



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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CHEMICAL

Valid To: February 28, 2027

Certificate Number: 5669.07

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above to perform the following tests on water, soils, aggregates, concrete, cement and construction materials, and air quality:

<u>Test(s):</u>	<u>Test Method(s):</u>
<u>Water:</u>	
Metals including Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cu, Cr, Fe, Hg, K, Li, Mg, Mn, Mo, Na*, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, U, V, Zn. (*Excluding Sodium for Saline Waters)	EL-M-OP-CH-DOH-MD106; APHA 3125 by ICP-MS EL-M-OP-CH-DOH-MD106A; APHA 3120 by ICP-OES
Anions and Oxyhalides; Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate and Sulfate, Bromate, Chlorate, Chlorite	EL-M-OP-CH-DOH-MD322; APHA 4110B & APHA 4110D by Ion Chromatography
Anions: Bromate, Bromide, Iodide, Nitrate, Nitrite	EL-M-OP-CH-DOH-MD420; By IC-UV/VIS according to ISO 11206
Alkalinity	EL-M-OP-CH-DOH-MD210; APHA 2320B by Titration
Ammonia	EL-M-OP-CH-DOH-MD302; APHA 4500 NH ₃ B & APHA 4500 NH ₃ C; US EPA 350.1 by Colorimetry
Ammonia by Salicylate Method	EL-M-OP-CH-DOH-MD429 HACH 8155 EPA 350.1
Anionic Surfactants by HACH Method	EL-M-OP-CH-DOH-MD344 HACH LCK332 APHA 5540C

<u>Test(s):</u>	<u>Test Method(s):</u>
Biochemical Oxygen Demand	EL-M-OP-CH-DOH-MD304; APHA 5210B by Oximeter
Chemical Oxygen Demand	EL-M-OP-CH-DOH-MD307; APHA 5220B, APHA 5220C & APHA 5220D; by HACH Digestion, Colorimetry and Titrimetric
Chloride	EL-M-OP-CH-DOH-MD205; APHA 4500 Cl B; ASTM D512 by MOHR Method
Chlorine Residual (Free Available)	EL-M-OP-CH-DOH-MD206; APHA 4500-Cl G by Colorimetry
Chlorine (Total)	EL-M-OP-CH-DOH-MD428 APHA 4500-Cl G HACH 8167 by colorimetry
Chromium VI	EL-M-OP-CH-DOH-MD330; APHA 3500 Cr B; HACH Method 8023 by Colorimetry
Conductivity	EL-M-OP-CH-DOH-MD201; APHA 2510B
Cyanide (Free)	EL-M-OP-CH-DOH-MD310; APHA 4500 – CN E; HACH Method 8027; by Colorimetry
Total Cyanide by In-Situ Steam Distillation / HACH Colorimetric Analysis	EL-M-OP-CH-DOH-MD310A HACH 10265 APHA 4500-CN C & E
Fluoride	EL-M-OP-CH-DOH-MD328; APHA 4500-F B and APHA 4500-F D; EPA Method 340.1; HACH Method 8029; by Colorimetry
Hardness (Total)	EL-M-OP-CH-DOH-MD211; APHA 2340B by Calculation; APHA 2340C by EDTA Titration
Kjeldahl Nitrogen (Total)	EL-M-OP-CH-DOH-MD318; APHA 4500-N _{org} B; by Distillation
Monochloramine	EL-M-OP-CH-DOH-MD435 HACH 10171 by Indophenol Method
Nitrate	EL-M-OP-CH-DOH-MD315; APHA 4500-NO ₃ B; HACH Method 8192; by Colorimetry
Nitrite	EL-M-OP-CH-DOH-MD317; USEPA 353.2; HACH Method 8507; by Colorimetry

<u>Test(s):</u>	<u>Test Method(s):</u>
Nitrate by UV Screening Method	EL-M-OP-CH-DOH-MD431 HACH 10049 APHA 4500-NO3
Nitrate by Cadmium Reduction Method	EL-M-OP-CH-DOH-MD430 HACH 8171 APHA 4500-NO3
Nitrogen (Total)	EL-M-OP-CH-DOH-MD419; ASTM D8083-16 by High Temperature Combustion
Oil and Grease	EL-M-OP-CH-DOH-MD414; EL-M-OP-CH-DOH-MD414A; APHA 5520B and APHA 5520E; by Gravimetry and Soxhlet Extraction
Organic Carbon (Total)	EL-M-OP-CH-DOH-MD319A; APHA 5310B by High Temperature Combustion; EL-M-OP-CH-DOH-MD319; APHA 5310C by HACH Method
pH value	EL-M-OP-CH-MD301; APHA 4500-H ⁺ B; ASTM D1293; BS 1377-3; BS 1427; EPA Method 9040B; EPA Method 9040C
Phosphate (Ortho)	EL-M-OP-CH-DOH-MD326; APHA 4500-P E; EPA Method 365.1
Phosphorous (Total)	EL-M-OP-CH-DOH-MD329; APHA 4500-P B and APHA 4500-P E; HACH Method 8190; by Colorimetry
Silica Oxide / Silica	EL-M-OP-CH-DOH-MD327; APHA 4500 SiO ₂ C and APHA 4500 SiO ₂ D; ASTM D859; HACH 8186; by Colorimetry
Total Solids	EL-M-OP-CH-DOH-MD427 APHA 2540B
Solids (Total Dissolved)	EL-M-OP-CH-DOH-MD208; APHA 2540C BS 1377-3; BS 1427; by Gravimetry
Solids (Total Suspended)	EL-M-OP-CH-DOH-MD209; APHA 2540D; by Gravimetry
Solids (Fixed & Volatile)	EL-M-OP-CH-DOH-MD212A; APHA 2540E
Solids (Settleable)	EL-M-OP-CH-DOH-MD212B; APHA 2540F

<u>Test(s):</u>	<u>Test Method(s):</u>
Solids (Total, Fixed & Volatile)	EL-M-OP-CH-DOH-MD212C; APHA 2540G
Sulfate	EL-M-OP-CH-DOH-MD324; APHA 4500-SO ₄ C; by Gravimetric; EL-M-OP-CH-DOH-MD331; EPA Method 375.4; HACH Method 8051; by Colorimetry
Sulfide	EL-M-OP-CH-DOH-MD332A; APHA 4500-S ²⁻ D; by Methylene Blue Method (HACH); EL-M-OP-CH-DOH-MD332B; APHA 4500-S ²⁻ F; by Iodometric Method
Turbidity	EL-M-OP-CH-DOH-MD203; APHA 2130A; by Nephelometry
<u>Soils:</u>	
Metals Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cu, Cr, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, U, V, Zn.	EL-M-OP-CH-DOH-MD112; APHA 3125; by ICP-MS; EL-M-OP-CH-DOH-MD112A; APHA 3120 by ICP-OES
Organic Matter Content	BS 1377-3 Clause 4
Sulfate Content (Acid Extract and Water Extract)	BS 1377-3:1990 Clause 5.2 and 5.3 (<i>Withdrawn</i>)
Chloride Content (Acid Extract and Water Extract)	BS 1377-3 Clause 9
pH	BS 1377-3 Clause 12
<u>Water, Soil and Filters</u>	
Gross Alpha and Gross Beta	EL-M-OP-CH-DOH-MD601 APHA 7110 B & E EPA 900; EPA 9310
<u>Water and Soil:</u>	
Extractable Petroleum Hydrocarbons (C10 to C40)	EL-M-OP-CH-DOH-MD401; EPA 8015C By GC FID
Volatile Organic Compounds (VOCs) and Benzene, Toluene, Ethylbenzene and Xylenes (BTEXs) including: Bromobenzene, Bromoform, Bromomethane, Bromochloromethane,	EL-M-OP-CH-DOH-MD404A (Waters); EL-M-OP-CH-DOH-MD404B (Soils); EL-M-OP-CH-DOH-MD404C (Purge & Trap Sampler for water) EPA 5021A; EPA 5030C; EPA 8260D

<u>Test(s):</u>	<u>Test Method(s):</u>
Bromodichloromethane, Carbon Tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, Chloroethene, (Vinyl Chloride), Chloroform, Chloromethane, Dibromomethane, Dichlorofluoromethane, Dichloromethane (Methylene Chloride), Ethylene Dibromide, 2-Chlorotoluene, 1,2-Dibromo-3-chloropropane Toluene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,1-Dichloropene, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Trichloroethane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,2,3-Trichloroethane, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene	(cont.) by GC-MS with Head Space and GC-MS with Purge & Trap Sampler
Poly Aromatic Hydrocarbons (PAH) including Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)preylene Benzo(a)pyrene Carbazole Chrysene Dibenzo(a,h)anthracene Fluorene	EL-M-OP-CH-DOH-MD403A (soils) ; EL-M-OP-CH-DOH-MD403B (waters) EPA 8270E; By GC-MS

<u>Test(s):</u>	<u>Test Method(s):</u>
Fluoroanthene Indeno (1, 2, 3-c, d) pyrene Naphthalene Phenanthrene Pyrene	(cont.)
GRO/VPD Analysis by GC FID HS	EL-M-OP-CH-DOH-MD416; EPA 8015D
TPHCWG (EPH) – Aliphatic & Aromatic Fractionation Analysis in Soil and Water	EL-M-OP-CH-DOH-MD417 by GC-FID; EPA 8015D
TPHCWG (VPH) – Aliphatic & Aromatic Fractionation Analysis in Soil and Water	EL-M-OP-CH-DOH-MD418 by GC-MS HS; EPA 8260D
Polychlorinated Biphenyls (PCBs) PCB 28 PCB 52 PCB 77 PCB 81 PCB 101 PCB 105 PCB 114 PCB 118 PCB 123 PCB 126 PCB 138 PCB 153 PCB 156 PCB 157 PCB 167 PCB 169 PCB 180 PCB 189	EL-M-OP-CH-DOH-MD421 By GC-MS EPA 8082A & EPA 8270E
Waters (Effluent and Saline)	
Phenols	EL-M-OP-CH-DOH-MD415 by SPE; Derivatization and GC-MS: EPA 528
<u>Industrial Hygiene (air/filter samples):</u>	
Volatile Organic Compounds (VOC) 2-Propanol Ethyl Acetate 1-Bromopropane Trichloromethane Benzene Ethane, 1,2-dichloro- Trichloroethylene Toluene Butyl Acetate	EL-M-OP-CH-DOH-MD422 In Charcoal tubes by GC-MS Based on NIOSH 1003/1501/1550

<u>Test(s):</u>	<u>Test Method(s):</u>
Ethylbenzene m-Xylene o-Xylene	(cont.)
Anion (Chlorate, Chloride, Chlorite, Bromide, Fluoride, Nitrate, Nitrite, Phosphate and Sulfate)	EL-M-OP-CH-DOH-MD322B In filters by Ion Chromatograph Based on NIOSH 6004/7908
Metals (Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, U, V, Zn.)	EL-M-OP-CH-DOH-MD106B In filters by ICP-MS Based on NIOSH 7300/7301/7303/7013/OSHA ID 125G

CONSTRUCTION MATERIALS

<u>Test(s):</u>	<u>Test Method(s):</u>
Moisture Content - Oven Dry Method	BS 812 Part 109, BS 1377 Part 2
Particle Size Distribution - Wet Sieving	BS 1377 Part 2
Particle Size Distribution - Dry Sieving	BS 1377 Part 2





Accredited Laboratory

A2LA has accredited

ELEMENT DOHA LLC

Doha, Qatar

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 1st day of April 2025.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5669.07
Valid to February 28, 2027

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.