WEAR CHECK

Sample Rating Trend

May2024

ISO

⚠

Area
[2016157]
Machine Id
UNDERGROUND #3-B
Component
Diesel Fuel
Fluid
DIESEL FUEL No. 2 (--- 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.

⚠ **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		**WC0950437**	---	---
Sample Date	Client Info		**31 May 2024**	---	---
Machine Age	hrs	Client Info	**0**	---	---
Sample Status			**ABNORMAL**	---	---

PHYSICAL PROPERTIES	method	limit/base	current	history1	history2
Specific Gravity	ASTM D1298*	0.850	**0.826**	---	---
Fuel Color	text	Visual Screen*	YELLO	**Pink**	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	4.1	**2.1**	---	---

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

DISTILLATION	method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	174	**161**	---	---
5% Distillation Point	°C	ASTM D2887*		**182**	---	---
10% Distill Point	°C	ASTM D2887*	186	**192**	---	---
15% Distillation Point	°C	ASTM D2887*		**199**	---	---
20% Distill Point	°C	ASTM D2887*	206	**207**	---	---
30% Distill Point	°C	ASTM D2887*	226	**221**	---	---
40% Distill Point	°C	ASTM D2887*	245	**235**	---	---
50% Distill Point	°C	ASTM D2887*	260	**249**	---	---
60% Distill Point	°C	ASTM D2887*	272	**262**	---	---
70% Distill Point	°C	ASTM D2887*	285	**276**	---	---
80% Distill Point	°C	ASTM D2887*	315	**292**	---	---
85% Distillation Point	°C	ASTM D2887*		**303**	---	---
90% Distill Point	°C	ASTM D2887*	360	**314**	---	---
95% Distillation Point	°C	ASTM D2887*		**333**	---	---
Final Boiling Point	°C	ASTM D2887*	>360	**367**	---	---

IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	35.0	**39**	---	---
Cetane Index	ASTM D4737*	<40.0	**50**	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	---	---
Sodium	ppm	ASTM D5185(m)	<0.1	**<1**	---	---
Potassium	ppm	ASTM D5185(m)	<0.1	**0**	---	---
Water	%	ASTM D6304*	<0.05	**0.005**	---	---
ppm Water	ppm	ASTM D6304*	<500	**60**	---	---
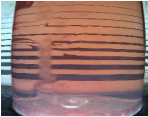
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	⚠ **8462**	---	---
Particles >6µm	ASTM D7647	>640	⚠ **2144**	---	---
Particles >14µm	ASTM D7647	>80	● **86**	---	---
Particles >21µm	ASTM D7647	>20	**20**	---	---
Particles >38µm	ASTM D7647	>4	**2**	---	---
Particles >71µm	ASTM D7647	>3	**0**	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	⚠ **20/18/14**	---	---

FUEL REPORT

Particle Count

Particle Trend

Water (KF)

Viscosity @ 40°C

Gas Chromatography (GCD)
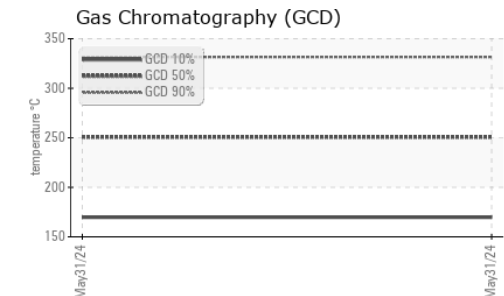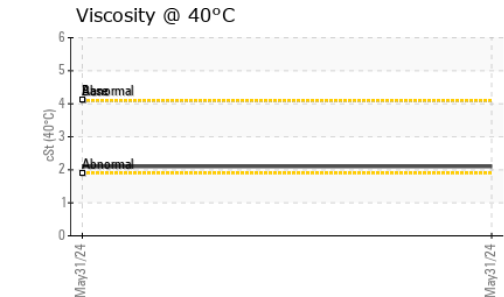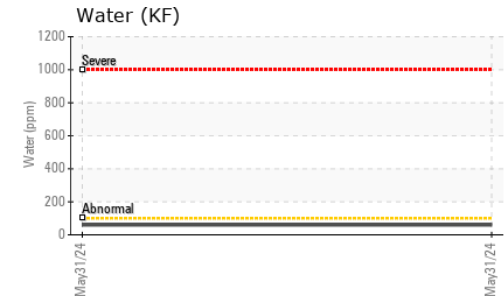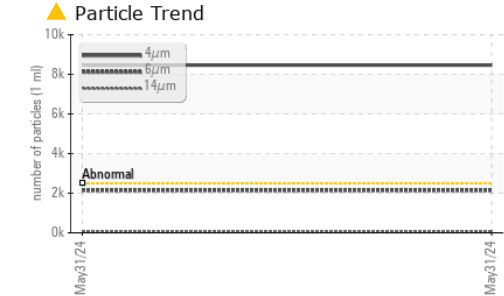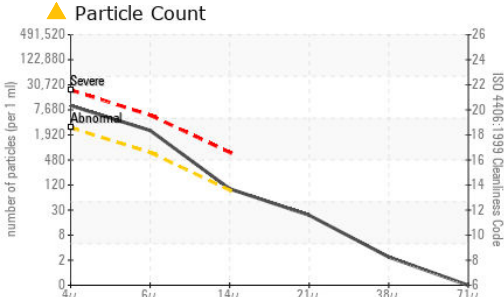
HEAVY METALS

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

SAMPLE IMAGES

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

GRAPHS

Fuel Distillation Curve

Pensky-Martens Flash Point (°C)

GCD Spectrum
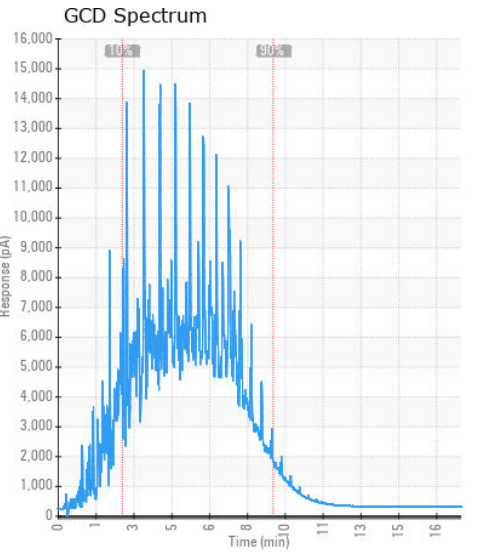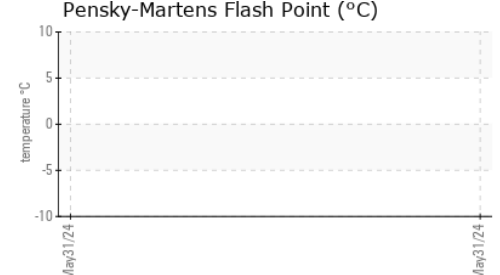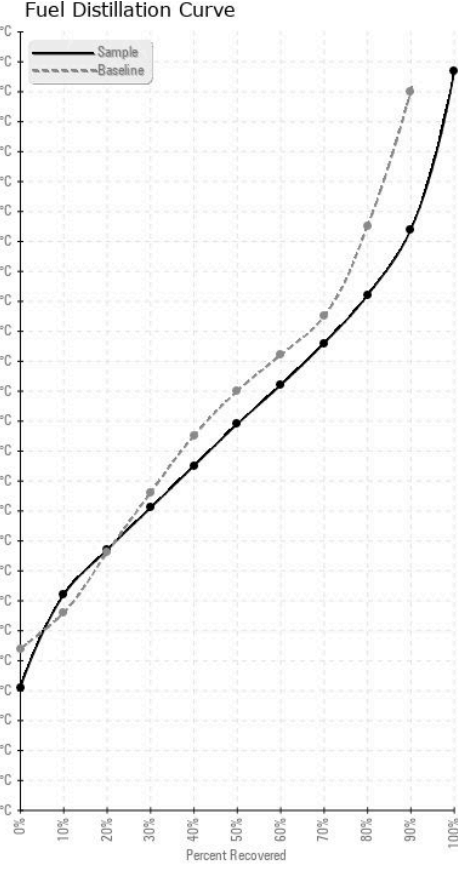
Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0950437   **Received** : 10 Jun 2024
Lab Number : 02640917   **Tested** : 13 Jun 2024
Unique Number : 5798456   **Diagnosed** : 13 Jun 2024 - Kevin Marson
Test Package : FUEL (Additional Tests: PrtCount)

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.

HONEYWELL
1929 OGILVIE RD
GLOUCESTER, ON
CA K1J 0B9
Contact: Alain Guindon
joseph.guindon@cse-cst.gc.ca
T: (613)991-2659
F:

ISO 17025:2017 Accredited Laboratory