



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 01/13/2017
Tracking No.: 163533

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	42-003-47346	County:	ANDREWS
Well No.:	38H	RRC District	08
Lease	UNIVERSITY "7-43"	Field	SPRABERRY (TREND AREA)
RRC Lease	40532	Field No.:	85280300
Location	Section: 38, Block: 7, Survey: UL, Abstract: U213		
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	09/30/2016
Type of Permit		Date	
Permit to Drill, Plug Back, or		02/12/2016	Permit No.
Rule 37 Exception			813817
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION

Spud	04/23/2016	Date of first production after rig	09/30/2016
Date plug back, deepening, drilling operation	04/23/2016	Date plug back, deepening, recompletion, drilling operation	06/09/2016
Number of producing wells on this lease this field (reservoir) including this	22	Distance to nearest well in lease & reservoir	779.0
Total number of acres in	6615.70	Elevation	2983 RKB
Total depth TVD	9477	Total depth MD	19795
Plug back depth TVD		Plug back depth MD	
Was directional survey made other inclination (Form W-	Yes	Rotation time within surface casing	40.8
Recompletion or	No	Is Cementing Affidavit (Form W-15)	Yes
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		Off Lease :	No
	5753.0 Feet from the	North Line and	
	4044.0 Feet from the	East Line of the	
		UNIVERSITY 7-43 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	02/11/2016
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	2010			CLASS C	1690	2848.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	6022			CLASS C	954	2036.0	3447	Calculation
3	Conventional Production	5 1/2	8 3/4	19776			CLASS H	2033	3532.1	5485	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		9416	/

PRODUCING/INJECTION/DISPOSAL INTERVAL

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 9802	19634.0

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

Was hydraulic fracturing treatment	Yes		
Is well equipped with a downhole sleeve?	Yes	If yes, actuation pressure	9500.0
Production casing test pressure (PSIG) hydraulic fracturing	9800	Actual maximum pressure (PSIG) during fracturin	8896
Has the hydraulic fracturing fluid disclosure been	No		
Ro	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)

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	3151.0	3151.0	No	SEE REMARK
SEVEN RIVERS	No			No	FORMATION DOES NOT EXIT IN THIS AREA
QUEEN	Yes	4088.0	4088.0	Yes	
GRAYBURG	Yes	4617.0	4617.0	Yes	
SAN ANDRES - CO2 FLOOD, HIGH FLOWS, H2S, CORROSIVE	Yes	4755.0	4755.0	Yes	
HOLT	No			No	FORMATION DOES NOT EXIT IN THIS AREA
GLORIETA	No			No	FORMATION DOES NOT EXIT IN THIS AREA
TUBB	No			No	FORMATION DOES NOT EXIT IN THIS AREA
CLEARFORK	Yes	6743.0	6743.0	Yes	
PERMIAN DETRITAL	No			No	FORMATION DOES NOT EXIT IN THIS AREA
LEON	No			No	FORMATION DOES NOT EXIT IN THIS AREA
WICHITA ALBANY	No			No	FORMATION DOES NOT EXIT IN THIS AREA
SPRABERRY	Yes	8390.0	8390.0	Yes	
DEAN	No			No	FORMATION BELOW TVD
WOLFCAMP	No			No	FORMATION BELOW TVD
CANYON	No			No	FORMATION BELOW TVD
PENNSYLVANIAN	No			No	FORMATION BELOW TVD
MCKEE	No			No	FORMATION BELOW TVD
STRAWN	No			No	FORMATION BELOW TVD
FUSSELMAN	No			No	FORMATION BELOW TVD
DEVONIAN	No			No	FORMATION BELOW TVD
SILURIAN	No			No	FORMATION BELOW TVD
ELLENBURGER	No			No	FORMATION 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. 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.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2016-10-18 09:21:08.156] EDL=9832 feet, max acres=640, SPRABERRY (TREND AREA) oil well

CASING RECORD :

KOP ~ 8930'. SURFACE CASING SETTING DEPTH OK PER ERIK HANSON. 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. PRODUCTION HOLE CROSSOVER FROM 8 3/4" TO 8 1/2" @ 10,100'.

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

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

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed	CASI RENFRO	Title:	Regulatory Specialist III
Telephone	(972) 444-9001	Date	01/13/2017



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

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.: 38H	API No.: 4200347346	Drilling Permit No.: 813817
Lease Name: University 7-43	Lease No.: 40932	
Field Name: Sprabery (Trend Area)	Field No.: 85280300	

I. CASING CEMENTING DATA

Type of casing: Conductor Surface Intermediate Liner Production

Drilled hole size (in.): 17 1/2" Depth of drilled hole (ft.): 2010' Est. % wash-out or hole enlargement: 100%

Size of casing in O.D. (in.): 13 3/8" Casing weight (lbs/ft) and grade: 54.5 J55 No. of centralizers used: 11

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.): 2010' Top of liner (ft.):
Setting depth liner (ft.):

Hrs. waiting on cement before drill-out: 12 Calculated top of cement (ft.): 0 Cementing date: 4/24/16

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1315	c/poz	remarks	2222	1600
2	375	c	remarks	626	400
3					
Total	1690			2848	2000

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: 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

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: 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

d013+d65+d020+d130

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.

clint thompson FS	Schlumberger	clint thompson
<small>Name and title of cementer's representative</small>	<small>Cementing Company</small>	<small>Signature</small>
2106 North County Road	Midland, TX, 79705	(432) 687-7058
<small>Address</small>	<small>City, State, Zip Code</small>	<small>Tel: Area Code Number</small>
		4/24/16
		<small>Date: mo. day yr.</small>

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



Signature

7/15/18

Date: mo. day yr.

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&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

Form W-15
Rev. 08/2014

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

OPERATOR INFORMATION

Operator Name: Pioneer Natural Resources
Operator P-S No.: 665794
Cementor Name: Schlumberger
Cementor P-S No.: 754900

WELL INFORMATION

District No.: 9
County: Andrews
Well No.: 38H
API No.: 4200347346
Drilling Permit No.: 913917
Lease Name: UNIVERSITY 7-43
Lease No.: 40732
Field Name: Spraberry (Trend Area)
Field No.: 85290300

I. CASING CEMENTING DATA

Type of casing: Intermediate
Drilled hole size (in.): 12 1/4
Depth of drilled hole (ft.): 6040
Est. % wash-out or hole enlargement: 150%
Casing weight (lbs/ft) and grade: 40 L80
No. of centralizers used: 15
Setting depth shoe (ft.): 6022
Cementing date: 28-Apr-16

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
Drilled hole size (in.):
Depth of drilled hole (ft.):
Est. % wash-out or hole enlargement:
Casing weight (lbs/ft) and grade:
Tapered string drilled hole size (in.):
Tapered string depth of drilled hole (ft.):
Setting depth tool (ft.):

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
Drilled hole size (in.):
Depth of drilled hole (ft.):
Est. % wash out or hole enlargement:
Casing weight (lbs/ft) and grade:
Tapered string drilled hole size (in.):
Tapered string depth of drilled hole (ft.):
Setting depth tool (ft.):

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)

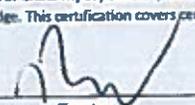
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount 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
 #1: 0.1 % D208 + 38 lb/sk D049 + 47 lb/sk D903 + 0.2 % D238 + 0.35 % D013 + 5 % D154 + 0.13 lb/sk D130 + 1 % D079 + 5 lb/sk D042
 #2: 94 lb/sk D983 + 0.02 gal/sk D047 + 0.2 % D800 + 0.2 % D065
 #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.

Ahmed Hussein, PS2
 Name and title of cementer's representative

Schlumberger
 Cementing Company


 Signature

2106 North County Road Midland TX 79705 (432) 687-7058 April 28, 2016
 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,

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


 Signature

7/15/16
 Date: mo. day yr.

g Report
 Title, 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.tnc.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. In plug and abandon a well, operators must use only cements approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pub/readtacSrvr.TacPage?i=11&app=98&p_dir=&p_loc=&p_tool=&p_plor=&p_1&p_tac=011-16&pe=1&ch=3&r=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.
- F. 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/DV tool. 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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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.: 38H
API No.: 42003417346
Lease Name: University 7-43
Lease No.: 40932
Field Name: Spraberry (TRENDS AREA)
Field No.: 85280300

I. CASING CEMENTING DATA

Type of casing: Conductor Surface Intermediate Liner Production
Drilled hole size (in.): 8 3/4" / 8 1/2"
Depth of drilled hole (ft.): 19795'
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 5 1/2"
Casing weight (lbs/ft) and grade: 20 P110 IC
No. of centralizers used: 40
Was cement circulated to ground surface (or bottom of cellar) outside casing? Yes No
Setting depth shoe (ft.): 1976'
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 12
Calculated top of cement (ft.): 5485
Cementing date: 9-Jun-16

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:
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:
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.)

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:
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:
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.)



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:** 38H
City: IRVING **Sec:** 38 **Block:** 7
State: TX **County:** ANDREWS
Survey Name: UL

SWR13EX Application Number: 6593 **Drilling Permit No:** 813817

SWR 13 CASING EXCEPTION APPLICATION/ALTERNATIVE REQUEST APPROVED

The Proposed Casing and Cementing Program submitted for the **LEASE NAME:** UNIVERSITY 7-43 ;
WELL NUMBER: 38H 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 02/15/2016 .
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: 02/22/2016

DISTRICT DIRECTOR

Tracking No.: 163533

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: 09/30/2016
Field Name SPRABERRY (TREND AREA)	Drilling Permit No. 813817	
Lease Name UNIVERSITY "7-43"	Lease/ID No. 40532	Well No. 38H
County ANDREWS	API No. 42- 003-47346	

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

10/14/2016

Date

-FOR RAILROAD COMMISSION USE ONLY-



Radial Cement Bond Gamma Ray Collar Locator Log

Company Pioneer Natural Resources	Well University 7-43 38H	Field Spraberry (Trend Area)	County Andrews	State Texas	Country U.S.A.		
Company Pioneer Natural Resources Well University 7-43 38H Field Spraberry (Trend Area) County Andrews State Texas Country U.S.A.					Location: API #: 42-003-47346 442' FNL & 1239'FWL SEC: 38, BLK: 7, TWP: Survey: University Lands SEC TWP RGE		
Permanent Datum Ground Level Elevation 2955' Log Measured From Kelly Bushing 29'A.P.D. Drilling Measured From Kelly Bushing					Other Services Elevation K.B. 2984' D.F. 2983' G.L. 2955'		
Date	31-July-2016						
Run Number	ONE						
Depth Driller	19795'						
Depth Logger	9723'						
Bottom Logged Interval	9720'						
Top Log Interval	Surface						
Open Hole Size	8 3/4"						
Type Fluid	Water						
Density / Viscosity	N/A						
Max. Recorded Temp.	169°						
Estimated Cement Top	5485'						
Time Well Ready	ROA						
Time Logger on Bottom	17:30						
Equipment Number	W4883						
Location	Midland						
Recorded By	J. Slocum						
Witnessed By	Mr. Fabian Sotelo						
Borehole Record			Tubing Record				
Run Number	Bit	From	To	Size	Weight	From	To
ONE							
TWO							
THREE							
FOUR							
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String	13 3/8"	54.5#	Surface	2010'			
Prot. String	9 5/8"	40#	Surface	6022'			
Production String	5 1/2"	20#	Surface	19795'			
Liner							
Marker Joints	8890' - 8910'		8662' - 8671'				

<<< Fold Here >>>

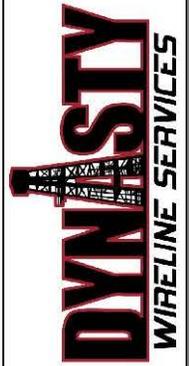
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Radial Bond Log Correlated to Marker Joints 8661.5' - 8671.5' and 8890' - 8910' Using a +8' Correction.

No Logs Available For Correlation.

THANK YOU FOR CHOOSING DYNASTY WIRELINE SERVICES!



MAIN PASS (0 PSI)

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 11 February 2016 **GAU Number:** 151025

Attention:	PIONEER NATURAL RES. USA, ATTN WELDON PIERSON IRVING, TX 75039	API Number:	
Operator No.:	665748	County:	ANDREWS
		Lease Name:	UNIVERSITY 7-43
		Lease Number:	
		Well Number:	36H
		Total Vertical Depth:	11600
		Latitude:	32.357801
		Longitude:	-102.228051
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UNIVERSITY LAND; Block-7; Section-38

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.

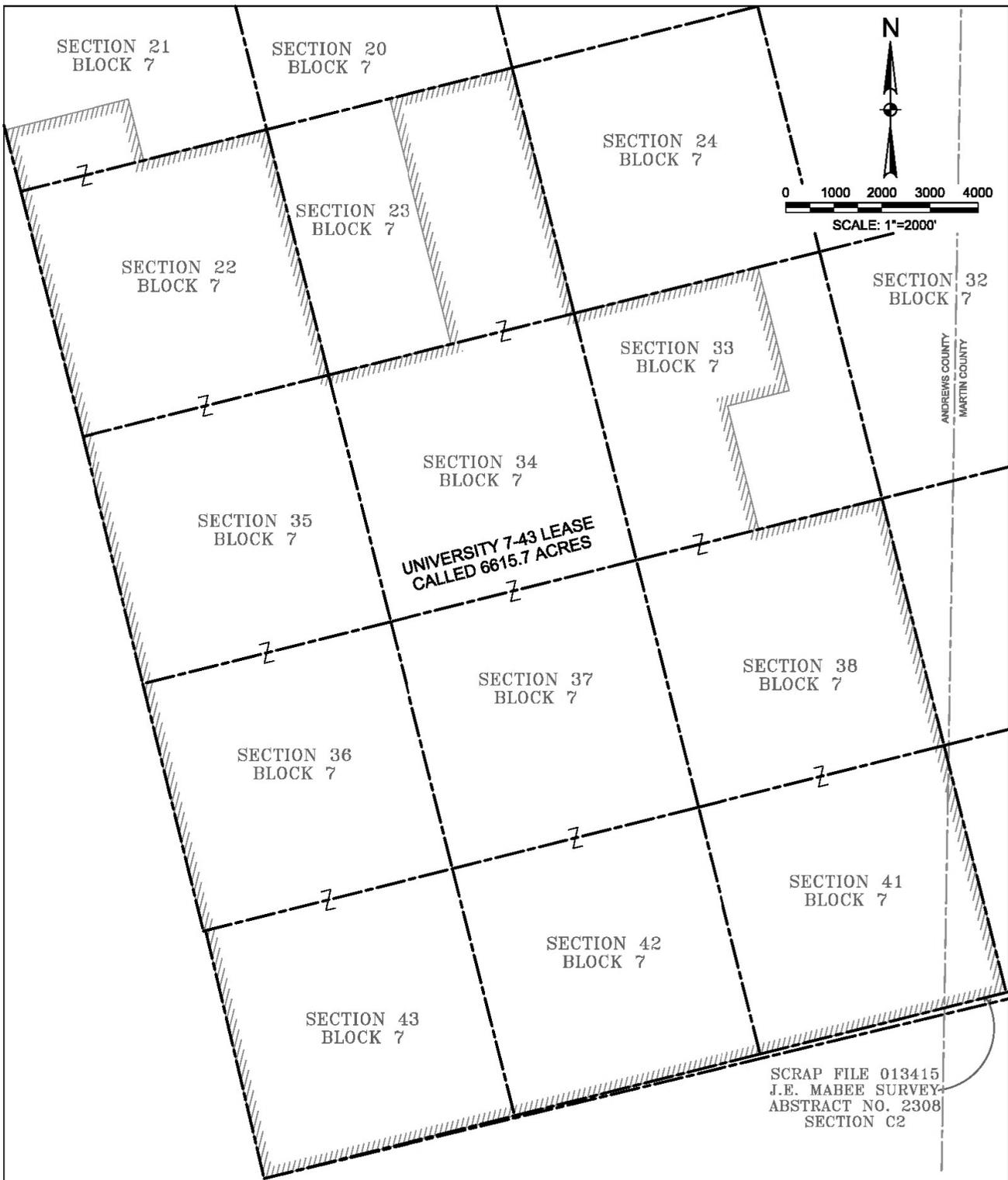
This recommendation is applicable to all wells within a radius of 200 feet of this location.

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 02/11/2016. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Form GW-2 P.O. Box 12967 Austin, Texas 78771-2967 512-463-2741 Internet address: www.rrc.texas.gov
Rev. 02/2014



LEGEND

- LEASE LINE
- WELL LATERAL
- SECTION LINE
- LAND HOOK
- COUNTY LINE
- FIR FOUND IRON ROD
- C.M. CONTROLLING MONUMENT
- N.T.S. NOT TO SCALE
- CONC B/D CONCRETE BRASS DISK
- CONC BRKN/B/D CONCRETE BROKEN BRASS DISK
- STNMND STONE MOUND
- GIP GALVANIZED IRON PIPE
- FN FND NAIL
- FIP FOUND IRON PIPE
- FIR 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

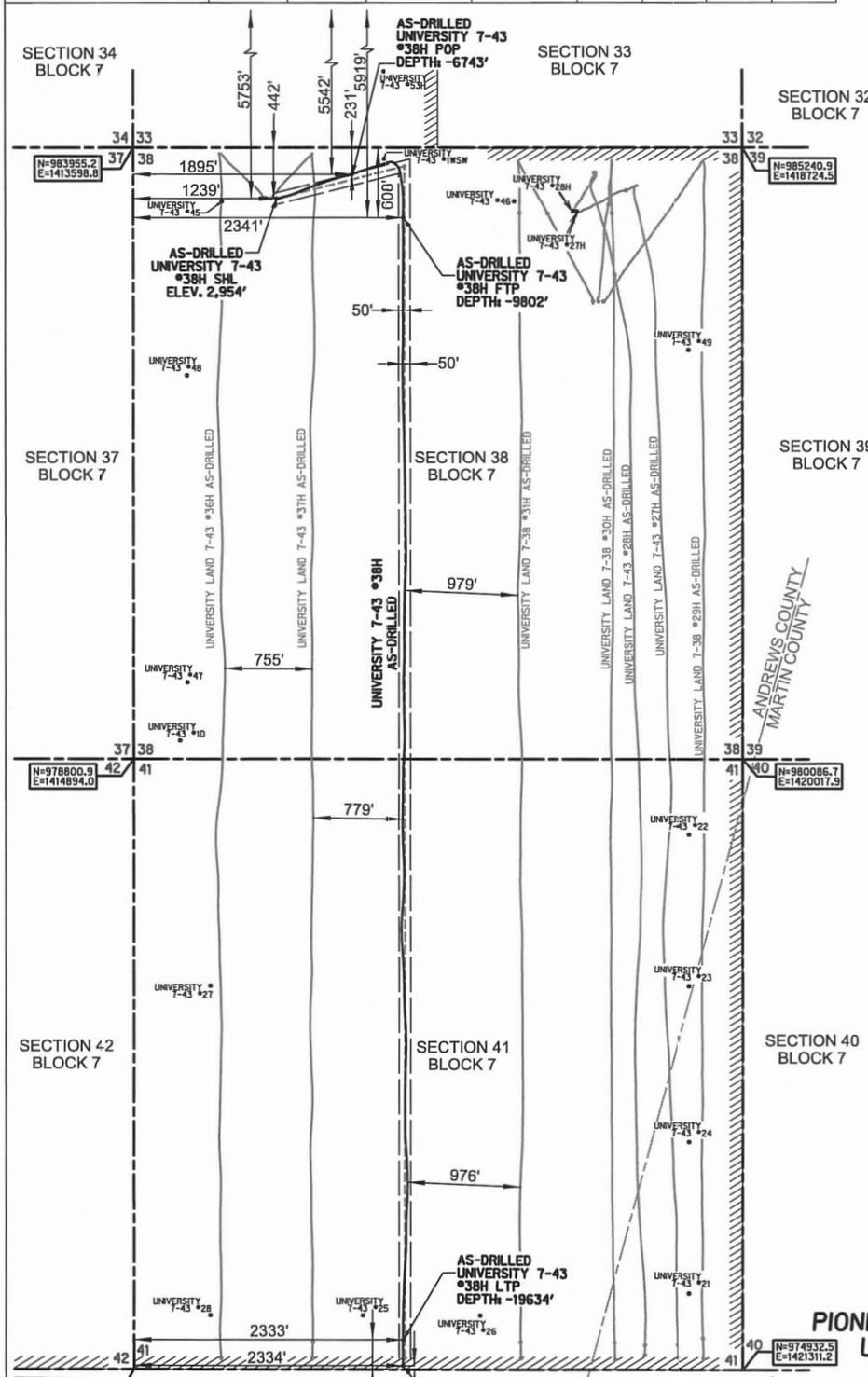
HALFF ASSOCIATES, INC., ENGINEERS - SURVEYORS
4500 W. Hillnole Ave. Ste 301 D - Midland, TEXAS - 79703
SCALE: 1"=2000' (432)-695-6110 AVO. 29678-W038

PIONEER
NATURAL RESOURCES

UNIVERSITY 7-43 #38H	NORTHING (NAD27)	EASTING (NAD27)	LATITUDE (NAD 27)	LONGITUDE (NAD 27)	SURVEY LINE		LEASE LINE	
SURFACE HOLE (SHL)	983828.3	1414908.4	32.3578520	102.2277663	442' N	1239' W	5753' N	1239' W
POINT OF PENETRATION (POP)	984192.3	1415493.7	32.3588795	102.2258917	231' N	1895' W	5542' N	1895' W
FIRST TAKE POINT (FTP)	983935.6	1416018.2	32.3581988	102.2241794	608' N	2341' W	5919' N	2341' W
LAST TAKE POINT (LTP)	974465.9	1418389.7	32.3322879	102.2159838	259' S	2333' W	259' S	2333' W
BOTTOM HOLE (BHL)	974249.0	1418445.2	32.3316944	102.2157922	35' S	2334' W	35' S	2334' W

0 500 1000 1500 2000

SCALE: 1"=1000'



NOTES:

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

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 1.00022818 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 ACRESAGES 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.



09/23/2016

NOTE: WELL IS LOCATED ABOUT 17.2 MILES EAST OF ANDREWS, ANDREWS COUNTY, TEXAS.
UNIVERSITY 7-43 LEASE
CALLED 6615.7 ACRES

PIONEER NATURAL RESOURCES
UNIVERSITY 7-43 #38H
AS-DRILLED PLAT
LOCATED IN
SECTION 38 AND SECTION 41, BLOCK 7,
UNIVERSITY LAND SURVEY, ANDREWS COUNTY,
TEXAS



DATED: 9/23/2016
BY: LATASHA OLIVER

TBPLS FIRM NO. 10193998
HALFF ASSOCIATES INC., ENGINEERS ~ SURVEYORS
3300 N. A. ST., BLDG 1, STE #114, MIDLAND, TEXAS ~ 79705
SCALE: 1"=1000' (432)-253-3250 AVO. 29678-W0129

PIONEER
NATURAL RESOURCES

SCRAP FILE 013415
J.E. MABEE SURVEY
ABSTRACT NO. 2308
SECTION C2

LEGEND

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