



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

8/3/2022

Re: Piedra Operating, LLC.
Well: University 8-14 H 6LS
Field: Spraberry (Trend Area)
Rig: Burton 20
County: Andrews County, TX
Permit: 877889
API Well No: 42-003-48543

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	139'- 1790'	8/2/2022 – 8/2/2022	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.

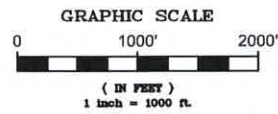
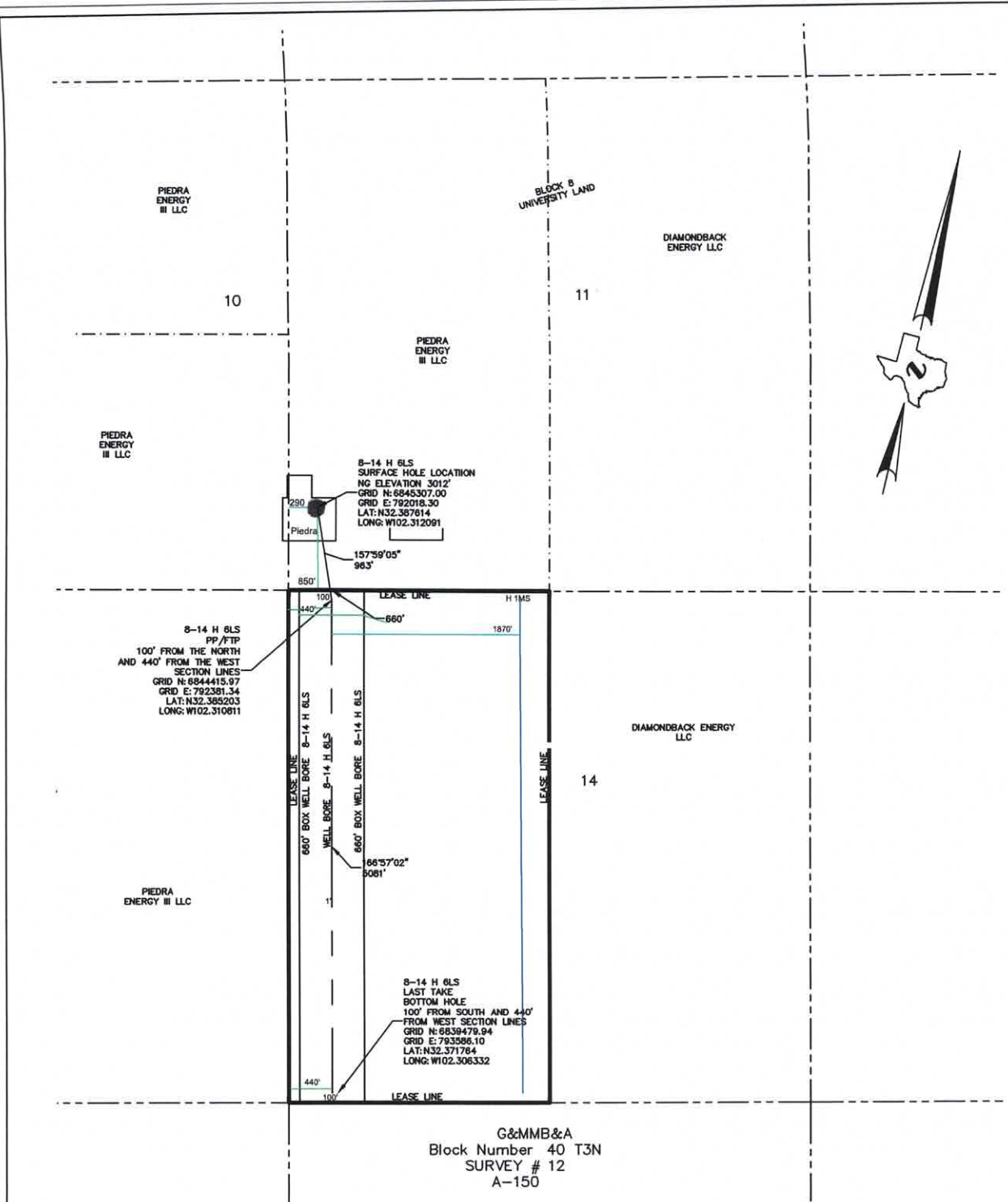
A handwritten signature in blue ink, appearing to read 'R. Nesloney'.

8/3/2022

Randall Nesloney
MWD Manager

Cc: Piedra Operating, LLC.

University 8-14 H 6LS
Proposed Bottom Hole Location
True Shot, LLC.
Closure Distance: 4.96 Feet
Closure Direction: 156.31 Degrees Azimuth



NOTE:
COURSES, DISTANCES AND COORDINATES SHOWN HEREON ARE LAMBERT GRID AND CONFORM TO THE "TEXAS COORDINATE SYSTEM", TEXAS NORTH CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983. ALL DISTANCES AND COORDINATES ARE SHOWN IN GRID FEET.
ELEVATION NAVD 1988

SCHUMANN ENGINEERING CO.
A LATERAL LAND COMPANY
CIVIL ENGINEERING - LAND SURVEYING
TEXAS FIRM No. 71890 - TEXAS FIRM No. 10148000
900 N. WINDFIELD STREET
SUITE 100
IRVING, TEXAS 75039
OFFICE (409) 664-5545

3RD MARCH, 2022
RJ DAUM
TEXAS RPLS 4826



LEGEND:
--- SECTION LINE
--- BLOCK LINE
--- LEASE LINE

THIS WELL IS TO BE LOCATED 150 MILES IN A NORTHEAST DIRECTION FROM ANDREWS WHICH IS THE NEAREST TOWN IN THE COUNTY OF THE WELL SITE.

LOCATION PLAT
PIEDRA OPERATING, LLC.
WELL NO. H 6LS
UNIVERSITY 8-14
SURFACE HOLE
850 FEET FROM THE SOUTH AND
290 FEET FROM THE WEST LINES,
SECTION 11, BLOCK 8,
LAST TAKE/BOTTOM HOLE
100 FEET FROM THE SOUTH AND
440 FEET FROM THE WEST LINES
SECTION 14, BLOCK 8,
UNIVERSITY LAND
ANDREWS COUNTY, TEXAS
QUAD: FIVE WELLS RANCH
SCALE: 1" = 1000'
PROJECT: 78329PO
JOB NO: 78,329 BL



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 8/2/2022 through 8/2/2022 conduct or supervise the taking of MWD surveys from a depth of 139 feet to a depth of 1790 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 8-14 H 6LS (API No. 42-003-48543, Permit No. 877889), 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.

A handwritten signature in blue ink, appearing to be 'R. Nesloney', is written over a horizontal line.

8/3/2022

Randall Nesloney
MWD Manager

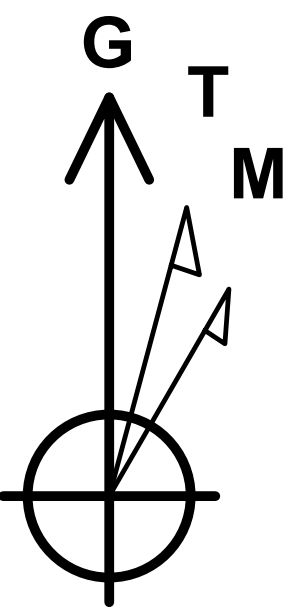
Cc: Piedra Operating, LLC.



Project: Andrews County, TX (NAD83-TNC)
Site: University 8-14
Well: University 8-14 H 6LS
Wellbore: OH / 70980
Design: Plan 3 11-21-22
Rig: H&P 460



PHOENIX
TECHNOLOGY SERVICES



Azimuths to Grid North
True North: 2.08°
Magnetic North: 7.91°

Magnetic Field
Strength: 47386.3nT
Dip Angle: 60.02°
Date: 12/12/2022
Model: MVHD

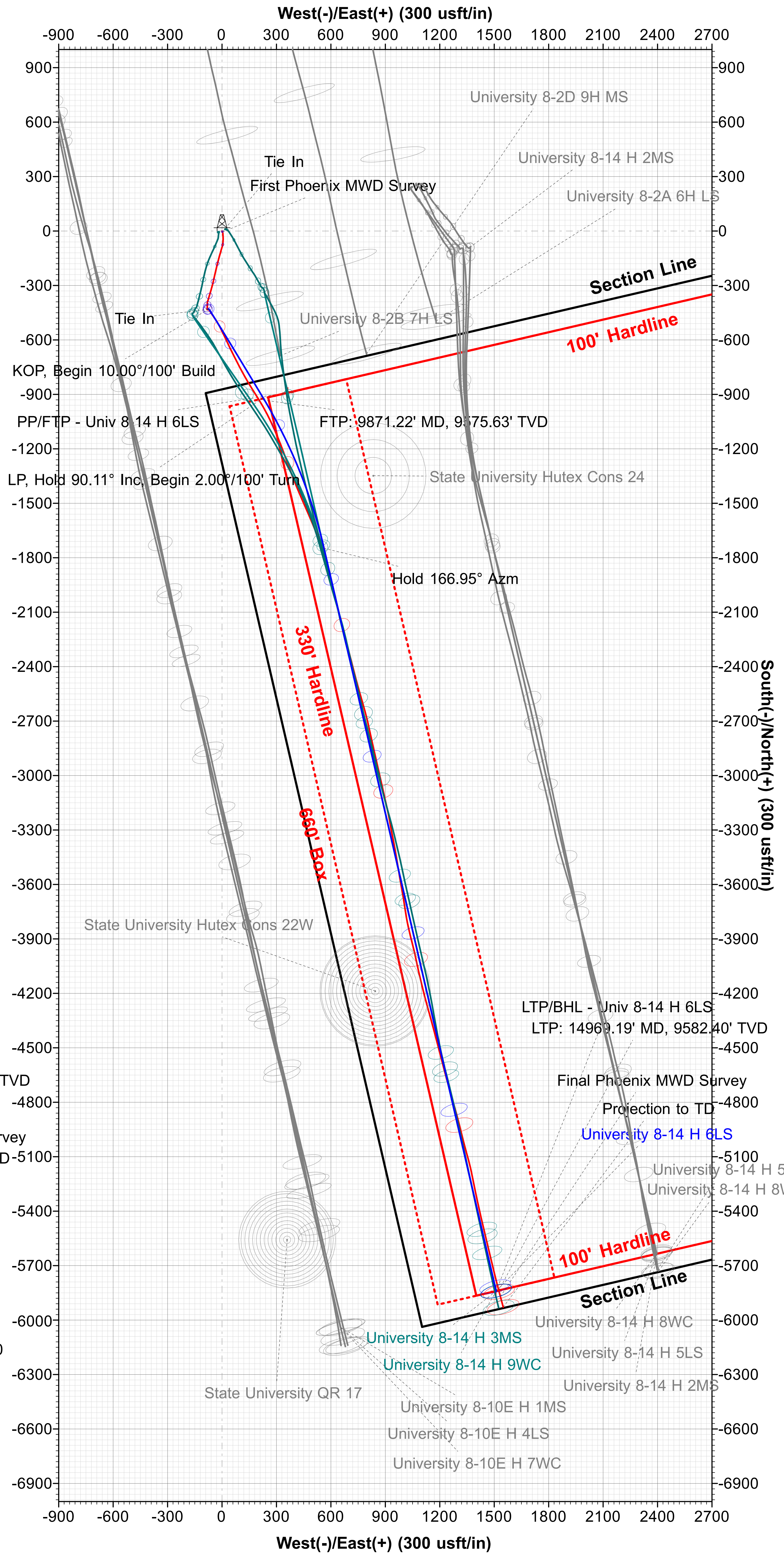
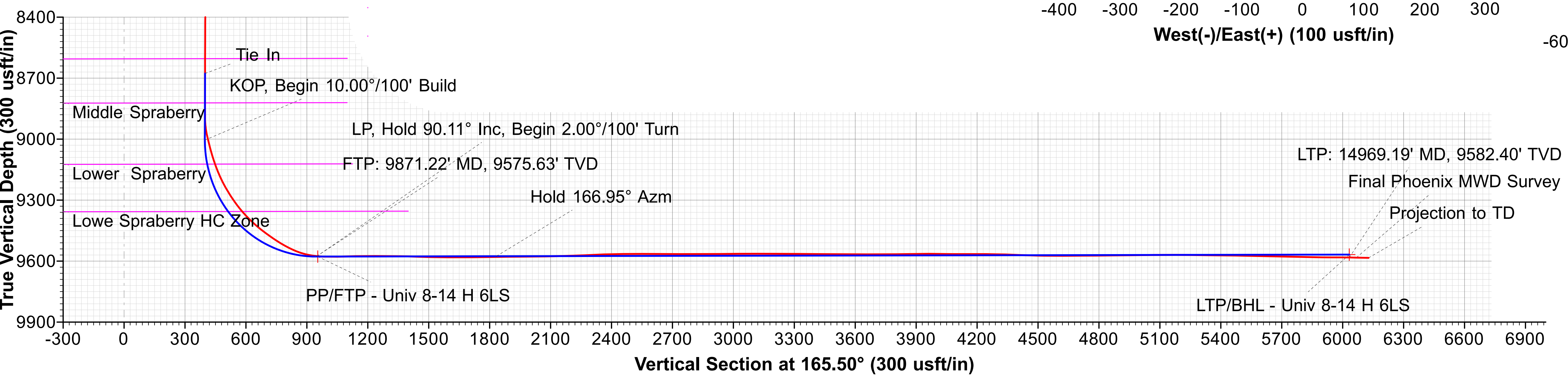
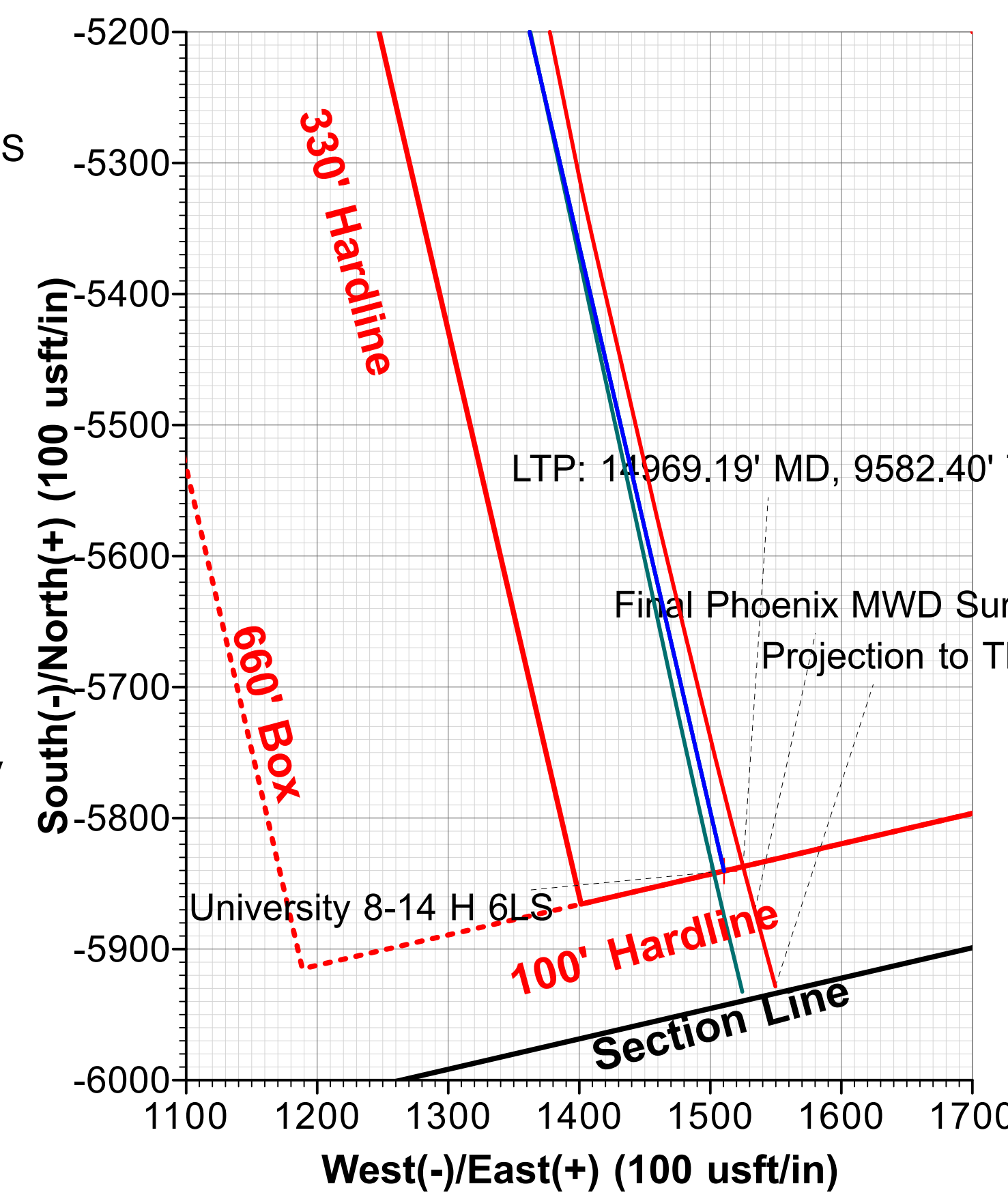
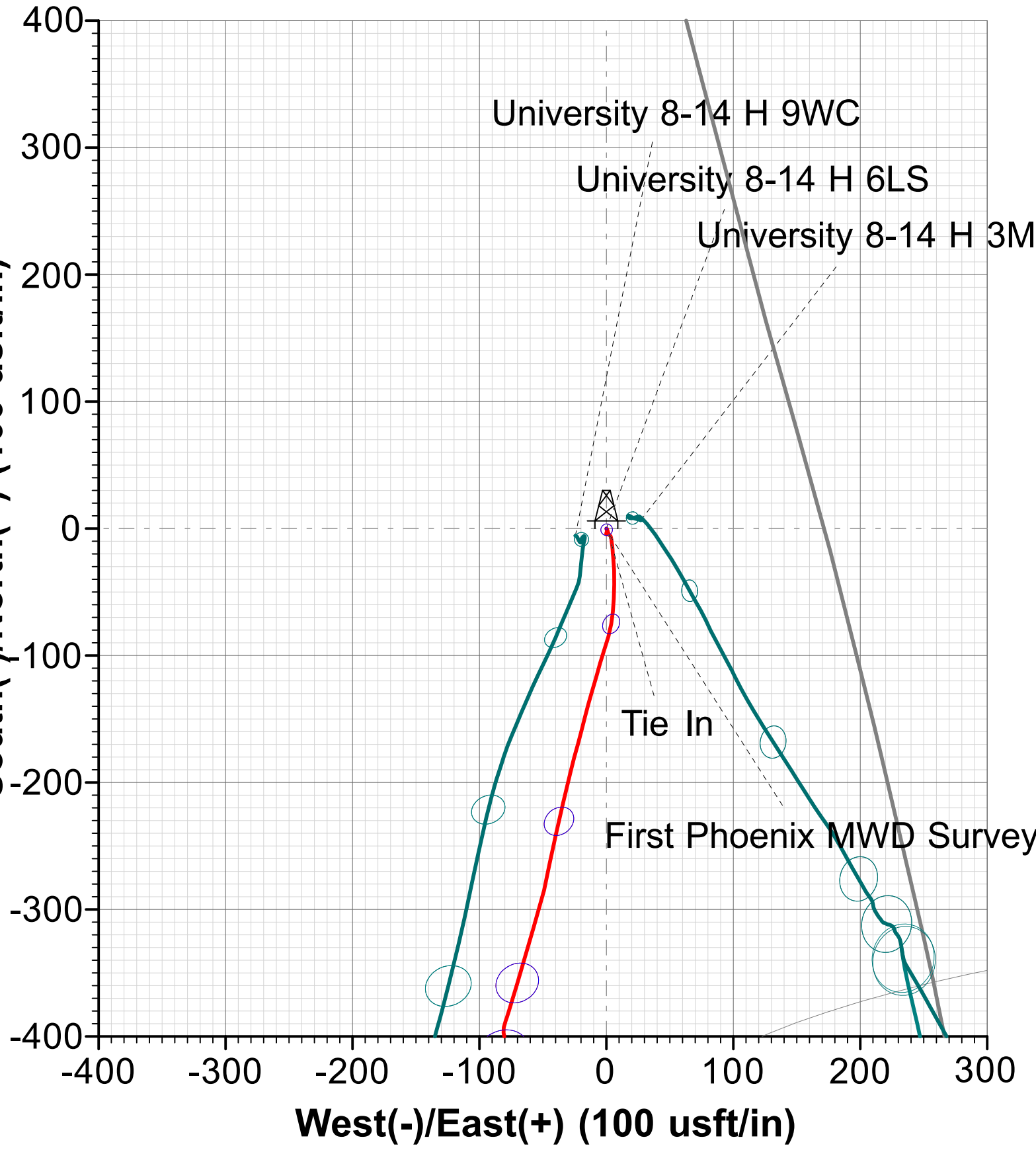
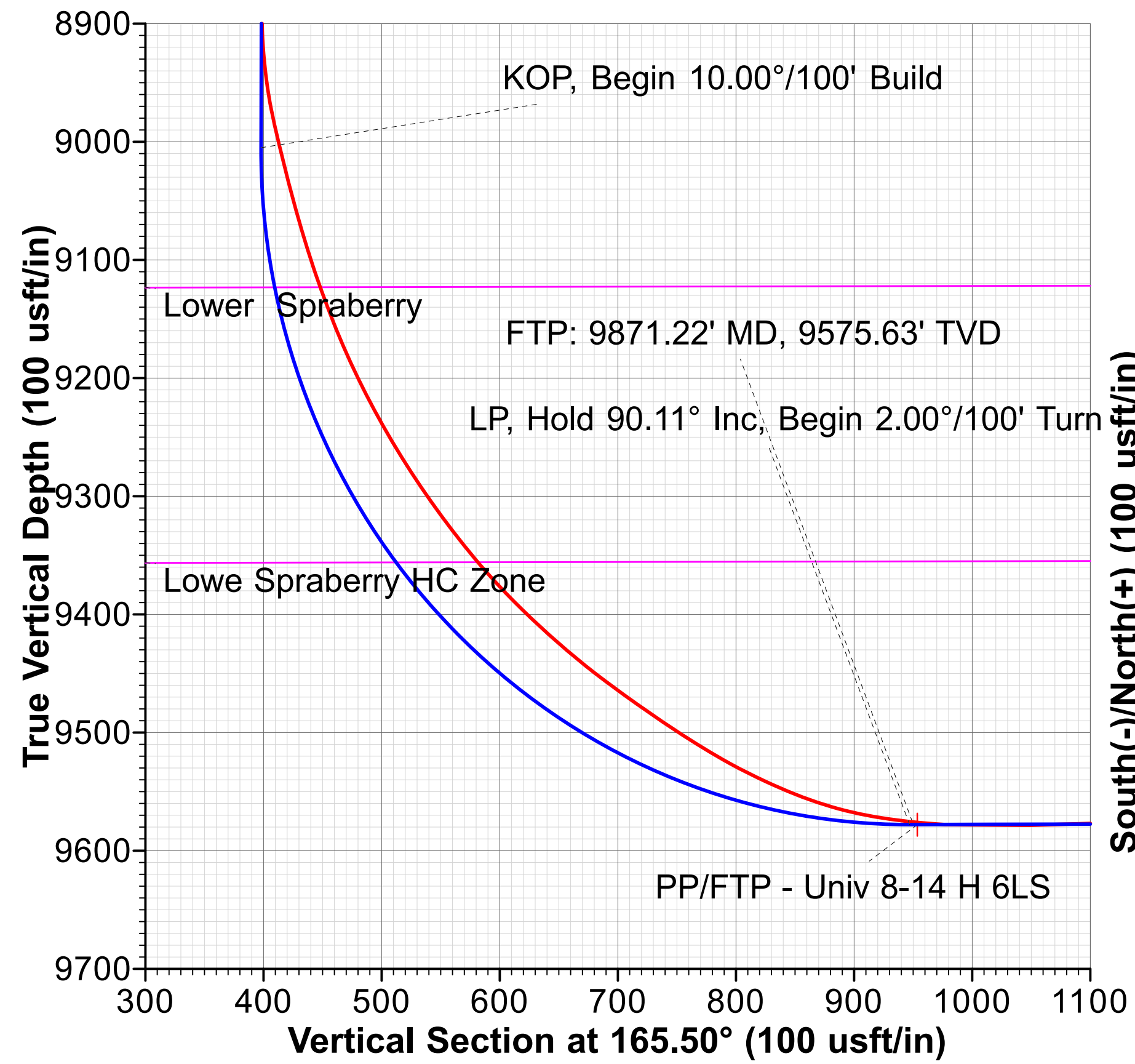
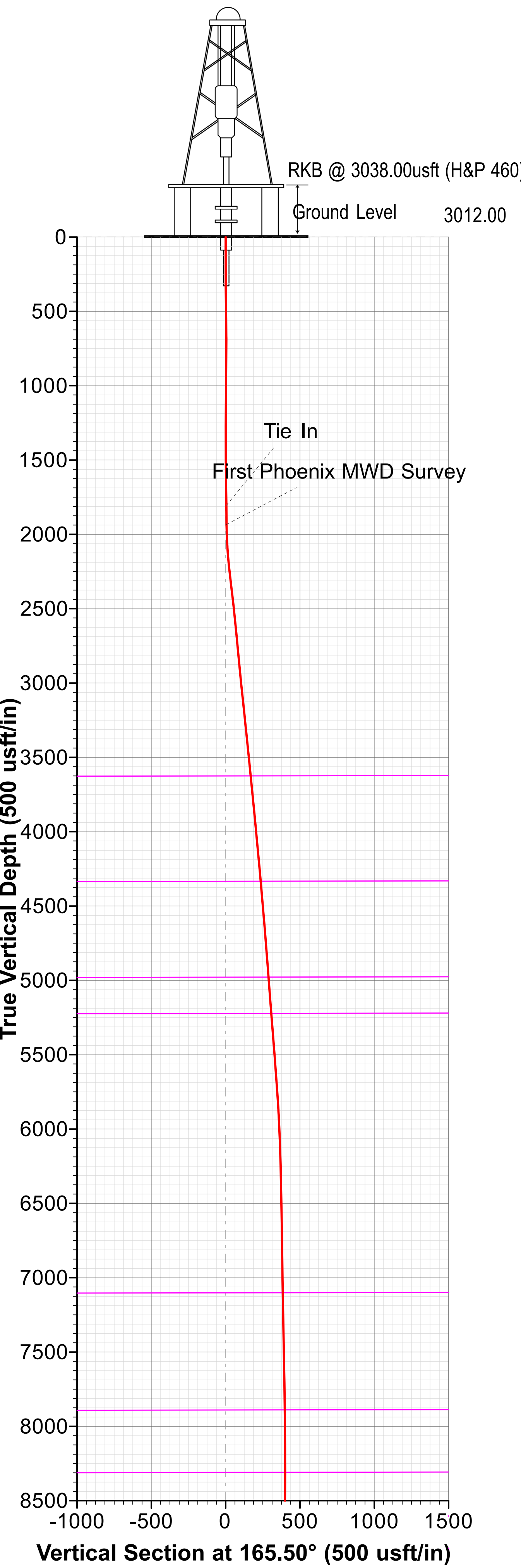
WELL DETAILS									
				Ground Level	3012.00				
				Easting	792018.30	Latitude	32° 23' 15.410529 N	Longitude	102° 18' 43.528252 W
+N/-S	+E/-W	Northing							
0.00	0.00	6845307.00							

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
1	8698.00	0.47	59.62	8677.01	-431.26	-75.11	0.00	0.000	398.71
2	9026.04	0.47	59.62	9005.04	-429.90	-72.79	0.00	0.000	397.97
3	9927.09	90.11	149.00	9577.93	-919.53	226.91	10.00	89.379	947.06
4	10824.61	90.11	166.95	9576.18	-1748.16	562.11	2.00	89.978	1833.22
5	15025.26	90.11	166.95	9568.00	-5840.32	1510.59	0.00	0.000	6032.51
LTP/BHL - Univ 8-14 H 6LS									
Annotation									
Tie In									
KOP, Begin 10.00°/100' Build									
LP, Hold 90.11° Inc, Begin 2.00°/100' Turn									
Hold 166.95° Azm									
TD at 15025.26									

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
LTP/BHL - Univ 8-14 H 6LS	9568.00	-5840.32	1510.59	6839466.68	793528.89	32° 22' 18.197501 N	102° 18' 23.455400 W		
PP/FTP - Univ 8-14 H 6LS	9578.00	-890.94	363.43	6844416.06	792381.73	32° 23' 6.730475 N	102° 18' 38.915771 W		

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: Texas North Central Zone
Local Origin: Well University 8-14 H 6LS, Grid North
Latitude: 32° 23' 15.410529 N
Longitude: 102° 18' 43.528252 W
Grid East: 792018.30
Grid North: 6845307.00
Scale Factor: 1.000
Geomagnetic Model: MVHD
Sample Date: 12-Dec-22
Magnetic Declination: 5.832°
Dip Angle from Horizontal: 60.022°
Magnetic Field Strength: 47386.28628914nT
To convert a Magnetic Direction to a Grid Direction, Add 7.91°
To convert a Magnetic Direction to a True Direction, Add 5.832° East
To convert a True Direction to a Grid Direction, Add 2.079°

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3624.68	3634.71	Seven Rivers
4333.55	4347.68	Queen
4978.45	4995.34	Grayburg
5222.41	5240.31	San Andres
7101.27	7122.06	Clearfork
7889.24	7910.18	Middle Clearfork
8309.24	8330.20	Lower Clearfork Shale
8604.24	8625.22	Upper Spraberry
8822.24	8843.23	Middle Spraberry
9123.22	9145.07	Lower Spraberry
9356.02	9403.82	Lowe Spraberry HC Zone





PHOENIX

TECHNOLOGY SERVICES USA INC.

Celebrating 20 Years of Focused Solutions

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

November 8, 2022

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

Attention: Regulatory Department

Re: Piedra Operating
University 8-14 H 6LS
Andrews Co., Texas
API # 42-003-48543
Job No. 70980

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	
Herman Carter	H 6LS	1,934	15,004	11/7/22	11/26/22	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



Piedra Operating LLC

Andrews County, TX (NAD83-TNC)

University 8-14

University 8-14 H 6LS

OH / 70980

Design: Surveys (H&P 460)

Standard Survey Report

30 November, 2022



Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	Database:	USA Compass

Project	Andrews County, TX (NAD83-TNC), Andrews County, Texas		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Texas North Central Zone		

Site	University 8-14		
Site Position:		Northing:	6,845,313.56 usft
From:	Map	Easting:	792,045.47 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 23' 15.485155 N
		Longitude:	102° 18' 43.214370 W
		Grid Convergence:	-2.079 °

Well	University 8-14 H 6LS		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	1.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 23' 15.410529 N
		Longitude:	102° 18' 43.528252 W
		Ground Level:	3,012.00 usft

Wellbore	OH / 70980		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	12/12/2022	5.832
			Dip Angle (°)
			60.022
			Field Strength (nT)
			47,386.28628914

Design	Surveys (H&P 460)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			165.50

Survey Program	Date	11/30/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
16.00	1,806.00	TruShot MWD Surveys (OH / 70980)	MWD	OWSG MWD - Standard
1,934.00	15,064.00	Phoenix MWD Surveys (OH / 70980)	MWD+HRGM+MS	OWSG MWD + HRGM + 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00
155.00	0.26	117.82	155.00	-0.15	0.28	0.21	0.19	0.19	0.00
251.00	0.13	114.65	251.00	-0.29	0.57	0.43	0.14	-0.14	-3.30
360.00	0.66	178.20	360.00	-0.97	0.70	1.12	0.56	0.49	58.30
447.00	0.75	162.12	446.99	-2.02	0.89	2.18	0.25	0.10	-18.48
491.00	0.62	174.33	490.99	-2.53	1.01	2.70	0.44	-0.30	27.75
533.00	0.70	179.69	532.98	-3.01	1.03	3.17	0.24	0.19	12.76
618.00	0.75	204.13	617.98	-4.04	0.80	4.11	0.37	0.06	28.75
705.00	0.44	260.11	704.97	-4.61	0.24	4.53	0.71	-0.36	64.34

Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	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)
793.00	0.35	354.60	792.97	-4.40	-0.12	4.23	0.66	-0.10	107.38
879.00	0.44	18.59	878.97	-3.83	-0.04	3.70	0.22	0.10	27.90
965.00	0.57	15.34	964.97	-3.10	0.18	3.05	0.15	0.15	-3.78
1,050.00	0.53	19.56	1,049.96	-2.33	0.43	2.36	0.07	-0.05	4.96
1,226.00	0.31	330.60	1,225.96	-1.14	0.47	1.22	0.23	-0.13	-27.82
1,311.00	0.13	309.07	1,310.96	-0.88	0.28	0.92	0.23	-0.21	-25.33
1,399.00	0.26	145.86	1,398.96	-0.99	0.31	1.03	0.44	0.15	-185.47
1,485.00	0.48	156.05	1,484.96	-1.48	0.57	1.57	0.27	0.26	11.85
1,574.00	0.48	145.77	1,573.95	-2.12	0.93	2.29	0.10	0.00	-11.55
1,662.00	0.75	159.92	1,661.95	-2.97	1.33	3.21	0.35	0.31	16.08
1,750.00	0.62	163.43	1,749.94	-3.97	1.67	4.26	0.16	-0.15	3.99
1,806.00	0.75	139.70	1,805.94	-4.54	1.99	4.89	0.55	0.23	-42.38
Tie In									
1,934.00	0.63	129.94	1,933.93	-5.63	3.07	6.22	0.13	-0.09	-7.63
First Phoenix MWD Survey									
2,029.00	2.62	169.31	2,028.89	-8.10	3.88	8.81	2.28	2.09	41.44
2,123.00	4.18	174.02	2,122.72	-13.62	4.63	14.34	1.68	1.66	5.01
2,217.00	6.28	176.26	2,216.32	-22.15	5.32	22.78	2.24	2.23	2.38
2,311.00	6.72	175.30	2,309.72	-32.77	6.11	33.25	0.48	0.47	-1.02
2,406.00	6.91	183.04	2,404.05	-44.01	6.26	44.18	0.99	0.20	8.15
2,500.00	6.80	180.69	2,497.38	-55.22	5.90	54.94	0.32	-0.12	-2.50
2,594.00	5.92	188.39	2,590.80	-65.58	5.12	64.78	1.30	-0.94	8.19
2,688.00	5.80	187.11	2,684.31	-75.09	3.83	73.66	0.19	-0.13	-1.36
2,782.00	6.63	196.83	2,777.76	-85.00	1.67	82.71	1.42	0.88	10.34
2,877.00	6.66	197.89	2,872.12	-95.49	-1.61	92.05	0.13	0.03	1.12
2,971.00	6.58	196.33	2,965.49	-105.85	-4.80	101.27	0.21	-0.09	-1.66
3,065.00	6.73	195.50	3,058.86	-116.33	-7.79	110.67	0.19	0.16	-0.88
3,160.00	6.85	196.99	3,153.19	-127.11	-10.93	120.32	0.22	0.13	1.57
3,254.00	6.73	195.36	3,246.53	-137.78	-14.03	129.88	0.24	-0.13	-1.73
3,349.00	6.70	194.55	3,340.88	-148.51	-16.90	139.55	0.10	-0.03	-0.85
3,443.00	6.64	194.08	3,434.25	-159.09	-19.60	149.12	0.09	-0.06	-0.50
3,538.00	6.64	195.49	3,528.61	-169.71	-22.40	158.70	0.17	0.00	1.48
3,632.00	6.56	194.83	3,621.99	-180.14	-25.22	168.08	0.12	-0.09	-0.70
3,727.00	6.57	194.11	3,716.36	-190.66	-27.94	177.59	0.09	0.01	-0.76
3,821.00	6.35	193.10	3,809.77	-200.93	-30.43	186.91	0.26	-0.23	-1.07
3,915.00	6.40	193.61	3,903.18	-211.09	-32.84	196.14	0.08	0.05	0.54
4,010.00	6.00	192.13	3,997.63	-221.09	-35.13	205.25	0.45	-0.42	-1.56
4,104.00	5.80	193.90	4,091.13	-230.50	-37.30	213.82	0.29	-0.21	1.88
4,198.00	5.83	193.59	4,184.65	-239.75	-39.56	222.21	0.05	0.03	-0.33
4,293.00	5.88	191.20	4,279.15	-249.22	-41.64	230.85	0.26	0.05	-2.52
4,387.00	5.64	191.33	4,372.68	-258.47	-43.48	239.35	0.26	-0.26	0.14
4,482.00	5.52	192.98	4,467.23	-267.50	-45.43	247.60	0.21	-0.13	1.74
4,577.00	5.38	189.90	4,561.80	-276.34	-47.22	255.71	0.34	-0.15	-3.24

Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	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)
4,671.00	5.23	194.64	4,655.40	-284.83	-49.06	263.47	0.49	-0.16	5.04
4,765.00	5.34	196.23	4,749.00	-293.17	-51.37	270.97	0.19	0.12	1.69
4,860.00	5.08	195.16	4,843.60	-301.47	-53.70	278.42	0.29	-0.27	-1.13
4,954.00	4.77	197.20	4,937.26	-309.22	-55.95	285.36	0.38	-0.33	2.17
5,048.00	5.24	194.84	5,030.90	-317.11	-58.20	292.43	0.55	0.50	-2.51
5,143.00	5.18	195.27	5,125.50	-325.44	-60.44	299.93	0.08	-0.06	0.45
5,237.00	5.23	196.41	5,219.12	-333.64	-62.77	307.29	0.12	0.05	1.21
5,332.00	5.02	197.70	5,313.74	-341.75	-65.26	314.53	0.25	-0.22	1.36
5,426.00	5.15	196.66	5,407.37	-349.71	-67.72	321.62	0.17	0.14	-1.11
5,521.00	5.12	197.03	5,501.99	-357.85	-70.18	328.88	0.05	-0.03	0.39
5,615.00	4.98	194.74	5,595.62	-365.81	-72.45	336.01	0.26	-0.15	-2.44
5,709.00	4.87	198.39	5,689.27	-373.54	-74.74	342.92	0.35	-0.12	3.88
5,804.00	4.83	196.79	5,783.93	-381.20	-77.17	349.73	0.15	-0.04	-1.68
5,898.00	3.43	199.44	5,877.69	-387.64	-79.25	355.44	1.50	-1.49	2.82
5,993.00	3.07	191.53	5,972.54	-392.81	-80.70	360.09	0.60	-0.38	-8.33
6,087.00	2.14	170.96	6,066.44	-397.01	-80.93	364.09	1.39	-0.99	-21.88
6,181.00	1.89	169.37	6,160.38	-400.27	-80.37	367.39	0.27	-0.27	-1.69
6,276.00	1.34	184.69	6,255.34	-402.91	-80.17	370.00	0.73	-0.58	16.13
6,370.00	1.34	182.81	6,349.32	-405.11	-80.32	372.09	0.05	0.00	-2.00
6,464.00	1.33	182.74	6,443.29	-407.29	-80.42	374.18	0.01	-0.01	-0.07
6,559.00	0.88	185.63	6,538.27	-409.12	-80.55	375.92	0.48	-0.47	3.04
6,653.00	0.95	192.49	6,632.26	-410.60	-80.79	377.29	0.14	0.07	7.30
6,747.00	1.08	191.84	6,726.25	-412.23	-81.14	378.78	0.14	0.14	-0.69
6,841.00	0.95	188.10	6,820.23	-413.87	-81.43	380.29	0.16	-0.14	-3.98
6,936.00	0.73	161.33	6,915.22	-415.22	-81.34	381.62	0.47	-0.23	-28.18
7,030.00	0.73	170.37	7,009.22	-416.38	-81.05	382.81	0.12	0.00	9.62
7,125.00	1.06	176.78	7,104.20	-417.85	-80.90	384.28	0.36	0.35	6.75
7,218.00	1.17	181.69	7,197.19	-419.66	-80.88	386.03	0.16	0.12	5.28
7,312.00	1.05	183.42	7,291.17	-421.48	-80.96	387.78	0.13	-0.13	1.84
7,406.00	1.15	186.40	7,385.15	-423.27	-81.12	389.48	0.12	0.11	3.17
7,501.00	1.36	193.92	7,480.13	-425.32	-81.50	391.36	0.28	0.22	7.92
7,595.00	1.36	186.84	7,574.10	-427.51	-81.90	393.38	0.18	0.00	-7.53
7,690.00	0.91	199.38	7,669.08	-429.34	-82.28	395.06	0.54	-0.47	13.20
7,784.00	0.80	192.80	7,763.07	-430.68	-82.67	396.26	0.16	-0.12	-7.00
7,879.00	0.78	155.91	7,858.06	-431.92	-82.56	397.48	0.53	-0.02	-38.83
7,973.00	0.51	155.60	7,952.06	-432.88	-82.12	398.53	0.29	-0.29	-0.33
8,067.00	0.63	97.64	8,046.05	-433.33	-81.44	399.13	0.60	0.13	-61.66
8,162.00	0.59	108.99	8,141.05	-433.56	-80.46	399.60	0.13	-0.04	11.95
8,256.00	0.56	87.77	8,235.04	-433.70	-79.54	399.97	0.23	-0.03	-22.57
8,350.00	0.70	76.10	8,329.04	-433.55	-78.52	400.07	0.20	0.15	-12.41
8,444.00	0.78	54.57	8,423.03	-433.04	-77.45	399.85	0.31	0.09	-22.90
8,539.00	0.62	56.12	8,518.02	-432.38	-76.49	399.45	0.17	-0.17	1.63
8,633.00	0.73	46.24	8,612.02	-431.68	-75.64	398.98	0.17	0.12	-10.51
8,698.00	0.47	59.62	8,677.01	-431.26	-75.11	398.71	0.45	-0.40	20.58

Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	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)
8,818.00	0.26	75.66	8,797.01	-430.94	-74.42	398.58	0.19	-0.18	13.37
8,913.00	0.20	140.87	8,892.01	-431.02	-74.11	398.73	0.27	-0.06	68.64
9,007.00	13.39	146.79	8,985.14	-440.29	-68.02	409.23	14.03	14.03	6.30
9,101.00	17.36	144.80	9,075.76	-460.86	-53.96	432.67	4.26	4.22	-2.12
9,196.00	23.78	146.47	9,164.66	-488.44	-35.20	464.07	6.79	6.76	1.76
9,290.00	31.11	151.48	9,248.04	-525.63	-13.10	505.61	8.17	7.80	5.33
9,384.00	37.40	155.35	9,325.70	-572.97	10.43	557.32	7.08	6.69	4.12
9,479.00	46.21	154.63	9,396.45	-630.28	37.21	619.52	9.29	9.27	-0.76
9,573.00	53.80	152.64	9,456.82	-694.72	69.22	689.92	8.24	8.07	-2.12
9,667.00	58.40	152.68	9,509.23	-764.01	105.04	765.97	4.89	4.89	0.04
9,762.00	68.75	148.93	9,551.47	-838.10	146.58	848.10	11.45	10.89	-3.95
9,847.00	82.18	147.43	9,572.75	-907.83	189.89	926.46	15.89	15.80	-1.76
9,871.22	84.17	148.48	9,575.63	-928.21	202.65	949.39	9.27	8.20	4.34
FTP: 9871.22' MD, 9575.63' TVD									
9,974.00	92.61	152.89	9,578.52	-1,017.70	252.89	1,048.60	9.27	8.22	4.29
10,068.00	90.62	156.58	9,575.87	-1,102.65	292.98	1,140.89	4.46	-2.12	3.93
10,162.00	89.98	159.42	9,575.38	-1,189.80	328.19	1,234.07	3.10	-0.68	3.02
10,256.00	89.56	160.33	9,575.76	-1,278.06	360.53	1,327.62	1.07	-0.45	0.97
10,351.00	87.88	157.89	9,577.88	-1,366.78	394.39	1,422.00	3.12	-1.77	-2.57
10,445.00	88.84	157.24	9,580.57	-1,453.63	430.25	1,515.06	1.23	1.02	-0.69
10,540.00	89.99	156.37	9,581.54	-1,540.94	467.67	1,608.96	1.52	1.21	-0.92
10,634.00	90.41	156.96	9,581.21	-1,627.25	504.90	1,701.84	0.77	0.45	0.63
10,728.00	90.82	162.07	9,580.20	-1,715.28	537.78	1,795.29	5.45	0.44	5.44
10,823.00	90.67	163.09	9,578.96	-1,805.91	566.22	1,890.16	1.09	-0.16	1.07
10,917.00	90.21	164.40	9,578.24	-1,896.15	592.53	1,984.11	1.48	-0.49	1.39
11,012.00	91.24	166.80	9,577.04	-1,988.15	616.15	2,079.10	2.75	1.08	2.53
11,106.00	91.81	166.56	9,574.54	-2,079.59	637.80	2,173.04	0.66	0.61	-0.26
11,200.00	92.24	165.56	9,571.22	-2,170.76	660.43	2,266.98	1.16	0.46	-1.06
11,295.00	92.57	165.03	9,567.23	-2,262.57	684.53	2,361.89	0.66	0.35	-0.56
11,389.00	90.16	165.55	9,564.99	-2,353.45	708.39	2,455.86	2.62	-2.56	0.55
11,484.00	90.08	165.48	9,564.79	-2,445.43	732.15	2,550.86	0.11	-0.08	-0.07
11,579.00	89.44	164.28	9,565.19	-2,537.14	756.93	2,645.85	1.43	-0.67	-1.26
11,673.00	90.16	163.98	9,565.52	-2,627.56	782.63	2,739.82	0.83	0.77	-0.32
11,768.00	90.01	167.39	9,565.38	-2,719.59	806.12	2,834.81	3.59	-0.16	3.59
11,862.00	90.56	167.80	9,564.91	-2,811.40	826.31	2,928.74	0.73	0.59	0.44
11,956.00	90.32	166.69	9,564.19	-2,903.07	847.06	3,022.69	1.21	-0.26	-1.18
12,050.00	90.16	167.68	9,563.79	-2,994.73	867.91	3,116.65	1.07	-0.17	1.05
12,145.00	89.58	166.87	9,564.01	-3,087.40	888.84	3,211.60	1.05	-0.61	-0.85
12,239.00	89.44	167.75	9,564.81	-3,179.09	909.49	3,305.55	0.95	-0.15	0.94
12,333.00	89.76	169.88	9,565.47	-3,271.30	927.72	3,399.39	2.29	0.34	2.27
12,427.00	89.39	168.65	9,566.17	-3,363.65	945.23	3,493.18	1.37	-0.39	-1.31
12,521.00	90.18	170.89	9,566.52	-3,456.15	961.92	3,586.91	2.53	0.84	2.38
12,616.00	89.82	170.23	9,566.52	-3,549.86	977.50	3,681.54	0.79	-0.38	-0.69

Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	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)
12,710.00	90.12	169.70	9,566.57	-3,642.42	993.88	3,775.25	0.65	0.32	-0.56
12,805.00	91.46	172.01	9,565.26	-3,736.20	1,008.98	3,869.82	2.81	1.41	2.43
12,899.00	89.76	167.73	9,564.26	-3,828.70	1,025.51	3,963.52	4.90	-1.81	-4.55
12,993.00	89.01	165.30	9,565.27	-3,920.10	1,047.42	4,057.49	2.71	-0.80	-2.59
13,088.00	90.45	168.38	9,565.72	-4,012.59	1,069.05	4,152.45	3.58	1.52	3.24
13,182.00	89.48	166.62	9,565.77	-4,104.36	1,089.39	4,246.39	2.14	-1.03	-1.87
13,276.00	88.34	166.04	9,567.56	-4,195.68	1,111.60	4,340.36	1.36	-1.21	-0.62
13,371.00	87.39	164.27	9,571.10	-4,287.44	1,135.92	4,435.29	2.11	-1.00	-1.86
13,465.00	89.44	164.95	9,573.70	-4,378.03	1,160.86	4,529.23	2.30	2.18	0.72
13,560.00	90.16	165.28	9,574.03	-4,469.84	1,185.26	4,624.23	0.83	0.76	0.35
13,654.00	90.45	165.55	9,573.53	-4,560.81	1,208.93	4,718.23	0.42	0.31	0.29
13,749.00	90.55	165.26	9,572.70	-4,652.74	1,232.87	4,813.22	0.32	0.11	-0.31
13,843.00	90.49	164.27	9,571.85	-4,743.43	1,257.57	4,907.21	1.06	-0.06	-1.05
13,938.00	90.79	163.77	9,570.79	-4,834.75	1,283.72	5,002.17	0.61	0.32	-0.53
14,032.00	90.52	166.10	9,569.71	-4,925.51	1,308.15	5,096.16	2.50	-0.29	2.48
14,127.00	89.55	165.64	9,569.66	-5,017.63	1,331.34	5,191.15	1.13	-1.02	-0.48
14,221.00	89.19	164.47	9,570.69	-5,108.45	1,355.58	5,285.14	1.30	-0.38	-1.24
14,315.00	89.24	168.55	9,571.98	-5,199.83	1,377.50	5,379.10	4.34	0.05	4.34
14,410.00	89.55	168.60	9,572.98	-5,292.94	1,396.32	5,473.96	0.33	0.33	0.05
14,505.00	88.17	166.72	9,574.87	-5,385.72	1,416.62	5,568.86	2.45	-1.45	-1.98
14,599.00	89.04	167.19	9,577.16	-5,477.26	1,437.83	5,662.80	1.05	0.93	0.50
14,694.00	89.22	166.69	9,578.60	-5,569.80	1,459.29	5,757.76	0.56	0.19	-0.53
14,789.00	88.41	166.31	9,580.57	-5,662.15	1,481.46	5,852.73	0.94	-0.85	-0.40
14,883.00	90.08	166.20	9,581.81	-5,753.45	1,503.80	5,946.71	1.78	1.78	-0.12
14,969.19	89.13	165.23	9,582.40	-5,836.97	1,525.06	6,032.89	1.58	-1.11	-1.13
LTP: 14969.19' MD, 9582.40' TVD									
14,977.00	89.04	165.14	9,582.53	-5,844.52	1,527.06	6,040.70	1.58	-1.11	-1.13
15,004.00	88.78	164.85	9,583.04	-5,870.59	1,534.05	6,067.70	1.44	-0.96	-1.07
Final Phoenix MWD Survey									
15,064.00	88.78	164.85	9,584.32	-5,928.49	1,549.73	6,127.68	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,806.00	1,805.94	-4.54	1.99	Tie In
1,934.00	1,933.93	-5.63	3.07	First Phoenix MWD Survey
9,871.22	9,575.63	-928.21	202.65	FTP: 9871.22' MD, 9575.63' TVD
14,969.19	9,582.40	-5,836.97	1,525.06	LTP: 14969.19' MD, 9582.40' TVD
15,004.00	9,583.04	-5,870.59	1,534.05	Final Phoenix MWD Survey
15,064.00	9,584.32	-5,928.49	1,549.73	Projection to TD

Company:	Piedra Operating LLC	Local Co-ordinate Reference:	Well University 8-14 H 6LS
Project:	Andrews County, TX (NAD83-TNC)	TVD Reference:	RKB @ 3038.00usft (H&P 460)
Site:	University 8-14	MD Reference:	RKB @ 3038.00usft (H&P 460)
Well:	University 8-14 H 6LS	North Reference:	Grid
Wellbore:	OH / 70980	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 460)	Database:	USA Compass

SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

Job #: 70980
 Client: Piedra Operating LLC
 County & State: Andrews Co., TX
 Well: University 8-14 H 6LS
 API No: 42-003-48543
 Proposed Direction: 165.50°

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
1806.00 ft	1805.94 ft	0.75 ft	139.70 ft	-4.54 ft	1.99 ft	MWD
Data Source Company:						Trueshot

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
7-Nov-22	1,934 ft	0.63°	129.94°

Last Survey Date	Last Survey Depth	INC	AZM
26-Nov-22	15,004 ft	88.78°	164.85°

Survey Instrument Type
Velocity

Projected TD Survey Date	Projected TD Survey Depth	INC	AZM
26-Nov-22	15,064 ft	88.78°	164.85°

CORRECTION INFORMATION

Magnetic Declination Used	5.83 degrees
Grid Convergence Used	-2.08 degrees
Total Correction	7.91 degrees

Corrected to True/Grid North
Grid

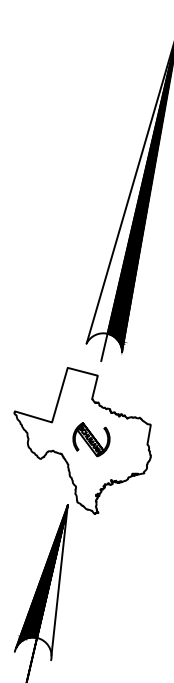
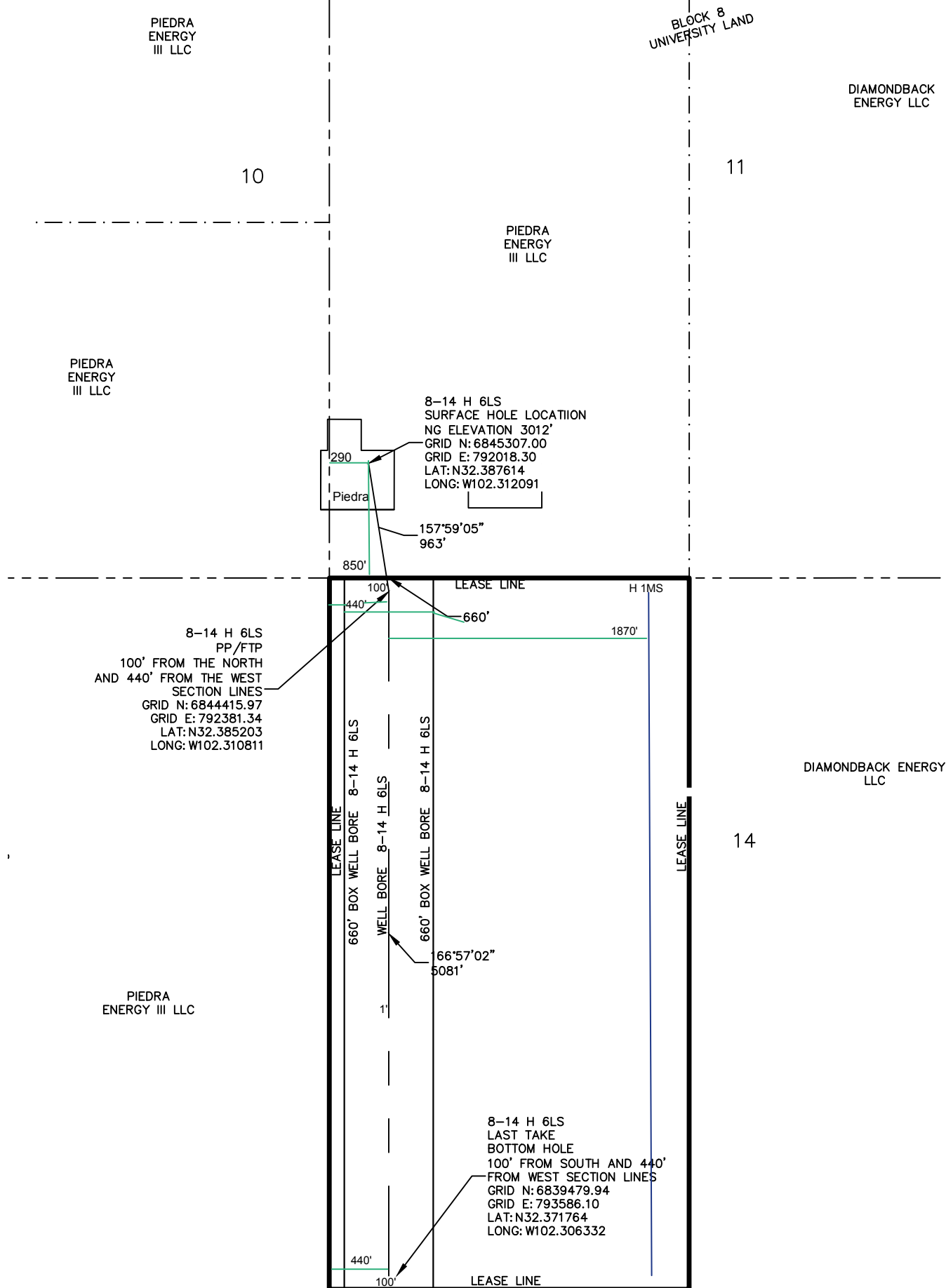
TO THE BEST OF MY KNOWLEDGE, I
 CERTIFY THIS SURVEY DATA TO BE
 TRUE AND CORRECT.

Herman Carter

Signature

November 26, 2022

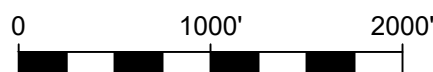
Date



LEGEND:

--- SECTION LINE
 — BLOCK LINE
 -.-.- LEASE LINE

GRAPHIC SCALE



(IN FEET)
1 inch = 1000 ft.

NOTE:

COURSES, DISTANCES AND COORDINATES SHOWN HEREON ARE LAMBERT GRID AND CONFORM TO THE "TEXAS COORDINATE SYSTEM", TEXAS NORTH CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983. ALL DISTANCES AND COORDINATES ARE SHOWN IN GRID FEET.

ELEVATION NAVD 1988



SCHUMANN
ENGINEERING CO.

CIVIL ENGINEERING - LAND SURVEYING
TEXAS FIRM No. F1880 - TEXAS FIRM No. 10149500

Office (432) 684-5548

RJ DAUM
TEXAS RPLS 4826

3RD MARCH, 2022



THIS WELL IS TO BE LOCATED 15.0 MILES IN A
NORTHEAST DIRECTION FROM ANDREWS WHICH IS THE
NEAREST TOWN IN THE COUNTY OF THE WELL SITE.

LOCATION	PLAT
----------	------

PIEDRA OPERATING, LLC.

WELL NO. H 6LS
UNIVERSITY 8-14

SURFACE HOLE
850 FEET FROM THE SOUTH AND
290 FEET FROM THE WEST LINES,
SECTION 11, BLOCK 8,
LAST TAKE/BOTTOM HOLE
100 FEET FROM THE SOUTH AND
440 FEET FROM THE WEST LINES
SECTION 14, BLOCK 8,
UNIVERSITY LAND
ANDREWS COUNTY, TEXAS

QUAD: FIVE WELLS RANCH
SCALE: 1" = 1000'

PROJECT: 78329PO
JOB NO: 78.329 6