

# شهادة اعتماد

رقم TL 015



يقر نظام الاعتماد العراقي بأن:  
**مختبر فوجرو ميدل ايست بي في**  
العراق - البصرة - حي المعقل

تم اعتماده وفقا لمتطلبات المواصفة ISO/ IEC 17025:2017  
(المتطلبات العامة لاهلية مختبرات الفحص والمعايرة)

في مجال:  
- اختبارات المواد الانشائية  
- اختبارات المواد الكيميائية

شروط التوافق مع متطلبات المواصفة اعلاه ومتطلبات IQAS الخاصة بالاعتماد  
مجال الاعتماد المرفق بالشهادة يعتبر جزءا لا يتجزأ منها

يمكن الحصول على الاصدار الاحدث من مجال الاعتماد من خلال الموقع الالكتروني

<https://iqas.mop.gov.iq>

يكون الاعتماد نافذا من ٢٠٢٤/٥/٢٧ الى ٢٠٢٦/٥/٢٦  
تاريخ منح الاعتماد لأول مرة  
٢٠١٧/١٠/١٢

نقذ

أ.د. محمد علي تميم  
نائب رئيس مجلس الوزراء  
وزير التخطيط

ب.م.م.م.

د. محمد لطيف أحمد  
مدير عام الهيئة العراقية للاعتماد



## ACCREDITATION CERTIFICATE

No. TL 015



Iraqi Accreditation System Certify that:

**Fugro Middle East B.V. Laboratory**

**Iraq –Barsa- Al-Maaqal**

Is accredited according to the requirements of the standard ISO/IEC 17025:2017  
(General Requirements for the Competence of Testing and Calibration Laboratories)

In the field of:

- Construction Materials Testing
- Chemical Materials Testing

This accreditation is subject to with the above standard & IQAS requirements  
The scope of accreditation is attached to the certificate & considered as part of it

The most recent issue of the accreditation scope is available on IQAS website

<https://iqas.mop.gov.iq>

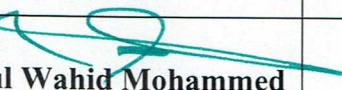
Accreditation is valid From 27/5/2024 To 26/5/2026

Initial accreditation date  
12/10/2017

Dr. Mohammed Lateef Ahmed  
General Manager of IQAS

Dr. Mohammed Ali Tamim  
Deputy Prime Minister  
Minister of Planning

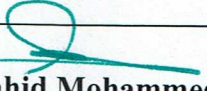


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|                                                                                      | <p style="text-align: center;">استمارة<br/>مجال الاعتماد<br/><b>Scope of Accreditation<br/>form</b></p> | <p style="text-align: center;">نظام الاعتماد العراقي<br/><b>IQAS</b></p> |
| <b>Organization address:</b><br>Iraq –Barsa- Al-Maaqal                                                                                                               | <b>Organization name:</b><br>Fugro Middle East B.V. Laboratory                                          | <b>Accreditation no.:</b><br>TL 015                                      |
| <b>Signature:</b> <br>Eng. Abdul Wahid Mohammed Ibrahim<br>Director General of IQAS | <b>Accreditation is valid:</b><br>From 12/5/2025 To 26/5/2026                                           | <b>Issue no.:</b><br>006                                                 |

|                         |                                                                                                                                                                                |             |                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------|
| Physical/<br>Mechanical | Code of practice for site investigations:<br>Section 6: Description of soils and rocks.<br>Description and classification of rocks<br>Description of rock masses-Core recovery | Rock        | BS 5930 Clause 44.4.4                |
| Physical/<br>Mechanical | Code of practice for site investigations:<br>Section 6: Description of soils and rocks. Description and classification of rock<br>Description of rock cores                    | Rock        | BS 5930 Clause 44 & Clark and Walker |
| Physical/<br>Mechanical | Code of practice for site investigations:<br>Section 7 Reports and interpretation<br>Geotechnical reporting                                                                    | Rock        | BS 5930 Section 7                    |
| Physical/<br>Mechanical | Code of practice for site investigations:<br>Section 3 Field investigations. Rotary open hole drilling and rotary core drilling- Rotary core drilling                          | Rock        | BS 5930 Clause 20.7.3                |
| Physical/<br>Mechanical | Code of practice for site investigations:<br>-Sections 3 Field investigations ground water samples                                                                             | Groundwater | BS 5930 Clause 23.3                  |
| Physical/<br>Mechanical | Asphalt content of Hot-Mix asphalt by ignition method                                                                                                                          | Asphalt     | ASTM.D6307                           |
| Physical/<br>Mechanical | Preparation of Bituminous Specimens Using Marshall Apparatus                                                                                                                   | Asphalt     | ASTM D6926 -04                       |



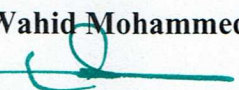


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| <b>Organization address:</b><br>Iraq –Barsa- Al-Maaqal                                                                                                                  | <b>Organization name:</b><br>Fugro Middle East B.V. Laboratory                                          | <b>Accreditation no.:</b><br>TL 015                                      |
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|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------------|
| Physical/<br>Mechanical | Unconfined compression test                                                                                                                                                                                   | Rock              | ASTM D 7012 Cl 8.1.1 and D 4543               |
| Hardened Concrete       | Determination of Compressive strength of concrete cubes                                                                                                                                                       | Hardened Concrete | BS EN 12390 Part 3 : 2009                     |
| Chemical                | Acid Soluble Sulphate Content of soil                                                                                                                                                                         | Soil              | BS 1377 Part 3 Clause 5.2                     |
| Chemical                | Determination of carbonate content                                                                                                                                                                            | Soil              | BS 1377: Part 3: 1990: Cl 6.3, Amd 9028: 1996 |
| Physical/<br>Mechanical | Determination of particle size distribution (Wet & Dry)                                                                                                                                                       | Aggregates        | BS EN 933 Part 1:2012                         |
| Physical/<br>Mechanical | Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine                                                                                                    | Aggregates        | ASTM C 131                                    |
| Physical/<br>Mechanical | Methods of test for soils for civil engineering purposes. Part 9: In-situ penetration tests – Determination of the penetration resistance using the split –barrel sampler (the standard penetration test SPT) | Soil              | BS 1377 Part 9 Section 3.3                    |
| Physical/<br>Mechanical | Code of practice for site investigations section 3: Field investigations sampling the ground                                                                                                                  | Soil              | BS 5930 Clause 22                             |
| Physical/<br>Mechanical | Code of practice for site investigations: Section 6: Description of soils and rocks:<br>-Description of soils<br>-Description and classification of rocks                                                     | Soil              | BS 5930 Section 41 & 44 Clark and Walker      |





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| Testing Field           | Type of test                                                                                   | Test object or Product | Reference to Standardized Method                                                                     |
|-------------------------|------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------|
| Physical/<br>Mechanical | Determination of water (moisture) of soil & Rock by mass                                       | Soil<br>Rock           | -BS 1377 part 2: 1990 Cl.3<br>-ASTM D2216-19                                                         |
| Physical/<br>Mechanical | Standard test method for Liquid limit, plastic limit & plasticity index.                       | Soil                   | -BS 1377 part 2: 1990 Cl. 4.5/5.3<br>-ASTM D4318-17                                                  |
| Physical/<br>Mechanical | Standard test method for particle size analysis                                                | Soil                   | -BS 1377 part 2: 1990 cl. 9.2/9.3<br>-ASTM D6913-17                                                  |
| Physical/<br>Mechanical | Triaxial test (UU+CU+CD)                                                                       | Soil                   | -BS 1377 part 7 Cl. 8,<br>BS 1377 part 8 Cl. 7<br>- BS 1377 part 8 Cl. 8<br>-ASTM D2850/4767/7181-21 |
| Physical/<br>Mechanical | Direct sheer                                                                                   | Soil                   | -BS 1377 : Part 7 1990 Cl. 4.5.4<br>-ASTM D3080-11                                                   |
| Chemical                | Acid soluble chloride content                                                                  | Soil                   | BS 1377: Part 3 1990 clause 7.3                                                                      |
| Chemical                | Water soluble chloride content of soil                                                         | Soil                   | BS 1377: 1990 Part 3 clause 7.2                                                                      |
| Chemical                | pH value of soil                                                                               | Soil                   | BS 1377: Part 3 1990 clause 9.5                                                                      |
| Physical/<br>Mechanical | Dry density moisture content relationship using 4.5 kg rammer for medium gravel size particles | Soil                   | -BS 1377 : Part 4: 1990 test 3.5 & 3.6<br>-ASTM D1557-12                                             |
| Physical/<br>Mechanical | Determination of CBR                                                                           | Soil                   | -BS 1377 : Part 4: 1990 Cl.7<br>-ASTM D1883-21                                                       |
| Physical/<br>Mechanical | In situ density by sand replacement method (large pouring cylinder)                            | Soil                   | -BS 1377 : Part 9 1990 Cl. 2.2<br>-ASTM D1556-15                                                     |
| Physical/<br>Mechanical | Sedimentation by Hydrometer method                                                             | Soil                   | -BS 1377 : Part 2 1990 cl. 9.5<br>- ASTM D7928-17                                                    |
| Physical/<br>Mechanical | Odometer ( One dimensional consolidation test )                                                | Soil                   | -BS 1377 : Part 5 1990 Cl.3<br>-ASTM D2435-11                                                        |





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| Physical/<br>Mechanical | Marshall Stability & Flow                                                                                | Asphalt | ASTM D6927-15                                           |
| Physical/<br>Mechanical | Bulk specific gravity & density<br>of Marshall specimen                                                  | Asphalt | ASTM D2726                                              |
| Physical/<br>Mechanical | Theoretical maximum specific<br>gravity (GMM) and density of<br>asphalt mixture                          | Asphalt | AASHTO-T209                                             |
| Physical/<br>Mechanical | Coring Sampling Compacted<br>Bituminous Mixtures for<br>Laboratory Testing ( Coring)                     | Asphalt | ASTM.5361                                               |
| Physical/<br>Mechanical | Thickness or Height of<br>Compacted Bituminous Paving<br>Mixture Specimens                               | Asphalt | ASTM.D3549 – 93a                                        |
| Physical/<br>Mechanical | Bulk Specific Gravity and<br>Density of Non-Absorptive<br>Compacted Bituminous<br>Mixtures (core sample) | Asphalt | ASTM.D2726                                              |
| Physical/<br>Mechanical | Surface Level (Flatness)                                                                                 | Asphalt | HMA Concrete Pavement Section<br>R9-13 (Iraqi Standard) |
| Physical/<br>Mechanical | Surface Level (Transverse)                                                                               | Asphalt | HMA Concrete Pavement Section<br>R9-13 (Iraqi Standard) |

