



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved  
Date: 09/15/2021  
Tracking No.: 254145

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION			
Operator	SHELL WESTERN E&P	Operator	774719
Operator	PO BOX 576 HOUSTON, TX 77001-0000		

WELL INFORMATION			
API	42-475-37931	County:	WARD
Well No.:	2712H	RRC District	08
Lease	UNIVERSITY 19 TG UNIT	Field	TWO GEORGES (BONE SPRING)
RRC Lease	38570	Field No.:	92100050
Location	Section: 27, Block: 19, Survey: UL, Abstract: U126		
Latitude	31	Longitud	-103
This well is 14.9 miles in a SE direction from MENTONE, which is the nearest town in the			

FILING INFORMATION			
Purpose of	Initial Potential		
Type of	New Well		
Well Type:	Producing	Completion or Recompletion	06/07/2021
Type of Permit	Date	Permit No.	
Permit to Drill, Plug Back, or Rule 37 Exception	01/15/2021	854143	
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	03/14/2021	Date of first production after rig	06/07/2021
Date plug back, deepening, drilling operation	03/14/2020	Date plug back, deepening, recompletion, drilling operation	04/12/2021
Number of producing wells on this lease this field (reservoir) including this	16	Distance to nearest well in lease & reservoir	808.0
Total number of acres in	12830.08	Elevation	2834 GL
Total depth TVD	11649	Total depth MD	20668
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)	67.0 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	1675.0 Feet from the	Off Lease :	No
	8964.0 Feet from the	NE Line and	
		SE Line of the	
	UNIVERSITY 19 TG UNIT Lease.		

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

PACKET:	N/A		
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:			
GAU Groundwater Protection Determination	Depth	1200.0	Date 06/17/2019
SWR 13 Exception	Depth	5060.0	

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION			
Date of	06/16/2021	Production	Flowing
Number of hours	24	Choke	34/64
Was swab used during this	No	Oil produced prior to	6072.00
PRODUCTION DURING TEST PERIOD:			
Oil	999.00	Gas	699
Gas - Oil	699	Flowing Tubing	1363.00
Water	4273		
CALCULATED 24-HOUR RATE			
Oil	999.0	Gas	699
Oil Gravity - API - 60.:	44.0	Casing	1440.00
Water	4273		

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	9 5/8	12 1/4	5147		1102	C	5392	8439.0	0	Circulated to Surface
2	Intermediate	7 5/8	8 3/4	11130			C & H	385	956.0	4147	Calculation
3	Tapered Production	5 1/2	6 3/4	11217			H	1423	1878.0	8130	Calculation
4	Tapered Production	4 1/2	6 3/4	20647			H	1423	1878.0	8130	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>
1	2 7/8	11192	
		<u>Packer Depth (ft.)/Type</u>	
		11116 / L80 6.5# EUE	

PRODUCING/INJECTION/DISPOSAL INTERVAL			
<u>Ro</u>	<u>Open hole?</u>	<u>From (ft.)</u>	<u>To (ft.)</u>
1	No	L1 12094	20509.0

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	9218.0
Production casing test pressure (PSIG) hydraulic fracturing 9900		Actual maximum pressure (PSIG) during fracturin 11116	
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	WELL DATA SUBMITTED TO FRAC FOCUS	12094 20509

FORMATION RECORD					
<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation</u>	<u>Remarks</u>
RUSTLER	Yes	815.0	818.0	Yes	
YATES	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
SEVEN RIVERS	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
QUEEN	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
CAPITAN REEF - HIGH FLOWS	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
DELAWARE	Yes	5172.0	5200.0	Yes	
GLORIETA	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
HOLT	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
CLEARFORK	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
TUBB	Yes	6145.0	6173.0	Yes	
CHERRY CANYON	Yes	6369.0	6397.0	Yes	
BONE SPRING	Yes	8676.0	8703.0	Yes	
WICHITA ALBANY	No			No	FORMATION IS NOT GEOLOGICALLY PRESENT
WOLFCAMP	Yes	11673.0	12064.0	Yes	
PENNSYLVANIAN	No			No	BELOW WELLBORE DEPTH
ATOKA	No			No	BELOW WELLBORE DEPTH
DEVONIAN	No			No	BELOW WELLBORE DEPTH
FUSSELMAN	No			No	BELOW WELLBORE DEPTH
MONTOYA	No			No	BELOW WELLBORE DEPTH
WADDELL	No			No	BELOW WELLBORE DEPTH
ELLENBURGER	No			No	BELOW WELLBORE DEPTH
PRECAMBRIAN (UNDIFFERENTIATED)	No			No	BELOW WELLBORE DEPTH
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 @ 11,229'. DEPTHS PROVIDED ARE REFERENCED AT KB @ 32'.

RRC REMARKS	
<b>PUBLIC COMMENTS:</b>  [RRC Staff 2021-09-08 09:51:44.178] EDL=8400 feet, max acres=704, TWO GEORGES (BONE SPRING) oil well;  take points: 12094-20509 feet	
<b>CASING RECORD :</b>  DV TOOL SET, BUT NOT OPENED. SETTING DEPTH OF 5 1/2" CASING IS THE CROSSOVER POINT DEPTH ON THE TAPERED PRODUCTION STRING.	
<b>TUBING RECORD:</b>	
<b>PRODUCING/INJECTION/DISPOSAL INTERVAL :</b>	
<b>ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :</b>	
<b>POTENTIAL TEST DATA:</b>	

OPERATOR'S CERTIFICATION			
Printed	Michael Boutwell	Title:	Regulatory Specialist
Telephone	(832) 337-0258	Date	09/01/2021



**RAILROAD COMMISSION OF TEXAS**

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

**Form W-15**

Rev. 08/2014

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

**CEMENTING REPORT****OPERATOR INFORMATION**

Operator Name: Shell Western E&P Operator P-5 No.: 774719  
Cementer Name: American Cementing Cementer P-5 No.: 017995

**WELL INFORMATION**

District No.: 08 County: Loving  
Well No.: 2712H API No.: 42-475-37931 Drilling Permit No.: 854143  
Lease Name: University 19 TG Unit Lease No.:  
Field Name: Two Georges (Bone Spring) Field No.: 92100050

**I. CASING CEMENTING DATA**

Type of casing: ☐ Conductor ☒ Surface ☐ Intermediate ☐ Liner ☐ Production  
Drilled hole size (in.): 12 1/4 Depth of drilled hole (ft.): 5163 Est. % wash-out or hole enlargement: 20%  
Size of casing in O.D. (in.): 9 5/8 Casing weight (lbs/ft) and grade: 36#, J-55 No. of centralizers used: 30  
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.): 5147 Top of liner (ft.):  
Setting depth tool: 1102  
Hrs. waiting on cement before drill-out: 12+ Calculated top of cement (ft.): 0 Cementing date: 3/17/2021

**SLURRY**

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	4876	C	See Remarks	7752.84	24757.5
2	516	C	See Remarks	686.28	235.1
3					
Total	5392			8439.12	24992.6

**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					

**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					



## CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

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

## REMARKS

LEAD: .75% A-2, 5% A-5, 2% Bentonite, .85% R-3 TAIL: .15% A-2, .35% R-21 - 105 bbls of cement back 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.

Service Supervisor - Kyle Smith

American Cementing

Name and title of cementer's representative

Cementing Company

Signature

7030 S. Yale Ave. Suite 810

Tulsa, OK, 74136

03/17/21

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.

Michael Boutwell

Regulatory Specialist

Michael Boutwell

Typed or printed name of operator's representative

Title

Signature

150 N. Dairy Ashford

Houston, TX 77079

832-337-0258

08/17/2021

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

## Instructions for Form W-15, Cementing Report

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

- A. **What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.

The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

- B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).

- C. **Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.





# RAILROAD COMMISSION OF TEXAS

1701 N. Congress

P.O. Box 12967

Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

## CEMENTING REPORT

Cementer: Fill in shaded areas.

Operator: Fill in other items.

### OPERATOR INFORMATION

Operator Name: <del>Shel</del> Western E&P	Operator P-5 No.: 774719
Cementer Name: AMERICAN CEMENTING, LLC	Cementer P-5 No.: 017955

### WELL INFORMATION

District No.: 08	County: Ward		
Well No.:2712 H	API No.:4247537931	Drilling Permit No.: 854143	
Lease Name:University 19 TG Unit	Lease No.:19 TG		
Field Name: Two Georges (Bone Spring)	Field No.: 92100050		

### I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 8 3/4	Depth of drilled hole (ft.): 7 5/8	Est. % wash-out or hole enlargement: 10%
Size of casing in O.D. (in.): 7 5/8	Casing weight (lbs/ft) and grade: 26.4#, P-110	No. of centralizers used: 0
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.): 11130	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 12+	Calculated top of cement (ft.): 4147	Cementing date: 3-25-2021

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	193	C	Remarks	743.05	7402.23
2	192	C	Remarks	213.12	2114.52
3					
Total					

### 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	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.) 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	Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

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

**CEMENTING TO SQUEEZE PLUG BACK OR PLUG AND ABANDON**

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

**REMARKS**

LEAD - CLASS C HSR Cement P02+ Extender A-10 Accelerator A-2 Accelerator ASA-301 Viscosifier BA-90 BondEnhancer BA-95 BondEnhancer CD-32A Dispersant FL-52 FluidLoss FP-28L Defoamer  
 Intergrity CELLO LostCirculation R-3 Retarder STATIC FREE Other  
 TAIL - CLASS H HSR Cement P02+ Extender A-2 Accelerator BENTONITE Viscosifier CD-32A Dispersant FL-66 FluidLoss FP-28L Defoamer R-21 Retarder STATIC FREE Other

**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.

Field Leader-John Kelsey

American Cementing, LLC

Name and title of cementer's representative  
7030 S. YALE AVE, Suite 810

Cementing Company

Signature

TULSA, OK 74136

(432) 248-3200

3-25-2021

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.

Michael Boutwell

Regulatory Specialist

Michael Boutwell

Typed or printed name of operator's representative

Title

Signature

150 N. Dairy Ashford

Houston, TX 77079

832-337-0258

08/17/2021

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.

- 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=&p\\_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=&p_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/OV 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.





## RAILROAD COMMISSION OF TEXAS

1701 N. Congress

P.O. Box 12967

Austin, Texas 78701-2967

## CEMENTING REPORT

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas.

Operator: Fill in other items.

## OPERATOR INFORMATION

Operator Name:	Shell Western E&P	Operator P-5 No.:	774719
Cementer Name:	American Cementing LLC	Cementer P-5 No.:	17955

## WELL INFORMATION

District No.:	08	County:	Ward
Well No.:	2712H	API No.:	42-475-37931
Lease Name:	University 19 TG Unit	Drilling Permit No.:	854143
Field Name:	Two Georges (Bone Spring)	Lease No.:	
		Field No.:	92100050

## I. CASING 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?			Setting depth shoe (ft.):	Top of liner (ft.):	
<input type="checkbox"/> Yes <input type="checkbox"/> No If no for surface casing, explain in Remarks.			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					

## II. CASING CEMENTING DATA

Type of casing:	<input type="checkbox"/> Surface	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Production	<input checked="" type="checkbox"/> Tapered production	<input type="checkbox"/> Multi-stage cement shoe	<input type="checkbox"/> Multiple parallel strings	
Drilled hole size (in.):	6 3/4	Depth of drilled hole (ft.):	20668	Est. % wash-out or hole enlargement:	15%		
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:	6 3/4	Lower:	6 3/4	Upper:	20668	Lower:	20668
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used			
Upper:	5 1/2	Lower:	4 1/2	Upper:	17#, P-110	Lower:	13.5#, P-110
Was cement circulated to ground surface (or bottom of cellar) outside casing?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Setting depth shoe: Upper: 11,217 Lower: 20647	
Hrs. waiting on cement before drill-out:		N/A		Calculated top of cement (ft.):		8130	
				Cementing date:		2-Apr-21	

## SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu.ft.)	Height (ft.)
1	1423	H	SEE REMARKS	1878.0	8099
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					

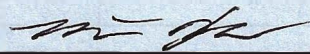


CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount 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


CLASS H, INTEGRACEM POZ, SODIUM METACILICATE, ASA-301, BENTONITE, FL-66, FP-28L, R-21, STATIC FREE

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.

<b>Robert Keller</b>	<b>Supervisor</b>	<b>American Cementing LLC</b>	
Name and title of cementer's representative		Cementing Company	Signature
<b>7030 S. Yale Ave Suite 810</b>	<b>Tulsa, OK, 74136</b>	<b>(432) 681-1100</b>	<b>April 2, 2021</b>
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.

*Michael Boutwell*

<b>Michael Boutwell</b>	<b>Regulatory Specialist</b>	
Typed or printed name of operator's representative		Signature
<b>150 N. Dairy Ashford</b>	<b>Houston, TX 77079</b>	<b>08/17/2021</b>
Address	City, State, Zip Code	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.

- 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.



APPLICATION FOR APPROVAL OF SURFACE CASING > 3500 FEET  
Statewide Rule 13(b)(1)(A)  
RAILROAD COMMISSION OF TEXAS

Operator's Name and Address: Shell Western E&P  
150 N. Dairy Ashford  
Houston, Texas 77079

P5 Number: 774719

Area for review: District 8

Lease Name: University 19 TG Unit 2712H

Field Name: Two Georges (Bone Spring) County: Ward

Survey: University Lands

Abstract: \_\_\_\_\_

Drilling Permits: 854143

Note: Attach a map if the request is for more than one pad.

How will the operator maintain well control during drilling operations:

While drilling the surface hole Shell utilizes drilling fluid of sufficient weight to overbalance the formations being penetrated.

In the event that flow is encountered a low-pressure rotating head is rigged-up under the rig floor to divert flow to the reserve pit.

How will the operator ensure cement is circulated to surface and that there is adequate bonding of cement:

If Operator determines that a DV tool is needed based on well bore conditions, a DV tool will be run to ensure adequate bonding of cement is achieved. Any changes to the as-drilled well will be submitted in the completion paperwork. Shell pumps a minimum of 100% excess cement for the first stage of the surface cement job. Adequate bonding of cement is achieved by utilizing the centralizer program as outlined in RRC Rule 3.13 (b) (1) (G).

How will the operator prevent the migration of formation fluids thru the annular space:

All cement slurries pumped by Shell comply with RRC Rule 3.13 (b) (1) (D) and Rule 3.13 (b) (1) (E). These slurries have been effective in preventing migration of formation fluids after the cement has been placed in the 100+ wells Shell has drilled in the Permian.

Signature: Michael Rautsch FOR Name: George Mullen

Date: 04/02/2020 Phone: 832-337-0549

RRC Use Only ►

RRC District Office Action:

☒ Approved

☐ Approved as Modified

☐ Denied

By:

Jessica Kent

Date: 04/28/2020

Remarks/Modifications:



WAYNE CHRISTIAN, CHAIRMAN  
CHRISTI CRADDICK, COMMISSIONER  
RYAN SITTON, COMMISSIONER



DANNY SORRELLS  
DIRECTOR, OIL AND GAS DIVISION  
JEFFERY MORGAN  
DISTRICT DIRECTOR

## RAILROAD COMMISSION OF TEXAS

### OIL AND GAS DIVISION

**OPERATOR Name:** SHELL WESTERN E&P

**RE: Lease:** UNIVERSITY 19 TG UNIT

**Address1:** PO BOX 576

**Address2:**

**City:** HOUSTON

**State:** TX

**Well No:** 2712H

**Sec:** 27 **Block:** 19

**County:** WARD

**Survey Name:** UL

**SWR13EX Application Number:** 83005

**Drilling Permit No:** 854143

### SWR 13 CASING EXCEPTION APPLICATION/ALTERNATIVE REQUEST APPROVED

The Proposed Casing and Cementing Program submitted for the **LEASE NAME:** UNIVERSITY 19 TG UNIT ;  
**WELL NUMBER:** 2712H has been approved by the Railroad Commission of Texas District Office.

- a. A copy of this approved letter must be kept on location during all phases of drilling and/or plugging operations. Once approved, changes CANNOT be made to the Proposed Casing Program on the original application without additional approval from the Railroad Commission of Texas District Office.
- b. Any substantive modifications to the cement program require prior approval from the Railroad Commission of Texas District Office, and may require re-submission of the SWR 13 (Statewide Rule 13) Alternate Surface Casing Application. Contact the Railroad Commission of Texas District Office for more information.
- c. The tail slurry must be sufficient to fill the Zone of Critical Cement as described in Statewide Rule 13(b)(1)(H)(i). In addition, all cement slurries must be mixed on location as described in Application for Alternate Surface Casing Program.
- d. The casing and cement program shall adhere to the following specifications:

Set 5060 feet of surface casing and circulate cement from the shoe to the ground surface.

An extension to omit the installation of tubing in the above-referenced well is approved for a period of up to 180 days from the date the application was received or the date the well began producing, whichever occurred last.

The proposed alternative drilling fluid program for the fresh water protected interval is hereby approved.

IF CEMENT IS NOT CIRCULATED TO THE GROUND SURFACE AS REQUIRED BY THIS EXCEPTION, YOU MUST CONTACT THE RAILROAD COMMISSION OF TEXAS DISTRICT OFFICE IMMEDIATELY AND FOLLOW THE PROCEDURES SET OUT IN RULE 13(b)(1)(H)(iii) OR AS REQUIRED BY THE RAILROAD COMMISSION OF TEXAS DISTRICT OFFICE.



You must comply with all other provisions of SWR 13 (Statewide Rule 13) and a representative of the cementing company who performs the cementing job for the protection of usable quality water strata must sign the Form W-15 attesting to the information regarding cementing operations performed; including circulation of cement. (Note: If surface casing is set below the approved depth, this can result in denial of future Statewide Rule 13(b)(1)(H)(i) requests.) A condition of the approved drilling permit requires notification to the Railroad Commission of Texas District Office eight (8) hours prior to the time casing is to be set/cemented in the well. If your exception request was submitted after the subject well has been drilled and completed, the operator may be referred for enforcement action.

This authorization shall expire within five (5) years from the date the Groundwater Protection Determination was issued, or at the expiration of the drilling permit (if the well is not spudded prior to expiration) for the referenced well, whichever occurs first. Furthermore, this authorization supersedes any prior authorizations issued for the referenced well.

This exception is based on information provided when the application was submitted on 04/23/2020 .  
If any information has changed, you must contact the appropriate Railroad Commission of Texas District Office, and submit a new application if applicable. If you have questions, please contact the appropriate Oil and Gas District office.

RRC APPROVAL BY: Jessica Kent

DATE: 04/28/2020

JEFFERY MORGAN

DISTRICT DIRECTOR

Tracking No.: 254145

## 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: SHELL WESTERN E&P	District No. 08	Completion Date: 06/07/2021
Field Name TWO GEORGES (BONE SPRING)	Drilling Permit No. 854143	
Lease Name UNIVERSITY 19 TG UNIT	Lease/ID No. 38570	Well No. 2712H
County WARD	API No. 42- 475-37931	

## 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). \_\_\_\_\_

Michael Boutwell

Signature

SHELL WESTERN E&amp;P

Name (print)

Regulatory Specialist

Title

(832) 337-0258

Phone

08/17/2021

Date

-FOR RAILROAD COMMISSION USE ONLY-



# PHOENIX

## TECHNOLOGY SERVICES

MD  
1:1200  
Feet

*MWD Gamma / ROP (1")*

**Client:** SWEPI

**Well Name:** University 19 TG Unit 2712H

**API/UWID:** 42475379310000

**County:** Ward

**Field:** Permian

**Permit #:** 854143

**State:** Texas

**Country:** USA

**Longitude:** 103° 21' 20.234 W

**Latitude:** 31° 28' 48.964 N

### Personnel

**Rig Name:** Nabors X05

**Job Number:** 67528

**Ground Level:** 2834.80 ft

**Kelly Bushing:** 2866.80 ft

**Drill Floor:** 32.00 ft

**Permanent Datum:** Mean Sea Level

**Drilling Measured From:** Kelly Bushing

**Spud Date:** March 14, 2021

**Bottom Hole Temp:** 198.4 °F

**Log Start Depth:** 0.00 ft

**Log End Depth:** 20700.00 ft

**Company Representative**

Brett McCoy

**Geologist**

Daniel Elizondo

**Directional Driller(s)**

Brian Stewart

Josh Faubion

**MWD Operator(s)**

Eric Neel

Chad Cooper

### Reference Data

**North Reference:** Grid North

**Magnetic Declination:** 6.86

**Grid Convergence:** -1.56

**Total Mag Correction:** 8.42

**Comments:**

*Main Leg*

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67528

### Operational Run Summary

Run Start Depth (ft)

Run End Depth (ft)

Run Start Date

Run Start Time

Run End Date

Run End Time

Run 1

Run 2

Run 3

Run 4

Run 5

0.00

5165.64

3/13/2021

7:23 AM

3/15/2021

6:49 AM

5165.64

10898.18

3/20/2021

3:20 PM

3/23/2021

12:35 PM

5165.64

10898.18

3/23/2021

1:01 PM

3/24/2021

11:13 AM

10898.18

11145.18

3/24/2021

7:58 PM

3/26/2021

6:22 PM

11145.18

12081.00

3/26/2021

7:18 PM

3/31/2021

12:38 PM

12081.00

20667.88

3/26/2021

7:18 PM

3/31/2021

12:38 PM

# CERTIFICATE OF POOLING AUTHORITY

Revised 05/2001

# P-12

1. Field Name(s) <b>Two Georges (Bone Spring)</b>	2. Lease/ID Number (if assigned) <b>38570</b>	3. RRC District Number <b>08</b>
4. Operator Name <b>Shell Western E&amp;P</b>	5. Operator P-5 Number <b>774719</b>	6. Well Number <b>2712H</b>
7. Pooled Unit Name <b>University 19 TG Unit</b>	8. API Number <b>475-37931</b>	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County <b>Loving &amp; Ward</b>	11. Total acres in pooled unit <b>12830.08</b>	

## DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
Tr. 1	University Lands	160.24	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 2	University Lands	480.71	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 3	University Lands	520.93	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 4	University Lands	641.05	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 5	University Lands	280.46	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 7	University Lands	320.54	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 8	University Lands	641.06	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 9	University Lands	566.27	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 10	University Lands	641.31	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 11	University Lands	641.23	<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.

Michael Boutwell  
Signature

Michael Boutwell

Reg. Specialist

m.boutwell@shell.com

Print Name

01/13/2021

(832) 337-0258

Title

E-mail (if available)

Date

Phone

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

- 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.
- 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.
- If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
- 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.
- If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- Identify the drill site tract with an \* to the left of the tract identifier.
- 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

# CERTIFICATE OF POOLING AUTHORITY

Revised 05/2001

# P-12

1. Field Name(s) <b>Two Georges (Bone Spring)</b>	2. Lease/ID Number (if assigned) <b>38570</b>	3. RRC District Number <b>08</b>
4. Operator Name <b>Shell Western E&amp;P</b>	5. Operator P-5 Number <b>774719</b>	6. Well Number <b>2712H</b>
7. Pooled Unit Name <b>University 19 TG Unit</b>	8. API Number <b>475-37931</b>	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County <b>Loving &amp; Ward</b>	11. Total acres in pooled unit <b>12830.08</b>	

## DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
Tr. 13	University Lands	320.61	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 14	University Lands	640.92	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 15	University Lands	640.99	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 16	University Lands	465.34	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 17	University Lands	640.96	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 18	University Lands	624.55	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 20	University Lands	120.21	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 23	University Lands	640.99	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 24	University Lands	640.90	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 25	University Lands	640.86	<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.

<u>Michael Boutwell</u> Signature	Michael Boutwell Print Name
Reg. Specialist	01/13/2021
m.boutwell@shell.com	(832) 337-0258
Title	Phone
E-mail (if available)	Date

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

- 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.
- 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.
- If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
- 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.
- If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- Identify the drill site tract with an \* to the left of the tract identifier.
- 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

# CERTIFICATE OF POOLING AUTHORITY

Revised 05/2001

# P-12

1. Field Name(s) <b>Two Georges (Bone Spring)</b>	2. Lease/ID Number (if assigned) <b>38570</b>	3. RRC District Number <b>08</b>
4. Operator Name <b>Shell Western E&amp;P</b>	5. Operator P-5 Number <b>774719</b>	6. Well Number <b>2712H</b>
7. Pooled Unit Name <b>University 19 TG Unit</b>	8. API Number <b>475-37931</b>	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County <b>Loving &amp; Ward</b>	11. Total acres in pooled unit <b>12830.08</b>	

## DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

TRACT/PLAT IDENTIFIER	TRACT NAME	ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS	
			UNLEASED	NON-POOLED
Tr. 26	University Lands	639.62	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 27	University Lands	638.33	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 28	University Lands	200.31	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 29	University Lands	120.19	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 30	University Lands	320.50	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 32	University Lands	320.48	<input type="checkbox"/>	<input type="checkbox"/>
Tr. 34	University Lands	320.52	<input type="checkbox"/>	<input type="checkbox"/>
TOTAL		12830.08	<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.

<u>Michael Boutwell</u>	Michael Boutwell
Signature	Print Name
Reg. Specialist	01/13/2021
m.boutwell@shell.com	(832) 337-0258
Title	Date
E-mail (if available)	Phone

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

- 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.
- 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.
- If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.
- 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.
- If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- Identify the drill site tract with an \* to the left of the tract identifier.
- 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



# RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1  
Rev. 09/2019

## Acreage Designation

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 I. OPERATOR INFORMATION			
Operator Name:	Shell Western E&P	Operator P-5 No.:	774719
Operator Address:	P.O. Box 576, Houston, Texas, 77001		

SECTION II. WELL INFORMATION			
District No.:	08	API No.:	42-475-37931
Well No.:	2712H	Drilling Permit No.:	854143
Lease Name:	University 19 TG Unit	RRC ID or Lease No.:	38570
Total Lease Acres:	12830.08	Field Name:	Two Georges (Bone Spring)
Proration Acres:	704.00	Field No.:	92100050
Wellbore Profile	Horizontal Well	Is this a UFT field?	No
SL Record (Parent) Well Drilling Permit No.:		County:	Loving

☐ Drilling Permit Application (Form W-1)  
☒ Completion Report (Form G-1/W-2)

SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER							
RRC ID No. or Lease No.	Well No.	Profile	Lease Name	API No.	Acres Assigned	SWR 38 Except. (Y/N)	Operator Name and Operator No. (if different from filing operator)
51148	1H	Horiz.	Blacktip University 19-26	475-35864	641.08	N	Anadarko E&P Onshore, LLC
51147	2H	Horiz.	University 19-29	475-35504	641.00	N	Anadarko E&P Onshore, LLC
38570	0903H	Horiz.	University 19 TG Unit	301-33222	704.00	N	
38570	1002H	Horiz.	University 19 TG Unit	301-34495	0.00	N	
38570	1004H	Horiz.	University 19 TG Unit	301-34496	704.00	N	
38570	1006H	Horiz.	University 19 TG Unit	301-34517	704.00	N	
38570	1201H	Horiz.	University 19 TG Unit	301-31255	704.00	N	
38570	1305H	Horiz.	University 19 TG Unit	301-34519	704.00	N	
38570	1307H	Horiz.	University 19 TG Unit	301-34522	704.00	N	
38570	1401E	Horiz.	University 19 TG Unit	301-31458	704.00	N	
38570	1401W	Horiz.	University 19 TG Unit	301-31345	704.00	N	
38570	1702H	Horiz.	University 19 TG Unit	301-31703	704.00	N	
38570	2203H	Horiz.	University 19 TG Unit	301-33923	704.00	N	
DP# 855615	2705H	Horiz.	University 19 TG Unit	475-37980	704.00	N	
38570	2710H	Horiz.	University 19 TG Unit	475-37928	704.00	N	

A. Total Assigned Horiz. Acreage =   
 Total Remaining Horiz. Acreage =   
 B. Total Assigned Vert./Dir. Acreage =   
 Total Remaining Vert./Dir. Acreage =

C. Total Assigned Acreage = **9730.080**  
 Total Remaining Acreage = **3100.000**

SECTION IV. REMARKS - REQUIRED FOR PSA AND CO-DEVELOPMENT (refer to instructions)

Attach Additional Pages As Needed.

☐ No additional pages☒ Additional Pages: 1 (No. of additional pages)

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

Michael Boutwell  
Signature

Michael Boutwell, Regulatory Specialist  
Name and title (type or print)

[m.boutwell@shell.com](mailto:m.boutwell@shell.com)

Email  
(include email address only if you affirmatively consent to its public release)

150 N. Dairy Ashford      Houston      Texas      77079  
Address      City,      State,      Zip Code

832-337-0258  
Tel:      Area Code      Number

08/19/21  
Date:      mo. day yr.



# RAILROAD COMMISSION OF TEXAS

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

Form P-16

Attachment

Page 1A

Rev. 09/2019

## Acreage Designation

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.

[illegible]



# UNIVERSITY 19 TG UNIT

12830.08 ACRES (MEASURED)

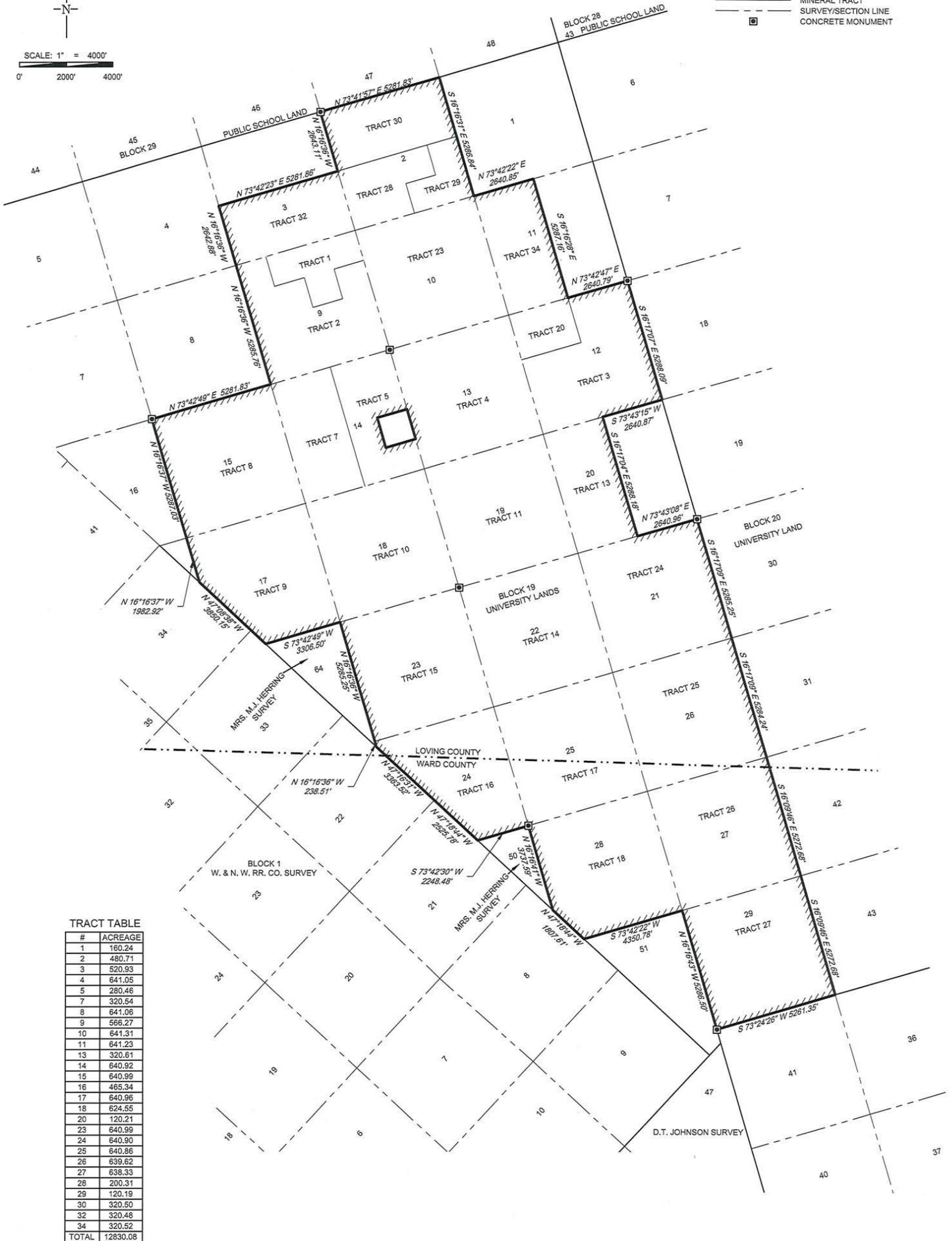
SECTIONS 2, 9, 10, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28 & 29,  
S/2 OF SECTION 3, E/2 OF SECTION 11, W/2 OF SECTION 20  
SAVE & EXCEPT NE/4 SE/4 OF SECTION 14  
BLOCK 19, UNIVERSITY LAND  
LOVING & WARD COUNTIES, TEXAS

SHELL WESTERN  
E&P

## LEGEND

	UNIT BOUNDARY
	APPROXIMATE LOCATION COUNTY LINE
	BLOCK/TOWNSHIP LINE
	MINERAL TRACT
	SURVEY/SECTION LINE
	CONCRETE MONUMENT

SCALE: 1" = 4000'  
0' 2000' 4000'



TRACT TABLE

#	ACREAGE
1	160.24
2	480.71
3	520.93
4	641.05
5	280.46
7	320.54
8	641.06
9	566.27
10	641.31
11	641.23
13	320.61
14	640.92
15	640.99
16	465.34
17	640.96
18	624.55
20	120.21
23	640.99
24	640.90
25	640.86
26	639.62
27	638.33
28	200.31
29	120.19
30	320.50
32	320.48
34	320.52
TOTAL	12830.08

This Plat is true and correct to the  
best of my belief and knowledge.

*George Mullen*

George Mullen  
Senior Regulatory Specialist

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 17 June 2019**GAU Number:** 243891**Attention:** SHELL WESTERN E&P  
PO BOX 576  
HOUSTON, TX 77001**Operator No.:** 774719**API Number:**  
**County:** WARD  
**Lease Name:** University 19 TG Unit  
**Lease Number:**  
**Well Number:** 2714H  
**Total Vertical Depth:** 11900  
**Latitude:** 31.647014  
**Longitude:** -103.355650  
**Datum:** NAD27**Purpose:** New Production Well**Location:** Survey-UL; Block-19; Section-27

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

Water-bearing strata from the land surface to a depth of 400 feet and the Rustler, which is estimated to occur from 775 to 1200 feet must be protected.

This recommendation is applicable to all wells within a radius of 200 feet of this location.

Please send Gamma/Porosity log of this well when it is available.

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 06/13/2019. 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





SHELL WESTERN  
E&P

AS-DRILLED LOCATION  
LEASE NAME & WELL NO.:  
**UNIVERSITY 19 TG UNIT 2712H**

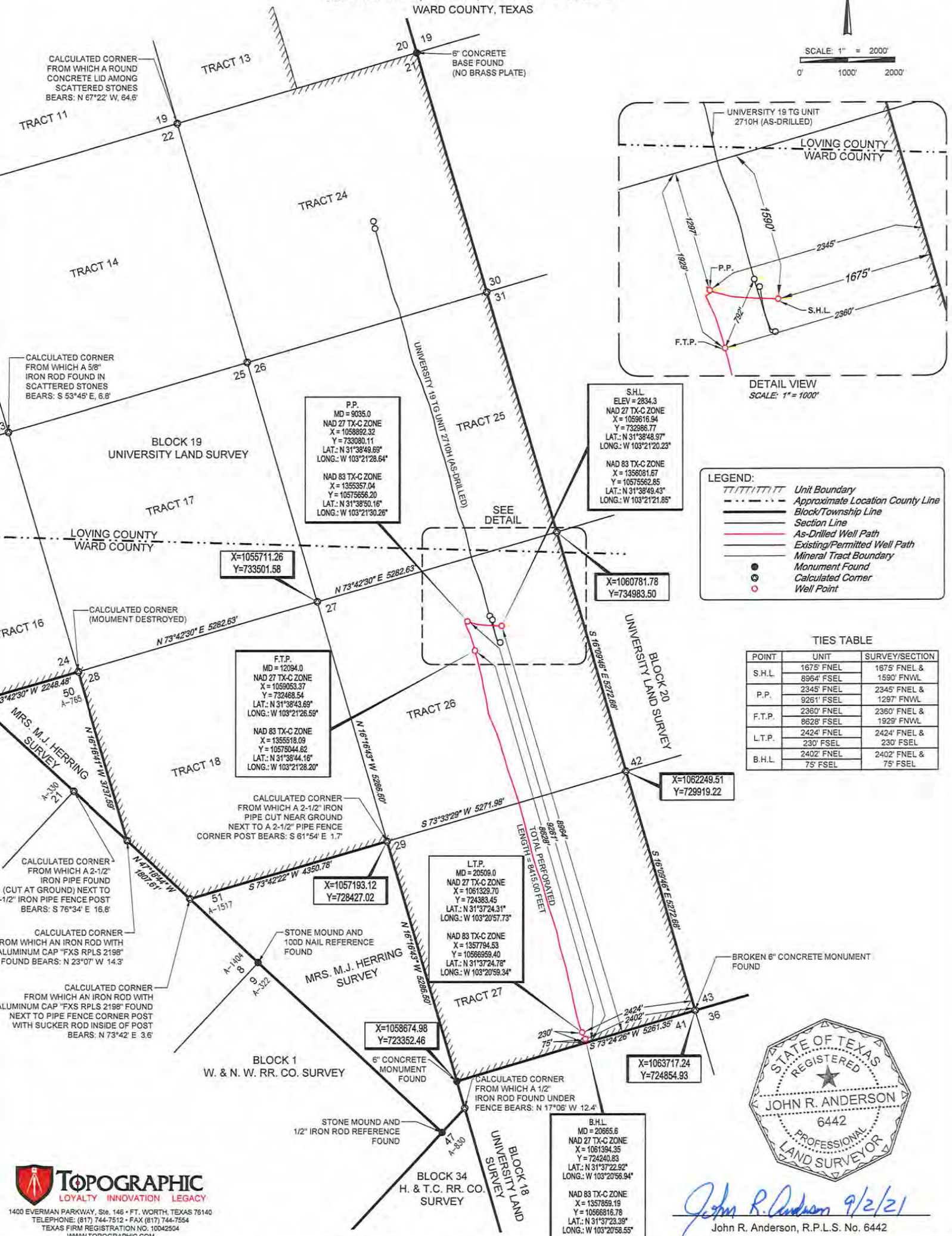
UNIT/LEASE ACREAGE:  
12830.08 ACRES (MEASURED)

NEAREST TOWN IN COUNTY:  
±14.9 MILES SOUTHEAST OF MENTONE, TEXAS

DESCRIPTION:  
SECTIONS 27 & 29, BLOCK 19, UNIVERSITY LAND SURVEY  
WARD COUNTY, TEXAS



SCALE: 1" = 2000'  
0' 1000' 2000'



John R. Anderson 9/2/21  
John R. Anderson, R.P.L.S. No. 6442

**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY  
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
TEXAS FIRM REGISTRATION NO. 10042504  
WWW.TOPOGRAPHIC.COM

REVISION:	NOTES:		NOTES CONT'D:
	INT	DATE	
UL-19-27-P1			1. ORIGINAL DOCUMENT SIZE: 11" X 17"
UNIVERSITY 19 TG UNIT			2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927, UNLESS OTHERWISE NOTED.
2712H			3. THIS LOCATION AND/OR UNIT/LEASE BOUNDARY HAS BEEN CAREFULLY SURVEYED ON THE GROUND UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE ACCORDING TO THE EVIDENCE, OFFICIAL SURVEY RECORDS, MAPS, AND OTHER DATA PROVIDED BY SHELL WESTERN E&P. THIS PLAT WAS CREATED FOR THE SOLE PURPOSE OF FILING A PERMIT WITH THE RAILROAD COMMISSION OF TEXAS AND SHOULD NOT BE CONSTRUED AS A "BOUNDARY SURVEY" IN COMPLIANCE WITH T.B.P.L.S. MINIMUM STANDARDS OF PROCEDURES FOR BOUNDARY SURVEYS. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
DATE: XX/XX/XXXX			4. ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FEET.
FILE: AD_19_27_P1_UNIVERSITY_19_27_TG_2712H			5. ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY SHELL WESTERN E&P OR ITS SUBSIDIARIES & AFFILIATES.
DRAWN BY: XXXX			6. THE AS-DRILLED SURFACE LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF SEPTEMBER 08, 2020.
SHEET: 1 OF 1			7. THE SUBSURFACE WELL PATH DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY SHELL WESTERN E&P OR ITS SUBSIDIARIES & AFFILIATES.
			8. S.H.L. = SURFACE HOLE LOCATION
			9. P.P. = POINT OF PENETRATION
			10. F.T.P. = FIRST TAKE POINT
			11. L.T.P. = LAST TAKE POINT
			12. B.H.L. = BOTTOM HOLE LOCATION