

API No. 42-105-42194		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <small>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.</small>				FORM W-1 07/2004	
Drilling Permit # 802221 SWR Exception Case/Docket No.						Permit Status: Approved	
1. RRC Operator No. 028625		2. Operator's Name (as shown on form P-5, Organization Report) APPROACH OPERATING LLC			3. Operator Address (include street, city, state, zip): ONE RIDGMAR CENTRE 6500 WEST FREEWAY SUITE 800 FORT WORTH, TX 76116-0000		
4. Lease Name UNIVERSITY 42		5. Well No. 1216HC					
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 7800		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. 7C		12. County CROCKETT		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 18 miles in a NW direction from OZONA which is the nearest town in the county of the well site.							
15. Section 12		16. Block 42	17. Survey UL	18. Abstract No. A-U362	19. Distance to nearest lease line: 100 ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: 7780.13	
21. Lease Perpendiculars: 10547 ft from the N line and 1650 ft from the W line.							
22. Survey Perpendiculars: 330 ft from the S line and 1650 ft from the W 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	
7C	42341300	HOLT RANCH (CONSOLIDATED)		Oil or Gas Well	7800	350.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks [RRC STAFF Dec 30, 2014 10:38 AM]: Well count changed to 124 per RRC records.				Certificate:			
				I certify that information stated in this application is true and complete, to the best of my knowledge.			
RRC Use Only Data Validation Time Stamp: Dec 30, 2014 3:21 PM('As Approved' Version)				Carol Adler, SR Regulatory Specialist Dec 29, 2014			
				Name of filer Date submitted			
				(817)989-9000, x2143 cadler@approachresources.com			
				Phone E-mail Address (OPTIONAL)			

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

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

Form W-1H
Supplemental Horizontal Well Information

07/2004

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

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Permit #	802221
Approved Date:	Dec 30, 2014

1. RRC Operator No. 028625	2. Operator's Name (exactly as shown on form P-5, Organization Report) APPROACH OPERATING LLC	3. Lease Name UNIVERSITY 42	4. Well No. 1216HC
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 HOLT RANCH (CONSOLIDATED) (Field # 42341300, RRC District 7C)			
6. Section 24	7. Block 42	8. Survey UL	9. Abstract
		10. County of BHL CROCKETT	
11. Terminus Lease Line Perpendiculars 20 ft. from the S line. and 1380 ft. from the W line			
12. Terminus Survey Line Perpendiculars 20 ft. from the S line. and 1380 ft. from the W line			
13. Penetration Point Lease Line Perpendiculars 10547 ft. from the N line. and 1380 ft. from the W 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 <div style="text-align: right;">802221</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: right;">Dec 30, 2014</div>	DISTRICT <div style="text-align: right;">* 7C</div>																																			
API NUMBER <div style="text-align: right;">42-105-42194</div>	FORM W-1 RECEIVED <div style="text-align: right;">Dec 29, 2014</div>	COUNTY <div style="text-align: right;">CROCKETT</div>																																			
TYPE OF OPERATION <div style="text-align: right;">NEW DRILL</div>	WELLBORE PROFILE(S) <div style="text-align: right;">Horizontal</div>	ACRES <div style="text-align: right;">7780.13</div>																																			
OPERATOR <div style="text-align: right;">028625</div> <div style="text-align: center;"> APPROACH OPERATING LLC ONE RIDGMAR CENTRE 6500 WEST FREEWAY SUITE 800 FORT WORTH, TX 76116-0000 </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: right;">(325) 657-7450</div>																																			
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LOCATION <div style="text-align: right;">18 miles NW direction from OZONA</div>		TOTAL DEPTH <div style="text-align: right;">7800</div>																																			
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION ◀ 12</div> <div>BLOCK ◀ 42</div> <div>ABSTRACT ◀ U362</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY ◀ UL</div> <div></div> <div></div> </div>																																					
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RESTRICTIONS: <div style="margin-left: 20px;"> Lateral: TH1 Penetration Point Location Lease Lines: 10547.0 F N L 1380.0 F W L Terminus Location BH County: CROCKETT Section: 24 Block: 42 Abstract: Survey: UL Lease Lines: 20.0 F S L 1380.0 F W L Survey Lines: 20.0 F S L 1380.0 F W L </div>																																					
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS 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 802221	DATE PERMIT ISSUED OR AMENDED Dec 30, 2014	DISTRICT * 7C										
API NUMBER 42-105-42194	FORM W-1 RECEIVED Dec 29, 2014	COUNTY CROCKETT										
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 7780.13										
OPERATOR APPROACH OPERATING LLC ONE RIDGMAR CENTRE 6500 WEST FREEWAY SUITE 800 FORT WORTH, TX 76116-0000		028625 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: (325) 657-7450										
LEASE NAME UNIVERSITY 42		WELL NUMBER 1216HC										
LOCATION 18 miles NW direction from OZONA		TOTAL DEPTH 7800										
Section, Block and/or Survey SECTION ◀ 12 BLOCK ◀ 42 ABSTRACT ◀ U362 SURVEY ◀ UL												
DISTANCE TO SURVEY LINES 330 ft. S 1650 ft. W		DISTANCE TO NEAREST LEASE LINE 100 ft.										
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FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									

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

CROCKETT (105) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
QUEEN	1,000	2,300		1	12/17/2013
SAN ANDRES	1,000	3,700		2	12/17/2013
LEONARD	3,100	4,200		3	12/17/2013
WOLFCAMP	3,400	6,300		4	12/17/2013
CANYON	4,000	8,800		5	12/17/2013
STRAWN	7,100	11,600		6	12/17/2013
DEVONIAN	8,900	11,900		7	12/17/2013
ELLENBURGER	6,500	13,400		8	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.state.tx.us/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Form GW-2

Date December 22, 2014

GAU File No.: 15787

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

API Number 10542185

Attention: CAROL ADLER

RRC Lease No. 000000

SC_028625_10542185_000000_15787.pdf

APPROACH OPERATING LLC
6500 W FWY
STE 800
FORT WORTH TX 76116

P-5# 028625

--Measured--

1240 ft FWL

330 ft FSL

MRL:SECTION

Digital Map Location:

X-coord/Long 101.20870

Y-coord/Lat 30.94060

Datum 27 Zone

County CROCKETT

Lease & Well No. UNIVERSITY 42 #1215HC&RAD

Purpose ND

Location SUR-UL,A-U362,BLK-42,SEC-12,--[TD=7800],[RRC 7C],

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 750 feet must be protected.

This recommendation is applicable to all wells within a radius of 300 feet of this location.

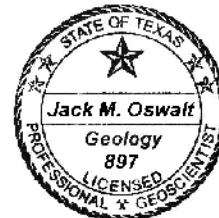
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form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

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

Sincerely,

Jack M. Oswalt, P.G.

GEOLOGIST SEAL



Geologist, Groundwater Advisory Unit
Oil & Gas Division

The seal appearing on this document was authorized by Jack M. Oswalt on 12/22/2014
Note: Alteration of this electronic document will invalidate the digital signature.

SURFACE LOCATION

PROPOSED PENETRATION POINT

PROPOSED 1st TAKE POINT

PROPOSED LAST TAKE POINT

PROPOSED BOTTOMHOLE LOC.

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