

Barge ID	Barge Number	UOM	Gauge Type	Date Strapped	Strapped By	Comment
MAP	615	BARRELS	INNAGE	6/24/04	INSPECTORATE	BARGE SHOULD BE ON EVEN LEVEL KEEL WHEN GAUGES ARE TAKEN.

Barge ID	Barge Number	Comp	Gauge Height
MAP	615	1 PORT	185.000
MAP	615	1 STAR	185.000
MAP	615	2 PORT	186.000
MAP	615	2 STAR	186.000
MAP	615	3 PORT	185.250
MAP	615	3 STAR	185.250

MAP 615

PORT 1

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.16	340.30	702.98	1,069.89	1,436.81	1,803.72	2,170.63	2,537.54	2,904.45	3,271.37	3,638.28	4,005.19	4,372.10	4,739.01	5,105.93
1/4	22.02	347.64	710.63	1,077.54	1,444.45	1,811.36	2,178.27	2,545.19	2,912.10	3,279.01	3,645.92	4,012.83	4,379.75	4,746.66	5,113.01
1/2	26.87	354.97	718.27	1,085.18	1,452.09	1,819.01	2,185.92	2,552.83	2,919.74	3,286.65	3,653.57	4,020.48	4,387.39	4,754.30	5,120.09
3/4	31.73	362.30	725.91	1,092.83	1,459.74	1,826.65	2,193.56	2,560.47	2,927.39	3,294.30	3,661.21	4,028.12	4,395.03	4,761.95	5,127.17
1	36.59	369.64	733.56	1,100.47	1,467.38	1,834.29	2,201.21	2,568.12	2,935.03	3,301.94	3,668.85	4,035.77	4,402.68	4,769.59	5,134.25
1/4	42.75	376.97	741.20	1,108.11	1,475.03	1,841.94	2,208.85	2,575.76	2,942.67	3,309.59	3,676.50	4,043.41	4,410.32	4,777.23	5,140.09
1/2	48.90	384.31	748.85	1,115.76	1,482.67	1,848.58	2,216.49	2,583.41	2,950.32	3,317.23	3,684.14	4,051.05	4,417.97	4,784.88	5,145.94
3/4	55.49	391.64	756.49	1,123.40	1,490.31	1,857.23	2,224.14	2,591.05	2,957.96	3,324.87	3,691.79	4,058.70	4,425.61	4,792.52	5,151.79
2	62.07	398.97	764.13	1,131.05	1,497.96	1,864.87	2,231.78	2,598.69	2,965.61	3,332.52	3,699.43	4,066.34	4,433.25	4,800.17	5,157.63
1/4	68.78	406.46	771.78	1,138.69	1,505.60	1,872.51	2,238.43	2,606.34	2,973.25	3,340.16	3,707.07	4,073.99	4,440.90	4,807.81	5,162.45
1/2	75.49	413.94	779.42	1,146.33	1,513.25	1,880.16	2,247.07	2,613.98	2,980.89	3,347.81	3,714.72	4,081.63	4,448.54	4,815.45	5,167.26
3/4	82.20	421.43	787.07	1,153.98	1,520.89	1,887.80	2,254.71	2,621.63	2,988.54	3,355.45	3,722.36	4,089.27	4,456.19	4,823.10	5,172.07
3	88.91	428.91	794.71	1,161.62	1,528.53	1,895.45	2,262.36	2,629.27	2,996.18	3,363.09	3,730.01	4,096.92	4,463.83	4,830.74	5,176.88
1/4	95.63	436.40	802.35	1,169.27	1,536.18	1,903.09	2,270.00	2,636.91	3,003.83	3,370.74	3,737.65	4,104.56	4,471.47	4,838.39	5,180.56
1/2	102.34	443.88	810.00	1,175.91	1,543.82	1,910.73	2,277.65	2,644.56	3,011.47	3,378.38	3,745.29	4,112.21	4,479.12	4,846.03	5,184.24
3/4	109.05	451.37	817.64	1,184.55	1,551.47	1,918.38	2,285.29	2,652.20	3,019.11	3,386.03	3,752.94	4,119.85	4,486.76	4,853.67	5,187.92
4	115.76	458.85	825.29	1,192.20	1,559.11	1,926.02	2,292.93	2,659.85	3,026.76	3,393.67	3,760.58	4,127.49	4,494.41	4,861.32	5,191.60
1/4	122.57	466.44	832.93	1,199.84	1,566.75	1,933.67	2,300.58	2,667.49	3,034.40	3,401.31	3,768.23	4,135.14	4,502.05	4,868.96	5,194.15
1/2	129.38	474.02	840.57	1,207.49	1,574.40	1,941.31	2,308.22	2,675.13	3,042.05	3,408.96	3,775.87	4,142.78	4,509.69	4,876.61	5,196.69
3/4	136.20	481.61	848.22	1,215.13	1,582.04	1,948.95	2,315.87	2,682.78	3,049.69	3,416.60	3,783.51	4,150.43	4,517.34	4,884.25	5,199.24
5	143.01	489.19	855.86	1,222.77	1,589.69	1,956.60	2,323.51	2,690.42	3,057.33	3,424.25	3,791.16	4,158.07	4,524.98	4,891.89	5,201.79
1/4	149.82	496.77	863.51	1,230.42	1,597.33	1,964.24	2,331.15	2,698.07	3,064.98	3,431.89	3,798.80	4,165.71	4,532.63	4,899.54	5,203.20
1/2	156.64	504.36	871.15	1,238.06	1,604.92	1,971.89	2,338.80	2,705.71	3,072.62	3,439.53	3,806.45	4,173.36	4,540.27	4,907.18	5,204.62
3/4	163.45	511.94	878.79	1,245.71	1,612.62	1,979.53	2,346.44	2,713.35	3,080.27	3,447.18	3,814.09	4,181.00	4,547.91	4,914.83	5,206.04
6	170.26	519.53	886.44	1,253.35	1,620.26	1,987.17	2,354.09	2,721.00	3,087.91	3,454.82	3,821.73	4,188.65	4,555.56	4,922.47	5,207.45
1/4	177.22	527.17	894.08	1,260.99	1,627.91	1,994.82	2,361.73	2,728.64	3,095.55	3,462.47	3,829.38	4,196.29	4,563.20	4,930.11	5,207.87
1/2	184.18	534.81	900.73	1,268.64	1,635.55	2,002.46	2,369.37	2,736.29	3,103.20	3,470.11	3,837.02	4,203.93	4,570.85	4,937.76	5,208.30
3/4	191.15	542.46	909.37	1,276.28	1,643.19	2,010.11	2,377.02	2,743.93	3,110.84	3,477.75	3,844.67	4,211.58	4,578.49	4,945.40	5,208.72
7	198.11	550.10	917.01	1,283.93	1,650.84	2,017.75	2,384.66	2,751.57	3,118.49	3,485.40	3,852.31	4,219.22	4,586.13	4,953.05	
1/4	205.07	557.75	924.66	1,291.57	1,658.48	2,025.39	2,392.31	2,759.22	3,126.13	3,493.04	3,859.95	4,226.87	4,593.78	4,960.69	
1/2	212.03	565.39	932.30	1,299.21	1,666.13	2,033.04	2,399.95	2,766.86	3,133.77	3,500.69	3,867.60	4,234.51	4,601.42	4,968.33	
3/4	218.99	573.03	939.95	1,306.86	1,673.77	2,040.68	2,407.59	2,774.51	3,141.42	3,508.33	3,875.24	4,242.15	4,609.07	4,975.98	
8	225.95	580.68	947.60	1,314.50	1,681.41	2,048.33	2,415.24	2,782.15	3,149.06	3,515.97	3,882.89	4,249.80	4,616.71	4,983.62	
1/4	233.04	588.32	955.23	1,322.15	1,689.06	2,055.97	2,422.88	2,789.79	3,156.71	3,523.62	3,890.53	4,257.44	4,624.35	4,991.27	
1/2	240.12	595.97	962.88	1,329.79	1,696.70	2,063.61	2,430.53	2,797.44	3,164.35	3,531.26	3,898.17	4,265.09	4,632.00	4,998.91	
3/4	247.21	603.61	970.52	1,337.43	1,704.35	2,071.26	2,438.17	2,805.08	3,171.99	3,538.91	3,905.82	4,272.73	4,639.64	5,006.55	
9	254.29	611.25	978.17	1,345.08	1,711.99	2,078.95	2,445.81	2,812.73	3,179.64	3,546.55	3,913.46	4,280.37	4,647.29	5,014.20	
1/4	261.38	618.90	985.81	1,352.72	1,719.63	2,086.55	2,453.46	2,820.37	3,187.28	3,554.19	3,921.11	4,288.02	4,654.93	5,021.84	
1/2	268.46	626.54	993.45	1,360.37	1,727.28	2,094.19	2,461.10	2,828.01	3,194.93	3,561.84	3,928.75	4,295.66	4,662.57	5,029.49	
3/4	275.55	634.19	1,001.10	1,368.01	1,734.92	2,101.83	2,468.75	2,835.66	3,202.57	3,569.48	3,936.39	4,303.31	4,670.22	5,037.13	
10	282.63	641.83	1,008.74	1,375.65	1,742.57	2,109.48	2,476.39	2,843.30	3,210.21	3,577.13	3,944.04	4,310.95	4,677.86	5,044.77	
1/4	289.84	649.47	1,016.39	1,383.30	1,750.21	2,117.12	2,484.03	2,850.95	3,217.86	3,584.77	3,951.68	4,318.59	4,685.51	5,052.42	
1/2	297.05	657.12	1,024.03	1,390.94	1,757.85	2,124.77	2,491.68	2,858.59	3,225.50	3,592.50	3,959.33	4,326.24	4,693.15	5,060.06	
3/4	304.26	664.76	1,031.67	1,398.59	1,765.50	2,132.41	2,499.32	2,866.23	3,233.15	3,600.06	3,966.97	4,333.88	4,700.79	5,067.71	
11	311.47	672.41	1,038.32	1,406.23	1,773.14	2,140.05	2,506.97	2,873.88	3,240.79	3,607.70	3,974.61	4,341.53	4,708.44	5,075.35	
1/4	318.68	680.05	1,046.96	1,413.87	1,780.79	2,147.70	2,514.61	2,881.52	3,248.43	3,615.35	3,982.26	4,349.17	4,716.08	5,082.99	
1/2	325.88	687.69	1,054.61	1,421.52	1,788.43	2,155.34	2,522.25	2,889.17	3,256.08	3,622.99	3,989.90	4,356.81	4,723.73	5,090.64	
3/4	333.09	695.34	1,062.25	1,429.16	1,796.07	2,162.99	2,529.90	2,896.81	3,263.72	3,630.63	3,997.55	4,364.46	4,731.37	5,098.28	

MAP 615

STAR 1

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.16	340.30	702.98	1,069.89	1,436.81	1,803.72	2,178.63	2,537.54	2,904.45	3,271.37	3,638.28	4,005.19	4,372.10	4,739.01	5,105.93
1/4	22.02	347.64	710.63	1,077.54	1,444.45	1,811.36	2,178.27	2,545.19	2,912.10	3,279.01	3,645.92	4,012.83	4,379.75	4,746.66	5,113.01
1/2	26.87	354.97	718.27	1,085.18	1,452.09	1,819.01	2,185.92	2,552.83	2,919.74	3,286.65	3,653.57	4,020.48	4,387.39	4,754.30	5,120.09
3/4	31.73	362.30	725.91	1,092.83	1,459.26	1,826.65	2,193.56	2,560.47	2,927.39	3,294.30	3,661.21	4,028.12	4,395.03	4,761.95	5,127.17
1	36.59	369.64	733.56	1,100.47	1,467.38	1,834.29	2,201.21	2,568.12	2,935.03	3,301.94	3,668.85	4,035.77	4,402.68	4,769.59	5,134.25
1/4	42.75	376.97	741.20	1,108.11	1,475.03	1,841.94	2,208.85	2,575.76	2,942.67	3,309.59	3,676.50	4,043.41	4,410.32	4,777.23	5,140.09
1/2	48.90	384.31	748.85	1,115.76	1,482.67	1,849.58	2,216.49	2,583.41	2,950.32	3,317.23	3,684.14	4,051.05	4,417.97	4,784.88	5,145.94
3/4	55.49	391.64	756.49	1,123.40	1,490.31	1,857.23	2,224.14	2,591.05	2,957.96	3,324.87	3,691.79	4,058.70	4,425.61	4,792.52	5,151.79
2	62.07	398.97	764.13	1,131.05	1,497.96	1,864.87	2,231.78	2,598.69	2,965.61	3,332.52	3,699.43	4,066.34	4,433.25	4,800.17	5,157.63
1/4	68.78	406.46	771.78	1,138.69	1,505.60	1,872.51	2,239.43	2,606.34	2,973.25	3,340.16	3,707.07	4,073.99	4,440.90	4,807.81	5,162.45
1/2	75.49	413.94	779.42	1,146.33	1,513.25	1,880.16	2,247.07	2,613.98	2,980.89	3,347.81	3,714.72	4,081.63	4,448.54	4,815.45	5,167.26
3/4	82.20	421.43	787.07	1,153.98	1,520.89	1,887.80	2,254.71	2,621.63	2,988.54	3,355.45	3,722.36	4,089.27	4,456.19	4,823.10	5,172.07
3	88.91	428.91	794.71	1,161.62	1,528.53	1,895.45	2,262.36	2,629.27	2,996.18	3,363.09	3,730.01	4,096.92	4,463.83	4,830.74	5,176.88
1/4	95.63	436.40	802.35	1,169.27	1,536.18	1,903.09	2,270.00	2,636.91	3,003.83	3,370.74	3,737.65	4,104.56	4,471.47	4,838.39	5,180.56
1/2	102.34	443.88	810.00	1,175.91	1,543.82	1,910.73	2,277.65	2,644.56	3,011.47	3,378.38	3,745.29	4,112.21	4,479.12	4,846.03	5,184.24
3/4	109.05	451.37	817.64	1,184.55	1,551.47	1,918.38	2,285.29	2,652.20	3,019.11	3,386.03	3,752.94	4,119.85	4,486.76	4,853.67	5,187.92
4	115.76	458.85	825.29	1,192.20	1,559.11	1,926.02	2,292.93	2,659.85	3,026.76	3,393.67	3,760.58	4,127.49	4,494.41	4,861.32	5,191.60
1/4	122.57	466.44	832.93	1,199.84	1,566.75	1,933.67	2,300.58	2,667.49	3,034.40	3,401.31	3,768.23	4,135.14	4,502.05	4,868.96	5,194.15
1/2	129.38	474.02	840.57	1,207.49	1,574.40	1,941.31	2,308.22	2,675.13	3,042.05	3,408.96	3,775.87	4,142.78	4,509.69	4,876.61	5,196.69
3/4	136.20	481.61	848.22	1,215.13	1,582.04	1,948.95	2,315.87	2,682.78	3,049.69	3,416.60	3,783.51	4,150.43	4,517.34	4,884.25	5,199.24
5	143.01	489.19	855.86	1,222.77	1,589.69	1,956.60	2,323.51	2,690.42	3,057.33	3,424.25	3,791.16	4,158.07	4,524.98	4,891.89	5,201.79
1/4	149.82	496.77	863.51	1,230.42	1,597.33	1,964.24	2,331.15	2,698.07	3,064.98	3,431.89	3,798.80	4,165.71	4,532.63	4,899.54	5,203.20
1/2	156.64	504.36	871.15	1,238.06	1,604.97	1,971.89	2,338.80	2,705.71	3,072.62	3,439.53	3,806.45	4,173.36	4,540.27	4,907.18	5,204.62
3/4	163.45	511.94	878.79	1,245.71	1,612.62	1,979.53	2,346.44	2,713.35	3,080.27	3,447.18	3,814.09	4,181.00	4,547.91	4,914.83	5,206.04
6	170.26	519.53	886.44	1,253.35	1,620.26	1,987.17	2,354.09	2,721.00	3,087.91	3,454.82	3,821.73	4,188.65	4,555.56	4,922.47	5,207.87
1/4	177.22	527.17	894.08	1,260.99	1,627.91	1,994.82	2,361.73	2,728.64	3,095.55	3,462.47	3,829.38	4,196.29	4,563.20	4,930.11	5,207.87
1/2	184.18	534.81	900.73	1,268.64	1,635.55	2,002.46	2,369.37	2,736.29	3,103.20	3,470.11	3,837.02	4,203.93	4,570.85	4,937.76	5,208.30
3/4	191.15	542.46	909.37	1,276.28	1,643.19	2,010.11	2,377.02	2,743.93	3,110.84	3,477.75	3,844.67	4,211.58	4,578.49	4,945.40	5,208.72
7	198.11	550.10	917.01	1,283.93	1,650.84	2,017.75	2,384.66	2,751.57	3,118.49	3,485.40	3,852.31	4,219.22	4,586.13	4,953.05	
1/4	205.07	557.75	924.66	1,291.57	1,658.48	2,025.39	2,392.31	2,759.22	3,126.13	3,493.04	3,859.95	4,226.87	4,593.78	4,960.69	
1/2	212.03	565.39	932.30	1,299.21	1,666.13	2,033.04	2,399.95	2,766.86	3,133.77	3,500.69	3,867.60	4,234.51	4,601.42	4,968.33	
3/4	218.99	573.03	939.95	1,306.86	1,673.77	2,040.68	2,407.59	2,774.51	3,141.42	3,508.33	3,875.24	4,242.15	4,609.07	4,975.98	
8	225.95	580.68	947.60	1,314.50	1,681.41	2,048.33	2,415.24	2,782.15	3,149.06	3,515.97	3,882.89	4,249.80	4,616.71	4,983.62	
1/4	233.04	588.32	955.23	1,322.15	1,689.06	2,055.97	2,422.88	2,789.79	3,156.71	3,523.62	3,890.53	4,257.44	4,624.35	4,991.27	
1/2	240.12	595.97	962.88	1,329.79	1,696.70	2,063.61	2,430.53	2,797.44	3,164.35	3,531.26	3,898.17	4,265.09	4,632.00	4,998.91	
3/4	247.21	603.61	970.52	1,337.43	1,704.35	2,071.26	2,438.17	2,805.08	3,171.99	3,538.91	3,905.82	4,272.73	4,639.64	5,006.55	
9	254.29	611.25	978.17	1,345.08	1,711.99	2,078.90	2,445.81	2,812.73	3,179.64	3,546.55	3,913.46	4,280.37	4,647.29	5,014.20	
1/4	261.38	618.90	985.81	1,352.72	1,719.63	2,086.55	2,453.46	2,820.37	3,187.28	3,554.19	3,921.11	4,288.02	4,654.93	5,021.84	
1/2	268.46	626.54	993.45	1,360.37	1,727.28	2,094.19	2,461.10	2,828.01	3,194.93	3,561.84	3,928.75	4,295.66	4,662.57	5,029.49	
3/4	275.55	634.19	1,001.10	1,368.01	1,734.92	2,101.83	2,468.75	2,835.66	3,202.57	3,569.48	3,936.39	4,303.31	4,670.22	5,037.13	
10	282.63	641.83	1,008.74	1,375.65	1,742.57	2,109.48	2,476.39	2,843.30	3,210.21	3,577.13	3,944.04	4,310.95	4,677.86	5,044.77	
1/4	289.84	649.47	1,016.39	1,383.30	1,750.21	2,117.12	2,484.03	2,850.95	3,217.86	3,584.77	3,951.68	4,318.59	4,685.51	5,052.42	
1/2	297.05	657.12	1,024.03	1,390.94	1,757.85	2,124.77	2,491.68	2,858.59	3,225.50	3,592.10	3,959.33	4,326.24	4,693.15	5,060.06	
3/4	304.26	664.76	1,031.67	1,398.59	1,765.50	2,132.41	2,499.32	2,866.23	3,233.15	3,600.06	3,966.97	4,333.88	4,700.79	5,067.71	
11	311.47	672.41	1,039.32	1,406.23	1,773.14	2,140.05	2,506.97	2,873.88	3,240.79	3,607.70	3,974.61	4,341.53	4,708.44	5,075.35	
1/4	318.68	680.05	1,046.96	1,413.87	1,780.79	2,147.70	2,514.61	2,881.52	3,248.43	3,615.35	3,982.26	4,349.17	4,716.08	5,082.99	
1/2	325.88	687.69	1,054.61	1,421.52	1,788.43	2,155.34	2,522.25	2,889.17	3,256.08	3,622.99	3,989.90	4,356.81	4,723.73	5,090.64	
3/4	333.09	695.34	1,062.25	1,429.16	1,796.07	2,162.99	2,529.90	2,896.81	3,263.72	3,630.63	3,997.55	4,364.46	4,731.37	5,098.28	

MAP 615

PORT 2

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	16.37	351.21	695.28	1,039.34	1,383.41	1,727.47	2,071.53	2,415.60	2,759.66	3,103.73	3,447.79	3,791.85	4,135.92	4,479.98	4,821.79
1/4	21.49	358.38	702.45	1,046.51	1,390.57	1,734.64	2,078.70	2,422.77	2,766.83	3,110.89	3,454.96	3,799.02	4,143.09	4,487.15	4,828.38
1/2	26.61	365.56	709.61	1,053.68	1,397.74	1,741.81	2,085.87	2,429.93	2,774.00	3,118.06	3,462.13	3,806.19	4,150.25	4,494.32	4,834.97
3/4	31.73	372.72	716.78	1,060.85	1,404.91	1,748.97	2,093.04	2,437.10	2,781.17	3,125.23	3,469.29	3,813.36	4,157.42	4,501.44	4,841.56
1	36.84	379.89	723.95	1,068.01	1,412.08	1,756.14	2,100.21	2,444.27	2,788.33	3,132.40	3,476.46	3,820.53	4,164.59	4,508.56	4,848.14
1/4	43.50	387.05	731.12	1,075.18	1,419.25	1,763.31	2,107.37	2,451.44	2,795.50	3,139.57	3,483.63	3,827.69	4,171.76	4,515.68	4,853.72
1/2	50.16	394.22	738.29	1,082.35	1,426.41	1,770.48	2,114.54	2,458.61	2,802.67	3,146.73	3,490.80	3,834.86	4,178.93	4,522.79	4,859.29
3/4	57.33	401.39	745.45	1,089.52	1,433.58	1,777.65	2,121.71	2,466.77	2,809.84	3,153.90	3,497.97	3,842.03	4,186.09	4,529.91	4,864.86
2	64.49	408.56	752.62	1,096.69	1,440.75	1,784.81	2,128.88	2,472.94	2,817.01	3,161.07	3,505.13	3,849.20	4,193.26	4,537.03	4,870.44
1/4	71.66	415.73	759.79	1,103.85	1,447.92	1,791.98	2,136.05	2,480.11	2,824.17	3,168.24	3,512.30	3,856.37	4,200.43	4,544.15	4,874.95
1/2	78.83	422.89	766.96	1,111.02	1,455.09	1,799.15	2,143.21	2,487.28	2,831.34	3,175.41	3,519.47	3,863.53	4,207.60	4,551.27	4,879.46
3/4	86.00	430.06	774.13	1,118.19	1,462.25	1,806.32	2,150.38	2,494.45	2,838.51	3,182.57	3,526.64	3,870.70	4,214.77	4,558.39	4,883.97
3	93.17	437.23	781.29	1,125.36	1,469.42	1,813.49	2,157.55	2,501.61	2,845.68	3,189.74	3,533.81	3,877.87	4,221.93	4,565.51	4,888.48
1/4	100.33	444.40	788.46	1,132.53	1,476.59	1,820.65	2,164.72	2,508.78	2,852.85	3,196.91	3,540.97	3,885.04	4,229.10	4,572.63	4,891.93
1/2	107.50	451.57	795.63	1,138.69	1,483.76	1,827.82	2,171.89	2,515.95	2,860.01	3,204.08	3,548.14	3,892.21	4,236.27	4,579.75	4,895.38
3/4	114.67	458.73	802.80	1,146.86	1,490.93	1,834.99	2,179.05	2,523.12	2,867.18	3,211.25	3,555.31	3,899.37	4,243.44	4,586.87	4,898.83
4	121.84	465.90	809.97	1,154.03	1,498.09	1,842.16	2,186.22	2,530.29	2,874.35	3,218.41	3,562.48	3,906.54	4,250.61	4,593.98	4,902.28
1/4	129.01	473.07	817.13	1,161.20	1,505.26	1,849.33	2,193.39	2,537.45	2,881.52	3,225.58	3,569.65	3,913.71	4,257.77	4,601.10	4,904.67
1/2	136.17	480.24	824.30	1,168.37	1,512.43	1,856.48	2,200.56	2,544.62	2,888.69	3,232.75	3,576.81	3,920.88	4,264.94	4,608.22	4,907.05
3/4	143.34	487.41	831.47	1,175.53	1,519.60	1,863.66	2,207.73	2,551.79	2,895.85	3,239.92	3,583.98	3,928.05	4,272.11	4,615.34	4,909.44
5	150.51	494.57	838.64	1,182.70	1,526.77	1,870.83	2,214.89	2,558.96	2,903.02	3,247.09	3,591.15	3,935.21	4,279.28	4,622.46	4,911.83
1/4	157.68	501.74	845.81	1,189.87	1,533.93	1,878.00	2,222.06	2,566.13	2,910.19	3,254.25	3,598.32	3,942.38	4,286.45	4,629.58	4,913.15
1/2	164.85	508.91	852.97	1,197.04	1,541.10	1,885.17	2,229.23	2,573.29	2,917.36	3,261.42	3,605.49	3,949.55	4,293.61	4,636.70	4,914.48
3/4	172.01	516.08	860.14	1,204.21	1,548.27	1,892.33	2,236.40	2,580.46	2,924.53	3,268.59	3,612.65	3,956.72	4,300.78	4,643.82	4,915.80
6	179.18	523.25	867.31	1,211.37	1,555.44	1,899.57	2,243.57	2,587.67	2,931.69	3,275.76	3,619.82	3,963.89	4,307.95	4,650.94	4,917.12
1/4	186.35	530.41	874.48	1,218.54	1,562.61	1,906.67	2,250.73	2,594.80	2,938.86	3,282.93	3,626.99	3,971.05	4,315.12	4,658.05	4,917.12
1/2	193.52	537.58	881.65	1,225.71	1,569.77	1,913.84	2,257.90	2,601.97	2,946.03	3,290.09	3,634.16	3,978.22	4,322.29	4,665.17	4,917.91
3/4	200.69	544.75	888.81	1,232.88	1,576.94	1,921.01	2,265.07	2,609.13	2,953.20	3,297.26	3,641.33	3,985.39	4,329.45	4,672.29	4,918.31
7	207.86	551.92	895.98	1,240.05	1,584.11	1,928.17	2,272.24	2,616.30	2,960.37	3,304.43	3,648.49	3,992.56	4,336.62	4,679.41	
1/4	215.02	559.09	903.15	1,247.21	1,591.28	1,935.34	2,279.41	2,623.47	2,967.53	3,311.60	3,655.66	3,999.73	4,343.79	4,686.53	
1/2	222.19	566.25	910.32	1,254.38	1,598.45	1,942.51	2,286.57	2,630.64	2,974.70	3,318.77	3,662.83	4,006.89	4,350.96	4,693.65	
3/4	229.36	573.42	917.49	1,261.55	1,605.61	1,949.68	2,293.74	2,637.81	2,981.87	3,325.93	3,670.00	4,014.06	4,358.13	4,700.77	
8	236.53	580.59	924.65	1,268.72	1,612.78	1,956.85	2,300.91	2,644.97	2,989.04	3,333.10	3,677.17	4,021.23	4,365.29	4,707.89	
1/4	243.69	587.76	931.82	1,275.89	1,619.95	1,964.01	2,308.08	2,652.14	2,996.21	3,340.27	3,684.33	4,028.40	4,372.46	4,715.01	
1/2	250.86	594.93	938.99	1,283.05	1,627.12	1,971.18	2,315.25	2,659.31	3,003.37	3,347.44	3,691.50	4,035.57	4,379.63	4,722.13	
3/4	258.03	602.09	946.16	1,290.22	1,634.29	1,978.35	2,322.41	2,666.48	3,010.54	3,354.61	3,698.67	4,042.73	4,386.80	4,729.24	
9	265.20	609.26	953.33	1,297.39	1,641.45	1,985.52	2,329.58	2,673.65	3,017.71	3,361.77	3,705.84	4,049.90	4,393.97	4,736.36	
1/4	272.37	616.43	960.49	1,304.56	1,648.62	1,992.69	2,336.75	2,680.81	3,024.88	3,368.94	3,713.01	4,057.07	4,401.13	4,743.48	
1/2	279.53	623.60	967.66	1,311.73	1,655.79	1,999.85	2,343.92	2,687.98	3,032.05	3,376.11	3,720.17	4,064.24	4,408.30	4,750.60	
3/4	286.70	630.77	974.83	1,318.89	1,662.96	2,007.02	2,351.09	2,695.15	3,039.21	3,383.28	3,727.34	4,071.41	4,415.47	4,757.72	
10	293.87	637.93	982.00	1,326.06	1,670.13	2,014.19	2,358.25	2,702.32	3,046.38	3,390.45	3,734.51	4,078.57	4,422.64	4,764.84	
1/4	301.04	645.10	989.17	1,333.23	1,677.29	2,021.36	2,365.42	2,709.49	3,053.55	3,397.61	3,741.68	4,085.74	4,429.81	4,771.96	
1/2	308.21	652.27	996.33	1,340.40	1,684.46	2,028.53	2,372.59	2,716.65	3,060.72	3,404.78	3,748.85	4,092.91	4,436.97	4,779.08	
3/4	315.37	659.44	1,003.50	1,347.57	1,691.63	2,035.69	2,379.76	2,723.82	3,067.89	3,411.95	3,756.01	4,100.08	4,444.14	4,786.20	
11	322.54	666.61	1,010.67	1,354.73	1,698.80	2,042.86	2,386.93	2,730.99	3,075.05	3,419.12	3,763.18	4,107.25	4,451.31	4,793.32	
1/4	329.71	673.77	1,017.84	1,361.90	1,705.97	2,050.03	2,394.09	2,738.16	3,082.22	3,426.29	3,770.35	4,114.41	4,458.48	4,800.43	
1/2	336.88	680.94	1,025.01	1,369.07	1,713.13	2,057.20	2,401.26	2,745.33	3,089.39	3,433.45	3,777.52	4,121.58	4,465.65	4,807.55	
3/4	344.05	688.11	1,032.17	1,376.24	1,720.30	2,064.37	2,408.43	2,752.49	3,096.56	3,440.62	3,784.69	4,128.75	4,472.81	4,814.67	

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	16.37	351.21	695.28	1,039.34	1,383.41	1,727.47	2,071.53	2,415.60	2,759.66	3,103.73	3,447.79	3,791.85	4,135.92	4,479.98	4,821.79
1/4	21.49	358.38	702.45	1,046.51	1,390.57	1,734.64	2,078.70	2,422.77	2,766.83	3,110.89	3,454.96	3,799.02	4,143.09	4,487.15	4,828.38
1/2	26.61	365.55	709.61	1,053.68	1,397.74	1,741.81	2,085.87	2,429.93	2,774.00	3,118.06	3,462.13	3,806.19	4,150.25	4,494.32	4,834.97
3/4	31.73	372.72	716.78	1,060.85	1,404.91	1,748.97	2,093.04	2,437.10	2,781.17	3,125.23	3,469.29	3,813.36	4,157.42	4,501.44	4,841.56
1	36.84	379.89	723.95	1,068.01	1,412.08	1,756.14	2,100.21	2,444.27	2,788.33	3,132.40	3,476.46	3,820.53	4,164.59	4,508.56	4,848.14
1/4	43.50	387.05	731.12	1,075.18	1,419.25	1,763.31	2,107.31	2,451.44	2,795.50	3,139.57	3,483.63	3,827.69	4,171.76	4,515.68	4,853.72
1/2	50.16	394.22	738.29	1,082.35	1,426.41	1,770.48	2,114.54	2,456.61	2,802.67	3,146.73	3,490.80	3,834.86	4,178.93	4,522.79	4,859.29
3/4	57.33	401.39	745.45	1,089.52	1,433.58	1,777.65	2,121.71	2,465.77	2,809.84	3,153.90	3,497.97	3,842.03	4,186.09	4,529.91	4,864.86
2	64.49	408.56	752.62	1,096.69	1,440.75	1,784.81	2,128.88	2,472.94	2,817.01	3,161.07	3,505.13	3,849.20	4,193.26	4,537.03	4,870.44
1/4	71.66	415.73	759.79	1,103.85	1,447.92	1,791.98	2,136.05	2,480.11	2,824.17	3,168.24	3,512.30	3,856.37	4,200.43	4,544.15	4,874.95
1/2	78.83	422.89	766.96	1,111.02	1,455.09	1,799.15	2,143.21	2,487.28	2,831.34	3,175.41	3,519.47	3,863.53	4,207.60	4,551.27	4,879.46
3/4	86.00	430.06	774.13	1,118.19	1,462.25	1,806.32	2,150.38	2,494.45	2,838.51	3,182.57	3,526.64	3,870.70	4,214.77	4,558.39	4,883.97
3	93.17	437.23	781.29	1,125.36	1,469.42	1,813.49	2,157.55	2,501.61	2,845.68	3,189.74	3,533.81	3,877.87	4,221.93	4,565.51	4,888.48
1/4	100.33	444.40	788.46	1,132.53	1,476.59	1,820.65	2,164.72	2,508.78	2,852.85	3,196.91	3,540.97	3,885.04	4,229.10	4,572.63	4,891.93
1/2	107.50	451.57	795.63	1,139.69	1,483.76	1,827.82	2,171.89	2,515.95	2,860.01	3,204.08	3,548.14	3,892.21	4,236.27	4,579.75	4,895.38
3/4	114.67	458.73	802.80	1,146.86	1,490.93	1,834.99	2,179.05	2,523.12	2,867.18	3,211.25	3,555.31	3,899.37	4,243.44	4,586.87	4,898.83
4	121.84	465.90	809.97	1,154.03	1,498.09	1,842.16	2,186.22	2,530.29	2,874.35	3,218.41	3,562.48	3,906.54	4,250.61	4,593.98	4,902.28
1/4	129.01	473.07	817.13	1,161.20	1,505.26	1,849.33	2,193.39	2,537.45	2,881.52	3,225.58	3,569.65	3,913.71	4,257.77	4,601.10	4,904.67
1/2	136.17	480.24	824.30	1,168.37	1,512.43	1,856.49	2,200.56	2,544.62	2,888.69	3,232.75	3,576.81	3,920.88	4,264.94	4,608.22	4,907.05
3/4	143.34	487.41	831.47	1,175.53	1,519.60	1,863.66	2,207.73	2,551.79	2,895.85	3,239.92	3,583.98	3,928.05	4,272.11	4,615.34	4,909.44
5	150.51	494.57	838.64	1,182.70	1,526.77	1,870.83	2,214.89	2,558.96	2,903.02	3,247.09	3,591.15	3,935.21	4,279.28	4,622.46	4,911.83
1/4	157.68	501.74	845.81	1,189.87	1,533.93	1,878.00	2,222.06	2,566.13	2,910.19	3,254.25	3,598.32	3,942.38	4,286.45	4,629.58	4,913.15
1/2	164.85	508.91	852.97	1,197.04	1,541.10	1,885.17	2,229.23	2,573.29	2,917.36	3,261.42	3,605.49	3,949.55	4,293.61	4,636.70	4,914.48
3/4	172.01	516.08	860.14	1,204.21	1,548.27	1,892.33	2,236.40	2,580.46	2,924.53	3,268.59	3,612.65	3,956.72	4,300.78	4,643.82	4,915.80
6	179.18	523.25	867.31	1,211.37	1,555.44	1,899.50	2,243.57	2,587.63	2,931.69	3,275.76	3,619.82	3,963.89	4,307.95	4,650.94	4,917.12
1/4	186.35	530.41	874.48	1,218.54	1,562.61	1,906.67	2,250.73	2,594.80	2,938.86	3,282.93	3,626.99	3,971.05	4,315.12	4,658.05	4,917.52
1/2	193.52	537.58	881.65	1,225.71	1,569.77	1,913.84	2,257.90	2,601.97	2,946.03	3,290.09	3,634.16	3,978.22	4,322.29	4,665.17	4,917.91
3/4	200.69	544.75	888.81	1,232.88	1,576.94	1,921.01	2,265.07	2,609.13	2,953.20	3,297.26	3,641.33	3,985.39	4,329.45	4,672.29	4,918.31
7	207.85	551.92	895.98	1,240.05	1,584.11	1,928.17	2,272.24	2,616.30	2,960.37	3,304.43	3,648.49	3,992.56	4,336.62	4,679.41	
1/4	215.02	559.09	903.15	1,247.21	1,591.28	1,935.34	2,279.41	2,623.47	2,967.53	3,311.60	3,655.66	3,999.73	4,343.79	4,686.53	
1/2	222.19	566.25	910.32	1,254.38	1,598.45	1,942.51	2,286.57	2,630.64	2,974.70	3,318.77	3,662.83	4,006.89	4,350.96	4,693.65	
3/4	229.36	573.42	917.49	1,261.55	1,605.61	1,949.68	2,293.74	2,637.81	2,981.87	3,325.93	3,670.00	4,014.06	4,358.13	4,700.77	
8	236.53	580.59	924.65	1,268.72	1,612.78	1,956.85	2,300.91	2,644.97	2,989.04	3,333.10	3,677.17	4,021.23	4,365.29	4,707.89	
1/4	243.69	587.76	931.82	1,275.89	1,619.95	1,964.01	2,308.08	2,652.14	2,996.21	3,340.27	3,684.33	4,028.40	4,372.46	4,715.01	
1/2	250.86	594.93	938.99	1,283.05	1,627.12	1,971.18	2,315.25	2,659.31	3,003.37	3,347.44	3,691.50	4,035.57	4,379.63	4,722.13	
3/4	258.03	602.09	946.16	1,290.22	1,634.29	1,978.35	2,322.41	2,666.48	3,010.54	3,354.61	3,698.67	4,042.73	4,386.80	4,729.24	
9	265.20	609.26	953.33	1,297.39	1,641.45	1,985.52	2,329.58	2,673.65	3,017.71	3,361.77	3,705.84	4,049.90	4,393.97	4,736.36	
1/4	272.37	616.43	960.49	1,304.56	1,648.62	1,992.69	2,336.75	2,680.81	3,024.88	3,368.94	3,713.01	4,057.07	4,401.13	4,743.48	
1/2	279.53	623.60	967.66	1,311.73	1,655.79	1,999.85	2,343.92	2,687.98	3,032.05	3,376.11	3,720.17	4,064.24	4,408.30	4,750.60	
3/4	286.70	630.77	974.83	1,318.89	1,662.96	2,007.02	2,351.09	2,695.15	3,039.21	3,383.28	3,727.34	4,071.41	4,415.47	4,757.72	
10	293.87	637.93	982.00	1,326.06	1,670.13	2,014.19	2,358.25	2,702.32	3,046.38	3,390.45	3,734.51	4,078.57	4,422.64	4,764.84	
1/4	301.04	645.10	989.17	1,333.23	1,677.29	2,021.36	2,365.42	2,709.49	3,053.55	3,397.61	3,741.68	4,085.74	4,429.81	4,771.96	
1/2	308.21	652.27	996.33	1,340.40	1,684.46	2,028.53	2,372.59	2,716.65	3,060.72	3,404.78	3,748.85	4,092.91	4,436.97	4,779.08	
3/4	315.37	659.44	1,003.50	1,347.57	1,691.63	2,035.69	2,379.76	2,723.82	3,067.89	3,411.95	3,756.01	4,100.08	4,444.14	4,786.20	
11	322.54	666.61	1,010.67	1,354.73	1,698.80	2,042.86	2,386.93	2,730.99	3,075.05	3,419.12	3,763.18	4,107.25	4,451.31	4,793.32	
1/4	329.71	673.77	1,017.84	1,361.90	1,705.97	2,050.03	2,394.09	2,738.16	3,082.22	3,426.29	3,770.35	4,114.41	4,458.48	4,800.43	
1/2	336.88	680.94	1,025.01	1,369.07	1,713.13	2,057.20	2,401.26	2,745.33	3,089.39	3,433.45	3,777.52	4,121.58	4,465.65	4,807.55	
3/4	344.05	688.11	1,032.17	1,376.24	1,720.30	2,064.37	2,408.43	2,752.49	3,096.56	3,440.62	3,784.69	4,128.75	4,472.81	4,814.67	

MAP 615

PORT 3

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.37	372.53	737.16	1,100.34	1,464.33	1,828.31	2,192.29	2,556.28	2,920.26	3,284.25	3,628.53	3,910.15	4,186.89	4,463.32	4,739.75
1/4	22.80	380.14	744.72	1,107.93	1,471.91	1,835.89	2,199.88	2,563.86	2,927.85	3,291.83	3,634.49	3,916.01	4,192.65	4,469.08	4,745.08
1/2	28.23	387.74	752.28	1,115.51	1,479.49	1,843.48	2,207.46	2,571.44	2,935.43	3,299.41	3,640.45	3,921.87	4,198.41	4,474.84	4,750.40
3/4	33.66	395.34	759.85	1,123.09	1,487.08	1,851.06	2,215.04	2,579.03	2,943.01	3,307.00	3,646.31	3,927.73	4,204.17	4,480.60	4,755.73
1	39.09	402.95	767.41	1,130.67	1,494.66	1,858.64	2,222.63	2,586.61	2,950.59	3,314.58	3,662.17	3,933.49	4,209.93	4,486.36	4,761.05
1/4	46.15	410.55	774.97	1,138.26	1,502.24	1,866.23	2,230.21	2,594.19	2,958.18	3,322.16	3,668.04	3,939.25	4,215.68	4,492.12	4,765.51
1/2	53.21	418.15	782.54	1,145.84	1,509.82	1,873.81	2,237.79	2,601.78	2,965.76	3,329.74	3,663.90	3,945.01	4,221.44	4,497.88	4,769.96
3/4	60.81	425.76	790.10	1,153.42	1,517.41	1,881.39	2,245.38	2,609.36	2,973.34	3,337.33	3,669.76	3,950.77	4,227.20	4,503.63	4,774.42
2	68.41	433.36	797.66	1,161.01	1,524.99	1,888.97	2,252.96	2,616.94	2,980.93	3,344.91	3,675.63	3,956.53	4,232.96	4,509.39	4,778.87
1/4	76.02	440.96	805.22	1,168.59	1,532.57	1,896.56	2,260.54	2,624.53	2,988.51	3,352.49	3,681.49	3,962.29	4,238.72	4,515.15	4,782.46
1/2	83.62	448.56	812.79	1,176.17	1,540.16	1,904.14	2,268.12	2,632.11	2,996.09	3,360.08	3,687.35	3,968.05	4,244.48	4,520.91	4,786.05
3/4	91.22	456.17	820.35	1,183.76	1,547.74	1,911.72	2,275.71	2,639.69	3,003.68	3,367.66	3,693.21	3,973.81	4,250.24	4,526.67	4,789.63
3	98.83	463.77	827.91	1,191.34	1,555.20	1,919.31	2,283.29	2,647.27	3,011.26	3,375.24	3,699.08	3,979.57	4,256.00	4,532.43	4,793.22
1/4	106.43	471.37	835.48	1,198.92	1,562.91	1,926.89	2,290.87	2,654.86	3,018.84	3,382.83	3,704.94	3,985.32	4,261.76	4,538.19	4,795.93
1/2	114.03	478.98	843.04	1,206.50	1,570.49	1,934.47	2,298.46	2,662.44	3,026.42	3,390.41	3,710.80	3,991.08	4,267.52	4,543.95	4,798.65
3/4	121.64	486.58	850.60	1,214.09	1,578.07	1,942.06	2,306.04	2,670.02	3,034.01	3,397.99	3,716.67	3,996.84	4,273.27	4,549.71	4,801.37
4	129.24	494.18	858.17	1,221.67	1,585.65	1,949.64	2,313.62	2,677.61	3,041.59	3,405.57	3,722.53	4,002.60	4,279.03	4,555.47	4,804.09
1/4	136.84	501.79	865.73	1,229.25	1,593.24	1,957.22	2,321.21	2,685.19	3,049.17	3,413.16	3,728.39	4,008.36	4,284.79	4,561.22	4,805.93
1/2	144.44	509.38	873.29	1,236.84	1,600.82	1,964.80	2,328.79	2,692.77	3,056.76	3,420.74	3,734.26	4,014.12	4,290.55	4,566.98	4,807.78
3/4	152.05	516.98	880.85	1,244.42	1,608.40	1,972.39	2,336.37	2,700.36	3,064.34	3,428.32	3,740.12	4,019.88	4,296.31	4,572.74	4,809.63
5	159.65	524.59	888.42	1,252.00	1,615.99	1,979.97	2,343.95	2,707.94	3,071.92	3,435.91	3,745.98	4,025.64	4,302.07	4,578.50	4,811.48
1/4	167.25	532.20	895.98	1,259.59	1,623.57	1,987.55	2,351.54	2,715.52	3,079.51	3,443.49	3,751.84	4,031.40	4,307.83	4,584.26	4,812.46
1/2	174.86	539.80	903.54	1,267.17	1,631.15	1,995.14	2,359.12	2,723.10	3,087.09	3,451.07	3,757.16	4,037.16	4,313.59	4,590.02	4,813.44
3/4	182.46	547.40	911.11	1,274.75	1,638.74	2,002.72	2,366.70	2,730.69	3,094.67	3,458.66	3,763.57	4,042.91	4,319.35	4,595.78	4,814.41
6	190.06	555.01	918.67	1,282.33	1,646.32	2,010.30	2,374.29	2,738.27	3,102.25	3,466.13	3,769.43	4,048.67	4,325.11	4,601.54	4,815.39
1/4	197.67	562.61	926.21	1,289.92	1,653.90	2,017.89	2,381.87	2,745.85	3,109.84	3,473.60	3,775.30	4,054.43	4,330.86	4,607.30	4,815.83
1/2	205.27	570.21	933.80	1,297.50	1,661.48	2,025.47	2,389.45	2,753.44	3,117.42	3,481.08	3,781.16	4,060.19	4,336.62	4,613.06	4,815.83
3/4	212.87	577.82	941.36	1,305.08	1,669.07	2,033.05	2,397.04	2,761.02	3,125.00	3,488.55	3,787.02	4,065.95	4,342.38	4,618.81	4,816.05
7	220.47	585.42	948.92	1,312.67	1,676.65	2,040.63	2,404.62	2,768.60	3,132.59	3,495.77	3,792.89	4,071.71	4,348.14	4,624.57	
1/4	228.08	593.02	956.48	1,320.25	1,684.23	2,048.22	2,412.20	2,776.19	3,140.17	3,502.98	3,798.75	4,077.47	4,353.90	4,630.33	
1/2	235.68	600.62	964.05	1,327.83	1,691.82	2,055.80	2,419.78	2,783.77	3,147.75	3,510.20	3,804.61	4,083.23	4,359.66	4,636.09	
3/4	243.28	608.23	971.61	1,335.42	1,699.40	2,063.38	2,427.37	2,791.35	3,155.34	3,517.42	3,810.47	4,088.99	4,365.42	4,641.85	
8	250.89	615.83	979.17	1,343.00	1,706.98	2,070.97	2,434.95	2,798.93	3,162.92	3,524.37	3,816.34	4,094.75	4,371.18	4,647.61	
1/4	258.49	623.43	986.74	1,350.58	1,714.57	2,078.55	2,442.53	2,806.52	3,170.50	3,531.33	3,822.20	4,100.50	4,376.94	4,653.37	
1/2	266.09	631.04	994.30	1,358.16	1,722.15	2,086.13	2,450.12	2,814.10	3,178.08	3,538.29	3,828.06	4,106.26	4,382.70	4,659.13	
3/4	273.70	638.64	1,001.86	1,365.75	1,729.73	2,093.75	2,457.70	2,821.68	3,185.67	3,545.25	3,833.93	4,112.02	4,388.45	4,664.89	
9	281.30	646.24	1,009.43	1,373.33	1,737.31	2,101.30	2,465.28	2,829.27	3,193.25	3,551.95	3,839.79	4,117.78	4,394.21	4,670.65	
1/4	288.90	653.84	1,016.99	1,380.91	1,744.90	2,108.88	2,472.87	2,836.85	3,200.83	3,558.65	3,845.65	4,123.54	4,399.97	4,676.40	
1/2	296.50	661.45	1,024.55	1,388.50	1,752.48	2,116.46	2,480.45	2,844.43	3,208.42	3,565.35	3,851.52	4,129.30	4,405.73	4,682.16	
3/4	304.11	669.05	1,032.12	1,396.08	1,760.06	2,124.05	2,488.03	2,852.02	3,216.00	3,572.06	3,857.38	4,135.06	4,411.49	4,687.92	
10	311.71	676.65	1,039.68	1,403.65	1,767.65	2,131.63	2,495.61	2,859.60	3,223.58	3,578.50	3,863.24	4,140.82	4,417.25	4,693.68	
1/4	319.31	684.22	1,047.26	1,411.25	1,775.23	2,139.21	2,503.20	2,867.18	3,231.17	3,584.94	3,869.10	4,146.58	4,423.01	4,699.44	
1/2	326.92	691.78	1,054.84	1,418.83	1,782.81	2,146.80	2,510.78	2,874.76	3,238.75	3,591.38	3,874.97	4,152.34	4,428.77	4,705.20	
3/4	334.52	699.34	1,062.41	1,426.41	1,790.40	2,154.38	2,518.36	2,882.35	3,246.33	3,597.83	3,880.83	4,158.09	4,434.53	4,710.96	
11	342.12	706.91	1,070.01	1,433.99	1,797.98	2,161.96	2,525.95	2,889.93	3,253.91	3,604.01	3,886.69	4,163.85	4,440.29	4,716.72	
1/4	349.73	714.47	1,077.59	1,441.58	1,805.56	2,169.55	2,533.53	2,898.51	3,261.50	3,610.20	3,892.56	4,169.61	4,446.04	4,722.48	
1/2	357.33	722.03	1,085.18	1,449.16	1,813.14	2,177.13	2,541.11	2,905.10	3,268.08	3,616.38	3,898.42	4,175.37	4,451.80	4,728.24	
3/4	364.93	729.59	1,092.76	1,456.74	1,820.73	2,184.71	2,548.70	2,912.68	3,276.66	3,622.57	3,904.28	4,181.13	4,457.56	4,733.99	

MAP 615

STAR 3

	0 FT	1 FT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT
0	17.37	372.53	737.16	1,100.34	1,464.33	1,828.31	2,192.29	2,556.28	2,920.26	3,284.25	3,628.53	3,910.15	4,186.89	4,463.32	4,739.75
1/4	22.80	380.14	744.72	1,107.93	1,471.91	1,835.89	2,199.88	2,563.86	2,927.85	3,291.83	3,634.49	3,916.01	4,192.65	4,469.08	4,745.08
1/2	28.23	387.74	752.28	1,115.57	1,479.49	1,843.48	2,207.46	2,571.44	2,935.43	3,299.41	3,640.45	3,921.87	4,198.41	4,474.84	4,750.40
3/4	33.66	395.34	759.85	1,123.09	1,487.08	1,851.06	2,215.04	2,579.03	2,943.01	3,307.00	3,646.31	3,927.73	4,204.17	4,480.60	4,755.73
1	39.09	402.95	767.41	1,130.67	1,494.66	1,858.64	2,222.63	2,586.61	2,950.59	3,314.58	3,652.17	3,933.49	4,209.93	4,486.36	4,761.05
1/4	46.15	410.55	774.97	1,138.26	1,502.24	1,866.23	2,230.21	2,594.19	2,958.18	3,322.16	3,658.04	3,939.25	4,215.68	4,492.12	4,765.51
1/2	53.21	418.15	782.54	1,145.84	1,509.82	1,873.81	2,237.79	2,601.78	2,965.76	3,329.74	3,663.90	3,945.01	4,221.44	4,497.88	4,769.96
3/4	60.81	425.76	790.10	1,153.42	1,517.41	1,881.39	2,245.38	2,609.36	2,973.34	3,337.33	3,669.76	3,950.77	4,227.20	4,503.63	4,774.42
2	68.41	433.36	797.66	1,161.01	1,524.99	1,888.97	2,252.96	2,616.94	2,980.93	3,344.91	3,675.63	3,956.53	4,232.96	4,509.39	4,778.87
1/4	76.02	440.96	805.22	1,168.58	1,532.57	1,896.56	2,260.54	2,624.53	2,988.51	3,352.49	3,681.49	3,962.29	4,238.72	4,515.15	4,782.46
1/2	83.62	448.56	812.79	1,176.17	1,540.16	1,904.14	2,268.12	2,632.11	2,996.09	3,360.08	3,687.35	3,968.05	4,244.48	4,520.91	4,786.05
3/4	91.22	456.17	820.35	1,183.76	1,547.74	1,911.72	2,275.71	2,639.69	3,003.68	3,367.66	3,693.21	3,973.81	4,250.24	4,526.67	4,789.63
3	98.83	463.77	827.91	1,191.34	1,555.20	1,919.31	2,283.29	2,647.27	3,011.26	3,375.24	3,699.08	3,979.57	4,256.00	4,532.43	4,793.22
1/4	106.43	471.37	835.48	1,198.92	1,562.91	1,926.89	2,290.87	2,654.86	3,018.84	3,382.83	3,704.94	3,985.32	4,261.76	4,538.19	4,795.93
1/2	114.03	478.98	843.04	1,206.50	1,570.49	1,934.47	2,298.46	2,662.44	3,026.42	3,390.41	3,710.80	3,991.08	4,267.52	4,543.95	4,798.65
3/4	121.64	486.58	850.60	1,214.09	1,578.07	1,942.06	2,306.04	2,670.02	3,034.01	3,397.99	3,716.67	3,996.84	4,273.27	4,549.71	4,801.37
4	129.24	494.18	858.17	1,221.67	1,585.65	1,949.64	2,313.62	2,677.61	3,041.59	3,405.57	3,722.53	4,002.60	4,279.03	4,555.47	4,804.09
1/4	136.84	501.79	865.73	1,229.25	1,593.24	1,957.22	2,321.21	2,685.19	3,049.17	3,413.16	3,728.39	4,008.36	4,284.79	4,561.22	4,805.93
1/2	144.44	509.39	873.29	1,236.84	1,600.82	1,964.80	2,328.79	2,692.77	3,056.76	3,420.74	3,734.26	4,014.12	4,290.55	4,566.98	4,807.78
3/4	152.05	516.99	880.85	1,244.42	1,608.40	1,972.39	2,336.37	2,700.36	3,064.34	3,428.32	3,740.12	4,019.88	4,296.31	4,572.74	4,809.63
5	159.65	524.59	888.42	1,252.00	1,615.99	1,979.97	2,343.95	2,707.94	3,071.92	3,435.91	3,745.98	4,025.64	4,302.07	4,578.50	4,811.48
1/4	167.25	532.20	895.98	1,259.59	1,623.57	1,987.55	2,351.54	2,715.52	3,079.51	3,443.49	3,751.84	4,031.40	4,307.83	4,584.26	4,812.46
1/2	174.86	539.80	903.54	1,267.17	1,631.15	1,995.14	2,359.12	2,723.10	3,087.09	3,451.07	3,757.71	4,037.16	4,313.59	4,590.02	4,813.44
3/4	182.46	547.40	911.11	1,274.75	1,638.74	2,002.72	2,366.70	2,730.69	3,094.67	3,458.66	3,763.57	4,042.91	4,319.35	4,595.78	4,814.41
6	190.06	555.01	918.67	1,282.33	1,646.32	2,010.30	2,374.29	2,738.27	3,102.25	3,466.13	3,769.43	4,048.67	4,325.11	4,601.54	4,815.39
1/4	197.67	562.61	926.23	1,289.92	1,653.90	2,017.89	2,381.87	2,745.85	3,109.84	3,473.60	3,775.30	4,054.43	4,330.86	4,607.30	4,815.61
1/2	205.27	570.21	933.80	1,297.50	1,661.48	2,025.47	2,389.45	2,753.44	3,117.42	3,481.08	3,781.16	4,060.19	4,336.62	4,613.06	4,815.83
3/4	212.87	577.82	941.36	1,305.08	1,669.07	2,033.05	2,397.04	2,761.02	3,125.00	3,488.55	3,787.02	4,065.95	4,342.38	4,618.81	4,816.05
7	220.47	585.42	948.92	1,312.67	1,676.65	2,040.63	2,404.62	2,768.60	3,132.59	3,495.77	3,792.89	4,071.71	4,348.14	4,624.57	
1/4	228.08	593.02	956.48	1,320.25	1,684.23	2,048.22	2,412.20	2,776.19	3,140.17	3,502.98	3,798.75	4,077.47	4,353.90	4,630.33	
1/2	235.68	600.62	964.05	1,327.83	1,691.82	2,055.80	2,419.78	2,783.77	3,147.75	3,510.20	3,804.61	4,083.23	4,359.66	4,636.09	
3/4	243.28	608.23	971.61	1,335.42	1,699.40	2,063.38	2,427.37	2,791.35	3,155.34	3,517.42	3,810.47	4,088.99	4,365.42	4,641.85	
8	250.89	615.83	979.17	1,343.00	1,706.98	2,070.97	2,434.95	2,798.93	3,162.92	3,524.37	3,816.34	4,094.75	4,371.18	4,647.61	
1/4	258.49	623.43	986.74	1,350.58	1,714.57	2,078.55	2,442.53	2,806.52	3,170.50	3,531.33	3,822.20	4,100.50	4,376.94	4,653.37	
1/2	266.09	631.04	994.30	1,358.16	1,722.15	2,086.13	2,450.12	2,814.10	3,178.08	3,538.29	3,828.06	4,106.26	4,382.70	4,659.13	
3/4	273.70	638.64	1,001.86	1,365.75	1,729.73	2,093.75	2,457.70	2,821.68	3,185.67	3,545.25	3,833.93	4,112.02	4,388.45	4,664.89	
9	281.30	646.24	1,009.43	1,373.33	1,737.31	2,101.30	2,465.28	2,829.27	3,193.25	3,551.95	3,839.79	4,117.78	4,394.21	4,670.65	
1/4	288.90	653.84	1,016.99	1,380.91	1,744.90	2,108.88	2,472.87	2,836.85	3,200.83	3,558.65	3,845.65	4,123.54	4,399.97	4,676.40	
1/2	296.50	661.45	1,024.55	1,388.50	1,752.48	2,116.46	2,480.45	2,844.43	3,208.42	3,565.35	3,851.52	4,129.30	4,405.73	4,682.16	
3/4	304.11	669.05	1,032.12	1,396.08	1,760.06	2,124.05	2,488.03	2,852.02	3,216.00	3,572.06	3,857.38	4,135.06	4,411.49	4,687.92	
10	311.71	676.65	1,039.68	1,403.66	1,767.65	2,131.63	2,495.61	2,859.60	3,223.58	3,578.50	3,863.24	4,140.82	4,417.25	4,693.68	
1/4	319.31	684.22	1,047.26	1,411.25	1,775.23	2,139.21	2,503.20	2,867.18	3,231.17	3,584.94	3,869.10	4,146.58	4,423.01	4,699.44	
1/2	326.92	691.78	1,054.84	1,418.81	1,782.81	2,146.80	2,510.78	2,874.76	3,238.75	3,591.38	3,874.97	4,152.34	4,428.77	4,705.20	
3/4	334.52	699.34	1,062.43	1,426.41	1,790.40	2,154.38	2,518.36	2,882.35	3,246.33	3,597.83	3,880.83	4,158.09	4,434.53	4,710.96	
11	342.12	706.91	1,070.01	1,433.99	1,797.98	2,161.96	2,525.95	2,889.93	3,253.91	3,604.01	3,886.69	4,163.85	4,440.29	4,716.72	
1/4	349.73	714.47	1,077.59	1,441.58	1,805.56	2,169.55	2,533.53	2,897.51	3,261.50	3,610.20	3,892.56	4,169.61	4,446.04	4,722.48	
1/2	357.33	722.03	1,085.18	1,449.16	1,813.14	2,177.13	2,541.11	2,905.10	3,269.08	3,616.38	3,898.42	4,175.37	4,451.80	4,728.24	
3/4	364.93	729.59	1,092.76	1,456.74	1,820.73	2,184.71	2,548.70	2,912.68	3,276.66	3,622.57	3,904.28	4,181.13	4,457.56	4,733.99	