

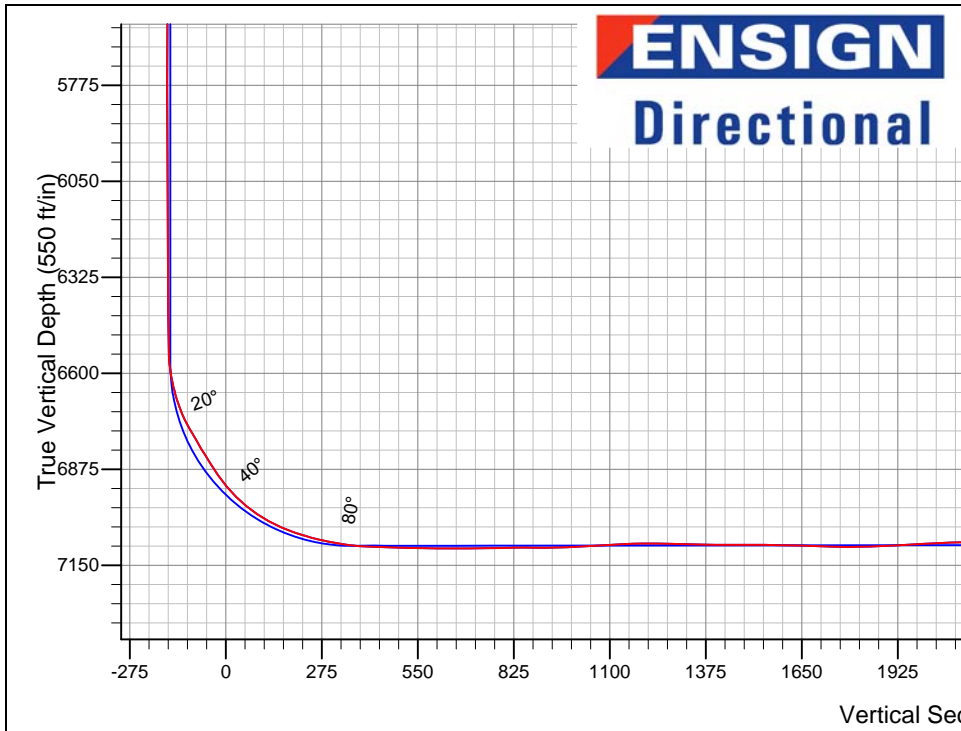
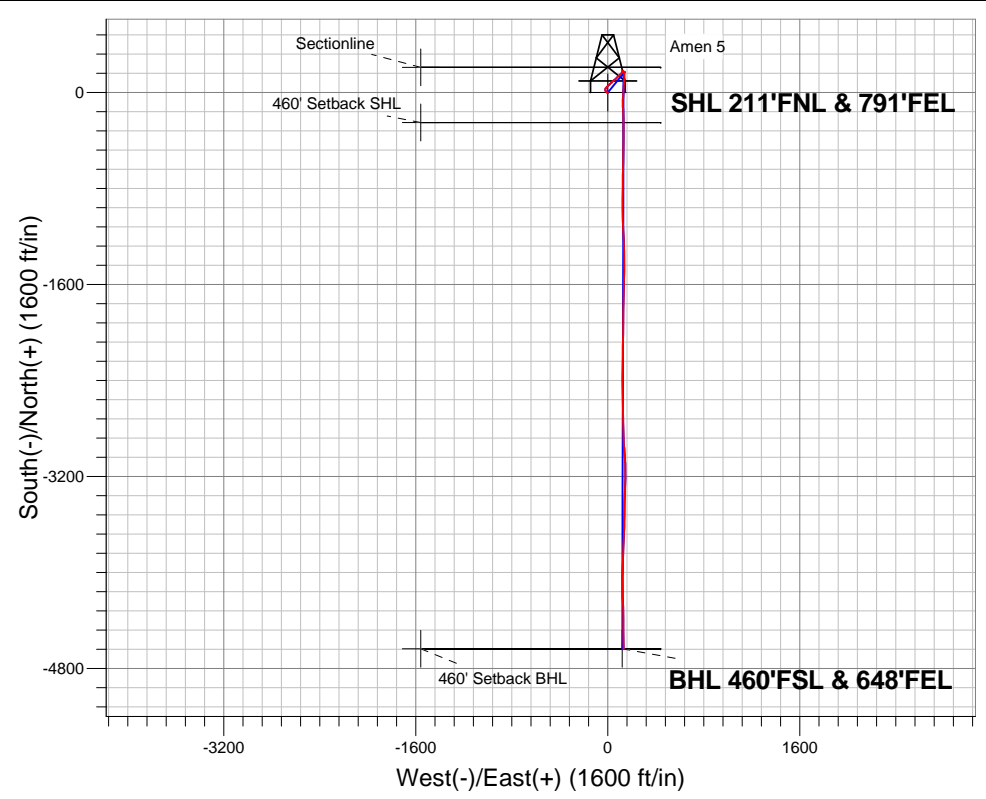
Verdad Oil & Gas Corporation

Well Name: **Amen 5**

Surface Location: Amen Pad Sec.14-T1N-R65W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4988.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1265243.14 3245094.90 40.058160 -104.624380
 RKB - 16.5' WELL @ 5004.5ft (RKB - 16.5')

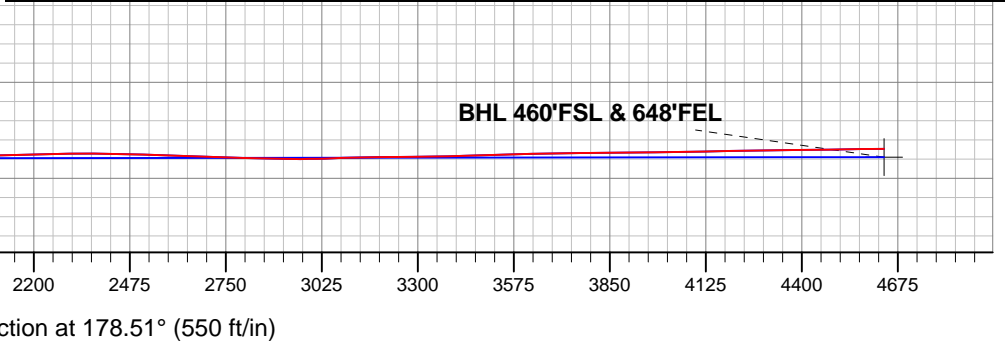
FINAL SURVEY

Projected Bottom Hole Location
 11663'MD 7066'TVD 4633'S & 132'E of SHL
 90.5 degree Incl @ 179.0 degree AZM



Amen Pad Sec.14-T1N-R65W Amen 5 Wellbore #1 14:01, November 04 2014	<h3>ANNOTATIONS</h3> <p>No annotation data is available.</p>
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<h3>LEGEND</h3> <ul style="list-style-type: none"> □ Amen 5, Wellbore #1, Plan #3 (10-17-14) V0 □ Wellbore #1 ○ Survey #1





Verdad Oil & Gas Corporation

SEC.14-T1N-R65W

Amen Pad Sec.14-T1N-R65W

Amen 5

Wellbore #1

Survey: Survey #1

Standard Survey Report

04 November, 2014

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Amen 5
Project:	SEC.14-T1N-R65W	TVD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Site:	Amen Pad Sec.14-T1N-R65W	MD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Well:	Amen 5	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.14-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	Amen Pad Sec.14-T1N-R65W				
Site Position:		Northing:	1,265,242.59 ft	Latitude:	40.058160
From:	Lat/Long	Easting:	3,245,036.12 ft	Longitude:	-104.624590
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.57 °

Well	Amen 5					
Well Position	+N/-S	0.0 ft	Northing:	1,265,243.14 ft	Latitude:	40.058160
	+E/-W	0.0 ft	Easting:	3,245,094.90 ft	Longitude:	-104.624380
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,988.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/17/2014	8.31	66.68	52,613

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	178.51	

Survey Program	Date	11/4/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
193.0	11,663.0	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	
460' Setback SHL										
0.4	0.00	246.30	0.4	0.0	0.0	0.0	0.00	0.00	0.00	
Sectionline										
1.0	0.00	246.30	1.0	0.0	0.0	0.0	0.00	0.00	0.00	
SHL 211'FNL & 791'FEL										
14.4	0.04	246.30	14.4	0.0	0.0	0.0	0.28	0.28	0.00	
460' Setback BHL										
193.0	0.50	246.30	193.0	-0.3	-0.8	0.3	0.26	0.26	0.00	
285.0	0.70	243.50	285.0	-0.8	-1.6	0.7	0.22	0.22	-3.04	
377.0	0.90	295.90	377.0	-0.7	-2.8	0.6	0.79	0.22	56.96	
468.0	1.00	297.80	468.0	0.0	-4.1	-0.1	0.12	0.11	2.09	
560.0	0.60	307.70	560.0	0.7	-5.2	-0.8	0.46	-0.43	10.76	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Amen 5
Project:	SEC.14-T1N-R65W	TVD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Site:	Amen Pad Sec.14-T1N-R65W	MD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Well:	Amen 5	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)	
652.0	0.90	295.40	652.0	1.3	-6.3	-1.4	0.37	0.33	-13.37	
744.0	1.20	311.70	743.9	2.2	-7.6	-2.4	0.46	0.33	17.72	
836.0	1.20	314.70	835.9	3.5	-9.0	-3.8	0.07	0.00	3.26	
928.0	1.70	320.70	927.9	5.3	-10.6	-5.5	0.57	0.54	6.52	
1,020.0	1.90	314.20	1,019.8	7.4	-12.5	-7.7	0.31	0.22	-7.07	
1,111.0	2.10	317.50	1,110.8	9.7	-14.8	-10.1	0.25	0.22	3.63	
1,237.0	2.30	323.50	1,236.7	13.4	-17.8	-13.9	0.24	0.16	4.76	
1,353.0	2.30	344.20	1,352.6	17.5	-19.8	-18.0	0.71	0.00	17.84	
1,445.0	2.60	343.70	1,444.5	21.3	-20.9	-21.8	0.33	0.33	-0.54	
1,537.0	3.30	6.20	1,536.4	25.9	-21.2	-26.5	1.46	0.76	24.46	
1,631.0	3.10	23.10	1,630.3	31.0	-19.9	-31.5	1.02	-0.21	17.98	
1,726.0	2.40	24.00	1,725.1	35.1	-18.1	-35.6	0.74	-0.74	0.95	
1,820.0	2.90	54.00	1,819.1	38.3	-15.4	-38.7	1.55	0.53	31.91	
1,915.0	3.60	38.40	1,913.9	42.1	-11.6	-42.4	1.18	0.74	-16.42	
2,009.0	3.50	38.00	2,007.7	46.7	-8.0	-46.9	0.11	-0.11	-0.43	
2,102.0	3.20	46.60	2,100.6	50.7	-4.4	-50.8	0.63	-0.32	9.25	
2,197.0	3.10	39.40	2,195.4	54.5	-0.8	-54.5	0.43	-0.11	-7.58	
2,291.0	4.00	47.90	2,289.2	58.7	3.2	-58.5	1.11	0.96	9.04	
2,386.0	3.40	65.30	2,384.0	62.0	8.3	-61.8	1.33	-0.63	18.32	
2,480.0	5.80	45.60	2,477.7	66.5	14.2	-66.1	3.02	2.55	-20.96	
2,575.0	6.10	43.10	2,572.2	73.6	21.1	-73.0	0.42	0.32	-2.63	
2,670.0	6.40	48.20	2,666.7	80.8	28.5	-80.0	0.66	0.32	5.37	
2,764.0	7.30	42.60	2,760.0	88.7	36.4	-87.7	1.19	0.96	-5.96	
2,859.0	7.30	45.20	2,854.2	97.4	44.8	-96.2	0.35	0.00	2.74	
2,954.0	7.00	55.20	2,948.5	104.9	53.8	-103.5	1.35	-0.32	10.53	
3,049.0	7.70	48.90	3,042.7	112.4	63.4	-110.7	1.12	0.74	-6.63	
3,143.0	6.50	42.40	3,136.0	120.5	71.7	-118.6	1.53	-1.28	-6.91	
3,237.0	7.10	44.30	3,229.3	128.6	79.3	-126.5	0.68	0.64	2.02	
3,331.0	6.60	50.00	3,322.7	136.2	87.5	-133.9	0.90	-0.53	6.06	
3,426.0	6.60	46.10	3,417.0	143.5	95.7	-141.0	0.47	0.00	-4.11	
3,520.0	6.10	45.40	3,510.4	150.8	103.1	-148.0	0.54	-0.53	-0.74	
3,615.0	4.60	49.60	3,605.0	156.8	109.6	-153.9	1.63	-1.58	4.42	
3,710.0	4.70	42.40	3,699.7	162.1	115.1	-159.1	0.62	0.11	-7.58	
3,804.0	4.00	24.80	3,793.5	167.9	119.1	-164.8	1.59	-0.74	-18.72	
3,898.0	3.20	31.30	3,887.3	173.2	121.8	-169.9	0.95	-0.85	6.91	
3,994.0	1.90	34.30	3,983.2	176.8	124.1	-173.5	1.36	-1.35	3.13	
4,088.0	1.80	6.70	4,077.1	179.5	125.2	-176.2	0.94	-0.11	-29.36	
4,182.0	0.20	226.60	4,171.1	180.9	125.2	-177.6	2.08	-1.70	-149.04	
4,277.0	0.30	271.80	4,266.1	180.8	124.9	-177.5	0.22	0.11	47.58	
4,372.0	1.30	16.00	4,361.1	181.8	124.9	-178.5	1.48	1.05	109.68	
4,466.0	0.40	168.10	4,455.1	182.5	125.3	-179.2	1.77	-0.96	161.81	
4,561.0	0.30	225.00	4,550.1	182.0	125.2	-178.7	0.36	-0.11	59.89	
4,656.0	0.50	259.90	4,645.1	181.8	124.6	-178.5	0.32	0.21	36.74	
4,750.0	0.40	276.20	4,739.1	181.7	123.8	-178.4	0.17	-0.11	17.34	
4,845.0	2.20	150.90	4,834.1	180.2	124.4	-176.9	2.58	1.89	-131.90	
4,939.0	1.60	131.50	4,928.0	177.7	126.3	-174.4	0.93	-0.64	-20.64	
5,033.0	1.50	104.10	5,022.0	176.5	128.4	-173.2	0.79	-0.11	-29.15	
5,127.0	1.50	94.80	5,115.9	176.1	130.9	-172.7	0.26	0.00	-9.89	
5,221.0	2.80	127.50	5,209.9	174.6	133.9	-171.1	1.85	1.38	34.79	
5,315.0	2.00	111.10	5,303.8	172.7	137.3	-169.0	1.11	-0.85	-17.45	
5,409.0	1.80	101.60	5,397.7	171.8	140.2	-168.1	0.40	-0.21	-10.11	
5,503.0	0.40	213.30	5,491.7	171.2	141.5	-167.5	2.11	-1.49	118.83	
5,598.0	0.10	321.70	5,586.7	171.0	141.3	-167.3	0.47	-0.32	114.11	
5,691.0	0.40	328.20	5,679.7	171.3	141.0	-167.6	0.32	0.32	6.99	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Amen 5
Project:	SEC.14-T1N-R65W	TVD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Site:	Amen Pad Sec.14-T1N-R65W	MD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Well:	Amen 5	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)	
5,785.0	0.40	317.50	5,773.7	171.8	140.6	-168.1	0.08	0.00	-11.38	
5,879.0	1.00	231.70	5,867.7	171.6	139.8	-167.9	1.12	0.64	-91.28	
5,973.0	1.00	241.60	5,961.7	170.7	138.4	-167.0	0.18	0.00	10.53	
6,066.0	0.80	265.00	6,054.7	170.2	137.1	-166.6	0.45	-0.22	25.16	
6,161.0	0.50	245.40	6,149.7	170.0	136.0	-166.4	0.39	-0.32	-20.63	
6,255.0	0.20	159.70	6,243.7	169.7	135.7	-166.1	0.56	-0.32	-91.17	
6,350.0	0.80	135.90	6,338.7	169.1	136.2	-165.5	0.66	0.63	-25.05	
6,444.0	0.60	120.30	6,432.7	168.3	137.1	-164.7	0.29	-0.21	-16.60	
6,538.0	0.60	165.30	6,526.7	167.6	137.7	-164.0	0.49	0.00	47.87	
6,585.0	6.10	180.00	6,573.6	164.9	137.7	-161.2	11.75	11.70	31.28	
6,633.0	11.20	181.50	6,621.0	157.7	137.6	-154.0	10.63	10.63	3.13	
6,680.0	16.40	181.10	6,666.6	146.5	137.3	-142.8	11.07	11.06	-0.85	
6,727.0	22.10	182.90	6,711.0	131.0	136.8	-127.4	12.19	12.13	3.83	
6,774.0	29.40	182.50	6,753.3	110.6	135.8	-107.0	15.54	15.53	-0.85	
6,822.0	30.10	180.90	6,795.0	86.8	135.1	-83.2	2.21	1.46	-3.33	
6,869.0	31.90	181.50	6,835.3	62.6	134.6	-59.1	3.89	3.83	1.28	
6,916.0	33.40	184.80	6,874.8	37.3	133.2	-33.8	4.95	3.19	7.02	
6,963.0	38.30	185.80	6,912.9	9.9	130.6	-6.5	10.50	10.43	2.13	
7,011.0	43.70	183.60	6,949.1	-21.5	128.1	24.8	11.64	11.25	-4.58	
7,058.0	50.30	182.00	6,981.2	-55.8	126.4	59.1	14.26	14.04	-3.40	
7,106.0	58.00	179.30	7,009.3	-94.7	126.0	97.9	16.67	16.04	-5.63	
7,153.0	64.30	177.40	7,031.9	-135.8	127.3	139.1	13.86	13.40	-4.04	
7,201.0	68.90	177.90	7,051.0	-179.8	129.1	183.1	9.63	9.58	1.04	
7,248.0	73.20	178.50	7,066.3	-224.2	130.4	227.5	9.23	9.15	1.28	
7,295.0	77.30	179.70	7,078.2	-269.7	131.2	273.0	9.07	8.72	2.55	
7,360.0	81.70	180.20	7,090.1	-333.6	131.2	336.8	6.81	6.77	0.77	
7,435.0	87.90	180.80	7,096.9	-408.2	130.6	411.5	8.30	8.27	0.80	
7,529.0	88.20	181.10	7,100.1	-502.1	129.0	505.3	0.45	0.32	0.32	
7,623.0	89.80	180.60	7,101.7	-596.1	127.6	599.2	1.78	1.70	-0.53	
7,718.0	90.20	180.80	7,101.7	-691.1	126.4	694.2	0.47	0.42	0.21	
7,813.0	91.30	180.60	7,100.4	-786.1	125.3	789.1	1.18	1.16	-0.21	
7,907.0	89.40	179.90	7,099.9	-880.1	124.9	883.0	2.15	-2.02	-0.74	
8,002.0	92.20	179.70	7,098.5	-975.1	125.2	978.0	2.95	2.95	-0.21	
8,096.0	94.00	178.80	7,093.5	-1,068.9	126.4	1,071.8	2.14	1.91	-0.96	
8,191.0	91.70	178.50	7,088.7	-1,163.8	128.7	1,166.7	2.44	-2.42	-0.32	
8,285.0	88.60	177.60	7,088.5	-1,257.7	131.9	1,260.7	3.43	-3.30	-0.96	
8,380.0	88.60	178.30	7,090.8	-1,352.6	135.3	1,355.7	0.74	0.00	0.74	
8,474.0	89.90	179.20	7,092.0	-1,446.6	137.3	1,449.6	1.68	1.38	0.96	
8,569.0	90.00	181.50	7,092.1	-1,541.6	136.7	1,544.6	2.42	0.11	2.42	
8,664.0	88.10	182.20	7,093.7	-1,636.5	133.7	1,639.4	2.13	-2.00	0.74	
8,758.0	88.10	181.50	7,096.8	-1,730.4	130.6	1,733.2	0.74	0.00	-0.74	
8,853.0	91.50	180.90	7,097.2	-1,825.4	128.6	1,828.1	3.63	3.58	-0.63	
8,948.0	93.50	180.00	7,093.0	-1,920.3	127.9	1,922.9	2.31	2.11	-0.95	
9,042.0	92.70	181.10	7,087.9	-2,014.1	127.0	2,016.7	1.45	-0.85	1.17	
9,138.0	91.50	180.40	7,084.4	-2,110.0	125.7	2,112.6	1.45	-1.25	-0.73	
9,232.0	91.20	180.20	7,082.2	-2,204.0	125.3	2,206.5	0.38	-0.32	-0.21	
9,327.0	91.40	180.60	7,080.0	-2,299.0	124.6	2,301.4	0.47	0.21	0.42	
9,422.0	88.70	180.20	7,080.0	-2,394.0	123.9	2,396.4	2.87	-2.84	-0.42	
9,517.0	88.60	179.90	7,082.2	-2,488.9	123.8	2,491.3	0.33	-0.11	-0.32	
9,612.0	88.20	178.80	7,084.8	-2,583.9	124.9	2,586.3	1.23	-0.42	-1.16	
9,707.0	87.70	178.50	7,088.2	-2,678.8	127.2	2,681.2	0.61	-0.53	-0.32	
9,801.0	88.40	179.70	7,091.4	-2,772.7	128.6	2,775.1	1.48	0.74	1.28	
9,895.0	88.80	177.90	7,093.7	-2,866.7	130.6	2,869.1	1.96	0.43	-1.91	
9,990.0	89.80	174.80	7,094.9	-2,961.5	136.6	2,964.0	3.43	1.05	-3.26	

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Site:	Amen Pad Sec.14-T1N-R65W	MD Reference:	WELL @ 5004.5ft (RKB - 16.5')
Well:	Amen 5	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)	
10,084.0	92.60	177.10	7,092.9	-3,055.2	143.3	3,057.9	3.85	2.98	2.45	
10,180.0	90.80	178.80	7,090.1	-3,151.1	146.7	3,153.8	2.58	-1.88	1.77	
10,274.0	90.20	182.30	7,089.3	-3,245.1	145.8	3,247.8	3.78	-0.64	3.72	
10,369.0	91.20	181.50	7,088.1	-3,340.0	142.7	3,342.6	1.35	1.05	-0.84	
10,463.0	91.60	180.80	7,085.8	-3,434.0	140.8	3,436.5	0.86	0.43	-0.74	
10,557.0	91.70	181.80	7,083.1	-3,527.9	138.6	3,530.3	1.07	0.11	1.06	
10,652.0	91.60	180.80	7,080.4	-3,622.8	136.5	3,625.2	1.06	-0.11	-1.05	
10,748.0	90.50	181.60	7,078.6	-3,718.8	134.5	3,721.0	1.42	-1.15	0.83	
10,842.0	90.70	184.10	7,077.6	-3,812.7	129.8	3,814.8	2.67	0.21	2.66	
10,937.0	90.90	182.20	7,076.3	-3,907.5	124.6	3,909.4	2.01	0.21	-2.00	
11,031.0	90.10	179.20	7,075.5	-4,001.5	123.4	4,003.3	3.30	-0.85	-3.19	
11,125.0	91.30	179.00	7,074.3	-4,095.5	124.9	4,097.3	1.29	1.28	-0.21	
11,220.0	91.30	179.00	7,072.2	-4,190.4	126.6	4,192.3	0.00	0.00	0.00	
11,314.0	90.80	179.70	7,070.4	-4,284.4	127.6	4,286.3	0.92	-0.53	0.74	
11,409.0	90.50	179.30	7,069.4	-4,379.4	128.5	4,381.3	0.53	-0.32	-0.42	
11,505.0	91.10	179.30	7,068.0	-4,475.4	129.6	4,477.2	0.63	0.63	0.00	
11,599.0	90.50	179.00	7,066.7	-4,569.4	131.0	4,571.2	0.71	-0.64	-0.32	
11,663.0	90.50	179.00	7,066.2	-4,633.3	132.2	4,635.2	0.00	0.00	0.00	
BHL 460'FSL & 660'FEL										

Checked By: _____	Approved By: _____	Date: _____
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