

CORROSION CONTAMINANTS FUEL CONDITION **NORMAL NORMAL NORMAL**

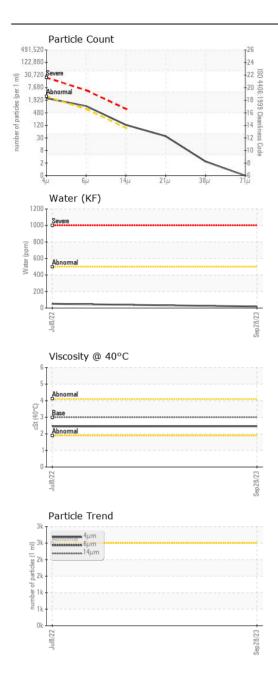
Area [20234317]

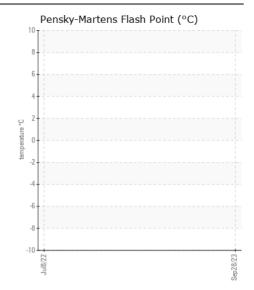
Koehler 4700 River Rd 300KW

Component Diesel Fuel

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (1000 GAL)

NO.2 DIESEL FUEL (ULTRALOW SULPHUR) (10	JUU GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.	Sample Number		Client Info		DC0029833	DC0022277	
	Sample Date		Client Info		28 Sep 2023	08 Jul 2022	
	Machine Age	yrs	Client Info		0	0	
	Sample Status				NORMAL	NORMAL	
CORROSION	Aluminum	ppm	ASTM D5185m	<0.1	0	0	
All metal levels are normal indicating no corrosion in the system.	Nickel	ppm	ASTM D5185m	<0.1	0	<1	
	Lead	ppm	ASTM D5185m	<0.1	0	0	
	Vanadium	ppm	ASTM D5185m	<0.1	0	0	
	Iron	ppm	ASTM D5185m	<0.1	0	0	
CONTAMINANTS	Silicon	ppm	ASTM D5185m	<1.0	0	0	
There is a moderate amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.	Sodium	ppm	ASTM D5185m	<0.1	0	0	
	Potassium	ppm	ASTM D5185m	<0.1	<1	0	
	Water	%	ASTM D6304	<0.05	0.002	0.005	
	ppm Water	ppm	ASTM D6304	<500	18.8	51.6	
	Particles >4µm		ASTM D7647	>2500	2080		
	Particles >6µm		ASTM D7647	>640	883		
	Particles >14μm		ASTM D7647	>80	112		
	Particles >21μm		ASTM D7647	>20	32		
	Particles >38μm		ASTM D7647	>4	2		
	Particles >71μm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/17/14		
	% Gasoline	%	*In-House	<0.50	0.0	0.0	
	% Biodiesel	%	*In-House	<20.0	0.0	0.0	
	Calcium	ppm	ASTM D5185m		2	0	
	Magnesium	ppm	ASTM D5185m		2	0	
	Phosphorus	ppm	ASTM D5185m		<1	0	
	Zinc	ppm	ASTM D5185m	<0.1	0	0	
FUEL CONDITION Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.	ASTM Color	scalar	*ASTM D1500		L4.5		
	Visc @ 40°C	cSt	ASTM D445	3.0	2.46	2.45	
	Sulfur	ppm	ASTM D5185m	10	7	0	
	Sulfur (UVF)	ppm	ASTM D5453		14		







Laboratory Sample No. Unique Number: 10685458

Lab Number : 05973508

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0029833

Received **Tested**

Diagnosed Test Package: DF-5 (Additional Tests: Screen)

: 12 Oct 2023 : 18 Oct 2023 - Doug Bogart

: 09 Oct 2023

JE RICHARDS 4600 HARGROVE DR LANHAM, MD US 20706 Contact: E. NOEL

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T: (240)623-4398

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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