

Bayswater Exploration & Production, LLC

Well Name: **Holton I-12HN**

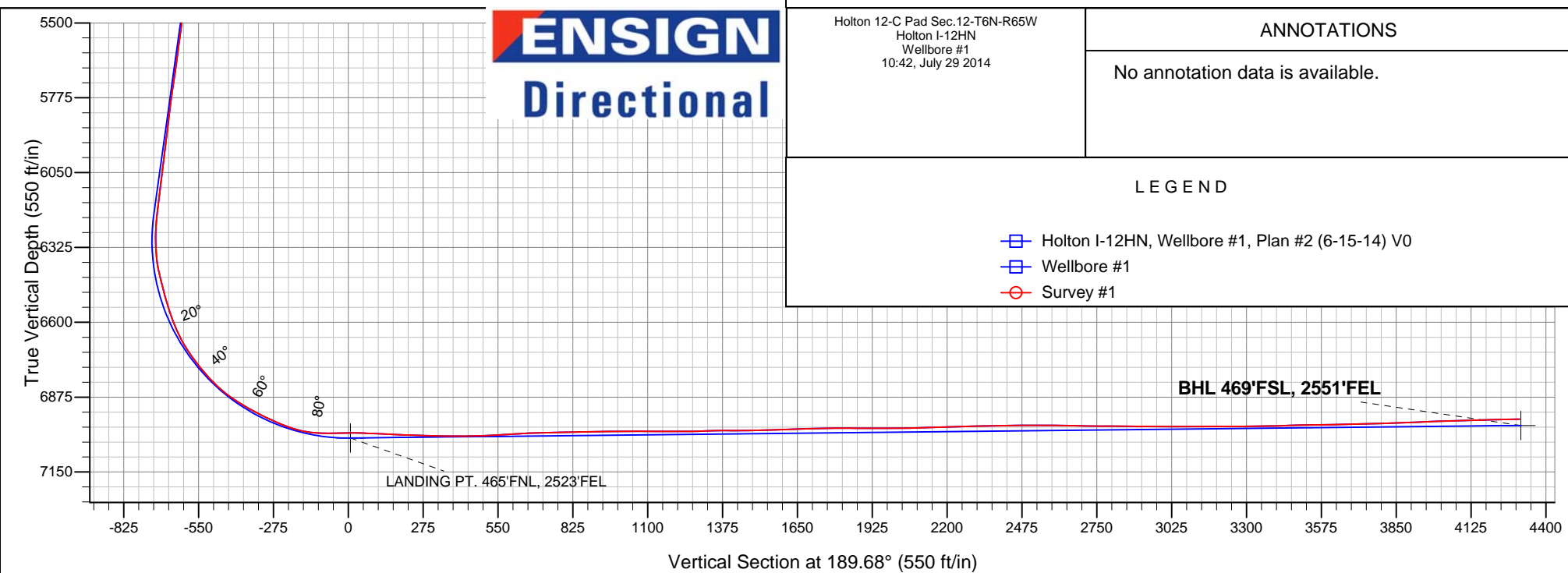
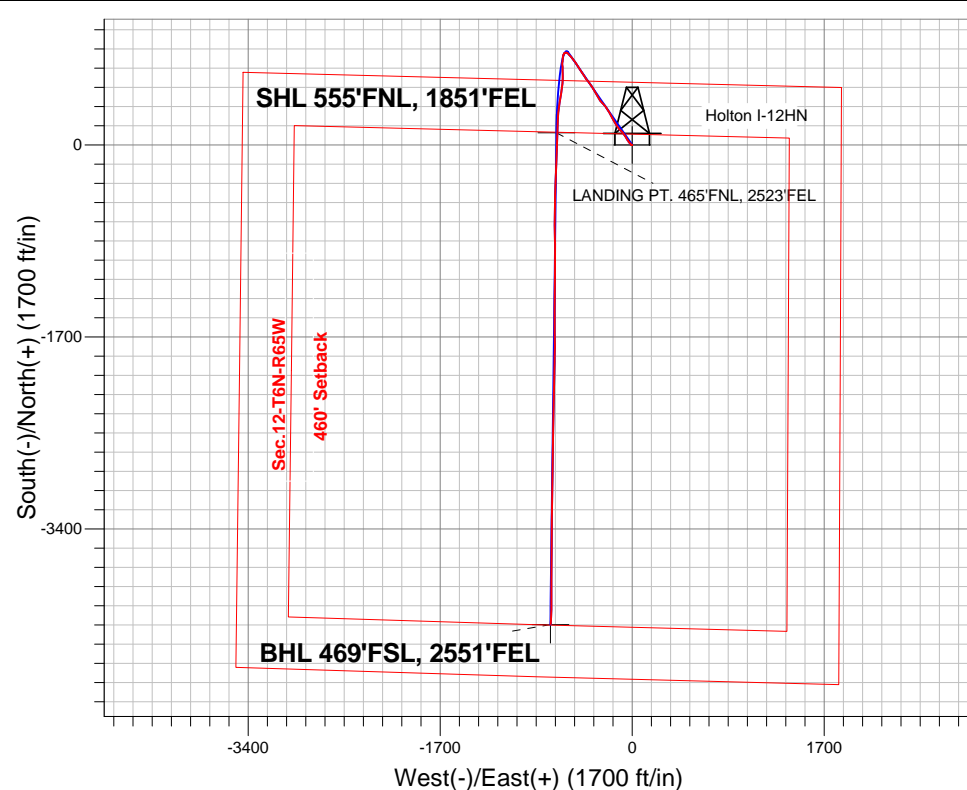
Surface Location: Holton 12-C Pad Sec.12-T6N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4718.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1428505.02	3247956.59	40.506225	-104.608292	
RKB - 22.5' WELL @ 4740.5ft (RKB - 22.5')						

FINAL SURVEY

Projected Bottom Hole Location
11880'MD 6956'TVD 4243'S & 721'W of SHL
91.2 degree Incl @ 182.47 degree AZM





Bayswater Exploration & Production, LLC

SEC.12-T6N-R65W

Holton 12-C Pad Sec.12-T6N-R65W

Holton I-12HN

Wellbore #1

Survey: Survey #1

Standard Survey Report

29 July, 2014



BAYSWATER
EXPLORATION & PRODUCTION, LLC

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Holton I-12HN
Project:	SEC.12-T6N-R65W	TVD Reference:	WELL @ 4740.5ft (RKB - 22.5')
Site:	Holton 12-C Pad Sec.12-T6N-R65W	MD Reference:	WELL @ 4740.5ft (RKB - 22.5')
Well:	Holton I-12HN	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.12-T6N-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	Holton 12-C Pad Sec.12-T6N-R65W		
Site Position:		Northing:	1,428,505.94 ft
From:	Lat/Long	Easting:	3,247,902.63 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.506229
		Longitude:	-104.608486
		Grid Convergence:	0.58 °

Well	Holton I-12HN		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.506225
		Longitude:	-104.608292
		Ground Level:	4,718.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	6/15/2014	8.38
			Dip Angle (°)
			67.06
			Field Strength (nT)
			52,888

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)
	0.0	0.0	0.0
			Direction (°)
			189.68

Survey Program	Date	7/29/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
166.0	11,880.0	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	294.20	1.0	0.0	0.0	0.0	0.90	0.90	0.00	
SHL 555'FNL, 1851'FEL										
166.0	1.50	294.20	166.0	0.9	-2.0	-0.5	0.90	0.90	0.00	
258.0	1.20	301.10	258.0	1.9	-3.9	-1.2	0.37	-0.33	7.50	
350.0	1.00	277.20	349.9	2.5	-5.5	-1.5	0.54	-0.22	-25.98	
442.0	0.40	158.20	441.9	2.3	-6.2	-1.2	1.35	-0.65	-129.35	
534.0	0.50	155.50	533.9	1.6	-5.9	-0.6	0.11	0.11	-2.93	
626.0	0.60	164.50	625.9	0.8	-5.6	0.2	0.14	0.11	9.78	
708.0	0.40	172.00	707.9	0.1	-5.5	0.8	0.26	-0.24	9.15	
830.0	0.20	155.70	829.9	-0.5	-5.3	1.4	0.18	-0.16	-13.36	
925.0	1.20	292.10	924.9	-0.3	-6.2	1.3	1.42	1.05	143.58	
1,020.0	4.00	316.70	1,019.8	2.5	-9.4	-0.9	3.11	2.95	25.89	

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Site:	Holton 12-C Pad Sec.12-T6N-R65W	MD Reference:	WELL @ 4740.5ft (RKB - 22.5')
Well:	Holton I-12HN	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)
1,115.0	5.60	319.30	1,114.5	8.4	-14.7	-5.8	1.70	1.68	2.74
1,210.0	8.00	316.50	1,208.8	16.7	-22.2	-12.7	2.55	2.53	-2.95
1,306.0	10.60	326.20	1,303.5	28.9	-31.8	-23.2	3.15	2.71	10.10
1,398.0	12.80	328.30	1,393.6	44.6	-41.8	-36.9	2.44	2.39	2.28
1,490.0	13.30	328.70	1,483.2	62.3	-52.7	-52.6	0.55	0.54	0.43
1,582.0	13.00	328.00	1,572.8	80.1	-63.6	-68.3	0.37	-0.33	-0.76
1,674.0	12.50	324.10	1,662.6	97.0	-75.0	-83.0	1.08	-0.54	-4.24
1,766.0	11.50	318.10	1,752.6	111.9	-86.9	-95.7	1.74	-1.09	-6.52
1,859.0	10.90	312.30	1,843.8	124.7	-99.6	-106.2	1.37	-0.65	-6.24
1,951.0	10.80	318.10	1,934.1	137.0	-111.8	-116.2	1.19	-0.11	6.30
2,043.0	10.20	323.00	2,024.6	149.9	-122.5	-127.2	1.17	-0.65	5.33
2,135.0	10.80	325.30	2,115.1	163.5	-132.3	-138.9	0.80	0.65	2.50
2,227.0	12.20	328.00	2,205.2	178.8	-142.3	-152.3	1.63	1.52	2.93
2,323.0	12.10	332.20	2,299.1	196.3	-152.4	-167.9	0.93	-0.10	4.38
2,418.0	10.70	327.80	2,392.2	212.6	-161.8	-182.3	1.73	-1.47	-4.63
2,513.0	11.30	332.00	2,485.4	228.3	-170.8	-196.3	1.05	0.63	4.42
2,608.0	9.80	331.30	2,578.8	243.6	-179.1	-210.0	1.58	-1.58	-0.74
2,703.0	10.90	329.90	2,672.3	258.4	-187.5	-223.2	1.19	1.16	-1.47
2,798.0	10.90	331.10	2,765.6	274.1	-196.3	-237.2	0.24	0.00	1.26
2,894.0	11.90	331.10	2,859.7	290.7	-205.5	-252.0	1.04	1.04	0.00
2,989.0	11.40	329.40	2,952.7	307.3	-215.0	-266.8	0.64	-0.53	-1.79
3,084.0	9.50	326.90	3,046.1	322.0	-224.1	-279.7	2.06	-2.00	-2.63
3,179.0	10.60	321.30	3,139.7	335.4	-233.8	-291.3	1.55	1.16	-5.89
3,274.0	11.10	320.40	3,233.0	349.2	-245.1	-303.0	0.56	0.53	-0.95
3,369.0	10.50	318.10	3,326.3	362.7	-256.7	-314.4	0.78	-0.63	-2.42
3,464.0	10.30	314.10	3,419.8	375.1	-268.6	-324.6	0.79	-0.21	-4.21
3,561.0	10.20	321.10	3,515.2	387.8	-280.2	-335.2	1.29	-0.10	7.22
3,656.0	10.00	328.10	3,608.7	401.4	-289.8	-346.9	1.31	-0.21	7.37
3,751.0	9.80	325.30	3,702.3	415.0	-298.8	-358.8	0.55	-0.21	-2.95
3,847.0	11.50	333.80	3,796.7	430.3	-307.7	-372.4	2.41	1.77	8.85
3,942.0	12.00	331.30	3,889.7	447.5	-316.6	-387.8	0.75	0.53	-2.63
4,037.0	12.70	331.60	3,982.5	465.3	-326.3	-403.8	0.74	0.74	0.32
4,132.0	13.00	331.10	4,075.1	483.9	-336.5	-420.4	0.34	0.32	-0.53
4,227.0	11.70	329.20	4,167.9	501.5	-346.5	-436.1	1.43	-1.37	-2.00
4,323.0	9.90	324.80	4,262.2	516.6	-356.3	-449.3	2.06	-1.88	-4.58
4,418.0	8.70	320.90	4,356.0	528.8	-365.5	-459.8	1.43	-1.26	-4.11
4,513.0	9.70	320.90	4,449.7	540.6	-375.1	-469.8	1.05	1.05	0.00
4,608.0	10.80	321.80	4,543.2	553.8	-385.7	-481.1	1.17	1.16	0.95
4,704.0	11.20	322.10	4,637.4	568.3	-397.0	-493.4	0.42	0.42	0.31
4,799.0	11.70	326.70	4,730.6	583.6	-407.9	-506.7	1.10	0.53	4.84
4,894.0	12.00	328.50	4,823.5	600.1	-418.4	-521.2	0.50	0.32	1.89
4,990.0	9.90	325.80	4,917.8	615.4	-428.2	-534.6	2.25	-2.19	-2.81
5,085.0	10.00	327.60	5,011.4	629.1	-437.2	-546.6	0.34	0.11	1.89
5,180.0	11.70	328.50	5,104.7	644.3	-446.7	-560.0	1.80	1.79	0.95
5,275.0	11.10	325.00	5,197.8	660.0	-457.0	-573.7	0.96	-0.63	-3.68
5,371.0	9.70	328.00	5,292.2	674.4	-466.5	-586.4	1.56	-1.46	3.13
5,466.0	9.40	326.00	5,385.9	687.7	-475.1	-597.9	0.47	-0.32	-2.11
5,561.0	9.80	327.60	5,479.6	700.9	-483.8	-609.6	0.51	0.42	1.68
5,656.0	10.30	326.70	5,573.1	714.8	-492.8	-621.8	0.55	0.53	-0.95
5,751.0	11.60	325.10	5,666.4	729.8	-502.9	-634.8	1.41	1.37	-1.68
5,846.0	11.10	325.10	5,759.5	745.1	-513.6	-648.1	0.53	-0.53	0.00
5,942.0	9.90	323.00	5,853.9	759.3	-523.9	-660.3	1.31	-1.25	-2.19
6,037.0	10.20	320.20	5,947.4	772.3	-534.2	-671.4	0.60	0.32	-2.95
6,132.0	11.30	318.50	6,040.8	785.7	-545.7	-682.7	1.20	1.16	-1.79

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Well:	Holton I-12HN	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)
6,227.0	12.40	316.00	6,133.7	800.0	-559.0	-694.6	1.28	1.16	-2.63
6,274.0	10.70	315.30	6,179.8	806.7	-565.5	-700.1	3.63	-3.62	-1.49
6,322.0	9.70	310.50	6,227.0	812.5	-571.8	-704.8	2.73	-2.08	-10.00
6,369.0	9.30	289.50	6,273.4	816.4	-578.3	-707.5	7.38	-0.85	-44.68
6,418.0	10.20	268.20	6,321.7	817.6	-586.4	-707.3	7.54	1.84	-43.47
6,465.0	12.10	246.40	6,367.8	815.4	-595.1	-703.7	9.76	4.04	-46.38
6,513.0	13.90	219.80	6,414.6	809.0	-603.4	-696.0	12.89	3.75	-55.42
6,560.0	14.90	201.20	6,460.2	799.0	-609.2	-685.2	10.02	2.13	-39.57
6,608.0	15.30	191.00	6,506.5	787.0	-612.6	-672.8	5.59	0.83	-21.25
6,655.0	17.80	186.60	6,551.6	773.8	-614.7	-659.4	5.95	5.32	-9.36
6,704.0	21.10	187.00	6,597.8	757.6	-616.6	-643.1	6.74	6.73	0.82
6,751.0	25.50	181.90	6,641.0	739.1	-618.0	-624.6	10.29	9.36	-10.85
6,799.0	30.40	179.60	6,683.3	716.6	-618.2	-602.4	10.45	10.21	-4.79
6,846.0	36.10	178.90	6,722.6	690.9	-617.9	-577.1	12.15	12.13	-1.49
6,894.0	39.30	178.90	6,760.6	661.5	-617.3	-548.3	6.67	6.67	0.00
6,941.0	41.90	177.70	6,796.3	630.9	-616.4	-518.3	5.78	5.53	-2.55
6,989.0	46.30	179.80	6,830.8	597.6	-615.7	-485.5	9.66	9.17	4.38
7,036.0	52.40	183.60	6,861.4	562.0	-616.8	-450.2	14.35	12.98	8.09
7,085.0	57.00	187.10	6,889.7	522.2	-620.6	-410.4	11.05	9.39	7.14
7,132.0	61.10	188.60	6,913.8	482.2	-626.1	-370.1	9.14	8.72	3.19
7,180.0	62.60	188.90	6,936.5	440.4	-632.5	-327.8	3.17	3.13	0.63
7,227.0	64.90	188.90	6,957.3	398.8	-639.0	-285.6	4.89	4.89	0.00
7,275.0	68.20	188.40	6,976.4	355.2	-645.6	-241.6	6.94	6.88	-1.04
7,322.0	73.40	187.50	6,991.8	311.3	-651.8	-197.2	11.21	11.06	-1.91
7,370.0	80.50	184.70	7,002.7	264.8	-656.7	-150.6	15.84	14.79	-5.83
7,417.0	88.70	182.40	7,007.1	218.2	-659.6	-104.1	18.11	17.45	-4.89
7,466.0	90.60	182.10	7,007.4	169.2	-661.5	-55.5	3.93	3.88	-0.61
7,490.0	90.90	182.10	7,007.1	145.2	-662.4	-31.8	1.25	1.25	0.00
7,529.0	89.97	181.99	7,006.8	106.3	-663.8	6.9	2.39	-2.37	-0.29
LANDING PT. 465'FNL, 2523'FEL									
7,629.0	87.60	181.70	7,008.9	6.3	-667.0	105.9	2.39	-2.37	-0.29
7,723.0	87.30	181.70	7,013.1	-87.5	-669.8	198.9	0.32	-0.32	0.00
7,818.0	88.50	182.40	7,016.5	-182.4	-673.2	293.0	1.46	1.26	0.74
7,912.0	89.70	182.20	7,018.0	-276.3	-677.0	386.2	1.29	1.28	-0.21
8,006.0	91.60	181.50	7,017.0	-370.2	-680.0	479.3	2.15	2.02	-0.74
8,100.0	93.70	181.70	7,012.6	-464.1	-682.6	572.3	2.24	2.23	0.21
8,194.0	92.80	181.50	7,007.3	-557.9	-685.3	665.2	0.98	-0.96	-0.21
8,289.0	90.70	181.00	7,004.4	-652.8	-687.3	759.1	2.27	-2.21	-0.53
8,383.0	90.80	178.70	7,003.2	-746.8	-687.1	851.7	2.45	0.11	-2.45
8,477.0	91.60	178.40	7,001.2	-840.8	-684.7	944.0	0.91	0.85	-0.32
8,572.0	89.60	180.30	7,000.2	-935.8	-683.6	1,037.4	2.90	-2.11	2.00
8,666.0	90.10	179.20	7,000.4	-1,029.8	-683.2	1,130.0	1.29	0.53	-1.17
8,761.0	89.80	180.80	7,000.5	-1,124.8	-683.2	1,223.6	1.71	-0.32	1.68
8,855.0	92.20	181.30	6,998.9	-1,218.7	-684.9	1,316.6	2.61	2.55	0.53
8,949.0	89.80	180.60	6,997.2	-1,312.7	-686.5	1,409.4	2.66	-2.55	-0.74
9,043.0	90.80	180.60	6,996.7	-1,406.7	-687.5	1,502.3	1.06	1.06	0.00
9,137.0	92.30	179.90	6,994.2	-1,500.6	-687.9	1,595.0	1.76	1.60	-0.74
9,232.0	91.70	178.50	6,990.9	-1,595.6	-686.6	1,688.3	1.60	-0.63	-1.47
9,326.0	90.20	179.80	6,989.3	-1,689.5	-685.2	1,780.7	2.11	-1.60	1.38
9,420.0	90.10	180.80	6,989.1	-1,783.5	-685.7	1,873.4	1.07	-0.11	1.06
9,515.0	90.00	180.60	6,989.0	-1,878.5	-686.8	1,967.3	0.24	-0.11	-0.21
9,609.0	90.80	181.70	6,988.3	-1,972.5	-688.7	2,060.2	1.45	0.85	1.17
9,703.0	92.10	181.70	6,986.0	-2,066.4	-691.5	2,153.3	1.38	1.38	0.00
9,798.0	91.50	180.10	6,983.0	-2,161.4	-693.0	2,247.1	1.80	-0.63	-1.68

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9,892.0	91.60	181.00	6,980.4	-2,255.3	-693.9	2,339.9	0.96	0.11	0.96
9,987.0	90.10	181.90	6,979.0	-2,350.3	-696.3	2,433.9	1.84	-1.58	0.95
10,081.0	90.00	181.30	6,978.9	-2,444.2	-698.9	2,527.0	0.65	-0.11	-0.64
10,175.0	89.40	180.60	6,979.4	-2,538.2	-700.5	2,619.9	0.98	-0.64	-0.74
10,270.0	89.00	181.30	6,980.8	-2,633.2	-702.1	2,713.8	0.85	-0.42	0.74
10,364.0	90.00	181.20	6,981.6	-2,727.2	-704.1	2,806.8	1.07	1.06	-0.11
10,459.0	88.70	180.80	6,982.7	-2,822.2	-705.8	2,900.7	1.43	-1.37	-0.42
10,554.0	90.90	181.20	6,983.0	-2,917.1	-707.4	2,994.6	2.35	2.32	0.42
10,648.0	89.60	180.10	6,982.6	-3,011.1	-708.5	3,087.4	1.81	-1.38	-1.17
10,743.0	90.00	180.30	6,982.9	-3,106.1	-708.8	3,181.1	0.47	0.42	0.21
10,838.0	90.50	179.80	6,982.5	-3,201.1	-708.9	3,274.7	0.74	0.53	-0.53
10,932.0	91.00	182.20	6,981.3	-3,295.1	-710.5	3,367.7	2.61	0.53	2.55
11,027.0	92.20	181.50	6,978.6	-3,390.0	-713.6	3,461.7	1.46	1.26	-0.74
11,121.0	90.20	179.40	6,976.6	-3,484.0	-714.3	3,554.5	3.08	-2.13	-2.23
11,216.0	91.10	179.80	6,975.6	-3,579.0	-713.7	3,648.0	1.04	0.95	0.42
11,310.0	92.00	181.20	6,973.0	-3,672.9	-714.5	3,740.8	1.77	0.96	1.49
11,404.0	91.50	179.40	6,970.2	-3,766.9	-715.0	3,833.5	1.99	-0.53	-1.91
11,499.0	93.00	179.80	6,966.4	-3,861.8	-714.3	3,926.9	1.63	1.58	0.42
11,593.0	91.10	180.50	6,963.1	-3,955.7	-714.6	4,019.6	2.15	-2.02	0.74
11,688.0	92.00	180.10	6,960.5	-4,050.7	-715.1	4,113.3	1.04	0.95	-0.42
11,783.0	91.40	182.20	6,957.7	-4,145.6	-717.0	4,207.2	2.30	-0.63	2.21
11,825.0	91.20	182.40	6,956.7	-4,187.6	-718.7	4,248.8	0.67	-0.48	0.48
11,880.0	91.20	182.40	6,955.6	-4,242.5	-721.0	4,303.3	0.00	0.00	0.00
BHL 465'FSL, 2555'FEL									

Checked By: _____	Approved By: _____	Date: _____
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