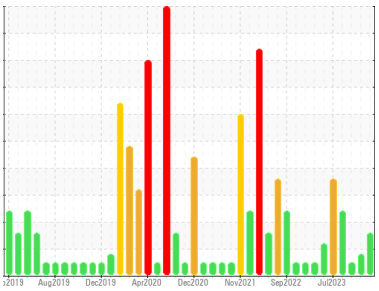
FUEL REPORT

Sample Rating Trend



WATER

Machine Id

TDT837241 DIESEL DAY TANK SPG4160A

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. We recommend an early resample to monitor this condition.

Contaminants

Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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		**PP13964294**	PP13941989	PP13920747
Sample Date		Client Info		**15 Mar 2024**	07 Jan 2024	07 Nov 2023
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**ABNORMAL**	ATTENTION	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.843**	0.841	0.841
Fuel Color	text	Visual Screen*	Yllow	**Yllow**	Yllow	Yllow
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.7**	2.9	2.7
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**62.9**	63.3	64.4

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	**174**	174	175
5% Distillation Point	°C	ASTM D2887*		**198**	197	197
10% Distill Point	°C	ASTM D2887*	201	**209**	209	208
15% Distillation Point	°C	ASTM D2887*		**218**	217	216
20% Distill Point	°C	ASTM D2887*	216	**226**	226	225
30% Distill Point	°C	ASTM D2887*	230	**241**	241	240
40% Distill Point	°C	ASTM D2887*	243	**254**	254	253
50% Distill Point	°C	ASTM D2887*	255	**267**	267	266
60% Distill Point	°C	ASTM D2887*	267	**280**	280	280
70% Distill Point	°C	ASTM D2887*	280	**294**	294	294
80% Distill Point	°C	ASTM D2887*	295	**309**	310	310
85% Distillation Point	°C	ASTM D2887*		**320**	321	322
90% Distill Point	°C	ASTM D2887*	310	**331**	332	333
95% Distillation Point	°C	ASTM D2887*		**350**	350	353
Final Boiling Point	°C	ASTM D2887*	341	**377**	377	384

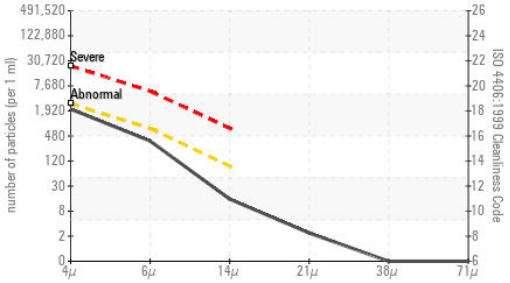
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	**36**	36	36
Cetane Index		ASTM D4737*	<40.0	**49**	49	49

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	0	0
Sodium	ppm	ASTM D5185(m)	<0.1	**<1**	<1	0
Potassium	ppm	ASTM D5185(m)	<0.1	**0**	0	<1
Water	%	ASTM D6304*	<0.05	**0.012**	0.008	0.021
ppm Water	ppm	ASTM D6304*	<500	**124**	85	215

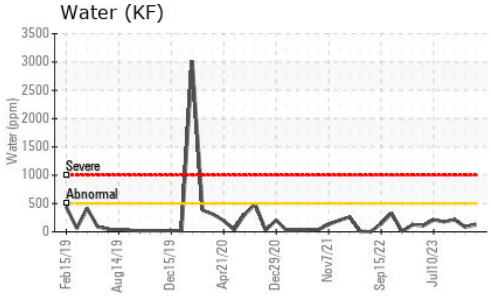
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**1861**	2898	964
Particles >6µm		ASTM D7647	>640	**319**	376	220
Particles >14µm		ASTM D7647	>80	**13**	8	18
Particles >21µm		ASTM D7647	>20	**2**	2	7
Particles >38µm		ASTM D7647	>4	**0**	0	2
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**18/15/11**	19/16/10	17/15/11

FUEL REPORT

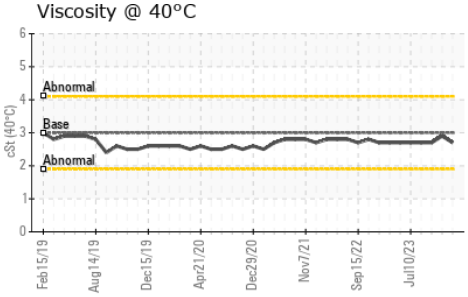
Particle Count



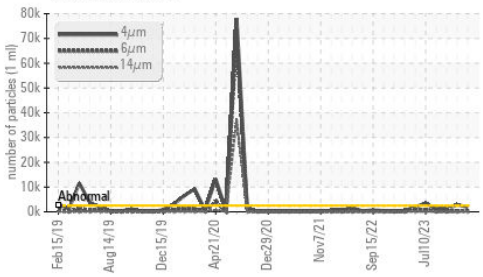
Water (KF)



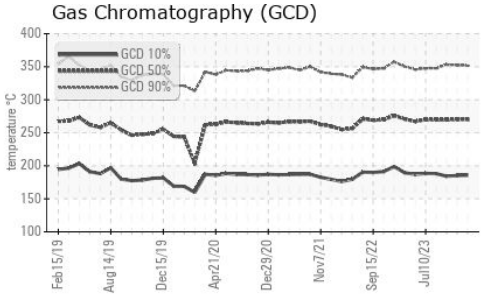
Viscosity @ 40°C



Particle Trend



Gas Chromatography (GCD)



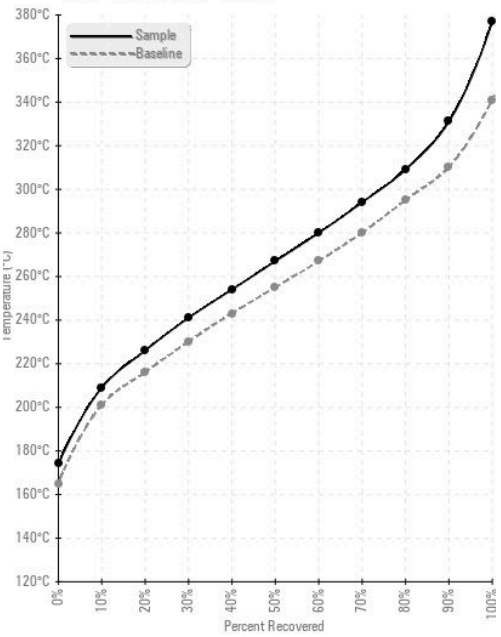
MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	ASTM D6469*	>=100000	**0**	0	0
Yeast	CFU/ml	ASTM D6469*	>=100000	**0**	0	0
Mold	Colonies	ASTM D6469*	MODER	**NONE**	NONE	NONE

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	**0**	0	<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**	<1	<1
Zinc	ppm	ASTM D5185(m)	<0.1	**0**	0	0

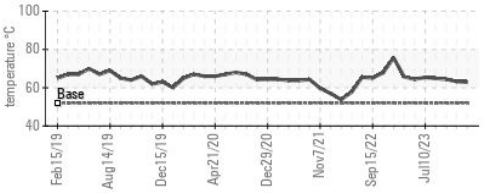
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

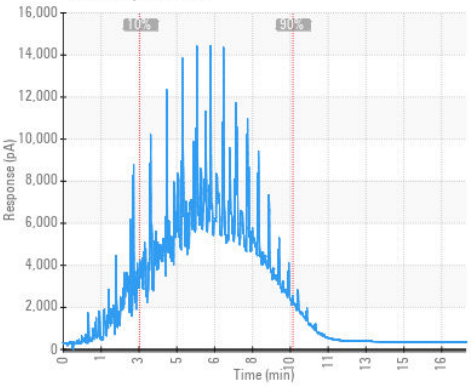
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP13964294 **Received** : 01 Apr 2024
Lab Number : 02625839 **Tested** : 09 Apr 2024
Unique Number : 5758971 **Diagnosed** : 09 Apr 2024 - Kevin Marson
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, 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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