



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 05/18/2018
Tracking No.: 184896

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.: 42-317-40613 **County:** MARTIN
Well No.: N 16MB **RRC District No.:** 08
Lease Name: UNIVERSITY 7-2730 **Field Name:** SPRABERRY (TREND AREA)
RRC Lease No.: 48980 **Field No.:** 85280300
Location: Section: 30, Block: 7, Survey: UL, Abstract: U27

Latitude: 32.370716 **Longitude:** -102.181548
This well is located 21.6 **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:** 10/21/2017

<u>Type of Permit</u>	<u>Date</u>	<u>Permit No.</u>
Permit to Drill, Plug Back, or Deepen Rule 37 Exception	11/30/2016	820427
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 05/27/2017 **Date of first production after rig released:** 10/21/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 05/27/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 08/07/2017
Number of producing wells on this lease in this field (reservoir) including this well: 24 **Distance to nearest well in lease & reservoir (ft.):** 34.0
Total number of acres in lease: 963.00 **Elevation (ft.):** 2923 GL
Total depth TVD (ft.): 8803 **Total depth MD (ft.):** 16493
Plug back depth TVD (ft.): 8779 **Plug back depth MD (ft.):** 16372
Was directional survey made other than inclination (Form W-12)? Yes **Rotation time within surface casing (hours):** 92.5
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 :** No
of lease on which this well is located: 300.0 **Feet from the** South **Line and**
510.0 **Feet from the** West **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:** 08/29/2017
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 12/10/2017 **Production method:** Pumping
Number of hours tested: 24 **Choke size:**
Was swab used during this test? No **Oil produced prior to test:** 19207.15

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 718.94 **Gas (MCF):** 249
Gas - Oil Ratio: 346 **Flowing Tubing Pressure:** 214.00
Water (BBLs): 1536

CALCULATED 24-HOUR RATE

Oil (BBLs): 718.9 **Gas (MCF):** 249
Oil Gravity - API - 60.: 40.0 **Casing Pressure:** 205.00
Water (BBLs): 1536

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - 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	516			HALCEM-C	580	777.8	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	8227	5527		SIL/C	2425	5251.2	300	Calculation
3	Intermediate	9 5/8	12 1/4	8227		8210	SIL/C	680	1565.3	5524	Calculation
4	Conventional Production	5 1/2	8 1/2	16488			H	1810	2777.0	6870	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	7739	/

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 8942	16372.0

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): 5979.0

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

Actual maximum pressure (PSIG) during hydraulic fracturing: 8815

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 GALS OF ACID.	8942	16372
2	Fracture	1,150,000 LBS OF 100 MESH ; 8,488,850 LBS OF PREMIUM WHITE 30/50; 776,246 LBS OF ATLAS CRC-LT 30/50	8942	16372

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 CISCO	Yes	4845.0	4845.0	Yes	NOT LOGGED, ESTIMATED, CEMENTED CASING
SPRABERRY	Yes	8403.0	8416.0	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 @ 8252'
 DIRECTIONAL SURVEY ATTACHED.
 L1 HEADER ATTACHED. LOG WILL BE UPLOADED VIA ONLINE LOG SUBMISSION SITE.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-04-12 13:00:08.095] EDL=7430 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: April Mestas

Title:

Telephone No.: (303) 260-1167

Date Certified: 04/09/2018



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: UNIT 103	Operator P-5 No.: 684474
Cementer Name: HALLIBURTON	Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 08	County: MARTIN	
Well No.: N 16MB	API No.: 42-317-40613	Drilling Permit No.: 820427
Lease Name: UNIVERSITY 7-2730	Lease No.:	
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.): 516	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 54.5 J-55	No. of centralizers used: 7
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 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: 14.5	Calculated top of cement (ft.): Surface	Cementing date: 5-9-17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	580	HALCEM CLASS-C	.25 POLY-FLAKE, 1% C.C.	777.78	516'
2					
3					
Total	580			777.78	516

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

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.

KYLE DUNNAM

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

2311 S. First St.

Artesia, NM, 88210

575-392-0700

5-28-2017

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.

Mike Harris
Typed or printed name of operator's representative

QEP
Title

Mike Harris
Signature

1050 17th St., Ste. 800
Address

Denver, CO 80205
City, State, Zip Code

(303) 260-1167
Tel: Area Code Number

12/22/17
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&rf=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&rf=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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Rev. 08/2014

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

CEMENTING REPORT

OPERATOR INFORMATION

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

WELL INFORMATION

District No.: 08	County: MARTIN
Well No.: N 16MB	API No.: 42-317-40613 Drilling Permit No.: 820427
Lease Name: UNIVERSITY 7-2730	Lease No.:
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.): 8,227	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40.0 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 shoe (ft.): 8210	
Hrs. waiting on cement before drill-out: 24+	Calculated top of cement (ft.): 5,527	Cementing date: 06/04/17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	445	SIL	0.40% GAS STOP	1250.895	3996.41
2	235	C	HALAD(R)-344, 0.55% HR-800	314.43	880.64
3					
Total	680			1565.325	4877.05

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.): 8,227	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40.0 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 tool (ft.): 5,527	
Hrs. waiting on cement before drill-out: 24+	Calculated top of cement (ft.): 300	Cementing date: 06/05/17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1950	SIL	0.40% GAS STOP	4615.65	
2	475	C	0.40% HALAD(R)-344, 0.55% HR-800	695.55	2132.61
3					
Total	2425			5211.2	2132.61

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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MICHAEL CRUZ

Halliburton

Michael Cruz
Signature

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

06/05/17

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.

April Mestas
Typed or printed name of operator's representative

Regulatory Analyst
Title

April Mestas
Signature

1050 17th St., Ste. 800

Denver, CO 80265

(303) 260-1167

12/22/17

Address

City, State, Zip Code

Tel: Area Code Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

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- 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.
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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.



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Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION
Operator Name: QEP RESOURCES INC EBUS
Operator P-5 No.: 1084474
Cementor Name: HALLIBURTON ENERGY SERVICES
Cementor P-5 No.: 347151

WELL INFORMATION
District No.: 08
County: MARTIN
Well No.: N 16MB
API No.: 42-317-40613
Drilling Permit No.: 820427
Lease Name: UNIVERSITY 7 2730
Lease No.:
Field Name: Spraberry (Trend area)
Field No.: 85280300

I. CASING CEMENTING DATA
Type of casing: [] Conductor [] Surface [] Intermediate [] Liner [x] Production
Drilled hole size (in.): 8 1/2
Depth of drilled hole (ft.): 16,493
Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 5 1/2
Casing weight (lbs/ft) and grade: 20.0 P-110
No. of centralizers used:
Was cement circulated to ground surface (or bottom of cellar) outside casing? [] YES [x] NO
Setting depth shoe (ft.): 16,488
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: n/a
Calculated top of cement (ft.): 6,870
Cementing date: 08-07-2017
SLURRY table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

II. CASING CEMENTING DATA
Type of casing: [] Surface [] Intermediate [] Production [] Tapered production [] Multi-stage cement shoe [] Multiple parallel strings
Drilled hole size (in.):
Depth of drilled hole (ft.):
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):
Casing weight (lbs/ft) and grade:
No. of centralizers used:
Tapered string drilled hole size (in.):
Tapered string depth of drilled hole (ft.):
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight (lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower: Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? [] 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.)

III. CASING CEMENTING DATA
Type of casing: [] Surface [] Intermediate [] Production [] Tapered production [] Multi-stage cement/DV tool [] Multiple parallel strings
Drilled hole size (in.):
Depth of drilled hole (ft.):
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):
Casing weight (lbs/ft) and grade:
No. of centralizers used:
Tapered string drilled hole size (in.):
Tapered string depth of drilled hole (ft.):
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight (lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower: Upper: Lower:
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.)

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)							

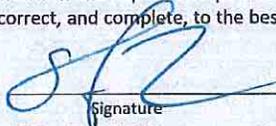
REMARKS

SO# 0904194933

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.

STEVEN TOMS-SERVICE SUPERVISOR II

Halliburton

Name and title of cementer's representative: 1301 W. Webb St. Cementing Company: Brownfield, Tx, 79316 Signature:  Date: 08-07-2017

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.

April Mestas Regulatory Analyst Signature: 

Typed or printed name of operator's representative Title Signature

1050 17th St., Ste. 800 Denver, CO 80265 (303) 260-1167 12/22/17

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 Slurry table in the subsequent Casing Cementing Data box.

Tracking No.: 184896

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: 10/21/2017
Field Name: SPRABERRY (TREND AREA)	Drilling Permit No. 820427	
Lease Name: UNIVERSITY 7-2730	Lease/ID No. 48980	Well No. N 16MB
County: MARTIN	API No. 42- 317-40613	

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)

 Title
 (303) 260-1167 01/30/2018
 Phone Date

-FOR RAILROAD COMMISSION USE ONLY-

Railroad Commission of Texas

Oil And Gas Division

Form P-8

Request for Clearance of Storage Tanks

Prior to Potential Test

Reference No. 39996

1. Operator's Name and Address (Exactly as shown on Form P-5 Organization Report) QEP ENERGY COMPANY ATTN SOUTHERN DIV REGULATORY 1050 17TH ST SUITE 800 DENVER, CO 80265-0000 2. RRC Operator Number: <u>684474</u>		3. RRC District No. 08
		4. County of Well Site MARTIN
		5. API No. 42-317-40613
6. Field Name (Wildcat or exactly as shown on RRC records) SPRABERRY (TREND AREA)	7. Drilling Permit No. 820427	8. Rule 37 Case No.
9. Lease Name UNIVERSITY 7-2730	10. Oil lease No.	11. Well No. N 16MB
12. Drilling completed on <u>08/07/2017</u>	13. Completion report--Form W-2 or G-1--will be filed on <u>11/07/2017</u>	
14. Oil or condensate gatherer's name and address RELIANCE GATHERING, LLC 300 N MARIENFELD ST STE 1100 MIDLAND, TX 79701-4384 (432) 683-4816	15. Authorization to transport oil or condensate (mark one) <input checked="" type="checkbox"/> Form P-4 attached <input checked="" type="checkbox"/> Form P-4 Filed on <u>10/25/2017</u>	
16. This request is for <u>270000</u> barrels of <input checked="" type="checkbox"/> crude oil OR <input type="checkbox"/> condensate	17. Amount of oil/condensate in tanks <u>0</u> barrels on <u>10/20/2017</u>	
18. Storage capacity in bbls. Tank battery <u>2000</u> Test tanks <u>0</u> Total <u>2000</u>		
19. Previous request for clearance. Amount <u>0</u> barrels granted on _____		
20. Reason for current request for clearance (explain briefly) New horizontal well; initial flowback could be up to 2000 bbls/day.		
Katie Biersmith _____ Name of operator's representative	REGULATORY ANALYST _____ Title of person	
(303) 672-6907 _____ Telephone	10/25/2017 _____ Date	
RRC District Office Action		
Status: Approved	Barrels recommended <u>270000</u>	RRC Staff _____ 10/25/2017 _____ Date

**CERTIFICATE OF COMPLIANCE
 AND TRANSPORTATION AUTHORITY**

This facsimile P-4 was generated electronically from data submitted to the RRC.
 A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 184896

1. Field name exactly as shown on proration schedule SPRABERRY (TREND AREA)		2. Lease name as shown on proration schedule UNIVERSITY 7-2730					
3. Current operator name exactly as shown on P-5 Organization Report QEP ENERGY COMPANY		4. Operator P-5 no. 684474	5. Oil Lse/Gas ID no. 48980	6. County MARTIN	7. RRC district 08		
8. Operator address including city, state, and zip code ATTN SOUTHERN DIV REGULATORY 1050 17TH ST SUITE 800 DENVER, CO 80265		9. Well no(s) (see instruction E) N 16MB			11. Effective Date 10/21/2017		
		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G)							
a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____							
----- OR -----							
b. New RRC Number for: <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <input type="checkbox"/> other well (specify) _____ Due to: <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		QEP ENERGY COMPANY(684474)				100.0	
	X	ETC TEXAS P/L, LTD(255104)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
RELIANCE GATHERING, LLC(701107)						100.0	
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>05/18/2018</u>							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator				Signature			
Name (print)				<input type="checkbox"/> Authorized Employee of previous operator		<input type="checkbox"/> Authorized agent of previous operator (see instruction G)	
Title				Date		Phone with area code	
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
QEP ENERGY COMPANY				April Mestas			
Name (print)				Signature			
Title				<input checked="" type="checkbox"/> Authorized Employee of current operator		<input type="checkbox"/> Authorized agent of current operator (see instruction G)	
E-mail Address (optional) <u>april.mestas@qepres.com</u>				Date <u>01/30/2018</u>		Phone with area code <u>(303) 260-1167</u>	

**CERTIFICATE OF
 POOLING AUTHORITY**

P-12

Revised 05/2001

1. Field Name(s) SPRABERRY (TREND AREA)	2. Lease/ID Number (if assigned)	3. RRC District Number 08
4. Operator Name QEP Energy Company	5. Operator P-5 Number 684474	6. Well Number N 16MB
7. Pooled Unit Name UNIVERSITY 7-2730	8. API Number 317-40613	9. Purpose of Filing <input type="checkbox"/> Drilling Permit (W-1)
10. County MARTIN	11. Total acres in pooled unit 963	<input checked="" type="checkbox"/> Completion Report

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.

Signature: *April Mestas* Print Name: April Mestas
 Regulatory Analyst E-mail (if available): april.mestas@qepre.com Date: 01/22/2018
 Title Phone: (303) 260-1167

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.





RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1

Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION

Operator Name: QEP ENERGY COMPANY	Operator P-5 No.: 684474
Operator Address: 1050 17TH STREET SUITE 800 DENVER, CO 80265	

SECTION II. WELL INFORMATION

District No.: 08	County: MARTIN	Purpose of Filing: <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> Completion Report (Form G-1/W-2)
Well No.: N 16MB	API No.: 42-317-40613	
Total Lease Acres: 963	Drilling Permit No.: 820427	
Lease Name: UNIVERSITY 7-2730	Lease No.: 48980	
Field Name: SPRABERRY (TREND AREA)	Field No.: 85280300	

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

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

RRC ID No. or Lease No.	Well No.	H-Horizontal 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)
48980	S 02SC	H	UNIVERSITY 7-2730	317-40530	30.92	N	
48980	N 04MA	H	UNIVERSITY 7-2730	317-40547	30.92	N	
48980	S 02LD	H	UNIVERSITY 7-2730	317-40531	30.92	N	
48980	S 03SA	H	UNIVERSITY 7-2730	317-40532	30.92	N	
48980	S 02 MB	H	UNIVERSITY 7-2730	317-40529	30.92	N	
48980	N 04SB	H	UNIVERSITY 7-2730	317-40543	30.92	N	
48980	N 05SC	H	UNIVERSITY 7-2730	317-40544	30.92	N	
48980	N 06MB	H	UNIVERSITY 7-2730	317-40542	30.92	N	
48980	S 06SA	H	UNIVERSITY 7-2730	317-40594	30.92	Y	
48980	S 07MA	H	UNIVERSITY 7-2730	317-40596	30.92	Y	
48980	S 07SB	H	UNIVERSITY 7-2730	317-40595	30.92	Y	
48980	S 08SC	H	UNIVERSITY 7-2730	317-40597	30.92	Y	
48980	N 09MB	H	UNIVERSITY 7-2730	317-40599	30.92	Y	
48980	N 09SA	H	UNIVERSITY 7-2730	317-40598	30.92	Y	
48980	N 10SC	H	UNIVERSITY 7-2730	317-40600	30.92	Y	
48980	N 11MA	H	UNIVERSITY 7-2730	317-40601	30.92	Y	
48980	S 11SA	H	UNIVERSITY 7-2730	317-40607	30.92	Y	

Total Well Count >	28	963	< A. Total Assigned Horiz. Acreage	963	< C. Total Assigned Acreage
		0	< Total Remaining Horiz. Acreage	0	< Total Remaining Acreage
		0	< B. Total Assigned Vert./Dir. Acreage		
		0	< Total Remaining Vert./Dir. Acreage		

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

This is a pooled horizontal unit. There are currently 4 Allocation wells that traverse through Tract 2 and Tract 3 of this unit (please see page 1A - Horizontal Well List (Cont'd)), and have been assigned acreage from this 2730 unit (that acreage has also been corrected to account for the new wells.) Total well count on page 1 includes all wells listed on page 1A-Horizontal Well List (Cont'd), likewise, the Total Horizontal Acreage on page 1 includes all the wells on page 1A Horizontal Well List (Cont'd).

Attach Additional Pages As Needed. No additional pages Additional Pages: 1 (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.

	April Mestas, REGULATORY ANALYST					
Signature	Name and title (type or print)		Email (include email address only if you affirmatively consent to its public release)			
1050 17TH STREET SUITE 800	DENVER	CO	80265	303	260-1864	04/11/2018
Address	City,	State,	Zip Code	Tel: Area Code	Number	Date: mo. day yr.

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

0 500 1000
1" = 1000 FEET

LEGEND

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

SURFACE HOLE LOCATION

300' FSL 510' FWL LEASE
300' FSL 510' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,845,278.36 X = 532,074.30
LAT: 32°22'14.58" N LONG: 102°10'52.57" W
LAT: 32.370715° N LONG: 102.181548° W

NAD 27
Y = 288,293.25 X = 555,175.43
LAT: 32°22'14.58" N LONG: 102°10'52.02" W
LAT: 32.370668° N LONG: 102.181116° W

PENETRATION POINT
38' FSL 446' FWL LEASE
38' FSL 446' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,837,456.42 X = 532,071.46
LAT: 32°22'11.91" N LONG: 102°10'53.48" W
LAT: 32.369874° N LONG: 102.181528° W

NAD 27
Y = 288,023.34 X = 555,170.03
LAT: 32°22'11.92" N LONG: 102°10'51.94" W
LAT: 32.369857° N LONG: 102.181095° W

FIRST TAKE POINT
402' FSL 406' FWL LEASE
402' FSL 406' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,837,801.91 X = 531,949.61
LAT: 32°22'15.28" N LONG: 102°10'53.05" W
LAT: 32.370912° N LONG: 102.181960° W

NAD 27
Y = 288,369.99 X = 555,051.50
LAT: 32°22'14.90" N LONG: 102°10'53.50" W
LAT: 32.370825° N LONG: 102.181538° W

LAST TAKE POINT
126' FSL 379' FWL LEASE
2914' FSL 379' FWL SECTION 27

NAD 83 (HPGN)
Y = 6,845,097.40 X = 530,245.69
LAT: 32°23'25.15" N LONG: 102°11'17.85" W
LAT: 32.390598° N LONG: 102.188289° W

NAD 27
Y = 295,611.48 X = 553,418.96
LAT: 32°23'25.77" N LONG: 102°11'16.51" W
LAT: 32.390491° N LONG: 102.187963° W

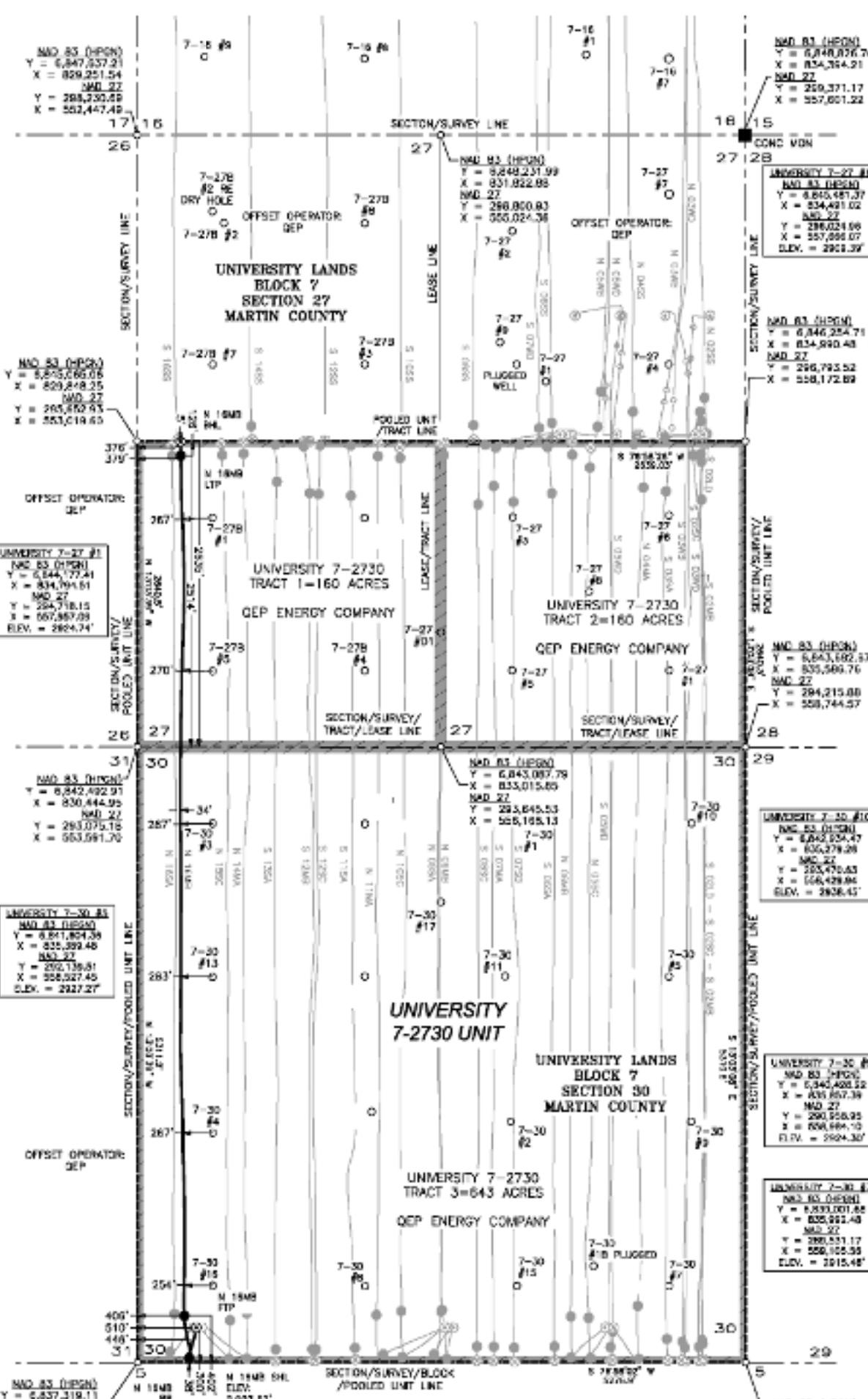
BOTTOM HOLE LOCATION
5' FSL 376' FWL LEASE
2825' FSL 376' FWL SECTION 27

NAD 83 (HPGN)
Y = 6,845,144.53 X = 530,215.94
LAT: 32°23'27.25" N LONG: 102°11'15.28" W
LAT: 32.390591° N LONG: 102.188406° W

NAD 27
Y = 295,725.89 X = 553,389.63
LAT: 32°23'26.91" N LONG: 102°11'14.71" W
LAT: 32.390605° N LONG: 102.187974° W

GENERAL NOTES

1. COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 83 (HPGN) (TEXAS NORTH-CENTRAL ZONE), AND BASED ON CLASS 1956 MONUMENT (Y = 6,817,154.36 X = 534,151.32)
2. VERTICAL DATUM IS MADD 98
3. LATITUDE AND LONGITUDE ARE NAD 83 (HPGN) AS SHOWN
4. AREA, DISTANCES AND COORDINATES ARE (GCR)
5. UNITS ARE UNITED STATES SURVEY FEET
6. ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DATA PROVIDED INFORMATION ONLY. ALL AGREEMENTS SHOWING BY DEED AND LEASE CALL EXCEPT WHERE INDICATED. THIS IS NOT BOUNDARY SURVEY.



UNIVERSITY 7-27 #1
NAD 83 (HPGN)
Y = 6,844,177.41
X = 534,794.61
NAD 27
Y = 294,718.15
X = 557,857.08
ELEV. = 2824.74'

UNIVERSITY 7-30 #10
NAD 83 (HPGN)
Y = 6,842,492.91
X = 530,444.95
NAD 27
Y = 293,075.16
X = 553,591.70

UNIVERSITY 7-30 #1
NAD 83 (HPGN)
Y = 6,841,854.36
X = 535,393.48
NAD 27
Y = 292,139.81
X = 558,527.45
ELEV. = 2927.27'

NAD 83 (HPGN)
Y = 6,843,162.57
X = 535,569.76
NAD 27
Y = 294,215.88
X = 558,744.57

UNIVERSITY 7-30 #10
NAD 83 (HPGN)
Y = 6,842,524.47
X = 535,279.28
NAD 27
Y = 293,470.63
X = 558,429.84
ELEV. = 2936.43'

UNIVERSITY 7-30 #9
NAD 83 (HPGN)
Y = 6,840,420.52
X = 535,857.39
NAD 27
Y = 290,958.95
X = 558,669.10
ELEV. = 2924.30'

UNIVERSITY 7-30 #2
NAD 83 (HPGN)
Y = 6,839,921.48
X = 535,921.48
NAD 27
Y = 289,531.17
X = 558,105.35
ELEV. = 2915.48'

NAD 83 (HPGN)
Y = 6,835,509.08
X = 536,796.14
NAD 27
Y = 289,031.62
X = 559,294.47

J.H. OBRIEN
A-945
SP-6844
BLOCK HA, SECTION 5
MARTIN COUNTY



I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.
John 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 N 16MB
SITUATED IN THE UNIVERSITY LANDS, BLOCK 7, SECTIONS 27 AND 30, AND BEING APPROXIMATELY 22 MILES NORTHEAST OF ANDREWS IN MARTIN COUNTY, TEXAS.



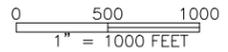
DATE: 02/01/18
DRAWN BY: JFC
CHECKED BY: JFC
FIELD CREW: JFC
PROJECT NO: 201802078
SCALE: 1" = 1000'
SHEET: 1 OF 1
REVISED: 0

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817-349-9800 - Fax: 979-732-5271
TWP: Flm 17957 | TRPLS Flm 30190887
www.fscinc.net

PLOT DATE: 02/01/18 10:32 A.M.



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

300' FSL 510' FWL LEASE
300' FSL 510' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,837,726.36 X = 832,074.30
LAT: 32°22'14.58" N LONG: 102°10'53.57" W
LAT: 32.370716° N LONG: 102.181548° W

NAD 27
Y = 288,293.25 X = 555,175.43
LAT: 32°22'11.91" N LONG: 102°10'52.02" W
LAT: 32.370609° N LONG: 102.181116° W

PENETRATION POINT

38' FSL 446' FWL LEASE
38' FSL 446' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,837,456.42 X = 832,071.48
LAT: 32°22'11.91" N LONG: 102°10'53.49" W
LAT: 32.369974° N LONG: 102.181526° W

NAD 27
Y = 288,023.34 X = 555,170.03
LAT: 32°22'11.52" N LONG: 102°10'51.94" W
LAT: 32.369867° N LONG: 102.181095° W

FIRST TAKE POINT

402' FSL 406' FWL LEASE
402' FSL 406' FWL SECTION 30

NAD 83 (HPGN)
Y = 6,837,801.91 X = 831,949.64
LAT: 32°22'15.28" N LONG: 102°10'55.05" W
LAT: 32.370912° N LONG: 102.181960° W

NAD 27
Y = 288,369.98 X = 555,051.50
LAT: 32°22'14.90" N LONG: 102°10'53.50" W
LAT: 32.370805° N LONG: 102.181528° W

LAST TAKE POINT

126' FNL 379' FWL LEASE
2514' FSL 379' FWL SECTION 27

NAD 83 (HPGN)
Y = 6,845,027.40 X = 830,245.99
LAT: 32°23'26.15" N LONG: 102°11'17.86" W
LAT: 32.390596° N LONG: 102.188296° W

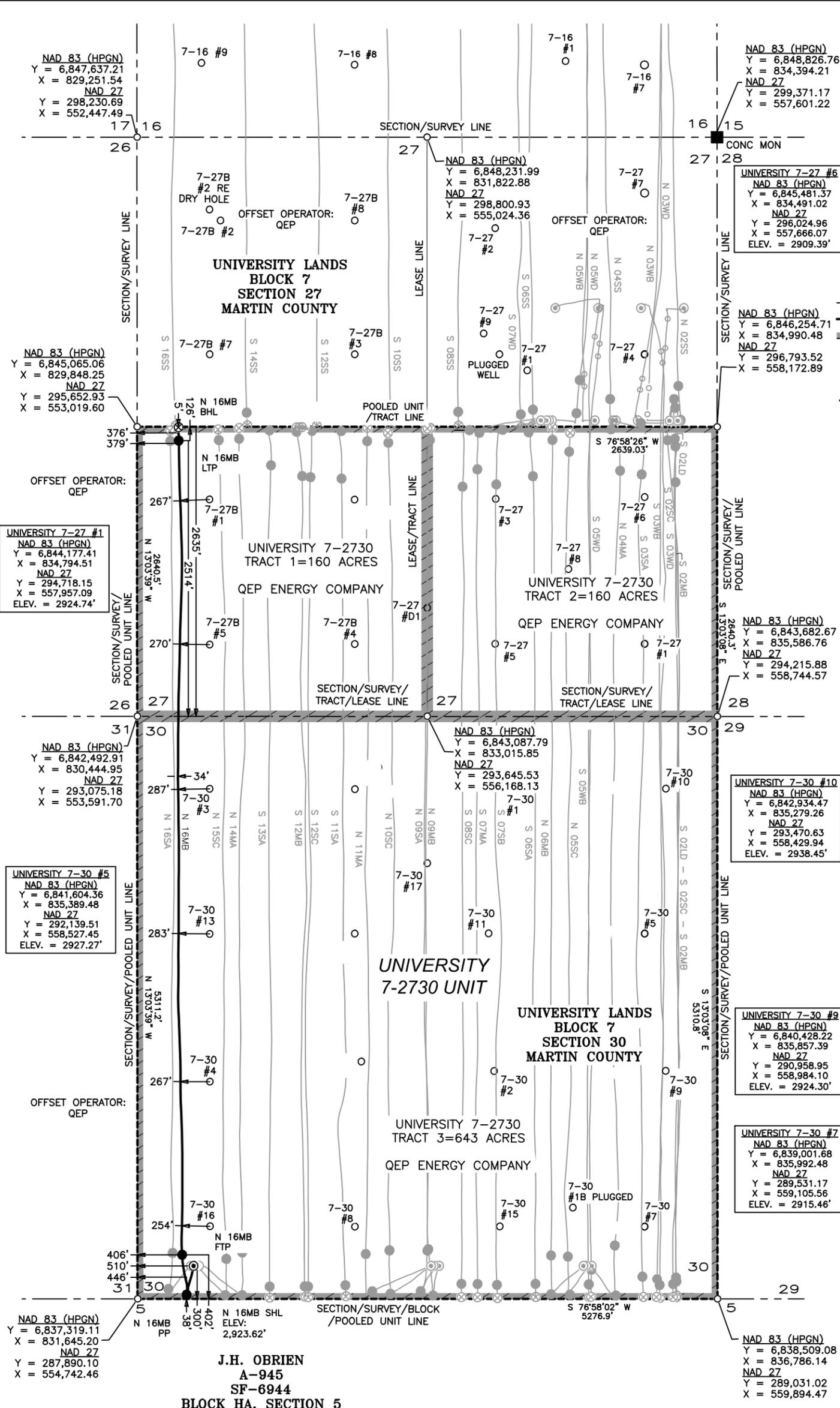
NAD 27
Y = 295,611.48 X = 553,416.96
LAT: 32°23'25.77" N LONG: 102°11'16.31" W
LAT: 32.390491° N LONG: 102.187863° W

BOTTOM HOLE LOCATION

5' FNL 376' FWL LEASE
2635' FSL 376' FWL SECTION 27

NAD 83 (HPGN)
Y = 6,845,144.53 X = 830,215.94
LAT: 32°23'27.29" N LONG: 102°11'18.26" W
LAT: 32.390915° N LONG: 102.188406° W

NAD 27
Y = 295,728.89 X = 553,388.03
LAT: 32°23'26.91" N LONG: 102°11'16.71" W
LAT: 32.390809° N LONG: 102.187974° W



SURFACE HOLE LOCATION 300' FSL 510' FWL LEASE 300' FSL 510' FWL SECTION 30
NAD 83 (HPGN) Y = 6,837,726.36 X = 832,074.30 LAT: 32°22'14.58" N LONG: 102°10'53.57" W LAT: 32.370716° N LONG: 102.181548° W
NAD 27 Y = 288,293.25 X = 555,175.43 LAT: 32°22'11.91" N LONG: 102°10'52.02" W LAT: 32.370609° N LONG: 102.181116° W
PENETRATION POINT 38' FSL 446' FWL LEASE 38' FSL 446' FWL SECTION 30
NAD 83 (HPGN) Y = 6,837,456.42 X = 832,071.48 LAT: 32°22'11.91" N LONG: 102°10'53.49" W LAT: 32.369974° N LONG: 102.181526° W
NAD 27 Y = 288,023.34 X = 555,170.03 LAT: 32°22'11.52" N LONG: 102°10'51.94" W LAT: 32.369867° N LONG: 102.181095° W
FIRST TAKE POINT 402' FSL 406' FWL LEASE 402' FSL 406' FWL SECTION 30
NAD 83 (HPGN) Y = 6,837,801.91 X = 831,949.64 LAT: 32°22'15.28" N LONG: 102°10'55.05" W LAT: 32.370912° N LONG: 102.181960° W
NAD 27 Y = 288,369.98 X = 555,051.50 LAT: 32°22'14.90" N LONG: 102°10'53.50" W LAT: 32.370805° N LONG: 102.181528° W
LAST TAKE POINT 126' FNL 379' FWL LEASE 2514' FSL 379' FWL SECTION 27
NAD 83 (HPGN) Y = 6,845,027.40 X = 830,245.99 LAT: 32°23'26.15" N LONG: 102°11'17.86" W LAT: 32.390596° N LONG: 102.188296° W
NAD 27 Y = 295,611.48 X = 553,416.96 LAT: 32°23'25.77" N LONG: 102°11'16.31" W LAT: 32.390491° N LONG: 102.187863° W
BOTTOM HOLE LOCATION 5' FNL 376' FWL LEASE 2635' FSL 376' FWL SECTION 27
NAD 83 (HPGN) Y = 6,845,144.53 X = 830,215.94 LAT: 32°23'27.29" N LONG: 102°11'18.26" W LAT: 32.390915° N LONG: 102.188406° W
NAD 27 Y = 295,728.89 X = 553,388.03 LAT: 32°23'26.91" N LONG: 102°11'16.71" W LAT: 32.390809° N LONG: 102.187974° W

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

John Kowalik

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



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

PLAT OF:
AN AS-DRILLED WELL LOCATION FOR:

QEP ENERGY COMPANY
UNIVERSITY 7-2730 UNIT
UNIVERSITY 7-2730 N 16MB

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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DATE: 02/01/18
DRAWN BY: JK/GG
CHECKED BY: JK
FIELD CREW: RE
PROJECT NO: 2016070576
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: 02/01/18 10:32 A.M.