



RAILROAD COMMISSION OF TEXAS

Form W-2

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

Status: Approved
Date: 04/03/2018
Tracking No.: 185163

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: GREYSTONE PETROLEUM, LLC Operator No.: 333762
Operator Address: 5555 E 71ST ST STE 8350 TULSA, OK 74136-0000

WELL INFORMATION

API No.: 42-003-47488 County: ANDREWS
Well No.: 2H RRC District No.: 08
Lease Name: UNIVERSITY LANDS 31 Field Name: EMMA (DEVONIAN)
RRC Lease No.: 49619 Field No.: 28899166
Location: Section: 42, Block: 9, Survey: UL, Abstract: U278

Latitude: Longitude:
This well is located 13.7 miles in a SW
direction from ANDREWS,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: New Well
Well Type: Producing Completion or Recompletion Date: 11/09/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	02/10/2017	822882
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 05/10/2017	Date of first production after rig released: 11/09/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 05/10/2017	Date plug back, deepening, recompletion, or drilling operation ended: 06/13/2017
Number of producing wells on this lease in this field (reservoir) including this well: 1	Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 241.70	Elevation (ft.): 3150 GL
Total depth TVD (ft.): 10541	Total depth MD (ft.): 18086
Plug back depth TVD (ft.): 10541	Plug back depth MD (ft.): 17991
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours): 73.0
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached? Yes
Type(s) of electric or other log(s) run: Gamma Ray (MWD)	Multiple completion? No
Electric Log Other Description:	
Location of well, relative to nearest lease boundaries	Off Lease : Yes
of lease on which this well is located: 113.0 Feet from the North Line and 376.0 Feet from the West Line of the UNIVERSITY LANDS 31 Lease.	

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

Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
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PACKET: N/A

W2:	N/A		
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:			
GAU Groundwater Protection Determination	Depth (ft.):	1500.0	Date: 02/06/2017
SWR 13 Exception	Depth (ft.):		

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION			
Date of test: 11/18/2017		Production method: Gas Lift	
Number of hours tested: 24		Choke size: OPEN	
Was swab used during this test? No		Oil produced prior to test: 1082.00	
PRODUCTION DURING TEST PERIOD:			
Oil (BBLS): 229.00		Gas (MCF): 475	
Gas - Oil Ratio: 2074		Flowing Tubing Pressure: 92.00	
Water (BBLS): 682			
CALCULATED 24-HOUR RATE			
Oil (BBLS): 229.0		Gas (MCF): 475	
Oil Gravity - API - 60.: 46.0		Casing Pressure: 972.00	
Water (BBLS): 682			

CASING RECORD											
Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	1642			C	1560	2666.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5794			H	700	1400.0	3487	Calculation
3	Intermediate	9 5/8	12 1/4	5794	3487		C	1000	2125.0	0	Circulated to Surface
4	Intermediate	7	8 3/4	10543			H	660	1535.0	9077	Calculation
5	Intermediate	7	8 3/4	10543	9077		C	900	1978.0	0	Circulated to Surface

LINER RECORD									
Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	9842	18077	ULTRA	500	860.0	9842	Circulated to Surface

TUBING RECORD			
Row	Size (in.)	Depth	Size (ft.)
1	3 1/2	9610	
			Packer Depth (ft.)/Type
			/

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 11890	17981.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.				
Was hydraulic fracturing treatment performed?		Yes		
Is well equipped with a downhole actuation sleeve?		No		
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:		7250		
Actual maximum pressure (PSIG) during hydraulic fracturing:		7960		
Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)?		Yes		
Row	Type of Operation	Amount and Kind of Material Used		Depth Interval (ft.)
1	Fracture	3,196,960# 30/50 PROP + 667,080# 20/40 PROP IN 15# XL GEL		11890 17981

FORMATION RECORD					
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
YATES	Yes	2792.0	2792.0	Yes	
SEVEN RIVERS	No			No	NOT PRESENT
QUEEN	No			No	NOT PRESENT
GRAYBURG	Yes	3992.0	3992.0	Yes	
SAN ANDRES - CO2 FLOOD, HIGH FLOWS, H2S, CORROSIVE	Yes	4257.0	4257.0	Yes	
HOLT	No			No	NOT PRESENT
GLORIETA	Yes	5359.0	5359.0	Yes	
TUBB	Yes	6500.0	6500.0	Yes	
CLEARFORK	Yes	5419.0	5419.0	Yes	
PERMIAN DETRITAL	No			No	NOT PRESENT
LEON	No			No	NOT PRESENT
WICHITA ALBANY	No			No	NOT PRESENT
SPRABERRY	No			No	NOT PRESENT
DEAN	No			No	NOT PRESENT
WOLFCAMP	Yes	8202.0	8202.0	Yes	
CANYON	Yes	8859.0	8859.0	Yes	
PENNSYLVANIAN	No			No	NOT PRESENT
MCKEE	No			No	NOT PRESENT
STRAWN	Yes	9025.0	9025.0	Yes	
FUSSELMAN	No			No	WELL IS NOT DEEP
DEVONIAN	Yes	10270.0	10270.0	Yes	
SILURIAN	No			No	WELL IS NOT DEEP
ELLENBURGER	No			No	WELL IS NOT DEEP
Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?					Yes
Is the completion being downhole commingled (SWR 10)?					No

REMARKS

RRC REMARKS	
PUBLIC COMMENTS: [RRC Staff 2018-03-15 16:24:30.566] EDL=6091 feet, max acres=260	
CASING RECORD : KOP @ 9,827'	
TUBING RECORD:	
PRODUCING/INJECTION/DISPOSAL INTERVAL :	
ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :	
POTENTIAL TEST DATA:	

OPERATOR'S CERTIFICATION	
Printed Name: Fred Laeger	Title: Completions Manager
Telephone No.: (918) 520-8148	Date Certified: 03/28/2018

**RAILROAD COMMISSION OF TEXAS**

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

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

OPERATOR INFORMATION	
Operator Name: Greystone Petroleum	Operator P-S No.: 333762
Cementor Name: Trans Tex Cementing Services, LLC	Cementor P-S No.: 864412

WELL INFORMATION	
District No.: 8	County: Andrews
Well No.: 2H	API No.: 42-003-47488
Lease Name: University Lands 31	Drilling Permit No.: 822882
Field Name: Emma (Devonian)	Lease No.: 28899166
	Field No.: 28899166

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.): 17.5	Depth of drilled hole (ft.): 1653'
Size of casing in O.D. (in.): 13-3/8"	Est. % wash-out or hole enlargement: 50% EST
Casing weight (lbs/ft) and grade: 54.5, J-55	No. of centralizers used: 8
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 1642
	Top of liner (ft.):
	Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): Surface
	Cementing date: 5/12/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1160	Diverse-C	See Remarks	2134	1536
2	400	Cl. "C"	1% CC 1.5% CFO	532	266
3					
Total	1560			2666	1802

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.):
Size of casing in O.D. (in.):	Est. % wash-out or hole enlargement:
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
Upper: Lower:	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.):
Size of casing in O.D. (in.):	Est. % wash-out or hole enlargement:
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
Upper: Lower:	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

Diverse "C" 6%Gel, 2%Cacl, 2#Pheno, 2#Gil, 1/4#CF, 1.5%CAS-1, .2%CFL-1Circ 200bbbs 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.

Tony Beltran

Trans Tex

Name and title of cementer's representative 519 Bason St	Cementing Company Midland, Texas	Signature 432-694-4900	Date: mo. day yr. 5/13/2017
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.

Mike Langford

Drilling Manager

Typed or printed name of operator's representative 2009 Brookhaven, Abilene, Texas 79605	Title 903.238.4092	Signature 3/5/2018
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.texas.gov/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.



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Form W-15

Rev. 08/2014

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

OPERATOR INFORMATION	
Operator Name: Greystone Petroleum	Operator P-5 No.: 333762
Cementer Name: Trans Tex Cementing Services, LLC	Cementer P-5 No.: 864412

WELL INFORMATION		
District No.: 8	County: Andrews	
Well No.: 2H	API No.: 42-003-47488	Drilling Permit No.: 822882
Lease Name: University Lands 31	Lease No.:	
Field Name: Emma (Devonian)	Field No.: 28899166	

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.): 12.25	Depth of drilled hole (ft.): 5823'	Est. % wash-out or hole enlargement: 30%, EST
Size of casing in O.D. (in.): 9-5/8"	Casing weight (lbs/ft) and grade: 40, L-80	No. of centralizers used: 8
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 5794	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): Surface	Cementing date: 5/17/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	450	Multi H	10% Gel, 3% salt	1089	2434
2	250	Multi H	2% Gel, 1.3% salt	310	217
3					
Total	700			1400	2651

II. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 12.25	Depth of drilled hole (ft.): DV@3487'	Est. % wash-out or hole enlargement: 30%
Size of casing in O.D. (in.): 9.625	Casing weight (lbs/ft) and grade: 40, L-80	No. of centralizers used: 8
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 checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.): 5794	
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): surface	Cementing date: 5/17/2017

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	750	Multi C	6% Gel, 3% salt	1815	4056
2	250	Multi C	2% gel, 3% salt	310	990
3					
Total	1000			2125	9102

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

DV tool at 3487', 100 bbls cement to surface on stg1, 10 bbls cement to surface on stage 2

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Tony Beltran

Trans Tex

Name and title of cementer's representative

519 Bason St

Cementing Company

Midland, Texas

Signature

432-694-4900

5/18/2017

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.

Mike Langford

Drilling Manager

Typed or printed name of operator's representative

Title

2009 Brookhaven, Abilene, Texas 79605

Signature

903.238.4092

3/5/2018

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

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- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

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CEMENTING REPORT

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

OPERATOR INFORMATION	
Operator Name: Greystone Petroleum	Operator P-5 No.: 333762
Cementer Name: Trans Tex Cementing Services, LLC	Cementer P-5 No.: 864412

WELL INFORMATION		
District No.: 8	County: Andrews	
Well No.: 2H	API No.: 42-003-47488	Drilling Permit No.: 822882
Lease Name: University Lands 31	Lease No.:	
Field Name: Emma (Devonian)	Field No.: 28899166	

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.): 8.5	Depth of drilled hole (ft.): 10564'	Est. % wash-out or hole enlargement: 30%, EST
Size of casing in O.D. (in.): 7"	Casing weight (lbs/ft) and grade: 26#, HCL-80	No. of centralizers used: 8
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 10543'	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): Surface	Cementing date: 5/25/17

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	160	Ultra Flush	12% Gel, 3% salt	561	4424
2	300	Multi H	6% Gel, 1.3% salt	726	5721
3	200	Multi H	2% gel, 3% salt	248	1954
Total	660			1535	12099

II. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input checked="" type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.): 8.5	Depth of drilled hole (ft.): DV@9077'	Est. % wash-out or hole enlargement: 30%
Size of casing in O.D. (in.): 9.625	Casing weight (lbs/ft) and grade: 40, L-80	No. of centralizers used: 8
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 checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.): 10522'	
Hrs. waiting on cement before drill-out: 24	Calculated top of cement (ft.): surface	Cementing date: 5/25/2017

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	700	Multi C	10% Gel 3% salt	1694	13348
2	200	Multi C	2% gel, 3% salt	284	2238
3					
Total	900			1978	15586

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

DV tool at 9077', 100 bbls cement spacer to surface on stg1, 110 bbls cement to surface on stage 2

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.

Tony Beltran

Trans Tex

Name and title of cementer's representative	Cementing Company	Signature
519 Bason St	Midland, Texas	432-694-4900
Address	City, State, Zip Code	Tel: Area Code Number
		Date: mo. day yr.

5/26/2017

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.

Mike Langford

Drilling Manager

Typed or printed name of operator's representative	Title	Signature
2009 Brookhaven, Abilene, Texas 79605		903.238.4092
Address	City, State, Zip Code	Tel: Area Code Number
		Date: mo. day yr.

3/5/2018

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.texas.gov/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=&tl=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=&tl=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.



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: Greystone Petroleum
Operator P-5 No.: 333762
Cementer Name: Trans Tex Cementing Services, LLC
Cementer P-5 No.: 864412

WELL INFORMATION

District No.: 8
County: Andrews
Well No.: 2H
API No.: 42-003-47488
Lease Name: University Lands 31
Lease No.:
Field Name: Emma (Devonian)
Field No.: 28899166
Drilling Permit No.: 822882

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☐ Surface ☐ Intermediate ☒ Liner ☐ Production
Drilled hole size (in.): 6.125
Depth of drilled hole (ft.): 18086'
Est. % wash-out or hole enlargement: 30%, EST
Size of casing in O.D. (in.): 4.5"
Casing weight (lbs/ft) and grade: 11.6#, P-110
No. of centralizers used: 0
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.): 18077'
Top of liner (ft.): 9842'
Setting depth liner (ft.): 18077'
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.): 9500'
Cementing date: 6/11/17

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	500	Ultraw/3% salt	7% CF 110% CFF	860	9132
2					
3					
Total	500			860	9132

II. CASING CEMENTING DATA

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

SLURRY

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.)
Upper: Lower:
Tapered string depth of drilled hole (ft.)
Upper: Lower:
Tapered string size of casing in O.D. (in.)
Upper: Lower:
Tapered string casing weight (lbs/ft) and grade
Upper: Lower:
Tapered string no. of centralizers used
Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO
Setting depth tool (ft.):
Hrs. waiting on cement before drill-out:
Calculated top of cement (ft.):
Cementing date:

SLURRY

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
Set per at 9842 w/45K, PU circulated 1 bbl cement off top of liner, tested liner to 2500psi

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.

Tony Beltran

Trans Tex

Name and title of cementer's representative 519 Bason St	Cementing Company Midland, Texas	Signature 432-694-4900	Date: 5/26/2017
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.

Mike Langford

Drilling Manager

Typed or printed name of operator's representative 2009 Brookhaven, Abilene, Texas 79605	Title	Signature 903.238.4092	Date: 3/5/2018
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

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- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

Tracking No.: 185163

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: GREYSTONE PETROLEUM, LLC	District No. 08	Completion Date: 11/09/2017
Field Name EMMA (DEVONIAN)	Drilling Permit No. 822882	
Lease Name UNIVERSITY LANDS 31	Lease/ID No. 49619	Well No. 2H
County ANDREWS	API No. 42- 003-47488	

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). _____

Fred Laeger

Signature

GREYSTONE PETROLEUM, LLC

Name (print)

Completions Manager

Title

(918) 520-8148

Phone

03/22/2018

Date

-FOR RAILROAD COMMISSION USE ONLY-



University Lands 31-2H

MD
1":100'

Company: Greystone Petroleum, LLC

Well Name: University Lands 31-2H

API: 42-003-47488

County/Parish: Andrews

State: Texas

Country: USA

Job number: GT170035

Field: Emma

Rig Id: Trinidad 121

Survey Company: Gordon Technologies LLC

MWD Field Hand Kevin Croasdell

MWD Field Hand Charlie Jones

MWD Field Hand Aaron Hargrave

MWD Field Hand Randy Abbott

Log measurements: Gamma / ROP / Temperature

Depth measured from: RKB ft

Maximum temperature: 183

Depth

Start: 1653 ft

End: 18086 ft

Date

05-12-17

06-09-17

Casing Depth Size

Surface: 1642 ft 13 3/8"

Intermediate: 5838 ft 9 5/8"

Intermediate2: 10543 ft 6 1/8"

Mud Type: OBM

Density: 8.8

Viscosity: 65

Rm:

Rmf:

Rmc:

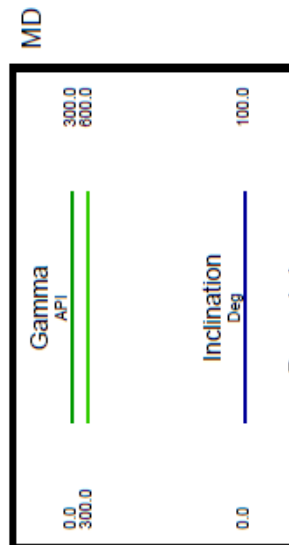
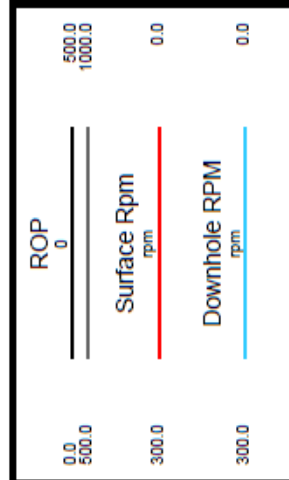
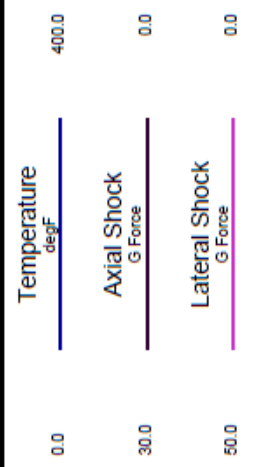
Elevations

KB: 3173 ft

GL: 3148 ft

DF: 3173 ft

Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	12 1/4"	47.39 ft	57.10 ft	1653 ft	5850 ft	04:15 5-12-17	12:30 5-17-17
2	8 1/2"	46.79 ft	56.50 ft	5850 ft	9820 ft	13:30 5-18-17	17:30 5-21-17
3	8 1/2"	36.71 ft	46.42 ft	9820 ft	10564 ft	19:00 5-21-17	07:30 5-24-17
4	6 1/8"	39.19 ft	48.90 ft	10564 ft	10683 ft	10:45 5-26-17	22:30 5-27-17
5	6 1/8"	40.19 ft	49.90 ft	10683 ft	11435 ft	23:50 5-27-17	15:30 5-29-17
6	6 1/8"	40.31 ft	50.02 ft	11435 ft	16016 ft	16:40 5-29-17	23:00 6-4-17
7	6 1/8"	34.47 ft	44.18 ft	16016 ft	18086 ft	7:45 6-5-17	9:00 6-9-17
8							
9							
10							



Gordon Technologies LLC uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

**RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION
CERTIFICATE OF COMPLIANCE STATEWIDE RULE 36**

FORM H-9
12/12/77

FILE WITH
DISTRICT OFFICE
IN TRIPLICATE

1. Operator				2. Operator Number (See Instruction 13)				3. RRC Dist.							
4. Street or P. O. Box No.				5. City				6. State				7. Zip Code			
8. Name of Lease, Facility or Operation				9. Field or Area Name				10. County							
11. General Operation Type - Circle One:								Other Explanation							
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input checked="" type="radio"/> A - Oil Field Production</p> <p><input type="radio"/> C - Pipeline or Gathering Sys.</p> <p><input type="radio"/> E - Drilling or Workover</p> <p><input type="radio"/> G - Combination (explain)</p> </div> <div style="width: 45%;"> <p><input type="radio"/> B - Gas Field Production</p> <p><input type="radio"/> D - Gasoline Plant</p> <p><input type="radio"/> F - Sweetening Unit</p> <p><input type="radio"/> H - Other (explain)</p> </div> </div>															
12. RRC ID# of Operation(s) to be Covered by This Certificate				Type ID Code (See Instruction 12)		Indicate if Filing for Storage Facility Only YES NO		13. Hydrogen Sulfide Concentration PPM				14. Maximum Escape Volume MCF/Day			
								15. 100 PPM Radius of Exposure (ROE) Ft.				16. 500 PPM Radius of Exposure (ROE) Ft.			
								17. Operation is Existing New <input type="checkbox"/> <input type="checkbox"/>				18. Modification Resulting in Certificate Change Yes No <input type="checkbox"/> <input type="checkbox"/>			
								19. Workover or Drilling Well with 100 PPM ROE Greater than 3000 feet on Rule 36 Certified Well/Lease				Yes No <input type="checkbox"/> <input type="checkbox"/>			
								20. Previous Certificate Number if Available (For Amended Certificates)							
								21. The 100 PPM ROE includes any part of a public area except a public road				Yes No <input type="checkbox"/> <input type="checkbox"/>			
								22. The 500 PPM ROE includes any part of a public road				Yes No <input type="checkbox"/> <input type="checkbox"/>			
								23. Injection of fluid containing Hydrogen Sulfide (See Instruction 14)				Yes No <input type="checkbox"/> <input type="checkbox"/>			
								24. Date (or Depth) of Compliance with all applicable provisions of Rule 36							
												Mo / Day / 19 Year			
								Depth of Compliance for Drilling Operation				Ft. from Surface			
25. Contingency Plan Location of Plan (See Instruction 15)								Has been prepared Yes No <input type="checkbox"/> <input type="checkbox"/>							
26. Location of data used to prepare this certificate (See Instruction 15)															
CERTIFICATE															
I declare under penalties prescribed in Section 91.143, Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision, and that I am qualified to make this certification by virtue of my training and experience, and by my analysis of the operation being certified, or by the analysis of qualified person working under my supervision, and that the data and facts stated therein are true, correct, and complete, to the best of my knowledge.															
<i>Fred Laeger</i>															
Representative of Company				Title				Phone No.				Date			

RAILROAD COMMISSION USE ONLY

This operation and the equipment used therein is approved on the basis of the above certification and is subject to further Commission audit for compliance with the required provisions of Statewide Rule 36. This approval may be cancelled if investigation determines that the operation does not comply with the provisions of Statewide Rule 36.

APPROVED BY: _____

DATE: _____

REMARKS:

CERTIFICATION NUMBER: _____

1. Field name exactly as shown on proration schedule EMMA (DEVONIAN)			2. Lease name as shown on proration schedule UNIVERSITY LANDS 31		
3. Current operator name exactly as shown on P-5 Organization Report GREYSTONE PETROLEUM, LLC			4. Operator P-5 no. 333762	5. Oil Lse/Gas ID no 49619	6. County ANDREWS
8. Operator address including city, state, and zip code 5555 E 71ST ST STE 8350 TULSA, OK 74136			7. RRC district 08		
9. Well no(s) <i>(see instruction E)</i> 2H			10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other <i>(see instruction A)</i>		
11. Effective Date 11/09/2017			12. Purpose of Filing. (Complete section a or b below.) <i>(See instructions B and G)</i> a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ --- OR --- b. New RRC Number for: <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well Due to: <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)		
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). <i>(See instruction G).</i>					
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left <i>(Attach an additional sheet in same format if more space is needed)</i>	Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X	X	DCP OPERATING COMPANY, LP(195959)	0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). <i>(See instruction G).</i>					
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First <i>(Attach an additional sheet in same format if more space is needed)</i>					Percent of Take
BRIDGER TRANSPORTATION, LLC(091157)					100.0
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>04/03/2018</u>					
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.					
Name of Previous Operator _____ Name (print) _____ Title _____			Signature _____ <input type="checkbox"/> Authorized Employee of previous operator <input type="checkbox"/> Authorized agent of previous operator <i>(see instruction G)</i> Date _____ Phone with area code _____		
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.					
GREYSTONE PETROLEUM, LLC Name (print) Completions Manager Title fred.laeger@greystone.bz E-mail Address (optional)			Fred Laeger Signature <input checked="" type="checkbox"/> Authorized Employee of current operator <input type="checkbox"/> Authorized agent of current operator <i>(see instruction G)</i> 03/28/2018 (918) 520-8148 Date Phone with area code		

CERTIFICATE OF POOLING AUTHORITY

Revised 05/2001

P-12

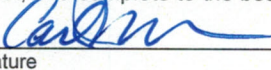
1. Field Name(s) Emma (Devonian)	2. Lease/ID Number (if assigned)	3. RRC District Number 8
4. Operator Name Greystone Petroleum, LLC	5. Operator P-5 Number 333762	6. Well Number 2H
7. Pooled Unit Name University Lands 31	8. API Number	9. Purpose of Filing <input checked="" type="checkbox"/> Drilling Permit (W-1) <input type="checkbox"/> Completion Report
10. County Andrews	11. Total acres in pooled unit 241.70	

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
1	University Lands	80.6	<input type="checkbox"/>	<input type="checkbox"/>
2	University Lands	80.6	<input type="checkbox"/>	<input type="checkbox"/>
3	University Lands	80.5	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

CERTIFICATION:

I declare under penalties prescribed pursuant to the Sec. 91.143, Texas Natural Resources Code, that I am authorized to make the foregoing statements and that the information provided by me or under my direction on this Certificate of Pooling Authority is true, correct, and complete to the best of my knowledge.



Carl F. Drews

Signature

Print Name

Vice President-Land

carl.drews@greystone.bz

02/01/2017

(713) 203-9880

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

RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 1

Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION

Operator Name:	Operator P-5 No.:
Operator Address:	

SECTION II. WELL INFORMATION

District No.:	County:	Purpose of Filing: <input type="checkbox"/> Drilling Permit Application (Form W-1) <input type="checkbox"/> Completion Report (Form G-1/W-2)
Well No.:	API No.:	
Total Lease Acres:	Drilling Permit No.:	
Lease Name:	Lease No.:	
Field Name:	Field No.:	

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 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

[illegible]

Total Well Count >		< A. Total Assigned Horiz. Acreage		< C. Total Assigned Acreage
		< Total Remaining Horiz. Acreage		< Total Remaining Acreage
		< B. Total Assigned Vert./Dir. Acreage		
		< Total Remaining Vert./Dir. Acreage		

SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

--

Attach Additional Pages As Needed. ☐ No additional pages ☐ Additional Pages: _____ (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.

Fred Lasger

Signature

Name and title (type or print)

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

Address	City,	State,	Zip Code	Tel: Area Code	Number	Date: mo. day yr.
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GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 06 February 2017**GAU Number:** 166977**Attention:** GREYSTONE PETROLEUM,
5555 E 71ST ST STE 8350
TULSA, OK 74136**Operator No.:** 333762**API Number:**
County: ANDREWS
Lease Name: University Lands 31
Lease Number:
Well Number: 2H
Total Vertical Depth: 18500
Latitude: 32.131281
Longitude: -102.619927
Datum: NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U278; Block-9; Section-42

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

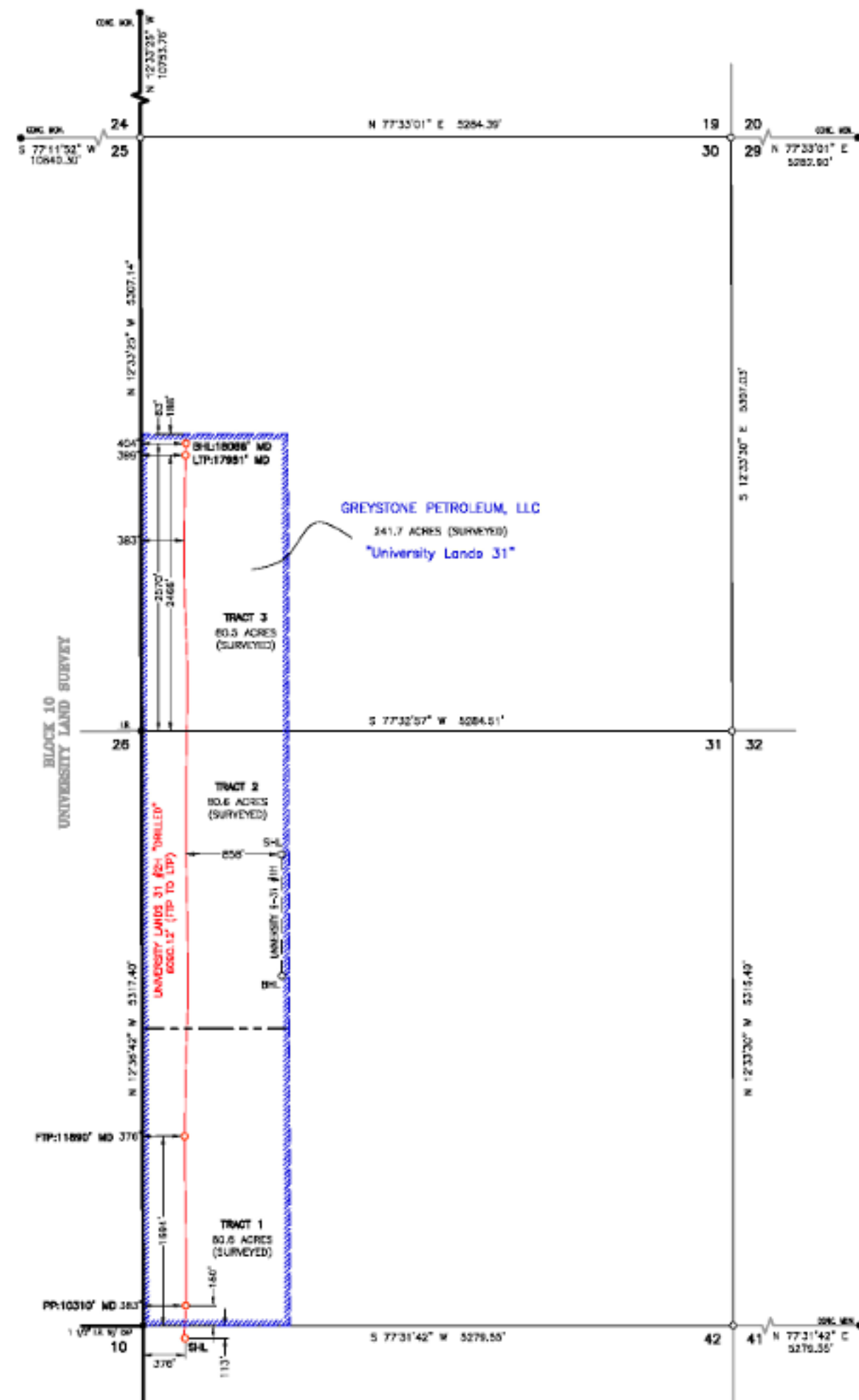
The interval from the land surface to a depth of 250 feet, and the zone from 850 to 1500 feet must be protected.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 02/03/2017. 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



Surface Hole Location:
 113' FNL & 376' FNL (SEC. 42)
 SHL Ground Elevation: 3148'
 X = 415598 Y = 207648
 LAT: N 32.1312813 LONG: W 102.5199274
 NAD 83 TX-NC ZONE
 X = 693272 Y = 8755756
 LAT: N 32.1313927 LONG: W 102.5203609

Penetration Point:
 180' FSL & 383' FNL (SEC. 31)
 X = 415541 Y = 207937
 LAT: N 32.1320649 LONG: W 102.5201563

First Take Point:
 1894' FSL & 376' FNL (SEC. 31)
 X = 415204 Y = 209413
 LAT: N 32.1360719 LONG: W 102.5214752

Last Take Point:
 2466' FSL & 399' FNL (SEC. 30)
 X = 413899 Y = 215390
 LAT: N 32.1522247 LONG: W 102.5266226

Bottom Hole Location:
 2576' FSL & 404' FNL (SEC. 30)
 X = 413881 Y = 215483
 LAT: N 32.1525080 LONG: W 102.5266987

All Coordinates are in NAD 83 TX-NC Zone unless otherwise noted.

REV#	DATE	REV#	DATE
1-MR	11/28/2017	1-DR	05/10/20
2-MR	11/30/2017		

SPECIAL NOTES:

	Section Line
	Block Line
	Hard Line
	Tract Line
	Unit/Lease Boundary
	Found Monument
	Calculated Corner

CERTIFICATION:

This well location shown on this permit plat was surveyed under my direct supervision. All As-Drilled information provided by client. This plat is for Texas Railroad Commission permit purposes only and should not be considered a boundary survey.

William J. Keating
 Texas Reg. No. 5041



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 LOYALTY INNOVATION LEGACY

2803 NORTH BIG D STREET • MIDLAND, TEXAS 79706
 TELEPHONE: (432) 692-1983 OR (432) 797-1986 • FAX: (432) 692-1743
 WWW.TOPOGRAPHIC.COM

Texas FRM Registration NO. 10042500

FILE NAME: AD_UNIVERSITY_LANDS_31_2H_REV2

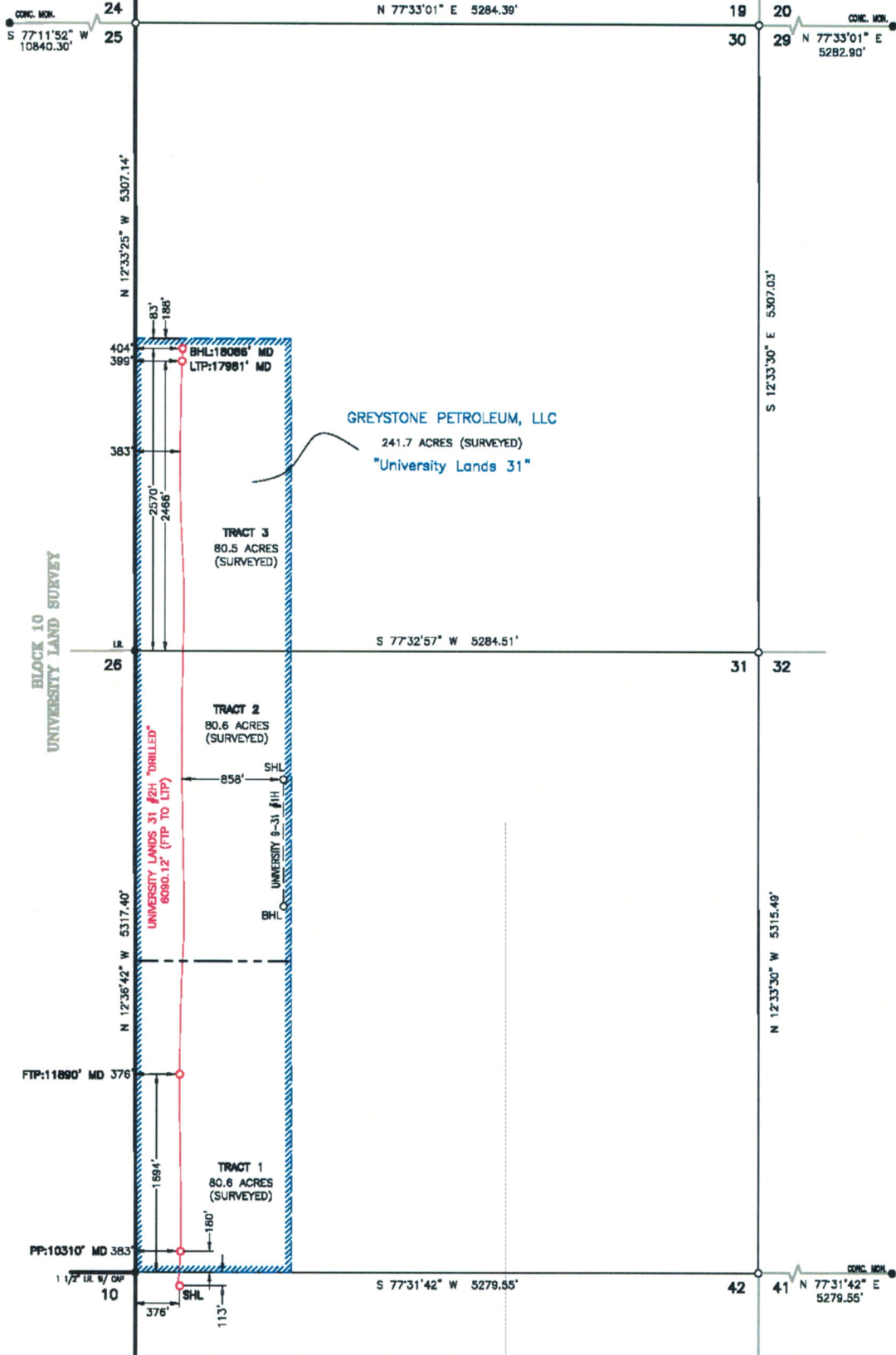
**GREYSTONE
 PETROLEUM, LLC**

LEASE NAME & WELL NO.:
UNIVERSITY LANDS 31 #2H "AS-DRILLED"
 TOPOGRAPHY & VESICOM
 NATURAL MESQUITE PASTURE
 NEAREST TOWN IN COUNTY:
 ±13.7 MILES SOUTHWEST OF ANDREWS, TEXAS

LOCATION DESCRIPTION:

SHL: SECTION 42, BLOCK 9, UNIVERSITY LAND
 PP/FTP: SECTION 31, BLOCK 9, UNIVERSITY LAND
 LTP/HEL: SECTION 30, BLOCK 9, UNIVERSITY LAND
 ANDREWS COUNTY, TEXAS

Scale: 1" = 1000' Surveyed: 12-29-2016 ORIGINAL DOC. SIZE: 11"x17"
 COGO: 726-44138 Drawn By: MR, 06/12/2017



Surface Hole Location:
 113' FNL & 376' FWL (SEC. 42)
 SHL Ground Elevation: 3148'
 X = 415598 Y = 207648
 LAT.: N 32.1312813 LONG.: W 102.6199274
 NAD 83 TX-NC ZONE
 X = 693272 Y = 6755756
 LAT.: N 32.1313927 LONG.: W 102.6203609

Penetration Point:
 180' FSL & 383' FWL (SEC. 31)
 X = 415541 Y = 207937
 LAT.: N 32.1320649 LONG.: W 102.6201563

First Take Point:
 1694' FSL & 376' FWL (SEC. 31)
 X = 415204 Y = 209413
 LAT.: N 32.1360719 LONG.: W 102.6214762

Last Take Point:
 2466' FSL & 399' FWL (SEC. 30)
 X = 413899 Y = 215360
 LAT.: N 32.1522247 LONG.: W 102.6266226

Bottom Hole Location:
 2570' FSL & 404' FWL (SEC. 30)
 X = 413881 Y = 215463
 LAT.: N 32.1525060 LONG.: W 102.6266987

All Coordinates are in NAD 27 TX-NC Zone unless otherwise noted.

REV#-BY	DATE REVISED	REV#-BY	DATE REVISED
1-MR	11/28/2017	1-XXX	XX/XX/XX
2-MR	11/30/2017		

SPECIAL NOTES:

Section Line	—
Block Line	—
Hard Line	—
Tract Line	—
Unit/Lease Boundary	—
Found Monument	—
Calculated Corner	—

CERTIFICATION:
 This well location shown on this permit plat was surveyed under my direct supervision. All As-Drilled information provided by client. This plat is for Texas Railroad Commission permit purpose only and should not be considered a boundary survey.

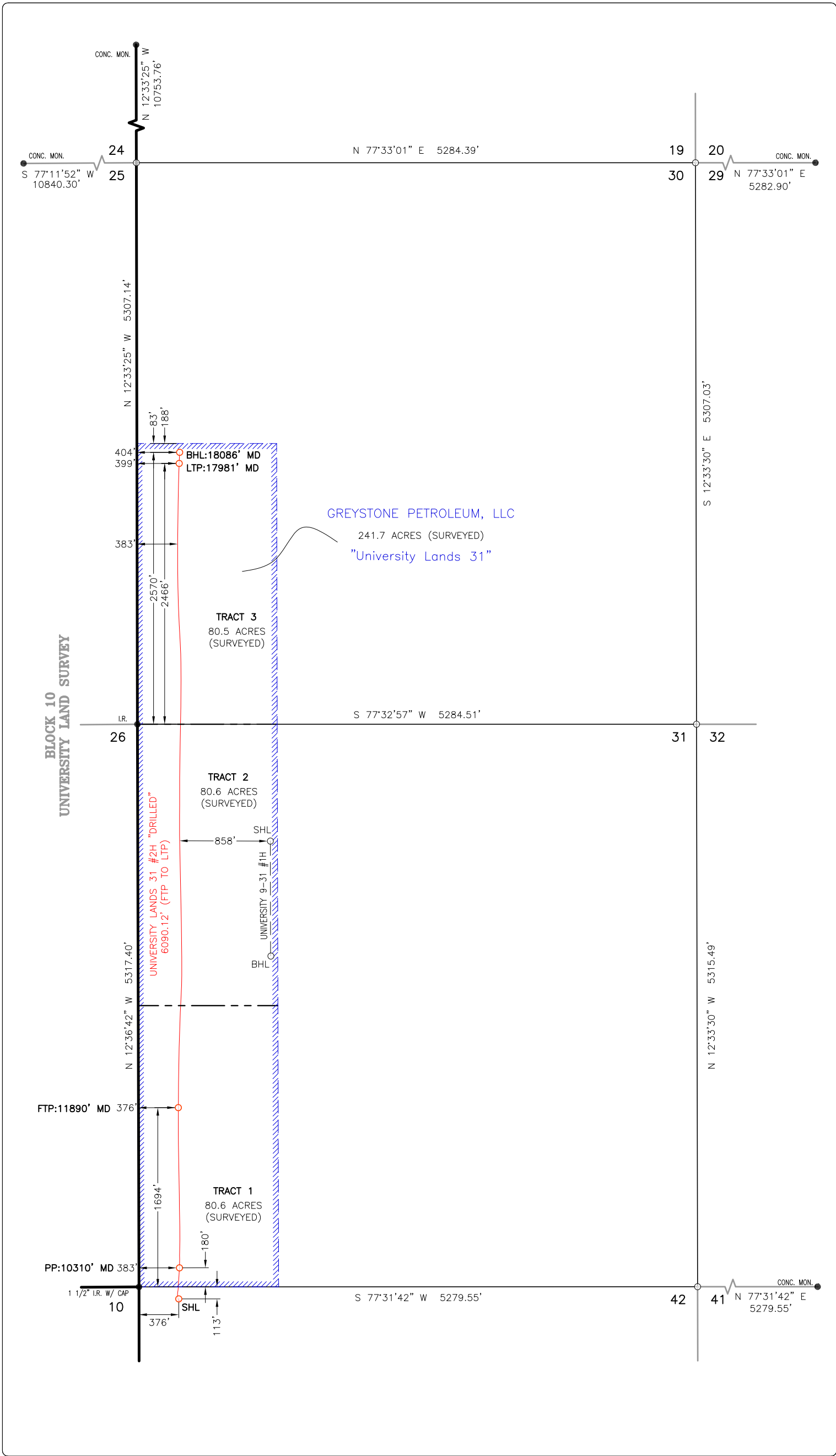
William J. Keating
 Texas Reg. No. 5041



GREYSTONE PETROLEUM, LLC

LEASE NAME & WELL NO:
UNIVERSITY LANDS 31 #2H "AS-DRILLED"
 TOPOGRAPHY & VEGETATION:
NATURAL MESQUITE PASTURE
 NEAREST TOWN IN COUNTY:
±13.7 MILES SOUTHWEST OF ANDREWS, TEXAS

LOCATION DESCRIPTION:
 SHL: SECTION 42, BLOCK 9, UNIVERSITY LAND
 PP/FTP: SECTION 31, BLOCK 9, UNIVERSITY LAND



SCALE: 1" = 1000'

0' 500' 1000'

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All Coordinates are in NAD 27 TX-NC Zone unless otherwise noted.

REV#	BY	DATE REVISED	REV#	BY	DATE REVISED
1	MR	11/28/2017	1	XXX	XX/XX/XX
2	MR	11/30/2017			

SPECIAL NOTES:

LEGEND

- Section Line
- Block Line
- Hard Line
- Tract Line
- Unit/Lease Boundary
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- Calculated Corner

CERTIFICATION:

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William J. Keating

Texas Reg. No. 5041

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TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

Texas FIRM Registration NO. 10042500
FILE NAME: AD_UNIVERSITY_LANDS_31_2H_REV2

STATE OF TEXAS
REGISTERED
WILLIAM J. KEATING
5041
PROFESSIONAL
LAND SURVEYOR

GREYSTONE
PETROLEUM, LLC

LEASE NAME & WELL NO.:
UNIVERSITY LANDS 31 #2H "AS-DRILLED"

TOPOGRAPHY & VEGETATION:
NATURAL MESQUITE PASTURE

NEAREST TOWN IN COUNTY:
±13.7 MILES SOUTHWEST OF ANDREWS, TEXAS

LOCATION DESCRIPTION:

SHL: SECTION 42, BLOCK 9, UNIVERSITY LAND
PP/FTP: SECTION 31, BLOCK 9, UNIVERSITY LAND
LTP/BHL: SECTION 30, BLOCK 9, UNIVERSITY LAND
ANDREWS COUNTY, TEXAS

Scale: 1" = 1000'	Surveyed: 12-29-2016	ORIGINAL DOC. SIZE: 11"x17"
COGO: 726-44138		Drawn By: MR; 06/12/2017