



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 09/06/2016
Tracking No.: 159108

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION

Operator PIONEER NATURAL RES. USA, INC. **Operator** 665748
Operator AMBER MCFADDEN PO BOX 3178 MIDLAND, TX 79702-0000

WELL INFORMATION

API 42-003-47294 **County:** ANDREWS
Well No.: 43H **RRC District** 08
Lease UNIVERSITY "7-43" **Field** SPRABERRY (TREND AREA)
RRC Lease 40532 **Field No.:** 85280300
Location Section: 36, Block: 7, Survey: UL, Abstract: U211

Latitude **Longitud**
This well is 17.2 miles in a E
direction from ANDREWS,
which is the nearest town in the

FILING INFORMATION

Purpose of Well Record Only
Type of New Well
Well Type: Shut-In Producer **Completion or Recompletion** 07/14/2016

Type of Permit Date Permit No.
Permit to Drill, Plug Back, or 11/19/2015 812044
Rule 37 Exception
Fluid Injection
O&G Waste Disposal
Other:

COMPLETION INFORMATION

Spud 02/07/2016 **Date of first production after rig** 07/14/2016
Date plug back, deepening, drilling operation 02/07/2016 **Date plug back, deepening, recompletion, drilling operation** 04/01/2016
Number of producing wells on this lease this field (reservoir) including this 19 **Distance to nearest well in lease & reservoir** 653.0
Total number of acres in 6615.70 **Elevation** 2989 RKB
Total depth TVD 9507 **Total depth MD** 20165
Plug back depth TVD **Plug back depth MD**
Was directional survey made other inclination (Form W- Yes **Rotation time within surface casing Is Cementing Affidavit (Form W-15)** 47.2 Yes
Recompletion or No **Multiple** No
Type(s) of electric or other log(s) Acceptable cased hole logs
Electric Log Other Description:
Location of well, relative to nearest lease of lease on which this well is 10261.0 Feet from the South **Off Lease :** No
3375.0 Feet from the West **Line and**
UNIVERSITY 7-43 **Line of the** Lease.

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

Field & Reservoir Gas ID or Oil Lease 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	1750.0	Date	11/18/2015
SWR 13 Exception	Depth	2000.0		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of		Production
Number of hours	24	Choke
Was swab used during this	No	Oil produced prior to
PRODUCTION DURING TEST PERIOD:		
Oil		Gas
Gas - Oil	0	Flowing Tubing
Water		
CALCULATED 24-HOUR RATE		
Oil		Gas
Oil Gravity - API - 60.:		Casing
Water		

CASING RECORD

<u>Ro</u>	<u>Type of Casing</u>	<u>Casing Size (in.)</u>	<u>Hole Size</u>	<u>Setting Depth</u>	<u>Multi - Stage</u>	<u>Multi - Tool Shoe</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined By</u>
1	Surface	13 3/8	17 1/2	1922			CLASS C	1693	2850.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	6040			TXI & H	1071	1897.5	3665	Calculation
3	Conventional Production	5 1/2	8 3/4	20133			TXI	2042	3632.0	3270	Cement Evaluation Log

LINER RECORD

<u>Ro</u>	<u>Liner Size</u>	<u>Hole Size</u>	<u>Liner Top</u>	<u>Liner Bottom</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined</u>
N/A									

TUBING RECORD

<u>Ro</u>	<u>Size (in.)</u>	<u>Depth</u>	<u>Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	2 7/8		9415	/

PRODUCING/INJECTION/DISPOSAL INTERVAL

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 9729	19994.0

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

Was hydraulic fracturing treatment	Yes
Is well equipped with a downhole sleeve?	Yes
Production casing test pressure (PSIG) during hydraulic fracturing	9500
Actual maximum pressure (PSIG) during fracturin	9258
Has the hydraulic fracturing fluid disclosure been	Yes
If yes, actuation pressure	9500.0
Amount and Kind of Material Used	
Depth Interval (ft.)	
Ro	
Type of Operation	

FORMATION RECORD

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
YATES	Yes	3165.0	3165.0	No	SEE REMARK ABOVE
SEVEN RIVERS	No			No	FORMATION DOESN'T EXIST IN THIS AREA
QUEEN	Yes	4175.0	4175.0	Yes	
GRAYBURG	Yes	4668.0	4668.0	Yes	
SAN ANDRES - CO2 FLOOD, HIGH FLOWS, H2S, CORROSIVE HOLT	Yes	4825.0	4825.0	Yes	
GLORIETA	No			No	FORMATION DOESN'T EXIST IN THIS AREA
TUBB	No			No	FORMATION DOESN'T EXIST IN THIS AREA
CLEARFORK	Yes	6814.0	6814.0	Yes	
PERMIAN DETRITAL	No			No	FORMATION DOESN'T EXIST IN THIS AREA
LEON	No			No	FORMATION DOESN'T EXIST IN THIS AREA
WICHITA ALBANY	No			No	FORMATION DOESN'T EXIST IN THIS AREA
SPRABERRY	Yes	8434.0	8434.0	Yes	
DEAN	No			No	FORMATIO BELOW TVD
WOLFCAMP	No			No	FORMATIO BELOW TVD
CANYON	No			No	FORMATIO BELOW TVD
PENNSYLVANIAN	No			No	FORMATIO BELOW TVD
MCKEE	No			No	FORMATIO BELOW TVD
STRAWN	No			No	FORMATIO BELOW TVD
FUSSELMAN	No			No	FORMATIO BELOW TVD
DEVONIAN	No			No	FORMATIO BELOW TVD
SILURIAN	No			No	FORMATIO BELOW TVD
ELLENBURGER	No			No	FORMATIO BELOW TVD

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm

No

Is the completion being downhole commingled

No

REMARKS

WELL RECORD ONLY, WAITING ON IP. PLEASE NOTE: THE NAME OF THIS WELL HAS BEEN CHANGED FROM UNIVERSITY 7-43 28H TO UNIVERSITY 7-43 43H DUE TO A LEASE CONSOLIDATION THAT WAS APPROVED BY THE RRC IN DECEMBER OF 2015.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2016-08-03 09:03:57.189] EDL=10265 feet, max acres=680, SPRABERRY (TREND AREA) oil well

CASING RECORD :

PRODUCTION HOLE CROSSOVER FROM 8 3/4" TO 8 1/2" @ 8950'.
KOP ~ 8950'.

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

EST % WASH-OUT OR HOLE ENLARGEMENT SHOWN ON W-15 REFLECTS EXCESS CEMENT PUMPED. SLURRY VOLUME AND HEIGHT ON W-15 INCLUDES THE EXCESS CEMENT PUMPED.

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

WE REQUEST A SWR-13 WAIVER FOR THE YATES FORMATION AS THERE ARE NO PRODUCING WELLS IN THAT FORMATION WITHIN 1 MILE OF THIS WELL. SEE ATTACHED MAP.

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed	CASI RENFRO	Title:	Regulatory Specialist III
Telephone	(972) 444-9001	Date	07/28/2016



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967

Austin, Texas 78701-2967
CEMENTING REPORT

Form W-15

Rev. 08/2014

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

OPERATOR INFORMATION	
Operator Name: Pioneer Natural Res. USA, Inc	Operator P-5 No.: 665748
Cementer Name: Schlumberger	Cementer P-5 No.: 754900

WELL INFORMATION	
District No.: 08	County: ANDREWS
Well No.: 43H	API No.: 4200347294 Drilling Permit No.: 812044
Lease Name: University 7-43	Lease No.: 40532
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.): 7 1/2"	Depth of drilled hole (ft.): 1924'	Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 13 3/8"	Casing weight (lbs/ft) and grade: 54.5 J55	No. of centralizers used: 12	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Setting depth shoe (ft.): 1922'	Top of liner (ft.):	
If no for surface casing, explain in Remarks.	Setting depth liner (ft.):		
Hrs. waiting on cement before drill-out: 12	Calculated top of cement (ft.): 0	Cementing date: 9-Feb-16	

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	1316	C	Remarks	2224.0	1524
2	377	C	Remarks	626.0	400
3					
Total	1693			2850.0	1924

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

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

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

Schlumberger-Private

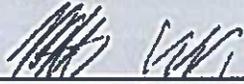
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

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

REMARKS

#1: 61lb/skD903+2%D079+0.13lb/skD130+2%S001+0.02gal/skD047+26lb/skD035
 #2: 94lb/skD903+0.1%D065+2%D020+0.02gal/skD047
 #3: 130 barrels to surface = 432 sacks
 #4:

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

Patrick McCann, FE	Schlumberger	
Name and title of cementer's representative	Cementing Company	Signature
32 E. Industrial Loop	(432) 683-1887	February 9, 2016
Address	Tel: Area Code Number	Date: mo. day yr.
Midland TX 79701		
City, State, Zip Code		

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.

Casi Renfro, Regulatory Specialist II
 5205 N. O'Connor Blvd., Suite 200
 Irving, TX 75039
 972.969.5687

_____	
Title	Signature
_____	6/23/16
Tel: Area Code Number	Date: mo. day yr.

I-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&ri=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967

Austin, Texas 78701-2967
CEMENTING REPORT

Form W-15

Rev. 08/2014

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

OPERATOR INFORMATION

Operator Name: Pioneer Natural Resources USA, INC Operator P-5 No.: 10105748
Cementer Name: Schlumberger Cementer P-5 No.: 754900

WELL INFORMATION

District No.: 08 County: ANDREWS
Well No.: 43H API No.: 4200317294 Drilling Permit No.: 812044
Lease Name: University 7-43 Lease No.: 40932
Field Name: Sprberry (TRENDS AREA) Field No.: 85280300

I. CASING CEMENTING DATA

Type of casing: Conductor Surface Intermediate Liner Production
Drilled hole size (in.): 12 1/4" Depth of drilled hole (ft.): 6100' Est. % wash-out or hole enlargement: 150%
Size of casing in O.D. (in.): 9 5/8" Casing weight (lbs/ft) and grade: 40 L80 No. of centralizers used: 15
Was cement circulated to ground surface (or bottom of cellar) outside casing? Yes No if no for surface casing, explain in Remarks.
Setting depth shoe (ft.): 6040' Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 12 Calculated top of cement (ft.): 5665 Cementing date: 20-Feb-16

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	671	TXI + Adds	Remarks	1469.5	1875
2	400	Class H + Adds	Remarks	428.0	500
3					
Total	1071			1897.5	2375

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 tool (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

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

III. CASING CEMENTING DATA

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

SLURRY

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

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

REMARKS

#1: 75ppsD049 + 5ppsD042 + 0.02gpsD047 + 0.1%D208 + 0.5%D238 + 0.1%D013 + 2%D154 + 0.13ppsD130 + 3%D174
 #2: 94pps D909 + 0.02gpsD047 + 0.1%D065 + 0.15%D800
 #3:
 #4:

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

<u>Matthew Courtney, FE2</u>	<u>Schlumberger</u>	
Name and title of cementer's representative	Cementing Company	Signature
<u>32 E. Industrial Loop</u>	<u>Midland TX 79701</u>	<u>(432) 683-1887</u>
Address	City, State, Zip Code	Tel: Area Code Number
		<u>February 20, 2016</u>
		Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

<u>Casi Renfro, Regulatory Specialist II</u>	<u></u>	<u></u>
<u>5205 N. O'Connor Blvd., Suite 200</u>	Title	Signature
<u>Irving, TX 75039</u>		
<u>972.969.5687</u>	Tel: Area Code Number	<u>7/14/16</u>
		Date: mo. day yr.

-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/pis/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/pis/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/OV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS
 1701 N. Congress
 P. O. Box 12967
 Austin, Texas 78701-2967
CEMENTING REPORT

Form W-15
 Rev. 05/2014

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

OPERATOR INFORMATION	
Operator Name: Pioneer Natural Resources USA, INC	Operator P-5 No.: 665748
Cementer Name: Schlumberger	Cementer P-5 No.: 754900

WELL INFORMATION	
District No.: 08	County: ANDREWS
Well No.: 43H	API No.: 4200347294 Drilling Permit No.: 812044
Lease Name: University 7-43	Lease No.: 40532
Field Name: Sprberry (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 checked="" type="checkbox"/> Production
Drilled hole size (in.): 8 3/4" / 8 1/2"	Depth of drilled hole (ft.): 20165'	Est. % wash-out or hole enlargement:			
Size of casing in O.D. (in.): 5 1/2"	Casing weight (lbs/ft) and grade: 20 P110	No. of centralizers used: 43			
Was cement circulated to ground surface (or bottom of cellar) outside casing?			Setting depth shoe (ft.):	Top of liner (ft.):	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no for surface casing, explain in Remarks.			20135'		
Hrs. waiting on cement before drill-out: 12	Calculated top of cement (ft.): 3270	Cementing date: 1-Apr-16			

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	362	TDJ	Remarks	927	3505
2	1680	TDJ	Remarks	2705	11202
3					
Total	2042			3632	14707

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

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

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



DISTRICT DIRECTOR

RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION

OPERATOR Name: PIONEER NATURAL RES. USA, INC. **RE: Lease:** UNIVERSITY 7-43
Address1: ATTN WELDON PIERSON
Address2: 5205 N O'CONNOR BLVD SUITE 200 **Well No:** 28H
City: IRVING **Sec:** 36 **Block:** 7
State: TX **County:** ANDREWS
Survey Name: UL

SWR13EX Application Number: 5336 **Drilling Permit No:** 812044

SWR 13 CASING EXCEPTION APPLICATION/ALTERNATIVE REQUEST APPROVED

The Proposed Casing and Cementing Program submitted for the **LEASE NAME:** UNIVERSITY 7-43 ;
WELL NUMBER: 28H has been approved by the Railroad Commission of Texas District Office.

- a. A copy of this approved letter must be kept on location during all phases of drilling and/or plugging operations. Once approved, changes CANNOT be made to the Proposed Casing Program on the original application without additional approval from the Railroad Commission of Texas District Office.
- b. Any substantive modifications to the cement program require prior approval from the Railroad Commission of Texas District Office, and may require re-submission of the SWR 13 (Statewide Rule 13) Alternate Surface Casing Application. Contact the Railroad Commission of Texas District Office for more information.
- c. The tail slurry must be sufficient to fill the Zone of Critical Cement as described in Statewide Rule 13(b)(1)(H)(i). In addition, all cement slurries must be mixed on location as described in Application for Alternate Surface Casing Program.
- d. The casing and cement program shall adhere to the following specifications:
Set 2000 feet of surface casing and circulate cement from the shoe to the ground surface.

IF CEMENT IS NOT CIRCULATED TO THE GROUND SURFACE AS REQUIRED BY THIS EXCEPTION, YOU MUST CONTACT THE RAILROAD COMMISSION OF TEXAS DISTRICT OFFICE IMMEDIATELY AND FOLLOW THE PROCEDURES SET OUT IN RULE 13(b)(1)(H)(iii) OR AS REQUIRED BY THE RAILROAD COMMISSION OF TEXAS DISTRICT OFFICE.

You must comply with all other provisions of SWR 13 (Statewide Rule 13) and a representative of the cementing company who performs the cementing job for the protection of usable quality water strata must sign the Form W-15 attesting to the information regarding cementing operations performed; including circulation of cement. (Note: If surface casing is set below the approved depth, this can result in denial of future Statewide Rule 13(b)(1)(H)(i) requests.) A condition of the approved drilling permit requires notification to the Railroad Commission of Texas District Office eight (8) hours prior to the time casing is to be set/cemented in the well. If your exception request was submitted after the subject well has been drilled and completed, the operator may be referred for enforcement action.

This authorization shall expire within five (5) years from the date the Groundwater Protection Determination was issued, or at the expiration of the drilling permit (if the well is not spudded prior to expiration) for the referenced well, whichever occurs first. Furthermore, this authorization supersedes any prior authorizations issued for the referenced well.

This exception is based on information provided when the application was submitted on 11/30/2015 .
If any information has changed, you must contact the appropriate Railroad Commission of Texas District Office, and submit a new application if applicable. If you have questions, please contact the appropriate Oil and Gas District office.

RRC APPROVAL BY: Erik Hanson

DATE: 12/03/2015

DISTRICT DIRECTOR

Tracking No.: 159108

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: PIONEER NATURAL RES. USA, INC.	District No. 08	Completion Date: 07/14/2016
Field Name SPRABERRY (TREND AREA)	Drilling Permit No. 812044	
Lease Name UNIVERSITY "7-43"	Lease/ID No. 40532	Well No. 43H
County ANDREWS	API No. 42- 003-47294	

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). _____

CASI RENFRO

Signature

PIONEER NATURAL RES. USA, INC.

Name (print)

Regulatory Specialist III

Title

(972) 444-9001

Phone

07/28/2016

Date

-FOR RAILROAD COMMISSION USE ONLY-



Radial Cement Bond Variable Density Log with Gamma Ray/CCL

Company Pioneer Natural Resources Well University 7-43 28H Field Sprayberry (Trend Area) County Andrews State TX	Company Pioneer Natural Resources	
	Well University 7-43 28H	
	Field Sprayberry (Trend Area)	
	County Andrews State TX	
Location: API #: 42-003-47294-0000		Other Services
367 FNL/ 1993' FEL, SEC:36, BLK: 7, TWP:., SVY: University Lands		Junk Basket Gauge Ring 4.625"
SEC TWP RGE		Elevation
Permanent Datum	Ground Level	Elevation 2,960'
Log Measured From	Kelly Bushing 29' APD	K.B. 2,988'
Drilling Measured From	Kelly Bushing	D.F. 2,987'
		G.L. 2,960'

Date	April 27, 2016
Run Number	One
Depth Driller	20,165'
Depth Logger	9,720'
Bottom Logged Interval	9,715'
Top Log Interval	Surface
Open Hole Size	8.75"
Type Fluid	Water
Density / Viscosity	N/A
Max. Recorded Temp.	163 Deg F
Estimated Cement Top	3,270'
Time Well Ready	ROA
Time Logger on Bottom	18:20
Equipment Number	120
Location	Midland
Recorded By	Aaron Norton
Witnessed By	Felipe Diaz

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Surface	17.5"	129'	1,924'				
Intermediate	12.25"	1,924'	6,100'				
Production	8.75"	6,100'	8,950'				
Production 2	8.50"	8,950'	20,165'				

	Size	Wgt/Ft	Top	Bottom
Casing Record				
Surface String	13.375"	54.5#	Surface	1,924'
Prot. String	9.625"	40#	Surface	6,040'
Production String	5.5"	20#	Surface	20,133'
Liner				
Short Joint			8,915'	8,935'

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Primary Log of Well
 Logged with 1,500 PSI applied surface pressure
 Log Correlated To Short Joint
 as per Customer Request

Thank You For Choosing Nine Energy Service



Main Pass

1500 PSI Surface Pressure

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 18 November 2015**GAU Number:** 19028

Attention: PIONEER NATURAL RES. USA,
ATTN WELDON PIERSON
IRVING, TX 75039

API Number:
County: ANDREWS
Lease Name: UNIVERSITY 7-43

Operator No.: 665748

Lease Number:
Well Number: 27H
Total Vertical Depth: 9500
Latitude: 32.351969
Longitude: -102.254447
Datum: NAD27

Purpose: New Drill**Location:** Survey-UL; Block-7; Section-36

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 300 feet, and the zone from 1350 to 1750 feet must be protected.

This recommendation is applicable to all wells within a radius of 200 feet of this location.

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

This determination is based on information provided when the application was submitted on 11/18/2015. 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

Pioneer Natural Resources

University 7-43 42H-44H pad



POSTED WELL DATA

Well Name
ProdFM

Well Number

WELL SYMBOLS

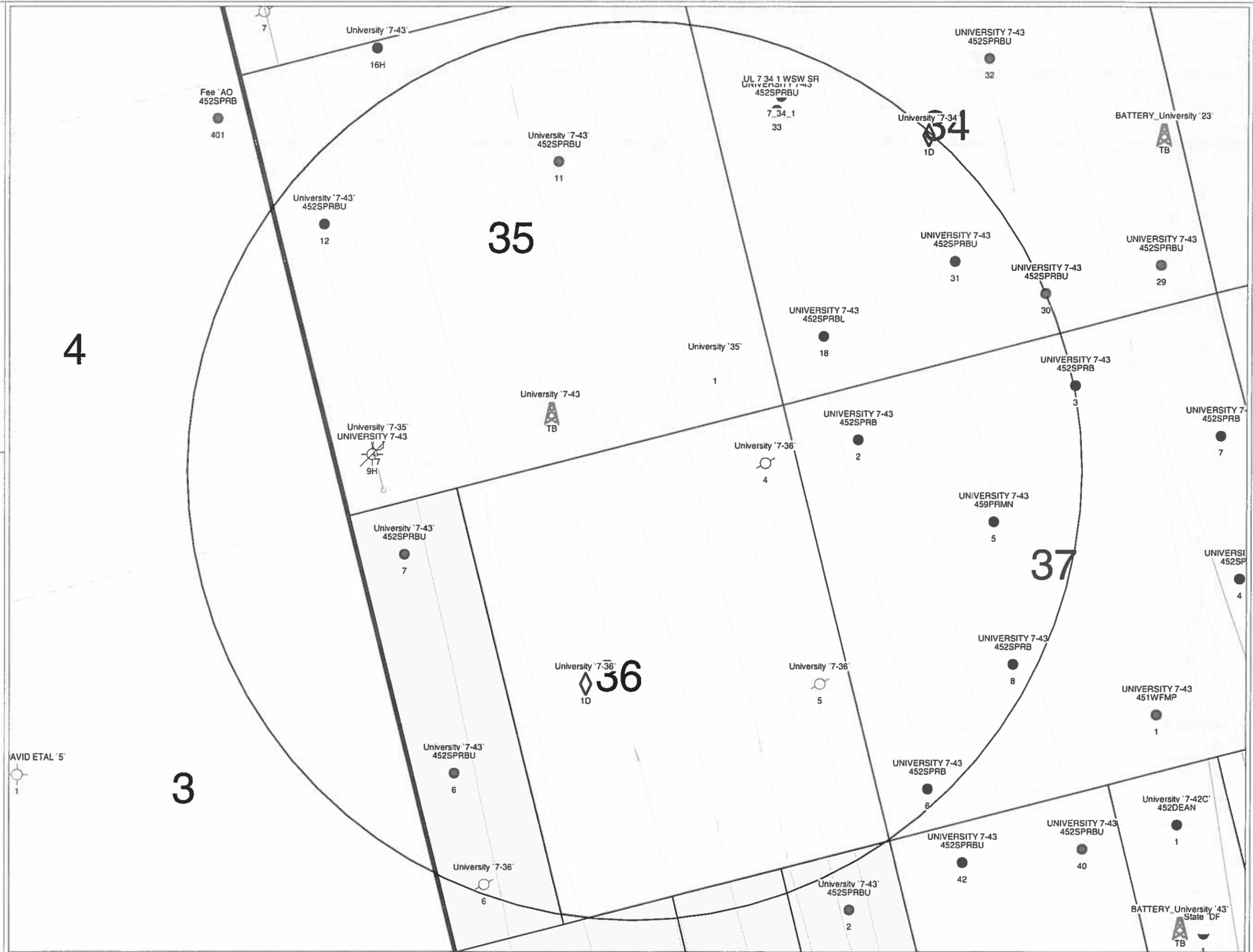
- Abandoned Well
- Abandoned Oil Well
- Completion in Progress
- Dry Hole, With Show of Gas
- Dry Hole, With Show of Oil
- Dry Hole
- Proposed Injector
- Location (Default)
- Oil Well
- Shut-in Oil and Gas
- Facilities
- Water Supply
- Junked & Abandoned

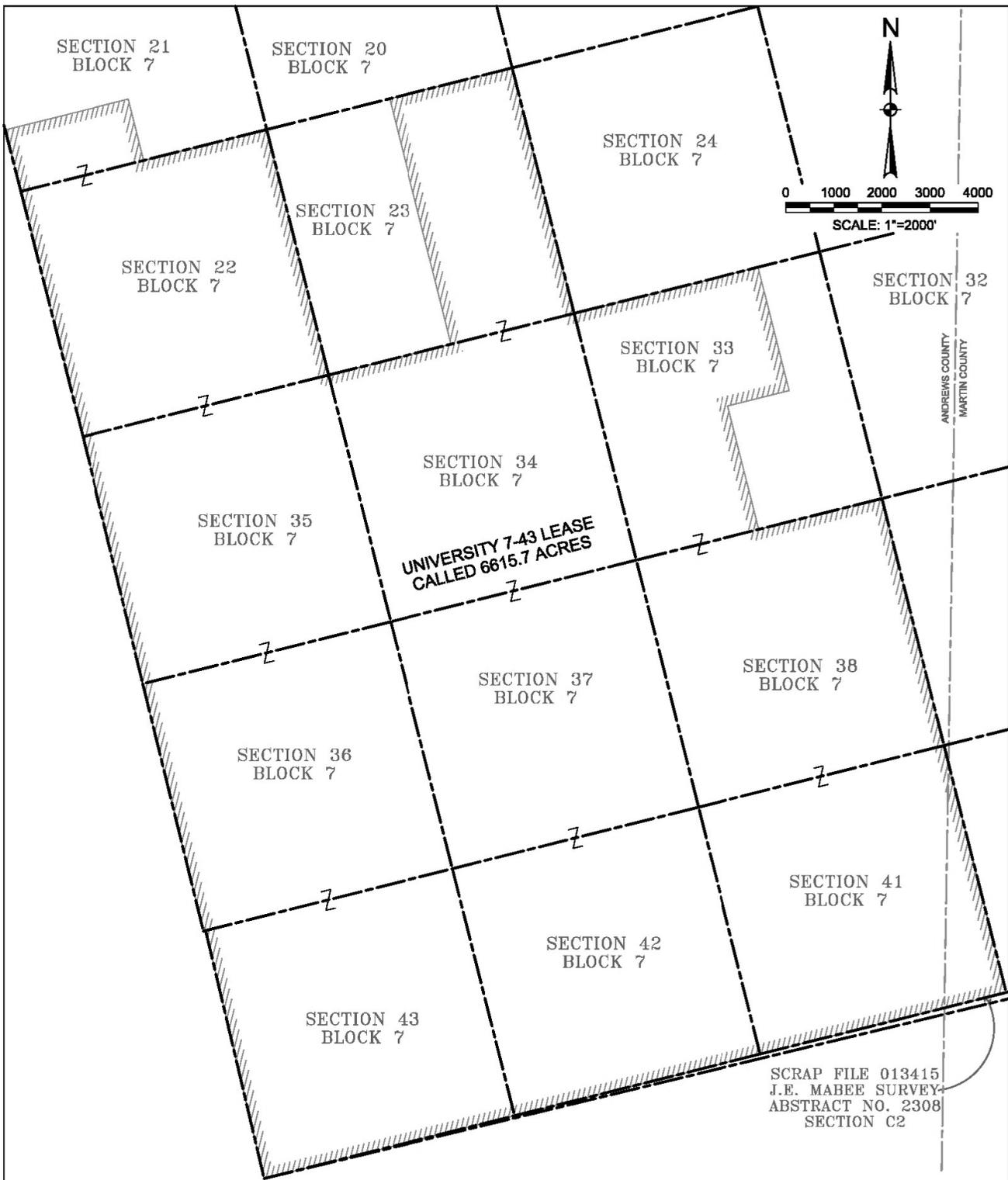
REMARKS

Circle Represents 1 Mile

By: Casi Renfro

July 14, 2016





LEGEND

	LEASE LINE
	WELL LATERAL
	SECTION LINE
	LAND HOOK
	COUNTY LINE
	FOUND IRON ROD
	CONTROLLING MONUMENT
	NOT TO SCALE
	CONCRETE BRASS DISK
	CONCRETE BROKEN BRASS DISK
	STONE MOUND
	GALVANIZED IRON PIPE
	FND NAIL
	FOUND IRON PIPE
	FOUND IRON ROD

ALL OF SECTION 22, SECTION 34, SECTION 35, SECTION 36, SECTION 37, SECTION 38, SECTION 41, SECTION 42, SECTION 43, THE S/2 OF THE SW/4 OF SECTION 21, THE E/2 OF SECTION 23, THE W/2 OF SECTION 33 AND THE W/2 OF THE NE/4 OF SECTION 33 ALL IN BLOCK 7, UNIVERSITY LAND SURVEY, ANDREWS COUNTY, TEXAS AND MARTIN COUNTY, TEXAS

NOTE WELL IS LOCATED ABOUT 15.4 MILES EAST OF ANDREWS, ANDREWS COUNTY, TEXAS.
**PIONEER NATURAL RESOURCES
 UNIVERSITY 7-43 LEASE**

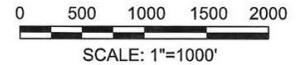


DATED: 10/5/2015
 BY: JUAN GONZALEZ

TBPLS FIRM NO. 10193998
 HALFF ASSOCIATES INC., ENGINEERS - SURVEYORS
 4500 W. Hillnole Ave. Ste 301 D - Midland, TEXAS - 79703
 SCALE: 1"=2000' (432)-695-6110 AVO. 29678-W038

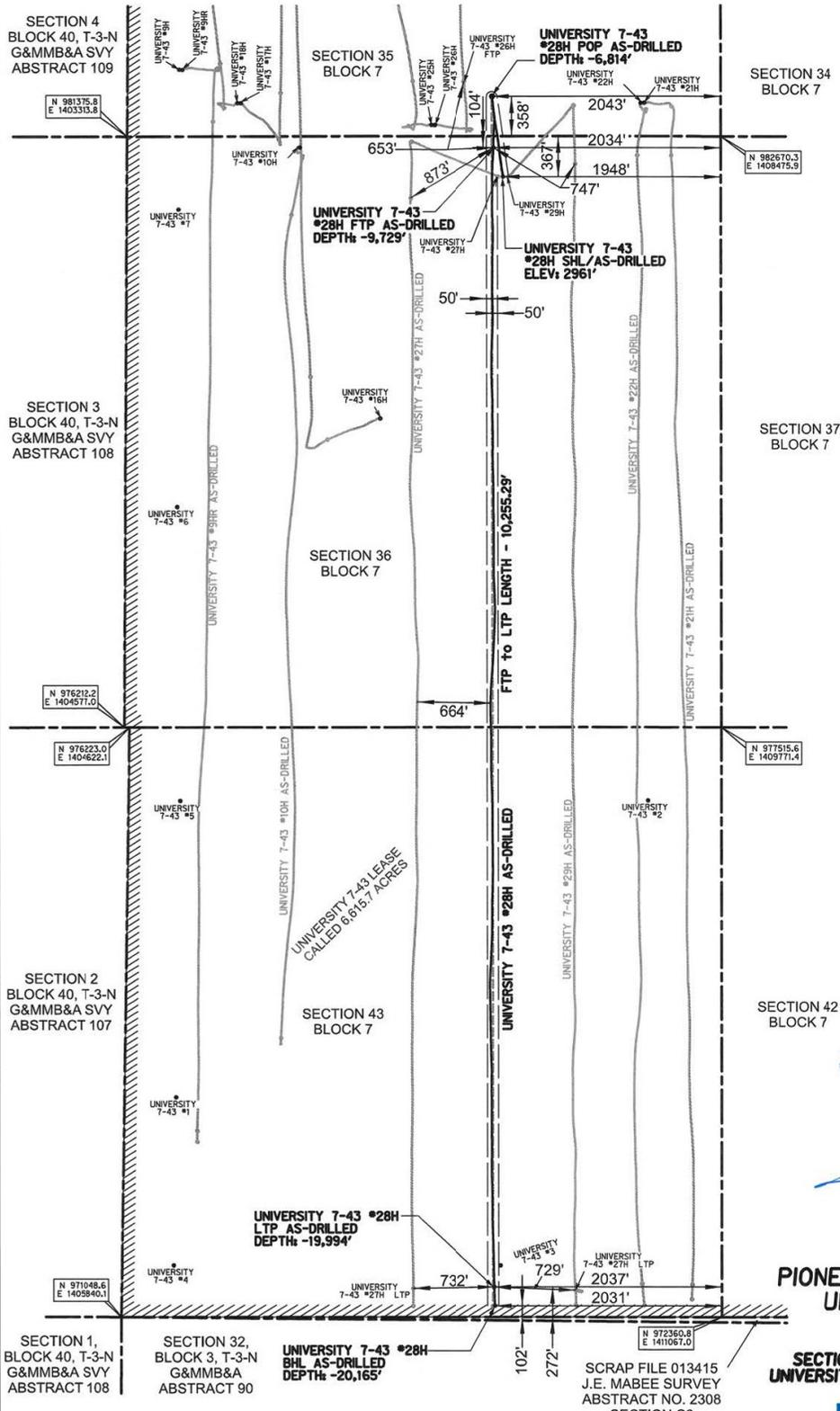
PIONEER
 NATURAL RESOURCES

UNIVERSITY 7-43 #28H AS-DRILLED	NORTHING (NAD27)	EASTING (NAD27)	LATITUDE (NAD 27)	LONGITUDE (NAD 27)	SECTION LINE		LEASE LINE	
SURFACE HOLE (SHL)	981840.3	1406675.5	32.3520013	102.2543067	367' N	1948' E	10261' S	3375' W
POINT OF PENETRATION (POP) DEPTH: -6,814'	982520.4	1406405.7	32.3538574	102.2552181	358' N	2043' E	10231' N	3274' W
FIRST TAKE POINT (FTP) DEPTH: -9,729'	982074.3	1406528.1	32.3526374	102.2547971	104' S	2034' E	10524' S	3287' W
LAST TAKE POINT (LTP) DEPTH: -19,994'	972128.9	1409024.4	32.3254270	102.2461628	272' S	2037' E	272' S	3346' W
BOTTOM HOLE (BHL) DEPTH: -20,165'	971964.9	1409072.1	32.3249784	102.2459991	102' S	2031' E	102' S	3355' W



LEGEND

	LEASE LINE
	WELL LATERAL
	ADJACENT WELL LATERAL
	PROPOSED WELL BORE
	PERMITTED WELL BORE
	LABOR LINE
	LEASE LINE
	NOT TO SCALE



NOTES:

THE BASIS OF BEARING IS THE TEXAS COORDINATE SYSTEM OF 1927, CENTRAL ZONE (4203), AS DERIVED BY GPS MEASUREMENT BASED UPON THE CORNS.

ALL TEXAS STATE PLANE COORDINATES SHOWN HEREON ARE NAD 27 GRID COORDINATES AS COMPUTED BY CORPSCON VERSION 6.0.1. ALL GEOGRAPHIC COORDINATES SHOWN HEREON WERE CONVERTED USING CORPSCON VERSION 6.0.1. UNLESS OTHERWISE NOTED, ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES AND THEY CAN BE CONVERTED TO SURFACE WHEN MULTIPLIED WITH A "SURFACE ADJUSTMENT FACTOR" OF 1.000232816 AS CALCULATED BY CORPSCON.

ELEVATIONS SHOWN HEREON ARE NAVD88 AS DERIVED BY GPS.

THIS EXHIBIT IS FOR TEXAS RAILROAD COMMISSION WELL PERMITTING PURPOSES ONLY. BOUNDARY LINES AND ACRES SHOWN HEREON REFLECT THE SURVEYORS PROFESSIONAL OPINION OF MINERAL RIGHTS AS DETERMINED FROM CLIENT-PROVIDED OIL AND GAS MINERAL LEASE DOCUMENTATION. THE INFORMATION DEPICTED HEREON SHALL NOT BE USED IN THE CONVEYANCE OF FEE TITLE TO REAL PROPERTY.

ALL MEASUREMENTS TO LEASE, UNIT, AND SURVEY LINES ARE PERPENDICULAR TO SAID LINES.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.

THE AS-DRILLED DATA USED TO DEPICT THE WELL BORE PATH WAS PROVIDED BY OTHERS. NO WARRANTY IS EITHER EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION HEREIN.



NOTE: WELL IS LOCATED ABOUT 17.2 MILES EAST OF ANDREWS, ANDREWS COUNTY, TEXAS.

UNIVERSITY 7-43 LEASE CALLED 6,615.7 ACRES

PIONEER NATURAL RESOURCES UNIVERSITY 7-43 #28H AS-DRILLED PLAT

LOCATED IN SECTION 36 AND SECTION 43, BLOCK 7, UNIVERSITY LAND SURVEY, ANDREWS COUNTY, TEXAS



DATED: 8/2/2016
 BY: JOE McDONALD
 TBPLS FIRM NO. 10193998
 HALFF ASSOCIATES INC., ENGINEERS ~ SURVEYORS
 3300 N A Street, Bldg 1, Ste 114 ~ Midland, TEXAS ~ 79705
 SCALE: 1"=1000' (432)-253-3250 AVO. 29678-W0125

PIONEER
 NATURAL RESOURCES