

API No. <u>42-301-36081</u> Drilling Permit # <u>883732</u> SWR Exception Case/Docket No. <u>0336982 (R37)</u>	<b>RAILROAD COMMISSION OF TEXAS</b> <b>OIL &amp; GAS DIVISION</b> <b>APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER</b> <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>	<b>FORM W-1</b> Permit Status: <b>Approved</b>
1. RRC Operator No. <b>646827</b>	2. Operator's Name (as shown on form P-5, Organization Report) <b>PDEH LLC</b>	3. Operator Address (include street, city, state, zip) <b>600 W ILLINOIS AVE MIDLAND, TX 79701-0000</b>
4. Lease Name <b>UL 20 PADDLE TAIL D</b>		5. Well No. <b>553H</b>
<b>GENERAL INFORMATION</b>		
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 <b>12000</b>	9. Do you have the right to minerals under any right-of- <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Is this well subject to Statewide Rule 36 (hydrogen sulfide) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>SURFACE LOCATION AND ACREAGE INFORMATION</b>		
11. RRC District No. <b>08</b>	12. County <b>LOVING</b>	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>14.2</u> miles in a <u>NE</u> direction from <u>Mentone</u> which is the nearest town in the county of the well site.		
15. Section <b>5</b>	16. Block <b>20</b>	17. Survey <b>UL</b>
18. Abstract No. <b>U30</b>		19. Distance to nearest lease line: <b>ft.</b>
20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>1922.1</b>		
21. Lease Perpendiculars: <u>656.0</u> ft. from the <u>NW</u> line and <u>2155.0</u> ft. from the <u>SW</u> line.		
22. Survey Perpendiculars: <u>656.0</u> ft. from the <u>NW</u> line and <u>2155.0</u> ft. from the <u>SW</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		
<b>FIELD INFORMATION      List all fields of anticipated completion including Wildcat. List one zone per line.</b>		
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		
<b>08</b>	<b>71052900</b>	<b>PHANTOM (WOLFCAMP)</b>
<b>08</b>	<b>92100050</b>	<b>TWO GEORGES (BONE SPRING)</b>
<b>Oil or Gas Well</b>	<b>12000</b>	<b>363.0</b>
<b>Oil Well</b>	<b>12000</b>	<b>0.0</b>
		<b>11</b>
		<b>1</b>
<b>BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS</b>		
<b>Remarks</b> See attached		<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge RRC User _____ <b>09/07/2022</b> Name of filer _____ Date Submitted _____ Phone _____ Email Address(OPTIONAL) _____
<b>RRC Use Only      Date Validation Time Stamp:      Wed, 21 Sep 2022 07:04:52</b>		

**RAILROAD COMMISSION OF TEXAS**

**FORM W-1H**

**OIL & GAS DIVISION**

**Supplemental Horizontal Well Information**

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

*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 Status: **Approved**

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

Permit # **883732**

Approved Date: **09/20/2022**

1. RRC Operator No. <b>646827</b>	2. Operator's Name (as shown on form P-5, Organization Report) <b>PDEH LLC</b>	3. Lease Name <b>UL 20 PADDLE TAIL D</b>	4 Well No. <b>553H</b>
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**Lateral Drainhole Location Information**

5. Field as shown on Form W-1 <b>PHANTOM (WOLFCAMP) ( Field # 71052900, RRC District 08 )</b>			
6. Section <b>17</b>	7. Block <b>20</b>	8. Survey <b>UL / A-U37</b>	9. Abstract <b>2057.0</b>
10. County of BHL <b>LOVING</b>			
11. Terminus Lease Line Perpendiculars <b>2699.0</b> ft. from the <b>SE</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			
12. Terminus Survey Line Perpendiculars <b>2590.0</b> ft. from the <b>NW</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			
13. Penetration Point Lease Line Perpendiculars <b>100.0</b> ft. from the <b>NW</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			

5. Field as shown on Form W-1 <b>TWO GEORGES (BONE SPRING) ( Field # 92100050, RRC District 08 )</b>			
6. Section <b>17</b>	7. Block <b>20</b>	8. Survey <b>UL / A-U37</b>	9. Abstract <b>2057.0</b>
10. County of BHL <b>LOVING</b>			
11. Terminus Lease Line Perpendiculars <b>2699.0</b> ft. from the <b>SE</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			
12. Terminus Survey Line Perpendiculars <b>2590.0</b> ft. from the <b>NW</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			
13. Penetration Point Lease Line Perpendiculars <b>100.0</b> ft. from the <b>NW</b> line and <b>2057.0</b> ft. from the <b>NE</b> line			

Permit Status:      Approved

**RAILROAD COMMISSION OF TEXAS**

**OIL & GAS DIVISION**

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

**FORM W-1 Comments**

Permit #                      883732  
  
Approved Date:              09/20/2022

*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.*

[ 09/01/2022 10:03:08 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 09/07/2022 10:19:35 AM]: PDEH HAS 100% OF MINERAL INTEREST AND WORKING INTEREST OWNERS IN AGREEMENT IN EACH TRACT. ACREAGE WILL BE ADJUSTED UPON COMPLETION. A P-6 IS PENDING APPROVAL BY THE RRC WELL COMPLIANCE TEAM. THE EXISTING

**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 <b>883732</b>	DATE PERMIT ISSUED OR AMENDED <b>09/20/2022</b>	DISTRICT <b>08</b>
API NUMBER <b>42-301-36081</b>	FORM W-1 RECEIVED <b>09/07/2022</b>	COUNTY <b>LOVING</b>
TYPE OF OPERATION <b>New Drill</b>	WELLBORE PROFILE(S) <b>Horizontal</b>	ACRES <b>1922.1</b>
OPERATOR <b>PDEH LLC 600 W ILLINOIS AVE MIDLAND, TX 79701-0000</b>		646827  <b>NOTICE</b> 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:  <b>(432) 684-5581</b>
LEASE NAME <b>UL 20 PADDLE TAIL D</b>		WELL NUMBER <b>553H</b>
LOCATION <b>14.2 miles NE direction from Mentone</b>		TOTAL DEPTH <b>12000</b>
Section, Block and/or SECTION <b>5</b> BLOCK <b>20</b> ABSTRACT <b>U30</b> SURVEY <b>UL</b>		
DISTANCE TO SURVEY LINES <b>656.0 ft NW 2155.0 ft SW</b>		DISTANCE TO NEAREST LEASE LINE <b>null</b>
DISTANCE TO LEASE LINES <b>656.0 ft NW 2155.0 ft SW</b>		DISTANCE TO NEAREST WELL ON LEASE <b>See FIELD(s) Below</b>

FIELD(s) and LIMITATIONS:

\* SEE FIELD DISTRICT FOR REPORTING PURPOSES \*

\*\* THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 37(h)(2)(B) \*\* CASE NO 0336982

FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH	WELL# NEAREST WELL	DIST
** PHANTOM (WOLFCAMP)	1922.1	12000	553H	08
UL 20 PADDLE TAIL D			363.0	
WELLBORE PROFILE(s) FOR FIELD: Horizontal				

Terminus Point: TH1 Section: 17 Block: 20 Abstract: Survey: UL / A-U37 BH County: LOVING

Lease Lines: 2699.0 ft SE 2057.0 ft NE

Survey Lines: 2590.0 ft NW 2057.0 ft NE

Penetration Lines: 100.0 ft NW 2057.0 ft NE

This is a hydrogen sulfide field. This well shall be drilled in accordance with SWR 36.

** TWO GEORGES (BONE SPRING)	1922.1	12000	553H	08
UL 20 PADDLE TAIL D			0.0	
WELLBORE PROFILE(s) FOR FIELD: Horizontal				

Terminus Point: TH1 Section: 17 Block: 20 Abstract: Survey: UL / A-U37 BH County: LOVING

Lease Lines: 2699.0 ft SE 2057.0 ft NE

Survey Lines: 2590.0 ft NW 2057.0 ft NE

Penetration Lines: 100.0 ft NW 2057.0 ft NE

This is a hydrogen sulfide field. This well shall be drilled in accordance with SWR 36.

'\*\*' PRECEDING FIELD NAME INDICATES RULE (R37)

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.

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.

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.

**Railroad Commission of Texas**  
**Oil and Gas Division**  
**SWR #13 Formation Data**  
**LOVING ( 301 ) COUNTY**

Formation	Remarks	Geological Order	Effective Date
RED BLUFF		1	02/09/2020
DELAWARE		2	02/09/2020
BELL CANYON		3	02/09/2020
CHERRY CANYON		4	02/09/2020
BRUSHY CANYON		5	02/09/2020
BONE SPRING		6	02/09/2020
WOLFCAMP		7	02/09/2020
PENNSYLVANIAN		8	02/09/2020
STRAWN		9	02/09/2020
ATOKA	high pressure	10	02/09/2020
MORROW		11	02/09/2020
DEVONIAN		12	02/09/2020
FUSSELMAN		13	02/09/2020
ELLENBURGER		14	02/09/2020
PRECAMBRIAN (UNDIFFERENTIATED)		15	02/09/2020

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. The listing order of the Formation information reflects the general stratigraphic order and relative geologic age. 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:** 08 September 2022      **GAU Number:** 355415

<b>Attention:</b>	PDEH LLC 600 W ILLINOIS AVE MIDLAND, TX 79701	<b>API Number:</b>	
<b>Operator No.:</b>	646827	<b>County:</b>	LOVING
		<b>Lease Name:</b>	UL 20 Paddle Tail
		<b>Lease Number:</b>	
		<b>Well Number:</b>	502H
		<b>Total Vertical:</b>	12000
		<b>Latitude:</b>	31.740214
		<b>Longitude:</b>	-103.360131
		<b>Datum:</b>	NAD27

**Purpose:** New Production Well  
**Location:** Survey-UL; Abstract-U30; Block-20; Section-5

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

Water-bearing strata from the land surface to a depth of 300 feet and the Rustler, which is estimated to occur from 825 to 1200 feet must be protected.

This recommendation is applicable for all wells drilled in this section 5.

Note: Unless stated otherwise, this recommendation is intended to apply to all wells drilled within 200 feet of the subject well. Unless stated otherwise, this recommendation is for normal drilling, production, and plugging operations only.

This determination is based on information provided when the application was submitted on 09/08/2022. 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

OPERATOR: PDEH LLC

WELL LOCATION

LEASE NAME & WELL NO.:

**UL 20 PADDLE TAIL D #553H**

PSA ACREAGE:

1,922.10 ACRES (CALLED)

NEAREST TOWN IN COUNTY:

±14.2 MILES NORTHEAST OF MENTONE, TEXAS

DESCRIPTION:

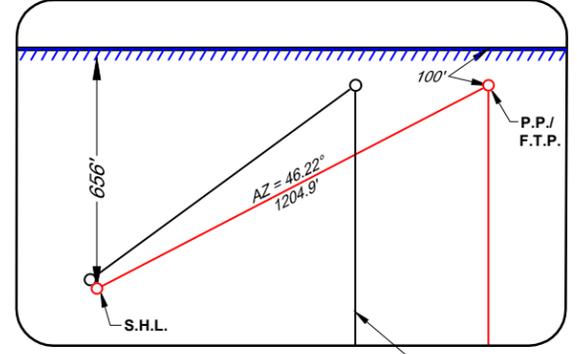
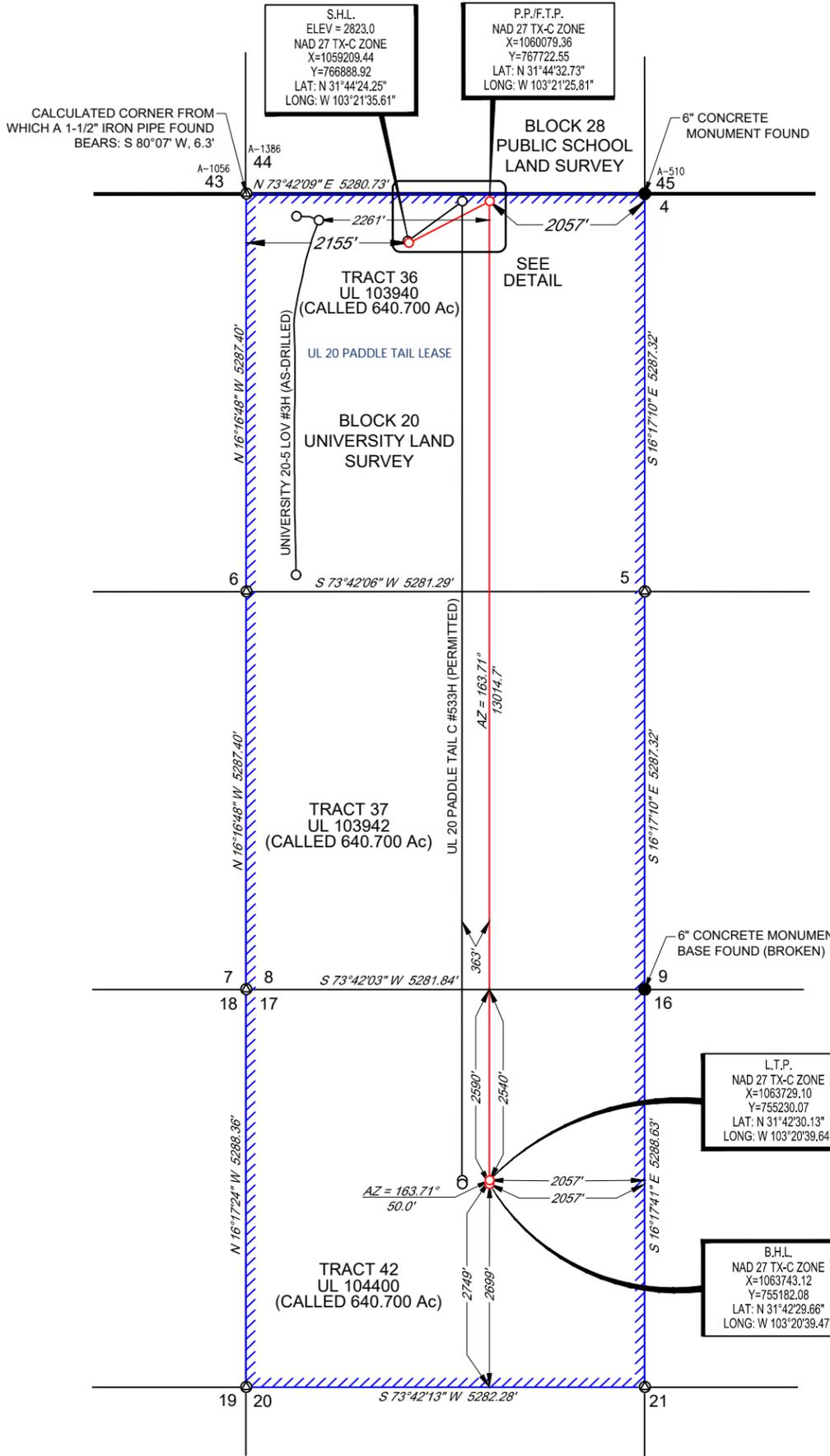
S.H.L./P.P./F.T.P.: SECTION 5, BLOCK 20, UNIVERSITY LAND SURVEY

L.T.P./B.H.L.: SECTION 17, BLOCK 20, UNIVERSITY LAND SURVEY

LOVING COUNTY, TEXAS



SCALE: 1" = 2000'  
0' 1000' 2000'



DETAIL VIEW  
SCALE: 1" = 500'  
UL 20 PADDLE TAIL C #533H (PERMITTED)

PRODUCTIVE LATERAL

LENGTH (F.T.P. TO L.T.P.)	
1	5,187'
2	5,287'
3	2,540'
TOTAL	13,014'

TIES TABLE

POINT	PSA	SURVEY/SECTION
S.H.L.	656' FNWL	656' FNWL & 2155' FSWL
	2155' FSWL	
P.P. / F.T.P.	100' FNWL	100' FNWL & 2057' FNEL
	2057' FNEL	
L.T.P.	2749' FSEL	2540' FNWL & 2057' FNEL
	2057' FNEL	
B.H.L.	2699' FSEL	2590' FNWL & 2057' FNEL
	2057' FNEL	

LEGEND:

- PSA Boundary
- Block/Township Line
- Section Line
- Proposed Well Path
- Existing/Permitted Well Path
- Monument Found
- Calculated Corner
- Well Point



*John R. Anderson* 7/26/2022  
John R. Anderson, R.P.L.S. No. 6442



1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
TEXAS FIRM REGISTRATION NO. 10042504  
WWW.TOPOGRAPHIC.COM

UL-20-5-P2 UL 20 PADDLE TAIL D #553H	REVISION:	
	INT	DATE
DATE: 07/20/2022		
FILE: LO_UL-20-5-P2_PADDLE_TAIL_D_#553H		
DRAWN BY: A.C.L.		
SHEET: 1 OF 1		

NOTES:

- ORIGINAL DOCUMENT SIZE: 11" X 17"
- 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.
- 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 PERMIAN DELAWARE ENTERPRISES HOLDINGS, LLC. THIS PLAT 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.L.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 PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
- ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FEET.
- ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY PERMIAN DELAWARE ENTERPRISES HOLDINGS, LLC OR ITS SUBSIDIARIES & AFFILIATES.

NOTES CONT'D:

- THE PRELIMINARY LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF JULY 2, 2022.
- S.H.L. = SURFACE HOLE LOCATION
- P.P. = POINT OF PENETRATION
- F.T.P. = FIRST TAKE POINT
- L.T.P. = LAST TAKE POINT
- B.H.L. = BOTTOM HOLE LOCATION