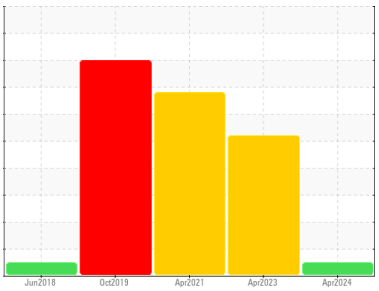
FUEL REPORT

Sample Rating Trend



NORMAL

Area
[103328]
Machine Id
44437257
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.

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 diesel fuel, low sulfur (US EPA/CGSB-3.517-3 type B).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**CU0018669**	CU0019831	CU0017544
Sample Date		Client Info		**13 Apr 2024**	01 Apr 2023	10 Apr 2021
Machine Age	hrs	Client Info		**378**	360	325
Sample Status				**NORMAL**	ABNORMAL	SEVERE

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.830**	0.832	▲ 0.782
Fuel Color	text	Visual Screen*	Yllow	**Red**	Pink	Pink
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.2**	2.2	2.1
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**52.8**	55.7	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	250	**16**	18	32

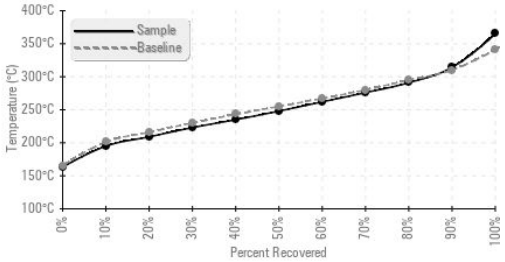
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**163**	166	155
5% Distillation Point	°C	ASTM D2887*		**186**	187	179
10% Distill Point	°C	ASTM D2887*	201	**195**	195	189
15% Distillation Point	°C	ASTM D2887*		**202**	202	195
20% Distill Point	°C	ASTM D2887*	216	**209**	210	202
30% Distill Point	°C	ASTM D2887*	230	**223**	222	216
40% Distill Point	°C	ASTM D2887*	243	**235**	234	229
50% Distill Point	°C	ASTM D2887*	255	**248**	247	243
60% Distill Point	°C	ASTM D2887*	267	**262**	259	258
70% Distill Point	°C	ASTM D2887*	280	**276**	272	272
80% Distill Point	°C	ASTM D2887*	295	**291**	287	288
85% Distillation Point	°C	ASTM D2887*		**303**	298	298
90% Distill Point	°C	ASTM D2887*	310	**314**	308	311
95% Distillation Point	°C	ASTM D2887*		**335**	327	333
Final Boiling Point	°C	ASTM D2887*	341	**365**	348	365
Distillation Residue	%	ASTM D86(e)*	3.0	**---**	---	---
Distillation Loss	%	ASTM D86(e)*	3.0	**---**	---	---

IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**38**	38	---
Cetane Index	ASTM D4737*	<40.0	**49**	48	---

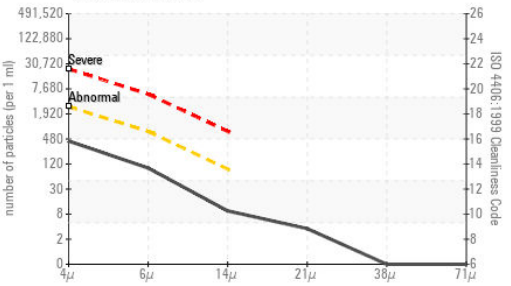
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	**<1**	0	<1
Potassium	ppm	ASTM D5185(m)	<0.1	**0**	0	<1
Water	%	ASTM D6304*	<0.05	**0.007**	▲ 0.081	▲ 0.189
ppm Water	ppm	ASTM D6304*	<500	**79**	▲ 813.8	▲ 1894.5

FUEL REPORT

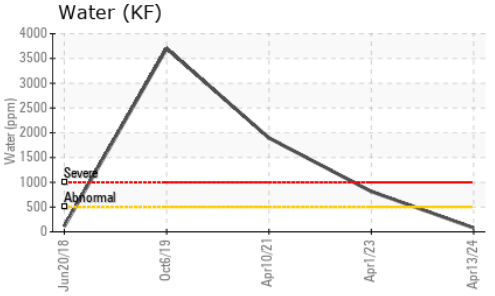
Fuel Distillation Curve



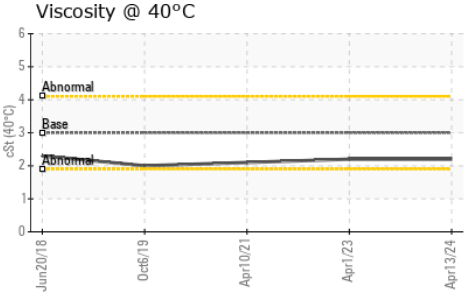
Particle Count



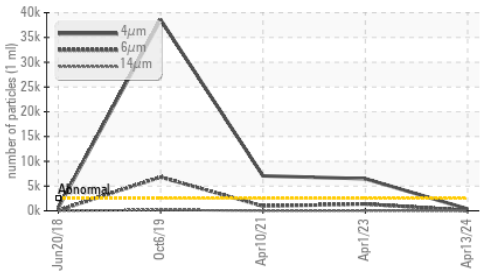
Water (KF)



Viscosity @ 40°C



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	**377**	▲ 6476	▲ 7055
Particles >6µm	ASTM D7647	>640	**85**	▲ 1370	● 946
Particles >14µm	ASTM D7647	>80	**8**	36	27
Particles >21µm	ASTM D7647	>20	**3**	6	5
Particles >38µm	ASTM D7647	>4	**0**	0	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	**16/14/10**	▲ 20/18/12	▲ 20/17/12

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	<1
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	**<1**	1	1
Magnesium	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1
Zinc	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1

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. : CU0018669 **Received** : 16 Apr 2024
Lab Number : 02629400 **Tested** : 18 Apr 2024
Unique Number : 5762532 **Diagnosed** : 18 Apr 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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