Calibration Certificate

Al Takamul Yard North Rumailah, Iraq
●Phone : +964 7810009138 ● www.qualitycontrol-iraq.com ● E-mail: op@qualitycontrol-iraq

Date of Issue: February 12, 2025

REQUEST NUMBER	: By Mail	APPROVED BY LAB INCHARGE QC
JOB NUMBER	: QC-CAL-25025	
CERTIFICATE NUMBER	: QC-CAL-25025-02	

Asiad Rafiq

CUSTOMER DETAILS

Name : **Halliburton Worldwide IRAQ**
Address : Western Burjesia, Oil Street, Zubair, South Iraq
Department : WPS

EQUIPMENT IDENTIFICATION AND SPECIFICATIONS

Description : **Blaster's Multimeter**
Type of Indication : Digital
Manufacturer : Thomas Instruments Inc.
Model : 109
Serial Number : **DE13636**
Calibrated Range :

Voltage (DC)	0.1 mV	to	1500 V	
Voltage (AC)	0.1 mV	to	1000 V	
Current (DC)	0.1 µA	to	2 A	
Current (AC)	0.1 µA	to	2 A	
Resistance	0.1 Ω	to	20 MΩ	

Resolution :

Voltage (DC)	0.1mV	0.0001V	0.001V	0.01V	0.1V	1V
Voltage (AC)	0.1mV	0.0001V	0.001V	0.01V	0.1V	1V
Current (DC)	0.1µA	0.001mA	0.01mA	0.1mA	1A	
Current (AC)	0.1µA	0.001mA	0.01mA	0.1mA	1A	
Resistance	0.1 ohm	0.001k ohm	0.01k ohm	0.1k ohm	0.001M ohm	0.01M Ohm

As Found Condition : Good
Calibrated By : Abdulrahman Loay
Calibration Date : February 12, 2025
Calibration Due : **February 11, 2027**
Last Calibration Test : February 22, 2023

ENVIRONMENTAL CONDITIONS DURING TEST

Ambient Temperature	:	22 °C	±	2 °C
Relative Humidity	:	40 %RH	±	5 %RH

CALIBRATION METHOD

The above equipment has been calibrated in accordance with QC Calibration Procedure # QC/CP/E/01
The deviations of the measurements obtained from UUC with respect to reference standards are determined to obtain the error.

TRACEABILITY

The measurements made by Quality Control Labs, realize the physical units of measurements (SI), through its state of the art calibration standards that are controlled and maintained by QC.

REFERENCE EQUIPMENT USED :

DESCRIPTION	MAKE	MODEL #	SERIAL #	CALIBRATION DATE	CALIBRATION DUE DATE
Multifunction Calibrator	Fluke, USA	5522A	2806902	8/20/2024	8/19/2025
Ref Mulitmeter	Fluke, USA	8508A	276568089	8/20/2024	8/19/2025
Decade Resistance Box	Corpico	RBB6-B	18F-1093	8/20/2024	8/19/2025

CERTIFICATE OF CALIBRATION

REQUEST NUMBER: By Mail
JOB NUMBER: QC-CAL-25025

CERTIFICATE NUMBER
QC-CAL-25025-02

CALIBRATION TEST RESULTS

Measurement Data for DC Voltage

Zero or Offset Readings of UUC

Before Adjustment	After Adjustment
mV	mV
0	0

Before Adjustment	After Adjustment
V	V
0	0

Readings on UUC	Readings on Ref. Standard	Error	Uncertainty (95 % C.L)
mV	mV	mV	± (mV)
199.9	199.86	0.04	1
V	V	V	± (V)
1.997	2.000	-0.0030	0.1
19.98	20.000	-0.0200	0.2
199.7	200.000	-0.3000	0.2
1000	999.300	0.7000	2.0
1500	1499.970	0.0300	2.0

Measurement Data for AC Voltage @ 60 Hz

Zero or Offset Readings of UUC

Before Adjustment	After Adjustment
mV	mV
0	0

Before Adjustment	After Adjustment
V	V
0	0

Readings on UUC	Readings on Ref. Standard	Error	Uncertainty (95 % C.L)
m V	m V	m V	m V
199.9	199.82	0.08	1
V	V	V	V
1.995	1.998	-0.0030	0.1
19.97	19.950	0.0200	0.1
199.8	199.92	-0.1200	0.5
1000	999.90	0.1000	4.0

Measurement Data for Resistance

Zero or Offset Readings of UUC

Before Adjustment	After Adjustment
Ω	Ω
0	0

Before Adjustment	After Adjustment
kΩ	kΩ
0	0

Before Adjustment	After Adjustment
MΩ	MΩ
0	0

Readings on UUC	Readings on Ref. Standard	Error	Uncertainty (95 % C.L)
Ω	Ω	Ω	± (Ω)
199.9	200.05000	-0.15000	0.10
kΩ	kΩ	kΩ	± (kΩ)
1.990	2.001000	-0.011000	0.10
19.98	20.00100	-0.021000	0.10
200.0	200.0800	-0.090000	1.00
MΩ	MΩ	MΩ	± (KΩ)
1.998	2.001000	-0.003000	1.00
19.99	20.0020	-0.012000	1.00

CERTIFICATE OF CALIBRATION

REQUEST NUMBER: By Mail
JOB NUMBER: QC-CAL-25025

CERTIFICATE NUMBER

QC-CAL-25025-02

Measurement Data for DC Current

Zero or Offset Readings of UUC

Before Adjustment	After Adjustment
µA	µA
0	0

Before Adjustment	After Adjustment
mA	mA
0	0

Before Adjustment	After Adjustment
A	A
0	0

Readings on UUC	Readings on Ref. Standard	Error	Uncertainty (95 % C.L)
µA	µA	µA	± (µA)
199.8	199.980	-0.180	0.1
mA	mA	mA	± (mA)
1.992	1.990	0.002	0.1
19.98	19.990	-0.010	0.1
199.8	199.980	-0.150	1
A	A	A	± (mA)
2.0	1.990000	0.010000	1

Measurement Data for AC Current @ 60 Hz

Zero or Offset Readings of UUC

Before Adjustment	After Adjustment
µA	µA
0	0

Before Adjustment	After Adjustment
mA	mA
0	0

Before Adjustment	After Adjustment
A	A
0	0

Readings on UUC	Readings on Ref. Standard	Error	Uncertainty (95 % C.L)
µA	µA	µA	± (µA)
199.9	199.990	-0.090	0
mA	mA	mA	± (mA)
1.973	1.970	0.003	0.1
19.99	19.990	0.003	0.1
200.0	199.980	-0.002	1
A	A	A	± (A)
2.0	1.990000	0.010000	1

Note : the Audiable Alarm for Close Loop isn't working

Results :

Calibration results were found to conform as per specified accuracy requirements. Above Instrument has **PASSED** its Calibration.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with international practice.

DEVIATION FROM STANDARD METHOD : None

REMARK (S) :

■ The results are as found (no adjustment done).

☐ The results are post adjustment.

CALIBRATED BY	REVIWED & APPROVED BY LAB INCHARGE	CLIENT
Abdulrahman Loay	LAB INCHARGE Asjad Rafiq	ALi Talib HB48903 Date: 12-02-2025 Signature Haliburton