



METEORITE
energy services

Meteorite Energy Services Survey Report

22 August, 2023

PERMIAN North

Martin

University 7-14

University 7-14JJ 210H

OH

Survey: FINAL SURFACE SURVEYS
(23MJ-311)

PIONEER

NATURAL RESOURCES

Company:	PERMIAN North	Local Co-ordinate Reference:	Well University 7-14JJ 210H
Project:	Martin	TVD Reference:	KB @ GL @ 2899.0usft
Site:	University 7-14	MD Reference:	KB @ GL @ 2899.0usft
Well:	University 7-14JJ 210H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURFACE SURVEYS (23MJ-311)	Database:	EDM 5000.16 Single User Db

Project	Martin		
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 7-14				
Site Position:		Northing:	1,009,336.80 usft	Latitude:	32° 25' 43.181 N
From:	Map	Easting:	1,430,438.20 usft	Longitude:	102° 10' 43.906 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0.95 °

Well	University 7-14JJ 210H					
Well Position	+N/-S	0.0 usft	Northing:	1,010,206.70 usft	Latitude:	32° 25' 52.134 N
	+E/-W	0.0 usft	Easting:	1,432,559.30 usft	Longitude:	102° 10' 19.336 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	2,899.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	8/16/2023	5.71	59.96	47,399.10000000

Design	FINAL SURFACE SURVEYS (23MJ-311)			
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 (°)
	-7.0	0.0	0.0	108.00

Survey Program	Date	8/22/2023			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
130.0	1,918.0	FINAL SURFACE SURVEYS (23MJ-311) (MWD+IFR+MS	MWD + IFR + Multi Station	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea 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	-2,899.0	0.0	0.0	0.0	0.00	0.00	0.00
130.0	0.60	177.60	130.0	-2,769.0	-0.7	0.0	0.2	0.46	0.46	0.00
213.0	0.70	200.30	213.0	-2,686.0	-1.6	-0.1	0.4	0.33	0.12	27.35
300.0	0.20	186.90	300.0	-2,599.0	-2.2	-0.3	0.4	0.58	-0.57	-15.40
387.0	0.20	20.50	387.0	-2,512.0	-2.2	-0.3	0.4	0.46	0.00	-191.26
482.0	0.40	337.80	482.0	-2,417.0	-1.8	-0.4	0.2	0.30	0.21	-44.95
577.0	0.20	282.90	577.0	-2,322.0	-1.4	-0.7	-0.2	0.35	-0.21	-57.79
673.0	0.60	84.80	673.0	-2,226.0	-1.4	-0.3	0.1	0.83	0.42	168.65
767.0	1.50	116.60	767.0	-2,132.0	-1.9	1.3	1.8	1.11	0.96	33.83
863.0	2.40	114.00	862.9	-2,036.1	-3.2	4.2	5.0	0.94	0.94	-2.71
958.0	3.70	101.90	957.8	-1,941.2	-4.7	9.1	10.1	1.52	1.37	-12.74
1,054.0	4.20	102.40	1,053.5	-1,845.5	-6.1	15.5	16.6	0.52	0.52	0.52
1,150.0	4.50	104.50	1,149.3	-1,749.7	-7.8	22.6	23.9	0.35	0.31	2.19

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,246.0	4.30	107.70	1,245.0	-1,654.0	-9.8	29.7	31.3	0.33	-0.21	3.33
1,341.0	5.00	106.30	1,339.7	-1,559.3	-12.1	37.0	39.0	0.75	0.74	-1.47
1,437.0	5.10	107.70	1,435.3	-1,463.7	-14.5	45.1	47.4	0.17	0.10	1.46
1,532.0	5.00	106.80	1,529.9	-1,369.1	-17.0	53.1	55.8	0.13	-0.11	-0.95
1,628.0	4.90	105.70	1,625.6	-1,273.4	-19.3	61.1	64.0	0.14	-0.10	-1.15
1,724.0	5.00	104.50	1,721.2	-1,177.8	-21.5	69.1	72.3	0.15	0.10	-1.25
1,848.0	4.20	104.70	1,844.8	-1,054.2	-24.0	78.7	82.2	0.65	-0.65	0.16
EXTRAPOLATION TO BIT										
1,918.0	4.20	104.70	1,914.6	-984.4	-25.3	83.6	87.4	0.00	0.00	0.00

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
University 7-14JJ 210H - - hit/miss target - Shape - Point	0.00	0.00	9,629.0	10,761.9	-1,372.9	1,020,968.60	1,431,186.40	32° 27' 38.364 N	102° 10' 37.428 W
- survey misses target center by 13341.5usft at 1918.0usft MD (1914.6 TVD, -25.3 N, 83.6 E)									
University 7-14JJ 210H - - survey misses target center by 7911.5usft at 1918.0usft MD (1914.6 TVD, -25.3 N, 83.6 E) - Point	0.00	0.00	9,719.0	710.5	1,152.4	1,010,917.20	1,433,711.70	32° 25' 59.350 N	102° 10' 6.032 W
University 7-14JJ 210H - - survey misses target center by 4686.1usft at 1918.0usft MD (1914.6 TVD, -25.3 N, 83.6 E) - Point	0.00	360.00	6,440.0	225.6	1,274.2	1,010,432.30	1,433,833.50	32° 25' 54.574 N	102° 10' 4.518 W

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,918.0	1,914.6	-25.3	83.6	EXTRAPOLATION TO BIT

Checked By: _____	Approved By: _____	Date: _____
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