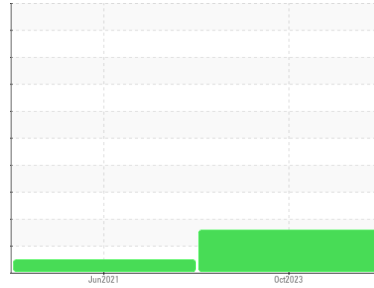




FUEL REPORT

Sample Rating Trend



ISO



Area
[132367]
 Machine Id
WINDSOR WATER

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. 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. The water content is negligible.

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). The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	CU0020252	CU0017397	---
Sample Date	Client Info	22 Oct 2023	04 Jun 2021	---
Machine Age	hrs	0	0	---
Sample Status		ABNORMAL	NORMAL	---

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	ASTM D1298*	0.839	0.828	0.824	---	
Fuel Color	text	Visual Screen*	Yllow	Pink	Pink	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.2	1.9	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	57.8	56.1	---

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185(m)	250	99	12	---

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D2887*	165	167	159	---
5% Distillation Point	°C	ASTM D2887*		187	179	---
10% Distill Point	°C	ASTM D2887*	201	196	190	---
15% Distillation Point	°C	ASTM D2887*		204	197	---
20% Distill Point	°C	ASTM D2887*	216	212	204	---
30% Distill Point	°C	ASTM D2887*	230	226	216	---
40% Distill Point	°C	ASTM D2887*	243	239	229	---
50% Distill Point	°C	ASTM D2887*	255	251	241	---
60% Distill Point	°C	ASTM D2887*	267	264	256	---
70% Distill Point	°C	ASTM D2887*	280	276	270	---
80% Distill Point	°C	ASTM D2887*	295	290	286	---
85% Distillation Point	°C	ASTM D2887*		300	297	---
90% Distill Point	°C	ASTM D2887*	310	309	312	---
95% Distillation Point	°C	ASTM D2887*		327	334	---
Final Boiling Point	°C	ASTM D2887*	341	346	364	---

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	39	40	---
Cetane Index	ASTM D4737*	<40.0	50	50	---

CONTAMINANTS

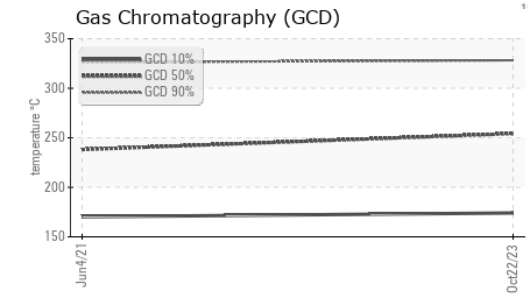
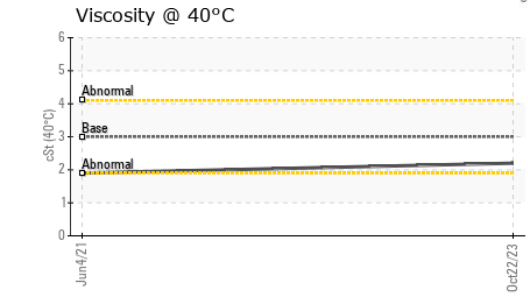
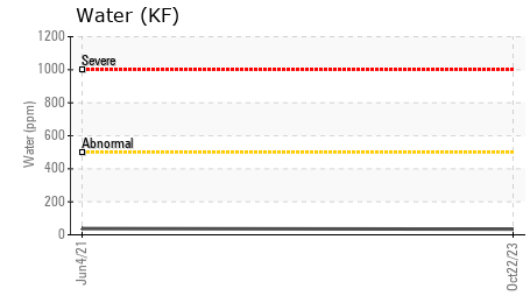
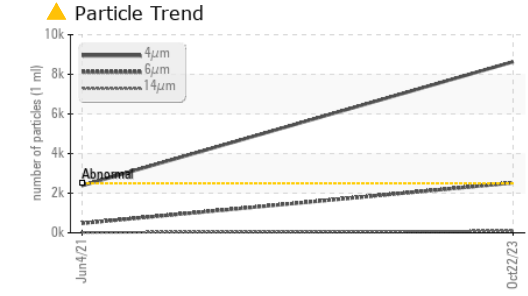
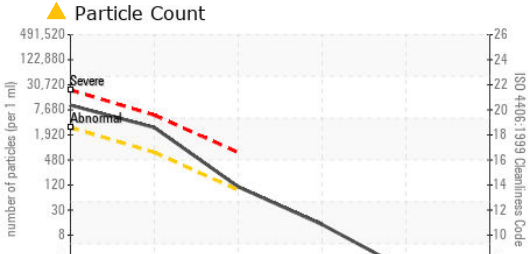
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	<1.0	<1	2	---
Sodium	ppm	ASTM D5185(m)	<0.1	<1	<1	---
Potassium	ppm	ASTM D5185(m)	<0.1	0	0	---
Water	%	ASTM D6304*	<0.05	0.003	0.003	---
ppm Water	ppm	ASTM D6304*	<500	34.4	37.9	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	▲ 8633	2386	---
Particles >6µm	ASTM D7647	>640	▲ 2524	480	---
Particles >14µm	ASTM D7647	>80	▲ 96	18	---
Particles >21µm	ASTM D7647	>20	12	3	---
Particles >38µm	ASTM D7647	>4	1	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/19/14	18/16/11	---



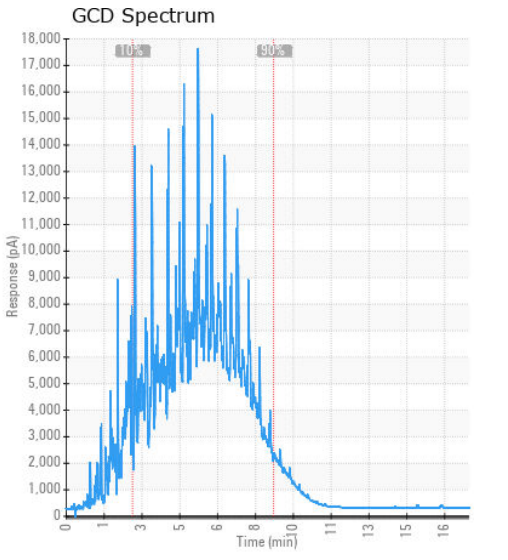
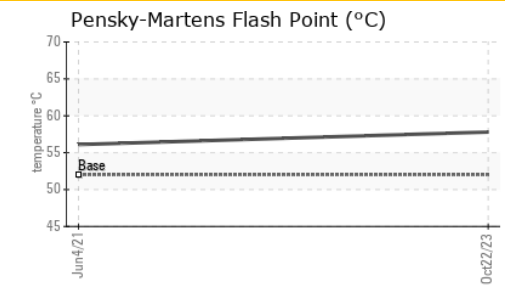
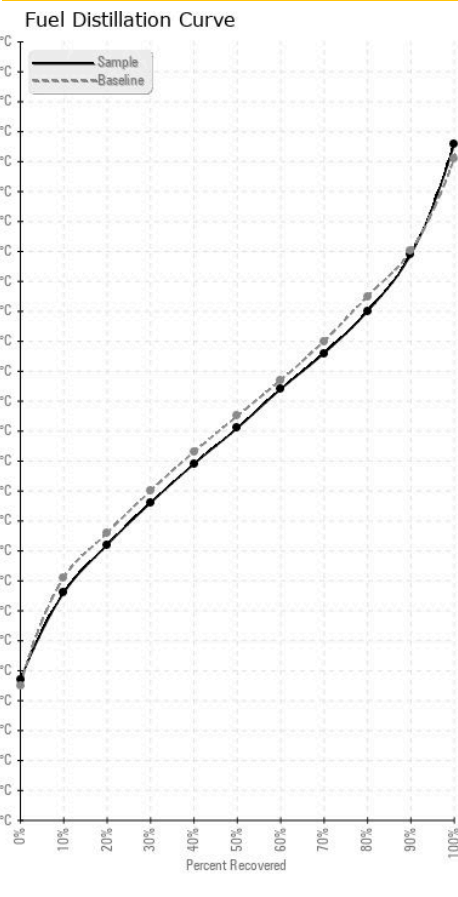
FUEL REPORT



HEAVY METALS	method	limit/base	current	history1	history2
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	<1	---
Calcium	ppm	ASTM D5185(m)	<0.1	0	---
Magnesium	ppm	ASTM D5185(m)	<0.1	<1	---
Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	---
Zinc	ppm	ASTM D5185(m)	<0.1	<1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					no image
Bottom					no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0020252 **Received** : 23 Oct 2023
Lab Number : 02591202 **Diagnosed** : 25 Oct 2023
Unique Number : 5668281 **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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