

MARKET STUDY
for
KNFL, Tremonton, Ut and KYFO, Ogden, UT

This market study has been prepared to demonstrate that the above stations, whose 5 mV/m contours overlap based on M-3 conductivity, have more than two other AM 5 mV/m city-grade contours entering those of KNFL and KYFO. The KNFL and KYFO facility data is tabulated in Figure 1.

Based on FCC data records and M-3 conductivity, there are in fact seven facilities whose 5 mV/m contours overlap those of both KNFL and KYFO. These stations are tabulated in Figures 2A through 2D and their contours are also shown in the map marked Figure 3. These stations are:

KSOS - Brigham City, UT	800 kHz, 1 kW-D, 0.03 kW-N, U
KXOL - Brigham City, UT	1660 kHz, 10 kW-D, 1 kW-N, U
KVNU - Logan, UT	610 kHz, 5 kW-D, 1 kW-N, DA-N, U
KALL - North Salt Lake City, UT	700 kHz, 50 kW-D, 1 kW-N, DA-2, U
KLO - Ogden, UT	1430 kHz, 10 kW-D, 5 kW-N, DA-2, U
KSVN - Ogden, UT	730 kHz, 1 kW-D, 0.066 kW-N, U
KANN - Roy, UT	1120 kHz, 10 kW-D, 1 kW-N, DA-2, U

Since the total of the above facilities meet the market study requirements of the Commission, no study of FM contours appears to be necessary.

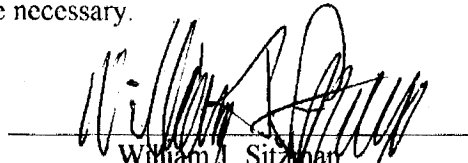

William J. Sitzman
Consulting Engineer

FIGURE 1

KNFL & KYFO FACILITY DATA.TXT

Callsign : KYFO
 Coordinates : 41-14-23.0 N, 111-58-58.0 W
 Comments :
 Frequency (KHz): 1490
 Power (w): 1000.000
 Pattern : LD
 Efficiency : 305.780 mV/m
 Desc : ND2
 City/State : OGDEN, UT
 ARN :
 Licensee : BIBLE BROADCAST NETWORK

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	89.4	0.0

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	305.780	75	305.780	150	305.780	225	305.780	300	305.780	
5	305.780	80	305.780	155	305.780	230	305.780	305	305.780	
10	305.780	85	305.780	160	305.780	235	305.780	310	305.780	
15	305.780	90	305.780	165	305.780	240	305.780	315	305.780	
20	305.780	95	305.780	170	305.780	245	305.780	320	305.780	
25	305.780	100	305.780	175	305.780	250	305.780	325	305.780	
30	305.780	105	305.780	180	305.780	255	305.780	330	305.780	
35	305.780	110	305.780	185	305.780	260	305.780	335	305.780	
40	305.780	115	305.780	190	305.780	265	305.780	340	305.780	
45	305.780	120	305.780	195	305.780	270	305.780	345	305.780	
50	305.780	125	305.780	200	305.780	275	305.780	350	305.780	
55	305.780	130	305.780	205	305.780	280	305.780	355	305.780	
60	305.780	135	305.780	210	305.780	285	305.780			
65	305.780	140	305.780	215	305.780	290	305.780			
70	305.780	145	305.780	220	305.780	295	305.780			
0.0 ohm K		: 0.000		1.0 ohm K		: 0.000				
RMSs		: 0.000		RMSt		: 0.000				
RSS		: 0.000								

Callsign : KNFL-CP
 Coordinates : 41-34-42.0 N, 112-06-03.0 W
 Comments :
 Frequency (KHz): 1470
 Power (w): 1000.000
 Pattern : CD
 Efficiency : 320.730 mV/m
 Desc :
 City/State : TREMONTON, UT
 ARN :
 Licensee : DIAMOND BROADCASTING CORP.

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	67.8	22.2

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	320.730	75	320.730	150	320.730	225	320.730	300	320.730	
5	320.730	80	320.730	155	320.730	230	320.730	305	320.730	
10	320.730	85	320.730	160	320.730	235	320.730	310	320.730	
15	320.730	90	320.730	165	320.730	240	320.730	315	320.730	
20	320.730	95	320.730	170	320.730	245	320.730	320	320.730	
25	320.730	100	320.730	175	320.730	250	320.730	325	320.730	
30	320.730	105	320.730	180	320.730	255	320.730	330	320.730	
35	320.730	110	320.730	185	320.730	260	320.730	335	320.730	
40	320.730	115	320.730	190	320.730	265	320.730	340	320.730	
45	320.730	120	320.730	195	320.730	270	320.730	345	320.730	
50	320.730	125	320.730	200	320.730	275	320.730	350	320.730	
55	320.730	130	320.730	205	320.730	280	320.730	355	320.730	
60	320.730	135	320.730	210	320.730	285	320.730			
65	320.730	140	320.730	215	320.730	290	320.730			
70	320.730	145	320.730	220	320.730	295	320.730			
0.0 ohm K		: 0.000		1.0 ohm K		: 0.000				
RMSs		: 0.000		RMSt		: 0.000				
RSS		: 0.000								

KSOS & KXOL FACILITY DATA.TXT

Callsign : KSOS
 Coordinates : 41-18-54.0 N, 112-04-43.0 W
 Comments :
 Frequency (KHz): 800
 Power (w): 1000.000
 Pattern : LD
 Efficiency : 296.000 mV/M
 Desc : NDI
 City/State : BRIGHAM CITY, UT
 ARN :
 Licensee : SIMMONS-SLC, LS, LLC

Tower	Field	Phase	Spang	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	56.8	19.2

Field Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	296.000	75	296.000	150	296.000	225	296.000	300	296.000
5	296.000	80	296.000	155	296.000	230	296.000	305	296.000
10	296.000	85	296.000	160	296.000	235	296.000	310	296.000
15	296.000	90	296.000	165	296.000	240	296.000	315	296.000
20	296.000	95	296.000	170	296.000	245	296.000	320	296.000
25	296.000	100	296.000	175	296.000	250	296.000	325	296.000
30	296.000	105	296.000	180	296.000	255	296.000	330	296.000
35	296.000	110	296.000	185	296.000	260	296.000	335	296.000
40	296.000	115	296.000	190	296.000	265	296.000	340	296.000
45	296.000	120	296.000	195	296.000	270	296.000	345	296.000
50	296.000	125	296.000	200	296.000	275	296.000	350	296.000
55	296.000	130	296.000	205	296.000	280	296.000	355	296.000
60	296.000	135	296.000	210	296.000	285	296.000		
65	296.000	140	296.000	215	296.000	290	296.000		
70	296.000	145	296.000	220	296.000	295	296.000		

0.0 ohm K : 0.000 1.0 ohm K : 0.000
 RMSs : 0.000 RMSt : 0.000
 RSS : 0.000

II
 Callsign : KXOL
 Coordinates : 41-18-54.0 N, 112-04-43.0 W
 Comments :
 Frequency (KHz): 1660
 Power (w): 10000.000
 Pattern : LD
 Efficiency : 1122.609 mV/M
 Desc : NDI
 City/State : BRIGHAM CITY, UT
 ARN :
 Licensee : SIMMONS-SLC, LS, LLC

Tower	Field	Phase	Spang	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	117.9	39.4

Field Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	1122.609	75	1122.609	150	1122.609	225	1122.609	300	1122.609
5	1122.609	80	1122.609	155	1122.609	230	1122.609	305	1122.609
10	1122.609	85	1122.609	160	1122.609	235	1122.609	310	1122.609
15	1122.609	90	1122.609	165	1122.609	240	1122.609	315	1122.609
20	1122.609	95	1122.609	170	1122.609	245	1122.609	320	1122.609
25	1122.609	100	1122.609	175	1122.609	250	1122.609	325	1122.609
30	1122.609	105	1122.609	180	1122.609	255	1122.609	330	1122.609
35	1122.609	110	1122.609	185	1122.609	260	1122.609	335	1122.609
40	1122.609	115	1122.609	190	1122.609	265	1122.609	340	1122.609
45	1122.609	120	1122.609	195	1122.609	270	1122.609	345	1122.609
50	1122.609	125	1122.609	200	1122.609	275	1122.609	350	1122.609
55	1122.609	130	1122.609	205	1122.609	280	1122.609	355	1122.609
60	1122.609	135	1122.609	210	1122.609	285	1122.609		
65	1122.609	140	1122.609	215	1122.609	290	1122.609		
70	1122.609	145	1122.609	220	1122.609	295	1122.609		

0.0 ohm K : 0.000 1.0 ohm K : 0.000
 RMSs : 0.000 RMSt : 0.000
 RSS : 0.000

KVNU & KALL FACILITY DATA.TXT

Callsign : KALL
 Coordinates : 40-53-29.0 N, 111-56-28.0 W
 Comments :
 Frequency (KHz): 700
 Power (w): 50000.000
 Pattern : LD
 Efficiency : 2097.000 mV/M
 Desc : DA2
 City/State : NORTH SALT LAKE CITY, UT
 ARN :
 Licensee : CITICASTERS LICENSES, L.P.

Tower	Field	Phase	Speng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	82.0	0.0
2	0.600	1.0	160.0	95.0	82.0	0.0
3	0.500	232.0	138.5	123.0	82.0	0.0
4	0.790	229.0	75.0	215.0	82.0	0.0

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	837.852	75	307.794	150	2670.311	225	3292.858	300	996.574	
5	985.663	80	280.009	155	3071.054	230	2947.146	305	988.562	
10	1070.340	85	271.772	160	3466.199	235	2613.078	310	973.013	
15	1141.254	90	283.605	165	3838.673	240	2302.473	315	942.636	
20	1173.262	95	316.126	170	4171.486	245	2024.541	320	892.041	
25	1165.710	100	369.746	175	4449.043	250	1785.257	325	819.494	
30	1121.639	105	445.439	180	4658.350	255	1586.893	330	729.008	
35	1046.957	110	545.764	185	4790.000	260	1427.970	335	633.393	
40	949.543	115	675.122	190	4838.838	265	1303.961	340	558.126	
45	838.317	120	839.033	195	4804.242	270	1208.760	345	538.445	
50	722.334	125	1042.768	200	4690.019	275	1136.430	350	593.511	
55	609.978	130	1289.880	205	4503.964	280	1082.465	355	704.699	
60	508.272	135	1581.029	210	4257.144	285	1043.990			
65	422.354	140	1913.279	215	3963.017	290	1018.920			
70	355.197	145	2279.856	220	3636.467	295	1004.578			

0.0 ohm K : 1925.979 1.0 ohm K : 1869.745
 RMSS : 2203.101 RMSt : 2097.000
 RSS : 2794.691

Callsign : KVNU
 Coordinates : 41-40-30.0 N, 111-56-06.0 W
 Comments :
 Frequency (KHz): 610
 Power (w): 5000.000
 Pattern : LD
 Efficiency : 665.745 mV/M
 Desc : DAN
 City/State : LOGAN, UT
 ARN :
 Licensee : SUN VALLEY RADIO, INC.

Tower	Field	Phase	Speng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	78.1	0.0

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	665.745	75	665.745	150	665.745	225	665.745	300	665.745	
5	665.745	80	665.745	155	665.745	230	665.745	305	665.745	
10	665.745	85	665.745	160	665.745	235	665.745	310	665.745	
15	665.745	90	665.745	165	665.745	240	665.745	315	665.745	
20	665.745	95	665.745	170	665.745	245	665.745	320	665.745	
25	665.745	100	665.745	175	665.745	250	665.745	325	665.745	
30	665.745	105	665.745	180	665.745	255	665.745	330	665.745	
35	665.745	110	665.745	185	665.745	260	665.745	335	665.745	
40	665.745	115	665.745	190	665.745	265	665.745	340	665.745	
45	665.745	120	665.745	195	665.745	270	665.745	345	665.745	
50	665.745	125	665.745	200	665.745	275	665.745	350	665.745	
55	665.745	130	665.745	205	665.745	280	665.745	355	665.745	
60	665.745	135	665.745	210	665.745	285	665.745			
65	665.745	140	665.745	215	665.745	290	665.745			
70	665.745	145	665.745	220	665.745	295	665.745			

0.0 ohm K : 0.000 1.0 ohm K : 0.000
 RMSS : 0.000 RMSt : 0.000
 RSS : 0.000

KLO & KSVN FACILITY DATA.TXT

Callsign : KSVN
 Coordinates : 41-11-17.0 N, 112-04-52.0 W
 Comments :
 Frequency (KHz): 730
 Power (w): 1000.000
 Pattern : LD
 Efficiency : 297.730 mV/M
 Desc : NDI
 City/State : OGDEN, UT
 ARN :
 Licensee : AZTECA BROADCASTING CORPORATION

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	1.000	0.0	0.0	0.0	75.6	0.0

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	297.730	75	297.730	150	297.730	225	297.730	300	297.730	
5	297.730	80	297.730	155	297.730	230	297.730	305	297.730	
10	297.730	85	297.730	160	297.730	235	297.730	310	297.730	
15	297.730	90	297.730	165	297.730	240	297.730	315	297.730	
20	297.730	95	297.730	170	297.730	245	297.730	320	297.730	
25	297.730	100	297.730	175	297.730	250	297.730	325	297.730	
30	297.730	105	297.730	180	297.730	255	297.730	330	297.730	
35	297.730	110	297.730	185	297.730	260	297.730	335	297.730	
40	297.730	115	297.730	190	297.730	265	297.730	340	297.730	
45	297.730	120	297.730	195	297.730	270	297.730	345	297.730	
50	297.730	125	297.730	200	297.730	275	297.730	350	297.730	
55	297.730	130	297.730	205	297.730	280	297.730	355	297.730	
60	297.730	135	297.730	210	297.730	285	297.730			
65	297.730	140	297.730	215	297.730	290	297.730			
70	297.730	145	297.730	220	297.730	295	297.730			

0.0 ohm K : 0.000 1.0 ohm K : 0.000
 RMSS : 0.000 RMSt : 0.000
 RSS : 0.000

Callsign : KLO
 Coordinates : 41-02-48.0 N, 112-01-36.0 W
 Comments :
 Frequency (KHz): 1430
 Power (w): 10000.000
 Pattern : LD
 Augmented
 Efficiency : 1140.720 mV/M
 Desc : DA2
 City/State : OGDEN, UT
 ARN :
 Licensee : KLO BROADCASTING CO.

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	0.517	326.3	0.0	0.0	148.5	0.0
2	1.000	0.0	78.4	240.4	186.4	0.0
3	0.882	26.7	235.5	270.7	150.7	0.0
4	0.329	174.6	218.3	310.1	152.6	0.0

Brng	Span	mV/M
200.0	30.0	1550.00

Field	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m	Brng	mV/m
0	1756.003	75	535.081	150	1614.997	225	506.106	300	727.760	
5	1858.033	80	541.387	155	1715.425	230	338.003	305	673.535	
10	1922.408	85	577.207	160	1798.175	235	219.393	310	625.789	
15	1945.652	90	626.232	165	1857.493	240	221.005	315	600.322	
20	1926.659	95	678.577	170	1888.667	245	321.758	320	614.987	
25	1866.684	100	730.668	175	1888.412	250	443.518	325	680.525	
30	1769.181	105	783.202	180	1855.116	255	558.244	330	793.953	
35	1639.534	110	839.232	185	1788.918	260	657.095	335	942.891	
40	1484.740	115	902.595	190	1720.392	265	736.360	340	1112.870	
45	1313.104	120	976.608	195	1657.785	270	794.352	345	1290.479	
50	1134.044	125	1063.117	200	1550.000	275	830.579	350	1463.749	
55	958.084	130	1161.996	205	1363.022	280	845.447	355	1622.021	
60	797.118	135	1271.111	210	1114.671	285	840.137			
65	664.653	140	1386.590	215	881.409	290	816.595			
70	574.518	145	1503.237	220	691.195	295	777.699			

0.0 ohm K : 723.238 1.0 ohm K : 720.196
 RMSS : 1198.216 RMSt : 1140.720
 RSS : 1056.863

FIGURE 2D

KANN FACILITY DATA.TXT

Call sign : KANN
 Coordinates : 41-03-31.0 N, 112-04-10.0 W
 Comments :
 Frequency (KHz): 1120
 Power (W): 10000.000
 Pattern : LD
 Augmented
 Efficiency : 957.500 mV/M
 Desc : DA2
 City/State : ROY, UT
 ARN :
 Licensee : FAITH COMMUNICATIONS CORPORATION

Tower	Field	Phase	Spcng	Ornt	Hght	TopLd
1	1.200	55.0	0.0	0.0	90.0	0.0
2	1.000	0.0	180.0	271.0	90.0	0.0
3	1.360	22.0	168.0	85.0	90.0	0.0

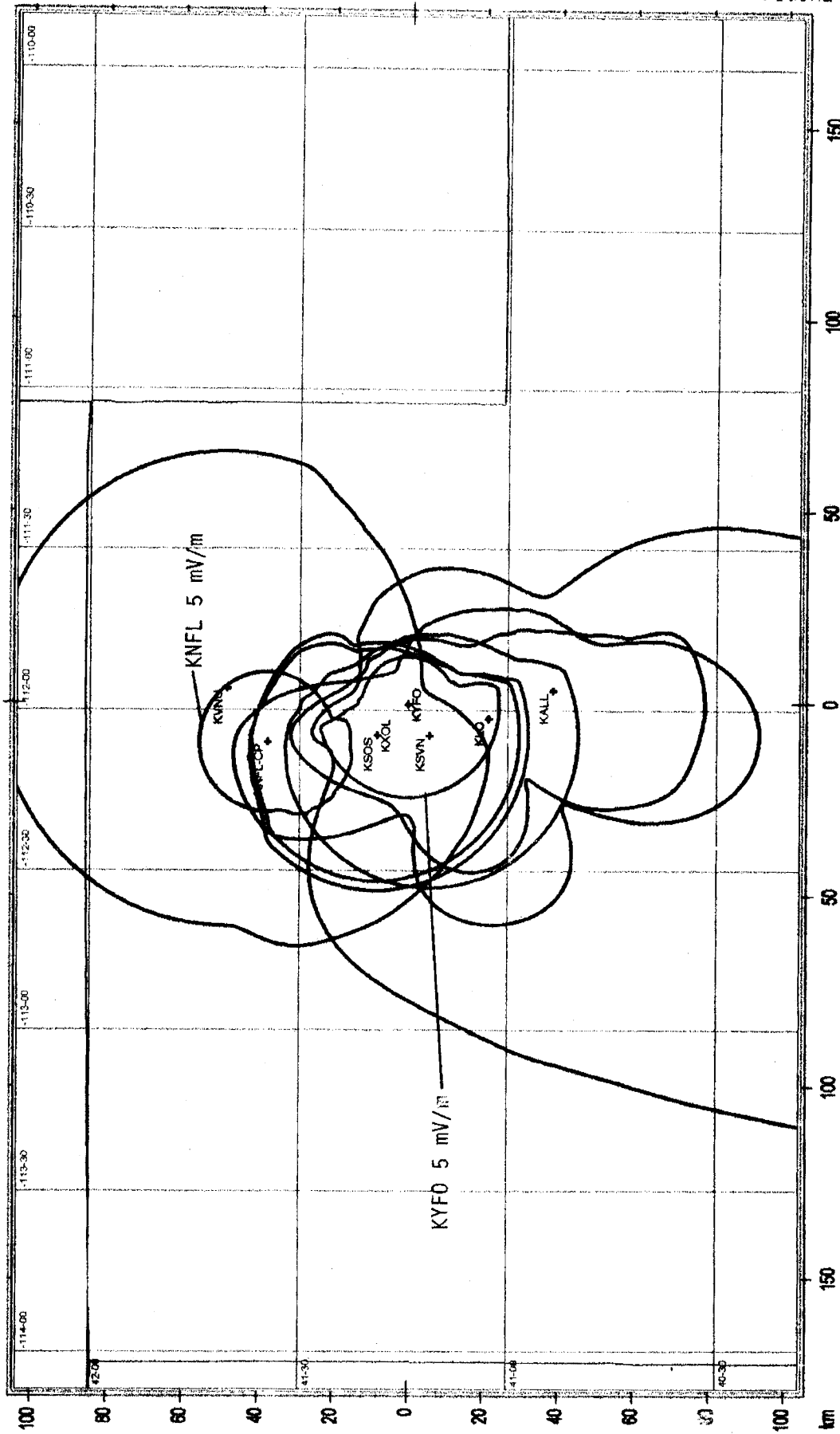
Brng	Span	mV/M
312.0	22.0	300.00

Field	Brng	mV/m	Field	Brng	mV/m	Field	Brng	mV/m	Field	Brng	mV/m
0	1756.865	75	942.337	150	768.219	225	302.142	300	440.761		
5	1636.754	80	945.730	155	922.490	230	404.405	305	340.104		
10	1452.555	85	950.576	160	1125.554	235	516.400	310	302.383		
15	1226.067	90	958.725	165	1335.227	240	609.092	315	314.853		
20	986.367	95	970.327	170	1516.800	245	677.611	320	437.176		
25	770.558	100	983.828	175	1644.188	250	723.964	325	680.170		
30	624.222	105	996.055	180	1700.137	255	752.078	330	951.471		
35	583.145	110	1002.436	185	1676.729	260	765.914	335	1216.193		
40	630.844	115	997.454	190	1575.431	265	768.570	340	1452.324		
45	714.225	120	975.497	195	1406.237	270	761.818	345	1638.954		
50	795.135	125	932.339	200	1185.902	275	745.900	350	1758.472		
55	858.056	130	867.667	205	935.786	280	719.479	355	1799.090		
60	900.240	135	789.364	210	680.496	285	679.764				
65	924.772	140	719.998	215	450.686	290	622.828				
70	936.948	145	700.137	220	300.152	295	544.289				
0.0 ohm K		: 508.956		1.0 ohm K		: 501.268					
RMSs		: 1005.923		RMSt		: 957.500					
RSS		: 1038.194									

0

FIGURE 3

Market Study Daytime 5 mV/m Contour Study Map



NOTE: All contours are based on M-3 soil conductivity.