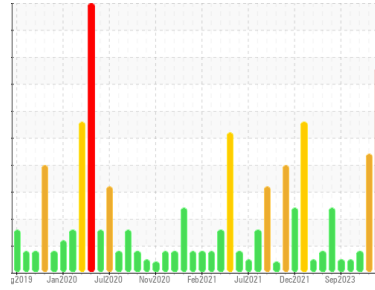


FUEL REPORT

Sample Rating Trend



CONTAMINANT



Area
Cranes [450255636]
Machine Id
Crane - Fwd Fuel Sample (S/N Sample Tag: MA-04003)
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. Check with fluid supplier for the availability of biocides to control the microorganisms in the system. We advise that you filter this fluid before use. We advise that you follow the water drain-off procedure for this component. We advise that you inspect the fuel tank for signs of corrosion and remove any heavy microbiological contamination manually. We recommend you service the filters on this component. Recommend resampling in 10 days. We recommend an early resample to monitor this condition.

▲ Contaminants

There is a moderate amount of silt (particulates < 14 microns in size) present in the fuel. Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample. Small amount of bacteria present. Elevated yeast counts. No reportable mold present.

Fuel Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0076303	PC	WC
Sample Date	Client Info			24 Jan 2024	24 Jan 2024	16 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Sample Status				ABNORMAL	SEVERE	ATTENTION

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity	ASTM D1298*	0.839		0.853	0.854	0.856
Fuel Color	text	Visual Screen*	Yellow	Yellow	Yellow	Yellow
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.9	2.9	2.7
Pensky-Martens Flash Point	°C	ASTM D7215*	52	64.3	65.7	66.1

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	250	8	10	8

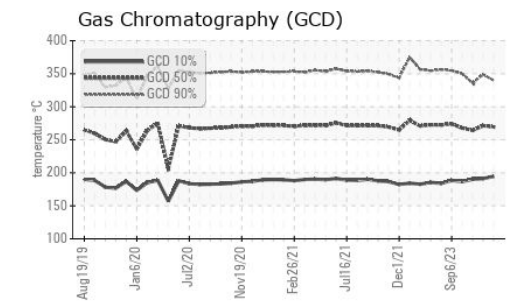
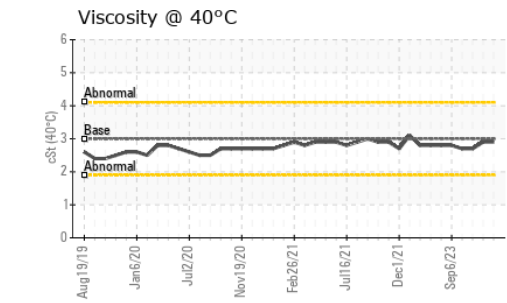
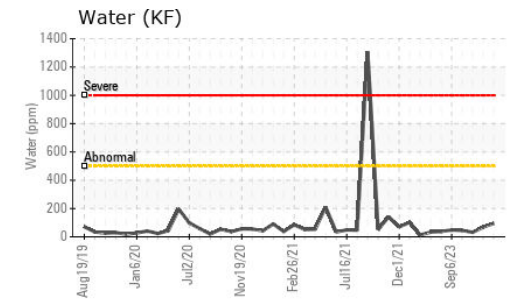
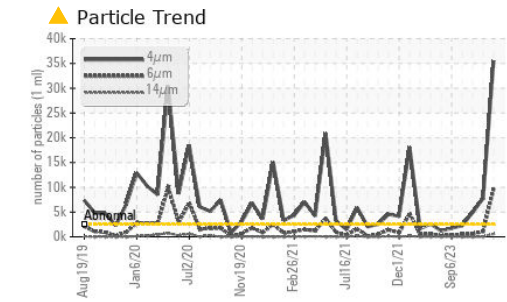
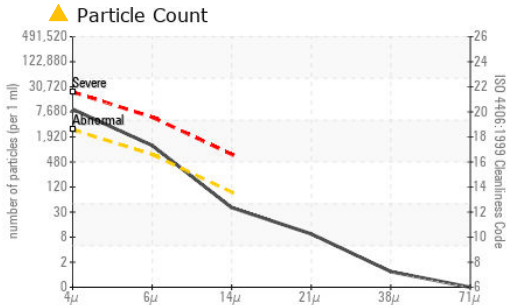
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	176	177	178
5% Distillation Point	°C	ASTM D2887*		202	205	202
10% Distill Point	°C	ASTM D2887*	201	214	216	212
15% Distillation Point	°C	ASTM D2887*		222	224	220
20% Distill Point	°C	ASTM D2887*	216	231	232	228
30% Distill Point	°C	ASTM D2887*	230	245	245	240
40% Distill Point	°C	ASTM D2887*	243	256	255	251
50% Distill Point	°C	ASTM D2887*	255	268	266	261
60% Distill Point	°C	ASTM D2887*	267	280	277	272
70% Distill Point	°C	ASTM D2887*	280	293	289	283
80% Distill Point	°C	ASTM D2887*	295	307	302	296
85% Distillation Point	°C	ASTM D2887*		318	311	307
90% Distill Point	°C	ASTM D2887*	310	329	321	318
95% Distillation Point	°C	ASTM D2887*		347	338	338
Final Boiling Point	°C	ASTM D2887*	341	377	353	368

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7		34	34	33
Cetane Index	ASTM D4737*	<40.0		45	45	43

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	<1
Potassium	ppm	ASTM D5185(m)	<0.1	0	0	0
Water	%	ASTM D6304*	<0.05	0.009	0.006	0.003
ppm Water	ppm	ASTM D6304*	<500	95	68	32

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500		▲ 7747	● 35534	▲ 4921
Particles >6µm	ASTM D7647	>640		▲ 1050	● 9592	▲ 624
Particles >14µm	ASTM D7647	>80		34	▲ 553	9
Particles >21µm	ASTM D7647	>20		8	▲ 154	2
Particles >38µm	ASTM D7647	>4		1	4	0
Particles >71µm	ASTM D7647	>3		0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13		▲ 20/17/12	● 22/20/16	▲ 19/16/10

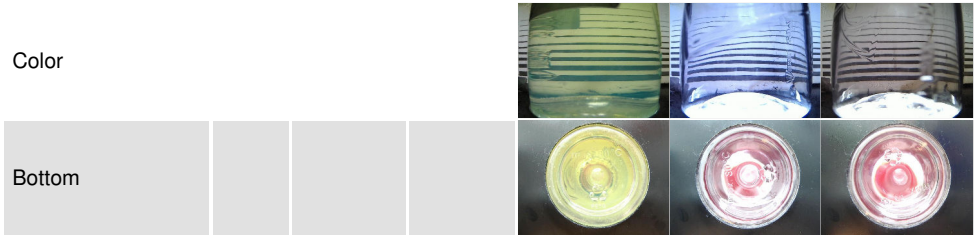
FUEL REPORT



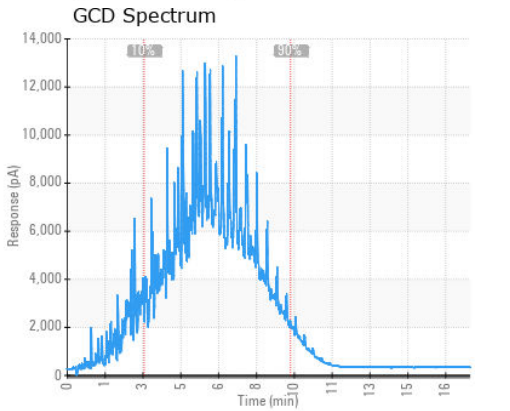
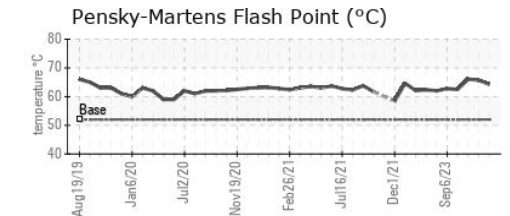
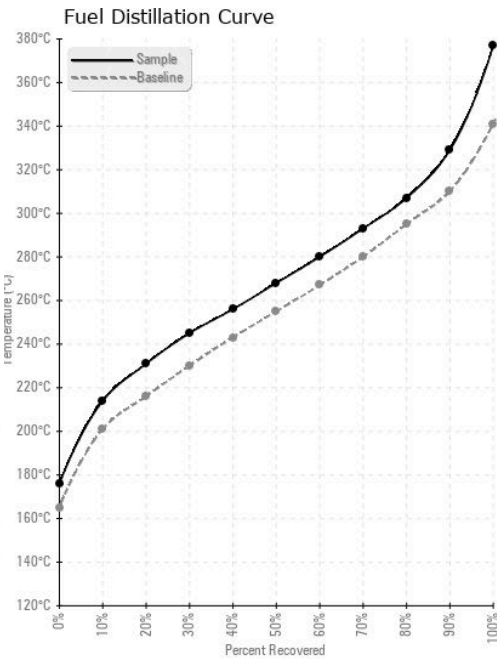
MICROBIAL	method	limit/base	current	history1	history2
Bacteria	CFU/ml ASTM D6469*	>=100000	1000	---	---
Yeast	CFU/ml ASTM D6469*	>=100000	▲ 1000000	---	---
Mold	Colonies ASTM D6469*	MODER	▲ LIGHT	---	---

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

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076303 **Received** : 16 Feb 2024
Lab Number : **02616485** **Tested** : 21 Feb 2024
Unique Number : 5733595 **Diagnosed** : 21 Feb 2024 - Kevin Marson
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, GC-PercFuel, PrtCount)

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshhynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

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.