

Fuels & Lubes Technologies, LLC

152 McLafferty Rd.

Fenelton, PA 16034

Phone: 724.355.3043 or 724.282.8264

FLTECHNOLOGIES@YAHOO.COM

AmberTech Emission Results

Dodge Cummins 5.7 Diesel Engine									
RPM's	Carbon Dioxide (CO2 %)			Carbon Monoxide (CO ppm)			Nitrogen Oxide (NO)		
	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced
650	1.02	0.57	44	2795	1870	33	190	80	58
1500	0.72	0.57	21	4074	1129	72	121	46	62
2500	1.84	0.21	89	1310	1257	4	209	40	81

Ford Powerstroke 7.3 Diesel Engine									
RPM's	Carbon Dioxide (CO2 %)			Carbon Monoxide (CO ppm)			Nitrogen Oxide (NO)		
	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced
650	1.87	1.39	26	1442	1234	14	208	102	51
1500	1.66	0.87	44	1492	2283	21	165	127	17
2500	1.02	0.57	44	2795	1870	33	190	80	58

International Harvester 466 Diesel Engine									
RPM's	Carbon Dioxide (CO2 %)			Carbon Monoxide (CO ppm)			Nitrogen Oxide (NO)		
	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced	w/o M99	W/ M99	% reduced
650	1.91	1.84	3	465	335	28	353	366	N/A
1500	2.58	2.5	3	785	612	22	222	209	6
2500	0.82	0.68	17	260	226	13	225	159	29

These are the emission results from a Dodge Cummins 5.7 Diesel , Ford Powerstroke7.3 Diesel Engine, and a IH DT 466 Diesel engine. The testing completed was based on the SAE highway simulation test. Each engine was ran for a one hour warm up rate and initial emissions readings were taken to establish baseline results. AmberTech M99 was added at a treat rate of 2 oz. per quart added to Castrol 15w40. Each engine was run for an additional hour after adding AmberTech M99 as a break in period. Emissions were then tested again to establish changes at 650, 1500, and 2 and 2500 rpm's. Results were measured using a Cosa 707 Emissions Analyzer at 650, 1500, and 2500 rpm's over a 2 day span. This performance is a snapshot in time and performance from other engines may vary.

Chemist: John Chovanes, Head Chemist, Fuels & Lubes Technologies, Chemical Engineer, ASTM, STLE CLS, AISE, SAE, ILCP