

API No. <u>42-301-32937</u> Drilling Permit # <u>816306</u> SWR Exception Case/Docket No. <u>0300901</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>774719</u>		2. Operator's Name (as shown on form P-5, Organization Report) SHELL WESTERN E&P			3. Operator Address (include street, city, state, zip): PO BOX 576 HOUSTON, TX 77001-0000		
4. Lease Name UNIVERSITY 20 ALLOC		5. Well No. <u>2003ST</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 checked="" 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>12400</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 LOVING		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>15.6</u> miles in a <u>SE</u> direction from <u>Mentone</u> which is the nearest town in the county of the well site.							
15. Section <u>29</u>		16. Block <u>20</u>		17. Survey <u>UL</u>		18. Abstract No. <u>A-U43</u>	
				19. Distance to nearest lease line: <u>534</u> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>13224.15</u>	
21. Lease Perpendiculars: <u>324</u> ft from the <u>SE</u> line and <u>1653</u> ft from the <u>NE</u> line. 22. Survey Perpendiculars: <u>1653</u> ft from the <u>NE</u> line and <u>335</u> ft from the <u>NW</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 Well	11900	804.00	
		< see Page 2 for additional Fields >					
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="text-align: center;"> George Mullen, Sr. Regulatory Specialist </div> <div style="display: flex; justify-content: space-between;"> <div> <u>George Mullen, Sr. Regulatory Specialist</u> Name of filer </div> <div> <u>Feb 07, 2018</u> Date submitted </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <u>(832)337-0549</u> Phone </div> <div> <u>george.mullen@shell.com</u> E-mail Address (OPTIONAL) </div> </div>			
RRC Use Only							
Data Validation Time Stamp: Feb 9, 2018 2:38 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**

W-1 Supplemental Field Data
07/2004

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 #	816306
Approved Date:	Feb 09, 2018

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 ALLOC	4. County LOVING				
ADDITIONAL FIELD INFORMATION (continued from Page 1)							
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	33. Total Acres
08	92100050	TWO GEORGES (BONE SPRING)	Oil Well	11900	3933.00	13	13183.98
Lease Name & Well Number UNIVERSITY 20 ALLOC, Well No. 2003ST			Surface Lease/Unit Perpendiculars 324 ft from SE line; 1653 ft from NE line			Wellbore Profiles Horizontal	

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
 Supplemental Horizontal Well Information

07/2004

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 #	816306
Approved Date:	Feb 09, 2018

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 ALLOC	4. Well No. 2003ST
-------------------------------	---	--------------------------------------	-----------------------

Lateral Drainhole Location Information

5. Field as shown on Form W-1	PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)
-------------------------------	--

6. Section 17	7. Block 20	8. Survey UL / A-U37	9. Abstract	10. County of BHL LOVING
------------------	----------------	-------------------------	-------------	-----------------------------

11. Terminus Lease Line Perpendiculars 8277 ft. from the SW line. and 8360 ft. from the SE line
12. Terminus Survey Line Perpendiculars 2287 ft. from the NE line. and 2412 ft. from the SE line
13. Penetration Point Lease Line Perpendiculars 2451 ft. from the NE line. and 383 ft. from the SE line

5. Field as shown on Form W-1	TWO GEORGES (BONE SPRING) (Field # 92100050, RRC District 08)
-------------------------------	---

6. Section 17	7. Block 20	8. Survey UL / A-U37	9. Abstract	10. County of BHL LOVING
------------------	----------------	-------------------------	-------------	-----------------------------

11. Terminus Lease Line Perpendiculars 5636 ft. from the SW line. and 8360 ft. from the SE line
12. Terminus Survey Line Perpendiculars 2287 ft. from the NE line. and 2412 ft. from the SE line
13. Penetration Point Lease Line Perpendiculars 2451 ft. from the NE line. and 383 ft. from the SE 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 #	816306
Approved Date:	Feb 09, 2018

[Feb 5, 2018 3:44 PM]: 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 Feb 5, 2018 4:08 PM]: Amended permit needed to reflect the new well name, well number and show it as an Allocation well. For the Two Georges (Bone Spring) field this well is an Allocation well made up of University 20 TG Unit and 80 acres out of Sec. 29, Blk. 20, University Lands. For the Phantom (Wolfcamp) field this well is an Allocation well made up of the University 20 PW Unit and 80 acres out of Sec. 29, Blk. 20, University Lands. Shell is the Operator of both leases and grants itself an exception to SWR 37. The SHL, PP and FTP are located in Sec. 29, Blk. 20, University Land Survey. The LTP and BHL are located in Sec. 17, Blk. 20, University Land Survey. Shell plans to request an exception to SWR 10 to downhole commingle the production in this well bore.; [RRC STAFF Feb 8, 2018 10:58 AM]: Unchecked pooled unit box on field details for both fields

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 816306	DATE PERMIT ISSUED OR AMENDED (AMENDED) Feb 09, 2018	DISTRICT * 08		
API NUMBER 42-301-32937	FORM W-1 RECEIVED Feb 07, 2018	COUNTY LOVING		
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 13224.15		
OPERATOR SHELL WESTERN E&P PO BOX 576 HOUSTON, TX 77001-0000		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 ALLOC		WELL NUMBER 2003ST		
LOCATION 15.6 miles SE direction from MENTONE		TOTAL DEPTH 12400		
Section, Block and/or Survey SECTION ◀ 29 BLOCK ◀ 20 ABSTRACT ◀ U43 SURVEY ◀ UL				
DISTANCE TO SURVEY LINES 1653 ft. NE 335 ft. NW		DISTANCE TO NEAREST LEASE LINE 534 ft.		
DISTANCE TO LEASE LINES 324 ft. SE 1653 ft. NE		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below		
FIELD(s) and LIMITATIONS: <p align="center">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</p> <p align="center">** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) **</p> <p align="center">CASE NO. 0300901</p>				
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH	WELL # NEAREST WE	DIST
-----	-----	-----	-----	-----
** PHANTOM (WOLFCAMP)	13224.15	11,900	2003ST	08
UNIVERSITY 20 ALLOC	534		804	

WELLBORE PROFILE(s) FOR FIELD: Horizontal				

RESTRICTIONS: Permitted for oil only. 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 individually prior to commingling production.				
Lateral: TH1 Penetration Point Location Lease Lines: 2451.0 F NE L 383.0 F SE L				
Terminus Location BH County: LOVING Section: 17 Block: 20 Abstract: Survey: UL / A-U37 Lease Lines: 8277.0 F SW L 8360.0 F SE L Survey Lines: 2287.0 F NE L 2412.0 F SE L				

** TWO GEORGES (BONE SPRING)	13183.98	11,900	2003ST	08
UNIVERSITY 20 ALLOC	534		3933	

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;">816306</div>	DATE PERMIT ISSUED OR AMENDED (AMENDED) Feb 09, 2018	DISTRICT <div style="text-align: center;">* 08</div>
API NUMBER <div style="text-align: right;">42-301-32937</div>	FORM W-1 RECEIVED <div style="text-align: center;">Feb 07, 2018</div>	COUNTY <div style="text-align: center;">LOVING</div>
TYPE OF OPERATION <div style="text-align: center;">NEW DRILL</div>	WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div>	ACRES <div style="text-align: center;">13224.15</div>
OPERATOR <div style="text-align: right;">774719</div> <div style="text-align: center;"> SHELL WESTERN E&P PO BOX 576 HOUSTON, TX 77001-0000 </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: center;">(432) 684-5581</div>
LEASE NAME <div style="text-align: center;">UNIVERSITY 20 ALLOC</div>		WELL NUMBER <div style="text-align: center;">2003ST</div>
LOCATION <div style="text-align: center;">15.6 miles SE direction from MENTONE</div>		TOTAL DEPTH <div style="text-align: center;">12400</div>
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION 29</div> <div>BLOCK 20</div> <div>ABSTRACT U43</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY UL</div> <div></div> <div></div> </div>		
DISTANCE TO SURVEY LINES <div style="display: flex; justify-content: space-around;"> <div>1653 ft. NE</div> <div>335 ft. NW</div> </div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">534 ft.</div>
DISTANCE TO LEASE LINES <div style="display: flex; justify-content: space-around;"> <div>324 ft. SE</div> <div>1653 ft. NE</div> </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;"> * SEE FIELD DISTRICT FOR REPORTING PURPOSES * ** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) ** CASE NO. 0300901 </div>		
FIELD NAME LEASE NAME -----	ACRES NEAREST LEASE	DEPTH NEAREST WE
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 individually prior to commingling production. Lateral: TH1 Penetration Point Location Lease Lines: 2451.0 F NE L 383.0 F SE L Terminus Location BH County: LOVING Section: 17 Block: 20 Abstract: Survey: UL / A-U37 Lease Lines: 5636.0 F SW L 8360.0 F SE L Survey Lines: 2287.0 F NE L 2412.0 F SE L		
' ** ' PRECEDING FIELD NAME INDICATES RULE (R37)		
<div style="text-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;">816306</div>	DATE PERMIT ISSUED OR AMENDED (AMENDED) Feb 09, 2018	DISTRICT <div style="text-align: right;">* 08</div>															
API NUMBER <div style="text-align: right;">42-301-32937</div>	FORM W-1 RECEIVED <div style="text-align: center;">Feb 07, 2018</div>	COUNTY <div style="text-align: center;">LOVING</div>															
TYPE OF OPERATION <div style="text-align: center;">NEW DRILL</div>	WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div>	ACRES <div style="text-align: right;">13224.15</div>															
OPERATOR <div style="text-align: right;">774719</div> <div style="text-align: center;">SHELL WESTERN E&P</div> <div style="text-align: center;">PO BOX 576</div> <div style="text-align: center;">HOUSTON, TX 77001-0000</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: center;">(432) 684-5581</div>															
LEASE NAME <div style="text-align: center;">UNIVERSITY 20 ALLOC</div>		WELL NUMBER <div style="text-align: right;">2003ST</div>															
LOCATION <div style="text-align: center;">15.6 miles SE direction from MENTONE</div>		TOTAL DEPTH <div style="text-align: right;">12400</div>															
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION 29</div> <div>BLOCK 20</div> <div>ABSTRACT U43</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY UL</div> <div></div> <div></div> </div>																	
DISTANCE TO SURVEY LINES <div style="display: flex; justify-content: space-around;"> <div>1653 ft. NE</div> <div>335 ft. NW</div> </div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: right;">534 ft.</div>															
DISTANCE TO LEASE LINES <div style="display: flex; justify-content: space-around;"> <div>324 ft. SE</div> <div>1653 ft. NE</div> </div>		DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: right;">See FIELD(s) Below</div>															
FIELD(s) and LIMITATIONS: <div style="text-align: center;"> * SEE FIELD DISTRICT FOR REPORTING PURPOSES * ** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) ** CASE NO. 0300901 </div>																	
<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left;">FIELD NAME</th> <th style="text-align: left;">ACRES</th> <th style="text-align: left;">DEPTH</th> <th style="text-align: left;">WELL #</th> <th style="text-align: left;">DIST</th> </tr> <tr> <th style="text-align: left;">LEASE NAME</th> <th style="text-align: left;">NEAREST LEASE</th> <th style="text-align: left;"></th> <th style="text-align: left;">NEAREST WE</th> <th style="text-align: left;"></th> </tr> </thead> <tbody> <tr> <td colspan="5"> The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application. 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. </td> </tr> </tbody> </table>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE		The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application. 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.				
FIELD NAME	ACRES	DEPTH	WELL #	DIST													
LEASE NAME	NEAREST LEASE		NEAREST WE														
The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application. 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.																	

UNIVERSITY 20 ALLOC 2003ST WELL LOCATION

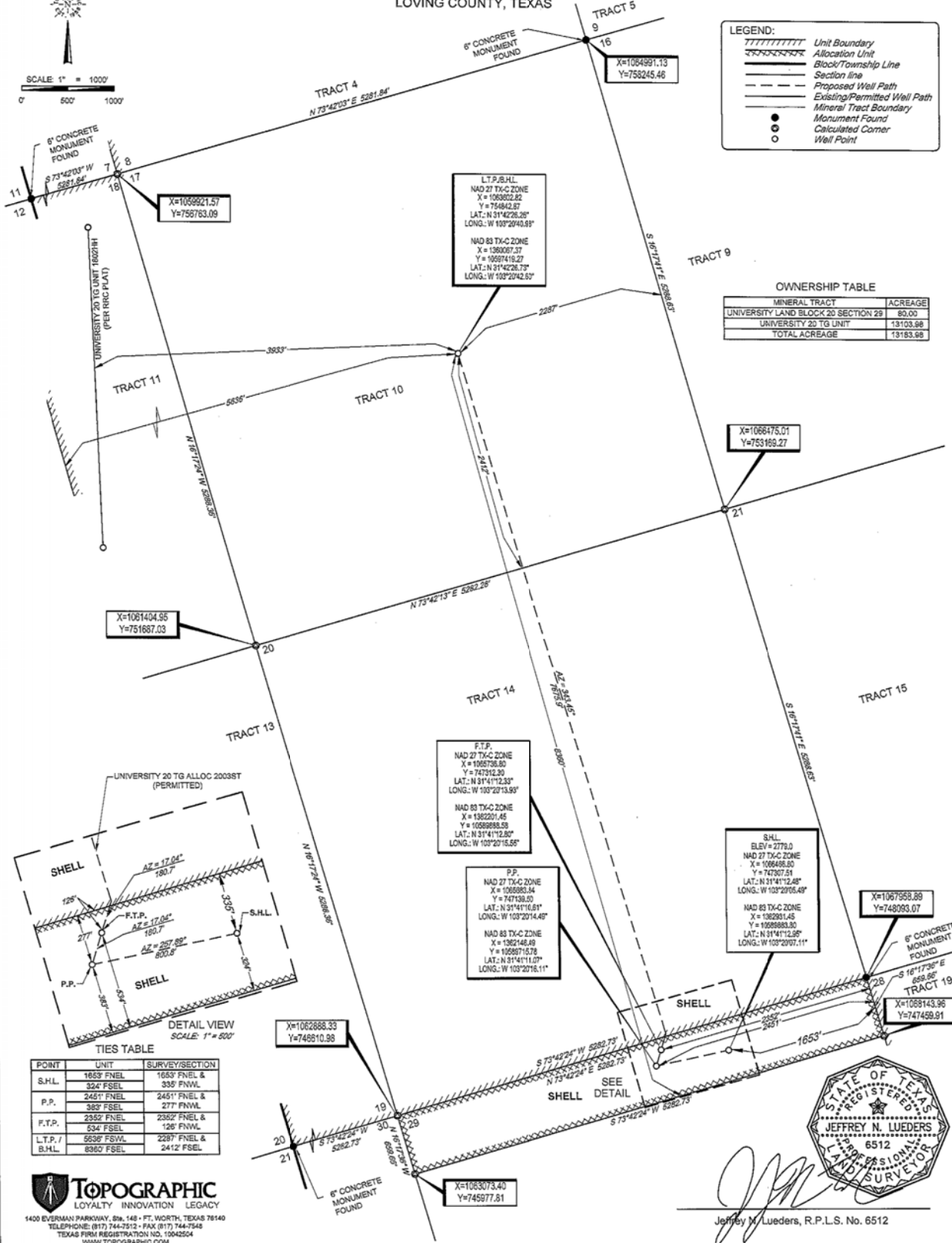
13103.98 ACRES (MEASURED)
ALLOCATION UNIT 80.00 ACRES (MEASURED)
SECTIONS 17 & 20, NORTH 80 ACRES OF SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY
LOVING COUNTY, TEXAS

SHELL WESTERN
E&P



LEGEND:

-----	Unit Boundary
-----	Allocation Unit
-----	Block/Township Line
-----	Section line
-----	Proposed Well Path
-----	Existing/Permitted Well Path
-----	Mineral Tract Boundary
●	Monument Found
○	Calculated Corner
○	Well Point



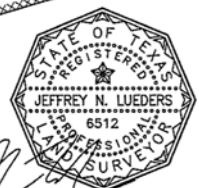
OWNERSHIP TABLE

MINERAL TRACT	ACREAGE
UNIVERSITY LAND BLOCK 20 SECTION 29	80.00
UNIVERSITY 20 TG UNIT	13103.98
TOTAL ACREAGE	13183.98

TIES TABLE

POINT	UNIT	SURVEY/SECTION
S.H.L.	1653' FSEL	1653' FSEL & 335' FPNL
P.P.	2451' FSEL	2451' FSEL & 382' FPNL
F.T.P.	2352' FSEL	2352' FSEL & 126' FPNL
L.T.P.	5638' FSEL	2287' FSEL & 2412' FSEL

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, SUITE 140 - FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7513 - FAX (817) 744-7548
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM



UNIVERSITY 20 ALLOC 2003ST	REVISION:		NOTES: 1. ORIGINAL DOCUMENT SIZE: 11" X 17" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927, UNLESS OTHERWISE NOTED. 3. THIS LOCATION AND/OR UNIT/LEASE BOUNDARY HAS BEEN CAREFULLY SURVEYED ON THE GROUND UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE ACCORDING TO THE EVIDENCE, OFFICIAL SURVEY RECORDS, MAPS, AND OTHER DATA PROVIDED BY SHELL WESTERN E&P. THIS PLAN WAS CREATED FOR THE SOLE PURPOSE OF FILING A PERMIT WITH THE RAILROAD COMMISSION OF TEXAS AND SHOULD NOT BE CONSTRUED AS A "BOUNDARY SURVEY" IN COMPLIANCE WITH T.B.P.U.S. MINIMUM STANDARDS OF PROCEDURES FOR BOUNDARY SURVEYS. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAN IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY. 4. ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FEET. 5. ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY SHELL WESTERN E&P OR ITS SUBSIDIARIES & AFFILIATES.	NOTES CONT'D: 6. THE LEASE AND WELL SHOWN HEREON ARE LOCATED APPROXIMATELY 5.6 MILES SOUTHEAST OF THE CITY/TOWNSHIP/MUNICIPALITY OF MENTONE WITHIN THE COUNTY OF LOVING IN THE STATE OF TEXAS. 7. THE PRELIMINARY LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF APRIL 25, 2016. 8. S.H.L. = SURFACE HOLE LOCATION 9. P.P. = POINT OF PENETRATION 10. F.T.P. = FIRST TAKE POINT 11. L.T.P. = LAST TAKE POINT 12. B.H.L. = BOTTOM HOLE LOCATION
	INT	DATE		
	O.M.	08/25/2017		
	J.R.A.	09/19/2017		
	O.M.	10/18/2017		
	O.M.	10/19/2017		
	O.M.	02/06/2018		
DATE:	05/04/2016	O.M.	02/07/2018	
FILE:	LOUNIVERSITY_20_ALLOC_2003ST_R_REV10	O.M.		
DRAWN BY:	O.M.	O.M.		
SHEET:	1 OF 1	O.M.		

ES:\SURVEILL\PERMAN BASIN\UNIVERSITY 20_20 LOVING\PRODUCTS\LO UNIVERSITY 20_ALLOC_2003ST_R2_REV10.DWG 07/2018 11:33:26 AM cmo