



FUEL REPORT

Sample Rating Trend

WATER

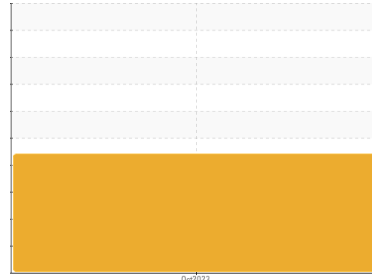


Area
[AU133227]

Machine Id
PERKINS BELL GUYSBOROUGH

Component
Diesel Fuel

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



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you filter this fluid before use. We advise that you follow the water drain-off procedure for this component.

Corrosion

{not applicable}

Contaminants

There is a moderate amount of particulates (2 to 100 microns in size) present in the fuel. Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample.

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	CU0020250	---	---
Sample Date	Client Info	18 Oct 2023	---	---
Machine Age	hrs Client Info	6	---	---
Sample Status		ABNORMAL	---	---

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2	
Specific Gravity	ASTM D1298*	0.839	0.848	---	---
Fuel Color	text Visual Screen*	Yellow	Yellow	---	---
Visc @ 40°C	cSt ASTM D7279(m)	3.0	2.7	---	---
Pensky-Martens Flash Point	°C ASTM D7215*	52	62.2	---	---

SULFUR CONTENT

method	limit/base	current	history1	history2	
Sulfur	ppm ASTM D5185(m)	10	10	---	---

DISTILLATION

method	limit/base	current	history1	history2	
Initial Boiling Point	°C ASTM D2887*	165	173	---	---
5% Distillation Point	°C ASTM D2887*		196	---	---
10% Distill Point	°C ASTM D2887*	201	208	---	---
15% Distillation Point	°C ASTM D2887*		216	---	---
20% Distill Point	°C ASTM D2887*	216	224	---	---
30% Distill Point	°C ASTM D2887*	230	238	---	---
40% Distill Point	°C ASTM D2887*	243	249	---	---
50% Distill Point	°C ASTM D2887*	255	261	---	---
60% Distill Point	°C ASTM D2887*	267	273	---	---
70% Distill Point	°C ASTM D2887*	280	285	---	---
80% Distill Point	°C ASTM D2887*	295	299	---	---
85% Distillation Point	°C ASTM D2887*		309	---	---
90% Distill Point	°C ASTM D2887*	310	320	---	---
95% Distillation Point	°C ASTM D2887*		338	---	---
Final Boiling Point	°C ASTM D2887*	341	362	---	---

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	35	---	---
Cetane Index	ASTM D4737*	<40.0	45	---	---

CONTAMINANTS

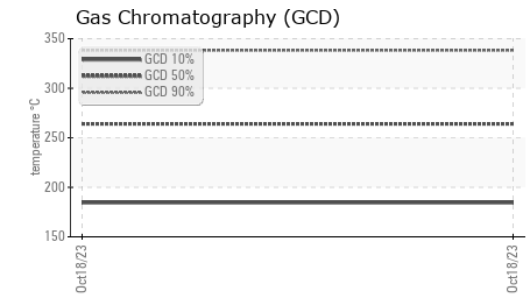
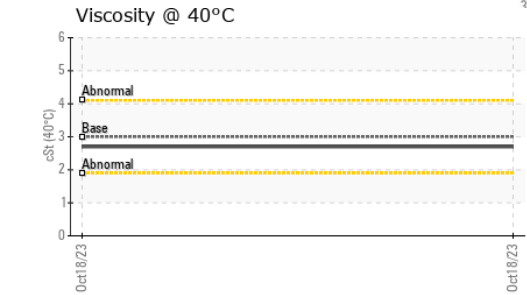
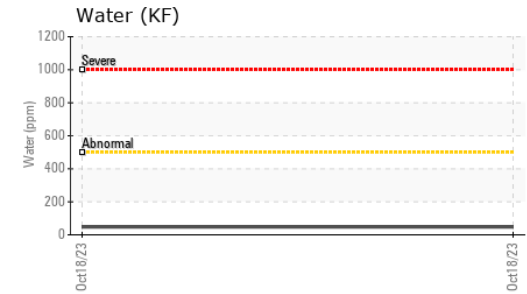
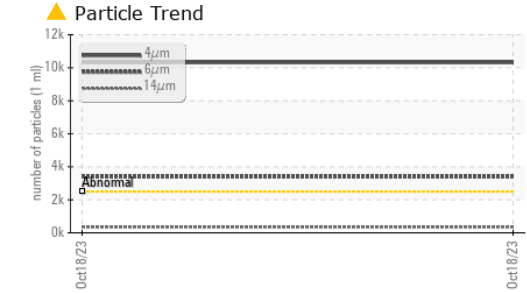
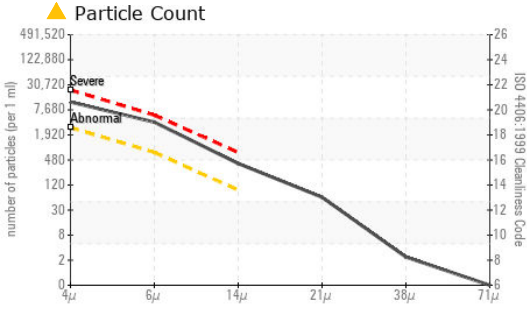
method	limit/base	current	history1	history2	
Silicon	ppm ASTM D5185(m)	<1.0	0	---	---
Sodium	ppm ASTM D5185(m)	<0.1	<1	---	---
Potassium	ppm ASTM D5185(m)	<0.1	0	---	---
Water	% ASTM D6304*	<0.05	0.004	---	---
ppm Water	ppm ASTM D6304*	<500	47.7	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	▲ 10315	---	---
Particles >6µm	ASTM D7647	>640	▲ 3398	---	---
Particles >14µm	ASTM D7647	>80	▲ 347	---	---
Particles >21µm	ASTM D7647	>20	▲ 54	---	---
Particles >38µm	ASTM D7647	>4	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/19/16	---	---



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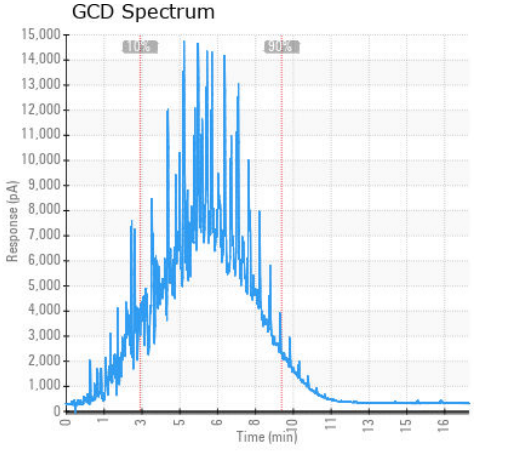
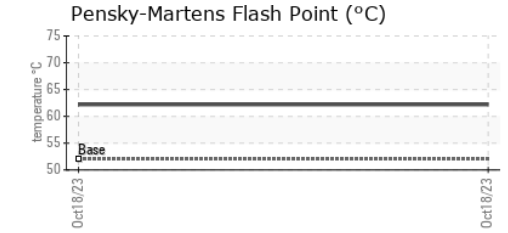
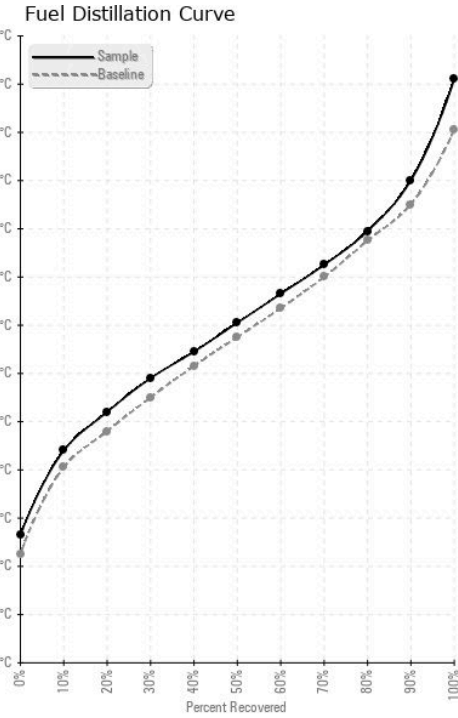


MICROBIAL	method	limit/base	current	history1	history2
Bacteria	CFU/ml ASTM D6469*	>=100000	0	---	---
Yeast	CFU/ml ASTM D6469*	>=100000	0	---	---
Mold	Colonies ASTM D6469*	MODER	NONE	---	---

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

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0020250 **Received** : 23 Oct 2023
Lab Number : 02591203 **Diagnosed** : 30 Oct 2023
Unique Number : 5668282 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, GC-PercFuel, PrtCount)

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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.