



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
 Date: 01/12/2018
 Tracking No.: 182659

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION

Operator HUNT OIL COMPANY **Operator** 416330
Operator 1900 NORTH AKARD STREET DALLAS, TX 75201-2300

WELL INFORMATION

API 42-461-40592 **County:** UPTON
Well No.: 102HB **RRC District** 7C
Lease UNIVERSITY 3-35 **Field** SPRABERRY (TREND AREA)
RRC Lease 19064 **Field No.:** 85279200
Location Section: 11, Block: 4, Survey: UL, Abstract: U47
Latitude 31.23098 **Longitud** -101.85607
This well is 5.72 **miles in a** E
direction from RANKIN,
which is the nearest town in the

FILING INFORMATION

Purpose of Well Record Only
Type of New Well
Well Type: Producing **Completion or Recompletion** 11/14/2017
Type of Permit **Date** **Permit No.**
Permit to Drill, Plug Back, or 05/15/2017 826301
Rule 37 Exception
Fluid Injection
O&G Waste Disposal
Other:

COMPLETION INFORMATION

Spud 06/03/2017 **Date of first production after rig** 11/14/2017
Date plug back, deepening, drilling operation 06/03/2017 **Date plug back, deepening, recompletion, drilling operation** 06/28/2017
Number of producing wells on this lease this field (reservoir) including this 1 **Distance to nearest well in lease & reservoir** 676.0
Total number of acres in 1315.21 **Elevation** 2706 GR
Total depth TVD 8458 **Total depth MD** 19215
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)** 63.0 Yes
Recompletion or No **Multiple** No
Type(s) of electric or other log(s) Neutron/Density logs (combo of tools)
Electric Log Other Description:
Location of well, relative to nearest lease of lease on which this well is 1164.0 **Feet from the** West **Off Lease :** No
 432.0 **Feet from the** North **Line and**
 UNIVERSITY 3-35 **Lease.** **Line of the**

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

<u>Field & Reservoir</u>	<u>Gas ID or Oil Lease</u>	<u>Well No.</u>	<u>Prior Service Type</u>
PACKET:	N/A		

W2: N/A

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

GAU Groundwater Protection Determination	Depth	570.0	Date	05/04/2017
SWR 13 Exception	Depth	1500.0		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

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

CASING RECORD

<u>Ro</u>	<u>Type of Casing</u>	<u>Casing Size (in.)</u>	<u>Hole Size</u>	<u>Setting Depth</u>	<u>Multi - Stage</u>	<u>Multi - Stage Shoe</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined By</u>
1	Surface	13 3/8	17 1/2	684			D903	3097	4514.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	7699	5029		50:50 POZ: C; H	781	2241.0	100	Calculation
3	Intermediate	9 5/8	12 1/4	7699			50:50 POZ: C; H	820	1758.0	5029	Calculation
4	Conventional Production	5 1/2	8 1/2	19215			D049; 50/50 POZ/H	2481	4141.2	4000	Calculation

LINER RECORD

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

TUBING RECORD

<u>Ro</u>	<u>Size (in.)</u>	<u>Depth</u>	<u>Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
N/A				/

PRODUCING/INJECTION/DISPOSAL INTERVAL

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 8979	19011.0

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** 8900.0

Production casing test pressure (PSIG) hydraulic fracturing 9500 **Actual maximum pressure (PSIG) during fracturin** 8722

Has the hydraulic fracturing fluid disclosure been Yes

<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>	
1	Fracture	STIMULATED USING 5,095 GAL OF 15% HCL ACID, 15,429,273 LBS OF TOTAL PROPPANT IN 406,090 BBLs OF TOTAL FLUID.	8979	19011

FORMATION RECORD

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
SANTA ROSA	Yes	685.0	685.0	Yes	
RUSTLER	Yes	1339.0	1339.0	Yes	
YATES	Yes	2164.0	2164.0	Yes	
QUEEN	Yes	2802.0	2805.0	Yes	
GRAYBURG	Yes	3673.0	3677.0	Yes	
SAN ANDRES - SALTWATER FLOW	Yes	4099.0	4103.0	Yes	
CLEARFORK	Yes	5765.0	5770.0	Yes	
SPRABERRY	Yes	6538.0	6543.0	Yes	
DEAN	Yes	7792.0	7797.0	Yes	
WOLFCAMP	Yes	7926.0	7931.0	Yes	
STRAWN	No			No	NOT PENETRATED
DEVONIAN	No			No	NOT PENETRATED
FUSSELMAN	No			No	NOT PENETRATED
ELLENBURGER	No			No	NOT PENETRATED

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

FILING WRI, WILL FILE AN INITIAL POTENTIAL WHEN WELL STARTS PRODUCING.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-01-10 16:25:38.598] Well-record-only approved with 0 max acres due to lacking complete as-drilled plat. The operator must provide a complete as-drilled plat when filing the initial potential. The location of the current perfs has been reviewed and is approved based on the permitted plat.

CASING RECORD :

SURFACE CASING: LOST CIRCULATION AT 180', USED EXTRA CEMENT.

TUBING RECORD:

WELL IS NOT PRODUCING YET.

PRODUCING/INJECTION/DISPOSAL INTERVAL :

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

TWO FRAC SLEEVES: (1) @ 19,071'-19,075', (2) @ 19,085'-19,089'.

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed	Kayla Butler	Title:	Production Tech
Telephone	(432) 684-0601	Date	12/05/2017



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P O. Box 12967

Austin, Texas 78701-2967

CEMENTING REPORT

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.

Operator: Fill in other items

OPERATOR INFORMATION					
Operator Name:	Hunt Oil	Operator P-5 No.:	416330		
Cementer Name:	Schlumberger	Cementer P-5 No.:	754900		

WELL INFORMATION					
District No.:	7C	County:	Upton		
Well No.:	102HB	API No.:	42-461-40592	Drilling Permit No.:	826301
Lease Name:	University 3-35	Lease No.:			
Field Name:	Spraberry (TREND AREA)	Field No.:			

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.):	720'	Est. % wash-out or hole enlargement:	100
Size of casing in O.D. (in.):	13 3/8"	Casing weight (lbs/ft) and grade:	48# 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	Setting depth shoe (ft.):	684'	Top of liner (ft.):
Hrs. waiting on cement before drill-out:	2.4	Calculated top of cement (ft.):	Surface	Cementing date:	7-Jun-17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	943	D903	Remarks	1831.4	1200
2	367	D903	Remarks	488.1	300
3					
Total	1310			2119.5	1500

IF 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.):	Upper: Lower:	Tapered string depth of drilled hole (ft.):	Upper: Lower:			
Tapered string size of casing in O.D. (in.):	Upper: Lower:	Tapered string casing weight (lbs/ft) and grade:	Upper: Lower:	Tapered string no. of centralizers used:	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					

IF 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.):	Upper: Lower:	Tapered string depth of drilled hole (ft.):	Upper: Lower:			
Tapered string size of casing in O.D. (in.):	Upper: Lower:	Tapered string casing weight (lbs/ft) and grade:	Upper: Lower:	Tapered string no. of centralizers used:	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					

CEMENTING TO SURFACE PLUG BACK OF PLUG AND ABANDON							
	TOPOUT	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date	7-Jun-17						
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	1787						
Slurry volume pumped (cu. ft.)	2394.58						
Calculated top of plug (ft.)	SURFACE						
Measured top of plug, if tagged (ft.)	SURFACE						
Slurry weight (lbs/gal)	16.8						
Class/type of cement	CLAS C						
Perforate and squeeze (YES/NO)							

REMARKS

#1: 1%001+.5%079+.13lb/skd130+.02gpsd047+.61lb/skd903+z6lb/skd035
 #2: .13lb/skd130+94lb/skd903
 #3:
 #4: 75 BBLs TO SURFACE AFTER TOPOUT

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.

STEPHEN LANCASTER, FIELD SPECIALISTS 3
 Name and title of cementer's representative

Schlumberger
 Cementing Company

Stephen Lancaster
 Signature

7104 W County Rd 116 Midland TX 79706 (432) 681-1100
 Address City, State, Zip Code Tel: Area Code Number Date: mo. day yr.
 June 7, 2017

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.

Chris Abshire
 Typed or printed name of operator's representative

HOC Company Man
 Title

Chris Abshire
 Signature

1900 W Akard St. Dallas Tx 75201 214-978-2300 6-7-2017
 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/rmadtac50st.facPage?st=RRapp-78p_dir-8p_rloc-8p_pluc-8p_gloc-8pg-1&p_tac-8ti=16&pi=1&ch=3&/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 callper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



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

Form W-15
 Rev. 08/2013

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

OPERATOR INFORMATION			
Operator Name:	Hunt Oil	Operator P-S No.:	416330
Cementor Name:	Schlumberger	Cementor P-5 No.:	754900

WELL INFORMATION			
District No.:	7C	County:	Upton
Well No.:	102HB	API No.:	42-461 40592
Lease Name:	University 3-35	Drilling Permit No.:	826301
Field Name:	Spraberry (TREND AREA)	Lease No.:	
		Field No.:	

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 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						
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 checked="" type="checkbox"/> Multi-stage cement shoe	<input type="checkbox"/> Multiple parallel strings
Drilled hole size (in.):	12 1/4"	Depth of drilled hole (ft.):	7793'	Est. % wash-out or hole enlargement:	100%	
Size of casing in O.D. (in.):	9 5/8"	Casing weight (lbs/ft) and grade:	40	No. of centralizers used:	18	
Tapered string drilled hole size (in.)	Upper: Lower:	Tapered string depth of drilled hole (ft.)	Upper: Lower:	Tapered string no. of centralizers used	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Upper: Lower:	Tapered string casing weight (lbs/ft) and grade	Upper: Lower:	Tapered string no. of centralizers used	Upper: Lower:	
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 tool (ft.):	7699'
Hrs. waiting on cement before drill-out:	18	Calculated top of cement (ft.):	5,029'	Cementing date:	13-Jun-17	
SLURRY						
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)	
1	612	50:50 Poz: C	REMARKS	1536.1	2453	
2	208	H	REMARKS	222.6	300	
3						
Total	820			1758.7	2753	

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.):	12 1/4"	Depth of drilled hole (ft.):	7792'	Est. % wash-out or hole enlargement:	150	
Size of casing in O.D. (in.):	9 5/8"	Casing weight (lbs/ft) and grade:	40	No. of centralizers used:	14	
Tapered string drilled hole size (in.)	Upper: Lower:	Tapered string depth of drilled hole (ft.)	Upper: Lower:	Tapered string no. of centralizers used	Upper: Lower:	
Tapered string size of casing in O.D. (in.)	Upper: Lower:	Tapered string casing weight (lbs/ft) and grade	Upper: Lower:	Tapered string no. of centralizers used	Upper: Lower:	
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 tool (ft.):	5029.4'
Hrs. waiting on cement before drill-out:	10	Calculated top of cement (ft.):	100'	Cementing date:	13-Jun-17	
SLURRY						
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)	
1	700	50:50 Poz: C	REMARKS	2114.0	2700	
2	81	C	REMARKS	127.2	300	
3						
Total	781			2241.2	3000	



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CEMENTING REPORT

Form W-15
 Rev 08/2014

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

OPERATOR INFORMATION	
Operator Name: HUNT	Operator P-5 No.: 416330
Cementer Name: Schlumberger	Cementer P-5 No.: 754900

WELL INFORMATION	
District No.: 2C	County: UPTON
Well No.: 102HB	API No.: 42-461-40592 Drilling Permit No.: 826301
Lease Name: UNIVERSITY 3 35	Lease No.:
Field Name: SPRABERRY	Field No.:

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 1/2	Depth of drilled hole (ft.): 19215 Est. % wash-out or hole enlargement: 10% Remarks:
Size of casing in O.D. (in.): 5 1/2	Casing weight (lbs/ft) and grade: 20 / P110 No. of centralizers used: 300
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.): 19215 Top of liner (ft.):
Hrs. waiting on cement before drill-out: N/A	Calculated top of cement (ft.): 4000 Cementing date: 28-Jun-17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	371	DD40	Remarks	849.89	3293
2	2110	50/50 POZ/H	Remarks	3291.6	11963
3					
Total	2481			4141.49	15216

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

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

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

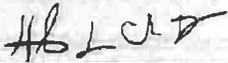
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1					
2					
3					
Total					

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: D154 10% + D208 .05% + D013 .65% + D042 3 LBS/SK + D130 .13 LBS/SK + D238 .45% + D047 .02 GAL/SK + D174 2%
 #2: D020 3% + D065 .1% + D238 .3% + D208 .1% + D079 .25% + D013 .25% + D047 .02 GAL/SK + D042 3 LBS/SK + D130 .13 LBS/SK + D177 .02 GAL/SK
 #3:
 #4:

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

<u>HECTOR COLON, FS</u>	<u>Schlumberger</u>	
Name and title of cementer's representative	Cementing Company	Signature
<u>7104 W County Rd 116</u>	<u>Midland TX 79706</u>	<u>June 28, 2017</u>
Address	City, State, Zip Code	Date: mo. day yr.
	<u>(432) 681-1100</u>	
	Tel: Area Code Number	

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

<u>DAVID LANKFORD</u>	<u>Drilling Foreman</u>	
Typed or printed name of operator's representative	Title	Signature
<u>1900 N. AKARD ST, DALLAS, TX 75201</u>	<u>214-978-8000</u>	<u>06-27-17</u>
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.rrc.state.tx.us/pls/pub/rrcadvacText.TacPage?sl=RR&app=9&p_dir=&p_floc=&p_tloc=&p_ploc=&og=1&p_lac=&tr=16&pr=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 the 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 the Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

CHRISTI CRADDICK, CHAIRMAN
RYAN SITTON, COMMISSIONER
WAYNE CHRISTIAN, COMMISSIONER



LORI WROTENBERY
DIRECTOR, OIL AND GAS DIVISION

BRIAN T. FLOYD
DISTRICT DIRECTOR

RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION

OPERATOR Name: HUNT OIL COMPANY

RE: Lease: UNIVERSITY 3-35

Address1: 1900 NORTH AKARD STREET

Well No: 102HB

Address2:

Sec: 11 **Block:** 4

City: DALLAS

County: UPTON

State: TX

Survey Name: CCSD&RGNG RR CO

SWR13EX Application Number: 15207

Drilling Permit No: 826301

SWR 13 CASING EXCEPTION APPLICATION/ALTERNATIVE REQUEST APPROVED

The Proposed Casing and Cementing Program submitted for the **LEASE NAME:** UNIVERSITY 3-35 ;
WELL NUMBER: 102HB 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 1500 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 05/23/2017 .
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: Bill Spraggins

DATE: 05/23/2017

BRIAN T. FLOYD
DISTRICT DIRECTOR

Tracking No.: 182659

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: HUNT OIL COMPANY	District No. 7C	Completion Date: 11/14/2017
Field Name SPRABERRY (TREND AREA)	Drilling Permit No. 826301	
Lease Name UNIVERSITY 3-35	Lease/ID No. 19064	Well No. 102HB
County UPTON	API No. 42- 461-40592	

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). _____

Kayla Butler
Signature

HUNT OIL COMPANY
Name (print)

Production Tech
Title

(432) 684-0601
Phone

11/30/2017
Date



Radial Cement Bond Variable Density Log W/ Gamma Ray/CCL

Company Hunt Oil & Gas Well University 3-35 #102HB Field Sprayberry (Trend Area) County Upton State Texas	Company		Hunt Oil & Gas	
	Well		University 3-35 #102HB	
	Field		Sprayberry (Trend Area)	
	County		Upton	State
Location:		API # : 42-461-40592		Other Services
		A-U47, Sec. 11, Blk. 4 CCSD & RGNG RR CO		JB/GR
		SEC	TWP	RGE
Permanent Datum		Ground Level	Elevation	2706.6'
Log Measured From		Kelly Bushing 25' APD		K.B. 2731.6'
Drilling Measured From		Kelly Bushing		D.F. 2730.6'
				G.L. 2706.6'

Date	30 AUG 2017
Run Number	One
Depth Driller	-
Depth Logger	8564'
Bottom Logged Interval	8562'
Top Log Interval	Surface
Open Hole Size	-
Type Fluid	-
Density / Viscosity	-
Max. Recorded Temp.	-
Estimated Cement Top	320'
Time Well Ready	ROA
Time Logger on Bottom	1100
Equipment Number	1004
Location	Midland, TX
Recorded By	L.Mata
Witnessed By	Cody Mooney

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
One							
Two							

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	5 1/2"	20#	Surface	-
Liner				
Short Joint	7553'-7573'			

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

1. Field Name(s) Spraberry (Trend Area)	2. Lease/ID Number <i>(if assigned)</i> 19064	3. RRC District Number 7C
4. Operator Name Hunt Oil Company	5. Operator P-5 Number 416330	6. Well Number 102HB
7. Pooled Unit Name University 3-35	8. API Number 461-40592	9. Purpose of Filing <input type="checkbox"/> Drilling Permit (W-1) <input checked="" type="checkbox"/> Completion Report
10. County Upton	11. Total acres in pooled unit 1315.2	

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/ IDENTIFIER	TRACT NAME	ACRES IN TRACT <i>(See inst. #7 below)</i>	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
1	UNIVERSITY LANDS	654.79	<input type="checkbox"/>	<input type="checkbox"/>
2	UNIVERSITY LANDS	660.42	<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"/>
			<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.

	Emily DiCarlo
Signature	Print Name
Land & Regulatory Tech. edicarlo@huntoil.com	11/15/2017 (214) 978-8197
Title	Date Phone

- INSTRUCTIONS** — Reference: Statewide Rules 31, 38 and 40
1. 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.
 2. 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.
 3. If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
 4. 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.
 5. If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
 6. Identify the drill site tract with an * to the left of the tract identifier.
 7. 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:	04 May 2017	GAU Number:	171437
Attention:	HUNT OIL COMPANY 1900 NORTH AKARD STREET DALLAS, TX 75201	API Number:	46140581
Operator No.:	416330	County:	UPTON
		Lease Name:	UNIVERSITY 3-35
		Lease Number:	
		Well Number:	4HB
		Total Vertical Depth:	8422
		Latitude:	31.200855
		Longitude:	-101.855609
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UL; Block-4; Section-11

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 20 feet below the base of the Cretaceous-age beds must be protected. The base of the Cretaceous is estimated to occur at a depth of 550 feet.

This recommendation is applicable for all wells drilled in this N/2 of sec. 11.

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 05/04/2017. 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