APPENDIX C

APPENDIX C.

FINAL SITE COORDINATES FOR ACCUMULATOR RING. COORDINATES ARE GIVEN AT BEND CENTER AND DOWNSTREAM END OF EACH MAGNET. COORDINATES ARE LISTED IN CLOCKWISE MANNER.

MAIN RING STATION IS X=0.0, Y=0.0 7/1/84 D.E. JOHNSON

NAME	LENGTH(IN)	X(FEET)	Y(FEET)	THETA(RAD)	S(METERS)
A10		-457.6270	-1398.9340	.523599	
A10	0.00	-457.6270	-1398.9340	.523599	0.0000
A1Q1		-444.0664	-1375.4464	.523599	
A1Q1	25.20	-443.5414	-1374.5370	.523599	8.5866
A1Q2		-441.6250	-1371.2177	.523599	
A1Q2	51.64	-440.5492	-1369.3543	.523599	10.4106
A1Q3		-438.3984	-1365.6291	.523599	
A1Q3	27.60	-437.8235	-1364.6333	.523599	12.0722
A1B3		-435.0894	-1359.8977	.523599	
A1B3	60.00	-433.6545	-1357.8485	.610865	14.5004
A1Q4		-421.1362	-1339.9705	.610865	
A1Q4	18.00	-420.7061	-1339.3562	.610865	21.3813
A1Q5		-413.7904	-1329.4796	.610865	
A1Q5	32.60	-413.0113	-1328.3670	.610865	25.4703
A1Q6		-398.5246	-1307.6777	.610865	
A1Q6	27.60	-397.8650	-1306.7358	.610865	33.5191
A1Q7		-389.3259	-1294.5407	.610865	
A1Q7	27.60	-388.6663	-1293.5987	.610865	38.4073
A1S7		-383.0209	-1285.5362	.610865	
A1S7	12.00	-382.7341	-1285.1266	.610865	41.5597
A1B7		-377.4257	-1277.5455	.610865	
A1B7	120.00	-373.8812	-1274.0009	.785398	45.9007
A1Q8		-372.1723	-1272.2921	.785398	
A1Q8	18.00	-371.6420	-1271.7618	.785398	46.8659
A1B8		-363.4798	-1263.5995	.785398	
A1B8	180.00	-356.9472	-1259.8280	1.047198	52.6571
A1Q9		-354.8543	-1258.6196	1.047198	
A1Q9	18.00	-354.2048	-1258.2446	1.047198	53.6223
A1S9		-352.9058	-1257.4946	1.047198	
A1S9	12.00	-352.4728	-1257.2446	1.047198	54.2319
A1B9		-344.2082	-1252.4731	1.047198	
A1B9	180.00	-336.9221	-1250.5208	1.308997	59.4135
A1Q10		-334.5878	-1249.8953	1.308997	
A1Q10	18.00	-333.8633	-1249.7012	1.308997	60.3787
A1B10		-324.9673	-1247.3175	1.308997	
A1B10	180.00	-317.4242	-1247.3175	1.570796	65.4587
A1S10		-315.9665	-1247.3175	1.570796	
A1S10	12.00	-315.4665	-1247.3175	1.570796	66.0554
A1Q11		-313.0755	-1247.3175	1.570796	
A1Q11	34.40	-311.6422	-1247.3175	1.570796	67.2211
A1Q12		-308.6662	-1247.3175	1.570796	
A1Q12	30.40	-307.3995	-1247.3175	1.570796	68.5142
A1S12		-306.1850	-1247.3175	1.570796	
A1S12	12.00	-305.6850	-1247.3175	1.570796	69.0368
A1Q13		-303.7037	-1247.3175	1.570796	
A1Q13	30.40	-302.4371	-1247.3175	1.570796	70.0268
A1Q14		-299.7517	-1247.3175	1.570796	
A1Q14	25.30	-298.6975	-1247.3175	1.570796	71.1666
A20		-272.9596	-1247.3175	1.570796	

A20	0.00	-272.9596	-1247.3175	1.570796	79.0115
A2Q14		-246.1676	-1247.3175	1.570796	
A2Q14	25.30	-245.1134	-1247.3175	1.570796	87.4990
A2Q13		-242.2155	-1247.3175	1.570796	
A2Q13	30.40	-240.9489	-1247.3175	1.570796	88.7684
A2S12		-239.7343	-1247.3175	1.570796	
A2S12	12.00	-239.2343	-1247.3175	1.570796	89.2910
A2Q12		-237.2531	-1247.3175	1.570796	
A2Q12	30.40	-235.9864	-1247.3175	1.570796	90.2809
A2Q11		-232.8438	-1247.3175	1.570796	
A2Q11	34.40	-231.4104	-1247.3175	1.570796	91.6757
A2S10		-229.9527	-1247.3175	1.570796	
A2S10	12.00	-229.4527	-1247.3175	1.570796	92.2724
A2B10		-220.9519	-1247.3175	1.570796	
A2B10	180.00	-213.6658	-1249.2698	1.832596	97.1363
A2Q10		-211.3315	-1249.8953	1.832596	
A2Q10	18.00	-210.6071	-1250.0894	1.832596	98.1015
A2B9		-201.7111	-1252.4731	1.832596	
A2B9	180.00	-195.1785	-1256.2446	2.094395	103.1815
A2S9		-193.0135	-1257.4946	2.094395	
A2S9	12.00	-192.5805	-1257.7446	2.094395	104.0959
A2Q9		-191.0649	-1258.6196	2.094395	
A2Q9	18.00	-190.4154	-1258.9946	2.094395	104.8579
A2B8		-182.4395	-1263.5995	2.094395	
A2B8	180.00	-177.1057	-1268.9333	2.356195	109.9379
A2Q8		-173.7469	-1272.2921	2.356195	
A2Q8	18.00	-173.2166	-1272.8224	2.356195	111.6143
A2B7		-168.4935	-1277.5455	2.356195	
A2B7	120.00	-165.6184	-1281.6517	2.530727	115.1703
A2S7		-162.8984	-1285.5362	2.530727	
A2S7	12.00	-162.6116	-1285.9458	2.530727	116.7681
A2Q7		-156.5934	-1294.5407	2.530727	
A2Q7	27.60	-155.9338	-1295.4826	2.530727	120.3167
A2Q6		-147.3947	-1307.6777	2.530727	
A2Q6	27.60	-146.7351	-1308.6197	2.530727	125.2049
A2Q5		-132.1289	-1329.4796	2.530727	
A2Q5	32.60	-131.3498	-1330.5922	2.530727	133.3807
A2Q4		-124.7830	-1339.9706	2.530727	
A2Q4	18.00	-124.3528	-1340.5849	2.530727	137.0989
A2B3		-110.8299	-1359.8977	2.530727	
A2B3	60.00	-109.5791	-1362.0642	2.617994	145.0466
A2Q3		-107.5208	-1365.6291	2.617994	
A2Q3	27.60	-106.9459	-1366.6250	2.617994	146.6518
A2Q2		-104.2943	-1371.2178	2.617994	
A2Q2	51.64	-103.2184	-1373.0812	2.617994	148.9240
A2Q1		-101.8529	-1375.4464	2.617994	
A2Q1	25.20	-101.3279	-1376.3557	2.617994	150.0765
A30		-88.2923	-1398.9340	2.617994	

A30	0.00	-88.2923	-1398.9340	2.617994	158.0230
A3Q1		-74.7317	-1422.4217	2.617994	
A3Q1	25.20	-74.2067	-1423.3310	2.617994	166.6096
A3Q2		-72.2903	-1426.6503	2.617994	
A3Q2	51.64	-71.2144	-1428.5137	2.617994	168.4336
A3Q3		-69.0637	-1432.2389	2.617994	
A3Q3	27.60	-68.4887	-1433.2348	2.617994	170.0952
A3B3		-65.7547	-1437.9703	2.617994	
A3B3	60.00	-64.6974	-1440.2375	2.705260	172.5234
A3Q4		-55.4738	-1460.0177	2.705260	
A3Q4	18.00	-55.1568	-1460.6974	2.705260	179.4043
A3Q5		-50.0613	-1471.6248	2.705260	
A3Q5	32.60	-49.4873	-1472.8558	2.705260	183.4933
A3Q6		-38.8132	-1495.7464	2.705260	
A3Q6	27.60	-38.3273	-1496.7885	2.705260	191.5421
A3Q7		-32.0356	-1510.2812	2.705260	
A3Q7	27.60	-31.5496	-1511.3234	2.705260	196.4303
A3S7		-27.3899	-1520.2437	2.705260	
A3S7	12.00	-27.1786	-1520.6969	2.705260	199.5827
A3B7		-23.2674	-1529.0846	2.705260	
A3B7	120.00	-21.9700	-1533.9266	2.879793	203.9237
A3Q8		-21.3445	-1536.2609	2.879793	
A3Q8	18.00	-21.1504	-1536.9853	2.879793	204.8889
A3B8		-18.1628	-1548.1351	2.879793	
A3B8	180.00	-18.1628	-1555.6783	3.141593	210.6801
A3Q9		-18.1628	-1558.0949	3.141593	
A3Q9	18.00	-18.1628	-1558.8449	3.141593	211.6453
A3S9		-18.1628	-1560.3449	3.141593	
A3S9	12.00	-18.1628	-1560.8449	3.141593	212.2549
A3B9		-18.1628	-1570.3881	3.141593	
A3B9	180.00	-20.1151	-1577.6742	3.403392	217.4365
A3Q10		-20.7406	-1580.0085	3.403392	
A3Q10	18.00	-20.9347	-1580.7329	3.403392	218.4017
A3B10		-23.3184	-1589.6289	3.403392	
A3B10	180.00	-27.0899	-1596.1615	3.665192	223.4817
A3S10		-27.8188	-1597.4238	3.665192	
A3S10	12.00	-28.0688	-1597.8569	3.665192	224.0784
A3Q11		-29.2643	-1599.9275	3.665192	
A3Q11	34.40	-29.9809	-1601.1688	3.665192	225.2441
A3Q12		-31.4689	-1603.7461	3.665192	
A3Q12	30.40	-32.1023	-1604.8431	3.665192	226.5372
A3S12		-32.7096	-1605.8949	3.665192	
A3S12	12.00	-32.9596	-1606.3279	3.665192	227.0598
A3Q13		-33.9502	-1608.0437	3.665192	
A3Q13	30.40	-34.5835	-1609.1407	3.665192	228.0498
A3Q14		-35.9262	-1611.4663	3.665192	
A3Q14	25.30	-36.4533	-1612.3793	3.665192	229.1896
A40		-49.3222	-1634.6689	3.665192	

A4O	0.00	-49.3222	-1634.6689	3.665192	237.0345
A4Q14		-62.7182	-1657.8715	3.665192	
A4Q14	25.30	-63.2453	-1658.7844	3.665192	245.5220
A4Q13		-64.6943	-1661.2941	3.665192	
A4Q13	30.40	-65.3276	-1662.3910	3.665192	246.7914
A4S12		-65.9349	-1663.4429	3.665192	
A4S12	12.00	-66.1849	-1663.8759	3.665192	247.3140
A4Q12		-67.1755	-1665.5917	3.665192	
A4Q12	30.40	-67.8088	-1666.6887	3.665192	248.3039
A4Q11		-69.3802	-1669.4103	3.665192	
A4Q11	34.40	-70.0968	-1670.6516	3.665192	249.6987
A4S10		-70.8257	-1671.9140	3.665192	
A4S10	12.00	-71.0757	-1672.3470	3.665192	250.2954
A4B10		-75.3261	-1679.7089	3.665192	
A4B10	180.00	-80.6599	-1685.0427	3.926991	255.1593
A4Q10		-82.3687	-1686.7515	3.926991	
A4Q10	18.00	-82.8990	-1687.2819	3.926991	256.1245
A4B9		-89.4114	-1693.7942	3.926991	
A4B9	180.00	-95.9439	-1697.5657	4.188790	261.2045
A4S9		-98.1090	-1698.8157	4.188790	
A4S9	12.00	-98.5420	-1699.0657	4.188790	262.1189
A4Q9		-100.0575	-1699.9407	4.188790	
A4Q9	18.00	-100.7070	-1700.3157	4.188790	262.8809
A4B8		-108.6830	-1704.9206	4.188790	
A4B8	180.00	-115.9691	-1706.8729	4.450590	267.9609
A4Q8		-120.5572	-1708.1023	4.450590	
A4Q8	18.00	-121.2817	-1708.2964	4.450590	269.6373
A4B7		-127.7335	-1710.0252	4.450590	
A4B7	120.00	-132.7271	-1710.4621	4.625123	273.1933
A4S7		-137.4512	-1710.8754	4.625123	
A4S7	12.00	-137.9493	-1710.9190	4.625123	274.7911
A4Q7		-148.4018	-1711.8334	4.625123	
A4Q7	27.60	-149.5474	-1711.9337	4.625123	278.3397
A4Q6		-164.3782	-1713.2312	4.625123	
A4Q6	27.60	-165.5238	-1713.3314	4.625123	283.2279
A4Q5		-190.8921	-1715.5509	4.625123	
A4Q5	32.60	-192.2452	-1715.6692	4.625123	291.4037
A4Q4		-203.6504	-1716.6671	4.625123	
A4Q4	18.00	-204.3976	-1716.7324	4.625123	295.1219
A4B3		-227.8845	-1718.7873	4.625123	
A4B3	60.00	-230.3860	-1718.7873	4.712389	303.0696
A4Q3		-234.5025	-1718.7873	4.712389	
A4Q3	27.60	-235.6524	-1718.7873	4.712389	304.6748
A4Q2		-240.9557	-1718.7873	4.712389	
A4Q2	51.64	-243.1074	-1718.7873	4.712389	306.9470
A4Q1		-245.8385	-1718.7873	4.712389	
A4Q1	25.20	-246.8885	-1718.7873	4.712389	308.0995
A5O		-272.9597	-1718.7873	4.712389	

A50	0.00	-272.9597	-1718.7873	4.712389	316.0460
A5Q1		-300.0809	-1718.7873	4.712389	
A5Q1	25.20	-301.1309	-1718.7873	4.712389	324.6326
A5Q2		-304.9636	-1718.7873	4.712389	
A5Q2	51.64	-307.1153	-1718.7873	4.712389	326.4566
A5Q3		-311.4168	-1718.7873	4.712389	
A5Q3	27.60	-312.5667	-1718.7873	4.712389	328.1182
A5B3		-318.0349	-1718.7873	4.712389	
A5B3	60.00	-320.5269	-1718.5692	4.799656	330.5464
A5Q4		-342.2689	-1716.6670	4.799656	
A5Q4	18.00	-343.0160	-1716.6017	4.799656	337.4273
A5Q5		-355.0272	-1715.5508	4.799656	
A5Q5	32.60	-356.3803	-1715.4325	4.799656	341.5163
A5Q6		-381.5411	-1713.2312	4.799656	
A5Q6	27.60	-382.6867	-1713.1309	4.799656	349.5651
A5Q7		-397.5175	-1711.8334	4.799656	
A5Q7	27.60	-398.6631	-1711.7332	4.799656	354.4533
A5S7		-408.4681	-1710.8754	4.799656	
A5S7	12.00	-408.9662	-1710.8318	4.799656	357.6057
A5B7		-418.1859	-1710.0252	4.799656	
A5B7	120.00	-423.0278	-1708.7278	4.974188	361.9467
A5Q8		-425.3621	-1708.1023	4.974188	
A5Q8	18.00	-426.0865	-1707.9082	4.974188	362.9119
A5B8		-437.2364	-1704.9206	4.974188	
A5B8	180.00	-443.7689	-1701.1490	5.235988	368.7031
A5Q9		-445.8618	-1699.9407	5.235988	
A5Q9	18.00	-446.5113	-1699.5657	5.235988	369.6683
A5S9		-447.8104	-1698.8157	5.235988	
A5S9	12.00	-448.2434	-1698.5657	5.235988	370.2779
A5B9		-456.5080	-1693.7941	5.235988	
A5B9	180.00	-461.8418	-1688.4603	5.497787	375.4595
A5Q10		-463.5506	-1686.7515	5.497787	
A5Q10	18.00	-464.0809	-1686.2212	5.497787	376.4247
A5B10		-470.5932	-1679.7088	5.497787	
A5B10	180.00	-474.3648	-1673.1763	5.759587	381.5047
A5S10		-475.0936	-1671.9139	5.759587	
A5S10	12.00	-475.3436	-1671.4809	5.759587	382.1014
A5Q11		-476.5391	-1669.4102	5.759587	
A5Q11	34.40	-477.2558	-1668.1689	5.759587	383.2671
A5Q12		-478.7438	-1665.5916	5.759587	
A5Q12	30.40	-479.3771	-1664.4947	5.759587	384.5602
A5S12		-479.9844	-1663.4428	5.759587	
A5S12	12.00	-480.2344	-1663.0098	5.759587	385.0828
A5Q13		-481.2250	-1661.2940	5.759587	
A5Q13	30.40	-481.8584	-1660.1971	5.759587	386.0728
A5Q14		-483.2011	-1657.8714	5.759587	
A5Q14	25.30	-483.7282	-1656.9585	5.759587	387.2126
A60		-496.5971	-1634.6688	5.759587	

A60	0.00	-496.5971	-1634.6688	5.759587	395.0575
A6Q14		-509.9931	-1611.4663	5.759587	
A6Q14	25.30	-510.5202	-1610.5533	5.759587	403.5450
A6Q13		-511.9691	-1608.0437	5.759587	
A6Q13	30.40	-512.6025	-1606.9467	5.759587	404.8144
A6S12		-513.2097	-1605.8949	5.759587	
A6S12	12.00	-513.4597	-1605.4619	5.759587	405.3370
A6Q12		-514.4504	-1603.7461	5.759587	
A6Q12	30.40	-515.0837	-1602.6491	5.759587	406.3269
A6Q11		-516.6550	-1599.9275	5.759587	
A6Q11	34.40	-517.3717	-1598.6862	5.759587	407.7217
A6S10		-518.1005	-1597.4238	5.759587	
A6S10	12.00	-518.3505	-1596.9908	5.759587	408.3184
A6B10		-522.6009	-1589.6289	5.759587	
A6B10	180.00	-524.5532	-1582.3427	6.021386	413.1823
A6Q10		-525.1787	-1580.0084	6.021386	
A6Q10	18.00	-525.3728	-1579.2840	6.021386	414.1475
A6B9		-527.7565	-1570.3880	6.021386	
A6B9	180.00	-527.7565	-1562.8449	6.283185	419.2275
A6S9		-527.7565	-1560.3449	.000000	
A6S9	12.00	-527.7565	-1559.8449	.000000	420.1419
A6Q9		-527.7565	-1558.0949	.000000	
A6Q9	18.00	-527.7565	-1557.3449	.000000	420.9039
A6B8		-527.7565	-1548.1351	.000000	
A6B8	180.00	-525.8042	-1540.8490	.261800	425.9839
A6Q8		-524.5748	-1536.2608	.261800	
A6Q8	18.00	-524.3807	-1535.5364	.261800	427.6603
A6B7		-522.6519	-1529.0846	.261800	
A6B7	120.00	-520.5334	-1524.5415	.436332	431.2163
A6S7		-518.5293	-1520.2437	.436332	
A6S7	12.00	-518.3180	-1519.7905	.436332	432.8141
A6Q7		-513.8837	-1510.2811	.436332	
A6Q7	27.60	-513.3977	-1509.2389	.436332	436.3627
A6Q6		-507.1060	-1495.7463	.436332	
A6Q6	27.60	-506.6200	-1494.7041	.436332	441.2509
A6Q5		-495.8580	-1471.6248	.436332	
A6Q5	32.60	-495.2839	-1470.3938	.436332	449.4267
A6Q4		-490.4455	-1460.0176	.436332	
A6Q4	18.00	-490.1285	-1459.3379	.436332	453.1449
A6B3		-480.1646	-1437.9702	.436332	
A6B3	60.00	-478.9138	-1435.8038	.523599	461.0926
A6Q3		-476.8556	-1432.2388	.523599	
A6Q3	27.60	-476.2806	-1431.2430	.523599	462.6978
A6Q2		-473.6290	-1426.6502	.523599	
A6Q2	51.64	-472.5531	-1424.7868	.523599	464.9700
A6Q1		-471.1876	-1422.4216	.523599	
A6Q1	25.20	-470.6626	-1421.5123	.523599	466.1225
A10		-457.6270	-1398.9340	.523599	
A10	0.00	-457.6270	-1398.9340	.523599	474.0690

15.21.50.UCLP, GG, TB10, 0.346KLNS. ** END OF LISTING **

FINAL SITE COORDINATES FOR DEBUNCHER RING DE JOHSON 7-1-84

BEGIN -467.8520 -1393.0300 .5235987756

NAME	LENGTH(IN)	X(FEET)	Y(FEET)	THETA(RAD)	S(METERS)
D10		-467.8520	-1393.0300	.523599	
D10	0.00	-467.8520	-1393.0300	.523599	0.0000
D1Q1		-467.5645	-1392.5320	.523599	
D1Q1	13.80	-467.2770	-1392.0341	.523599	.3505
D1Q2		-460.5812	-1380.4365	.523599	
D1Q2	27.60	-460.0062	-1379.4406	.523599	4.7828
D1Q3		-453.3103	-1367.8431	.523599	
D1Q3	27.60	-452.7353	-1366.8472	.523599	9.2151
D1Q4		-446.0395	-1355.2496	.523599	
D1Q4	27.60	-445.4645	-1354.2537	.523599	13.6474
D1Q5		-438.7687	-1342.6562	.523599	
D1Q5	32.60	-438.0895	-1341.4798	.523599	18.1432
D1Q6		-431.4978	-1330.0627	.523599	
D1Q6	32.60	-430.8187	-1328.8864	.523599	22.5755
D1Q7		-424.2270	-1317.4693	.523599	
D1Q7	27.60	-423.6520	-1316.4734	.523599	26.9443
D1B7		-420.5906	-1311.1708	.523599	
D1B7	65.37	-419.0094	-1308.9504	.618799	29.6402
D1Q8		-416.3719	-1305.2465	.618799	
D1Q8	27.60	-415.7048	-1304.3097	.618799	31.3766
D1B8		-412.1532	-1299.3221	.618799	
D1B8	65.37	-410.3681	-1297.2621	.713998	34.0725
D1Q9		-407.3904	-1293.8256	.713998	
D1Q9	27.60	-406.6373	-1292.9565	.713998	35.8089
D1Q10		-397.8677	-1282.8358	.713998	
D1Q10	27.60	-397.1146	-1281.9667	.713998	40.2412
D1Q11		-388.3449	-1271.8459	.713998	
D1Q11	27.60	-387.5918	-1270.9768	.713998	44.6735
D1B11		-383.5822	-1266.3494	.713998	
D1B11	65.37	-381.6094	-1264.4684	.809198	47.3693
D1Q12		-378.3185	-1261.3306	.809198	
D1Q12	27.60	-377.4862	-1260.5370	.809198	49.1058
D1B12		-373.0549	-1256.3117	.809198	
D1B12	65.37	-370.9123	-1254.6267	.904398	51.8016
D1Q13		-367.3380	-1251.8159	.904398	
D1Q13	27.60	-366.4341	-1251.1050	.904398	53.5381
D1B13		-361.6211	-1247.3201	.904398	
D1B13	65.37	-359.3280	-1245.8464	.999598	56.2339
D1Q14		-355.5028	-1243.3881	.999598	
D1Q14	27.60	-354.5353	-1242.7663	.999598	57.9704
D1B14		-349.3844	-1239.4560	.999598	

D1B14	65.37	-346.9616	-1238.2070	1.094797	60.6662
D1Q15		-342.9200	-1236.1234	1.094797	
D1Q15	27.60	-341.8979	-1235.5965	1.094797	62.4027
D1B15		-336.4556	-1232.7908	1.094797	
D1B15	65.37	-333.9251	-1231.7777	1.189997	65.0985
D1Q16		-329.7037	-1230.0877	1.189997	
D1Q16	27.60	-328.6361	-1229.6603	1.189997	66.8350
D1B16		-322.9518	-1227.3847	1.189997	
D1B16	65.37	-320.3364	-1226.6167	1.285197	69.5308
D1Q17		-315.9735	-1225.3357	1.285197	
D1Q17	27.60	-314.8701	-1225.0117	1.285197	71.2673
D1B17		-308.9952	-1223.2866	1.285197	
D1B17	65.37	-306.3187	-1222.7708	1.380397	73.9631
D1Q18		-301.8538	-1221.9102	1.380397	
D1Q18	27.60	-300.7245	-1221.6926	1.380397	75.6996
D1B18		-294.7123	-1220.5338	1.380397	
D1B18	65.37	-291.9988	-1220.2747	1.475597	78.3954
D1Q19		-287.4723	-1219.8425	1.475597	
D1Q19	27.60	-286.3275	-1219.7332	1.475597	80.1319
D1B19		-280.2324	-1219.1512	1.475597	
D1B19	65.37	-277.5066	-1219.1512	1.570796	82.8277
D1Q20		-272.9595	-1219.1512	1.570796	
D1Q20	27.60	-271.8095	-1219.1512	1.570796	84.5642
D2B19		-265.6866	-1219.1512	1.570796	
D2B19	65.37	-262.9731	-1219.4103	1.665996	87.2600
D2Q19		-258.4466	-1219.8425	1.665996	
D2Q19	27.60	-257.3018	-1219.9518	1.665996	88.9965
D2B18		-251.2067	-1220.5338	1.665996	
D2B18	65.37	-248.5301	-1221.0497	1.761196	91.6923
D2Q18		-244.0652	-1221.9102	1.761196	
D2Q18	27.60	-242.9360	-1222.1279	1.761196	93.4288
D2B17		-236.9237	-1223.2866	1.761196	
D2B17	65.37	-234.3083	-1224.0546	1.856396	96.1246
D2Q17		-229.9455	-1225.3357	1.856396	
D2Q17	27.60	-228.8420	-1225.6596	1.856396	97.8611
D2B16		-222.9672	-1227.3847	1.856396	
D2B16	65.37	-220.4366	-1228.3977	1.951595	100.5570
D2Q16		-216.2152	-1230.0877	1.951595	
D2Q16	27.60	-215.1476	-1230.5151	1.951595	102.2934
D2B15		-209.4633	-1232.7908	1.951595	
D2B15	65.37	-207.0405	-1234.0398	2.046795	104.9893
D2Q15		-202.9989	-1236.1234	2.046795	
D2Q15	27.60	-201.9768	-1236.6504	2.046795	106.7257
D2B14		-196.5345	-1239.4561	2.046795	
D2B14	65.37	-194.2414	-1240.9297	2.141995	109.4216

D2Q14		-190.4162	-1243.3881	2.141995	
D2Q14	27.60	-189.4487	-1244.0098	2.141995	111.1580
D2B13		-184.2978	-1247.3201	2.141995	
D2B13	65.37	-182.1552	-1249.0051	2.237195	113.8539
D2Q13		-178.5809	-1251.8159	2.237195	
D2Q13	27.60	-177.6770	-1252.5268	2.237195	115.5903
D2B12		-172.8641	-1256.3117	2.237195	
D2B12	65.37	-170.8913	-1258.1927	2.332395	118.2862
D2Q12		-167.6004	-1261.3306	2.332395	
D2Q12	27.60	-166.7681	-1262.1242	2.332395	120.0226
D2B11		-162.3368	-1266.3494	2.332395	
D2B11	65.37	-160.5518	-1268.4095	2.427594	122.7185
D2Q11		-157.5741	-1271.8459	2.427594	
D2Q11	27.60	-156.8210	-1272.7150	2.427594	124.4549
D2Q10		-148.0513	-1282.8358	2.427594	
D2Q10	27.60	-147.2982	-1283.7049	2.427594	128.8872
D2Q9		-138.5285	-1293.8257	2.427594	
D2Q9	27.60	-137.7754	-1294.6948	2.427594	133.3195
D2B8		-133.7658	-1299.3221	2.427594	
D2B8	65.37	-132.1847	-1301.5425	2.522794	136.0153
D2Q8		-129.5471	-1305.2465	2.522794	
D2Q8	27.60	-128.8800	-1306.1832	2.522794	137.7518
D2B7		-125.3284	-1311.1708	2.522794	
D2B7	65.37	-123.9655	-1313.5314	2.617994	140.4476
D2Q7		-121.6920	-1317.4693	2.617994	
D2Q7	27.60	-121.1170	-1318.4652	2.617994	142.1841
D2Q6		-114.4211	-1330.0627	2.617994	
D2Q6	32.60	-113.7420	-1331.2391	2.617994	146.6799
D2Q5		-107.1503	-1342.6562	2.617994	
D2Q5	32.60	-106.4711	-1343.8326	2.617994	151.1122
D2Q4		-99.8795	-1355.2497	2.617994	
D2Q4	27.60	-99.3045	-1356.2456	2.617994	155.4810
D2Q3		-92.6086	-1367.8431	2.617994	
D2Q3	27.60	-92.0336	-1368.8390	2.617994	159.9133
D2Q2		-85.3378	-1380.4366	2.617994	
D2Q2	27.60	-84.7628	-1381.4325	2.617994	164.3456
D2Q1		-78.3545	-1392.5321	2.617994	
D2Q1	13.80	-78.0670	-1393.0300	2.617994	168.4274
D3O		-78.0670	-1393.0300	2.617994	
D3O	0.00	-78.0670	-1393.0300	2.617994	168.4274
D3Q1		-77.7795	-1393.5280	2.617994	
D3Q1	13.80	-77.4920	-1394.0259	2.617994	168.7779
D3Q2		-70.7961	-1405.6235	2.617994	
D3Q2	27.60	-70.2211	-1406.6194	2.617994	173.2102
D3Q3		-63.5253	-1418.2169	2.617994	

D3Q3	27.60	-62.9503	-1419.2129	2.617994	177.6425
D3Q4		-56.2545	-1430.8104	2.617994	
D3Q4	27.60	-55.6795	-1431.8063	2.617994	182.0748
D3Q5		-48.9836	-1443.4038	2.617994	
D3Q5	32.60	-48.3045	-1444.5802	2.617994	186.5706
D3Q6		-41.7128	-1455.9973	2.617994	
D3Q6	32.60	-41.0336	-1457.1736	2.617994	191.0029
D3Q7		-34.4420	-1468.5907	2.617994	
D3Q7	27.60	-33.8670	-1469.5867	2.617994	195.3717
D3B7		-30.8055	-1474.8892	2.617994	
D3B7	65.37	-29.6732	-1477.3687	2.713194	198.0675
D3Q8		-27.7843	-1481.5049	2.713194	
D3Q8	27.60	-27.3065	-1482.5510	2.713194	199.8040
D3B8		-24.7630	-1488.1206	2.713194	
D3B8	65.37	-23.8715	-1490.6965	2.808394	202.4998
D3Q9		-22.3843	-1494.9934	2.808394	
D3Q9	27.60	-22.0081	-1496.0802	2.808394	204.2363
D3Q10		-17.6282	-1508.7353	2.808394	
D3Q10	27.60	-17.2520	-1509.8221	2.808394	208.6686
D3Q11		-12.8720	-1522.4772	2.808394	
D3Q11	27.60	-12.4959	-1523.5640	2.808394	213.1009
D3B11		-10.4933	-1529.3501	2.808394	
D3B11	65.37	-9.8507	-1531.9991	2.903593	215.7967
D3Q12		-8.7787	-1536.4180	2.903593	
D3Q12	27.60	-8.5075	-1537.5356	2.903593	217.5332
D3B12		-7.0640	-1543.4859	2.903593	
D3B12	65.37	-6.6761	-1546.1839	2.998793	220.2290
D3Q13		-6.0290	-1550.6847	2.998793	
D3Q13	27.60	-5.8653	-1551.8230	2.998793	221.9655
D3B13		-4.9939	-1557.8836	2.998793	
D3B13	65.37	-4.8642	-1560.6063	3.093993	224.6613
D3Q14		-4.6479	-1565.1483	3.093993	
D3Q14	27.60	-4.5932	-1566.2970	3.093993	226.3978
D3B14		-4.3018	-1572.4129	3.093993	
D3B14	65.37	-4.4315	-1575.1356	3.189193	229.0936
D3Q15		-4.6479	-1579.6776	3.189193	
D3Q15	27.60	-4.7026	-1580.8263	3.189193	230.8301
D3B15		-4.9939	-1586.9422	3.189193	
D3B15	65.37	-5.3819	-1589.6403	3.284392	233.5259
D3Q16		-6.0290	-1594.1411	3.284392	
D3Q16	27.60	-6.1926	-1595.2794	3.284392	235.2624
D3B16		-7.0640	-1601.3400	3.284392	
D3B16	65.37	-7.7067	-1603.9889	3.379592	237.9582
D3Q17		-8.7787	-1608.4078	3.379592	
D3Q17	27.60	-9.0498	-1609.5254	3.379592	239.6947

D3B17		-10.4933	-1615.4757	3.379592	
D3B17	65.37	-11.3848	-1618.0516	3.474792	242.3905
D3Q18		-12.8721	-1622.3486	3.474792	
D3Q18	27.60	-13.2482	-1623.4354	3.474792	244.1270
D3B18		-15.2508	-1629.2215	3.474792	
D3B18	65.37	-16.3831	-1631.7010	3.569992	246.8228
D3Q19		-18.2721	-1635.8371	3.569992	
D3Q19	27.60	-18.7498	-1636.8832	3.569992	248.5593
D3B19		-21.2933	-1642.4528	3.569992	
D3B19	65.37	-22.6562	-1644.8134	3.665192	251.2551
D3Q20		-24.9298	-1648.7513	3.665192	
D3Q20	27.60	-25.5048	-1649.7472	3.665192	252.9916
D4B19		-28.5662	-1655.0498	3.665192	
D4B19	65.37	-30.1473	-1657.2702	3.760391	255.6874
D4Q19		-32.7849	-1660.9741	3.760391	
D4Q19	27.60	-33.4520	-1661.9109	3.760391	257.4239
D4B18		-37.0036	-1666.8985	3.760391	
D4B18	65.37	-38.7886	-1668.9585	3.855591	260.1197
D4Q18		-41.7663	-1672.3949	3.855591	
D4Q18	27.60	-42.5194	-1673.2641	3.855591	261.8562
D4B17		-46.5291	-1677.8914	3.855591	
D4B17	65.37	-48.5018	-1679.7725	3.950791	264.5520
D4Q17		-51.7927	-1682.9103	3.950791	
D4Q17	27.60	-52.6250	-1683.7039	3.950791	266.2885
D4B16		-57.0563	-1687.9292	3.950791	
D4B16	65.37	-59.1990	-1689.6142	4.045991	268.9843
D4Q16		-62.7732	-1692.4250	4.045991	
D4Q16	27.60	-63.6772	-1693.1359	4.045991	270.7208
D4B15		-68.4901	-1696.9208	4.045991	
D4B15	65.37	-70.7832	-1698.3945	4.141190	273.4166
D4Q15		-74.6085	-1700.8528	4.141190	
D4Q15	27.60	-75.5759	-1701.4745	4.141190	275.1531
D4B14		-80.7268	-1704.7848	4.141190	
D4B14	65.37	-83.1496	-1706.0339	4.236390	277.8489
D4Q14		-87.1912	-1708.1175	4.236390	
D4Q14	27.60	-88.2134	-1708.6444	4.236390	279.5854
D4B13		-93.6556	-1711.4501	4.236390	
D4B13	65.37	-96.1862	-1712.4632	4.331590	282.2812
D4Q13		-100.4075	-1714.1531	4.331590	
D4Q13	27.60	-101.4752	-1714.5806	4.331590	284.0177
D4B12		-107.1595	-1716.8562	4.331590	
D4B12	65.37	-109.7749	-1717.6242	4.426790	286.7135
D4Q12		-114.1377	-1718.9052	4.426790	
D4Q12	27.60	-115.2412	-1719.2292	4.426790	288.4500
D4B11		-121.1160	-1720.9542	4.426790	

D4B11	65.37	-123.7926	-1721.4701	4.521990	291.1458
D4Q11		-128.2575	-1722.3306	4.521990	
D4Q11	27.60	-129.3867	-1722.5483	4.521990	292.8823
D4Q10		-142.5364	-1725.0827	4.521990	
D4Q10	27.60	-143.6656	-1725.3003	4.521990	297.3146
D4Q9		-156.8153	-1727.8347	4.521990	
D4Q9	27.60	-157.9445	-1728.0523	4.521990	301.7469
D4B8		-163.9567	-1729.2111	4.521990	
D4B8	65.37	-166.6702	-1729.4702	4.617189	304.4427
D4Q8		-171.1967	-1729.9024	4.617189	
D4Q8	27.60	-172.3415	-1730.0117	4.617189	306.1792
D4B7		-178.4366	-1730.5937	4.617189	
D4B7	65.37	-181.1624	-1730.5937	4.712389	308.8750
D4Q7		-185.7095	-1730.5937	4.712389	
D4Q7	27.60	-186.8595	-1730.5937	4.712389	310.6115
D4Q6		-200.2512	-1730.5937	4.712389	
D4Q6	32.60	-201.6095	-1730.5937	4.712389	315.1073
D4Q5		-214.7929	-1730.5937	4.712389	
D4Q5	32.60	-216.1512	-1730.5937	4.712389	319.5396
D4Q4		-229.3345	-1730.5937	4.712389	
D4Q4	27.60	-230.4845	-1730.5937	4.712389	323.9084
LGRF		-236.6054	-1730.5937	4.712389	
LGRF	84.00	-240.1054	-1730.5937	4.712389	326.8408
D4Q3		-243.8762	-1730.5937	4.712389	
D4Q3	27.60	-245.0262	-1730.5937	4.712389	328.3407
D4Q2		-258.4179	-1730.5937	4.712389	
D4Q2	27.60	-259.5679	-1730.5937	4.712389	332.7730
LGRF		-265.6887	-1730.5937	4.712389	
LGRF	84.00	-269.1887	-1730.5937	4.712389	335.7054
D50Q		-272.3845	-1730.5937	4.712389	
D50Q	13.80	-272.9595	-1730.5937	4.712389	336.8548
D50		-272.9595	-1730.5937	4.712389	
D50	0.00	-272.9595	-1730.5937	4.712389	336.8548
D50Q		-273.5345	-1730.5937	4.712389	
D50Q	13.80	-274.1095	-1730.5937	4.712389	337.2053
LGRF		-280.2304	-1730.5937	4.712389	
LGRF	84.00	-283.7304	-1730.5937	4.712389	340.1377
D5Q2		-287.5012	-1730.5937	4.712389	
D5Q2	27.60	-288.6512	-1730.5937	4.712389	341.6376
LGRF		-294.7720	-1730.5937	4.712389	
LGRF	84.00	-298.2720	-1730.5937	4.712389	344.5700
D5Q3		-302.0429	-1730.5937	4.712389	
D5Q3	27.60	-303.1929	-1730.5937	4.712389	346.0699
LGRF		-309.3137	-1730.5937	4.712389	
LGRF	84.00	-312.8137	-1730.5937	4.712389	349.0023

D5Q4		-316.5845	-1730.5937	4.712389	
D5Q4	27.60	-317.7345	-1730.5937	4.712389	350.5022
LGRF		-323.7512	-1730.5937	4.712389	
LGRF	84.00	-327.2512	-1730.5937	4.712389	353.4029
D5Q5		-331.1262	-1730.5937	4.712389	
D5Q5	32.60	-332.4845	-1730.5937	4.712389	354.9980
LGRF		-338.3970	-1730.5937	4.712389	
LGRF	84.00	-341.8970	-1730.5937	4.712389	357.8669
D5Q6		-345.6679	-1730.5937	4.712389	
D5Q6	32.60	-347.0262	-1730.5937	4.712389	359.4303
LGRF		-353.0429	-1730.5937	4.712389	
LGRF	84.00	-356.5429	-1730.5937	4.712389	362.3310
D5Q7		-360.2095	-1730.5937	4.712389	
D5Q7	27.60	-361.3595	-1730.5937	4.712389	363.7991
D5B7		-367.4824	-1730.5937	4.712389	
D5B7	65.37	-370.1959	-1730.3346	4.807589	366.4949
D5Q8		-374.7224	-1729.9024	4.807589	
D5Q8	27.60	-375.8672	-1729.7931	4.807589	368.2314
D5B8		-381.9623	-1729.2110	4.807589	
D5B8	65.37	-384.6389	-1728.6952	4.902789	370.9272
D5Q9		-389.1038	-1727.8346	4.902789	
D5Q9	27.60	-390.2330	-1727.6170	4.902789	372.6637
SMRF		-393.8271	-1726.9243	4.902789	
SMRF	59.06	-396.2432	-1726.4586	4.902789	374.5293
SMRF		-398.6594	-1725.9929	4.902789	
SMRF	59.06	-401.0756	-1725.5273	4.902789	376.0293
D5Q10		-403.3827	-1725.0826	4.902789	
D5Q10	27.60	-404.5119	-1724.8650	4.902789	377.0960
SMRF		-408.1060	-1724.1723	4.902789	
SMRF	59.06	-410.5221	-1723.7066	4.902789	378.9616
D5Q11		-417.6616	-1722.3306	4.902789	
D5Q11	27.60	-418.7908	-1722.1129	4.902789	381.5283
D5B11		-424.8030	-1720.9542	4.902789	
D5B11	65.37	-427.4184	-1720.1862	4.997988	384.2241
D5Q12		-431.7813	-1718.9052	4.997988	
D5Q12	27.60	-432.8847	-1718.5812	4.997988	385.9606
D5B12		-438.7596	-1716.8561	4.997988	
D5B12	65.37	-441.2902	-1715.8431	5.093188	388.6564
D5Q13		-445.5115	-1714.1531	5.093188	
D5Q13	27.60	-446.5791	-1713.7257	5.093188	390.3929
D5B13		-452.2634	-1711.4500	5.093188	
D5B13	65.37	-454.6862	-1710.2010	5.188388	393.0887
D5Q14		-458.7278	-1708.1174	5.188388	
D5Q14	27.60	-459.7500	-1707.5904	5.188388	394.8252
D5B14		-465.1922	-1704.7848	5.188388	

D5B14	65.37	-467.4853	-1703.3111	5.283588	397.5210
D5Q15		-471.3106	-1700.8527	5.283588	
D5Q15	27.60	-472.2780	-1700.2310	5.283588	399.2575
D5B15		-477.4289	-1696.9207	5.283588	
D5B15	65.37	-479.5716	-1695.2357	5.378788	401.9533
D5Q16		-483.1458	-1692.4249	5.378788	
D5Q16	27.60	-484.0498	-1691.7140	5.378788	403.6898
D5B16		-488.8627	-1687.9291	5.378788	
D5B16	65.37	-490.8355	-1686.0481	5.473987	406.3856
D5Q17		-494.1263	-1682.9102	5.473987	
D5Q17	27.60	-494.9586	-1682.1166	5.473987	408.1221
D5B17		-499.3900	-1677.8914	5.473987	
D5B17	65.37	-501.1750	-1675.8313	5.569187	410.8179
D5Q18		-504.1527	-1672.3949	5.569187	
D5Q18	27.60	-504.9058	-1671.5258	5.569187	412.5544
D5B18		-508.9154	-1666.8984	5.569187	
D5B18	65.37	-510.4966	-1664.6780	5.664387	415.2502
D5Q19		-513.1341	-1660.9741	5.664387	
D5Q19	27.60	-513.8012	-1660.0373	5.664387	416.9867
D5B19		-517.3528	-1655.0497	5.664387	
D5B19	65.37	-518.7157	-1652.6891	5.759587	419.6825
D5Q20		-520.9893	-1648.7512	5.759587	
D5Q20	27.60	-521.5643	-1647.7553	5.759587	421.4190
D6B19		-524.6257	-1642.4527	5.759587	
D6B19	65.37	-525.7580	-1639.9732	5.854787	424.1148
D6Q19		-527.6470	-1635.8371	5.854787	
D6Q19	27.60	-528.1247	-1634.7910	5.854787	425.8513
D6B18		-530.6682	-1629.2214	5.854787	
D6B18	65.37	-531.5598	-1626.6455	5.949986	428.5471
D6Q18		-533.0470	-1622.3485	5.949986	
D6Q18	27.60	-533.4231	-1621.2618	5.949986	430.2836
D6B17		-535.4257	-1615.4756	5.949986	
D6B17	65.37	-536.0683	-1612.8266	6.045186	432.9794
D6Q17		-537.1403	-1608.4077	6.045186	
D6Q17	27.60	-537.4115	-1607.2902	6.045186	434.7159
D6B16		-538.8550	-1601.3399	6.045186	
D6B16	65.37	-539.2429	-1598.6418	6.140386	437.4117
D6Q16		-539.8900	-1594.1410	6.140386	
D6Q16	27.60	-540.0537	-1593.0027	6.140386	439.1482
D6B15		-540.9251	-1586.9421	6.140386	
D6B15	65.37	-541.0548	-1584.2194	6.235586	441.8440
D6Q15		-541.2711	-1579.6775	6.235586	
D6Q15	27.60	-541.3258	-1578.5288	6.235586	443.5805
D6B14		-541.6172	-1572.4128	6.235586	
D6B14	65.37	-541.4875	-1569.6901	6.330785	446.2763

D6Q14		-541.2711	-1565.1482	.047600	
D6Q14	27.60	-541.2164	-1563.9995	.047600	448.0128
D6B13		-540.9251	-1557.8835	.047600	
D6B13	65.37	-540.5371	-1555.1854	.142800	450.7086
D6Q13		-539.8900	-1550.6846	.142800	
D6Q13	27.60	-539.7264	-1549.5464	.142800	452.4451
D6B12		-538.8550	-1543.4858	.142800	
D6B12	65.37	-538.2123	-1540.8368	.238000	455.1409
D6Q12		-537.1403	-1536.4179	.238000	
D6Q12	27.60	-536.8692	-1535.3003	.238000	456.8774
D6B11		-535.4257	-1529.3500	.238000	
D6B11	65.37	-534.5341	-1526.7741	.333199	459.5732
D6Q11		-533.0469	-1522.4771	.333199	
D6Q11	27.60	-532.6708	-1521.3904	.333199	461.3097
D6Q10		-528.2908	-1508.7352	.333199	
D6Q10	27.60	-527.9147	-1507.6485	.333199	465.7420
D6Q9		-523.5347	-1494.9934	.333199	
D6Q9	27.60	-523.1586	-1493.9066	.333199	470.1743
D6B8		-521.1560	-1488.1205	.333199	
D6B8	65.37	-520.0236	-1485.6410	.428399	472.8701
D6Q8		-518.1347	-1481.5048	.428399	
D6Q8	27.60	-517.6570	-1480.4587	.428399	474.6066
D6B7		-515.1134	-1474.8892	.428399	
D6B7	65.37	-513.7505	-1472.5285	.523599	477.3024
D6Q7		-511.4770	-1468.5907	.523599	
D6Q7	27.60	-510.9020	-1467.5947	.523599	479.0389
D6Q6		-504.2062	-1455.9972	.523599	
D6Q6	32.60	-503.5270	-1454.8209	.523599	483.5347
D6Q5		-496.9353	-1443.4038	.523599	
D6Q5	32.60	-496.2562	-1442.2274	.523599	487.9670
D6Q4		-489.6645	-1430.8103	.523599	
D6Q4	27.60	-489.0895	-1429.8144	.523599	492.3358
D6Q3		-482.3936	-1418.2169	.523599	
D6Q3	27.60	-481.8186	-1417.2209	.523599	496.7681
D6Q2		-475.1228	-1405.6234	.523599	
D6Q2	27.60	-474.5478	-1404.6275	.523599	501.2004
D6Q1		-468.1395	-1393.5279	.523599	
D6Q1	13.80	-467.8520	-1393.0300	.523599	505.2822
D10		-467.8520	-1393.0300	.523599	
D10	0.00	-467.8520	-1393.0300	.523599	505.2822

15.23.23.UCLP, GG, TB10, 0.452KLNS. ** END OF LISTING **