



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 03/06/2018
Tracking No.: 183949

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.: 42-495-33782 **County:** WINKLER
Well No.: 2H **RRC District No.:** 08
Lease Name: UL 20 FLATHEAD **Field Name:** PHANTOM (WOLFCAMP)
RRC Lease No.: 48623 **Field No.:** 71052900
Location: Section: 23, Block: 20, Survey: UNIVERSITY LANDS, Abstract:

Latitude: 31.715229 **Longitude:** -103.288028
This well is located 8.9 **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: Other/Recompletion
Well Type: Producing **Completion or Recompletion Date:** 05/31/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	02/01/2017	822324
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 02/16/2017 **Date of first production after rig released:** 05/31/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 02/16/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 04/27/2017
Number of producing wells on this lease in this field (reservoir) including this well: 2 **Distance to nearest well in lease & reservoir (ft.):** 1705.0
Total number of acres in lease: 640.70 **Elevation (ft.):** 2793 GR
Total depth TVD (ft.): 12352 **Total depth MD (ft.):** 19476
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):** 352.0
Recompletion or reclass? Yes **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: 467.0 **Feet from the** East **Line and**
237.0 **Feet from the** North **Line of the**
UL 20 FLATHEAD **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.):** 300.0 **Date:** 01/20/2017
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 07/17/2017 **Production method:** Flowing
Number of hours tested: 24 **Choke size:** 21/64
Was swab used during this test? No **Oil produced prior to test:** 12163.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 582.00 **Gas (MCF):** 706
Gas - Oil Ratio: 1213 **Flowing Tubing Pressure:** 0.00
Water (BBLs): 3954

CALCULATED 24-HOUR RATE

Oil (BBLs): 582.0 **Gas (MCF):** 706
Oil Gravity - API - 60.: 35.0 **Casing Pressure:** 4113.00
Water (BBLs): 3954

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	534			C	535	728.0	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5125			NEOCEM	1365	3594.2	0	Circulated to Surface
3	Intermediate	7	8 3/4	12010			HALCEM	815	1669.9	5125	Cement Evaluation Log

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6	11460	19466	H	565	691.0	12010	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 12370	19289.0

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):** 6600.0
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 4400 **Actual maximum pressure (PSIG) during hydraulic fracturing:** 9455
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>
COLBY-QUEEN	Yes	0.0	0.0	No	NOT LOGGED
YATES	Yes	0.0	0.0	No	NOT LOGGED
QUEEN-SEVEN RIVERS	Yes	0.0	0.0	No	NOT LOGGED
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE HOLT	Yes	0.0	0.0	No	NOT LOGGED
DELAWARE	Yes	0.0	0.0	No	NOT LOGGED
GLORIETA	Yes	0.0	0.0	No	NOT LOGGED
CLEARFORK	Yes	0.0	0.0	No	NOT LOGGED
WICHITA ALBANY	Yes	0.0	0.0	No	NOT LOGGED
CANYON	Yes	0.0	0.0	No	NOT LOGGED
BONE SPRINGS	Yes	0.0	0.0	No	NOT LOGGED
MONTOYA	Yes	0.0	0.0	No	NOT LOGGED
WADDELL	Yes	0.0	0.0	No	NOT LOGGED
RUSTLER - POSSIBLE FLOW; POSSIBLE USABLE QUALITY W LAMAR	Yes	917.0	917.0	Yes	
CHERRY CANYON	Yes	5101.0	5101.0	Yes	
BRUSHY CANYON	Yes	7485.0	7486.0	Yes	
FIRST BONE SPRING CARBONATE	Yes	8842.0	8843.0	Yes	
FIRST BONE SPRING SAND	Yes	9848.0	9849.0	Yes	
SECOND BONE SPRING	Yes	10196.0	10198.0	Yes	
SECOND BONE SAND	Yes	10663.0	10665.0	Yes	
THIRD BONE SPRING SHALE	Yes	11208.0	11210.0	Yes	
THIRD BONE SPRING SAND	Yes	11458.0	11460.0	Yes	
THIRD BONE SPRING V SAND	Yes	11460.0	11458.0	Yes	
THIRD BONE SPRING W SAND	Yes	11720.0	11724.0	Yes	
WOLFCAMP	Yes	11744.0	11749.0	Yes	
ATOKA	No			No	BELOW TVD
STRAWN	No			No	BELOW TVD
PENNSYLVANIAN	No			No	BELOW TVD
MISSISSIPPIAN	No			No	BELOW TVD
DEVONIAN	No			No	BELOW TVD
SILURIAN	No			No	BELOW TVD
FUSSELMAN	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 2017-12-11 08:24:51.71] EDL=6919 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well

CASING RECORD :

TUBING RECORD:

6 MONTH EXCEPTION PER FIELD RULES

PRODUCING/INJECTION/DISPOSAL INTERVAL :

KOP IS 11570'

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: 02/23/2018



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	Operator P-5 No.: 276868
Cementer Name: Halliburton Energy Services	Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08	County: WINKLER	
Well No.: 2H	API No.: 495-33782	Drilling Permit No.: 822324
Lease Name: UL20 FLATHEAD	Lease No.:	
Field Name: PHANTOM (WOLFCAMP)	Field No.: 71052900	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 17 1/2	Depth of drilled hole (ft.): 534	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 68# K-55	No. of centralizers used: 4
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.): 534	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 5	Calculated top of cement (ft.): SURFACE	Cementing date: 2/18/17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	535	C	1% CALCIUM CHLORIDE, 3 LBM KOL-SEAL	728	999
2					
3					
Total	535			728	999

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

SLURRY

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

WE HAD PARTIAL RETURNS THROUGHOUT THE JOB AND CIRCULATED 165 SKS OF CEMENT TO SURFACE

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

CODY NELSON

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

1301 W. Webb St.

Brownfield, Tx, 79316

575-392-0700

2/18/17

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

OPS ASSISTANT

K. Boyd

Typed or printed name of operator's representative

Title

Signature

10999 IH 10 WEST, SUITE 900

SAN ANTONIO, TX 78230

210-478-5950

08/29/2017

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: WINKLER	
Well No.: 2H	API No.: 495-33782	Drilling Permit No.: 822324
Lease Name: UL 20 FLATHEAD	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.): 5136	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# HCL-80	No. of centralizers used: 40
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.): 5125	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 11	Calculated top of cement (ft.): 0	Cementing date: 3-23-17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1210	NEOCEM	NEOCEM	3388	10813.67
2	155	HALCEM C	.10% HR-800	206.15	657.98
3					
Total	1365			3594.15	11471.65

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

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

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

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

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

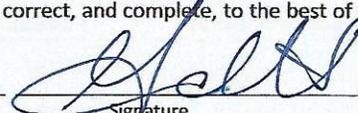
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement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

REMARKS

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GERARDO HERNANDEZ-TREVIZO

Halliburton



Name and title of cementer's representative	Cementing Company	Signature	
2311 S. First St.	Artesia, NM, 88210	575-392-0700	3-23-17
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.

<u>Tim Wilson</u>	<u>Well site</u>	
Typed or printed name of operator's representative	Title	Signature
10999 IH 10 WEST	SAN ANTONIO, TX 78230	210-478-5950
Address	City, State, Zip Code	Tel: Area Code Number
		08/29/2017
		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.

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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: H & P 602 Operator P-5 No.: 276868
Cementer Name: HALLIBURTON Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08 County: WINKLER
Well No.: #2H API No.: 495-33782 Drilling Permit No.: 822324
Lease Name: UL 20 FLATHEAD Lease No.:
Field Name: PHANTOM (WOLFCAMP) Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: [] Conductor [] Surface [x] Intermediate [] Liner [] Production
Drilled hole size (in.): 8 3/4 Depth of drilled hole (ft.): 12035 Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 7 Casing weight (lbs/ft) and grade: 32# HCP-110 No. of centralizers used: 59
Was cement circulated to ground surface (or bottom of cellar) outside casing? [] YES [x] NO
Setting depth shoe (ft.): 12010 Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 19 Calculated top of cement (ft.): 5125 Cementing date: 4/4/2017

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and Total.

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? [] YES [] NO Setting depth shoe (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and 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.) Upper: Lower: Tapered string depth of drilled hole (ft.) Upper: Lower:
Tapered string size of casing in O.D. (in.) Upper: Lower: Tapered string casing weight (lbs/ft) and grade Upper: Lower: Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? [] YES [] NO Setting depth tool (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and 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

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.

Francisco A. Bautista Service Supervisor Halliburton
 Name and title of cementer's representative Cementing Company *Francisco A. Bautista* Signature
2311 S. First St. Artesia, NM, 88210 575-392-0700 4/4/2017
 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.

KATRINA BOYD OPS ASSISTANT *K. Boyd* Signature
 Typed or printed name of operator's representative Title
10999 IH 10 WEST, SUITE 900 SAN ANTONIO, TX 78230 210-478-5950 08/29/2017
 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.



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
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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 ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08	County: MIDLAND	
Well No.: 2H	API No.: 495-33782	Drilling Permit No.: 822324
Lease Name: UL 20 FLATHEAD	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.): 19476	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 4 1/2	Casing weight (lbs/ft) and grade: 13.5# P-110	No. of centralizers used: 12
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.): 19466	Top of liner (ft.): 11460
		Setting depth liner (ft.): 19466
Hrs. waiting on cement before drill-out: 0	Calculated top of cement (ft.): 12010	Cementing date: 4/25/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	565	H	0.35% HR-601, 0.4% HALAD(R)-344	691	8037
2					
3					
Total	565			691	8037

II. CASING CEMENTING DATA

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

SLURRY

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

III. CASING CEMENTING DATA

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

SLURRY

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

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

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

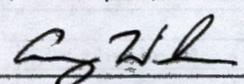
REMARKS

SO# 09039960678

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.

CASEY WILSON - SERVICE SUPERVISOR

Halliburton



Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

04/25/17

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

OPS ASSISTANT



Typed or printed name of operator's representative

Title

Signature

10999 IH 10 WEST, SUITE 900 SAN ANTONIO, TX 78230

210-478-5950

8/29/2017

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

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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.
- 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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- 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.

CHRISTI CRADDICK, CHAIRMAN
RYAN SITTON, COMMISSIONER
WAYNE CHRISTIAN, COMMISSIONER



LORI WROTENBERY
DIRECTOR, OIL AND GAS DIVISION

D. CRAIG PEARSON
DISTRICT DIRECTOR

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

OPERATOR Name: FORGE ENERGY, LLC
Address1: 10999 IH 10 WEST SUITE 900
Address2:
City: SAN ANTONIO
State: TX

RE: Lease: UL 20 FLATHEAD

Well No: 2H
Sec: 23 **Block:** 20
County: WINKLER
Survey Name: UL

SWR13EX Application Number: 18626

Drilling Permit No: 822324

SWR 13 CASING EXCEPTION APPLICATION/ALTERNATIVE REQUEST APPROVED

An extension to omit the installation of tubing in the above-referenced well is approved for a period of up to 180 days from the date the well began producing.

RRC APPROVAL BY: Jeffery Morgan

DATE: 09/09/2017

D. CRAIG PEARSON
DISTRICT DIRECTOR

Tracking No.: 183949

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: FORGE ENERGY, LLC	District No. 08	Completion Date: 05/31/2017
Field Name PHANTOM (WOLFCAMP)	Drilling Permit No. 822324	
Lease Name UL 20 FLATHEAD	Lease/ID No. 48623	Well No. 2H
County WINKLER	API No. 42- 495-33782	

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 _____ Phone 12/08/2017 _____ Date
--	---

-FOR RAILROAD COMMISSION USE ONLY-



Gamma Ray

LWD

Recorded
MD

1:1200 / 1:240

Field Print

Company : Forge Energy Well : UL 20 Flathead 2H Field : Phatom (Wolfcamp) County : Winkler State : Texas Country : United States	Company : Forge Energy Well : UL 20 Flathead 2H Field : Phatom (Wolfcamp) Rig : H&P 602 County : Winkler State : Texas Country : United States API # : 42-495-33782-00-00					
	Location	Latitude : 31° 42' 54.82" N				
		Longitude : 103° 17' 16.90" W				
		+N / -S : 757,255.13 ft				
	+E / -W : 1,081,303.00 ft					
Other Services : Directional, Temperature, Azimuthal Gamma Ray, and Rotary Steerable System.						
Permanent Datum : Mean Sea Level	Elevation : 0 ft	above Mean Sea Level	Elevation	K.B. : Top Drive		
Log Measured From : Drill Floor	Elevation : 2818 ft	above Perm. Datum		D.F. : 2818 ft		
Depth Reference : Driller's Pipe Tally				G.L. : 2793 ft		
Depth Logged : 534 ft	To : 19451 ft	Total Depth MD : 19476 ft		W.D. : N / A		
Date Logged : 20-Mar-17	To : 21-Apr-17	Total Depth TVD : 12249 ft				
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)
17.500	0	534	13.375	68.00	0	534
12.250	534	5135	9.625	40.00	0	5122
8.750	5135	12035	7.000	32.00	0	11995
6.000	12035	19476				
WFT Job Number	12381641	WFT Base	Midland			

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	01	02	03	04	05
Bit Type	PDC	PDC	Tri-cone	Tri-cone	Tri-cone
Bit Size	12.250	8.750	8.750	8.750	8.750
	in.				

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

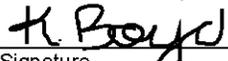
1. Field Name(s) PHANTOM (WOLFCAMP)	2. Lease/ID Number <i>(if assigned)</i>	3. RRC District Number 08
4. Operator Name Forge Energy, LLC	5. Operator P-5 Number 276868	6. Well Number 2H
7. Pooled Unit Name UL 20 FLATHEAD	8. API Number	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County WINKLER	11. Total acres in pooled unit 640.7	

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT <i>(See inst. #7 below)</i>	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
	UL LEASE #115743	320.35	<input type="checkbox"/>	<input type="checkbox"/>
	UL LEASE #115744	160.175	<input type="checkbox"/>	<input type="checkbox"/>
	UL LEASE #117994	160.175	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

CERTIFICATION:

I declare under penalties prescribed pursuant to the Sec. 91.143, Texas Natural Resources Code, that I am authorized to make the foregoing statements and that the information provided by me or under my direction on this Certificate of Pooling Authority is true, correct, and complete to the best of my knowledge.

	Katrina Boyd
Signature	Print Name
Operations Assitant	01/19/2017
Title	Date
kboyd@forgenergy.com	(432) 524-1301
E-mail <i>(if available)</i>	Phone

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

1. When two or more tracts are pooled to form a unit to obtain a drilling permit, file completion paperwork, or reform a pooled unit pursuant to Rule 38(d)(3) the operator must file an original Certificate of Pooling Authority and certified plat.
2. The certified plat shall designate each tract with an outline and a tract identifier. The tract identifier on the plat shall correspond to the tract identifier and associated information listed on the Certificate.
3. If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
4. If the Purpose of Filing is to obtain a drilling permit, in box #1 list all applicable fields separately or enter "All Fields" if the Certificate pertains to all fields requested on Form W-1.
5. If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
6. Identify the drill site tract with an * to the left of the tract identifier.
7. The total number of acres in the pooled unit in #11 should equal the total of all acres in the individual tracts listed.

Clear Form



RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1

Rev. 01/2016

Acreege Designation

SECTION I. OPERATOR INFORMATION

Operator Name: Forge Energy, LLC
Operator P-5 No.: 276868
Operator Address: 10999 IH 10 West, Suite 900; San Antonio, TX 78230

SECTION II. WELL INFORMATION

District No.: 08
Well No.: 2H
Total Lease Acres: 640.7
Lease Name: UL 20 FLATHEAD
Field Name: PHANTOM (WOLFCAMP)
County: WINKLER
API No.: 495-33782
Drilling Permit No.: 822324
Lease No.: 48623
Field No.: 71052900
Purpose of Filing: [X] Drilling Permit Application (Form W-1) [] Completion Report (Form G-1/W-2)

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.

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

Table with 8 columns: RRC ID No. or Lease No., Well No., H-Directional D-Directional V-Vertical, Lease Name, API No., Acres Assigned, SWR 38 Except. (Y/N), Operator Name and Operator No. (if different from filing operator). Contains two rows of well data.

Summary table with 4 columns: Total Well Count >, Acres, < A. Total Assigned Horiz. Acreege, < C. Total Assigned Acreege. Includes rows for Total Remaining Horiz. Acreege, Total Assigned Vert./Dir. Acreege, and Total Remaining Vert./Dir. Acreege.

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

New Well

Attach Additional Pages As Needed. [X] 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: K. Boyd
Name and title: Katrina Boyd Operations Assistant
Email: kboyd@forgenergy.com
Address: 15727 Anthem Parkway Suite 501 San Antonio TX 78249
Tel: 432 219-3638
Date: 10/19/2017

FORGE - PERMIAN BASIN

42495329930000
UNIVERSITY 20-14 A #2
POGO PROD CO
ELEV KB : 2,809

Field Name : BLOCK 0021 NORTHWEST

<5,443FT>

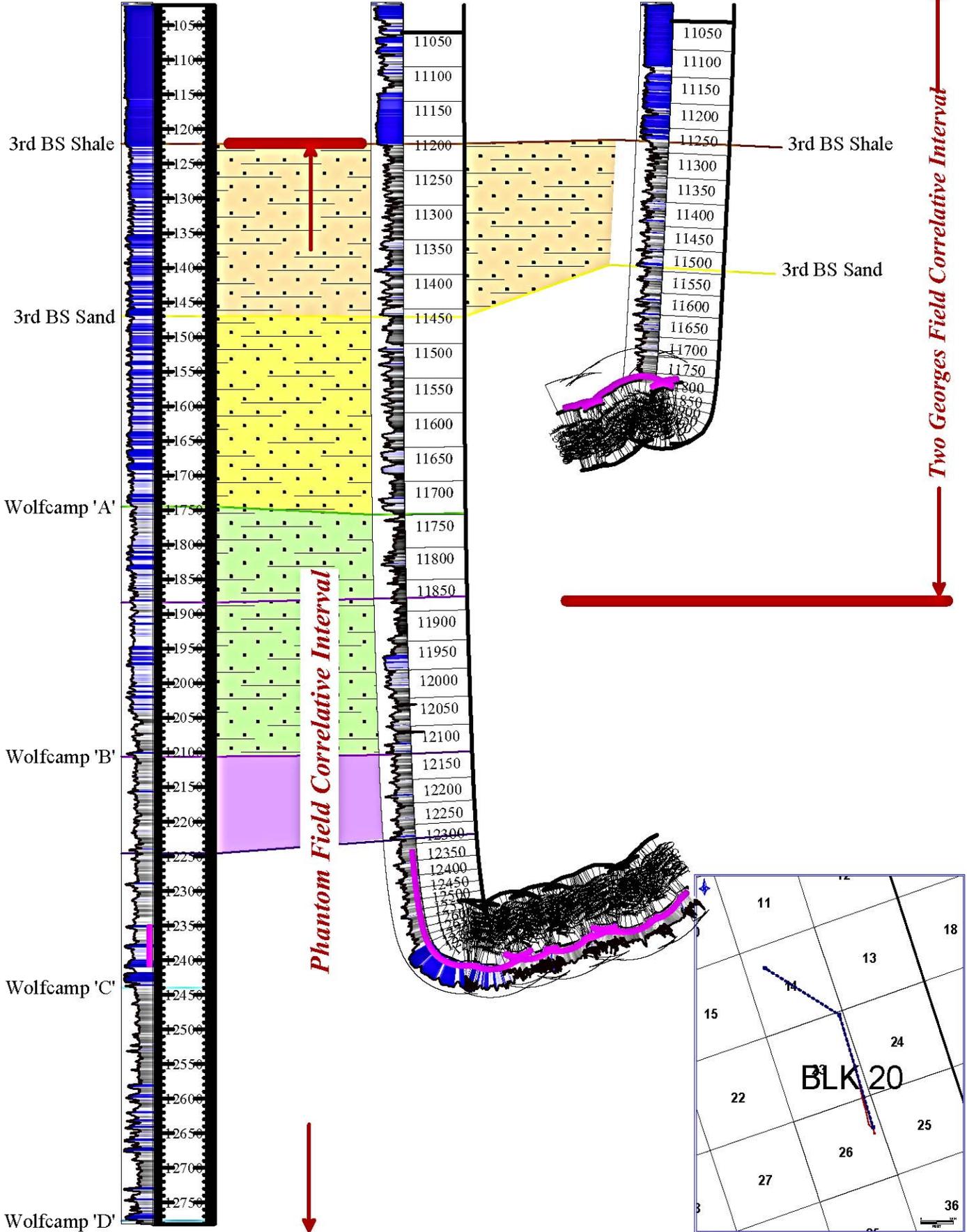
42495337820000
UL 20 FLATHEAD #2H
FORGE ENERGY LLC
ELEV KB : 2,818

Field Name : PHANTOM

<7,075FT>

42495333110000
UNIVERSITY 20-26 #1H
FORGE ENERGY, LLC
ELEV KB : 2,801

Field Name : TWO GEORGES



GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 20 January 2017 **GAU Number:** 166220

Attention:	FORGE ENERGY, LLC 10999 IH 10 WEST SUITE 900 SAN ANTONIO, TX 78230	API Number:	
Operator No.:	276868	County:	WINKLER
		Lease Name:	UL 20 FLATHEAD
		Lease Number:	
		Well Number:	2H
		Total Vertical Depth:	6700
		Latitude:	31.715229
		Longitude:	-103.288028
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UL; Block-20; Section-23

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 between 250 and 300 feet, must be protected.

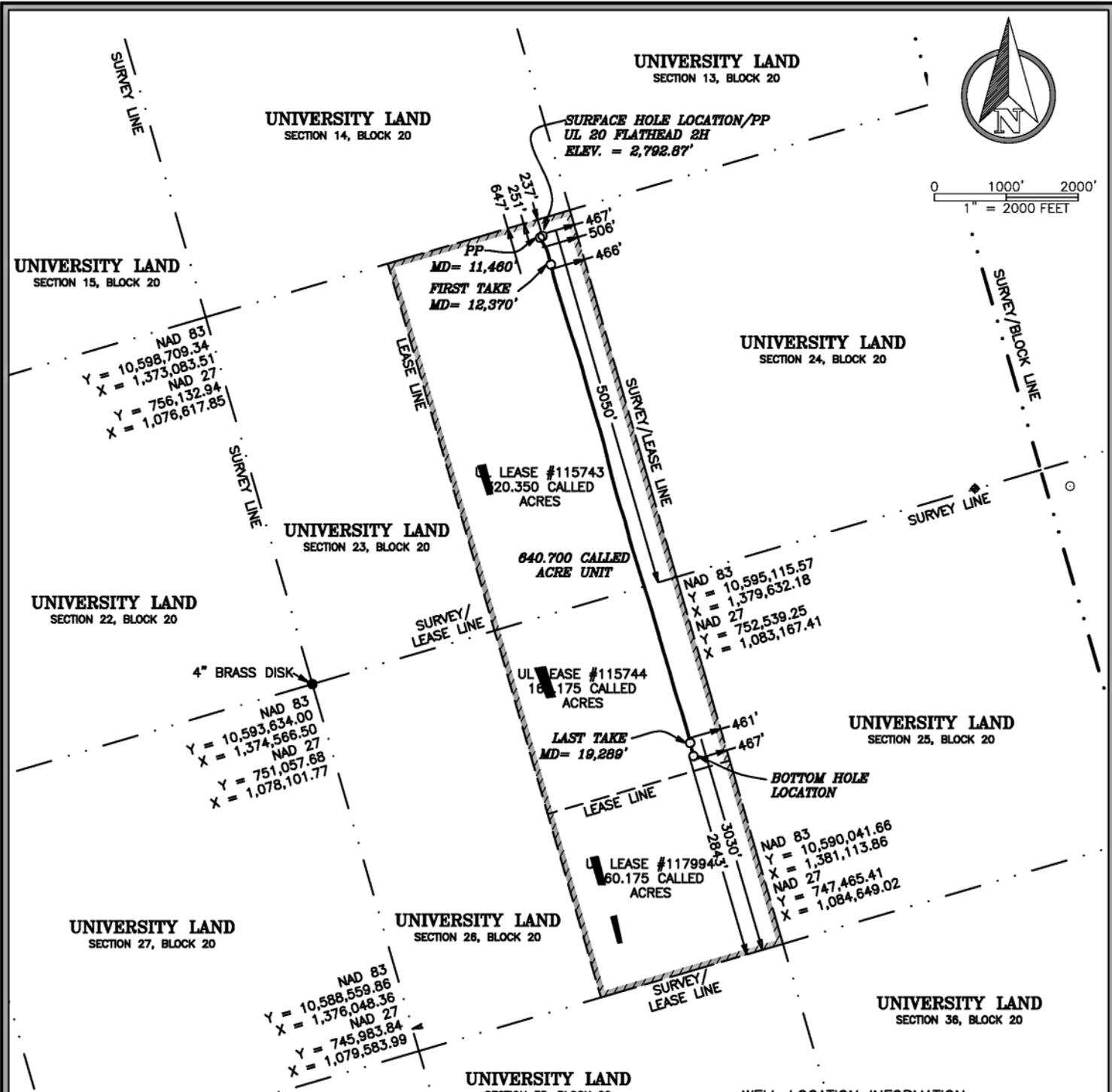
This recommendation is applicable for all wells drilled in this sec. 23.

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 01/20/2017. 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



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


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



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".

PLAT OF:
AN AS-DRILLED WELL LOCATION FOR:
FORGE ENERGY
UL 20 FLATHEAD 2H
SITUATED IN THE UNIVERSITY LAND, SECTION 23, BLOCK 20, THE UNIVERSITY LAND, SECTION 26, BLOCK 20, AND BEING APPROXIMATELY 8.9 MILES SOUTHWEST OF WINK IN WINKLER COUNTY, TEXAS.

DATE: 9-5-2017
DRAWN BY: AP/RP/JG
CHECKED BY: DH
FIELD CREW: BK/DN
PROJECT NO: 2016100922
SCALE: 1" = 2000'
SHEET: 1
REVISION: 0

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
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