

Laboratory Certification For  
Omran Geotechnical Company (OGC)

Lab ID: LCP-005

Issue date: Dec 12<sup>th</sup>, 2017

Expiry date: March 11<sup>th</sup>, 2018

This letter confirms the completion of inspection and certification for OGC, which is located at House# 121, Saray-e- Ghazni, Finest Supermarket Alley, Kabul Afghanistan. This laboratory should now be considered as **Certified for a period of 3-months** from the date of this letter. This laboratory should now be considered as certified for use by the US Army Corps of Engineers Transatlantic Afghanistan District (USACE TAA) and other clients, for all tests listed in Table 1 to Table 6, as attached to this letter. The following tests (**ASTM C40, ASTM D2434, ASTM D5873, ASTM D1260, ASTM D36, ASTM C617, ASTM D4791, BS 812**) are not permitted under this period of Certification. This certification will be included with records that are maintained at the ABA and USACE TAA Headquarters in Bagram Airbase, Afghanistan. Retaining the certification will require yearly inspections by the ABA. This certification is also contingent upon the following conditions:

- A. Continued employment of the below individual while without his oversight, the laboratory will require recertification:
  - a. Mr. Samad Heidari the laboratory manager;
- B. If the calibration certificates of equipment expire or become invalid as per the relevant standard;
- C. If the laboratory is moved to a new location, it will require recertification; and
- D. If the laboratory fails to comply by the approved lab quality management plan, safety standards, and other criteria set forth in the most up-to-date ABA lab certification manual, the lab certification may be suspended.

For verification and good standing of this certification please check our online directory of laboratories at [http://aba.af/lcp\\_directory.php](http://aba.af/lcp_directory.php). The inspection and certification process for the OGC adhered to procedures outlined by the Materials Testing Center (MTC), which is located at the Geotechnical and Structures Laboratory (GSL), U.S. Army Engineer Research and Development Center (ERDC) in Vicksburg, Mississippi, USA. The MTC is the USACE-authorized agency for certifying laboratories for use in quality control testing for USACE construction projects. To facilitate construction in Afghanistan, the USACE TAA has authorized the ABA to conduct laboratory certifications with strict adherence to MTC protocol. Qualifications of the authors for conducting these certifications include: 12 years of laboratory experience, 12 years of teaching classes on construction materials, and six years of teaching university-level construction classes.

Certified to perform 81 tests, as shown on attached sheets and summarized as:

Table 1: 26

Table 2: 13

Table 3: 14

Table 4: 17

Table 5: 3

Table 6: 8

Regards,

Mowlood Popal

President of Afghanistan Builders Association



### OGC Certified Laboratory Tests

**Table 1. List of Certified Soil Tests**

No	Test Method	Test Procedure Title
1	ASTM D 421	Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants
2	ASTM D 422	Particle-Size Analysis of Soils
3	ASTM D 698	Laboratory Compaction Characteristics of Soil Using Standard Effort
4	ASTM D 854	Specific Gravity of Soil Solids by Water Pycnometer
5	ASTM D 1556	Density and Unit Weight of Soil in Place by the Sand Cone Method
6	ASTM D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
7	ASTM D 1883	CBR (California Bearing Ratio) of Laboratory-Compacted Soils
8	ASTM D 2166	Unconfined Compressive Strength of Cohesive Soil
9	ASTM D 2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
10	ASTM D 2487	Classification of Soils for Engineering Purposes
11	ASTM D 4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
12	ASTM D 6951	Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications
13	AASHTO T 92	Determining the Shrinkage Factors of Soils
14	ASTMD 1196	Nonrepetitive Static Plate Load Tests of Soils and Flexible Pavement Components, for Use in Evaluation and Design of Airport and Highway Pavements
15	ASTMD 1586	Penetration Test and Split-Barrel Sampling of Soils
16	ASTMD 1587	Thin-Walled Tube Sampling of soils for geotechnical purposes
17	ASTMD 2113	Rock Core Drilling and Sampling of Rock for Site Investigation
18	ASTMD 4220	Preserving and Transporting Soil Samples
19	ASTMD 5434	Field Logging of Subsurface Explorations of Soil and Rock
20	ASTMD 6032	Standard Test Method for Determining Rock Quality Designation (RQD) of Rock Core
21	ASTMD 3550	Standard Practice for Thick Wall, Ring-Lined, Split Barrel, Drive Sampling of Soils
22	ASTMD 2938	Standard Test Method for Unconfined Compressive Strength of Intact Rock Core Specimens
23	ASTMD 2435	One-Dimensional Consolidation Properties of Soils Using Incremental Loading
24	ASTMD 5333	Standard Test Method for Measurement of Collapse Potential of Soils

No	Test Method	Test Procedure Title
25	ASTMD 3080	Direct Shear Test of Soils Under Consolidated Drained Conditions
26	ASTM G57-06	Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method

**Table 2. List of Certified Aggregate (Fine and Course) Tests**

No	Test Method	Test Procedure Title
1	ASTM C 29	Unit Weight and Voids in Aggregate
2	ASTM C 88	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
3	ASTM C 117	Material Finer than 75 um (No. 200) Sieve in Mineral Aggregates by Washing
4	ASTM C 127	Specific Gravity and Absorption of Coarse Aggregate
5	ASTM C 128	Specific Gravity and Absorption of Fine Aggregate
6	ASTM C 131	Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
7	ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
8	ASTM C 142	Clay Lumps and Friable Particles in Aggregates
9	ASTM C 535	Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
10	ASTM D 75	Sampling Aggregates
11	ASTM D 2419	Sand Equivalent of Soils and Fine Aggregate
12	ASTM D 5821	Determining the Percentage of Fractured Particles in Coarse Aggregate
13	ASTM C 702	Reducing Samples of Aggregate to Testing Size

**Table 3. List of Certified Cement, Grout, Mortar and Concrete Tests**

No	Test Method	Test Procedure Title
1	ASTM C 31	Making and Curing Test Specimens in the Field
2	ASTM C 39	Compressive Strength of Cylindrical Specimens
3	ASTM C 143	Slump of Hydraulic-Cement Concrete
4	ASTM C 172	Sampling Freshly Mixed Concrete
5	ASTM C 192	Making and Curing Test Specimens in the Laboratory
6	ASTM C 231	Air Content of Freshly Mixed Concrete by the Pressure Method
7	ASTM C 188	Density of Hydraulic Cement
8	ASTM C 191	Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle

9	ASTM C 187	Standard Test Methods for Normal Consistency of Hydraulic Cement
10	ASTM C 1437	Standard Test Method for Flow of Hydraulic Cement Mortar
11	ASTM C 1019	Sampling and Testing Grout
12	ASTM C 109	Compressive Strength of Hydraulic Cement Mortars
13	ASTM C 1064	Temperature of Freshly Mixed Portland Cement Concrete
14	ASTM C 174	Standard Test Method for Measuring Thickness of Concrete Elements Using Drilled Concrete Cores

**Table 4. List of Certified Asphalt Cement and Asphalt Concrete Tests**

No	Test Method	Test Procedure Title
1	ASTM D 5	Penetration of Bituminous Materials
2	ASTM D 70	Density of Semi-Solid Bituminous Materials (Pycnometer Method)
3	ASTM D 92	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
4	ASTM D 140	Sampling Bituminous Materials
5	ASTM D 546	Sieve Analysis of Mineral Filler for Bituminous Paving Mixtures
6	ASTM D 979	Sampling Bituminous Paving Mixtures
7	ASTM D 2041	Theoretical Maximum Specific Gravity and Density of Bituminous Pavement Mixtures
8	ASTM D 2172	Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
9	ASTM D 2726	Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
10	ASTM D 3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
11	ASTM D 3549	Thickness or Height of Compacted Bituminous Paving Mixture Specimens
12	ASTM D 5361	Sampling Compacted Bituminous Mixtures for Laboratory Testing
13	ASTM D 5444	Mechanical Size Analysis of Extracted Aggregate
14	ASTM D 6926	Preparation of Bituminous Specimens Using Marshall Apparatus
15	ASTM D 6927	Marshall Stability and Flow of Bituminous Mixtures
16	AASHTO T 182	Coating and Stripping of Bitumen-Aggregate Mixtures
17	AASHTO T 230	Determining Degree of Pavement Compaction of Bituminous Aggregate Mixtures

**Table 5. List of Certified Brick, Stone, and Concrete Masonry Units Tests**

No	Test Method	Test Procedure Title
1	ASTM C 67	Sampling and Testing Brick and Structural Clay Tile
2	ASTM C 97	Absorption and Bulk Specific Gravity of Dimension Stone
3	ASTM C 1552	Practice for Capping Concrete Masonry Units, Related Units, and Masonry Prisms for Compression Testing

**Table 6. List of Certified Petrography and Rock Mechanic Tests**

No	Test Method	Test Procedure Title
1	ASTM C 295	Petrographic Examination of Aggregates for Concrete
2	ASTM D 2845	Standard Test Method for Laboratory Determination of Pulse Velocities and Ultrasonic Elastic Constants of Rock
3	ASTM D 3967	Standard Test Method for Splitting Tensile Strength of Intact Rock Specimens
4	ASTM D 5607	Standard Test Method for Laboratory Direct Shear Strength Tests of rock specimens under constant normal force
5	ASTM D 6473	Specific Gravity and Absorption of Rock
6	ASTM D 5731	Standard Test Method for Determination of the Point Load Strength Index of Rock
7	ASTM D 7012	Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock core Specimens Under Varying States of Stress And Temperatures
8	ASTM D 2664	Standard Test Method for Triaxial Compressive Strength of Intact Rock Core Specimens