

# **Percussion Petroleum II, LLC**

**Winkler Co., TX (NAD-27)**

**UL Yellowtail Pad**

**UL Yellowtail East K 21-29-17 WB 11H**

**OH**

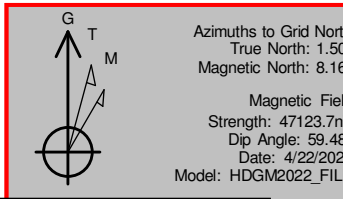
**Design: OH**

## **TRRC Certified Surveys**

**27 June, 2022**



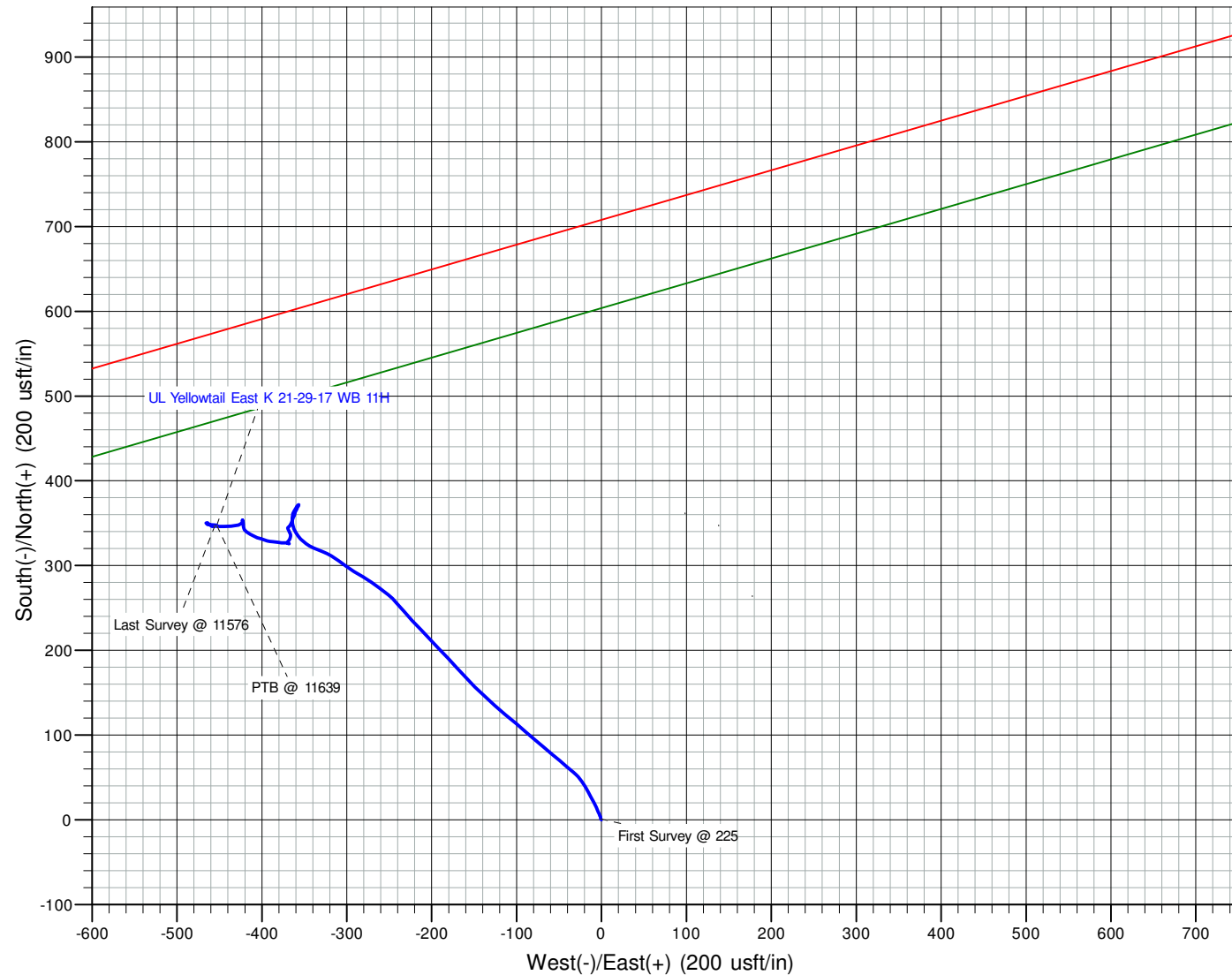
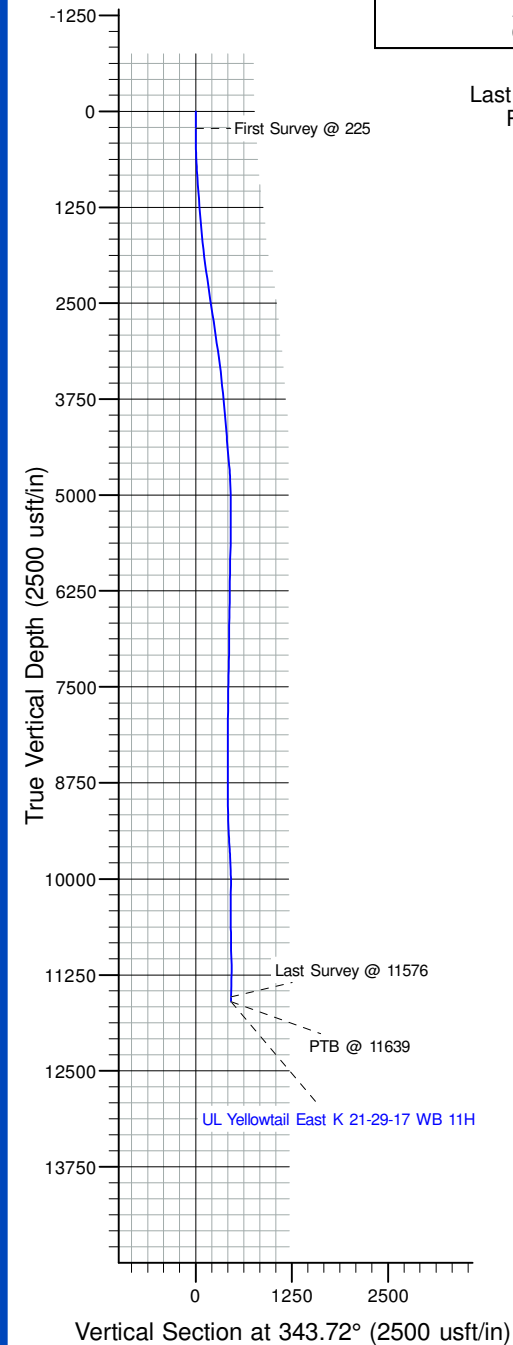
Project: Winkler Co., TX (NAD-27)  
Site: UL Yellowtail Pad  
Well: UL Yellowtail East K 21-29-17 WB 11H  
Wellbore: OH  
Design: OH  
Lat: 31.712953  
Long: -103.237140  
GL: 2767.00  
KB: RKB @ 2792.00usft



WELL DETAILS: UL Yellowtail East K 21-29-17 WB 11H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	756010.84	1097100.21	31.712953	-103.237140

Last Survey @ 11576 MD, 11536.91 TVD, 347.83 N/S, -454.99 E/W  
PTB @ 11639 MD, 11599.88 TVD, 347.67 N/S, -452.81 E/W



# TRRC Certified Surveys

<b>Company:</b>	Percussion Petroleum II, LLC	<b>Local Co-ordinate Reference:</b>	Well UL Yellowtail East K 21-29-17 WB 11H
<b>Project:</b>	Winkler Co., TX (NAD-27)	<b>TVD Reference:</b>	RKB @ 2792.00usft
<b>Site:</b>	UL Yellowtail Pad	<b>MD Reference:</b>	RKB @ 2792.00usft
<b>Well:</b>	UL Yellowtail East K 21-29-17 WB 11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	FHartmann

<b>Project</b>	Winkler Co., TX (NAD-27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Texas Central 4203		

Site		UL Yellowtail Pad			
Site Position:		Northing:	755,364.37 usft	Latitude:	31.711020
From:	Map	Easting:	1,094,929.80 usft	Longitude:	-103.244063
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.50 °

Well	UL Yellowtail East K 21-29-17 WB 11H					
Well Position	+N/-S	0.00 usft	Northing:	756,010.84 usft	Latitude:	31.712953
	+E/-W	0.00 usft	Easting:	1,097,100.21 usft	Longitude:	-103.237140
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,767.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2022_FILE	4/22/2022	6.67	59.48	47,123.70000000

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	343.72	

<b>Survey Program</b>	<b>Date</b>	6/27/2022			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
225.00	11,639.00	MWD Surveys (OH)	MWD+HRGM	OWSG MWD + HRGM	

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.00	0.63	326.81	225.00	1.04	-0.68	1.24	326.81
First Survey @ 225							
315.00	0.76	10.93	314.99	2.04	-0.83	2.20	337.70
404.00	0.76	331.18	403.98	3.13	-1.01	3.29	342.17
494.00	0.74	338.86	493.97	4.20	-1.50	4.46	340.28
585.00	2.04	335.56	584.95	6.22	-2.39	6.66	339.01
673.00	2.78	336.71	672.87	9.61	-3.88	10.36	338.01
768.00	3.94	336.02	767.70	14.70	-6.12	15.93	337.42
861.00	4.29	331.26	860.46	20.67	-9.09	22.58	336.27
954.00	4.21	333.59	953.21	26.78	-12.28	29.46	335.37
1,049.00	4.07	329.53	1,047.96	32.81	-15.54	36.30	334.66

# TRRC Certified Surveys

<b>Company:</b>	Percussion Petroleum II, LLC	<b>Local Co-ordinate Reference:</b>	Well UL Yellowtail East K 21-29-17 WB 11H
<b>Project:</b>	Winkler Co., TX (NAD-27)	<b>TVD Reference:</b>	RKB @ 2792.00usft
<b>Site:</b>	UL Yellowtail Pad	<b>MD Reference:</b>	RKB @ 2792.00usft
<b>Well:</b>	UL Yellowtail East K 21-29-17 WB 11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	FHartmann

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
1,143.00	4.35	331.00	1,141.71	38.80	-18.96	43.19	333.96	
1,238.00	4.37	324.21	1,236.43	44.89	-22.82	50.36	333.05	
1,333.00	4.45	320.24	1,331.15	50.66	-27.30	57.54	331.68	
1,427.00	5.56	307.41	1,424.79	56.23	-33.25	65.32	329.41	
1,521.00	6.53	312.45	1,518.27	62.60	-40.81	74.73	326.90	
1,616.00	7.09	310.17	1,612.60	70.03	-49.27	85.63	324.87	
1,711.00	7.07	309.87	1,706.88	77.56	-58.24	96.99	323.10	
1,805.00	7.97	309.84	1,800.07	85.44	-67.68	109.00	321.62	
1,899.00	8.43	310.14	1,893.10	94.06	-77.95	122.17	320.35	
1,997.00	8.92	311.26	1,989.98	103.70	-89.16	136.76	319.31	
2,187.00	10.00	309.30	2,177.40	123.87	-113.00	167.66	317.63	
2,282.00	10.07	311.94	2,270.94	134.64	-125.56	184.10	317.00	
2,471.00	9.56	314.61	2,457.18	156.71	-149.02	216.25	316.44	
2,661.00	9.29	318.73	2,644.62	179.31	-170.37	247.35	316.47	
2,755.00	9.52	316.22	2,737.35	190.63	-180.75	262.70	316.52	
2,851.00	9.19	316.69	2,832.08	201.94	-191.51	278.31	316.52	
2,946.00	9.25	316.97	2,925.85	213.04	-201.92	293.53	316.54	
3,040.00	9.55	316.09	3,018.59	224.18	-212.48	308.88	316.53	
3,134.00	8.93	317.02	3,111.37	235.14	-222.86	323.97	316.53	
3,228.00	8.57	319.59	3,204.27	245.81	-232.38	338.26	316.61	
3,323.00	8.30	319.20	3,298.24	256.39	-241.45	352.18	316.72	
3,418.00	7.68	307.70	3,392.33	265.46	-250.95	365.30	316.61	
3,513.00	7.46	306.40	3,486.50	273.00	-260.94	377.65	316.29	
3,607.00	7.40	305.67	3,579.71	280.15	-270.77	389.62	315.98	
3,702.00	7.17	300.51	3,673.94	286.73	-280.84	401.36	315.59	
3,797.00	7.25	300.67	3,768.19	292.80	-291.11	412.89	315.17	
3,890.00	6.72	306.28	3,860.50	299.01	-300.54	423.95	314.85	
3,984.00	6.42	307.27	3,953.89	305.45	-309.16	434.60	314.65	
4,079.00	6.71	299.86	4,048.27	311.43	-318.20	445.24	314.38	
4,174.00	7.50	292.55	4,142.54	316.57	-328.74	456.38	313.92	
4,268.00	6.52	292.74	4,235.83	320.99	-339.33	467.09	313.41	
4,363.00	5.19	306.08	4,330.34	325.60	-347.77	476.41	313.11	
4,457.00	5.46	315.41	4,423.94	331.29	-354.35	485.09	313.07	
4,552.00	6.00	330.82	4,518.47	338.84	-359.94	494.34	313.27	
4,647.00	5.97	346.28	4,612.95	347.98	-363.54	503.24	313.75	
4,742.00	4.04	5.98	4,707.59	356.11	-364.36	509.48	314.34	
4,836.00	2.17	16.07	4,801.45	361.11	-363.52	512.40	314.81	
4,929.00	1.70	33.61	4,894.40	363.95	-362.27	513.52	315.13	
5,025.00	1.47	27.33	4,990.36	366.23	-360.92	514.19	315.42	
5,079.00	1.29	26.52	5,044.35	367.39	-360.33	514.60	315.56	
5,218.00	1.36	40.20	5,183.31	370.05	-358.56	515.27	315.90	
5,313.00	1.19	44.46	5,278.29	371.62	-357.15	515.41	316.14	
5,406.00	0.51	179.13	5,371.28	371.89	-356.46	515.14	316.21	
5,501.00	1.36	205.71	5,466.27	370.45	-356.95	514.44	316.06	

# TRRC Certified Surveys

<b>Company:</b>	Percussion Petroleum II, LLC	<b>Local Co-ordinate Reference:</b>	Well UL Yellowtail East K 21-29-17 WB 11H
<b>Project:</b>	Winkler Co., TX (NAD-27)	<b>TVD Reference:</b>	RKB @ 2792.00usft
<b>Site:</b>	UL Yellowtail Pad	<b>RKB Reference:</b>	RKB @ 2792.00usft
<b>Well:</b>	UL Yellowtail East K 21-29-17 WB 11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	FHartmann

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
5,595.00	1.32	212.56	5,560.24	368.54	-358.01	513.80	315.83	
5,688.00	1.22	204.00	5,653.22	366.73	-358.99	513.19	315.61	
5,781.00	1.29	208.79	5,746.20	364.91	-359.90	512.53	315.40	
5,876.00	1.22	193.84	5,841.18	362.99	-360.66	511.70	315.18	
5,970.00	1.46	195.14	5,935.15	360.86	-361.21	510.58	314.97	
6,064.00	1.06	212.58	6,029.13	358.97	-361.99	509.80	314.76	
6,158.00	1.27	197.90	6,123.11	357.25	-362.78	509.15	314.56	
6,253.00	1.14	200.84	6,218.09	355.36	-363.44	508.30	314.36	
6,348.00	0.99	197.10	6,313.07	353.69	-364.01	507.55	314.18	
6,442.00	1.00	198.25	6,407.06	352.14	-364.51	506.82	314.01	
6,536.00	1.04	198.68	6,501.04	350.55	-365.04	506.10	313.84	
6,630.00	0.88	208.75	6,595.03	349.11	-365.66	505.56	313.67	
6,725.00	0.96	215.06	6,690.02	347.82	-366.47	505.25	313.50	
6,819.00	0.96	219.23	6,784.00	346.57	-367.42	505.08	313.33	
6,915.00	0.86	224.25	6,879.99	345.43	-368.43	505.04	313.15	
7,010.00	0.78	228.59	6,974.98	344.49	-369.41	505.11	313.00	
7,104.00	1.29	151.89	7,068.97	343.13	-369.39	504.17	312.89	
7,198.00	1.25	148.33	7,162.95	341.33	-368.36	502.19	312.82	
7,292.00	1.33	157.75	7,256.92	339.44	-367.41	500.21	312.73	
7,387.00	1.18	155.55	7,351.90	337.53	-366.58	498.31	312.64	
7,481.00	0.67	182.71	7,445.89	336.10	-366.21	497.07	312.55	
7,576.00	0.88	184.44	7,540.88	334.82	-366.29	496.26	312.43	
7,670.00	0.90	194.94	7,634.87	333.39	-366.54	495.48	312.29	
7,764.00	0.63	193.02	7,728.86	332.17	-366.84	494.89	312.16	
7,859.00	0.76	207.14	7,823.85	331.10	-367.25	494.47	312.04	
7,952.00	0.70	216.83	7,916.84	330.10	-367.87	494.26	311.90	
8,044.00	0.81	213.16	8,008.84	329.10	-368.56	494.11	311.76	
8,138.00	1.05	217.45	8,102.82	327.86	-369.45	493.95	311.59	
8,233.00	0.49	159.82	8,197.82	326.79	-369.84	493.53	311.46	
8,328.00	0.89	109.82	8,292.81	326.16	-369.01	492.49	311.47	
8,423.00	0.61	113.04	8,387.80	325.71	-367.85	491.32	311.52	
8,517.00	0.68	304.84	8,481.80	325.83	-367.84	491.40	311.53	
8,612.00	0.74	305.89	8,576.79	326.52	-368.80	492.57	311.52	
8,706.00	0.65	265.85	8,670.79	326.83	-369.83	493.55	311.47	
8,800.00	0.61	267.16	8,764.78	326.77	-370.86	494.28	311.38	
8,896.00	0.88	267.84	8,860.77	326.72	-372.11	495.18	311.28	
8,990.00	1.30	268.70	8,954.75	326.67	-373.89	496.49	311.14	
9,085.00	2.25	278.64	9,049.71	326.92	-376.81	498.87	310.94	
9,180.00	2.89	276.13	9,144.61	327.46	-381.04	502.41	310.68	
9,275.00	4.09	275.81	9,239.43	328.06	-386.79	507.18	310.30	
9,369.00	4.84	284.67	9,333.15	329.40	-393.96	513.53	309.90	
9,464.00	4.62	288.24	9,427.83	331.61	-401.47	520.72	309.56	
9,558.00	5.80	294.35	9,521.44	334.76	-409.40	528.84	309.27	
9,652.00	4.95	305.76	9,615.03	339.08	-417.01	537.47	309.12	
9,746.00	3.09	339.57	9,708.80	343.83	-421.19	543.71	309.23	

# TRRC Certified Surveys

<b>Company:</b>	Percussion Petroleum II, LLC	<b>Local Co-ordinate Reference:</b>	Well UL Yellowtail East K 21-29-17 WB 11H
<b>Project:</b>	Winkler Co., TX (NAD-27)	<b>TVD Reference:</b>	RKB @ 2792.00usft
<b>Site:</b>	UL Yellowtail Pad	<b>MD Reference:</b>	RKB @ 2792.00usft
<b>Well:</b>	UL Yellowtail East K 21-29-17 WB 11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	FHartmann

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
9,840.00	2.34	5.67	9,802.70	348.11	-421.89	546.96	309.53
9,933.00	2.03	342.45	9,895.63	351.57	-422.19	549.41	309.79
10,027.00	0.73	341.42	9,989.60	353.73	-422.89	551.32	309.91
10,122.00	0.62	167.93	10,084.60	353.80	-422.97	551.43	309.91
10,215.00	0.69	177.95	10,177.60	352.75	-422.85	550.66	309.84
10,309.00	0.52	192.30	10,271.59	351.76	-422.92	550.09	309.75
10,404.00	1.61	202.16	10,366.57	350.11	-423.51	549.49	309.58
10,498.00	4.40	253.92	10,460.45	347.89	-427.48	551.15	309.14
10,593.00	5.96	268.79	10,555.06	346.77	-435.91	557.02	308.50
10,687.00	4.28	264.30	10,648.68	346.32	-444.28	563.31	307.94
10,782.00	2.96	279.26	10,743.49	346.36	-450.23	568.04	307.57
10,876.00	2.52	265.04	10,837.39	346.57	-454.68	571.71	307.32
10,970.00	1.75	267.96	10,931.32	346.34	-458.18	574.35	307.09
11,065.00	2.54	320.15	11,026.26	347.91	-460.98	577.53	307.04
11,158.00	2.40	308.58	11,119.18	350.71	-463.82	581.48	307.09
11,251.00	1.99	193.37	11,212.14	350.35	-465.72	582.78	306.95
11,346.00	2.54	96.89	11,307.09	348.49	-464.01	580.30	306.91
11,440.00	2.29	92.84	11,401.01	348.15	-460.06	576.94	307.12
11,576.00	1.99	94.37	11,536.91	347.83	-454.99	572.72	307.40
Last Survey @ 11576							
11,639.00	1.99	94.37	11,599.88	347.67	-452.81	570.89	307.52
PTB @ 11639							

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
225.00	225.00	1.04	-0.68	First Survey @ 225
11,576.00	11,536.91	347.83	-454.99	Last Survey @ 11576
11,639.00	11,599.88	347.67	-452.81	PTB @ 11639

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------



# ALTITUDE ENERGY PARTNERS LLC. SURVEY DATA CERTIFICATION

ALTITUDE JOB NUMBER	AEP-PB-220181	OPERATOR	Percussion Petroleum II
WELL NAME	UL Yellowtail East K 21-29-17 WB 11H	COUNTY & STATE	Winkler Co. Texas
API WELL NUMBER	42-495-34701	PROPOSED DIRECTION	343.72°
Latitude	31.712953	Longitude	-103.237140

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
N/A	N/A	N/A	N/A	N/A	N/A	N/A
FIRST	FIRST				SURVEY INSTRUMENT	
SURVEY	SURVEY				TYPE	
DATE	DEPTH	INCLIN	AZIMUTH		MWD	
6/2/2022	225	.63	326.81	MAGNETIC DECLINATION OR TOTAL GRID		
LAST	LAST			TOTAL CORRECTION USED		8.16
SURVEY	SURVEY			DECLINATION OR GRID		Grid
DATE	DEPTH	INCLIN	AZIMUTH			
6/20/2022	11576	1.99	94.37			
PROJECTED	PROJECTED					
TD SURVEY	TD SURVEY					
DATE	DEPTH	INCLIN	AZIMUTH			
6/20/2022	11639	1.99	94.37			

The data and calculations for this survey have been checked by me and conform to the calibration standards and operational procedures set forth by Altitude Energy Partners LLC. I am authorized and qualified to review the data, calculations and this report, and that the report represents a true and correct Directional Survey of this well based on the original data corrected to True North and obtained at the well site. Wellbore coordinates are calculated using Minimum curvature or other method.

Brantley Anderson

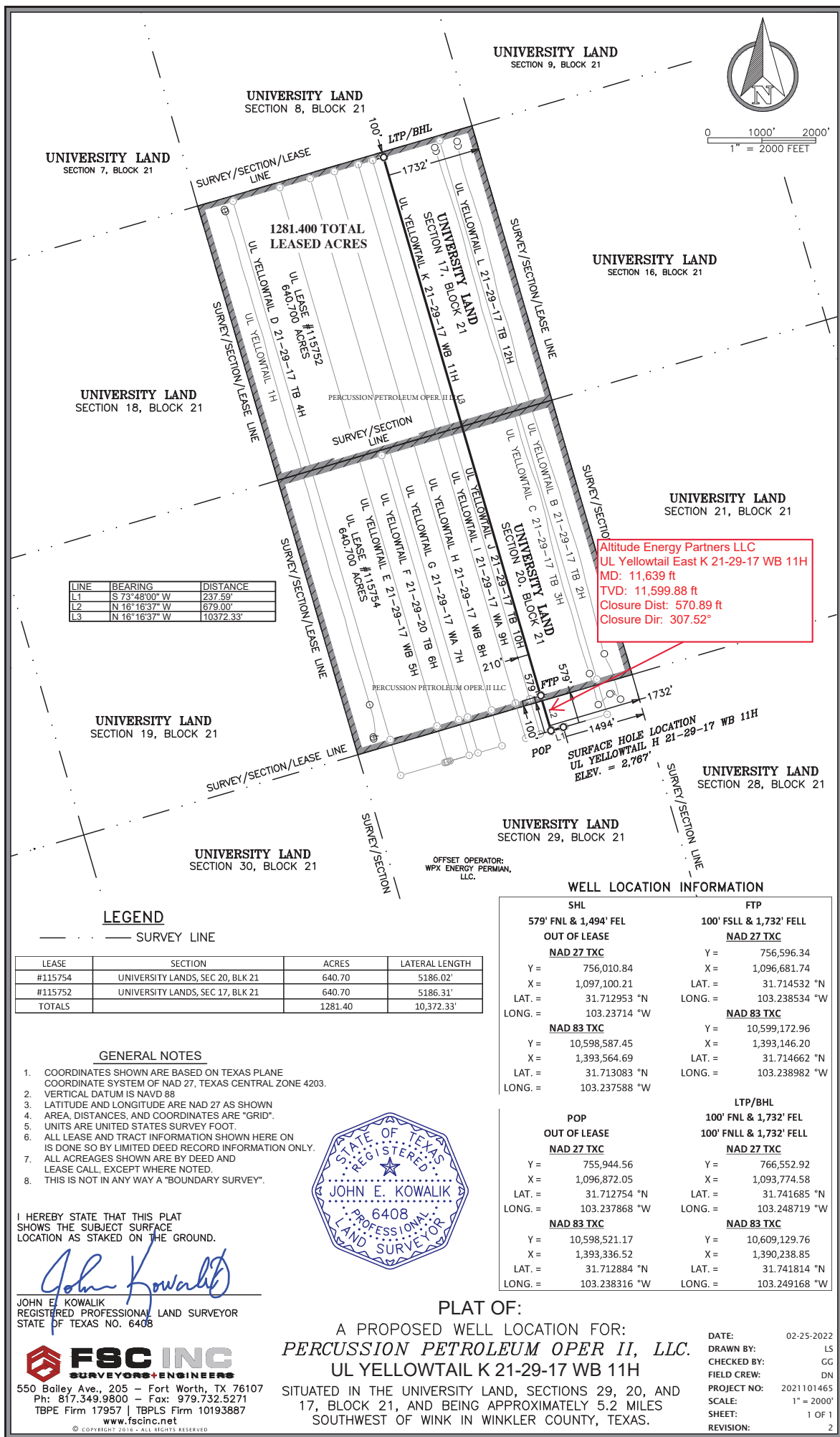
PRINT MWD NAME ABOVE

*Brantley Anderson*

SIGN MWD NAME ABOVE

6/20/2022

TODAY'S DATE



LINE	BEARING	DISTANCE
L1	S 73°48'00" W	237.59'
L2	N 16°16'37" W	679.00'
L3	N 16°16'37" W	10372.33'

LEASE	SECTION	ACRES	LATERAL LENGTH
#115754	UNIVERSITY LANDS, SEC 20, BLK 21	640.70	5186.02'
#115752	UNIVERSITY LANDS, SEC 17, BLK 21	640.70	5186.31'
TOTALS		1281.40	10,372.33'

- GENERAL NOTES**
- COORDINATES SHOWN ARE BASED ON TEXAS PLANE COORDINATE SYSTEM OF NAD 27, TEXAS CENTRAL ZONE 4203.
  - VERTICAL DATUM IS NAVD 88
  - LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN
  - AREA, DISTANCES, AND COORDINATES ARE "GRID".
  - UNITS ARE UNITED STATES SURVEY FOOT.
  - ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY.
  - ALL ACRES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED.
  - THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.

*John E. Kowalik*  
JOHN E. KOWALIK  
REGISTERED PROFESSIONAL LAND SURVEYOR  
STATE OF TEXAS NO. 6408

**FSC INC**  
SURVEYORS + ENGINEERS

550 Bailey Ave., 205 - Fort Worth, TX 76107  
Ph: 817.349.9800 - Fax: 979.732.5271  
TBPE Firm 17957 | TBPLS Firm 10193887  
www.fscinc.net

© COPYRIGHT 2016 - ALL RIGHTS RESERVED

PLAT OF:  
A PROPOSED WELL LOCATION FOR:  
**PERCUSSION PETROLEUM OPER II, LLC.**  
**UL YELLOWTAIL K 21-29-17 WB 11H**  
SITUATED IN THE UNIVERSITY LAND, SECTIONS 29, 20, AND 17, BLOCK 21, AND BEING APPROXIMATELY 5.2 MILES SOUTHWEST OF WINK IN WINKLER COUNTY, TEXAS.

DATE: 02-25-2022  
DRAWN BY: LS  
CHECKED BY: GG  
FIELD CREW: DN  
PROJECT NO: 2021101465  
SCALE: 1" = 2000'  
SHEET: 1 OF 1  
REVISION: 2





3335 Pollok Drive  
Conroe, Texas 77303  
936.442.2500 (office)  
www.msdir.com

19 August 2022

The Railroad Commission of Texas  
Oil & Gas Division  
PO Box 12967  
Austin, TX 78711-2967

Percussion Petroleum II, LLC  
UL Yellowtail East K 21-29-17 WB 11H  
Permit Number: 876976  
Survey: UL  
Abstract: N/A  
Field: PHANTOM (WOLFCAMP)  
Winkler County, Texas

API Number: 42-495-34701

Please find the attached survey performed on the above referenced well by MS Directional LLC; Operator Number 592486.

Other information required by your office is as follows:

Name of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Jared Dugas	Original Wellbore	11655.00' - 22807.00'	06/21/2022 - 07/10/2022	MWD

If any other information is required, please contact the undersigned at the letterhead address and telephone number.

Sincerely,

Charles Davis  
MWD Operations Manager





Company: Percussion Petroleum II, LLC  
Well: UL Yellowtail East K 21-29-17 WB 11H  
County: Winkler County, Texas (NAD 27)  
Rig: Scan Texas  
Wellbore: Wellbore #1  
Design: Design #4  
Date: 16:00, July 11 2022

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: Texas Central 4203  
System Datum: Mean Sea Level

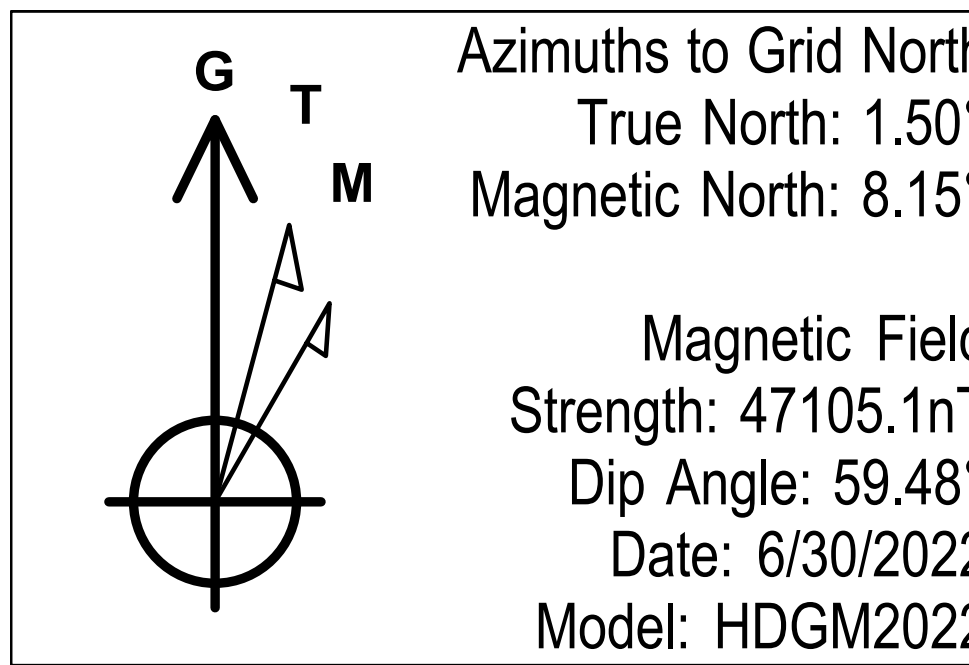
WELL DETAILS: UL Yellowtail East K 21-29-17 WB 11H

GL @ 2767.00		WELL @ 2792.00usft (Scan Texas)		Slot
+N/-S	+E/-W	Northing	Easting	
0.00	0.00	756010.84	1097100.21	
			Latitude	
			31.712953	
			Longitude	
			-103.237140	

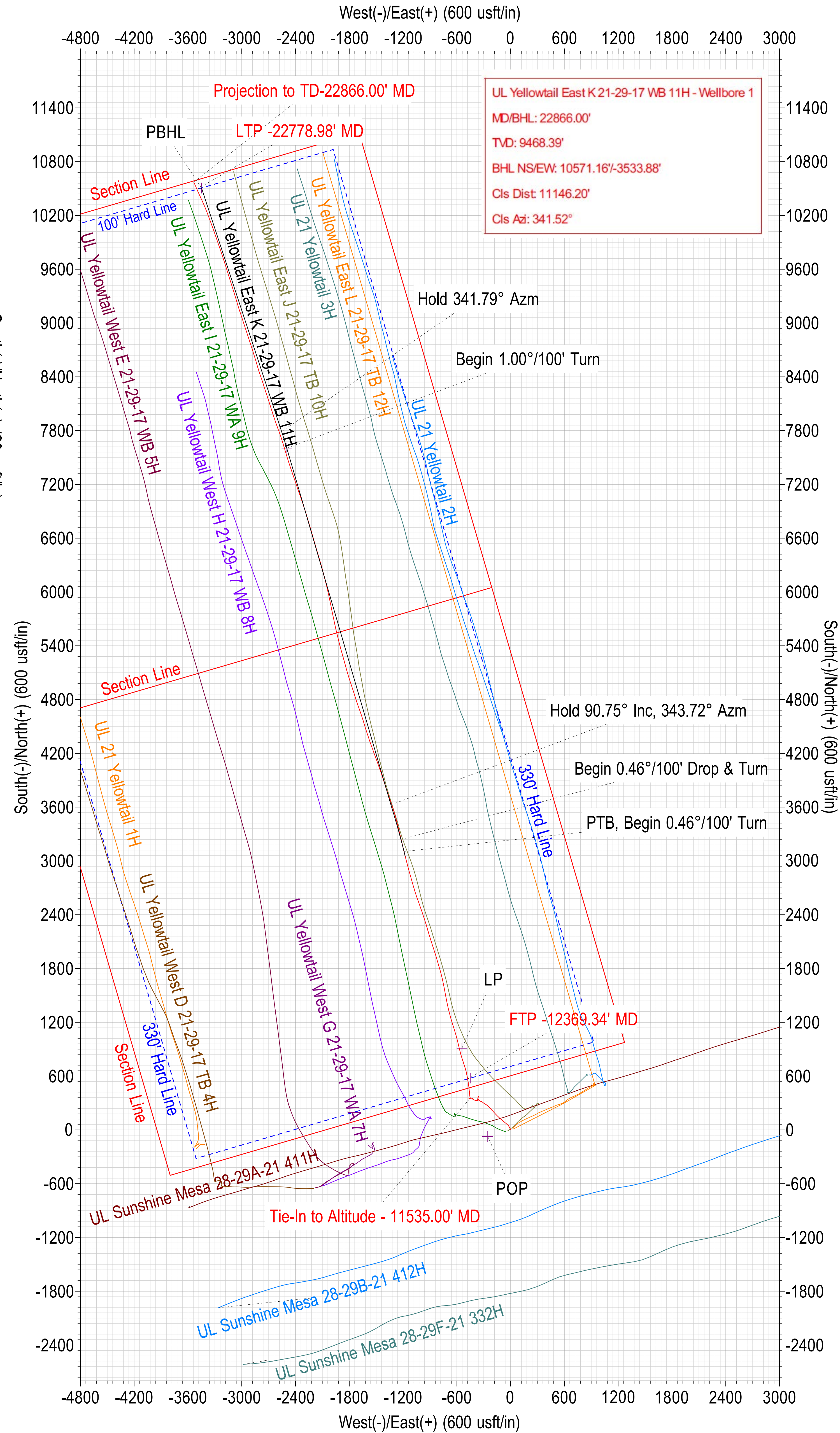
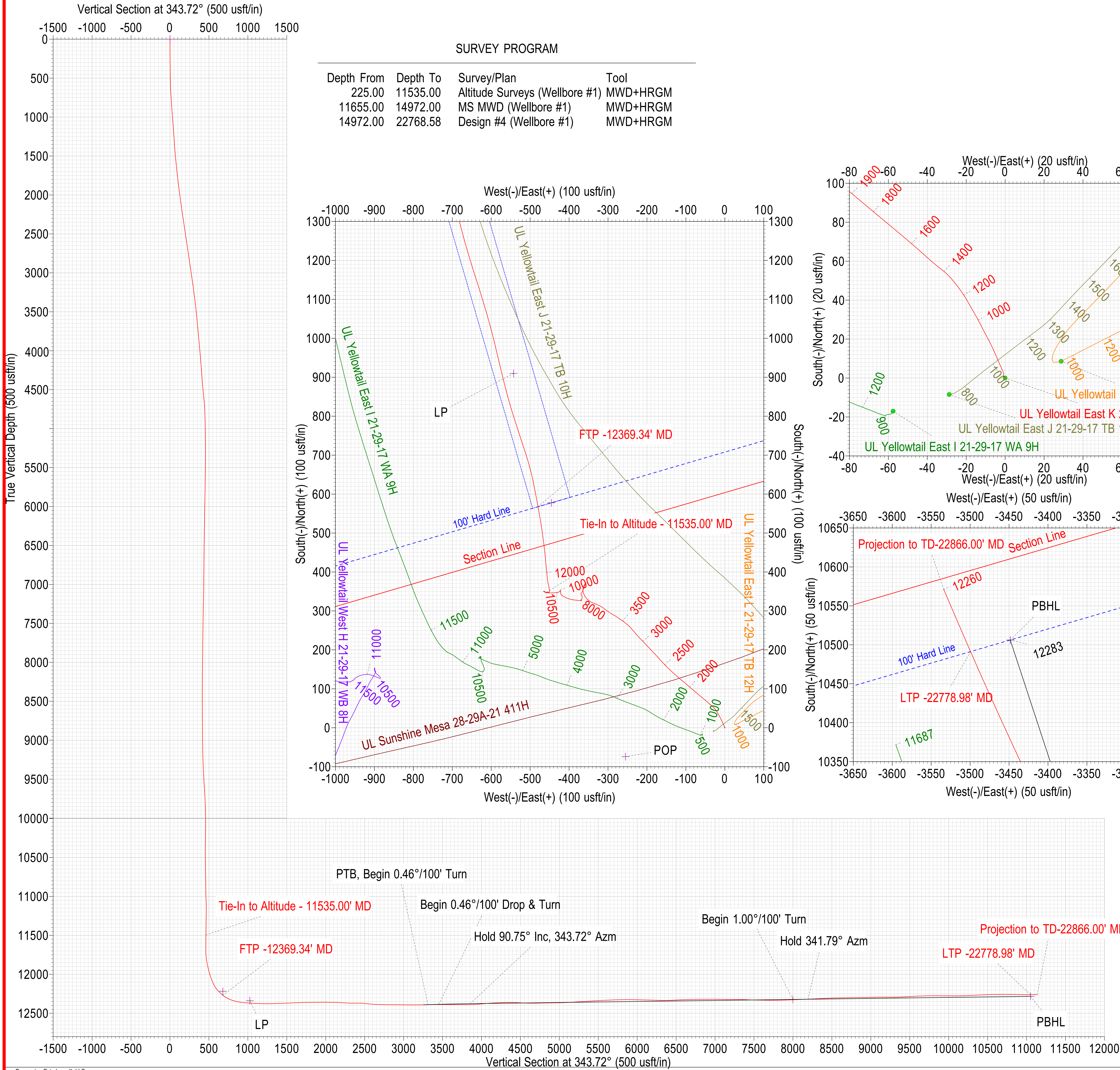
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
14972.00	91.84	346.13	12391.64	3050.29	-1175.63	0.00	0.000	3257.55	Last Survey
15029.00	91.84	346.13	12389.81	3105.60	-1189.28	0.00	0.000	3314.47	PTB, Begin 0.46°/100' Turn
15468.58	90.97	343.01	12379.05	3529.15	-1306.21	0.74	-105.583	3753.81	
15569.74	90.75	343.72	12377.53	3626.06	-1335.17	0.74	106.858	3854.95	Hold 90.75° Inc, 343.72° Azm
19715.14	90.75	343.72	12323.27	7604.90	-2497.15	0.00	0.000	8000.00	Begin 1.00°/100' Turn
19908.58	90.75	341.79	12320.74	7789.63	-2554.50	1.00	-90.005	8193.39	Hold 341.79° Azm
22768.68	90.75	341.79	12283.33	10506.18	-3448.43	0.00	0.000	11051.62	PBHL

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - UL Yellowtail East K 21-29-17 WB 11H	12218.75	577.62	-445.41	756588.46	1096654.80	31.714508	-103.238620
LP - UL Yellowtail East K 21-29-17 WB 11H	12339.74	909.93	-542.42	756920.77	1096557.79	31.715414	-103.238960
LTP/PBHL v4 - UL Yellowtail East K 21-29-17 WB 11H	12283.33	10506.18	-3448.43	766517.02	1093651.78	31.741577	-103.249111
POP - UL Yellowtail East K 21-29-17 WB 11H	0.00	-74.17	-255.11	755936.67	1096845.10	31.712730	-103.237954
T1 v4 - UL Yellowtail East K 21-29-17 WB 11H	12323.27	7604.90	-2497.15	763615.74	1094603.06	31.733672	-103.245808



To convert a Magnetic Direction to a Grid Direction, Add 8.146°  
To convert a Magnetic Direction to a True Direction, Add 6.650° East  
To convert a True Direction to a Grid Direction, Add 1.496°







**Percussion Petroleum II, LLC  
Winkler County, Texas (NAD 27)  
42-495-34701  
UL Yellowtail East K 21-29-17 WB 11H  
Wellbore 1**

**MS MWD  
Certified Survey Report  
19 August 2022**



Field	Winkler County, Texas (NAD 27) - Percussion Petroleum II, LLC		
CRS	US-SPC27-EXACT / Texas Central 4203	North Reference	GRID
Apply Scale Factor	NO	Scale Factor	0.0
System Datum	Mean Sea Level	Depth Datum->MSL	2792.00 UsFt

Well	UL Yellowtail East K 21-29-17 WB 11H		
Local North	-1.51 UsFt	Local East	-2.19 UsFt
Map Northing	756010.84 US survey foot	Map Easting	1097100.21 US survey foot
Latitude	31° 42' 46.62949" N	Longitude	103° 14' 13.70403" W
Depth Datum / Rig	WELL-Scan Texas / Scan Texas	Datum Elevation	2792.00 UsFt
GL Elevation	2767.00 UsFt		
Grid Convergence	-1.496		

Well bore	UL Yellowtail East K 21-29-17 WB 11H - Wellbore 1		
Magnetic Model	User defined	Date	30/06/2022
Total Field (nT)	47105.10	Dip Angle (°)	59.483
Declination (°)	6.650		
VS Origin	User Defined	VS Azimuth	343.72
VS Origin NS	0.00 UsFt	VS Origin EW	0.00 UsFt

Survey Program	MS MWD		
Depth From (UsFt)	0.00	Survey	Altitude Surveys
11535.00	11535.00	MS MWD	MS MWD
	22866.00		

Survey Report									
MD UsFt	Inc °	Azi °	TVD UsFt	NS UsFt	EW UsFt	VS UsFt	DLS (°/100 UsFt)	BR (°/100 UsFt)	TR (°/100 UsFt)
11535.00	1.99	94.17	11495.94	348.01	-456.53	462.04	0.00	0.00	0.00 Tie In
11655.00	1.87	95.55	11615.87	347.67	-452.50	460.58	0.11	-0.10	1.15
11687.00	1.97	94.83	11647.85	347.57	-451.44	460.19	0.32	0.31	-2.25
11780.00	2.98	1.89	11740.80	349.85	-449.76	461.91	3.93	1.09	-99.94
11811.00	5.43	349.44	11771.71	352.10	-450.00	464.13	8.39	7.90	40.16
11874.00	9.80	349.39	11834.14	360.31	-451.54	472.44	6.94	6.94	-0.08
11919.00	11.76	347.16	11878.34	368.54	-453.26	480.83	4.45	4.36	-4.96
11969.00	13.02	352.72	11927.18	379.10	-455.11	491.48	3.47	2.52	11.12
12063.00	18.72	354.41	12017.56	404.64	-457.92	516.78	6.08	6.06	1.80
12157.00	22.90	354.81	12105.41	437.88	-461.05	549.57	4.45	4.45	0.43
12250.00	38.43	352.62	12185.16	484.85	-466.43	596.16	16.74	16.70	-2.35
12345.00	48.29	350.00	12254.15	549.21	-476.41	660.74	10.55	10.38	-2.76
12440.00	62.44	348.73	12308.01	625.82	-490.87	738.34	14.93	14.89	-1.34
12534.00	74.81	341.66	12342.24	710.16	-513.39	825.61	14.90	13.16	-7.52
12629.00	83.25	342.33	12360.30	798.78	-542.19	918.75	8.91	8.88	0.71
12724.00	85.82	346.38	12369.35	889.82	-567.68	1013.28	5.03	2.71	4.26
12819.00	87.88	346.54	12374.57	982.04	-589.88	1108.02	2.17	2.17	0.17
12913.00	87.70	343.49	12378.20	1072.76	-614.17	1201.92	3.25	-0.19	-3.24
13006.00	92.24	342.01	12378.25	1161.55	-641.74	1294.88	5.13	4.88	-1.59
13101.00	92.45	344.67	12374.36	1252.48	-668.95	1389.79	2.81	0.22	2.80
13196.00	92.19	346.58	12370.51	1344.43	-692.51	1484.65	2.03	-0.27	2.01
13290.00	91.49	348.34	12367.49	1436.13	-712.91	1578.40	2.01	-0.74	1.87
13382.00	92.29	349.80	12364.46	1526.41	-730.35	1669.95	1.81	0.87	1.59
13476.00	90.92	348.94	12361.83	1618.76	-747.68	1763.45	1.72	-1.46	-0.91
13571.00	91.28	348.93	12360.00	1711.45	-768.34	1858.22	3.19	0.38	-3.17
13664.00	89.90	343.82	12359.05	1801.22	-792.60	1951.19	2.71	-1.48	-2.27
13758.00	89.13	343.73	12359.84	1891.47	-818.87	2045.19	0.82	-0.82	-0.10
13845.00	87.99	342.28	12362.03	1974.64	-844.29	2132.15	2.12	-1.31	-1.67
13936.00	86.62	342.18	12366.31	2061.20	-872.03	2223.01	1.51	-1.51	-0.11
14027.00	87.83	342.17	12370.71	2147.73	-899.85	2313.87	1.33	1.33	-0.01
14118.00	92.34	344.32	12370.58	2234.84	-926.07	2404.84	5.49	4.96	2.36
14210.00	83.09	342.20	12374.24	2322.77	-952.52	2496.66	10.31	-10.05	-2.30
14301.00	85.20	341.38	12383.52	2408.76	-980.81	2587.13	2.49	2.32	-0.90
14391.00	88.74	340.79	12388.28	2493.77	-1009.94	2676.89	3.99	3.93	-0.66
14407.00	89.18	340.18	12388.57	2508.84	-1015.28	2692.86	4.70	2.75	-3.81
14502.00	89.03	340.72	12390.06	2598.36	-1047.07	2787.70	0.59	-0.16	0.57
14596.00	89.82	343.58	12391.00	2687.82	-1075.87	2881.65	3.16	0.84	3.04
14691.00	89.18	344.17	12391.83	2779.08	-1102.26	2976.64	0.92	-0.67	0.62
14783.00	89.59	344.58	12392.82	2867.67	-1127.03	3068.63	0.63	0.45	0.45
14877.00	89.99	344.84	12393.16	2958.34	-1151.82	3162.61	0.51	0.43	0.28
14972.00	91.84	346.13	12391.64	3050.29	-1175.63	3257.55	2.37	1.95	1.36
15110.00	90.00	346.47	12389.43	3184.34	-1208.31	3395.39	1.36	-1.33	0.25
15204.00	89.98	346.39	12389.44	3275.72	-1230.36	3489.28	0.09	-0.02	-0.09
15298.00	90.11	346.29	12389.37	3367.06	-1252.56	3583.18	0.17	0.14	-0.11
15391.00	90.54	345.55	12388.84	3457.26	-1275.19	3676.11	0.92	0.46	-0.80
15485.00	88.83	342.52	12389.36	3547.62	-1301.04	3770.10	3.70	-1.82	-3.22
15579.00	90.63	340.97	12389.80	3636.88	-1330.48	3864.03	2.53	1.91	-1.65
15673.00	94.92	341.45	12385.25	3725.75	-1360.71	3957.81	4.59	4.56	0.51
15768.00	95.76	341.93	12376.41	3815.55	-1390.43	4052.34	1.02	0.88	0.51
15862.00	92.89	342.18	12369.32	3904.71	-1419.31	4146.02	3.06	-3.05	0.27



## Survey Report

MD UsFt	Inc °	Azi °	TVD UsFt	NS UsFt	EW UsFt	VS UsFt	DLS (°/100 UsFt)	BR (°/100 UsFt)	TR (°/100 UsFt)
15956.00	93.40	341.35	12364.17	3993.85	-1448.67	4239.82	1.04	0.54	-0.88
16050.00	88.99	339.86	12362.21	4082.48	-1479.88	4333.64	4.95	-4.69	-1.59
16144.00	89.14	340.07	12363.74	4170.78	-1512.07	4427.42	0.27	0.16	0.22
16239.00	86.33	339.69	12367.49	4259.90	-1544.72	4522.13	2.98	-2.96	-0.40
16332.00	89.40	341.64	12370.96	4347.58	-1575.49	4614.91	3.91	3.30	2.10
16428.00	90.85	341.79	12370.75	4438.73	-1605.61	4710.85	1.52	1.51	0.16
16523.00	91.31	343.42	12368.96	4529.36	-1634.00	4805.81	1.78	0.48	1.72
16617.00	90.61	341.55	12367.38	4618.99	-1662.29	4899.77	2.12	-0.74	-1.99
16711.00	90.16	339.79	12366.75	4707.68	-1693.40	4993.63	1.93	-0.48	-1.87
16805.00	93.33	342.44	12363.89	4796.56	-1723.80	5087.47	4.39	3.37	2.82
16899.00	93.30	341.93	12358.45	4885.91	-1752.52	5181.28	0.54	-0.03	-0.54
16993.00	94.37	341.97	12352.17	4975.08	-1781.58	5275.03	1.14	1.14	0.04
17088.00	92.88	342.84	12346.16	5065.45	-1810.23	5369.81	1.82	-1.57	0.92
17183.00	94.07	344.98	12340.40	5156.55	-1836.51	5464.62	2.57	1.25	2.25
17277.00	92.19	344.36	12335.27	5247.07	-1861.33	5558.47	2.11	-2.00	-0.66
17371.00	92.58	344.23	12331.36	5337.48	-1886.75	5652.38	0.44	0.41	-0.14
17465.00	91.58	345.87	12327.94	5428.24	-1910.98	5746.29	2.04	-1.06	1.74
17560.00	90.71	345.99	12326.05	5520.37	-1934.07	5841.20	0.92	-0.92	0.13
17655.00	88.72	347.84	12326.52	5612.89	-1955.58	5936.04	2.86	-2.09	1.95
17748.00	88.87	347.93	12328.47	5703.80	-1975.09	6028.77	0.19	0.16	0.10
17842.00	88.74	348.59	12330.44	5795.81	-1994.21	6122.46	0.72	-0.14	0.70
17937.00	88.42	348.15	12332.79	5888.83	-2013.36	6217.12	0.57	-0.34	-0.46
18028.00	88.11	347.74	12335.54	5977.78	-2032.35	6307.83	0.56	-0.34	-0.45
18122.00	92.26	346.24	12335.24	6069.35	-2053.51	6401.65	4.69	4.41	-1.60
18215.00	92.68	346.89	12331.23	6159.53	-2075.89	6494.49	0.59	0.45	-0.38
18310.00	93.21	344.89	12326.35	6251.33	-2099.82	6589.32	1.19	0.56	-1.05
18404.00	90.74	343.37	12323.11	6341.69	-2125.50	6683.25	3.08	-2.63	-1.62
18498.00	90.32	343.36	12322.24	6431.75	-2152.41	6777.24	0.45	-0.45	-0.01
18590.00	90.46	344.18	12321.62	6520.08	-2178.13	6869.24	0.90	0.15	0.89
18684.00	89.95	343.90	12321.28	6610.45	-2203.97	6963.24	0.62	-0.54	-0.30
18777.00	89.13	343.31	12322.03	6699.67	-2230.22	7056.23	1.09	-0.88	-0.63
18870.00	89.46	343.22	12323.17	6788.72	-2257.00	7149.22	0.37	0.35	-0.10
18965.00	90.13	343.17	12323.51	6879.66	-2284.46	7244.22	0.71	0.71	-0.05
19059.00	88.71	342.11	12324.46	6969.37	-2312.51	7338.19	1.89	-1.51	-1.13
19153.00	86.64	340.20	12328.28	7058.25	-2342.84	7432.01	3.00	-2.20	-2.03
19248.00	89.45	341.39	12331.52	7147.90	-2374.07	7526.82	3.21	2.96	1.25
19342.00	89.09	340.94	12332.71	7236.86	-2404.41	7620.72	0.61	-0.38	-0.48
19436.00	89.05	341.24	12334.24	7325.78	-2434.87	7714.61	0.32	-0.04	0.32
19531.00	91.22	341.40	12334.02	7415.77	-2465.30	7809.52	2.29	2.28	0.17
19625.00	92.24	343.35	12331.18	7505.31	-2493.75	7903.45	2.34	1.09	2.07
19718.00	91.65	342.90	12328.02	7594.25	-2520.73	7996.39	0.80	-0.63	-0.48
19813.00	92.93	343.32	12324.23	7685.08	-2548.30	8091.30	1.42	1.35	0.44
19907.00	92.75	339.51	12319.57	7774.05	-2578.22	8185.09	4.05	-0.19	-4.05
20000.00	91.99	340.14	12315.72	7861.27	-2610.27	8277.80	1.06	-0.82	0.68
20094.00	93.27	341.84	12311.41	7950.04	-2640.85	8371.59	2.26	1.36	1.81
20188.00	91.75	342.64	12307.29	8039.48	-2669.50	8465.46	1.83	-1.62	0.85
20282.00	91.80	342.46	12304.38	8129.11	-2697.67	8559.40	0.20	0.05	-0.19
20376.00	90.86	341.08	12302.20	8218.36	-2727.07	8653.32	1.78	-1.00	-1.47
20470.00	92.42	342.94	12299.51	8307.72	-2756.09	8747.23	2.58	1.66	1.98
20566.00	89.38	340.11	12298.00	8398.74	-2786.50	8843.12	4.33	-3.17	-2.95
20660.00	91.66	343.67	12297.15	8488.06	-2815.71	8937.05	4.50	2.43	3.79
20754.00	91.14	343.28	12294.85	8578.15	-2842.44	9031.02	0.69	-0.55	-0.41
20848.00	90.03	342.56	12293.89	8668.00	-2870.05	9125.01	1.41	-1.18	-0.77
20943.00	89.98	341.50	12293.88	8758.36	-2899.36	9219.96	1.12	-0.05	-1.12
21038.00	90.90	341.98	12293.15	8848.58	-2929.12	9314.90	1.09	0.97	0.51
21132.00	92.22	341.98	12290.59	8937.93	-2958.19	9408.82	1.40	1.40	0.00
21227.00	93.10	342.15	12286.18	9028.22	-2987.41	9503.68	0.94	0.93	0.18
21320.00	93.01	341.08	12281.23	9116.34	-3016.70	9596.48	1.15	-0.10	-1.15
21414.00	91.12	343.56	12277.84	9205.83	-3045.23	9690.38	3.32	-2.01	2.64
21509.00	90.99	343.21	12276.09	9296.85	-3072.39	9785.36	0.39	-0.14	-0.37
21603.00	89.01	342.05	12276.09	9386.56	-3100.45	9879.34	2.44	-2.11	-1.23
21697.00	90.11	342.95	12276.81	9476.20	-3128.71	9973.31	1.51	1.17	0.96
21790.00	89.01	342.33	12277.53	9564.96	-3156.46	10066.29	1.36	-1.18	-0.67
21885.00	92.31	342.32	12276.43	9655.46	-3185.30	10161.25	3.47	3.47	-0.01
21980.00	92.79	341.97	12272.21	9745.79	-3214.40	10256.12	0.63	0.51	-0.37
22075.00	92.87	341.07	12267.52	9835.78	-3244.47	10350.93	0.95	0.08	-0.95
22170.00	91.52	340.54	12263.88	9925.43	-3275.68	10445.73	1.53	-1.42	-0.56
22263.00	91.91	341.29	12261.09	10013.28	-3306.08	10538.58	0.91	0.42	0.81
22357.00	90.20	339.65	12259.36	10101.85	-3337.49	10632.41	2.52	-1.82	-1.74
22451.00	90.51	339.37	12258.78	10189.90	-3370.40	10726.15	0.44	0.33	-0.30
22545.00	89.18	338.21	12259.03	10277.53	-3404.40	10819.80	1.88	-1.41	-1.23
22640.00	88.30	335.00	12261.12	10364.69	-3442.11	10914.03	3.50	-0.93	-3.38
22733.00	89.88	335.86	12262.60	10449.26	-3480.77	11006.04	1.93	1.70	0.92
22807.00	91.37	336.69	12261.79	10516.99	-3510.54	11079.41	2.30	2.01	1.12
22866.00	91.37	336.69	12260.38	10571.16	-3533.88	11137.95	0.00	0.00	0.00 PTB



MS Directional LLC Survey Data Certification

MS Directional LLC Job Number: MSMO-96413  
Survey Type: MWD  
Operating Company: Percussion Petroleum II, LLC  
Well Name and Number: UL Yellowtail East K 21-29-17 WB 11H  
Drainhole Number: Original Wellbore  
Location: Winkler, Texas  
API Number: 42-495-34701  
Tie In Depth: 11535.00  
Surveyed Depths: 11655.00' - 22807.00'  
Projected TD Survey: 22866.00'  
Dates Performed: 06/21/2022 - 07/10/2022

To the best of my knowledge, I certify the following:

1. The data is true, correct and complete and within the limitations of the tool set forth by MS Directional LLC
2. I am authorized and qualified to make this report; and
3. I have reviewed this report and find it conforms to the principles and procedures as set forth by MS Directional LLC

MWD Surveyor Name: Jared Dugas

MWD Operations Manager: Charles Davis

Signature:

Date: 08/19/2022

Email: charles.davis@msdir.com