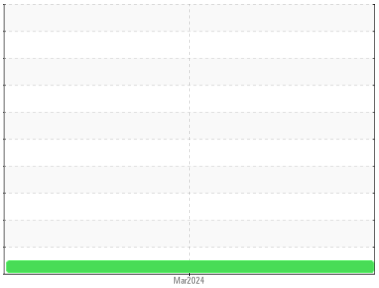
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
PLAEMP
Machine Id
PHASE 1 HOT OIL
Component
Heat Transfer Fluid
Fluid
ESSO OIL 1156 (--- GAL)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

Fluid Condition
Acid Number (AN) is severely high. Visc @ 40°C is abnormally high. COC Flash Point is marginally high.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC**	---	---
Sample Date		Client Info		**04 Mar 2024**	---	---
Machine Age	yrs	Client Info		**0**	---	---
Oil Age	yrs	Client Info		**52**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	**<1**	---	---
Chromium	ppm	ASTM D5185(m)	>21	**0**	---	---
Nickel	ppm	ASTM D5185(m)	>21	**<1**	---	---
Titanium	ppm	ASTM D5185(m)	>21	**0**	---	---
Silver	ppm	ASTM D5185(m)	>21	**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>21	**<1**	---	---
Lead	ppm	ASTM D5185(m)	>21	**0**	---	---
Copper	ppm	ASTM D5185(m)	>21	**0**	---	---
Tin	ppm	ASTM D5185(m)	>21	**1**	---	---
Antimony	ppm	ASTM D5185(m)	>21	**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

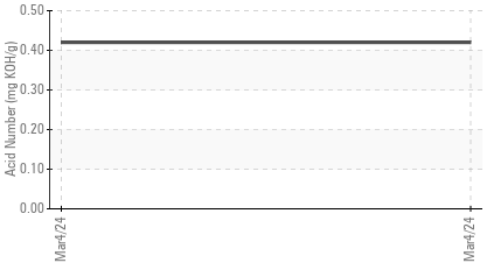
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**0**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0**	---	---
Manganese	ppm	ASTM D5185(m)		**0**	---	---
Magnesium	ppm	ASTM D5185(m)		**<1**	---	---
Calcium	ppm	ASTM D5185(m)		**0**	---	---
Phosphorus	ppm	ASTM D5185(m)		**0**	---	---
Zinc	ppm	ASTM D5185(m)		**<1**	---	---
Sulfur	ppm	ASTM D5185(m)	1000	**3726**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**<1**	---	---
Sodium	ppm	ASTM D5185(m)	>21	**0**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Water	%	ASTM D6304*	>0.0601	**0.003**	---	---
ppm Water	ppm	ASTM D6304*	>601	**30**	---	---

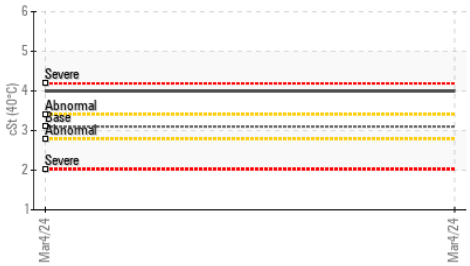
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		▲ **0.42**	---	---

OIL ANALYSIS REPORT

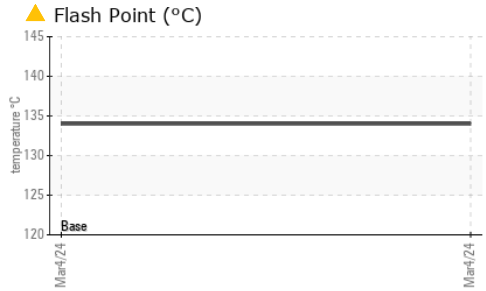
Acid Number



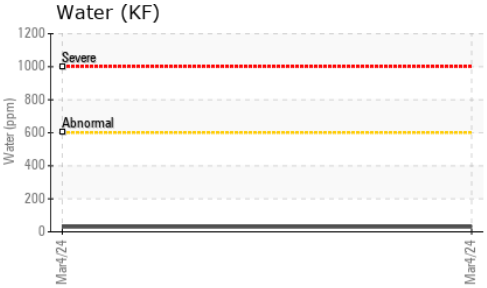
Viscosity @ 40°C



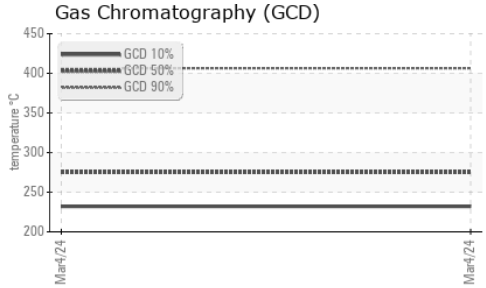
Flash Point (°C)



Water (KF)



Gas Chromatography (GCD)

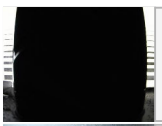


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	---	---
Emulsified Water	scalar	Visual*	>0.0601	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	3.1	▲ **4**	---	---
COC Flash Point	°C	ASTM D92*	100	▲ **134**	---	---

SEDIMENT		method	limit/base	current	history1	history2
Pentane Insolubles	%	ASTM D893(m)*		**0.273**	---	---

SIMULATED DISTILLATON (GCD)		method	limit/base	current	history1	history2
(GCD) % < 335°C	°C	ASTM D2887*		**81.28**	---	---
(GCD) Initial Boiling Point	°C	ASTM D2887*		**188.5**	---	---
(GCD) 5% Distillation Point	°C	ASTM D2887*		**228.0**	---	---
(GCD) 10% Distillation Point	°C	ASTM D2887*		**232.0**	---	---
(GCD) 20% Distillation Point	°C	ASTM D2887*		**243.1**	---	---
(GCD) 30% Distillation Point	°C	ASTM D2887*		**254.1**	---	---
(GCD) 40% Distillation Point	°C	ASTM D2887*		**261.9**	---	---
(GCD) 50% Distillation Point	°C	ASTM D2887*		**275.1**	---	---
(GCD) 60% Distillation Point	°C	ASTM D2887*		**288.2**	---	---
(GCD) 70% Distillation Point	°C	ASTM D2887*		**305.9**	---	---
(GCD) 80% Distillation Point	°C	ASTM D2887*		**329.0**	---	---
(GCD) 90% Distillation Point	°C	ASTM D2887*		**406.4**	---	---
(GCD) FBP% Distillation Point	°C	ASTM D2887*		**539.3**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02621857
Unique Number : 5746976
Test Package : TEST (Additional Tests: COC Flash, GC-PercFuel, GCD, ICP, KF, KV40, PntInsol, Spat, TAN AutoTitr)

Received : 13 Mar 2024
Tested : 20 Mar 2024
Diagnosed : 20 Mar 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.

WEARCHECK CANADA INC.
C8-1175 Appleby Line
BURLINGTON, ON
CA L7L 5H9
Contact: Dorian Anderson
dorian.anderson@wearcheck.com
T:
F: (905)569-8605