RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 10/18/2017
Tracking No.: 179145

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.: 42-105-42351 **County:** CROCKETT
Well No.: 3820KH **RRC District No.:** 7C
Lease Name: UNIVERSITY SALT DRAW **Field Name:** LIN (WOLFCAMP)
RRC Lease No.: 18942 **Field No.:** 53613750
Location: Section: 20, Block: 38, Survey: UL, Abstract: U262

Latitude: **Longitude:**
This well is located 7.43 **miles in a** SE **direction from** BARNHART, **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:** 03/19/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	01/09/2017	821518
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 01/28/2017 **Date of first production after rig released:** 03/19/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 01/28/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 03/19/2017
Number of producing wells on this lease in this field (reservoir) including this well: 43 **Distance to nearest well in lease & reservoir (ft.):** 342.0
Total number of acres in lease: 32786.63 **Elevation (ft.):** 2613 GL
Total depth TVD (ft.): 6645 **Total depth MD (ft.):** 14886
Plug back depth TVD (ft.): **Plug back depth MD (ft.):** 14818
Was directional survey made other than inclination (Form W-12)? Yes **Rotation time within surface casing (hours):** 62.5
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No **Multiple completion?** No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:

Location of well, relative to nearest lease boundaries of lease on which this well is located: 8319.0 **Feet from the** North **Line and** 3155.0 **Feet from the** East **Line of the** UNIVERSITY SALT DRAW **Lease.** **Off Lease :** No

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.):** 800.0 **Date:** 12/30/2016

SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 08/07/2017 **Production method:** Gas Lift

Number of hours tested: 24 **Choke size:** 64

Was swab used during this test? No **Oil produced prior to test:** 9703.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLS): 937.00 **Gas (MCF):** 1102

Gas - Oil Ratio: 1176 **Flowing Tubing Pressure:** 217.00

Water (BBLS): 1811

CALCULATED 24-HOUR RATE

Oil (BBLS): 937.0 **Gas (MCF):** 1102

Oil Gravity - API - 60.: 42.0 **Casing Pressure:** 970.00

Water (BBLS): 1811

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Tool 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	968			C/POZ; C	345	648.2	0	Circulated to Surface
2	Conventional Production	5 1/2	8 1/2	14868			C/H	2120	3664.0	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

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	6550	6568 / EUE AS1-X PACKER

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 6918	14775.0

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):** 8386.0

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 8500 **Actual maximum pressure (PSIG) during hydraulic fracturing:** 7901

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)	6918	14775

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
QUEEN	Yes	1228.2	1228.5	Yes	LOGGED MWD GR
SAN ANDRES	Yes	1405.3	1407.0	Yes	LOGGED MWD GR
LEONARD	Yes	3280.4	3331.7	Yes	LOGGED MWD GR
WOLFCAMP	Yes	5676.3	5770.5	Yes	PRODUCING INTERVAL
CANYON	No			Yes	NOT PENETRATED
STRAWN	No			Yes	NOT PENETRATED
DEVONIAN	No			Yes	NOT PENETRATED
ELLENBURGER	No			Yes	NOT PENETRATED

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

KOP 6185'

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2017-09-20 14:10:12.176] EDL=7870 feet, max acres=320, LIN (WOLFCAMP) oil well

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:** 09/11/2017

RAILROAD COMMISSION OF TEXAS

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

CEMENTING REPORT

Form W-15
Rev. 08/2014

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 LLC	**Cementer P-5 No.:** 169789

WELL INFORMATION

District No.: 7C	**County:** REAGAN	
Well No.: 3820KH	**API No.:** 42-105-42351	**Drilling Permit No.:** 821518
Lease Name: UNIVERSITY SALT DRAW	**Lease No.:** 18942	
Field Name: LIN (WOLFCAMP)	**Field No.:** 53613750	

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☑ Surface ☐ Intermediate ☐ Liner ☐ Production

Drilled hole size (in.): 12 1/4	**Depth of drilled hole (ft.):** 968	**Est. % wash-out or hole enlargement:** 0%
Size of casing in O.D. (in.): 9 5/8	**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? ☑ YES ☐ NO If no for surface casing, explain in Remarks.	**Setting depth shoe (ft.):** 968	**Top of liner (ft.):** / **Setting depth liner (ft.):**
Hrs. waiting on cement before drill-out:	**Calculated top of cement (ft.):** Surface	**Cementing date:** 1/28/2017

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	190	C/Poz	See Remarks	438.9	600'
2	155	C	See Remarks	209.25	1398'
3					
Total	345			648.15	1998'

II. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ 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? ☐ YES ☐ 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: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ 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? ☐ YES ☐ 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/Poz: 85/15%:Gel,C-45,Citric Acid,Salt,Kol Seal,Phenoseal. TAIL Class C 100%:C-45,Salt.

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.

Jose M Perez / Service Supervisor	Compass Cementing LLC		
Name and title of cementer's representative	Cementing Company	Signature	
1930 S US HWY 277	SONORA TX,76950	325-387-2940	1/28/2017
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.

Dusty Johnson	Site Supervisor		
Typed or printed name of operator's representative	Title	Signature	
P.O. BOX 4660	HOUSTON TX,77210-4660	713-997-1160	1/28/2017
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_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

CEMENTING REPORT

Form W-15
Rev. 08/2014

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	**Cementer P-5 No.:** 169789

WELL INFORMATION

District No.: 7C	**County:** REAGAN	
Well No.: 3820KH	**API No.:** 42-105-42351	**Drilling Permit No.:** 821518
Lease Name: UNIVERSITY SALT DRAW	**Lease No.:** 18942	
Field Name: LIN (WOLFCAMP)	**Field No.:** 53613750	

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☐ Surface ☐ Intermediate ☐ Liner ☑ Production

Drilled hole size (in.): 8.5/8.75	**Depth of drilled hole (ft.):** 14886	**Est. % wash-out or hole enlargement:** 0%
Size of casing in O.D. (in.): 5.5	**Casing weight (lbs/ft) and grade:** 17/HCP110	**No. of centralizers used:** 71
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☑ YES ☐ NO If no for surface casing, explain in Remarks.	**Setting depth shoe (ft.):** 14868	**Top of liner (ft.):** / **Setting depth liner (ft.):**
Hrs. waiting on cement before drill-out:	**Calculated top of cement (ft.):** 0	**Cementing date:** 3/19/17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	585	C	SEE REMARKS	1638	6116
2	1535	H	SEE REMARKS	2026	8754
3					
Total	2120	C/H	SEE REMARKS	3664	14870

II. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ 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? ☐ YES ☐ 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: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ 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? ☐ YES ☐ 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-8%GEL, .1%C47B, .275%CITRIC ACID, .1%CSA1000, 5#/SK KOLSEAL, 4#/SK GYPSEAL; TAIL-.1%C20, .125%C45, .1%C47B, .1%CSA1000

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.

Alton Channell/ CSIT	Compass Cementing Services	Alton Channell	Digitally signed by Alton Channell DN: cn=Alton Channell, o, ou, email=achannell@compassenergyservices.com, c=US Date: 2017.03.19 07:50:55 -05'00'
Name and title of cementer's representative	Cementing Company	Signature	

10013 West Co Rd. 157	Midland, TX, 79706	432-561-5970	3/19/17
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.

Dusty Johnson	Site Supervisor	Dusty Johnson	Digitally signed by Dusty Johnson DN: cn=Dusty Johnson, o, ou, email=dusty_j@hotmail.com, c=US Date: 2017.03.19 07:48:00 -05'00'
Typed or printed name of operator's representative	Title	Signature	

P.O. Box 154	Houston Tx 77001	713-997-1205	03/19/2017
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_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
Oil and Gas Division

ELECTRIC LOG STATUS REPORT

FORM L-1

Tracking No.: 179145

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: 03/19/2017
Field Name LIN (WOLFCAMP)	Drilling Permit No. 821518	
Lease Name UNIVERSITY SALT DRAW	Lease/ID No. 18942	Well No. 3820KH
County CROCKETT	API No. **42-** 105-42351	

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	Associate Analyst Title
EP ENERGY E&P COMPANY, L.P. Name (print)	(713) 997-6212 Phone 09/11/2017 Date

-FOR RAILROAD COMMISSION USE ONLY-

Gamma Log

MD
1":100'

Company: EP Energy E&P Company
Well Name: University Salt Draw 3820 KH
API: 42-105-42351
County/Parish: Crockett County
State/Prov: Texas
Country: USA
Job #: B0220

Company:	EP Energy E&P Company
Well Name:	University Salt Draw 3820 KH
API:	42-105-42351
County/Parish:	Crockett County
State or Prov:	Texas
Country:	USA
Job number:	B0220
Field:	Wolfcamp Shale
Rig Identification:	Nabors F-34
Survey Company:	Nabors Drilling Solutions
MWD Operator 1	David Foley
MWD Operator 2	Remote Operating Center
Geologist	Lauren Robinson
Drilling Engineer	Ryan Williams
Coordinates	N: 499189.220 E:1758758.310

Log measurements: GR, ROP
Depth measured from: Drill Floor - 30 ft
Maximum temperature: 195 F

	Depth	Date
Start:	998 ft	03/12/2017
End:	14797 ft	03/18/2017

Casing	Depth	Size
Surface:	995 ft	9 5/8"
Intermediate:		

Mud type: Oil based
Density: 8.85 ppg
Viscosity: 53 sec/qt
Rm: **Rmf:** **Rmc:**

Elevations	
KB:	2642.00 ft
DF:	30 ft
GL:	2612.00 ft

Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	8 3/4"	48.00 ft	49.00 ft	998 ft	3795 ft	03/12/2017	03/13/2017
2	8 3/4"	54.00 ft	55.00 ft	3795 ft	3846 ft	03/14/2017	03/14/2017
3	8 3/4"	53.00 ft	54.00 ft	3846 ft	6185 ft	03/14/2017	03/15/2017
4	8 3/4"	54.00 ft	55.00 ft	6185 ft	6757 ft	03/15/2017	03/16/2017
5	8 1/2"	52.00 ft	53.00 ft	6757 ft	14797 ft	03/16/2017	03/18/2017
6							
7							
8							
9							
10							

RAILROAD COMMISSION OF TEXAS

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

Form P-16
Page 1
Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION

Operator Name: EP ENERGY E&P COMPANY, L.P.	**Operator P-5 No.:** 253385
Operator Address: PO BOX 4660 HOUSTON, TEXAS 77210	

SECTION II. WELL INFORMATION

District No.: 7C	**County:** CROCKETT	**Purpose of Filing:**
Well No.: 3820KH	**API No.:**	☐ Drilling Permit Application (Form W-1)
Total Lease Acres: 32789.627	**Drilling Permit No.:**	☑ Completion Report (Form G-1/W-2)
Lease Name: UNIVERSITY SALT DRAW	**Lease No.:** 18942	
Field Name: LIN (WOLFCAMP)	**Field No.:** 53613750	

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

RRC ID No. or Lease No.	Well No.	H-Horizontal D-Directional V-Vertical	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
18942	4102AH	H	UNIVERSITY SALT DRAW	42-105-42187	300	N	
18942	4102BH	H	UNIVERSITY SALT DRAW	42-105-42188	300	N	
18942	4102CH	H	UNIVERSITY SALT DRAW	42-105-42189	300	N	
18942	4102DH	H	UNIVERSITY SALT DRAW	42-105-42190	300	N	
18942	4102EH	H	UNIVERSITY SALT DRAW	42-105-42191	300	N	
18942	4102FH	H	UNIVERSITY SALT DRAW	42-105-42192	300	N	
18942	4102GH	H	UNIVERSITY SALT DRAW	42-105-42208	300	N	
18942	4102HH	H	UNIVERSITY SALT DRAW	42-105-42209	300	N	
18942	4102IH	H	UNIVERSITY SALT DRAW	42-105-42210	300	N	
18942	4102JH	H	UNIVERSITY SALT DRAW	42-105-42211	300	N	
18942	4102KH	H	UNIVERSITY SALT DRAW	42-105-42212	300	N	
18942	4102LH	H	UNIVERSITY SALT DRAW	42-105-42213	300	N	
18942	4125AH	H	UNIVERSITY SALT DRAW	42-105-42225	300	N	
18942	5505AH	H	UNIVERSITY SALT DRAW	42-105-41561	300	N	
18942	4101AH	H	UNIVERSITY SALT DRAW	42-105-42269	300	N	
18942	4101BH	H	UNIVERSITY SALT DRAW	42-105-42278	300	N	
18942	4101CH	H	UNIVERSITY SALT DRAW	42-105-42270	300	N	

Total Well Count >	43	13200	**< A. Total Assigned Horiz. Acreage**	13200	**< C. Total Assigned Acreage**
		20189.627	**< Total Remaining Horiz. Acreage**	20189.627	**< Total Remaining Acreage**
			< B. Total Assigned Vert./Dir. Acreage		
			< Total Remaining Vert./Dir. Acreage		

SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

Attach Additional Pages As Needed. ☐ **No additional pages** ☑ **Additional Pages:** 1 **(No. of additional pages)**

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Signature	Name and title (type or print)	Email (include email address *only* if you affirmatively consent to its public release)
	Rita M Dean Assoc Analyst	rita.martinez@epenergy.com

Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.
PO BOX 4660 HOUSTON, TEXAS 77002		713-997-6212	09/11/2017

RAILROAD COMMISSION OF TEXAS

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

Acreage Designation Attachment

Form P-16
Attachment
Page 1A
Rev. 01/2016

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III (CONTINUED). LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

RRC ID No. or Lease No.	Well No.	H-Horizontal D-Directional V-Vertical	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
18942	4101EH	H	UNIVERSITY SALT DRAW	42-105-42272	300	N	
18942	4101FH	H	UNIVERSITY SALT DRAW	42-105-42273	300	N	
18942	4101GH	H	UNIVERSITY SALT DRAW	42-105-42313	300	N	
18942	4101HH	H	UNIVERSITY SALT DRAW	42-105-42313	300	N	
18942	4101IH	H	UNIVERSITY SALT DRAW	42-105-42315	300	N	
18942	4114AH	H	UNIVERSITY SALT DRAW	42-105-42325	300	N	
18942	4114BH	H	UNIVERSITY SALT DRAW	42-105-42326	300	N	
18942	4114CH	H	UNIVERSITY SALT DRAW	42-105-42327	300	N	
18942	4114DH	H	UNIVERSITY SALT DRAW	42-105-42328	300	N	
18942	4101DH	H	UNIVERSITY SALT DRAW	42-105-42271	300	N	
18942	4101LH	H	UNIVERSITY SALT DRAW	42-105-42213	300	N	
18942	4114AH	H	UNIVERSITY SALT DRAW	42-105-42325	300	N	
18942	4114BH	H	UNIVERSITY SALT DRAW	42-105-42326	300	N	
18942	4114CH	H	UNIVERSITY SALT DRAW	42-105-42327	300	N	
18942	4114DH	H	UNIVERSITY SALT DRAW	42-105-42328	300	N	
18942	3820AH	H	UNIVERSITY SALT DRAW	42-105-42342	300	N	
18942	3820CH	H	UNIVERSITY SALT DRAW	42-105-42344	300	N	
18942	3820DH	H	UNIVERSITY SALT DRAW	42-105-42345	300	N	
18942	3820BH	H	UNIVERSITY SALT DRAW	42-105-42343	300	N	
18942	3820EH	H	UNIVERSITY SALT DRAW	42-105-42346	300	N	
18942	3820FH	H	UNIVERSITY SALT DRAW	42-105-42347	300	N	
18942	3820GH	H	UNIVERSITY SALT DRAW	42-105-42353	300	N	
18942	3820HH	H	UNIVERSITY SALT DRAW	42-105-42348	300	N	
18942	3820IH	H	UNIVERSITY SALT DRAW	42-105-42349	300	N	
18942	3820JH	H	UNIVERSITY SALT DRAW	42-105-42350	300	N	
18942	3820KH	H	UNIVERSITY SALT DRAW	42-105-42351	300	N	

Total Well Count >	43	13200	**< A. Total Assigned Horiz. Acreage**	13200	**< C. Total Assigned Acreage**
		20189.627	**< Total Remaining Horiz. Acreage**	20189.627	**< Total Remaining Acreage**
			< B. Total Assigned Vert./Dir. Acreage		
			< Total Remaining Vert./Dir. Acreage		

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Groundwater Advisory Unit

Date Issued:	30 December 2016	**GAU Number:**	164940

Attention:	EP ENERGY E&P COMPANY, ATTN JOSEPH ARAIZA HOUSTON, TX 77210	**API Number:**	
		County:	CROCKETT
		Lease Name:	UNIVERSITY SALT DRAW
		Lease Number:	18942
Operator No.:	253385	**Well Number:**	3820GH
		Total Vertical Depth:	8999
		Latitude:	31.036960
		Longitude:	-101.103695
		Datum:	NAD27

Purpose: New Drill

Location: Survey-UL; Abstract-U262; Block-38; Section-20

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

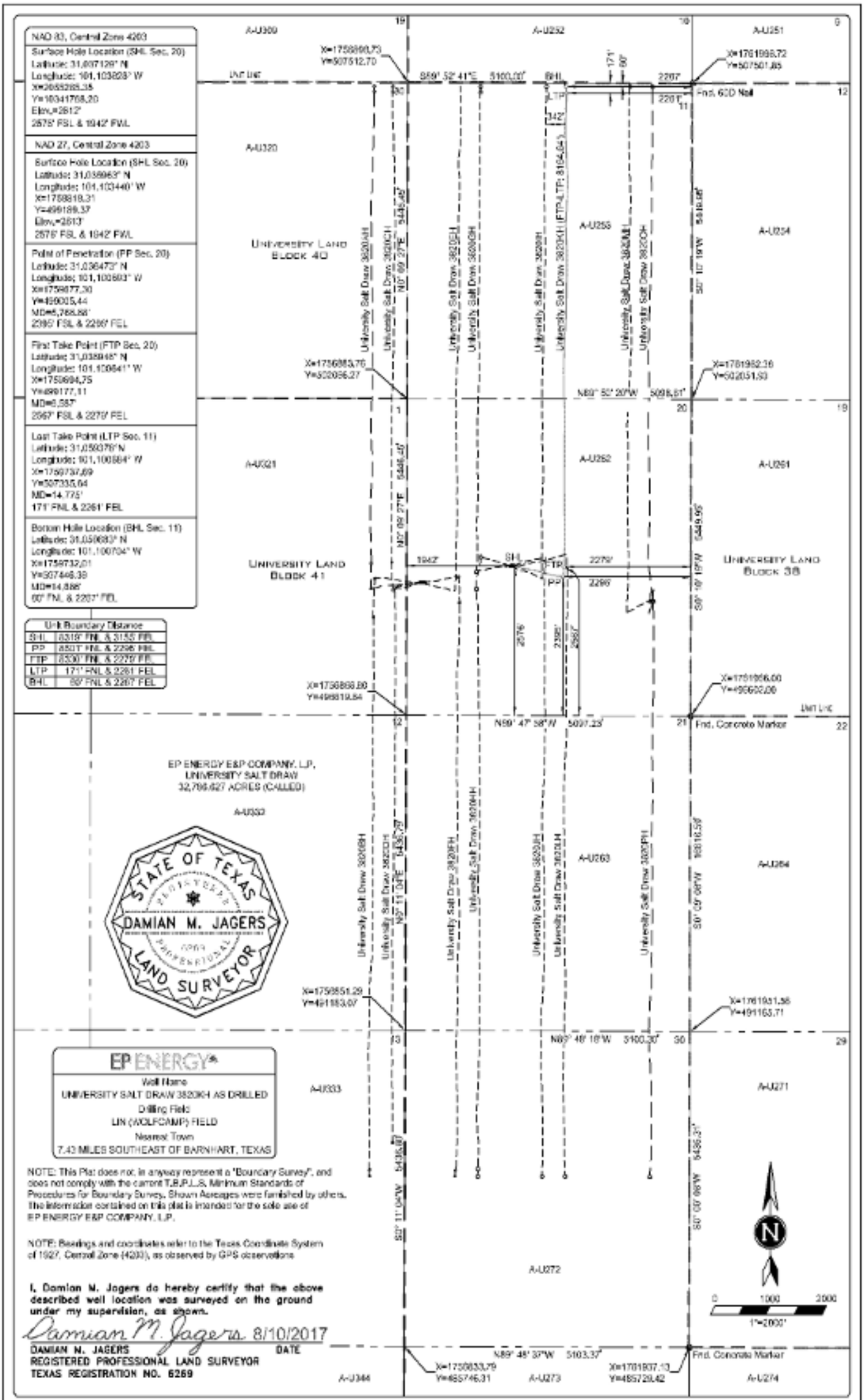
The interval from the land surface to 20 feet below the base of the Cretaceous-age beds must be protected. The base of the Cretaceous is estimated to occur at a depth of 800 feet.

This recommendation is applicable to all wells within a radius of 2000 feet of this location.

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 12/21/2016. 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



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. Shown Acreages 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.

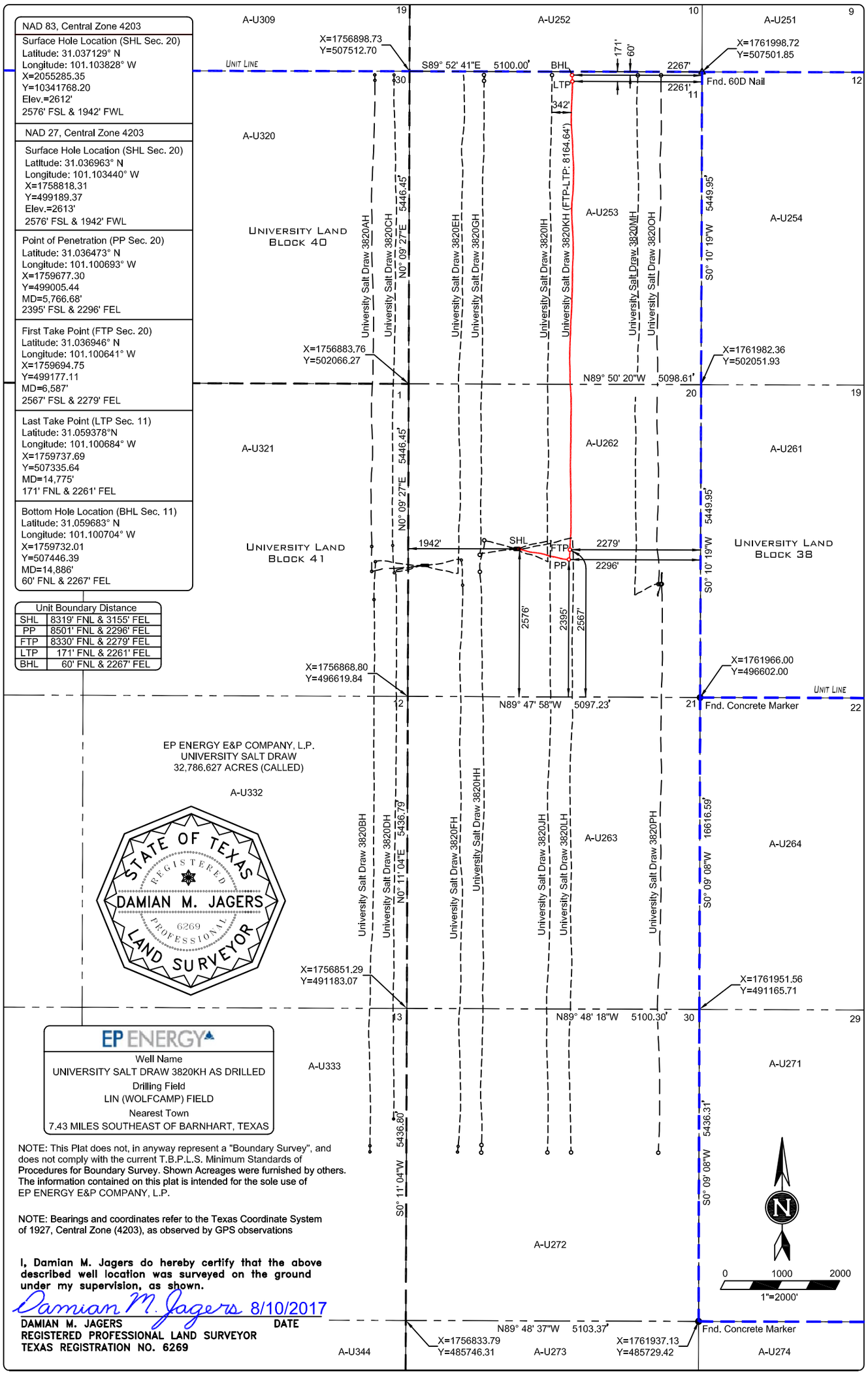
Damian M. Jagers 8/10/2017

DAMIAN M. JAGERS DATE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 6269

XTS
ENERGY THERE SERVICES, LLC

EP ENERGY E&P COMPANY, L.P.

University Salt Draw 3820KH AS DRILLED
Block 38, Section 20
Block 38, Section 11
Crockett County, Texas



XTS
CROSS TIMBERS SURVEYING, LLC
1503 DARTMOUTH ST, LONGVIEW, TX 75601
Phone: 254-965-8686 Fax: 254-968-5715
www.xtsurvey.com

EP ENERGY E&P COMPANY, L.P.

University Salt Draw 3820KH AS DRILLED
Block 38, Section 20
Block 38, Section 11
Crockett County, Texas