

Machine Id 000195421 Component Diesel Fuel Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

RECOMMENDATION

Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you filter this fluid before use. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

CORROSION

{not applicable}

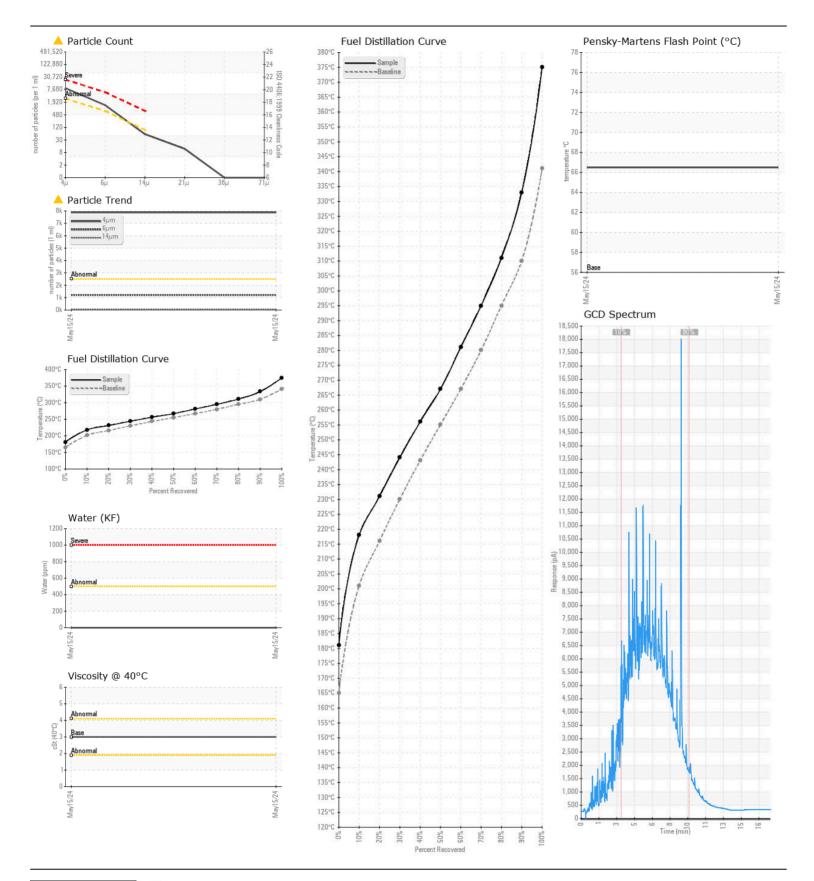
CONTAMINANTS

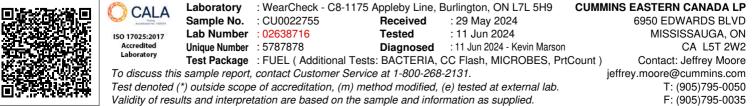
There is a moderate amount of silt (particulates < 14 microns in size) present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample. The water content is negligible.

	Test	UOM	Method	Limit/Abn	Cı	urrent	History1	History2
	Sample Number		Client Info		CL	J0022755		
	Sample Date		Client Info		15	May 2024		
	Machine Age	hrs	Client Info		34	64		
	Sample Status				AB	NORMAL		
	Aluminum	ppm	ASTM D5185(m)	<0.1		0		
	Nickel	ppm	ASTM D5185(m)	<0.1		0		
	Lead	ppm	ASTM D5185(m)	<0.1		0		
	Vanadium	ppm	ASTM D5185(m)	<0.1		0		
	Iron	ppm	ASTM D5185(m)	<0.1		0		
	Silicon	ppm	ASTM D5185(m)	<1.0		0		
	Sodium	ppm	ASTM D5185(m)	<0.1		<1		
	Potassium	ppm	ASTM D5185(m)	<0.1		0		
	Water	%	ASTM D6304*	< 0.05		0.00		
	ppm Water	ppm	ASTM D6304*	<500		0		
	Particles >4µm		ASTM D7647	>2500		7878		
	Particles >6µm		ASTM D7647	>640		1213		
	Particles >14µm		ASTM D7647	>80		50		
	Particles >21µm		ASTM D7647	>20		10		
	Particles >38µm		ASTM D7647	>4		0		
	Particles >71µm		ASTM D7647	>3		0		
	Oil Cleanliness		ISO 4406 (c)	>18/16/13		20/17/13		
	Bacteria	CFU/ml	ASTM D6469*	>=100000		0		
	Yeast	CFU/ml	ASTM D6469*	>=100000		0		
	Mold	Colonies	ASTM D6469*	MODER		NONE		
	Calcium	ppm	ASTM D5185(m)	<0.1		<1		
	Magnesium	ppm	ASTM D5185(m)	<0.1		0		
	Phosphorus	ppm	ASTM D5185(m)	<0.1		<1		
	Zinc	ppm	ASTM D5185(m)	<0.1		<1		
	Specific Gravity	4 4	ASTM D1298*	0.839		0.860		
	Fuel Color	text	Visual Screen*	Yllow		LtRed		
	Visc @ 40°C Pensky-Martens Flash Point	cSt °C	ASTM D7279(m) ASTM D7215*	3.0 52		3		
	Sulfur		ASTM D7215 ASTM D5185(m)	52 10		66.5 7		
	Initial Boiling Point	°C	ASTM D5185(III) ASTM D2887*	165		7 181		
	10% Distill Point	°C	ASTM D2887*	201		218		
	20% Distill Point	°C	ASTM D2887*	216		-		
	30% Distill Point	°C	ASTM D2887*	230		231 244		
	40% Distill Point	°C	ASTM D2887*	243		256		
	50% Distill Point	°C	ASTM D2887*	245		250		
	60% Distill Point	°C	ASTM D2887*	267		281		
	70% Distill Point	°C	ASTM D2887*	280		295		
	80% Distill Point		ASTM D2887*	295		311		
	90% Distill Point	°C	ASTM D2887*	310		333		
	Final Boiling Point	°C	ASTM D2887*	341		375		
	API Gravity	-	ASTM D1298*	37.7		33		
	Cetane Index		ASTM D4737*	<40.0		43		
	Colume mack			10.0				

FUEL CONDITION

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B). The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





Contact/Location: Jeffrey Moore - CUMMIS Page 2 of 2