



**RAILROAD COMMISSION OF TEXAS**

**Form W-2**

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

Status: Approved  
Date: 08/01/2016  
Tracking No.: 156487

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

**OPERATOR INFORMATION**

**Operator Name:** PERMIAN RESOURCES, LLC      **Operator No.:** 655836  
**Operator Address:** PO BOX 14670 OKLAHOMA CITY, OK 73113-0000

**WELL INFORMATION**

**API No.:** 42-383-39595      **County:** REAGAN  
**Well No.:** 0620HD      **RRC District No.:** 7C  
**Lease Name:** UNIVERSITY 10 RE      **Field Name:** LIN (WOLFCAMP)  
**RRC Lease No.:** 18869      **Field No.:** 53613750  
**Location:** Section: 6, Block: 10, Survey: UL, Abstract: U212  
  
**Latitude:**      **Longitude:**  
**This well is located**      6.74      **miles in a**      NORTH  
**direction from**      BIG LAKE,  
**which is the nearest town in the county.**

**FILING INFORMATION**

**Purpose of filing:** Well Record Only  
**Type of completion:** New Well  
**Well Type:** Shut-In Producer      **Completion or Recompletion Date:** 04/20/2016  
  

<u>Type of Permit</u>	<u>Date</u>	<u>Permit No.</u>
Permit to Drill, Plug Back, or Deepen Rule 37 Exception	04/06/2016	814372
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

**COMPLETION INFORMATION**

**Spud date:** 03/15/2016      **Date of first production after rig released:** 04/20/2016  
**Date plug back, deepening, recompletion, or drilling operation commenced:** 03/15/2016      **Date plug back, deepening, recompletion, or drilling operation ended:** 04/20/2016  
**Number of producing wells on this lease in this field (reservoir) including this well:** 1      **Distance to nearest well in lease & reservoir (ft.):** 319.0  
**Total number of acres in lease:** 630.90      **Elevation (ft.):** 2538      GL  
**Total depth TVD (ft.):** 8390      **Total depth MD (ft.):** 18628  
**Plug back depth TVD (ft.):** 8390      **Plug back depth MD (ft.):** 18628  
**Was directional survey made other than inclination (Form W-12)?** Yes      **Rotation time within surface casing (hours):** 197.5  
**Recompletion or reclass?** No      **Is Cementing Affidavit (Form W-15) attached?** Yes  
**Type(s) of electric or other log(s) run:** Gamma Ray (MWD)      **Multiple completion?** No  
**Electric Log Other Description:**  
**Location of well, relative to nearest lease boundaries**      **Off Lease :** No  
**of lease on which this well is located:**      674.0 **Feet from the**      South **Line and**  
1303.0 **Feet from the**      East **Line of the**  
UNIVERSITY 10 RE **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.):** 550.0                      **Date:** 03/14/2016  
**SWR 13 Exception**    **Depth (ft.):**

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

**Date of test:**    **Production method:**  
**Number of hours tested:** 24    **Choke size:**  
**Was swab used during this test?** No    **Oil produced prior to test:**

**PRODUCTION DURING TEST PERIOD:**

**Oil (BBLs):**    **Gas (MCF):**  
**Gas - Oil Ratio:** 0    **Flowing Tubing Pressure:**  
**Water (BBLs):**

**CALCULATED 24-HOUR RATE**

**Oil (BBLs):**    **Gas (MCF):**  
**Oil Gravity - API - 60.:**    **Casing Pressure:**  
**Water (BBLs):**

**CASING RECORD**

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	728			CLASS C 65/35	900	1444.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	7204			CLASS C 50/50	1300	3210.0	0	Circulated to Surface
3	Conventional Production	5 1/2	8 3/4	18616			CLASS H 50/50	4085	5281.0	21	Calculation

**LINER RECORD**

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

**TUBING RECORD**

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

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

Row	Open hole?	From (ft.)	To (ft.)
N/A			

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

**Was hydraulic fracturing treatment performed?** No

**Is well equipped with a downhole actuation sleeve?** No    **If yes, actuation pressure (PSIG):**

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

**Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)?** No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
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N/A

**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	2698.0	2716.0	No	
QUEEN	No			No	NOT ENCOUNTERED
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY	Yes	2864.0	2885.0	No	
CLEARFORK	No			No	PINCHED OUT IN THIS AREA
SPRABERRY	Yes	5527.0	5587.0	No	
WOLFCAMP	Yes	8221.0	8411.0	No	
STRAWN	No			No	BELOW TD
FUSSELMAN	No			No	BELOW TD
ELLENBURGER	No			No	BELOW TD

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**

**RRC REMARKS**

**PUBLIC COMMENTS:**

**CASING RECORD :**

**TUBING RECORD:**

TUBING WILL BE RECORDED WITH W2-IP

**PRODUCING/INJECTION/DISPOSAL INTERVAL :**

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

**POTENTIAL TEST DATA:**

**OPERATOR'S CERTIFICATION**

**Printed Name:** Rian Hinds

**Title:** Regulatory Technician

**Telephone No.:** (405) 968-4451

**Date Certified:** 06/06/2016



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 shade areas. Operator: Fill in other items.

OPERATOR INFORMATION
Operator Name: American Energy Permian
Operator P-5 No.: 017996
Cementer Name: Crest Pumping Technologies
Cement P-5 No.: 189898

WELL INFORMATION
District No.: 7C
County: Reagan
Well No.: 0620HD
API No.: 42-383-39595
Lease Name: University 10RE
Lease No.:
Field Name: Lin (Wolfcamp)
Field No.:

I. CASING CEMENTING DATA
Type of casing: [ ] Conductor [X] Surface [ ] Intermediate [ ] Liner [ ] Production
Drilled hole size (in.): 17 1/2
Depth of drilled hole (ft.): 728
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 13 3/8
Casing weight (lbs/ft) and grade: 54.5# J-55
No. of centralizers used: 5
Was cement circulated to ground surface (or bottom of cellar) outside casing? [X] YES [ ] NO
Setting depth shoe (ft.): 728
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date: 3/16/2016

SLURRY table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

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.):
Tapered string depth of drilled hole (ft.):
Upper: Lower:
Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight(lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower:
Upper: Lower:
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 table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

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.):
Tapered string depth of drilled hole (ft.):
Upper: Lower:
Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight(lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower:
Upper: Lower:
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 table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)





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Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION

Operator Name: American Energy Permian
Operator P-5 No.:
Cementer Name: Crest Pumping Technologies
Cementer P-5 No.: 189898

WELL INFORMATION

District No.: 7C
County: Reagan
Well No.: 0620HD
API No.: 42-383-39595
Drilling Permit No.: 814372
Lease Name: University 10 RE
Lease No.:
Field Name: Lin (Wolfcamp)
Field No.:

I. CASING CEMENTING DATA

Type of casing: Conductor Surface Intermediate (checked) Liner Production
Drilled hole size (in.): 12 1/4
Depth of drilled hole (ft.): 7204
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 9 5/8
Casing weight (lbs/ft) and grade: 40# J-55
No. of centralizers used: 53
Was cement circulated to ground surface... (checked) YES
Setting depth shoe (ft.): 7204
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.): 0
Cementing date: 4/3/2016

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and Total.

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.):
Tapered string depth of drilled hole (ft.):
Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight (lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower:
Was cement circulated to ground surface... (unchecked) YES (unchecked) NO
Setting depth shoe (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and 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.):
Tapered string depth of drilled hole (ft.):
Upper: Lower:
Tapered string size of casing in O.D. (in.):
Tapered string casing weight (lbs/ft) and grade:
Tapered string no. of centralizers used:
Upper: Lower:
Was cement circulated to ground surface... (unchecked) YES (unchecked) NO
Setting depth tool (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date:

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.). Rows include slurry 1, 2, 3, and 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 of 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**

- 1 5% Salt; 7% Bentonite Gel; 0.05% GXT-C; 0.25% CPT-503p; 4# Kol Seal; 2# Dura Fiber-X
- 2 3% Salt; 1% Bentonite Gel; 0.5% CPT-19; 0.4% CPT-35; 4# Kol Seal; 0.1% CPT-20A
- 3
- 4

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.

Richie Panko / Cementer

Crest Pumping Technologies

*Richie Panko*

Name and title of cementer's representative

Cementing Company

Signature

P.O. Box 117 Jacksboro, TX 76458

940-567-3392

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

Rian Hinds

Regulatory Technician

*Rian Hinds*

Typed or printed name of operator's representative

Title

Signature

PO Box 13710 OKC, OK 73113

405-968-4451

04/29/2016

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo.

**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&ptac=&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&ptac=&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-outs less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as 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-15's 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

CEMENTING REPORT

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

OPERATOR INFORMATION
Operator Name: Permian Resources
Cementer Name: Crest Pumping Technologies
Operator P-5 No.:
Cementer P-5 No.: 189898

WELL INFORMATION
District No.: 7C
Well No.: 0620HD
Lease Name: University 10 RE
Field Name: Lin (Wolfcamp)
County: Reagan
API No.: 42-383-39595
Drilling Permit No.: 814372
Lease No.:
Field No.:

I. CASING CEMENTING DATA
Type of casing: [ ] Conductor [ ] Surface [ ] Intermediate [ ] Liner [X] Production
Drilled hole size (in.): 8 3/4
Depth of drilled hole (ft.): 18618
Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 5 1/2
Casing weight (lbs/ft) and grade: 17# P-110
No. of centralizers used: 155
Was cement circulated to ground surface (or bottom of cellar) outside casing? [ ] YES [X] NO
Setting depth shoe (ft.): 18616
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.): 21
Cementing date: 4/20/2016

SLURRY table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

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 table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

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 table with columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)



Tracking No.: 156487

*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: PERMIAN RESOURCES, LLC	District No. 7C	Completion Date: 04/20/2016
Field Name LIN (WOLFCAMP)	Drilling Permit No. 814372	
Lease Name UNIVERSITY 10 RE	Lease/ID No. 18869	Well No. 0620HD
County REAGAN	API No. 42- 383-39595	

**SECTION II. LOG STATUS (Complete either A or B)**

A. BASIC ELECTRIC LOG NOT RUN

B. BASIC ELECTRIC LOG RUN. (Select one)

- 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- 4. Log attached to (select one):
  - (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: \_\_\_\_\_  
 Check here if attached log is being submitted after being held confidential.
  - (b) Form P-7, Application for Discovery Allowable and New Field Designation.
  - (c) Form W-4, Application for Multiple Completion:  
 Lease or ID No(s). \_\_\_\_\_  
 Well No(s). \_\_\_\_\_

\_\_\_\_\_  
 Rian Hinds  
 Signature  
 PERMIAN RESOURCES, LLC  
 Name (print)

\_\_\_\_\_  
 Regulatory Technician  
 Title  
 (405) 968-4451  
 Phone  
 06/06/2016  
 Date

-FOR RAILROAD COMMISSION USE ONLY-

	<b>Gamma Ray Build and Lateral</b>	
	Job #: 168046	Well ID: 814372
	Scale: 5"/100	Type: MD

Well Site Information	
Oil Company	American Energy-Perm Basin, LLC
Surface Location	674.0' FSL & 1282.0' FEL
Well Name	University 10 RE 0620HD
API	42-383-39595
Field	Lin (Wolfcamp)
State	Texas
Country	USA

Surface Coordinates	
Well Type	Horizontal
Latitude	31.288956° N
Longitude	101.470446° W
N / S Coordinates	591,819.67 ft
E / W Coordinates	1,644,819.61 ft
Azimuth Reference	True North
Grid Convergence	0.59°

MWD Engineers	
Lead Hand	T.Studer
Second Hand	H.Corrals

Perm Datum	Mean Sea Level	Elevation	2,538.00 ft
Log depth measured from KB is	21.00 ft	above perm datum.	KB = 2559.00 ft
Total Depth	18628.00 ft	Spud Date	Mar/27/2016
(MD) Log Interval		End Date	Apr/15/2016
		Start Depth	813.00 ft
		End Depth	18628.50 ft

Bore Hole Record			
Hole Size	From	To	
12 1/4"	699.00 FT	7,216.00 FT	
8 3/4"	7,217.00 FT	18,628.00	

Casing Record					
Type	Size	WGT	From	To	
Surface	13 3/8"	54.5	0.00 FT	721.00 FT	
Intermediate	9 5/8"	40.0	0.00 FT	7,216.00 FT	

**CERTIFICATE OF COMPLIANCE  
 AND TRANSPORTATION AUTHORITY**

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

Tracking No.: 156487

1. Field name exactly as shown on proration schedule <b>LIN (WOLFCAMP)</b>		2. Lease name as shown on proration schedule <b>UNIVERSITY 10 RE</b>					
3. Current operator name exactly as shown on P-5 Organization Report <b>PERMIAN RESOURCES, LLC</b>		4. Operator P-5 no. <b>655836</b>	5. Oil Lse/Gas ID no. <b>18869</b>	6. County <b>REAGAN</b>	7. RRC district <b>7C</b>		
8. Operator address including city, state, and zip code <b>PO BOX 14670 OKLAHOMA CITY, OK 73113</b>		9. Well no(s) (see instruction E) <b>0620HD</b>			11. Effective Date <b>04/20/2016</b>		
		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G)							
a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____							
----- OR -----							
b. New RRC Number for: <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <input type="checkbox"/> other well (specify) _____ Due to: <input type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		LUCID ENERGY WESTEX, LLC(511943)				100.0	
	X	LUCID ENERGY WESTEX, LLC(511943)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
MEDALLION OPERATING COMPANY, LLC(558336)						100.0	
<b>RRC USE ONLY:</b> Reviewer's initials: <u>RRC Staff</u> Approval date: <u>08/01/2016</u>							
<b>15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.</b> Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator _____				Signature _____			
Name (print) _____				<input type="checkbox"/> Authorized Employee of previous operator		<input type="checkbox"/> Authorized agent of previous operator (see instruction G)	
Title _____				Date _____		Phone with area code _____	
<b>16. CURRENT OPERATOR CERTIFICATION.</b> By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
PERMIAN RESOURCES, LLC				Rian Hinds			
Name (print) _____				Signature _____			
Regulatory Technician				<input checked="" type="checkbox"/> Authorized Employee of current operator		<input type="checkbox"/> Authorized agent of current operator (see instruction G)	
Title _____				Date <u>06/06/2016</u>		Phone with area code <u>(405) 968-4451</u>	
E-mail Address (optional) <u>rian.hinds@permianresources.com</u>				Date _____		Phone with area code _____	

## CERTIFICATE OF POOLING AUTHORITY

# P-12

Revised 05/2001

1. Field Name(s) <b>Lin (Wolfcamp)</b>	2. Lease/ID Number (if assigned)	3. RRC District Number <b>7C</b>
4. Operator Name <b>American Energy-Perm Basin, LLC</b>	5. Operator P-5 Number <b>017996</b>	6. Well Number <b>0620HD</b>
7. Pooled Unit Name <b>University 10 RE</b>	8. API Number <b>42-383-39595</b>	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1)
10. County <b>Reagan</b>	11. Total acres in pooled unit <b>630.90</b>	<input type="checkbox"/> Completion Report

### DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT <i>(See inst. #7 below)</i>	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
1	University Lands	313.100	<input type="checkbox"/>	<input type="checkbox"/>
2	University Lands	317.800	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

**CERTIFICATION:**

I declare under penalties prescribed pursuant to the Sec. 91.143, Texas Natural Resources Code, that I am authorized to make the foregoing statements and that the information provided by me or under my direction on this Certificate of Pooling Authority is true, correct, and complete to the best of my knowledge.

 Signature	Rena Carter Print Name
Sr. Regulatory Specialist	03/11/2016
rena.carter@aep-lp.com E-mail (if available)	(405) 607-5559 Phone
Title	Date

**INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40**

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

Clear Form

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 14 March 2016**GAU Number:** 152286

**Attention:** AMERICAN ENERGY-PERM  
 PO BOX 13710  
 OKLAHOMA CITY, OK 73113

**API Number:**  
**County:** REAGAN  
**Lease Name:** University 10 RE

**Operator No.:** 017996

**Lease Number:**  
**Well Number:** 0620HD  
**Total Vertical Depth:** 13000  
**Latitude:** 31.288955  
**Longitude:** -101.470382  
**Datum:** NAD27

**Purpose:** New Drill**Location:** Survey-UL; Block-10; Section-6

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 550 feet must be protected.

This recommendation is applicable to all wells within a radius of 500 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 03/14/2016. 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