SOUTHWEST RESEARCH INSTITUTE™

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ACCREDITED
Certificate #
0972-01

Certificate of Calibration

Submitted By:	DIV20	**Work Order:**	444061673
Address:	T1	**Date Issued:**	Nov 23, 2004
Contact:	RON GREEN	**Calibration Date:**	Nov 23, 2004
Manufacturer Model:	FLUKE 2625A	****Calibration Due:**	May 23, 2005
Description:	HYDRA DATA LOGGER	**Calibration Location:**	Bldg. 64
Serial No:	5832650	**Environment:**	Temp. 73.0°F Hum. 42 %RH
Asset No:	005129	***As Found:**	IN TOLERANCE
Procedure:	MULTIMETERS, JAN/03	***As Left:**	IN TOLERANCE

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 and ANSI/NCSL Z540-1-1994 which are equivalent to relevant requirements of the ISO 9000-1994 series of standards. This certificate may not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. The results of this calibration relate only to the individual instrument described above. This certificate shall not be used to claim product endorsement by the American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government.

Uncertainty evaluation includes the item under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor of k=2 to approximate a 95% confidence level. See Remarks or attached Calibration Report with the same Work Order number for calibration data.

*The client has sole responsibility for determination of in/out of tolerance or compliance/noncompliance. An in/out of tolerance opinion is provided for your convenience based only on the Test Instrument (TI) reading(s) and limits as reported. The reported uncertainty relates only to the results at the time of calibration and does not imply any short or long term stability of the TI.

**Calibration interval is determined by the client and does not assure the instrument will remain within tolerance until this date. Any number of factors may cause the instrument to be out of tolerance before the next calibration date.

Remarks: SN 5832650 and SN 5129A calibrated together.

Standards Used

Asset	Manufacturer	Model	Description	Cal Due
000182	FLUKE	5700A/EP	CALIBRATOR	Dec 23, 04

Approved by: Walt Hill
Metrology Group Leader

Measurements by: Scott Kester
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	444061673	Mfr.	FLUKE	Technician	SRK
Asset No.	005129	Model	2625A		
Serial No.	5832650	Type.	DATA LOGGER	Cal Date.	23-Nov-04
Remarks:					

Function/Range	Test Point	TI Reading	Difference	+/- Limit	+/- Uncertainty	Found/Left
DCV	mVolt	mVolt	mVolt	mVolt	mVolt	Result
300 mV	0.00	-0.01	-0.01	0.02	0.012	Pass
	150.00	149.99	-0.01	0.07	0.027	Pass
	290.00	289.99	-0.01	0.11	0.027	Pass
	Volts	Volts	Volts	Volts	Volts	
3 V	2.9000	2.8998	-0.0002	0.0012	0.00021	Pass
	-2.9000	-2.9001	-0.0001	0.0012	0.00021	Pass
30 V	29.000	28.998	-0.002	0.010	0.021	Pass
300 V	290.00	289.98	-0.02	0.10	0.012	Pass
AC Volts	mVolt	mVolt	mVolt	mVolt	mVolt	
300 mV 1 kHz	20.00	20.05	0.05	0.28	0.035	Pass
100 kHz	20.00	20.12	0.12	1.50	0.070	Pass
1 kHz	290.00	290.07	0.07	0.74	0.11	Pass
100 kHz	290.00	297.15	7.15	15.00	0.58	Pass
	Volts	Volts	Volts	Volts	Volts	
3 V 1 kHz	2.9000	2.9004	0.0004	0.0066	0.00059	Pass
30 V 1 kHz	29.000	29.003	0.003	0.069	0.0082	Pass
300 V 1 kHz	290.00	290.02	0.02	0.66	0.16	Pass
Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	
300 Ohm	0.00	0.05	0.05	0.09	0.010	Pass
	190.00	190.03	0.03	0.20	0.024	Pass
	kOhm	kOhm	kOhm	kOhm	kOhm	
3000 Ohm	0.0000	0.0000	0.0000	0.0003	0.00010	Pass
	1.9000	1.8997	-0.0003	0.0014	0.00019	Pass
30 kOhm	19.000	18.996	-0.004	0.013	0.0019	Pass
300 kOhm	190.00	190.00	0.00	0.13	0.022	Pass
	MOhm	MOhm	MOhm	MOhm	MOhm	
3 MOhm	1.9000	1.9004	0.0004	0.0014	0.00025	Pass
Frequency	kHz	kHz	kHz	kHz	kHz	
90 kHz 2V p-p	10.000	10.000	0.000	0.006	0.0013	Pass

END OF REPORT