Environmental
Semi-Volatiles

Semi-volatiles is a catch all phrase for many classes of higher boiling organic compounds. These can be Polynuclear Aromatics, Phenols, Phthalate Esters, Nitrosamines, Chlorinated Hydrocarbons, and others. Since everyone is looking for lower detection limits, these compounds are usually extracted, concentrated and shot by direct injection. The common link between these compounds is their hydrocarbon backbone, which can be easily detected by the FID detector. DPS configures the Semi-volatiles GC Analyzers with the sensitive FID detector and the column of your choice to separate and identify these classes of compounds. Or, let our experts assist you in selecting a good general purpose column to cover most of the applications. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Semi-volatiles GC Analyzer systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.

Available Configurations Include:

600-C-030 - Series 600 Semi-Volatiles GC Analyzer (FID, 30m)
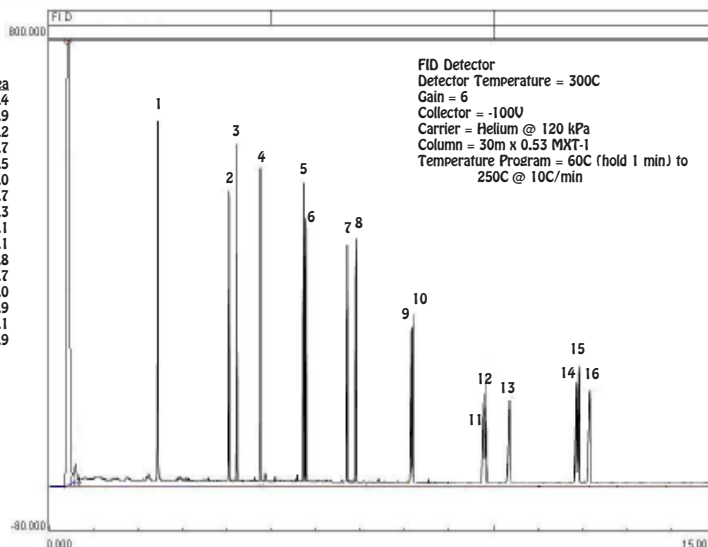500-C-030 - Companion 1 Portable Semi-Volatiles GC Analyzer (FID, 30m)

Series 600 GC

Companion 1 Portable GC

PNA's - Polynuclear Aromatic Hydrocarbons

Peak	Component	Area
1	Naphthalene	1439.4
2	Acenaphthylene	1243.9
3	Acenaphthene	1374.2
4	Fluorene	1284.7
5	Phenanthrene	1212.5
6	Anthracene	1165.0
7	Fluoranthene	1074.7
8	Pyrene	1103.3
9	Benzo(a)anthracene	827.1
10	Chrysene	940.1
11	Benzo(b)fluoranthene	498.8
12	Benzo(k)fluoranthene	632.7
13	Benzo(a)pyrene	399.0
14	Indeno(1,2,3-cd)pyrene	579.9
15	Dibenzo(a,h)anthracene	627.1
16	Benzo(ghi)perylene	428.9

FID Detector
Detector Temperature = 300C
Gain = 6
Collector = -100V
Carrier = Helium @ 120 kPa
Column = 30m x 0.53 MXT-1
Temperature Program = 60C (hold 1 min) to 250C @ 10C/min