

API No. <u>42-003-47556</u> Drilling Permit # <u>840640</u> SWR Exception Case/Docket No. <u>0311808</u> (R37)		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 07/2004 Permit Status: Approved	
1. RRC Operator No. <u>950523</u>		2. Operator's Name (as shown on form P-5, Organization Report) ZARVONA ENERGY LLC		3. Operator Address (include street, city, state, zip): 1010 LAMAR ST SUITE 500 HOUSTON, TX 77002-6334			
4. Lease Name ULS 5-9 UNIT		5. Well No. 6H					
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> New Drill <input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D) </div>							
7. Wellbore Profile (mark ALL appropriate boxes): <div style="display: flex; justify-content: space-between;"> <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 </div>							
8. Total Depth 15000		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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
SURFACE LOCATION AND ACREAGE INFORMATION							
11. RRC District No. 08		12. County ANDREWS		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>16</u> miles in a <u>NE</u> direction from <u>Andrew</u> which is the nearest town in the county of the well site.							
15. Section 4		16. Block 5		17. Survey UL		18. Abstract No. A-U108	
				19. Distance to nearest lease line: <u>1</u> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 1280	
21. Lease Perpendiculars: <u>467</u> ft from the <u>SOUTH</u> line and <u>467</u> ft from the <u>EAST</u> line.							
22. Survey Perpendiculars: <u>467</u> ft from the <u>SOUTH</u> line and <u>467</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			
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	
08	28899581	EMMA (MISSISSIPPIAN)		Oil Well	15000	0.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks See W1 Comments attached				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;"> <div> <u>Alvaro Rosales, Regulatory Manager</u> Name of filer <u>(713)6000600</u> Phone </div> <div> <u>May 30, 2018</u> Date submitted <u>arosales@zarvonaenergy.com</u> E-mail Address (OPTIONAL) </div> </div>			
RRC Use Only Data Validation Time Stamp: Jun 1, 2018 3:20 PM('As Approved' Version)							

Permit Status: Approved <i>The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.</i>

RAILROAD COMMISSION OF TEXAS
 OIL & GAS DIVISION

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

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.

Permit #	840640
Approved Date:	Jun 01, 2018

1. RRC Operator No. 950523	2. Operator's Name (exactly as shown on form P-5, Organization Report) ZARVONA ENERGY LLC	3. Lease Name ULS 5-9 UNIT	4. Well No. 6H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 EMMA (MISSISSIPPIAN) (Field # 28899581, RRC District 08)			
6. Section 16	7. Block 5	8. Survey UL / A-U120	9. Abstract
		10. County of BHL ANDREWS	
11. Terminus Lease Line Perpendiculars 100 ft. from the SOUTH line. and 330 ft. from the East line			
12. Terminus Survey Line Perpendiculars 100 ft. from the SOUTH line. and 330 ft. from the East line			
13. Penetration Point Lease Line Perpendiculars 467 ft. from the SOUTH line. and 467 ft. from the East line			

Permit Status:	Approved
<i>The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.</i>	

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

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

*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.*

W-1 Comments

Permit #	840640
Approved Date:	Jun 01, 2018

[May 30, 2018 9:27 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 May 30, 2018 1:40 PM]: Changing producing vertical well to a horizontal; [RRC STAFF Jun 1, 2018 9:36 AM]: SHL marked as off-lease per plat. Nearest LL distance changed to 1' for this allocation. Terminus survey info corrected per plat and RRC GIS. LTP/BHL direction changed from 100' FEL to FSL and PP SL calls corrected per plat.; [RRC STAFF Jun 1, 2018 9:47 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Jun 1, 2018 10:40 AM]: Problems identified with this permit are resolved.; [RRC STAFF Jun 1, 2018 10:40 AM]: Revised plat and P-16 sent by Alvaro Rosales

**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 align="center">840640</div>	DATE PERMIT ISSUED OR AMENDED <div align="center">Jun 01, 2018</div>	DISTRICT <div align="center">* 08</div>	
API NUMBER <div align="center">42-003-47556</div>	FORM W-1 RECEIVED <div align="center">May 30, 2018</div>	COUNTY <div align="center">ANDREWS</div>	
TYPE OF OPERATION <div align="center">RECOMPLETION</div>	WELLBORE PROFILE(S) <div align="center">Horizontal</div>	ACRES <div align="center">1280</div>	
OPERATOR <div align="center"> ZARVONA ENERGY LLC 1010 LAMAR ST SUITE 500 HOUSTON, TX 77002-6334 </div>		<div align="right">950523</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 align="center">(432) 684-5581</div>
LEASE NAME <div align="center">ULS 5-9 UNIT</div>		WELL NUMBER <div align="center">6H</div>	
LOCATION <div align="center">16 miles NE direction from ANDREW</div>		TOTAL DEPTH <div align="center">15000</div>	
Section, Block and/or Survey <div> SECTION ◀ 4 BLOCK ◀ 5 ABSTRACT ◀ U108 SURVEY ◀ UL </div>			
DISTANCE TO SURVEY LINES <div align="center">467 ft. SOUTH 467 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div align="center">1 ft.</div>	
DISTANCE TO LEASE LINES <div align="center">467 ft. SOUTH 467 ft. EAST</div>		DISTANCE TO NEAREST WELL ON LEASE <div align="center">See FIELD(s) Below</div>	
FIELD(s) and LIMITATIONS: <div align="center"> * SEE FIELD DISTRICT FOR REPORTING PURPOSES * ** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) ** CASE NO. 0311808 </div>			
FIELD NAME LEASE NAME <hr/>		ACRES NEAREST LEASE <hr/>	DEPTH NEAREST LEASE <hr/>
** EMMA (MISSISSIPPIAN) <div align="center">ULS 5-9 UNIT</div>		<div align="center">1280.00</div> <div align="center">1</div>	<div align="center">15,000</div> <div align="center">0</div>
<div align="center">6H</div>		<div align="center">08</div>	
<hr/> WELLBORE PROFILE(s) FOR FIELD: Horizontal <hr/>			
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 467.0 F SOUTH L 467.0 F EAST L Terminus Location BH County: ANDREWS Section: 16 Block: 5 Abstract: Survey: UL / A-U120 Lease Lines: 100.0 F SOUTH L 330.0 F EAST L Survey Lines: 100.0 F SOUTH L 330.0 F EAST L			
' ** ' PRECEDING FIELD NAME INDICATES RULE (R37)			
<div align="center">THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</div>			
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.			

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;">840640</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Jun 01, 2018</div>	DISTRICT <div style="text-align: center;">* 08</div>
API NUMBER <div style="text-align: right;">42-003-47556</div>	FORM W-1 RECEIVED <div style="text-align: center;">May 30, 2018</div>	COUNTY <div style="text-align: center;">ANDREWS</div>
TYPE OF OPERATION <div style="text-align: center;">RECOMPLETION</div>	WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div>	ACRES <div style="text-align: center;">1280</div>
OPERATOR <div style="text-align: right;">950523</div> <div style="text-align: center;">ZARVONA ENERGY LLC</div> <div style="text-align: center;">1010 LAMAR ST SUITE 500</div> <div style="text-align: center;">HOUSTON, TX 77002-6334</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;">ULS 5-9 UNIT</div>		WELL NUMBER <div style="text-align: center;">6H</div>
LOCATION <div style="text-align: center;">16 miles NE direction from ANDREW</div>		TOTAL DEPTH <div style="text-align: center;">15000</div>
Section, Block and/or Survey <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> SECTION ◀ 4 SURVEY ◀ UL </div> <div style="width: 30%;"> BLOCK ◀ 5 </div> <div style="width: 30%;"> ABSTRACT ◀ U108 </div> </div>		
DISTANCE TO SURVEY LINES <div style="text-align: center;">467 ft. SOUTH 467 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">1 ft.</div>
DISTANCE TO LEASE LINES <div style="text-align: center;">467 ft. SOUTH 467 ft. EAST</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; margin-top: 20px;"> * SEE FIELD DISTRICT FOR REPORTING PURPOSES * ** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) ** CASE NO. 0311808 </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 30%;"> FIELD NAME LEASE NAME </div> <div style="width: 20%;"> ACRES NEAREST LEASE </div> <div style="width: 20%;"> DEPTH NEAREST WE </div> <div style="width: 20%;"> WELL # NEAREST WE </div> <div style="width: 10%;"> DIST </div> </div> <p style="margin-top: 20px;">This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved permit for those formations that have been identified for the county in which you are drilling the well in.</p>		

**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>

(713)	600-5402	06/01/2018
Tel: Area Code	Number	Date: mo. day yr.



RAILROAD COMMISSION OF TEXAS

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

Form P-16

Page 2

Rev. 01/2016

Acreage Designation

Filer is the owner or lessee of all or an undivided portion of the minerals under each tract listed below and has the legal right to drill on each tract traversed by the well that will have perforations or other take points open in the interval of the applied-for field(s). All tracts listed will actually be traversed by the wellbore or the filer has pooling authority or other contractual authority, such as a production sharing agreement, authorizing inclusion of the non-drillsite tract in the acreage assigned to the well.

SECTION V. LISTING OF ALL TRACTS CONTRIBUTING ACREAGE TO AN RRC DESIGNATED DRILLSITE DEVELOPMENTAL UNIT THAT IS NOT A SINGLE LEASE, POOLED UNIT, OR GROUP OF TRACTS UNITIZED BY CONTRACT FOR PURPOSES OF SECONDARY RECOVERY

RRC ID No. or Lease No.	Lease Name	Beginning Lease Acreage	Allocated Lease Acreage	Ending Lease Acreage	Operator Name and Operator No. (if different from filing operator)
Tract 1	ULS 5-9 Unit	640	640	640	
Tract 2	ULS 5-9 Unit	640	640	640	
Total Allocated Acreage >			1280	1280	< Total Lease Acreage 1280

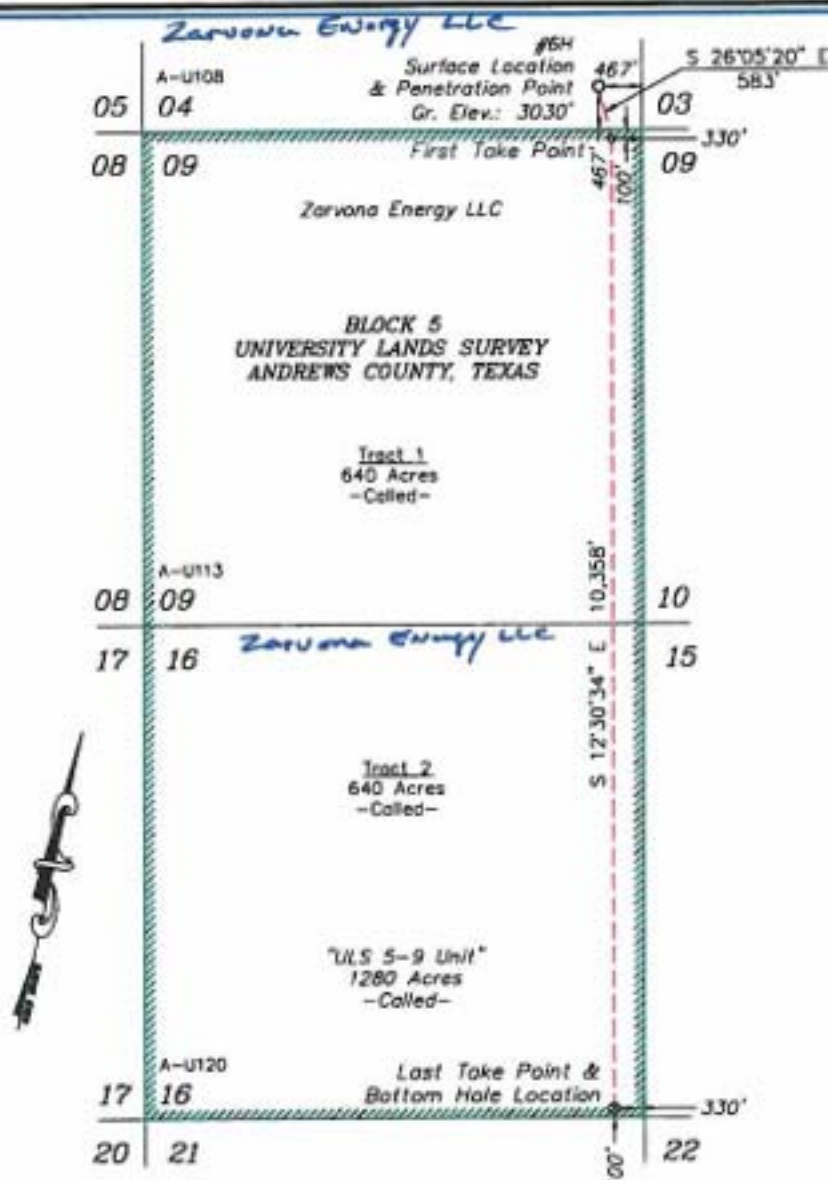
Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION VI. LISTING OF ALL WELLS IN THE APPLIED FOR FIELD ON THE SAME ACREAGE AS THE LEASE OR POOLED UNIT DESIGNATED FOR THE TRACTS LISTED IN SECTION V BY FILER

[illegible]

SECTION VII. REMARKS

--



Section & Lease Line Calls	
Surface Location	467' FEL & 467' FSL
Penetration Point	467' FEL & 467' FSL
First Take Point	100' FNL & 330' FEL
Last Take Point	100' FSL & 330' FEL
Bottom Hole Location	100' FSL & 330' FEL

	State Plane Coordinate		Geodetic (D.M.S.)		Geodetic (D.D.)	
Surface Location & Penetration Point	X = 500,180.55	Y = 335,795.34	Lat = 32°29'39.06" N	Long = 102°21'38.21" W	Lat = 32.49418355° N	Long = 102.36618943° W
First Take Point	X = 500,437.09	Y = 335,271.42	Lat = 32°29'34.36" N	Long = 102°21'36.52" W	Lat = 32.49287701° N	Long = 102.36569909° W
Last Take Point & Bottom Hole Location	X = 502,680.72	Y = 325,158.93	Lat = 32°27'55.06" N	Long = 102°21'23.31" W	Lat = 32.46529489° N	Long = 102.35647491° W

The ULS 5-9 Unit #6H is located approximately
16 miles Northeast of Andrews, Texas.



NOTE:

- 1) Plane Coordinates shown hereon are Lambert Grid and Conform to the "Texas Coordinate System", Texas North Central Zone, North American Datum of 1927, unless otherwise noted. Scale factor is 1.000217847.
- 2) Geodetic Coordinates shown hereon reference the North American Datum of 1927, unless otherwise noted.
- 3) This plat is provided only for filing purposes with the Texas Railroad Commission and should not be construed as a boundary survey.
- 4) Preliminary for Office Review 05/29/18, issued as Final 05/30/18

Legend

- - - - - Denotes Proposed Well Bore
- ▨ Denotes Unit Boundary
- - - - - Denotes Tract Line
- Denotes Proposed Well Location
- Denotes Proposed Take Points
- ⊙ Denotes Proposed Bottom Hole Location

CERTIFICATION:

I hereby certify that this plat was made from notes taken in the field in a bona fide survey made under my supervision.

Lindsay Gyax

Texas R.P.L.S. No. 6434



WEST COMPANY

Land Surveyors & Civil Engineers

110 W. Louisiana Ave., Suite 110, Midland, Texas 79701
(432) 687-0885 - FAX (432) 687-0888
Firm Registration Number: 100682-00

ZARVONA ENERGY LLC

Location of the

ULS 5-9 UNIT #6 H

SL (467' FSL & 467' FEL) Section 04
BHL (100' FSL & 330' FEL) Section 16
All in Block 5, University Lands Survey
Andrews County, Texas

Scale: 1"=2000'

W.O.: 2017-0303-1

Surveyed: 04/28/2017

Drawn By: SC

File: J:\2018\2017-0303-1\2017-0303-1 The ULS 5-9 Unit #6H.dwg