



Railroad Commission of Texas
Oil and Gas Division
PO Box 12967
Capitol Station
Austin, TX 78711

Attention: Pam Johns

Pioneer Natural Resources
University 6H #8H
Andrews County, Texas
API # 42-003-48168

Enclosed, please find the original and one copy of the survey performed on the referenced well by INTREPID MWD TECH., a division of INTREPID DIRECTIONAL DRILLING SPECIALIST. Other information required by your office is as follows:

<u>Name & Title of Surveyor</u>	<u>Start Depth</u>	<u>End Depth</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type of Survey</u>
Josh Benavides	2133	19893	01/08/2020	01/17/2020	MWD/ D&I & Gamma
	PTB:	19957			

The bottom hole orientation/coordinates related 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.

Sincerely,

Taylor Culwell

Taylor Culwell
Well Planner

Pioneer Natural Resources

**Andrews County, TX (NAD 27 TC)
(University)Sec6_BLK7_University Lands Svy
University 6H #8H**

OWB

Design: AWB

Standard Survey Report

17 January, 2020



Company:	Pioneer Natural Resources	Local Co-ordinate Reference:	Well University 6H #8H
Project:	Andrews County, TX (NAD 27 TC)	TVD Reference:	KB @ 3003.0usft (H&P 487)
Site:	(University)Sec6_BLK7_University Lands Svy	MD Reference:	KB @ 3003.0usft (H&P 487)
Well:	University 6H #8H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10_13

Project	Andrews County, TX (NAD 27 TC)		
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)Sec6_BLK7_University Lands Svy				
Site Position:		Northing:	1,008,490.70 usft	Latitude:	32° 25' 30.313 N
From:	Map	Easting:	1,403,654.40 usft	Longitude:	102° 15' 56.105 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.00 °

Well	University 6H #8H					
Well Position	+N-S	0.0 usft	Northing:	1,008,505.40 usft	Latitude:	32° 25' 30.468 N
	+E-W	0.0 usft	Easting:	1,403,712.60 usft	Longitude:	102° 15' 55.429 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	2,977.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	12/31/2019	5.99	60.05	47,732.20000000

Design	AWB				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	345.89	

Survey Program	Date	01/17/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
26.0	1,993.0	Meteorite Energy (OWB)	MWD	OWSG MWD - Standard	
2,133.0	19,957.0	Intrepid MWD (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station 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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
26.0	0.00	360.00	26.0	0.0	0.0	0.0	0.00	0.00	0.00	
146.1	0.70	114.40	146.1	-0.3	0.7	-0.5	0.58	0.58	0.00	
209.0	0.80	145.20	209.0	-0.8	1.3	-1.1	0.65	0.16	48.99	
297.1	0.80	251.50	297.1	-1.5	1.0	-1.7	1.45	0.00	120.60	
386.6	0.70	350.50	386.6	-1.2	0.4	-1.2	1.28	-0.11	110.59	
474.0	1.40	31.40	474.0	0.3	0.8	0.0	1.13	0.80	46.79	
563.0	1.10	39.30	563.0	1.8	1.9	1.3	0.39	-0.34	8.88	
649.5	1.50	56.40	649.5	3.1	3.4	2.2	0.64	0.46	19.77	
736.4	1.70	71.70	736.3	4.1	5.6	2.7	0.54	0.23	17.61	

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Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
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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)
824.4	1.50	63.20	824.3	5.1	7.8	3.0	0.35	-0.23	-9.65
913.2	2.60	74.70	913.0	6.1	10.8	3.3	1.32	1.24	12.95
998.7	2.70	79.20	998.4	7.0	14.7	3.2	0.27	0.12	5.26
1,084.8	2.40	73.10	1,084.4	7.9	18.4	3.2	0.47	-0.35	-7.09
1,172.0	2.20	84.50	1,171.6	8.6	21.8	3.0	0.57	-0.23	13.07
1,255.2	1.60	78.50	1,254.7	9.0	24.5	2.8	0.76	-0.72	-7.21
1,344.3	2.70	70.30	1,343.7	10.0	27.7	2.9	1.28	1.23	-9.21
1,431.5	3.10	65.20	1,430.8	11.6	31.8	3.5	0.55	0.46	-5.85
1,517.4	2.70	70.50	1,516.7	13.3	35.8	4.2	0.56	-0.47	6.16
1,604.9	2.10	79.90	1,604.1	14.3	39.3	4.2	0.82	-0.69	10.75
1,690.6	1.70	101.20	1,689.7	14.3	42.1	3.6	0.94	-0.47	24.87
1,778.9	1.80	98.90	1,777.9	13.8	44.8	2.5	0.14	0.11	-2.60
1,862.6	1.60	101.50	1,861.6	13.4	47.2	1.5	0.26	-0.24	3.11
1,950.8	0.80	114.00	1,949.8	12.9	49.0	0.6	0.95	-0.91	14.17
1,993.0	0.80	97.30	1,992.0	12.7	49.5	0.3	0.55	0.00	-39.58
TIE ON									
2,133.0	0.75	97.41	2,132.0	12.5	51.4	-0.4	0.04	-0.04	0.08
2,228.0	1.91	94.41	2,227.0	12.3	53.6	-1.2	1.22	1.22	-3.16
2,322.0	3.44	88.84	2,320.9	12.2	58.0	-2.3	1.65	1.63	-5.93
2,417.0	4.20	91.71	2,415.6	12.2	64.3	-3.9	0.82	0.80	3.02
2,511.0	4.91	97.70	2,509.3	11.5	71.8	-6.3	0.91	0.76	6.37
2,606.0	5.29	87.85	2,604.0	11.2	80.2	-8.7	1.00	0.40	-10.37
2,700.0	6.86	73.64	2,697.4	12.9	89.9	-9.4	2.30	1.67	-15.12
2,795.0	7.79	64.47	2,791.7	17.3	101.1	-7.9	1.57	0.98	-9.65
2,889.0	8.13	65.68	2,884.8	22.8	112.9	-5.5	0.40	0.36	1.29
2,984.0	7.44	67.65	2,978.9	27.9	124.8	-3.4	0.78	-0.73	2.07
3,078.0	7.17	70.32	3,072.1	32.1	135.9	-2.0	0.46	-0.29	2.84
3,173.0	6.33	68.90	3,166.5	36.0	146.4	-0.7	0.90	-0.88	-1.49
3,267.0	6.43	63.63	3,259.9	40.2	155.9	1.0	0.63	0.11	-5.61
3,361.0	6.13	59.42	3,353.3	45.1	165.0	3.5	0.58	-0.32	-4.48
3,456.0	5.75	69.30	3,447.8	49.4	173.8	5.5	1.15	-0.40	10.40
3,550.0	5.86	79.63	3,541.3	51.9	182.9	5.8	1.12	0.12	10.99
3,645.0	6.37	74.43	3,635.8	54.2	192.8	5.6	0.79	0.54	-5.47
3,739.0	6.59	70.17	3,729.2	57.4	202.8	6.2	0.56	0.23	-4.53
3,834.0	6.40	68.03	3,823.6	61.3	212.9	7.5	0.32	-0.20	-2.25
3,928.0	6.39	70.57	3,917.0	65.0	222.7	8.7	0.30	-0.01	2.70
4,023.0	6.30	71.93	4,011.4	68.3	232.6	9.6	0.18	-0.09	1.43
4,117.0	5.95	68.79	4,104.9	71.7	242.1	10.5	0.52	-0.37	-3.34
4,212.0	6.14	68.00	4,199.4	75.4	251.4	11.8	0.22	0.20	-0.83
4,306.0	6.24	69.80	4,292.8	79.0	260.8	13.1	0.23	0.11	1.91
4,401.0	6.08	72.02	4,387.3	82.4	270.5	14.0	0.30	-0.17	2.34
4,495.0	5.65	68.93	4,480.8	85.6	279.5	14.8	0.57	-0.46	-3.29
4,589.0	5.87	68.35	4,574.3	89.0	288.3	16.0	0.24	0.23	-0.62

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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)
4,684.0	5.39	73.60	4,668.8	92.1	297.1	16.9	0.74	-0.51	5.53
4,778.0	4.98	75.25	4,762.4	94.3	305.3	17.1	0.46	-0.44	1.76
4,873.0	5.41	72.54	4,857.1	96.7	313.5	17.4	0.52	0.45	-2.85
4,967.0	6.57	68.39	4,950.5	100.0	322.8	18.3	1.32	1.23	-4.41
5,062.0	6.36	68.86	5,044.9	103.9	332.7	19.7	0.23	-0.22	0.49
5,156.0	6.90	69.99	5,138.3	107.8	342.9	20.9	0.59	0.57	1.20
5,251.0	7.18	72.91	5,232.6	111.5	353.9	21.8	0.48	0.29	3.07
5,345.0	7.72	75.76	5,325.8	114.7	365.6	22.1	0.70	0.57	3.03
5,440.0	8.17	81.26	5,419.9	117.3	378.5	21.5	0.93	0.47	5.79
5,534.0	8.66	81.74	5,512.9	119.4	392.1	20.2	0.53	0.52	0.51
5,628.0	8.76	78.85	5,605.8	121.8	406.1	19.1	0.48	0.11	-3.07
5,722.0	8.38	78.56	5,698.7	124.5	419.9	18.4	0.41	-0.40	-0.31
5,817.0	7.71	78.97	5,792.8	127.1	432.9	17.7	0.71	-0.71	0.43
5,911.0	7.75	79.32	5,886.0	129.5	445.3	17.0	0.07	0.04	0.37
6,005.0	7.44	78.53	5,979.1	131.9	457.5	16.3	0.35	-0.33	-0.84
6,044.0	7.29	78.28	6,017.8	132.9	462.4	16.1	0.39	-0.38	-0.64
6,154.0	7.36	68.91	6,126.9	136.8	475.8	16.7	1.09	0.06	-8.52
6,249.0	6.40	63.40	6,221.2	141.4	486.2	18.6	1.23	-1.01	-5.80
6,344.0	0.75	344.26	6,316.0	144.4	490.8	20.3	6.63	-5.95	-83.31
6,438.0	1.94	297.11	6,410.0	145.7	489.2	22.0	1.63	1.27	-50.16
6,533.0	1.94	298.31	6,504.9	147.2	486.4	24.2	0.04	0.00	1.26
6,627.0	1.53	302.26	6,598.9	148.6	483.9	26.1	0.45	-0.44	4.20
6,722.0	1.41	291.08	6,693.9	149.7	481.8	27.7	0.33	-0.13	-11.77
6,817.0	2.12	266.74	6,788.8	150.0	478.9	28.7	1.07	0.75	-25.62
6,911.0	1.58	263.79	6,882.8	149.8	475.9	29.2	0.58	-0.57	-3.14
7,006.0	1.45	265.52	6,977.7	149.5	473.4	29.6	0.15	-0.14	1.82
7,100.0	1.82	266.00	7,071.7	149.3	470.7	30.1	0.39	0.39	0.51
7,194.0	1.59	260.00	7,165.7	149.0	467.9	30.4	0.31	-0.24	-6.38
7,289.0	0.42	307.92	7,260.6	149.0	466.4	30.8	1.42	-1.23	50.44
7,383.0	0.76	282.82	7,354.6	149.3	465.5	31.4	0.45	0.36	-26.70
7,478.0	0.46	341.92	7,449.6	149.8	464.8	32.0	0.69	-0.32	62.21
7,573.0	0.72	310.70	7,544.6	150.6	464.2	32.9	0.43	0.27	-32.86
7,667.0	0.66	320.38	7,638.6	151.4	463.4	33.9	0.14	-0.06	10.30
7,762.0	0.09	200.01	7,733.6	151.7	463.0	34.3	0.75	-0.60	-126.71
7,856.0	1.00	118.28	7,827.6	151.3	463.7	33.7	1.05	0.97	-86.95
7,951.0	0.81	93.12	7,922.6	150.9	465.1	32.9	0.46	-0.20	-26.48
8,045.0	0.95	94.96	8,016.6	150.8	466.5	32.5	0.15	0.15	1.96
8,139.0	1.54	66.66	8,110.6	151.2	468.5	32.4	0.89	0.63	-30.11
8,234.0	0.75	85.03	8,205.6	151.7	470.3	32.5	0.91	-0.83	19.34
8,328.0	0.42	196.15	8,299.6	151.5	470.8	32.1	1.05	-0.35	118.21
8,423.0	0.45	219.86	8,394.5	150.8	470.5	31.6	0.19	0.03	24.96
8,518.0	0.41	254.74	8,489.5	150.5	469.9	31.4	0.27	-0.04	36.72
8,612.0	0.62	243.50	8,583.5	150.2	469.1	31.3	0.25	0.22	-11.96

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8,707.0	1.01	255.57	8,678.5	149.7	467.8	31.2	0.45	0.41	12.71	
8,801.0	0.61	244.60	8,772.5	149.3	466.6	31.0	0.45	-0.43	-11.67	
8,916.0	0.82	271.71	8,887.5	149.1	465.2	31.2	0.34	0.18	23.57	
9,011.0	2.48	323.39	8,982.5	150.7	463.3	33.2	2.18	1.75	54.40	
9,106.0	16.83	345.39	9,075.9	165.8	458.6	49.0	15.33	15.11	23.16	
9,200.0	23.53	346.78	9,164.1	197.2	450.9	81.4	7.15	7.13	1.48	
9,295.0	29.61	344.20	9,249.0	238.3	440.1	123.8	6.51	6.40	-2.72	
9,389.0	40.50	350.19	9,325.9	290.9	428.6	177.7	12.14	11.59	6.37	
9,483.0	51.53	349.03	9,391.0	357.3	416.3	245.1	11.77	11.73	-1.23	
9,578.0	57.60	346.44	9,446.1	432.9	399.8	322.4	6.76	6.39	-2.73	
9,672.0	63.12	344.30	9,492.6	511.9	379.1	404.0	6.20	5.87	-2.28	
9,672.9	63.23	344.32	9,493.0	512.7	378.9	404.8	12.41	12.28	2.01	
FTP @ 9672.9' MD, 190' FSL, 471' FEL										
9,766.0	74.67	346.04	9,526.4	596.5	356.8	491.6	12.41	12.29	1.85	
9,860.0	83.50	346.64	9,544.2	686.2	335.0	583.8	9.41	9.39	0.64	
9,955.0	88.30	348.26	9,550.9	778.6	314.4	678.5	5.33	5.05	1.71	
10,049.0	90.39	345.47	9,552.0	870.1	293.1	772.4	3.71	2.22	-2.97	
10,143.0	90.83	344.33	9,551.0	960.9	268.6	866.4	1.30	0.47	-1.21	
10,238.0	92.86	345.01	9,548.0	1,052.4	243.5	961.3	2.25	2.14	0.72	
10,269.0	90.91	344.66	9,546.9	1,082.4	235.4	992.3	6.39	-6.29	-1.13	
10,364.0	90.46	343.84	9,545.8	1,173.8	209.6	1,087.3	0.98	-0.47	-0.86	
10,458.0	91.11	343.79	9,544.5	1,264.0	183.4	1,181.2	0.69	0.69	-0.05	
10,553.0	91.50	346.00	9,542.4	1,355.7	158.7	1,276.1	2.36	0.41	2.33	
10,647.0	90.49	347.79	9,540.7	1,447.3	137.4	1,370.1	2.19	-1.07	1.90	
10,742.0	91.70	348.70	9,538.9	1,540.3	118.0	1,465.0	1.59	1.27	0.96	
10,836.0	91.22	347.10	9,536.5	1,632.1	98.3	1,558.9	1.78	-0.51	-1.70	
10,931.0	89.45	345.34	9,536.0	1,724.4	75.7	1,653.9	2.63	-1.86	-1.85	
11,025.0	89.71	345.04	9,536.6	1,815.3	51.7	1,747.9	0.42	0.28	-0.32	
11,120.0	90.63	344.60	9,536.4	1,906.9	26.8	1,842.9	1.07	0.97	-0.46	
11,215.0	89.59	345.25	9,536.2	1,998.7	2.1	1,937.9	1.29	-1.09	0.68	
11,309.0	90.21	346.24	9,536.3	2,089.8	-21.1	2,031.9	1.24	0.66	1.05	
11,404.0	90.18	344.72	9,536.0	2,181.7	-44.9	2,126.9	1.60	-0.03	-1.60	
11,498.0	91.78	346.33	9,534.4	2,272.7	-68.4	2,220.8	2.41	1.70	1.71	
11,593.0	90.46	346.19	9,532.6	2,365.0	-90.9	2,315.8	1.40	-1.39	-0.15	
11,687.0	90.43	346.45	9,531.8	2,456.3	-113.2	2,409.8	0.28	-0.03	0.28	
11,782.0	91.50	346.63	9,530.2	2,548.7	-135.3	2,504.8	1.14	1.13	0.19	
11,876.0	90.13	346.29	9,528.9	2,640.1	-157.3	2,598.8	1.50	-1.46	-0.36	
11,970.0	89.17	345.91	9,529.5	2,731.3	-179.9	2,692.8	1.10	-1.02	-0.40	
12,065.0	90.15	345.50	9,530.0	2,823.4	-203.3	2,787.8	1.12	1.03	-0.43	
12,160.0	91.30	345.33	9,528.8	2,915.3	-227.2	2,882.8	1.22	1.21	-0.18	
12,250.0	90.85	345.45	9,527.1	3,002.4	-249.9	2,972.7	0.52	-0.50	0.13	
12,341.0	90.66	345.31	9,525.9	3,090.4	-272.9	3,063.7	0.26	-0.21	-0.15	
12,433.0	88.92	343.99	9,526.3	3,179.1	-297.3	3,155.7	2.37	-1.89	-1.43	
12,524.0	89.12	344.07	9,527.8	3,266.6	-322.3	3,246.6	0.24	0.22	0.09	

Company:	Pioneer Natural Resources	Local Co-ordinate Reference:	Well University 6H #8H
Project:	Andrews County, TX (NAD 27 TC)	TVD Reference:	KB @ 3003.0usft (H&P 487)
Site:	(University)Sec6_BLK7_University Lands Svy	MD Reference:	KB @ 3003.0usft (H&P 487)
Well:	University 6H #8H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10_13

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)	
12,615.0	89.14	343.68	9,529.2	3,354.0	-347.6	3,337.6	0.43	0.02	-0.43	
12,706.0	90.41	345.76	9,529.6	3,441.8	-371.5	3,428.5	2.68	1.40	2.29	
12,801.0	92.20	347.36	9,527.4	3,534.2	-393.6	3,523.5	2.53	1.88	1.68	
12,895.0	91.30	345.78	9,524.5	3,625.6	-415.4	3,617.4	1.93	-0.96	-1.68	
12,990.0	91.39	344.89	9,522.3	3,717.4	-439.5	3,712.4	0.94	0.09	-0.94	
13,084.0	92.62	344.96	9,519.0	3,808.1	-463.9	3,806.3	1.31	1.31	0.07	
13,178.0	92.51	345.99	9,514.8	3,899.0	-487.5	3,900.2	1.10	-0.12	1.10	
13,273.0	90.77	346.30	9,512.1	3,991.2	-510.2	3,995.2	1.86	-1.83	0.33	
13,367.0	90.57	346.03	9,511.0	4,082.5	-532.7	4,089.2	0.36	-0.21	-0.29	
13,462.0	91.64	345.92	9,509.2	4,174.7	-555.7	4,184.2	1.13	1.13	-0.12	
13,557.0	90.41	346.39	9,507.5	4,266.9	-578.4	4,279.2	1.39	-1.29	0.49	
13,651.0	89.73	345.94	9,507.3	4,358.2	-600.9	4,373.2	0.87	-0.72	-0.48	
13,746.0	90.83	345.66	9,506.9	4,450.2	-624.2	4,468.2	1.19	1.16	-0.29	
13,840.0	89.54	345.60	9,506.6	4,541.3	-647.5	4,562.1	1.37	-1.37	-0.06	
13,935.0	89.29	345.38	9,507.5	4,633.3	-671.3	4,657.1	0.35	-0.26	-0.23	
14,029.0	89.48	345.20	9,508.6	4,724.2	-695.2	4,751.1	0.28	0.20	-0.19	
14,123.0	90.52	345.88	9,508.6	4,815.2	-718.7	4,845.1	1.32	1.11	0.72	
14,218.0	91.36	346.04	9,507.0	4,907.4	-741.7	4,940.1	0.90	0.88	0.17	
14,312.0	90.77	346.63	9,505.3	4,998.7	-763.9	5,034.1	0.89	-0.63	0.63	
14,407.0	89.57	344.96	9,505.0	5,090.8	-787.2	5,129.1	2.16	-1.26	-1.76	
14,501.0	90.60	345.38	9,504.8	5,181.6	-811.3	5,223.1	1.18	1.10	0.45	
14,596.0	89.54	346.90	9,504.7	5,273.9	-834.1	5,318.1	1.95	-1.12	1.60	
14,690.0	89.73	347.34	9,505.3	5,365.5	-855.0	5,412.1	0.51	0.20	0.47	
14,774.1	90.83	347.70	9,504.9	5,447.6	-873.2	5,496.1	1.37	1.31	0.43	
CROSS SEC LINE @ 14774.1' MD, 482' FEL										
14,785.0	90.97	347.75	9,504.7	5,458.3	-875.5	5,507.0	1.37	1.31	0.43	
14,880.0	89.87	346.99	9,504.0	5,550.9	-896.3	5,602.0	1.41	-1.16	-0.80	
14,974.0	90.04	346.98	9,504.1	5,642.5	-917.4	5,696.0	0.18	0.18	-0.01	
15,069.0	88.08	346.49	9,505.7	5,735.0	-939.2	5,790.9	2.13	-2.06	-0.52	
15,163.0	87.24	346.19	9,509.5	5,826.2	-961.4	5,884.8	0.95	-0.89	-0.32	
15,258.0	88.22	346.24	9,513.3	5,918.4	-984.0	5,979.8	1.03	1.03	0.05	
15,353.0	88.47	346.63	9,516.0	6,010.7	-1,006.3	6,074.7	0.49	0.26	0.41	
15,447.0	90.29	348.16	9,517.0	6,102.5	-1,026.8	6,168.7	2.53	1.94	1.63	
15,542.0	90.15	348.00	9,516.7	6,195.4	-1,046.4	6,263.6	0.22	-0.15	-0.17	
15,636.0	90.60	346.56	9,516.0	6,287.1	-1,067.1	6,357.6	1.60	0.48	-1.53	
15,730.0	91.58	345.73	9,514.3	6,378.4	-1,089.6	6,451.6	1.37	1.04	-0.88	
15,825.0	90.21	345.58	9,512.8	6,470.4	-1,113.2	6,546.5	1.45	-1.44	-0.16	
15,919.0	88.78	343.41	9,513.6	6,560.9	-1,138.3	6,640.5	2.76	-1.52	-2.31	
16,014.0	89.59	344.12	9,515.0	6,652.2	-1,164.8	6,735.4	1.13	0.85	0.75	
16,108.0	90.10	344.24	9,515.2	6,742.6	-1,190.5	6,829.4	0.56	0.54	0.13	
16,202.0	90.15	345.34	9,515.0	6,833.3	-1,215.1	6,923.4	1.17	0.05	1.17	
16,297.0	90.74	344.89	9,514.3	6,925.1	-1,239.5	7,018.3	0.78	0.62	-0.47	
16,391.0	89.31	345.54	9,514.2	7,016.0	-1,263.5	7,112.3	1.67	-1.52	0.69	

Company:	Pioneer Natural Resources	Local Co-ordinate Reference:	Well University 6H #8H
Project:	Andrews County, TX (NAD 27 TC)	TVD Reference:	KB @ 3003.0usft (H&P 487)
Site:	(University)Sec6_BLK7_University Lands Svy	MD Reference:	KB @ 3003.0usft (H&P 487)
Well:	University 6H #8H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10_13

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)	
16,485.0	89.26	346.26	9,515.4	7,107.1	-1,286.4	7,206.3	0.77	-0.05	0.77	
16,580.0	90.21	345.96	9,515.8	7,199.4	-1,309.2	7,301.3	1.05	1.00	-0.32	
16,674.0	89.87	346.87	9,515.8	7,290.7	-1,331.3	7,395.3	1.03	-0.36	0.97	
16,769.0	90.29	346.65	9,515.6	7,383.2	-1,353.1	7,490.3	0.50	0.44	-0.23	
16,863.0	89.37	347.52	9,515.9	7,474.8	-1,374.1	7,584.3	1.35	-0.98	0.93	
16,958.0	90.15	347.53	9,516.3	7,567.6	-1,394.6	7,679.3	0.82	0.82	0.01	
17,052.0	88.50	346.45	9,517.4	7,659.2	-1,415.8	7,773.2	2.10	-1.76	-1.15	
17,147.0	88.02	345.65	9,520.3	7,751.3	-1,438.6	7,868.2	0.98	-0.51	-0.84	
17,241.0	89.12	345.11	9,522.7	7,842.2	-1,462.4	7,962.1	1.30	1.17	-0.57	
17,335.0	90.04	344.49	9,523.3	7,933.0	-1,487.0	8,056.1	1.18	0.98	-0.66	
17,430.0	89.57	345.53	9,523.7	8,024.7	-1,511.6	8,151.1	1.20	-0.49	1.09	
17,524.0	89.09	345.41	9,524.8	8,115.7	-1,535.2	8,245.1	0.53	-0.51	-0.13	
17,619.0	88.25	346.09	9,527.0	8,207.8	-1,558.5	8,340.1	1.14	-0.88	0.72	
17,713.0	87.66	345.14	9,530.3	8,298.7	-1,581.9	8,434.0	1.19	-0.63	-1.01	
17,808.0	89.03	345.39	9,533.1	8,390.6	-1,606.0	8,529.0	1.47	1.44	0.26	
17,903.0	90.32	345.15	9,533.6	8,482.5	-1,630.2	8,624.0	1.38	1.36	-0.25	
17,997.0	89.23	345.19	9,534.0	8,573.3	-1,654.2	8,717.9	1.16	-1.16	0.04	
18,092.0	88.95	345.43	9,535.5	8,665.2	-1,678.3	8,812.9	0.39	-0.29	0.25	
18,186.0	88.39	346.45	9,537.7	8,756.4	-1,701.2	8,906.9	1.24	-0.60	1.09	
18,281.0	87.30	346.39	9,541.2	8,848.6	-1,723.5	9,001.8	1.15	-1.15	-0.06	
18,375.0	87.10	345.77	9,545.8	8,939.8	-1,746.0	9,095.7	0.69	-0.21	-0.66	
18,469.0	88.42	345.72	9,549.5	9,030.8	-1,769.2	9,189.6	1.41	1.40	-0.05	
18,564.0	89.76	345.54	9,551.0	9,122.8	-1,792.7	9,284.6	1.42	1.41	-0.19	
18,658.0	90.66	344.81	9,550.7	9,213.7	-1,816.8	9,378.6	1.23	0.96	-0.78	
18,737.1	89.57	345.53	9,550.5	9,290.2	-1,837.0	9,457.7	1.64	-1.37	0.90	
CROSS SEC LINE @ 18737.1' MD, 480' FEL										
18,752.0	89.37	345.66	9,550.6	9,304.6	-1,840.7	9,472.6	1.64	-1.37	0.90	
18,847.0	88.81	345.93	9,552.2	9,396.7	-1,864.1	9,567.6	0.65	-0.59	0.28	
18,941.0	89.09	345.91	9,553.9	9,487.8	-1,886.9	9,661.6	0.30	0.30	-0.02	
19,036.0	89.40	345.65	9,555.1	9,579.9	-1,910.3	9,756.6	0.43	0.33	-0.27	
19,130.0	89.79	345.41	9,555.8	9,670.9	-1,933.7	9,850.6	0.49	0.41	-0.26	
19,224.0	88.92	343.00	9,556.9	9,761.4	-1,959.3	9,944.5	2.73	-0.93	-2.56	
19,319.0	90.66	346.11	9,557.2	9,852.9	-1,984.6	10,039.5	3.75	1.83	3.27	
19,413.0	91.83	346.35	9,555.2	9,944.2	-2,007.0	10,133.4	1.27	1.24	0.26	
19,507.0	92.73	345.66	9,551.4	10,035.3	-2,029.7	10,227.4	1.21	0.96	-0.73	
19,602.0	91.16	347.01	9,548.2	10,127.6	-2,052.1	10,322.3	2.18	-1.65	1.42	
19,696.0	89.01	347.81	9,548.1	10,219.3	-2,072.6	10,416.3	2.44	-2.29	0.85	
19,791.0	88.59	347.19	9,550.0	10,312.0	-2,093.2	10,511.2	0.79	-0.44	-0.65	
19,893.0	89.57	348.30	9,551.7	10,411.7	-2,114.8	10,613.1	1.45	0.96	1.09	
LAST SVY										
19,957.0	89.57	348.30	9,552.2	10,474.4	-2,127.8	10,677.1	0.00	0.00	0.00	
PTD @ 19957.0' MD, 101' FNL, 3114' FEL										

Company:	Pioneer Natural Resources	Local Co-ordinate Reference:	Well University 6H #8H
Project:	Andrews County, TX (NAD 27 TC)	TVD Reference:	KB @ 3003.0usft (H&P 487)
Site:	(University)Sec6_BLK7_University Lands Svy	MD Reference:	KB @ 3003.0usft (H&P 487)
Well:	University 6H #8H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10_13

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
U6H8HD	0.00	360.00	6,500.0	147.1	470.9	1,008,652.51	1,404,183.51	32° 25' 32.004 N	102° 15' 49.967 W
- actual wellpath misses target center by 15.6usft at 6528.5usft MD (6500.5 TVD, 147.1 N, 486.5 E)									
- Point									
U6H8HK	0.00	360.00	8,979.0	147.1	470.9	1,008,652.51	1,404,183.51	32° 25' 32.004 N	102° 15' 49.967 W
- actual wellpath misses target center by 8.3usft at 9007.3usft MD (8978.8 TVD, 150.6 N, 463.4 E)									
- Point									
T1 (Uni 6H #8H)	0.60	165.90	9,506.0	5,007.7	-749.5	1,013,513.14	1,402,963.14	32° 26' 19.875 N	102° 16' 5.185 W
- actual wellpath misses target center by 16.2usft at 14317.2usft MD (9505.2 TVD, 5003.8 N, -765.1 E)									
- Rectangle (sides W100.0 H4,434.0 D20.0)									
PBHL (Uni 6H #8H)	-0.46	165.88	9,550.5	10,476.1	-2,125.5	1,018,981.50	1,401,587.10	32° 27' 13.729 N	102° 16' 22.347 W
- actual wellpath misses target center by 3.3usft at 19957.0usft MD (9552.2 TVD, 10474.4 N, -2127.8 E)									
- Rectangle (sides W100.0 H5,633.0 D20.0)									
U6H8HL	0.00	0.00	9,552.0	702.8	331.2	1,009,208.23	1,404,043.83	32° 25' 37.477 N	102° 15' 51.708 W
- actual wellpath misses target center by 6.0usft at 9877.6usft MD (9546.0 TVD, 703.2 N, 331.0 E)									
- Point									

Design Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
1,993.0	1,992.0	12.7	49.5	TIE ON	
9,672.9	9,493.0	512.7	378.9	FTP @ 9672.9' MD, 190' FSL, 471' FEL	
14,774.1	9,504.9	5,447.6	-873.2	CROSS SEC LINE @ 14774.1' MD, 482' FEL	
18,737.1	9,550.5	9,290.2	-1,837.0	CROSS SEC LINE @ 18737.1' MD, 480' FEL	
19,893.0	9,551.7	10,411.7	-2,114.8	LAST SVY	
19,957.0	9,552.2	10,474.4	-2,127.8	PTD @ 19957.0' MD, 101' FNL, 3114' FEL	

Checked By: _____	Approved By: _____	Date: _____
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State of Texas
County of
Andrews

I, Josh Benavides certify that; I am employed by INTREPID DIRECTIONAL DRILLING SPECIALISTS, Ltd.; that I did conduct or supervise the taking of MWD surveys on the dates and depths below ; that the data is true, correct, complete and within the limitations of the tool as set forth by INTREPID MWD, a division of INTREPID DIRECTIONAL DRILLING, Ltd.; that I am authorized and qualified to make this report;that this survey was conducted at the request of Pioneer Natural Resources API# 42-003-48168 Andrews County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by INTREPID MWD. A division of INTREPID DIRECTIONAL DRILLING SPECIALISTS, Ltd.

<u>Start Depth</u>	<u>End Depth</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type of Survey</u>
2133	19893	01/08/2020	01/17/2020	MWD/ D&I & Gamma

Josh Benavides

Josh Benavides
MWD Engineer