



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved  
Date: 07/21/2017  
Tracking No.: 174864

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

OPERATOR INFORMATION	
Operator Name: PERMIAN RESOURCES, LLC	Operator No.: 655836
Operator Address: PO BOX 14670 OKLAHOMA CITY, OK 73113-0000	

WELL INFORMATION	
API No.: 42-383-39835	County: REAGAN
Well No.: 936HS	RRC District No.: 7C
Lease Name: UNIVERSITY 11 RE	Field Name: LIN (WOLFCAMP)
RRC Lease No.: 18457	Field No.: 53613750
Location: Section: 33, Block: 10, Survey: UNIVERSITY LANDS, Abstract:	
Latitude:	Longitude:
This well is located 2.97 miles in a NW direction from BIG LAKE, which is the nearest town in the county.	

FILING INFORMATION		
Purpose of filing: Well Record Only		
Type of completion: New Well		
Well Type: Shut-In Producer	Completion or Recompletion Date:	06/01/2017
Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	03/23/2017	824347
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION			
Spud date: 03/26/2017	Date of first production after rig released:	06/01/2017	
Date plug back, deepening, recompletion, or drilling operation commenced: 03/26/2017	Date plug back, deepening, recompletion, or drilling operation ended:	06/01/2017	
Number of producing wells on this lease in this field (reservoir) including this well: 6	Distance to nearest well in lease & reservoir (ft.):	188.0	
Total number of acres in lease: 3214.83	Elevation (ft.):	2666	GR
Total depth TVD (ft.): 7250	Total depth MD (ft.):	17626	
Plug back depth TVD (ft.):	Plug back depth MD (ft.):		
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours):	15.0	
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached?	Yes	
Type(s) of electric or other log(s) run: Other	Multiple completion?	No	
Electric Log Other Description: MEASURED DEPTH LOG			
Location of well, relative to nearest lease boundaries	Off Lease :	Yes	
of lease on which this well is located:	549.0 Feet from the	South Line and	
	527.0 Feet from the	East Line of the	
	UNIVERSITY 11 RE Lease.		
FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
PACKET:	N/A		

W2: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination

Depth (ft.): 850.0

Date: 03/17/2017

SWR 13 Exception

Depth (ft.):

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test:

Production method:

Number of hours tested: 24

Choke size:

Was swab used during this test? No

Oil produced prior to test:

PRODUCTION DURING TEST PERIOD:

Oil (BBLs):

Gas (MCF):

Gas - Oil Ratio: 0

Flowing Tubing Pressure:

Water (BBLs):

CALCULATED 24-HOUR RATE

Oil (BBLs):

Gas (MCF):

Oil Gravity - API - 60.:

Casing Pressure:

Water (BBLs):

CASING RECORD											
Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	1011			C	1290	2127.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5998			C	1650	4121.0	0	Circulated to Surface
3	Conventional Production	5 1/2	8 3/4	17613			H	3100	5170.0	0	Circulated to Surface

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

TUBING RECORD			
Row	Size (in.)	Depth	Size (ft.)
N/A			

Packer Depth (ft.)/Type	
/	

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
L			
N/A			

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

Was hydraulic fracturing treatment performed?

No

Is well equipped with a downhole actuation sleeve?

No

If yes, actuation pressure (PSIG):

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

Actual maximum pressure (PSIG) during hydraulic fracturing:

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

No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
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N/A

FORMATION RECORD					
<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
GRAYBURG	Yes	2366.0	2366.0	Yes	
QUEEN	Yes	1910.0	1910.0	Yes	
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY	Yes	2867.0	2867.0	Yes	
CLEARFORK	Yes	3484.0	3484.0	Yes	
SPRABERRY	Yes	5708.0	5708.0	Yes	
STRAWN	No	9300.0	10200.0	No	WELL IS NOT DEEP
FUSSELMAN	No	8800.0	11000.0	No	WELL IS NOT DEEP
ELLENBURGER	No	8700.0	10500.0	No	WELL IS NOT DEEP
Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?					No
Is the completion being downhole commingled (SWR 10)?					No

REMARKS

RRC REMARKS
<p><b>PUBLIC COMMENTS:</b></p>
<p><b>CASING RECORD :</b></p>
<p><b>TUBING RECORD:</b></p> <p>TUBING WILL BE SET WHEN WELL IS COMPLETED.</p>
<p><b>PRODUCING/INJECTION/DISPOSAL INTERVAL :</b></p>
<p><b>ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :</b></p>
<p><b>POTENTIAL TEST DATA:</b></p>

OPERATOR'S CERTIFICATION	
<b>Printed Name:</b> Rena Carter	<b>Title:</b> Sr. Regulatory Specialist
<b>Telephone No.:</b> (405) 968-4450	<b>Date Certified:</b> 06/13/2017



# 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  
Operator: Fill In other

OPERATOR INFORMATION					
Operator Name: Permian Resources LLC			Operator P-5 No.: 655836		
Cementer Name: Crest Pumping Technologies			Cementer P-5 No.: 189898		
WELL INFORMATION					
District No.: 7C			County: Reagan		
Well No.: 936H 5			API No.: 42-383-39835		
Lease Name: University 11 RE			Drilling Permit No.: 824347		
Field Name: LINC (Wolfcamp)			Lease No.:		
			Field No.: 53613750		
I. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 17 1/2		Depth of drilled hole (ft.): 1013		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 13 3/8		Casing weight (lbs/ft) and grade: 54.5 J-55		No. of centralizers used: 6	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.				Setting depth shoe (ft.): 1011'	
				Top of liner (ft.):	
				Setting depth liner (ft.):	
Hrs. waiting on cement before drill-out: 1/2		Calculated top of cement (ft.): 0		Cementing date: 03/26/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	790	Class C	See Remarks	1,462	2,105
2	500	Class C	See Remarks	665	957
Total	1,290			2,127	3,062
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 If no for surface casing, explain in Remarks.				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.)
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 If no for surface casing, explain in Remarks.				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.)
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							

3 bwow Sodium Chloride, 6 % Bentonite Gel, 0.5 lbs/sk Cellophane Flake,  
2 % Calcium Chloride, 0.5 lbs/sk Cellophane Flake,

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.

Deseree McCarter/Cementer	Crest Pumping Technologies	<i>Deseree McCarter</i>
Name and title of cementer's representative	Cementing Company	Signature
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	03/26/2017
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

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

<i>Rena Carter</i>	<i>Regulatory Specialist</i>	<i>Rena Carter</i>
Typed or printed name of operator's representative	Title	Signature
P.O. Box 14670 Oklahoma City, OK. 73113	405-968-4450	06/13/17
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

### Instructions for Form W-15, Cementing Report

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

**A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.

The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

**B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).

**C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

**D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.

**E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool, and Multi-stage cement shoe. The operator must

**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

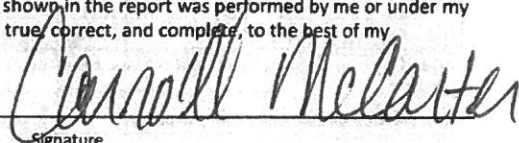
 Cementer: Fill in  
 Operator: Fill in other

OPERATOR INFORMATION					
Operator Name: Permian Resources LLC			Operator P-5 No.: 655836		
Cementer Name: Crest Pumping Technologies			Cementer P-5 No.: 189898		
WELL INFORMATION					
District No.: 7C			County: Reagan		
Well No.: 936HS			API No.: 42-383-39835		Drilling Permit No.: 824347
Lease Name: University 11 RE			Lease No.:		
Field Name: Lin (Wolfcamp)			Field No.: 53613750		
I. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 12 1/4		Depth of drilled hole (ft.): 5,998		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 9 5/8		Casing weight (lbs/ft) and grade: 40 HCK55		No. of centralizers used: 52	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.				Setting depth shoe (ft.): 5,998	
				Top of liner (ft.):	
				Setting depth liner (ft.):	
Hrs. waiting on cement before drill-out: 24		Calculated top of cement (ft.): 0		Cementing date: 04/09/17	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1450	Class C	See Remarks	3,799	12,130
2	200	Class C	See Remarks	322	1,028
Total	1,650			4,121	13,158
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 shoe (ft.):	
If no for surface casing, explain in Remarks.					
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.)
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 shoe (ft.):	
If no for surface casing, explain in Remarks.					
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.)
Total					

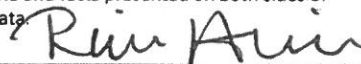
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount 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							

5 bwow Sodium Chloride, 7 % Bentonite Gel, 0.05 % Geovis XT, 0.2 % CPT-45, 0.25 % CPT-503P, 0.71 lbs/sk Dura Fiber, 4 lbs/sk Kol Seal, 0.3 % CPT-20A, 3 bwow Sodium Chloride, 1 % Bentonite Gel, 0.5 % CPT-19, 0.4 % CD-3, 4 lbs/sk Kol Seal, 0.35 % CPT-20A,

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.

Carroll McCarter/Cementer	Crest Pumping Technologies	
Name and title of cementer's representative	Cementing Company	Signature
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	04/09/2017
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

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

Rian Hinds	Regulatory Technician	
Typed or printed name of operator's representative	Title	Signature
PO Box 14670 OKC, OK 73113	405-968-4451	5/8/2017
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

### Instructions for Form W-15, Cementing Report

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

**A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.

The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

**B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System

(<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).

**C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

**D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.

**E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool. and Multi-stage cement shoe. The operator must

**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

## CEMENTING REPORT

Cementer: Fill in  
Operator: Fill in other

OPERATOR INFORMATION					
Operator Name: Permian Resources LLC			Operator P-5 No.: 655836		
Cementer Name: Crest Pumping Technologies			Cementer P-5 No.: 189898		
WELL INFORMATION					
District No.: 7C			County: Reagan		
Well No.: 936 HS			API No.: 42-383-39835 Drilling Permit No.: 824347		
Lease Name: University 11 RE			Lease No.:		
Field Name: LIN (w/efcamp)			Field No.: 53613750		
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		Depth of drilled hole (ft.): 17613		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 5 1/2		Casing weight (lbs/ft) and grade: P-110 17H		No. of centralizers used: 144	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.				Setting depth shoe (ft.): 17613	
				Top of liner (ft.):	
				Setting depth liner (ft.):	
Hrs. waiting on cement before drill-out: 1/2		Calculated top of cement (ft.): 0		Cementing date: 05/26/2017	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	720	Class H	See Remarks	2,124	8,409
2	2380	Class H	See Remarks	3,046	12,059
Total	3,100			5,170	20,468
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:			
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:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO				Setting depth shoe (ft.):	
If no for surface casing, explain in Remarks.					
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.)
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:			
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:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO				Setting depth shoe (ft.):	
If no for surface casing, explain in Remarks.					
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.)
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							

5 bwow Sodium Chloride, 1 % CPT-19, 2.5 % CPT-45, 0.4 % CPT-503P, 5 % Gypsum, 0.25 % CPT-20A, 0.25 % Citric Acid,  
 10 bwow Sodium Chloride, 2 % Bentonite Gel, 0.4 % CPT-12, 0.95 % CPT-15, 0.05 % Geovis XT, 0.05 % CPT-20A,  
 5 Gallons CPT-21L, 54 Gallons Coreplex 300, 54 Gallons Biocide,

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.

Charles Overby/Cementer	Crest Pumping Technologies	<i>Charles Overby</i>
Name and title of cementer's representative	Cementing Company	Signature
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	05/26/2017
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

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

<i>Rena Carter</i>	<i>Regulatory Specialist</i>	<i>Rena Carter</i>
Typed or printed name of operator's representative	Title	Signature
P.O. Box 14670 Oklahoma City, OK 73113	405-968-4450	06/13/17
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

### Instructions for Form W-15, Cementing Report

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

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

Tracking No.: 174864

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: PERMIAN RESOURCES, LLC	District No. 7C	Completion Date: 06/01/2017
Field Name LIN (WOLFCAMP)	Drilling Permit No. 824347	
Lease Name UNIVERSITY 11 RE	Lease/ID No. 18457	Well No. 936HS
County REAGAN	API No. 42- 383-39835	

## 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). \_\_\_\_\_

Rena Carter

Signature

PERMIAN RESOURCES, LLC

Name (print)

Sr. Regulatory Specialist

Title

(405) 968-4450

Phone

06/08/2017

Date

-FOR RAILROAD COMMISSION USE ONLY-



# COLUMBINE LOGGING

Scale: 1" / 100'  
Measured Depth Log

**Well Name** University 11 RE 936HS

**Location** Blk. 11, Sec. 04 + 09

**State** Texas

**County** Reagan

**Country** USA

**Rig Number** Unit 407

**API Number** 42383398350000

**AFE #** 1550416

**Geographic Region** Permian

**Field** LIN (Wolfcamp)

**Spud Date** 3/26/2017

**Surface Coordinates** LAT: 31.321562  
LON: -101.502359

**Bottom Hole Coordinates** LAT: 31.185  
LON: -101.502079

**Ground Elevation** 2666'

**K.B. Elevation** 2687'

**Logged Interval** 6500'

**Formation** Wolfcamp A

**Type of Drilling Fluid** OBM

## Operator

**Company** PERMIAN RESOURCES LLC.

**Address** 5701 N. SHARTEL AVE,  
OKLAHOMA CITY, OK 73118



**PERMIAN**  
**RESOURCES**

# CERTIFICATE OF COMPLIANCE AND TRANSPORTATION AUTHORITY

P-4

This facsimile P-4 was generated electronically from data submitted to the RRC.

A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 174864

1. Field name exactly as shown on proration schedule <b>LIN (WOLFCAMP)</b>		2. Lease name as shown on proration schedule <b>UNIVERSITY 11 RE</b>					
3. Current operator name exactly as shown on P-5 Organization Report <b>PERMIAN RESOURCES, LLC</b>		4. Operator P-5 no. <b>655836</b>	5. Oil Lse/Gas ID no <b>18457</b>	6. County <b>REAGAN</b>	7. RRC district <b>7C</b>		
8. Operator address including city, state, and zip code <b>PO BOX 14670 OKLAHOMA CITY, OK 73113</b>		9. Well no(s) (see instruction E) <b>936HS</b>					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) <b>a. Change of:</b> <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ --- OR --- <b>b. New RRC Number for:</b> <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <b>Due to:</b> <input type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)		11. Effective Date <b>06/01/2017</b>			
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
N/A							
<b>RRC USE ONLY:</b> Reviewer's initials: <u>RRC Staff</u> Approval date: <u>07/21/2017</u>							
<b>15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.</b> Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator _____ Name (print) _____ Title _____				Signature <input type="checkbox"/> <b>Authorized Employee of previous operator</b> <input type="checkbox"/> <b>Authorized agent of previous operator (see instruction G)</b> _____ Date _____ Phone with area code _____			
<b>16. CURRENT OPERATOR CERTIFICATION.</b> By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
<b>PERMIAN RESOURCES, LLC</b> Name (print) <u>Sr. Regulatory Specialist</u> Title <u>rena.carter@permianresources.com</u> E-mail Address (optional)				<b>Rena Carter</b> Signature <input checked="" type="checkbox"/> <b>Authorized Employee of current operator</b> <input type="checkbox"/> <b>Authorized agent of current operator (see instruction G)</b> _____ Date <u>06/08/2017</u> Phone with area code <u>(405) 968-4450</u>			



**CERTIFICATE OF  
POOLING AUTHORITY**

Revised 05/2001

**P-12**

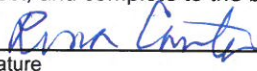
1. Field Name(s) <b>Lin (Wolfcamp)</b>	2. Lease/ID Number (if assigned)	3. RRC District Number <b>7C</b>
4. Operator Name <b>Permian Resources, LLC.</b>	5. Operator P-5 Number <b>655836</b>	6. Well Number <b>936HS</b>
7. Pooled Unit Name <b>University 11 RE</b>	8. API Number	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County <b>Reagan</b>	11. Total acres in pooled unit <b>3214.8</b>	

**DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT**

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
1	University Lands	320.375	<input type="checkbox"/>	<input type="checkbox"/>
2	University Lands	641.5	<input type="checkbox"/>	<input type="checkbox"/>
3	University Lands	641.5	<input type="checkbox"/>	<input type="checkbox"/>
4	University Lands	641.5	<input type="checkbox"/>	<input type="checkbox"/>
5	University Lands	641.5	<input type="checkbox"/>	<input type="checkbox"/>
6	University Lands	328.45	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

**CERTIFICATION:**

I declare under penalties prescribed pursuant to the Sec. 91.143, Texas Natural Resources Code, that I am authorized to make the foregoing statements and that the information provided by me or under my direction on this Certificate of Pooling Authority is true, correct, and complete to the best of my knowledge.



Signature

Rena Carter

Print Name

Regulatory Coordinator

rena.carter@permianresources.com

02/28/2017

(405) 968-4450

Title

E-mail (if available)

Date

Phone

**INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40**

- When two or more tracts are pooled to form a unit to obtain a drilling permit, file completion paperwork, or reform a pooled unit pursuant to Rule 38(d)(3) the operator must file an original Certificate of Pooling Authority and certified plat.
- The certified plat shall designate each tract with an outline and a tract identifier. The tract identifier on the plat shall correspond to the tract identifier and associated information listed on the Certificate.
- If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
- If the Purpose of Filing is to obtain a drilling permit, in box #1 list all applicable fields separately or enter "All Fields" if the Certificate pertains to all fields requested on Form W-1.
- If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- Identify the drill site tract with an \* to the left of the tract identifier.
- The total number of acres in the pooled unit in #11 should equal the total of all acres in the individual tracts listed.

**Clear Form**

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 17 March 2017**GAU Number:** 169038**Attention:** PERMIAN RESOURCES, LLC  
PO BOX 14670  
OKLAHOMA CITY, OK 73113**Operator No.:** 655836**API Number:** 38339829  
**County:** REAGAN  
**Lease Name:** University 11 RE  
**Lease Number:**  
**Well Number:** 932HA  
**Total Vertical Depth:** 9000  
**Latitude:** 31.215619  
**Longitude:** -101.502487  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UL; Block-10; Section-33

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 the base of the Santa Rosa, which is estimated to occur at a depth between 800 and 850 feet, must be protected.

This recommendation is applicable for all wells drilled in this SE/4 of sec. 33.

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 03/16/2017. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

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



NAD 27, Central Zone 4203

Surface Hole Location (Sec. 33)  
Latitude: 31.215620° N  
Longitude: 101.502359° W  
X=1634571.51  
Y=565251.81  
Elev.=2666'  
549' FSL & 527' FEL

Point of Penetration (Sec. 33)  
Latitude: 31.214146° N  
Longitude: 101.501745° W  
X=1634757.96  
Y=564713.67  
15' FSL & 330' FEL

First Take Point (Sec. 4)  
Latitude: 31.213830° N  
Longitude: 101.501748° W  
X=1634755.62  
Y=564598.69  
100' FNL & 330' FEL

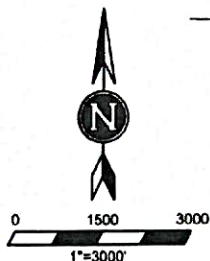
Last Take Point (Sec. 9)  
Latitude: 31.185233° N  
Longitude: 101.502077° W  
X=1634543.75  
Y=554199.82  
100' FSL & 331' FEL

Bottom Hole Location (Sec. 9)  
Latitude: 31.185000° N  
Longitude: 101.502079° W  
X=1634542.02  
Y=554114.84  
15' FSL & 331' FEL



Well Name  
UNIVERSITY 11 RE 936HS  
Drilling Field  
LIN (WOLFCAMP) FIELD

Nearest Town  
2.97 MILES NORTHWEST OF BIG LAKE, TEXAS



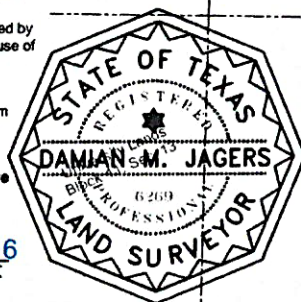
NOTE: This Plat does not, in anyway represent a "Boundary Survey", and does not comply with the current T.B.P.L.S. Minimum Standards of Procedures for Boundary Survey. Acreage shown herein were furnished by others. The information contained on this plat is intended for the sole use of PERMIAN RESOURCES, LLC.

NOTE: Bearings and coordinates refer to the Texas Coordinate System of 1927, Central Zone (4203), as observed by GPS observations

I, Damian M. Jagers do hereby certify that the above described well location was surveyed on the ground under my supervision, as shown.

*Damian M. Jagers* 1/10/2016  
DATE

Damian M. Jagers  
REGISTERED PROFESSIONAL LAND SURVEYOR  
TEXAS REGISTRATION NO. 6269



1501 Derrin Road, Suite 100, Longview, TX 75601  
Phone: 254-955-9588  
Email: cross@xtssurveying.com  
Web: www.xtssurveying.net

Draft Date	12-13-16
Drawn By	D. Jagers
Revised By	
Reviewed By	B. Weisinger

Well Plat  
For  
Permian Resources, LLC

University 11 RE 936HS  
University Lands Block 11, Section 4  
University Lands Block 11, Section 9  
University Lands Block 11, Section 3  
University Lands Block 11, Section 15  
University Lands Block 11, Section 10  
University Lands Block 11, Section 11  
University Lands Block 11, Section 7  
Reagan County, Texas

Tract	Lessor	Called Acreage	% of Total
1	University Lands	320.3750 Acres	9.9856
2	University Lands	641.5000 Acres	19.9544
3	University Lands	641.5000 Acres	19.9544
4	University Lands	641.5000 Acres	19.9544
5	University Lands	641.5000 Acres	19.9544
6	University Lands	328.4500 Acres	10.2168
Total		3214.8250 Acres	100.0000

University Lands  
Block 10, Sec. 35

University Lands  
Block 10, Sec. 34

University Lands  
Block 10, Sec. 33

University Lands  
Block 10, Sec. 32

University Lands  
Block 10, Sec. 31

University Lands  
Block 11, Sec. 2

University Lands  
Block 11, Sec. 3

University Lands  
Block 11, Sec. 4

University Lands  
Block 11, Sec. 5

University Lands  
Block 11, Sec. 6

University Lands  
Block 11, Sec. 10

University Lands  
Block 11, Sec. 9

University Lands  
Block 11, Sec. 8

University Lands  
Block 11, Sec. 7

University Lands  
Block 11, Sec. 14

University Lands  
Block 11, Sec. 15

University Lands  
Block 11, Sec. 16

University Lands  
Block 11, Sec. 17

University Lands  
Block 11, Sec. 18