



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 shade areas.
 Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: Oxy Usa Inc	Operator P-5 No.: 630591
Cementer Name: Crest Pumping Technologies	Cementer P-5 No.: 189898

WELL INFORMATION

District No.: 08	County: Midland ANDREWS
Well No.: 4404	API No.: 42-003-46118
Lease Name: Mabee MABEE 140A	Lease No.: 40718
Field Name: SPRABERRY (TREND AREA)	Field No.: 05280300

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate	<input type="checkbox"/> Liner <input type="checkbox"/> Production				
Drilled hole size (in.):	Depth of drilled hole (ft.): 0				
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:				
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): Top of liner (ft.):				
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			Remarks 1		
2			Remarks 2		
3					
Total					

II. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate	<input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings				
Drilled hole size (in.):	Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:				
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade: No. of centralizers used:				
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)				
Upper: Lower:	Upper: Lower:				
Tapered string size of casing in O.D. (in.)	Tapered string casing weight(lbs/ft) and grade				
Upper: Lower:	Upper: Lower:				
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):				
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): Cementing date:				
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

III. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate	<input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings				
Drilled hole size (in.):	Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:				
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade: No. of centralizers used:				
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)				
Upper: Lower:	Upper: Lower:				
Tapered string size of casing in O.D. (in.)	Tapered string casing weight(lbs/ft) and grade				
Upper: Lower:	Upper: Lower:				
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):				
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): Cementing date:				
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

STAGE 1 STAGE 2
SLURRY SLURRY
SQUEEZE SQUEEZE

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	5/18/2017	5/18/2017					
Size of hole of pipe (in.)	8 5/8	8 5/8					
Depth to bottom of tubing or drill pipe (ft.)	2450	2450					
Cement retainer setting depth (ft.)	2450	2450					
CIBP setting depth (ft.)	3630	3630					
Amount of cement on top of CIBP (ft.)	DRILLED OUT						
Sacks of cement used	550	280					
Slurry volume pumped (cu. ft.)	1045	314					
Calculated top of plug (ft.)	0	1605					
Measured top of plug, if tagged (ft.)	DRILLED OUT						
Slurry weight (lbs/gal)	12.6	16.2					
Class/type of cement	Class C	Class H					
Perforate and squeeze (YES/NO)	YES	YES					

REMARKS

- 1 5% Salt / 65 Gel
2 1lb/sk Salt / 2lb/sk Gypsum SHOT SQUEEZE HOLES IN 8 5/8" CASING AT 2750'. SET BP @ 3630'
3 AND SQ-PACKER AT 2450' AND SQUEEZED 830 SXS CEMENT INTO ANULUS.
DRILLED OUT, PRESSURE TESTED, DRILLED OUT BP THEN RE-INSTALLED 5 1/2".

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.

Roberto Garcia / Cementer

Name and title of cementer's representative

Crest Pumping Technologies

Roberto Garza

P.O. Box 117 Jacksboro TX 76458

State / Zip Code

940-567-3303

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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 the 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.

Robert K. Wilson

Typed or printed name of operator's representative

Regulatory Lead

Title

Signature

P.O. BOX 4294, HOUSTON, TX 77210

City, State, Zip Code

713-985-6991

Tel. Area Code

JUNE 13, 2017

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



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P.O. Box 12967

Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION

Operator Name: Occidental Permian LLC OXY USA INC
Cementer Name: Crest Pumping Technologies

Operator P-5 No.: 630591

Cementer P-6 No.: 189898

WELL INFORMATION

District No.:	08	County:	Midland ANDREWS
Well No.:	4404	API No.:	42-003-46118
Lease Name:	Mabee MABEE 140A	Lease No.:	40718
Field Name:	SPRABERRY (TREND AREA)	Field No.:	85280300

I. CASING CEMENTING DATA

Type of casing:	<input type="checkbox"/> Conductor	<input type="checkbox"/> Surface	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Liner	<input type="checkbox"/> Production
Drilled hole size (in.):	Depth of drilled hole (ft.):			Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:			No. of centralizers used:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	If no for surface casing, explain in Remarks.			Setting depth shoe (ft.):	Top of liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):			Setting depth liner (ft.):	

SLURRY

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

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:	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:	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:
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SLURRY

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

III. CASING CEMENTING DATA

Type of casing:	<input type="checkbox"/> Surface	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Production	<input type="checkbox"/> Tapered production	<input checked="" type="checkbox"/> Multi-stage cement/DV tool	<input type="checkbox"/> Multiple parallel strings
Drilled hole size (in.):	7 7/8	Depth of drilled hole (ft.):	11200	Est. % wash-out or hole enlargement:	2 1/2	
Size of casing in O.D. (in.):	5 1/2	Casing weight (lbs/ft) and grade:	17.0 L-80	No. of centralizers used:	3	

Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)					
Upper: Lower:	Upper:	Lower:	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:	Upper:	Lower:

Was cement circulated to ground surface (or bottom of cellar) outside casing? YES NO Setting depth tool (ft.): 3588

Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): SURFACE	Cementing date: 5/26/2017
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SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	470	35/65 Poz Class C	See Remarks	893	5,033
2	50	Class C	Neat	67	375
3					
Total	520			960	5,408

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 3% Sodium Chloride 6% Bentonite Gel, 4% CPT-503P
 2
 3
 4

**CEMENTING OF 5½" PRODUCTION WITH DV-TOOL AT
 3588' AFTER CONDUCTING SQUEEZE ON 9 5/8" INTERMEDIATE.
 5½" CASING WAS REMOVED AT 3634', THEN REPLACED AND CEMENTED
 WITH STAGE TOOL AT 3588'.**

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.

Kamrin Almond / Cementer

Name and title of cementer's representative

Crest Pumping Technologies

Cementing Company

Signature

P.O. Box 117 Jacksboro, TX 76458

City, State, Zip Code

940-567-3392

Tel: Area Code Number

Date: mo day yr

Address

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ROBERT K. WILSON

Typed or printed name of operator's representative

REGULATORY LEAD

Title

Signature

P.O. Box 4294, HOUSTON, TEXAS 77210

Address

City, State, Zip Code

713-985-6991

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JUNE 13, 2017

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

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G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.