



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 08/06/2020
Tracking No.: 234416

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION			
Operator	SABLE PERMIAN RESOURCES, LLC	Operator	742251
Operator	700 MILAM STREET SUITE 3100 HOUSTON, TX 77002-0000		

WELL INFORMATION			
API	42-383-40689	County:	REAGAN
Well No.:	3513HK	RRC District	7C
Lease	UNIVERSITY 10	Field	LIN (WOLFCAMP)
RRC Lease	17844	Field No.:	53613750
Location	Section: 35, Block: 10, Survey: UL, Abstract: U241		
Latitude		Longitud	
This well is 4.94 miles in a NW direction from BIG LAKE, which is the nearest town in the			

FILING INFORMATION			
Purpose of	Well Record Only		
Type of	New Well		
Well Type:	Shut-In Producer	Completion or Recompletion	09/04/2019
Type of Permit	Date	Permit No.	
Permit to Drill, Plug Back, or Rule 37 Exception	06/26/2019	854556	
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	07/07/2019	Date of first production after rig	09/04/2019
Date plug back, deepening, drilling operation	07/07/2019	Date plug back, deepening, recompletion, drilling operation	09/04/2019
Number of producing wells on this lease this field (reservoir) including this	33	Distance to nearest well in lease & reservoir	550.0
Total number of acres in	8391.10	Elevation	2716 GL
Total depth TVD	8347	Total depth MD	24112
Plug back depth TVD		Plug back depth MD	
Was directional survey made other inclination (Form W-	Yes	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	225.8 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	166.0 Feet from the 7891.0 Feet from the	Off Lease :	No
		South Line and West Line of the UNIVERSITY 10 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	1050.0	Date 06/28/2019
SWR 13 Exception	Depth		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION		
Date of		Production
Number of hours	24	Choke
Was swab used during this	No	Oil produced prior to
PRODUCTION DURING TEST PERIOD:		
Oil		Gas
Gas - Oil	0	Flowing Tubing
Water		
CALCULATED 24-HOUR RATE		
Oil		Gas
Oil Gravity - API - 60.:		Casing
Water		

CASING RECORD											
Ro	Type of Casing	Casing	Hole	Setting	Multi -	Multi -	Cement	Cement	Slurry	Top of	TOC
		Size (in.)	Size	Depth	Stage Tool	Stage Shoe	Class	Amoun	Volume (cu.	Cement (ft.)	Determined By
1	Surface	13 3/8	17 1/2	1119			CLASS C	1141	2203.0	530	Calculation
2	Intermediate	9 5/8	12 1/2	7703			CLASS C	940	2974.0	0	Circulated to Surface
3	Conventional Production	5 1/2	8 3/4	24112			CLASS C	4395	6836.0	0	Circulated to Surface

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>	
		/	
N/A			

PRODUCING/INJECTION/DISPOSAL INTERVAL			
<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
		L	
N/A			

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment		No	
Is well equipped with a downhole sleeve?		No	
		If yes, actuation pressure	
Production casing test pressure (PSIG) during hydraulic fracturing		Actual maximum pressure (PSIG) during fracturin	
Has the hydraulic fracturing fluid disclosure been		No	
<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>

N/A

FORMATION RECORD					
Formations	Encountere	Depth TVD	Depth MD	Is formation	Remarks
GRAYBURG	Yes	2929.0	2940.0	Yes	LOGGED MWD GR
QUEEN	Yes	2709.0	2720.0	Yes	ESTIMATED DEPTHS
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY CLEARFORK	Yes	3227.0	3240.0	Yes	LOGGED MWD GR
	Yes	4078.0	4108.0	Yes	ESTIMATED DEPTHS
SPRABERRY	Yes	5928.0	5958.0	Yes	LOGGED MWD GR
JO-MILL	Yes	6848.0	6879.0	Yes	LOGGED MWD GR
DEAN	Yes	7336.0	7367.0	Yes	LOGGED MWD GR
TOP WOLFCAMP	Yes	7501.0	7532.0	Yes	LOGGED MWD GR
STRAWN	No			No	DID NOT ENCOUNTER -- TOO DEEP
FUSSELMAN	No			No	DID NOT ENCOUNTER -- TOO DEEP
ELLENBURGER	No			No	DID NOT ENCOUNTER -- TOO DEEP
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
WELL NOT COMPLETED.

RRC REMARKS
<p>PUBLIC COMMENTS:</p> <p>[RRC Staff 2020-05-11 09:44:07.121] Unperfed WRO packet. EDL = 0 feet, max acres = 0</p>
<p>CASING RECORD :</p> <p>TOPPED OUT W/226SKS AND GOT CEMENT TO SURFACE</p>
<p>TUBING RECORD:</p> <p>WELL NOT COMPLETE</p>
<p>PRODUCING/INJECTION/DISPOSAL INTERVAL :</p>
<p>ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :</p>
<p>POTENTIAL TEST DATA:</p>

OPERATOR'S CERTIFICATION			
Printed	Dawn Manning	Title:	Permitting & Regulatory Specialist
Telephone	(713) 579-8028	Date	04/24/2020

**RAILROAD COMMISSION OF TEXAS**

1701 N. Congress

P.O. Box 12967

Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementor: Fill in shade areas.

Operator: Fill in other items.

OPERATOR INFORMATION

Sable Permian Resources LLC	Operator P-5 No.: 745521
Cementor Name: Crest Pumping Technologies	Cementor P-5 No.: 189898

WELL INFORMATION

District No.: 07C	County: Reagan	
Well No.: 13HK	API No.: 383-40689	Drilling Permit No.: 854556
Lease Name: University 10 35-23	Lease No.:	
Field Name: LIN (WOLFCAMP)	Field No.: 53613750	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 17 1/2	Depth of drilled hole (ft.): 119	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 54.50# J-55	No. of centralizers used: 7
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 1119	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): 530	Cementing date: 7/9/2019

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	630	Class C	See Remarks	1,254	1,805
2	285	Class C	See Remarks	499	718
3	226	Class C	See Remarks	450	647
Total	1,141			2,203	3,170

II. CASING CEMENTING DATA

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

SLURRY

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

III. CASING CEMENTING DATA

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

SLURRY

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

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

REMARKS

- 1 3 bwow Sodium Chloride, 6% Bentonite Gel, 0.4% CPT-503P, 0.5 lbs/sk Cellophane Flakes
- 2 0.5 lbs/sk Cellophane Flakes
- 3
- 4 Didn't circulate cement to surface. Topped out with 226 sks and got cement to surface

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.

Zedd Hutson/Cementer

Crest Pumping Technologies

Zedd Hutson

Name and title of cementer's representative

Cementing Company

Signature

P.O. Box 117 Jacksboro, TX 76458

940-567-3392

7/9/2019

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.

TODD BRODERICK

DRILLING ENGINEER

Todd Broderick

Typed or printed name of operator's representative

Title

Signature

700 MILAM, SUITE 3100 HOUSTON, TX 77002

713-579-8018

Apr 23, 2020

Address

City

State, Zip Code

Tel: Area Code

Number

Date:

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&plac=&li=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&plac=&li=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 W15'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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CEMENTING REPORT

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.

Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: SABLE PERMIAN

Operator P-5 No.:

Cementer Name: HALLIBURTON

Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 07C

County: REAGAN

Well No.: 3515 HK

API No.: 383-40689

Drilling Permit No.: 854556

Lease Name: UNIVERSITY 10

Lease No.:

Field Name: LIN (WOLFCAMP)

Field No.: 53613750

I. CASING CEMENTING DATA

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

Drilled hole size (in.): 12 1/2

Depth of drilled hole (ft.): 7703

Est. % wash-out or hole enlargement: 20

Size of casing in O.D. (in.): 9 5/8

Casing weight (lbs/ft) and grade: 40# J-55

No. of centralizers used: 64

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.):

Top of liner (ft.):

7703

Setting depth liner (ft.):

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.):

Cementing date: 8-14-2019

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	805	C		2747.47	7076
2	135	C		227.34	627
3					
Total	940			2974.81	7703

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:

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	0			0	0

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:

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	0			0	0

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
CIRCULATED 128 SACKS CMT TO SURFACE

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.

STEVEN GRISHAM

Halliburton

Name and title of cementer's representative
6155 W. Murphy St.

Cementing Company
Odessa, TX, 79763

Signature

432-571-8600

8-15-2019

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.

~~XXXXXXXXXX~~ TODD BRODERICK

~~XXXX~~ DRILLING ENGINEER

~~XXXXXXXXXX~~

~~Todd Broderick~~
Todd Broderick (Apr 23, 2020)

Typed or printed name of operator's representative

Title

Signature

~~XXXXXXXXXX~~ 700 MILAM SUITE 3100 HOUSTON, TX 77002

713-579-8108

~~XXXXXXXXXX~~
Date: mo. day yr.

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

Apr 23, 2020

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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.
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- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- 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.
- 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.
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- 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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CEMENTING REPORT

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.

Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: SABLE PERMIAN RESOURCES LLC

Operator P-5 No.: 745521

Cementer Name: HALLIBRTON ENERGY SERVICES

Cementer P-5 No.: 347151

WELL INFORMATION

District No.: 07C

County: ~~XOON~~ REAGAN

Well No.: 3513HK

API No.: 383-40659

Drilling Permit No.: 854556

Lease Name: UNIVERSITY 10

Lease No.:

Field Name: LIN (WOLFCAMP)

Field No.: 53613750

I. CASING CEMENTING DATA

Type of casing: ☐ Contactor ☐ Surface ☐ Intermediate ☐ Liner ☒ Production

Drilled hole size (in.): 8 3/4

Depth of drilled hole (ft.): 24112

Est. % wash-out or hole enlargement: 20

Size of casing in O.D. (in.): 5 1/2

Casing weight (lbs/ft) and grade: 20# P110CY

No. of centralizers used: 421

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.):

Top of liner (ft.):

24112

Setting depth liner (ft.):

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.): 0

Cementing Date: 9/3/2019

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	1470	ECONOCHEM HLC	SEE REMARKS	2624	7457.8
2	2925	NEOCHEM PT2	N/1	4212	16648.2
3					
Total	4395			6836	24106

II. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered ☐ Multi-stage shoe ☐ Multiple parallel string

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:

Upper: Lower:

Was cement circulated to ground surface (or bottom cellar) outside casing? ☐ YES ☐ NO

Setting depth shoe (ft.):

Hrs. waiting on cement before drill-out:

Calculated top of cement (ft.):

Cementing Date: 8/25/2019

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 ☐ Multi-stage/DV tool ☐ Multiple parallel string

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:

Upper: Lower:

Was cement circulated to ground surface (or bottom 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					


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
<p align="center">905904053</p> <p>SLURRY 1 ADDITIVES: .125 LBM POLY-E-FLAKE, .475% HR-601, 3 LBM KOL-SEAL, .075% SA-1015, .25 LBM D-AIR 5000.</p>

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.

TRENTON C. ELROD - SSIT	Halliburton	
Name and title of cementer's representative	Cementing Company	Signature
1301 W. Webb St.	Brownfield, Tx, 79316	575-392-0700
Address	City, State, Zip code	Tel: Area Code Number
		9/3/2019
		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.

TODD BRODERICK	DRILLING ENGINEER	
Intermediate Production Tapered production Multi-stage cement shoe	Title	Signature
700 MILAM, SUITE 3100 HOUSTON, TX 77002	713-579-8108	Apr 23, 2020
Address	City, State, Zip code	Tel: Area Code Number
		Date: mo. Day yr.

Instructions for 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.

- 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.
- 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).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- 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.
- 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.
- ## 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.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing data box.

Tracking No.: 234416

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: SABLE PERMIAN RESOURCES, LLC	District No. 7C	Completion Date: 09/04/2019
Field Name LIN (WOLFCAMP)	Drilling Permit No. 854556	
Lease Name UNIVERSITY 10	Lease/ID No. 17844	Well No. 3513HK
County REAGAN	API No. 42- 383-40689	

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). _____

Dawn Manning

Signature

SABLE PERMIAN RESOURCES, LLC

Name (print)

Permitting & Regulatory Specialist

Title


(713) 579-8028

Phone

04/24/2020

Date

-FOR RAILROAD COMMISSION USE ONLY-

	Gamma Ray Curve And Lateral			
	Job #:	198171	Well ID:	854556
	Scale:	5" = 100 ft	Type:	MD

Well Site Information	
Oil Company	Sable Permian Resources
Surface Location	University 10 F Pad
Well Name	University 10 35-23 #13HK
API	42383406890000
Field	Permian
State	Texas
Country	United States of America

Surface Coordinates	
Well Type	Lateral
Latitude	31° 12' 54 N
Longitude	101° 32' 35 W
N / S Coordinates	565,124.60 usft
E / W Coordinates	1,621,875.74 usft
Azimuth Reference	True North
Grid Convergence	-0.62°

MWD Engineers	
Lead Hand	R. Williams
Second Hand	M. Martin

Perm Datum	Mean Sea Level	Elevation	2,715.00 ft		
Log depth measured from KB is	31.00 ft	above perm datum.	KB = 2,746.00 ft		
Total Depth	24,112.00 ft	Spud Date	Aug/08/2019	End Date	Aug/30/2019
(MD) Log Interval		Start Depth	1,061.94 ft	End Depth	23,723.00 ft

Bore Hole Record		
Hole Size	From	To
12.25 in	1,152.00 ft	7,718.00 ft
8.75 in	7,718.00 ft	24,112.00 ft

Casing Record				
Type	Size	WGT	From	To
Surface	9.63 in	40.00 ppf	0.00 ft	7,703.00 ft
Production	5.50 in	17.00 ppf	0.00 ft	24,112.00 ft

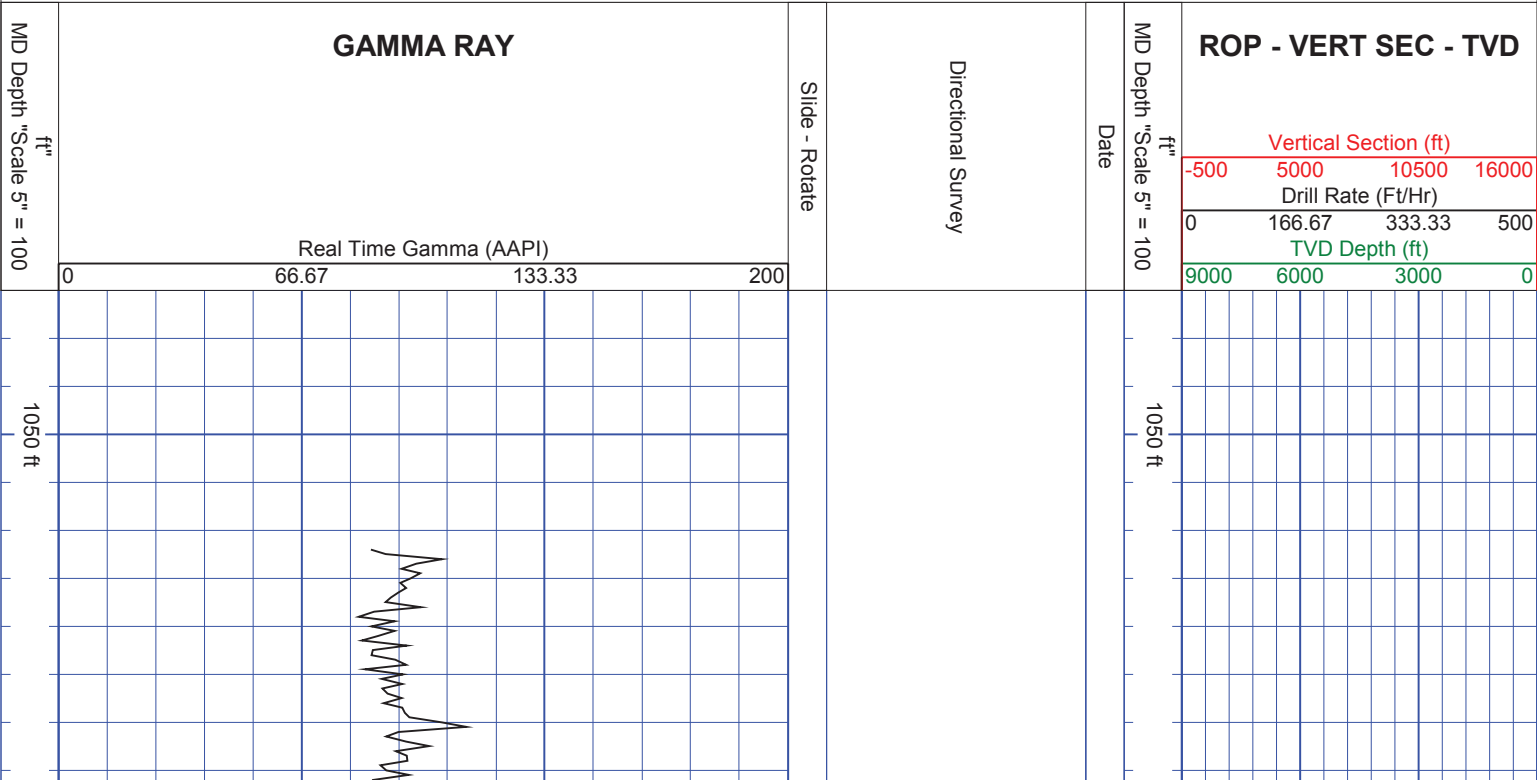
Run Data									
Bit Run Number	1	2	3	4	5				
Start Date & Time	Aug/09/2019 01:15:00	Aug/13/2019 02:00:00	Aug/15/2019 04:00:00	Aug/16/2019 08:30:00	Aug/20/2019 06:00:00				
End Date & Time	Aug/12/2019 23:45:00	Aug/14/2019 00:00:00	Aug/16/2019 07:00:00	Aug/20/2019 05:30:00	Aug/24/2019 06:00:00				
Run Hours	94.30	22.00	27.00	93.00	90.00				
Depth In	1,152.00 ft	7,082.00 ft	7,718.00 ft	7,960.00 ft	14,403.00 ft				
Depth Out	7,082.00 ft	7,718.00 ft	7,960.00 ft	14,403.00 ft	19,280.00 ft				
Total Gamma Correction	9.18	9.18	6.16	6.36	6.34				
Gamma to Bit	61.99 ft	49.72 ft	51.98 ft	51.98 ft	53.86 ft				
Resistivity to Bit	N/A	N/A	N/A	N/A	N/A				
Mud Type	OBM	OBM	OBM	OBM	OBM				
Density	9.10 ppg	9.30 ppg	12.20 ppg	12.50 ppg	12.60 ppg				
Viscosity	46.00 sec/qt	43.00 sec/qt	52.00 sec/qt	50.00 sec/qt	58.00 sec/qt				
PH	N/A	N/A	N/A	N/A	N/A				
Fluid Loss	N/A	N/A	N/A	N/A	N/A				
K+ ppm	N/A	N/A	N/A	N/A	N/A				
CL- ppm	57,000.00 mg/L	61,000.00 mg/L	62,000.00 mg/L	58,000.00 mg/L	58,000.00 mg/L				
Max Mud Temp	161.00 °F	159.00 °F	146.00 °F	206.00 °F	143.00 °F				
Mud Report Depth	5,645.00 ft	7,718.00 ft	7,859.00 ft	14,400.00 ft	19,280.00 ft				

Run Data

Bit Run Number	6	7			
Start Date & Time	Aug/24/2019 09:30:00	Aug/28/2019 12:00:00			
End Date & Time	Aug/28/2019 06:00:00	Sep/01/2019 17:00:00			
Run Hours	96.50	101.00			
Depth In	19,280.00 ft	22,282.00 ft			
Depth Out	22,282.00 ft	24,112.00 ft			
Total Gamma Correction	6.73	6.73			
Gamma to Bit	58.15 ft	58.15 ft			
Resistivity to Bit	N/A	N/A			
Mud Type	OBM	OBM			
Density	12.60 ppg	12.60 ppg			
Viscosity	60.00 sec/qt	57.00 sec/qt			
PH	N/A	N/A			
Fluid Loss	N/A	N/A			
K+ ppm	N/A	N/A			
CL- ppm	67,000.00 mg/L	57,000.00 mg/L			
Max Mud Temp	212.00 °F	208.00 °F			
Mud Report Depth	22,282.00 ft	24,112.00 ft			

Remarks
Note; Data not logged to TD due to MWD failure.

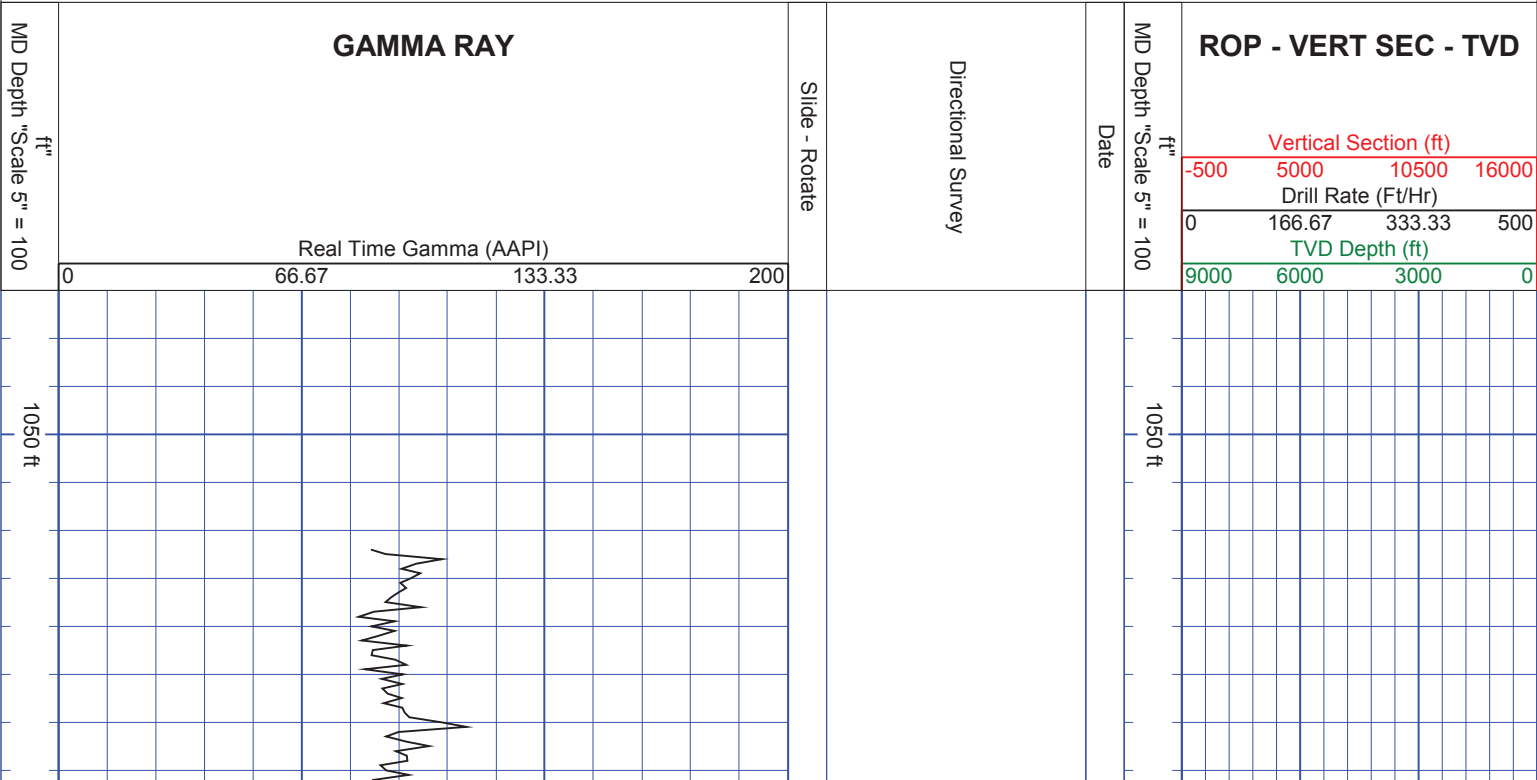
Interpretations of this data by Cathedral Energy Services will be of best judgment as to correctness. Cathedral Energy Services cannot and does not guarantee the accuracy or correctness of interpretations or any surveys derived therefrom. Cathedral Energy Services makes no warranties of performance, results, fitness or suitability for any particular purposes with respect to the goods being furnished under the terms and conditions. Cathedral Energy Services warrants that the equipment furnished will conform to Cathedral Energy Services published specifications in effect at the time and be in good working order.



Bit Run Number	6	7			
Start Date & Time	Aug/24/2019 09:30:00	Aug/28/2019 12:00:00			
End Date & Time	Aug/28/2019 06:00:00	Sep/01/2019 17:00:00			
Run Hours	96.50	101.00			
Depth In	19,280.00 ft	22,282.00 ft			
Depth Out	22,282.00 ft	24,112.00 ft			
Total Gamma Correction	6.73	6.73			
Gamma to Bit	58.15 ft	58.15 ft			
Resistivity to Bit	N/A	N/A			
Mud Type	OBM	OBM			
Density	12.60 ppg	12.60 ppg			
Viscosity	60.00 sec/qt	57.00 sec/qt			
PH	N/A	N/A			
Fluid Loss	N/A	N/A			
K+ ppm	N/A	N/A			
CL- ppm	67,000.00 mg/L	57,000.00 mg/L			
Max Mud Temp	212.00 °F	208.00 °F			
Mud Report Depth	22,282.00 ft	24,112.00 ft			

Remarks
Note; Data not logged to TD due to MWD failure.

Interpretations of this data by Cathedral Energy Services will be of best judgment as to correctness. Cathedral Energy Services cannot and does not guarantee the accuracy or correctness of interpretations or any surveys derived therefrom. Cathedral Energy Services makes no warranties of performance, results, fitness or suitability for any particular purposes with respect to the goods being furnished under the terms and conditions. Cathedral Energy Services warrants that the equipment furnished will conform to Cathedral Energy Services published specifications in effect at the time and be in good working order.



CERTIFICATE OF COMPLIANCE
AND TRANSPORTATION AUTHORITY

P-4

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.: 234416

1. Field name exactly as shown on proration schedule LIN (WOLFCAMP)		2. Lease name as shown on proration schedule UNIVERSITY 10							
3. Current operator name exactly as shown on P-5 Organization Report SABLE PERMIAN RESOURCES, LLC		4. Operator P-5 no. 742251	5. Oil Lse/Gas ID no 17844	6. County REAGAN	7. RRC district 7C				
8. Operator address including city, state, and zip code 700 MILAM STREET SUITE 3100 HOUSTON, TX 77002		9. Well no(s) (see instruction E) 3513HK			11. Effective Date 09/04/2019				
		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 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"/> other well (specify) _____ <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		
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>08/06/2020</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. <table style="width:100%;"><tr><td style="width:50%;">Name of Previous Operator _____ Name (print) _____ Title _____</td><td style="width:50%;">Signature _____ <input type="checkbox"/> Authorized Employee of previous operator _____ Date _____ <input type="checkbox"/> Authorized agent of previous operator (see instruction G) _____ Phone with area code _____</td></tr></table>								Name of Previous Operator _____ Name (print) _____ Title _____	Signature _____ <input type="checkbox"/> Authorized Employee of previous operator _____ Date _____ <input type="checkbox"/> Authorized agent of previous operator (see instruction G) _____ Phone with area code _____
Name of Previous Operator _____ Name (print) _____ Title _____	Signature _____ <input type="checkbox"/> Authorized Employee of previous operator _____ Date _____ <input type="checkbox"/> Authorized agent of previous operator (see instruction G) _____ 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. <table style="width:100%;"><tr><td style="width:50%;">Name (print) <u>SABLE PERMIAN RESOURCES, LLC</u> Permitting & Regulatory Specialist Title <u>dmanning@sableres.com</u> E-mail Address (optional) _____</td><td style="width:50%;">Signature <u>Dawn Manning</u> <input checked="" type="checkbox"/> Authorized Employee of current operator <u>04/24/2020</u> Date _____ <input type="checkbox"/> Authorized agent of current operator (see instruction G) <u>(713) 579-8028</u> Phone with area code _____</td></tr></table>								Name (print) <u>SABLE PERMIAN RESOURCES, LLC</u> Permitting & Regulatory Specialist Title <u>dmanning@sableres.com</u> E-mail Address (optional) _____	Signature <u>Dawn Manning</u> <input checked="" type="checkbox"/> Authorized Employee of current operator <u>04/24/2020</u> Date _____ <input type="checkbox"/> Authorized agent of current operator (see instruction G) <u>(713) 579-8028</u> Phone with area code _____
Name (print) <u>SABLE PERMIAN RESOURCES, LLC</u> Permitting & Regulatory Specialist Title <u>dmanning@sableres.com</u> E-mail Address (optional) _____	Signature <u>Dawn Manning</u> <input checked="" type="checkbox"/> Authorized Employee of current operator <u>04/24/2020</u> Date _____ <input type="checkbox"/> Authorized agent of current operator (see instruction G) <u>(713) 579-8028</u> Phone with area code _____								

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 28 June 2019**GAU Number:** 244610**Attention:** SABLE PERMIAN RESOURCES,
700 MILAM STREET SUITE
HOUSTON, TX 77002**Operator No.:** 742251**API Number:**
County: REAGAN
Lease Name: UNIVERSITY 10
Lease Number:
Well Number: 3523HK
Total Vertical Depth: 7500
Latitude: 31.215721
Longitude: -101.542890
Datum: NAD27**Purpose:** New Production Well**Location:** Survey-UL; Abstract-U241; Block-10; Section-35

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 the base of the Santa Rosa, which is estimated to occur at a depth of 1050 feet, must be protected.

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. Unless stated otherwise, this recommendation is for normal drilling, production, and plugging operations only.

This determination is based on information provided when the application was submitted on 06/28/2019. 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.

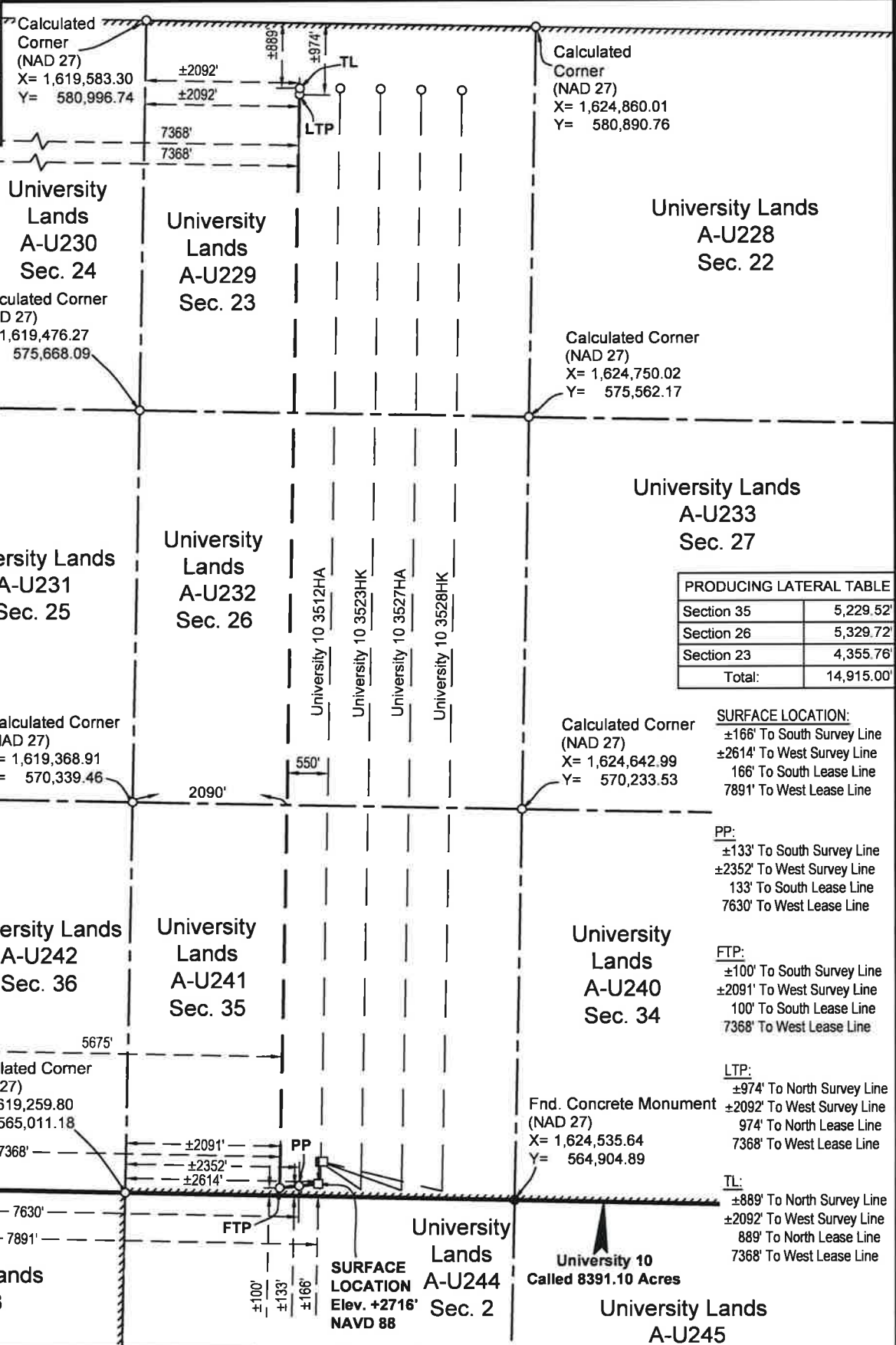
Groundwater Advisory Unit, Oil and Gas Division

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

NOTE
Approx. 4.94 Miles Northwesterly
From "BIG LAKE, TEXAS"

LEGEND
--- Approximate Survey Lines
Lease Lines

UNIVERSITY 10 3513HK WELL		
X=	1,621,877'	
Y=	565,125'	NAD 27
LAT.	31.214897° N	
LONG.	101.542963° W	
X=	1,918,345'	
Y=	10,407,701'	NAD83/86
LAT.	31.215050° N	
LONG.	101.543359° W	
PP		
X=	1,621,615'	
Y=	565,097'	NAD 27
LAT.	31.214813° N	
LONG.	101.543801° W	
X=	1,918,083'	
Y=	10,407,674'	NAD83/86
LAT.	31.214966° N	
LONG.	101.544197° W	
FTP		
X=	1,621,352'	
Y=	565,069'	NAD 27
LAT.	31.214729° N	
LONG.	101.544639° W	
X=	1,917,820'	
Y=	10,407,646'	NAD83/86
LAT.	31.214882° N	
LONG.	101.545035° W	
LTP		
X=	1,621,655'	
Y=	579,981'	NAD 27
LAT.	31.255735° N	
LONG.	101.544189° W	
X=	1,918,123'	
Y=	10,422,558'	NAD83/86
LAT.	31.255887° N	
LONG.	101.544585° W	
TL		
X=	1,621,657'	
Y=	580,066'	NAD 27
LAT.	31.255969° N	
LONG.	101.544186° W	
X=	1,918,125'	
Y=	10,422,643'	NAD83/86
LAT.	31.256121° N	
LONG.	101.544582° W	



PRODUCING LATERAL TABLE	
Section 35	5,229.52'
Section 26	5,329.72'
Section 23	4,355.76'
Total:	14,915.00'

SURFACE LOCATION:
±166' To South Survey Line
±2614' To West Survey Line
166' To South Lease Line
7891' To West Lease Line

PP:
±133' To South Survey Line
±2352' To West Survey Line
133' To South Lease Line
7630' To West Lease Line

FTP:
±100' To South Survey Line
±2091' To West Survey Line
100' To South Lease Line
7368' To West Lease Line

LTP:
±974' To North Survey Line
±2092' To West Survey Line
974' To North Lease Line
7368' To West Lease Line

TL:
±889' To North Survey Line
±2092' To West Survey Line
889' To North Lease Line
7368' To West Lease Line

LATERAL TABLE		
SURFACE LOCATION TO PP	S 83° 57' 10" W	263.69'
PP TO FTP	S 83° 57' 10" W	263.69'
FTP TO LTP	N 01° 09' 49" E	14,915.00'
LTP TO TL	N 01° 09' 49" E	85.00'
TOTAL:		15,527.38'

NOTES:

- This plat represents a survey made on the ground and meets the requirements for filing a well location plat with the Texas Railroad Commission and is intended solely for that purpose. Lease lines shown hereon were established from field measurements and record data. Mineral title shown hereon was furnished by Sable Permian Resources, LLC and/or their agent(s). This plat does not meet the requirements for boundary surveys in the State of Texas.
- All bearings, distances, areas and coordinates refer to the Texas Coordinate System of 1927, Central Zone.

University Lands
A-U244
Sec. 2
Blk 11

WELL LOCATION PLAT
SABLE PERMIAN RESOURCES, LLC
UNIVERSITY 10 3513HK WELL
UNIVERSITY LANDS SURVEY, ABSTRACT U241, SEC. 35, BLK 10
REAGAN COUNTY, TEXAS

REVISIONS				
DRAWN BY:	ADF	#	BY:	DATE:
PROJ. MGR.:	DBM	1	ADF	06/24/2019
DATE:	06/19/2019			
DESCRIPTION:				
Extend lateral to 15,000'.				
FILENAME: T:\2019\2190472\DWG\University 10 3513HK RRC.dwg				



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