

API No. <u>42-475-36564</u> Drilling Permit # <u>772930</u> SWR Exception Case/Docket No. _____		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>				FORM W-1 Permit Status: Approved	
1. RRC Operator No. <u>697104</u>		2. Operator's Name (as shown on form P-5, Organization Report) <u>RED WILLOW PRODUCTION, LLC</u>			3. Operator Address (include street, city, state, zip) <u>PO BOX 369</u> <u>IGNACIO, CO 81137-0000</u>		
4. Lease Name <u>UNIVERSITY 41-20</u>			5. Well No. <u>1 H</u>				
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; font-size: small;"> <div> <input checked="" type="checkbox"/> New Drill <input type="checkbox"/> Amended </div> <div> <input type="checkbox"/> Recompletion <input type="checkbox"/> Amended as Drilled (BHL)(Also File Form W-1D) </div> <div> <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer </div> <div> <input type="checkbox"/> Re-Enter </div> </div>							
7. Wellbore Profile (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between; font-size: small;"> <div> <input type="checkbox"/> Vertical </div> <div> <input checked="" type="checkbox"/> Horizontal (Also File Form W-1H) </div> <div> <input type="checkbox"/> Directional (Also File Form W-1D) </div> <div> <input type="checkbox"/> Sidetrack </div> </div>							
8. Total Depth <u>11700</u>		9. Do you have the right to develop the minerals under any right-of-way? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
SURFACE LOCATION AND ACREAGE INFORMATION							
11. RRC District No. <u>08</u>		12. County <u>WARD</u>		13. Surface Location <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore			
14. This well is to be located <u>14.0</u> miles in a <u>NW</u> direction from <u>Pyote</u> which is the nearest town in the county of the well site.							
15. Section <u>41</u>	16. Block <u>20</u>	17. Survey <u>UL</u>	18. Abstract No. <u>U130</u>	19. Distance to nearest lease line: <u>500.0</u> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>1602.8</u>		
21. Lease Perpendiculars: <u>250.0</u> ft. from the <u>SOUTH</u> line and <u>1735.0</u> ft. from the <u>WEST</u> line.							
22. Survey Perpendiculars: <u>250.0</u> ft. from the <u>SOUTH</u> line and <u>1735.0</u> ft. from the <u>WEST</u> line.							
23. Is this a pooled unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		24. Unitization Docket No:		25. Are you applying for Substandard Acreage Field? <input type="checkbox"/> Yes (attach Form W-1A) <input checked="" type="checkbox"/> No			
FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line.							
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)	29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir	32. Number of Wells on this lease in this Reservoir	
<u>08</u>	<u>92100050</u>	<u>TWO GEORGES (BONE SPRING)</u>	<u>Oil Well</u>	<u>11700</u>	<u>0.0</u>	<u>1</u>	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS							
Remarks 				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> RRC User _____ Name of filer _____ Phone _____ </div> <div> 10/31/2013 Date Submitted _____ Email Address(OPTIONAL) _____ </div> </div>			
RRC Use Only Date Validation Time Stamp: Tue, 19 Nov 2013 08:27:01							

RAILROAD COMMISSION OF TEXAS

OIL & GAS DIVISION

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-

*This facsimile W-1 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.*

FORM W-1H

Supplemental Horizontal Well Information

Permit Status: Approved

*The RRC has not approved this
application. Duplication or distribution of
information is at the user's own risk.*

Permit # 772930

Approved Date: 11/08/2013

1. RRC Operator No. 697104	2. Operator's Name (as shown on form P-5, Organization Report) RED WILLOW PRODUCTION, LLC	3. Lease Name UNIVERSITY 41-20	4 Well No. 1 H
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Lateral Drainhole Location Information

5. Field as shown on Form W-1 TWO GEORGES (BONE SPRING) (Field # 92100050, RRC District 08)				
6. Section 40	7. Block 20	8. Survey UL	9. Abstract U35	10. County of BHL WINKLER
11. Terminus Lease Line Perpendiculars 2585.0 ft. from the SOUTH line and 521.0 ft. from the EAST line				
12. Terminus Survey Line Perpendiculars 2585.0 ft. from the SOUTH line and 2120.0 ft. from the WEST line				
13. Penetration Point Lease Line Perpendiculars 500.0 ft. from the SOUTH line and 2342.0 ft. from the WEST line				

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER 772930	DATE PERMIT ISSUED OR AMENDED Nov 08, 2013	DISTRICT * 08	
API NUMBER 42-475-36564	FORM W-1 RECEIVED Oct 31, 2013	COUNTY WARD	
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 1602.8	
OPERATOR RED WILLOW PRODUCTION, LLC		697104 NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (432) 684-5581	
LEASE NAME UNIVERSITY 41-20		WELL NUMBER 1 H	
LOCATION 14 miles NW direction from PYOTE		TOTAL DEPTH 11700	
Section, Block and/or Survey SECTION 41 BLOCK 20 ABSTRACT U130 SURVEY UL			
DISTANCE TO SURVEY LINES 250 ft. SOUTH 1735 ft. WEST		DISTANCE TO NEAREST LEASE LINE 500 ft.	
DISTANCE TO LEASE LINES 250 ft. SOUTH 1735 ft. WEST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below	
FIELD(s) and LIMITATIONS: <p align="center">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</p>			
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST WE
TWO GEORGES (BONE SPRING) UNIVERSITY 41-20		1602.80 500	11,700 0
WELLBORE PROFILE(s) FOR FIELD: Horizontal			
RESTRICTIONS: This is a hydrogen sulfide field. Hydrogen Sulfide Fields with perforations must be isolated and tested per State Wide Rule 36 and a Form H-9 filed with the district office. Fields with SWR 10 authority to downhole commingle must be isolated and tested individually prior to commingling production. Lateral: TH1 Penetration Point Location Lease Lines: 500.0 F SOUTH L 2342.0 F WEST L Terminus Location BH County: WINKLER Section: 40 Block: 20 Abstract: U35 Survey: UL Lease Lines: 2585.0 F SOUTH L 521.0 F EAST L Survey Lines: 2585.0 F SOUTH L 2120.0 F WEST L			
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS			

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER <div style="text-align: right;">772930</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Nov 08, 2013</div>	DISTRICT <div style="text-align: center;">* 08</div>										
API NUMBER <div style="text-align: right;">42-475-36564</div>	FORM W-1 RECEIVED <div style="text-align: center;">Oct 31, 2013</div>	COUNTY <div style="text-align: center;">WARD</div>										
TYPE OF OPERATION <div style="text-align: center;">NEW DRILL</div>	WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div>	ACRES <div style="text-align: center;">1602.8</div>										
OPERATOR <div style="text-align: right;">697104</div> <div style="text-align: center;">RED WILLOW PRODUCTION, LLC</div>		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: <div style="text-align: center;">(432) 684-5581</div>										
LEASE NAME <div style="text-align: center;">UNIVERSITY 41-20</div>		WELL NUMBER <div style="text-align: center;">1 H</div>										
LOCATION <div style="text-align: center;">14 miles NW direction from PYOTE</div>		TOTAL DEPTH <div style="text-align: center;">11700</div>										
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION 41</div> <div>BLOCK 20</div> <div>ABSTRACT U130</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY UL</div> </div>												
DISTANCE TO SURVEY LINES <div style="text-align: center;">250 ft. SOUTH 1735 ft. WEST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">500 ft.</div>										
DISTANCE TO LEASE LINES <div style="text-align: center;">250 ft. SOUTH 1735 ft. WEST</div>		DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: center;">See FIELD(s) Below</div>										
FIELD(s) and LIMITATIONS: <div style="text-align: center; padding-top: 20px;">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</div>												
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">FIELD NAME</td> <td style="width: 10%;">ACRES</td> <td style="width: 10%;">DEPTH</td> <td style="width: 10%;">WELL #</td> <td style="width: 10%;">DIST</td> </tr> <tr> <td>LEASE NAME</td> <td>NEAREST LEASE</td> <td></td> <td>NEAREST WE</td> <td></td> </tr> </table>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE	
FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									
<p>This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.</p>												

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date November 6, 2013

GAU File No.: SC- 7980

***** EXPEDITED APPLICATION *****

API Number 47500000

Attention: DENISE JONES

RRC Lease No. 000000

SC_697104_47500000_000000_7980.pdf

RED WILLOW PRODUCTION, LLC
P O BOX 369
IGNACIO CO 81137

--Measured--

1735 ft FWL

250 ft FSL

MRL: SECTION

P-5# 697104

Digital Map Location:

X-coord/Long 1068930

Y-coord/Lat 732117

Datum 27 Zone C

County WARD

Lease & Well No. UNIVERSITY 41-20 #1H

Purpose ND

Location SUR-UL, BLK-20, SEC-41, -- [TD=11700], [RRC 8],

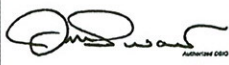
To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Texas Railroad Commission recommends:

The interval from the land surface to a depth of 300 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 intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

If you have any questions, please contact us at 512-463-2741, gau@rrc.state.tx.us, or by mail.

Sincerely,


Digitally signed by Jack Oswalt
DN: cn=US, st=TEXAS, o=Austin, ou=Railroad
Commission of Texas, ou=Groundwater
Advisory Unit, cn=Jack Oswalt,
email=jack.oswalt@rrc.state.tx.us
Date: 2013.11.06 15:21:40 -06'00'

Jack M. Oswalt, P.G.

Geologist, Groundwater Advisory Unit
Oil & Gas Division

GEOLOGIST SEAL



The seal appearing on this document was authorized by Jack M. Oswalt on 11/6/2013
Note: Alteration of this electronic document will invalidate the digital signature.

RED WILLOW PRODUCTION, LLC

LEASE NAME & WELL NO

UNIVERSITY 41-20 #1H

TOPOGRAPHY & VEGETATION:

NATURAL MESQUITE PASTURE

NEAREST TOWN IN COUNTY

±14.0 MILES NORTHWEST OF PYOTE, TEXAS

DESCRIPTION:

**SECTION 41, BLOCK 20, UNIVERSITY LAND
WARD/WINKLER COUNTY, TEXAS**



on very carefully staked on the ground according to
survey records, maps, and other data available to us.
any way represent a "Boundary Survey", and does not
P.L.S. Minimum Standards of Procedures for Boundary Surveys.

DN:



William J. Keating
No. 5041

ating, a Registered Professional Land Surveyor, and on
Topographic Land Surveys, do hereby certify that the
location was surveyed and staked on the ground as
plot is for Texas Railroad Commission permitting only.

Surface Hole Location:

250' FSL & 1735' FWL
SHL Ground Elevation: 2795'
X = 1068930 Y = 732117
LAT: N 31.6452363 LONG: W 103.3256271
NAD 83 TX-C ZONE
X = 1365395 Y = 10574693
LAT: N 31.6453688 LONG: W 103.3260753

First Take Point:

500' FSL & 2342' FWL
X = 1068443 Y = 732527
LAT: N 31.6464020 LONG: W 103.3240164
NAD 83 TX-C ZONE
X = 1365808 Y = 10575103
LAT: N 31.6463325 LONG: W 103.3244646

Bottom Hole Location:

2585' FSL & 2120' FWL
X = 1073716 Y = 735649
LAT: N 31.6561214 LONG: W 103.3105630
NAD 83 TX-C ZONE
X = 1370181 Y = 10578525
LAT: N 31.6562517 LONG: W 103.3110309

ORIGINAL DOC. SIZE: 8.5"x14"

SCALE: 1" = 2000'

DATE: OCTOBER 8, 2013

COGO: 627-71298

LO_UNIVERSITY41_20_1H_REV2

DRAWN BY: ACP; 10-15-13

REV#	BY	DATE REVISED
1	ACP	10-15-13
2	ACP	10-15-13

LEGEND:

— x — Fence
— E — Power
— W — Water
— P — Pipeline
== == == Lease
- - - - - Calculated



TOPOGRAPHIC
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