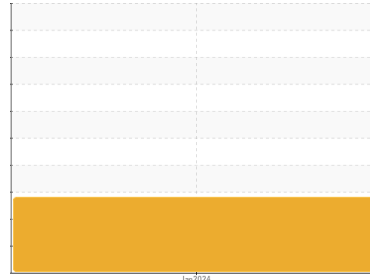




FUEL REPORT

Sample Rating Trend



DIRT



Machine Id
BOBCAT T590 BOBCAT T590

Component
Diesel Fuel

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

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Corrosion

{not applicable}

Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. The water content is negligible. NOTE: The silicon level is much higher than typical and it is believed to be from either process contamination or a supplemental additive, advise investigate.

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			WC0899620	---	---
Sample Date	Client Info			08 Jan 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	0.821	---	---
Fuel Color	text	Visual Screen*	Yellow	Yellow	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.3	---	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	54.4	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	7	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	164	---	---
5% Distillation Point	°C	ASTM D2887*		186	---	---
10% Distill Point	°C	ASTM D2887*	201	195	---	---
15% Distillation Point	°C	ASTM D2887*		202	---	---
20% Distill Point	°C	ASTM D2887*	216	209	---	---
30% Distill Point	°C	ASTM D2887*	230	223	---	---
40% Distill Point	°C	ASTM D2887*	243	237	---	---
50% Distill Point	°C	ASTM D2887*	255	251	---	---
60% Distill Point	°C	ASTM D2887*	267	265	---	---
70% Distill Point	°C	ASTM D2887*	280	279	---	---
80% Distill Point	°C	ASTM D2887*	295	294	---	---
85% Distillation Point	°C	ASTM D2887*		304	---	---
90% Distill Point	°C	ASTM D2887*	310	315	---	---
95% Distillation Point	°C	ASTM D2887*		336	---	---
Final Boiling Point	°C	ASTM D2887*	341	371	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	40	---	---
Cetane Index		ASTM D4737*	<40.0	53	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	▲ 189	---	---
Sodium	ppm	ASTM D5185(m)	<0.1	<1	---	---
Potassium	ppm	ASTM D5185(m)	<0.1	2	---	---
Water	%	ASTM D6304*	<0.05	0.00	---	---
ppm Water	ppm	ASTM D6304*	<500	0	---	---

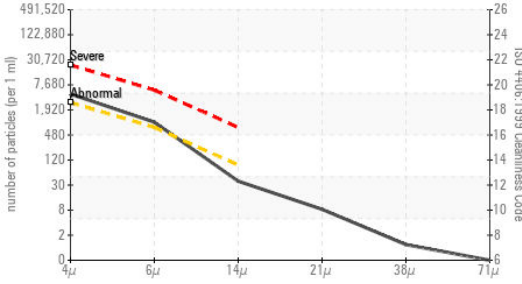
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ 4048	---	---
Particles >6µm		ASTM D7647	>640	▲ 854	---	---
Particles >14µm		ASTM D7647	>80	33	---	---
Particles >21µm		ASTM D7647	>20	7	---	---
Particles >38µm		ASTM D7647	>4	1	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 19/17/12	---	---

FUEL REPORT

▲ Silicon (ppm)



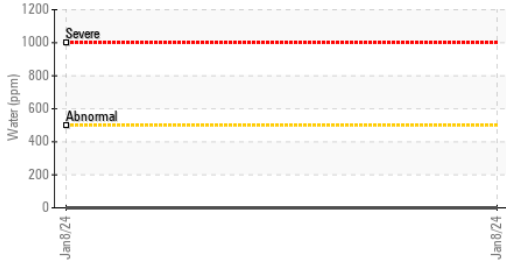
▲ Particle Count



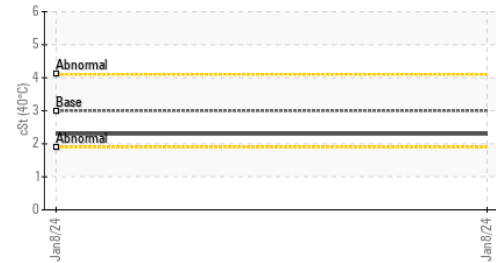
▲ Particle Trend



Water (KF)



Viscosity @ 40°C

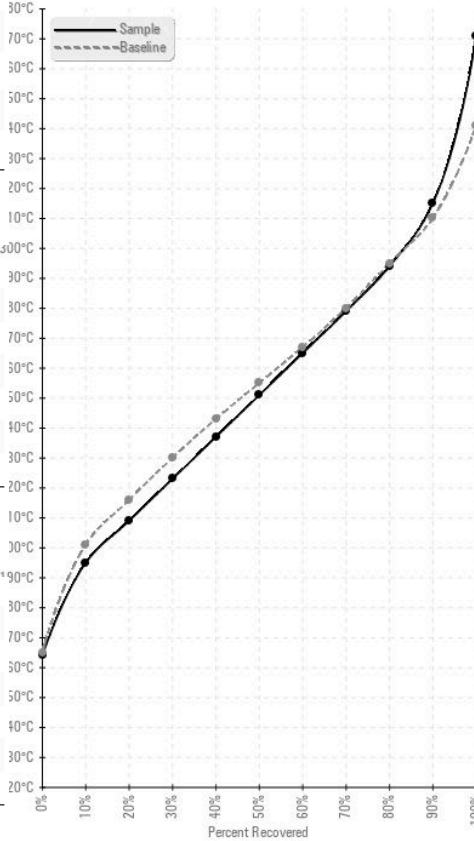


HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	---	---
Nickel	ppm	ASTM D5185(m)	<0.1	0	---	---
Lead	ppm	ASTM D5185(m)	<0.1	0	---	---
Vanadium	ppm	ASTM D5185(m)	<0.1	0	---	---
Iron	ppm	ASTM D5185(m)	<0.1	0	---	---
Calcium	ppm	ASTM D5185(m)	<0.1	0	---	---
Magnesium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

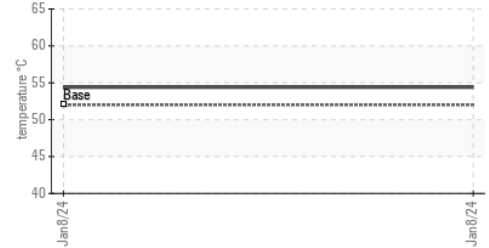
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

GRAPHS

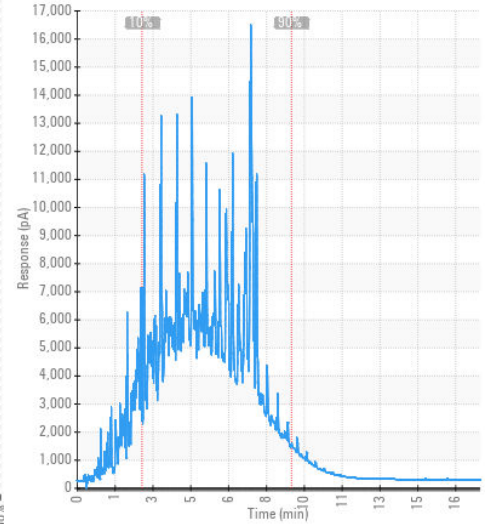
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899620 **Received** : 22 Jan 2024
Lab Number : 02610491 **Diagnosed** : 26 Jan 2024
Unique Number : 5711577 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount, SpecGravity)

ABC Mecanique
 710 rue de Vernon, Unit 8
 Gatineau, QC
 CA J9J 3K5
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 pieces@abcmecanique.com
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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.