



**RAILROAD COMMISSION OF TEXAS**

**Form W-2**

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

Status: Approved  
Date: 06/09/2015  
Tracking No.: 124295

**OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,**

OPERATOR INFORMATION			
Operator	CONOCOPHILLIPS COMPANY	Operator	172232
Operator	600 W ILLINOIS AVE MIDLAND, TX 79701-0000		

WELL INFORMATION			
API	42-003-46642	County:	ANDREWS
Well No.:	330D	RRC District	08
Lease	UNIVERSITY ANDREWS	Field	EMBAR (PERMIAN)
RRC Lease	01270	Field No.:	28843666
Location	Section: 31, Block: 10, Survey: UL, Abstract: U315		
Latitude	32.12008	Longitud	-102.71230
This well is 17 miles in a SW direction from ANDREWS, which is the nearest town in the			

FILING INFORMATION			
Purpose of	Well Record Only		
Type of	New Well		
Well Type:	Active UIC	Completion or Recompletion	10/28/2014
<u>Type of Permit</u>		<u>Date</u>	<u>Permit No.</u>
Permit to Drill, Plug Back, or Rule 37 Exception		08/13/2014	792078
Fluid Injection		09/02/2014	F-19855
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	09/04/2014	Date of first production after rig	10/28/2014
Date plug back, deepening, drilling operation	09/04/2014	Date plug back, deepening, recompletion, drilling operation	10/03/2014
Number of producing wells on this lease this field (reservoir) including this	4	Distance to nearest well in lease & reservoir	232.0
Total number of acres in	160.00	Elevation	3228 GL
Total depth TVD	8514	Total depth MD	
Plug back depth TVD	8514	Plug back depth MD	
Was directional survey made other inclination (Form W-	Yes	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	87.5 Yes
Recompletion or	No	Multiple	No
Type(s) of electric or other log(s)	Neutron logs		
Electric Log Other Description:			
Location of well, relative to nearest lease of lease on which this well is	1010.0 Feet from the	Off Lease :	No
	1168.0 Feet from the	South Line and	
		East Line of the	
		EMBAR UNIVERSITY Lease.	

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease	Well No.	Prior Service Type
PACKET:	N/A		

W2: N/A

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

<b>GAU Groundwater Protection Determination</b>	<b>Depth</b> 1250.0	<b>Date</b> 09/03/2014
<b>SWR 13 Exception</b>	<b>Depth</b>	

**INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION**

<b>Date of</b>		<b>Production</b>
<b>Number of hours</b>	24	<b>Choke</b>
<b>Was swab used during this</b>	No	<b>Oil produced prior to</b>

**PRODUCTION DURING TEST PERIOD:**

<b>Oil</b>		<b>Gas</b>
<b>Gas - Oil</b>	0	<b>Flowing Tubing</b>
<b>Water</b>		

**CALCULATED 24-HOUR RATE**

<b>Oil</b>		<b>Gas</b>
<b>Oil Gravity - API - 60.:</b>		<b>Casing</b>
<b>Water</b>		

**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	9 5/8	12 1/4	1388			C	617	1002.0	0	Circulated to Surface
2	Conventional Production	7	8 3/4	8163			H, C	1151	3532.0	0	Circulated to Surface

**LINER RECORD**

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

**TUBING RECORD**

<u>Ro</u>	<u>Size (in.)</u>	<u>Depth</u>	<u>Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	4 1/2	8105		8100 / AS-1X

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	Yes	L 8163	8514.0

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

**Was hydraulic fracturing treatment** No

**Is well equipped with a downhole sleeve?** No **If yes, actuation pressure**

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

**Has the hydraulic fracturing fluid disclosure been** No

<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>
1	Acid	ACIDIZED OH - 990 BBLs HCL 15%	8163 8514

**FORMATION RECORD**

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
YATES	Yes	2560.0		Yes	
SEVEN RIVERS	Yes	2758.0		Yes	
QUEEN	Yes	3404.0		Yes	
GRAYBURG	Yes	3679.0		Yes	
SAN ANDRES - CO2 FLOOD, HIGH FLOWS, H2S, CORROSIVE	Yes	3943.0		Yes	
HOLT	No			No	NOT ENCOUNTERED - PINCHED OUT
GLORIETA	Yes	5069.0		Yes	
TUBB	Yes	5880.0		Yes	
CLEARFORK	Yes	5402.0		Yes	
PERMIAN DETRITAL	Yes	7675.0		Yes	
LEON	No			No	NOT ENCOUNTERED - PINCHED OUT
WICHITA ALBANY	Yes	6443.0		Yes	
SPRABERRY	No			No	NOT ENCOUNTERED - PINCHED OUT
DEAN	No			No	NOT ENCOUNTERED - PINCHED OUT
WOLFCAMP	Yes	7273.0		Yes	
CANYON	No			No	NOT ENCOUNTERED - PINCHED OUT
PENNSYLVANIAN	No			No	NOT ENCOUNTERED - PINCHED OUT
MCKEE	No			No	NOT ENCOUNTERED - PINCHED OUT
STRAWN	No			No	NOT ENCOUNTERED - PINCHED OUT
FUSSELMAN	No			No	NOT ENCOUNTERED - PINCHED OUT
DEVONIAN	No			No	NOT ENCOUNTERED - PINCHED OUT
SILURIAN	No			No	NOT ENCOUNTERED - PINCHED OUT
ELLENBURGER	Yes	7980.0		Yes	
CONNELL	Yes	7924.0		Yes	
JOINS	Yes	7962.0		Yes	
WADDELL	Yes	7851.0		Yes	
SANTA ROSA	Yes	1067.0		Yes	
RUSTLER	Yes	1332.0		Yes	

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm Yes  
 Is the completion being downhole commingled No

**REMARKS**

**RRC REMARKS**

**PUBLIC COMMENTS:**

**CASING RECORD :**

**TUBING RECORD:**

**PRODUCING/INJECTION/DISPOSAL INTERVAL :**

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

**POTENTIAL TEST DATA:**

**OPERATOR'S CERTIFICATION**

<b>Printed</b>	Colleen Reda	<b>Title:</b>	Regulatory Specialist
<b>Telephone</b>	(281) 206-5219	<b>Date</b>	01/09/2015

**Cementer: Fill in shaded areas.**

Operator: Fill in other items.

**RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division**

Form W-15  
Cementing Report  
Rev. 4/28/2014  
046292

1. Operator's Name (As shown on Form P-5, Organization Report) <b>CONOCOPHILLIPS COMPANY</b>		2. RRC Operator No. <b>172232</b>	3. RRC District No. <b>08</b>	4. County of Well Site <b>ANDREWS</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Embar (Permian)</b>			6. API No. <b>42-003-46642</b>	7. Drilling Permit No. <b>792078</b>
8. Lease Name <b>EMBAR UNIVERSITY</b>		9. Rule 37 Case No.	10. Oil Lease/Gas ID No. <b>36125</b>	11. Well No. <b>10 SWD</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		9-5-2014					
13. • Drilled Hole Size		12 1/4"					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		9 5/8"					
15. Top of liner (ft.)							
16. Setting depth (ft.)		1388'					
17. Number of centralizers used		12					
18. Hrs. Waiting on cement before drill-out		18					
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶	428					
	Class ▶	C					
	Additives ▶	REMARKS 1					
2 <sup>nd</sup> Slurry	No. of sacks ▶	189					
	Class ▶	C					
	Additives ▶	REMARKS 2					
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶	749					
	Height (ft.) ▶	2384					
2 <sup>nd</sup>	Volume (cu. ft.) ▶	253					
	Height (ft.) ▶	806					
3 <sup>rd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	1002					
	Height (ft.) ▶	3190					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		YES					

(22) Remarks #1 .005 pps Static Free + 2% CaCl2 + .25 pps Cello flake + .1% CD-32 + .005 gps FP-6L + 4% Gel  
Remarks #2 .005 pps Static Free + 2% CaCl2 + .005 gps FP-6L

CEMENTING TO PLUG AND ABANDON	PLUG#1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu. ft.)								
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lb/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalties 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.

JOSE J RANGEL—Field Specialist

Name and title of cementer's representative

Baker Hughes Oilfield OPS, Inc.

Cementing Company

Signature

*JJR*

2929 Allen Parkway Suite 2100

Address

Houston, Texas 77019

City, State, Zip Code

(713) 439-8600

Tel: Area Code Number

September 5, 2014

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.

COLLEEN REEDA

Typed or printed name of operator's representative

Regulatory Specialist

Title

Signature

*Colleen Reeda*

600 N. DAIRY ASHFORD

Address

Houston TX 77079

City, State, Zip Code

281-206-5219

Tel.: Area Code Number

11-1-14

Date: mo. day yr.

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

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

- 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. Form W-15 should be filed with the following.
- An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rates;
  - Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
  - Form W-3, Plugging Record, unless the 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. Where to file. The appropriate Commission District Office for the county in which the well is located.
- C. Surface Casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Committee.
- D. Centralizers. Surface Casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In Non-deviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.
- E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.
- F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (3) and (4).
- G. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three foot below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations, 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.

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

**RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division**

Form W-15  
Cementing Report  
Rev. 4/28/2014  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>CONOCO PHILLIPS CO</b>	2. RRC Operator No. <b>172232</b>	3. RRC District No. <b>08</b>	4. County of Well Site <b>ANDREWS</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>EMBAR (Permian)</b>		6. API No. <b>42003466420000</b>	7. Drilling Permit No. <b>792078</b>
8. Lease Name <b>EMBAR UNIVERSITY</b>	9. Rule 37 Case No.	10. Oil Lease/Gas ID No. <b>36125</b>	11. Well No. <b>10 SWD</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				9-10-14			
13. • Drilled Hole Size				8 3/4			
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)				7			
15. Top of liner (ft.)							
16. Setting depth (ft.)				8163'			
17. Number of centralizers used				66			
18. Hrs. Waiting on cement before drill-out				19			
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶			100			
	Class ▶			H			
	Additives ▶			REMARKS			
2 <sup>nd</sup> Slurry	No. of sacks ▶			600			
	Class ▶			C			
	Additives ▶			REMARKS			
3 <sup>rd</sup> Slurry	No. of sacks ▶			451			
	Class ▶			H			
	Additives ▶			REMARKS			
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶			318			
	Height (ft.) ▶			2113			
2 <sup>nd</sup>	Volume (cu. ft.) ▶			2202			
	Height (ft.) ▶			14633			
3 <sup>rd</sup>	Volume (cu. ft.) ▶			712			
	Height (ft.) ▶			4735			
Total	Volume (cu. ft.) ▶			3532			
	Height (ft.) ▶			21481			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing ?				YES			

(22). Remarks #1-50/50 POZ - .005 LB/SK STATIC FREE - 1% SODIUM CHLORIDE - 10 LB/SK LCM-1 - 8 LB/SK KOL SEAL - .2% FL-52 - .3% ASA-301 - .005 GPS FP-6L - 2% SMS  
 Remarks #2 -60/40 POZ - 1.1% R-21 - 15 LB/SK BA-90 - .005 LB/SK STATIC FREE - 8 LB/SK LCM-1 - .5% FL-52 - .8% ASA -301 -5% A-10 - .005 GPS FP-6L -3% SMS -1% BA-10A -4% MPA-5  
 Remarks #3- 14.8/61.1 POZ - .005 LB/SK STAIC FREE - 3 LB/SK LCM-1 -2% FL-62 - .10% R-3 - .7% SMS -5% BA-10A - 11 LB/SK CSE-2  
 143 BBLs CEMENT BACK TO SURFACE, 143 BBLs = 252 SACKS

1070

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu. Ft.)								
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lb/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalties 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.

Don McDaniel-Field Specialist  
 Name and title of cementer's representative

BakerHughes OilField Ops  
 Cementing Company

*Don McDaniel*  
 Signature

2929 Allen Parkway Suite 2100  
 Address

Houston, Texas 77019  
 City, State, Zip Code

(713)439-8600  
 Tel: Area Code Number

9/10/14  
 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.

COLLEEN REDA  
 Typed or printed name of operator's representative

Regulatory Specialist  
 Title

*Colleen Reda*  
 Signature

600 N. DAIRY ASHFORD  
 Address

HOUSTON TX 77079  
 City, State, Zip Code

281-206-5219  
 Tel.: Area Code Number

11/1/2014  
 Date: mo. day yr.

**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: CONOCOPHILLIPS COMPANY	District No. 08	Completion Date: 10/28/2014
Field Name EMBAR (PERMIAN)	Drilling Permit No. 792078	
Lease Name UNIVERSITY ANDREWS	Lease/ID No. 01270	Well No. 330D
County ANDREWS	API No. 42- 003-46642	

**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). \_\_\_\_\_

Colleen Reda  
Signature  
CONOCOPHILLIPS COMPANY  
Name (print)

Regulatory Specialist  
Title  
(281) 206-5219  
Phone  
01/09/2015  
Date

Company: ConocoPhillips  
 Well: Embar University 10D  
 Field: Embar  
 County: Andrews State: Texas

County: Andrews		Embar		1168 FEL & 1646 FNL		Embar University 10D		Company: ConocoPhillips	
Field:		Location:		Well:		Company:		Compensated Neutron Log	
Gamma Ray		Tracking# 124295		Location:		Elev.:		K.B. 3242.00 ft	
1168 FEL & 1646 FNL		Section 31; Block 10; Abstract U315		Survey: UL		G.L. 3228.00 ft		D.F. 3241.00 ft	
Permanent Datum:		Ground Level		Elev.:		3228.00 f			
Log Measured From:		Kelly Bushing		14.00 ft		above Perm.Datum			
Drilling Measured From:		Kelly Bushing							
API Serial No.		Section:		Block:		Abstract			
42-003-46642		31		10		U315			

Logging Date	06-Oct-2014		
Run Number	1A		
Depth Driller	8450.00 ft		
Schlumberger Depth	8503.00 ft		
Bottom Log Interval	8103.00 ft		
Top Log Interval	200.00 ft		
Casing Fluid Type	Water		
Salinity			
Density	8.5 lbm/gal		
Fluid Level	0.00 ft		
BIT/CASING/TUBING STRING			
Bit Size	6.25 in		
From	8163.00 ft		
To	8503.00 ft		
Casing/Tubing Size	7 in		
Weight	23 lbm/ft		
Grade	L80		
From	0.00 ft		
To	8162.00 ft		
Max Recorded Temperatures	125 degF		
Logger on Bottom	Time	06-Oct-2014 08:53:55	
Unit Number	Location:	2140	Midland, TX
Recorded By:	MSolorzano		
Witnessed By	AVargas		

## Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

## Contents

1. Header
2. Disclaimer
3. Contents
4. Remarks and Equipment Summary
5. Depth Summary
6. Composite 1 Correlation Pass
  - 6.1 Integration Summary
  - 6.2 Software Version
  - 6.3 Composite Summary
  - 6.4 Log ( CH CNL 2 )
  - 6.5 Parameter Listing
7. Composite 1 Main Pass
  - 7.1 Integration Summary
  - 7.2 Software Version
  - 7.3 Composite Summary
  - 7.4 Log ( CH CNL 5 )
  - 7.5 Parameter Listing
8. 1A Repeat Analysis
  - 8.1 Composite Summary
  - 8.2 Log ( CH CNL 5 RA )
9. Tail

## Remarks and Equipment Summary

Equip name		Length	MP name	Offset
LEH-QC		30.52		
CAL-YA		28.06		
CAL-YA				

1A: Toolstring

1A: Remarks

Logging Objective: CNL-HNGS-CCL-GR from PBTD to surface.

HGNS above 5150 ft is invalid due to no fluid in well. Client request to log and present data. Well was vacuuming in.

Toolstring run as per toolsketch.

Tracking # 124295

From: Reda, Colleen (Earthstream Global)  
<Colleen.Red@contractor.conocophillips.com>  
Sent: Tuesday, June 09, 2015 10:10 AM  
To: Jim Moore  
Subject: Tracking # 124295

Jim,

Good morning. Sorry I am just responding now to your message from 6/3/15 for Tracking # 124295.

When this completion package was filed on 1/9/15, that was the correct lease name and lease ID. But, then this lease was consolidated with our University Andrews lease (ID # 01270). I attached the paperwork my company filed on 2/17/15. Now, this well is actually the University Andrews # 330D with lease ID # 01270.

Can I change the lease name, well # and ID # on the package or what would be the best way to make these changes?

Thank you for your help,  
Colleen

Colleen Reda  
Regulatory Specialist - MCBU  
ConocoPhillips Lower 48

16290 Katy Freeway, Houston, Texas 77094  
T: 281.206.5219 | M: 281.386.9856 | Colleen.Red@contractor.conocophillips.com

Visit the new Lower 48 website:  
[www.conocophillipsuslower48.com](http://www.conocophillipsuslower48.com)

RAILROAD COMMISSION OF TEXAS  
OIL AND GAS DIVISION

Form W-12

(1-1-71)

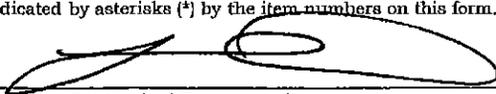
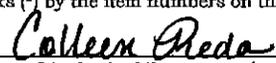
<b>INCLINATION REPORT</b> (One Copy Must Be Filed With Each Completion Report.)		6. RRC District 8
1. FIELD NAME (as per RRC Records or Wildcat) <b>Embar (Permian)</b>		7. RRC Lease Number. (Oil completions only) <b>36125</b>
2. LEASE NAME EMBAR UNIVERSITY		8. Well Number 10D
3. OPERATOR CONOCO PHILLIPS COMPANY		9. RRC Identification Number (Gas completions only)
4. ADDRESS 600 NORTH DAIRY ASHFORD HOUSTON, TX 77079		10. County ANDREWS
5. LOCATION (Section, Block, and Survey) <b>Sec. 31, Blk 10, UL A-315</b>		

RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle x100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
500	5.00	0.70	1.22	6.11	6.11
1000	5.00	0.60	1.05	5.24	11.35
1392	3.92	0.80	1.40	5.47	16.82
1456	0.64	0.90	1.57	1.01	17.83
1949	4.93	0.50	0.87	4.30	22.13
2442	4.93	0.10	0.17	0.86	22.99
2935	4.93	0.40	0.70	3.44	26.43
3428	4.93	0.40	0.70	3.44	29.87
3920	4.92	0.70	1.22	6.01	35.88
4414	4.94	0.70	1.22	6.04	41.92
4906	4.92	0.80	1.40	6.87	48.79
5399	4.93	0.50	0.87	4.30	53.09
5892	4.93	0.60	1.05	5.16	58.25
6385	4.93	1.80	3.14	15.49	73.74
6878	4.93	2.00	3.49	17.21	90.95
7370	4.92	1.30	2.27	11.16	102.11

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form?  yes  no
18. Accumulative total displacement of well bore at total depth of 8117 feet = 116.24 feet.
- \*19. Inclination measurements were made in -  Tubing  Casing  Open hole  Drill Pipe
20. Distance from surface location of well to the nearest lease line 1010' feet.
21. Minimum distance to lease line as prescribed by field rules 330 feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? NO  
(If the answer to the above question is "yes", attach written explanation of the circumstances.)

<p><b>INCLINATION DATA CERTIFICATION</b></p> <p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.</p> <p></p> <p>Signature of Authorized Representative JOSEPH HECKENDORN, Drilling Superint</p> <p>Name of Person and Title (type or print) Precision Drilling Company LP</p> <p>Name of Company</p> <p>Telephone: <u>432</u> <u>681-1919</u> Area Code</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I declare under penalties prescribed in 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.</p> <p></p> <p>Signature of Authorized Representative COLLEEN READA, Reg. Spec.</p> <p>Name of Person and Title (type or print) CONOCO PHILLIPS COMPANY</p> <p>Operator</p> <p>Telephone: <u>281-206-5219</u> Area Code</p>
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Railroad Commission Use Only:

Approved By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

\*Designated items certified by company that conducted the inclination surveys.



Groundwater  
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Date **September 3, 2014**

GAU File No.: **16927**

\*\*\*\*\* EXPEDITED APPLICATION

\*\*\*\*\*  
API Number **00346642**

Attention: **COLLEEN REDA**

RRC Lease No. **000000**

SC\_172232\_00346642\_000000\_16927.pdf

CONOCOPHILLIPS CO  
600 N DAIRY ASHFORD  
HOUSTON TX 77079  
  
P-5# 172232

--Measured--

1168 ft FEL

1646 ft FNL

MRL:SECTION

Digital Map Location:

X-coord/Long **102.71274**

Y-coord/Lat **32.12020**

Datum **83**

Zone

County **ANDREWS**

Lease & Well No. **EMBAR UNIVERSITY #10D&RAD**

Purpose **ND**

Location **SUR-UL, BLK-10, SEC-31, -- [TD=9000], [RRC 8],**

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to a depth of 250 feet and the ZONE from 850 feet to 1250 feet must be protected.

This recommendation is applicable to all wells within a radius of 500 feet of this location.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

If you have any questions, please contact us at 512-463-2741 [gau@rrc.state.tx.us](mailto:gau@rrc.state.tx.us), or by mail.

Sincerely,

[Signature Line]

**George Dunfield, P.G.**

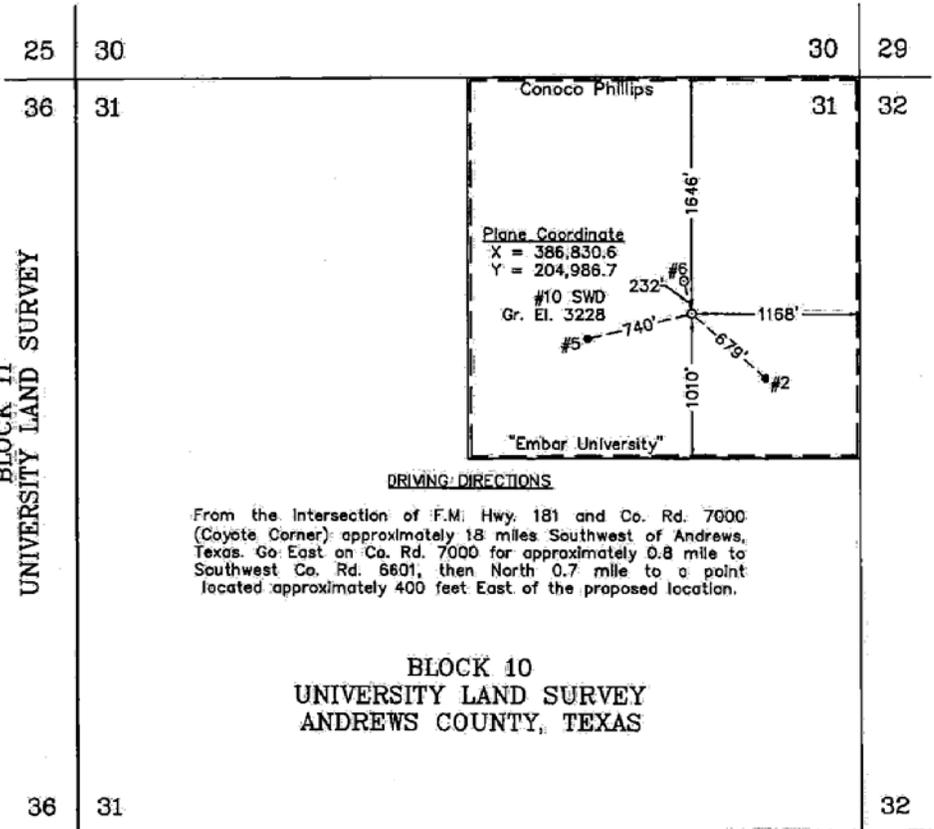
Geologist, Groundwater Advisory Unit  
Oil & Gas Division

GEOLOGIST SEAL



The seal appearing on this document was authorized by George Dunfield on 9/3/2014  
Note: Alteration of this electronic document will invalidate the digital signature.

BLOCK 11  
UNIVERSITY LAND SURVEY



**DRIVING DIRECTIONS**

From the Intersection of F.M. Hwy. 181 and Co. Rd. 7000 (Coyote Corner) approximately 18 miles Southwest of Andrews, Texas. Go East on Co. Rd. 7000 for approximately 0.8 mile to Southwest Co. Rd. 6601, then North 0.7 mile to a point located approximately 400 feet East of the proposed location.

**BLOCK 10  
UNIVERSITY LAND SURVEY  
ANDREWS COUNTY, TEXAS**

**102 W.F. COWDEN SURVEY (S.F. 9956) 102**



Date Surveyed: July 2, 2014  
Weather: Hot & Clear

**LEGEND**

- o - Denotes Proposed Well Location
- - Denotes Producing Well Location
- - - - Denotes Lease Line

The Embar University #10 SWD is located approximately 17 miles Southwest of Andrews, Texas.

**NOTE:**

- 1) Plane Coordinates and Bearings shown hereon are Lambert Grid and Conform to the "Texas Coordinate System", Texas North Central Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.
- 2) Geodetic Coordinate unless otherwise shown hereon references the North American Datum of 1927, (Clarke Spheroid of 1866). Reference Station - "WALKER" (CU0800)
- 3) This plat is provided for filing purposes only with the Texas Railroad Commission and should not be construed as a boundary survey.

Geodetic Coordinate (NAD 83)  
Latitude = 32°07'12.71" N  
Longitude = 102°42'45.88" W

Geodetic Coordinate  
Latitude = 32°07'12.31" N  
Longitude = 102°42'44.31" W



I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION.

**J. FRANK NEWMAN**  
Professional Surveyor  
No. 5011  
Texas R.P.L.S. No. 4398

**WEST COMPANY  
of Midland, LLC**

FIRM REGISTRATION NUMBER: 100682-00  
110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

**ConocoPhillips**

Location of the  
**EMBAR UNIVERSITY #10 D**  
1646' FNL & 1168' FEL  
Section 31, Block 10  
University Land Survey  
Andrews County, Texas

Drawn By: CLB	Date: July 17, 2014
Scale: 1" = 1000'	Field Book: 608 / 1-8
Revision Date:	Quadrangle: Coyote Corner
W.O. No: 2014-0900	Dwg. No.: L-2014-0900