

ASTM – D975 test using Xtreme Fuel Optimizer (XFO)

**EXHIBIT F - ASTM D975 DIESEL FUEL SPECIFICATION TEST RESULTS**

TEST METHOD		TEST PROPERTY	DIESEL FUEL STANDARD <sup>1</sup>	FUEL TEST	FUEL + XFO TEST
ASTM	ISO				
D93	2719	Flash Point, min	52°C	62.8°C	65°C
D2500	-	Cloud Point, max	-	8.9°C	8.9°C
D2709	-	Trace Sediment, %vol, max	<0.05%	<0.005%	<0.005%
D445	3104	Kinematic Viscosity, cSt, 40°C, min	1.9	2.67	2.66
		Kinematic Viscosity, cSt, 40°C, max	4.1		
D482	6245	Ash, % mass, max	0.01	0.002	0.001
D2622, D4294	EN 24260	Sulfur, % weight, max	0.05	0.042	0.042
D130	2160	Copper Corrosion, 3 hr @ 212°F, max	<No. 3A	No. 1A	No. 1A
D613	5165	Cetane Number, min	40	43.9	44.8
D976	4264	Cetane Index, min	40	45.5	46.8
D287	-	API Gravity @ 60°F, min	34	34.3	34.3
		API Gravity @ 60°F, max	38		
D524	10370	Ramsbottom Carbon Residue on 10% Distillation Residue, % mass, max	0.35	0.15	0.15
D86	3405	Distillation, % Volume Recovered, °F			
		Initial Boiling Point, Typical	375°F	369°F	368°F
		10%, Typical	430°F	421°F	420°F
		50%, Typical	510°F	504°F	506°F
		90%, Maximum	625°F	608°F	607°F
		95%, Maximum	671°F	634°F	635°F
		Recovered Volume, % min	98%	98%	98%

Notes

- 1 Diesel Grade No. 2 On Road
- 2 1:10,000 treatment rate

**OTHER DIESEL FUEL TEST RESULTS**

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See following pages for ASTM test definitions.