



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 01/12/2017
Tracking No.: 166228

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION			
Operator	PERMIAN RESOURCES, LLC	Operator	655836
Operator	700 MILAM STE 3100 HOUSTON, TX 77002-0000		

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

FILING INFORMATION			
Purpose of	Initial Potential		
Type of	New Well		
Well Type:	Producing	Completion or Recompletion	09/20/2016
Type of Permit		Date	Permit No.
Permit to Drill, Plug Back, or Rule 37 Exception		04/06/2016	814372
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	03/15/2016	Date of first production after rig	09/20/2016
Date plug back, deepening, drilling operation	03/15/2016	Date plug back, deepening, recompletion, drilling operation	04/20/2016
Number of producing wells on this lease this field (reservoir) including this	5	Distance to nearest well in lease & reservoir	292.0
Total number of acres in	630.90	Elevation	2538 GL
Total depth TVD	8390	Total depth MD	18628
Plug back depth TVD	8390	Plug back depth MD	18628
Was directional survey made other inclination (Form W-	Yes	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	197.5 Yes
Recompletion or	No	Multiple	No
Type(s) of electric or other log(s)	Gamma Ray (MWD)		
Electric Log Other Description:			
Location of well, relative to nearest lease of lease on which this well is	674.0 Feet from the South	1303.0 Feet from the East	Off Lease : No Line and Line of the UNIVERSITY 10 RE Lease.

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease	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** 550.0 **Date** 03/14/2016
SWR 13 Exception **Depth**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of 10/24/2016 **Production** Gas Lift
Number of hours 24 **Choke** 64
Was swab used during this No **Oil produced prior to** 7107.00

PRODUCTION DURING TEST PERIOD:

Oil 398.00 **Gas** 1140
Gas - Oil 2864 **Flowing Tubing** 180.00
Water 3191

CALCULATED 24-HOUR RATE

Oil 398.0 **Gas** 1140
Oil Gravity - API - 60.: 41.0 **Casing** 1169.00
Water 3191

CASING RECORD

<u>Ro</u>	<u>Type of Casing</u>	<u>Casing Size (in.)</u>	<u>Hole Size</u>	<u>Setting Depth</u>	<u>Multi - Stage</u>	<u>Multi - Tool Stage Shoe</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined By</u>
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 C PLUS	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

<u>Ro</u>	<u>Liner Size</u>	<u>Hole Size</u>	<u>Liner Top</u>	<u>Liner Bottom</u>	<u>Cement Class</u>	<u>Cement Amoun</u>	<u>Slurry Volume (cu.)</u>	<u>Top of Cement (ft.)</u>	<u>TOC Determined</u>
N/A									

TUBING RECORD

<u>Ro</u>	<u>Size (in.)</u>	<u>Depth</u>	<u>Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	2 7/8	8616		/

PRODUCING/INJECTION/DISPOSAL INTERVAL

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 8758	18523.0

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

Was hydraulic fracturing treatment Yes

Is well equipped with a downhole sleeve? No **If yes, actuation pressure**

Production casing test pressure (PSIG) during hydraulic fracturing 8500 **Actual maximum pressure (PSIG) during fracturin** 8029

Has the hydraulic fracturing fluid disclosure been Yes

Ro Type of Operation Amount and Kind of Material Used Depth Interval (ft.)

FORMATION RECORD

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
GRAYBURG	Yes	2698.0	2716.0	Yes	
QUEEN	Yes	2151.0	2158.0	Yes	
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY CLEARFORK	Yes	2864.0	2885.0	Yes	
	No			No	PINCHED OUT IN AREA
SPRABERRY	Yes	5527.0	5587.0	Yes	
WOLFCAMP	Yes	7089.0	7150.0	Yes	
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

No

Is the completion being downhole commingled

No

REMARKS

KOP FOR THIS WELL IS 7,858

RRC REMARKS**PUBLIC COMMENTS:**

[RRC Staff 2016-12-20 13:41:59.357] EDL=9765 feet, max acres=380, 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	Rian Hinds	Title:	Regulatory Technician
Telephone	(405) 968-4451	Date	12/19/2016



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
Drilling Permit No.: 814372
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
Slurry No. No. of Sacks Class Additives Volume (cu. ft.) Height (ft.)
1 475 Class C 65/35 Remarks 1 879 1,265
2 425 Class C Remarks 2 565 814
3
Total 900 1,444 2,079

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



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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 [X] Intermediate [] 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... [X] YES [] NO
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... [] YES [] 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... [] YES [] 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 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 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.: 166228

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: 09/20/2016
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 _____ 12/13/2016 _____

Phone

Date

-FOR RAILROAD COMMISSION USE ONLY-

	Gamma Ray Build and Lateral	
	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. Corrais

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	8 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 LIN (WOLFCAMP)		2. Lease name as shown on proration schedule UNIVERSITY 10 RE					
3. Current operator name exactly as shown on P-5 Organization Report PERMIAN RESOURCES, LLC		4. Operator P-5 no. 655836	5. Oil Lse/Gas ID no. 18869	6. County REAGAN	7. RRC district 7C		
8. Operator address including city, state, and zip code PO BOX 14670 OKLAHOMA CITY, OK 73113		9. Well no(s) (see instruction E) 0620HD			11. Effective Date 04/20/2016		
		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	
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>08/01/2016</u>							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. 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 _____	
16. CURRENT OPERATOR CERTIFICATION. 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@permiانresources.com</u>				Date _____		Phone with area code _____	

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

1. Field Name(s) Lin (Wolfcamp)	2. Lease/ID Number (if assigned)	3. RRC District Number 7C
4. Operator Name American Energy-Perm Basin, LLC	5. Operator P-5 Number 017996	6. Well Number 0620HD
7. Pooled Unit Name University 10 RE	8. API Number 42-383-39595	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1)
10. County Reagan	11. Total acres in pooled unit 630.90	<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
Title	Date
rena.carter@aep-lp.com	(405) 607-5559
E-mail (if available)	Phone

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

STATEMENT OF PRODUCTIVITY OF ACREAGE
ASSIGNED TO PRORATION UNITS

Form P-15

Tracking No.: 166228

This facsimile P-15 was generated electronically
from data submitted to the RRC.

The undersigned states that he is authorized to make this statement; that he has knowledge of the facts concerning the PERMIAN RESOURCES, LLC ,

UNIVERSITY 10 RE , No. 0620HD ; that such well is
LEASE OPERATOR WELL

completed in the LIN (WOLFCAMP) Field, REAGAN County,

Texas and that the acreage claimed, and assigned to such well for proration purposes as authorized by special rule and as shown on the attached certified plat embraces _____

157.725 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE -

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge,

Date 12/13/2016 Signature Rian Hinds

Telephone (405) 968-4451 Title Regulatory Technician
AREA CODE



RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 2

Rev. 01/2016

Acreage Designation

Filer is the owner or lessee of all or an undivided portion of the minerals under each tract listed below and has the legal right to drill on each tract traversed by the well that will have perforations or other take points open in the interval of the applied-for field(s). All tracts listed will actually be traversed by the wellbore or the filer has pooling authority or other contractual authority, such as a production sharing agreement, authorizing inclusion of the non-drillsite tract in the acreage assigned to the well.

SECTION V. LISTING OF ALL TRACTS CONTRIBUTING ACREAGE TO AN RRC DESIGNATED DRILLSITE DEVELOPMENTAL UNIT THAT IS NOT A SINGLE LEASE, POOLED UNIT, OR GROUP OF TRACTS UNITIZED BY CONTRACT FOR PURPOSES OF SECONDARY RECOVERY					
RRC ID No. or Lease No.	Lease Name	Beginning Lease Acreage	Allocated Lease Acreage	Ending Lease Acreage	Operator Name and Operator No. (if different from filing operator)
Total Allocated Acreage >					< Total Lease Acreage

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 VI. LISTING OF ALL WELLS IN THE APPLIED FOR FIELD ON THE SAME ACREAGE AS THE LEASE OR POOLED UNIT DESIGNATED FOR THE TRACTS LISTED IN SECTION V BY FILER									
RRC ID No. or Lease No.	Well No.	Acres Assigned	SWR 38 Except. (Y/N)	H-Horizontal D-Directional V-Vertical	RRC ID No. or Lease No.	Well No.	Acres Assigned	SWR 38 Except. (Y/N)	H-Horizontal D-Directional V-Vertical
A. Total Wells & Acreage >						A. Total Wells & Acreage >			
B. Total Assigned Horiz. Acreage >						B. Total Assigned Horiz. Acreage >			
C. Total Assigned Vert./Dir. Acreage >						C. Total Assigned Vert./Dir. Acreage >			

SECTION VII. REMARKS

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:	
Operator No.:	017996	County:	REAGAN
		Lease Name:	University 10 RE
		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

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

NAD 27, Central Zone 4203

Surface Hole Location (SEC. 6)
 Latitude: 31.288956° N
 Longitude: 101.470446° W
 X=1644819.61
 Y=591819.67
 Elev.=2538'
 674' FSL & 1303' FEL

Point of Penetration (SEC. 6)
 Latitude: 31.287201° N
 Longitude: 101.471474° W
 X=1644491.93
 Y=591184.99
 33' FSL & 1621' FEL

First Take Point (SEC. 6)
 Latitude: 31.289044° N
 Longitude: 101.471504° W
 X=1644489.36
 Y=591855.10
 703' FSL & 1633' FEL

Last Take Point (SEC. 32)
 Latitude: 31.315862° N
 Longitude: 101.471297° W
 X=1644653.92
 Y=601608.02
 156' FNL & 1610' FEL

Bottom Hole Location (SEC. 32)
 Latitude: 31.316150° N
 Longitude: 101.471303° W
 X=1644653.00
 Y=601712.98
 51' FNL & 1612' FEL

Tract	Lessor	Called Acreage	% of Total
1	University Lands	313.1000 Acres	49.5275
2	University Lands	317.9000 Acres	50.3725
Total		630.9000 Acres	100.0000

G. C. & S. F. RR CO Survey
 Section 1, A-163

BHL 51' 156'

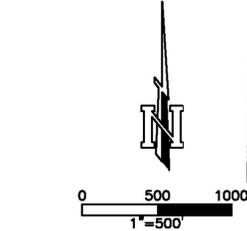
X=1646265.93
 Y=601732.22

Found Concrete Marker

Unit Boundary Distance	
SHL	674' FSL & 1303' FEL
PP	33' FSL & 984' FNL
FTP	703' FSL & 970' FNL
LTP	156' FNL & 986' FNL
BHL	51' FNL & 963' FNL

University Lands
 Block 58, Sec. 31

University Lands
 Block 10, Sec. 5



PERMIAN
RESOURCES

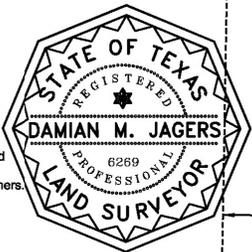
Well Name
 UNIVERSITY 10 RE 0620HD
 Drilling Field
 LIN (WOLFCAMP) FIELD
 Nearest Town
 6.74 MILES NORTH OF BIG LAKE, TEXAS

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

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 11/14/2016
 Damian M. Jagers
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NO. 6269



X=1643507.64
 Y=591172.10

University Lands
 Block 10, Sec. 7

XTS
CROSS TIMBERS SURVEYING, LLC

1603 Dextrouth St. Longview, TX 75601
 Phone: 940-460-6666
 email: cross@xtssurveying.com
 www: www.xtssurveying.net

As-Drilled Plat
 for
 Permian Resources, LLC

UNIVERSITY 10 RE 0620HD
 University Lands Block 10, Section 6
 University Lands Block 58, Section 32
 Reagan County, Texas