

# Verdad Oil & Gas Corporation

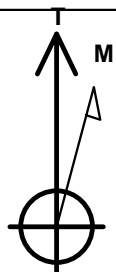
Well Name: **Blackburn 01N-64W-08-8N**

Surface Location: Blackburn 01N-64W-08-8N Sec.8-T1N-R64W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
Ground Elevation: 5045.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1270465.53	3261255.99	40.072043	-104.566451	
		RKB - 16.2'	WELL @ 5061.2ft (RKB - 16.2')			

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
460' Setback BHL	1.0	-4384.6	-1462.3	Polygon
460' Setback SHL	1.0	-24.0	-1462.1	Polygon
North Sectionline	1.0	436.0	-1462.3	Polygon
SHL 436'FNL & 324'FEL	1.0	0.0	0.0	Point
BHL 460'FSL & 660'FEL	6981.2	-4384.6	-412.6	Point



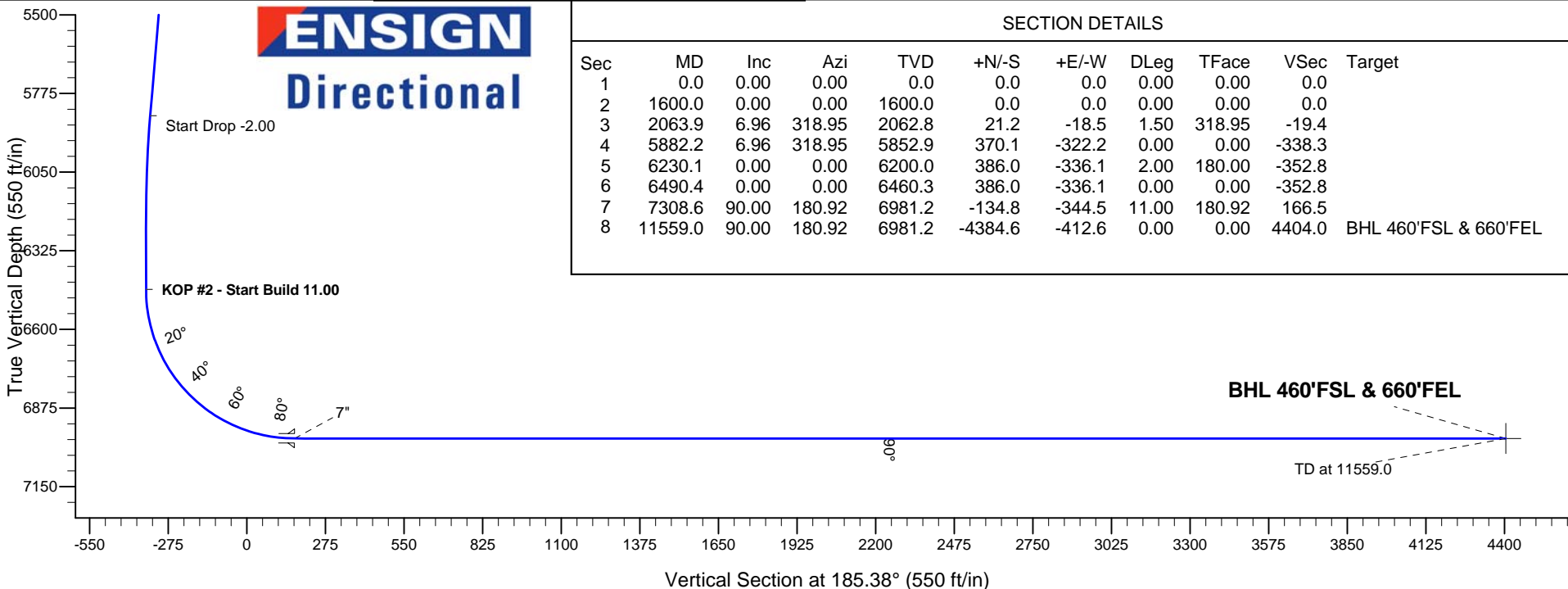
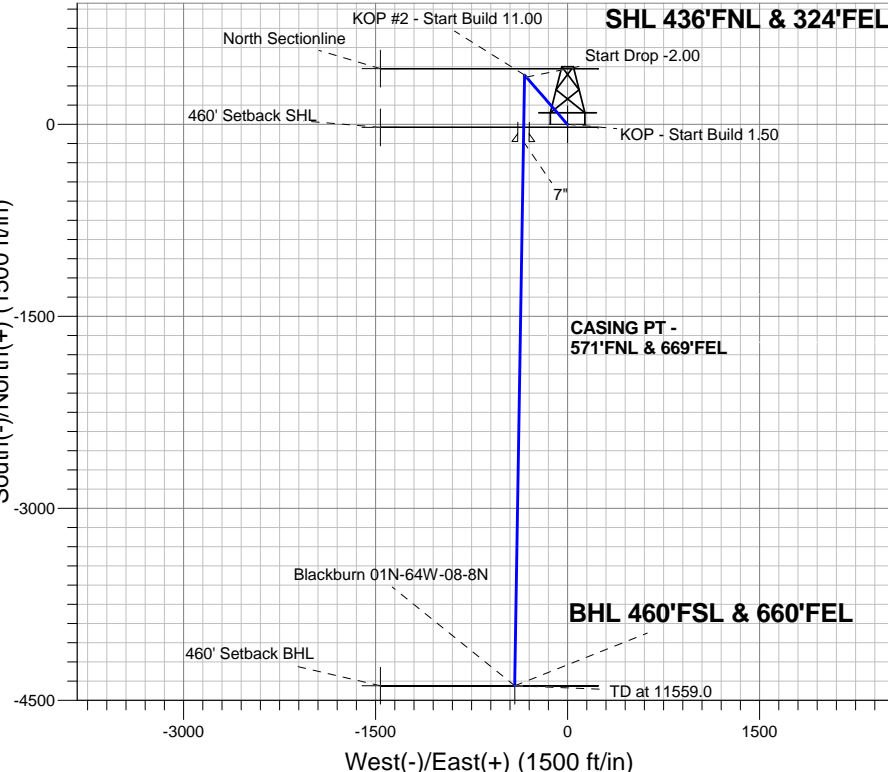
Azimuths to True North  
Magnetic North: 8.25°  
  
Magnetic Field  
Strength: 52604.5nT  
Dip Angle: 66.69°  
Date: 12/31/2014  
Model: IGRF2010

Blackburn 01N-64W-08-8N Sec.8-T1N-R64W  
Blackburn 01N-64W-08-8N  
Plan #2 (3-26-15)

## ANNOTATIONS

TVD	MD	Annotation
1600.0	1600.0	KOP - Start Build 1.50
5852.9	5882.2	Start Drop -2.00
6460.3	6490.4	KOP #2 - Start Build 11.00
6981.2	11559.0	TD at 11559.0

South(-)/North(+) (1500 ft/in)



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
3	2063.9	6.96	318.95	2062.8	21.2	-18.5	1.50	318.95	-19.4	
4	5882.2	6.96	318.95	5852.9	370.1	-322.2	0.00	0.00	-338.3	
5	6230.1	0.00	0.00	6200.0	386.0	-336.1	2.00	180.00	-352.8	
6	6490.4	0.00	0.00	6460.3	386.0	-336.1	0.00	0.00	-352.8	
7	7308.6	90.00	180.92	6981.2	-134.8	-344.5	11.00	180.92	166.5	
8	11559.0	90.00	180.92	6981.2	-4384.6	-412.6	0.00	0.00	4404.0	BHL 460'FSL & 660'FEL



# **Verdad Oil & Gas Corporation**

**Sec.8-T1N-R64W**

**Blackburn 01N-64W-08-8N Sec.8-T1N-R64W**

**Blackburn 01N-64W-08-8N**

**Wellbore #1**

**Plan: Plan #2 (3-26-15)**

## **Standard Planning Report**

**26 March, 2015**

<b>Database:</b>	landmark	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Company:</b>	Verdad Oil & Gas Corporation	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Project:</b>	Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-26-15)		

<b>Project</b>	Sec.8-T1N-R64W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site Blackburn 01N-64W-08-8N Sec.8-T1N-R64W					
Site Position:		Northing:		1,270,465.55 ft	
From:	Lat/Long	Easting:		Latitude:	40.072043
		3,261,255.99 ft		Longitude:	-104.566451
Position Uncertainty:		Slot Radius:		Grid Convergence:	0.60 °
0.0 ft		"			

Well	Blackburn 01N-64W-08-8N					
Well Position	+N/-S	0.0 ft	Northing:	1,270,465.53 ft	Latitude:	40.072043
	+E/-W	0.0 ft	Easting:	3,261,255.99 ft	Longitude:	-104.566451
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,045.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/31/2014	8.25	66.70	52,605

<b>Design</b>	Plan #2 (3-26-15)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	185.38

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,063.9	6.96	318.95	2,062.8	21.2	-18.5	1.50	1.50	0.00	318.95	
5,882.2	6.96	318.95	5,852.9	370.1	-322.2	0.00	0.00	0.00	0.00	
6,230.1	0.00	0.00	6,200.0	386.0	-336.1	2.00	-2.00	0.00	180.00	
6,490.4	0.00	0.00	6,460.3	386.0	-336.1	0.00	0.00	0.00	0.00	
7,308.6	90.00	180.92	6,981.2	-134.8	-344.5	11.00	11.00	0.00	180.92	
11,559.0	90.00	180.92	6,981.2	-4,384.6	-412.6	0.00	0.00	0.00	0.00	BHL 460'FSL & 66C

**Database:** landmark  
**Company:** Verdad Oil & Gas Corporation  
**Project:** Sec.8-T1N-R64W  
**Site:** Blackburn 01N-64W-08-8N Sec.8-T1N-R64W  
**Well:** Blackburn 01N-64W-08-8N  
**Wellbore:** Wellbore #1  
**Design:** Plan #2 (3-26-15)

**Local Co-ordinate Reference:** Well Blackburn 01N-64W-08-8N  
**TVD Reference:** WELL @ 5061.2ft (RKB - 16.2')  
**MD Reference:** WELL @ 5061.2ft (RKB - 16.2')  
**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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP - Start Build 1.50</b>									
1,700.0	1.50	318.95	1,700.0	1.0	-0.9	-0.9	1.50	1.50	0.00
1,800.0	3.00	318.95	1,799.9	3.9	-3.4	-3.6	1.50	1.50	0.00
1,900.0	4.50	318.95	1,899.7	8.9	-7.7	-8.1	1.50	1.50	0.00
2,000.0	6.00	318.95	1,999.3	15.8	-13.7	-14.4	1.50	1.50	0.00
2,063.9	6.96	318.95	2,062.8	21.2	-18.5	-19.4	1.50	1.50	0.00
2,100.0	6.96	318.95	2,098.6	24.5	-21.3	-22.4	0.00	0.00	0.00
2,200.0	6.96	318.95	2,197.9	33.7	-29.3	-30.8	0.00	0.00	0.00
2,300.0	6.96	318.95	2,297.1	42.8	-37.3	-39.1	0.00	0.00	0.00
2,400.0	6.96	318.95	2,396.4	51.9	-45.2	-47.5	0.00	0.00	0.00
2,500.0	6.96	318.95	2,495.6	61.1	-53.2	-55.8	0.00	0.00	0.00
2,600.0	6.96	318.95	2,594.9	70.2	-61.1	-64.2	0.00	0.00	0.00
2,700.0	6.96	318.95	2,694.2	79.3	-69.1	-72.5	0.00	0.00	0.00
2,800.0	6.96	318.95	2,793.4	88.5	-77.0	-80.9	0.00	0.00	0.00
2,900.0	6.96	318.95	2,892.7	97.6	-85.0	-89.2	0.00	0.00	0.00
3,000.0	6.96	318.95	2,992.0	106.7	-92.9	-97.6	0.00	0.00	0.00
3,100.0	6.96	318.95	3,091.2	115.9	-100.9	-105.9	0.00	0.00	0.00
3,200.0	6.96	318.95	3,190.5	125.0	-108.9	-114.3	0.00	0.00	0.00
3,300.0	6.96	318.95	3,289.8	134.2	-116.8	-122.6	0.00	0.00	0.00
3,400.0	6.96	318.95	3,389.0	143.3	-124.8	-131.0	0.00	0.00	0.00
3,500.0	6.96	318.95	3,488.3	152.4	-132.7	-139.3	0.00	0.00	0.00
3,600.0	6.96	318.95	3,587.5	161.6	-140.7	-147.7	0.00	0.00	0.00
3,700.0	6.96	318.95	3,686.8	170.7	-148.6	-156.0	0.00	0.00	0.00
3,800.0	6.96	318.95	3,786.1	179.8	-156.6	-164.4	0.00	0.00	0.00
3,900.0	6.96	318.95	3,885.3	189.0	-164.5	-172.7	0.00	0.00	0.00
4,000.0	6.96	318.95	3,984.6	198.1	-172.5	-181.1	0.00	0.00	0.00
4,100.0	6.96	318.95	4,083.9	207.3	-180.5	-189.4	0.00	0.00	0.00
4,200.0	6.96	318.95	4,183.1	216.4	-188.4	-197.8	0.00	0.00	0.00
4,300.0	6.96	318.95	4,282.4	225.5	-196.4	-206.1	0.00	0.00	0.00
4,400.0	6.96	318.95	4,381.7	234.7	-204.3	-214.5	0.00	0.00	0.00
4,500.0	6.96	318.95	4,480.9	243.8	-212.3	-222.8	0.00	0.00	0.00
4,600.0	6.96	318.95	4,580.2	252.9	-220.2	-231.2	0.00	0.00	0.00
4,700.0	6.96	318.95	4,679.4	262.1	-228.2	-239.5	0.00	0.00	0.00
4,800.0	6.96	318.95	4,778.7	271.2	-236.1	-247.9	0.00	0.00	0.00
4,900.0	6.96	318.95	4,878.0	280.3	-244.1	-256.2	0.00	0.00	0.00
5,000.0	6.96	318.95	4,977.2	289.5	-252.1	-264.6	0.00	0.00	0.00
5,100.0	6.96	318.95	5,076.5	298.6	-260.0	-272.9	0.00	0.00	0.00

<b>Database:</b>	landmark	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Company:</b>	Verdad Oil & Gas Corporation	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Project:</b>	Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-26-15)		

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)
5,200.0	6.96	318.95	5,175.8	307.8	-268.0	-281.3	0.00	0.00	0.00
5,300.0	6.96	318.95	5,275.0	316.9	-275.9	-289.6	0.00	0.00	0.00
5,400.0	6.96	318.95	5,374.3	326.0	-283.9	-298.0	0.00	0.00	0.00
5,500.0	6.96	318.95	5,473.6	335.2	-291.8	-306.4	0.00	0.00	0.00
5,600.0	6.96	318.95	5,572.8	344.3	-299.8	-314.7	0.00	0.00	0.00
5,700.0	6.96	318.95	5,672.1	353.4	-307.7	-323.1	0.00	0.00	0.00
5,800.0	6.96	318.95	5,771.3	362.6	-315.7	-331.4	0.00	0.00	0.00
5,882.2	6.96	318.95	5,852.9	370.1	-322.2	-338.3	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,900.0	6.60	318.95	5,870.6	371.7	-323.6	-339.7	2.00	-2.00	0.00
6,000.0	4.60	318.95	5,970.1	379.0	-330.0	-346.4	2.00	-2.00	0.00
6,100.0	2.60	318.95	6,069.9	383.8	-334.2	-350.8	2.00	-2.00	0.00
6,200.0	0.60	318.95	6,169.9	385.9	-336.0	-352.7	2.00	-2.00	0.00
6,230.1	0.00	0.00	6,200.0	386.0	-336.1	-352.8	2.00	-2.00	0.00
6,300.0	0.00	0.00	6,269.9	386.0	-336.1	-352.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,369.9	386.0	-336.1	-352.8	0.00	0.00	0.00
6,490.4	0.00	0.00	6,460.3	386.0	-336.1	-352.8	0.00	0.00	0.00
<b>KOP #2 - Start Build 11.00</b>									
6,500.0	1.05	180.92	6,469.9	385.9	-336.1	-352.7	10.95	10.95	0.00
6,600.0	12.05	180.92	6,569.1	374.5	-336.3	-341.4	11.00	11.00	0.00
6,700.0	23.05	180.92	6,664.3	344.4	-336.8	-311.4	11.00	11.00	0.00
6,800.0	34.05	180.92	6,752.0	296.7	-337.5	-263.8	11.00	11.00	0.00
6,900.0	45.05	180.92	6,829.0	233.1	-338.6	-200.4	11.00	11.00	0.00
7,000.0	56.05	180.92	6,892.4	156.0	-339.8	-123.5	11.00	11.00	0.00
7,100.0	67.05	180.92	6,940.0	68.3	-341.2	-36.0	11.00	11.00	0.00
7,200.0	78.05	180.92	6,969.9	-27.0	-342.7	59.0	11.00	11.00	0.00
7,300.0	89.05	180.92	6,981.1	-126.2	-344.3	157.9	11.00	11.00	0.00
7,308.6	90.00	180.92	6,981.2	-134.8	-344.5	166.5	11.00	11.00	0.00
<b>7"</b>									
7,400.0	90.00	180.92	6,981.2	-226.2	-345.9	257.6	0.00	0.00	0.00
7,500.0	90.00	180.92	6,981.2	-326.1	-347.5	357.3	0.00	0.00	0.00
7,600.0	90.00	180.92	6,981.2	-426.1	-349.1	457.0	0.00	0.00	0.00
7,700.0	90.00	180.92	6,981.2	-526.1	-350.7	556.7	0.00	0.00	0.00
7,800.0	90.00	180.92	6,981.2	-626.1	-352.3	656.4	0.00	0.00	0.00
7,900.0	90.00	180.92	6,981.2	-726.1	-353.9	756.1	0.00	0.00	0.00
8,000.0	90.00	180.92	6,981.2	-826.1	-355.5	855.8	0.00	0.00	0.00
8,100.0	90.00	180.92	6,981.2	-926.1	-357.1	955.5	0.00	0.00	0.00
8,200.0	90.00	180.92	6,981.2	-1,026.1	-358.7	1,055.2	0.00	0.00	0.00
8,300.0	90.00	180.92	6,981.2	-1,126.0	-360.3	1,154.9	0.00	0.00	0.00
8,400.0	90.00	180.92	6,981.2	-1,226.0	-362.0	1,254.6	0.00	0.00	0.00
8,500.0	90.00	180.92	6,981.2	-1,326.0	-363.6	1,354.2	0.00	0.00	0.00
8,600.0	90.00	180.92	6,981.2	-1,426.0	-365.2	1,453.9	0.00	0.00	0.00
8,700.0	90.00	180.92	6,981.2	-1,526.0	-366.8	1,553.6	0.00	0.00	0.00
8,800.0	90.00	180.92	6,981.2	-1,626.0	-368.4	1,653.3	0.00	0.00	0.00
8,900.0	90.00	180.92	6,981.2	-1,726.0	-370.0	1,753.0	0.00	0.00	0.00
9,000.0	90.00	180.92	6,981.2	-1,826.0	-371.6	1,852.7	0.00	0.00	0.00
9,100.0	90.00	180.92	6,981.2	-1,925.9	-373.2	1,952.4	0.00	0.00	0.00
9,200.0	90.00	180.92	6,981.2	-2,025.9	-374.8	2,052.1	0.00	0.00	0.00
9,300.0	90.00	180.92	6,981.2	-2,125.9	-376.4	2,151.8	0.00	0.00	0.00
9,400.0	90.00	180.92	6,981.2	-2,225.9	-378.0	2,251.5	0.00	0.00	0.00
9,500.0	90.00	180.92	6,981.2	-2,325.9	-379.6	2,351.2	0.00	0.00	0.00
9,600.0	90.00	180.92	6,981.2	-2,425.9	-381.2	2,450.9	0.00	0.00	0.00
9,700.0	90.00	180.92	6,981.2	-2,525.9	-382.8	2,550.6	0.00	0.00	0.00

<b>Database:</b>	landmark	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Company:</b>	Verdad Oil & Gas Corporation	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Project:</b>	Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-26-15)		

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)	
9,800.0	90.00	180.92	6,981.2	-2,625.9	-384.4	2,650.3	0.00	0.00	0.00	
9,900.0	90.00	180.92	6,981.2	-2,725.8	-386.0	2,750.0	0.00	0.00	0.00	
10,000.0	90.00	180.92	6,981.2	-2,825.8	-387.6	2,849.7	0.00	0.00	0.00	
10,100.0	90.00	180.92	6,981.2	-2,925.8	-389.2	2,949.4	0.00	0.00	0.00	
10,200.0	90.00	180.92	6,981.2	-3,025.8	-390.8	3,049.1	0.00	0.00	0.00	
10,300.0	90.00	180.92	6,981.2	-3,125.8	-392.4	3,148.8	0.00	0.00	0.00	
10,400.0	90.00	180.92	6,981.2	-3,225.8	-394.0	3,248.5	0.00	0.00	0.00	
10,500.0	90.00	180.92	6,981.2	-3,325.8	-395.6	3,348.2	0.00	0.00	0.00	
10,600.0	90.00	180.92	6,981.2	-3,425.8	-397.2	3,447.9	0.00	0.00	0.00	
10,700.0	90.00	180.92	6,981.2	-3,525.7	-398.8	3,547.6	0.00	0.00	0.00	
10,800.0	90.00	180.92	6,981.2	-3,625.7	-400.4	3,647.3	0.00	0.00	0.00	
10,900.0	90.00	180.92	6,981.2	-3,725.7	-402.0	3,747.0	0.00	0.00	0.00	
11,000.0	90.00	180.92	6,981.2	-3,825.7	-403.6	3,846.7	0.00	0.00	0.00	
11,100.0	90.00	180.92	6,981.2	-3,925.7	-405.2	3,946.4	0.00	0.00	0.00	
11,200.0	90.00	180.92	6,981.2	-4,025.7	-406.8	4,046.1	0.00	0.00	0.00	
11,300.0	90.00	180.92	6,981.2	-4,125.7	-408.4	4,145.8	0.00	0.00	0.00	
11,400.0	90.00	180.92	6,981.2	-4,225.6	-410.1	4,245.5	0.00	0.00	0.00	
11,500.0	90.00	180.92	6,981.2	-4,325.6	-411.7	4,345.2	0.00	0.00	0.00	
11,559.0	90.00	180.92	6,981.2	-4,384.6	-412.6	4,404.0	0.00	0.00	0.00	

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
BHL 460'FSL & 660'F	0.00	0.00	6,981.2	-4,384.6	-412.6	1,266,077.02	3,260,889.59	40.060007	-104.567925	
- plan hits target										
- Point										
460' Setback BHL	0.00	0.00	1.0	-4,384.6	-1,462.3	1,266,065.96	3,259,839.99	40.060007	-104.571675	
- plan misses by 4622.0ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)										
- Polygon										
Point 1			1.0	0.0	0.0	1,266,065.96	3,259,839.99			
Point 2			1.0	0.0	1,700.0	1,266,083.86	3,261,539.83			
North Sectionline	0.00	0.00	1.0	436.0	-1,462.3	1,270,886.10	3,259,789.24	40.073240	-104.571676	
- plan misses by 1525.9ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)										
- Polygon										
Point 1			1.0	0.0	0.0	1,270,886.10	3,259,789.24			
Point 2			1.0	0.0	1,700.0	1,270,904.00	3,261,489.08			
SHL 436'FNL & 324'F	0.00	0.00	1.0	0.0	0.0	1,270,465.55	3,261,255.99	40.072043	-104.566451	
- plan hits target										
- Point										
460' Setback SHL	0.00	0.00	1.0	-24.0	-1,462.1	1,270,426.15	3,259,794.28	40.071977	-104.571675	
- plan misses by 1462.3ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)										
- Polygon										
Point 1			1.0	0.0	0.0	1,270,426.15	3,259,794.28			
Point 2			1.0	0.0	1,700.0	1,270,444.04	3,261,494.11			

<b>Database:</b>	landmark	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Company:</b>	Verdad Oil & Gas Corporation	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Project:</b>	Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (3-26-15)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,308.6	6,981.2	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,600.0	1,600.0	0.0	0.0	KOP - Start Build 1.50	
5,882.2	5,852.9	21.2	-18.5	Start Drop -2.00	
6,490.4	6,460.3	370.1	-322.2	KOP #2 - Start Build 11.00	
11,559.0	6,981.2	386.0	-336.1	TD at 11559.0	



# **Verdad Oil & Gas Corporation**

**Sec.8-T1N-R64W**

**Blackburn 01N-64W-08-8N Sec.8-T1N-R64W**

**Blackburn 01N-64W-08-8N**

**Wellbore #1**

**Plan #2 (3-26-15)**

## **Anticollision Report**

**26 March, 2015**



<b>Company:</b>	Verdad Oil & Gas Corporation	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Project:</b>	Sec.8-T1N-R64W	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Reference Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	landmark
<b>Reference Design:</b>	Plan #2 (3-26-15)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2 (3-26-15)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	ISCSWA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

Survey Tool Program		Date	3/26/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,559.0	Plan #2 (3-26-15) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Blackburn 01N-64W-08-6N Sec.8-T1N-R64W						
Blackburn 01N-64W-08-6N - Wellbore #1 - Plan #2 (9-26	7,352.2	11,451.4	488.8	386.2	4.766	CC, ES, SF

Blackburn 01N-64W-08-6N Sec.8-T1N-R64W - Blackburn 01N-64W-08-6N - Wellbore #1 - Plan #2 (9-2)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	23.8	23.8	0.0	0.0	-167.02	-4,607.9	-1,062.3	4,728.8					
100.0	100.0	123.8	123.8	0.1	0.2	-167.02	-4,607.9	-1,062.3	4,728.8	4,728.5	0.28	N/A		
200.0	200.0	223.8	223.8	0.3	0.4	-167.02	-4,607.9	-1,062.3	4,728.8	4,728.0	0.73	6,497.393		
300.0	300.0	323.8	323.8	0.6	0.6	-167.02	-4,607.9	-1,062.3	4,728.8	4,727.6	1.18	4,016.525		
400.0	400.0	423.8	423.8	0.8	0.8	-167.02	-4,607.9	-1,062.3	4,728.8	4,727.1	1.63	2,906.681		
500.0	500.0	523.8	523.8	1.0	1.1	-167.02	-4,607.9	-1,062.3	4,728.8	4,726.7	2.08	2,277.393		
600.0	600.0	623.8	623.8	1.2	1.3	-167.02	-4,607.9	-1,062.3	4,728.8	4,726.2	2.53	1,872.091		
700.0	700.0	723.8	723.8	1.5	1.5	-167.02	-4,607.9	-1,062.3	4,728.8	4,725.8	2.98	1,589.255		
800.0	800.0	823.8	823.8	1.7	1.7	-167.02	-4,607.9	-1,062.3	4,728.8	4,725.3	3.42	1,380.664		
900.0	900.0	923.8	923.8	1.9	2.0	-167.02	-4,607.9	-1,062.3	4,728.8	4,724.9	3.87	1,220.476		
1,000.0	1,000.0	1,023.8	1,023.8	2.1	2.2	-167.02	-4,607.9	-1,062.3	4,728.8	4,724.4	4.32	1,093.594		
1,100.0	1,100.0	1,123.8	1,123.8	2.4	2.4	-167.02	-4,607.9	-1,062.3	4,728.8	4,724.0	4.77	990.609		
1,200.0	1,200.0	1,223.8	1,223.8	2.6	2.6	-167.02	-4,607.9	-1,062.3	4,728.8	4,723.5	5.22	905.352		
1,300.0	1,300.0	1,323.8	1,323.8	2.8	2.9	-167.02	-4,607.9	-1,062.3	4,728.8	4,723.1	5.67	833.606		
1,400.0	1,400.0	1,423.8	1,423.8	3.0	3.1	-167.02	-4,607.9	-1,062.3	4,728.8	4,722.6	6.12	772.397		
1,500.0	1,500.0	1,523.8	1,523.8	3.3	3.3	-167.02	-4,607.9	-1,062.3	4,728.8	4,722.2	6.57	719.562		
1,600.0	1,600.0	1,623.8	1,623.8	3.5	3.5	-167.02	-4,607.9	-1,062.3	4,728.8	4,721.7	7.02	673.493		
1,700.0	1,700.0	1,723.8	1,723.8	3.7	3.8	-125.97	-4,607.9	-1,062.3	4,729.5	4,722.1	7.47	633.382		
1,800.0	1,799.9	1,823.7	1,823.7	3.9	4.0	-125.98	-4,607.9	-1,062.3	4,731.8	4,723.9	7.91	598.223		
1,900.0	1,899.7	1,923.5	1,923.5	4.2	4.2	-126.00	-4,607.9	-1,062.3	4,735.7	4,727.3	8.35	566.871		
2,000.0	1,999.3	2,000.0	2,000.0	4.4	4.4	-126.00	-4,607.9	-1,062.3	4,741.1	4,732.4	8.75	541.843		
2,100.0	2,098.6	2,071.7	2,071.7	4.6	4.5	-126.03	-4,608.4	-1,061.8	4,748.6	4,739.4	9.13	520.275		
2,200.0	2,197.9	2,129.6	2,129.6	4.9	4.6	-126.12	-4,609.5	-1,060.8	4,757.2	4,747.8	9.48	501.727		
2,300.0	2,297.1	2,200.0	2,199.9	5.1	4.8	-126.23	-4,611.7	-1,058.7	4,766.8	4,757.0	9.86	483.522		
2,400.0	2,396.4	11,456.5	7,053.0	5.4	86.7	-105.98	-164.0	-831.4	4,704.0	4,652.3	51.66	91.055		
2,500.0	2,495.6	11,456.5	7,053.0	5.7	86.7	-105.98	-164.0	-831.4	4,605.4	4,553.4	51.93	88.684		

<b>Company:</b>	Verdad Oil & Gas Corporation	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Project:</b>	Sec.8-T1N-R64W	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Reference Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	landmark
<b>Reference Design:</b>	Plan #2 (3-26-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,600.0	2,594.9	11,456.5	7,053.0	5.9	86.7	-105.98	-164.0	-831.4	4,506.8	4,454.6	52.20	86.332	
2,700.0	2,694.2	11,456.5	7,053.0	6.2	86.7	-105.98	-164.0	-831.4	4,408.3	4,355.8	52.48	84.000	
2,800.0	2,793.4	11,456.5	7,053.0	6.5	86.7	-105.98	-164.0	-831.4	4,309.8	4,257.1	52.76	81.688	
2,900.0	2,892.7	11,456.5	7,053.0	6.8	86.7	-105.98	-164.0	-831.4	4,211.4	4,158.4	53.04	79.397	
3,000.0	2,992.0	11,456.5	7,053.0	7.1	86.7	-105.98	-164.0	-831.4	4,113.1	4,059.8	53.33	77.129	
3,100.0	3,091.2	11,456.5	7,053.0	7.4	86.7	-105.98	-164.0	-831.4	4,014.9	3,961.3	53.62	74.883	
3,200.0	3,190.5	11,456.5	7,053.0	7.7	86.7	-105.98	-164.0	-831.4	3,916.8	3,862.9	53.91	72.660	
3,300.0	3,289.8	11,456.5	7,053.0	7.9	86.7	-105.98	-164.0	-831.4	3,818.8	3,764.6	54.20	70.460	
3,400.0	3,389.0	11,456.5	7,053.0	8.2	86.7	-105.98	-164.0	-831.4	3,720.8	3,666.4	54.49	68.283	
3,500.0	3,488.3	11,456.5	7,053.0	8.5	86.7	-105.98	-164.0	-831.4	3,623.0	3,568.2	54.79	66.130	
3,600.0	3,587.5	11,456.5	7,053.0	8.8	86.7	-105.98	-164.0	-831.4	3,525.3	3,470.3	55.08	64.001	
3,700.0	3,686.8	11,456.5	7,053.0	9.1	86.7	-105.98	-164.0	-831.4	3,427.8	3,372.4	55.38	61.896	
3,800.0	3,786.1	11,456.5	7,053.0	9.4	86.7	-105.98	-164.0	-831.4	3,330.4	3,274.7	55.68	59.815	
3,900.0	3,885.3	11,456.5	7,053.0	9.7	86.7	-105.98	-164.0	-831.4	3,233.1	3,177.2	55.98	57.758	
4,000.0	3,984.6	11,456.5	7,053.0	10.1	86.7	-105.98	-164.0	-831.4	3,136.1	3,079.8	56.28	55.724	
4,100.0	4,083.9	11,456.5	7,053.0	10.4	86.7	-105.98	-164.0	-831.4	3,039.2	2,982.6	56.58	53.716	
4,200.0	4,183.1	11,456.5	7,053.0	10.7	86.7	-105.98	-164.0	-831.4	2,942.5	2,885.6	56.88	51.731	
4,300.0	4,282.4	11,456.5	7,053.0	11.0	86.7	-105.98	-164.0	-831.4	2,846.0	2,788.9	57.18	49.770	
4,400.0	4,381.7	11,456.5	7,053.0	11.3	86.7	-105.98	-164.0	-831.4	2,749.8	2,692.4	57.49	47.835	
4,500.0	4,480.9	11,456.5	7,053.0	11.6	86.7	-105.98	-164.0	-831.4	2,653.9	2,596.1	57.79	45.924	
4,600.0	4,580.2	11,456.5	7,053.0	11.9	86.7	-105.98	-164.0	-831.4	2,558.3	2,500.2	58.09	44.037	
4,700.0	4,679.4	11,456.5	7,053.0	12.2	86.7	-105.98	-164.0	-831.4	2,463.1	2,404.7	58.40	42.177	
4,800.0	4,778.7	11,456.5	7,053.0	12.5	86.7	-105.98	-164.0	-831.4	2,368.2	2,309.5	58.70	40.341	
4,900.0	4,878.0	11,456.5	7,053.0	12.8	86.7	-105.98	-164.0	-831.4	2,273.8	2,214.8	59.01	38.532	
5,000.0	4,977.2	11,456.5	7,053.0	13.1	86.7	-105.98	-164.0	-831.4	2,179.9	2,120.6	59.32	36.750	
5,100.0	5,076.5	11,456.5	7,053.0	13.4	86.7	-105.98	-164.0	-831.4	2,086.5	2,026.9	59.62	34.996	
5,200.0	5,175.8	11,456.5	7,053.0	13.7	86.7	-105.98	-164.0	-831.4	1,993.8	1,933.9	59.93	33.269	
5,300.0	5,275.0	11,456.5	7,053.0	14.1	86.7	-105.98	-164.0	-831.4	1,901.8	1,841.6	60.24	31.573	
5,400.0	5,374.3	11,456.5	7,053.0	14.4	86.7	-105.98	-164.0	-831.4	1,810.7	1,750.2	60.54	29.908	
5,500.0	5,473.6	11,456.5	7,053.0	14.7	86.7	-105.98	-164.0	-831.4	1,720.6	1,659.7	60.85	28.275	
5,600.0	5,572.8	11,456.5	7,053.0	15.0	86.7	-105.98	-164.0	-831.4	1,631.6	1,570.4	61.16	26.678	
5,700.0	5,672.1	11,456.5	7,053.0	15.3	86.7	-105.98	-164.0	-831.4	1,543.9	1,482.5	61.47	25.118	
5,800.0	5,771.3	11,456.5	7,053.0	15.6	86.7	-105.98	-164.0	-831.4	1,457.9	1,396.1	61.78	23.600	
5,900.0	5,870.6	11,456.5	7,053.0	15.9	86.7	-105.47	-164.0	-831.4	1,373.7	1,311.0	62.69	21.913	
6,000.0	5,970.1	11,456.5	7,053.0	16.1	86.7	-102.66	-164.0	-831.4	1,291.5	1,225.3	66.21	19.505	
6,100.0	6,069.9	11,456.5	7,053.0	16.3	86.7	-100.04	-164.0	-831.4	1,211.4	1,142.0	69.44	17.446	
6,200.0	6,169.9	11,456.5	7,053.0	16.5	86.7	-97.63	-164.0	-831.4	1,134.1	1,061.8	72.32	15.681	
6,300.0	6,269.9	11,456.5	7,053.0	16.7	86.7	-137.99	-164.0	-831.4	1,060.4	988.2	72.21	14.684	
6,400.0	6,369.9	11,456.5	7,053.0	16.8	86.7	-137.99	-164.0	-831.4	991.2	918.8	72.40	13.691	
6,500.0	6,469.9	11,456.5	7,053.0	17.0	86.7	41.62	-164.0	-831.4	927.7	853.5	74.19	12.504	
6,600.0	6,569.1	11,456.5	7,053.0	17.1	86.7	47.98	-164.0	-831.4	864.2	783.3	80.88	10.686	
6,700.0	6,664.3	11,456.5	7,053.0	17.1	86.7	55.67	-164.0	-831.4	797.7	709.9	87.83	9.082	
6,800.0	6,752.0	11,456.5	7,053.0	17.0	86.7	64.41	-164.0	-831.4	730.1	636.0	94.10	7.758	
6,900.0	6,829.0	11,456.5	7,053.0	16.8	86.7	73.47	-164.0	-831.4	663.9	565.1	98.75	6.723	
7,000.0	6,892.4	11,456.5	7,053.0	16.7	86.7	81.85	-164.0	-831.4	602.3	501.0	101.33	5.945	
7,100.0	6,940.0	11,456.5	7,053.0	16.5	86.7	88.65	-164.0	-831.4	549.7	447.5	102.22	5.378	
7,200.0	6,969.9	11,456.5	7,053.0	16.4	86.7	93.30	-164.0	-831.4	511.0	408.7	102.29	4.996	
7,300.0	6,981.1	11,456.5	7,053.0	16.5	86.7	95.56	-164.0	-831.4	490.9	388.6	102.35	4.796	
7,352.2	6,981.8	11,451.4	7,053.0	16.7	86.6	95.57	-169.1	-831.5	488.8	386.2	102.54	4.766 CC, ES, SF	
7,400.0	6,981.2	11,403.6	7,053.2	17.1	85.7	95.66	-216.9	-832.4	488.9	387.0	101.90	4.798	
7,500.0	6,981.2	11,303.6	7,053.6	17.8	83.8	95.70	-316.9	-834.3	489.2	388.5	100.77	4.855	
7,600.0	6,981.2	11,203.6	7,054.0	18.8	81.9	95.74	-416.9	-836.1	489.5	389.7	99.81	4.905	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

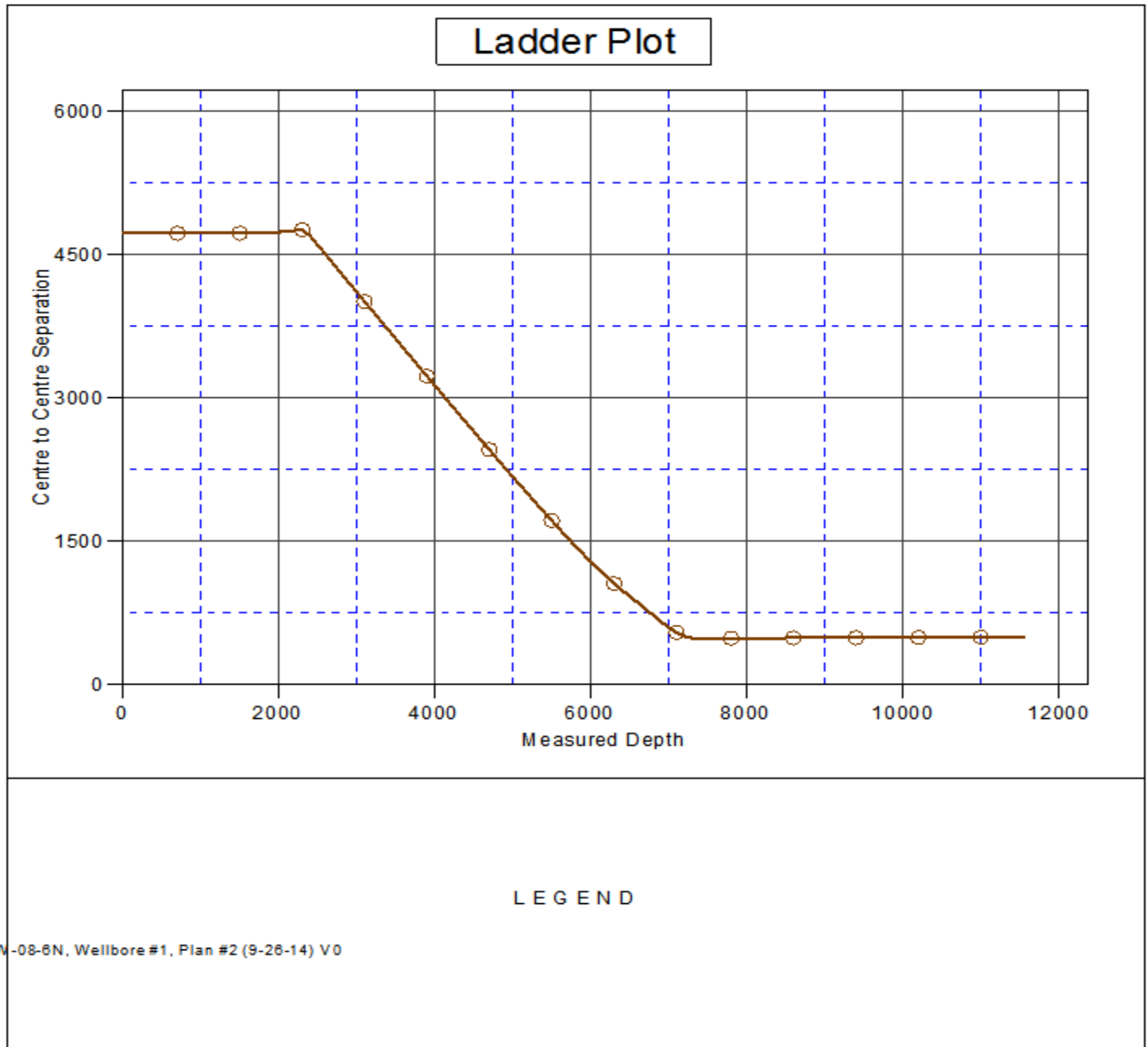
<b>Company:</b>	Verdad Oil & Gas Corporation	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Project:</b>	Sec.8-T1N-R64W	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Reference Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	landmark
<b>Reference Design:</b>	Plan #2 (3-26-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Blackburn 01N-64W-08-6N Sec.8-T1N-R64W - Blackburn 01N-64W-08-6N - Wellbore #1 - Plan #2 (9-2)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,700.0	6,981.2	11,103.6	7,054.4	19.9	80.1	95.78	-516.8	-838.0	489.8	390.8	99.00	4.948	
7,800.0	6,981.2	11,003.6	7,054.7	21.1	78.2	95.82	-616.8	-839.9	490.2	391.8	98.31	4.986	
7,900.0	6,981.2	10,903.6	7,055.1	22.4	76.3	95.87	-716.8	-841.7	490.5	392.7	97.73	5.018	
8,000.0	6,981.2	10,803.6	7,055.5	23.7	74.5	95.91	-816.8	-843.6	490.8	393.5	97.23	5.047	
8,100.0	6,981.2	10,703.6	7,055.9	25.2	72.6	95.95	-916.8	-845.5	491.1	394.2	96.81	5.072	
8,200.0	6,981.2	10,603.6	7,056.3	26.7	70.7	95.99	-1,016.7	-847.3	491.4	394.9	96.45	5.095	
8,300.0	6,981.2	10,503.6	7,056.7	28.2	68.9	96.03	-1,116.7	-849.2	491.7	395.5	96.14	5.114	
8,400.0	6,981.2	10,403.6	7,057.0	29.8	67.0	96.07	-1,216.7	-851.1	492.0	396.1	95.87	5.132	
8,500.0	6,981.2	10,303.6	7,057.4	31.4	65.1	96.11	-1,316.7	-852.9	492.3	396.6	95.64	5.147	
8,600.0	6,981.2	10,203.6	7,057.8	33.1	63.3	96.15	-1,416.7	-854.8	492.6	397.1	95.44	5.161	
8,700.0	6,981.2	10,103.6	7,058.2	34.7	61.4	96.20	-1,516.6	-856.7	492.9	397.6	95.27	5.173	
8,800.0	6,981.2	10,003.6	7,058.6	36.4	59.6	96.24	-1,616.6	-858.5	493.2	398.0	95.13	5.184	
8,900.0	6,981.2	9,903.6	7,059.0	38.2	57.7	96.28	-1,716.6	-860.4	493.5	398.5	95.01	5.194	
9,000.0	6,981.2	9,803.6	7,059.3	39.9	55.9	96.32	-1,816.6	-862.3	493.8	398.9	94.91	5.202	
9,100.0	6,981.2	9,703.6	7,059.7	41.7	54.1	96.36	-1,916.6	-864.1	494.1	399.2	94.83	5.210	
9,200.0	6,981.2	9,603.6	7,060.1	43.4	52.2	96.40	-2,016.5	-866.0	494.4	399.6	94.77	5.217	
9,300.0	6,981.2	9,503.6	7,060.5	45.2	50.4	96.44	-2,116.5	-867.9	494.7	400.0	94.73	5.222	
9,400.0	6,981.2	9,403.6	7,060.9	47.0	48.6	96.48	-2,216.5	-869.7	495.0	400.3	94.70	5.227	
9,500.0	6,981.2	9,303.6	7,061.3	48.8	46.8	96.52	-2,316.5	-871.6	495.3	400.6	94.68	5.231	
9,600.0	6,981.2	9,203.6	7,061.7	50.6	45.0	96.56	-2,416.5	-873.5	495.6	400.9	94.69	5.234	
9,700.0	6,981.2	9,103.6	7,062.0	52.4	43.2	96.60	-2,516.5	-875.3	495.9	401.2	94.70	5.236	
9,800.0	6,981.2	9,003.6	7,062.4	54.2	41.4	96.64	-2,616.4	-877.2	496.2	401.5	94.74	5.238	
9,900.0	6,981.2	8,903.6	7,062.8	56.0	39.6	96.69	-2,716.4	-879.1	496.5	401.7	94.79	5.238	
10,000.0	6,981.2	8,803.6	7,063.2	57.9	37.9	96.73	-2,816.4	-880.9	496.8	402.0	94.86	5.237	
10,100.0	6,981.2	8,703.6	7,063.6	59.7	36.1	96.77	-2,916.4	-882.8	497.1	402.2	94.95	5.236	
10,200.0	6,981.2	8,603.6	7,064.0	61.6	34.4	96.81	-3,016.4	-884.7	497.4	402.4	95.06	5.233	
10,300.0	6,981.2	8,503.6	7,064.3	63.4	32.7	96.85	-3,116.3	-886.5	497.7	402.5	95.20	5.228	
10,400.0	6,981.2	8,403.6	7,064.7	65.2	31.0	96.89	-3,216.3	-888.4	498.1	402.7	95.36	5.223	
10,500.0	6,981.2	8,303.6	7,065.1	67.1	29.4	96.93	-3,316.3	-890.3	498.4	402.8	95.56	5.215	
10,600.0	6,981.2	8,203.6	7,065.5	68.9	27.7	96.97	-3,416.3	-892.1	498.7	402.9	95.79	5.206	
10,700.0	6,981.2	8,103.6	7,065.9	70.8	26.2	97.01	-3,516.3	-894.0	499.0	402.9	96.06	5.195	
10,800.0	6,981.2	8,003.6	7,066.3	72.7	24.6	97.05	-3,616.2	-895.9	499.3	402.9	96.38	5.180	
10,900.0	6,981.2	7,903.6	7,066.6	74.5	23.1	97.09	-3,716.2	-897.7	499.6	402.8	96.76	5.163	
11,000.0	6,981.2	7,803.6	7,067.0	76.4	21.7	97.13	-3,816.2	-899.6	499.9	402.7	97.20	5.143	
11,100.0	6,981.2	7,703.6	7,067.4	78.3	20.4	97.17	-3,916.2	-901.5	500.2	402.5	97.73	5.118	
11,200.0	6,981.2	7,603.6	7,067.8	80.1	19.2	97.21	-4,016.2	-903.3	500.5	402.2	98.36	5.089	
11,300.0	6,981.2	7,503.6	7,068.2	82.0	18.1	97.25	-4,116.1	-905.2	500.8	401.7	99.11	5.053	
11,400.0	6,981.2	7,403.6	7,068.6	83.9	17.1	97.29	-4,216.1	-907.1	501.1	401.1	100.00	5.012	
11,500.0	6,981.2	7,294.0	7,062.3	85.8	16.2	96.57	-4,325.4	-909.1	500.7	399.6	101.11	4.952	
11,559.3	6,981.2	7,229.7	7,048.4	86.9	15.7	94.98	-4,388.1	-910.3	499.6	397.5	102.05	4.895	

<b>Company:</b>	Verdad Oil & Gas Corporation	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Project:</b>	Sec.8-T1N-R64W	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Reference Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	landmark
<b>Reference Design:</b>	Plan #2 (3-26-15)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5061.2ft (RKB - 16.2')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Blackburn 01N-64W-08-8N  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.60°



<b>Company:</b>	Verdad Oil & Gas Corporation	<b>Local Co-ordinate Reference:</b>	Well Blackburn 01N-64W-08-8N
<b>Project:</b>	Sec.8-T1N-R64W	<b>TVD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Reference Site:</b>	Blackburn 01N-64W-08-8N Sec.8-T1N-R64W	<b>MD Reference:</b>	WELL @ 5061.2ft (RKB - 16.2')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Blackburn 01N-64W-08-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	landmark
<b>Reference Design:</b>	Plan #2 (3-26-15)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5061.2ft (RKB - 16.2')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Blackburn 01N-64W-08-8N  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.60°

