



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 No.	
Permit to Drill, Plug Back, or Rule 37 Exception	02/12/2016	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 Is Cementing Affidavit (Form W-15)	40.8 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	5753.0 Feet from the North Line and 4044.0 Feet from the East Line of the UNIVERSITY 7-43 Lease.	Off Lease :	No

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											
Ro	Type of Casing	Casing	Hole	Setting	Multi -	Multi -	Cement	Cement	Slurry	Top of	TOC
		Size (in.)	Size	Depth	Stage Tool	Stage Shoe	Class	Amoun	Volume (cu.	Cement (ft.)	Determined By
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>
1	2 7/8	9416	
		<u>Packer Depth (ft.)/Type</u>	
		/	

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		
<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>

FORMATION RECORD					
Formations	Encountere	Depth TVD	Depth MD	Is formation	Remarks
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: Spraberry (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

Digitally signed by clint thompson
DN: cn=clint thompson, o=Schlumberger, ou=US, email=clint.thompson@slb.com, c=US

Name and title of cementer's representative	Cementing Company	Signature
2106 North County Road	Midland, TX, 79705	(432) 687-7058
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.

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

Signature: 
e
te, Zip Code Tel: Area Code Number Date: mo. day yr.

m W-15, Cementing Report

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

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.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).
- 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&r=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&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.
- 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.
- 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.
- 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.
- 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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CEMENTING REPORT

Form W-15

Rev. 08/2014

Cementers: Fill in shaded areas.

Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: Pioneer Natural Resources

Operator P-S No.: 665744

Cementing Name: Schlumberger

Cementing P-S No.: 754900

WELL INFORMATION

District No.: 9

County: Andrews

Well No.: 38H

API No.: 4200343346

Drilling Permit No.: 913917

Lease Name: UNIVERSITY 7-43

Lease No.: 40532

Field Name: Spraberry (Trend 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.): 6040'

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.): 6022'

Top of liner (ft.):

Casing? ☐ Yes ☒ No

Setting depth liner (ft.):

Hrs. waiting on cement before drill-out: 12

Calculated top of cement (ft.): 3447

Cementing date: 28-Apr-16

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	634	POZ-C	Remarks	1610	2055
2	320	C	Remarks	426	529
3					
Total	954			2036	2575

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 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:

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					



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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** Drilling Permit No.: **813817**
Lease Name: **University 7-43** Lease No.: **40932**
Field Name: **Spraberry (TREND 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 LC** No. of centralizers used: **40**
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ Yes ☒ No If no for surface casing, explain in Remarks. **1976'**
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

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	374	H	Remarks	927.5	3500
2	1659	H	Remarks	2604.6	10783
3					
Total	2033			3532.1	14283

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 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: 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: 0.25% D238 + 1.2% D079 + 0.1% D208 + 47pps D909 + 3pps D042 + 5% D154 + 0.02gps D047 + 2% D020 + 37pps D035
 #2: 0.1% D065 + 0.3% D079 + 47pps D909 + 3.5% D020 + 0.1% D208 + 0.02gps D047 + 0.3% D238 + 0.25% D013 + 3pps D042 + 37pps D035
 #3:

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>Joe Bessler, FS</u>	<u>Schlumberger</u>	
Name and title of cementer's representative	Cementing Company	Signature
<u>32 E. Industrial Loop</u>	<u>Midland</u>	<u>TX</u>
Address	City,	State,
<u>79701</u>	<u>(432) 683-1887</u>	<u>June 9, 2016</u>
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 data and facts presented in this report.

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

<u></u>	<u></u>
Title	Signature
<u></u>	<u>8/24/16</u>
Tel: Area Code Number	Date: mo. day yr.

INSTRUCTIONS for Form W-15, Cementing Report

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

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.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).
- 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_loc=&p_loc=&p_loc=&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_loc=&p_loc=&p_loc=&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.
- 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.
- 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.
- 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.
- 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

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

City: IRVING

State: TX

Well No: 38H

Sec: 38 **Block:** 7

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

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: 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 Well Field County State	Pioneer Natural Resources University 7-43 38H Spraberry (Trend Area) Andrews 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					
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							
Run Number	Bit	From	To	Size	Weight	From	To
ONE							
TWO							
THREE							
FOUR							
Casing Record		Size		Wgt/Ft		Top	
Surface String		13 3/8"		54.5#		Surface	
Prot. String		9 5/8"		40#		Surface	
Production String		5 1/2"		20#		Surface	
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)

Pioneer Natural Resources

University 7-43 36H-38H pad



0 1,422 2,844
FEET

POSTED WELL DATA

Well Name
ProdFM

●

Well Number

WELL SYMBOLS

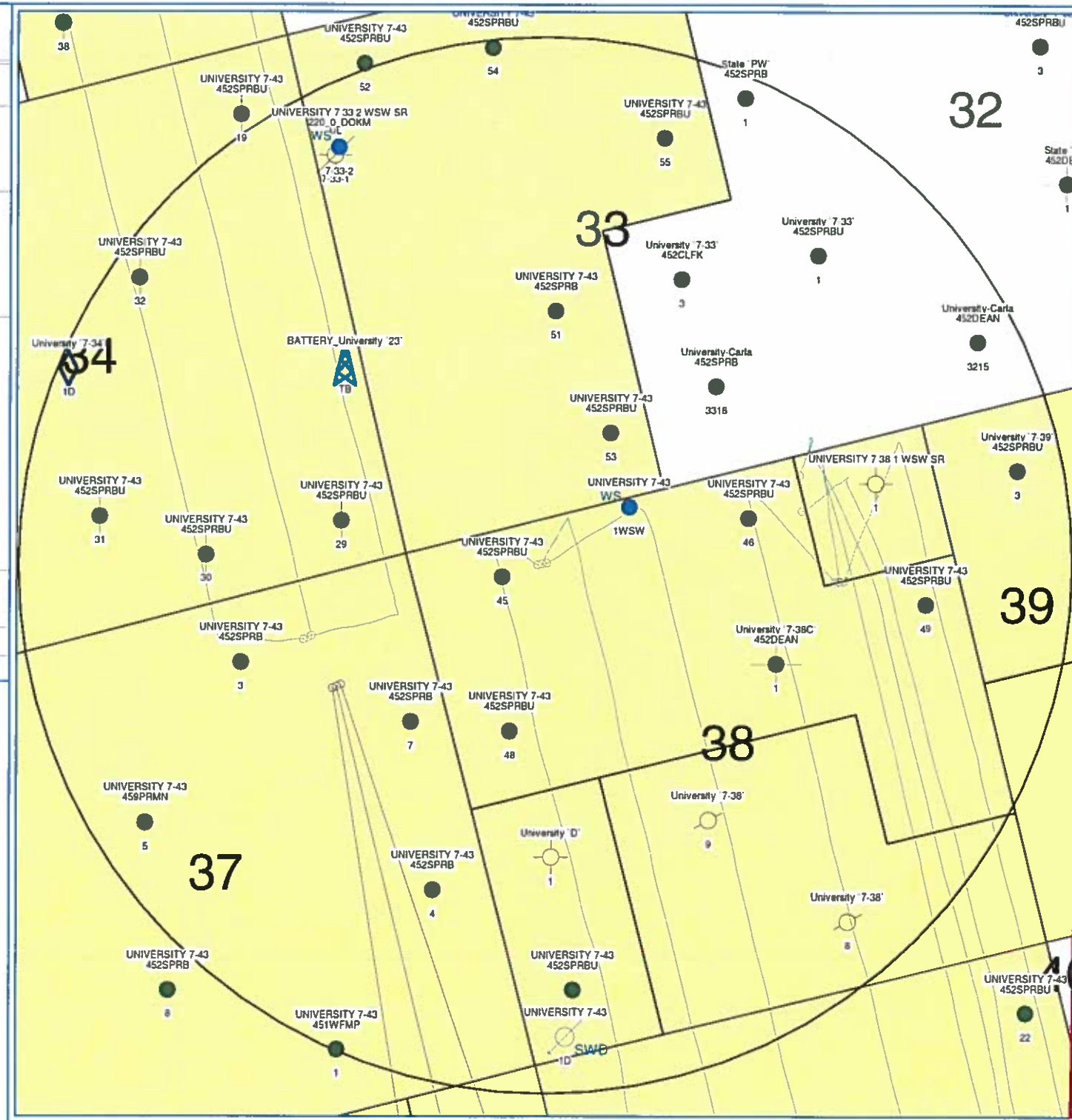
- Abandoned Well
- Abandoned Oil Well
- Completion in Progress
- Dry Hole
- Proposed Injector
- Location (Default)
- Oil Well
- Shut-in Oil and Gas
- Salt Water Disposal
- Facilities
- Water Supply
- Junked & Abandoned

REMARKS

Circle Represents 1 Mile

By: Casi Renfro

July 15, 2016



PETRA 7/15/2016 9:26:21 AM

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**Operator No.:** 665748**API Number:**
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.

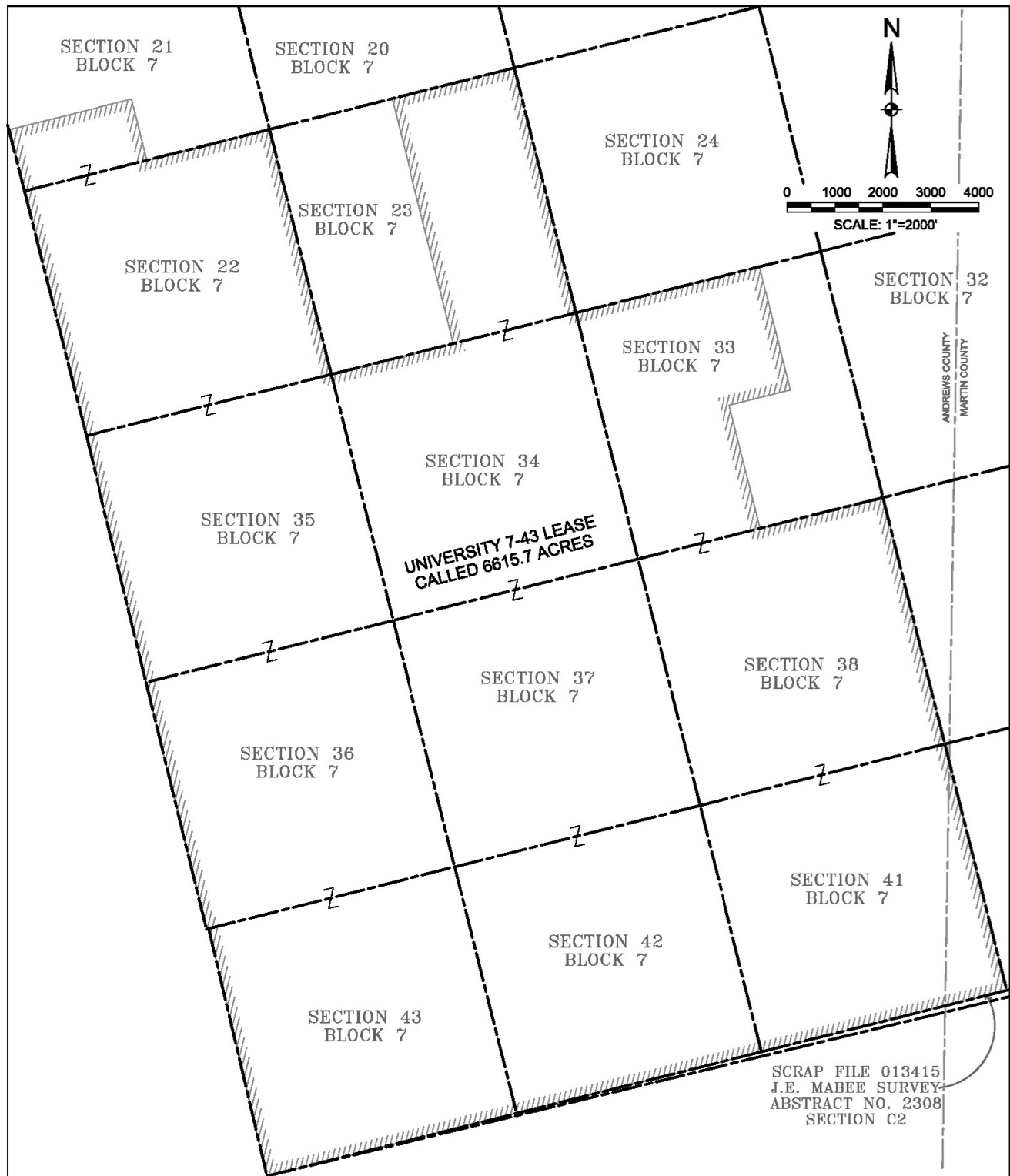
This recommendation is applicable to all wells within a radius of 200 feet of this location.

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
7	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

PIONEER NATURAL RESOURCES
UNIVERSITY 7-43 LEASE



DATED: 10/5/2015
BY: JUAN GONZALEZ

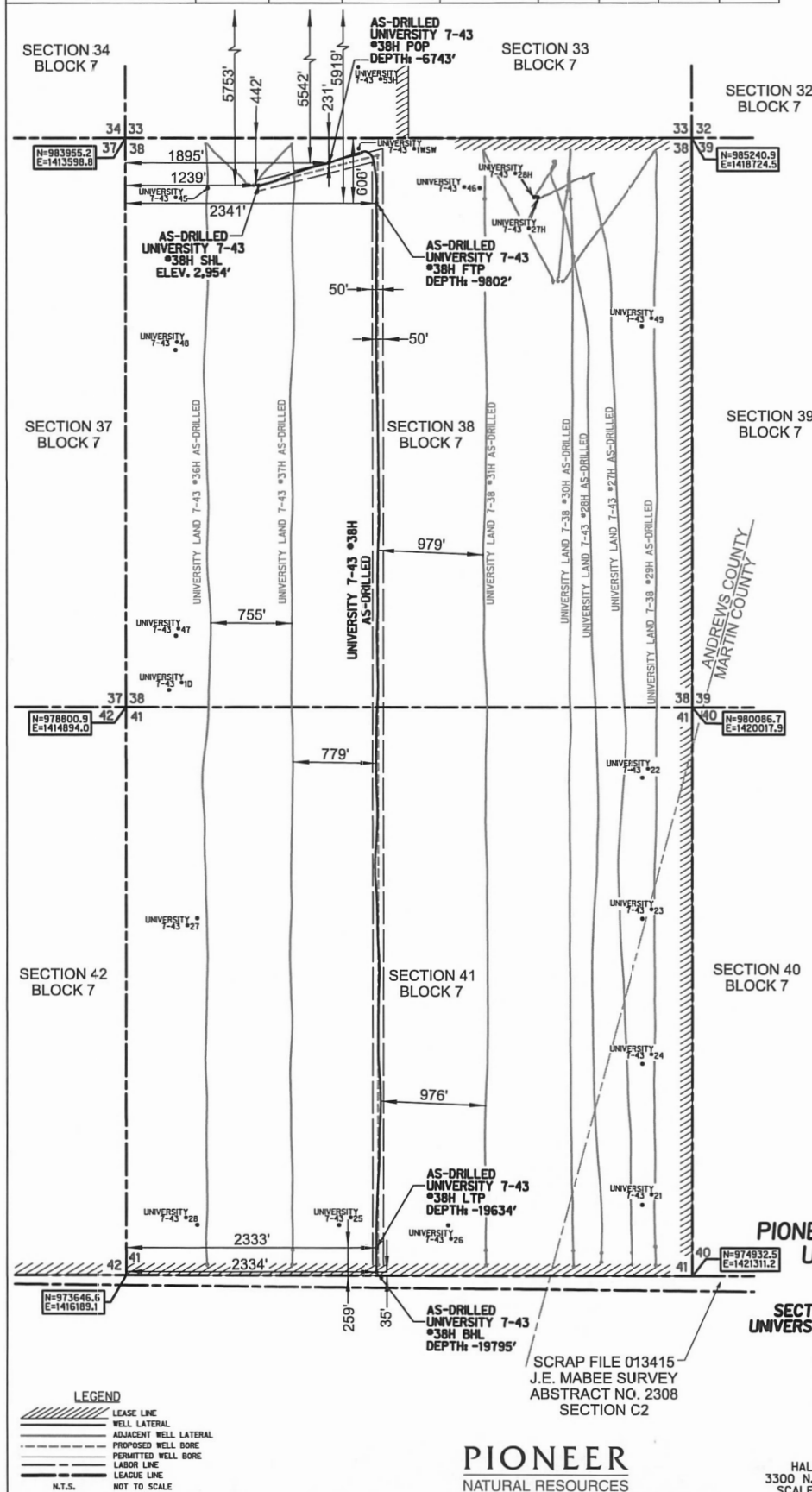
TBPLS FIRM NO. 10193998
HALFF ASSOCIATES INC., ENGINEERS - SURVEYORS
4500 W. Millinole Ave. Ste 301 D- Midland, TEXAS - 79703
SCALE: 1"=2000' (432)-695-6110 AVO. 29678-W038

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 CORN.

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

HALFF

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