



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AUSTRALIAN LABORATORY SERVICES CO. LTD. (ALS ARABIA) – DAMMAM
P.O. Box 9692, 7th Street Al-Ammamrah Area
Dammam 31423, Saudi Arabia
Mohamed Elbeb Phone: +966 13 834 5959 ext: 239
mohamed.elbeb@alsarabia.com.

CHEMICAL

Valid To: May 31, 2022

Certificate Number: 3258.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests using the following testing technologies, and in the analyte categories, identified below:

Testing Technologies: Electrochemistry, Gravimetry, Titrimetry, Spectroscopy, Chromatography, Mass Spectrometry, ICP Optical Emission Spectroscopy, ICP Mass Spectrometry, Refractometry

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EA002/EA005	Water, Soil	pH	SM 4500-H ⁺ B, APHA 23 rd Edition, 2017
EA006	Water, Soil	Sodium Absorption Ratio (SAR)	SM 3120 (Ca, Mg, Na A), APHA 23 rd Edition, 2017
EA008	Soil	Calcium Carbonate Equivalent	ASTM C602
EA008S	Soil	Carbonate (CO ₃)	ASTM D4373-2
EA010	Water, Soil	Conductivity	SM 2510B, APHA 23 rd Edition, 2017
EA014	Water	Silt Density Index	ASTM D4189-07
EA015 & H	Water	Determination of Total Dissolved Solids (TDS) at 180°C	SM 2540C, APHA 23 rd Edition, 2017
EA016	Water	Salinity (non-Marine Estimated TDS)	SM 2510B, APHA 23 rd Edition, 2017
EA025	Water	Determination of Total Suspended Solids (TSS) at 104±1°C	SM 2540D, APHA 23 rd Edition, 2017
EA030	Soil	Total Solids	In-house Method
EA030	Water	Total Solids	SM 2540B, APHA 23 rd Edition, 2017
EA034	Water	Settleable Solids	SM 2540F, APHA 23 rd Edition, 2017
EA035	Water	Fixed and/or Volatile Solids	SM 2540E, APHA 23 rd Edition, 2017
EA036	Water	Fixed and/or Volatile Suspended Solids	SM 2540E, APHA 23 rd Edition, 2017
EA040	Water	Colour (Apparent)	SM 2120B, APHA 23 rd Edition, 2017

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EA041	Water	Colour (True)	SM 2120B, APHA 23 rd Edition, 2017
EA045	Water	Turbidity	SM 2130B, APHA 23 rd Edition, 2017
EA050	Water	Specific Gravity	ASTM D1429
EA051	Soil	Bulk Density	In-house Method
EA055	Water	Moisture Content	In-house Method
EA065	Water	Total Hardness as CaCO ₃	SM 2340B, APHA 23 rd Edition, 2017
EA066	Water	Calcium Hardness as CaCO ₃	SM 2340B, APHA 23 rd Edition, 2017
EA069	Water	Magnesium Hardness as CaCO ₃	SM 2340B, APHA 23 rd Edition, 2017
EA071	Water	Langelier's Index (LSI)	ASTM D3739-06
EA075	Water	Determination of Redox Potential	SM 2580, APHA 23 rd Edition, 2017
EA080	Water	Determination of Resistivity Water at 25°C	SM 2510, APHA 23 rd Edition, 2017
EA101	Soil	Determination of Loss on Ignition (LOI)	AS/NZS 2853:1996
EA116	Water	Temperature	SM 2550, APHA 23 rd Edition, 2017
EA118	Water	Floatables	SM 2530, APHA 23 rd Edition, 2017
EA165	Water	Free and Total CO ₂	SM 4500-CO ₂ , APHA 23 rd Edition, 2017
EA200	Water	Taste in Water (Flavour Threshold Test)	SM 2160B, APHA 23 rd Edition, 2017
EA201	Water	Determination of Odor in Water	SM 2170B, APHA 23 rd Edition, 2017
ED009	Water	Determination of Anions by Ion Chromatography	SM 4110B, APHA 23 rd Edition, 2017; US EPA 300.1
ED013	Water	Determination of Inorganic Disinfection By-Products in Water by Ion Chromatography	US EPA 300.1 Part B
ED037	Water	Hydroxide Alkalinity as CaCO ₃	SM 2320B, APHA 23 rd Edition, 2017
ED037	Water	Carbonate Alkalinity as CaCO ₃	SM 2320B, APHA 23 rd Edition, 2017
ED037	Water	Bicarbonate Alkalinity as CaCO ₃	SM 2320B, APHA 23 rd Edition, 2017
ED037	Water	Total Alkalinity as CaCO ₃	SM 2320B, APHA 23 rd Edition, 2017
ED038	Water	Acidity as CaCO ₃	SM 2310B, APHA 23 rd Edition, 2017
ED040	Water	Dissolved Sulphur (ICPAES) as SO ₄	US EPA 6010 ICP/AES
ED040T	Soil	Sulphate – Total as SO ₄	US EPA 6010 ICP/AES
ED045	Water, Soil	Chloride	SM 4500-Cl ⁻ B, APHA 23 rd Edition, 2017

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
ED093	Water, Soil	Determination of Major Cations (Ca, Mg, K, Na) by ICP/AES	US EPA 6010 ICP/AES
EG005	Water, Soil	Silica (SiO ₂)	US EPA 6010 ICP/AES
EG005	Water, Soil	Phosphorus (P)	US EPA 6010 ICP/AES
EG005	Water, Soil	Silicon (Si)	US EPA 6010 ICP/AES
EG005	Water, Soil	Sulfur (S)	US EPA 6010 ICP/AES
EG005/EG020	Water, Soil	Aluminium (Al)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Antimony (Sb)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Arsenic (As)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Barium (Ba)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Beryllium (Be)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Bismuth (Bi)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Boron (B)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Cadmium (Cd)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Chromium (Cr)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Cobalt (Co)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Copper (Cu)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Iron (Fe)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Lead (Pb)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Lithium (Li)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Manganese (Mn)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Molybdenum (Mo)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Nickel (Ni)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Selenium (Se)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Silver (Ag)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Strontium (Sr)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Tin (Sn)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EG005/EG020	Water, Soil	Titanium (Ti)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Vanadium (V)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG005/EG020	Water, Soil	Zinc (Zn)	US EPA 6010 ICP/AES; US EPA 6020 ICP/MS
EG020	Water, Soil	Caesium (Cs)	US EPA 6020 ICP/MS
EG020	Water, Soil	Cerium (Ce)	US EPA 6020 ICP/MS
EG020	Water, Soil	Dysprosium (Dy)	US EPA 6020 ICP/MS
EG020	Water, Soil	Erbium (Er)	US EPA 6020 ICP/MS
EG020	Water, Soil	Europium (Eu)	US EPA 6020 ICP/MS
EG020	Water, Soil	Gadolinium (Gd)	US EPA 6020 ICP/MS
EG020	Water, Soil	Gallium (Ga)	US EPA 6020 ICP/MS
EG020	Water, Soil	Hafnium (Hf)	US EPA 6020 ICP/MS
EG020	Water, Soil	Holmium (Ho)	US EPA 6020 ICP/MS
EG020	Water, Soil	Indium (In)	US EPA 6020 ICP/MS
EG020	Water, Soil	Lanthanum (La)	US EPA 6020 ICP/MS
EG020	Water, Soil	Lutetium (Lu)	US EPA 6020 ICP/MS
EG020	Water, Soil	Mercury (Hg)	US EPA 6020 ICP/MS
EG020	Water, Soil	Neodymium (Nd)	US EPA 6020 ICP/MS
EG020	Water, Soil	Praseodymium (Pr)	US EPA 6020 ICP/MS
EG020	Water, Soil	Rubidium (Rb)	US EPA 6020 ICP/MS
EG020	Water, Soil	Samarium (Sm)	US EPA 6020 ICP/MS
EG020	Water, Soil	Tellurium (Te)	US EPA 6020 ICP/MS
EG020	Water, Soil	Terbium (Tb)	US EPA 6020 ICP/MS
EG020	Water, Soil	Thallium (Tl)	US EPA 6020 ICP/MS
EG020	Water, Soil	Thorium (Th)	US EPA 6020 ICP/MS
EG020	Water, Soil	Thulium (Tm)	US EPA 6020 ICP/MS
EG020	Water, Soil	Uranium (U)	US EPA 6020 ICP/MS
EG020	Water, Soil	Ytterbium (Yb)	US EPA 6020 ICP/MS
EG020	Water, Soil	Yttrium (Y)	US EPA 6020 ICP/MS
EG020	Water, Soil	Zirconium (Zr)	US EPA 6020 ICP/MS
EG035	Water, Soil	Mercury by Flow Injection Mercury – Atomic Absorption Spectrometry (FIMS-AAS)	SM 3112B, APHA 23 rd Edition, 2017
EG049	Water, Soil	Trivalent Chromium (Cr III)	SM 3500-Cr A & B, APHA 23 rd Edition, 2017
EG050G	Water, Soil	Hexavalent Chromium by Discrete Analyser	SM 3500-Cr B, APHA 23 rd Edition, 2017
EG051G	Water	Determination of Ferrous Iron and Ferric Iron by Discrete Analyser	SM 3500-Fe B, APHA 23 rd Edition, 2017
EG052	Water	Silica (SiO ₂)	US EPA 6010 ICP/AES
EG053	Water	Ferric Iron – Dissolved	SM 3500-Fe B, APHA 23 rd Edition, 2017
EK010	Water	Total Residual Chlorine	SM 4500-Cl G, APHA 23 rd Edition, 2017
EK011	Water	Free Chlorine	SM 4500-Cl G, APHA 23 rd Edition, 2017

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EK012	Water	Chlorine Dioxide	HACH Method 10126
EK025	Water, Soil	Free Cyanide	SM 4500-CN C&N, APHA 23 rd Edition, 2017
EK026SF	Water, Soil	Total Cyanide by Segmented Flow Analyser	SM 4500-CN ⁻ O, APHA 23 rd Edition, 2017; ASTM D7511-12; ISO 14403
EK028	Water, Soil	Weak Acid Dissociable Cyanide (WAD)	SM 4500-CN C&N, APHA 23 rd Edition, 2017
EK040	Water, Soil	Fluoride	SM 4500-F ⁻ C, APHA 23 rd Edition, 2017
EK055	Water, Soil	Ammonia as N by Titrimetry	SM 4500-NH ₃ H, APHA 23 rd Edition, 2017
EK055G	Water, Soil	Ammonia as N by Discrete Analyser	SM 4500-NH ₃ H, APHA 23 rd Edition, 2017.; Aquakem NH ₃ -W-P-V
EK057G	Water, Soil	Nitrite as N by Discrete Analyser	SM 4500-NO ₂ ⁻ B, APHA 23 rd Edition, 2017
EK058	Water, Soil	Nitrate as N by Discrete Analyser	NEMI Method 9171; Thermo-Scientific Method NO _x -W-C-I
EK059G	Water, Soil	Nitrate as N + Nitrite as N (NO _x) by Discrete Analyser	NEMI Method 9171; Thermo-Scientific Method NO _x -W-C-I
EK060	Water, Soil	Organic Nitrogen as N	SM 4500B & H, APHA 23 rd Edition, 2017
EK061G	Water, Soil	Total Kjeldahl Nitrogen (TKN) as N	SM 4500-N _{org} D, APHA 23 rd Edition, 2017; Aquakem Labmedics TKN002
EK067G	Water, Soil	Total Phosphorus as P	SM 4500-P H, APHA 23 rd Edition, 2017
EK071G	Water, Soil	Reactive Phosphorus as P	SM 4500-P G, APHA 23 rd Edition, 2017; Aquakem Labmedics PHO002/002/003
EK084	Water, Soil	Un-ionised Hydrogen Sulfide	SM 4500-S ²⁻ H, APHA 23 rd Edition, 2017
EK085	Water, Soil	Sulphide as S ²⁻ by Methylene Blue Method	SM 4500-S ²⁻ D, APHA 23 rd Edition, 2017
EK086	Water	Sulphite as SO ₃	SM 4500-SO ₃ ²⁻ D, APHA 23 rd Edition, 2017
EK087	Water	Thiosulfate as S ₂ O ₃ ²⁻	In-house Method
EP002	Water	Dissolved Organic Carbon (DOC)	SM 5310B, APHA 23 rd Edition, 2017
EP004	Soil	Organic Matter	AS 1289.4.1.1 - 1997
EP004	Soil	Total Organic Carbon (TOC), Calculated	AS 1289.4.1.1 - 1997
EP005	Water	Total Organic Carbon (TOC)	SM 5310B, APHA 23 rd Edition, 2017

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP006	Water	Total Inorganic Carbon (TIC)	SM 5310B, APHA 23 rd Edition, 2017
EP007	Water	Total Carbon (TC)	SM 5310B, APHA 23 rd Edition, 2017
EP008	Water	Chlorophyll	SM 10200H, APHA 23 rd Edition, 2017
EP010	Water	Formaldehyde	ASTM D6303-98
EP015	Water	Total Petroleum Hydrocarbon (Gravimetric)	SM 5520B, APHA 23 rd Edition, 2017
EP020	Water	Oil and Grease	SM 5520B, APHA 23 rd Edition, 2017
EP020.1	Soil	Oil and Grease (N-Hexane Extractable Material (HEM)) in Soil, Sludge and Sediments Sample	US EPA 9071B
EP025	Water	Dissolved Oxygen	SM 4500-O G, APHA 23 rd Edition, 2017
EP026	Water, Soil	Chemical Oxygen Demand (COD)	SM 5220C, APHA 23 rd Edition, 2017
EP026ST	Water	Chemical Oxygen Demand – Sealed Tube Small Scale	ISO 15705:2002
EP030	Water	Biochemical Oxygen Demand (BOD)	SM 5210B, APHA 23 rd Edition, 2017
EP035	Water	Phenolics – Total	SM 5530B & D, APHA 23 rd Edition, 2017
EP050	Water	Determination of Anionic Surfactants as MBAS	SM 5540B & C, APHA 23 rd Edition, 2017
EP066	Water, Soil	Polychlorinated Biphenyls	US EPA 8270 GC/MS
EP068A	Water, Soil	Aldrin	US EPA 8270 GC/MS
EP068A	Water, Soil	Alpha-BHC (Lindane)	US EPA 8270 GC/MS
EP068A	Water, Soil	Beta & Gamma-BHC	US EPA 8270 GC/MS
EP068A	Water, Soil	Chlordane-cis	US EPA 8270 GC/MS
EP068A	Water, Soil	Chlordane-trans	US EPA 8270 GC/MS
EP068A	Water, Soil	DDD	US EPA 8270 GC/MS
EP068A	Water, Soil	DDE	US EPA 8270 GC/MS
EP068A	Water, Soil	DDT	US EPA 8270 GC/MS
EP068A	Water, Soil	Delta-BHC	US EPA 8270 GC/MS
EP068A	Water, Soil	Dieldrin	US EPA 8270 GC/MS
EP068A	Water, Soil	Endosulphan 1	US EPA 8270 GC/MS
EP068A	Water, Soil	Endosulphan 2	US EPA 8270 GC/MS
EP068A	Water, Soil	Endosulphan sulphate	US EPA 8270 GC/MS
EP068A	Water, Soil	Endrin	US EPA 8270 GC/MS
EP068A	Water, Soil	Endrin aldehyde	US EPA 8270 GC/MS
EP068A	Water, Soil	Endrin ketone	US EPA 8270 GC/MS
EP068A	Water, Soil	Heptachlor	US EPA 8270 GC/MS
EP068A	Water, Soil	Heptachlor epoxide	US EPA 8270 GC/MS
EP068A	Water, Soil	Hexachlorobenzene (HCB)	US EPA 8270 GC/MS
EP068A	Water, Soil	Methoxychlor	US EPA 8270 GC/MS
EP068B	Water, Soil	Azinphos-methyl	US EPA 8270 GC/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP068B	Water, Soil	Bromophos-ethyl	US EPA 8270 GC/MS
EP068B	Water, Soil	Carbophenothion	US EPA 8270 GC/MS
EP068B	Water, Soil	Chlorfenvinphos E	US EPA 8270 GC/MS
EP068B	Water, Soil	Chlorfenvinphos Z	US EPA 8270 GC/MS
EP068B	Water, Soil	Chlorpyrifos	US EPA 8270 GC/MS
EP068B	Water, Soil	Chlorpyrifos-methyl	US EPA 8270 GC/MS
EP068B	Water, Soil	Demetron-S-methyl	US EPA 8270 GC/MS
EP068B	Water, Soil	Diazinon	US EPA 8270 GC/MS
EP068B	Water, Soil	Dichlorvos	US EPA 8270 GC/MS
EP068B	Water, Soil	Dimethoate	US EPA 8270 GC/MS
EP068B	Water, Soil	Ethion	US EPA 8270 GC/MS
EP068B	Water, Soil	Fenamiphos	US EPA 8270 GC/MS
EP068B	Water, Soil	Fenthion	US EPA 8270 GC/MS
EP068B	Water, Soil	Malathion	US EPA 8270 GC/MS
EP068B	Water, Soil	Monocrotophos	US EPA 8270 GC/MS
EP068B	Water, Soil	Parathion	US EPA 8270 GC/MS
EP068B	Water, Soil	Parathion-methyl	US EPA 8270 GC/MS
EP068B	Water, Soil	Pirimphos-ethyl	US EPA 8270 GC/MS
EP068B	Water, Soil	Prothiofos	US EPA 8270 GC/MS
EP068C	Water, Soil	Atrazine	US EPA 8270 GC/MS
EP068C	Water, Soil	Simazine	US EPA 8270 GC/MS
EP070	Water, Soil	Aliphatic / Aromatic TPH (C6-C8)	US EPA 8260 P&T/GC/MS
EP070	Water, Soil	Aliphatic / Aromatic TPH (C8-C10)	US EPA 8260 P&T/GC/MS
EP070	Water, Soil	Aliphatic / Aromatic TPH (C10-C12)	US EPA 8015 GC/FID
EP070	Water, Soil	Aliphatic / Aromatic TPH (C12-C16)	US EPA 8015 GC/FID
EP070	Water, Soil	Aliphatic / Aromatic TPH (C16-C21)	US EPA 8015 GC/FID
EP071	Water, Soil	TPH (C10-C14)	US EPA 8015 (M) GC/FID
EP071	Water, Soil	TPH (C15-C28)	US EPA 8015 (M) GC/FID
EP071	Water, Soil	TPH (C29-C36)	US EPA 8015 (M) GC/FID
EP071	Water, Soil	TPH (C37-C40)	US EPA 8015 (M) GC/FID
EP074	Water, Soil	1,2,4-Trimethylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,3,5-Trimethylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Isopropylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	n-Butylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	n-Propylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	p-Isopropyltoluene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	sec-Butylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Styrene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	tert-Butylbenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	2-Butanone (MEK)	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	2-Hexanone (MBK)	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	2-Propanone (Acetone)	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	4-Methyl-2-pentanone (MIBK)	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Vinyl Acetate	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2-Dibromoethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2-Dichloropropane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	2,2-Dichloropropane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	cis-1,3-Dichloropropylene	US EPA 8260 P&T/GC/MS

ALS Method Code(s)	Matrices	Parameter/Analyte(s)	Reference(s)
EP074	Water, Soil	trans-1,3-Dichloropropylene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1,1,2-Tetrachloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1,1-Trichloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1,2,2-Tetrachloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1,2-Trichloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1-Dichloro-1-propene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1-Dichloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,1-Dichloroethene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2,3-Trichloropropane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2-Dibromo-3-chloropropane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2-Dichloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,3-Dichloropropane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Bromochloromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Bromomethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Carbon tetrachloride	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Chloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Chloromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	cis-1,2-Dichloroethene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Dibromomethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Dichlorodifluoromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Dichloromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Hexachlorobutadiene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Methylene chloride	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Pentachloroethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Tetrachloroethene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	trans-1,2-Dichloroethene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	trans-1,3-Dichloropropene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Trichloroethene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Trichlorofluoromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Vinyl chloride	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2,3-Trichlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2,4-Trichlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,2-Dichlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,3-Dichlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	1,4-Dichlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	2-Chlorotoluene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	4-Chlorotoluene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Bromobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Chlorobenzene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Bromodichloromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Bromoform	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Chloroform	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Dibromochloromethane	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Napthalene	US EPA 8260 P&T/GC/MS
EP074	Water, Soil	Methyl tert-Butyl Ether (MTBE)	US EPA 8260 P&T/GC/MS
EP074/EP080	Water, Soil	Benzene	US EPA 8260 P&T/GC/MS
EP074/EP080	Water, Soil	Ethylbenzene	US EPA 8260 P&T/GC/MS
EP074/EP080	Water, Soil	m-Xylene	US EPA 8260 P&T/GC/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP074/EP080	Water, Soil	o-Xylene	US EPA 8260 P&T/GC/MS
EP074/EP080	Water, Soil	p-Xylene	US EPA 8260 P&T/GC/MS
EP074/EP080	Water, Soil	Toluene	US EPA 8260 P&T/GC/MS
EP075	Water, Soil	1,2,4-Trichlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1,2,5-Trinitrobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1,2-Dichlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1,3,5-Trinitrobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1,3-Dichlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1,4-Dichlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	1-Naphthylamine	US EPA 8270 GC/MS
EP075	Water, Soil	2,4,5-Trichlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2,4,6-Trichlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2,4-Dichlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2,4-Dimethylphenol	US EPA 8270 GC/MS
EP075	Water, Soil	2,4-Dinitrotoluene	US EPA 8270 GC/MS
EP075	Water, Soil	2,6-Dichlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2,6-Dinitrotoluene	US EPA 8270 GC/MS
EP075	Water, Soil	2-Chloronaphthalene	US EPA 8270 GC/MS
EP075	Water, Soil	2-Chlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2-Methylnaphthalene	US EPA 8270 GC/MS
EP075	Water, Soil	2-Methylphenol	US EPA 8270 GC/MS
EP075	Water, Soil	2-Nitroaniline	US EPA 8270 GC/MS
EP075	Water, Soil	2-Nitrophenol	US EPA 8270 GC/MS
EP075	Water, Soil	2-Picoline	US EPA 8270 GC/MS
EP075	Water, Soil	3,3-Dichlorobenzidine	US EPA 8270 GC/MS
EP075	Water, Soil	3-Methylcholanthrene	US EPA 8270 GC/MS
EP075	Water, Soil	3-Nitroaniline	US EPA 8270 GC/MS
EP075	Water, Soil	4-Aminobiphenyl	US EPA 8270 GC/MS
EP075	Water, Soil	4-Bromophenyl phenyl ether	US EPA 8270 GC/MS
EP075	Water, Soil	4-Chloro-3-methylphenol	US EPA 8270 GC/MS
EP075	Water, Soil	4-Chloroaniline	US EPA 8270 GC/MS
EP075	Water, Soil	4-Chlorophenyl phenyl ether	US EPA 8270 GC/MS
EP075	Water, Soil	4-Nitroaniline	US EPA 8270 GC/MS
EP075	Water, Soil	4-Nitroquinoline-N-oxide	US EPA 8270 GC/MS
EP075	Water, Soil	5-Nitro-o-toluidine	US EPA 8270 GC/MS
EP075	Water, Soil	7,12-Dimethylbenz(a)anthracene	US EPA 8270 GC/MS
EP075	Water, Soil	Acenaphthene	US EPA 8270 GC/MS
EP075	Water, Soil	Acenaphthylene	US EPA 8270 GC/MS
EP075	Water, Soil	Acetophenone	US EPA 8270 GC/MS
EP075	Water, Soil	Aldrin	US EPA 8270 GC/MS
EP075	Water, Soil	Alpha-BHC (Lindane)	US EPA 8270 GC/MS
EP075	Water, Soil	Aniline	US EPA 8270 GC/MS
EP075	Water, Soil	Anthracene	US EPA 8270 GC/MS
EP075	Water, Soil	Azobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	Benzo(a)anthracene	US EPA 8270 GC/MS
EP075	Water, Soil	Benzo(a)pyrene	US EPA 8270 GC/MS
EP075	Water, Soil	Benzo(b)fluoranthene	US EPA 8270 GC/MS
EP075	Water, Soil	Benzo(ghi)perylene	US EPA 8270 GC/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP075	Water, Soil	Benzo(k)fluoranthene	US EPA 8270 GC/MS
EP075	Water, Soil	Beta & Gamma-BHC	US EPA 8270 GC/MS
EP075	Water, Soil	Bis(2-chloroethoxy)methane	US EPA 8270 GC/MS
EP075	Water, Soil	Bis(2-chloroethyl)ether	US EPA 8270 GC/MS
EP075	Water, Soil	Bis(2-ethylhexyl)phthalate (DEHP)	US EPA 8270 GC/MS
EP075	Water, Soil	Butylbenzylphthalate (BBP)	US EPA 8270 GC/MS
EP075	Water, Soil	Carbazole	US EPA 8270 GC/MS
EP075	Water, Soil	Chlorfenvinphos E	US EPA 8270 GC/MS
EP075	Water, Soil	Chlorfenvinphos Z	US EPA 8270 GC/MS
EP075	Water, Soil	Chlorobenzilate	US EPA 8270 GC/MS
EP075	Water, Soil	Chlorpyrifos	US EPA 8270 GC/MS
EP075	Water, Soil	Chlorpyrifos-methyl	US EPA 8270 GC/MS
EP075	Water, Soil	Chrysene	US EPA 8270 GC/MS
EP075	Water, Soil	DDE	US EPA 8270 GC/MS
EP075	Water, Soil	DDT	US EPA 8270 GC/MS
EP075	Water, Soil	Delta-BHC	US EPA 8270 GC/MS
EP075	Water, Soil	Diazinon	US EPA 8270 GC/MS
EP075	Water, Soil	Dibenzo(ah)anthracene	US EPA 8270 GC/MS
EP075	Water, Soil	Dibenzofuran	US EPA 8270 GC/MS
EP075	Water, Soil	Dichlorvos	US EPA 8270 GC/MS
EP075	Water, Soil	Dieldrin	US EPA 8270 GC/MS
EP075	Water, Soil	Diethylphthalate (DEP)	US EPA 8270 GC/MS
EP075	Water, Soil	Dimethoate	US EPA 8270 GC/MS
EP075	Water, Soil	Dimethylaminoazobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	Dimethylphthalate (DMP)	US EPA 8270 GC/MS
EP075	Water, Soil	Di-n-butylphthalate (DnBP)	US EPA 8270 GC/MS
EP075	Water, Soil	Di-n-octylphthalate (DnOP)	US EPA 8270 GC/MS
EP075	Water, Soil	Endosulphan 1	US EPA 8270 GC/MS
EP075	Water, Soil	Endosulphan 2	US EPA 8270 GC/MS
EP075	Water, Soil	Endosulphan sulphate	US EPA 8270 GC/MS
EP075	Water, Soil	Endrin	US EPA 8270 GC/MS
EP075	Water, Soil	Ethion	US EPA 8270 GC/MS
EP075	Water, Soil	Fenthion	US EPA 8270 GC/MS
EP075	Water, Soil	Fluoranthene	US EPA 8270 GC/MS
EP075	Water, Soil	Fluorene	US EPA 8270 GC/MS
EP075	Water, Soil	Heptachlor	US EPA 8270 GC/MS
EP075	Water, Soil	Heptachlor epoxide	US EPA 8270 GC/MS
EP075	Water, Soil	Hexachlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	Hexachlorobutadiene	US EPA 8270 GC/MS
EP075	Water, Soil	Hexachlorocyclopentadiene	US EPA 8270 GC/MS
EP075	Water, Soil	Hexachloroethane	US EPA 8270 GC/MS
EP075	Water, Soil	Hexachloropropylene	US EPA 8270 GC/MS
EP075	Water, Soil	Indeno(123cd)pyrene	US EPA 8270 GC/MS
EP075	Water, Soil	Isophorone	US EPA 8270 GC/MS
EP075	Water, Soil	Malathion	US EPA 8270 GC/MS
EP075	Water, Soil	m-Cresol	US EPA 8270 GC/MS
EP075	Water, Soil	Methapyrilene	US EPA 8270 GC/MS
EP075	Water, Soil	N-2-Fluorenyl acetamide	US EPA 8270 GC/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP075	Water, Soil	Naphthalene	US EPA 8270 GC/MS
EP075	Water, Soil	Nitrobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosodibutylamine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosodiethylamine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosodiphenylamine & Diphenylamine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosomethylethylamine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosomorpholine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitroso-n-propylamine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosopiperidine	US EPA 8270 GC/MS
EP075	Water, Soil	N-Nitrosopyrrolidine	US EPA 8270 GC/MS
EP075	Water, Soil	o-Cresol	US EPA 8270 GC/MS
EP075	Water, Soil	p-Cresol	US EPA 8270 GC/MS
EP075	Water, Soil	Pentachlorobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	Pentachloronitrobenzene	US EPA 8270 GC/MS
EP075	Water, Soil	Pentachlorophenol	US EPA 8270 GC/MS
EP075	Water, Soil	Phenacetin	US EPA 8270 GC/MS
EP075	Water, Soil	Phenanthrene	US EPA 8270 GC/MS
EP075	Water, Soil	Phenol	US EPA 8270 GC/MS
EP075	Water, Soil	Pirimphos-ethyl	US EPA 8270 GC/MS
EP075	Water, Soil	Pronamide	US EPA 8270 GC/MS
EP075	Water, Soil	Prothiofos	US EPA 8270 GC/MS
EP075	Water, Soil	Pyrene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2,4,5-Trichlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2,4,6-Trichlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2,4-Dichlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2,4-Dimethylphenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2,6-Dichlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2-Chlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2-Methylphenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2-Nitrophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	3- & 4-Methylphenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	4-Chloro-3-methylphenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Pentachlorophenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Phenol	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	2-Methylnaphthalene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Acenaphthene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Acenaphthylene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Anthracene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Benz(a)anthracene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Benzo(a)pyrene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Benzo(b)fluoranthene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Benzo(g,h,i)perylene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Benzo(k)fluoranthene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Chrysene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Dibenzo(a,h)anthracene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Fluoranthene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Fluorene	US EPA 8270 GC/MS

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
EP075 (SIM)	Water, Soil	Indeno(1-2-1-cd)pyrene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Naphthalene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Phenanthrene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Pyrene	US EPA 8270 GC/MS
EP075 (SIM)	Water, Soil	Sum of Polycyclic Aromatic Hydrocarbon	US EPA 8270 GC/MS
EP080	Water, Soil	TPH (C6-C9)	US EPA 8260 P&T/GC/MS
EP081	Water, Soil	Aliphatic / Aromatic TPH (C5-C6)	US EPA 8260 P&T/GC/MS
FC001	Food, Feed	Determination of Nitrogen Content and Calculation of Protein Content in Food, Food Products, Animal Feeding Stuffs and other Associated Raw Materials	AOAC 928.08, AOAC 950.48, AOAC 954.01, AOAC 981.10, AOAC 991.20; ISO 8968-1:2014, ISO 20483:2013
FC002	Food, Feed, Beverages	Determination of pH by Potentiometry	ISO 2917, ISO 1842, BS 770-5
FC003	Fruit Juices, Food (Water Soluble)	Determination of Titratable Acidity by Titrimetry	AOAC 19 th Edition, 2012; ISO 6091:2010
FC004	Food	Determination of Water Activity	ISO 18787:2017
FC005	Oils/Fats, Beverages	Determination of Density / Relative Density by Digital Density Meter	In-house Method
FC006	Food	Determination of Water Content in Foodstuffs Using Volumetric Karl Fischer Titrator	AOAC 991.02, AOAC 977.10, AOAC 2001.12; ISO 5536:2009
FC007	Food, Feed	Determination of Dry Matter by Gravimetry	AOAC 930.15, AOAC 967.3
FC008	Food	Determination of Ash Content by Gravimetry	AOAC 19 th Edition, 2012; Pierre Schuck et. al. – Analytical Methods for Food and Dairy Powders
FC009	Food	Determination of Total Dietary Fiber in Foodstuffs and Raw Materials by an Enzymatic – Gravimetric Method	AOAC 985.29
FC010	Food, Beverages, Fruits, Vegetable Products	Determination of Total Solids (Soluble) by Refractometric Method	AOAC 932.12, AOAC 932.14, AOAC 970.59, AOAC 976.20, AOAC 983.17; ISO 2173
FC011	Food, Feed	Determination of Chloride by Titrimetry (Volhard Method) and Salt Content (as NaCl) by Calculation	AOAC 935.43, AOAC 935.47, AOAC 937.09, AOAC 941.13,

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
FC012	Oils/Fats	Determination of Refractive Index in Oils and Fats Using Abbemat Refractometer	AOAC 921.08
FC013	Foods & Food Products	Determination Total Sugars by Titration Method	AOAC 19 th Edition, 2012; Pearson's Composition & Chemical Analysis of Foods, 9 th Edition
FC014	Food & Fortified Food Products, Infant Formula, Fortified Beverages	Determination of Nutritional Elements in Food Products by ICP-AES: (Al, Ca, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Se, P, Zn)	AOAC 984.27; Pearson's Composition & Chemical Analysis of Foods, 9 th Edition
FC015	Drinks and Foodstuffs	Determination of Mixed Additives in Drinks and Foodstuffs by HPLC	In-House Method
FC018	Oils/Fats	Determination of Peroxide Value	AOAC 965.3; ISO 3960:2017
FC023	Food & Food Products	Determination of Moisture Content of Food, Food Products and Animal Feeding Stuffs by Gravimetric Method	ISO 712:2009; ISO 3727-1:2001 / IDF 80-1:2001; ISO 5537:2004 / IDF 26:2004; ISO 5534:2004 / IDF 4:2004; ISO 6731:2010 / IDF 21:2010; ISO 6734:2010 / IDF 15:2010; AOAC 19 th Edition, 2012; AACC Method 44-15.02; GAFTA Method 2:1
FC026	Food, Feed, Oils/ Fats	Determination of Cholesterol in Foods, Feeding Stuffs, Fats and Oils by Gas Chromatography	JAOAC Int., vol. 76, No.4, 1993, pp. 902-906; AOAC 994.10; Journal of Food Composition & Analysis, 21 (2008) 306-314
FC028	Foods, Oils/Fats	Determination of Acid Value / Free Fatty Acids	AOAC 940.28
FC029	Foods	Energy by Calculation	FAO 2003; FSANZ Guide Std. 1.2.8
FC031	Food, Feed, Beverages, Supplements & Premixes	Determination of Vitamins B1 and B2 in Foods, Feedingstuffs, Drinks, Supplements and Premixes by HPLC	Analyst AMC Paper, 2000,125, 353-360
FC032	Food, Feed	Determination of Vitamin B6 (Pyroxidine / Pyridoxol) by HPLC	In-house Method

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
FC036	Food, Fortified Food Products, Fortified Beverages	Determination of Vitamin C (Ascorbic Acid) by Liquid Chromatography	JAOAC 48(6) 1248-1256
FC037	Food & Fortified Food Products	Determination of Carbohydrates in Foods and Foodstuff by Calculation	FAO Ch. 2 – Method of Food Analysis
FC038	Dairy & Dairy Products	Determination of Total Fats in Dairy Products by Mojonnier Method	AOAC 932.06; ISO 1211:2010; ISO 1735:2004
FC039	Foods, Special Foods, Beverages	Determination of Trace Elements in Foods, Feedstuffs and Premixes by ICP-MS (Arsenic, Cadmium, Mercury, and Lead)	EN 15763:2009
FC041	Food & Food Products	Determination of Fatty Acids Profile by Gas Chromatography	AOAC 969.33; AOCS Ce 2b-11, AOCS Ce 1k-09
FC042	Special Foods, Foods, Beverages	Determination of Total Sugars and Sugar Profile in Food Using High Pressure Liquid Chromatography and Refractive Index Detector	AOAC 982.14; AOAC 977.20
FC043	Food & Food Products	Determination of Total Fat in Food after Acid Hydrolysis by Mojonnier Method	AOAC 996.06, AOAC 945.44, AOAC 954.02, AOAC 935.37, AOAC 922.06, AOAC 991.36, AOAC 963.15
FC044	Food & Food Products	Potentiometric Determination of Chloride / Salt (as NaCl) in Foods	GB/T 12457:1990; ISO 1841:1981; ISO 5943:1988; AOAC 971.27
FC053	Oils/Fats	Determination of Saponification Value (Koettstorfer Number) of Fats and Oils	AOAC 920.16; ISO 3657:2013; USP 34 <401>
FC058	Oils/Fats	Determination of Iodine Value of Fats and Oils by Wijs Method	AOAC 993.20
FC060	Food, Feed	Determination of Aflatoxins B1, B2, G1, G2 and Total Aflatoxins in Foods and Feedingstuffs by HPLC	Easyextract Aflatoxin RP71/RP70N R-Biopharm Rhone
FC061	Dairy & Dairy Products	Determination of Aflatoxin M1 in Milk, Cream, Yogurt, Milk powders, Cheese and Butter by Reverse Phase HPLC	Easyextract Aflatoxin RP71/RP70N R-Biopharm Rhone

<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
FC062	Food, Beverages, and Feed	Determination of Ochratoxin A in Feed, Cereals, Cereal Products, Dried Fruit, Spices and Drinks by HPLC	Ochraprep P14/P14B R-Biopharm Rhone
FC093	Oils/Fats	Determination of Antioxidants (Tertiary Butyl Hydroquinone and Butylated Hydroxy Anisole) in Oils, Fats and Butter Oil by HPLC-DAD	AOAC 983.15
FC094	Honey	Determination of Hydroxymethylfurfural (HMF) in Honey by HPLC-DAD	International Honey Commission 2009
ME-MS81	Rock	Litho geochemistry by ICP-MS: (Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Zr)	In-house Method
PE100	Crude Oil	Determination of Salts in Crude Oil by Electrometric Method	ASTM D3230-13
PE112	Oil, Fuel	Density, Relative Density and API Gravity of Liquids by Digital Density Meter	ASTM D4052-16
PE112A-SA	Crude Oil	Density and Relative Density of Crude Oil by Digital Density Meter	ASTM D5002-16
<u>ALS Method Code(s)</u>	<u>Matrices</u>	<u>Parameter/Analyte(s)</u>	<u>Reference(s)</u>
PE112B	Bitumen, Asphalt, Soft Tar	Density of Semi-Solid Bituminous Materials by Pycnometer	ASTM D70-17
PE954	Oil, Fuel	Flash Point by Pensky-Martens Closed Cup Tester	ASTM D93-16a
PE966-SA	Oil, Fuel (Petroleum)	Determination of Dynamic Viscosity of Oil and Fuel by Stabinger Viscometer (SVM 3000/G2) and Calculation of Kinematic Viscosity	ASTM D7042-16
PE969	Oil, Fuel	Determination of Water Content in Crude Oil and Petroleum Products Using Volumetric Karl Fischer Titrator	ASTM E203-08; ASTM D4377-2011
PE970	Oil, Fuel	Determination of Water and Sediment in Fuels and Oils by the Centrifuge Method	ASTM D1796-11 (2016)



Accredited Laboratory

A2LA has accredited

AUSTRALIAN LABORATORY SERVICES CO. LTD. (ALS ARABIA) – DAMMAM

Dammam, SAUDI ARABIA

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 29th day of December 2020.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3258.01
Valid to May 31, 2022

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