

API No. <u>42-495-33809</u> Drilling Permit # <u>823989</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 07/2004 Permit Status: Approved	
1. RRC Operator No. <u>252002</u>		2. Operator's Name (as shown on form P-5, Organization Report) <u>ENERGEN RESOURCES CORPORATION</u>		3. Operator Address (include street, city, state, zip): <u>3510 N A ST BLDGS A AND B</u> <u>MIDLAND, TX 79705-0000</u>			
4. Lease Name <u>UL 20 STRIPES 38-47</u>			5. Well No. <u>605H</u>				
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <input checked="" type="checkbox"/> New Drill <input type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter <input type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)							
7. Wellbore Profile (mark ALL appropriate boxes): <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 <u>12500</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>WINKLER</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>13</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>38</u>		16. Block <u>20</u>		17. Survey <u>UL</u>		18. Abstract No. <u>A-U33</u>	
				19. Distance to nearest lease line: <u>200</u> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>1281.4</u>	
21. Lease Perpendiculars: <u>250</u> ft from the <u>NW</u> line and <u>1261</u> ft from the <u>NE</u> line.							
22. Survey Perpendiculars: <u>250</u> ft from the <u>NW</u> line and <u>1261</u> ft from the <u>NE</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	71052900	PHANTOM (WOLFCAMP)		Oil or Gas Well	12000	923.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks [FILER Mar 2, 2017 11:08 AM]: Thank you!				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. <div style="text-align: center;"> Vonda Freeman Ms., Regulatory Analyst </div> <div style="display: flex; justify-content: space-between;"> <div> Name of filer <u>(432)684-3693</u> Phone </div> <div> Date submitted <u>Mar 02, 2017</u> E-mail Address (OPTIONAL) <u>midlandrrc@energen.com</u> </div> </div>			
RRC Use Only Data Validation Time Stamp: Mar 13, 2017 7:52 AM(Current 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**

Form W-1H 07/2004
Supplemental Horizontal Well Information

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 #	823989
Approved Date:	Mar 10, 2017

1. RRC Operator No. 252002	2. Operator's Name (exactly as shown on form P-5, Organization Report) ENERGEN RESOURCES CORPORATION	3. Lease Name UL 20 STRIPES 38-47	4. Well No. 605H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)			
6. Section 47	7. Block 20	8. Survey UL	9. Abstract U136
		10. County of BHL WARD	
11. Terminus Lease Line Perpendiculars 200 ft. from the SE line. and 1254 ft. from the NE line			
12. Terminus Survey Line Perpendiculars 200 ft. from the SE line. and 1254 ft. from the NE line			
13. Penetration Point Lease Line Perpendiculars 250 ft. from the NW line. and 1261 ft. from the NE 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 823989	DATE PERMIT ISSUED OR AMENDED Mar 10, 2017	DISTRICT * 08																																																		
API NUMBER 42-495-33809	FORM W-1 RECEIVED Mar 02, 2017	COUNTY WINKLER																																																		
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RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

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FIELD NAME	ACRES	DEPTH	WELL #	DIST								
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**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

WINKLER (495) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	725	725	possible flow; possible usable quality water	1	12/17/2013
COLBY-QUEEN	2,900	3,200		2	12/17/2013
YATES	2,280	3,200		3	12/17/2013
QUEEN-SEVEN RIVERS	2,700	3,400		4	12/17/2013
SAN ANDRES	3,600	4,400	high flows, H2S, corrosive	5	12/17/2013
HOLT	4,500	4,800		6	12/17/2013
DELAWARE	4,300	5,000		7	12/17/2013
GLORIETA	4,900	5,600		8	12/17/2013
CLEARFORK	4,750	6,200		9	12/17/2013
WICHITA ALBANY	6,600	6,850		10	12/17/2013
BRUSHY CANYON	7,300	7,300		11	12/17/2013
CHERRY CANYON	6,000	7,800		12	12/17/2013
CANYON	8,400	8,400		13	12/17/2013
BONE SPRINGS	9,000	9,800		14	12/17/2013
MONTOYA	10,300	10,300		15	12/17/2013
WADDELL	11,000	11,000		16	12/17/2013
WOLFCAMP	7,600	12,400		17	12/17/2013
ATOKA	12,900	12,900		18	12/17/2013
STRAWN	8,100	14,800		19	12/17/2013
PENNSYLVANIAN	8,000	15,500		20	12/17/2013
MISSISSIPPIAN	10,200	17,300		21	12/17/2013
DEVONIAN	7,900	17,800		22	12/17/2013
SILURIAN	8,500	18,000		23	12/17/2013
FUSSELMAN	9,700	18,800		24	12/17/2013
ELLENBURGER	9,500	21,400		25	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**Date Issued:** 15 March 2017**GAU Number:** 168309**Attention:** ENERGEN RESOURCES
3510 N A ST BLDGS A AND B
MIDLAND, TX 79705**Operator No.:** 252002**API Number:**
County: WINKLER
Lease Name: UL 20 STRIPES 38-47
Lease Number:
Well Number: 605H
Total Vertical Depth: 12500
Latitude: 31.673021
Longitude: -103.274861
Datum: NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U33; Block-20; Section-38

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 the base of the Alluvium, which is estimated to occur at a depth between 250 and 300 feet, must be protected.

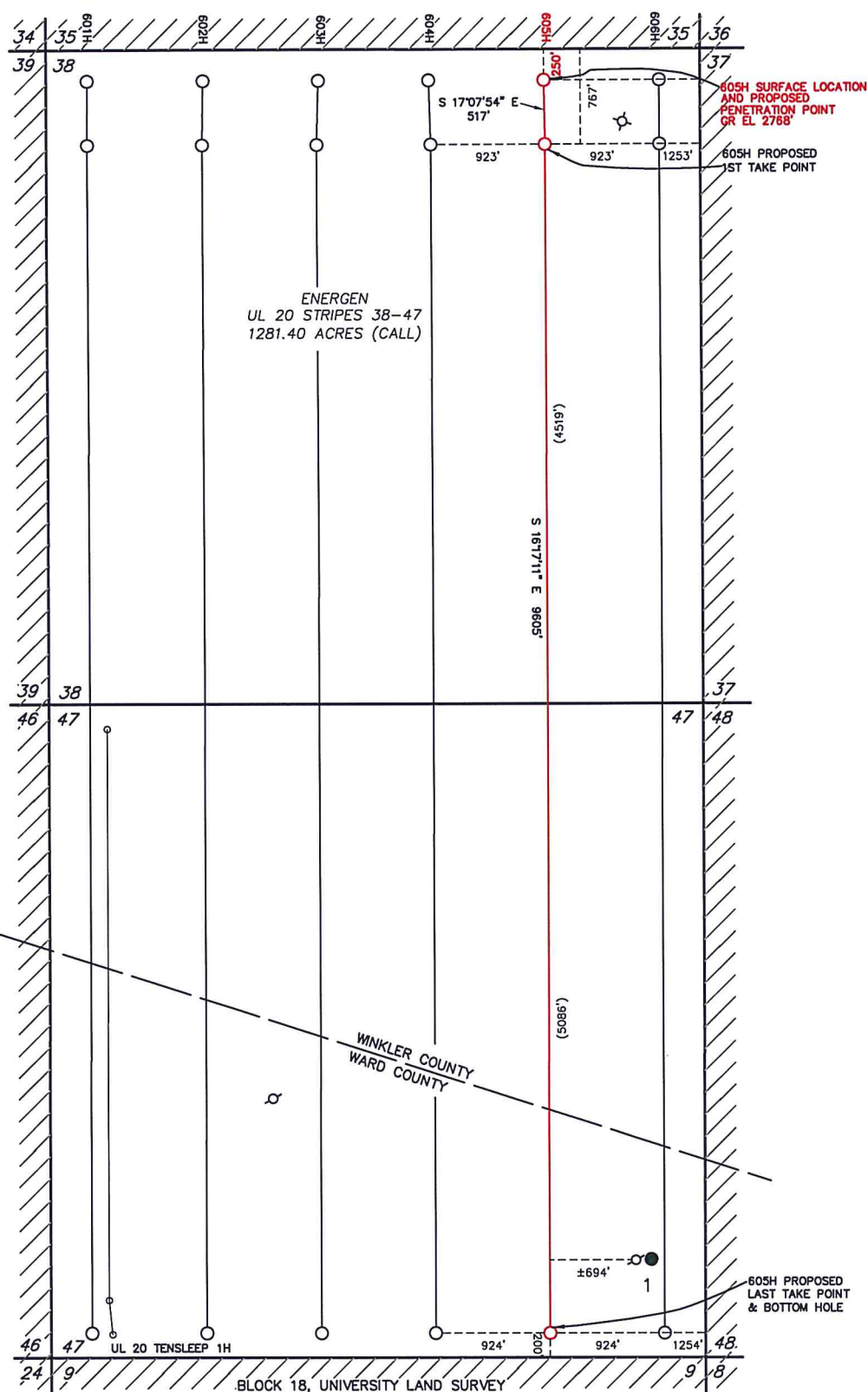
This recommendation is applicable to all wells within a radius of 1000 feet of this location.

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 03/02/2017. 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



NAD 83, TEXAS CENTRAL ZONE		NAD 27, TEXAS CENTRAL ZONE	
S/L: N=10584374.9', E=1381455.0'	LAT=31.6731511 N, LONG=103.2753080 W	S/L: N=741798.7', E=1084990.1'	LAT=31.6730210 N, LONG=103.2748609 W
1ST/P: N=10583880.8', E=1381607.3'	LAT=31.6718044 N, LONG=103.2747766 W	1ST/P: N=741304.7', E=1085142.4'	LAT=31.6716743 N, LONG=103.2743296 W
B/H: N=10574661.1', E=1384300.9'	LAT=31.6466337 N, LONG=103.2653284 W	B/H: N=732085.0', E=1087835.9'	LAT=31.6465326 N, LONG=103.2648939 W

APPROXIMATELY 13.0 MILES NW OF PYOTE, TEXAS

4. THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THE INFORMATION PRESENTED HEREON FOR THE PURPOSE OF THIS SALE IS LIMITED TO THE "OFFERED POSITION" AS THE TITLE BLOCK AND DOES NOT CONSTITUTE A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE "PROFESSIONAL LAND SURVEYING PRACTICES ACT."








REVISED 2/23/17
FEBRUARY 6, 2017



- NOTES:
1. COORDINATES AND BEARINGS SHOWN HEREON ARE HAD 83, LAMBERT GRID COORDINATES AND CONFORM TO THE TEXAS COORDINATE SYSTEM "TEXAS CENTRAL" WITH REFERENCE TO THE 1983 TRI-STATE "ANGLE" WITH A CENTRAL COMBINED SCALE FACTOR OF 0.99980700. THE POSITIONAL TOLERANCE OF THIS SURVEY EXCEEDS THE REQUIREMENTS FOR A RURAL SURVEY.
 2. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE TITLE REPORT AND REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMPREHENSIVE SCOPE OF THIS PROJECT. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS AND FURNISHING OF THIS SURVEY. SEE DOCUMENTS AND ELECTRONIC DATA FILED IN THE OFFICE OF WPG INC FOR COMPLETE RECONSTRUCTION OF THE ENTIRE TRACT OR BLOCKS.
 3. REVISED 2/23/17 TO REMOVE OFFSET MULLS.



P.O. DRAWER 11186
MIDLAND, TEXAS 79702
(432) 520-9200
FAX (432) 520-9212
tahistrand@wpg-us.com

-  GAS WELL
-  WATER INJECTION WELL
-  OIL WELL
-  LOCATED WELL
-  DRY HOLE
-  WATER WELL
-  PLUGGED WELL

PERMIT PLAT
ENERGEN RESOURCES CORPORATION
UL 20 STRIPES 38-47 805H
S/L & PROPOSED P/P: 250' FNNWL & 1261' FNEL
PROPOSED 1ST T/P: 787' FNNWL & 1253' FNEL
SECTION 38, BLOCK 20, UNIVERSITY LAND SURVEY
PROPOSED LAST T/P & B/H: 200' FSEL & 1254' FNEL
SECTION 47, BLOCK 20, UNIVERSITY LAND SURVEY
WINKLER & WARD COUNTIES, TEXAS

DATE: JANUARY 25, 2017 DATE SURVEYED: 1/11/17
JOB NO.: 17-1011-00 FIELD BOOK 824/20 DRAFT NGH REV. 1