PHOENIX
TECHNOLOGY SERVICES

January 30, 2019

Railroad Commission of Texas
Oil and Gas Division
P.O. Box 12967
Capitol Station
Austin, Texas 78711

Attention: Regulatory Department

Re: Shell Western Exploration and Production Co.
University 20 PW Unit 2501H
Winkler County, TX
API #42-495-34181
Job No. 63987

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Shane Metcalf	2501H	182	16,731	12/21/18	1/22/19	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

12329 Cutten Rd. Houston, TX 77066 • Phone (713) 337-0600 • Fax (713) 337-0599
www.phxtech.com

SWEPI

Winkler County, Texas (NAD27)
University 20 PW Unit
2501H

OH / 63987

Survey: Phoenix MWD Surveys

Standard Survey Report

23 January, 2019

Survey Report

Company:	SWEPI	**Local Co-ordinate Reference:**	Well 2501H
Project:	Winkler County, Texas (NAD27)	**TVD Reference:**	RKB @ 2797.10usft (Precision 565)
Site:	University 20 PW Unit	**MD Reference:**	RKB @ 2797.10usft (Precision 565)
Well:	2501H	**North Reference:**	Grid
Wellbore:	OH / 63987	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Precision 565)	**Database:**	USA Compass

Project Winkler County, Texas (NAD27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas Central 4203		

Site University 20 PW Unit

Site Position:		**Northing:**	762,967.47 usft	**Latitude:**	31° 43' 49.23758 N
From:	Map	**Easting:**	1,073,353.65 usft	**Longitude:**	103° 18' 50.66766 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-1.54 °

Well 2501H

Well Position	**+N/-S**	0.00 usft	**Northing:**	748,146.30 usft	**Latitude:**	31° 41' 26.61079 N
	+E/-W	0.00 usft	**Easting:**	1,088,575.84 usft	**Longitude:**	103° 15' 49.95487 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,772.10 usft

Wellbore OH / 63987

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	2/10/2019	7.05	59.56	47,444.20449534

Design Surveys (Precision 565)

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	343.71

Survey Program **Date** 1/23/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
182.00	16,822.00	Phoenix MWD Surveys (OH / 63987)	MWD+HDGM+AX	OWSG Rev.2 MWD + HDGM + Axial Correction

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182.00	2.72	167.89	181.93	-4.22	0.91	-4.31	1.49	1.49	0.00
First Phoenix MWD Survey									
273.00	2.45	146.13	272.84	-7.95	2.44	-8.32	1.11	-0.30	-23.91
365.00	4.68	61.17	364.71	-7.77	6.83	-9.38	5.53	2.42	-92.35
444.00	8.27	48.00	443.19	-2.41	13.88	-6.21	4.89	4.54	-16.67
538.00	8.13	48.22	536.23	6.54	23.86	-0.42	0.15	-0.15	0.23
721.00	8.32	46.64	717.35	24.25	43.13	11.18	0.16	0.10	-0.86
907.00	8.60	43.20	901.33	43.63	62.44	24.36	0.31	0.15	-1.85
1,094.00	9.30	42.22	1,086.05	65.01	82.16	39.35	0.38	0.37	-0.52
1,282.00	9.81	43.38	1,271.44	87.90	103.37	55.38	0.29	0.27	0.62

Survey Report

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Well:	2501H	**North Reference:**	Grid
Wellbore:	OH / 63987	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Precision 565)	**Database:**	USA Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,471.00	10.18	37.55	1,457.58	112.85	124.61	73.36	0.57	0.20	-3.08
1,659.00	10.79	31.18	1,642.44	141.07	143.85	95.06	0.70	0.32	-3.39
1,847.00	11.10	32.74	1,827.02	171.35	162.75	118.82	0.23	0.16	0.83
2,035.00	11.75	35.24	2,011.30	202.21	183.58	142.60	0.43	0.35	1.33
2,223.00	12.37	35.94	2,195.15	234.15	206.44	166.84	0.34	0.33	0.37
2,411.00	12.68	37.11	2,378.67	266.91	230.71	191.48	0.21	0.16	0.62
2,601.00	12.60	38.81	2,564.07	299.68	256.28	215.77	0.20	-0.04	0.89
2,695.00	11.43	48.03	2,656.02	313.90	269.63	225.67	2.39	-1.24	9.81
2,883.00	11.23	44.87	2,840.36	339.33	296.40	242.57	0.35	-0.11	-1.68
2,978.00	11.15	45.37	2,933.55	352.34	309.46	251.39	0.13	-0.08	0.53
3,166.00	11.25	47.14	3,117.97	377.59	335.84	268.23	0.19	0.05	0.94
3,353.00	12.53	49.02	3,300.95	403.30	364.53	284.86	0.72	0.68	1.01
3,540.00	15.31	46.42	3,482.45	433.63	397.73	304.66	1.52	1.49	-1.39
3,727.00	13.80	38.62	3,663.46	468.08	429.54	328.80	1.32	-0.81	-4.17
3,914.00	9.96	43.12	3,846.42	497.32	454.53	349.86	2.11	-2.05	2.41
4,102.00	10.26	43.08	4,031.50	521.41	477.07	366.66	0.16	0.16	-0.02
4,287.00	9.50	45.56	4,213.76	544.14	499.23	382.26	0.47	-0.41	1.34
4,473.00	8.48	47.35	4,397.47	564.18	520.28	395.59	0.57	-0.55	0.96
4,661.00	7.94	45.23	4,583.54	582.71	539.69	407.94	0.33	-0.29	-1.13
4,847.00	7.20	51.52	4,767.93	599.01	557.93	418.47	0.60	-0.40	3.38
4,942.00	6.67	50.38	4,862.23	606.24	566.84	422.90	0.58	-0.56	-1.20
5,099.00	7.02	46.74	5,018.11	618.63	580.86	430.86	0.35	0.22	-2.32
5,287.00	9.06	54.98	5,204.26	635.00	601.35	440.83	1.24	1.09	4.38
5,476.00	10.96	56.15	5,390.37	653.55	628.46	451.03	1.01	1.01	0.62
5,665.00	11.27	55.97	5,575.83	673.89	658.68	462.07	0.17	0.16	-0.10
5,853.00	12.38	56.60	5,759.84	695.26	690.73	473.60	0.59	0.59	0.34
6,042.00	12.72	54.51	5,944.32	718.50	724.59	486.41	0.30	0.18	-1.11
6,231.00	13.44	54.56	6,128.42	743.31	759.43	500.45	0.38	0.38	0.03
6,419.00	13.98	53.82	6,311.06	769.39	795.56	515.35	0.30	0.29	-0.39
6,607.00	10.87	46.46	6,494.65	795.01	826.75	531.19	1.85	-1.65	-3.91
6,794.00	6.33	17.05	6,679.58	817.04	842.57	547.90	3.31	-2.43	-15.73
6,982.00	4.77	354.99	6,866.71	834.73	844.92	564.22	1.39	-0.83	-11.73
7,169.00	1.83	285.31	7,053.43	843.27	841.36	573.42	2.39	-1.57	-37.26
7,356.00	2.26	291.51	7,240.32	845.41	835.05	577.24	0.26	0.23	3.32
7,545.00	2.21	285.97	7,429.17	847.78	828.08	581.47	0.12	-0.03	-2.93
7,734.00	1.87	262.89	7,618.05	848.40	821.52	583.91	0.47	-0.18	-12.21
7,923.00	2.10	256.39	7,806.94	847.21	815.09	584.56	0.17	0.12	-3.44
8,111.00	1.66	254.79	7,994.84	845.68	809.12	584.77	0.24	-0.23	-0.85
8,299.00	1.72	261.33	8,182.76	844.54	803.70	585.20	0.11	0.03	3.48
8,485.00	1.79	258.61	8,368.67	843.55	798.09	585.82	0.06	0.04	-1.46
8,675.00	2.09	251.16	8,558.56	841.84	791.91	585.92	0.21	0.16	-3.92
8,862.00	1.95	226.66	8,745.45	838.56	786.36	584.32	0.46	-0.07	-13.10
9,050.00	1.64	227.28	8,933.36	834.54	782.06	581.67	0.17	-0.16	0.33

Survey Report

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Site:	University 20 PW Unit	**MD Reference:**	RKB @ 2797.10usft (Precision 565)
Well:	2501H	**North Reference:**	Grid
Wellbore:	OH / 63987	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Precision 565)	**Database:**	USA Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,237.00	1.61	253.23	9,120.28	831.96	777.58	580.45	0.39	-0.02	13.88
9,425.00	1.83	277.03	9,308.20	831.57	772.07	581.62	0.39	0.12	12.66
9,612.00	2.23	288.60	9,495.09	833.09	765.66	584.88	0.31	0.21	6.19
9,800.00	2.52	306.38	9,682.93	836.71	758.87	590.26	0.42	0.15	9.46
9,988.00	2.35	292.84	9,870.76	840.66	751.99	595.98	0.32	-0.09	-7.20
10,174.00	1.56	287.84	10,056.65	842.92	746.06	599.81	0.43	-0.42	-2.69
10,362.00	1.61	280.04	10,244.58	844.16	741.03	602.41	0.12	0.03	-4.15
10,550.00	1.90	278.64	10,432.49	845.09	735.34	604.90	0.16	0.15	-0.74
10,737.00	2.02	275.85	10,619.38	845.89	729.00	607.45	0.08	0.06	-1.49
10,925.00	1.85	268.55	10,807.27	846.15	722.67	609.47	0.16	-0.09	-3.88
11,111.00	2.51	296.19	10,993.14	847.87	716.01	612.99	0.66	0.35	14.86
11,299.00	3.83	308.81	11,180.85	853.63	707.43	620.92	0.79	0.70	6.71
11,418.00	4.28	288.20	11,299.56	857.50	700.11	626.70	1.27	0.38	-17.32
11,513.00	13.50	354.19	11,393.48	869.69	695.60	639.66	13.03	9.71	69.46
11,608.00	25.30	357.40	11,482.93	901.11	693.55	670.40	12.47	12.42	3.38
11,703.00	37.54	8.24	11,563.91	950.26	696.80	716.66	14.15	12.88	11.41
11,798.00	45.42	5.85	11,635.03	1,012.66	704.40	774.42	8.46	8.29	-2.52
11,893.00	53.16	358.45	11,697.00	1,084.49	706.83	842.68	10.05	8.15	-7.79
11,987.00	58.55	351.43	11,749.78	1,161.86	699.83	918.91	8.43	5.73	-7.47
12,082.00	70.32	346.15	11,790.73	1,245.70	683.01	1,004.10	13.36	12.39	-5.56
12,177.00	83.42	345.33	11,812.26	1,335.16	660.26	1,096.36	13.81	13.79	-0.86
12,276.00	85.74	346.13	11,821.61	1,430.67	635.97	1,194.85	2.48	2.34	0.81
12,371.00	87.92	343.62	11,826.87	1,522.23	611.22	1,289.67	3.50	2.29	-2.64
12,560.00	91.45	343.26	11,827.91	1,703.36	557.36	1,478.63	1.88	1.87	-0.19
12,655.00	88.92	341.63	11,827.60	1,793.92	528.71	1,573.60	3.17	-2.66	-1.72
12,749.00	88.70	339.91	11,829.55	1,882.65	497.76	1,667.45	1.84	-0.23	-1.83
12,844.00	88.19	333.75	11,832.13	1,969.92	460.41	1,761.69	6.50	-0.54	-6.48
12,939.00	87.99	337.09	11,835.30	2,056.25	420.92	1,855.63	3.52	-0.21	3.52
13,034.00	90.90	341.17	11,836.22	2,144.98	387.09	1,950.29	5.27	3.06	4.29
13,129.00	87.51	337.97	11,837.54	2,233.97	353.94	2,045.01	4.91	-3.57	-3.37
13,223.00	88.56	334.27	11,840.76	2,319.86	315.92	2,138.11	4.09	1.12	-3.94
13,318.00	89.27	337.61	11,842.56	2,406.58	277.20	2,232.21	3.59	0.75	3.52
13,413.00	88.53	337.64	11,844.39	2,494.41	241.04	2,326.66	0.78	-0.78	0.03
13,508.00	86.99	334.37	11,848.10	2,581.12	202.45	2,420.71	3.80	-1.62	-3.44
13,602.00	90.11	339.46	11,850.48	2,667.53	165.62	2,513.98	6.35	3.32	5.41
13,697.00	91.18	340.52	11,849.41	2,756.78	133.12	2,608.77	1.59	1.13	1.12
13,792.00	91.64	344.72	11,847.07	2,847.40	104.75	2,703.70	4.45	0.48	4.42
13,887.00	90.09	345.11	11,845.64	2,939.11	80.03	2,798.67	1.68	-1.63	0.41
13,983.00	88.10	341.58	11,847.15	3,031.05	52.53	2,894.63	4.22	-2.07	-3.68
14,078.00	88.68	344.64	11,849.82	3,121.91	24.94	2,989.58	3.28	0.61	3.22
14,173.00	88.90	348.79	11,851.83	3,214.32	3.12	3,084.41	4.37	0.23	4.37
14,268.00	90.58	348.38	11,852.26	3,307.44	-15.68	3,179.06	1.82	1.77	-0.43
14,362.00	88.47	347.19	11,853.04	3,399.30	-35.56	3,272.81	2.58	-2.24	-1.27

Survey Report

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Wellbore:	OH / 63987	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Precision 565)	**Database:**	USA Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,551.00	90.61	348.04	11,854.56	3,583.89	-76.10	3,461.35	1.22	1.13	0.45
14,646.00	84.63	344.66	11,858.50	3,676.07	-98.48	3,556.11	7.23	-6.29	-3.56
14,741.00	84.32	344.33	11,867.65	3,767.19	-123.75	3,650.66	0.48	-0.33	-0.35
14,836.00	90.79	346.87	11,871.70	3,859.06	-147.34	3,745.47	7.32	6.81	2.67
14,931.00	93.70	346.45	11,867.98	3,951.42	-169.24	3,840.26	3.09	3.06	-0.44
15,025.00	90.65	345.88	11,864.41	4,042.62	-191.70	3,934.09	3.30	-3.24	-0.61
15,120.00	89.55	350.20	11,864.25	4,135.53	-211.38	4,028.80	4.69	-1.16	4.55
15,214.00	90.41	351.60	11,864.28	4,228.34	-226.25	4,122.05	1.75	0.91	1.49
15,309.00	88.07	347.53	11,865.54	4,321.74	-243.45	4,216.52	4.94	-2.46	-4.28
15,404.00	90.73	353.17	11,866.54	4,415.34	-259.36	4,310.84	6.56	2.80	5.94
15,498.00	89.01	347.63	11,866.75	4,507.99	-275.03	4,404.16	6.17	-1.83	-5.89
15,593.00	87.50	341.49	11,869.65	4,599.47	-300.29	4,499.05	6.65	-1.59	-6.46
15,688.00	89.64	337.26	11,872.02	4,688.33	-333.74	4,593.72	4.99	2.25	-4.45
15,783.00	89.38	337.33	11,872.83	4,775.96	-370.41	4,688.13	0.28	-0.27	0.07
15,877.00	89.93	341.50	11,873.40	4,863.94	-403.45	4,781.84	4.47	0.59	4.44
15,972.00	87.69	333.86	11,875.37	4,951.73	-439.49	4,876.22	8.38	-2.36	-8.04
16,067.00	86.81	334.12	11,879.93	5,037.01	-481.10	4,969.74	0.97	-0.93	0.27
16,162.00	88.70	334.61	11,883.65	5,122.59	-522.17	5,063.41	2.06	1.99	0.52
16,257.00	90.64	336.00	11,884.20	5,208.89	-561.85	5,157.38	2.51	2.04	1.46
16,352.00	90.82	337.02	11,882.99	5,296.01	-599.72	5,251.62	1.09	0.19	1.07
16,446.00	86.84	335.40	11,884.91	5,381.99	-637.62	5,344.78	4.57	-4.23	-1.72
16,541.00	86.14	337.87	11,890.72	5,469.03	-675.22	5,438.87	2.70	-0.74	2.60
16,636.00	86.24	341.27	11,897.04	5,557.84	-708.30	5,533.40	3.57	0.11	3.58
16,731.00	88.76	341.70	11,901.18	5,647.83	-738.44	5,628.23	2.69	2.65	0.45
Final Phoenix MWD Survey									
16,822.00	88.76	341.70	11,903.15	5,734.21	-767.00	5,719.15	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
182.00	181.93	-4.22	0.91	First Phoenix MWD Survey
16,731.00	11,901.18	5,647.83	-738.44	Final Phoenix MWD Survey
16,822.00	11,903.15	5,734.21	-767.00	Projection to TD

SURVEY DATA CERTIFICATION

PHOENIX TECHNOLOGY SERVICES

Job #:	63987
Client:	SWEPI
County & State:	Winkler, TX
Well:	University 20 PW Unit 2501H
API No:	42-495-34181
Proposed Direction:	343.71°

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
0.00 ft	0.00 ft	0.00°	0.00°	. N	. E	Surface
				Data Source Company:		Phoenix Technology Services

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
21-Dec-18	182 ft	2.72°	167.89°

Last Survey Date	Last Survey Depth	INC	AZM
22-Jan-19	16,731 ft	88.76°	341.70°

Survey Instrument Type
Phoenix Velocity

Projected TD Survey Date	Projected TD Survey Depth	INC	AZM
22-Jan-19	16,822 ft	88.76°	341.70°

CORRECTION INFORMATION

Magnetic Declination Used	7.05	degrees
Grid Convergence Used	1.51	degrees
Total Correction	8.56	degrees

Corrected to True/Grid North
Grid North

TO THE BEST OF MY KNOWLEDGE, I CERTIFY THIS SURVEY DATA TO BE TRUE AND CORRECT.

Shane Metcalf

Signature

1/22/2019

Date

SHELL WESTERN E&P

WELL LOCATION

LEASE NAME & WELL NO.:

UNIVERSITY 20 PW 2501H

UNIT/LEASE ACREAGE:

640.46 ACRES (MEASURED)

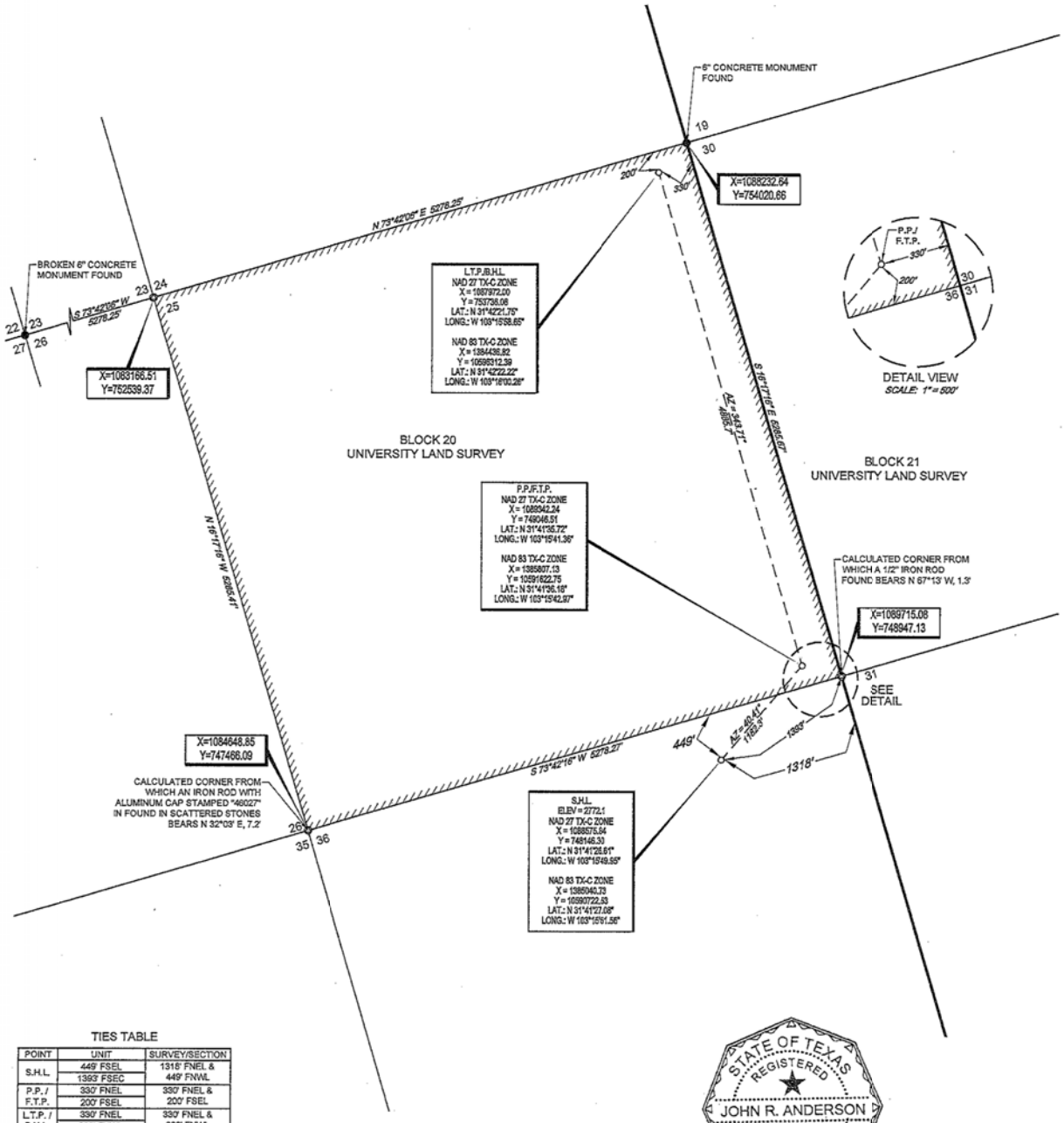
NEAREST TOWN IN COUNTY:

±7.5 MILES SOUTHWEST OF WINK, TEXAS

DESCRIPTION:

SECTION 25, BLOCK 20, UNIVERSITY LAND SURVEY
WINKLER COUNTY, TEXAS

SCALE: 1" = 1000'
0' 500' 1000'



TIES TABLE

POINT	UNIT	SURVEY/SECTION
S.H.L.	449' FSEL	1318' FNEL &
	1393' FSEC	449' FNWL
P.P. / F.T.P.	330' FNEL	330' FNEL &
	200' FSEL	200' FSEL
L.T.P. / B.H.L.	330' FNEL	330' FNEL &
	200' FNWL	200' FNWL

LEGEND:
- Unit Boundary
- Block/Township Line
- Section line
- Proposed Well Path
- Monument Found
- Calculated Corner
- Well Point

STATE OF TEXAS
REGISTERED
JOHN R. ANDERSON
6442
PROFESSIONAL
LAND SURVEYOR

John R. Anderson 5/4/18
John R. Anderson, R.P.L.S. No. 6442

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
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TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

	REVISION:	
UL-20-36-P1 UNIVERSITY 20 PW 2501H	INT	DATE
DATE: 05/04/2018		
FILE: LO UL_20_36_P1 UNIVERSITY_20_PW_2501H_OPT2		
DRAWN BY: O.M. / A.C.L.		
SHEET: 1 OF 1		

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 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 IF MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT IS NON-TRANSFERRABLE. 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 PRELIMINARY LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF MARCH 7, 2018.
7. S.H.L. = SURFACE HOLE LOCATION
8. P.P. = POINT OF PENETRATION
9. F.T.P. = FIRST TAKE POINT
10. L.T.P. = LAST TAKE POINT
11. B.H.L. = BOTTOM HOLE LOCATION

S:\SURVEY\SHELL\PERMIAN_BASIN\UNIVERSITY_20_36_WNKIUL-20-36-P1\FINAL_PRODUCTS\LO_UL_20_36_P1_UNIVERSITY_20_PW_2501H_OPT2.DWG 5/4/2018 1:16:51 PM omorrow