

API No. <u>42-495-33544</u> Drilling Permit # <u>775589</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. 774719		2. Operator's Name (as shown on form P-5, Organization Report) SHELL WESTERN E&P			3. Operator Address (include street, city, state, zip):		
4. Lease Name UNIVERSITY 20-10 WNK		5. Well No. 1H					
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 12500		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. 08		12. County WINKLER		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>9.5</u> miles in a <u>W</u> direction from <u>Wink</u> which is the nearest town in the county of the well site.							
15. Section 10		16. Block 20		17. Survey UL		18. Abstract No. A-	
				19. Distance to nearest lease line: 200 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 641.31	
21. Lease Perpendiculars: <u>230</u> ft from the <u>N</u> line and <u>2600</u> ft from the <u>W</u> line. 22. Survey Perpendiculars: <u>230</u> ft from the <u>N</u> line and <u>2600</u> ft from the <u>W</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	11726	0.00	
08	92100050	TWO GEORGES (BONE SPRING)		Oil Well	9638	0.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks 				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. George Mullen, Sr. Regulatory Specialist Name of filer _____ Date submitted Dec 12, 2013			
				(832)337-0549 george.mullen@shell.com Phone E-mail Address (OPTIONAL)			
RRC Use Only Data Validation Time Stamp: Dec 31, 2013 11:08 AM('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**

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

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

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Permit #	775589
Approved Date:	Dec 31, 2013

1. RRC Operator No. 774719	2. Operator's Name (exactly as shown on form P-5, Organization Report) SHELL WESTERN E&P	3. Lease Name UNIVERSITY 20-10 WNK	4. Well No. 1H
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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)
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6. Section 10	7. Block 20	8. Survey UL	9. Abstract	10. County of BHL WINKLER
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11. Terminus Lease Line Perpendiculars _____ 200 _____ ft. from the _____ S _____ line. and _____ 2600 _____ ft. from the _____ W _____ line
12. Terminus Survey Line Perpendiculars _____ 200 _____ ft. from the _____ S _____ line. and _____ 2600 _____ ft. from the _____ W _____ line
13. Penetration Point Lease Line Perpendiculars _____ 707 _____ ft. from the _____ N _____ line. and _____ 2600 _____ ft. from the _____ W _____ line

5. Field as shown on Form W-1	PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)
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6. Section 10	7. Block 20	8. Survey UL	9. Abstract	10. County of BHL WINKLER
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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 775589	DATE PERMIT ISSUED OR AMENDED Dec 31, 2013	DISTRICT * 08	
API NUMBER 42-495-33544	FORM W-1 RECEIVED Dec 12, 2013	COUNTY WINKLER	
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 641.31	
OPERATOR SHELL WESTERN E&P		774719 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 20-10 WNK		WELL NUMBER 1H	
LOCATION 9.5 miles W direction from WINK		TOTAL DEPTH 12500	
Section, Block and/or Survey SECTION ◀ 10 BLOCK ◀ 20 ABSTRACT ◀ SURVEY ◀ UL			
DISTANCE TO SURVEY LINES 230 ft. N 2600 ft. W		DISTANCE TO NEAREST LEASE LINE 200 ft.	
DISTANCE TO LEASE LINES 230 ft. N 2600 ft. W		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 LEASE	WELL # NEAREST WE
PHANTOM (WOLFCAMP) UNIVERSITY 20-10 WNK	641.31 200	11,726 0	1H 08
WELLBORE PROFILE(s) FOR FIELD: Horizontal			
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 707.0 F N L 2600.0 F W L Terminus Location BH County: WINKLER Section: 10 Block: 20 Abstract: Survey: UL Lease Lines: 200.0 F S L 2600.0 F W L Survey Lines: 200.0 F S L 2600.0 F W L			
TWO GEORGES (BONE SPRING) UNIVERSITY 20-10 WNK	641.31 200	9,638 0	1H 08
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			

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LEASE NAME UNIVERSITY 20-10 WNK		WELL NUMBER 1H
LOCATION 9.5 miles W direction from WINK		TOTAL DEPTH 12500
Section, Block and/or Survey SECTION 10 BLOCK 20 ABSTRACT SURVEY UL		
DISTANCE TO SURVEY LINES 230 ft. N 2600 ft. W		DISTANCE TO NEAREST LEASE LINE 200 ft.
DISTANCE TO LEASE LINES 230 ft. N 2600 ft. W		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *		
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE
<p>individually prior to commingling production.</p> <p>Lateral: TH1 Penetration Point Location Lease Lines: 707.0 F N L 2600.0 F W L</p> <p>Terminus Location BH County: WINKLER Section: 10 Block: 20 Abstract: Survey: UL Lease Lines: 200.0 F S L 2600.0 F W L Survey Lines: 200.0 F S L 2600.0 F W L</p>		
<p align="center">THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</p> <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> <p>Currently there are no identified formations listed for this county. It is still the operators responsibility to isolate and report any potential flow zones that are encountered in the completion of this well.</p>		

Groundwater
Advisory Unit

GROUNDWATER PROTECTION DETERMINATION

Date January 2, 2014

GAU File No.: SC- 6151

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

API Number 49533544

Attention: GEORGE MULLEN

RRC Lease No. 000000

SC_774719_49533544_000000_6151.pdf

SHELL WESTERN E&P
150 DAIRY ASHFORD
HOUSTON TX 77079

--Measured--

2600 ft FWL

230 ft FNL

MRL:SECTION

P-5# 774719

Digital Map Location:

X-coord/Long 103.32100

Y-coord/Lat 31.73660

Datum 27 Zone

County WINKLER

Lease & Well No. UNIVERSITY 20 10 WNK #1H

Purpose ND

Location SUR-UL,BLK-20,SEC-10,--[TD=12500],[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,

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 1/2/2014.
Note: Alteration of this electronic document will invalidate the digital signature.

S:\SURVEY\SHELL\PERMAN BASIN\UNIVERSITY 20-10 LOW\FINAL PRODUCTS\LO UNIVERSITY 20-10 WNK 1H REV1.DWG 12/5/2013 12:58:18 PM abrown