

### Laboratory Certification For

### Geo Search Satellite Lab

Lab ID: LCP-028

Issue date: Oct 24, 2016

Expiry date: Oct 23, 2017

This letter confirms the completion of inspection and certification for Geo Search Satellite laboratory for Project # 291 Kabul LSA, which is located at New Camp Sullivan (Formally known as Camp Eggers) Kabul, Afghanistan. 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 3, as attached to this letter. This lab has been found to be qualified according to ASTM C1077 and ASTM E329 for testing, and to USACE Safety Standard EM385-1-1. 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 following individuals while without their oversight, the laboratory will require recertification:
  1. Ghulam Ali Helal laboratory manager; and
  2. Other Senior Technicians who were inspected and certified during the inspection, a list of certified technicians can be provided upon request;
- B. If the calibration certificates of equipments expire or become invalid as per the relevant ASTM or AASHTO 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/Lab-certification-program.html>. The inspection and certification process for the Geo Search 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.

Regards,

Naeem Yassin

President of Afghanistan Builders Association  
(ABA)



### Geo Search Satellite lab Certified Laboratory Tests

**Table 1. List of Certified Soil Tests for Geo Search Satellite lab**

No	Test Method	Test Procedure Title
1	ASTM D 422	Standard Test Method for Particle Size Analysis of Soils
2	ASTM D 698	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> ( 2,700 Kn-m/m <sup>3</sup> ))
3	ASTM D 1556	Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method
4	ASTM D 1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
5	ASTM D 2216	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
6	ASTM D 4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
7	ASTM D 4944	Standard Test Method for Field Determination of Water (Moisture) Content of Soil by the Calcium Carbide Gas Pressure Tester

**Table 2. List of Certified Aggregate (Fine and Coarse) Tests for Geo Search Satellite lab**

No	Test Method	Test Procedure Title
1	ASTM C 29	Unit Weight and Voids in Aggregate
2	ASTM D 75	Standard Practice for Sampling Aggregates
3	ASTM C 117	Material Finer than 75 um (No. 200) Sieve in Mineral Aggregates by Washing
4	ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates

**Table 3. List of Certified Concrete Tests for Geo Search Satellite lab**

No	Test Method	Test Procedure Title
1	ASTM C 31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
2	ASTM C 39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
3	ASTM C 143	Standard Test Method for Slump of Hydraulic-Cement Concrete
4	ASTM C 172	Sampling of Freshly Mixed Concrete
5	ASTM C 174	Concrete Thickness By Drilled Corse
6	ASTM C 231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

No	Test Method	Test Procedure Title
7	ASTM C 1064	Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete