



Project: SEC 33 T2N R64W  
Site: Jackson 02N-64W-33 Pad  
Well: Jackson 33-6H  
Wellbore: OH  
Design: Plan 2  
Lat: 40.1014560  
Long: -104.5615790

LP\_Jackson 33-6H(0 FNL 1920 FWL)

1000

500

0

-500

-1000

-1500

-2000

-2500

-3000

-3500

-4000

-4500

-5000

South(-)/North(+) (1000 ft/in)

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
997.05	13.94	42.91	990.19	61.80	57.45	2.00	42.91	-52.00	
5447.77	13.94	42.91	5309.81	847.15	787.53	0.00	0.00	-712.79	
6144.81	0.00	0.00	6000.00	908.95	844.98	2.00	180.00	-764.79	
6558.19	0.00	0.00	6413.38	908.95	844.98	0.00	0.00	-764.79	
7560.59	90.22	180.42	7050.00	269.95	840.32	9.00	180.42	-134.47	
12865.75	90.22	180.42	7030.00	-5035.03	801.61	0.00	0.00	5098.44	PBHL

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7030.00	-5035.03	801.61	1276167.56	3263360.84	40.0876340	-104.5587140	Point
- plan hits target center								
LP	7050.00	269.96	840.32	1281472.65	3263343.41	40.1021970	-104.5585750	Point
- plan misses target center by 0.01ft at 7560.58ft MD (7050.00 TVD, 269.96 N, 840.32 E)								

#### PROJECT DETAILS: SEC 33 T2N R64W

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Northern Zone  
Colorado Northern Zone  
System Datum: Mean Sea Level

#### CASING DETAILS

TVD	MD	Name	Size
1700.00	1728.40	9 5/8"	9.625
7030.00	12865.75	5 1/2"	5.500



Azimuths to True North  
Magnetic North: 8.08°

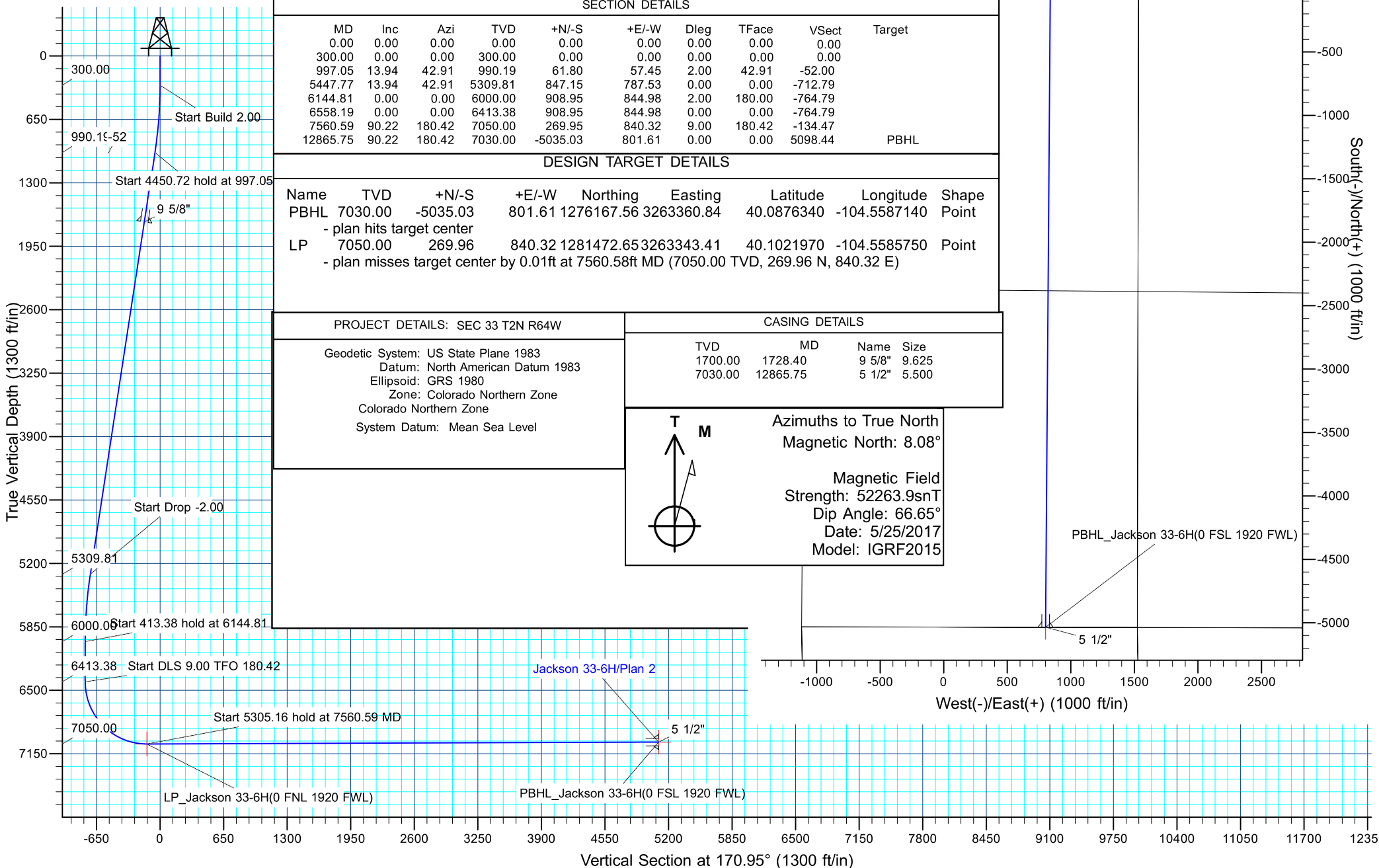
Magnetic Field  
Strength: 52263.9snT  
Dip Angle: 66.65°  
Date: 5/25/2017  
Model: IGRF2015

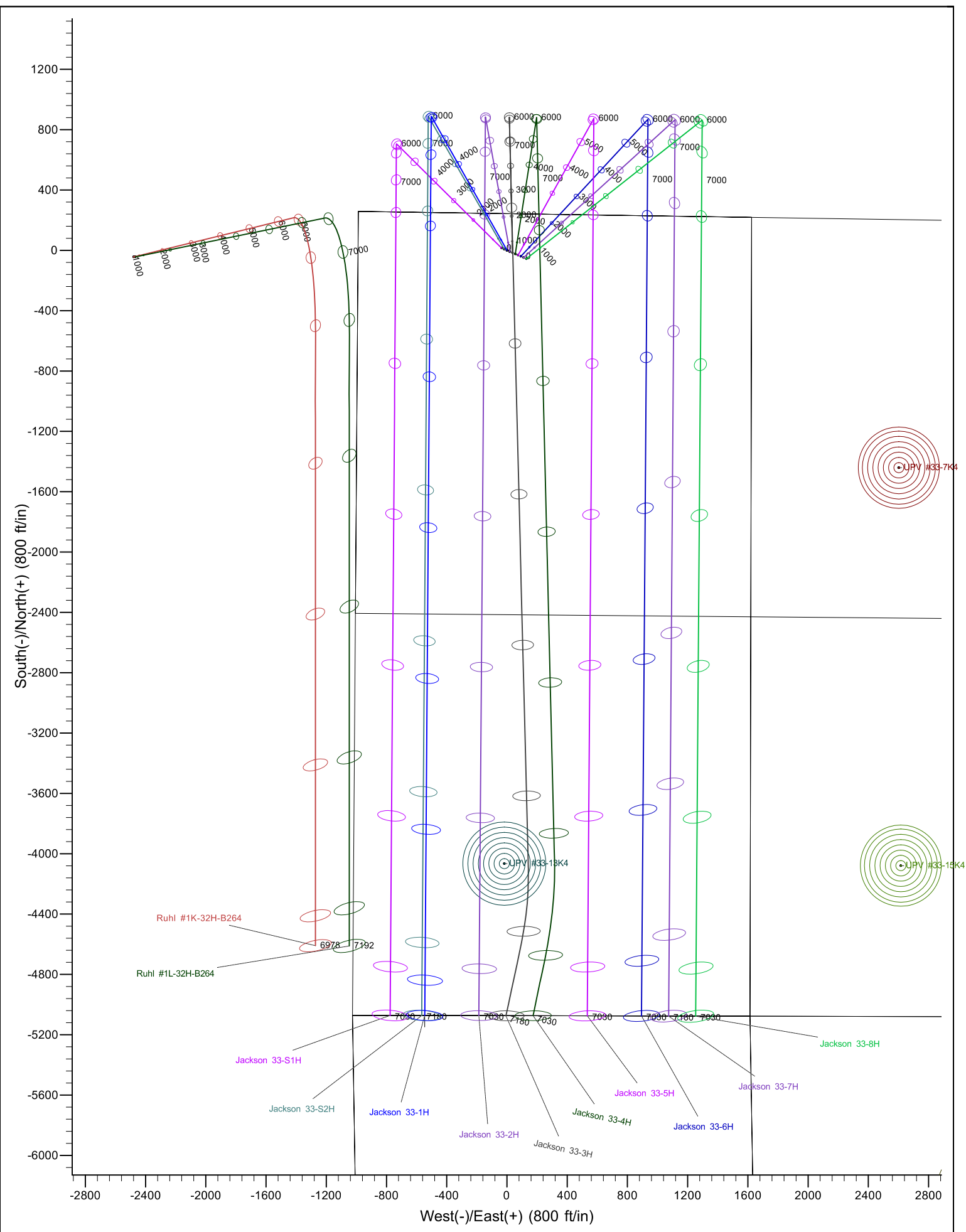
PBHL\_Jackson 33-6H(0 FSL 1920 FWL)

5 1/2"

West(-)/East(+) (1000 ft/in)

Vertical Section at 170.95° (1300 ft/in)







# **Verdad Resources LLC**

**SEC 33 T2N R64W**

**Jackson 02N-64W-33 Pad**

**Jackson 33-6H**

**OH**

**Plan: Plan 2**

## **Standard Planning Report**

**28 December, 2017**





<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson 33-6H
<b>Company:</b>	Verdad Resources LLC	<b>TVD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Project:</b>	SEC 33 T2N R64W	<b>MD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Site:</b>	Jackson 02N-64W-33 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Jackson 33-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

<b>Project</b>	SEC 33 T2N R64W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	Jackson 02N-64W-33 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,281,248.57 usft	<b>Latitude:</b> 40.1016100
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,262,377.29 usft	<b>Longitude:</b> -104.5620370
<b>Position Uncertainty:</b>	3.28 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 0.61 °

<b>Well</b>	Jackson 33-6H, 267 FNL 1045 FWL			
<b>Well Position</b>	<b>+N/-S</b>	-56.11 ft	<b>Northing:</b>	1,281,193.82 usft
	<b>+E/-W</b>	128.12 ft	<b>Easting:</b>	3,262,506.00 usft
<b>Position Uncertainty</b>		3.28 ft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 40.1014560
				<b>Longitude:</b> -104.5615790
				<b>Ground Level:</b> 5,017.00 ft

<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>
	IGRF2015	5/25/2017	8.08	66.65	52,264

<b>Design</b>	Plan 2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	170.95

<b>Plan Survey Tool Program</b>	<b>Date</b>	12/22/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	12,865.59 Plan 2 (OH)	MWD	
			OWSG MWD - Standard	

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
997.05	13.94	42.91	990.19	61.80	57.45	2.00	2.00	0.00	42.91	
5,447.77	13.94	42.91	5,309.81	847.15	787.53	0.00	0.00	0.00	0.00	
6,144.81	0.00	0.00	6,000.00	908.95	844.98	2.00	-2.00	0.00	180.00	
6,558.19	0.00	0.00	6,413.38	908.95	844.98	0.00	0.00	0.00	0.00	
7,560.59	90.22	180.42	7,050.00	269.95	840.32	9.00	9.00	-17.92	180.42	
12,865.75	90.22	180.42	7,030.00	-5,035.03	801.61	0.00	0.00	0.00	0.00	PBHL_Jackson 33-6H



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson 33-6H
<b>Company:</b>	Verdad Resources LLC	<b>TVD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Project:</b>	SEC 33 T2N R64W	<b>MD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Site:</b>	Jackson 02N-64W-33 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Jackson 33-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	42.91	399.98	1.28	1.19	-1.08	2.00	2.00	0.00
500.00	4.00	42.91	499.84	5.11	4.75	-4.30	2.00	2.00	0.00
600.00	6.00	42.91	599.45	11.49	10.69	-9.67	2.00	2.00	0.00
700.00	8.00	42.91	698.70	20.42	18.98	-17.18	2.00	2.00	0.00
800.00	10.00	42.91	797.47	31.88	29.63	-26.82	2.00	2.00	0.00
900.00	12.00	42.91	895.62	45.85	42.62	-38.58	2.00	2.00	0.00
997.05	13.94	42.91	990.19	61.80	57.45	-52.00	2.00	2.00	0.00
1,000.00	13.94	42.91	993.06	62.32	57.94	-52.44	0.00	0.00	0.00
1,100.00	13.94	42.91	1,090.11	79.97	74.34	-67.29	0.00	0.00	0.00
1,200.00	13.94	42.91	1,187.17	97.62	90.75	-82.13	0.00	0.00	0.00
1,300.00	13.94	42.91	1,284.22	115.26	107.15	-96.98	0.00	0.00	0.00
1,400.00	13.94	42.91	1,381.28	132.91	123.55	-111.83	0.00	0.00	0.00
1,500.00	13.94	42.91	1,478.33	150.55	139.96	-126.67	0.00	0.00	0.00
1,600.00	13.94	42.91	1,575.39	168.20	156.36	-141.52	0.00	0.00	0.00
1,700.00	13.94	42.91	1,672.44	185.84	172.76	-156.37	0.00	0.00	0.00
1,728.40	13.94	42.91	1,700.00	190.85	177.42	-160.58	0.00	0.00	0.00
9 5/8"									
1,800.00	13.94	42.91	1,769.49	203.49	189.17	-171.21	0.00	0.00	0.00
1,900.00	13.94	42.91	1,866.55	221.13	205.57	-186.06	0.00	0.00	0.00
2,000.00	13.94	42.91	1,963.60	238.78	221.97	-200.91	0.00	0.00	0.00
2,100.00	13.94	42.91	2,060.66	256.42	238.38	-215.76	0.00	0.00	0.00
2,200.00	13.94	42.91	2,157.71	274.07	254.78	-230.60	0.00	0.00	0.00
2,300.00	13.94	42.91	2,254.77	291.71	271.18	-245.45	0.00	0.00	0.00
2,400.00	13.94	42.91	2,351.82	309.36	287.59	-260.30	0.00	0.00	0.00
2,500.01	13.94	42.91	2,448.88	327.01	303.99	-275.14	0.00	0.00	0.00
2,600.01	13.94	42.91	2,545.93	344.65	320.39	-289.99	0.00	0.00	0.00
2,700.01	13.94	42.91	2,642.99	362.30	336.80	-304.84	0.00	0.00	0.00
2,800.01	13.94	42.91	2,740.04	379.94	353.20	-319.68	0.00	0.00	0.00
2,900.01	13.94	42.91	2,837.10	397.59	369.61	-334.53	0.00	0.00	0.00
3,000.01	13.94	42.91	2,934.15	415.23	386.01	-349.38	0.00	0.00	0.00
3,100.01	13.94	42.91	3,031.21	432.88	402.41	-364.22	0.00	0.00	0.00
3,200.01	13.94	42.91	3,128.26	450.52	418.82	-379.07	0.00	0.00	0.00
3,300.01	13.94	42.91	3,225.31	468.17	435.22	-393.92	0.00	0.00	0.00
3,400.01	13.94	42.91	3,322.37	485.81	451.62	-408.76	0.00	0.00	0.00
3,500.01	13.94	42.91	3,419.42	503.46	468.03	-423.61	0.00	0.00	0.00
3,600.01	13.94	42.91	3,516.48	521.10	484.43	-438.46	0.00	0.00	0.00
3,700.01	13.94	42.91	3,613.53	538.75	500.83	-453.30	0.00	0.00	0.00
3,800.01	13.94	42.91	3,710.59	556.39	517.24	-468.15	0.00	0.00	0.00
3,900.01	13.94	42.91	3,807.64	574.04	533.64	-483.00	0.00	0.00	0.00
4,000.01	13.94	42.91	3,904.70	591.69	550.04	-497.84	0.00	0.00	0.00
4,100.01	13.94	42.91	4,001.75	609.33	566.45	-512.69	0.00	0.00	0.00
4,200.01	13.94	42.91	4,098.81	626.98	582.85	-527.54	0.00	0.00	0.00
4,300.01	13.94	42.91	4,195.86	644.62	599.25	-542.39	0.00	0.00	0.00
4,400.01	13.94	42.91	4,292.92	662.27	615.66	-557.23	0.00	0.00	0.00
4,500.01	13.94	42.91	4,389.97	679.91	632.06	-572.08	0.00	0.00	0.00
4,600.01	13.94	42.91	4,487.03	697.56	648.46	-586.93	0.00	0.00	0.00
4,700.01	13.94	42.91	4,584.08	715.20	664.87	-601.77	0.00	0.00	0.00
4,800.01	13.94	42.91	4,681.13	732.85	681.27	-616.62	0.00	0.00	0.00
4,900.01	13.94	42.91	4,778.19	750.49	697.68	-631.47	0.00	0.00	0.00
5,000.01	13.94	42.91	4,875.24	768.14	714.08	-646.31	0.00	0.00	0.00



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**Company:** Verdad Resources LLC  
**Project:** SEC 33 T2N R64W  
**Site:** Jackson 02N-64W-33 Pad  
**Well:** Jackson 33-6H  
**Wellbore:** OH  
**Design:** Plan 2

**Local Co-ordinate Reference:** Well Jackson 33-6H  
**TVD Reference:** WELL @ 5017.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5017.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.01	13.94	42.91	4,972.30	785.78	730.48	-661.16	0.00	0.00	0.00
5,200.01	13.94	42.91	5,069.35	803.43	746.89	-676.01	0.00	0.00	0.00
5,300.01	13.94	42.91	5,166.41	821.07	763.29	-690.85	0.00	0.00	0.00
5,400.01	13.94	42.91	5,263.46	838.72	779.69	-705.70	0.00	0.00	0.00
5,447.77	13.94	42.91	5,309.81	847.15	787.53	-712.79	0.00	0.00	0.00
5,500.01	12.90	42.91	5,360.63	856.03	795.78	-720.26	2.00	-2.00	0.00
5,600.01	10.90	42.91	5,458.48	871.12	809.82	-732.96	2.00	-2.00	0.00
5,700.01	8.90	42.91	5,556.98	883.71	821.52	-743.55	2.00	-2.00	0.00
5,800.01	6.90	42.91	5,656.03	893.77	830.87	-752.02	2.00	-2.00	0.00
5,900.01	4.90	42.91	5,755.50	901.29	837.86	-758.35	2.00	-2.00	0.00
6,000.01	2.90	42.91	5,855.26	906.27	842.49	-762.54	2.00	-2.00	0.00
6,100.01	0.90	42.91	5,955.20	908.69	844.74	-764.58	2.00	-2.00	0.00
6,144.81	0.00	0.00	6,000.00	908.95	844.98	-764.79	2.00	-2.00	0.00
6,200.01	0.00	0.00	6,055.20	908.95	844.98	-764.79	0.00	0.00	0.00
6,300.01	0.00	0.00	6,155.20	908.95	844.98	-764.79	0.00	0.00	0.00
6,400.01	0.00	0.00	6,255.20	908.95	844.98	-764.79	0.00	0.00	0.00
6,500.01	0.00	0.00	6,355.20	908.95	844.98	-764.79	0.00	0.00	0.00
6,558.19	0.00	0.00	6,413.38	908.95	844.98	-764.79	0.00	0.00	0.00
6,600.01	3.76	180.42	6,455.17	907.58	844.97	-763.44	9.00	9.00	0.00
6,700.01	12.76	180.42	6,554.03	893.22	844.87	-749.27	9.00	9.00	0.00
6,800.01	21.76	180.42	6,649.43	863.57	844.65	-720.03	9.00	9.00	0.00
6,900.01	30.76	180.42	6,739.01	819.37	844.33	-676.43	9.00	9.00	0.00
7,000.01	39.76	180.42	6,820.58	761.70	843.91	-619.54	9.00	9.00	0.00
7,100.01	48.76	180.42	6,892.12	691.97	843.40	-550.76	9.00	9.00	0.00
7,200.01	57.76	180.42	6,951.87	611.92	842.81	-471.79	9.00	9.00	0.00
7,300.01	66.76	180.42	6,998.36	523.50	842.17	-384.58	9.00	9.00	0.00
7,400.01	75.76	180.42	7,030.45	428.90	841.48	-291.26	9.00	9.00	0.00
7,500.02	84.76	180.42	7,047.34	330.44	840.76	-194.14	9.00	9.00	0.00
7,560.58	90.22	180.42	7,050.00	269.96	840.32	-134.48	9.00	9.00	0.00
LP_Jackson 33-6H(0 FNL 1920 FWL)									
7,560.59	90.22	180.42	7,050.00	269.95	840.32	-134.47	9.00	9.00	0.00
7,600.02	90.22	180.42	7,049.85	230.53	840.03	-95.58	0.00	0.00	0.00
7,700.02	90.22	180.42	7,049.47	130.53	839.30	3.05	0.00	0.00	0.00
7,800.02	90.22	180.42	7,049.09	30.53	838.57	101.69	0.00	0.00	0.00
7,900.02	90.22	180.42	7,048.72	-69.46	837.84	200.33	0.00	0.00	0.00
8,000.02	90.22	180.42	7,048.34	-169.46	837.11	298.97	0.00	0.00	0.00
8,100.02	90.22	180.42	7,047.96	-269.46	836.38	397.61	0.00	0.00	0.00
8,200.02	90.22	180.42	7,047.59	-369.46	835.65	496.25	0.00	0.00	0.00
8,300.02	90.22	180.42	7,047.21	-469.45	834.92	594.88	0.00	0.00	0.00
8,400.02	90.22	180.42	7,046.83	-569.45	834.19	693.52	0.00	0.00	0.00
8,500.02	90.22	180.42	7,046.45	-669.45	833.46	792.16	0.00	0.00	0.00
8,600.02	90.22	180.42	7,046.08	-769.44	832.73	890.80	0.00	0.00	0.00
8,700.02	90.22	180.42	7,045.70	-869.44	832.00	989.44	0.00	0.00	0.00
8,800.02	90.22	180.42	7,045.32	-969.44	831.27	1,088.08	0.00	0.00	0.00
8,900.02	90.22	180.42	7,044.95	-1,069.43	830.54	1,186.72	0.00	0.00	0.00
9,000.02	90.22	180.42	7,044.57	-1,169.43	829.82	1,285.35	0.00	0.00	0.00
9,100.02	90.22	180.42	7,044.19	-1,269.43	829.09	1,383.99	0.00	0.00	0.00
9,200.02	90.22	180.42	7,043.82	-1,369.42	828.36	1,482.63	0.00	0.00	0.00
9,300.02	90.22	180.42	7,043.44	-1,469.42	827.63	1,581.27	0.00	0.00	0.00
9,400.02	90.22	180.42	7,043.06	-1,569.42	826.90	1,679.91	0.00	0.00	0.00
9,500.02	90.22	180.42	7,042.69	-1,669.41	826.17	1,778.55	0.00	0.00	0.00
9,600.02	90.22	180.42	7,042.31	-1,769.41	825.44	1,877.18	0.00	0.00	0.00
9,700.02	90.22	180.42	7,041.93	-1,869.41	824.71	1,975.82	0.00	0.00	0.00



**Database:** EDM 5000.14 Single User Db  
**Company:** Verdad Resources LLC  
**Project:** SEC 33 T2N R64W  
**Site:** Jackson 02N-64W-33 Pad  
**Well:** Jackson 33-6H  
**Wellbore:** OH  
**Design:** Plan 2

**Local Co-ordinate Reference:** Well Jackson 33-6H  
**TVD Reference:** WELL @ 5017.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5017.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,800.02	90.22	180.42	7,041.55	-1,969.40	823.98	2,074.46	0.00	0.00	0.00
9,900.02	90.22	180.42	7,041.18	-2,069.40	823.25	2,173.10	0.00	0.00	0.00
10,000.02	90.22	180.42	7,040.80	-2,169.40	822.52	2,271.74	0.00	0.00	0.00
10,100.02	90.22	180.42	7,040.42	-2,269.39	821.79	2,370.38	0.00	0.00	0.00
10,200.02	90.22	180.42	7,040.05	-2,369.39	821.06	2,469.01	0.00	0.00	0.00
10,300.02	90.22	180.42	7,039.67	-2,469.39	820.33	2,567.65	0.00	0.00	0.00
10,400.02	90.22	180.42	7,039.29	-2,569.39	819.60	2,666.29	0.00	0.00	0.00
10,500.02	90.22	180.42	7,038.92	-2,669.38	818.87	2,764.93	0.00	0.00	0.00
10,600.02	90.22	180.42	7,038.54	-2,769.38	818.14	2,863.57	0.00	0.00	0.00
10,700.02	90.22	180.42	7,038.16	-2,869.38	817.41	2,962.21	0.00	0.00	0.00
10,800.02	90.22	180.42	7,037.79	-2,969.37	816.68	3,060.85	0.00	0.00	0.00
10,900.02	90.22	180.42	7,037.41	-3,069.37	815.95	3,159.48	0.00	0.00	0.00
11,000.02	90.22	180.42	7,037.03	-3,169.37	815.22	3,258.12	0.00	0.00	0.00
11,100.02	90.22	180.42	7,036.66	-3,269.36	814.49	3,356.76	0.00	0.00	0.00
11,200.02	90.22	180.42	7,036.28	-3,369.36	813.76	3,455.40	0.00	0.00	0.00
11,300.02	90.22	180.42	7,035.90	-3,469.36	813.03	3,554.04	0.00	0.00	0.00
11,400.02	90.22	180.42	7,035.52	-3,569.35	812.30	3,652.68	0.00	0.00	0.00
11,500.02	90.22	180.42	7,035.15	-3,669.35	811.57	3,751.31	0.00	0.00	0.00
11,600.02	90.22	180.42	7,034.77	-3,769.35	810.85	3,849.95	0.00	0.00	0.00
11,700.02	90.22	180.42	7,034.39	-3,869.34	810.12	3,948.59	0.00	0.00	0.00
11,800.02	90.22	180.42	7,034.02	-3,969.34	809.39	4,047.23	0.00	0.00	0.00
11,900.02	90.22	180.42	7,033.64	-4,069.34	808.66	4,145.87	0.00	0.00	0.00
12,000.02	90.22	180.42	7,033.26	-4,169.33	807.93	4,244.51	0.00	0.00	0.00
12,100.02	90.22	180.42	7,032.89	-4,269.33	807.20	4,343.14	0.00	0.00	0.00
12,200.02	90.22	180.42	7,032.51	-4,369.33	806.47	4,441.78	0.00	0.00	0.00
12,300.02	90.22	180.42	7,032.13	-4,469.33	805.74	4,540.42	0.00	0.00	0.00
12,400.03	90.22	180.42	7,031.76	-4,569.32	805.01	4,639.06	0.00	0.00	0.00
12,500.03	90.22	180.42	7,031.38	-4,669.32	804.28	4,737.70	0.00	0.00	0.00
12,600.03	90.22	180.42	7,031.00	-4,769.32	803.55	4,836.34	0.00	0.00	0.00
12,700.03	90.22	180.42	7,030.62	-4,869.31	802.82	4,934.98	0.00	0.00	0.00
12,800.03	90.22	180.42	7,030.25	-4,969.31	802.09	5,033.61	0.00	0.00	0.00
12,865.75	90.22	180.42	7,030.00	-5,035.03	801.61	5,098.44	0.00	0.00	0.00
PBHL_Jackson 33-6H(0 FSL 1920 FWL)									

## Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_Jackson 33-6H(0	0.00	0.00	7,030.00	-5,035.03	801.61	1,276,167.56	3,263,360.85	40.0876340	-104.5587140
- plan hits target center									
- Point									
LP_Jackson 33-6H(0 FN	0.00	0.00	7,050.00	269.96	840.32	1,281,472.65	3,263,343.42	40.1021970	-104.5585750
- plan misses target center by 0.01ft at 7560.58ft MD (7050.00 TVD, 269.96 N, 840.32 E)									
- Point									



<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson 33-6H
<b>Company:</b>	Verdad Resources LLC	<b>TVD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Project:</b>	SEC 33 T2N R64W	<b>MD Reference:</b>	WELL @ 5017.00ft (Original Well Elev)
<b>Site:</b>	Jackson 02N-64W-33 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Jackson 33-6H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 2		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,728.40	1,700.00	9 5/8"		9.625	13.500
12,865.75	7,030.00	5 1/2"		5.500	8.500

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00	
997.05	990.19	61.80	57.45	Start 4450.72 hold at 997.05 MD	
5,447.77	5,309.81	847.15	787.53	Start Drop -2.00	
6,144.81	6,000.00	908.95	844.98	Start 413.38 hold at 6144.81 MD	
6,558.19	6,413.38	908.95	844.98	Start DLS 9.00 TFO 180.42	
7,560.59	7,050.00	269.95	840.32	Start 5305.16 hold at 7560.59 MD	
12,865.75	7,030.00	-5,035.03	801.61	TD at 12865.75	