



**RAILROAD COMMISSION OF TEXAS**

**Form W-2**

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

Status: Approved  
Date: 10/12/2018  
Tracking No.: 198977

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

**OPERATOR INFORMATION**

**Operator Name:** EP ENERGY E&P COMPANY, L.P.      **Operator No.:** 253385  
**Operator Address:** ATTN CHELSEA CANTRELLE PO BOX 4660 HOUSTON, TX 77210-4660

**WELL INFORMATION**

**API No.:** 42-383-39823      **County:** REAGAN  
**Well No.:** 0823DH      **RRC District No.:** 7C  
**Lease Name:** UNIVERSITY CENTRAL      **Field Name:** LIN (WOLFCAMP)  
**RRC Lease No.:** 17575      **Field No.:** 53613750  
**Location:** Section: 23, Block: 8, Survey: UL, Abstract: U158  
  
**Latitude:**      **Longitude:**  
**This well is located**      11.42      **miles in a**      SW  
**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:** 05/27/2018  
  

<u>Type of Permit</u>	<u>Date</u>	<u>Permit No.</u>
Permit to Drill, Plug Back, or Deepen	03/03/2017	823658
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

**COMPLETION INFORMATION**

<b>Spud date:</b> 04/03/2017	<b>Date of first production after rig released:</b> 05/27/2018
<b>Date plug back, deepening, recompletion, or drilling operation commenced:</b> 04/03/2017	<b>Date plug back, deepening, recompletion, or drilling operation ended:</b> 05/27/2018
<b>Number of producing wells on this lease in this field (reservoir) including this well:</b> 74	<b>Distance to nearest well in lease &amp; reservoir (ft.):</b> 321.0
<b>Total number of acres in lease:</b> 38716.54	<b>Elevation (ft.):</b> 2845      GL
<b>Total depth TVD (ft.):</b> 7606	<b>Total depth MD (ft.):</b> 16456
<b>Plug back depth TVD (ft.):</b>	<b>Plug back depth MD (ft.):</b>
<b>Was directional survey made other than inclination (Form W-12)?</b> Yes	<b>Rotation time within surface casing (hours):</b> 112.5
<b>Recompletion or reclass?</b> No	<b>Is Cementing Affidavit (Form W-15) attached?</b> Yes
<b>Type(s) of electric or other log(s) run:</b> None	<b>Multiple completion?</b> No
<b>Electric Log Other Description:</b>	
<b>Location of well, relative to nearest lease boundaries of lease on which this well is located:</b>	<b>Off Lease :</b> No
	South <b>Line and</b>
	East <b>Line of the</b>
	UNIVERSITY CENTRAL <b>Lease.</b>

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

<u>Field &amp; Reservoir</u>	<u>Gas ID or Oil Lease No.</u>	<u>Well No.</u>	<u>Prior Service Type</u>
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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.):** 750.0      **Date:** 03/08/2017  
**SWR 13 Exception**      **Depth (ft.):**

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

**Date of test:** 06/17/2018      **Production method:** Flowing  
**Number of hours tested:** 24      **Choke size:** 64  
**Was swab used during this test?** No      **Oil produced prior to test:** 7844.00

**PRODUCTION DURING TEST PERIOD:**

**Oil (BBLs):** 1756.00      **Gas (MCF):** 455  
**Gas - Oil Ratio:** 259      **Flowing Tubing Pressure:** 166.00  
**Water (BBLs):** 2216

**CALCULATED 24-HOUR RATE**

**Oil (BBLs):** 1756.0      **Gas (MCF):** 455  
**Oil Gravity - API - 60.:** 0.0      **Casing Pressure:** 0.00  
**Water (BBLs):** 2216

**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	9 5/8	12 1/4	908			C/POZ; C	355	669.2	0	Circulated to Surface
2	Conventional Production	5 1/2	8 3/4	16447			C/POZ;H/P OZ	2365	4239.2	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**

Row	Size (in.)	Depth (ft.)	Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	7662		/

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 7913	16355.0

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

**Was hydraulic fracturing treatment performed?** Yes  
**Is well equipped with a downhole actuation sleeve?** Yes      **If yes, actuation pressure (PSIG):** 6968.0  
**Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:** 8500      **Actual maximum pressure (PSIG) during hydraulic fracturing:** 8650  
**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	ADD PERFS AND FRAC (SEE FRACFOCUS FOR DETAILS)	7913 16355

**FORMATION RECORD**

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
GRAYBURG	Yes	2937.2	2639.6	Yes	LOGGED - MWD GR
QUEEN	Yes	2619.2	2639.6	Yes	LOGGED - MWD GR
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY	Yes	3215.0	3247.7	Yes	LOGGED - MWD GR
CLEARFORK	Yes	5206.7	5247.9	Yes	LOGGED - MWD GR
SPRABERRY	Yes	5773.6	5814.8	Yes	LOGGED - MWD GR
WOLFCAMP	Yes	7230.6	7272.5	Yes	PRODUCING INTERVAL
STRAWN	No			No	NOT ENCOUNTERED
FUSSELMAN	No			No	NOT ENCOUNTERED
ELLENBURGER	No			No	NOT ENCOUNTERED

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**

UNIVERSITY CENTRAL 0823DH KOP 7210'  
 ALL REQUIRED ADDITIONAL FORMS OR ATTACHMENTS WERE PREVIOUSLY SUBMITTED WITH WRO W-2,  
 TRACKING #183386

**RRC REMARKS**

**PUBLIC COMMENTS:**

[RRC Staff 2018-09-06 08:48:12.257] Previously filed packet indicates the Strawn, Fusselman and Ellenburger were not penetrated.

**CASING RECORD :**

**TUBING RECORD:**

**PRODUCING/INJECTION/DISPOSAL INTERVAL :**

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

**POTENTIAL TEST DATA:**

**OPERATOR'S CERTIFICATION**

**Printed Name:** Rita Martinez-Dean **Title:** Associate Analyst  
**Telephone No.:** (713) 997-6212 **Date Certified:** 09/05/2018



# 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: EP ENERGY E&P COMPANY, L.P.	Operator P-5 No.: 253385
Cementer Name: COMPASS WELL SERVICES	Cementer P-5 No.: 169789

WELL INFORMATION	
District No.: 7C	County: REAGAN
Well No.: 0823DH	API No.: 42-383-39823
Lease Name: UNIVERSITY CENTRAL	Drilling Permit No.: 823658
Field Name: LIN (WOLFCAMP)	Lease No.: 17575
	Field No.: 53613750

I. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 12.25	Depth of drilled hole (ft.): 908	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 9.625	Casing weight (lbs/ft) and grade: 36 J-55	No. of centralizers used: 6
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 908	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date: 4/03/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	200	C/POZ	SEE REMARKS	460	1470
2	155	C	SEE REMARKS	209.25	602
3					
Total	355			669.25	2072

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

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

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

**REMARKS**

LEAD CMT: Class C 85%, Poz 15%, Bentonite 5%, C-45 1.25%, C-40P 0.2%, Salt 5.2#/sk, Kol Seal 6#/sk, Phenoseal 2#/sk TAIL CMT: Class C 100%, C-45 0.25%, Salt 1.61#/sk

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.

Ricardo Nunez-Huerta CMT Supervisor      Compass Well Services      *Ricardo Nunez-Huerta*

Name and title of cementer's representative      Cementing Company      Signature

10013W Rd 157      Midland, Tx 79706      432-561-5970      04/03/2017

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.

*Jared Fause*      Company Rep      *Jared Fause*

Typed or printed name of operator's representative      Title      Signature

P.O. Box 154      Houston Tx 77001      713-997-1205      04/03/2017

Address      City, State, Zip Code      Tel: Area Code      Number      Date: mo. day yr.

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

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

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



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**Form W-15**

Rev. 08/2014

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

**CEMENTING REPORT**

**OPERATOR INFORMATION**

<b>Operator Name:</b> EP ENERGY E&P COMPANY, L.P.	<b>Operator P-5 No.:</b> 253385
<b>Cementer Name:</b> COMPASS CEMENTING SERVICES LLC.	<b>Cementer P-5 No.:</b> 169789

**WELL INFORMATION**

<b>District No.:</b> 7C	<b>County:</b> REAGAN	
<b>Well No.:</b> 0823DH	<b>API No.:</b> 42-383-39823	<b>Drilling Permit No.:</b> 823658
<b>Lease Name:</b> UNIVERSITY CENTRAL	<b>Lease No.:</b> 17575	
<b>Field Name:</b> LIN (WOLFCAMP)	<b>Field No.:</b> 53613750	

**I. CASING CEMENTING DATA**

<b>Type of casing:</b> <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input checked="" type="checkbox"/> Production		
<b>Drilled hole size (in.):</b> 8.75" & 8.5"	<b>Depth of drilled hole (ft.):</b> 16,456'	<b>Est. % wash-out or hole enlargement:</b>
<b>Size of casing in O.D. (in.):</b> 5.5"	<b>Casing weight (lbs/ft) and grade:</b> 17# HCP-110	<b>No. of centralizers used:</b> 77
<b>Was cement circulated to ground surface (or bottom of cellar) outside casing?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <small>If no for surface casing, explain in Remarks.</small>	<b>Setting depth shoe (ft.):</b> 16,447'	<b>Top of liner (ft.):</b>
		<b>Setting depth liner (ft.):</b>
<b>Hrs. waiting on cement before drill-out:</b>	<b>Calculated top of cement (ft.):</b> 0' SURFACE	<b>Cementing date:</b> 11/7/17

**SLURRY**

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	755	C/POZ	SEE REMARKS	2114	8243
2	1610	H/POZ	SEE REMARKS	2125.2	9191
3					
<b>Total</b>	2365			4239.2	17434

**II. CASING CEMENTING DATA**

<b>Type of casing:</b> <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		
<b>Drilled hole size (in.):</b>	<b>Depth of drilled hole (ft.):</b>	<b>Est. % wash-out or hole enlargement:</b>
<b>Size of casing in O.D. (in.):</b>	<b>Casing weight (lbs/ft) and grade:</b>	<b>No. of centralizers used:</b>
<b>Tapered string drilled hole size (in.)</b> Upper: Lower:		<b>Tapered string depth of drilled hole (ft.)</b> Upper: Lower:
<b>Tapered string size of casing in O.D. (in.)</b> Upper: Lower:		<b>Tapered string no. of centralizers used</b> Upper: Lower:
<b>Was cement circulated to ground surface (or bottom of cellar) outside casing?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>Setting depth shoe (ft.):</b>
<b>Hrs. waiting on cement before drill-out:</b>	<b>Calculated top of cement (ft.):</b>	<b>Cementing date:</b>

**SLURRY**

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>					

**III. CASING CEMENTING DATA**

<b>Type of casing:</b> <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		
<b>Drilled hole size (in.):</b>	<b>Depth of drilled hole (ft.):</b>	<b>Est. % wash-out or hole enlargement:</b>
<b>Size of casing in O.D. (in.):</b>	<b>Casing weight (lbs/ft) and grade:</b>	<b>No. of centralizers used:</b>
<b>Tapered string drilled hole size (in.)</b> Upper: Lower:		<b>Tapered string depth of drilled hole (ft.)</b> Upper: Lower:
<b>Tapered string size of casing in O.D. (in.)</b> Upper: Lower:		<b>Tapered string no. of centralizers used</b> Upper: Lower:
<b>Was cement circulated to ground surface (or bottom of cellar) outside casing?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>Setting depth tool (ft.):</b>
<b>Hrs. waiting on cement before drill-out:</b>	<b>Calculated top of cement (ft.):</b>	<b>Cementing date:</b>

**SLURRY**

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
<b>Total</b>					

**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)							

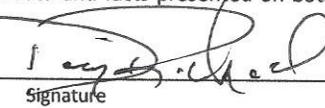
**REMARKS**

LEAD CLASS C 50% POZ 50% BENTONITE 8%, C-45 .3%, C-47B .05%, CITRIC ACID .3%, CSA-1000 .15%, KOL SEAL 5%, GYP SEAL 4%. TAIL CLASS H 50% POZ 50% C-20 .08%, C-45 .1%, C-47B .2%, CSA-1000 .1%.

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.

**Justin Cortez** Cement Supervisor I Compass Cementing Services Llc.  
 Name and title of cementer's representative Cementing Company   
**1933 S US HWY 277** **Sonora, Texas 76950** **325-387-2940** **11/7/17**  
 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.

**DANNY RICHMOND** **WELLSITE SUPERVISOR**   
 Typed or printed name of operator's representative Title Signature  
**PO BOX 154,** **HOUSTON, TX 77001** **713-997-1160** **11/7/17**  
 Address City, State, Zip Code Tel: Area Code Number Date: mo. day yr.

**Instructions for Form W-15, Cementing Report**

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

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

Tracking No.: 198977

*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: EP ENERGY E&P COMPANY, L.P.	District No. 7C	Completion Date: 05/27/2018
Field Name LIN (WOLFCAMP)	Drilling Permit No. 823658	
Lease Name UNIVERSITY CENTRAL	Lease/ID No. 17575	Well No. 0823DH
County REAGAN	API No. 42- 383-39823	

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

\_\_\_\_\_  
 Rita Martinez-Dean  
 Signature  
 EP ENERGY E&P COMPANY, L.P.  
 Name (print)

\_\_\_\_\_  
 Associate Analyst  
 Title  
 (713) 997-6212  
 Phone  
 08/31/2018  
 Date

-FOR RAILROAD COMMISSION USE ONLY-



# GAMMA LOG

Company: EP Energy E&P Company, L.P.  
 Well Name: University Central 823 DH  
 API: 42-383-39823  
 County/Parish: Reagan  
 State/Prov: Texas  
 Country: USA  
 Job #: T-3844

Company: EP Energy E&P Company, L.P.  
 Well Name: University Central 823 DH  
 API: 42-383-39823  
 County/Parish: Reagan  
 State or Prov: Texas  
 Country: USA  
 Job number: T-3844  
 Field: Lin (Wolfcamp)  
 Rig Identification: Nabors 888  
 Survey Company: Nabors Drilling Solutions  
 MWD Operator 1 Kris Seals  
 MWD Operator 2 Remote Operations Center  
 Geologist Mindy wilson  
 Drilling Engineer Derek Motley  
 Coordinates 31.16581 N / 101.64924 W

Log measurements: GAMMA / DIR / ROP / TEMP  
 Depth measured from: Drill Floor - 27.0 ft ft  
 Maximum temperature: 193

Depth  
 Start: 930 ft  
 End: 16456 ft

Casing	Depth	Size	Mud type: Oil based	Ele
Surface:	930 ft	9 5/8"	Density: 9.55 PPG	KB:
Intermediate:			Viscosity: 60 Sec / Quart	DF:
			Rm: NA Rmf: NA Rmc: NA	GL2

Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	8 3/4"	49.00 ft	50.00 ft	930 ft	7210 ft	10/31/2017	1
2	8 3/4"	50.00 ft	51.00 ft	7210 ft	7380 ft	11/01/2017	1
3	8 3/4"	50.00 ft	51.00 ft	7380 ft	7854 ft	11/02/2017	1
4	8 1/2"	52.00 ft	53.00 ft	7854 ft	16456 ft	11/03/2017	1
5							
6							
7							
8							
9							
10							







## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 08 March 2017      **GAU Number:** 167962

<b>Attention:</b>	EP ENERGY E&P COMPANY, ATTN JOSEPH ARAIZA HOUSTON, TX 77210	<b>API Number:</b>	
<b>Operator No.:</b>	253385	<b>County:</b>	REAGAN
		<b>Lease Name:</b>	UNIVERSITY CENTRAL
		<b>Lease Number:</b>	17575
		<b>Well Number:</b>	0823FH
		<b>Total Vertical Depth:</b>	8999
		<b>Latitude:</b>	31.165809
		<b>Longitude:</b>	-101.649113
		<b>Datum:</b>	NAD27

**Purpose:** New Drill  
**Location:** Survey-UL; Abstract-U158; Block-8; Section-23

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 750 feet must be protected.

This recommendation is applicable for all wells drilled in this sec. 23.

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

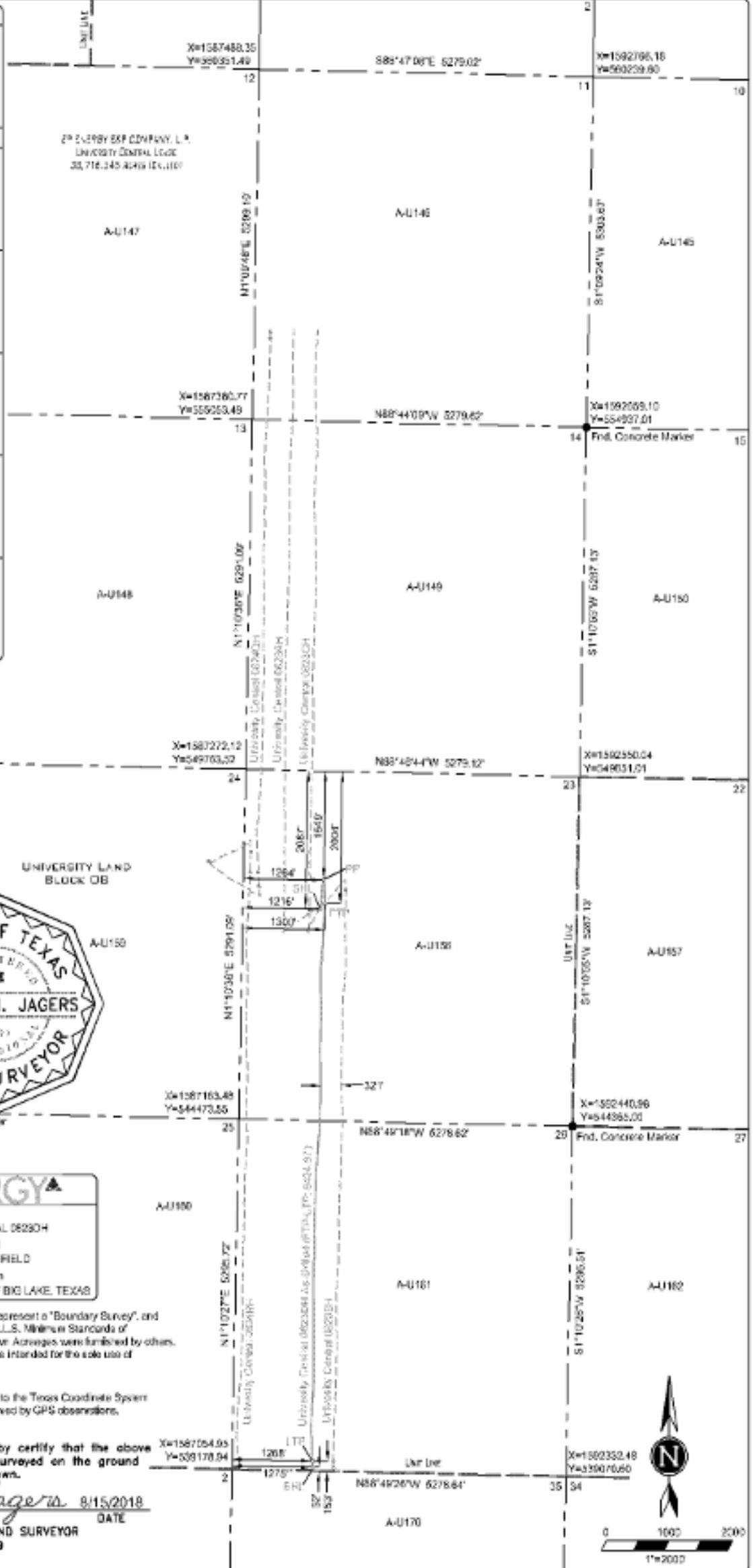
This determination is based on information provided when the application was submitted on 02/23/2017. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Form GW-2      P.O. Box 12967 Austin, Texas 78771-2967      512-463-2741      Internet address: www.rrc.texas.gov  
Rev. 02/2014

<p>NAD 83, Central Zone 4203</p> <p>Surface Hole Location (SHL Sec. 23)</p> <p>Latitude = 31.165667° N</p> <p>Longitude = 101.649635° W</p> <p>X = 1587488.35</p> <p>Y = 552551.49</p> <p>Elv. = 2845'</p> <p>2087' FNL &amp; 1216' FWL</p>
<p>NAD 27, Central Zone 4203</p> <p>Surface Hole Location (SHL Sec. 23)</p> <p>Latitude = 31.163612° N</p> <p>Longitude = 101.649240° W</p> <p>X = 1587645.45</p> <p>Y = 547550.61</p> <p>Elv. = 2845'</p> <p>2087' FNL &amp; 1216' FWL</p>
<p>Penetration Point (PP Sec. 23)</p> <p>Latitude = 31.167060° N</p> <p>Longitude = 101.649077° W</p> <p>X = 1586501.52</p> <p>Y = 548087.85</p> <p>MD = 7272.54</p> <p>1649' FNL &amp; 1264' FWL</p>
<p>First Take Point (FTP Sec. 23)</p> <p>Latitude = 31.166038° N</p> <p>Longitude = 101.648970° W</p> <p>X = 1586530.79</p> <p>Y = 547732.06</p> <p>MD = 7913</p> <p>2064' FNL &amp; 1300' FWL</p>
<p>Last Take Point (LTP Sec. 26)</p> <p>Latitude = 31.142864° N</p> <p>Longitude = 101.649305° W</p> <p>X = 1586326.29</p> <p>Y = 535905.40</p> <p>MD = 16358</p> <p>153' FSL &amp; 1260' FWL</p>
<p>Bottom Hole Location (BHL Sec. 26)</p> <p>Latitude = 31.142593° N</p> <p>Longitude = 101.649287° W</p> <p>X = 1586330.74</p> <p>Y = 535904.87</p> <p>MD = 16456</p> <p>62' FSL &amp; 1275' FWL</p>

Well Boundary Distances	
SHL	8495' FSL & 4082' FFL
PP	3557' FSL & 3019' FFL
FTP	3562' FSL & 3070' FFL
LTP	153' FSL & 1194' FFL
BHL	52' FSL & 1200' FFL



**EP ENERGY**

Well Name  
UNIVERSITY CENTRAL 0823DH

Drilling Field  
LIN (WOLFCAMP) FIELD

Nearest Town  
11.42 MILES SOUTHWEST OF BIG LAKE, TEXAS

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 Procedure for Boundary Survey. Shown Acresages were furnished by others. The information contained on this plat is intended for the sole use of EP ENERGY E&P COMPANY, L.P.

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

I, Damian M. Jagers do hereby certify that the above described well location was surveyed on the ground under my supervision, as shown.

*Damian M. Jagers* 8/15/2018  
 DAMIAN M. JAGERS REGISTERED PROFESSIONAL LAND SURVEYOR TEXAS REGISTRATION NO. 6269



EP ENERGY E&P COMPANY, L.P.

University Central 0823DH  
 Block 8, Section 23  
 Block 8, Section 26  
 Reagan County, Texas