



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

Type of Permit Date Permit No.
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

Spud date: 04/03/2017 Date of first production after rig released: 05/27/2018
Date plug back, deepening, recompletion, or drilling operation commenced: 04/03/2017 Date plug back, deepening, recompletion, or drilling operation ended: 05/27/2018
Number of producing wells on this lease in this field (reservoir) including this well: 74 Distance to nearest well in lease & reservoir (ft.): 321.0
Total number of acres in lease: 38716.54 Elevation (ft.): 2845 GL
Total depth TVD (ft.): 7606 Total depth MD (ft.): 16456
Plug back depth TVD (ft.): Plug back depth MD (ft.):
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours): 112.5
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: None
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease : No
of lease on which this well is located: 8498.0 Feet from the South Line and
4062.0 Feet from the East Line of the
UNIVERSITY CENTRAL 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.):	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			
<u>Row</u>	<u>Size (in.)</u>	<u>Depth Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
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 :	
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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.

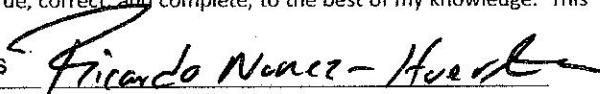
CEMENTING REPORT

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		Drilling Permit No.: 823658	
Lease Name: UNIVERSITY CENTRAL		Lease No.: 17575			
Field Name: LIN (WOLFCAMP)		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:		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:		Upper:		Upper:	
Lower:		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:		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:		Upper:		Upper:	
Lower:		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					

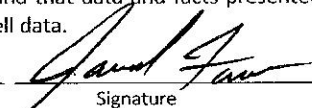
CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount 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	
Name and title of cementer's representative	Cementing Company	Signature
10013W Rd 157	Midland, Tx 79706	432-561-5970
Address	City, State, Zip Code	Tel: Area Code Number
		Date: mo. day yr. 04/03/2017

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	
Typed or printed name of operator's representative	Title	Signature
P.O. Box 154	Houston Tx 77001	713-997-1205
Address	City, State, Zip Code	Tel: Area Code Number
		Date: mo. day yr. 04/03/2017

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.



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

WELL INFORMATION

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

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.): 8.75" & 8.5"	Depth of drilled hole (ft.): 16,456'	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 5.5"	Casing weight (lbs/ft) and grade: 17# HCP-110	No. of centralizers used: 77
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.): 16,447'	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): 0' SURFACE	Cementing date: 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					
Total	2365			4239.2	17434

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 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.):	
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.) Upper: Lower:	Tapered string depth of drilled hole (ft.) 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.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

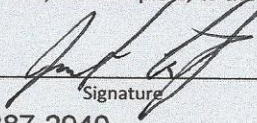
SLURRY

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 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	Signature
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		Signature
PO BOX 154,	HOUSTON, TX 77001	713-997-1160
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	E
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							

Address	City	State	Zip Code	Tel: Area Code	Number	Date: mo. day yr.
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GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 08 March 2017**GAU Number:** 167962**Attention:** EP ENERGY E&P COMPANY,
ATTN JOSEPH ARAIZA
HOUSTON, TX 77210**Operator No.:** 253385**API Number:**
County: REAGAN
Lease Name: UNIVERSITY CENTRAL
Lease Number: 17575
Well Number: 0823FH
Total Vertical Depth: 8999
Latitude: 31.165809
Longitude: -101.649113
Datum: 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

