



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

Certificate #
0972-01

Submitted By: DIV20
Address: B57
Contact: DON BANNON
Manufacturer Model: FLUKE 2625A
Description: HYDRA DATA LOGGER
Serial No: 5832650
Asset No: 005129
Procedure: CL516 6/00

Work Order: 303067071
Date Issued: Dec 9, 2005
Calibration Date: Dec 9, 2005
***Calibration Due:** Jun 9, 2006
Calibration Location: Bldg. 64
Environment: Temp. 72.0°F Hum. 42 %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: None

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
000182	5200003	FLUKE	5700A/EP	CALIBRATOR	Dec 27, 05

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

Measurements by: Mike Young
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303067071	Mfr.	FLUKE	Technician	MSY
Asset No.	005129	Model	2625A		
Serial No.	5832650	Type.	DATA LOGGER	Cal Date.	09-Dec-05
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	289.90	-0.10	0.11	0.027	Pass
	Volts	Volts	Volts	Volts	Volts	
3 V	2.9000	2.8999	-0.0001	0.0012	0.00021	Pass
	-2.9000	-2.9002	-0.0002	0.0012	0.00021	Pass
30 V	29.000	28.999	-0.001	0.010	0.021	Pass
300 V	290.00	289.99	-0.01	0.10	0.012	Pass
AC Volts	mVolt	mVolt	mVolt	mVolt	mVolt	
300 mV 1 kHz	20.00	20.01	0.01	0.28	0.035	Pass
100 kHz	20.00	20.14	0.14	1.50	0.070	Pass
1 kHz	290.00	290.03	0.03	0.74	0.11	Pass
100 kHz	290.00	297.68	7.68	15.00	0.58	Pass
	Volts	Volts	Volts	Volts	Volts	
3 V 1 kHz	2.9000	2.9001	0.0001	0.0066	0.00059	Pass
30 V 1 kHz	29.000	29.000	0.000	0.069	0.0082	Pass
300 V 1 kHz	290.00	290.00	0.00	0.66	0.16	Pass
Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	
300 Ohm	0.00	0.04	0.04	0.09	0.010	Pass
	190.00	190.05	0.05	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	1.9000	0.0000	0.0014	0.00019	Pass
30 kOhm	19.000	19.000	0.000	0.013	0.0019	Pass
300 kOhm	190.00	190.01	0.01	0.13	0.022	Pass
	MOhm	MOhm	MOhm	MOhm	MOhm	
3 MOhm	1.9000	1.9005	0.0005	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