



FUEL REPORT

Sample Rating Trend

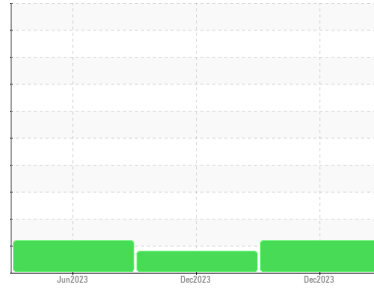
ISO



Machine Id
4100 GORDON BAKER

Component
Diesel Fuel

Fluid
No.2 DIESEL FUEL (ULTRALOW 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 ultra-low-sulfur diesel fuel (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	PP0000904	PP0000878	WC0851952
Sample Date	Client Info	29 Dec 2023	08 Dec 2023	06 Jun 2023
Machine Age	hrs	0	0	0
Sample Status		ABNORMAL	SEVERE	ATTENTION

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	ASTM D1298*	0.839	0.852	0.851	0.837	
Fuel Color	text	Visual Screen*	Yellow	Orang	Orang	Red
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.3	2.5	2.5
Pensky-Martens Flash Point	°C	ASTM D7215*	52	63.2	30.8	56.4

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185(m)	10	13	15	7

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D2887*	165	174	146	168
5% Distillation Point	°C	ASTM D2887*		199	195	196
10% Distill Point	°C	ASTM D2887*	201	209	212	206
15% Distillation Point	°C	ASTM D2887*		217	220	214
20% Distill Point	°C	ASTM D2887*	216	225	229	221
30% Distill Point	°C	ASTM D2887*	230	237	243	236
40% Distill Point	°C	ASTM D2887*	243	248	254	249
50% Distill Point	°C	ASTM D2887*	255	258	264	263
60% Distill Point	°C	ASTM D2887*	267	268	275	277
70% Distill Point	°C	ASTM D2887*	280	278	286	291
80% Distill Point	°C	ASTM D2887*	295	290	298	307
85% Distillation Point	°C	ASTM D2887*		298	307	316
90% Distill Point	°C	ASTM D2887*	310	306	316	325
95% Distillation Point	°C	ASTM D2887*		320	332	336
Final Boiling Point	°C	ASTM D2887*	341	346	361	352

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	34	34	37
Cetane Index	ASTM D4737*	<40.0	43	45	50

CONTAMINANTS

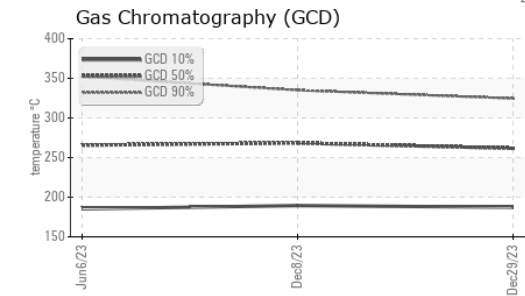
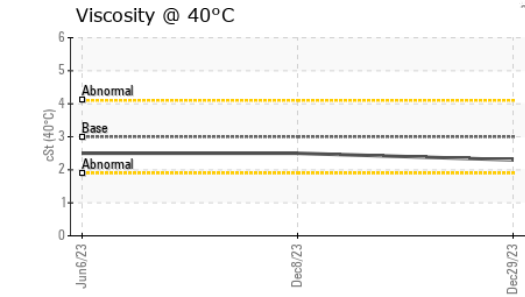
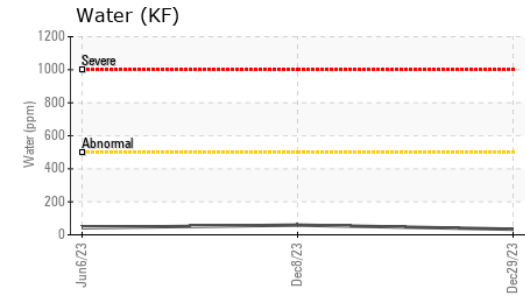
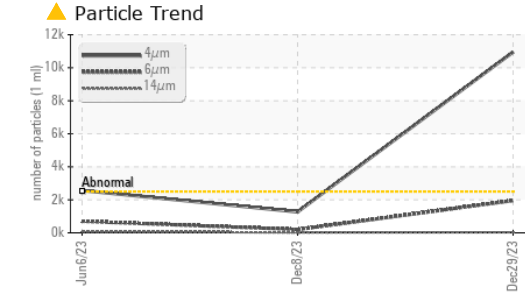
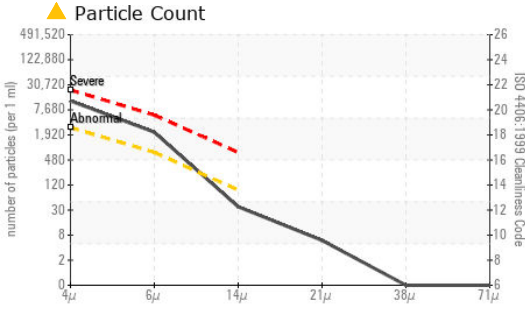
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	<1.0	0	<1	0
Sodium	ppm	ASTM D5185(m)	<0.1	<1	<1	0
Potassium	ppm	ASTM D5185(m)	<0.1	0	0	<1
Water	%	ASTM D6304*	<0.05	0.003	0.005	0.004
ppm Water	ppm	ASTM D6304*	<500	34	59	43.3

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	▲ 10953	1272	▲ 2568
Particles >6µm	ASTM D7647	>640	▲ 1956	199	▲ 700
Particles >14µm	ASTM D7647	>80	32	19	72
Particles >21µm	ASTM D7647	>20	5	5	26
Particles >38µm	ASTM D7647	>4	0	1	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/18/12	17/15/11	▲ 19/17/13



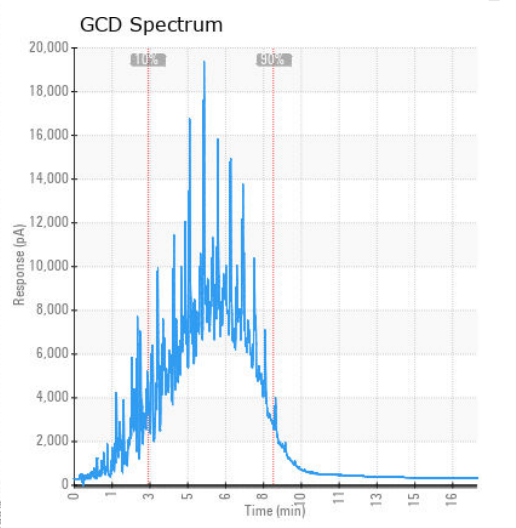
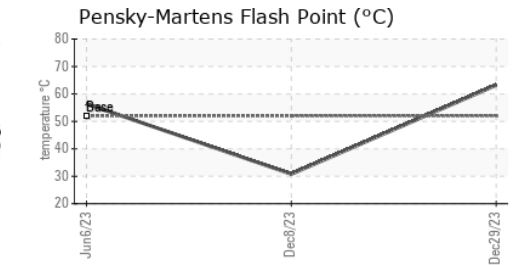
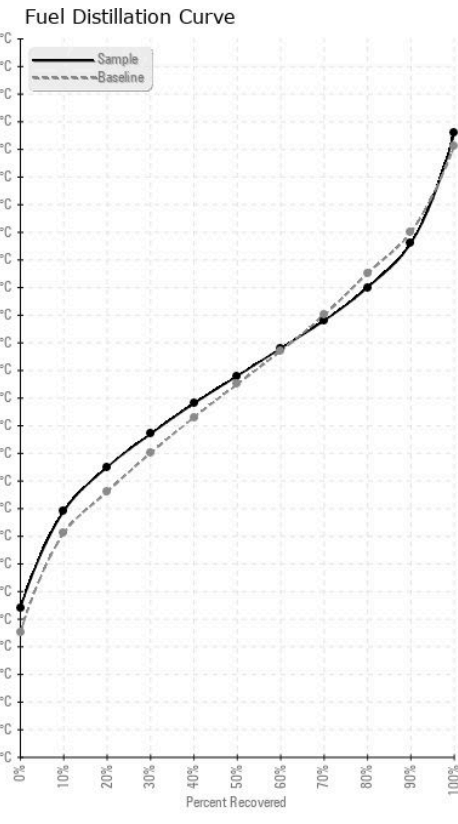
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HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	0	0
Lead	ppm	ASTM D5185(m)	<0.1	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	0	0
Iron	ppm	ASTM D5185(m)	<0.1	<1	<1
Calcium	ppm	ASTM D5185(m)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

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : PP0000904

Lab Number : 02606305

Unique Number : 5707391

Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

Received : 03 Jan 2024

Diagnosed : 04 Jan 2024

Diagnostician : Kevin Marson

BMO Financial Group

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Contact: Blaine Setterfield

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F:

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.