



Sample 1

ULSD Automotive Diesel

Sample 2

ULSD Automotive Diesel Treated with Chornco #2082

No.	Test	Test Description	Sample 1		Sample 2		Results	Comments
			Result	Units	Result	Units		
1	ASTM D482	Ash	0.001	Wt %	0.001	Wt %	No Change	Resulting blend within specification
2	ITM 1037	Temperature	40	°C	40	°C	Same	
		Incubation period	72.0	hr	72.0	hr	Same	
		Bacteria	Not Detected		Not Detected		No Change	Resulting blend within specification
		Fungus	Not Detected		Not Detected		No Change	Resulting blend within specification
3	ASTM D613	Cetane	46		46.5		+ 1.1%	Resulting blend improvement
4	ASTM D2624	Temperature	72	°F	72	°F	Same	
		Electrical Conductivity	82	pS/M	82	pS/M	No Change	Resulting blend within specification
5	ASTM D2500	Cloud Point	-15	°C	-15	°C	No Change	Resulting blend within specification
6	ASTM D240	Gross Heat of Combustion	19581	BTU/lb	19580	BTU/lb	Lowered	Resulting blend within specification
		Gross Heat of Combustion (Calculated)	137733	BTU/gal	137726	BTU/gal	Lowered	Resulting blend within specification
		Gross Heat of Combustion (Calculated)	5784778	BTU/bbl	5784480	BTU/bbl	Lowered	Resulting blend within specification
7	ASTM D130	Copper Corrosion @50°C/3hr.	1a		1a		No Change	Resulting blend within specification
8	ASTM D6079	Fluid Temperature	59.9	°C	60	°C	Same	
		Major Axis	0.66	mm	0.5	mm	-24%	Resulting blend improvement
		Minor Axis	0.64	mm	0.44	mm	-34%	Resulting blend improvement
		Wear Scar Diameter	650	um	470	um	-28%	Resulting blend improvement
9	ASTM D2274	Filterable Insolubles	0.4	mg/100ml	0.1	mg/100ml	-75%	Resulting blend improvement
		Adherent Insolubles	0.3	mg/100ml	0.2	mg/100ml	-33%	Resulting blend improvement
		Total Insolubles	0.7	mg/100ml	0.3	mg/100ml	-40%	Resulting blend improvement
10	ASTM D445	Kinematic Viscosity @40°C	2.62	mm2/s	2.62	mm2/s	No Change	Resulting blend within specification
11	ASTM D2709	Sediment & Water	0.000	Vol %	0.000	Vol %	No Change	Resulting blend within specification
12	ASTM D6217	Volume of Sample Filtered	1.00	L	1.00	L	Same	
		Particulate Contamination	1.9	mg/L	1.0	mg/L	-47%	Resulting blend improvement

Notes:

- Nos 1-2-4-5-6-7-10-11 **These tests demonstrate that the specification has not been compromised by the addition of Chornco #2082**
- 3 **ASTM D613** **The cetane increase provides for improved ignition properties of the fuel**
- 8 **ASTM D6079** **Diesel fuel injection equipment relies on the lubricating properties of the fuel. A shortening of the life of engine components can be caused by a lack of lubricity in diesel fuel. The resulting addition of Chornco #2082 substantially improves fuel lubricity.**
- 9 **ASTM D2274** **The addition of Chornco #2082 substantially improves the inherent stability of the resulting fuel.**
- 12 **ASTM D6217** **The mass of particulates present in a fuel is a significant factor, along with the size and nature of the individual particles, in the rapidity with which fuel system filters and other small orifices in fuel systems can become plugged. The addition of Chornco #2082 substantially reduces the particulate contamination of the fuel.**