NOISE Reports
Glossary

Assumed HTSD recovery: The total sample, usually normalized to 100%, can be renormalized to the fractional amount measured by High Temperature Simulated Distillation that boils within the observable range of NOISE, below 1000F.

Average carbon # of n-paraffins: Intensity weighted average of the n-paraffin carbon # distribution.

Average number of carbons and hydrogens: The Z-type vs. carbon number table is used to calculate the average carbon number and type of the sample. The average type allows calculation of the average number of hydrogens and thus the empirical formula for the sample.

Benzothiophenes,dibenzothiophenes, and benzonaphthothiophenes: Z-6, Z-12, and Z-18 include benzothiophenes and dibenzothiophenes that are separated chromatographically from the other aromatics of the same type, permitting their measurement and separate tabulation.

Carbazoles: Alkyl carbazoles (Z-15) are listed separately and totaled with the diaromatics.

Data file/run date: The name of the data file for your sample and the date it was run. Providing the data file name helps when retrieving archived results to answer questions.

Iso/normal paraffin ratio: The total isoparaffin intensity is divided by the total normal paraffin intensity to obtain an average iso/normal ratio for the sample.

NOISE: Nitric Oxide Ionization Spectrometry Evaluation.

PAH Distribution: A histogram of polynuclear aromatic hydrocarbon levels generated by selecting appropriate entries from the Z-type vs. carbon number table. Since other compounds of the same type and carbon number are included, the indicated levels are maximums.

Phenols: Alkyl phenols (Z-6) are listed separately and totaled with the monoaromatics.

TAC ref: The invoice number assigned by Triton Analytics Corporation for the data set.

Z number summary: The weight percentage of each Z number (type) found in the sample.

Z-type vs. carbon number table: The mass spectrometer typically records 1500 complete mass spectra during the elution of the sample from the gas chromatograph. Plotting the intensity of one mass from each spectrum (scan) by scan number, equivalent to time, generates a "mass chromatogram." Since the mass spectrometer scans several hundred mass units, the GC-MS records several hundred mass chromatograms, one for each mass measured. Selecting a mass indicative of the Z-type and carbon number, one can integrate the peaks in its mass chromatogram and record the result. The table is the collection of the integrated intensities of the mass chromatograms of the Z-type indicator masses.

Triton Analytics Corporation, 16840 Barker Springs, #302, Houston, TX 77084
ph 281-578-2289 fax 281-578-2295 email: Dan.Villalanti@tritonanalytics.com
http://www.TritonAnalytics.com