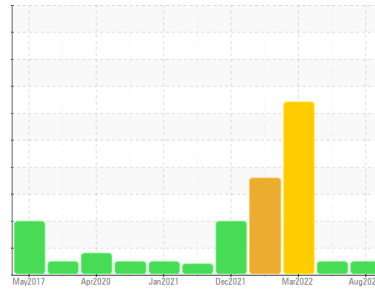




FUEL REPORT

Sample Rating Trend



NORMAL



Area
[13898420]
 Machine Id
Z-7101B MPG B
 Component
Diesel Fuel
 Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- LTR)

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

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 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	PP	PP	PP
Sample Date	Client Info	06 Aug 2023	07 Jun 2023	30 Mar 2022
Machine Age	hrs	0	1930	0
Sample Status		NORMAL	NORMAL	ABNORMAL

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2		
Specific Gravity	ASTM D1298*	0.839	0.838	0.837	0.843	
Fuel Color	text	Visual Screen*	Yellow	Yellow	Yellow	
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.9	2.7	2.7
Pensky-Martens Flash Point	°C	ASTM D7215*	52	64.6	63.8	54.3
Cloud Point	°C	ASTM D2500*		-16	-15	-19

SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185(m)	10	7	7	8

DISTILLATION

method	limit/base	current	history1	history2		
Initial Boiling Point	°C	ASTM D2887*	165	175	175	154
5% Distillation Point	°C	ASTM D2887*		196	195	183
10% Distill Point	°C	ASTM D2887*	201	207	207	194
15% Distillation Point	°C	ASTM D2887*		216	216	203
20% Distill Point	°C	ASTM D2887*	216	225	224	212
30% Distill Point	°C	ASTM D2887*	230	240	240	226
40% Distill Point	°C	ASTM D2887*	243	254	253	239
50% Distill Point	°C	ASTM D2887*	255	267	267	251
60% Distill Point	°C	ASTM D2887*	267	281	281	265
70% Distill Point	°C	ASTM D2887*	280	295	295	280
80% Distill Point	°C	ASTM D2887*	295	310	310	295
85% Distillation Point	°C	ASTM D2887*		321	321	305
90% Distill Point	°C	ASTM D2887*	310	332	333	317
95% Distillation Point	°C	ASTM D2887*		349	351	336
Final Boiling Point	°C	ASTM D2887*	341	365	375	362

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	37	37	36
Cetane Index	ASTM D4737*	<40.0	51	51	45

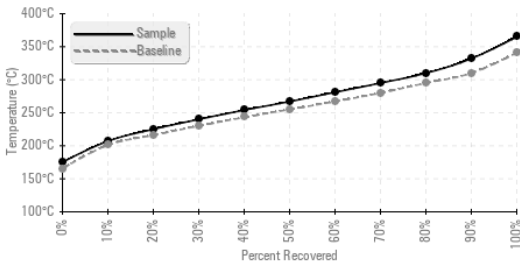
CONTAMINANTS

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	<1
Potassium	ppm	ASTM D5185(m)	<0.1	<1	<1	0
Water	%	ASTM D6304*	<0.05	0.003	0.003	0.005
ppm Water	ppm	ASTM D6304*	<500	27.6	37.5	53.9
Sediment	%	ASTM D1796(e)*	<0.05	---	0.006	---

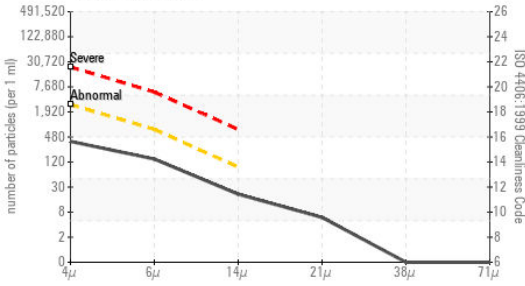


FUEL REPORT

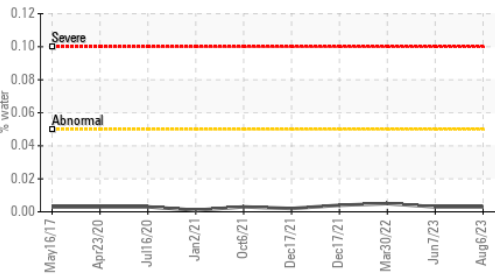
Fuel Distillation Curve



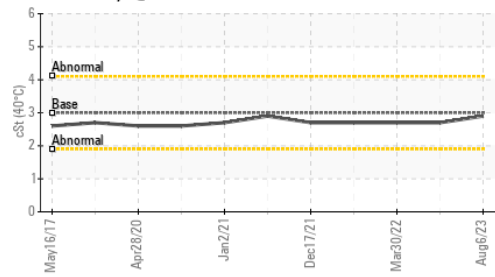
Particle Count



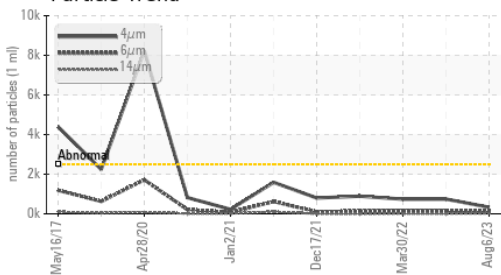
Water



Viscosity @ 40°C



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	330	743	739
Particles >6µm	ASTM D7647	>640	125	172	169
Particles >14µm	ASTM D7647	>80	18	10	14
Particles >21µm	ASTM D7647	>20	5	2	3
Particles >38µm	ASTM D7647	>4	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/14/11	17/15/10	17/15/11

MICROBIAL	method	limit/base	current	history1	history2
Bacteria	CFU/ml ASTM D6469*	>=100000	0	0	▲ 100000
Yeast	CFU/ml ASTM D6469*	>=100000	0	0	▲ 100000
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	<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	0	0	0
Zinc	ppm ASTM D5185(m)	<0.1	0	0	0

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HIBERNIA MGMT & DEVELOPMENT CO. LTD
Sample No. : PP
Lab Number : 02577285
Unique Number : 5630345
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, CldPt, GC-PercFuel, PRTCOUNT, Sediment)
Received : 21 Aug 2023
Diagnosed : 28 Aug 2023
Diagnostician : Kevin Marson
 ST. JOHNS, NL
 CA A1C 6K3
 Contact: Sam Nash
 samantha.m.nash@exxonmobil.com
 T:
 F: (709)722-3766

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.