, DISTANCES, AND COORDINATES ARE "GRID".
- UNITS ARE UNITED STATES SURVEY FOOT.
- ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

**LEGEND**

- SURVEY LINE
- LEASE LINE
- COUNTY LINE
- 200' NO PERF ZONE
- EXISTING ENERGEN LATERALS

**DRIVING DIRECTIONS TO LOCATION:**

FROM THE INTERSECTION OF STATE HIGHWAY 115 AND FM 1232 IN WINK, HEAD SOUTH ON STATE HIGHWAY 115 FOR 5.1 MILES. TURN RIGHT (SOUTHWEST) ONTO LITTLE JOE ROAD FOR 2.8 MILES AND TURN LEFT (WEST) ON A LEASE ROAD. HEAD WEST ON LEASE ROAD FOR 5.5 MILES AND THE LOCATION WILL BE APPROXIMATELY 0.3 MILES ON THE RIGHT (NORTHWEST).

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MARK DILLON HARP  
REGISTERED PROFESSIONAL LAND SURVEYOR  
STATE OF TEXAS NO. 6445



**WELL LOCATION INFORMATION:**

<b>SURFACE HOLE LOCATION:</b>		<b>BOTTOM PERF LOCATION:</b>	
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<b>PENETRATION POINT:</b>		<b>BOTTOM HOLE LOCATION:</b>	
NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,573,612.93, X = 1,380,989.36 LAT: N 31.64354°, LONG: W 103.27589° PP: 554' FWL & 125' FSL		NAD 83, TEXAS CENTRAL ZONE COORD'S Y = 10,578,357.60, X = 1,379,541.54 LAT: N 31.65648°, LONG: W 103.28094° BHL: 5086' FSLL & 494' FWLL BHL: 201' FNL & 494' FWLL	
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<b>TOP PERF LOCATION:</b>			
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NAD 27, TEXAS CENTRAL ZONE COORD'S Y = 731,904.73, X = 1,084,194.10 LAT: N 31.64577°, LONG: W 103.27658°			

**PLAT OF:**  
AN AS-DRILL WELL LOCATION FOR:  
**FORGE ENERGY**  
**UL 20 TENSLEEP 1H**

SITUATED IN THE UNIVERSITY LAND, SECTION 47, BLOCK 20, AND BEING APPROXIMATELY 9.0 MILES SOUTHWEST OF WINK IN WINKLER AND WARD COUNTIES, TEXAS.

DATE:	10-24-2017
DRAWN BY:	AP/RP/CH/AI
CHECKED BY:	DH
FIELD CREW:	BK
PROJECT NO:	2016080608
SCALE:	1" = 2000'
SHEET:	1 OF 1
REVISION:	3



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