



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 03/11/2020
Tracking No.: 226881

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	42-383-40619	County:	REAGAN
Well No.:	33HK	RRC District	7C
Lease	UNIVERSITY OWENS 1-6 ALLOC 33	Field	LIN (WOLFCAMP)
RRC Lease	20520	Field No.:	53613750
Location	Section: 235, Block: 1, Survey: T&P RR CO, Abstract: 576		
Latitude		Longitud	
This well is	8.43	miles in a	NW
direction from	BARNHART,		
which is the nearest town in the			

FILING INFORMATION			
Purpose of	Initial Potential		
Type of	Other/Recompletion		
Well Type:	Producing	Completion or Recompletion	09/27/2019
Type of Permit		Date	Permit No.
Permit to Drill, Plug Back, or		05/09/2019	852545
Rule 37 Exception			
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	05/09/2019	Date of first production after rig	09/27/2019
Date plug back, deepening, drilling operation	08/01/2019	Date plug back, deepening, recompletion, drilling operation	08/14/2019
Number of producing wells on this lease this field (reservoir) including this	10	Distance to nearest well in lease & reservoir	499.0
Total number of acres in	839.44	Elevation	2702 GL
Total depth TVD	7342	Total depth MD	17370
Plug back depth TVD	7307	Plug back depth MD	17340
Was directional survey made other inclination (Form W-	Yes	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	131.2 Yes
Recompletion or	Yes	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	745.0 Feet from the	Off Lease :	Yes
	610.0 Feet from the	South Line and East Line of the	
	UNIVERSITY OWENS 1-6 ALLOC 33 Lease.		

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
<u>Field & Reservoir</u>	<u>Gas ID or Oil Lease</u>	<u>Well No.</u>	<u>Prior Service Type</u>
W2:	N/A		

PACKET: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination	Depth	850.0	Date	02/01/2019
SWR 13 Exception	Depth			

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of	10/01/2019	Production	Gas Lift
Number of hours	24	Choke	128
Was swab used during this	No	Oil produced prior to	3337.00
PRODUCTION DURING TEST PERIOD:			
Oil	1539.00	Gas	1406
Gas - Oil	913	Flowing Tubing	1085.00
Water	3090		
CALCULATED 24-HOUR RATE			
Oil	1539.0	Gas	1406
Oil Gravity - API - 60.:	39.5	Casing	252.00
Water	3090		

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 - 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	958			CLASS C	895	1336.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	6703			PREM PLUS	1035	1406.0	2422	Calculation
3	Intermediate	9 5/8	12 1/4	6703	2422		PREM PLUS/POZ MIX	1005	1367.0	0	Circulated to Surface
4	Conventional Production	5 1/2	8 3/4	17365			CLASS H	2575	4921.0	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 Size (ft.)</u>	<u>Packer Depth (ft.)/Type</u>
1	2 7/8	7115	7094 / AS1-X

PRODUCING/INJECTION/DISPOSAL INTERVAL

<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 7639	17284.0

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

Was hydraulic fracturing treatment		Yes	
Is well equipped with a downhole sleeve? Yes		If yes, actuation pressure	8500.0
Production casing test pressure (PSIG) hydraulic fracturing	8500	Actual maximum pressure (PSIG) during fracturin	8436
Has the hydraulic fracturing fluid disclosure been		Yes	

<u>Ro</u>	<u>Type of Operation</u>	<u>Amount and Kind of Material Used</u>	<u>Depth Interval (ft.)</u>
1	Fracture	SEE FRAC FOCUS	7639 17284

FORMATION RECORD

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
QUEEN	Yes	1754.0	1765.0	Yes	ESTIMATED
GRAYBURG	Yes	1974.0	1985.0	Yes	LOGGED MWD GR
SAN ANDRES	Yes	2174.0	2185.0	Yes	ESTIMATED
SPRABERRY	Yes	5011.0	5118.0	Yes	LOGGED MWD GR
JO-MILL	Yes	5824.0	5931.0	Yes	LOGGED MWD GR
DEAN	Yes	6332.0	6439.0	Yes	LOGGED MWD GR
TOP WOLFCAMP	Yes	6451.0	6558.0	Yes	LOGGED MWD GR

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

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RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2020-03-10 15:39:23.297] EDL=9600 feet, max acres=380, LIN (WOLFCAMP) oil or gas well;

take points: 7639-17284 feet

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	Brenda Hoffman	Title:	Senior Regulatory Specialist
Telephone	(713) 579-8049	Date	01/31/2020



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
Operator: Fill in other

OPERATOR INFORMATION					
Operator Name: Sable Permian Resources LLC			Operator P-5 No.: 742251		
Cementer Name: Crest Pumping Technologies			Cementer P-5 No.: 189898		
WELL INFORMATION					
District No.: 7 C			County: D&D REAGAN		
Well No.: 33HK			API No.: 42-383-40619		Drilling Permit No.: 852545
Lease Name: University Owens 6-1 VPad			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.): 961'		Est. % wash-out or hole enlargement: 20	
Size of casing in O.D. (in.): 13 3/8"		Casing weight (lbs/ft) and grade: 54.5#/J-55		No. of centralizers used: 7	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.			Setting depth shoe (ft.): 958'		Top of liner (ft.):
			Setting depth liner (ft.):		
Hrs. waiting on cement before drill-out: 7		Calculated top of cement (ft.): 0'		Cementing date: 05/11/2019	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	520	Class C	See Remarks	837	1,205
2	375	Class C	See Remarks	499	718
Total	895			1,336	1,923
II. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.) Upper: Lower:			Tapered string depth of drilled hole (ft.) Upper: Lower:		
Tapered string size of casing in O.D.(in.) Upper: Lower:			Tapered string casing weight(lbs/ft) and grade Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.				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.)
Total					
III. CASING CEMENTING DATA					
Type of Casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered Production <input type="checkbox"/> Multi-stage cement/DV Tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.) Upper: Lower:			Tapered string depth of drilled hole (ft.) Upper: Lower:		
Tapered string size of casing in O.D.(in.) Upper: Lower:			Tapered string casing weight(lbs/ft) and grade Upper: Lower:		Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.				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.)
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

0.3 gal/bbl Plexgel 907,
 3 bwow Sodium Chloride, 6 % Bentonite Gel, 0.4 % CPT-503P, 0.5 lbs/sk Cellophane Flake,
 0.5 lbs/sk Cellophane Flake,

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.

Clayton Greene/Cementer	Crest Pumping Technologies	<i>Michael Bailey</i> for Clayton Greene
Name and title of cementer's representative	Cementing Company	Signature
P.O. Box 117 Jacksboro, TX 76458	940-567-3392	05/11/2019
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 well data and information only.

Jonathan Rebenack	Senior Drilling Engineer	<i>Jonathan Rebenack</i>
Typed or printed name of operator's representative	Title	Signature
700 Milam Street, Suite 3100 Houston, TX 77002-0000	713-579-8111	Oct 21, 2019
Address City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission. To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pls/pub/readtacSext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool. and Multi-stage cement shoe. The operator must
- F. Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
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Form W-15

Rev. 08/2014

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

CEMENTING REPORT

OPERATOR INFORMATION	
Operator Name: SABLE PERMIAN RESOURCES OPERATING LLC-EBUS	Operator P-5 No.: 742251
Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.: 7C	County: REAGAN	
Well No.: 33HK	API No.: 42-383-40619	Drilling Permit No.: 852545
Lease Name: UNIVERSITY OWENS 1-6 ALLOC 33	Lease No.:	
Field Name: LIN (WOLFCAMP)	Field No.: 53613750	

PLACING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
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:		
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.		Setting depth shoe (ft.):	Top of liner (ft.):		
			Setting depth liner (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

PLACING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 12 1/4"	Depth of drilled hole (ft.): 6703'		Est. % wash-out or hole enlargement: 20		
Size of casing in O.D. (in.): 9 5/8"	Casing weight (lbs/ft) and grade: 40.0#/ K-55		No. of centralizers used: 56		
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 checked="" type="checkbox"/> NO			Setting depth shoe (ft.): 6703'		
Hrs. waiting on cement before drill-out: N/A	Calculated top of cement (ft.): 2422'		Cementing date: 6/28/2019		
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	835	PREMIUM PLUS/POZMIX	REMARKS	1272	4059
2	100	PREMIUM PLUS	50% HR-800	134	317
3					
Total	1035			1406	4376

PLACING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.): 12 1/4"	Depth of drilled hole (ft.): 6703'		Est. % wash-out or hole enlargement: 20		
Size of casing in O.D. (in.): 9 5/8"	Casing weight (lbs/ft) and grade: 40.0#/ K-55		No. of centralizers used: 56		
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 checked="" type="checkbox"/> YES <input type="checkbox"/> NO			Setting depth tool (ft.): 2422'		
Hrs. waiting on cement before drill-out: 6	Calculated top of cement (ft.): 0'		Cementing date: 6/28/2019		
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1005	PREMIUM PLUS/POZMIX	REMARKS	1367	4362
2					
3					
Total	1005			1367	4362

CEMENTING TO SOLIDIFY 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

SHOE: 1ST: .40% HALAD-344, 1% CA-661, .025% SA-1015, .25 LBM D-AIR 5000, .65% HR-800, 3 LBM KOL SEAL, .25 LBM POLY E FLAKE. TOOL: 1ST: .40% HALAD-344, 1% CA-661, .025% SA-1015, .25 LBM D-AIR 5000, .50% HR-800, 3 LBM KOL SEAL, .25 LBM POLY E FLAKE. FROM TOOL WE CIRCULATED 90 BBL (372 SACKS) OF CEMENT, TO SURFACE. SO 905789495

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.

FELICIANO VALVERDE SS II

Halliburton

Feliciano Valverde

Name and title of cementer's representative	Cementing Company	Signature	
1301 W. Webb St.	Brownfield, Tx, 79316	575-392-0700	6/28/2019
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.

Jonathan Rebenack

Senior Drilling Engineer

Jonathan Rebenack
Jonathan Rebenack (Oct 24, 2019)

Typed or printed name of operator's representative	Title	Signature	
700 Milam Street, Suite 3100	Houston, TX 77002-0000	713-579-8111	Oct 24, 2019
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=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&ri=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



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Form W-15

Rev. 08/2014

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

CEMENTING REPORT

OPERATOR INFORMATION

Operator Name: SABLE PERMIAN RESOURCES, LLC
Operator P-S No.: 742251
Cementer Name: HALLIBURTON ENERGY SERVICES
Cementer P-S No.: 347153

WELL INFORMATION

District No.: 7 C
County: REAGAN
Well No.: 33HK
API No.: 42-383-40619
Drilling Permit No.: 852545
Lease Name: UNIVERSITY OWENS 1-8ALLOG 33
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.): 8 3/4"
Depth of drilled hole (ft.): 17370'
Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 5 1/2"
Casing weight (lbs/ft) and grade: 17.0#/ RYP-110
No. of centralizers used: 317
Was cement circulated to ground surface (or bottom of cellar) outside casing? YES NO
Setting depth shoe (ft.): 17365'
Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: N/A
Calculated top of cement (ft.): 0'
Cementing date: 07-08-2019

SLURRY

Table with 6 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 6 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 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu. ft.), Height (ft.)

CEMENTING TO SURFACE, 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 43 SACKS, 103 SACKS 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.

ERIC GATLIN SERVICE SUPERVISOR

Halliburton

Name and title of cementer's representative	Cementing Company	Signature	
6155 W. Murphy St.	Odessa, TX, 79763		07-08-2019
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.

Jonathan Rebenack

Senior Drilling Engineer

Jonathan Rebenack (Oct 21, 2019)

Typed or printed name of operator's representative	Title	Signature	
700 Milam St., Suite 3100	Houston, TX 77002-0000		Oct 21, 2019
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. **What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. **Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_floc=&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_floc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

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: 09/27/2019
Field Name LIN (WOLFCAMP)	Drilling Permit No. 852545	
Lease Name UNIVERSITY OWENS 1-6 ALLOC 33	Lease/ID No. 20520	Well No. 33HK
County REAGAN	API No. 42- 383-40619	

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). _____

Brenda Hoffman

Signature

SABLE PERMIAN RESOURCES, LLC

Name (print)

Senior Regulatory Specialist

Title

(713) 579-8049

Phone

12/10/2019

Date



Gamma Ray Curve And Lateral

Job #: 198135 Well ID: 852545
 Scale: 2" = 100 ft Type: MD

Well Site Information

Dil Company	Sable Permian Resources
Surface Location	Sec 235 V Pad
Well Name	University Owens 1-6 Alloc 33 #33HK
\API	42383406190000
Field	Permian
State	Texas
Country	United States of America

Surface Coordinates

Well Type	Lateral
Latitude	31° 9' 44 N
Longitude	101° 18' 8 W
N / S Coordinates	545,233.17 usft
E / W Coordinates	1,696,938.77 usft
Azimuth Reference	True North
Grid Convergence	-0.50°

MWD Engineers

Lead Hand	R. Williams
Second Hand	M. Martin

Perm Datum	Mean Sea Level	Elevation	2,702.00 ft	
Log depth measured from KB is	31.00 ft	above perm datum.	KB = 2,733.00 ft	
Total Depth	17,370.00 ft	Spud Date	Jun/22/2019	
		End Date	Jul/06/2019	
MD) Log Interval	Start Depth	863.47 ft	End Depth	17,370.07 ft

Core Hole Record

Core Hole Size	From	To
12.25 in	961.00 ft	6,715.00 ft
8.75 in	6,715.00 ft	17,370.00 ft

Casing Record

Type	Size	WGT	From	To
Surface	9.63 in	40.00 ppf	0.00 ft	6,715.00 ft
Production	5.50 in	17.00 ppf	0.00 ft	17,370.00 ft

Bit Run Number	Start Date & Time	End Date & Time	Run Data																				
			1	2	3	4	5	Run Hours	Depth In	Depth Out	Total Gamma Correction	Gamma to Bit	Resistivity to Bit	Mud Type	Density	Viscosity	PH	Fluid Loss	K+ ppm	CL- ppm	Max Mud Temp	Mud Report Depth	
	Jun/22/2019 00:00:00	Jun/24/2019 09:00:00	57.00	60.50	12.50	37.00	68.00	961.00 ft	3,414.00 ft	5,802.00 ft	53.00 ft	44.39 ft	53.96 ft	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62,000.00 mg/L	149.00 °F	3,414.00 ft
	Jun/24/2019 09:00:00	Jun/26/2019 23:00:00	9.71	9.71	9.71	9.71	9.71	961.00 ft	5,802.00 ft	6,715.00 ft	53.00 ft	44.39 ft	53.96 ft	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62,000.00 mg/L	162.00 °F	3,414.00 ft
	Jun/27/2019 00:30:00	Jun/27/2019 23:00:00	12.50	60.50	12.50	37.00	68.00	961.00 ft	3,414.00 ft	5,802.00 ft	53.00 ft	44.39 ft	53.96 ft	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62,000.00 mg/L	150.00 °F	6,715.00 ft
	Jun/29/2019 04:30:00	Jun/30/2019 17:30:00	37.00	60.50	12.50	37.00	68.00	961.00 ft	3,414.00 ft	5,802.00 ft	53.00 ft	44.39 ft	53.96 ft	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62,000.00 mg/L	137.00 °F	7,470.00 ft
	Jun/30/2019 19:30:00	Jul/03/2019 15:30:00	68.00	60.50	12.50	37.00	68.00	961.00 ft	3,414.00 ft	5,802.00 ft	53.00 ft	44.39 ft	53.96 ft	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62,000.00 mg/L	205.00 °F	14,977.00 ft

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued:	01 February 2019	GAU Number:	230493
Attention:	SABLE PERMIAN RESOURCES 700 MILAM STREET SUITE HOUSTON, TX 77002	API Number:	38340518
Operator No.:	742252	County:	REAGAN
		Lease Name:	SECTION 235-220 ALLOC 06
		Lease Number:	
		Well Number:	11HS
		Total Vertical Depth:	7500
		Latitude:	31.160934
		Longitude:	-101.307672
		Datum:	NAD27

Purpose: New Production Well
Location: Survey-T&P RR CO ; Abstract-576; Block-1; Section-235

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 850 feet, must be protected.

This recommendation is applicable for all wells drilled in this Section 235.

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 01/29/2019. 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

NAD 27, Central Zone 4203

Surface Hole Location (Sec. 235)
 Latitude = 31.162229° N
 Longitude = 101.302296° W
 X = 1696938.77
 Y = 545233.17
 Elev. = 2702'
 745' FSL & 610' FEL

Point of Penetration (Sec. 6)
 Latitude = 31.168081° N
 Longitude = 101.303416° W
 X = 1696581.81
 Y = 544455.04
 42' FNL & 4535' FEL

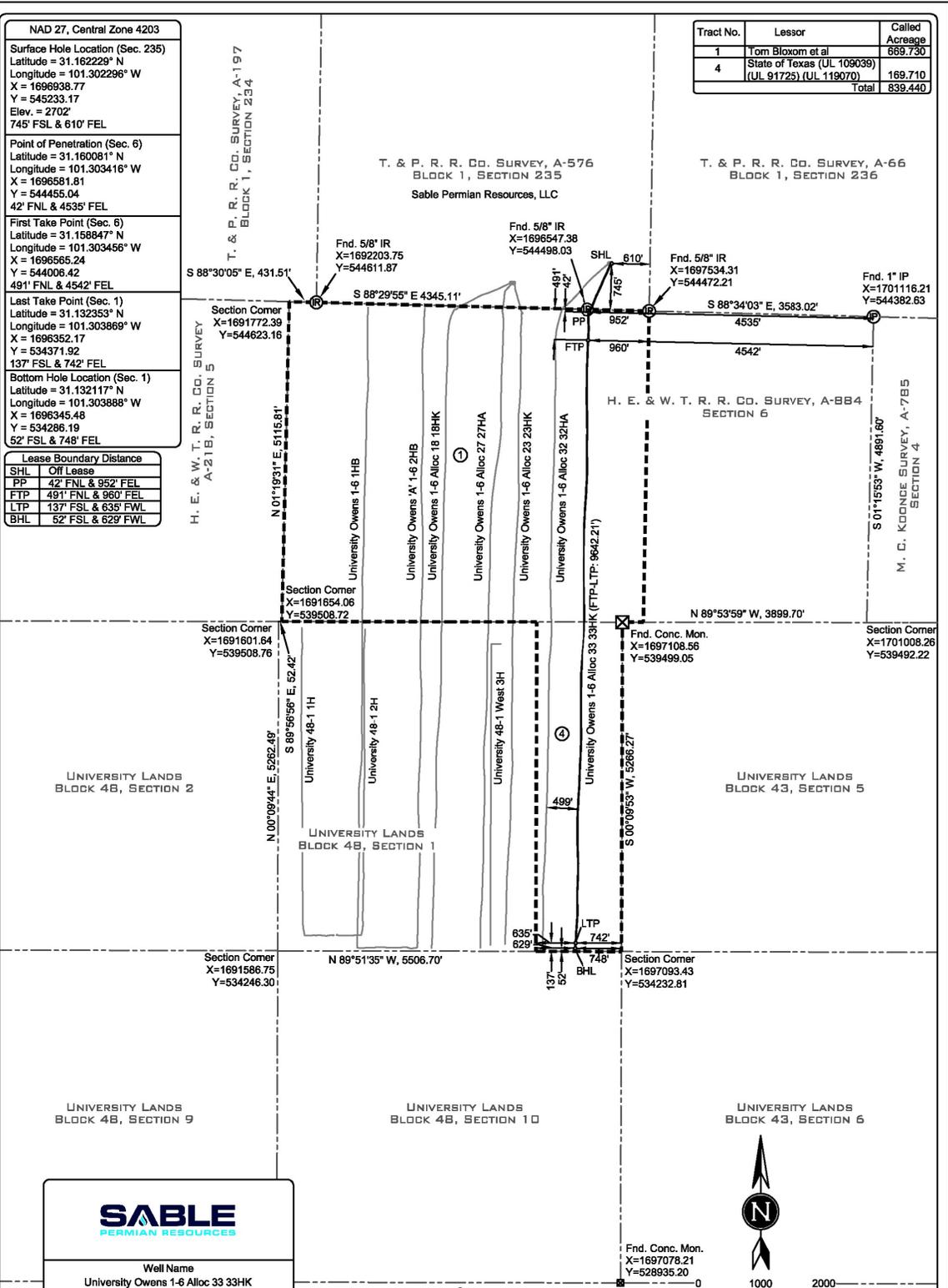
First Take Point (Sec. 6)
 Latitude = 31.158847° N
 Longitude = 101.303456° W
 X = 1696565.24
 Y = 544006.42
 491' FNL & 4542' FEL

Last Take Point (Sec. 1)
 Latitude = 31.132353° N
 Longitude = 101.303869° W
 X = 1696352.17
 Y = 534371.92
 137' FSL & 742' FEL

Bottom Hole Location (Sec. 1)
 Latitude = 31.132117° N
 Longitude = 101.303888° W
 X = 1696345.48
 Y = 534286.19
 52' FSL & 748' FEL

Lease Boundary Distance	
SHL	Off Lease
PP	42' FNL & 952' FEL
FTP	491' FNL & 960' FEL
LTP	137' FSL & 635' FWL
BHL	52' FSL & 629' FWL

Tract No.	Lessor	Called Acreage
1	Tom Bloxom et al	689.730
4	State of Texas (UL 109039) (UL 91725) (UL 119070)	169.710
Total		859.440



SABLE PERMIAN RESOURCES

Well Name
 University Owens 1-6 Alloc 33 33HK
 Drilling Field
 LIN (WOLFCAMP) FIELD
 Nearest Town
 8.43 MILES NORTHWEST OF BARNHART, TEXAS

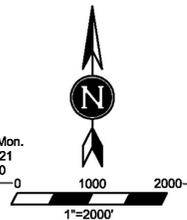


I, Damian M. Jagers do hereby certify that the above described well plat was created from a survey made on the ground under my supervision, as shown.

Damian M. Jagers 1/24/2020
 DAMIAN M. JAGERS DATE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NO. 6269

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 Acresages were furnished by others. The information contained on this plat is intended for the sole use of SABLE PERMIAN RESOURCES, LLC.

NOTE: Bearings and coordinates refer to the Texas Coordinate System of 1927, Central Zone (4203), as observed by GPS observations.



XTS CROSS TIMBERS SURVEYING, LLC

1603 Diermouth St., Longview, TX 75601
 Phone: 254-468-8088 Fax: 254-468-5716
 www.xtsurvey.com

As-Drilled Well Plat
 for
 Sable Permian Resources, LLC

University Owens 1-6 Alloc 33 33HK
 T. & P. R. R. Co. Survey, A-576 // Block 1, Sec. 235
 H. E. & W. T. R. R. Co. Survey, A-884 // Section 6
 University Lands Block 48, Section 1
 Reagan County, Texas