SOUTHWEST RESEARCH INSTITUTE®

6220 Culebra Road, P.O. Drawer 28510
Institute Quality Systems
Institute Calibration Laboratory
Phone: 210-522-5215 Fax 210-522-4834

Certificate of Calibration

ACCREDITED
Calibration Laboratory
Certificate #0972-01

Submitted By: DIV20
Address: B57
Contact: DON BANNON
Manufacturer / Model: ORION / EA940
Description: EXPANDABLE IONANALYZER
Serial No: 2330
Asset No: 001948
Procedure: ORION EA940 - 26 APR. 2006

Work Order: 303075289
Date Issued: Jul 6, 2007
Calibration Date: Jul 6, 2007
***Calibration Due:** Jul 6, 2008
Calibration Location: Bldg. 64
Environment: Temp. 70.0°F Hum. 45 %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: mV Tested Only

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
006413	7085202	FLUKE	5520A/SC1100	MULTI-PRODUCT CALIBRATOR	Mar 28, 08

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

Measurements by: Joe Greagrey
Metrology Technician

m:\a2la1.rpt Rev date August 15, 2005

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303075289	Mfr:	ORION	Technician:	JRG
Asset No:	001948	Model:	EA 940		
Serial No:	2330	Type:	ION ANALYZER	Cal Date:	06-Jul-07
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	1900.1	0.1	1.0	0.12	Pass
	-1900.0	-1900.4	-0.4	1.0	0.12	Pass
Ch 2	mVolts	mVolts	mVolts	mVolts	mVolts	
	1900.0	1900.1	0.1	1.0	0.12	Pass
	-1900.0	-1900.3	-0.3	1.0	0.12	Pass

END OF REPORT