



SOUTHWEST RESEARCH INSTITUTE®

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Institute Calibration Laboratory
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Certificate #
0972-01

Certificate of Calibration

Submitted By: DIV20
Address: B57
Contact: DON BANNON
Manufacturer Model: ORION 720A
Description: PH/ION METER
Serial No: 003368
Asset No: 001441
Procedure: CL-79, JUN/99

Work Order: 303067491
Date Issued: Jan 16, 2006
Calibration Date: Jan 16, 2006
***Calibration Due:** Jan 16, 2007
Calibration Location: Bldg. 64
Environment: Temp. 72.0°F Hum. 41 %RH
****Data Type:** FOUND-LEFT

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, 1999, 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: mVolts Cal'd only

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
006413	7085202	FLUKE	5520A/SC1100	MULTI-PRODUCT CALIBRATOR	Mar 08, 06

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

Measurements by: Paul DeMore
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303067491	Mfr.	Orion	Technician	PRD
Asset No.	001441	Model	720A	Cal Date.	16-Jan-06
Serial No.	003368	Type.	pH Meter		
Remarks:					
LIMITED CAL: Millivolts Only					

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Relative	m Volts	m Volts	m Volts	m Volts	m Volts	Result
	0.0	0.0	0.0	0.2	0.13	Pass
	1000.0	1000.0	0.0	0.5	0.13	Pass
	-1000.0	-1000.0	0.0	0.5	0.13	Pass
Absolute	m Volts	m Volts	m Volts	m Volts	m Volts	
	0.0	0.0	0.0	0.2	0.13	Pass
	1000.0	1000.0	0.0	0.5	0.13	Pass
	-1000.0	-1000.0	0.0	0.5	0.13	Pass

END OF REPORT