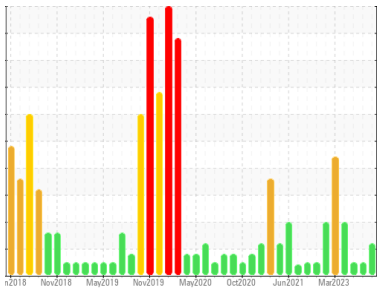
FUEL REPORT

Sample Rating Trend



ISO

Machine Id
Crane - Mid Ship Fuel Sample (S/N Sample Tag: MA-04002)
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. Resample at the next service interval to monitor.

▲ Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample. 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).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC**	PC	PC
Sample Date		Client Info		**24 Jan 2024**	06 Sep 2023	15 Aug 2023
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**ATTENTION**	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.850**	0.844	0.843
Fuel Color	text	Visual Screen*	Yllow	**Yllow**	Yllow	Yllow
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.8**	3.1	2.8
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**64.1**	62.2	61.9

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	**14**	14	15

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**176**	173	172
5% Distillation Point	°C	ASTM D2887*		**201**	197	196
10% Distill Point	°C	ASTM D2887*	201	**213**	209	209
15% Distillation Point	°C	ASTM D2887*		**221**	218	218
20% Distill Point	°C	ASTM D2887*	216	**229**	227	227
30% Distill Point	°C	ASTM D2887*	230	**243**	243	242
40% Distill Point	°C	ASTM D2887*	243	**254**	256	255
50% Distill Point	°C	ASTM D2887*	255	**266**	268	268
60% Distill Point	°C	ASTM D2887*	267	**278**	282	281
70% Distill Point	°C	ASTM D2887*	280	**290**	295	295
80% Distill Point	°C	ASTM D2887*	295	**304**	311	310
85% Distillation Point	°C	ASTM D2887*		**314**	321	321
90% Distill Point	°C	ASTM D2887*	310	**325**	332	331
95% Distillation Point	°C	ASTM D2887*		**343**	350	350
Final Boiling Point	°C	ASTM D2887*	341	**360**	371	365

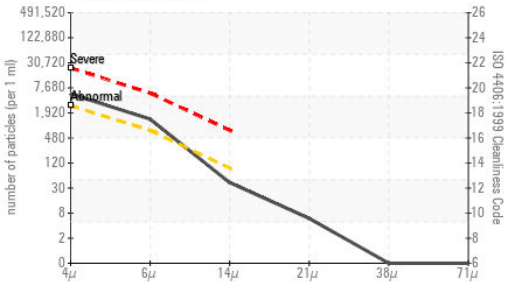
IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**34**	36	36
Cetane Index	ASTM D4737*	<40.0	**46**	49	49

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**	0	0
Potassium	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1
Water	%	ASTM D6304*	<0.05	**0.013**	0.004	0.003
ppm Water	ppm	ASTM D6304*	<500	**135**	46.5	35.7

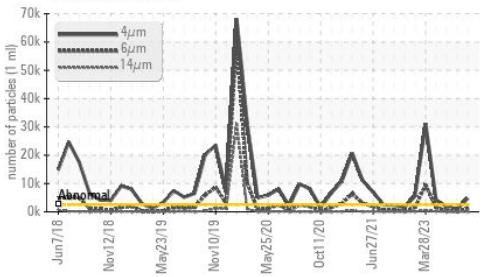
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ **4766**	851	1774
Particles >6µm	ASTM D7647	>640	▲ **1192**	163	401
Particles >14µm	ASTM D7647	>80	**36**	4	20
Particles >21µm	ASTM D7647	>20	**5**	1	7
Particles >38µm	ASTM D7647	>4	**0**	0	2
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ **19/17/12**	17/15/9	18/16/11

FUEL REPORT

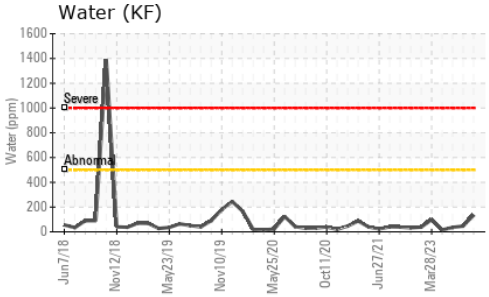
Particle Count



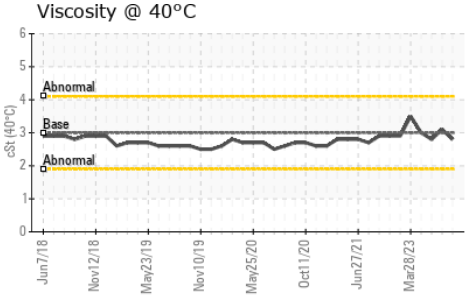
Particle Trend



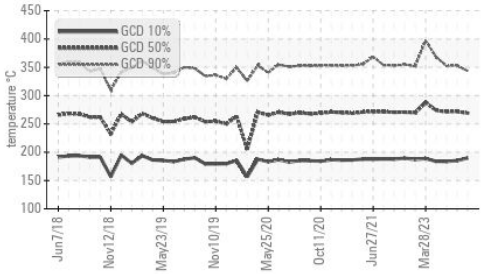
Water (KF)



Viscosity @ 40°C



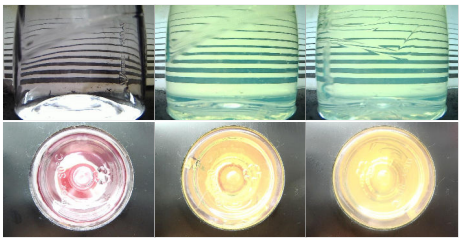
Gas Chromatography (GCD)



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

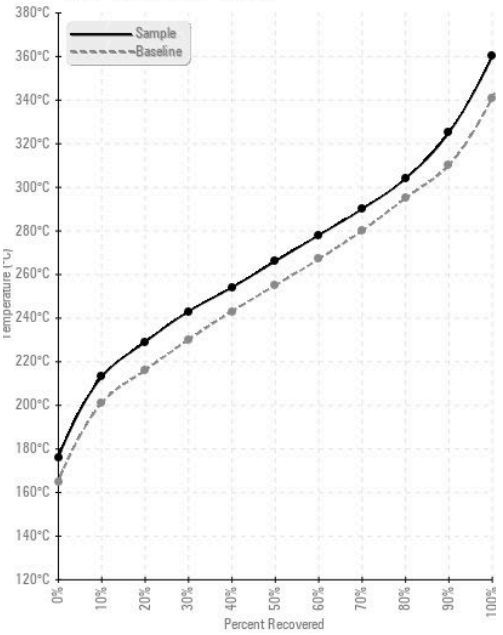
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Lead	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	**0**	0	0
Iron	ppm	ASTM D5185(m)	<0.1	**0**	<1	<1
Calcium	ppm	ASTM D5185(m)	<0.1	**0**	0	0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

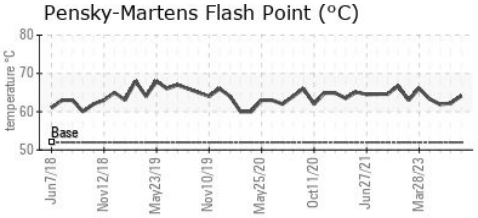


GRAPHS

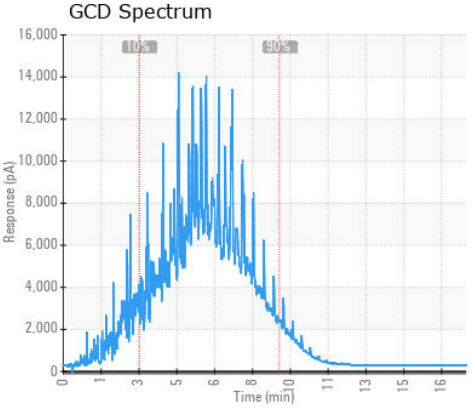
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC
Lab Number : 02611323
Unique Number : 5720418
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, GC-PercFuel, PrtCount)
Received : 25 Jan 2024
Tested : 08 Feb 2024
Diagnosed : 08 Feb 2024 - Kevin Marson

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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