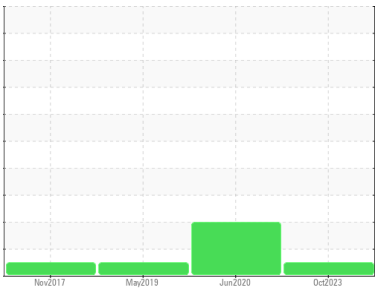
FUEL REPORT

Sample Rating Trend



NORMAL

Area
[98898]
Machine Id
280 SLATER
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation
Laboratory test indicate that this fuel is suitable for use and meets all test requirements. Resample at the next service interval to monitor.

Corrosion
{not applicable}

Contaminants
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

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).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**CU0020744**	CU0016219	CU0014778
Sample Date		Client Info		**21 Oct 2023**	23 Jun 2020	05 May 2019
Machine Age	hrs	Client Info		**250**	0	184
Sample Status				**NORMAL**	ABNORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.821**	0.827	0.820
Fuel Color	text	Visual Screen*	Yllow	**Pink**	Pink	Pink
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2**	2.0	2.1
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**54.8**	61	56

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	250	**12**	20	21

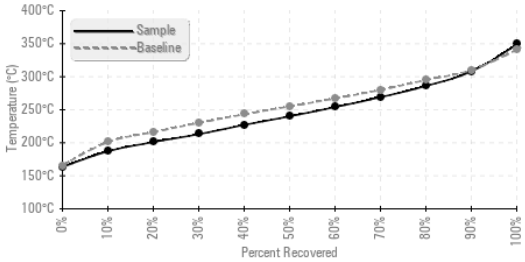
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**163**	168	159
5% Distillation Point	°C	ASTM D2887*		**180**	187	180
10% Distill Point	°C	ASTM D2887*	201	**187**	195	189
15% Distillation Point	°C	ASTM D2887*		**194**	199	196
20% Distill Point	°C	ASTM D2887*	216	**201**	208	203
30% Distill Point	°C	ASTM D2887*	230	**213**	220	216
40% Distill Point	°C	ASTM D2887*	243	**227**	233	228
50% Distill Point	°C	ASTM D2887*	255	**240**	245	242
60% Distill Point	°C	ASTM D2887*	267	**254**	262	255
70% Distill Point	°C	ASTM D2887*	280	**269**	272	270
80% Distill Point	°C	ASTM D2887*	295	**286**	288	286
85% Distillation Point	°C	ASTM D2887*		**297**	301	295
90% Distill Point	°C	ASTM D2887*	310	**308**	309	307
95% Distillation Point	°C	ASTM D2887*		**328**	327	324
Final Boiling Point	°C	ASTM D2887*	341	**349**	346	336
Distillation Residue	%	ASTM D86(e)*	3.0	**---**	---	1.4
Distillation Loss	%	ASTM D86(e)*	3.0	**---**	---	0.5

IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**40**	---	41.1
Cetane Index	ASTM D4737*	<40.0	**50**	49	51.6

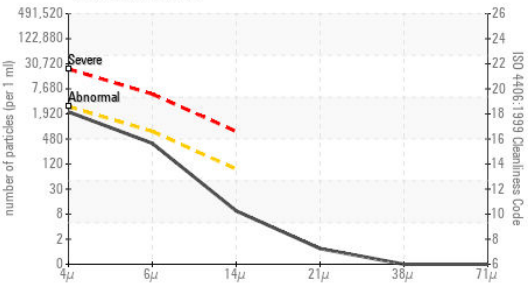
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1
Potassium	ppm	ASTM D5185(m)	<0.1	**<1**	<1	0
Water	%	ASTM D6304*	<0.05	**0.001**	0.002	0.002
ppm Water	ppm	ASTM D6304*	<500	**14.0**	17.3	24.0

FUEL REPORT

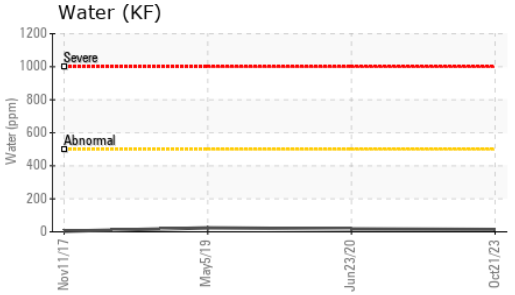
Fuel Distillation Curve



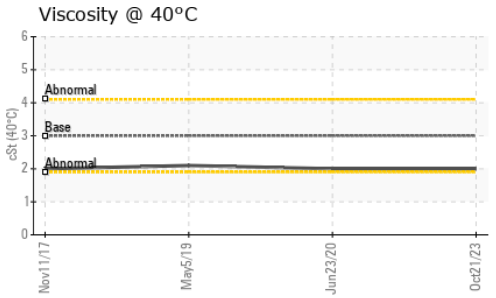
Particle Count



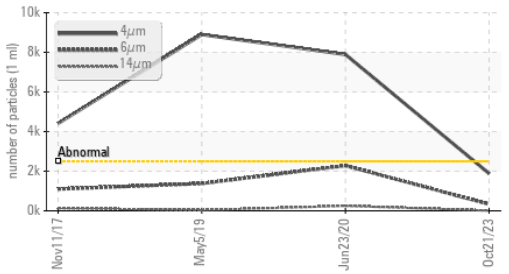
Water (KF)



Viscosity @ 40°C

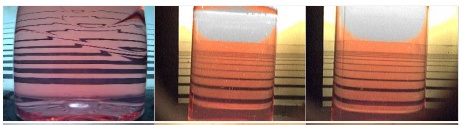


Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	**1882**	▲ 7892	8900
Particles >6µm	ASTM D7647	>640	**332**	▲ 2280	1377
Particles >14µm	ASTM D7647	>80	**8**	▲ 251	29
Particles >21µm	ASTM D7647	>20	**1**	▲ 113	5
Particles >38µm	ASTM D7647	>4	**0**	▲ 7	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	**18/16/10**	▲ 20/18/15	20/18/12

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Lead	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Iron	ppm	ASTM D5185(m)	<0.1	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Phosphorus	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Zinc	ppm	ASTM D5185(m)	<0.1	**0**	0	0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0020744 **Received** : 25 Oct 2023
Lab Number : 02591880 **Diagnosed** : 30 Oct 2023
Unique Number : 5668959 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, 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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