

# RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

Tracking No.: 86048

Status: Submitted

This facsimile W-2 was generated electronically  
from data submitted to the RRC.

API No. **42- 003-44982**

7. RRC District No.  
**08**

8. RRC Lease No.  
**01270**

## Oil Well Potential Test, Completion or Recompletion Report, and Log

1. FIELD NAME (as per RRC Records or Wildcat) <b>EMBAR (PERMIAN)</b>		2. LEASE NAME <b>UNIVERSITY ANDREWS</b>		9. Well No. <b>229</b>
3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report) <b>CONOCOPHILLIPS COMPANY</b>			RRC Operator No. <b>172232</b>	10. County of well site <b>ANDREWS</b>
4. ADDRESS <b>ATTN ALVA FRANCO P O BOX 51810 MIDLAND, TX 79710-1810</b>				
5. If Operator has changed within last 60 days, name former operator				
6a. Location (Section, Block, and Survey) <b>30 , 10 , UNIVERSITY LANDS</b>		6b. Distance and direction to nearest town in this county. <b>17 MILES SW FROM ANDREWS, TEXAS</b>		
12. If workover or reclass, give former field (with reservoir) & Gas ID or oil lease no. <b>FIELD &amp; RESERVOIR</b>				Well #
<b>N/A</b>				
13. Type of electric or other log run <b>Combo of Induction/Neutron/Density/Sonic</b>			14. Completion or recompletion date <b>08/26/2013</b>	

11. Purpose of filing

Initial Potential

Retest

Reclass

Well record only (Explain In remarks)

### SECTION I- POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified infield rules.

15. Date of test <b>09/04/2013</b>	16. No. of hours tested <b>24</b>	17. Production method (Flowing, Gas Lift, Jetting, Pumping- Size & Type of pump) <b>Pumping</b>			18. Choke size <b>18/64</b>
19. Production during Test Period	Oil - BBLs <b>336.0</b>	Gas - MCF <b>384</b>	Water - BBLs <b>10</b>	Gas - Oil Ratio <b>1142</b>	Flowing Tubing Pressure <b>PSI</b>
20. Calculated 24-Hour Rate	Oil - BBLs <b>336.0</b>	Gas - MCF <b>384</b>	Water - BBLs <b>10</b>	Oil Gravity-API-60° <b>42.2</b>	Casing Pressure <b>PSI</b>
21. Was swab used during this test? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		22. Oil produced prior to test (New & Reworked wells)			23. Injection Gas-Oil Ratio

REMARKS: NEW WELL

**INSTRUCTIONS:** File an original and one copy of the completed Form W-2 in the appropriate RRC District Office within 30 days after completing a well and within 10 days after a potential test. If an operator does not properly report the results of a potential test within the 10-day period, the effective date of the allowable assigned to the well will not extend back more than 10 days before the W-2 was received in the District Office. (Statewide Rules 16 and 51) To report a completion or recompletion, fill in both sides of this form. To report a retest, fill in only the front side.

**WELL TESTERS CERTIFICATION**

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test by observation of (a) meter readings or (b) the top and bottom gauges of each tank into which production was run during the test. I further certify that the potential test data shown above is true, correct, and complete, to the best of my knowledge.

\_\_\_\_\_  
Signature: Well Tester

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
RRC Representative

**OPERATOR'S CERTIFICATION**

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct and complete, to the best of my knowledge.

**CONOCOPHILLIPS COMPANY**  
Type or printed name of operator's representative

**(432) 688-6847**                      **09/21/2013**  
Telephone: Area Code              Number              Month    Day    Year

**Staff Regulatory Technician**  
Title of Person

**Kathy Thomasson**  
Signature

SECTION III DATA ON WELL COMPLETION AND LOG (Not Required on Retest)									
24. Type of Completion New Well <input checked="" type="checkbox"/> Deepening <input type="checkbox"/> Plug Back <input type="checkbox"/> Other <input type="checkbox"/>					25. Permit to Drill, Plug Back or Deepen Rule 37 Exception		DATE 12/20/2012		PERMIT NO. 753489
26. Notice of Intention to Drill this well was filed in Name of <b>CONOCOPHILLIPS COMPANY</b>					Water Injection Permit		PERMIT NO.		CASE NO.
27. Number of producing wells on this lease in this field (reservoir) including this well 117			28. Total number of acres in this lease 4223.0		Salt Water Disposal Permit		PERMIT NO.		PERMIT NO.
29. Date Plug Back, Deepening, Workover or Drilling Operations:		Commenced 06/02/2013	Completed 08/26/2013	30. Distance to nearest well, Same Lease & Reservoir 674.0		Other		PERMIT NO.	
31. Location of well, relative to nearest lease boundaries				5401.0 Feet From North		Line and 3652.0		Feet from Lease	
				West		Line of the UNIVERSITY ANDREWS			
32. Elevation (DF, RKB, RT, GR ETC.) 3244 GL			33. Was directional survey made other than inclination (Form W-12)?			<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No	
34. Top of Pay 6028	35. Total Depth 7950	36. P. B. Depth 7950	37. Surface Casing Determined by	Field Rules <input type="checkbox"/>	Recommendation of T.D.W.R. Railroad Commission (Special)	<input checked="" type="checkbox"/>	Dt. of Letter 11/10/2011	<input checked="" type="checkbox"/>	Dt. of Letter 03/20/2013
38. Is well multiple completion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
39. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No. FIELD & RESERVOIR N/A					GAS ID or OIL LEASE #		Oil-0 Gas-G	Well #	
40. Intervals Drilled by:	Rotary Tools <input checked="" type="checkbox"/>	Cable Tools <input type="checkbox"/>	41. Name of Drilling Contractor H&P				42. Is Cementing Affidavit Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
43. CASING RECORD (Report All Strings Set in Well)									
CASING SIZE	WT #/FT.	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu. ft.		
9 5/8	36.0	1461		C 750	12 1/4	SURF	1185.0		
7	26.0	7660		LITECRETE/TXI 1380	8 3/4	SURF	2406.0		
4 1/2	12.0	7845		N/A 0	6 1/8	SURF	0.0		
44. LINER RECORD									
Size		Top		Bottom		Sacks Cement		Screen	
N/A									
45. TUBING RECORD									
Size	Depth Set		Packer Set		46. Producing Interval (this completion) Indicate depth of perforation or open hole				
2 3/8	5963		5954		From 6028 To 6369				
					From 6532 To 7239				
					From To				
					From To				
47. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.									
Depth Interval				Amount and Kind of Material Used					
6028.0		6369.0		FRAC W/2370 GAL 15% HCL, 106122# BROWN 20/40, 20038# CRC 20/40, TOTAL CLEAN FLUID 71778 GAL					
6532.0		6741.0		FRAC W/3006 GAL 15% HCL, 63650# 40/70 WHITE, 25321# CRC 20/40, TOTAL CLEAN FLUID 202078 GAL					
6916.0		7239.0		FRAC W/2953 GAL 15% HCL, 65975# 40/70 WHITE, 32565# CRC 20/40, TOTAL CLEAN FLUID 224525 GAL					
7789.0		7792.0		ACZ'D W/10004 GAL 15% HCL					
48. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)									
Formations		Depth		Formations		Depth			
LOWER CLEARFORK		6021.0							
WICHITA ALBANY		6441.0							
ELLENBURGER		7800.0							
REMARKS: NEW WELL. DH COMMINGLE LETTER DATED 05/08/2013. DH COMMINGLE EMBAR (ELLENBURGER), EMBAR (PERMIAN). FOR ALLOWABLE & REPORTING PURPOSES, WELL ASSIGNED TO EMBAR (PERMIAN) FIELD.									

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

**Form W-15**  
Cementing Report  
Rev. 4/1/83  
483-045

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

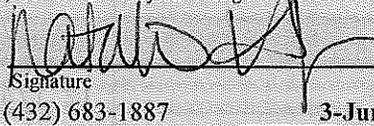
1. Operator's Name (As shown on Form P-5, Organization Report) <b>Conoco Phillips Company</b>		2. RRC Operator No. 172232	3. RRC District No. 08	4. County of Well Site <b>Andrews</b>
5. Field Name (Wildcat or exactly as shown on RRC records) <b>Embar (Permian)</b>			6. API No. 42-003-44982	7. Drilling Permit No. 753489
8. Lease Name <b>University Andrews</b>		9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 01270	11. Well No. <b>229</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		6/3/2013					
13. ●Drilling 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.)		1461					
17. Number of centralizers used		12+1 cmt	bsk				
18. Hrs. waiting on cement before drill-out		19.5					
1st Slurry	19. API cement used: No. of sacks ▶	500					
	Class ▶	Class C					
	Additives ▶	Remarks					
2nd Slurry	No. of sacks ▶	250					
	Class ▶	Class C					
	Additives ▶	Remarks					
3rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	850					
	Height (ft.) ▶	2714					
2nd	Volume (cu. ft.) ▶	335					
	Height (ft.) ▶	1070					
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	1185					
	Height (ft.) ▶	3784					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		Yes	78 bbls=258sks				

1st 3%D20 + 2% s1 + .125ppsD130 + .2%D46  
2nd 1.5% S1+ .125 PPS D130

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. (lbs/gal)								
31. Type cement								

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.

<b>Natalie Hodgen, FET</b>	<b>Dowell Schlumberger</b>	
Name and title of cementer's representative	Cementing Company	Signature
32 E. Industrial Loop	Midland, Texas 79701	(432) 683-1887
Address	City, State, Zip Code	Tel.: Area Code Number
		Date: 3-Jun-13
		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.

Kathy Thomasson	Staff Regulatory Tech.	
Typed or printed name of operator's representative	Title	Signature
P. O. Box 51810	Midland TX 79710	432-688-6847
Address	City, State, Zip Code	Tel.: Area Code Number
		Date: 09/12/2013
		mo. day yr.

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

**IMPORTANT:** Operators and cementing companies must comply with the requirements of the Commission's State 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 rules;
  - 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 Commission.
- 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 nondeviated 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 (b) (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 feet 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

**Form W-15**  
Cementing Report  
Rev. 4/1/83  
483-045

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

1. Operator's Name (As shown on Form P-5, Organization Report) <b>CONOCOPHILLIPS</b>	2. RRC Operator No. 172232	3. RRC District No. 08	4. County of Well Site <b>Andrews</b>
5. Field Name (Wildcat or exactly as shown on RRC records) Embar (Permian)	6. API No. 42-003-44982	7. Drilling Permit No. 753489	
8. Lease Name <b>University Andrews</b>	9. Rule 37 Case No.	10. Oil Lease/Gas ID No. 01270	11. Well No. <b>229</b>

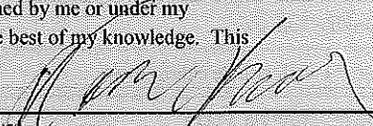
CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				6/10/2013			
13. ●Drilling hole size				8 3/4			
●Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)				7			
15. Top of liner (ft.)							
16. Setting depth (ft.)				7660			
17. Number of centralizers used				62			
18. Hrs. waiting on cement before drill-out				724			
1st Slurry	19. API cement used: No. of sacks ▶			800			
	Class ▶			LiteCRETE			
	Additives ▶			Remarks			
2nd Slurry	No. of sacks ▶			580			
	Class ▶			TXI			
	Additives ▶			Remarks			
3rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶			1600			
	Height (ft.) ▶			10643			
2nd	Volume (cu. ft.) ▶			806			
	Height (ft.) ▶			5363			
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶			2406			
	Height (ft.) ▶			16006			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				YES			

1st .02gal/skD206+.25%D065+.15%B374+.4%D207+.2%D046  
2nd 75ppsD049+.5%D167+1%D174+.2%D046+3PPSD042+.125PPSD130+2%D020+.225%B374+.2%D065  
Circulated 10 bbls = 28 sks

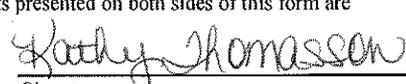
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	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date								
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25. Depth to bottom of tubing or drill pipe (ft.)								
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27. Slurry volume pumped (cu. ft.)								
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29. Measured top of plug, if tagged (ft.)								
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31. Type cement								

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<u>Karlene Rodriguez, FE</u>	<u>Dowell Schlumberger</u>	
Name and title of cementer's representative	Cementing Company	Signature
32 E. Industrial Loop	Midland, Texas 79701	(432) 683-1887
Address	City, State, Zip Code	Tel.: Area Code Number
		10-Jun-13
		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.

<u>Kathy Thomasson</u>	<u>Staff Regulatory Tech.</u>	
Typed or printed name of operator's representative	Title	Signature
P. O. Box 51810	Midland TX 79710	432-688-6847
Address	City, State, Zip Code	Tel.: Area Code Number
		09/12/2013
		Date: mo. day yr.

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- B. Where to file.** The appropriate Commission District Office for the county in which the well is located.
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- 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 (b) (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 feet 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.

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Tracking No.: 86048

*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: CONOCOPHILLIPS COMPANY	District No. 08	Completion Date: 08/26/2013
Field Name EMBAR (PERMIAN)	Drilling Permit No. 753489	
Lease Name UNIVERSITY ANDREWS	Lease/ID No. 01270	Well No. 229
County ANDREWS	API No. 42- 003-44982	

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

Kathy Thomasson

Signature

Staff Regulatory Technician

Title

CONOCOPHILLIPS COMPANY

Name (print)

(432) 688-6847

Phone

09/21/2013

Date

-FOR RAILROAD COMMISSION USE ONLY-

Tracking # 86048  
**HALLIBURTON**

**SPECTRAL GAMMA  
 DUAL SPACED NEUTRON**

CONOCOPHILLIPS COMPANY UNIVERSITY ANDREWS No. 229 EMBAR ANDREWS TEXAS	COMPANY <b>CONOCOPHILLIPS COMPANY</b>		
	WELL <b>UNIVERSITY ANDREWS No. 229</b>		
FIELD/BLOCK <b>EMBAR</b>			
COUNTY <b>ANDREWS</b>			
STATE <b>TEXAS</b>			
API No. 42-003-44982		Other Services: N/A	
Location 50' FNL & 940' FWL SECTION 30, BLOCK 10 UNIVERSITY LANDS SURVEY			
COMPANY WELL FIELD/BLOCK COUNTY STATE	Sect.	Twp.	Rge.
Permanent Datum	GL	Elev. 3244.0 ft	Elev.: K.B. 3262.5
Log measured from	KB	18.5 ft above perm. Datum	D.F. 3261.5
Drilling measured from	KB		G.L. 3244.0
Date	12-Jun-13		
Run No.	ONE		
Depth - Driller	7950.00 ft		
Depth - Logger	7812.0 ft		
Bottom - Logged Interval	7809.0 ft		
Top - Logged Interval	200.0 ft		
Casing - Driller	7.000 in @ 7660.0 ft	@	@
Casing - Logger	7646.0 ft		
Bit Size	6.125 in	@	@
Type Fluid In Hole	CUT BRINE		
Density	8.8 ppg	27.00 s/qt	
PH	10.00 pH	0.0 cptm	
Source of Sample	FLOWLINE		
Rm @ Meas. Temperature	0.157 ohmm @ 86.50 degF	@	@
Rmf @ Meas. Temperature	0.13 ohmm @ 86.50 degF	@	@
Rmc @ Meas. Temperature	0.188 ohmm @ 86.50 degF	@	@
Source Rmf	Rmc	CHART	CHART
Rm @ BHT	0.11 ohmm @ 129.0 degF	@	@
Time Since Circulation	0.0 hr		
Time on Bottom	12-Jun-13 08:39		
Max. Rec. Temperature	129.0 degF @ 7812.0 ft	@	@
Equipment	Location	11153040	ODESSA, TX
Recorded By	MARIO GONZALEZ		
Witnessed By	MICHELLE NAVARRETTE		

**APPLICATION FOR ALTERNATE SURFACE CASING PROGRAM**  
**Statewide Rule 13(b)(2)(g)**  
**RRC District 8/8A**

7/03

Operator's Name and Address: ConocoPhillips Company Attn: Gustavo Fejervary P O Box 51810 Midland, TX 79710	Lease: University Andrews	Well No.: 229
	Field: Embar	
	Drilling Permit No.: 753489	
	County: Andrews	RRC District: 08
	Location: 50 FNL, 940 FWL, Section 30, Block 10, University Lands	
	Proposed TD: 9200'	

Distance and Direction from nearest town: 17 miles SW direction from Andrews, Texas

Proposed injection or disposal well?  Yes  No NOTE: Special conditions may apply. See PROVISIONS below.

Usable-quality water strata (as determined by TCEQ "Waterboard" letter) occur from land surface to depth of 250' and 900' to 1200'.

**Note: Please submit copy of TCEQ "Waterboard" letter with this request. Request cannot be processed without this information.**

Distance and direction of nearest water well (within 1/4 mile): Non-

Type of water well (domestic, public, irrigation, stock, etc.): \_\_\_\_\_ Depth: \_\_\_\_\_

**Proposed Casing and Cementing Program**

Note: You may attach a wellbore diagram or cementing proposal to this application.

This application is for (check applicable boxes):  Short surface casing  Excess surface casing  no surface casing

The proposed surface casing depth: Between 1423' and 1468' below Ground Level. Multi-Stage tool depth (if applicable): None

Intermediate or production casing depth: None Multi-Stage tool depth (if applicable): None

Centralizer number and placement: 1 20' above shoe, 1 on joint above float collar, 1 on the 3<sup>rd</sup> joint, 1 every 3<sup>rd</sup> joint to surface.

Does the cement across the critical zone have 72-hr compressive strength of at least 1,200 psi?  Yes  No

Does the filler cement have 24-hr compressive strength of at least 250 psi?  Yes  No

Do you plan on circulating cement to the surface on all casing strings protecting usable-quality water?  Yes  No

Reason for this request: It is COP best practice to set the surface casing 25' into the Rustler formation. Geologists' estimate for top of the Rustler is 1398', putting the surface casing shoe exceeding the 200' allowance below the lowest quality water depth. The additional depth is requested so that the shoe is in a competent formation in the event of a well control situation.

**PROVISIONS APPLICABLE TO RULE 13 EXCEPTIONS:**

1. Caution: If this well is being drilled for injection or disposal purposes, an injection or disposal well permit may be denied unless surface casing is set and cemented through all zones of usable-quality groundwater.
2. Centralizers must be used through all usable-quality waters. Refer to Rule 13(b)(2)(F).
3. Notify District Office 8 hours prior to setting casing.

Signature: [Signature] Print Name: Gustavo Fejervary Date: 03/20/2013 Phone: 432/688-9012

**IF CEMENT IS NOT CIRCULATED TO THE GROUND SURFACE AS REQUIRED BY THIS EXCEPTION, YOU MUST IMMEDIATELY CONTACT THE DISTRICT 8/8A OFFICE AT 432-684-5581, AND FOLLOW THE PROCEDURES AS SET OUT IN RULE 13(B)(2)(g)(III) OR AS RECOMMENDED BY THE DISTRICT OFFICE.**

RRC Use Only ▶

RRC District Office Action:	
<input type="checkbox"/> Approved <input checked="" type="checkbox"/> Approved as Modified <input type="checkbox"/> Denied	By: <u>[Signature]</u> Date: 3-20-13
Remarks/Modifications: <u>Critical Zone Slurry Required across the water boards</u>	

Groundwater  
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date **November 10, 2011**

GAU File No.: SC- **14830**

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

API Number **00300000**

Attention: **DORIAN K. FUENTES**

RRC Lease No. **000000**

**SC\_172232\_00300000\_000000\_14830.pdf**

CONOCOPHILLIPS CO  
P O BOX 51810  
MIDLAND TX 79710  
  
P-5# 172232

--Measured--

230 ft FEL

820 ft FSL

MRL: SURVEY

Digital Map Location:  
X-coord/Long **102.42414**  
Y-coord/Lat **32.07384**  
Datum **27** Zone

County **ANDREWS**

Lease & Well No. **UNIVERSITY ANDREWS #203&ALL (229)**

Purpose **H15**

Location **SUR-UL, BLK-10, SEC-30, -- [TD=7200], [RRC 8],**

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

The interval from the land surface to a depth of 250 feet and the ZONE from 900 feet to 1200 feet must be protected.

This recommendation is applicable to all wells drilled in this section 30.

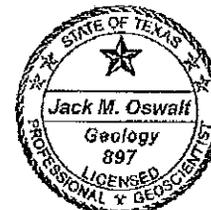
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form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

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

Sincerely,

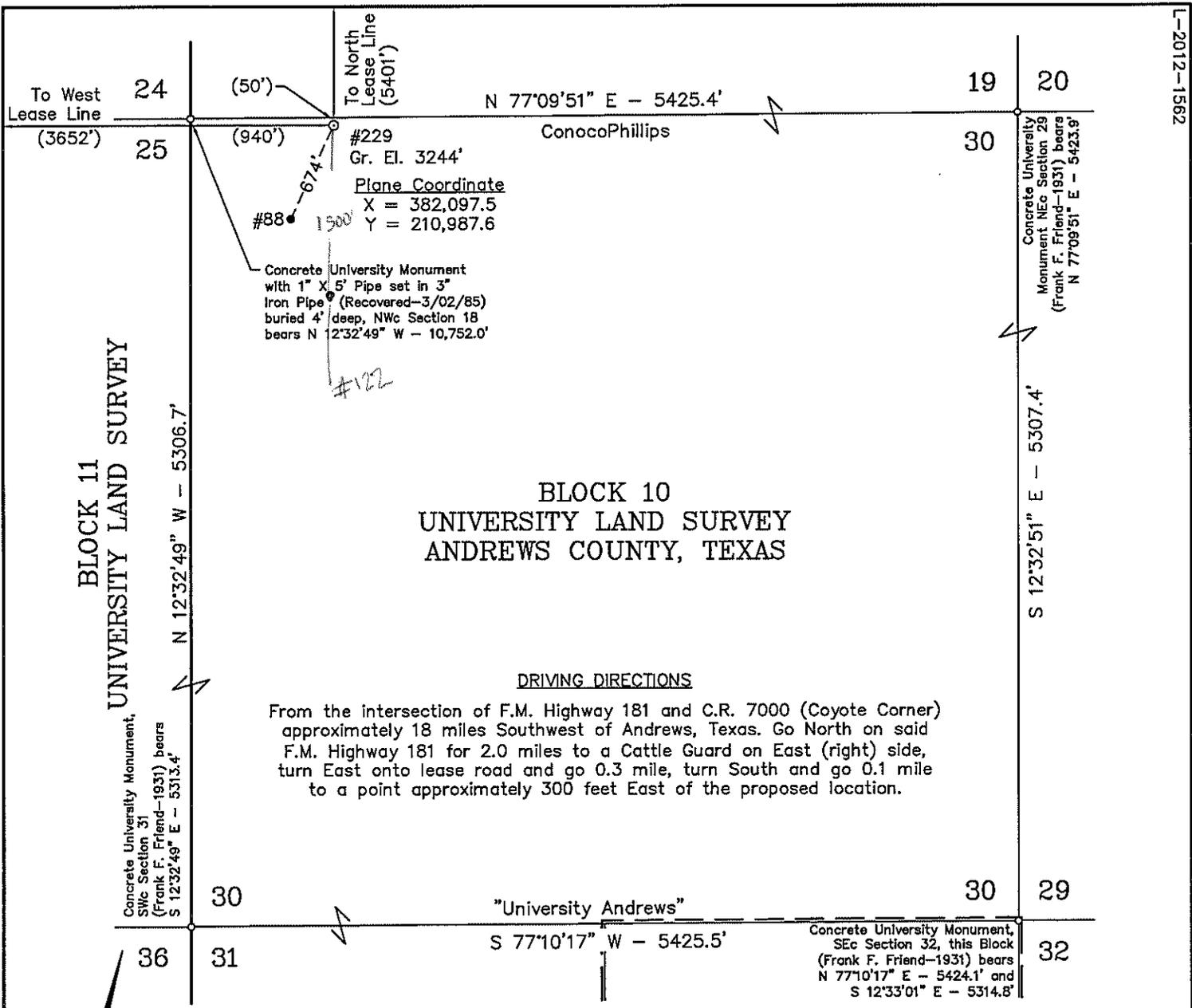
  
Digitally signed by Jack Oswalt  
DN: c=US, st=TEXAS, l=Austin,  
o=Railroad Commission of Texas,  
cn=Jack Oswalt,  
email=jack.oswalt@rrc.state.tx.us  
Date: 2011.11.10 10:48:11 -0600  
**Jack M. Oswalt, P.G.**

GEOLOGIST SEAL



Geologist, Groundwater Advisory Unit  
Oil & Gas Division

The seal appearing on this document was authorized by Jack M. Oswalt on 11/10/2011  
Note: Alteration of this electronic document will invalidate the digital signature.



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

**DRIVING DIRECTIONS**

From the intersection of F.M. Highway 181 and C.R. 7000 (Coyote Corner) approximately 18 miles Southwest of Andrews, Texas. Go North on said F.M. Highway 181 for 2.0 miles to a Cattle Guard on East (right) side, turn East onto lease road and go 0.3 mile, turn South and go 0.1 mile to a point approximately 300 feet East of the proposed location.

**LEGEND**

- - Denotes Proposed Well Location
- - Denotes Producing Well Location
- - Denotes Calculated Corner this Survey
- - Denotes Lease Line

Date Surveyed: October 10, 2012  
Weather: Cool & Cloudy

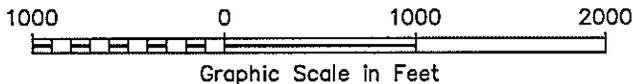
The University Andrews #229 is located approximately 17 miles Southwest of Andrews, Texas.

**NOTE:**

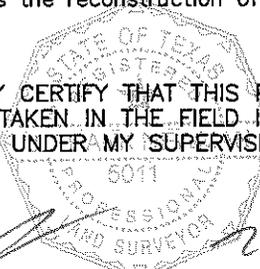
- 1) Plane Coordinates and Bearings shown hereon are Lambert Grid and Conform to the "Texas Coordinate System", Texas North Central Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.
- 2) Geodetic Coordinate unless otherwise shown hereon references the North American Datum of 1927, (Clarke Spheroid of 1866). Reference Station - "WALKER" (CU0800)
- 3) See information filed in the office of this Surveyor which describes the reconstruction of this Section.

Geodetic Coordinate (NAD 83)  
Latitude = 32°08'09.69" N  
Longitude = 102°43'44.32" W

Geodetic Coordinate  
Latitude = 32°08'09.29" N  
Longitude = 102°43'42.75" 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 TEXAS R.P.L.S. No. 5011  
MACON McDONALD TEXAS R.P.L.S. No. 4398  
R. CRAIG ALDERMAN TEXAS R.P.L.S. No. 5285

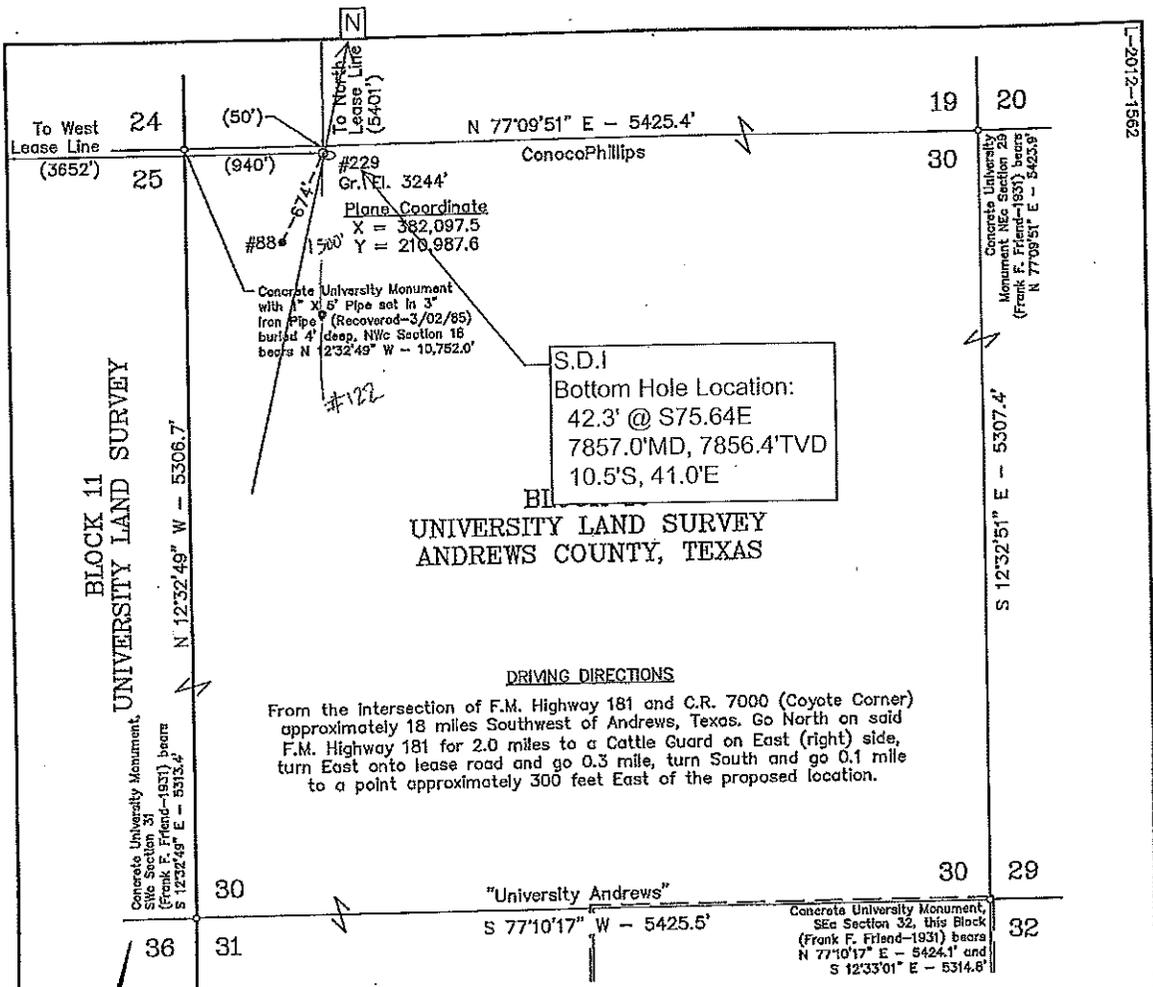
**WEST COMPANY  
of Midland, Inc.**

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

**ConocoPhillips**

Location of the  
**UNIVERSITY ANDREWS #229**  
50' FNL & 940' FWL  
Section 30, Block 10  
University Land Survey  
Andrews County, Texas

Drawn By: SC	Date: October 29, 2012
Scale: 1" = 1000'	Field Book: 546 / 63-70
Revision Date:	Quadrangle: North Cowden NW
W.O. No: 2012-1562	Dwg. No.: L-2012-1562



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ANDREWS COUNTY, TEXAS**

**DRIVING DIRECTIONS**

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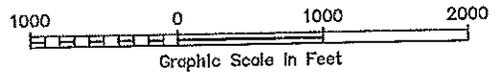
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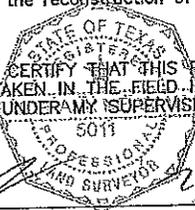
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