

Bayswater Exploration & Production, LLC

Well Name: **Matrix N-29HC**

Surface Location: Matrix 29- Pad Sec.29-T6N-R65W

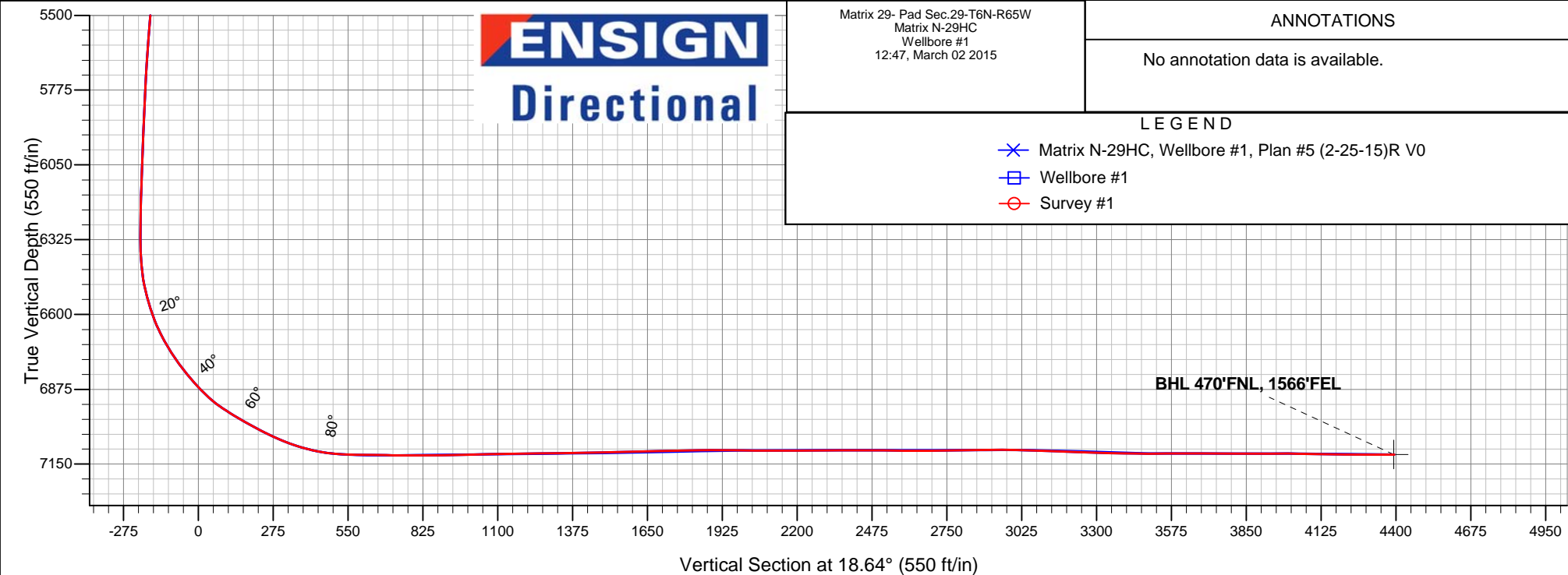
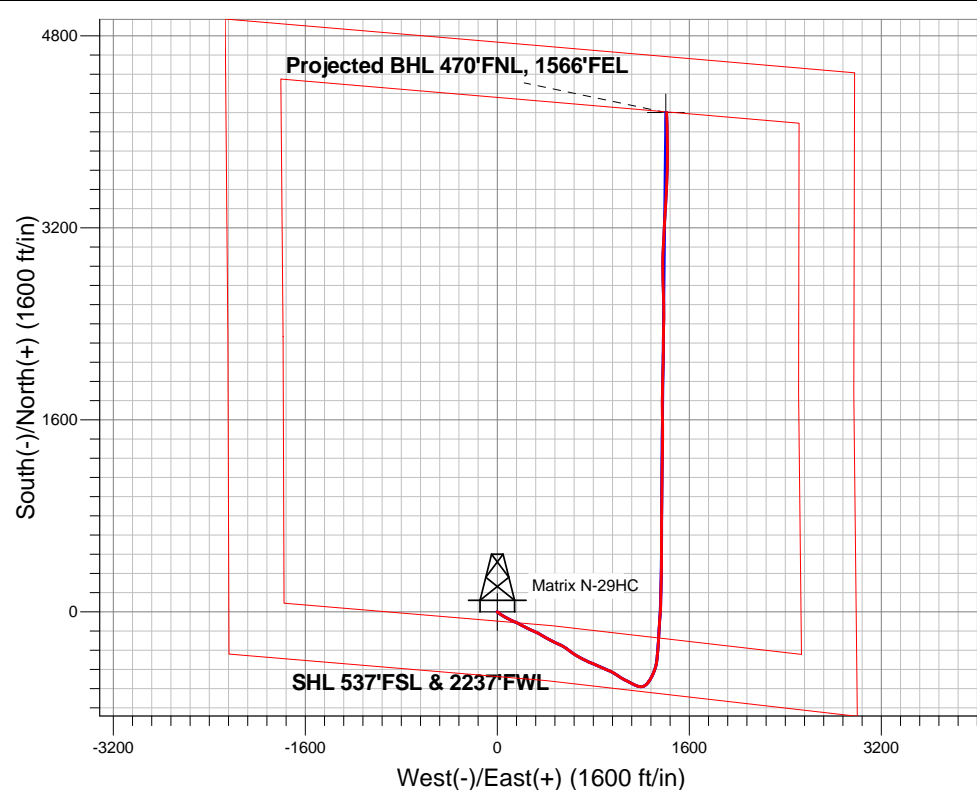
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4708.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1408871.98	3225781.76	40.452920	-104.688679	
RKB - 22.5' WELL @ 4730.5ft (RKB - 22.5')						

FINAL SURVEY

Projected Bottom Hole Location
11777'MD 7115'TVD 4162'N & 1410'E of SHL
89.96 degree Incl @ 358.23 degree AZM





Bayswater Exploration & Production, LLC

SEC.29-T6N-R65W

Matrix 29- Pad Sec.29-T6N-R65W

Matrix N-29HC

Wellbore #1

Survey: Survey #1

Standard Survey Report

02 March, 2015



BAYSWATER
EXPLORATION & PRODUCTION, LLC

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Matrix N-29HC
Project:	SEC.29-T6N-R65W	TVD Reference:	WELL @ 4730.5ft (RKB - 22.5')
Site:	Matrix 29- Pad Sec.29-T6N-R65W	MD Reference:	WELL @ 4730.5ft (RKB - 22.5')
Well:	Matrix N-29HC	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.29-T6N-R65W		
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	Matrix 29- Pad Sec.29-T6N-R65W				
Site Position:		Northing:	1,408,840.92 ft	Latitude:	40.452836
From:	Lat/Long	Easting:	3,225,730.56 ft	Longitude:	-104.688864
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.52 °

Well	Matrix N-29HC					
Well Position	+N/-S	0.0 ft	Northing:	1,408,871.98 ft	Latitude:	40.452920
	+E/-W	0.0 ft	Easting:	3,225,781.76 ft	Longitude:	-104.688679
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,708.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/24/2015	8.34	66.98	52,787

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 (°)	
	7,114.5	0.0	0.0	18.64	

Survey Program	Date	3/2/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
128.0	11,777.0	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	0.00	209.80	1.0	0.0	0.0	0.0	0.23	0.23	0.00	
SHL 537'FSL & 2237'FWL										
128.0	0.30	209.80	128.0	-0.3	-0.2	-0.3	0.23	0.23	0.00	
220.0	0.20	165.90	220.0	-0.7	-0.2	-0.7	0.23	-0.11	-47.72	
312.0	0.40	212.50	312.0	-1.1	-0.4	-1.1	0.33	0.22	50.65	
404.0	0.30	304.00	404.0	-1.2	-0.8	-1.4	0.55	-0.11	99.46	
496.0	0.20	336.70	496.0	-0.9	-1.0	-1.2	0.19	-0.11	35.54	
588.0	0.10	291.60	588.0	-0.8	-1.2	-1.1	0.16	-0.11	-49.02	
680.0	0.50	309.50	680.0	-0.5	-1.5	-0.9	0.44	0.43	19.46	
705.0	0.40	277.70	705.0	-0.4	-1.7	-0.9	1.06	-0.40	-127.20	
827.0	0.40	171.30	827.0	-0.8	-2.1	-1.4	0.53	0.00	-87.21	
923.0	1.80	108.00	923.0	-1.6	-0.6	-1.7	1.73	1.46	-65.94	

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Well:	Matrix N-29HC	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)
1,018.0	3.10	111.70	1,017.9	-3.0	3.2	-1.8	1.38	1.37	3.89
1,113.0	4.30	119.30	1,112.7	-5.7	8.7	-2.6	1.36	1.26	8.00
1,205.0	6.30	134.40	1,204.3	-10.9	15.3	-5.4	2.63	2.17	16.41
1,297.0	8.00	128.40	1,295.6	-18.4	24.0	-9.8	2.02	1.85	-6.52
1,389.0	9.80	124.20	1,386.5	-26.8	35.5	-14.0	2.08	1.96	-4.57
1,481.0	11.80	120.50	1,476.8	-35.9	50.0	-18.1	2.30	2.17	-4.02
1,573.0	12.90	118.70	1,566.7	-45.6	67.1	-21.8	1.27	1.20	-1.96
1,665.0	14.20	116.60	1,656.1	-55.6	86.2	-25.1	1.51	1.41	-2.28
1,758.0	14.90	116.60	1,746.2	-66.1	107.1	-28.4	0.75	0.75	0.00
1,850.0	15.70	115.20	1,834.9	-76.7	129.0	-31.4	0.96	0.87	-1.52
1,942.0	13.30	109.20	1,924.0	-85.5	150.2	-33.0	3.07	-2.61	-6.52
2,034.0	14.40	118.20	2,013.3	-94.4	170.3	-35.0	2.63	1.20	9.78
2,126.0	15.30	118.20	2,102.2	-105.5	191.1	-38.9	0.98	0.98	0.00
2,218.0	15.00	119.60	2,191.0	-117.1	212.1	-43.2	0.51	-0.33	1.52
2,310.0	15.50	116.80	2,279.8	-128.5	233.5	-47.2	0.97	0.54	-3.04
2,402.0	16.30	117.20	2,368.3	-140.0	255.9	-50.8	0.88	0.87	0.43
2,494.0	14.60	112.60	2,456.9	-150.3	278.1	-53.6	2.28	-1.85	-5.00
2,590.0	15.50	113.60	2,549.6	-160.1	301.0	-55.5	0.98	0.94	1.04
2,685.0	15.30	113.30	2,641.2	-170.2	324.2	-57.6	0.23	-0.21	-0.32
2,780.0	17.00	122.30	2,732.5	-182.6	347.4	-61.9	3.18	1.79	9.47
2,876.0	17.00	120.70	2,824.3	-197.2	371.4	-68.2	0.49	0.00	-1.67
2,971.0	15.90	116.80	2,915.4	-210.2	394.9	-72.9	1.64	-1.16	-4.11
3,066.0	16.10	120.70	3,006.7	-222.8	417.9	-77.5	1.15	0.21	4.11
3,161.0	15.40	119.40	3,098.2	-235.7	440.2	-82.6	0.83	-0.74	-1.37
3,256.0	14.50	115.90	3,190.0	-247.1	461.9	-86.5	1.34	-0.95	-3.68
3,351.0	13.50	113.30	3,282.1	-256.7	482.8	-88.9	1.24	-1.05	-2.74
3,446.0	13.60	112.80	3,374.5	-265.4	503.2	-90.6	0.16	0.11	-0.53
3,542.0	14.10	118.00	3,467.7	-275.2	524.0	-93.3	1.40	0.52	5.42
3,637.0	13.20	115.80	3,560.0	-285.4	544.0	-96.5	1.09	-0.95	-2.32
3,732.0	12.80	124.70	3,652.6	-296.1	562.4	-100.8	2.15	-0.42	9.37
3,827.0	15.40	129.30	3,744.7	-310.1	580.8	-108.2	2.98	2.74	4.84
3,923.0	17.60	126.10	3,836.8	-326.7	602.4	-117.0	2.48	2.29	-3.33
4,018.0	17.90	123.70	3,927.2	-343.3	626.1	-125.1	0.83	0.32	-2.53
4,113.0	17.50	122.30	4,017.8	-359.0	650.4	-132.3	0.61	-0.42	-1.47
4,208.0	16.60	119.60	4,108.6	-373.3	674.2	-138.2	1.26	-0.95	-2.84
4,303.0	15.80	118.60	4,199.8	-386.2	697.4	-143.0	0.89	-0.84	-1.05
4,399.0	14.90	116.30	4,292.4	-398.0	719.9	-146.9	1.13	-0.94	-2.40
4,494.0	14.00	115.90	4,384.4	-408.4	741.2	-150.0	0.95	-0.95	-0.42
4,589.0	13.30	114.00	4,476.7	-417.9	761.5	-152.5	0.87	-0.74	-2.00
4,684.0	12.70	111.70	4,569.3	-426.2	781.2	-154.1	0.83	-0.63	-2.42
4,779.0	11.60	110.10	4,662.1	-433.3	799.9	-154.9	1.21	-1.16	-1.68
4,874.0	12.30	114.50	4,755.1	-440.8	818.1	-156.1	1.21	0.74	4.63
4,970.0	13.80	115.20	4,848.6	-449.9	837.7	-158.5	1.57	1.56	0.73
5,065.0	15.60	115.60	4,940.5	-460.2	859.5	-161.3	1.90	1.89	0.42
5,160.0	14.90	114.20	5,032.1	-470.8	882.2	-164.1	0.83	-0.74	-1.47
5,255.0	14.00	112.10	5,124.1	-480.1	904.0	-165.9	1.10	-0.95	-2.21
5,351.0	12.60	109.60	5,217.5	-488.0	924.6	-166.8	1.58	-1.46	-2.60
5,446.0	13.60	113.10	5,310.1	-495.8	944.6	-167.9	1.34	1.05	3.68
5,541.0	13.10	121.60	5,402.5	-505.9	964.1	-171.1	2.13	-0.53	8.95
5,636.0	14.20	124.20	5,494.8	-518.1	982.9	-176.7	1.33	1.16	2.74
5,731.0	15.40	124.20	5,586.7	-531.7	1,002.9	-183.2	1.26	1.26	0.00
5,826.0	15.80	121.90	5,678.2	-545.6	1,024.4	-189.5	0.78	0.42	-2.42
5,921.0	14.10	119.40	5,770.0	-558.1	1,045.4	-194.7	1.91	-1.79	-2.63
6,016.0	15.20	118.60	5,861.9	-569.8	1,066.4	-199.0	1.18	1.16	-0.84

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Well:	Matrix N-29HC	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)
6,112.0	13.40	116.60	5,954.9	-580.8	1,087.4	-202.7	1.94	-1.88	-2.08
6,207.0	14.60	117.20	6,047.1	-591.2	1,107.9	-206.0	1.27	1.26	0.63
6,302.0	15.70	116.30	6,138.8	-602.4	1,130.1	-209.5	1.18	1.16	-0.95
6,397.0	13.50	112.40	6,230.7	-612.3	1,151.9	-211.9	2.54	-2.32	-4.11
6,444.0	13.20	111.40	6,276.4	-616.3	1,161.9	-212.6	0.81	-0.64	-2.13
6,492.0	13.90	110.00	6,323.1	-620.3	1,172.5	-213.0	1.61	1.46	-2.92
6,539.0	15.00	99.90	6,368.6	-623.3	1,183.8	-212.2	5.84	2.34	-21.49
6,588.0	15.70	90.30	6,415.9	-624.4	1,196.6	-209.1	5.37	1.43	-19.59
6,635.0	15.80	78.30	6,461.1	-623.1	1,209.3	-203.9	6.92	0.21	-25.53
6,683.0	17.90	62.10	6,507.1	-618.4	1,222.2	-195.2	10.67	4.38	-33.75
6,730.0	19.20	54.20	6,551.6	-610.5	1,234.8	-183.7	6.01	2.77	-16.81
6,778.0	20.80	42.30	6,596.8	-599.5	1,247.0	-169.4	9.09	3.33	-24.79
6,825.0	24.40	36.80	6,640.2	-585.6	1,258.4	-152.6	8.87	7.66	-11.70
6,873.0	28.30	32.80	6,683.2	-568.1	1,270.5	-132.1	8.92	8.13	-8.33
6,920.0	31.50	28.70	6,723.9	-547.9	1,282.5	-109.2	8.08	6.81	-8.72
6,968.0	34.90	23.80	6,764.1	-524.3	1,294.0	-83.2	9.02	7.08	-10.21
7,015.0	38.00	21.50	6,801.9	-498.6	1,304.8	-55.3	7.21	6.60	-4.89
7,064.0	40.70	18.00	6,839.8	-469.3	1,315.2	-24.3	7.13	5.51	-7.14
7,111.0	43.80	11.90	6,874.6	-438.8	1,323.3	7.2	10.93	6.60	-12.98
7,159.0	48.80	6.90	6,907.7	-404.6	1,328.9	41.4	12.85	10.42	-10.42
7,206.0	55.70	5.20	6,936.5	-367.7	1,332.8	77.7	14.96	14.68	-3.62
7,254.0	58.40	4.70	6,962.6	-327.6	1,336.3	116.8	5.69	5.63	-1.04
7,301.0	60.70	4.00	6,986.4	-287.2	1,339.4	156.1	5.06	4.89	-1.49
7,349.0	62.20	3.40	7,009.4	-245.1	1,342.1	196.8	3.31	3.13	-1.25
7,396.0	64.40	2.90	7,030.5	-203.2	1,344.4	237.3	4.78	4.68	-1.06
7,444.0	66.30	3.30	7,050.5	-159.6	1,346.8	279.3	4.03	3.96	0.83
7,491.0	68.20	4.00	7,068.7	-116.3	1,349.5	321.1	4.27	4.04	1.49
7,539.0	73.90	4.30	7,084.2	-71.1	1,352.8	365.1	11.89	11.88	0.63
7,586.0	76.10	4.50	7,096.4	-25.8	1,356.3	409.1	4.70	4.68	0.43
7,635.0	81.10	2.20	7,106.1	22.1	1,359.1	455.4	11.19	10.20	-4.69
7,670.0	84.00	1.80	7,110.6	56.8	1,360.3	488.6	8.36	8.29	-1.14
7,707.8	86.44	1.73	7,113.8	94.4	1,361.4	524.7	6.47	6.46	-0.18
Casing Pt. (N-29HC)									
7,754.0	89.43	1.65	7,115.4	140.6	1,362.8	568.8	6.47	6.46	-0.18
7,817.0	88.81	1.39	7,116.4	203.5	1,364.5	629.0	1.07	-0.98	-0.41
7,910.0	89.52	0.42	7,117.8	296.5	1,366.0	717.6	1.29	0.76	-1.04
8,005.0	90.13	0.33	7,118.1	391.5	1,366.6	807.8	0.65	0.64	-0.09
8,099.0	90.66	359.98	7,117.4	485.5	1,366.8	897.0	0.68	0.56	-0.37
8,193.0	91.19	359.72	7,115.9	579.5	1,366.6	986.0	0.63	0.56	-0.28
8,287.0	91.54	0.25	7,113.6	673.5	1,366.6	1,075.0	0.68	0.37	0.56
8,381.0	90.75	1.04	7,111.8	767.5	1,367.6	1,164.4	1.19	-0.84	0.84
8,475.0	90.48	0.86	7,110.8	861.4	1,369.2	1,253.9	0.35	-0.29	-0.19
8,569.0	90.84	1.21	7,109.7	955.4	1,370.9	1,343.5	0.53	0.38	0.37
8,664.0	91.10	359.89	7,108.1	1,050.4	1,371.8	1,433.8	1.42	0.27	-1.39
8,758.0	91.19	0.60	7,106.2	1,144.4	1,372.2	1,523.0	0.76	0.10	0.76
8,761.1	91.21	0.61	7,106.1	1,147.5	1,372.2	1,525.9	0.72	0.55	0.47
WP #1 (Matrix N-29HC)									
8,852.0	91.71	1.04	7,103.8	1,238.3	1,373.5	1,612.4	0.72	0.55	0.47
8,946.0	90.92	0.51	7,101.7	1,332.3	1,374.8	1,701.9	1.01	-0.84	-0.56
9,041.0	91.28	1.12	7,099.8	1,427.3	1,376.2	1,792.3	0.75	0.38	0.64
9,135.0	89.96	0.25	7,098.8	1,521.3	1,377.3	1,881.7	1.68	-1.40	-0.93
9,229.0	89.60	359.10	7,099.2	1,615.3	1,376.7	1,970.6	1.28	-0.38	-1.22
9,261.4	89.48	358.89	7,099.4	1,647.6	1,376.2	2,001.1	0.75	-0.37	-0.65
WP #2 (Matrix N-29HC)									

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Survey

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9,323.0	89.25	358.49	7,100.1	1,709.2	1,374.8	2,059.0	0.75	-0.37	-0.65
9,417.0	89.96	0.77	7,100.8	1,803.2	1,374.2	2,147.9	2.54	0.76	2.43
9,510.0	90.48	2.88	7,100.4	1,896.2	1,377.1	2,236.9	2.34	0.56	2.27
9,605.0	90.66	1.48	7,099.5	1,991.1	1,380.7	2,328.0	1.49	0.19	-1.47
9,699.0	89.96	359.98	7,099.0	2,085.1	1,381.9	2,417.4	1.76	-0.74	-1.60
9,793.0	89.16	0.86	7,099.7	2,179.1	1,382.6	2,506.7	1.27	-0.85	0.94
9,887.0	89.60	0.69	7,100.7	2,273.1	1,383.9	2,596.2	0.50	0.47	-0.18
9,981.0	90.22	0.95	7,100.8	2,367.0	1,385.2	2,685.7	0.72	0.66	0.28
10,075.0	91.01	0.60	7,099.8	2,461.0	1,386.5	2,775.1	0.92	0.84	-0.37
10,170.0	90.92	359.45	7,098.2	2,556.0	1,386.6	2,865.1	1.21	-0.09	-1.21
10,264.0	90.13	357.43	7,097.4	2,650.0	1,384.0	2,953.3	2.31	-0.84	-2.15
10,358.0	87.93	358.49	7,099.0	2,743.9	1,380.6	3,041.3	2.60	-2.34	1.13
10,359.5	87.93	358.50	7,099.0	2,745.3	1,380.6	3,042.6	1.05	-0.27	1.01
WP #3 (Matrix N-29HC)									
10,453.0	87.67	359.45	7,102.6	2,838.8	1,378.9	3,130.6	1.05	-0.27	1.01
10,547.0	88.55	0.86	7,105.7	2,932.7	1,379.2	3,219.7	1.77	0.94	1.50
10,642.0	88.37	2.36	7,108.3	3,027.7	1,381.9	3,310.5	1.59	-0.19	1.58
10,736.0	88.81	2.80	7,110.6	3,121.5	1,386.1	3,400.8	0.66	0.47	0.47
10,809.2	89.77	3.69	7,111.5	3,194.7	1,390.2	3,471.5	1.78	1.31	1.21
WP #4 (Matrix N-29HC)									
10,830.0	90.04	3.94	7,111.5	3,215.4	1,391.6	3,491.5	1.78	1.31	1.21
10,924.0	90.57	4.11	7,111.0	3,309.1	1,398.2	3,582.5	0.59	0.56	0.18
11,019.0	89.96	2.71	7,110.6	3,404.0	1,403.9	3,674.1	1.61	-0.64	-1.47
11,113.0	89.08	2.44	7,111.4	3,497.9	1,408.1	3,764.5	0.98	-0.94	-0.29
11,207.0	90.13	1.92	7,112.0	3,591.8	1,411.7	3,854.6	1.25	1.12	-0.55
11,301.0	90.66	1.83	7,111.4	3,685.7	1,414.7	3,944.6	0.57	0.56	-0.10
11,333.3	90.02	1.44	7,111.2	3,718.0	1,415.7	3,975.5	2.31	-1.97	-1.21
WP #5 (Matrix N-29HC)									
11,395.0	88.81	0.69	7,111.8	3,779.7	1,416.8	4,034.3	2.31	-1.97	-1.21
11,489.0	89.25	359.10	7,113.4	3,873.7	1,416.6	4,123.3	1.75	0.47	-1.69
11,583.0	89.52	359.10	7,114.4	3,967.7	1,415.2	4,211.9	0.29	0.29	0.00
11,678.0	89.96	358.23	7,114.8	4,062.7	1,412.9	4,301.2	1.03	0.46	-0.92
11,777.0	89.96	358.23	7,114.9	4,161.6	1,409.9	4,393.9	0.00	0.00	0.00
BHL 470'FNL, 1572'FEL									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SHL 537'FSL & 2237'I	0.00	0.00	1.0	0.0	0.0	1,408,871.99	3,225,781.76	40.452920	-104.688679
- hit/miss target									
- Shape									
- survey hits target center									
- Point									
BHL 470'FNL, 1572'FI	0.00	0.00	7,114.5	4,161.6	1,404.0	1,413,046.11	3,227,147.57	40.464343	-104.683633
- survey misses target center by 5.9ft at 11777.0ft MD (7114.9 TVD, 4161.6 N, 1409.9 E)									
- Point									

Checked By: _____ Approved By: _____ Date: _____