

## KQHE RF Site Survey

On 10/4/2013 an RF site survey was performed on KQHE's transmitting facility located on Ester Dome AK. The facility has a one hundred (100) foot self supported tower and is in a fifty (50) foot enclosed area surrounded by an approximately ten (10) foot barbed wire fence. The perimeter and equipment room entry door has RF signage posted.

The antenna mounted is a four bay Shively model 6810 with a gain of 2.12 dBi and center array is elevated at fifty five (55) feet above the ground. The survey was performed at a operating frequency of 92.7Mhz and a transmitting power of 982 watts. This power setting is the purposed CP full power setting for an ERP of 2kw.

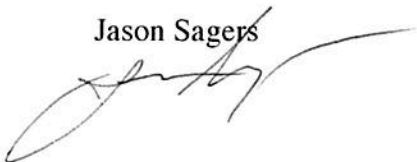
Survey was performed using test equipment from manufacture Narda, model NIM-511 with a serial number A-0111 calibrated by Narda on 3/13/2012. Test equipment was also certified for conformance on 9/30/2013 by Advanced Test Equip Corp. Equipment is capable of measuring E & H fields as well as total and spacial averaging over 6 min intervals. Measurements were taken through out the inside parameter using spatial averaging over a vertical cross section area.

The greatest "Hot Spot" was detected at 16 feet from the base of the tower where several tests were performed with results of .0049 mW/cm averaged power density, .0003 V/m E field strength, .0421 A/m H field strength and with maximum peak readings of .1144 mW/cm were detected.

### Conclusion

Since, the spatially averaged RF field readings are well below the maximum permissible exposure limits for General Population/Uncontrolled exposure, which are set to 0.200 mW/cm<sup>2</sup> for frequency range 30Mhz – 300Mhz, this site is fully compliant with the FCC regulations for RF exposure.

Jason Sagers



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## Calibration Certificate

Narda Safety Test Solutions hereby certifies that the referenced equipment has been calibrated by qualified personnel to Narda's approved procedures. The calibration was carried out within a certified quality management system conforming to ISO 9001:2000.

The metrological confirmation system for test equipment complies with ISO 10012-1.

Object	NIM-511 E/H Field Probe
Part Number (P/N)	2402/15B
Serial Number (S/N)	A-0111
Manufacturer	Narda Safety Test Solutions
Date of Calibration	Thu 21/Mar/2013 10:49:10
Results of Calibration	Test Results within Specification
Confirmation interval (recommended)	24 Months
Ambient conditions	(23 +/-3)°C (40...60)% rel. humidity
Calibration Procedure	ATE Software 990199 Ver. 1.61
Probe Definition File Set	P/N 990199-15 Ver. 1.04
Results Filed Under	NIM511_NIM_A-0111_21Mar2013.xlsx

Hauppauge, NY

L. Villanueva  
Calibrated by

 3/20/13  
Quality Assurance

This certificate may only be published in full, unless permission for the publication of an approved extract has been obtained in writing from the Director of Quality Assurance.

## Calibration Certificate

Narda Safety Test Solutions hereby certifies that the object referenced to this certificate has been calibrated by qualified personnel using Narda's approved procedures. The calibration was carried out in accordance with a certified quality management system which conformed to ISO 9001.

OBJECT	<b>Industrial Field Meter NIM-510</b>
MANUFACTURER	Narda Safety Test Solutions GmbH
PART NUMBER (P/N)	<b>2403/02B</b>
SERIAL NUMBER (S/N)	<b>A-0111</b>
CUSTOMER	
CALIBRATION DATE	2012-03-13
RESULT ASSESSMENT	within specifications
AMBIENT CONDITIONS	Temperature: $(23 \pm 3) ^\circ\text{C}$ Relative humidity: (20 to 60) %
CALIBRATION PROCEDURE	2401-8700-00A

ISSUE DATE: 2012-03-14

  
\_\_\_\_\_  
CALIBRATED BY  
Aigler

  
\_\_\_\_\_  
AUTHORIZED SIGNATORY

MANAGEMENT  
SYSTEM



This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.

Certified by DQS according  
to ISO 9001:2008  
(Reg.-No. 099379 QM08)



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## Certificate of Conformance

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The following instrument was inspected and found to be fully operational and passed all functional tests as required and/or specified by the manufacturer's inspection/test procedure or by an equivalent Advanced Test Equipment Corp. approved test procedure.

Manufacturer: NARDA

Model: NIM-511

Serial number: A-0111

Issued by:

A handwritten signature in black ink, appearing to read 'J. Hernandez', written over a horizontal line.

Date: 9/30/2013

QF40/051107

