



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 03/12/2018
Tracking No.: 183463

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

OPERATOR INFORMATION

Operator Name: QEP ENERGY COMPANY **Operator No.:** 684474
Operator Address: ATTN SOUTHERN DIV REGULATORY 1050 17TH ST SUITE 800 DENVER, CO 80265-0000

WELL INFORMATION

API No.: 42-317-40597 **County:** MARTIN
Well No.: S 08SC **RRC District No.:** 08
Lease Name: UNIVERSITY 7-2730 **Field Name:** SPRABERRY (TREND AREA)
RRC Lease No.: 48980 **Field No.:** 85280300
Location: Section: 27, Block: 7, Survey: UL, Abstract: U27

Latitude: **Longitude:**
This well is located 22 **miles in a** NE
direction from ANDREWS,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: New Well
Well Type: Producing **Completion or Recompletion Date:** 06/19/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen Rule 37 Exception	11/30/2016	820023
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 02/04/2017 **Date of first production after rig released:** 06/19/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 02/04/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 04/03/2017
Number of producing wells on this lease in this field (reservoir) including this well: 24 **Distance to nearest well in lease & reservoir (ft.):** 111.0
Total number of acres in lease: 963.00 **Elevation (ft.):** 2916 GR
Total depth TVD (ft.): 9542 **Total depth MD (ft.):** 17196
Plug back depth TVD (ft.): 7923 **Plug back depth MD (ft.):** 17075
Was directional survey made other than inclination (Form W-12)? Yes **Rotation time within surface casing (hours):** 77.5
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No **Multiple completion?** No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:
Location of well, relative to nearest lease boundaries **Off Lease :** Yes
of lease on which this well is located: 2582.0 **Feet from the** North **Line and**
1604.0 **Feet from the** East **Line of the**
UNIVERSITY 7-2730 **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.):** 350.0 **Date:** 08/29/2016
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 06/28/2017 **Production method:** Pumping
Number of hours tested: 24 **Choke size:**
Was swab used during this test? No **Oil produced prior to test:** 8028.58

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 1199.82 **Gas (MCF):** 809
Gas - Oil Ratio: 674 **Flowing Tubing Pressure:** 220.00
Water (BBLs): 2854

CALCULATED 24-HOUR RATE

Oil (BBLs): 1199.8 **Gas (MCF):** 809
Oil Gravity - API - 60.: 40.0 **Casing Pressure:** 180.00
Water (BBLs): 2854

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	501			C	580	488.0	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	8240	5552		C	2405	5208.0	200	Calculation
3	Intermediate	9 5/8	12 1/4	8240			C	690	1580.0	5552	Circulated to Surface
4	Conventional Production	5 1/2	8 1/2	17191			VERSACE M/SOLUC	1970	3001.4	4765	Calculation

LINER RECORD

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

TUBING RECORD

Row	Size (in.)	Depth (ft.)	Packer Depth (ft.)/Type
1	2 7/8	8974	/

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 9802	17075.0

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): 5621.0

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 10000

Actual maximum pressure (PSIG) during hydraulic fracturing: 9062

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

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)	
1	Acid	100,000 GAL 15% HCL ACID	9802	17075
2	Fracture	1,133,537 LBS 100 MESH, 8,357,471 LBS PREM WHITE, 722,073 LBS CRC	9802	17075

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
SANTA ROSA	Yes	1505.0	1505.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
YATES	Yes	3070.0	3070.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
QUEEN	Yes	4050.0	4050.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
GRAYBURG	Yes	4600.0	4600.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
SAN ANDRES - ACTIVE CO2 FLOOD; HIGH FLOWS; H2S; CO CLEARFORK	Yes	4845.0	4845.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
LEONARD	Yes	8167.0	8208.0	Yes	
CISCO	No			No	NOT ENCOUNTERED
SPRABERRY	Yes	8326.0	8368.0	Yes	
JO MILL	Yes	9179.0	9227.0	Yes	
DEAN	No			No	NOT ENCOUNTERED
WOLFCAMP	No			No	NOT ENCOUNTERED
PENNSYLVANIAN	No			No	NOT ENCOUNTERED
STRAWN	No			No	NOT ENCOUNTERED
MISSISSIPPIAN	No			No	NOT ENCOUNTERED
FUSSELMAN	No			No	NOT ENCOUNTERED
SILURIAN	No			No	NOT ENCOUNTERED
DEVONIAN	No			No	NOT ENCOUNTERED
ELLENBURGER	No			No	NOT ENCOUNTERED

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

KOP @ 9,043'
 DIRECTIONAL SURVEY ATTACHED
 LOG SUBMITTED VIA RRC ONLINE PORTAL 2/5/18

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-01-25 14:17:10.865] EDL=7273 feet, max acres=520, SPRABERRY (TREND AREA) oil well

CASING RECORD :

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

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

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed Name: Katie Biersmith

Title: Regulatory Analyst

Telephone No.: (303) 672-6907

Date Certified: 03/07/2018



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: QEP ENERGY COMPANY-EBIZ	Operator P-5 No.: 684474
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.: 08	County: MARTIN	
Well No.: 5085C	API No.: 42-317-40597	Drilling Permit No.: 820023
Lease Name: UNIVERSITY 7-2730	Lease No.: 48980	
Field Name: Spraberry (Trend Area)	Field No.: 85280300	

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.): 501	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: J-55, 68#	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.): 501	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 14.5	Calculated top of cement (ft.): Surface	Cementing date: 2/5/2017

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	580	C	1% CaCl2 / 0.25 LBM POLY-E-FLAKE	488	662
2					
3					
Total	580			488	662

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

S.O.#0903827869 CEMENT TO SURFACE 55 BBLs 230 SKS

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.

GUSTAVO GARZA SERVICE SUPERVISOR

Halliburton



Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

2/4/2017

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.

Katie Biersmith

Regulatory Analyst



Typed or printed name of operator's representative

Title

Signature

1050 17th Street suite 800

Denver CO 80265 (303) 672-6907

11/30/17

Address

City, State, Zip Code

Tel: Area Code Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

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

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



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Well No.: S 08SC	API No.: 42-317-40597	Drilling Permit No.: 820023
Lease Name: UNIVERSITY 7-2730	Lease No.: 48980	
Field Name: Spraberry (Trend Area)	Field No.: 85280300	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.):	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY

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

II. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.): 8260	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# L-80	No. of centralizers used: 8
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 checked="" type="checkbox"/> NO	Setting depth shoe (ft.): 8240	
Hrs. waiting on cement before drill-out: 24+	Calculated top of cement (ft.): 5552	Cementing date: 02/12/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	445	C	SEE REMARKS	1252	3996
2	245	C	SEE REMARKS	328	930
3					
Total	690			1580	4926

III. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.): 8260	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# L-80	No. of centralizers used: 7
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 checked="" type="checkbox"/> NO	Setting depth tool (ft.): 5552	
Hrs. waiting on cement before drill-out: 24+	Calculated top of cement (ft.): 200	Cementing date: 02/12/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1930	C	SEE REMARKS	4572	14587
2	475	C	SEE REMARKS	636	2025
3					
Total	2405			5208	16612

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

1ST LEAD ADDS.- NEOCEM TM 1ST TAIL ADDS. - .40%HALAD-344, .70% HR-800
 2ND LEAD ADDS.- NEOCEM TM 2ND TAIL ADDS.- .40% HALAD-344, .65% HR-800

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Richard Jones - Service Supervisor

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

02/12/2017

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

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Katie Biersmith

Regulatory Analyst

Katie Biersmith

Typed or printed name of operator's representative

Title

Signature

1050 17th Street Suite 800

Denver, CO 80265

(303) 672-6907

11/30/17

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

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- 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

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

CEMENTING REPORT

OPERATOR INFORMATION

Operator Name: GEP ENERGY COMPANY EBZ	Operator P-5 No.: 684474
Cementor Name: HALLIBURTON ENERGY SERVICES	Cementor P-5 No.: 347151

WELL INFORMATION

District No.: 08	County: MARTIN
Well No.: 5 085C	API No.: 42-317-40597 Drilling Permit No.: 820023
Lease Name: UNIVERSITY 7-2730	Lease No.:
Field Name: Spraberry (Trend Area)	Field No.: 852 80300

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input checked="" type="checkbox"/> Production		
Drilled hole size (in.): 8 1/2	Depth of drilled hole (ft.): 17,196	Est. % wash-out or hole enlargement: 20%
Size of casing in O.D. (in.): 5 1/2	Casing weight (lbs/ft) and grade: 20# HCP-110	No. of centralizers used:
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.): 17191	Top of liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): 4765	Setting depth liner (ft.):
Cementing date: 04/02/2017		

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1870	VERSACEM	REMARKS	2739.55	11960.78
2	100	SOLUCEM	REMARKS	261.8	1151.96
3					
Total	1970			3001.35	13112.74

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/OV 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)							

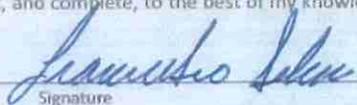
REMARKS

1ST SLURRY: 0.10% HR-601, 0.25% D-AIR 5000, 0.0750% SA-1015, 0.15% CFR-3, 0.60% HALAD(R)-23. 2ND SLURRY : 0.70% HR-601
DID NOT CIRCULATE CEMENT TO SURFACE SALES ORDER # (0903902333)

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 SILVA SSIT

Halliburton



Name and title of cementer's representative	Cementing Company	Signature	
1301 W. Webb St.	Brownfield, Tx, 79316	575-392-0700	04/02/2017
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.

Katie Biersmith

Regulatory Analyst



Typed or printed name of operator's representative	Title	Signature	
1050 17th Street Suite 800	Denver, CO 80265	(303) 672-6907	11/30/17
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo day yr.

Instructions for Form W-15, Cementing Report

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

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.trc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission at Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cements approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_floc=&p_lloc=&p_plor=&pg=1&p_tac=&t=16&nl=1&ch=3&ri=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_floc=&p_lloc=&p_plor=&pg=1&p_tac=&t=16&nl=1&ch=3&ri=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 70% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in the 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 the Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Forms W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, combine the list of slurries in the slurry table in the subsequent Casing Cementing Data box.

Tracking No.: 183463

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: QEP ENERGY COMPANY	District No. 08	Completion Date: 06/19/2017
Field Name: SPRABERRY (TREND AREA)	Drilling Permit No. 820023	
Lease Name: UNIVERSITY 7-2730	Lease/ID No. 48980	Well No. S 08SC
County: MARTIN	API No. 42- 317-40597	

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). _____

 Signature
 QEP ENERGY COMPANY
 Name (print)

 Regulatory Analyst
 Title
 (303) 672-6907
 Phone
 01/11/2018
 Date

-FOR RAILROAD COMMISSION USE ONLY-

**CERTIFICATE OF
 POOLING AUTHORITY**

P-12

Revised 05/2001

1. Field Name(s) SPRABERRY (TREND AREA)	2. Lease/ID Number (if assigned) 48980	3. RRC District Number 08
4. Operator Name QEP Energy Company	5. Operator P-5 Number 684474	6. Well Number S 08SC
7. Pooled Unit Name UNIVERSITY 7-2730	8. API Number 42-317-40597	9. Purpose of Filing <input type="checkbox"/> Drilling Permit (W-1) <input checked="" type="checkbox"/> Completion Report
10. County MARTIN	11. Total acres in pooled unit 963	

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
TRACT 1	UNIVERSITY 7-2730	160	<input type="checkbox"/>	<input type="checkbox"/>
TRACT 2	UNIVERSITY 7-2730	160	<input type="checkbox"/>	<input type="checkbox"/>
TRACT 3	UNIVERSITY 7-2730	643	<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.

Katie Biersmith

Katie Biersmith

Signature
 Regulatory Analyst katie.biersmith@qepres.com
 Title E-mail (if available)

Print Name
 01/11/2018 (303) 672-6907
 Date Phone

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

- 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.
- 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.
- If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
- 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.
- If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- Identify the drill site tract with an * to the left of the tract identifier.
- 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

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued:	29 August 2016	GAU Number:	159200
Attention:	QEP ENERGY COMPANY ATTN SOUTHERN DIV DENVER, CO 80265	API Number:	31740531
Operator No.:	684474	County:	MARTIN
		Lease Name:	UNIVERSITY 7-2730
		Lease Number:	
		Well Number:	S 02LD
		Total Vertical Depth:	8100
		Latitude:	32.394210
		Longitude:	-102.173814
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UL; Block-7; Section-27

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 a depth of 350 feet must be protected.

This recommendation is applicable for all wells drilled in this University 7-2730 Lease in Sections 27 and 30.

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).

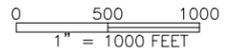
This determination is based on information provided when the application was submitted on 08/26/2016. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

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



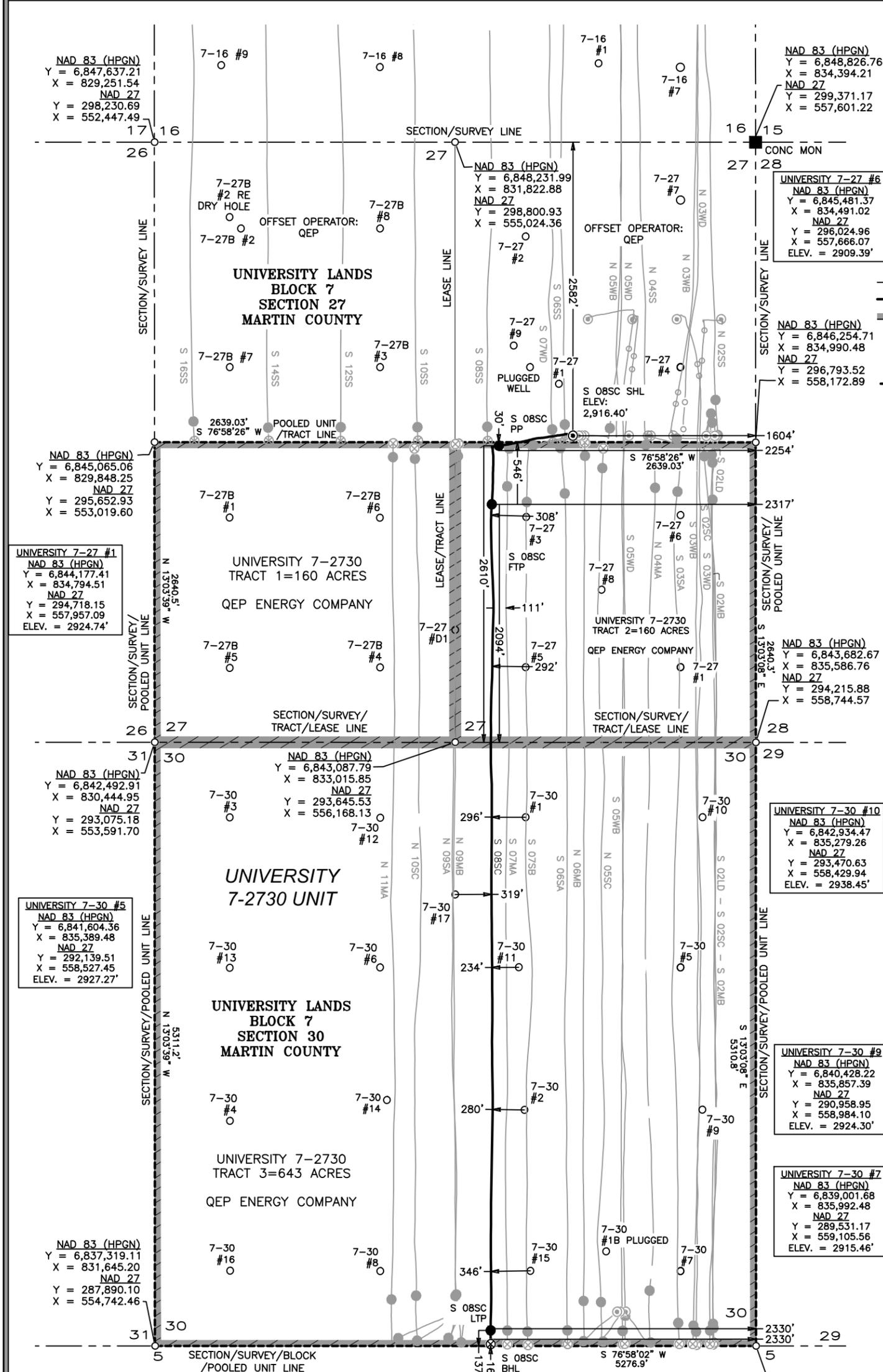
NAD 83 (HPGN) GRID
TEXAS NORTH CENTRAL ZONE



LEGEND

- SURVEY LINE
- AS-DRILL LATERAL
- ▨ LEASE LINE
- FOUND CONCRETE MONUMENT
- CALCULATED CORNER
- - - POOLED UNIT LINE

- SURFACE HOLE LOCATION**
OUT OF LEASE
2582' FNL 1604' FEL SECTION 27
- NAD 83 (HPGN)
Y = 6,845,949.55 X = 833,414.44
LAT: 32°23'36.37" N LONG: 102°10'41.31" W
NAD 27
Y = 296,503.39 X = 556,594.03
LAT: 32°23'35.98" N LONG: 102°10'39.76" W
- PENETRATION POINT**
30' FNL 2254' FEL LEASE
2610' FSL 2254' FEL SECTION 27
- NAD 83 (HPGN)
Y = 6,845,717.19 X = 832,801.08
LAT: 32°23'33.85" N LONG: 102°10'48.37" W
NAD 27
Y = 296,276.89 X = 555,978.48
LAT: 32°23'33.47" N LONG: 102°10'46.81" W
- FIRST TAKE POINT**
546' FNL 2317' FEL LEASE
2094' FSL 2317' FEL SECTION 27
- NAD 83 (HPGN)
Y = 6,845,200.21 X = 832,856.47
LAT: 32°23'28.76" N LONG: 102°10'47.51" W
NAD 27
Y = 295,759.40 X = 556,028.93
LAT: 32°23'28.38" N LONG: 102°10'45.95" W
- LAST TAKE POINT**
137' FSL 2330' FEL LEASE
137' FSL 2330' FEL SECTION 30
- NAD 83 (HPGN)
Y = 6,838,116.82 X = 834,485.35
LAT: 32°22'19.27" N LONG: 102°10'25.63" W
NAD 27
Y = 288,660.71 X = 557,590.07
LAT: 32°22'18.89" N LONG: 102°10'24.08" W
- BOTTOM HOLE LOCATION**
16' FSL 2330' FEL LEASE
16' FSL 2330' FEL SECTION 30
- NAD 83 (HPGN)
Y = 6,837,998.99 X = 834,512.86
LAT: 32°22'18.12" N LONG: 102°10'25.27" W
NAD 27
Y = 288,542.62 X = 557,616.45
LAT: 32°22'17.73" N LONG: 102°10'23.71" W



J.H. OBRIEN
A-945
SF-6944
BLOCK HA, SECTION 5
MARTIN COUNTY



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

John E. Kowalik
JOHN E. KOWALIK
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS NO. 6408

PLAT OF:
AN AS-DRILLED WELL LOCATION FOR:
QEP ENERGY COMPANY
UNIVERSITY 7-2730 UNIT
UNIVERSITY 7-2730 S 08SC
SITUATED IN THE UNIVERSITY LANDS, BLOCK 7, SECTIONS 27 AND 30, AND BEING APPROXIMATELY 22 MILES NORTHEAST OF ANDREWS IN MARTIN COUNTY, TEXAS.

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
www.fscinc.net
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QEP ENERGY™

DATE: 12/08/17
DRAWN BY: JK/GG
CHECKED BY: JK
FIELD CREW: RE
PROJECT NO: 2016090810
SCALE: 1" = 1000'
SHEET: 1 OF 1
REVISION: 0

- GENERAL NOTES**
- COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 83 (HPGN) "TEXAS NORTH CENTRAL ZONE", AND BASED ON "GLASS" NGSS MONUMENT (Y = 6,817,164.36, X = 834,131.39)
 - VERTICAL DATUM IS NAVD 88
 - LATITUDE AND LONGITUDE ARE NAD 83 (HPGN) 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 ACRES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

PLOT DATE: 12/08/17 4:10 P.M.