



Certificate of Calibration

Traceability/Job No
109320.001

Prepared For **WILLBROS GOVERNMENT SERVICES**

99-2500 HALWA VALLEY ST
AIEA, HI 96701

P.O. No: VERBAL CASEY/SALES
Data Req'd: Yes

Instrument Information

Inst Descrip: PRESSURE GAUGE	Calibration Site: IN SHOP	As Received	As Left
Manufacturer: ASHCROFT	Date Rec: 25-Apr-2013		
Model: 45-1279SS-04L-400#	Date of Cal: 25-Apr-2013	IN TOLERANCE	IN TOLERANCE
Serial No: 8966699	Next Cal Due: 25-Apr-2014	OPERATIONAL	OPERATIONAL
Cust ID No: 8966699	Procedure: 501491		FULL CAL
Accuracy: $\pm 0.5\%$ F.S.	Cal Result: PASS		NOT ADJUSTED
Remarks: SEE ATTACHED DATA SHEET.			

Calibration Standards Used

ID No	Model No	Manufacturer	Description	Serial No	Cal Date	Cal Due
F436	ST-2H	HEISE	CALIBRATOR	50055	25-Jan-2013	25-Jan-2014
F487	HQS-2	HEISE	PRESSURE MODULE	HQS-15614	05-Feb-2013	05-Feb-2014

Calibration Room Environment

Temperature: 70F/21.1C Relative Humidity: 49 % Barometric Pressure: N/A

This item meets published specifications. It has been calibrated using standards traceable to the National Institute of Standards and Technology. Alternatively, accuracies have been derived from accepted values of natural physical constants, or derived by the ratio type of self-calibration techniques. This certificate may be reproduced in full. Partial reproduction may be done only with written prior consent. All calibration activities are performed in compliance with ANSI/NCCL Z540.3-2006, ISO 10012, and MIL-STD-45662A.

FLW Service Corporation

5672 Bolsa Avenue
Huntington Beach, CA 92649
(800) 576-6308 Fax: (714) 622-2002

Issued On April 25, 2013 By:

Ygnacio Garcia, Technician

FORM P370-15.2 Mar 2012

**FLW Service Corporation**

5672 Bolsa Avenue
Huntington Beach, CA 92649
Ph: 714-751-7512 Fax: 714-755-7332
<http://www.flw.com>

Job/Traceability #: 109320.001

DATA REPORT

ID: 8966699

Date: 04/25/13

Unit of Measurement: PSI

Range: 0 to 400

UUT Accuracy: 0.5 % FS

UUT Resolution: 1 PSI

STANDARD READING PSI	UUT AS FOUND PSI	ERROR %		UUT AS LEFT PSI	ERROR %	
0	0	0.000	Pass	0	0.000	Pass
80	81	0.250	Pass	81	0.250	Pass
160	160	0.000	Pass	160	0.000	Pass
240	239	0.250	Pass	239	0.250	Pass
320	318	0.500	Pass	318	0.500	Pass
400	400	0.000	Pass	400	0.000	Pass

Remarks:

Data Taken By:

RD Technology of Hawaii

134 Nakolo Place
Honolulu, HI 96819
(808) 833-3499

Certificate of Calibration

Navy Lab Code 7RD

Willbros Government Services

Willbros Government Services

99-2500 Halawa Valley St.

Aiea HI 96701- (808) 352-0528

Ashcroft

Manufacturer

16531

Serial Number

06/07/2012

Calibration Date

06/07/2013

Recalibration Due

NAVAIR 17-20MP-06

Instrument Accuracy / Procedure

0-300 PSI

Model

Pressure Gauge

Description

112,776

Test Number**Asset Number**

23 °C

Temperature

43 % RH

Humidity

RD Technology of Hawaii certifies that the above listed instrument meets or exceeds all published specifications and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology within the limitations of the Institutes calibration services, or have been derived from accepted values of natural physical constants, or have been by the ratio type of self-calibration techniques. Our "Calibration System Requirements" is in compliance with ANSI/NC SL Z540-1 standards.

Calibration Standards Used:

Equip #	Manufacturer	Description	Model	Serial	Date Calibrated	Date Due
10,009	DH Instruments	Pressure Control Calibrator	PPC2 AF	190	04/24/2012	04/24/2013

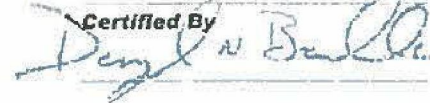
In Tolerance

Condition Received

In Tolerance

Condition Returned

RD Technology of Hawaii / DB

Certified By


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(808) 833-3499

Certificate of Calibration

Navy Lab Code 7RD

Willbros Government Services

Willbros Government Services

99-2500 Halawa Valley St.

Aiea HI 96701- (808) 352-0528

Ashcroft

Manufacturer

16567

Serial Number

06/21/2012

Calibration Date

06/21/2013

Recalibration Due

NAVAIR 17-20MP-06

Instrument Accuracy / Procedure

0-300 PSI

Model

Pressure Gauge

Description

112,896

Test Number**Asset Number**

25 °C

Temperature

45 % RH

Humidity

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Calibration Standards Used:

Equip #	Manufacturer	Description	Model	Serial	Date Calibrated	Date Due
10,009	DH Instruments	Pressure Control Calibrator	PPC2 AF	190	04/24/2012	04/24/2013

In Tolerance

Condition Received

In Tolerance

Condition Returned

RD Technology of Hawaii / DB

Certified By

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Providing Solutions that People Trust

Caltrol, Inc.
91-110 Hanua Street
Kapolei, HI 96701
Ph 808-487-7717
Fax 808-488-3343

CALIBRATION CERTIFICATE

This is to certify that the following pressure instruments were checked at various pressure points for accuracy with a Keller LEO 1 Manometer SN: 14734, traceable to the National Institute of Standards and Technology, NIST and found to be within calibration specifications.

Date: October 15, 2010

Purchase order #: CC, Ann Manners

Customer: Willbros Government Services

Sale Order #: 398716

Ashcroft 45-1279SS-04L-300 0-300# PSI Gauge #2

<u>Actual:</u>	<u>Up scale reading:</u>	<u>Down scale reading:</u>
50 psig	49.5 psig	49.6 psig
100 psig	101.2 psig	101.2 psig
150 psig	152 psig	152 psig
200 psig	202.2 psig	202 psig
250 psig	252.2 psig	252.4 psig


Authorized Signature
Shaun Ferguson



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Fax 808-488-3343

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Date: October 15, 2010

Purchase order #: CC, Ann Manners

Customer: Willbros Government Services

Sale Order #: 398716

Ashcroft 45-1279SS-04L-300 0-300# PSI Gauge #1

<u>Actual:</u>	<u>Up scale reading:</u>	<u>Down scale reading:</u>
50 psig	50.5 psig	50.6 psig
100 psig	100.7 psig	100.2 psig
150 psig	151.2 psig	150.7 psig
200 psig	201.9 psig	202 psig
250 psig	251.9 psig	252.2 psig


Authorized Signature
Shaun Ferguson



Certificate of Calibration

Traceability Job No
108644.001

Prepared For: WILLBROS GOVERNMENT SERVICES
99-2500 HALWA VALLEY ST
AIEA, HI 96701

P.O. No: 54118-641/SALES
Data Req'd: Yes

Instrument Information

Inst Descrip: PRESSURE GAUGE	Calibration Site: IN SHOP	As Received	As Left
Manufacturer: ASHCROFT	Date Rec: 15-Nov-2012		
Model: 45-127955-04L-300#	Date of Cal: 15-Nov-2012	IN TOLERANCE	IN TOLERANCE
Serial No: 8966476	Next Cal Due: 15-Nov-2013	OPERATIONAL	OPERATIONAL
Cust ID No: 8966476	Procedure: S01491		FULL CAL
Accuracy: $\pm 0.5\%$ F.S.	Cal Result: PASS		NOT ADJUSTED
Remarks: SEE ATTACHED DATA SHEET			

Calibration Standards Used

ID No	Model No	Manufacturer	Description	Serial No	Cal Date	Cal Due
F486	PTE-1 / FM	HEISE	PRESSURE CALIBRATOR	9999	18-Jan-2012	18-Jan-2013
F447	HQS-2	HEISE	PRESSURE MODULE	HQS-29535	17-May-2012	17-May-2013

Calibration Room Environment

Temperature: 72F/22.2C Relative Humidity: 42 % Barometric Pressure: N/A

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Issued On November 15, 2012 By:


Yovacio Garcia, Technician

FORM P370-15 2 Mar 2012



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<http://www.flw.com>

Job/Traceability #: 108644-001

DATA REPORT

ID: 8966476

Date: 11/15/12

Unit of Measurement: PSI

Range: 0 to 300

UUT Accuracy: 0.5 % FS

UUT Resolution: 0.1 PSI

STANDARD READING PSI	UUT AS FOUND PSI	ERROR %		UUT AS LEFT PSI	ERROR %	
0	0.0	0.000	Pass	0.0	0.000	Pass
60	60.1	0.033	Pass	60.1	0.033	Pass
120	120.0	0.000	Pass	120.0	0.000	Pass
180	180.0	0.000	Pass	180.0	0.000	Pass
240	240.0	0.000	Pass	240.0	0.000	Pass
300	300.0	0.000	Pass	300.0	0.000	Pass

Remarks: _____

Data Taken By: Y. Garcia