

API No. <u>42-003-48038</u> Drilling Permit # <u>850696</u> SWR Exception Case/Docket No. <u>0318679 (R37)</u>	<b>RAILROAD COMMISSION OF TEXAS</b> <b>OIL &amp; GAS DIVISION</b> <b>APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER</b> <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>	<b>FORM W-1</b> 07/2004 Permit Status: <b>Approved</b>
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1. RRC Operator No. <b>664930</b>	2. Operator's Name (as shown on form P-5, Organization Report) <b>PIEDRA OPERATING, LLC</b>	3. Operator Address (include street, city, state, zip): <b>PO BOX 10485 MIDLAND, TX 79702-0000</b>
4. Lease Name <b>UNIVERSITY 5-38</b>		5. Well No. <b>2H</b>

<b>GENERAL INFORMATION</b>					
6. Purpose of filing (mark ALL appropriate boxes):					
<input checked="" type="checkbox"/> New Drill		<input type="checkbox"/> Recompletion		<input type="checkbox"/> Reclass	
<input checked="" type="checkbox"/> Amended		<input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)		<input type="checkbox"/> Field Transfer	
<input type="checkbox"/> Vertical		<input checked="" type="checkbox"/> Horizontal (Also File Form W-1H)		<input type="checkbox"/> Directional (Also File Form W-1D)	
<input type="checkbox"/> Sidetrack					
8. Total Depth <b>9580</b>	9. Do you have the right to develop the minerals under any right-of-way ?		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)?		
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

<b>SURFACE LOCATION AND ACREAGE INFORMATION</b>					
11. RRC District No. <b>08</b>	12. County <b>ANDREWS</b>		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>15.8</u> miles in a <u>NE</u> direction from <u>Andrews</u> which is the nearest town in the county of the well site.					
15. Section <b>35</b>	16. Block <b>5</b>	17. Survey <b>UL</b>		18. Abstract No. <b>A-U139</b>	19. Distance to nearest lease line: <b>1</b> ft.
20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>640</b>					
21. Lease Perpendiculars: <u>300</u> ft from the <u>SOUTH</u> line and <u>975</u> ft from the <u>EAST</u> line.					
22. Survey Perpendiculars: <u>300</u> ft from the <u>SOUTH</u> line and <u>975</u> ft from the <u>EAST</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	

<b>FIELD INFORMATION</b> 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
08	85280301	SPRABERRY (TREND AREA) R 40 EXC	Oil or Gas Well	9400	880.00	2

<b>BOTTOMHOLE LOCATION INFORMATION</b> is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)	
<b>Remarks</b> See W1 Comments attached	<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge.  <div style="text-align: right;"> <u>Ann Ritchie</u>      <u>Jul 02, 2019</u>            Name of filer      Date submitted         </div> <div style="text-align: right;"> <u>(432)6846381</u>      <u>ann.wtor@gmail.com</u>            Phone      E-mail Address (OPTIONAL)         </div>
<b>RRC Use Only</b> Data Validation Time Stamp: Jul 5, 2019 11:41 AM( 'As Approved' Version )	

**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION**

**Form W-1H** 07/2004  
**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.*

**APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER**

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Permit # **850696**  
Approved Date: **Jul 05, 2019**

1. RRC Operator No. <b>664930</b>	2. Operator's Name (exactly as shown on form P-5, Organization Report) <b>PIEDRA OPERATING, LLC</b>	3. Lease Name <b>UNIVERSITY 5-38</b>	4. Well No. <b>2H</b>
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**Lateral Drainhole Location Information**

5. Field as shown on Form W-1 **SPRABERRY (TREND AREA) R 40 EXC (Field # 85280301, RRC District 08)**

6. Section <b>2</b>	7. Block <b>8</b>	8. Survey <b>UL / A-U220</b>	9. Abstract	10. County of BHL <b>ANDREWS</b>
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11. Terminus Lease Line Perpendiculars <b>100</b> ft. from the <b>South</b> line. and <b>440</b> ft. from the <b>East</b> line
12. Terminus Survey Line Perpendiculars <b>100</b> ft. from the <b>South</b> line. and <b>440</b> ft. from the <b>East</b> line
13. Penetration Point Lease Line Perpendiculars <b>100</b> ft. from the <b>North</b> line. and <b>440</b> ft. from the <b>East</b> line

Permit Status: **Approved**

*The RRC has not approved this application.  
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**RAILROAD COMMISSION OF TEXAS  
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**APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER**

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**W-1 Comments**

Permit # **850696**

Approved Date: **Jul 05, 2019**

[ Jul 2, 2019 10:41 AM]: Commission Staff expresses no opinion as to whether a 100% ownership interest in each of the leases alone or in combination with a "production sharing agreement" confers the right to drill across lease/unit lines or whether a pooling agreement is also required. However, until that issue is directly addressed and ruled upon by a Texas court of competent jurisdiction it appears that a 100% interest in each of the leases and a production sharing agreement constitute a sufficient colorable claim to the right to drill a horizontal well as proposed to authorize the removal of the regulatory bar and the issuance of a drilling permit by the Commission, assuming the proposed well is in compliance with all other relevant Commission requirements.

Issuance of the permit is not an endorsement or approval of the applicant's stated method of allocating production proceeds among component leases or units. All production must be reported to the Commission as production from the lease or pooled unit on which the wellhead is located and reported production volume must be determined by actual measurement of hydrocarbon volumes prior to leaving that tract and may not be based on allocation or estimation. Payment of royalties is a contractual matter between the lessor and lessee. Interpreting the leases and determining whether the proposed proceeds allocation comports with the relevant leases is not a matter within Commission jurisdiction but a matter for the parties to the lease and, if necessary, a Texas court of competent jurisdiction.

The foregoing statements are not, and should not be construed as, a final opinion or decision of the Railroad Commission.; [FILER Jul 2, 2019 10:48 AM]: Revised surface hole location





**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION  
SWR #13 Formation Data**

**ANDREWS (003) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
YATES	2,500	3,200		1	12/17/2013
SEVEN RIVERS	3,000	3,000		2	12/17/2013
QUEEN	3,600	4,800		3	12/17/2013
GRAYBURG	3,100	5,000		4	12/17/2013
SAN ANDRES	3,700	5,300	CO2 flood, high flows, H2S, corrosive	5	12/17/2013
HOLT	5,000	5,500		6	12/17/2013
GLORIETA	5,100	6,000		7	12/17/2013
TUBB	6,100	6,300		8	12/17/2013
CLEARFORK	5,600	7,600		9	12/17/2013
PERMIAN DETRITAL	7,800	7,900		10	12/17/2013
LEON	7,900	7,900		11	12/17/2013
WICHITA ALBANY	6,500	8,100		12	12/17/2013
SPRABERRY	7,300	8,600		13	12/17/2013
DEAN	9,200	9,500		14	12/17/2013
WOLFCAMP	7,500	9,900		15	12/17/2013
CANYON	8,600	10,200		16	12/17/2013
PENNSYLVANIAN	8,700	10,200		17	12/17/2013
MCKEE	8,300	10,600		18	12/17/2013
STRAWN	8,800	11,000		19	12/17/2013
FUSSELMAN	8,400	11,900		20	12/17/2013
DEVONIAN	7,600	12,500		21	12/17/2013
SILURIAN	8,000	12,500		22	12/17/2013
ELLENBURGER	7,900	13,900		23	12/17/2013

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.  
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

<b>Date Issued:</b>	18 January 2018	<b>GAU Number:</b>	186621
<b>Attention:</b>	PIEDRA OPERATING, LLC PO BOX 10485 MIDLAND, TX 79702	<b>API Number:</b>	00347700
<b>Operator No.:</b>	664930	<b>County:</b>	ANDREWS
		<b>Lease Name:</b>	UNIVERSITY 5-38 ALLOCATED
		<b>Lease Number:</b>	
		<b>Well Number:</b>	1H
		<b>Total Vertical Depth:</b>	12500
		<b>Latitude:</b>	32.431547
		<b>Longitude:</b>	-102.309839
		<b>Datum:</b>	NAD27

**Purpose:** New Drill  
**Location:** Survey-UL; Abstract-U139; Block-5; Section-35

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 275 feet, and the zone from 1300 to 1750 feet must be protected.

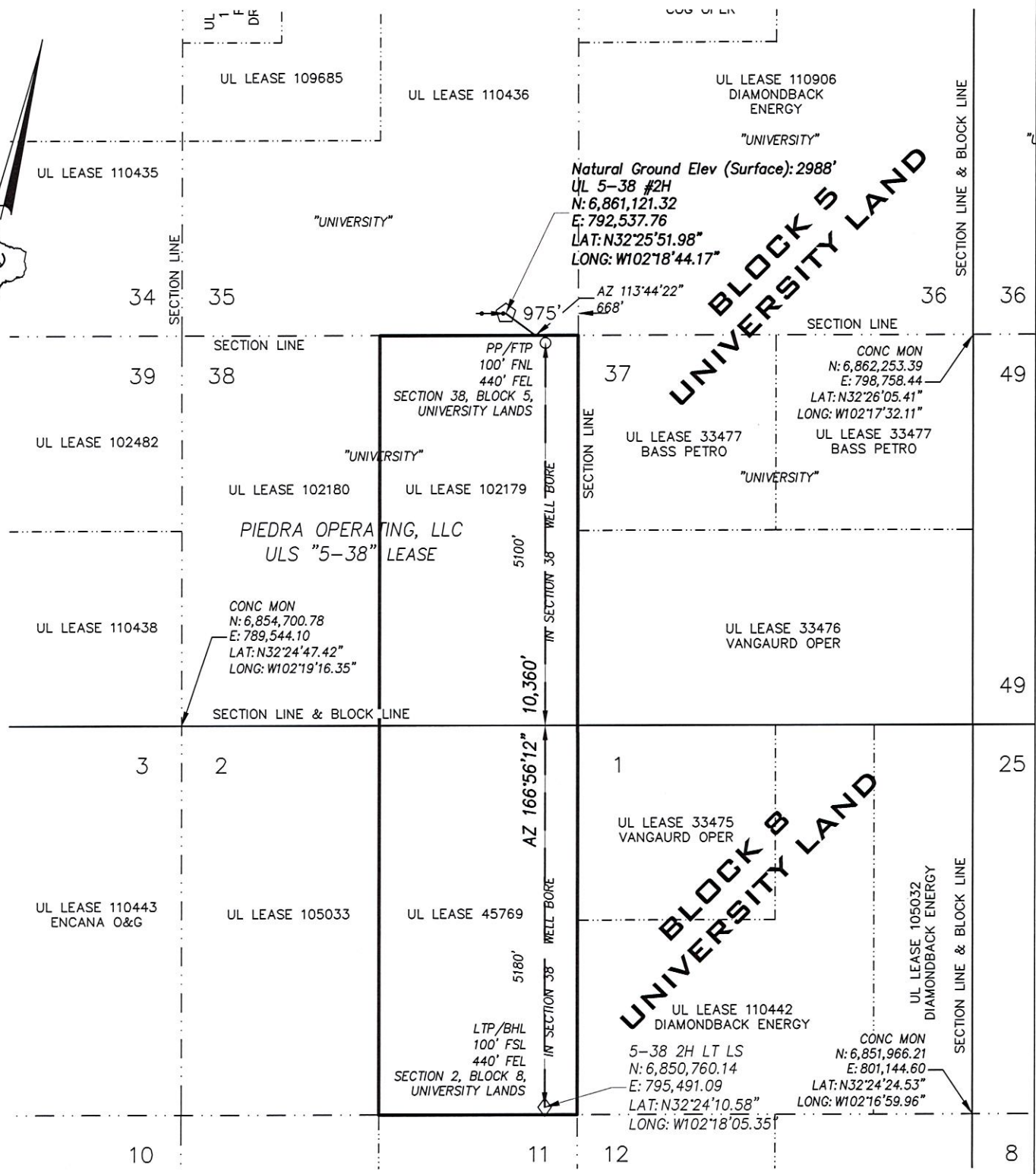
This recommendation is applicable to all wells within a radius of 200 feet of this location.

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).

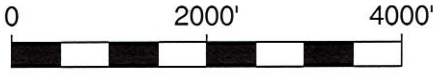
This determination is based on information provided when the application was submitted on 01/10/2018. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

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



**GRAPHIC SCALE**



( IN FEET )  
1 inch = 2000 ft.

TOTAL ACREAGE IN LEASE 640 ACRES

**NOTE:**

COURSES, DISTANCES AND COORDINATES SHOWN HEREON ARE LAMBERT GRID AND CONFORM TO THE "TEXAS COORDINATE SYSTEM", TEXAS NORTH CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983. ALL DISTANCES AND COORDINATES ARE SHOWN IN GRID FEET. ELEVATION NAVD 1988

THIS WELL IS TO BE LOCATED 15.8 MILES IN A NORTHEAST DIRECTION FROM ANDREWS WHICH IS THE NEAREST TOWN IN THE COUNTY OF THE WELL SITE.

THE UNDERSIGNED DOES HEREBY CERTIFY THAT THIS LOCATION WAS THIS DAY MADE ON THE GROUND BY ME OR UNDER MY SUPERVISION AND THAT THIS PLAT IS A CORRECT REPRESENTATION THEREOF.

DATED THIS 13TH DAY OF DECEMBER, 2018

RJ DAUM  
TEXAS RPLS 4826



**SCHUMANN ENGINEERING CO., INC.**  
REGISTERED PROFESSIONAL LAND SURVEYORS REGISTERED PROFESSIONAL CIVIL ENGINEERS  
Civil Engineering ~ Land Surveying  
TEXAS FIRM No. F1880 TEXAS FIRM No. 10149500  
408 N. PECOS STREET - P. O. BOX 504 MIDLAND, TEXAS 79702-0504  
Office (432) 684-5548 Fax (432) 684-6973

**LOCATION PLAT**

PIEDRA OPERATING L.L.C.  
WELL NO. 2H  
UNIVERSITY 5-38  
SURFACE HOLE  
300 FEET FROM THE SOUTH AND  
975 FEET FROM THE EAST LINES  
SECTION 38, BLOCK 5,  
LAST TAKE/BOTTOM HOLE  
100 FEET FROM THE SOUTH AND  
440 FEET FROM THE EAST LINES  
SECTION 2, BLOCK 8,  
UNIVERSITY LAND  
ANDREWS COUNTY, TEXAS  
QUAD: FIVE WELLS RANCH PROJECT: 76489  
SCALE: 1" = 2000' REV 6-11-19 JOB NO: 76,489