



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 06/02/2015
Tracking No.: 129610

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

OPERATOR INFORMATION

Operator Name: APACHE CORPORATION Operator No.: 027200
Operator Address: ATTN REGULATORY STE 3000 303 VETERANS AIRPARK LN MIDLAND, TX 79705-0000

WELL INFORMATION

API No.: 42-383-38545 County: REAGAN
Well No.: 2HU RRC District No.: 7C
Lease Name: UNIVERSITY 2505 HZ UNIT Field Name: SPRABERRY (TREND AREA)
RRC Lease No.: 18877 Field No.: 85279200
Location: Section: 25, Block: 58, Survey: UNIVERSITY LAND, Abstract:

Latitude: 31.30940 Longitude: -101.58970
This well is located 11.2 miles in a NW
direction from BIG LAKE,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: New Well
Well Type: Producing Completion or Recompletion Date: 10/05/2014

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	11/22/2013	773568
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 06/22/2014	Date of first production after rig released: 10/05/2014
Date plug back, deepening, recompletion, or drilling operation commenced: 06/22/2014	Date plug back, deepening, recompletion, or drilling operation ended: 07/16/2014
Number of producing wells on this lease in this field (reservoir) including this well: 7	Distance to nearest well in lease & reservoir (ft.): 229.0
Total number of acres in lease: 482.30	Elevation (ft.): 2619 GL
Total depth TVD (ft.): 8037	Total depth MD (ft.): 15483
Plug back depth TVD (ft.): 8037	Plug back depth MD (ft.): 15388
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours): 102.5
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached? Yes
Type(s) of electric or other log(s) run: None	Multiple completion? No
Electric Log Other Description:	
Location of well, relative to nearest lease boundaries	Off Lease : No
of lease on which this well is located:	200.0 Feet from the North Line and
	888.0 Feet from the West Line of the
	UNIVERSITY 2505 HZ UNIT Lease.

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

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

W2:	N/A		
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:			
GAU Groundwater Protection Determination		Depth (ft.): 475.0	Date: 11/20/2013
SWR 13 Exception		Depth (ft.):	

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION		
Date of test: 10/17/2014		Production method: Flowing
Number of hours tested: 24		Choke size: 22/64
Was swab used during this test?	No	Oil produced prior to test: 3010.00
PRODUCTION DURING TEST PERIOD:		
Oil (BBLS): 427.00		Gas (MCF): 260
Gas - Oil Ratio: 608		Flowing Tubing Pressure: 830.00
Water (BBLS): 1147		
CALCULATED 24-HOUR RATE		
Oil (BBLS): 427.0		Gas (MCF): 260
Oil Gravity - API - 60.:	41.0	Casing Pressure: 1230.00
Water (BBLS): 1147		

CASING RECORD											
Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	535			C	550	737.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	7451			LOWDENS E	465	1184.0	4297	Calculation
3	Intermediate	9 5/8	12 1/4	7451	4297		C 50/50 POZ	915	2097.0	2277	Calculation
4	Conventional Production	5 1/2	8 1/2	15478			H	2100	3765.0	430	Calculation

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

TUBING RECORD				
Row	Size (in.)	Depth	Size (ft.)	Packer Depth (ft.)/Type
1	2 3/8	7126		/

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 8213	15358.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment performed?		Yes	
Is well equipped with a downhole actuation sleeve?		If yes, actuation pressure (PSIG): 8200.0	
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 7000		Actual maximum pressure (PSIG) during hydraulic fracturing: 9210	
Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)?		Yes	
Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
1	Fracture	SEE FRAC FOCUS	8213 15358

FORMATION RECORD					
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
GRAYBURG	Yes	2977.0	2977.0	Yes	
QUEEN	Yes	2586.0	2586.0	Yes	
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY CLEARFORK	Yes	3254.0	3254.0	Yes	
SPRABERRY	Yes	4255.0	4255.0	Yes	
STRAWN	No			No	NOTI ENCOUNTERED-HORIZONTAL WELL
FUSSELMAN	No			No	NOT ENCOUNTERED-HORIZONTAL WELL
ELLENBURGER	No			No	NOT ENCOUNTERED-HORIZONTAL WELL
Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?					No
Is the completion being downhole commingled (SWR 10)?					No

REMARKS
KICK OFF POINT 7640'

RRC REMARKS

OPERATOR'S CERTIFICATION

Telephone No.: (432) 818-1023

Date Certified: 03/05/2015

Date Certified: 03/05/2015

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

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

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

1. Operator's Name (As shown on Form P-5, Organization Report) Apache Corporation	2. RRC Operator No. 027200	3. RRC District No. 7C	4. County of Well Site Reagan
5. Field Name (Wildcat or exactly as shown on RRC records) Sprayberry (Trend Area)		6. API No. 42-383-38545	7. Drilling Permit No. 773568
8. Lease Name University 2505	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No. 2HU

CASING CEMENTING DATA:			SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
					Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date			6/24/2014					
13. • Drilled hole size			17 1/2					
• Est. % wash or hole enlargement			100%					
14. Size of casing			13 3/8					
15. Top of liner (ft.)			-					
16. Setting depth (ft.)			538					
17. Number of centralizers used			5					
18. Hrs. waiting on cement before drill-out			36					
1st Slurry	19. API cement used: No. of sacks ▶		550					
	Class ▶		C					
	Additives ▶		Remarks					
2nd Slurry	No. of sacks ▶							
	Class ▶							
	Additives ▶							
3rd Slurry	No. of sacks ▶							
	Class ▶							
	Additives ▶							
1st	20. Slurry pumped: Volume (cu. ft.) ▶		737					
	Height (ft.) ▶		1061					
2nd	Volume (cu. ft.) ▶							
	Height (ft.) ▶							
3rd	Volume (cu. ft.) ▶							
	Height (ft.) ▶							
Total	Volume (cu. ft.) ▶		737					
	Height (ft.) ▶		1061					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?			Yes					
22. Remarks 1. 2% Calcium Chloride 1/4 PPS CelloFlake								

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 the well as shown in this 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.

Matt Brown **Cementer**

Name and title of cementer's representative

Crest Pumping Technologies

Cementing Company

Matt Brown
Signature

309 West 7th Street Suite 1500

Address

Fort Worth

City

TX

State

76102

Zip Code

940-567-3392

Tel.: Area Code

Number

6/24/2014

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 the data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Michelle Cooper
Typed or printed name of operator's representative

Drlg Tech
Title

Michelle Cooper
Signature

303 Veterans Airpark Lane
Address

Midland Tx 79705
City State Zip Code

432-818-1168
Tel.: Area Code Number

8-14-14
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 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 country 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.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

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

1. Operator's Name (As shown on Form P-5, Organization Report) Apache Corporation	2. RRC Operator No. 02 7200	3. RRC District No. 7C	4. County of Well Site Reagan
5. Field Name (Wildcat or exactly as shown on RRC records) Sprayberry (Trend Area)		6. API No. 42- 383- 38545	7. Drilling Permit No. 773 568
8. Lease Name University 2505	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No. 2HU

Intermediate

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date						7/3/2014	7/2/2014
13. • Drilled hole size						12 1/4	12 1/4
• Est. % wash or hole enlargement						30 %	30 %
14. Size of casing						9 5/8	9 5/8
15. Top of liner (ft.)						-	-
16. Setting depth (ft.)						4297	7451
17. Number of centralizers used						29	20
18. Hrs. waiting on cement before drill-out						97	97
1st Slurry	19. API cement used: No. of sacks ▶					815	265
	Class ▶					C 50/50 POZ	Lowdense
	Additives ▶					Remarks 3	Remarks 1
2nd Slurry	No. of sacks ▶					100	200
	Class ▶					C	C Plus
	Additives ▶					Remarks 4	Remarks 2
3rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶					1964	864
	Height (ft.) ▶					6272	2758
2nd	Volume (cu. ft.) ▶					133	320
	Height (ft.) ▶					425	1022
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶					2097	1184
	Height (ft.) ▶					6696	3780
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?						No	No
22. Remarks 1. 2PPS DuraFiber 0.40% CPT-45 0.15% CPT-20 0.15% Citric Acid 3PPS KolSeal 0.30% GXT-C 2. 1% Gel 3% Salt 0.50% CPT-19 0.30% CPT-35 0.25% CPT-503P 0.15% CPT-20 4PPS KolSeal 3. 7% Gel 5% Salt 0.40% CPT-503P 0.50% CPT-19 0.60% CPT-45 2PPS KolSeal 4. 0.20% CPT-19							

OVER ►

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 the well as shown in this 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.

Allen Brown Cementer
Name and title of cementer's representative

Crest Pumping Technologies
Cementing Company

Allen Brown
Signature

309 West 7th Street Suite 1500
Address

Fort Worth
City

TX 76102
State Zip Code

940-567-3392
Tel.: Area Code Number

7/2/2014
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 the data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Michelle Cooper
Typed or printed name of operator's representative

Dolz Tech
Title

Michelle Cooper
Signature

303 Veterans Airpark Lane
Address

Midland Tx 79705
City State Zip Code

432-818-1168
Tel.: Area Code Number

8-14-14
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 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 country 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.

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

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

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

1. Operator's Name (As shown on Form P-5, Organization Report) Apache Corporation	2. RRC Operator No. 27200	3. RRC District No. 7C	4. County of Well Sight Reagan
5. Field Name (Wildcat or exactly as shown on RRC records) Sprayberry (Trend Area)	7. API NO. 42- 383-38545	8. Drilling Permit No. 773568	
8. Lease Name University 2505	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No. 2HU

CASING CEMENTING DATA:		SURFACE CASING	INTER- MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				7/18/2014			
13. -Drilled hole size				8 1/2			
-Est. % wash or hole enlargement				30%			
14. Size of casing (in. O.D.)				5 1/2			
15. Top of liner (ft.)							
16. Setting depth (ft.)				15,478			
17. Number of centralizers used				102			
18. Hrs. Waiting on cement before drill-out							
1st Slurry	19. API cement used: No. of sacks			500			
	Class			H50/50Poz			
	Additives			REMARKS			
2nd Slurry	No. of sacks			1600			
	Class			H Plus			
	Additives			REMARKS2			
3rd Slurry	No. of sacks						
	Class						
	Additives						
1st	20. Slurry Pumped: Volume (cu.ft.)			1205			
	Height (ft.)			5250			
2nd	Volume (cu.ft.)			2560			
	Height (ft.)			11176			
3rd	Volume (cu.ft.)						
	Height (ft.)						
Total	Volume (cu.ft.)			3765			
	Height (ft.)			16426			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				NO			
22. Remarks							
1	7% Gel, 5% Salt, .5% CPT-19, .4% cpt-503P, .3% CPT-45, 4 PPS KOLSEAL, .15% CITRIC ACID, .15% CPT-20						
2	1% GEL, 3% SALT, 1% CPT-19, .4% CPT-35, .25% CPT-503P, .15% CPT-20						
3							

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date								
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Shaun Jackson **Cementer**

Name and title of cementer's representative

Crest Pumping Technologies

Cementing Company

Shaun Jackson
Signature

309 West 7th Street Suite 1500

Address

Fort Worth

City

TX

State

76102

Zip Code

940-567-3392

Tel.: Area Code

Number

07/18/2014

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 the data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Michelle Cooper
Typed or printed name of operator's representative

D-15 Tech
Title

Michelle Cooper
Signature

303 Veterans Airpark Lane

Address

City

State

Zip Code

Tel.: Area Code

Number

Date: mo, day yr.

Instructions to Form W-15, Cementing Report

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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.

CERTIFICATE OF COMPLIANCE
AND TRANSPORTATION AUTHORITY

P-4

This facsimile P-4 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 129610

1. Field name exactly as shown on proration schedule SPRABERRY (TREND AREA)		2. Lease name as shown on proration schedule UNIVERSITY 2505					
3. Current operator name exactly as shown on P-5 Organization Report APACHE CORPORATION		4. Operator P-5 no. 027200	5. Oil Lse/Gas ID no	6. County REAGAN	7. RRC district 7C		
8. Operator address including city, state, and zip code ATTN REGULATORY STE 3000 303 VETERANS AIRPARK LN MIDLAND, TX 79705		9. Well no(s) (see instruction E) 2HU			11. Effective Date 10/05/2014		
		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ -- OR -- b. New RRC Number for: <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well Due to: <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		LUCID ENERGY WESTEX, LLC(511943)				100.0	
	X	ATLAS PL MID-CONT. WESTTEX, LLC(036586)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
TRAFIGURA AG INC.(864322)						100.0	
RRC USE ONLY: Reviewer's initials: _____ Approval date: _____							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator Name (print) Title				Signature <input type="checkbox"/> Authorized Employee of previous operator <input type="checkbox"/> Authorized agent of previous operator (see instruction G) Date Phone with area code			
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
Name (print) Title sherene.starr@apachecorp.com E-mail Address (optional)				Signature <input checked="" type="checkbox"/> Authorized Employee of current operator <input type="checkbox"/> Authorized agent of current operator (see instruction G) 03/05/2015 (432) 818-1023 Date Phone with area code			

Tracking No.: 129610

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: APACHE CORPORATION	District No. 7C	Completion Date: 10/05/2014
Field Name SPRABERRY (TREND AREA)	Drilling Permit No. 773568	
Lease Name UNIVERSITY 2505	Lease/ID No.	Well No. 2HU
County REAGAN	API No. 42- 383-38545	

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). _____

Sherene Starr

Signature

Name (print)

Title

(432) 818-1023

Phone

03/05/2015

Date

-FOR RAILROAD COMMISSION USE ONLY-

Date: mo. day yr.

STATEMENT OF PRODUCTIVITY OF ACREAGE
ASSIGNED TO PRORATION UNITS

Form P-15

Tracking No.: 129610

This facsimile P-15 was generated electronically
from data submitted to the RRC.

The undersigned states that he is authorized to make this statement; that he has knowledge of the facts concerning the APACHE CORPORATION ,

UNIVERSITY 2505 , No. 2HU ; that such well is
LEASE OPERATOR WELL

completed in the SPRABERRY (TREND AREA) Field, REAGAN County,

Texas and that the acreage claimed, and assigned to such well for proration purposes as authorized by special rule and as shown on the attached certified plat embraces _____

100.0 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE

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,

Date 03/05/2015 Signature Sherene Starr

Telephone (432) 818-1023 Title _____
AREA CODE

CERTIFICATE OF POOLING AUTHORITY

Revised 05/2001

P-12

1. Field Name(s) Spraberry (Trend Area)	2. Lease/ID Number (if assigned)	3. RRC District Number 7C
4. Operator Name Apache Corporation	5. Operator P-5 Number 027200	6. Well Number 2HU
7. Pooled Unit Name University 2505	8. API Number 42-383-38545	9. Purpose of Filing <input type="checkbox"/> Drilling Permit (W-1) <input checked="" type="checkbox"/> Completion Report
10. County Reagan	11. Total acres in pooled unit 482.32	

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
Tract 1	SE/4 of Sec 25	159.42	<input type="checkbox"/>	<input type="checkbox"/>
Tract 2	NE/4 of Sec 5	161.45	<input type="checkbox"/>	<input type="checkbox"/>
Tract 3	SW/4 of Sec 5	161.45	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<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.



Sherene Starr

Signature

Print Name

Regulatory Analyst

sherene.starr@apachecorp.com

03/03/2015

(432) 818-1023

Title

E-mail (if available)

Date

Phone

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

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

Clear Form

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date November 20, 2013

GAU File No.: SC- 11633

***** EXPEDITED APPLICATION *****

API Number 38300000

Attention: JENNA HERNANDEZ

RRC Lease No. 000000

SC_027200_38300000_000000_11633.pdf

APACHE CORP
303 VETERANS AIRPARK LN
STE 3000
MIDLAND TX 79705

--Measured--

1750 ft FEL

2433 ft FSL

MRL:SECTION

P-5# 027200

Digital Map Location:

X-coord/Long 1607653

Y-coord/Lat 599658

Datum 27 Zone C

County REAGAN

Lease & Well No. UNIVERSITY 2505 #2HU

Purpose ND

Location SUR-UL,BLK-58,SEC-25,-- [TD=8300] , [RRC 7C] ,

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 475 feet must be protected.

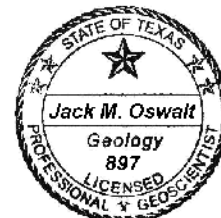
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form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

If you have any questions, please contact us at 512-463-2741, gau@rrc.state.tx.us, or by mail.

Sincerely,

Jack M. Oswalt, P.G.

GEOLOGIST SEAL



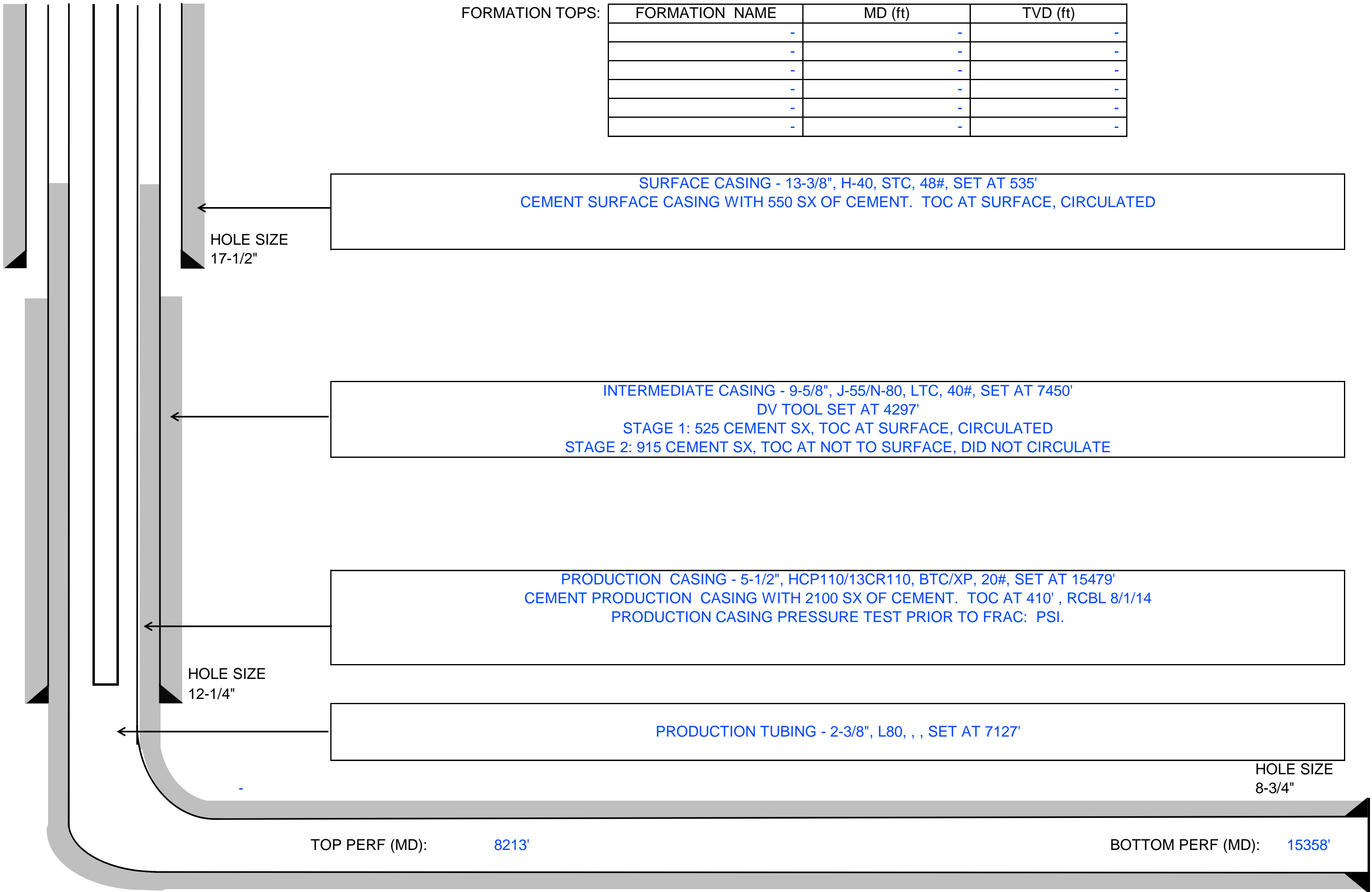
Geologist, Groundwater Advisory Unit
Oil & Gas Division

The seal appearing on this document was authorized by Jack M. Oswalt on 11/20/2013
Note: Alteration of this electronic document will invalidate the digital signature.

WELL NAME: University 2505 #2HU
API: 42-383-38545
SPUD DATE: 6/22/2014
PRODUCING FORMATION: Wolfcamp
FIELD: Spraberry
COUNTY: Reagan
STATE: TEXAS
WORKING INTEREST 100.00%

SURFACE LOC: 2432' FSL & 1750' FEL
SECTION 25
BLOCK 58
SURVEY University Land
ABS 0.00
BOTTOM HOLE LOC: 119' FSL & 1720' FEL
SECTION 5
BLOCK 9
SURVEY University Land
ABS 0.00

DRILL RIG: Patterson 173
RIG RELEASE: 7/18/2014
FIRST PRODUCTION: 1/0/1900
KB (ft): 2,647.60
GL (ft): 2,619.00
KB/GL DIFF (ft): 28.60
TMD (ft): 15,483.00
TD OF PILOT HOLE (ft): N/A
FC DEPTH (ft): 15,432.00
PBMD (ft): 15,388.00
RDV DEPTH (ft): N/A
ORIO VALVE (ft): 15,388.00
DEEPEST TVD (ft): 8,037.00



KOP (ft): 7,640
LATERAL LENGTH (ft): 7,470
TD OF PILOT HOLE (ft): N/A

TMD (ft): 15,483
FC DEPTH (ft): 15,432
PBMD (ft): 15,388
RDV DEPTH (ft): N/A
ORIO VALVE (ft): 15,388

COMPLETION:

Plug N Perf - 36 STAGES, 6 JSPF, 60 DEGREE PHASING, 4 CLUSTERS PER STAGE, 50' BETWEEN PERFS, 200' BETWEEN PLUGS, 48 HOLES PER STAGE

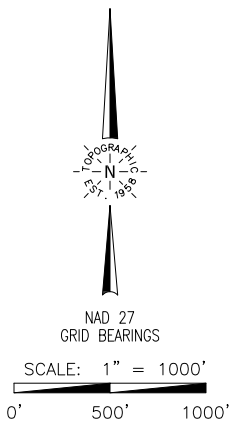
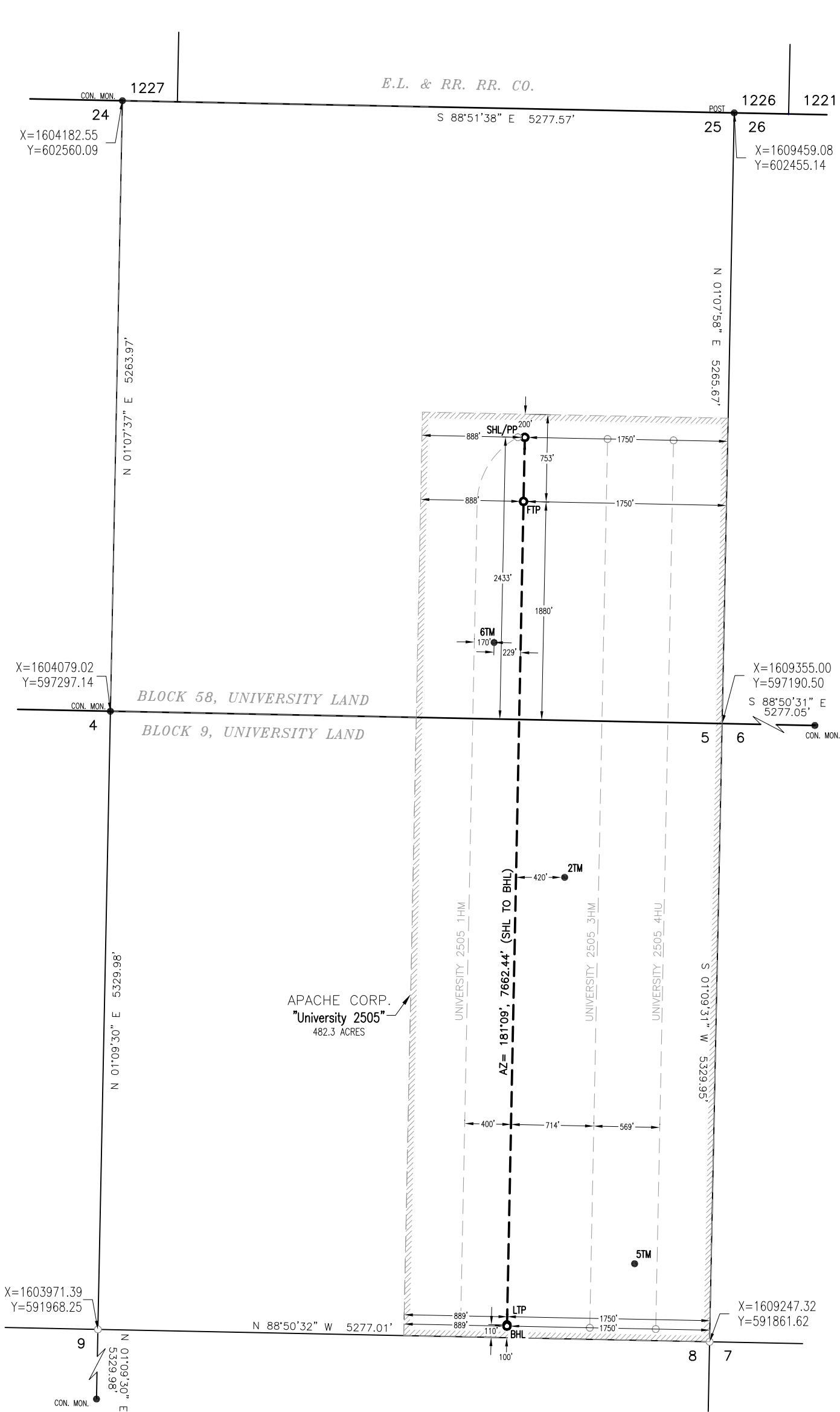
STIMULATON:

TOTAL ACID (gal)	TOTAL LTR (bbl)	TOTAL PROP (lbs)	MAX WH RATE (bpm)	MAX WH PRESS (psi)
1863'	387,100	17,682,768	99.80	9,210

STATUS:

PRODUCTION METHOD	LIFT TYPE	SETTING DEPTH
FLOWING	TUBING	7127'

COMMENTS:



Surface Hole Location:

GROUND ELEVATION:

SHL Ground Elevation: 2619'

COORDINATES:

NAD 27 TX-C ZONE:

X = 1607653.49 Y = 599657.86
LAT.: N 31°18'33.86" LONG.: W 101°35'22.95"
LAT.: N 31.3094056 LONG.: W 101.5897074

NAD 83 TX-C ZONE:

X = 1904121.58 Y = 10442234.64
LAT.: N 31°18'34.40" LONG.: W 101°35'24.38"
LAT.: N 31.3095552 LONG.: W 101.5901047

SURVEY LINE PERPENDICULARS:

2433' FSL & 1750' FEL (SEC. 25, BLK 58)

UNIT LINE PERPENDICULARS:

200' FNL & 888' FWL

Penetration Point:

COORDINATES:

NAD 27 TX-C ZONE:

X = 1607653.49 Y = 599657.86
LAT.: N 31°18'33.86" LONG.: W 101°35'22.95"
LAT.: N 31.3094056 LONG.: W 101.5897074

NAD 83 TX-C ZONE:

X = 1904121.58 Y = 10442234.64
LAT.: N 31°18'34.40" LONG.: W 101°35'24.38"
LAT.: N 31.3095552 LONG.: W 101.5901047

SURVEY LINE PERPENDICULARS:

2433' FSL & 1750' FEL (SEC. 25, BLK 58)

UNIT LINE PERPENDICULARS:

200' FNL & 888' FWL

First Take Point:

COORDINATES:

NAD 27 TX-C ZONE:

X = 1607642.39 Y = 599105.50
LAT.: N 31°18'28.39" LONG.: W 101°35'23.00"
LAT.: N 31.3078867 LONG.: W 101.5897230

NAD 83 TX-C ZONE:

X = 1904110.48 Y = 10441682.28
LAT.: N 31°18'28.93" LONG.: W 101°35'24.43"
LAT.: N 31.3080363 LONG.: W 101.5901203

SURVEY LINE PERPENDICULARS:

1880' FSL & 1750' FEL (SEC. 25, BLK 58)

UNIT LINE PERPENDICULARS:

753 FNL & 888' FWL

Last Take Point:

COORDINATES:

NAD 27 TX-C ZONE:

X = 1607499.79 Y = 592006.96
LAT.: N 31°17'18.12" LONG.: W 101°35'23.72"
LAT.: N 31.2883665 LONG.: W 101.5899228

NAD 83 TX-C ZONE:

X = 1903967.85 Y = 10434583.74
LAT.: N 31°17'18.66" LONG.: W 101°35'25.15"
LAT.: N 31.2885168 LONG.: W 101.5903201

SURVEY LINE PERPENDICULARS:

110' FSL & 1750' FEL (SEC. 5, BLK 9)

UNIT LINE PERPENDICULARS:

110' FSL & 889' FWL

Bottom Hole Location:

COORDINATES:

NAD 27 TX-C ZONE:

X = 1607499.58 Y = 591996.96
LAT.: N 31°17'18.02" LONG.: W 101°35'23.72"
LAT.: N 31.2883390 LONG.: W 101.5899231

NAD 83 TX-C ZONE:

X = 1903967.65 Y = 10434573.75
LAT.: N 31°17'18.56" LONG.: W 101°35'25.15"
LAT.: N 31.2884893 LONG.: W 101.5903204

SURVEY LINE PERPENDICULARS:

100' FSL & 1750' FEL (SEC. 5, BLK 9)

UNIT LINE PERPENDICULARS:

100' FSL & 889' FWL

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us. This plat does not in any way represent a "Boundary Survey", and does not comply with correct T.B.P.L.S. Minimum Standards of Procedures for Boundary Surveys.



William J. Keating

Texas Reg. No. 5041

I, William J. Keating, a Registered Professional Land Surveyor, and an authorized agent of Topographic Land Surveyors, do hereby certify that the above described well location was surveyed and staked on the ground as shown herein. This plat is for Texas Railroad Commission permitting only.



2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

File Name: LO_UNIVERSITY2505_2HU



LEGEND:

- Prop. Wellbore
- Unit Boundary
- Section Lines
- Fence
- Powerline
- Calculated Corner
- Pipeline
- Lease Road

LEASE NAME & WELL NO.:

UNIVERSITY 2505 #2HU

TOPOGRAPHY & VEGETATION:

NATURAL MESQUITE PASTURE

NEAREST TOWN IN COUNTY:

±11.2 MILES NORTHWEST OF BIG LAKE, TEXAS

LOCATION DESCRIPTION:

SHL:
PP/FTP:
LTP/BHL:

SECTION 25, BLOCK 58, UNIVERSITY LAND
SECTION 25, BLOCK 58, UNIVERSITY LAND
SECTION 5, BLOCK 9, UNIVERSITY LAND
REAGAN COUNTY, TEXAS

Scale: 1" = 1000'

ORIGINAL DOC. SIZE: 11"x17"

All Coordinates are in NAD 27 TX-C Zone unless otherwise noted.

COGO: 569-107244

Surveyed: OCTOBER 14, 2013

Drawn By: ACP; 10-31-13