CORROSION CONTAMINANTS FUEL CONDITION NORMAL

ABNORMAL

NORMAL

[71395]
SOURIS
Component
Diesel Fuel

## No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Laboratory test indicate that this fuel is suitable for use and meets all test requirements. The fuel change at the time of sampling has been noted. We advise that you filter this fluid before use. We recommend an early resample to monitor this condition.	Sample Number		Client Info		CU0021726	CU0020678	
	Sample Date		Client Info		12 Jun 2024	03 Feb 2023	
	Machine Age	hrs	Client Info		230	214	
	Sample Status				ABNORMAL	SEVERE	
CORROSION  {not applicable}	Aluminum	ppm	ASTM D5185(m)		0	0	
	Nickel	ppm	ASTM D5185(m)		0	0	
, ,	Lead	ppm	ASTM D5185(m)	<0.1	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	Iron 	ppm	ASTM D5185(m)	<0.1	0	<1	
CONTAMINANTS	Silicon	ppm	ASTM D5185(m)	<1.0	0	0	
There is a moderate amount of particulates (2 to 100 microns in size) present in the fuel. The water content is negligible.	Sodium	ppm	ASTM D5185(m)	<0.1	0	0	
	Potassium	ppm	ASTM D5185(m)	<0.1	0	0	
	Water	%	ASTM D6304*	< 0.05	0.003	0.004	
	ppm Water	ppm	ASTM D6304*	< 500	29	42.1	
	Particles >4μm		ASTM D7647	>2500	2237	257	
	Particles >6µm		ASTM D7647	>640	<b>850</b>	52	
	Particles >14μm		ASTM D7647	>80	<u> </u>	5	
	Particles >21μm		ASTM D7647	>20	<u> </u>	2	
	Particles >38μm		ASTM D7647	>4	6	0	
	Particles >71μm		ASTM D7647	>3	1	0	
	Oil Cleanliness		ISO 4406 (c)	>18/16/13	<u> </u>	15/13/10	
	Calcium	ppm	ASTM D5185(m)	<0.1	0	<1	
	Magnesium	ppm	ASTM D5185(m)	<0.1	0	<1	
	Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	0	
	Zinc	ppm	ASTM D5185(m)	<0.1	2	<1	
FUEL CONDITION Specific Gravity ASTM D1298* 0.839					0.827	0.823	
	Fuel Color	text	Visual Screen*	Yllow	Orang	Yllow	
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.	Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.1	2	
	Pensky-Martens Flash Point	°C	ASTM D7215*	52	55.7	49	
	Sulfur	ppm	ASTM D5185(m)	10	15	<u> </u>	
	Initial Boiling Point	°C	ASTM D2887*	165	166	161	
	10% Distill Point	°C	ASTM D2887*	201	194	191	
	20% Distill Point	°C	ASTM D2887*	216	208	205	
	30% Distill Point	°C	ASTM D2887*	230	221	216	
	40% Distill Point	°C	ASTM D2887*	243	233	227	
	50% Distill Point	°C	ASTM D2887*	255	245	238	
	60% Distill Point	°C	ASTM D2887*	267	258	250	
	70% Distill Point		ASTM D2887*	280	270	261	
	80% Distill Point	°C	ASTM D2887*	295	287	276	
	90% Distill Point			310	312	297	
	Final Boiling Point	°C	ASTM D2887*	341	371	334	

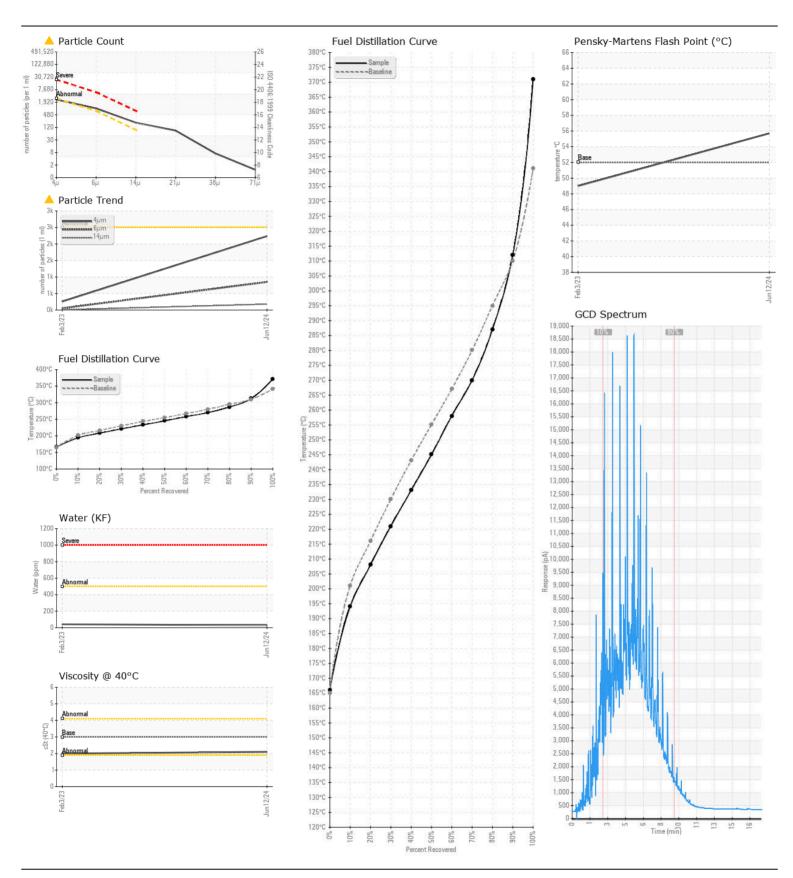
**API** Gravity

Cetane Index

40

ASTM D1298\* 37.7

ASTM D4737\* <40.0





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: CU0021726 : 02643554 Unique Number : 5801093

Received **Tested** Diagnosed

: 21 Jun 2024 : 25 Jun 2024

: 25 Jun 2024 - Kevin Marson

Test Package: FUEL (Additional Tests: CC Flash, PrtCount)

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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