

Constituent	www.SmartChemistry.com		Method
	SAE J2719 Limits ($\mu\text{mol/mol}$)	Detection Limits ($\mu\text{mol/mol}$)	
Water	5	1	ASTM D7649-10
Total Hydrocarbons (C₁ Basis)	2		
Methane		0.001	ASTM D5466
Ethane, Ethene, Ethyne		0.6	ASTM D1946
Other Hydrocarbons (Smart Chemistry Detection Limit is for individual compound of hydrocarbon)		0.001	ASTM D5466
Oxygen	5	3	ASTM D7649-10
Helium	300	10	ASTM D1946
Nitrogen, Argon	100		
Nitrogen		5	ASTM D7649-10
Argon		1	ASTM D7649-10
Carbon Dioxide	1	0.5	ASTM D7649-10
Carbon Monoxide	0.2	0.001	ASTM D5466
Total Sulfur	0.004	0.0001	ASTM D7652-11
Hydrogen Sulfide		0.00002	ASTM D7652-11
Carbonyl Sulfide		0.00002	ASTM D7652-11
Methyl Mercaptan		0.00002	ASTM D7652-11
Carbon Disulfide		0.00002	ASTM D7652-11
Formaldehyde	0.01	0.001	ASTM D5466
Formic Acid	0.2	0.001	ASTM D5466
Ammonia	0.1	0.02	ASTM D5466
Total halogenates	0.05		
Chlorine		0.001	ASTM D5466
Hydrogen Chloride		0.001	ASTM D5466
Hydrogen Bromide		0.001	ASTM D5466
Organic Halides (32 compounds Analyzed) (Smart Chemistry Detection Limit is for individual organic halide compound)		0.001	ASTM D5466
Particulate Concentration	1 mg/kg	0.025 mg/kg	ASTM D7651-10
Particulates Found & Size	< 100 μm		ASTM D7634-10
Gaseous Sampling at Nozzle			ASTM D7606-11
Particulate Sampling at Nozzle			ASTM D7650-10