



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 12/13/2021
Tracking No.: 257853

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT,

OPERATOR INFORMATION

Table with Operator, SHELL WESTERN E&P, Operator 774719, and PO BOX 576 HOUSTON, TX 77001-0000.

WELL INFORMATION

Table with well details: API 42-301-35216, Well No.: 1008H, Lease UNIVERSITY 19 TG UNIT, RRC Lease 38570, Location Section: 13, Block: 19, Survey: UL, Abstract: U13, County: LOVING, RRC District 08, Field TWO GEORGES (BONE SPRING), Field No.: 92100050, Latitude 31, Longitud -103, and nearest town MENTONE.

FILING INFORMATION

Table with filing details: Purpose of Initial Potential, Type of New Well, Well Type: Producing, Completion or Recompletion 08/26/2021, Type of Permit, Date 01/25/2021, Permit No. 865686, and other categories like Rule 37 Exception, Fluid Injection, O&G Waste Disposal, and Other.

COMPLETION INFORMATION

Table with completion details: Spud 04/15/2021, Date of first production after rig 08/26/2021, Date plug back, deepening, drilling operation 04/15/2021, Date plug back, deepening, recompletion, drilling operation 07/06/2021, Number of producing wells on this lease this field (reservoir) including this 18, Distance to nearest well in lease & reservoir 114.0, Total number of acres in 12830.08, Elevation 2807 GL, Total depth TVD 11646, Total depth MD 22904, Plug back depth TVD, Plug back depth MD, Was directional survey made other inclination (Form W- Yes, Rotation time within surface casing 47.0, Is Cementing Affidavit (Form W-15) 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 6467.0 Feet from the NE Line and 10932.0 Feet from the NW Line of the UNIVERSITY 19 TG UNIT Lease. Off Lease : No

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Field & Reservoir Gas ID or Oil Lease Well No. Prior Service Type

PACKET: N/A

W2: N/A

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

| | | | | |
|---|--------------|--------|-------------|------------|
| GAU Groundwater Protection Determination | Depth | 1000.0 | Date | 11/04/2020 |
| SWR 13 Exception | Depth | 5000.0 | | |

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

| | | | |
|---------------------------------------|------------|------------------------------|---------|
| Date of | 09/08/2021 | Production | Flowing |
| Number of hours | 24 | Choke | 36/64 |
| Was swab used during this | No | Oil produced prior to | 1302.00 |
| PRODUCTION DURING TEST PERIOD: | | | |
| Oil | 1369.00 | Gas | 1884 |
| Gas - Oil | 1376 | Flowing Tubing | 1999.00 |
| Water | 4558 | | |
| CALCULATED 24-HOUR RATE | | | |
| Oil | 1369.0 | Gas | 1884 |
| Oil Gravity - API - 60.: | 56.0 | Casing | 1921.00 |
| Water | 4558 | | |

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 Tool</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 | 9 5/8 | 12 1/4 | 5039 | | 1187 | C | 1547 | 2831.0 | 0 | Circulated to Surface |
| 2 | Surface | 9 5/8 | 12 1/4 | 5039 | | | C | 4568 | 7129.0 | 1187 | Calculation |
| 3 | Intermediate | 7 5/8 | 8 3/4 | 11146 | | | C & H | 394 | 990.0 | 4039 | Calculation |
| 4 | Tapered Production | 5 1/2 | 6 3/4 | 11197 | | | H | 1696 | 2238.0 | 8149 | Calculation |
| 5 | Tapered Production | 4 1/2 | 6 3/4 | 22867 | | | H | 1696 | 2238.0 | 8149 | Calculation |

LINER RECORD

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

TUBING RECORD

| <u>Ro</u> | <u>Size (in.)</u> | <u>Depth</u> | <u>Size (ft.)</u> | <u>Packer Depth (ft.)/Type</u> |
|-----------|-------------------|--------------|-------------------|--------------------------------|
| 1 | 2 7/8 | 11388 | | 11359 / L80 6.5PPF EUE |

PRODUCING/INJECTION/DISPOSAL INTERVAL

| <u>Ro</u> | <u>Open hole?</u> | <u>From (ft.)</u> | <u>To (ft.)</u> |
|-----------|-------------------|-------------------|-----------------|
| 1 | No | L1 11899 | 22738.0 |

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 9159.0 | | |
| Production casing test pressure (PSIG) hydraulic fracturing 9900 | Actual maximum pressure (PSIG) during fracturin 10981 | | |
| 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 FRACFOCUS | 11899 22738 |

FORMATION RECORD

| <u>Formations</u> | <u>Encountere</u> | <u>Depth TVD</u> | <u>Depth MD</u> | <u>Is formation</u> | <u>Remarks</u> |
|---|-------------------|------------------|-----------------|---------------------|---------------------------------------|
| RED BLUFF | No | | | No | FORMATION IS NOT GEOLOGICALLY PRESENT |
| DELAWARE | Yes | 5085.0 | 5153.0 | Yes | |
| BELL CANYON | Yes | 5110.0 | 5178.0 | Yes | |
| CHERRY CANYON | Yes | 6056.0 | 6125.0 | Yes | |
| BRUSHY CANYON | Yes | 7275.0 | 7344.0 | Yes | |
| BONE SPRING | Yes | 8719.0 | 8788.0 | Yes | |
| WOLFCAMP | Yes | 11534.0 | 11651.0 | Yes | |
| PENNSYLVANIAN | No | | | No | BELOW WELLBORE DEPTH |
| STRAWN | No | | | No | BELOW WELLBORE DEPTH |
| ATOKA - HIGH PRESSURE | No | | | No | BELOW WELLBORE DEPTH |
| MORROW | No | | | No | BELOW WELLBORE DEPTH |
| DEVONIAN | No | | | No | BELOW WELLBORE DEPTH |
| FUSSELMAN | 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'. WELLBORE DOES NOT CROSS BELOW BASE OF TWO GEORGES (BONE SPRING) CORRELATIVE INTERVAL. AS PREVIOUSLY AGREED WITH THE RRC (EMAIL ATTACHED), THIS WELL IS REPORTED TO THE TWO GEORGES (BONE SPRING) REGULATORY FIELD.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2021-12-08 14:55:46.613] EDL=10800 feet, max acres=704, TWO GEORGES (BONE SPRING) oil well;

take points: 11899-22738 feet

CASING RECORD :

DV TOOL SET AND OPENED FOR MULTI-STAGE SURFACE CEMENT JOB. TWO SEPARATE CEMENTING COMPANIES WERE USED FOR THE MULTI-STAGE JOB, SO TWO SURFACE W-15S ARE INCLUDED INSTEAD OF A SINGLE MULTI-STAGE CEMENT W-15.

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

WELLBORE IS COMPLETED IN THE OVERLAP BETWEEN THE TWO GEORGES (BONE SPRING) AND PHANTOM (WOLFCAMP) FIELDS, BUT DOES NOT CROSS THE BASE OF THE TWO GEORGES. AS PREVIOUSLY AGREED WITH THE RRC, THIS WELL IS REPORTED TO THE TWO GEORGES (BONE SPRING) REGULATORY FIELD.

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

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

| | | | |
|------------------|------------------|---------------|-----------------------|
| Printed | Michael Boutwell | Title: | Regulatory Specialist |
| Telephone | (832) 337-0258 | Date | 12/09/2021 |



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, LLC | Cementer P-5 No.: 017955 |

WELL INFORMATION

| | | |
|---------------------------------------|-----------------------|-----------------------------|
| District No.: 08 | County: LOVING | |
| Well No.: 1008H | API No.: 42-301-35216 | Drilling Permit No.: 865686 |
| Lease Name: UNIVERSITY 19 TG UNIT | Lease No.: | |
| Field Name: Two Georges (Bone Spring) | Field No.: 92100050 | |

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.): 12 1/4 | Depth of drilled hole (ft.): 5039 | 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: 29 |
| 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.): 5039 | Top of liner (ft.): |
| | | Setting depth liner (ft.): |
| Hrs. waiting on cement before drill-out: 12+ | Calculated top of cement (ft.): 1187 | Cementing date: 4/17/21 |

SLURRY

| Slurry No. | No. of Sacks | Class | Additives | Volume (cu. ft.) | Height (ft.) |
|--------------|--------------|-------|-------------|------------------|--------------|
| 1 | 4052 | C | SEE REMARKS | 6443 | 15806 |
| 2 | 516 | C | SEE REMARKS | 686 | 2186 |
| 3 | | | | | |
| Total | 4568 | | | 7129 | |

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 55.00 % POZ+ Extender 45.00 % A-2 Accelerator 0.75 %BWOB A-5 Accelerator 5.00 %BWOW BENTONITE Viscosifier 2.00 %BWOB FP-28L Defoamer 0.01 gal/sk R-3 Retarder 0.80 %BWOBSTATIC FREE Other 0.01 lb/sk TAIL:CLASS C HSR Cement 100.00 %A-2 Accelerator0.15 %BWOB FP-28L Defoamer 0.01 gal/skR-21 Retarder 0.35 %BWOB STATIC FREE Other 0.01 lb /sk

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- **JAMES KENT**

American Cementing, LLC



Name and title of cementer's representative

Cementing Company

Signature

7030 S. YALE AVE, Suite 810

TULSA, OK 74136

(432) 248-3200

4/17/21

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.

? [UZSW4agfi W

DWg'Sack BWS1ef



Typed or printed name of operator's representative

Title

Signature

" @z6S[k3eZAdV

: agefa` 1FJ))")+

*%\$Z% Z S *

###" S' S' S#

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

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: Schlumberger Cementer P-5 No.: 754900

WELL INFORMATION

District No.: 08 County: Loving
Well No.: 1008H API No.: 42-301-35216 Drilling Permit No.: 865686
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 [X] Surface Intermediate Liner Production
Drilled hole size (in.): 12 1/4 Depth of drilled hole (ft.): 5039 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: 29
Was cement circulated to ground surface (or bottom of cellar) outside casing? [X] Yes [] No
Setting depth shoe (ft.): 5039 Top of liner (ft.):
Setting depth tool: 1187
Hrs. waiting on cement before drill-out: 12+ Calculated top of cement (ft.): 0 Cementing date: 18-Apr-21

SLURRY

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)
Row 1: 1, 1547, POZ C, Remarks, 2831.0, 1187
Row 2: 2, , , , ,
Row 3: 3, , , , ,
Total: 1547, , , , 2831.0, 1187

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

Table with 6 columns: Slurry No., No. of Sacks, Class, Additives, Volume (cu.ft.), Height (ft.)
Row 1: 1, , , , ,
Row 2: 2, , , , ,
Row 3: 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

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

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

REMARKS

#1: 61lb/skD903+28lb/skD132+0.4%D013+1%D079+0.01%D800

#2:

#3:

#4: 160bbl cement to surface

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

TIM HAMMER, FS

Schlumberger



Name and title of cementer's representative

Cementing Company

Signature

7104 W County Rd 116

Midland

TX

79706

(432) 681-1100

April 18, 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.

? [UZW4agfi W

DWg'SfackEbMS1ef



Typed or printed name of operator's representative

Title

Signature

" @z6Sjck 3eZxidV

832-337-0258

##" S'S' S#

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). 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

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, LLC | Cementer P-5 No.: 017955 |

| WELL INFORMATION | |
|---------------------------------------|-----------------------------|
| District No.: 08 | County: LOVING |
| Well No.: 1008H | API No.: 42-301-35216 |
| Lease Name: UNIVERSITY 19 TG UNIT | Drilling Permit No.: 865686 |
| 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 checked="" type="checkbox"/> Intermediate |
| | <input type="checkbox"/> Liner | <input type="checkbox"/> Production | |
| Drilled hole size (in.): 8 3/4 | Depth of drilled hole (ft.): 11164 | 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 | Setting depth shoe (ft.): 11146 | Top of liner (ft.): | |
| | | Setting depth liner (ft.): | |
| Hrs. waiting on cement before drill-out: 12+ | Calculated top of cement (ft.): 4039 | Cementing date: 05/21/2021 | |

| SLURRY | | | | | |
|--------------|--------------|-------|---------------|------------------|--------------|
| Slurry No. | No. of Sacks | Class | Additives | Volume (cu. ft.) | Height (ft.) |
| 1 | 202 | C | SEE REMARK #1 | 777 | 7219 |
| 2 | 192 | H | SEE REMARK #2 | 213 | 1982 |
| 3 | | | | | |
| Total | 394 | | | 990 | 9201 |

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

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

| III. CASING CEMENTING DATA | | | |
|--|---|---|--|
| Type of casing: | <input type="checkbox"/> Surface | <input type="checkbox"/> Intermediate | <input type="checkbox"/> Production |
| | <input type="checkbox"/> Tapered production | <input type="checkbox"/> Multi-stage cement/DV tool | <input type="checkbox"/> Multiple parallel strings |
| Drilled hole size (in.): | Depth of drilled hole (ft.): | Est. % wash-out or hole enlargement: | |
| Size of casing in O.D. (in.): | Casing weight (lbs/ft) and grade: | No. of centralizers used: | |
| Tapered string drilled hole size (in.) | Tapered string depth of drilled hole (ft.) | | |
| Upper: | Lower: | Upper: | Lower: |
| Tapered string size of casing in O.D. (in.) | Tapered string casing weight (lbs/ft) and grade | Tapered string no. of centralizers used | |
| Upper: | Lower: | Upper: | Lower: |
| 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) | | | | | | | |

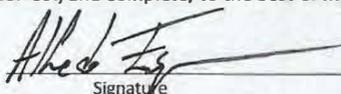
REMARKS

REMARK #1: C55/45POZ+ 10 LB/SK BA-90+ 5 LB/SK BA-95+ 0.8% FL-52+ 5% A-10+ 0.35% ASA-301+ 0.5% CD-32A+ 3% A-2+ 1.05% R-3+ 0.25 LB/SK INTEGRASEAL CELLO+ 0.01 LB/SK STATIC FREE+ 0.01 GAL/SK FP-28L. REMARK #2: H55/45POZ+ 2% BENTONITE+ 0.5% FL-66+ 0.4% CD-32A+ 0.3% A-2+ 0.35% R-21+ 0.01 LB/SK STATIC FREE+ 0.01 GAL/SK FP-28L.

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.

JESUS ALFREDO ESPARZA

AMERICAN CEMENTING, LLC



Name and title of cementer's representative

Cementing Company

Signature

7030 S. YALE AVE. SUITE 810

TULSA, OK 74136

(432) 248-3200

05/21/2021

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.

? [UZSW4agfi W

DWg Stack EbWStef



Typed or printed name of operator's representative

Title

Signature

" @z6Sldk3eZ&dV

: agefa`1FJ))")+

*%SZ0%Z S *

##!" S!S' S#

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

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, LLC | Cementer P-5 No.: 017955 |

| WELL INFORMATION | | |
|---------------------------------------|-----------------------|-----------------------------|
| District No.: 08 | County: Loving | |
| Well No.: 1008H | API No.: 42-301-35216 | Drilling Permit No.: 865686 |
| Lease Name: University 19 TG Unit | Lease No.: | |
| 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 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 | | | | | |

| 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.): 22904 | | 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.) Upper: 6 3/4 Lower: 6 3/4 | | | Tapered string depth of drilled hole (ft.) Upper: 22904 Lower: 22904 | | |
| Tapered string size of casing in O.D. (in.) Upper: 5 1/2 Lower: 4 1/2 | | Tapered string casing weight (lbs/ft) and grade Upper: 17#, P-110 Lower: 13.5#, P-110 | | Tapered string no. of centralizers used Upper: 67 Lower: 248 | |
| 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.): Upper: 11,197 Lower: 22,867 | |
| Hrs. waiting on cement before drill-out: N/A | | Calculated top of cement (ft.): 8149 | | Cementing date: 5/31/21 | |
| SLURRY | | | | | |
| Slurry No. | No. of Sacks | Class | Additives | Volume (cu. ft.) | Height (ft.) |
| 1 | 1696 | H | See Remarks | 2238.72 | 16219.51 |
| 2 | | | | | |
| 3 | | | | | |
| Total | 1696 | | | | 16219.51 |

| 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

Slurry: Class H 55%, POZ 45%, A-2 .400%, ASA-301 .150%, Bentonite 2%, FL-66 .500%, FP-28L .010 gal/sk, R-21 .600%, Static Free .005 lb/sk

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.

| | | |
|---|--------------------------------|---|
| <u>Field Leader- JAMES SHEETS</u> | <u>American Cementing, LLC</u> |  |
| Name and title of cementer's representative | Cementing Company | Signature |
| <u>7030 S. YALE AVE, Suite 810</u> | <u>TULSA, OK 74136</u> | <u>(432) 248-3200</u> |
| Address | City, State, Zip Code | Tel: Area Code Number |
| | | Date: mo. day yr. <u>5/31/21</u> |

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.

| | | |
|--|------------------------------|---|
| <u>Michael Boutwell</u> | <u>Regulatory Specialist</u> |  |
| Typed or printed name of operator's representative | Title | Signature |
| <u>150 N. Dairy Ashford</u> | <u>Houston, TX 77079</u> | <u>832-337-0258</u> |
| Address | City, State, Zip Code | Tel: Area Code Number |
| | | Date: mo. day yr. <u>11/02/2021</u> |

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.



**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 08

Lease Name: University 19 TG Unit 1008H

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

Survey: University Lands Abstract: _____

Drilling Permits: 865686

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 Boutwell Name: Michael Boutwell Date: 02/09/2021 Phone: 832-337-0258

| | | | |
|--|---|---------------------------------|---|
| RRC District Office Action: | | | |
| <input checked="" type="checkbox"/> Approved | <input type="checkbox"/> Approved as Modified | <input type="checkbox"/> Denied | By: <u>/s/ Erik Hanson</u> Date: <u>2/10/2021</u> |
| RRC Use Only ▶ Remarks/Modifications: | | | |
| | | | |
| | | | |

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 02/09/2021 .
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: Erik Hanson

DATE: 02/10/2021

JEFFERY MORGAN
DISTRICT DIRECTOR

Tracking No.: 257853

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

When to File Form L-1:

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

| | | |
|---|-------------------------------|--------------------------------|
| Operator Name: SHELL WESTERN E&P | District No. 08 | Completion Date: 08/26/2021 |
| Field Name TWO GEORGES (BONE SPRING) | Drilling Permit No. 865686 | |
| Lease Name UNIVERSITY 19 TG UNIT | Lease/ID No. 38570 | Well No. 1008H |
| County LOVING | API No. 42- 301-35216 | |

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&P

Name (print)

Regulatory Specialist

Title

(832) 337-0258

Phone

11/02/2021

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 1008H
API/UWID: 42301352160000
County: Loving **Field:** Permian
Permit #: 865686
State: Texas **Country:** USA

Longitude: 103° 23' 32.36147 W
Latitude: 31° 42' 5.22982 N

Personnel

Rig Name: Nabors X05
Job Number: 67704
Ground Level: 2807.60 ft
Kelly Bushing: 2839.60 ft
Drill Floor: 32.00 ft
Permanent Datum: Mean Sea Level
Drilling Measured From: Kelly Bushing
Spud Date: April 14, 2002
Bottom Hole Temp: 211.6 °F
Log Start Depth: 0.00 ft
Log End Depth: 22920.00 ft

Company Representative
Heath McAfee

Geologist
Daniel Elizondo

Directional Driller(s)
Bryan Stewart
Jared Pounds

MWD Operator(s)
Eric Neel
Chad Cooper

Reference Data

North Reference: Grid North
Magnetic Declination: 6.74
Grid Convergence: -1.58
Total Mag Correction: 8.32

Comments:

Main Leg

PHOENIX TECHNOLOGY SERVICES LP ("PHOENIX") DOES NOT MAKE AND EXPRESSLY DISCLAIMS ALL WARRANTIES, REPRESENTATIONS AND CONDITIONS, WITH RESPECT TO THE INFORMATION CONTAINED IN THIS DOCUMENT, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED OR ARISING FROM CONTRACT OR STATUTE INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, ACCURACY AND FITNESS FOR A PARTICULAR PURPOSE. ANYONE USING THIS INFORMATION DOES SO AT THEIR OWN RISK AND ASSUMES AND AGREES THAT PHOENIX SHALL NOT BE LIABLE FOR ANY ERROR, OMISSION, DEFECT, DEFICIENCY, OR NONCONFORMITY IN THE INFORMATION AND WITHOUT LIMITING THE FOREGOING, PHOENIX DOES NOT WARRANT THAT THE INFORMATION OR THE USE THEREOF WILL BE FREE OF ALL ERRORS OR THAT IT DOES NOT INFRINGE ANY THIRD PARTY RIGHTS. ANYONE USING THE INFORMATION AGREES TO INDEMNIFY AND HOLD PHOENIX HARMLESS FROM ALL CLAIMS, ACTIONS, COSTS (INCLUDING LEGAL COSTS) ON A SUI GENERIS AND THE OWN CLIENT BASIS) AND LIABILITIES ARISING FROM OR IN CONNECTION WITH THE USE OF THE INFORMATION.

67704

Operational Run Summary

| | Run 1 | Run 2 | Run 3 | Run 4 |
|-----------------------------|-----------|-----------|-----------|-----------|
| Run Start Depth (ft) | 0.00 | 5039.54 | 11164.23 | 12011.70 |
| Run End Depth (ft) | 5039.54 | 11164.23 | 12011.70 | 22904.07 |
| Run Start Date | 4/14/2021 | 5/17/2021 | 5/20/2021 | 5/22/2021 |
| Run Start Time | 6:44 PM | 11:28 AM | 10:49 PM | 4:14 PM |
| Run End Date | 4/16/2021 | 5/20/2021 | 5/22/2021 | 5/27/2021 |
| Run End Time | 2:19 PM | 6:16 AM | 3:38 PM | 2:48 PM |

Boutwell, Michael SEPCO-UPU/S/R

From: Boutwell, Michael SEPCO-UPU/S/R
Sent: Wednesday, August 12, 2020 2:07 PM
To: Boutwell, Michael SEPCO-UPU/S/R
Subject: FW: Shell Wetern E&P University 19 Unit P-6

From: Sandy Buch <sbuch@msmtx.com>
Sent: Wednesday, August 12, 2020 12:25 PM
To: Mullen, George S SEPCO-UPU/S/R <George.Mullen@shell.com>
Cc: Krystal Schmidt <KSchmidt@msmtx.com>
Subject: FW: Shell Wetern E&P University 19 Unit P-6

Think Secure. This email is from an external source.

George,
I found this email relating to our work with the RRC and wanted you to have it for our call.
Sandy

From: Colin Lineberry <Colin.Lineberry@rrc.texas.gov>
Sent: Tuesday, November 1, 2016 10:11 AM
To: Sandy Buch <sbuch@msmtx.com>; Joe Stasulli <Joe.Stasulli@rrc.texas.gov>
Cc: Brian Sullivan <bsullivan@msmtx.com>; Lois White <lwhite@msmtx.com>; Lisa Eddins <Lisa.Eddins@rrc.texas.gov>
Subject: RE: Shell Wetern E&P University 19 Unit P-6

Hi Sandy,

Joe and I have discussed this two or three times and we agree that, based on the facts shown on the draft P-6 you have provided and the facts stated in your proposal, that your proposed procedure addresses regulatory concerns and we do not see any reason the transfers and future completions you have outlined could not be processed and approved. Of particular significance to that conclusion is the fact that you propose to place all existing and future Shell wells, completed above the base of the designated interval for the Two Georges (Bone Spring) Field in that field and all existing and future wells completed below the base of the designated interval for the Two Georges (Bone Spring) Field in the Phantom (Wolfcamp) Field. Also of prime importance is the designation of the pooled units by P-6 to exclude tracts 6 and 12 from the shallower designated unit and only include acreage that Shell has the right to develop and in which all interests are identical.

I hope this is helpful and gives Shell the assurance it seeks.

Colin

From: Sandy Buch [<mailto:sbuch@msmtx.com>]
Sent: Monday, October 31, 2016 2:15 PM
To: Colin Lineberry; Joe Stasulli
Cc: Brian Sullivan; Lois White
Subject: Shell Wetern E&P University 19 Unit P-6

Hi Colin and Joe,

I am checking to see if you have any comments on the proposal I sent you to combine RRC leases and assign completions for a University Lands pooled unit in Loving and Ward Counties. As you may recall, Shell is anxious to begin permitting wells so we would like to get the procedure OK'd so we can file the P-6 and begin permitting.

Sandy

Sandra Bolz Buch

sbuch@msmtx.com

McElroy, Sullivan Miller, Weber & Olmstead, L.L.P.

1201 Spyglass Drive, Suite 200

Austin, Texas 78746

512/327-8111 phone

512/327-6566 fax

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

| | | |
|--|--|---|
| 1. Field Name(s) Two Georges (Bone Spring) | 2. Lease/ID Number <i>(if assigned)</i> | 3. RRC District Number 08 |
| 4. Operator Name Shell Western E&P | 5. Operator P-5 Number 774719 | 6. Well Number 1008H |
| 7. Pooled Unit Name University 19 TG Unit | 8. API Number | 9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report |
| 10. County Loving & Ward | 11. Total acres in pooled unit 12830.08 | |

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

| TRACT/PLAT IDENTIFIER | TRACT NAME | ACRES IN TRACT <i>(See inst. #7 below)</i> | INDICATE UNDIVIDED INTERESTS | |
|-----------------------|------------------|---|------------------------------|--------------------------|
| | | | UNLEASED | NON-POOLED |
| 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.

| | |
|------------------------------|------------------|
| <i>Michael Boutwell</i> | Michael Boutwell |
| Signature | Print Name |
| Regulatory Specialist | 10/21/2020 |
| m.boutwell@shell.com | (832) 337-0258 |
| Title | Date |
| E-mail <i>(if available)</i> | Phone |

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

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

Clear Form

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

| | | |
|--|---|---|
| 1. Field Name(s) Two Georges (Bone Spring) | 2. Lease/ID Number <i>(if assigned)</i> | 3. RRC District Number 08 |
| 4. Operator Name Shell Western E&P | 5. Operator P-5 Number 774719 | 6. Well Number 1008H |
| 7. Pooled Unit Name University 19 TG Unit | 8. API Number | 9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report |
| 10. County Loving & Ward | 11. Total acres in pooled unit 12830.08 | |

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

| TRACT/PLAT IDENTIFIER | TRACT NAME | ACRES IN TRACT <i>(See inst. #7 below)</i> | INDICATE UNDIVIDED INTERESTS | |
|-----------------------|------------------|---|------------------------------|--------------------------|
| | | | UNLEASED | NON-POOLED |
| 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.

| | |
|--|--|
| <p style="font-family: cursive; font-size: 1.2em; margin: 0;"><i>Michael Boutwell</i></p> <p style="margin: 0;">Signature</p> <p style="margin: 0;">Regulatory Specialist</p> <p style="margin: 0;">Title</p> | <p style="margin: 0;">Michael Boutwell</p> <p style="margin: 0;">Print Name</p> <p style="margin: 0;">10/21/2020</p> <p style="margin: 0;">Date</p> <p style="margin: 0;">m.boutwell@shell.com</p> <p style="margin: 0;">E-mail <i>(if available)</i></p> <p style="margin: 0;">(832) 337-0258</p> <p style="margin: 0;">Phone</p> |
|--|--|

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

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

Clear Form

CERTIFICATE OF POOLING AUTHORITY

P-12

Revised 05/2001

| | | |
|--|---|---|
| 1. Field Name(s) Two Georges (Bone Spring) | 2. Lease/ID Number <i>(if assigned)</i> | 3. RRC District Number 08 |
| 4. Operator Name Shell Western E&P | 5. Operator P-5 Number 774719 | 6. Well Number 1008H |
| 7. Pooled Unit Name University 19 TG Unit | 8. API Number | 9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report |
| 10. County Loving & Ward | 11. Total acres in pooled unit 12830.08 | |

DESCRIPTION OF INDIVIDUAL TRACTS CONTAINED WITHIN THE POOLED UNIT

| TRACT/PLAT IDENTIFIER | TRACT NAME | ACRES IN TRACT <i>(See inst. #7 below)</i> | INDICATE UNDIVIDED INTERESTS | |
|-----------------------|------------------|---|------------------------------|--------------------------|
| | | | UNLEASED | NON-POOLED |
| 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.

| | |
|------------------------------|------------------|
| <i>Michael Boutwell</i> | Michael Boutwell |
| Signature | Print Name |
| Regulatory Specialist | 10/21/2020 |
| m.boutwell@shell.com | (832) 337-0258 |
| Title | Date |
| E-mail <i>(if available)</i> | Phone |

INSTRUCTIONS — Reference: Statewide Rules 31, 38 and 40

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

Clear Form



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.: | 42-301-35216 |
| Well No.: | 1008H | Drilling Permit No.: | 865686 |
| 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 |
| Purpose of Filing: <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> 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 Exempt. (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 | |
| DP# 865686 | 1008H | Horiz. | University 19 TG Unit | 301-35216 | 704.00 | N | |
| 38570 | 1201H | Horiz. | University 19 TG Unit | 301-31255 | 704.00 | N | |
| DP# 867199 | 1202H | Horiz. | University 19 TG Unit | 301-35313 | 704.00 | N | |
| DP# 867200 | 1204H | Horiz. | University 19 TG Unit | 301-35314 | 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 | |
| DP# 865689 | 1308H | Horiz. | University 19 TG Unit | 301-35218 | 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 | |

| | | | |
|--|--|-----------------------------|----------|
| A. Total Assigned Horiz. Acreage = | | C. Total Assigned Acreage = | 9730.080 |
| Total Remaining Horiz. Acreage = | | Total Remaining Acreage = | 3100.000 |
| B. Total Assigned Vert./Dir. Acreage = | | | |
| Total Remaining Vert./Dir. Acreage = | | | |

| 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

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

150 N. Dairy Ashford
Address City, State, Zip Code

832-337-0258
Tel: Area Code Number

11/02/21
Date: mo. day yr.

UNIVERSITY 19 TG UNIT

12830.08 ACRES (MEASURED)

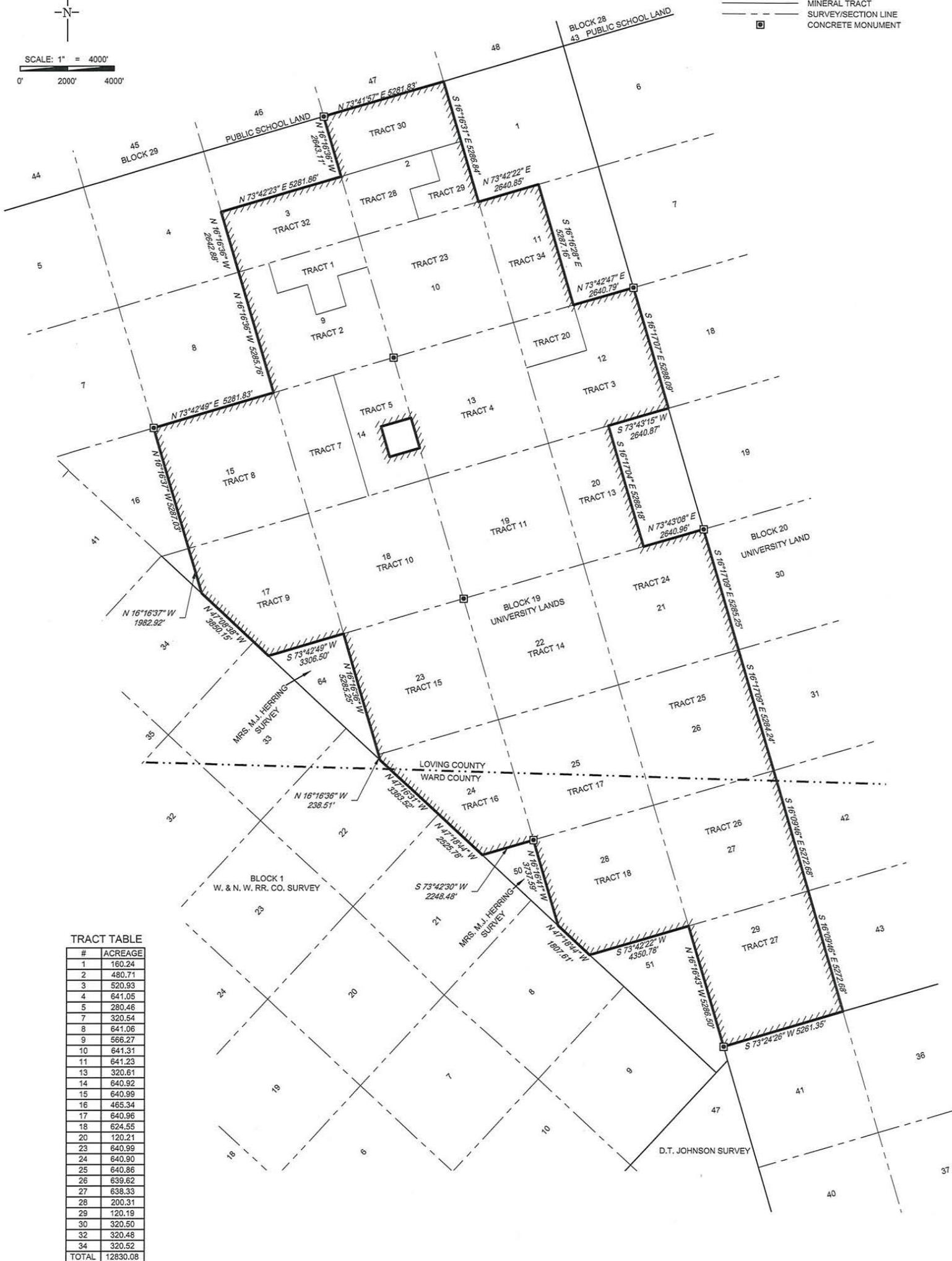
SECTIONS 2, 9, 10, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28 & 29,
S/2 OF SECTION 3, E/2 OF SECTION 11, W/2 OF SECTION 20
SAVE & EXCEPT NE/4 SE/4 OF SECTION 14
BLOCK 19, UNIVERSITY LAND
LOVING & WARD COUNTIES, TEXAS

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: 04 November 2020**GAU Number:** 289601

Attention: SHELL WESTERN E&P
 PO BOX 576
 HOUSTON, TX 77001

API Number: 30135217**County:** LOVING**Lease Name:** UNIVERSITY 19 TG UNIT**Operator No.:** 774719**Lease Number:****Well Number:** 1309H**Total Vertical:** 11900**Latitude:** 31.701531**Longitude:** -103.392353**Datum:** NAD27**Purpose:** New Production Well**Location:** Survey-UL; Abstract-U13; Block-19; Section-13

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 225 feet and the Rustler, which is estimated to occur from 600 to 1000 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 11/03/2020. 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.

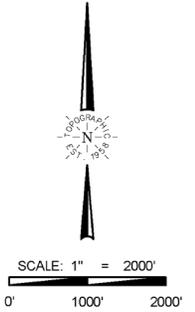
Groundwater Advisory Unit, Oil and Gas Division

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

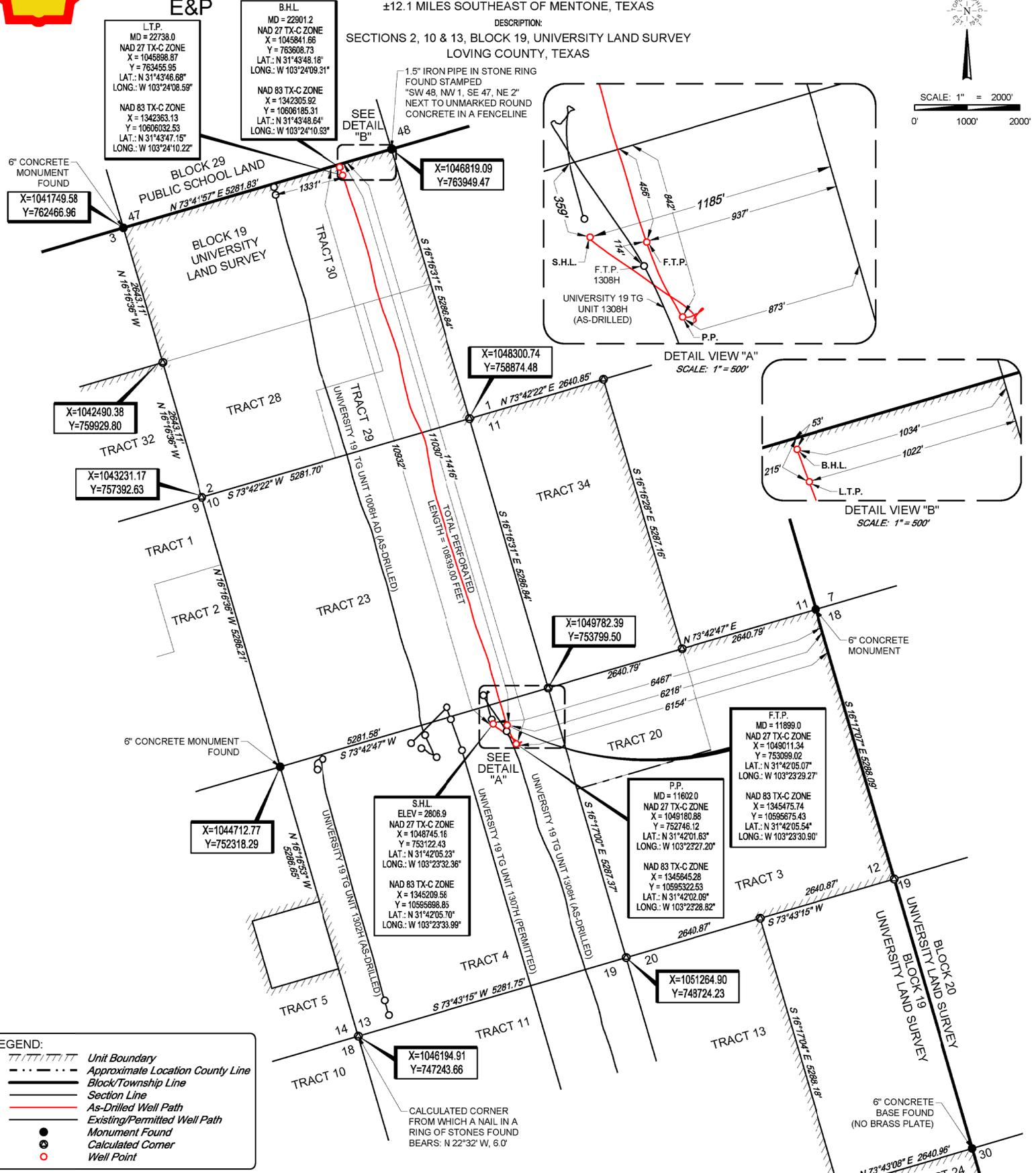


SHELL WESTERN E&P

AS-DRILLED LOCATION
LEASE NAME & WELL NO.:
UNIVERSITY 19 TG UNIT 1008H
UNIT/LEASE ACREAGE:
12830.08 ACRES (MEASURED)
NEAREST TOWN IN COUNTY:
±12.1 MILES SOUTHEAST OF MENTONE, TEXAS



DESCRIPTION:
SECTIONS 2, 10 & 13, BLOCK 19, UNIVERSITY LAND SURVEY
LOVING COUNTY, TEXAS



LEGEND:

- Unit Boundary
- Approximate Location County Line
- Block/Township Line
- Section Line
- As-Drilled Well Path
- Existing/Permitted Well Path
- Monument Found
- Calculated Corner
- Well Point

TIES TABLE

| POINT | UNIT | SURVEY/SECTION |
|--------|-------------|------------------------|
| S.H.L. | 6457' FNEL | 1185' FNEL & 359' FNWL |
| | 10932' FNWL | |
| P.P. | 6154' FNEL | 873' FNEL & 842' FNWL |
| | 11416' FNWL | |
| F.T.P. | 6218' FNEL | 937' FNEL & 458' FNWL |
| | 11030' FNWL | |
| L.T.P. | 1022' FNEL | 1022' FNEL & 215' FNWL |
| | 215' FNWL | |
| B.H.L. | 1034' FNEL | 1034' FNEL & 53' FNWL |
| | 53' FNWL | |

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



John R. Anderson 11/17/2021
John R. Anderson, R.P.L.S. No. 6442

| UL-19-13-P1 UNIVERSITY 19 TG UNIT 1008H | REVISION: | |
|---|-----------|------------|
| | INT | DATE |
| | O.M. | 11/17/2021 |

DATE: 11/03/2021
FILE: AD UNIVERSITY 19 TG UL-19-13-P1 TG UNIT 1008H REV1
DRAWN BY: A.C.L.
SHEET: 1 OF 1

NOTES:

- ORIGINAL DOCUMENT SIZE: 11" X 17"
- 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.
- 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.
- ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), U.S. SURVEY FEET.
- ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY SHELL WESTERN E&P OR ITS SUBSIDIARIES & AFFILIATES.

NOTES CONT'D:

- THE AS-DRILLED SURFACE LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF JUNE 23, 2021.
- THE SUBSURFACE WELL PATH DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY SHELL WESTERN E&P OR ITS SUBSIDIARIES & AFFILIATES.
- S.H.L. = SURFACE HOLE LOCATION
- P.P. = POINT OF PENETRATION
- F.T.P. = FIRST TAKE POINT
- L.T.P. = LAST TAKE POINT
- B.H.L. = BOTTOM HOLE LOCATION