302

2018 MAY 17 PM 2:09

iHeart MEDIA

2625 S Memorial Drive
Suite A
Tulsa, OK 74129

o 918.664.4581
f 918.664.3066

www.iHeartMedia.com
www.iHeartRadio.com
#iheartradio

May 16, 2018

Accepted / Filed

MAY 16 2018

Federal Communications Commission
Office of the Secretary

COURIER DELIVERY

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

RE: Citicasters Licenses, Inc., as debtor in possession (FRN No. 0027342682)
Application for New License on FCC Form 302-AM
KEIB (AM), 1150 kHz, Los Angeles, CA; Facility ID No. 19219

Dear Ms. Dortch:

On behalf of Citicasters Licenses, Inc., as debtor in possession, the licensee of the above-referenced station, enclosed is an original and four copies of an application for New License submitted on FCC Form 302-AM.

Also enclosed is Form 159, Remittance Advice, with credit card payment of the $1,505.00 filing fee.

Please stamp and return the additional copy of this submission in the enclosed Federal Express envelope. Please direct communications concerning this application to the undersigned.

BF 20180516AAF

Respectfully submitted,
Citicasters Licenses, Inc., as debtor in possession

By: _____
Stephen G. Davis
Senior Vice President, RE, Facilities & Corporate Development

cc: Public Inspection File

Agency Tracking ID:PGC3096328 Authorization Number:602180
Successful Authorization -- Date Paid: 5/16/18
FILE COPY ONLY!!

READ INSTRUCTIONS CAREFULLY BEFORE PROCEEDING (1) LOCKBOX #979089	FEDERAL COMMUNICATIONS COMMISSION **REMITTANCE ADVICE** **FORM 159** PAGE NO 1 OF 1	APPROVED BY OMB 3060-059 SPECIAL USE FCC USE ONLY

SECTION A - Payer Information

(2) PAYER NAME (if paying by credit card, enter name exactly as it appears on your card)	(3) TOTAL AMOUNT PAID (dollars and cents)
Citicasters Licenses, Inc., as debtor in possession	**$1505.00**

(4) STREET ADDRESS LINE NO. 1
7136 S. Yale Avenue
(5) STREET ADDRESS LINE NO. 2
Suite 501

(6) CITY	(7) STATE	(8) ZIP CODE
Tulsa	**OK**	**74136**

(9) DAYTIME TELEPHONE NUMBER (INCLUDING AREA CODE)	(10) COUNTRY CODE (IF NOT IN U.S.A.)
918-6644581	**US**

FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED

(11) PAYER (FRN)	(12) FCC USE ONLY
0027342682	

IF PAYER NAME AND THE APPLICANT NAME ARE DIFFERENT, COMPLETE SECTION B
IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)

(13) APPLICANT NAME
Citicasters Licenses, Inc., as debtor in possession
(14) STREET ADDRESS LINE NO. 1
7136 S. Yale Avenue
(15) STREET ADDRESS LINE NO. 2
Suite 501

(16) CITY	(17) STATE	(18) ZIP CODE
Tulsa	**OK**	**74136**

(19) DAYTIME TELEPHONE NUMBER (INCLUDING AREA CODE)	(20) COUNTRY CODE (IF NOT IN U.S.A.)
918-6644581	**US**

FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED

(21) APPLICANT (FRN)	(22) FCC USE ONLY
0027342682	

COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET

(23A) FCC Call Sign/Other ID	(24A) Payment Type Code(PTC)	(25A) Quantity
KEIB	**MMR**	**1**
(26A) Fee Due for (PTC)	(27A) Total Fee	FCC Use Only
$700.00	**$700.00**	
(28A) FCC CODE 1	(29A) FCC CODE 2	
19219	**302AMNEWLICENSE**	

(23B) FCC Call Sign/Other ID	(24B) Payment Type Code(PTC)	(25B) Quantity
KEIB	**MOR**	**1**
(26B) Fee Due for (PTC)	(27B) Total Fee	FCC Use Only
$805.00	**$805.00**	
(28B) FCC CODE 1	(29B) FCC CODE 2	
19219	**302AMDIRANTENNA**	

0027342682

Accepted / Filed

MAY 16 2018

Federal Communications Commission
Office of the Secretary

Federal Communications Commission
Washington, D. C. 20554

Approved by OMB
3060-0627
Expires 01/31/98

FOR FCC USE ONLY

FCC 302-AM
APPLICATION FOR AM BROADCAST STATION LICENSE

(Please read instructions before filling out form.

FOR COMMISSION USE ONLY
FILE NO. BL-20180516ABS

SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

CITICASTERS LICENSES, INC., AS DEBTOR IN POSSESSION

MAILING ADDRESS (Line 1) (Maximum 35 characters)
7136 S YALE AVE

MAILING ADDRESS (Line 2) (Maximum 35 characters)
SUITE 501

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
TULSA	OK	74136

TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)
9186644581	KEIB	19219

2. A. Is a fee submitted with this application? [✓] Yes [ ] No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

[ ] Governmental Entity [ ] Noncommercial educational licensee [ ] Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A) FEE TYPE CODE	(B) FEE MULTIPLE	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
M M R	0 0 0 1	$ 700.00	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	FOR FCC USE ONLY
M O R	0 0 0 1	$ 805.00	

	TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.	$ 1,505.00	

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT CITICASTERS LICENSES, INC., AS DEBTOR IN POSSESSION		
MAILING ADDRESS 7136 S YALE AVE, SUITE 501		
CITY TULSA	STATE OK	ZIP CODE 74136

2. This application is for:

☑ Commercial ☐ Noncommercial

☑ AM Directional ☐ AM Non-Directional

Call letters	Community of License	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
KEIB	LOS ANGELES, CA			

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☐ Yes ☐ No

If No, explain in an Exhibit.

Exhibit No.

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☐ Yes ☐ No

If No, state exceptions in an Exhibit.

Exhibit No.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☐ No

If Yes, explain in an Exhibit.

Exhibit No.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☑ Yes ☐ No

☐ Does not apply

If No, explain in an Exhibit.

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☑ No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

☐ Yes ☑ No

If Yes, provide particulars as an Exhibit.

Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☑ Yes ☐ No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name	Signature	
Stephen G. Davis		
Title	Date	Telephone Number
Senior Vice President Engineering	5/15/2018	918-664-4581

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant
CITICASTERS LICENSES, INC.

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☑ Station License ☐ Direct Measurement of Power

1. Facilities authorized in construction permit

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day
KEIB	NA	1150	UNLIMITED	44	50

2. Station location

State	City or Town
CALIFORNIA	LOS ANGELES

3. Transmitter location

State	County	City or Town	Street address (or other identification)
CA	LOS ANGELES	CITY OF INDUSTRY	14285 E. DON JULIAN

4. Main studio location

State	County	City or Town	Street address (or other identification)
CA	LOS ANGELES	BURBANK	3400 W. RIVERSIDE DR.

5. Remote control point location (specify only if authorized directional antenna)

State	County	City or Town	Street address (or other identification)
CA	LOS ANGELES	BURBANK	3400 W. RIVERSIDE DR.

6. Has type-approved stereo generating equipment been installed? ☐ Yes ☑ No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68? ☑ Yes ☐ No ☐ Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed. Exhibit No. SEE ENG.

8. Operating constants:

RF common point or antenna current (in amperes) without modulation for night system	RF common point or antenna current (in amperes) without modulation for day system
30.44	32.45

Measured antenna or common point resistance (in ohms) at operating frequency		Measured antenna or common point reactance (in ohms) at operating frequency	
Night	Day	Night	Day
50.0	50.0	-J9.2	-J9.2

Antenna indications for directional operation

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day
1 (SC)	+75.0	+79.0	1.300	1.310	20.0	23.5
2 (SW)	+0.0	+0.0	1.000	1.000	18.5	21.5
3 (NW)	-18.6	+11.6	0.752	0.835	13.0	14.6
4 (NE)	+64.8	+87.5	0.990	0.938	12.2	14.3
5 (SE)	+167.7	-159.8	0.430	0.225	6.05	5.20

Manufacturer and type of antenna monitor: POTOMAC INSTRUMENTS 1902-4

SECTION III - Page 2

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.
UNIFORM CROSS-SECTION, STEEL GUYED	146.9	148.5	149.3	Exhibit No. N/A

Excitation ☑ Series ☐ Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude	West Longitude
34 ° 02 ' 00 "	117 ° 59 ' 00 "

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits. Exhibit No. N/A

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system. Exhibit No. SEE ENG.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

NONE

11. Give reasons for the change in antenna or common point resistance.

N/A

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type)	Signature
RONALD D. RACKLEY	Ronald D. Rackley
Address (include ZIP Code)	Date
DLR, INC. 201 FLETCHER AVENUE SARASOTA, FL 34237	3/19/2018
	Telephone No. (Include Area Code)
	941-329-6000

☐ Technical Director ☑ Registered Professional Engineer

☐ Chief Operator ☐ Technical Consultant

☐ Other (specify)

APPLICATION FOR
DIRECT MEASUREMENT OF POWER INFORMATION
RADIO STATION KEIB
LOS ANGELES, CALIFORNIA

March 19, 2018

1150 KHZ 50 KW-D 44 KW-N U DA-2

APPLICATION FOR
DIRECT MEASUREMENT OF POWER INFORMATION
RADIO STATION KEIB
LOS ANGELES, CALIFORNIA

1150 KHZ 50 KW-D 44 KW-N U DA-2

Executive Summary - KEIB

The technical exhibit of which this narrative is part was prepared on behalf of the licensee of AM broadcast station KEIB, Los Angeles, California. KEIB operates on 1150 kHz with a power of 50 KW day and 44 KW night. It operates with a five tower directional antenna during daytime and nighttime hours. This report details the results of a partial proof-of-performance of the KEIB nighttime directional antenna pattern only, which was conducted after the monitor point of the 48 degree true radial was found to be elevated.

No adjustments have been made to the nighttime directional antenna parameters. The directional antenna system remains unchanged and both patterns continue to operate in accordance with the FCC Rules and the terms of the station license.

Included herein are the detailed measurement data concerning the partial proof-of-performance of the nighttime directional antenna system. As can be seen from the information provided, the KEIB nighttime directional antenna pattern is within the proposed modified standard pattern shape and the system is operating in accordance with the FCC Rules.

Antenna Sampling System

The antenna monitor and sampling system remain unchanged. The sampling loops continue to be employed. No other elements of the sampling system have been changed.

Field Strength Measurements

Field strength measurements were made by John Warner and Jake Wyatt of the KEIB licensee's Engineering Staff. The following Potomac Instruments FIM-4100 field strength meter was used for the measurements:

Meter Type	Serial Number	Most Recent Calibration Date
FIM-4100	133	April 2017

Field strength measurements were made along the KEIB monitor point radials at locations specified in the original proof-of-performance for the nighttime directional antenna pattern. A tabulation of meter readings for the measured pattern is included herein as Item 1. Item 2 summarizes the results of the field strength measurements. A tabulation of the measured field strength data is included as Item 3. Graphs of measured field strength data are included as Item 4

Field Strength Measurement Analysis

The field strength measurements were analyzed in accordance with Section 73.154 of the FCC Rules. The logarithms of the ratios of measured 2018 directional to non-directional fields were averaged for each radial. The radial averages thus obtained were multiplied by the measured radial non-directional unattenuated fields to determine the present directional radiation values for all radials.

After the field strength analysis work was completed, it was found that the licensed nighttime directional antenna modified standard radiation pattern would have to be further modified with a new augmentation in order to enclose the measured radiation value for the 48 degree true radial. Additional close-in non-directional measurements were included in the analysis of this radial, which was performed graphically as required by the FCC Rules in cases where augmentations are necessary. Simultaneous with the application for license for which this exhibit was prepared, an application for construction permit specifying a new modified standard pattern is being filed with the FCC. The specified augmentation is for a field value that is 120% of the measured inverse field value for the 48 degree true radial, in a accordance with the requirements of Section 73.152(d)(2)(iv)(B) of the Rules.

Monitor Point Change

A new monitor point for the 333.5 degree nighttime radial has been selected. Item 5 is a description of the new monitor point. Item 6 is a map showing its location.

Environmental Considerations

The measures to restrict human exposure to radiofrequency fields previously provided to the FCC remain in force at the KEIB transmitter site.

Ronald D. Rackley, P.E.
March 19, 2018

Tabulation of Meter Readings - KEIB

Nighttime Directional	SC Tower	SW Tower	NW Tower	NE Tower	SE Tower
Tower Numbering	1	2	3	4	5
Theoretical Field Ratio	1.253	1.000	0.837	0.977	0.376
Theoretical Phase(deg)	+69.9	+0.0	-6.6	+67.5	+160.1
Antenna Monitor Ratio	1.290	1.000	0.751	0.979	0.415
Antenna Monitor Phase(deg)	+74.7	+0.0	-18.1	+64.3	+166.0

Directional Readings	44 kW DA-Night
Common Point Resistance(ohms)	50.0
Common Point Current(amps)	30.44
Antenna Input Power	46,332

Non-Directional Common Point Readings	12.5 kW
Feeding NW Tower	NDA
Tower #3 Resistance(ohms)	34.0
Tower #3 Current(amps)	19.17
Antenna Input Power	12,500

Summary of Measured Field Strength Data

Radial deg. T	2018 Measured DA-Night (44 kW)	Modified Standard DA-Night (44 kW)
7.5	149	325
48	206	247
90	73.1	183
123.5	126	164
187.5	1189	1251
333.5	192	291

Item 3

Tabulation of Measured Field Strength Data

Radio Station KEIB

7.5 Degree True Radial

Point Desig.	Distance (km)	1998 ND Date & Time (local)	1998 ND Field Strength (mV/m)	2018 DA Date & Time (local)	2018 DA Field Strength (mV/m)	Ratio (2018/1998)
		2/12/1998 4/23/1998*		2/5/2018 2/6/2018*		
12	2.10	1111	570	1440	113	0.198
13 MP	2.30	1120	570	1442	125	0.219
14	2.40	1124	450	1444	86.4	0.192
15	2.50	1126	485	1445	125	0.258
16	2.80	1143	385	1448	72.0	0.187
17	3.10	1335*	320	1450	16.2	0.051
18	4.30	1344*	340	1456	60.0	0.176
19	4.50	1311	275	1500	27.5	0.100
20	4.90	1350*	270	1505	59.5	0.220
21	5.50	1333	230	1510	41.0	0.178
22	5.60	1357*	195	1316	27.8	0.143
23	6.00	1345	135	1319	8.90	0.066
24	6.20	1400*	110	1321	9.80	0.089
25	6.50	1355	105	1526	5.60	0.053
26	6.70	1404*	170	1527	14.1	0.083
27	7.00	1414	145	1529	18.1	0.125
28	7.26	1407*	121	1531	8.20	0.068
29	7.76	1413*	110	1111*	4.10	0.037
30	8.00	1436	105	1107*	8.50	0.081
31	8.20	1417*	118	1105*	5.40	0.046
32	9.00	1421*	60.0	1100*	3.40	0.057
34	11.00	1524	65.0	1052*	4.30	0.066
35	11.30	1430*	68.0	1036*	6.40	0.094
36	11.40	1432*	59.0	1034*	5.90	0.100
37	11.50	1434*	54.0	1039*	7.10	0.131
38	12.00	1531	43.0	1043*	6.10	0.142
39	12.20	1438*	48.0	1044*	3.40	0.071
					Average Log Ratio:	-0.983
					Antilog of Average:	0.104
					1998 ND Analyzed Field Strength(mV/m):	1430
					2018 DA Analyzed Field Strength(mV/m):	148.7

Radio Station KEIB

48 Degree True Radial

Point Desig.	Distance (km)	2017 ND Date & Time (local)	2017 ND Field Strength (mV/m)	2017 DA Date & Time (local)	2017 DA Field Strength (mV/m)	Ratio (2017/2017)
		12/5/2017		12/5/2017		
14MP	2.95	923	403	1259	37.8	0.094
15	3.50	930	175	1256	31.0	0.177
18	5.05	937	288	1250	24.5	0.085
19	5.34	940	255	1247	27.0	0.106
20	5.84	945	244	1242	31.3	0.128
21	6.57	954	188	1238	40.2	0.214
22	7.00	957	144	1235	28.7	0.199
23	7.45	1000	143	1231	20.7	0.145
24	8.00	1005	151	1226	23.3	0.154
25	8.45	1009	108	1222	16.2	0.150
26	9.96	1014	130	1219	13.6	0.105
27	9.00	1017	89.0	1215	14.0	0.157
28	9.90	1020	108	1211	17.3	0.160
29	11.00	1026	78.0	1201	7.90	0.101
30	12.20	1033	71.0	1154	11.7	0.165
31	13.28	1047	56.0	1148	12.5	0.223
32	14.25	1052	41.0	1144	6.90	0.168
33	14.90	1100	37.0	1139	6.60	0.178
34	16.10	1107	36.0	1130	7.70	0.214
35	17.00	1111	22.0	1126	2.63	0.120
36	18.00	1116	16.0	1122	1.62	0.101
					Average Log Ratio:	-0.842
					Antilog of Average:	0.144
					2017 ND Analyzed Field Strength(mV/m):	1430
					2017 DA Analyzed Field Strength(mV/m):	205.8

Radio Station KEIB

90 Degree True Radial

Point Desig.	Distance (km)	1998 ND		2018 DA		Ratio (1998/2018)
		Date & Time (local)	Field Strength (mV/m)	Date & Time (local)	Field Strength (mV/m)	
		2/12/1998		2/6/2018		
18 MP	3.50	1113	371	1211	23.2	0.063
19	3.95	1118	370	1213	0.990	0.003
20	4.50	1127	203	1218	6.10	0.030
21	5.00	1125	243	1221	21.5	0.088
22	5.50	1127	205	1226	16.9	0.082
23	5.75	1140	225	1228	11.1	0.049
24	5.95	1148	250	1230	15.3	0.061
25	6.48	1201	228	1240	21.0	0.092
26	6.85	1210	240	1245	15.0	0.063
27	8.45	1225	158	1253	14.4	0.091
28	8.70	1227	159	1254	10.4	0.065
32	14.00	1407	79.0	1317	9.90	0.125
33	17.88	1446	59.0	1335	4.30	0.073
34	18.90	1457	48.0	1345	3.40	0.071
35	19.90	1508	41.0	1351	1.85	0.045
36	21.00	1523	41.0	1357	1.25	0.030
37	21.95	1535	31.0	1405	0.400	0.013
38	24.05	1545	30.5	1408	0.530	0.017
39	25.00	1548	20.1	1413	0.380	0.019
40	27.00	1555	27.0	1417	0.500	0.019
41	28.00	1603	25.2	1433	0.630	0.025
42	29.00	1608	15.5	1424	0.970	0.063
43	30.00	1612	16.8	1428	1.56	0.093
44	31.00	1617	14.5	1433	1.20	0.083
45	32.00	1621	14.5	1437	1.10	0.076
46	32.85	1624	11.7	1442	0.820	0.070
					Average Log Ratio:	-1.337
					Antilog of Average:	0.046
					1998 ND Analyzed Field Strength(mV/m):	1590
					2018 DA Analyzed Field Strength(mV/m):	73.1

Radio Station KEIB

123.5 Degree True Radial

Point Desig.	Distance (km)	1998 ND		2018 DA		Ratio (1998/2018)
		Date & Time (local)	Field Strength (mV/m)	Date & Time (local)	Field Strength (mV/m)	
		2/23/1998 4/24/1998*		2/7/2018		
9	3.00	1012	360	827	65.7	0.183
10 MP	3.20	958	380	832	28.3	0.074
11	3.50	953	440	837	42.6	0.097
12	3.85	948	360	829	62.7	0.174
13	5.25	1352*	308	845	2.60	0.008
14	5.88	1354*	320	848	12.3	0.038
15	6.00	920	310	853	16.7	0.054
16	6.27	1357*	225	856	30.1	0.134
17	6.45	931	205	857	29.8	0.145
18	6.70	1400*	180	859	38.6	0.214
19	7.10	1402*	125	901	6.60	0.053
20	7.29	1408*	185	903	3.80	0.021
21	7.60	1406*	170	908	2.70	0.016
22	7.70	916	193	910	2.90	0.015
23	8.00	859	185	916	6.70	0.036
25	8.10	1416*	190	927	14.0	0.074
26	8.18	1417*	170	929	12.8	0.075
27	8.28	1418*	180	930	16.1	0.089
28	8.35	1419*	129	931	16.6	0.129
29	8.42	1420*	134	933	12.4	0.093
30	8.50	906	155	934	10.3	0.066
31	8.66	1422*	120	938	12.1	0.101
32	8.91	1425*	148	943	17.0	0.115
33	9.00	845	180	945	24.1	0.134
34	9.20	1430*	148	947	14.6	0.099
35	9.30	841	105	948	16.7	0.159
37	9.86	1439*	96.0	953	12.7	0.132
39	10.40	1445*	138	959	22.0	0.159
40	10.52	1446*	138	1002	21.9	0.159
41	10.66	1448*	130	1003	17.1	0.132
42	10.94	1450*	112	1006	16.1	0.144
43	11.35	1221	118	1009	17.0	0.144
44	12.40	1230	128	1013	31.1	0.243
46	14.50	1245	75.0	1026	18.1	0.241
					Average Log Ratio:	-1.062
					Antilog of Average:	0.087
					1998 ND Analyzed Field Strength(mV/m):	1457
					2018 DA Analyzed Field Strength(mV/m):	126.4

Radio Station KEIB

187.5 Degree True Radial

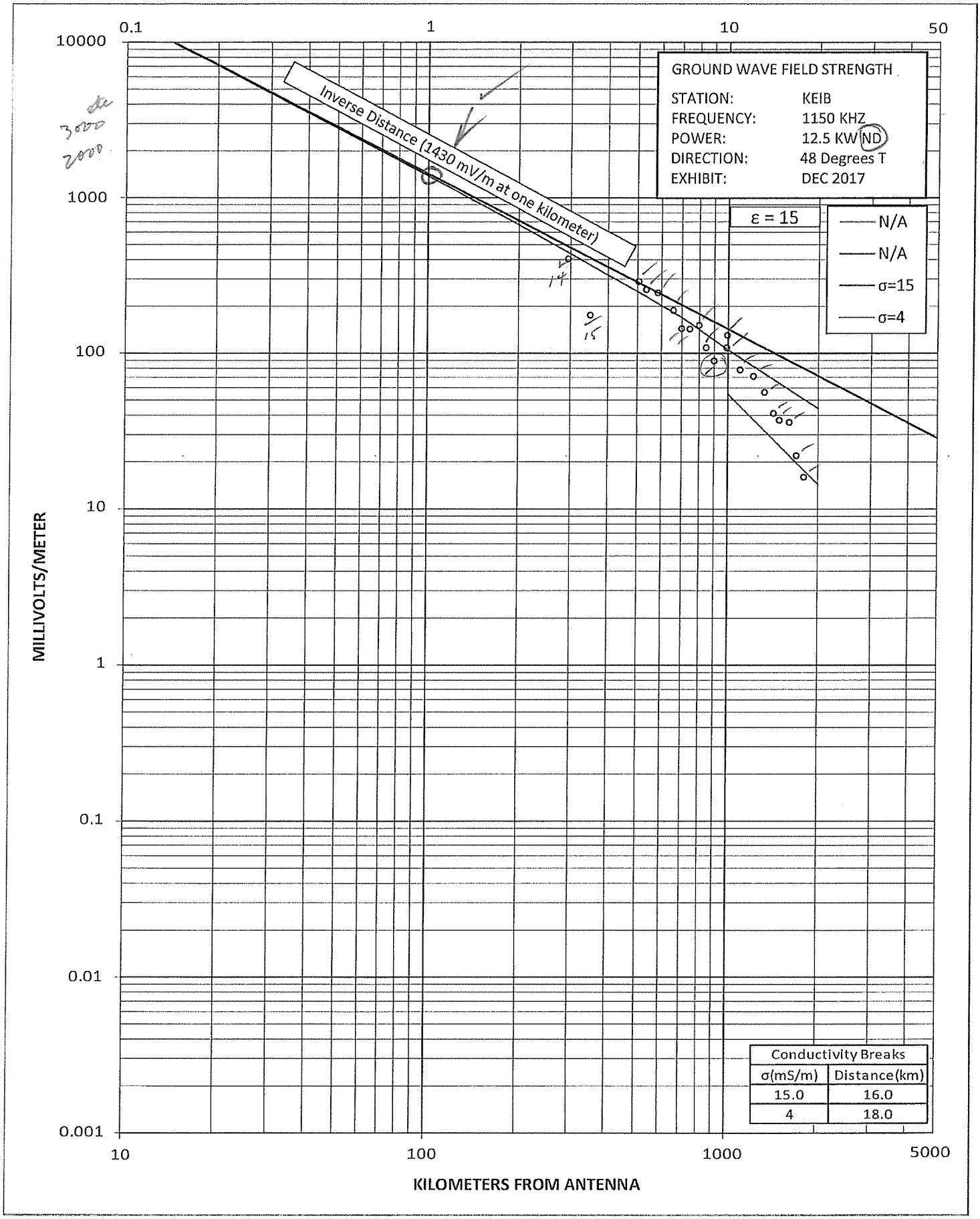
Point Desig.	Distance (km)	1998 ND Date & Time (local)	1998 ND Field Strength (mV/m)	2018 DA Date & Time (local)	2018 DA Field Strength (mV/m)	Ratio (1998/2018)
		2/13/1998 2/14/1998*		2/7/2018		
12	3.00	841*	310	1311	275	0.887
13 MP	4.28	845*	200	1306	321	1.605
14	4.98	910	270	1301	238	0.881
15	6.00	923	200	1255	110	0.550
17	8.00	1058	90.0	1248	70.3	0.781
18	9.00	1103	70.0	1244	44.0	0.629
19	10.00	1112	78.0	1237	47.7	0.612
20	11.00	927*	56.0	1231	51.4	0.918
21	12.10	1503*	60.0	1225	61.9	1.032
22	12.95	1519*	60.0	1220	49.2	0.820
23	14.00	1529*	50.0	1214	43.7	0.874
24	14.95	1551*	42.0	1211	32.7	0.779
25	17.00	1607*	42.0	1158	49.9	1.188
26	17.85	1011*	36.0	1153	38.9	1.081
27	18.90	1033*	33.0	1147	32.1	0.973
28	19.95	1037*	26.0	1144	25.8	0.992
29	20.95	1041*	24.0	1140	23.8	0.992
30	22.02	1050*	31.0	1134	17.8	0.574
31	23.00	1100*	28.0	1127	17.4	0.621
32	23.96	1108*	28.0	1123	12.6	0.450
33	24.95	1118*	24.0	1120	15.1	0.629
34	25.80	1125*	21.5	1114	12.6	0.586
35	26.90	1145*	25.0	1105	12.4	0.496
36	27.94	1159*	16.0	1059	13.9	0.869
37	28.84	1215*	21.0	1056	13.1	0.624
					Average Log Ratio:	-0.107
					Antilog of Average:	0.782
					1998 ND Analyzed Field Strength(mV/m):	1520
					2018 DA Analyzed Field Strength(mV/m):	1189

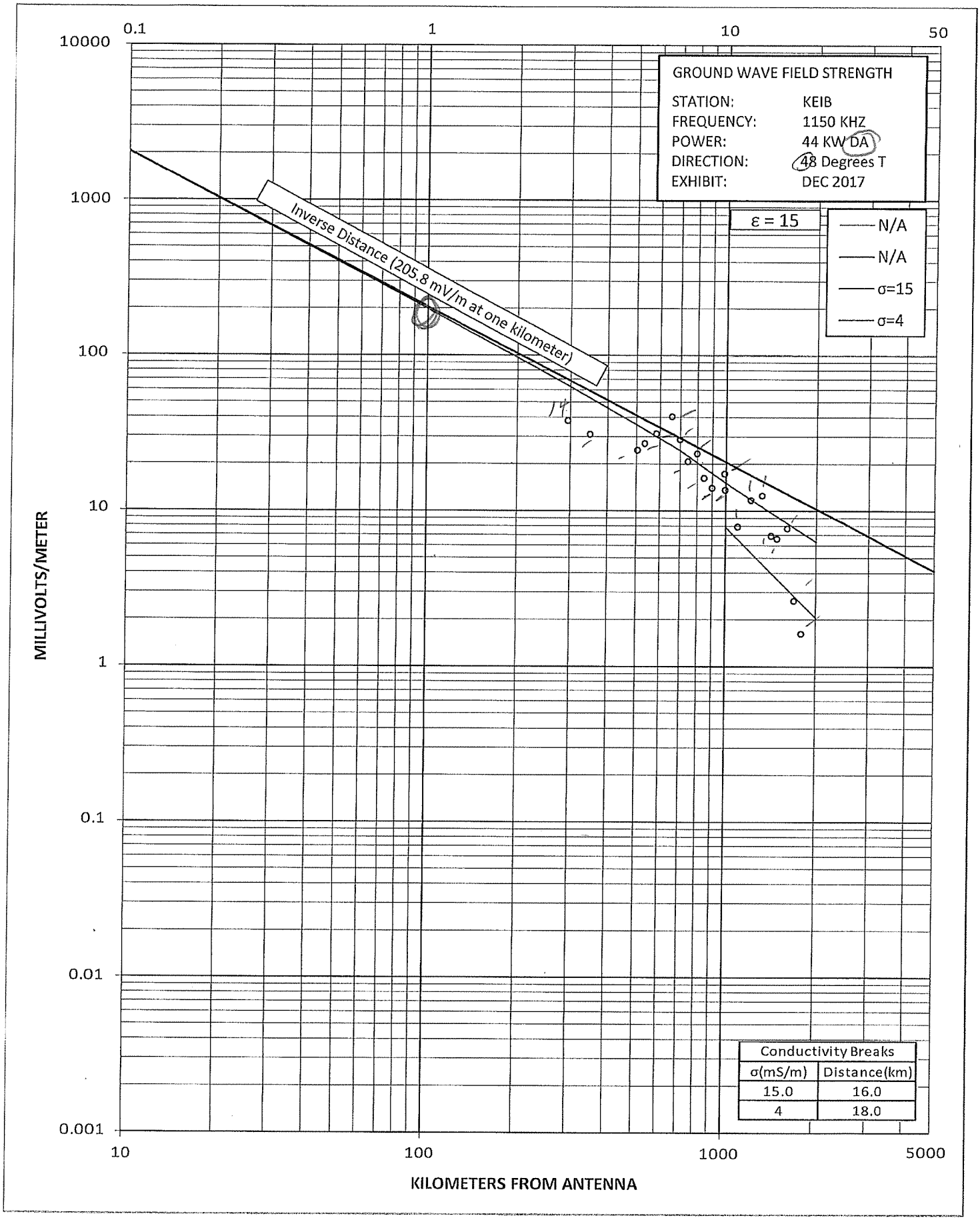
Radio Station KEIB

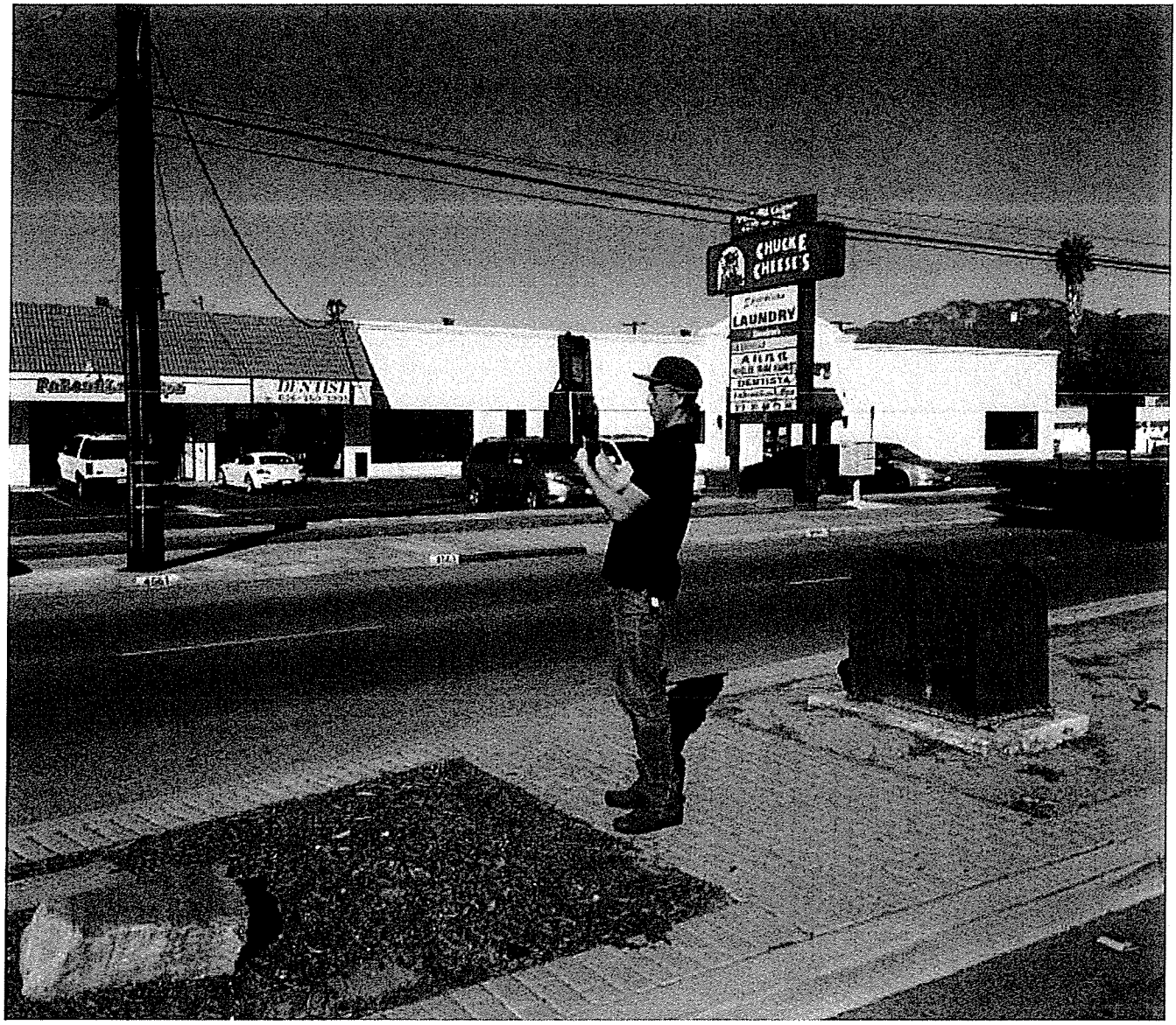
333.5 Degree True Radial

Point Desig.	Distance (km)	1998 ND Date & Time (local)	1998 ND Field Strength (mV/m)	2018 DA Date & Time (local)	2018 DA Field Strength (mV/m)	Ratio (1998/2018)
		2/13/1998 2/14/1998*		2/6/2018		
10	4.47	930	212	855	6.50	0.031
11	4.79	938	228	857	11.8	0.052
12	5.05	943	188	859	30.3	0.161
13	5.25	1319*	265	902	55.3	0.209
14 MP(OLD)	5.30	1321*	205	904	36.5	0.178
15	5.58	1323*	130	906	13.0	0.100
16	5.78	1325*	100	907	22.0	0.220
17	5.95	1326*	265	909	21.0	0.079
18	6.14	950	172	911	28.0	0.163
19	6.25	1329*	118	913	22.5	0.191
20 MP(NEW)	6.62	1334*	110	916	12.9	0.117
22	6.82	1338*	142	919	25.5	0.180
23	6.95	1000	127	920	16.5	0.130
24	7.17	1343*	128	922	12.3	0.096
25	7.40	1345*	98.0	924	20.7	0.211
26	8.20	1355*	110	930	26.5	0.241
27	8.40	1020	112	932	15.6	0.139
28	8.56	1359*	86.0	933	13.3	0.155
29	8.76	1401*	113	935	23.6	0.209
30	8.87	1403*	115	939	22.3	0.194
31	9.07	1407*	117	940	24.8	0.212
32	10.20	1035	100	946	11.6	0.116
33	11.00	1040	74.0	948	5.60	0.076
34	11.90	1048	60.0	954	10.0	0.167
					Average Log Ratio:	-0.864
					Antilog of Average:	0.137
					1998 ND Analyzed Field Strength(mV/m):	1400
					2018 DA Analyzed Field Strength(mV/m):	191.6

Graphs of Measured Field Strength Data

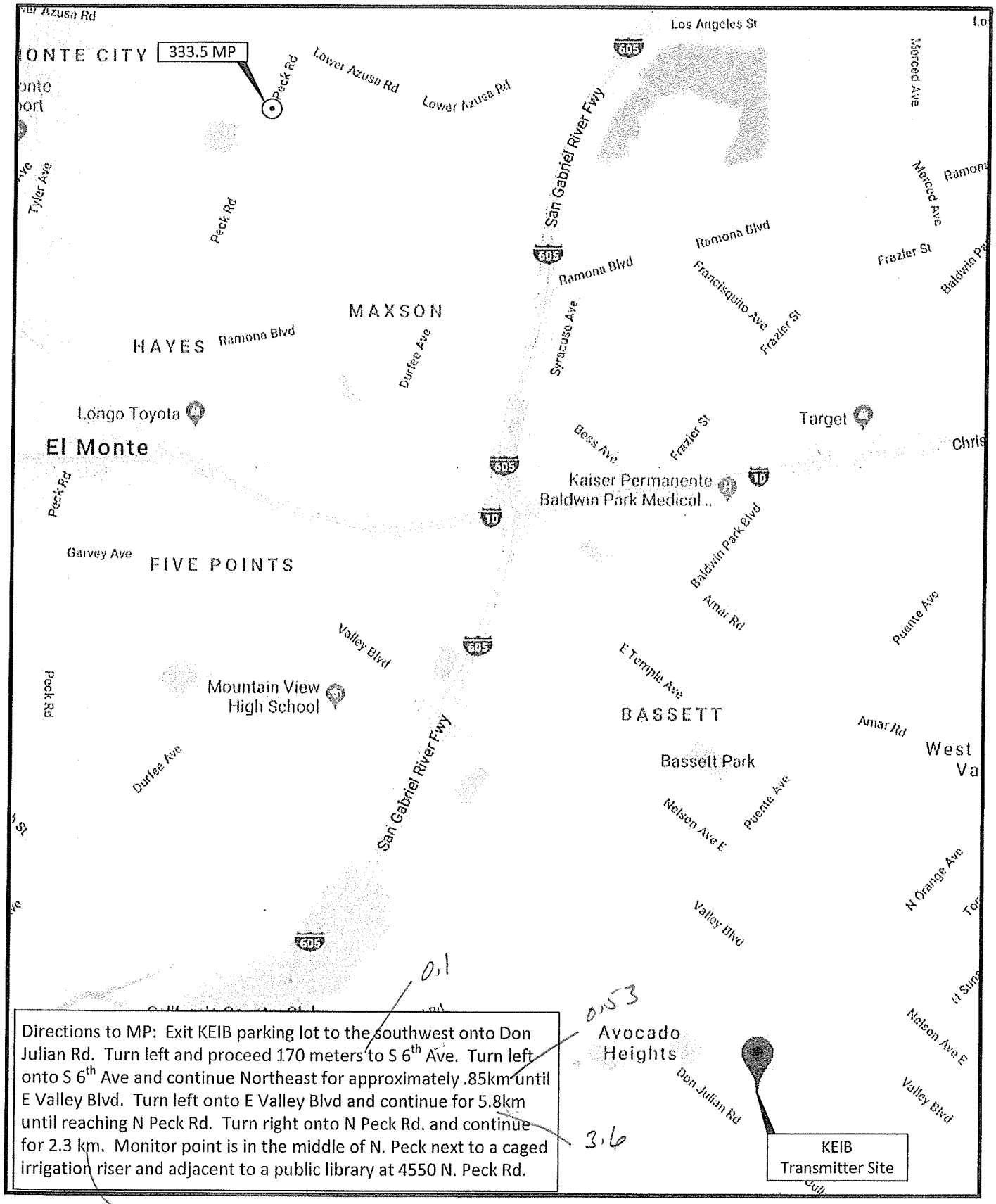

GROUND WAVE FIELD STRENGTH
STATION: KEIB
FREQUENCY: 1150 KHZ
POWER: 12.5 KW ND
DIRECTION: 48 Degrees T
EXHIBIT: DEC 2017
Inverse Distance (1430 mV/m at one kilometer)
ε = 15
N/A
N/A
σ=15
σ=4
Conductivity Breaks
σ(mS/m) Distance(km)
15.0 16.0
4 18.0
MILLIVOLTS/METER
KILOMETERS FROM ANTENNA
0.1
1
10
50
10000
1000
100
10
1
0.1
0.01
0.001
10
100
1000
5000


GROUND WAVE FIELD STRENGTH
STATION: KEIB
FREQUENCY: 1150 KHZ
POWER: 44 KW DA
DIRECTION: 48 Degrees T
EXHIBIT: DEC 2017
ε = 15
N/A
N/A
σ=15
σ=4
Inverse Distance (205.8 mV/m at one kilometer)
Conductivity Breaks
σ(mS/m) | Distance(km)
15.0 | 16.0
4 | 18.0
MILLIVOLTS/METER
KILOMETERS FROM ANTENNA
10000
1000
100
10
1
0.1
0.01
0.001
0.1
1
10
50
10
100
1000
5000



Radial Point Number: 20
Distance to Antenna: 6.62 km
Night-DA Field Strength: 12.9 mV/m

333.5 Degree Night Monitor Point



Directions to MP: Exit KEIB parking lot to the southwest onto Don Julian Rd. Turn left and proceed 170 meters to S 6th Ave. Turn left onto S 6th Ave and continue Northeast for approximately .85km until E Valley Blvd. Turn left onto E Valley Blvd and continue for 5.8km until reaching N Peck Rd. Turn right onto N Peck Rd. and continue for 2.3 km. Monitor point is in the middle of N. Peck next to a caged irrigation riser and adjacent to a public library at 4550 N. Peck Rd.

Map to 333.5 Degree Night Monitor Point