



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 06/16/2015
Tracking No.: 135772

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

OPERATOR INFORMATION

Operator Name: AMERICAN ENERGY-PERM BASIN, LLC Operator No.: 017996
Operator Address: PO BOX 13710 OKLAHOMA CITY, OK 73113-0000

WELL INFORMATION

API No.: 42-383-38937 County: REAGAN
Well No.: 0921H RRC District No.: 7C
Lease Name: UNIVERSITY 09 Field Name: LIN (WOLFCAMP)
RRC Lease No.: 17946 Field No.: 53613750
Location: Section: 9, Block: 9, Survey: UL, Abstract: U179

Latitude: Longitude:
This well is located 10.98 miles in a NW
direction from BIG LAKE,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Well Record Only
Type of completion: New Well
Well Type: Shut-In Producer Completion or Recompletion Date: 05/03/2015

Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 02/10/2015 787569
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 01/19/2015 Date of first production after rig released: 05/03/2015
Date plug back, deepening, recompletion, or drilling operation commenced: 01/19/2015 Date plug back, deepening, recompletion, or drilling operation ended: 05/03/2015
Number of producing wells on this lease in this field (reservoir) including this well: 51 Distance to nearest well in lease & reservoir (ft.): 864.0
Total number of acres in lease: 4522.00 Elevation (ft.): 2645 GL
Total depth TVD (ft.): 7894 Total depth MD (ft.): 18090
Plug back depth TVD (ft.): 7894 Plug back depth MD (ft.): 18090
Was directional survey made other than inclination (Form W-12)? No Rotation time within surface casing (hours): 5.5
Is Cementing Affidavit (Form W-15) attached? No
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease : No
of lease on which this well is located: 228.0 Feet from the North Line and
3010.0 Feet from the West Line of the
UNIVERSITY 09 Lease.

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

Field & Reservoir Gas ID or Oil Lease No. Well No. Prior Service Type

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: 05/30/2014
SWR 13 Exception		Depth (ft.):	

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION	
Date of test:	Production method:
Number of hours tested: 24	Choke size:
Was swab used during this test? No	Oil produced prior to test:
PRODUCTION DURING TEST PERIOD:	
Oil (BBLs):	Gas (MCF):
Gas - Oil Ratio: 0	Flowing Tubing Pressure:
Water (BBLs):	
CALCULATED 24-HOUR RATE	
Oil (BBLs):	Gas (MCF):
Oil Gravity - API - 60.:	Casing Pressure:
Water (BBLs):	

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 5/8	17 1/2	642			PREM PLUS	710	1088.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	6301			VERSACE M	980	2426.0	0	Circulated to Surface
3	Conventional Production	5 1/2	8 3/4	18090			H	2930	4833.0	0	Circulated to Surface

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

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
N/A			

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment performed?	No		
Is well equipped with a downhole actuation sleeve?	No	If yes, actuation pressure (PSIG):	
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:		Actual maximum pressure (PSIG) during hydraulic fracturing:	
Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)?	No		
Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)

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

Form W-15
Cementing Report

RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

1. Operator's Name (As Shown on Form P-5, Organization Report) American Energy Permian Basin		2. RRC Operator No. 017996	3. RRC District No. 7C	4. County of Well Site Reagan
5. Field Name (Wildcat or Exactly as Shown on RRC Records) Lin (Wolfcamp)		6. API No. 42-383-38937		7. Drilling Permit No. 787569
8. Lease Name University 09		9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well Number 0921H

CASING CEMENTING DATA:		SURFACE CASING	INTERMEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				SINGLE STRING	MULTIPLE PARALLEL STRINGS	TOOL	SHOE
12. Cementing Date		1/19/2015					
13. *Drilled Hole Size		17 1/2					
*Ext. % Wash or Hole Enlargement							
14. Size of Casing (in. O.D.)		13 5/8					
15. Top of Liner (ft)							
16. Setting Depth (ft)		642					
17. Number of Centralizers Used							
18. Hrs. Waiting on Cement Before Drill-Out							
1st slurry	19. API Cement Used: No. of Sacks >	290					
	Class >	PREMIUM PLUS					
	Additives >	*					
2nd slurry	No. of Sacks >	420					
	Class >	PREMIUM PLUS					
	Additives >	**					
3rd slurry	No. of Sacks >						
	Class >						
	Additives >						
1st	20. Slurry Pumped: Volume (cu.ft.) >	524.9					
	Height (ft) >	756					
2nd	Volume (cu.ft.) >	562.8					
	Height (ft) >	760					
3rd	Volume (cu.ft.) >						
	Height (ft) >						
Total	Volume (cu.ft.) >	1088					
	Height (ft) >	1516					
21. Was Cement Circulated to Ground Surface (or Bottom of Celler) Outside Casing?		NO					
22. Remarks							
* Premium Plus 80/20 POZ w/ 2% CaCl ₂ , 2% CAS-1, 0.3% CFL-4, 1/4# Celloflake							
** Premium Plus w/ 0.5% CFL-4, 1/4# Celloflake							

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								

CEMENTERS 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.

Jason Sanders
Name and Title of Cementer's Representative

Universal Pressure Pumping, Inc.
Cementing Company

Signature

P. O. BOX 60268 SAN ANGELO TX. 76906
Address City State Zip Code

(325) 651 - 5700
Tel: Area Code Number

January 19, 2015
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.

Rian Hinds
Typed or Printed Name of Operators Representative

Regulatory Technician
Title

Signature

301 NW 63rd St. OKC, OK 73116
Address City State Zip Code

405-608-5477
Tel: Area Code Number

5/26/15
Date: Mo. Day Yr.

Instruction 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 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 applications, 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 12 (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 1000 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

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

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.

Operator: Fill in other items.

CEMENTING REPORT

OPERATOR INFORMATION	
Operator Name: AMERICAN ENERGY	Operator P-5 No.: 017996
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION	
District No.: 7C	County: REAGAN
Well No.: 921H	API No.: 42-383-38937
Lease Name: UNIVERSITY 09	Drilling Permit No.: 787569
Field Name: Lin (Wolfcamp)	Field No.:

I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 12.25	Depth of drilled hole (ft.): 6301		Est. % wash-out or hole enlargement:		
Size of casing in O.D. (in.): 9.625	Casing weight (lbs/ft) and grade: 40 J-55		No. of centralizers used:		
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.			Setting depth shoe (ft.): 6301	Top of liner (ft.):	
			Setting depth liner (ft.):		
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):		Cementing date: 04/20/2015		
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	865	VERSACEM	SEE REMARKS	2245.54	6829
2	115	H	SEE REMARKS	180.55	519
3					
Total	980			2426.09	7348

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

III. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):	Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:		
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:		No. of centralizers used:		

HALLIBURTON

Tapered string drilled hole size (in.) Upper: Lower:		Tapered string drilled hole size (in.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:		Tapered string casing weight (lbs/ft) and grade Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:	
SLURRY			
Slurry No.	No. of Sacks	Class	Additives
1			
2			
3			
Total			

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS							
.50% HR-800, 31BM KOL-SEAL, .25LBM D-AIR 31BM KOL-SEAL, .40% HALAD®-9, 51BM SALT 0902319684							

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.

RIGO TREVINO S.S.
 Name and title of cementer's representative
6155 W Murphy Odessa, TX 79763
 Address City, State, Zip Code

Halliburton Energy Services
 Cementing Company
432-571-8600
 Tel: Area Code Number

Rigo Trevino
 Signature
04/20/2015
 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.

Rian Hinds
 Typed or printed name of operator's representative
301 NW 63d St. OKC, OK 73116
 Address City, State, Zip Code

Regulatory Technician
 Title
405-608-5477
 Tel: Area Code Number

Rian Hinds
 Signature
5/26/15
 Date: mo. day yr.

Instructions for form W-15, Cementing Report



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION					
Operator Name: ABP		Operator P-5 No.: 017996			
Cementer Name: HALLIBURTON		Cementer P-5 No.: 347151			
WELL INFORMATION					
District No.: 7C		County: REAGAN			
Well No.: 921H		API No.: 42-383-38937		Drilling Permit No.: 787569	
Lease Name: UNIVERSITY 00		Lease No.:			
Field Name: Lin (Wolfcamp)		Field No.:			
I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input checked="" type="checkbox"/> Production					
Drilled hole size (in.): 8 3/4		Depth of drilled hole (ft.): 18090		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 5 1/2		Casing weight (lbs/ft) and grade:		No. of centralizers used: 144	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.		Setting depth shoe (ft.): 18090		Top of liner (ft.):	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date: 5-2-15	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	770	H	REMARKS	2053	7539
2	2180	H	REMARKS	2708	12555
3					
Total	2950			4861	20444
II. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.) Upper: Lower:		Tapered string depth of drilled hole (ft.) Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:		Tapered string casing weight (lbs/ft) and grade Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth shoe (ft.):		Cementing date:	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0
III. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.) Upper: Lower:		Tapered string depth of drilled hole (ft.) Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:		Tapered string casing weight (lbs/ft) and grade Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth tool (ft.):		Cementing date:	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS
1ST SLURRY 770 SKS VERSACEM H [11.5#, 2.68FT, 16.01GAL] { 10% BENTONITE, 5% CAL SEAL, .25# D AIR, .25% HR 601, .15% FE2, .05 SA 101 } 2ND SLURRY 2180 SKS VERSACEM H [14.4#, 1.27FT, 5.6GAL] { .05% FWCA, .3% HR 601 }


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.

SS2 RICARDO CHAVEZ

Halliburton

Name and title of cementer's representative
121 B Street

Cementing Company
Ft. Stockton, Tx, 79735

Signature

432-571-8600

Date: mo. day yr.
5-2-15

Address

City, State, Zip Code

Tel: Area Code Number

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.

Rian Hinds

Regulatory Technician

Typed or printed name of operator's representative

Title

Signature


301 NW 63rd St.

OKC, OK 73116

405-608-5477

Date: mo. day yr.
5/20/15

Address

City, State, Zip Code

Tel: Area Code Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the collar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cements approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pls/pub/readTextPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Date **May 30, 2014**

GAU File No.: **11914**

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

API Number **38338928**

Attention: **AL ARLIAN**

RRC Lease No. **017946**

SC_252014_38338928_017946_11914.pdf

ENDURING RESOURCES LLC
511 16TH ST
STE 70
DENVER CO 80202

--Measured--

3011 ft FWL

268 ft FNL

MRL:SECTION

P-5# 252014

Digital Map Location:

X-coord/Long **1601698**

Y-coord/Lat **591745**

Datum **27** Zone **C**

County **REAGAN**

Lease & Well No. **UNIVERSITY 09 #0912H&PAD**

Purpose **ND**

Location **SUR-UL,BLK-9,SEC-9,--[TD=8600],[RRC 7C],**

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 475 feet must be protected.

This recommendation is applicable to all wells drilled on this pad.

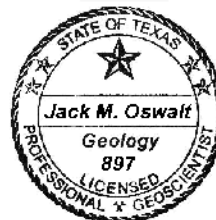
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form 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 5/30/2014
Note: Alteration of this electronic document will invalidate the digital signature.

Tracking No.: 135772

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: AMERICAN ENERGY-PERM BASIN, LLCDistrict
No. 7CCompletion
Date: 05/03/2015Field
Name LIN (WOLFCAMP)Drilling Permit
No. 787569Lease
Name UNIVERSITY 09Lease/ID
No.Well
No. 0921HCounty
REAGANAPI
No. 42- 383-38937

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). _____

Rian Hinds

Signature

Associate Regulatory Technician

Title

(405) 680-5477

05/28/2015

Name (print)

Phone

Date

-FOR RAILROAD COMMISSION USE ONLY-

NAD 27, Central Zone 4203
Surface Hole Location (Sec. 09)
Latitude: 31.287576° N
Longitude: 101.608486° W
X=1601698.51
Y=591785.52
Elev.=2645'
228' FNL & 2269' FEL
Point of Penetration (Sec. 09)
Latitude: 31.288204° N
Longitude: 101.608607° W
X=1601663.27
Y=592014.26
1' FNL & 2308' FEL
First Take Point (Sec. 09)
Latitude: 31.287932° N
Longitude: 101.608610° W
X=1601661.26
Y=591915.28
100' FNL & 2308' FEL
Last Take Point (Sec. 16)
Latitude: 31.259175° N
Longitude: 101.608907° W
X=1601448.67
Y=581458.06
100' FSL & 2308' FEL
Bottom Hole Location (Sec. 16)
Latitude: 31.258903° N
Longitude: 101.608909° W
X=1601446.65
Y=581359.08
1' FSL & 2308' FEL

Unit Boundary Distance	
SHL	228' FNL & 3010' FWL
PP	1' FNL & 2970' FWL
FTP	100' FNL & 2970' FWL
LTP	100' FSL & 2970' FWL
BHL	1' FSL & 2970' FWL

NOTE: This Plat does not, in anyway represent a "Boundary Survey", and does not comply with the current T.B.P.L.S. Minimum Standards of Procedures for Boundary Survey. Acreage shown herein were furnished by others. The information contained on this plat is intended for the sole use of AMERICAN ENERGY - PERMIAN BASIN.

NOTE: Bearings and coordinates refer to the Texas Coordinate System of 1927, Central Zone (4203), as observed by GPS observations

I, Conner Stevens do hereby certify that the above described well location was staked on the ground under my supervision, as shown.
Conner Stevens 1-30-2015
CONNER STEVENS DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 1983

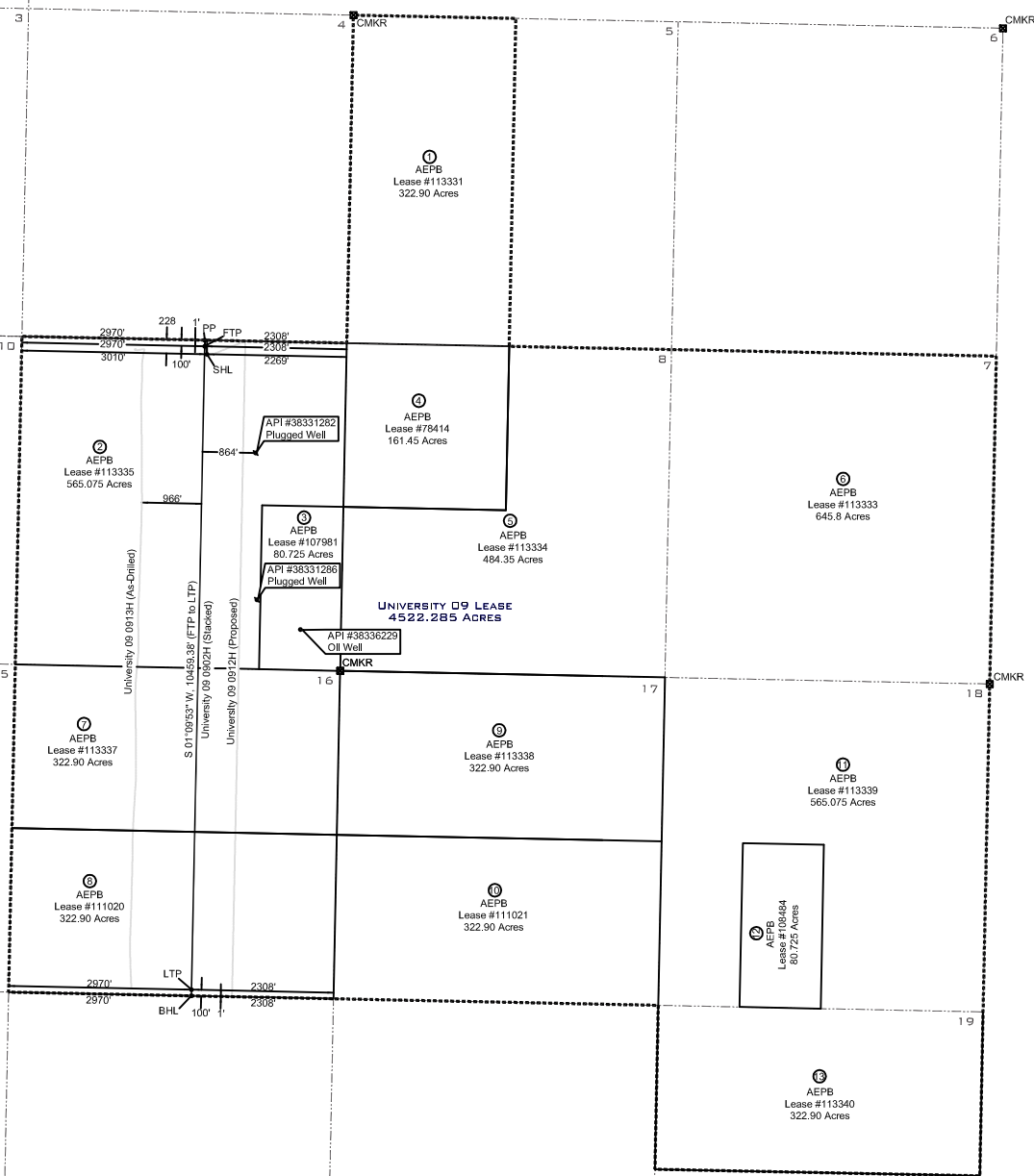


AMERICAN ENERGY PERMIAN BASIN

Well Name
UNIVERSITY 09 0921H
Drilling Field
LIN (WOLFCAMP) FIELD
Nearest Town
10.98 MILES NORTHWEST OF BIG LAKE, TEXAS



0 1500 3000
1"=3000'



1481 W. SOUTH LOOP, SUITE 3, STEPHENVILLE, TX 76401
Phone: 254-905-8880 Fax: 254-968-5715
email: cross@xtssurvey.com web: www.xtssurvey.net

Draft Date	1-28-15
Drawn By	B. Weisinger
Revised By	-----
Reviewed By	J. Keith

As-Drilled Well Plat
For
American Energy - Permian Basin

University 09 0921H
University Lands Block 9, Section 9
University Lands Block 9, Section 16
Reagan County, Texas