

PO Box 4482, Midland, TX 79704 | 432-296-6366

Railroad Commission of Texas Oil & Gas Division P.O. Box 12967 Austin, TX 78711

Attn: Pam Johns

2/7/2022

Re: Piedra Operating, LLC.

Well: University 5-35 N4 #H 4LS Field: Spraberry (Trend Area)

Rig: Burton 10

County: Andrews County, TX

Permit: 876228

API Well No: 42-003-48505

Enclosed please find the original of the surveys performed on the referenced well by True Shot, LLC. (P-5 No. 871488). Other information required by your office is as follows:

Name & Title Of Surveyor	Wellhole Number	Survey Depths	Dates Performed	Type Survey
J.Carrier, Field Service Technician	Original Hole	148'- 1825'	2/5/2022 – 2/6/2022	MWD

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

2/7/2022

Randall Nesloney MWD Manager

Cc: Piedra Operating, LLC.

TRUEshot

Piedra Operating, LLC Company: Well: University 5-35 N4 #H 4LS Location: Andrews County, Tx

Job Number: Mag (Grid): Dir Driller:

FST:

03-1-22-3815 9.01° N/A Jake Carrier

Calculation Method Proposed Azimuth Depth Reference

Minimum Curvature

0.0 10' Tie Into: Assumed Vertical

Rig: Job Date: 2/5/2022 - 2/6/2022

Burton #10

7		ob Date:	2/:	5/2022 - 2									
Survey	Survey	Inclina-			True Vertical	Vertical	Cool	rdinates	CI	osure	Dogleg	Build	Walk
Number	Depth	tion	Azimuth	Length	Depth	Section	N/S	E/W	Distance	Direction	Severity	Rate	Rate
	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	Azimuth		(d/100')	(d/100')
Tie In	0.00	0.00	The second second	0	0.00	0.00	0.00 0	0.00 0					
1	148	1.27	306.08	148	147.99	0.97	0.97 N	1.33 W	1.64	306.08	0.86	0.86	206.81
2	237	0.35		89	236.98	1.60	1.60 N	2.39 W	2.87	303.74	1.09	-1.03	-28.74
3	312	0.13	299.58	75	311.98	1.68	1.68 N	2.69 W	3.17	301.99	0.31	-0.29	25.44
4	398	0.44	248.42	86	397.98	1.61	1.61 N		3.47	297.54	0.43	0.36	-59.49
5	483	0.75	276.81	85	482.97	1.55	1.55 N	3.94 W	4.23	291.52	0.49	0.36	33.40
6	568	0.18	97.87	85	567.97	1.60	1.60 N			290.17	1.09	-0.67	-210.52
7	657	0.62	98.66	89	656.97	1.51	1.51 N			291.96	0.49	0.49	0.89
8	743	0.53	68.34	86	742.96	1.59	1.59 N	2.91 W		298.56	0.36	-0.10	-35.26
9	829	0.44	56.82	86	828.96	1.91	1.91 N	2.27 W	2.97	310.16	0.15	-0.10	-13.40
10	918	0.35	54.45	89	917.96	2.26	2.26 N	1.76 W	2.86	322.07	0.10	-0.10	-2.66
11	1007	0.35	69.30	89	1006.96	2.51	2.51 N	1.28 W	2.82	332.92	0.10		16.69
12	1095	0.35	88.11	88	1094.95	2.62	2.62 N	0.76 W	2.73	343.71	0.13	0.00	21.38
13	1183	0.09		88	1182.95	2.56	2.56 N	0.47 W		349.53	0.38	-0.30	82.69
14	1269	0.26		86	1268.95	2.33	2.33 N	0.56 W	2.40	346.58	0.25	0.20	60.20
15	1447	0.53		178	1446.95	1.23	1.23 N	1.09 W	1.65	318.45	0.16		-5.58
16	1533	0.40	210.37	86	1532.95	0.61	0.61 N	1.40 W	1.52	293.45	0.17	-0.15	8.90
17	1622	0.48	197.62	89	1621.94	-0.02	0.02 S	1.67 W	1.67	269.41	0.14	0.09	-14.33
18	1711	0.22	196.22	89	1710.94	-0.54	0.54 S	1.83 W	1.90	253.64	0.29	-0.29	-1.57
19	1798	0.35	197.27	87	1797.94	-0.95	0.95 S	1.95 W	2.17	244.05	0.15	0.15	1.21
20	1825	0.31	200.88	27	1824.94	-1.10	1.10 S	2.00 W	2.28	241.29	0.17	-0.15	13.37
Proj.	1871	0.31	200.88	46	1870.94	-1.33	1.33 S	2.09 W	2.48	237.56	0.00	0.00	0.00

University 5-35 N4 #H 4LS
Proposed Bottom Hole Location
True Shot, LLC.
Closure Distance: 2.28 Feet



PO Box 4482, Midland, TX 79704 | 432-296-6366

MWD Survey Certification

State of Texas County of Andrews

I, Randall Nesloney, certify that: I am employed by True Shot, LLC.; that I did on the day(s) of 2/5/2022 through 2/6/2022 conduct or supervise the taking of MWD surveys from a depth of 148 feet to a depth of 1825 feet, that the data is true, correct, complete and within the limitations of the tool as set forth by True Shot, LLC; that I am authorized and qualified to make this report; that these surveys were conducted at the request of Piedra Operating, LLC. for the University 5-35 N4 #H 4LS (API No. 42-003-48505, Permit No. 876228), located in Andrews County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by True Shot, LLC.

2/7/2022

Randall Nesloney MWD Manager

Cc: Piedra Operating, LLC.



3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

February 22, 2023

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

Attention: Regulatory Department

Re: Piedra Operating

University 5-35 N4 H 4LS Andrews Co., Texas API # 42-003-48505 Job No. 71235

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	Drain	Surveye	d Depths	Dates Pe	rformed	Type of Survey
Surveyor	Hole					
	Number	From	То	Start	End	
Chad Hatcher	H 4LS	1,975	17,761	12/14/22	2/16/23	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



RKB @ 3011.00usft (Ensign T54)

2986.00

Ground Level

First Phoenix MWD Survey

Begin Tigoda/100' Drop

1000 1500

Ti*բ*⊂In

1500

2000

2500

5 5000

6000

6500

7000

7500Begin Vertical Hold

Middle Clearfork

Lower Clearfork Shale

Vertical Section at 339.55° (500 usft/in)

Project: Andrews County, TX (NAD83-TNC)

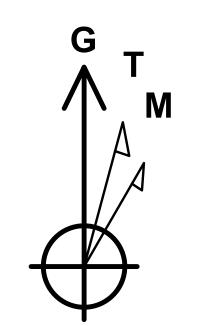
Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235 Design: Plan 4 02-09-23

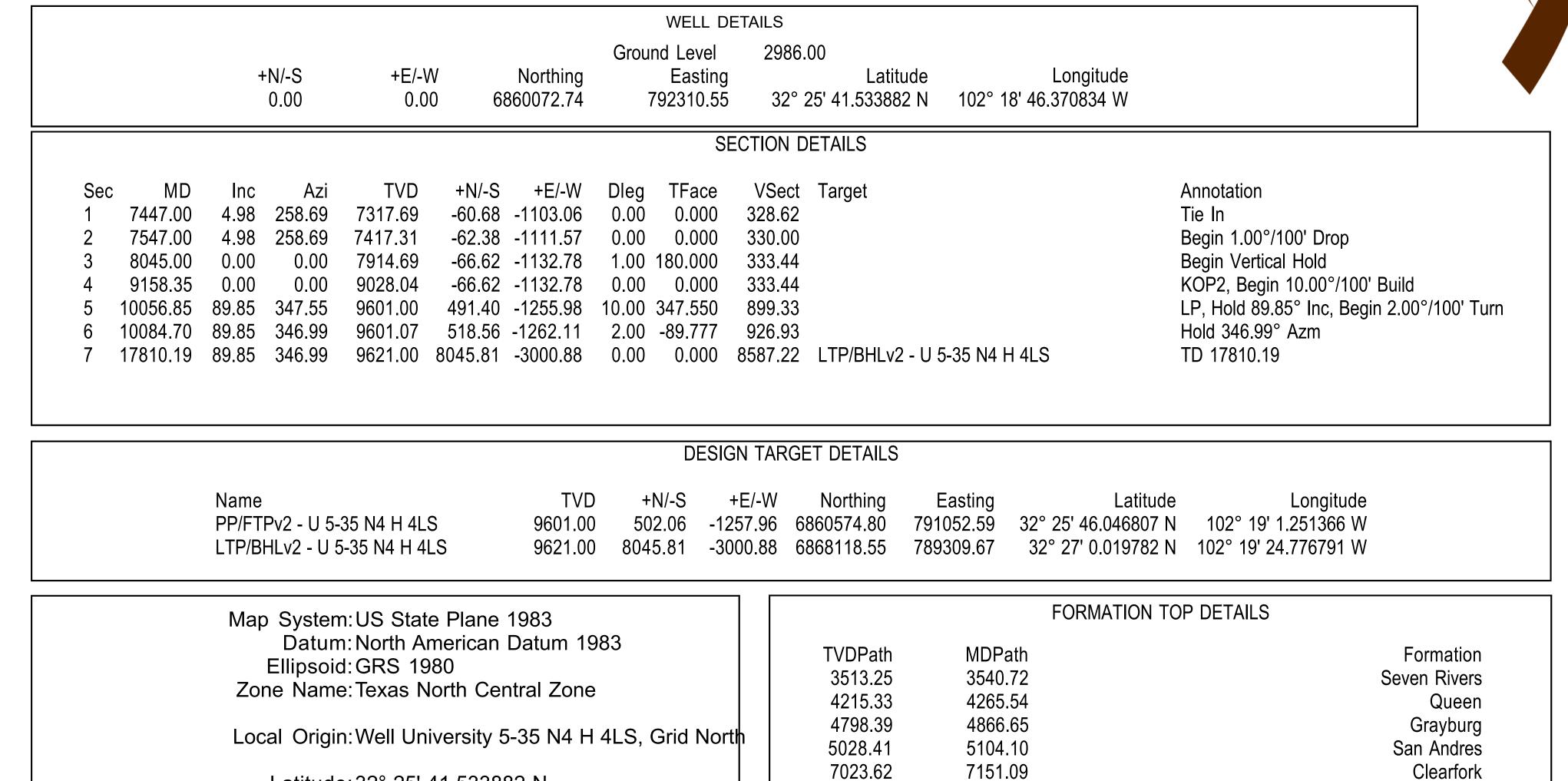
Rig: Ensign T54





Azimuths to Grid North True North: 2.08° Magnetic North: 7.83°

> **Magnetic Field** Strength: 47412.0nT Dip Angle: 60.01° Date: 1/31/2023 Model: MVHD

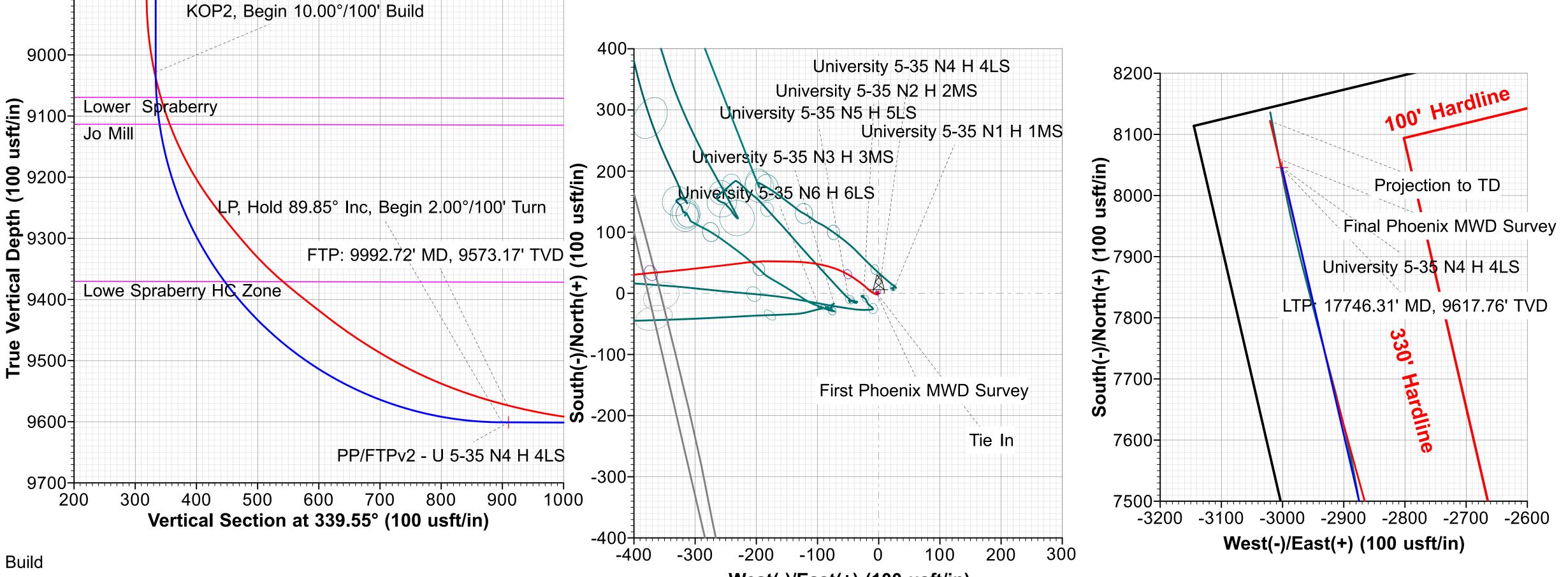


Latitude: 32° 25' 41.533882 N Longitude: 102° 18' 46.370834 W Grid East: 792310.55 Grid North: 6860072.74 Scale Factor: 1.000 Geomagnetic Model: MVHD Sample Date: 31-Jan-23 Magnetic Declination: 5.755° Dip Angle from Horizontal:60.011° Magnetic Field Strength: 47412.00871224nT

To convert a Magnetic Direction to a True Direction, Add 5.755° East

To convert a True Direction to a Grid Direction, Add 2.080°

8538.64 8668.95 8786.64 8916.95 9069.64 9199.99 9244.29 9113.65 9370.86 9525.85 To convert a Magnetic Direction to a Grid Direction, Add 7.834°



7792.87

8266.95

Middle Clearfork

Upper Spraberry

Middle Spraberry

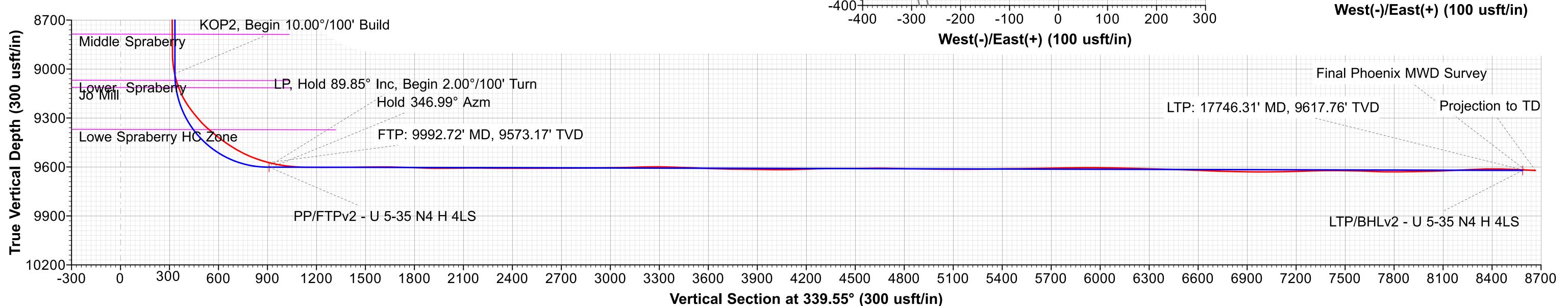
Lower Spraberry

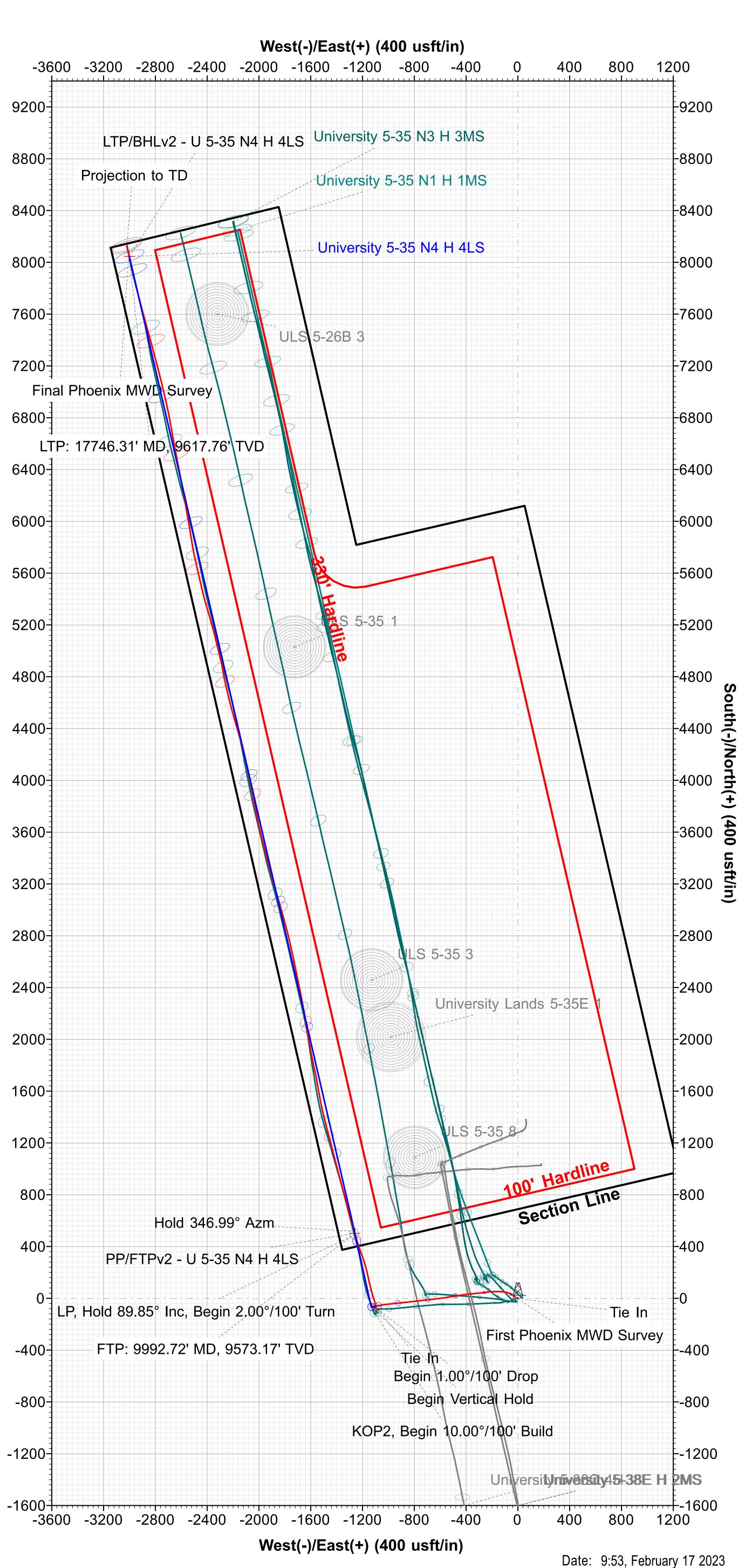
Lower Clearfork Shale

Lowe Spraberry HC Zone

7662.64

8136.64







Piedra Operating LLC

Andrews County, TX (NAD83-TNC) University 5-35 University 5-35 N4 H 4LS

OH / 71235

Design: Surveys (Ensign T54)

Standard Survey Report

17 February, 2023





Map Zone:

Survey Report



Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS

RKB @ 3011.00usft (Ensign T54) RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature

USA Compass

Project Andrews County, TX (NAD83-TNC), Andrews County, Texas

Map System: US State Plane 1983 Geo Datum: North American Datum 1983

Texas North Central Zone

System Datum: Mean Sea Level

Site University 5-35

 Site Position:
 Northing:
 6,860,078.37 usft
 Latitude:
 32° 25' 41.598293 N

 From:
 Map
 Easting:
 792,334.88 usft
 Longitude:
 102° 18' 46.089531 W

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence:

-2.079°

Well University 5-35 N4 H 4LS

 Well Position
 +N/-S
 0.00 usft
 Northing:
 6,860,072.74 usft
 Latitude:
 32° 25' 41.533882 N

 +E/-W
 0.00 usft
 Easting:
 792,310.55 usft
 Longitude:
 102° 18' 46.370834 W

Position Uncertainty

1.00 usft

Wellhead Elevation:

usft

Ground Level:

2,986.00 usft

Wellbore OH / 71235

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 MVHD
 1/31/2023
 5.755
 60.011
 47,412.00871223

Design Surveys (Ensign T54)

Audit Notes:

Version: 1.0 Phase: ACTUAL Tie On Depth: 0.00

Vertical Section:Depth From (TVD)+N/-S+E/-WDirection(usft)(usft)(usft)(°)

0.00 0.00 0.00 339.55

Survey Program Date 2/17/2023

From To
(usft) (usft) Survey (Wellbore) Tool Name Description

15.00 1,840.00 TrueShot MWD Surveys (OH / 71235) MWD OWSG MWD - Standard

1,975.00 17,825.00 Phoenix MWD Surveys (OH / 71235) MWD+HRGM+MS OWSG MWD + HRGM + Multi-Station Correction

Survey Vertical Vertical Measured **Dogleg** Build Turn Depth Inclination Depth +N/-S +E/-W Section Rate Rate Rate **Azimuth** (usft) (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (°) (°) (usft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 15.00 0.00 0.00 15.00 0.00 0.00 0.00 0.00 0.00 0.00 163.00 1.27 306.08 162.99 0.97 -1.33 1.37 0.86 0.86 0.00 252.00 0.35 280.50 251.98 1.60 -2.39 2.33 1.09 -1.03 -28.74 327.00 0.13 299.58 326.98 1.68 -2.69 2.51 0.31 -0.2925.44 -59.49 413.00 0.44 248.42 412.98 1.61 -3.082.58 0.43 0.36 2.83 498.00 0.75 276.81 497.97 -3.940.49 0.36 33.40 1.55 583.00 0.18 97.87 582.97 1.60 -4.363.02 1.09 -0.67 -210.52 98.66 1.51 -3.742.72 672.00 0.62 671.97 0.49 0.49 0.89 0.53 68.34 757.96 1.59 -2.91 2.50 0.36 -35.26 758.00 -0.10





Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS RKB @ 3011.00usft (Ensign T54)

RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature
USA Compass

W1/01/									
rvey									
Measured Depth (usft)	I Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
(3.2.3)	()	()	(3.5.5)	(uoit)	(40.1)	(5.51.9)	(,	((,
844.0	0 0.44	56.82	843.96	1.91	-2.27	2.58	0.15	-0.10	-13.40
933.0		54.45	932.96	2.26	-1.76	2.73	0.10	-0.10	-2.66
1,022.0		69.30	1,021.96	2.51	-1.28	2.80	0.10	0.00	16.69
1,110.0		88.11	1,109.96	2.62	-0.76	2.72	0.10	0.00	21.38
1,110.0		160.88	1,109.90	2.56	-0.70	2.72	0.13	-0.30	82.69
1,190.0	0.09	100.00	1,197.93	2.30	-0.47	2.30	0.36	-0.30	02.09
1,284.0	0.26	212.65	1,283.95	2.33	-0.56	2.38	0.25	0.20	60.20
1,462.0	0.53	202.72	1,461.95	1.23	-1.09	1.54	0.16	0.15	-5.58
1,548.0		210.37	1,547.95	0.61	-1.40	1.06	0.17	-0.15	8.90
1,637.0		197.62	1,636.94	-0.02	-1.67	0.57	0.14	0.09	-14.33
1,726.0		196.22	1,725.94	-0.54	-1.83	0.14	0.29	-0.29	-1.57
,			-						
1,813.0		197.27	1,812.94	-0.95	-1.95	-0.21	0.15	0.15	1.21
1,840.0	0.31	200.88	1,839.94	-1.10	-2.00	-0.33	0.17	-0.15	13.37
Tie In									
1,975.0	0.47	232.64	1,974.94	-1.77	-2.57	-0.76	0.19	0.12	23.53
First Pho	oenix MWD Surv	rey .							
2,065.0	0 2.09	287.71	2,064.91	-1.50	-4.43	0.14	2.07	1.80	61.19
2,154.0	0 2.47	300.86	2,153.84	-0.02	-7.62	2.64	0.72	0.43	14.78
2,244.0	0 3.55	300.48	2,243.72	2.39	-11.69	6.32	1.20	1.20	-0.42
2,334.0	0 4.26	312.88	2,333.51	6.07	-16.54	11.47	1.22	0.79	13.78
2,423.0	0 5.84	311.35	2,422.16	11.32	-22.36	18.42	1.78	1.78	-1.72
2,513.0	0 6.35	307.04	2,511.65	17.34	-29.77	26.65	0.76	0.57	-4.79
2,603.0	0 8.39	304.81	2,600.91	24.09	-39.14	36.24	2.29	2.27	-2.48
2,692.0		299.27	2,688.87	31.24	-50.62	46.96	1.25	0.82	-6.22
2,783.0		292.55	2,778.53	37.96	-64.61	58.15	2.01	1.57	-7.38
2,872.0		286.19	2,865.95	43.48	-80.38	68.83	1.49	0.64	-7.15
2,962.0		280.72	2,954.13	47.63	-97.87	78.83	1.52	0.92	-6.08
3,052.0	0 14.06	275.73	3,041.82	50.46	-117.90	88.48	2.65	2.34	-5.54
3,142.0	0 15.32	271.30	3,128.88	51.82	-140.67	97.71	1.87	1.40	-4.92
3,232.0		271.00	3,215.74	52.29	-164.25	106.40	0.29	-0.28	-0.33
3,321.0		269.74	3,301.64	52.44	-187.53	114.67	0.43	0.21	-1.42
3,412.0		262.84	3,389.29	50.83	-211.90	121.68	2.17	0.74	-7.58
3,502.0		263.25	3,475.92	47.88	-236.12	127.37	0.46	-0.44	0.46
5,552.0		_00.20	-,				30	J	33
3,592.0	0 15.13	263.33	3,562.72	45.10	-259.75	133.02	0.45	-0.44	0.09
3,681.0		263.51	3,648.66	42.44	-282.74	138.57	0.14	-0.13	0.20
3,772.0		263.75	3,736.62	39.85	-305.93	144.25	0.34	-0.33	0.26
3,861.0		264.09	3,822.75	37.48	-328.22	149.82	0.29	-0.27	0.38
3,952.0		264.67	3,910.91	35.27	-350.65	155.59	0.33	-0.29	0.64
-									
4,041.0		264.98	3,997.24	33.32	-372.19	161.28	0.35	-0.34	0.35
4,130.0	0 13.73	263.67	4,083.67	31.22	-393.34	166.71	0.41	-0.20	-1.47
4,221.0		260.94	4,172.06	28.32	-414.79	171.49	0.72	0.07	-3.00
4,311.0	0 13.36	262.01	4,259.54	25.19	-435.68	175.85	0.55	-0.48	1.19
4,400.0	0 13.24	261.32	4,346.16	22.22	-455.93	180.15	0.22	-0.13	-0.78
4,490.0	0 14.83	260.99	4,433.47	18.86	-477.50	184.54	1.77	1.77	-0.37





Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference:

North Reference: Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS RKB @ 3011.00usft (Ensign T54)

RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature USA Compass

Survey										
Juivey										
De	sured pth sft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,	579.00	14.61	260.64	4,519.55	15.25	-499.82	188.96	0.27	-0.25	-0.39
4,0	668.00	14.33	260.80	4,605.72	11.66	-521.77	193.27	0.32	-0.31	0.18
4,	757.00	13.85	261.18	4,692.04	8.27	-543.17	197.56	0.55	-0.54	0.43
4,8	847.00	14.25	261.19	4,779.35	4.92	-564.76	201.97	0.44	0.44	0.01
4,9	937.00	14.67	262.73	4,866.50	1.78	-587.01	206.81	0.63	0.47	1.71
5,0	025.00	14.22	262.01	4,951.72	-1.13	-608.77	211.68	0.55	-0.51	-0.82
5,	116.00	14.09	262.95	5,039.96	-4.04	-630.83	216.66	0.29	-0.14	1.03
5,2	205.00	13.90	263.57	5,126.31	-6.57	-652.20	221.76	0.27	-0.21	0.70
5,2	295.00	14.30	263.04	5,213.60	-9.13	-673.98	226.98	0.47	0.44	-0.59
5,3	385.00	15.17	264.31	5,300.64	-11.64	-696.73	232.57	1.03	0.97	1.41
	475.00	15.09	263.26	5,387.52	-14.18	-720.08	238.35	0.32	-0.09	-1.17
5,	564.00	15.31	263.37	5,473.41	-16.90	-743.26	243.90	0.25	0.25	0.12
	654.00	15.67	263.73	5,560.14	-19.60	-767.14	249.72	0.41	0.40	0.40
5,	743.00	15.79	263.22	5,645.81	-22.34	-791.12	255.53	0.21	0.13	-0.57
5,8	833.00	15.13	263.79	5,732.55	-25.06	-814.95	261.31	0.75	-0.73	0.63
5,9	923.00	14.91	263.71	5,819.47	-27.60	-838.14	267.04	0.25	-0.24	-0.09
6,0	013.00	14.28	263.98	5,906.57	-30.03	-860.68	272.64	0.70	-0.70	0.30
6,	103.00	13.98	262.96	5,993.85	-32.53	-882.51	277.93	0.43	-0.33	-1.13
6,	193.00	13.90	264.32	6,081.20	-34.93	-904.06	283.20	0.37	-0.09	1.51
6,2	282.00	13.63	264.82	6,167.64	-36.93	-925.14	288.69	0.33	-0.30	0.56
6,3	372.00	13.72	265.16	6,255.09	-38.79	-946.34	294.36	0.13	0.10	0.38
6,4	462.00	11.82	262.25	6,342.86	-40.94	-966.11	299.26	2.23	-2.11	-3.23
6,	552.00	11.14	263.75	6,431.06	-43.13	-983.88	303.42	0.83	-0.76	1.67
6,0	642.00	9.12	264.36	6,519.65	-44.77	-999.63	307.38	2.25	-2.24	0.68
6,	732.00	8.49	263.53	6,608.59	-46.22	-1,013.33	310.81	0.71	-0.70	-0.92
6,8	822.00	8.22	262.45	6,697.64	-47.82	-1,026.30	313.85	0.35	-0.30	-1.20
6,9	912.00	8.25	261.19	6,786.71	-49.65	-1,039.06	316.59	0.20	0.03	-1.40
7,0	002.00	7.78	259.34	6,875.83	-51.77	-1,051.43	318.93	0.60	-0.52	-2.06
7,0	092.00	7.54	260.22	6,965.03	-53.90	-1,063.24	321.06	0.30	-0.27	0.98
7,	182.00	7.10	261.28	7,054.29	-55.74	-1,074.55	323.28	0.51	-0.49	1.18
,	272.00	6.72	259.84	7,143.64	-57.51	-1,085.23	325.36	0.46	-0.42	-1.60
7,3	362.00	6.00	260.51	7,233.08	-59.22	-1,095.06	327.19	0.80	-0.80	0.74
	447.00	4.98	258.69	7,317.69	-60.68	-1,103.06	328.62	1.22	-1.20	-2.14
7,0	601.00	2.83	248.60	7,471.33	-63.37	-1,113.15	329.62	1.46	-1.40	-6.55
7,0	692.00	0.29	111.01	7,562.29	-64.28	-1,115.03	329.43	3.35	-2.79	-151.20
7,	783.00	1.33	104.65	7,653.28	-64.63	-1,113.79	328.67	1.15	1.14	-6.99
7,8	874.00	0.19	154.38	7,744.27	-65.03	-1,112.71	327.92	1.34	-1.25	54.65
7,	965.00	0.69	160.81	7,835.27	-65.68	-1,112.46	327.22	0.55	0.55	7.07
	054.00	0.89	147.34	7,924.26	-66.77	-1,111.91	326.01	0.31	0.22	-15.13
8,	143.00	1.41	141.06	8,013.24	-68.20	-1,110.85	324.29	0.60	0.58	-7.06
8,	235.00	2.43	125.08	8,105.19	-70.21	-1,108.54	321.61	1.24	1.11	-17.37
,	325.00	1.07	90.11	8,195.15	-71.30	-1,106.14	319.74	1.86	-1.51	-38.86
	414.00	1.22	108.92	8,284.13	-71.61	-1,104.41	318.85	0.45	0.17	21.13
	503.00	0.24	269.31	8,373.13	-71.92	-1,103.70	318.31	1.63	-1.10	180.21





Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS RKB @ 3011.00usft (Ensign T54)

RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature
USA Compass

Surve	ey .									
	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)
	8,593.00	0.62	229.79	8,463.12	-72.24	-1,104.26	318.21	0.51	0.42	-43.91
	8,683.00	0.91	192.17	8,553.12	-73.25	-1,104.79	317.44	0.63	0.32	-41.80
	8,772.00	0.49	114.95	8,642.11	-74.10	-1,104.59	316.58	1.05	-0.47	-86.76
	8,861.00	1.90	57.94	8,731.09	-73.48	-1,102.99	316.60	1.89	1.58	-64.06
	8,951.00	2.69	52.41	8,821.02	-71.40	-1,100.06	317.53	0.91	0.88	-6.14
	9,040.00	3.15	58.21	8,909.90	-68.84	-1,096.32	318.62	0.61	0.52	6.52
	9,130.00	9.03	342.66	8,999.45	-60.78	-1,096.33	326.18	9.76	6.53	-83.94
	9,219.00	17.87	346.00	9,085.93	-40.82	-1,101.72	346.76	9.97	9.93	3.75
	9,309.00	26.96	341.63	9,169.05	-7.99	-1,111.51	380.94	10.26	10.10	-4.86
	9,398.00	36.89	343.84	9,244.49	36.93	-1,125.34	427.86	11.23	11.16	2.48
	9,489.00	41.52	346.76	9,314.99	92.56	-1,139.86	485.05	5.48	5.09	3.21
	9,581.00	50.70	346.90	9,378.71	157.05	-1,154.94	550.75	9.98	9.98	0.15
	9,670.00	53.02	346.38	9,433.67	225.14	-1,171.12	620.21	2.65	2.61	-0.58
	9,759.00	58.73	341.35	9,483.60	295.82	-1,191.68	693.61	7.94	6.42	-5.65
	9,849.00	65.21	339.98	9,525.87	370.73	-1,218.00	773.00	7.32	7.20	-1.52
	9,939.00	72.40	342.94	9,558.40	450.24	-1,244.61	856.79	8.56	7.99	3.29
	9,992.72	75.67	343.44	9,573.17	499.68	-1,259.54	908.33	6.15	6.09	0.92
		72' MD, 9573.1								
	10,030.00	77.94	343.77	9,581.68	534.49	-1,269.79	944.53	6.15	6.09	0.90
	10,119.00	83.88	344.37	9,595.73	618.96	-1,293.89	1,032.10	6.71	6.67	0.67
	10,211.00	88.67	345.79	9,601.71	707.65	-1,317.52	1,123.45	5.43	5.21	1.54
	10,237.00	89.45	346.10	9,602.14	732.87	-1,323.83	1,149.28	3.23	3.00	1.19
	10,328.00	89.88	345.25	9,602.67	821.03	-1,346.35	1,239.76	1.05	0.47	-0.93
	10,418.00	90.56	345.04	9,602.32	908.02	-1,369.42	1,329.33	0.79	0.76	-0.23
	10,507.00	90.30	345.25	9,601.65	994.05	-1,392.24	1,417.90	0.38	-0.29	0.24
	10,597.00	90.81	344.94	9,600.78	1,081.01	-1,415.39	1,507.48	0.66	0.57	-0.34
	10,686.00	90.30	346.45	9,599.92	1,167.25	-1,437.38	1,595.96	1.79	-0.57	1.70
	10,775.00	88.42	344.30	9,600.91	1,253.35	-1,459.84	1,684.48	3.21	-2.11	-2.42
	10,864.00	88.11	346.49	9,603.61	1,339.43	-1,482.27	1,772.97	2.48	-0.35	2.46
	10,956.00	88.02	346.20	9,606.72	1,428.78	-1,503.98	1,864.28	0.33	-0.10	-0.32
	11,047.00	90.13	349.06	9,608.18	1,517.64	-1,523.47	1,954.34	3.91	2.32	3.14
	11,136.00	90.79	350.37	9,607.47	1,605.20	-1,539.36	2,041.94	1.65	0.74	1.47
	11,227.00	90.47	349.37	9,606.47	1,694.78	-1,555.36	2,131.46	1.15	-0.35	-1.10
	11,316.00	89.28	347.78	9,606.66	1,782.01	-1,572.99	2,219.35	2.23	-1.34	-1.79
	11,407.00	89.64	348.13	9,607.52	1,871.00	-1,591.98	2,309.37	0.55	0.40	0.38
	11,497.00	90.02	349.85	9,607.79	1,959.34	-1,609.17	2,398.15	1.96	0.42	1.91
	11,589.00	89.88	350.76	9,607.87	2,050.03	-1,624.66	2,488.53	1.00	-0.15	0.99
	11,678.00	90.24	351.24	9,607.78	2,137.93	-1,638.58	2,575.76	0.67	0.40	0.54
	11,768.00	90.16	349.58	9,607.46	2,226.67	-1,653.58	2,664.14	1.85	-0.09	-1.84
	11,859.00	90.50	348.73	9,606.94	2,316.04	-1,670.70	2,753.86	1.01	0.37	-0.93
	11,949.00	90.07	348.23	9,606.49	2,404.23	-1,688.67	2,842.77	0.73	-0.48	-0.56
	12,041.00	90.56	349.12	9,605.98	2,494.43	-1,706.74	2,933.60	1.10	0.53	0.97
	12,131.00	90.72	348.17	9,604.98	2,582.67	-1,724.45	3,022.46	1.07	0.18	-1.06





Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS RKB @ 3011.00usft (Ensign T54)

RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature USA Compass

Surve	у									
	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)
	12,221.00	91.69	347.48	9,603.09	2,670.62	-1,743.43	3,111.50	1.32	1.08	-0.77
	12,311.00	91.98	346.95	9,600.20	2,758.34	-1,763.34	3,200.65	0.67	0.32	-0.59
	12,402.00	89.33	345.32	9,599.16	2,846.68	-1,785.14	3,291.03	3.42	-2.91	-1.79
	12,491.00	88.31	344.42	9,601.00	2,932.57	-1,808.36	3,379.63	1.53	-1.15	-1.01
	12,581.00	87.34	344.09	9,604.41	3,019.13	-1,832.77	3,469.26	1.14	-1.08	-0.37
	12,671.00	88.02	343.83	9,608.06	3,105.55	-1,857.62	3,558.92	0.81	0.76	-0.29
	12,761.00	88.25	343.85	9,610.98	3,191.95	-1,882.65	3,648.61	0.26	0.26	0.02
	12,851.00	89.22	345.20	9,612.97	3,278.67	-1,906.66	3,738.25	1.85	1.08	1.50
	12,940.00	89.38	345.88	9,614.06	3,364.84	-1,928.88	3,826.76	0.78	0.18	0.76
	13,030.00	88.93	344.96	9,615.39	3,451.93	-1,951.53	3,916.27	1.14	-0.50	-1.02
	13,120.00	89.22	345.83	9,616.84	3,539.01	-1,974.22	4,005.79	1.02	0.32	0.97
	13,209.00	91.01	347.74	9,616.66	3,625.65	-1,994.57	4,094.07	2.94	2.01	2.15
	13,300.00	92.44	348.90	9,613.92	3,714.72	-2,012.98	4,183.96	2.02	1.57	1.27
	13,389.00	91.38	348.88	9,610.95	3,802.00	-2,030.12	4,271.73	1.19	-1.19	-0.02
	13,479.00	90.10	348.14	9,609.79	3,890.19	-2,048.05	4,360.62	1.64	-1.42	-0.82
	13,568.00	89.96	347.92	9,609.75	3,977.25	-2,066.51	4,448.65	0.29	-0.16	-0.25
	13,657.00	90.44	348.43	9,609.44	4,064.36	-2,084.74	4,536.64	0.79	0.54	0.57
	13,747.00	90.90	348.75	9,608.38	4,152.58	-2,102.55	4,625.52	0.62	0.51	0.36
	13,838.00	88.34	344.27	9,608.99	4,241.03	-2,123.77	4,715.81	5.67	-2.81	-4.92
	13,928.00	89.42	344.91	9,610.75	4,327.78	-2,147.68	4,805.45	1.39	1.20	0.71
	14,019.00	89.21	343.43	9,611.83	4,415.32	-2,172.50	4,896.14	1.64	-0.23	-1.63
	14,109.00	89.19	344.44	9,613.09	4,501.80	-2,197.40	4,985.87	1.12	-0.02	1.12
	14,199.00	89.56	345.20	9,614.07	4,588.65	-2,220.97	5,075.48	0.94	0.41	0.84
	14,289.00	90.29	347.02	9,614.19	4,676.01	-2,242.57	5,164.88	2.18	0.81	2.02
	14,379.00	90.24	347.59	9,613.77	4,763.81	-2,262.35	5,254.06	0.64	-0.06	0.63
	14,469.00	91.33	350.68	9,612.54	4,852.18	-2,279.31	5,342.78	3.64	1.21	3.43
	14,558.00	90.27	345.95	9,611.30	4,939.30	-2,297.33	5,430.71	5.45	-1.19	-5.31
	14,648.00	90.47	346.38	9,610.72	5,026.69	-2,318.85	5,520.10	0.53	0.22	0.48
	14,739.00	91.27	346.41	9,609.33	5,115.12	-2,340.25	5,610.44	0.88	0.88	0.03
	14,828.00	90.78	343.99	9,607.74	5,201.15	-2,362.98	5,698.99	2.77	-0.55	-2.72
	14,919.00	91.13	343.57	9,606.22	5,288.51	-2,388.40	5,789.73	0.60	0.38	-0.46
	15,009.00	90.56	344.35	9,604.90	5,375.00	-2,413.26	5,879.45	1.07	-0.63	0.87
	15,099.00	89.59	346.11	9,604.78	5,462.02	-2,436.20	5,969.00	2.23	-1.08	1.96
	15,189.00	89.01	347.54	9,605.88	5,549.64	-2,456.71	6,058.27	1.71	-0.64	1.59
	15,278.00	88.65	346.84	9,607.70	5,636.41	-2,476.44	6,146.46	0.88	-0.40	-0.79
	15,368.00	88.60	347.57	9,609.86	5,724.15	-2,496.37	6,235.63	0.81	-0.06	0.81
	15,457.00 15,547.00	88.51 88.42	350.80 350.58	9,612.10 9,614.51	5,811.53 5,900.31	-2,513.06 -2,527.62	6,323.33 6,411.60	3.63 0.26	-0.10 -0.10	3.63 -0.24
	15,637.00	88.05	350.19	9,617.28	5,989.00	-2,542.64	6,499.96	0.60	-0.41	-0.43
	15,727.00	88.05	350.22	9,620.35	6,077.64	-2,557.94	6,588.35	0.03	0.00	0.03
	15,816.00	87.57	349.72	9,623.75	6,165.22	-2,573.43	6,675.82	0.78	-0.54	-0.56
	15,906.00	88.54	349.61	9,626.80	6,253.70	-2,589.57	6,764.37	1.08	1.08	-0.12
	15,995.00	88.54	349.37	9,629.07	6,341.18	-2,605.80	6,852.00	0.27	0.00	-0.27





Company: Piedra Operating LLC

Project: Andrews County, TX (NAD83-TNC)

Site: University 5-35

Well: University 5-35 N4 H 4LS

Wellbore: OH / 71235

Design: Surveys (Ensign T54)

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Database:

Well University 5-35 N4 H 4LS RKB @ 3011.00usft (Ensign T54)

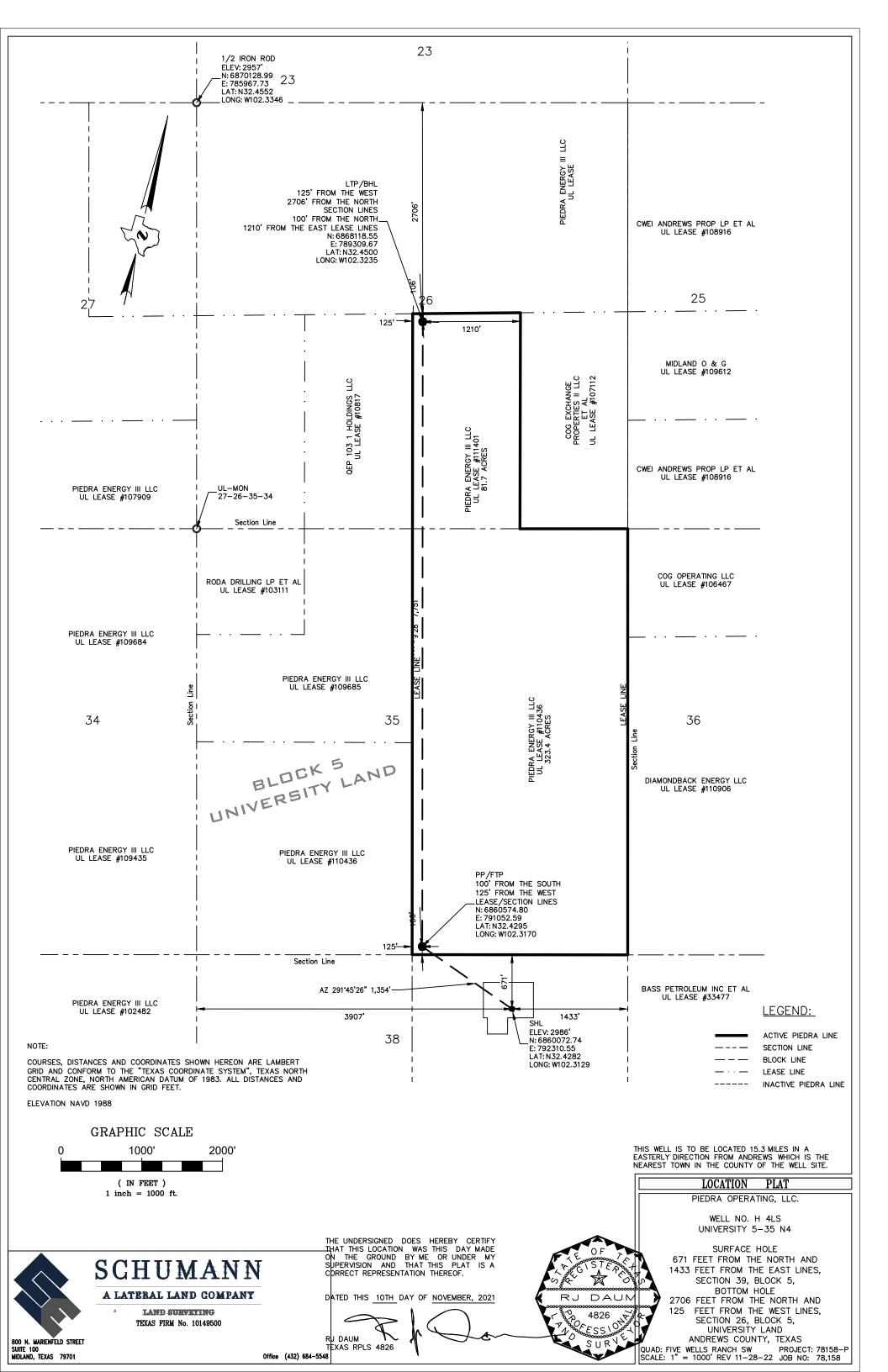
RKB @ 3011.00usft (Ensign T54)

Grid

Minimum Curvature USA Compass

ey									
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)
16,085.00	89.53	348.78	9,630.59	6,429.54	-2,622.85	6,940.75	1.28	1.10	-0.66
16,174.00	90.72	349.36	9,630.39	6,516.92	-2,639.73	7,028.52	1.49	1.34	0.65
16,263.00	90.90	349.43	9,629.13	6,604.39	-2,656.11	7,116.20	0.22	0.20	0.08
16,353.00	91.78	349.92	9,627.03	6,692.91	-2,672.23	7,204.77	1.12	0.98	0.54
16,443.00	91.95	349.53	9,624.10	6,781.42	-2,688.28	7,293.30	0.47	0.19	-0.43
16,532.00	90.58	348.09	9,622.13	6,868.70	-2,705.54	7,381.12	2.23	-1.54	-1.62
16,622.00	88.99	346.36	9,622.47	6,956.47	-2,725.44	7,470.30	2.61	-1.77	-1.92
16,713.00	89.14	347.05	9,623.96	7,045.01	-2,746.37	7,560.58	0.78	0.16	0.76
16,802.00	87.54	345.25	9,626.54	7,131.38	-2,767.66	7,648.95	2.71	-1.80	-2.02
16,892.00	88.65	345.52	9,629.53	7,218.42	-2,790.36	7,738.43	1.27	1.23	0.30
16,981.00	90.96	345.54	9,629.83	7,304.59	-2,812.59	7,826.94	2.60	2.60	0.02
17,071.00	90.69	344.56	9,628.53	7,391.54	-2,835.81	7,916.51	1.13	-0.30	-1.09
17,160.00	91.42	344.53	9,626.90	7,477.30	-2,859.52	8,005.16	0.82	0.82	-0.03
17,250.00	92.21	344.71	9,624.05	7,564.04	-2,883.38	8,094.76	0.90	0.88	0.20
17,340.00	92.69	344.67	9,620.20	7,650.76	-2,907.12	8,184.31	0.54	0.53	-0.04
17,429.00	92.63	346.50	9,616.07	7,736.86	-2,929.25	8,272.72	2.06	-0.07	2.06
17,519.00	91.56	347.02	9,612.78	7,824.41	-2,949.85	8,361.95	1.32	-1.19	0.58
17,608.00	88.59	346.86	9,612.66	7,911.10	-2,969.96	8,450.20	3.34	-3.34	-0.18
17,699.00	87.62	346.46	9,615.67	7,999.59	-2,990.94	8,540.45	1.15	-1.07	-0.44
17,746.31	87.32	346.42	9,617.76	8,045.54	-3,002.03	8,587.37	0.63	-0.63	-0.08
LTP: 1774	6.31' MD, 9617	.76' TVD							
17,761.00	87.23	346.41	9,618.46	8,059.80	-3,005.47	8,601.94	0.63	-0.63	-0.08
Final Pho	enix MWD Surv	vey							
17,825.00	87.23	346.41	9,621.55	8,121.94	-3,020.49	8,665.40	0.00	0.00	0.00
Projection	to TD								

Design Annotat	ions					
i	easured Depth (usft)	Vertical Depth (usft)	Local Coo +N/-S (usft)	rdinates +E/-W (usft)	Comment	
	1,840.00	1,839.94	-1.10	-2.00	Tie In	
	1,975.00	1,974.94	-1.77	-2.57	First Phoenix MWD Survey	
	9,992.72	9,573.17	499.68	-1,259.54	FTP: 9992.72' MD, 9573.17' TVD	
1	7,746.31	9,617.76	8,045.54	-3,002.03	LTP: 17746.31' MD, 9617.76' TVD	
1	7,761.00	9,618.46	8,059.80	-3,005.47	Final Phoenix MWD Survey	
1	7,825.00	9,621.55	8,121.94	-3,020.49	Projection to TD	



SURVEY DATA CERTIFICATION



Job #:	71235

Client: Piedra Operating, LLC

County & State: Andrews County, TX

Well: University 5-35 N4 H 4LS

API No: 42-003-48505

Proposed Direction: 339.55°

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
1840.00 ft	1839.94 ft	0.31 ft	200.88 ft	-1.10 ft	-2.00 ft	MWD
				Data Source	e Company:	True Shot

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
14-Dec-22	1,975 ft	0.47°	232.64°

Last Survey Date	Last Survey Depth	INC	AZM
16-Feb-23	17,761 ft	87.23°	346.41°

Survey Instrument Type	
Velocity	

_	Projected		
TD Survey	TD Survey	INC	AZM
Date	Depth		
16-Feb-23	17,825 ft	87.23°	346.41°

CORRECTION INFORMATION

Magnetic Declination Used	5.76	degrees	
Grid Convergence Used	-2.08	degrees	
Total Correction	7.84	degrees	

Corrected to True/Grid North	
Grid	

Chad Hatcher

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

February 16, 2023

Date