

## **ANNEX A - ONE GAS CHROMATOGRAPH MASS SPECTROMETER**

### **A: Liquid autosampler key features**

- At least 108, 2ml -vials sample positions
- Priority sample position
- Four 4ml wash vials, four 4ml waste vials
- Injection into front channel or rear channel
- Programmable vial sequence

### **B: Detectors**

- FID technology which enables identification and quantification at large peaks and small peaks per sample per run
- Mass spectrometer detector
- GC/MS sensitivity mix

### **C: Computer software and controls**

- PC Dell win 10 (Clarus SQ8 Controller)
- 24-inch LCD Monitor (non-ATO)
- Laser printer (B/W Brother HL-5000D (120V))
- 2 USB cables 480 MBPS A/B Plug (10ft)
- S/W Turbo Mass NIST 2017
- NIST Mass Spectral Library

### **D: Start up kits**

- 5uL x 0.63mm o.d syringe
- 2ml clear sample vials (144), 2ml amber sample vials (100 count)
- Blue crimp caps with septa (100), green crimp caps with septa (100), red crimp caps with septa (100)
- Septa for waste wash vials (100)
- Crimper-11mm, decapper-11mm
- 2ml vial rack holder
- GCMP w/PSS Injector Consumables Kit

### **E: GC Columns**

- COL-Elite 5mS 30m x 0.25mm; 0.25um

- COL-Elite 5mS 30m x 0.32mm; 0.50um
- COL-Elite 225 30m x 0.25mm; 0.15um
- COL-Elite VRX 60m x 0.25mm; 1.40um

#### **F: Head Space Sampler**

- Touch screen graphical user interface with colour LCD
- Sample thermostating temperature up to 210 Celsius
- Overlapping thermostating for maximum throughput
- Stainless steel jet needle
- Upgradeable

#### **G: General Specifications**

- **Power needs- 220v/110volts 60hz**
- **GC and Autosampler should be fully controlled from the touch screen graphic user interface**
- The needs of the GCMS as it relates to what is required are as follows;
- Semivolatiles

<input type="checkbox"/> Polycyclic aromatic compounds
<input type="checkbox"/> Chlorinated hydrocarbons
<input type="checkbox"/> Phthalates
<input type="checkbox"/> Phenols
<input type="checkbox"/> Amines
<input type="checkbox"/> Organochlorine pesticides
<input type="checkbox"/> Organophosphorus pesticides
<input type="checkbox"/> Drugs
<input type="checkbox"/> Solvent impurities
<input type="checkbox"/> Hydrocarbons
<input type="checkbox"/> FAME's
<input type="checkbox"/> Carbohydrates
<input type="checkbox"/> Sterols

**NOTE: Where brand names are included here, they are not restrictive and any equal brand shall be acceptable.**