

# **Appendix G**

## **Qualitative GC/MS Analytical**

**QUALITATIVE ANALYSIS METHOD USING  
GAS CHROMATOGRAPHY MASS SPECTROMETRY  
REGIONAL ANALYTICAL SERVICES  
JACKSON LABORATORY, RM 2104**

**DESCRIPTION**

The following method is used for the qualitative analysis of received, post-oxidation, and precipitated NCH samples.

**INSTRUMENT**

Agilent 6890 GC interfaced to a 5973N MSD operating in electrospray ionization mode.

**COLUMN**

HP-5 (30m, 0.25 mm ID fused silica coated with 1 um film thickness, 5% phenyl methylsiloxane bonded stationary phase)

**INSTRUMENT PARAMETERS**

Split Ratio	50:1
Inlet Temperature	150°C
Flow Rate	1.0 mL/min
Injection Volume	1 uL
MSD Transfer Line Heater	300°C
Initial Column Temperature	40°C
Pre-Program Hold	5 min
Temperature Ramp	10°C/min to 280°C, 15 min hold
MSD Scan Parameters	300 – 800 amu, threshold 150

**SAMPLE PREPARATION**

Samples are analyzed neat.

**RESULTS**

Qualitative analysis of 16% NCH samples as received, after oxidation, and after precipitation are shown below.











