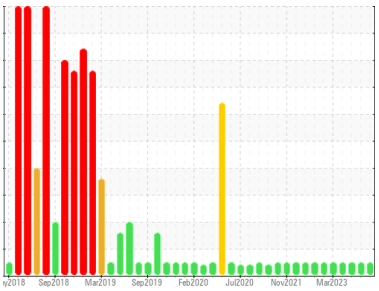
FUEL REPORT

Sample Rating Trend



NORMAL

Machine Id
TDT411202D DIESEL DAY TANK FIRE WATER PUMP D
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. Resample at the next service interval to monitor.

Corrosion
{not applicable}

Contaminants
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

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		**PP13920747**	PP13899605	PP13878485
Sample Date		Client Info		**07 Nov 2023**	06 Aug 2023	10 Jul 2023
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**NORMAL**	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.841**	0.841	0.842
Fuel Color	text	Visual Screen*	Yllow	**Yllow**	Yllow	Yllow
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.7**	2.8	2.7
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**64.4**	64.8	65.1

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	**8**	8	8

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**175**	176	176
5% Distillation Point	°C	ASTM D2887*		**197**	199	200
10% Distill Point	°C	ASTM D2887*	201	**208**	211	211
15% Distillation Point	°C	ASTM D2887*		**217**	219	219
20% Distill Point	°C	ASTM D2887*	216	**226**	227	227
30% Distill Point	°C	ASTM D2887*	230	**241**	242	241
40% Distill Point	°C	ASTM D2887*	243	**254**	254	254
50% Distill Point	°C	ASTM D2887*	255	**267**	267	266
60% Distill Point	°C	ASTM D2887*	267	**281**	280	279
70% Distill Point	°C	ASTM D2887*	280	**294**	293	292
80% Distill Point	°C	ASTM D2887*	295	**310**	308	307
85% Distillation Point	°C	ASTM D2887*		**321**	318	317
90% Distill Point	°C	ASTM D2887*	310	**333**	329	327
95% Distillation Point	°C	ASTM D2887*		**352**	346	345
Final Boiling Point	°C	ASTM D2887*	341	**378**	368	364

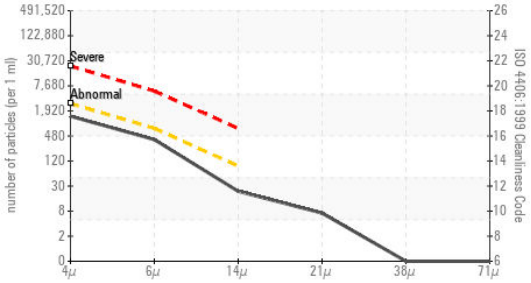
IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**36**	36	36
Cetane Index	ASTM D4737*	<40.0	**49**	50	49

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Potassium	ppm	ASTM D5185(m)	<0.1	**<1**	<1	<1
Water	%	ASTM D6304*	<0.05	**0.003**	0.002	0.003
ppm Water	ppm	ASTM D6304*	<500	**33**	23.8	27.7

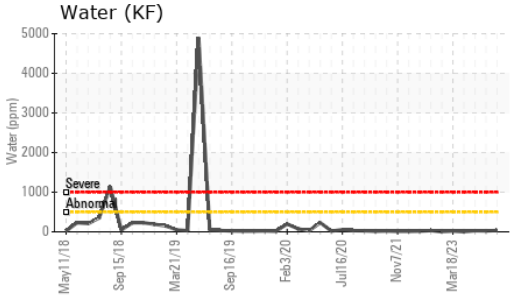
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	**1256**	798	730
Particles >6µm	ASTM D7647	>640	**346**	187	203
Particles >14µm	ASTM D7647	>80	**20**	10	21
Particles >21µm	ASTM D7647	>20	**6**	3	6
Particles >38µm	ASTM D7647	>4	**0**	0	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	**17/16/11**	17/15/10	17/15/12

FUEL REPORT

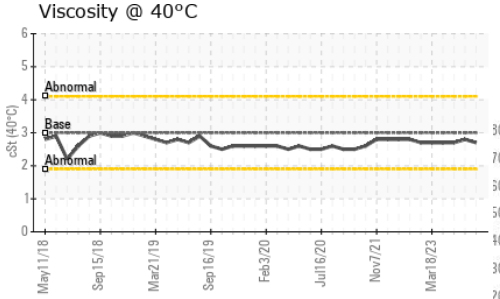
Particle Count



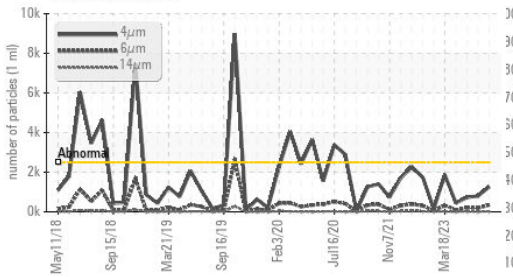
Water (KF)



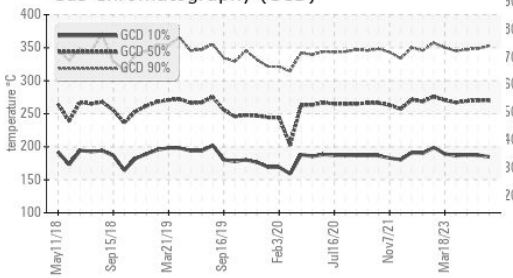
Viscosity @ 40°C



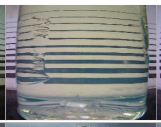
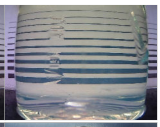
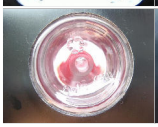
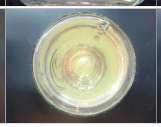
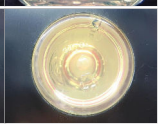
Particle Trend



Gas Chromatography (GCD)

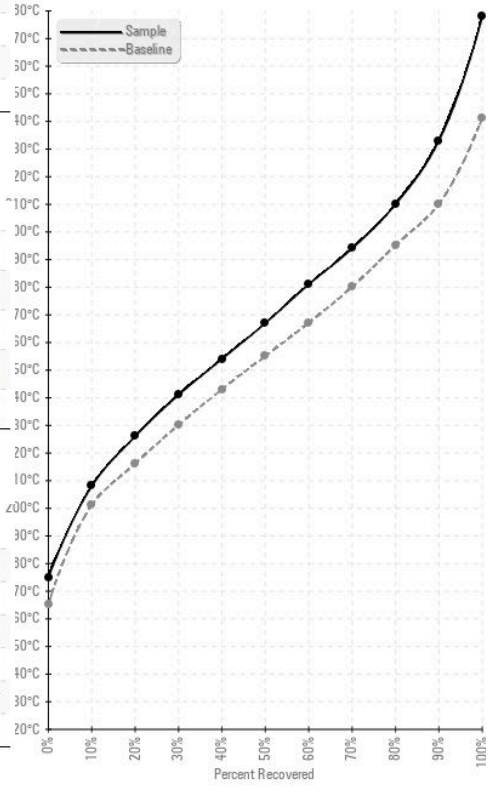


HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Lead	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Iron	ppm	ASTM D5185(m)	<0.1	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	**0**	0	0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

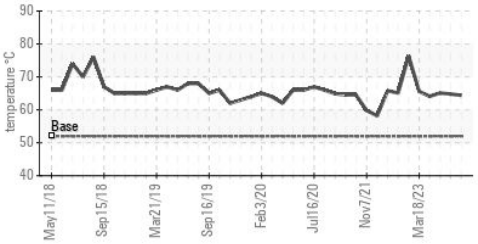
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

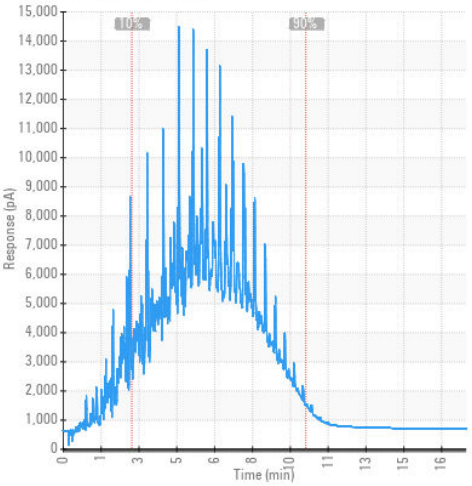
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP13920747 **Received** : 11 Dec 2023
Lab Number : 02602454 **Diagnosed** : 13 Dec 2023
Unique Number : 5695539 **Diagnostician** : Kevin Marson
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, 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.

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