

## CALIBRATION CERTIFICATE

ISSUED BY: ENVIRONMENTAL MEASUREMENTS LAB.  
DATE OF ISSUE : 8 DEC 2019  
CERTIFICATE No.: ENV 3079



## ARAB BRITISH DYNAMICS

P.O. BOX: Sakr factory No. (3) - Egypt. Post Code: 11361  
Tel. 22689023 - 22689024 Fax: 22688726

Page 1 of 2 pages  
Approved Signatory  
Signature Ghada Awad  
Name Awad Mohamed  
Title T.M.

REFERENCE: 02

CUSTOMER & ADDRESS: الشركة الدولية للخدمات البيئية FAX: -----  
الجواهيرية

DATE OF RECEIPT: 1/12/2019

CALIBRATED DATE: 1/12/2019 DUE DATE: -----

LOCATION: In lab.  On Site

DESCRIPTION : GAS ANALYZER (NO)

RANGE : 0-4000 PPM

MANUFACTURER : ECOM

MODEL : J2KN Basis

ACCURECY :  $\pm 5\%$

SERIAL NO. : 11019-P

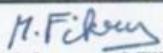
ENVIRONMENTAL CONDITION :

TEMPERATURE: 22.6 °C

HUMIDITY : 53.3 %

### BASIS OF TEST:

The instrument has been calibrated by using multi gas dilution system ( serial no.: 2689 )  
traceable to SI UNITS & according to EPA method ( EPA-454 / B-17-001 )

  
Calibrated By: Mohammed Fikry

This certificate is issued in accordance with the requirements of the Accreditation bodies and ISO 17025 requirements. It provides tractability of measurement to recognized international standards, and to units of measurement realized at the National Physical Laboratory or other recognized international standards laboratories. This certificate may not be reproduced other in full, except with the prior written approval of the issuing laboratory.

# CALIBRATION CERTIFICATE

CERTIFICATE N<sup>o</sup>. ENV 3079

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Ghadia Komal

ENV  
4

## Calibration results

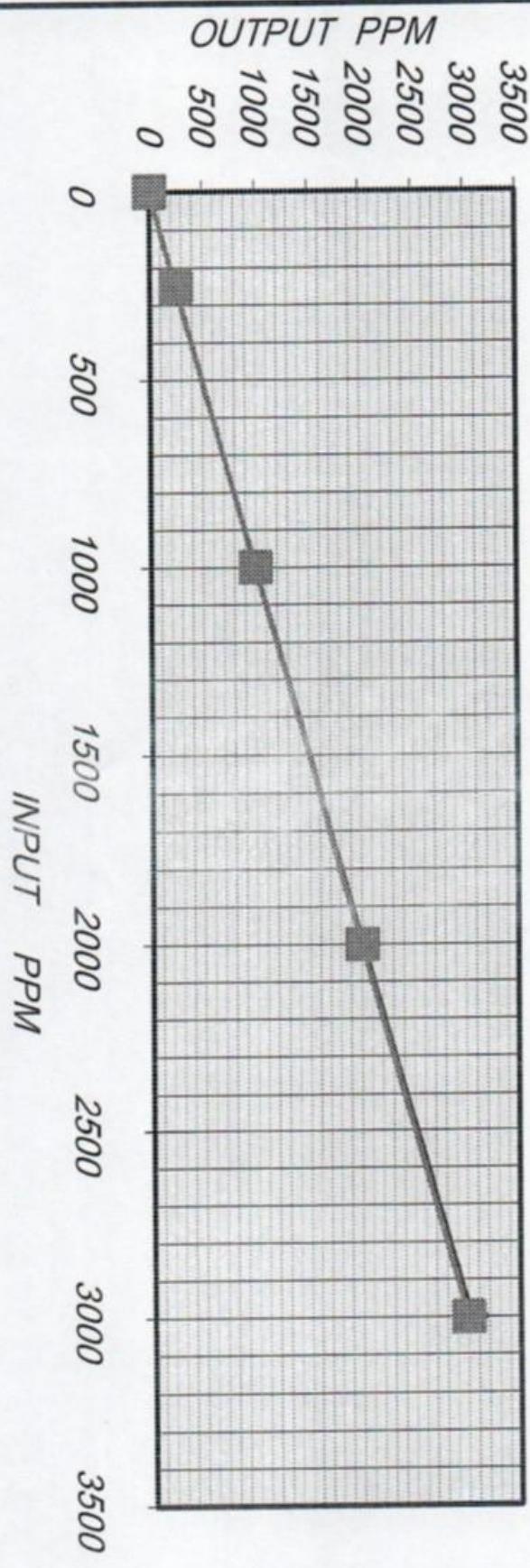
Applied values NO PPM	Reading values NO PPM	Error NO PPM
0	0	0
250	248	-2
1000	1000	0
2000	2010	10
3000	3028	28

The calculated uncertainty =  $\pm 2.310\%$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor K=2 providing a level of approximately 95 %



## CALIBRATION CHART ENV3079(No)



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Tel. 22689023 - 22689024      Fax: 22688726



Page 1 of 2 pages

Approved Signatory  
Signature *Ghada Kamel*  
Name Awad Mohamed  
Title T.M.

REFERENCE: 02

CUSTOMER & ADDRESS: الشركة الدولية للخدمات البيئية      FAX: -----  
الخواص  
الجوازات

DATE OF RECEIPT: 1/ 12 /2019

CALIBRATED DATE: 1/ 12 /2019

DUE DATE: -----

LOCATION: In lab.  On Site

DESCRIPTION : GAS ANALYZER (SO<sub>2</sub>)

RANGE : 0-4000 PPM

MANUFACTURER : ECOM

MODEL : J2KN Basis

ACCURECY :  $\pm 5\%$

SERIAL NO. : 11019-P

### ENVIRONMENTAL CONDITION :

TEMPERATURE: 22.6 °C

HUMIDITY : 53.3 %

### BASIS OF TEST:

The instrument has been calibrated by using multi gas dilution system ( serial no.: 2689 )  
traceable to SI UNITS & according to EPA method ( EPA-454 / B-17-001 )

*M. Fikry*

Calibrated By: Mohammed Fikry

# CALIBRATION CERTIFICATE

CERTIFICATE No. ENV 3079

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Ghada Karmah

ENV  
4

## Calibration results

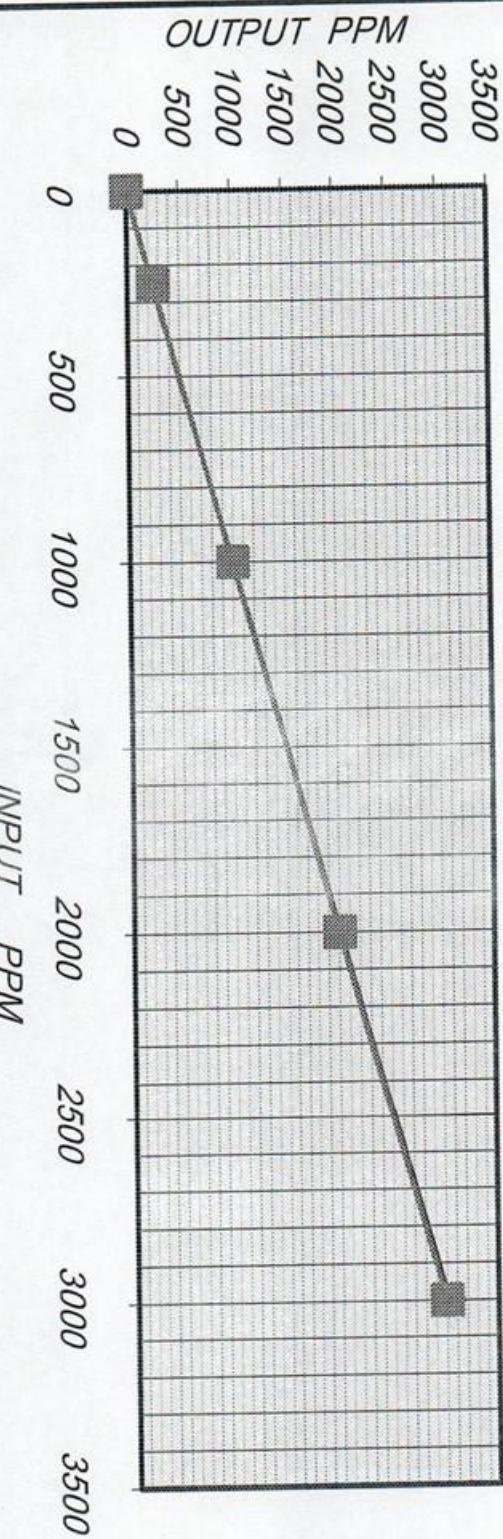
Applied values SO <sub>2</sub> PPM	Reading values SO <sub>2</sub> PPM	Error SO <sub>2</sub> PPM
0	0	0
250	246	-4
1000	1000	0
2000	2006	6
3000	3017	17

The calculated uncertainty =  $\pm 2.310\%$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor K=2 providing a level of approximately 95 %



## CALIBRATION CHART ENV3079( $SO_2$ )



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Tel. 22689023 - 22689024      Fax: 22688726



Page 1 of 2 pages  
Approved Signatory  
Signature Ghada Karras  
Name Awad Mohamed  
Title T.M.

REFERENCE: 02

CUSTOMER & ADDRESS: الشركة الدولية للخدمات البيئية      FAX: -----  
الخواص  
الجوية

DATE OF RECEIPT: 1/ 12 /2019

CALIBRATED DATE: 1/ 12 / 2019      DUE DATE: -----

LOCATION: In lab.  On Site

DESCRIPTION : GAS ANALYZER (CO)

RANGE : 0-4000 PPM

MANUFACTURER : ECOM

MODEL : J2KN Basis

ACCURECY :  $\pm 5\%$

SERIAL NO. : 11019-P

ENVIRONMENTAL CONDITION :

TEMPERATURE: 22.6 °C

HUMIDITY : 53.3 %

BASIS OF TEST:

The instrument has been calibrated by using multi gas dilution system ( serial no.: 2689 )  
traceable to SI UNITS & according to EPA method ( EPA-454 / B-17-001 )

*M.Fikry*

Calibrated By: Mohamed Fikry

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Ghada Kamal



## Calibration results

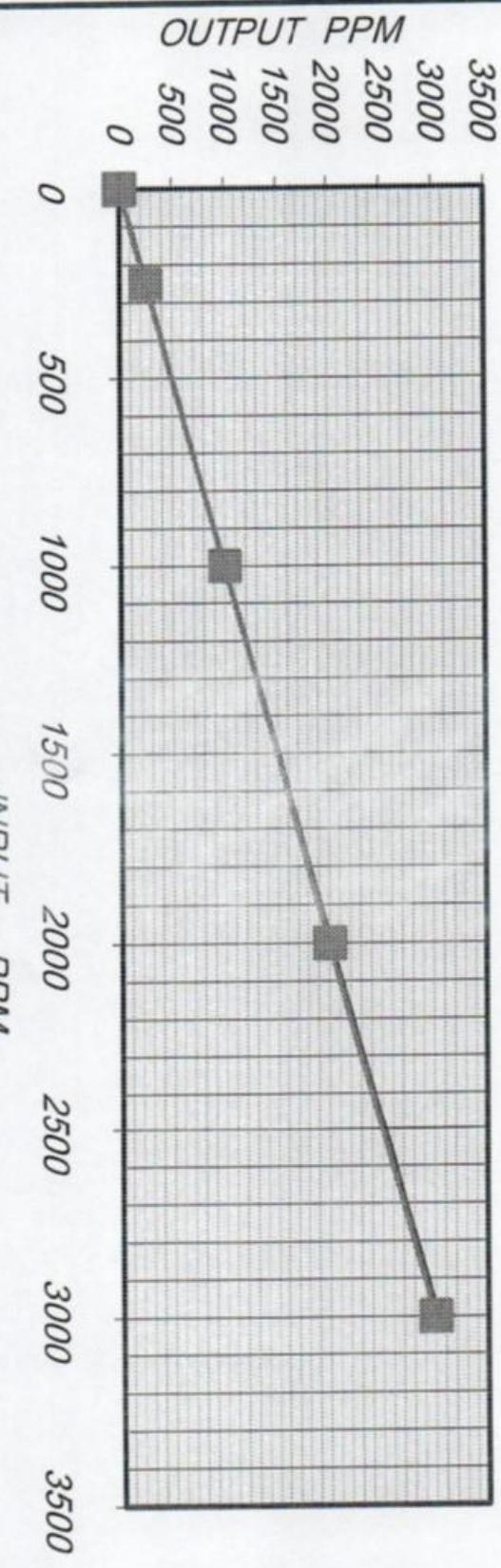
Applied values CO PPM	Reading values CO PPM	Error CO PPM
0	0	0
250	255	5
1000	1000	0
2000	2015	15
3000	3020	20

The calculated uncertainty =  $\pm 2.000 \%$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor K=2 providing a level of approximately 95 %



## CALIBRATION CHART ENV3079(CO)



—●— INPUT  
—■— OUTPUT  
—— IDEAL