

Area
[154043]
 Machine Id
DOOSAN 79656982
 Component
Diesel Fuel
 Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you filter this fluid before use. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022897	---	---
Sample Date		Client Info		26 Feb 2024	---	---
Machine Age	hrs	Client Info		854	---	---
Sample Status				SEVERE	---	---

CORROSION

{not applicable}

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	---	---

CONTAMINANTS

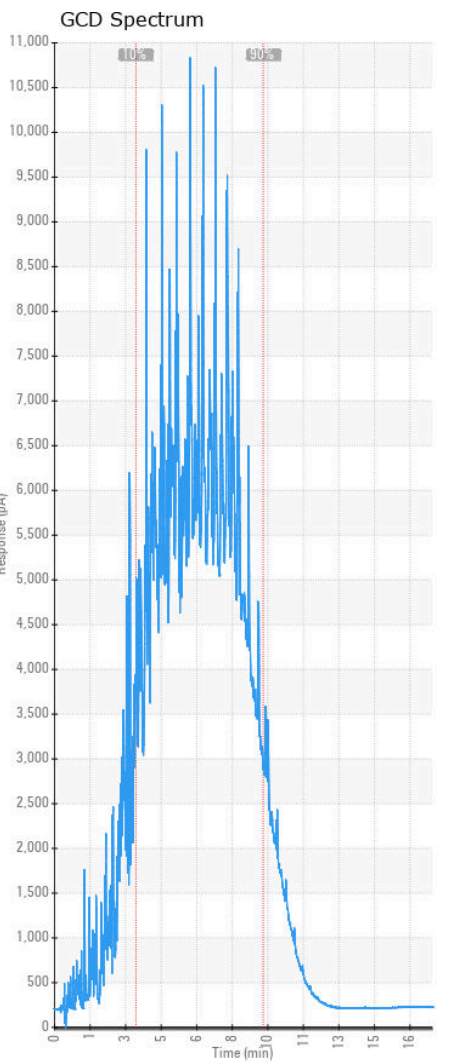
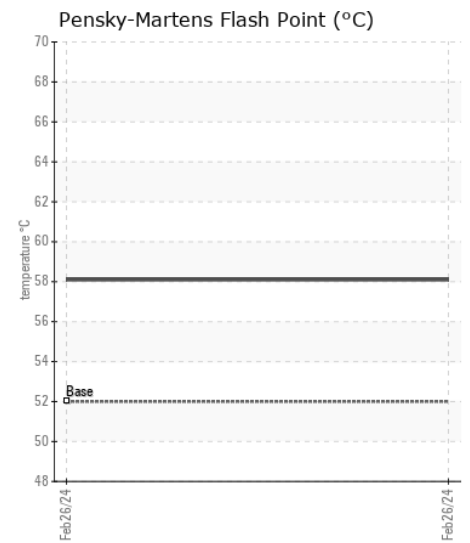
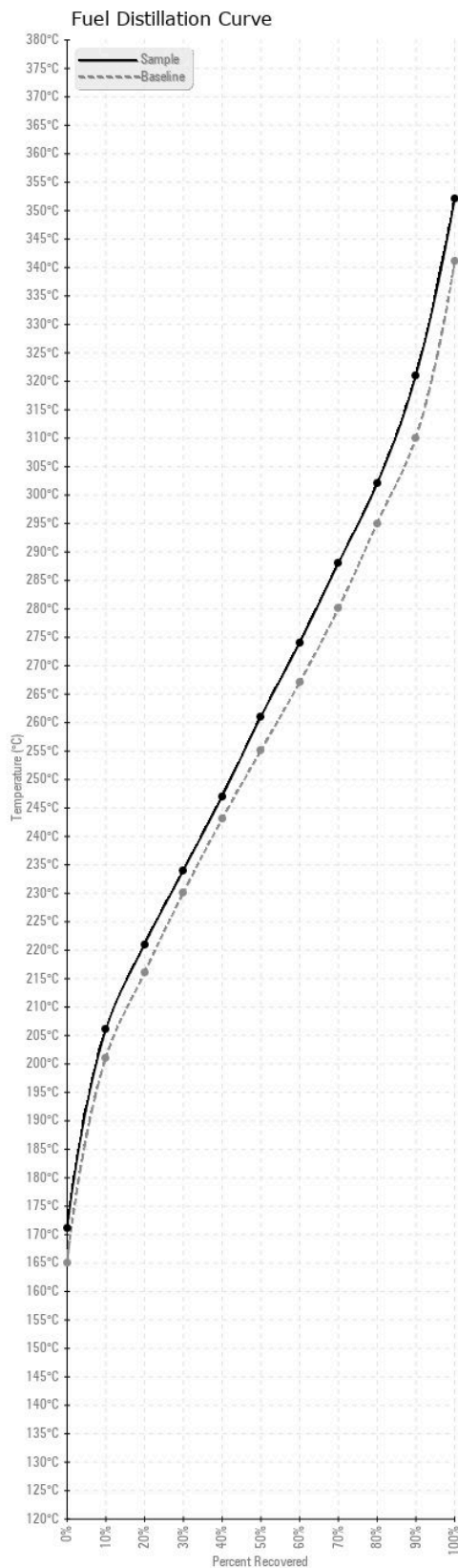
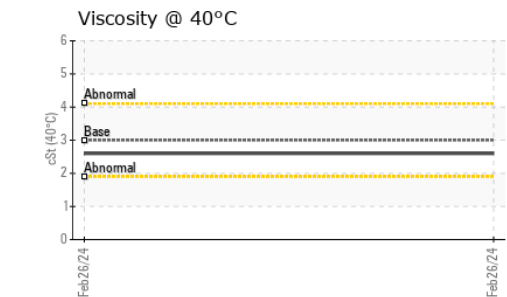
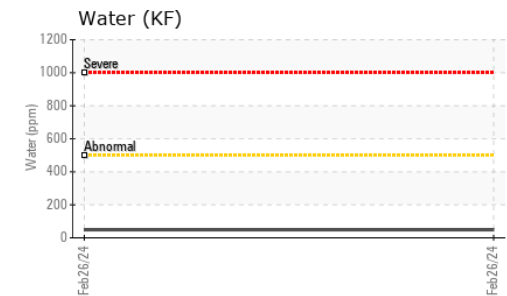
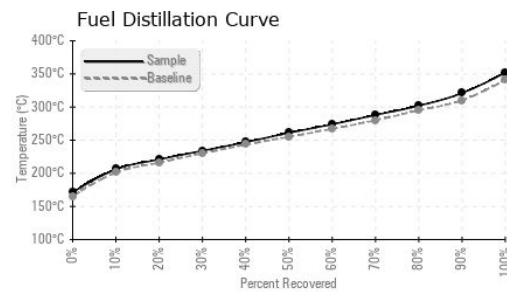
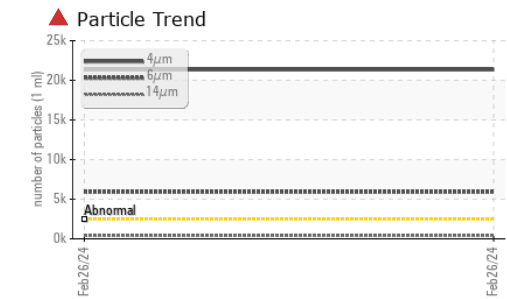
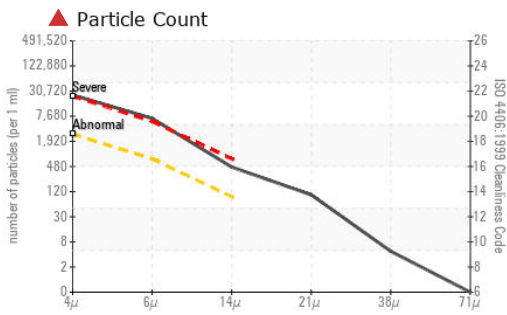
There is a high amount of particulates (2 to 100 microns in size) present in the fuel. The water content is negligible.

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	49	---	---
Particles >4µm		ASTM D7647	>2500	▲ 21337	---	---
Particles >6µm		ASTM D7647	>640	▲ 5918	---	---
Particles >14µm		ASTM D7647	>80	▲ 409	---	---
Particles >21µm		ASTM D7647	>20	▲ 89	---	---
Particles >38µm		ASTM D7647	>4	4	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 22/20/16	---	---
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	---	---

FUEL CONDITION

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

Specific Gravity		ASTM D1298*	0.839	0.843	---	---
Fuel Color	text	Visual Screen*	Yellow	Red	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.6	---	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	58.1	---	---
Sulfur	ppm	ASTM D5185(m)	10	8	---	---
Initial Boiling Point	°C	ASTM D2887*	165	171	---	---
10% Distill Point	°C	ASTM D2887*	201	206	---	---
20% Distill Point	°C	ASTM D2887*	216	221	---	---
30% Distill Point	°C	ASTM D2887*	230	234	---	---
40% Distill Point	°C	ASTM D2887*	243	247	---	---
50% Distill Point	°C	ASTM D2887*	255	261	---	---
60% Distill Point	°C	ASTM D2887*	267	274	---	---
70% Distill Point	°C	ASTM D2887*	280	288	---	---
80% Distill Point	°C	ASTM D2887*	295	302	---	---
90% Distill Point	°C	ASTM D2887*	310	321	---	---
Final Boiling Point	°C	ASTM D2887*	341	352	---	---
API Gravity		ASTM D1298*	37.7	36	---	---
Cetane Index		ASTM D4737*	<40.0	47	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022897
Lab Number : 02618807
Unique Number : 5735917
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount)

Received : 28 Feb 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Kevin Marson

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 F: (905)795-0035

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.