

TECHNICAL EXHIBIT
APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
CLEAR CHANNEL BROADCASTING LICENSES, INC.
RADIO STATION WTKT
HARRISBURG, PENNSYLVANIA

October 29, 2004

1460 KHZ 5 KW-D; 4.2 W-N U DA-N

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Technical Narrative

The technical exhibit of which this narrative is part has been prepared on behalf of Clear Channel Broadcasting Licenses, Inc., licensee of AM broadcast station WTKT, Harrisburg, Pennsylvania. WTKT is licensed as a Class B station for operation fulltime on 1460 kilohertz with a power of 5.0 kilowatts, operating daytime with a non-directional antenna and nighttime with a directional antenna. WTKT also has a construction permit, No. BP-20040109ACP to re-locate the existing facility. The construction permit specifies a daytime power reduction that resulted from the move of the WTKT transmitter site relative to other stations. Field strength measurements made from the new transmitter site have shown that this power reduction is unnecessary. By means of this present application, the licensee proposes to modify the construction permit to restore the daytime power to the presently licensed value, 5 kilowatts. WTKT will continue to employ a nondirectional antenna during daytime hours and a directional antenna at night.

The proposal is classified as a minor change according to 47 CFR 73.3571(a)(2). As a Class B station operating on one of the channels listed in 73.26(a), the proposal satisfies 47 CFR 73.21(a)(2) which permits

operation with a nominal power of not less than 0.25 kilowatt nor more than 50 kilowatts at any time. The proposal is acceptable for filing under the criteria set forth in 47 CFR 73.37.

The proposed facility will not have a significant environmental impact with regard to potential radio frequency electromagnetic field exposure to humans as defined by 47 CFR 1.1307(b). The Federal Aviation Administration has not been notified of the proposal, as new tower construction is not proposed.

Waiver of Section 73.24(g)

The provisions of 47 CFR 73.24(g) require that the population within the 1,000 mV/m contour not exceed 1 percent of the population within the 25 mV/m groundwave contour. The proposed 1,000 mV/m daytime contour encompasses 584 persons, or 1.3 percent of the 45,877 persons in the proposed 25 mV/m contour. As this exceeds the standard of 73.24(g), a waiver is respectfully requested.

The requirements of 73.24(g) date from a time before the massive shift of urban populations to suburban areas, when cities were generally well defined population centers surrounded by rural areas where radio stations were encouraged to construct their transmitter sites. Such is generally not the case today, as the areas surrounding large and medium size towns where transmitter sites must be located to provide satisfactory coverage are often densely populated.

In a number of past requests for waiver of 73.24(g), it has been noted that the vast majority of receivers suffer no degradation in reception with field

strengths significantly higher than 1,000 mV/m. In fact, a field strength of 7,000 mV/m has been shown to be necessary to cause blanketing interference of any consequence. The population within the predicted daytime 7,000 mV/m contour is 0 persons. Based on the history of previous waiver requests that have been granted, the blanketing interference potential for WTKT is minimal. The applicant recognizes the responsibility to correct blanketing problems, if any occur.

Daytime Coverage

The proposed WTKT daytime field strength contours are depicted on Figure 1 and the existing daytime field strength contours are shown on Figure 2. As indicated on Figure 1, the proposed daytime 5 mV/m contour completely encompasses the city limits of Harrisburg. The Harrisburg city limits depicted were obtained from a map contained in the TIGER 2000 U.S. census files.

Field Strength Measurements

In order to establish the actual ground conductivity pertinent to the required allocation study, field strength measurements were taken on WTKT and also on co-channel station WEMR in Tunkhannock, Pennsylvania. Measurement data are contained in Figure 5 both in graphical and tabular form.

The field strength measurements were taken by Mr. John Warner and Mr. Michael A. Golchert. Recently calibrated field intensity meters were employed.

Daytime Allocation Study

A daytime allocation study was made utilizing FCC Figure M-3 as shown on Figure 3. The daytime field strength contours were calculated in accordance with 47 CFR 73.183. Figure 4 is a tabulation of the data employed in the calculation of daytime contours. Based on this analysis, the proposed WTKT facility will comply with all relevant allocation criteria.

City-of-License Coverage

The proposed WTKT daytime field strength contours are depicted on Figure 1. The proposed daytime 5 mV/m contour completely encompasses the city limits of Harrisburg.

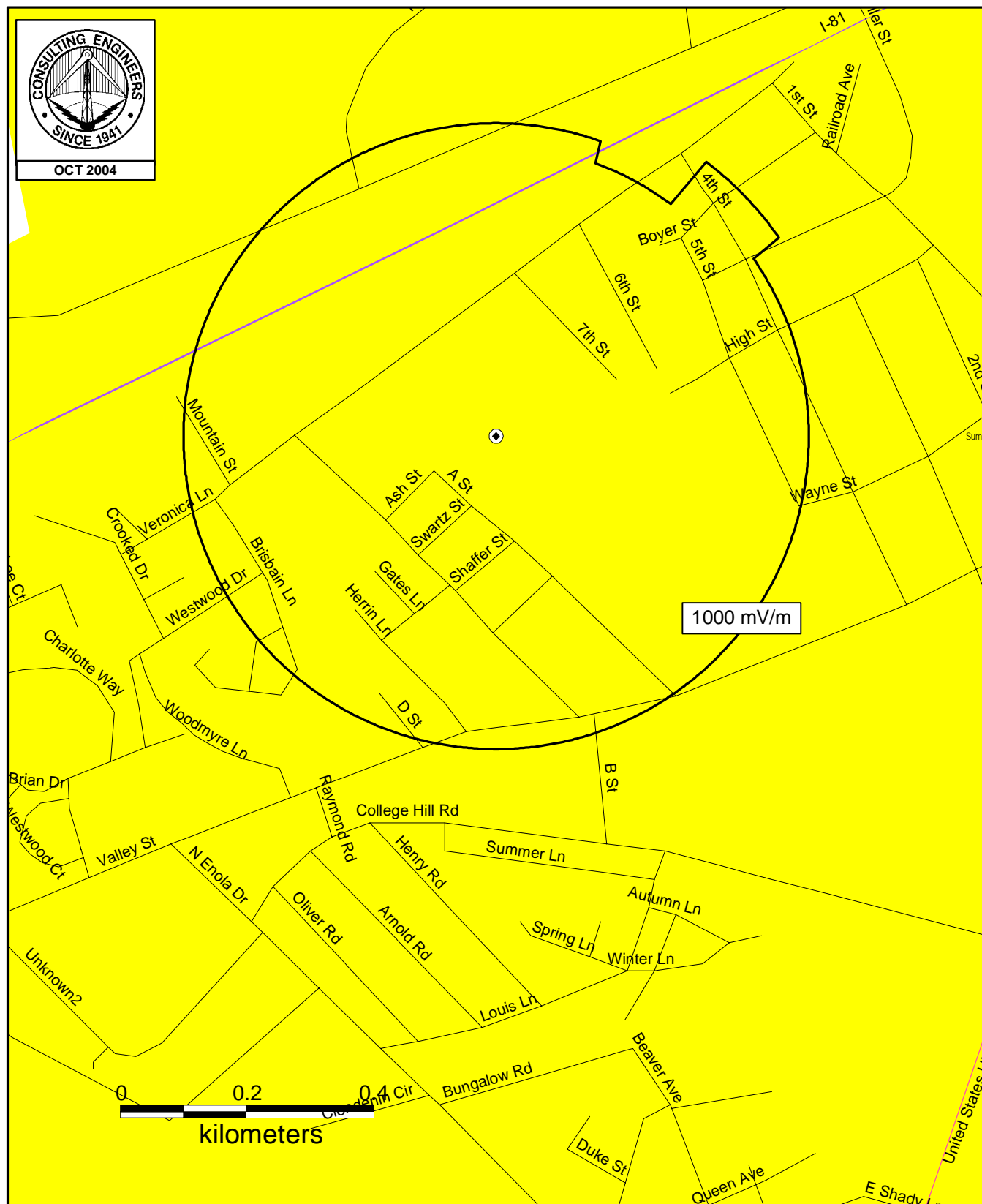
Environmental Considerations

The proposed WTKT operation for the new daytime power increase was evaluated in terms of both the electric and magnetic field components which will be present at the base of each tower. Using Figures 1 through 4 of Supplement A to OET Bulletin 65, the worst-case interpolated distance at which the electric and magnetic fields would fall below ANSI guidelines is 2 meters. The area surrounding the base of each tower will be appropriately restricted with a fence having a minimum radius of 2 meters (7 feet), unless data obtained after construction has been completed indicates otherwise. The fences should assure that persons on the property outside the fenced areas will not be exposed to radiofrequency field levels in excess of the standards specified in 47 CFR 1.1307(b) for human exposure to radiofrequency radiation.

Matthew Folkert
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Sarasota, Florida 34237

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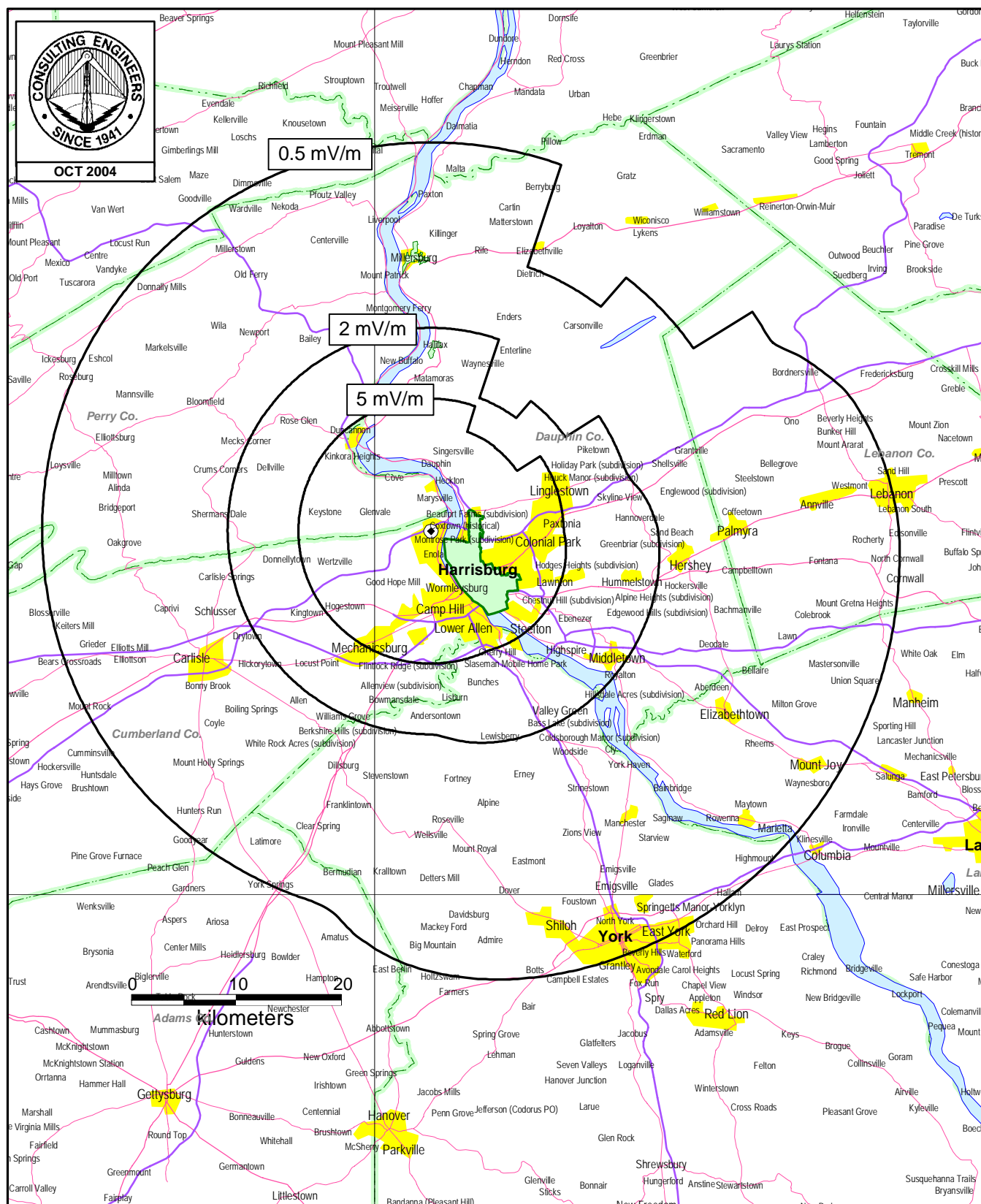
October 29, 2004



PROPOSED DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WTKT
HARRISBURG, PENNSYLVANIA
1460 KHZ 5 KW-D, 4.2 KW-N U DA-N

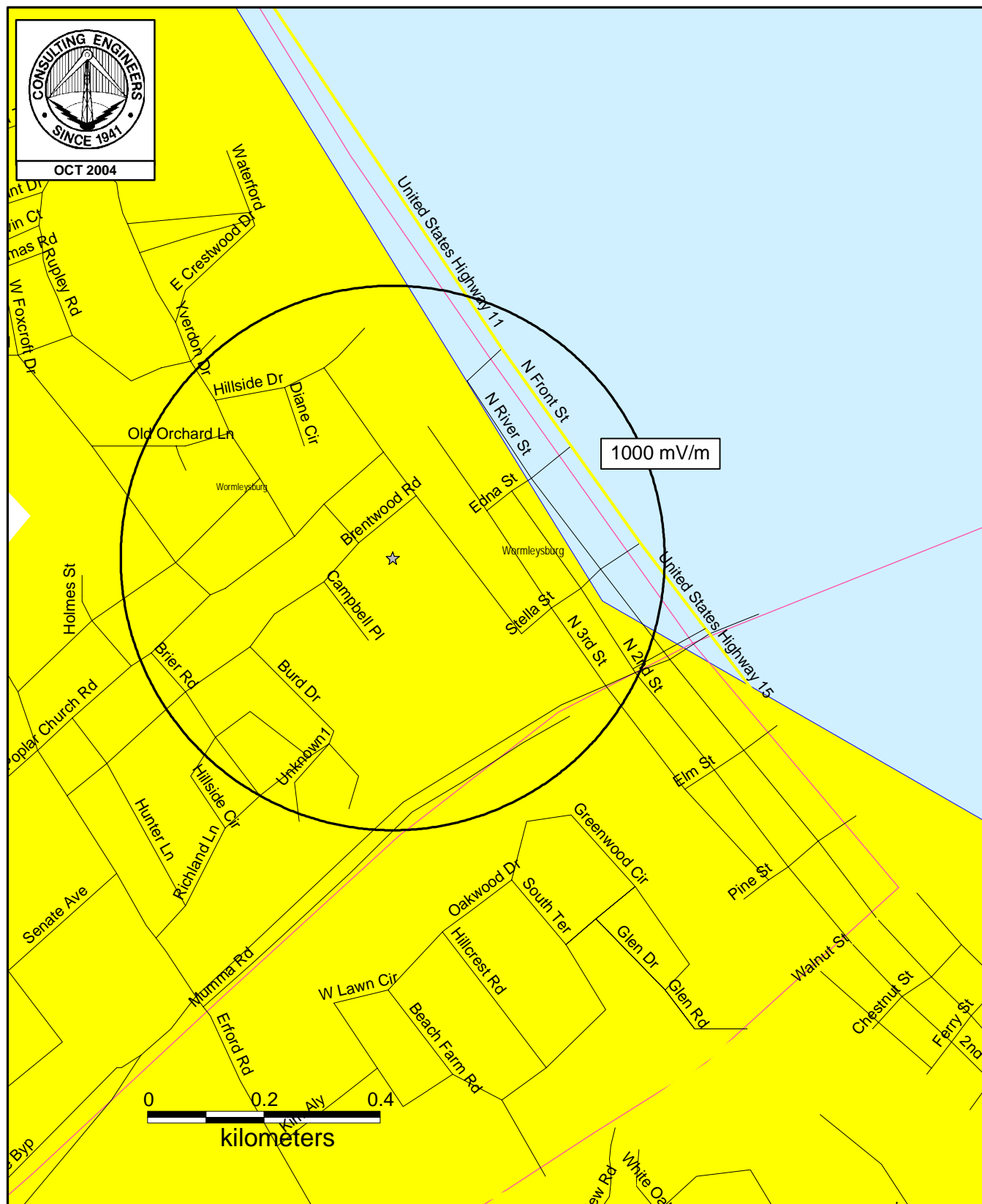
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



PROPOSED DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WTKT
HARRISBURG, PENNSYLVANIA
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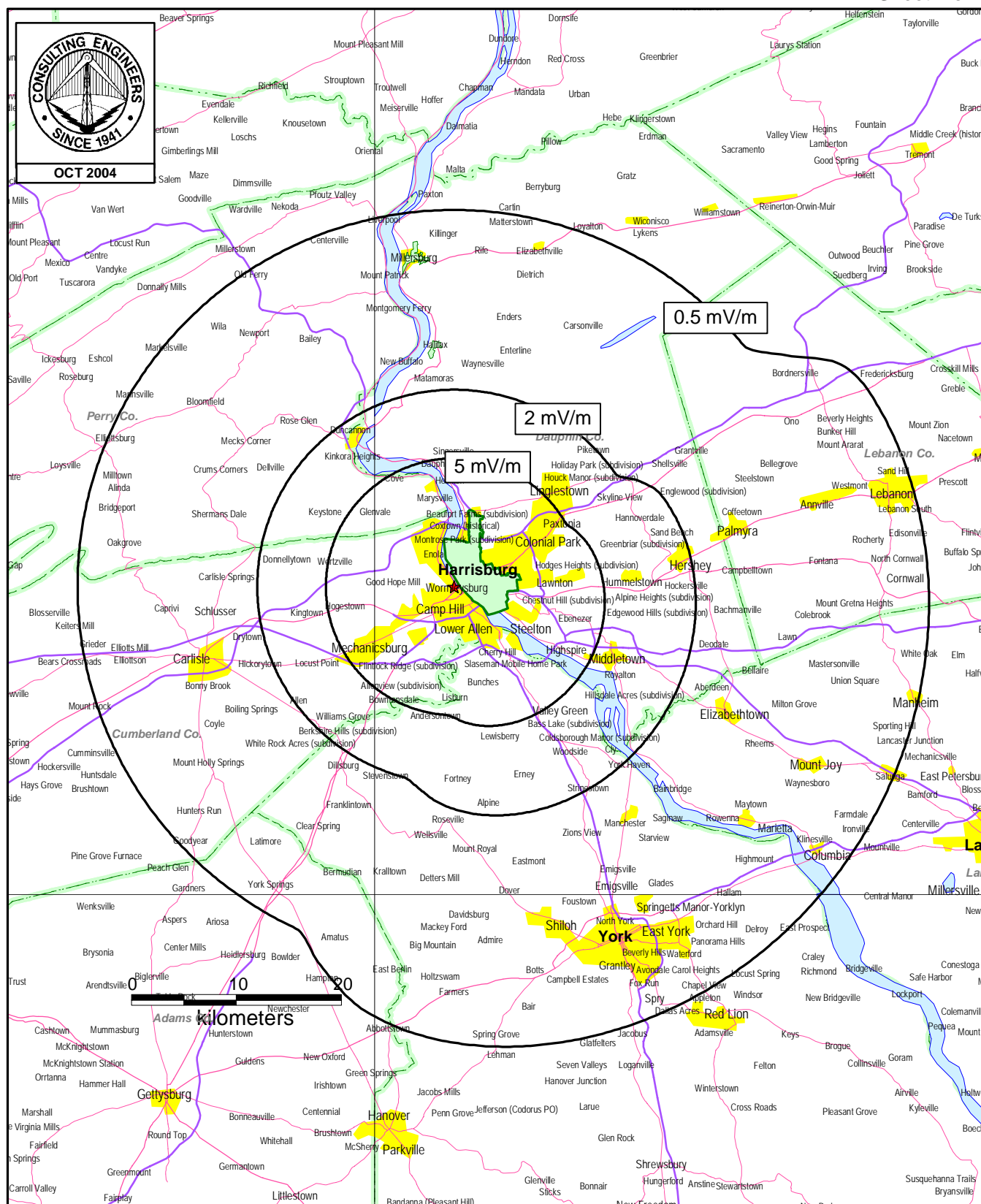
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



EXISTING DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WWTKT
HARRISBURG, PENNSYLVANIA
1460 KHZ 5 KW-D, 4.2 KW-N U DA-N

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

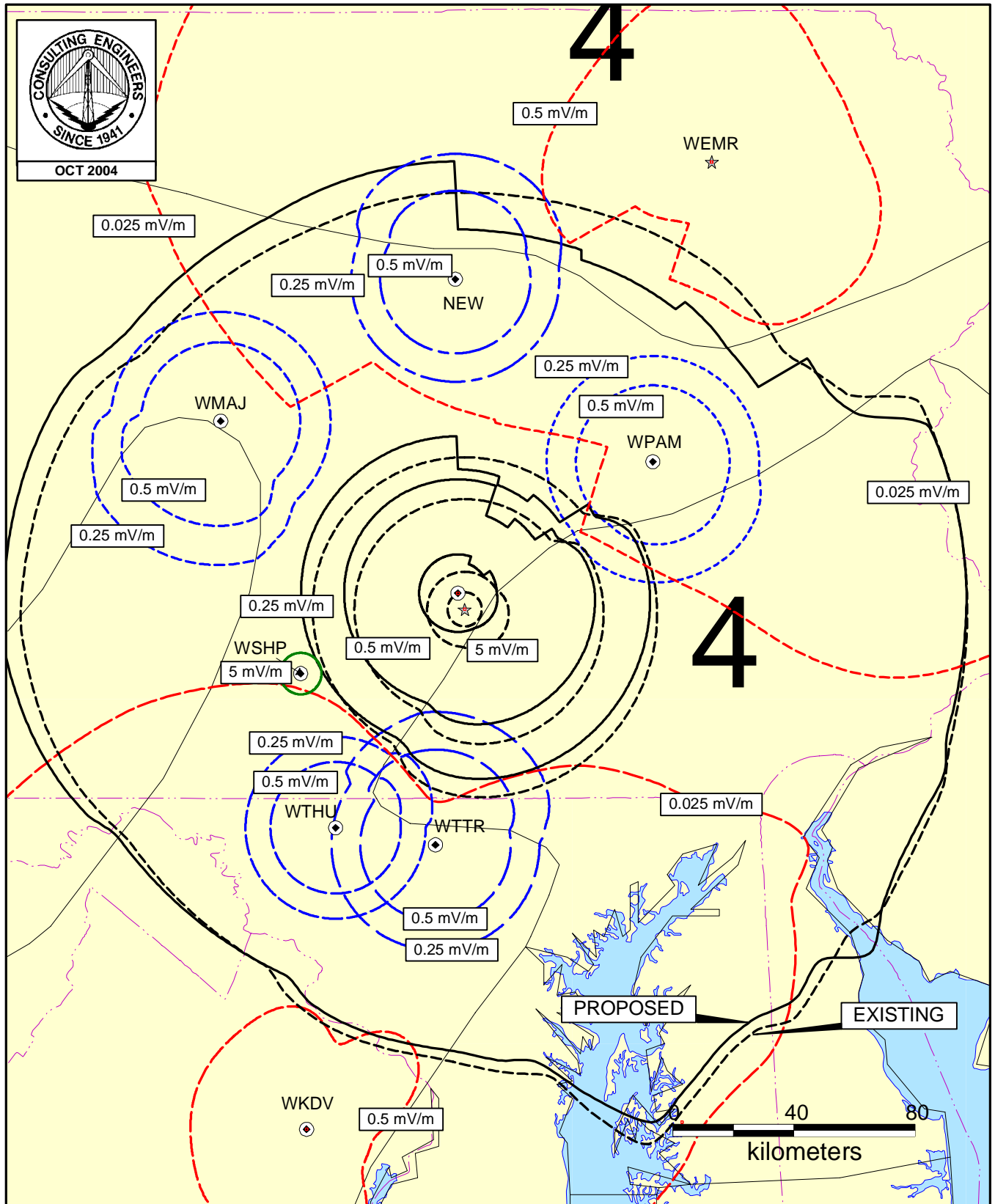


EXISTING DAYTIME FIELD STRENGTH CONTOURS

RADIO STATION WTGT
HARRISBURG, PENNSYLVANIA
1460 KHZ 5 KW-D, 4.2 KW-N U DA-N

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



DAYTIME ALLOCATION STUDY

RADIO STATION WTKT
HARRISBURG, PENNSYLVANIA
1460 KHZ 5 KW-D, 4.2 KW-N U DA-N

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Tabulation of Data Employed in
Calculation of Groundwave Contours

Call: WTKT - Proposed
Harrisburg, PA
Coordinates: 40-18-32 North 76-56-13 West
Frequency: 1460 kHz

Measured conductivity(see Figure 5) and FCC M3 conductivity
employed along remaining azimuths

Call: WTKT - License
Harrisburg, PA
Coordinates: 40-15-42 North 76-54-40 West
Frequency: 1460 kHz

FCC M3 conductivity employed along all azimuths

Call: WEMR - License
Tunkhannock, PA
Coordinates: 41-33-46 North 75-58-11 West
Frequency: 1460 kHz

Measured conductivity(see Figure 5) and FCC M3 conductivity
employed along remaining azimuths

Call: WKDV - License
Manassas, VA
Coordinates: 38-45-00 North 77-30-49 West
Frequency: 1460 kHz

FCC M3 conductivity employed along all azimuths

Call: WPAM - License
Pottsville, PA
Coordinates: 40-41-27 North 76-11-39 West
Frequency: 1450 kHz

FCC M3 conductivity employed along all azimuths

Call: WMAJ - License
State College, PA
Coordinates: 40-48-32 North 77-50-28 West
Frequency: 1450 kHz

FCC M3 conductivity employed along all azimuths

Call: WTHU - License
Thurmont, MD
Coordinates: 39-37-37 North 77-24-11 West
Frequency: 1450 kHz

FCC M3 conductivity employed along all azimuths

Call: WTTR - License
Westminster, MD
Coordinates: 39-34-37 North 77-01-21 West
Frequency: 1470 kHz

FCC M3 conductivity employed along all azimuths

Call: WSHP - License
Shippensburg, PA
Coordinates: 40-04-30 North 77-32-09 West
Frequency: 1480 kHz

FCC M3 conductivity employed along all azimuths

Call: New - Application
Montoursville, PA
Coordinates: 41-13-17 North 76-56-48 West
Frequency: 1450 kHz

FCC M3 conductivity employed along all azimuths

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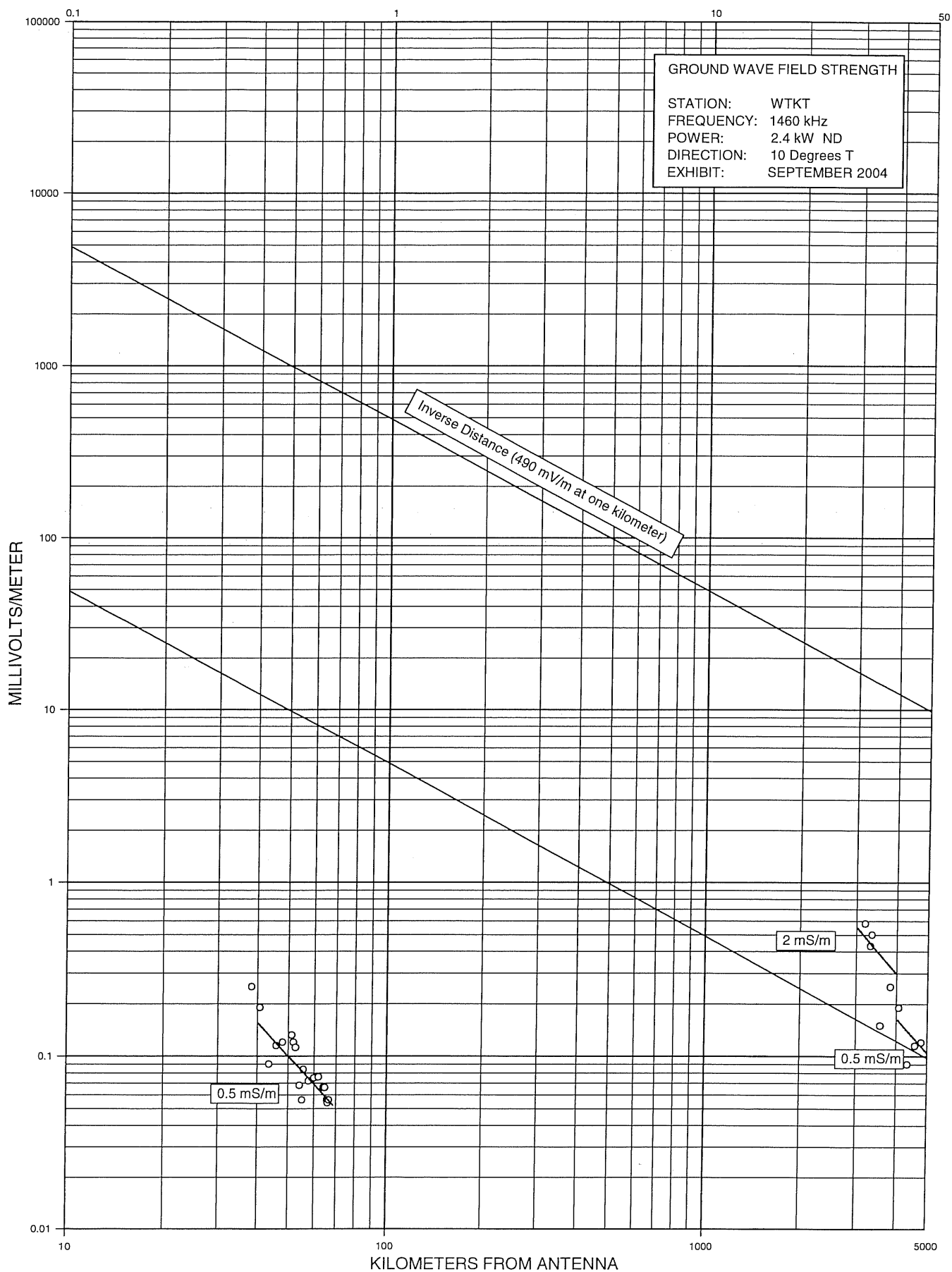
1460 KHZ 5 KW-D; 4.2 W-N U DA-N

Field Strength Measurements

Radio Station: WTKT

10 Degree Radial(Stub) - Day

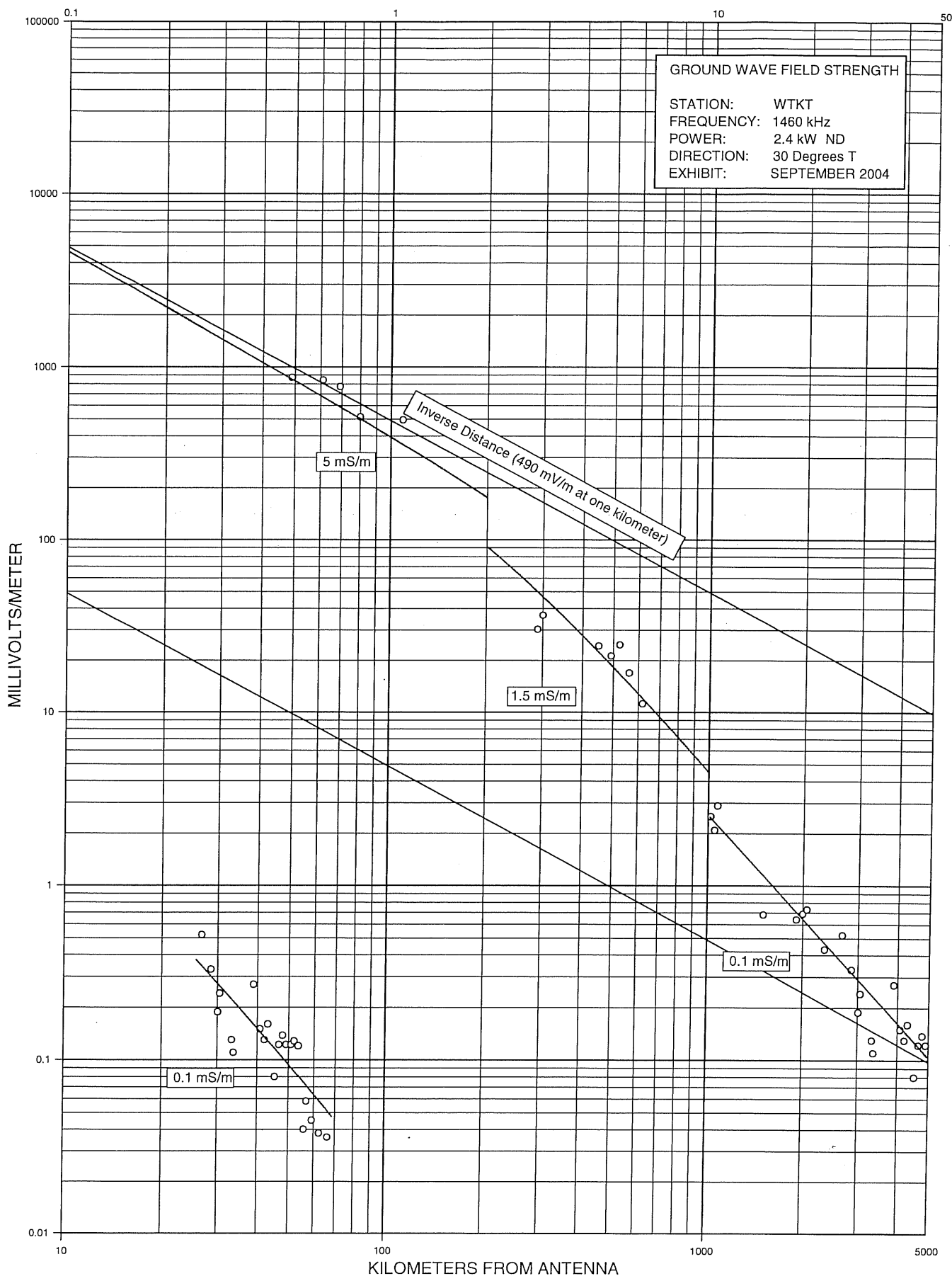
Point Desig.	Distance (km)	Date	Time (local)	Field Strength (mV/m)
1	51.20	9/1/04	950	0.132
2	51.80	9/1/04	1000	0.120
3	52.60	9/1/04	1009	0.112
4	54.10	9/1/04	1020	0.068
5	55.10	9/1/04	1040	0.056
6	55.60	9/1/04	1046	0.084
7	57.70	9/1/04	1054	0.072
8	61.90	9/1/04	1110	0.076
9	64.70	9/1/04	1135	0.066
10	65.70	9/1/04	1226	0.056
11	66.00	9/1/04	1232	0.054
12	66.50	9/1/04	1238	0.056



Radio Station: WTKT

30 Degree Radial - Day

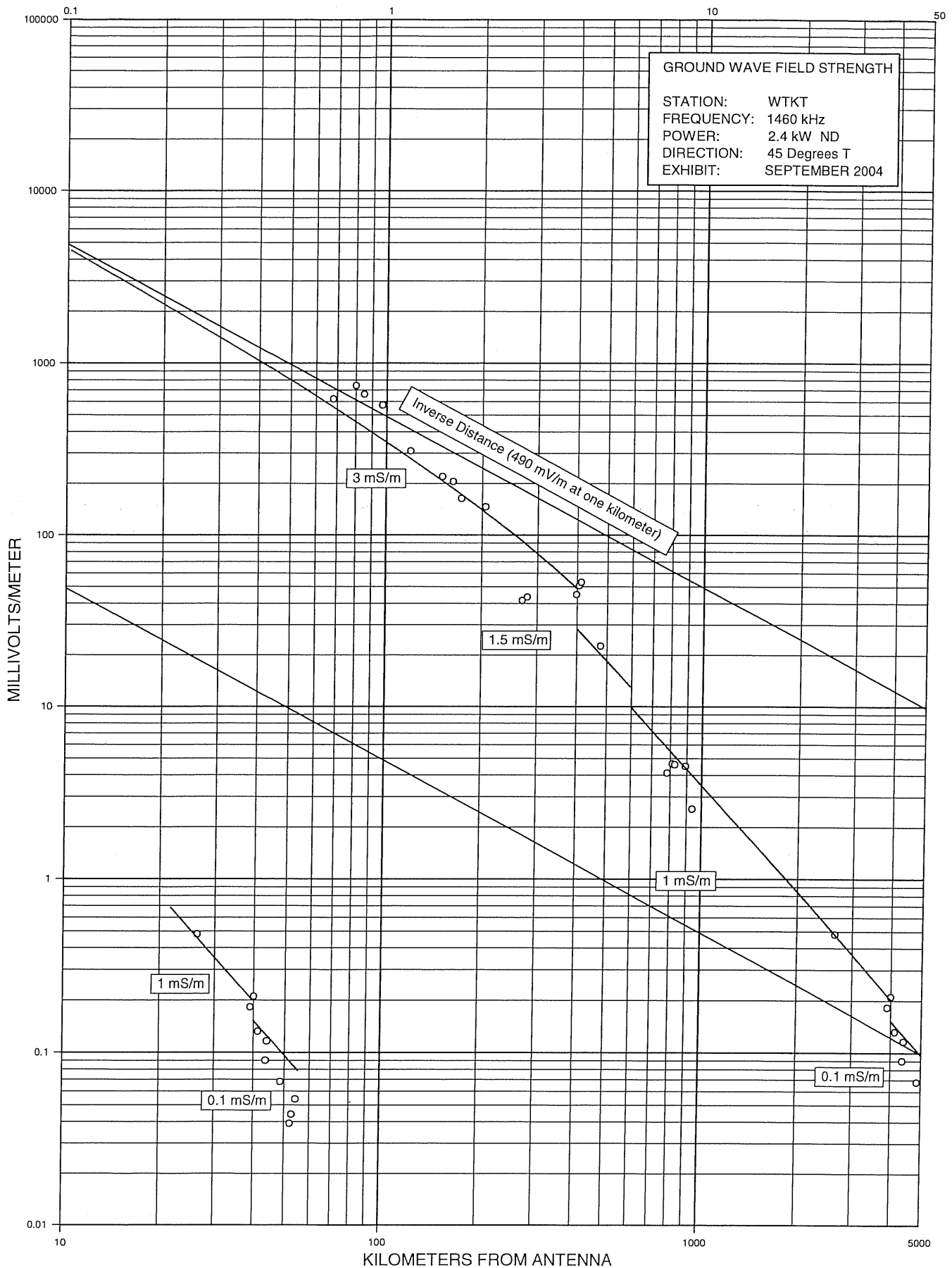
Point Desig.	Distance (km)	Date	Time (local)	Field Strength (mV/m)
1	0.49	8/16/04	915	870
2	0.61	8/16/04	1003	840
3	0.69	8/16/04	0950	770
4	0.80	8/16/04	0924	515
5	1.09	8/16/04	0923	495
6	2.89	8/16/04	1010	30.2
7	3.00	8/16/04	1018	36.5
8	4.49	8/16/04	1051	24.2
9	4.92	8/16/04	1133	21.2
10	5.24	8/16/04	1056	24.6
11	5.61	8/16/04	1139	16.9
12	6.19	8/16/04	1145	11.2
13	10.20	8/16/04	1212	2.50
14	10.50	8/16/04	1216	2.08
15	10.70	8/16/04	1219	2.88
16	15.00	8/16/04	1244	0.680
17	19.10	8/16/04	1300	0.640
18	20.00	8/16/04	1319	0.690
19	20.60	8/16/04	1322	0.730
20	23.50	8/16/04	1330	0.430
21	26.70	8/16/04	1410	0.520
22	28.60	8/16/04	1419	0.330
23	30.10	8/16/04	1432	0.188
24	30.50	8/16/04	1428	0.240
25	33.30	8/16/04	1457	0.130
26	33.70	8/16/04	1525	0.110
27	38.90	8/16/04	1533	0.270
28	40.80	8/16/04	1542	0.150
29	42.10	8/16/04	1547	0.130
30	43.10	8/16/04	1558	0.160
31	45.30	8/16/04	1606	0.080
32	46.60	8/16/04	1614	0.122
33	47.90	8/16/04	1619	0.138
34	49.10	8/16/04	1626	0.122
35	50.90	8/16/04	1635	0.122
36	52.00	8/16/04	1640	0.128
37	53.50	8/16/04	1651	0.120
38	55.80	8/17/04	0914	0.040
39	56.80	8/17/04	0929	0.058
40	59.20	8/17/04	0946	0.045
41	62.40	8/16/04	1003	0.038
42	66.20	8/16/04	1020	0.036



Radio Station: WTKT

45 Degree Radial - Day

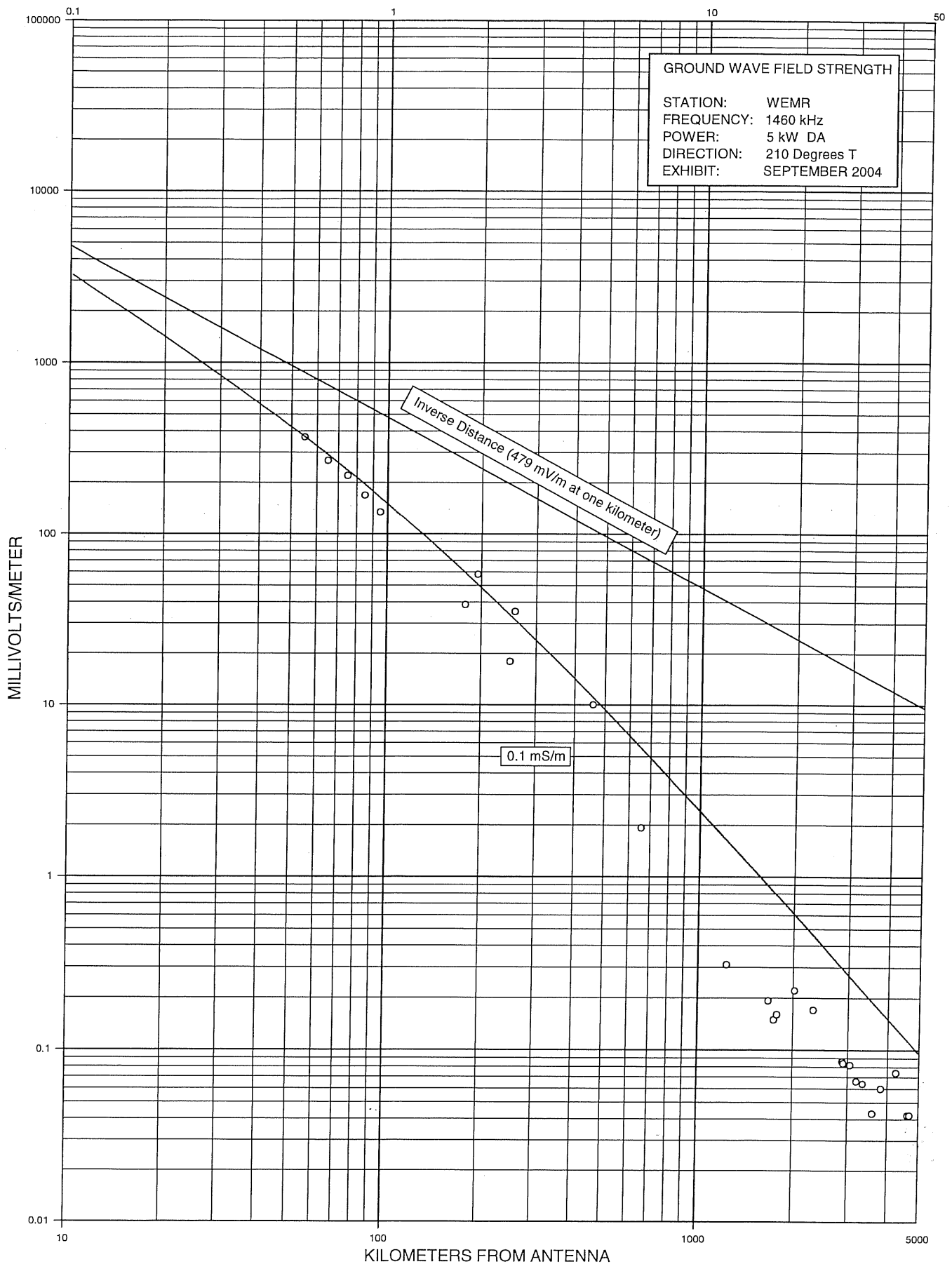
Point Desig.	Distance (km)	Date	Time (local)	Field Strength (mV/m)
1	0.68	7/30/04	1451	620
2	0.80	7/30/04	1457	740
3	0.85	7/30/04	1503	660
4	0.97	8/11/04	1102	570
5	1.19	8/11/04	1019	309
6	1.50	7/30/04	1510	219
7	1.62	7/30/04	1520	205
8	1.72	7/30/04	1530	163
9	2.05	7/30/04	1536	146
10	2.68	7/31/04	1254	41.5
11	2.78	7/30/04	1555	43.5
12	3.98	7/31/04	1310	45.0
13	4.06	7/31/04	1315	50.5
14	4.12	7/31/04	1340	53.0
15	4.77	7/31/04	1320	22.5
16	7.82	7/31/04	1400	4.12
17	8.11	7/31/04	1407	4.65
18	8.25	7/31/04	1540	4.60
19	8.90	7/31/04	1418	4.50
20	9.37	7/31/04	1424	2.54



Radio Station: WEMR

210 Degree Radial - Day

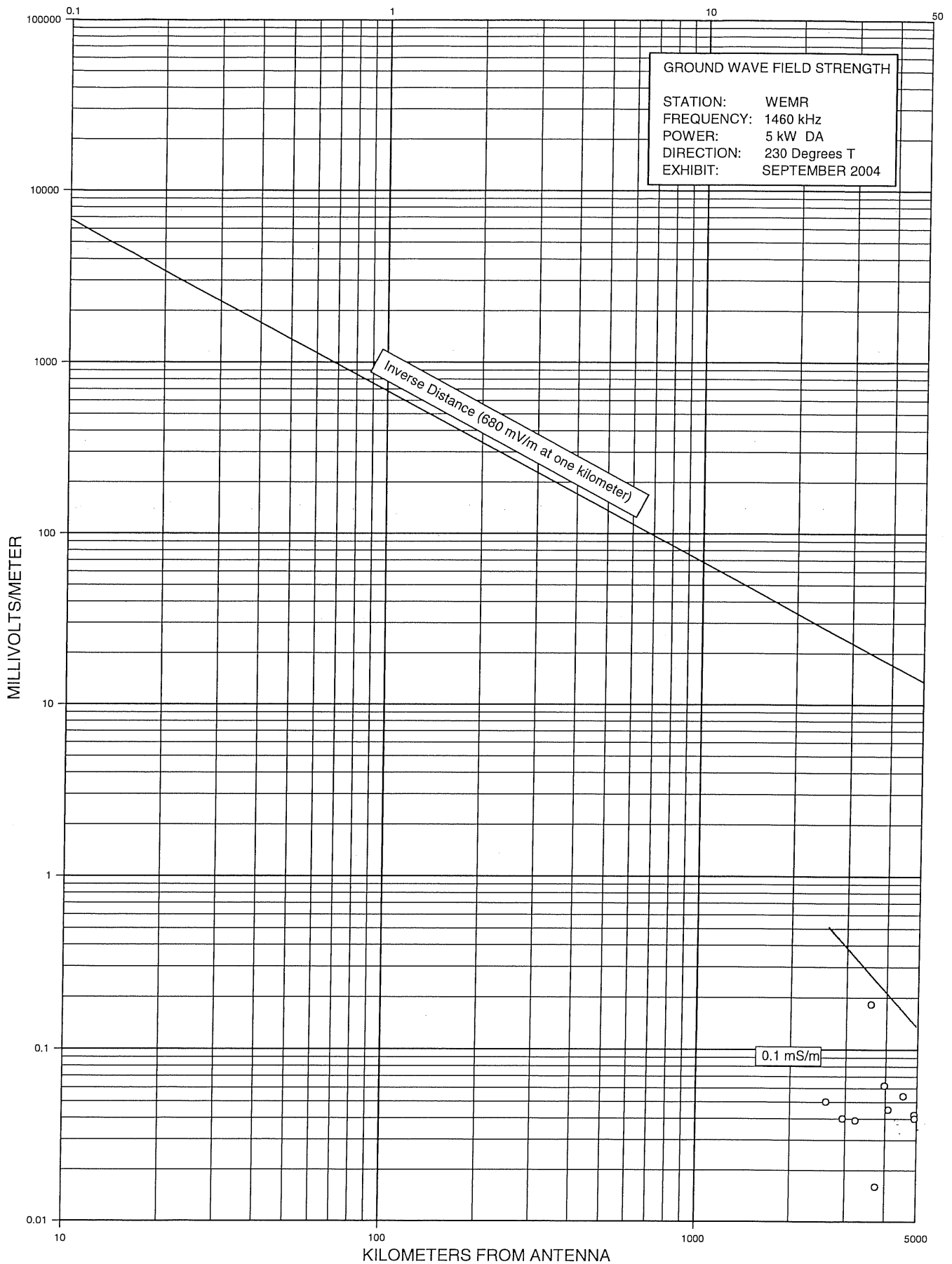
Point Desig.	Distance (km)	Date	Time (local)	Field Strength (mV/m)
1	0.49	8/16/04	915	870
2	0.61	8/16/04	1003	840
3	0.69	8/16/04	0950	770
4	0.80	8/16/04	0924	515
5	1.09	8/16/04	0923	495
6	2.89	8/16/04	1010	30.2
7	3.00	8/16/04	1018	36.5
8	4.49	8/16/04	1051	24.2
9	4.92	8/16/04	1133	21.2
10	5.24	8/16/04	1056	24.6
11	5.61	8/16/04	1139	16.9
12	6.19	8/16/04	1145	11.2
13	10.20	8/16/04	1212	2.50
14	10.50	8/16/04	1216	2.08
15	10.70	8/16/04	1219	2.88
16	15.00	8/16/04	1244	0.680
17	19.10	8/16/04	1300	0.640
18	20.00	8/16/04	1319	0.690
19	20.60	8/16/04	1322	0.730
20	23.50	8/16/04	1330	0.430
21	26.70	8/16/04	1410	0.520
22	28.60	8/16/04	1419	0.330
23	30.10	8/16/04	1432	0.188
24	30.50	8/16/04	1428	0.240
25	33.30	8/16/04	1457	0.130
26	33.70	8/16/04	1525	0.110
27	38.90	8/16/04	1533	0.270
28	40.80	8/16/04	1542	0.150
29	42.10	8/16/04	1547	0.130
30	43.10	8/16/04	1558	0.160
31	45.30	8/16/04	1606	0.080
32	46.60	8/16/04	1614	0.122
33	47.90	8/16/04	1619	0.138
34	49.10	8/16/04	1626	0.122
35	50.90	8/16/04	1635	0.122
36	52.00	8/16/04	1640	0.128
37	53.50	8/16/04	1651	0.120
38	55.80	8/17/04	0914	0.040
39	56.80	8/17/04	0929	0.058
40	59.20	8/17/04	0946	0.045
41	62.40	8/16/04	1003	0.038
42	66.20	8/16/04	1020	0.036



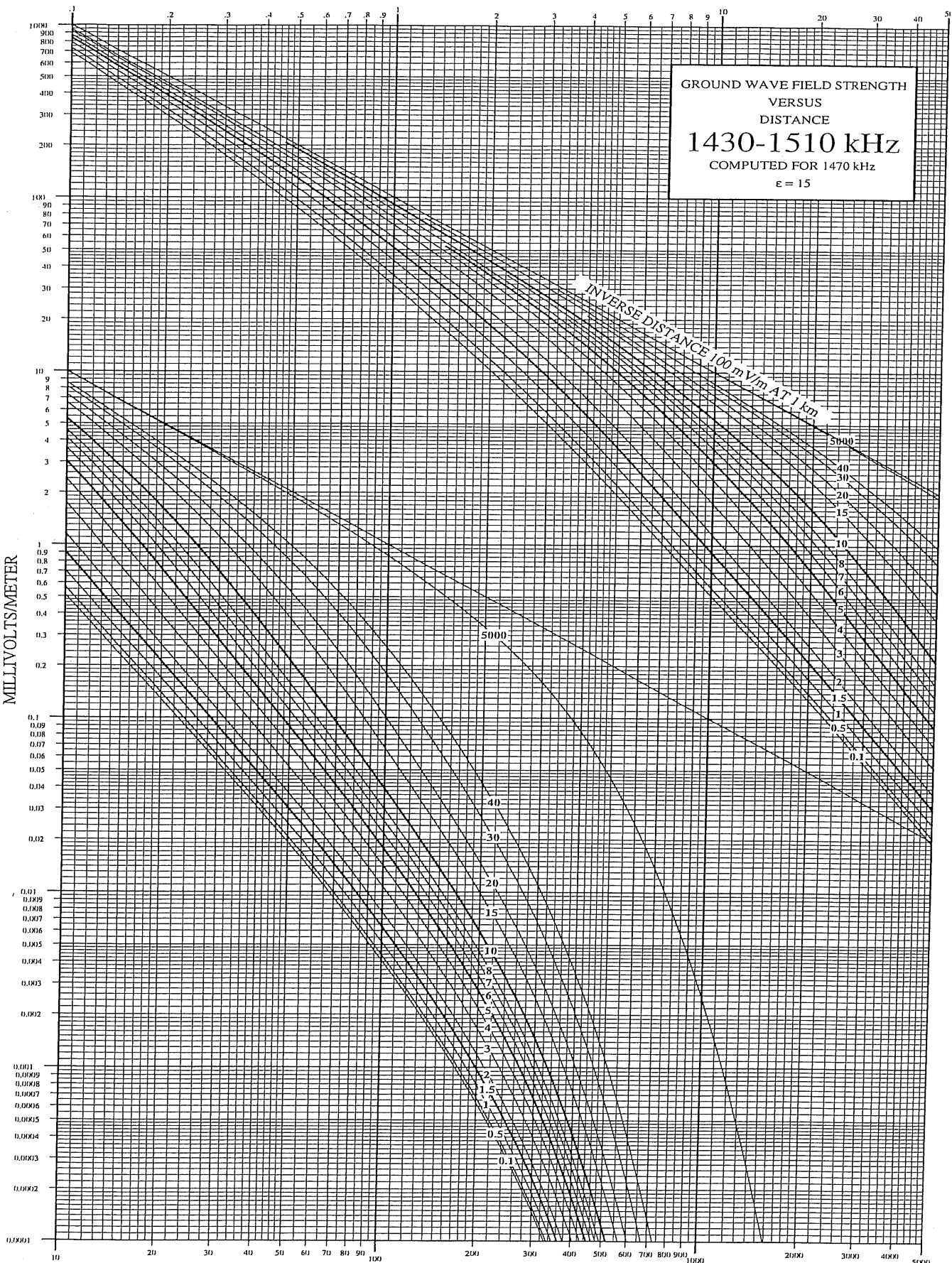
Radio Station: WEMR

230 Degree Radial (Stub) - Day

Point Desig.	Distance (km)	Date	Time (local)	Field Strength (mV/m)
1	26.10	9/3/04	1259	0.050
2	29.40	9/3/04	1240	0.042
3	32.30	9/3/04	1051	0.039
4	35.80	9/3/04	1041	0.182
5	37.50	9/3/04	1113	0.016
6	39.70	9/3/04	1124	0.062
7	40.90	9/3/04	1130	0.045
8	45.40	9/3/04	1143	0.054
9	49.20	9/3/04	1154	0.042
10	49.30	9/3/04	1203	0.040



KILOMETERS FROM ANTENNA



KILOMETERS FROM ANTENNA

GRAPH 18