



SOUTHWEST RESEARCH INSTITUTE®

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Institute Calibration Laboratory
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Certificate of Calibration

Certificate #
0972-01

Submitted By: DIV20

Address: B57

Contact: DON BANNON

Manufacturer / Model: ORION / EA920

Description: EXPANDABLE IONANALYZER

Serial No: S001A

Asset No: 001880

Procedure: ORION EA920 - 13 FEB 2007

Work Order: 303073180

Date Issued: Feb 13, 2007

Calibration Date: Feb 13, 2007

***Calibration Due:** Feb 13, 2008

Calibration Location: Bldg. 64

Environment: Temp. 73.0°F Hum. 40 %RH

****Data Type:** FOUND-LEFT

DivID/Location: N/A

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 2005, ANSI/NCSL Z540-1-1994 and relevant requirements of the ISO 9000-2000 standard. This certificate shall not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. This certificate shall not be used to claim product endorsement by Southwest Research Institute, American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government. Results of this calibration relate only to the instrument described above at the time of calibration and does not imply any long term stability of the instrument.

*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. **Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance. See Remarks or attached Measurement Report with the same Work Order number for data.

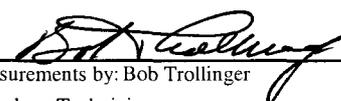
Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

Remarks: Calibrated mV only

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
004164	6380025	FLUKE	5500A/SC300	CALIBRATOR	Jul 21, 07

Reviewed by: blt () jrg () pwc () wgh ()
Metrology Technician


Measurements by: Bob Trollinger
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303073180	Mfr:	ORION	Technician:	BLT
Asset No:	001880	Model:	EA920	Cal Date:	13-Feb-07
Serial No:	S001A	Type:	ION ANALYZER		

Remarks:

LIMITED CAL: mVolts Only

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Ch 1	mVolts	mVolts	mVolts	mVolts	mVolts	Result
	1900.0	1900.2	0.2	1.0	0.12	Pass
	-1900.0	-1900.8	-0.8	1.0	0.12	Pass
Ch 2	mVolts	mVolts	mVolts	mVolts	mVolts	
	1900.0	1900.3	0.3	1.0	0.12	Pass
	-1900.0	-1900.7	-0.7	1.0	0.12	Pass

END OF REPORT