Verdad Oil & Gas Corporation

Well Name: **Young 01N-65W-28-8N**

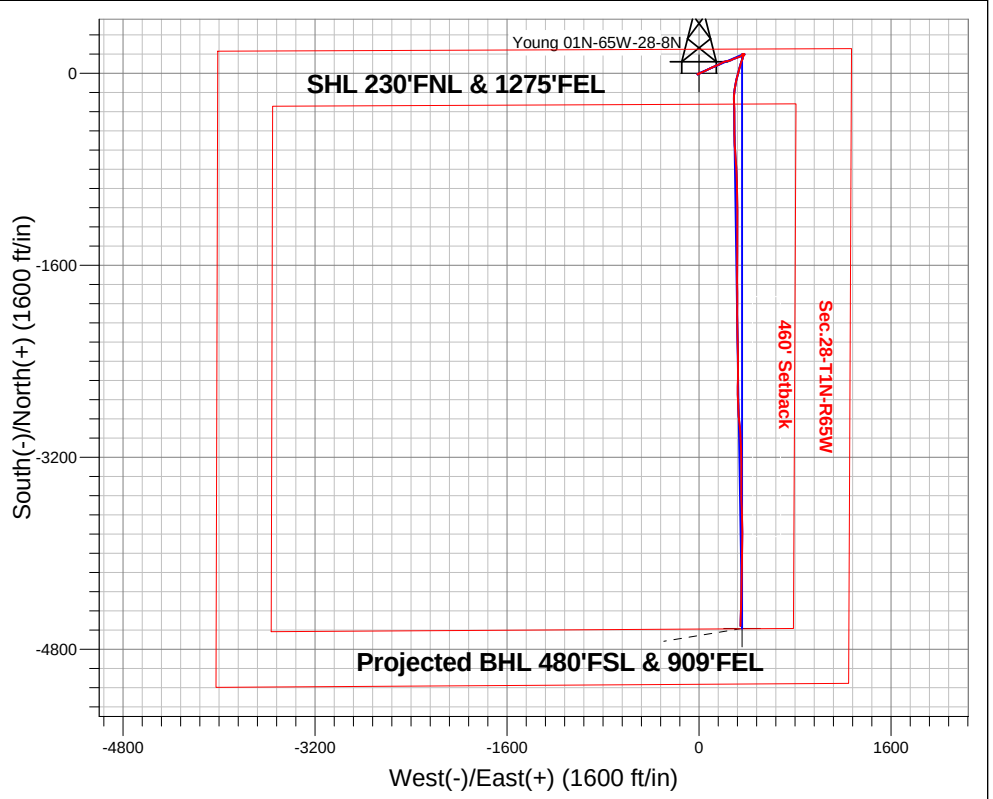
Surface Location: Young 01N-65W-28 Pad Sec.28-T1N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 5073.0

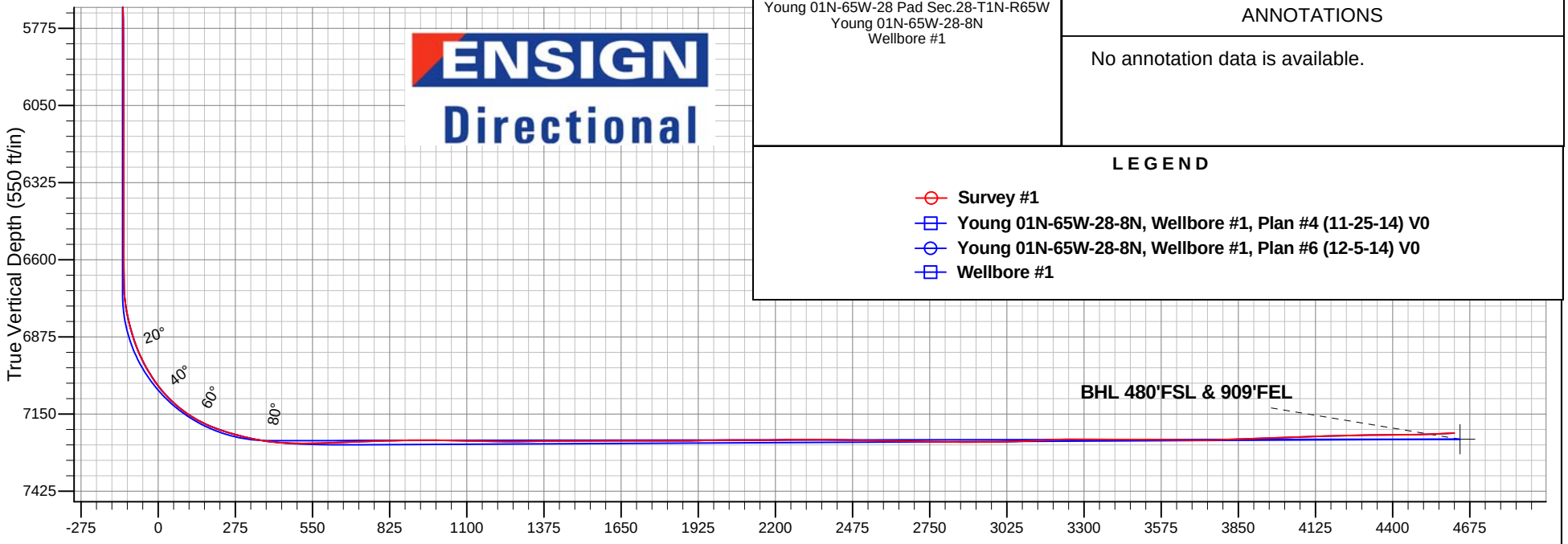
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1254550.36	3234062.99	40.029100	-104.664150	

Frontier 6 RKB - 16.5' WELL @ 5089.5ft (Frontier 6 RKB - 16.5')

FINAL SURVEY

Projected Bottom Hole Location
11808'MD 7218'TVD 4607'S & 345'E of SHL
92.7 degree Incl @ 181.3 degree AZM





Young 01N-65W-28 Pad Sec.28-T1N-R65W
Young 01N-65W-28-8N
Wellbore #1

ANNOTATIONS

No annotation data is available.

LEGEND

- **Survey #1**
- **Young 01N-65W-28-8N, Wellbore #1, Plan #4 (11-25-14) V0**
- **Young 01N-65W-28-8N, Wellbore #1, Plan #6 (12-5-14) V0**
- **Wellbore #1**

Verdad Oil & Gas Corporation

SEC.28-T1N-R65W
Young 01N-65W-28 Pad Sec.28-T1N-R65W
Young 01N-65W-28-8N

Wellbore #1

Survey: Survey #1

Standard Survey Report

10 December, 2014

ENSIGN Directional

Survey Report

Company:	Verdad Oil & Gas Corporation	**Local Co-ordinate Reference:**	Well Young 01N-65W-28-8N
Project:	SEC.28-T1N-R65W	**TVD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Site:	Young 01N-65W-28 Pad Sec.28-T1N-R65W	**MD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Well:	Young 01N-65W-28-8N	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

Project SEC.28-T1N-R65W, Weld County, Colorado

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site Young 01N-65W-28 Pad Sec.28-T1N-R65W

Site Position:		**Northing:**	1,254,550.36 ft	**Latitude:**	40.029100
From:	Lat/Long	**Easting:**	3,234,062.99 ft	**Longitude:**	-104.664150
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.54 °

Well Young 01N-65W-28-8N

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,254,550.36 ft	**Latitude:**	40.029100
	+E/-W	0.0 ft	**Easting:**	3,234,062.99 ft	**Longitude:**	-104.664150
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,073.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/5/2014	8.31	66.65	52,579

Design Wellbore #1

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	175.57

Survey Program **Date** 12/10/2014

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
168.0	11,808.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.01	234.90	1.0	0.0	0.0	0.0	0.60	0.60	0.00
SHL 230'FNL & 1275'FEL									
168.0	1.00	234.90	168.0	-0.8	-1.2	0.7	0.60	0.60	0.00
351.0	1.10	225.10	351.0	-3.0	-3.8	2.7	0.11	0.05	-5.36
443.0	1.20	236.10	442.9	-4.2	-5.2	3.7	0.26	0.11	11.96
534.0	1.10	224.70	533.9	-5.3	-6.6	4.8	0.27	-0.11	-12.53
626.0	1.10	221.00	625.9	-6.6	-7.8	6.0	0.08	0.00	-4.02
718.0	1.10	221.70	717.9	-7.9	-8.9	7.2	0.01	0.00	0.76
810.0	1.10	228.90	809.9	-9.2	-10.2	8.4	0.15	0.00	7.83
902.0	1.10	295.90	901.9	-9.4	-11.7	8.4	1.32	0.00	72.83
994.0	1.00	322.60	993.8	-8.3	-12.9	7.3	0.54	-0.11	29.02
1,085.0	0.80	73.50	1,084.8	-7.5	-12.8	6.5	1.63	-0.22	121.87

Company:	Verdad Oil & Gas Corporation	**Local Co-ordinate Reference:**	Well Young 01N-65W-28-8N
Project:	SEC.28-T1N-R65W	**TVD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Site:	Young 01N-65W-28 Pad Sec.28-T1N-R65W	**MD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Well:	Young 01N-65W-28-8N	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
1,177.0	1.10	83.40	1,176.8	-7.3	-11.3	6.4	0.37	0.33	10.76
1,269.0	1.10	81.30	1,268.8	-7.0	-9.6	6.3	0.04	0.00	-2.28
1,310.0	1.10	82.00	1,309.8	-6.9	-8.8	6.2	0.03	0.00	1.71
1,449.0	2.60	66.70	1,448.7	-5.5	-4.6	5.1	1.13	1.08	-11.01
1,541.0	4.00	73.00	1,540.6	-3.7	0.4	3.7	1.57	1.52	6.85
1,632.0	5.60	58.40	1,631.3	-0.4	7.2	1.0	2.20	1.76	-16.04
1,723.0	5.10	60.00	1,721.9	3.9	14.5	-2.8	0.57	-0.55	1.76
1,815.0	6.50	64.90	1,813.4	8.2	22.8	-6.4	1.61	1.52	5.33
1,906.0	7.50	72.00	1,903.7	12.2	33.1	-9.6	1.45	1.10	7.80
1,998.0	7.30	66.70	1,994.9	16.3	44.2	-12.9	0.77	-0.22	-5.76
2,089.0	8.00	61.60	2,085.1	21.6	55.0	-17.3	1.07	0.77	-5.60
2,184.0	7.80	59.80	2,179.2	28.0	66.4	-22.8	0.33	-0.21	-1.89
2,279.0	8.40	66.90	2,273.3	34.0	78.4	-27.8	1.23	0.63	7.47
2,373.0	8.70	61.80	2,366.2	40.0	91.0	-32.9	0.87	0.32	-5.43
2,468.0	9.30	66.20	2,460.1	46.5	104.3	-38.3	0.96	0.63	4.63
2,563.0	9.80	64.60	2,553.8	53.1	118.6	-43.8	0.60	0.53	-1.68
2,657.0	8.90	67.20	2,646.5	59.4	132.6	-48.9	1.06	-0.96	2.77
2,752.0	9.90	66.20	2,740.2	65.5	146.8	-54.0	1.07	1.05	-1.05
2,846.0	10.10	69.30	2,832.8	71.7	161.9	-58.9	0.61	0.21	3.30
2,940.0	10.60	61.10	2,925.3	78.8	177.2	-64.8	1.65	0.53	-8.72
3,035.0	9.80	59.50	3,018.8	87.1	191.8	-72.0	0.89	-0.84	-1.68
3,129.0	8.40	66.70	3,111.6	93.9	205.0	-77.7	1.92	-1.49	7.66
3,224.0	9.50	79.00	3,205.4	98.1	219.1	-80.9	2.32	1.16	12.95
3,318.0	11.00	80.70	3,297.9	101.0	235.6	-82.5	1.63	1.60	1.81
3,413.0	9.20	71.40	3,391.5	104.9	251.7	-85.2	2.55	-1.89	-9.79
3,507.0	10.70	70.50	3,484.1	110.2	267.1	-89.3	1.60	1.60	-0.96
3,601.0	10.60	62.50	3,576.4	117.1	282.9	-94.9	1.58	-0.11	-8.51
3,694.0	7.80	69.50	3,668.2	123.3	296.4	-100.0	3.24	-3.01	7.53
3,788.0	7.60	74.20	3,761.4	127.2	308.4	-103.0	0.70	-0.21	5.00
3,883.0	8.20	69.50	3,855.5	131.3	320.8	-106.1	0.93	0.63	-4.95
3,977.0	8.40	67.00	3,948.5	136.3	333.4	-110.2	0.44	0.21	-2.66
4,072.0	6.90	60.90	4,042.7	141.8	344.8	-114.8	1.79	-1.58	-6.42
4,166.0	5.40	55.30	4,136.1	147.1	353.3	-119.4	1.72	-1.60	-5.96
4,260.0	4.30	48.70	4,229.8	151.9	359.6	-123.7	1.31	-1.17	-7.02
4,356.0	2.30	6.70	4,325.6	156.2	362.6	-127.7	3.14	-2.08	-43.75
4,450.0	1.90	271.10	4,419.6	158.1	361.2	-129.7	3.32	-0.43	-101.70
4,545.0	0.40	180.90	4,514.6	157.8	359.6	-129.6	2.05	-1.58	-94.95
4,639.0	0.40	104.80	4,608.6	157.4	359.9	-129.1	0.52	0.00	-80.96
4,734.0	0.90	74.40	4,703.6	157.5	361.0	-129.2	0.62	0.53	-32.00
4,829.0	1.50	74.80	4,798.5	158.1	362.9	-129.5	0.63	0.63	0.42
4,924.0	2.30	70.50	4,893.5	159.0	365.9	-130.3	0.85	0.84	-4.53
5,018.0	2.30	86.40	4,987.4	159.8	369.6	-130.7	0.68	0.00	16.91
5,112.0	0.90	42.80	5,081.4	160.4	371.9	-131.2	1.87	-1.49	-46.38
5,207.0	1.30	61.40	5,176.4	161.5	373.4	-132.2	0.56	0.42	19.58
5,302.0	1.50	144.20	5,271.3	161.0	375.1	-131.5	1.96	0.21	87.16
5,396.0	1.80	131.00	5,365.3	159.0	376.9	-129.4	0.51	0.32	-14.04
5,491.0	1.40	137.90	5,460.3	157.2	378.8	-127.5	0.47	-0.42	7.26
5,586.0	1.40	255.50	5,555.2	156.0	378.5	-126.3	2.52	0.00	123.79
5,680.0	1.10	233.10	5,649.2	155.2	376.6	-125.6	0.60	-0.32	-23.83
5,775.0	1.10	234.90	5,744.2	154.1	375.2	-124.7	0.04	0.00	1.89
5,869.0	0.60	266.40	5,838.2	153.6	373.9	-124.2	0.71	-0.53	33.51
5,964.0	0.40	220.00	5,933.2	153.3	373.2	-124.0	0.46	-0.21	-48.84
6,058.0	0.80	188.80	6,027.2	152.4	372.9	-123.1	0.53	0.43	-33.19
6,153.0	0.40	266.50	6,122.2	151.7	372.5	-122.5	0.86	-0.42	81.79

Company:	Verdad Oil & Gas Corporation	**Local Co-ordinate Reference:**	Well Young 01N-65W-28-8N
Project:	SEC.28-T1N-R65W	**TVD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Site:	Young 01N-65W-28 Pad Sec.28-T1N-R65W	**MD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Well:	Young 01N-65W-28-8N	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
6,248.0	0.60	267.90	6,217.2	151.7	371.6	-122.5	0.21	0.21	1.47
6,342.0	0.20	288.20	6,311.2	151.7	371.0	-122.6	0.44	-0.43	21.60
6,437.0	0.40	256.50	6,406.2	151.7	370.5	-122.6	0.27	0.21	-33.37
6,530.0	0.50	269.40	6,499.2	151.6	369.8	-122.6	0.15	0.11	13.87
6,625.0	0.70	283.40	6,594.2	151.7	368.8	-122.8	0.26	0.21	14.74
6,719.0	0.90	168.00	6,688.2	151.2	368.4	-122.2	1.44	0.21	-122.77
6,766.0	6.00	182.00	6,735.1	148.3	368.4	-119.4	10.92	10.85	29.79
6,814.0	10.70	190.80	6,782.5	141.5	367.5	-112.6	10.12	9.79	18.33
6,861.0	15.00	196.90	6,828.4	131.3	364.9	-102.8	9.58	9.15	12.98
6,908.0	18.60	199.20	6,873.3	118.4	360.7	-90.2	7.79	7.66	4.89
6,955.0	23.70	199.20	6,917.2	102.4	355.1	-74.7	10.85	10.85	0.00
7,002.0	28.40	198.30	6,959.4	82.9	348.5	-55.7	10.04	10.00	-1.91
7,049.0	32.70	196.40	6,999.8	60.1	341.4	-33.5	9.38	9.15	-4.04
7,096.0	37.40	194.80	7,038.3	34.1	334.1	-8.2	10.19	10.00	-3.40
7,143.0	42.70	194.80	7,074.3	4.9	326.4	20.4	11.28	11.28	0.00
7,191.0	48.40	195.00	7,107.9	-28.2	317.6	52.7	11.88	11.88	0.42
7,238.0	53.90	192.20	7,137.4	-63.8	309.0	87.5	12.59	11.70	-5.96
7,286.0	60.10	190.10	7,163.5	-103.3	301.3	126.2	13.43	12.92	-4.38
7,333.0	65.80	188.00	7,184.9	-144.6	294.7	166.9	12.76	12.13	-4.47
7,380.0	70.00	181.60	7,202.5	-188.0	291.1	209.9	15.46	8.94	-13.62
7,427.0	73.20	178.70	7,217.4	-232.5	291.0	254.3	8.98	6.81	-6.17
7,474.0	76.80	178.50	7,229.5	-277.9	292.1	299.7	7.67	7.66	-0.43
7,521.0	78.60	178.30	7,239.6	-323.8	293.4	345.5	3.85	3.83	-0.43
7,555.0	80.50	178.80	7,245.7	-357.2	294.2	378.9	5.77	5.59	1.47
7,611.0	86.40	180.60	7,252.1	-412.9	294.5	434.4	11.01	10.54	3.21
7,706.0	90.40	179.20	7,254.8	-507.8	294.7	529.0	4.46	4.21	-1.47
7,800.0	92.50	177.40	7,252.4	-601.7	297.5	622.9	2.94	2.23	-1.91
7,895.0	92.10	175.70	7,248.6	-696.5	303.2	717.8	1.84	-0.42	-1.79
7,989.0	91.70	175.80	7,245.5	-790.2	310.2	811.8	0.44	-0.43	0.11
8,084.0	90.60	178.50	7,243.5	-885.0	314.9	906.7	3.07	-1.16	2.84
8,179.0	89.60	179.70	7,243.4	-980.0	316.4	1,001.5	1.64	-1.05	1.26
8,273.0	88.20	179.00	7,245.2	-1,074.0	317.4	1,095.3	1.67	-1.49	-0.74
8,368.0	89.00	180.10	7,247.5	-1,168.9	318.2	1,190.0	1.43	0.84	1.16
8,462.0	90.70	179.70	7,247.8	-1,262.9	318.3	1,283.7	1.86	1.81	-0.43
8,557.0	91.00	179.70	7,246.3	-1,357.9	318.8	1,378.5	0.32	0.32	0.00
8,652.0	90.00	180.40	7,245.5	-1,452.9	318.8	1,473.2	1.28	-1.05	0.74
8,746.0	89.80	181.10	7,245.7	-1,546.9	317.5	1,566.8	0.77	-0.21	0.74
8,841.0	90.20	180.40	7,245.7	-1,641.9	316.3	1,661.4	0.85	0.42	-0.74
8,935.0	90.70	179.40	7,244.9	-1,735.9	316.4	1,755.1	1.19	0.53	-1.06
9,029.0	89.40	179.70	7,244.9	-1,829.9	317.2	1,848.9	1.42	-1.38	0.32
9,123.0	91.20	179.90	7,244.4	-1,923.9	317.5	1,942.7	1.93	1.91	0.21
9,217.0	90.20	179.00	7,243.2	-2,017.9	318.4	2,036.4	1.43	-1.06	-0.96
9,311.0	89.70	179.70	7,243.3	-2,111.9	319.5	2,130.2	0.92	-0.53	0.74
9,405.0	91.40	179.50	7,242.4	-2,205.8	320.1	2,224.0	1.82	1.81	-0.21
9,499.0	89.60	177.90	7,241.6	-2,299.8	322.3	2,317.8	2.56	-1.91	-1.70
9,593.0	90.30	179.00	7,241.7	-2,393.8	324.8	2,411.7	1.39	0.74	1.17
9,688.0	87.80	181.80	7,243.2	-2,488.7	324.2	2,506.3	3.95	-2.63	2.95
9,782.0	88.50	180.40	7,246.3	-2,582.7	322.4	2,599.9	1.66	0.74	-1.49
9,876.0	89.40	178.50	7,248.0	-2,676.6	323.3	2,693.6	2.24	0.96	-2.02
9,970.0	89.80	178.50	7,248.6	-2,770.6	325.7	2,787.5	0.43	0.43	0.00
10,065.0	88.80	174.60	7,249.8	-2,865.4	331.4	2,882.5	4.24	-1.05	-4.11
10,159.0	91.60	174.80	7,249.5	-2,959.0	340.1	2,976.4	2.99	2.98	0.21
10,254.0	91.80	177.60	7,246.7	-3,053.7	346.4	3,071.4	2.95	0.21	2.95
10,348.0	93.20	178.10	7,242.6	-3,147.6	349.9	3,165.2	1.58	1.49	0.53

Company:	Verdad Oil & Gas Corporation	**Local Co-ordinate Reference:**	Well Young 01N-65W-28-8N
Project:	SEC.28-T1N-R65W	**TVD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Site:	Young 01N-65W-28 Pad Sec.28-T1N-R65W	**MD Reference:**	WELL @ 5089.5ft (Frontier 6 RKB - 16.5')
Well:	Young 01N-65W-28-8N	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
10,443.0	89.60	179.50	7,240.2	-3,242.5	351.9	3,260.0	4.07	-3.79	1.47
10,538.0	89.30	180.20	7,241.2	-3,337.5	352.2	3,354.7	0.80	-0.32	0.74
10,633.0	90.70	180.40	7,241.2	-3,432.5	351.7	3,449.4	1.49	1.47	0.21
10,727.0	89.50	179.90	7,241.0	-3,526.5	351.4	3,543.1	1.38	-1.28	-0.53
10,822.0	88.70	176.20	7,242.5	-3,621.4	354.7	3,638.0	3.98	-0.84	-3.89
10,917.0	90.80	179.20	7,242.9	-3,716.3	358.5	3,732.9	3.85	2.21	3.16
11,011.0	91.80	180.20	7,240.8	-3,810.3	359.0	3,826.6	1.50	1.06	1.06
11,105.0	92.80	179.40	7,237.0	-3,904.2	359.3	3,920.3	1.36	1.06	-0.85
11,200.0	92.10	181.50	7,232.9	-3,999.1	358.5	4,014.9	2.33	-0.74	2.21
11,295.0	91.20	180.90	7,230.2	-4,094.1	356.5	4,109.4	1.14	-0.95	-0.63
11,389.0	91.60	181.10	7,227.9	-4,188.0	354.9	4,202.9	0.48	0.43	0.21
11,484.0	91.30	181.30	7,225.5	-4,283.0	352.9	4,297.4	0.38	-0.32	0.21
11,579.0	90.10	181.30	7,224.3	-4,377.9	350.8	4,391.9	1.26	-1.26	0.00
11,674.0	91.40	181.80	7,223.1	-4,472.9	348.2	4,486.4	1.47	1.37	0.53
11,753.0	92.70	181.30	7,220.3	-4,551.8	346.1	4,564.9	1.76	1.65	-0.63
11,808.0	92.70	181.30	7,217.7	-4,606.7	344.8	4,619.6	0.00	0.00	0.00
BHL 460'FSL & 895'FEL									

Checked By: _____ Approved By: _____ Date: _____