MOBIL 1 WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
092945
Component
Front Right Final Drive
Fluid
GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

Copper and lead ppm levels are abnormal. Aluminum ppm levels are noted. Bearing and/or bushing wear is indicated.

CONTAMINATION

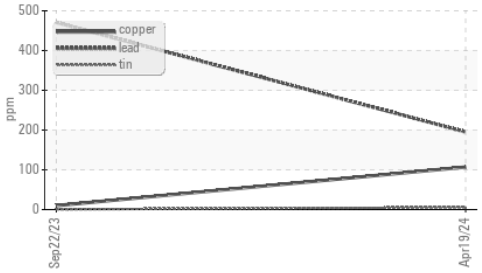
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

FLUID CONDITION

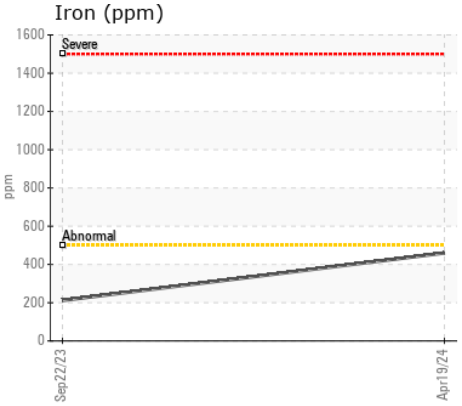
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0851987**	WC0811318	---
Sample Date		Client Info		**19 Apr 2024**	22 Sep 2023	---
Machine Age	hrs	Client Info		**488**	150	---
Oil Age	hrs	Client Info		**438**	150	---
Filter Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Filter Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---
Iron	ppm	ASTM D5185(m)	>500	**460**	212	---
Chromium	ppm	ASTM D5185(m)	>10	**6**	2	---
Nickel	ppm	ASTM D5185(m)	>10	**2**	<1	---
Titanium	ppm	ASTM D5185(m)		**2**	0	---
Silver	ppm	ASTM D5185(m)		**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	● **33**	<1	---
Lead	ppm	ASTM D5185(m)	>25	▲ **195**	▲ 471	---
Copper	ppm	ASTM D5185(m)	>50	▲ **107**	10	---
Tin	ppm	ASTM D5185(m)	>10	**5**	<1	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185(m)	>75	▲ **161**	3	---
Potassium	ppm	ASTM D5185(m)	>20	**10**	<1	---
Water		WC Method	>0.2	**NEG**	NEG	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**VLITE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**9**	5	---
Boron	ppm	ASTM D5185(m)	50	**6**	8	---
Barium	ppm	ASTM D5185(m)	15	**3**	4	---
Molybdenum	ppm	ASTM D5185(m)	15	**0**	0	---
Manganese	ppm	ASTM D5185(m)		**5**	4	---
Magnesium	ppm	ASTM D5185(m)	50	**5**	2	---
Calcium	ppm	ASTM D5185(m)	50	**17**	8	---
Phosphorus	ppm	ASTM D5185(m)	350	**161**	378	---
Zinc	ppm	ASTM D5185(m)	100	**21**	15	---
Sulfur	ppm	ASTM D5185(m)	12500	**4282**	4687	---
Visc @ 40°C	cSt	ASTM D7279(m)	220	**192**	194	---

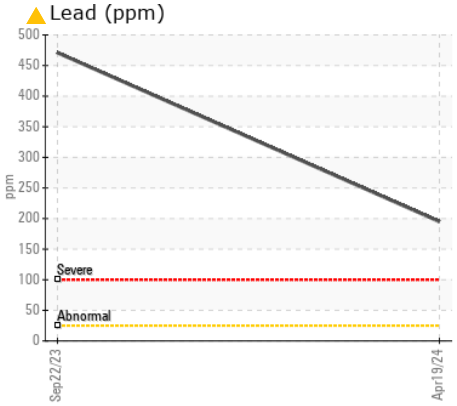
Non-ferrous Metals



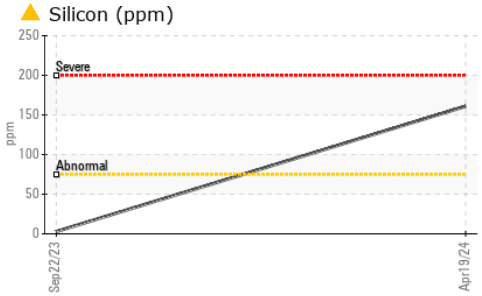
Iron (ppm)



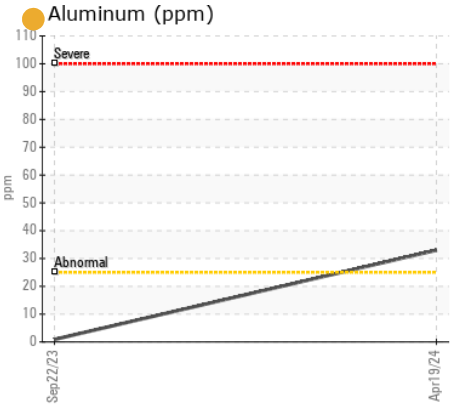
Lead (ppm)



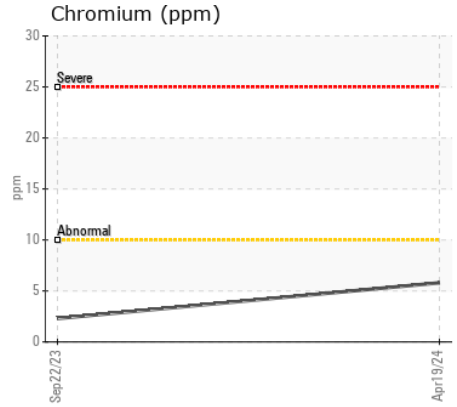
Silicon (ppm)



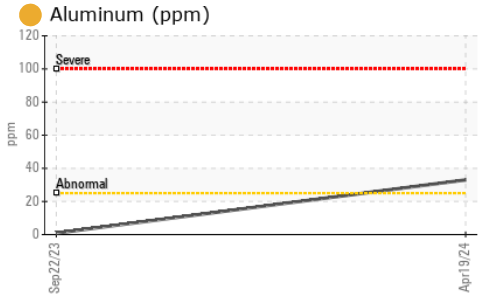
Aluminum (ppm)



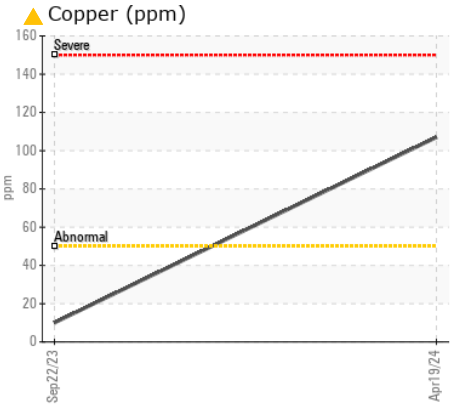
Chromium (ppm)



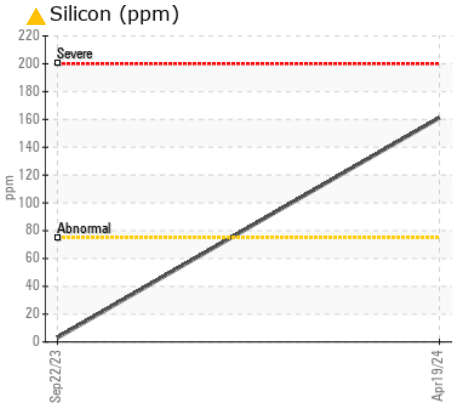
Aluminum (ppm)



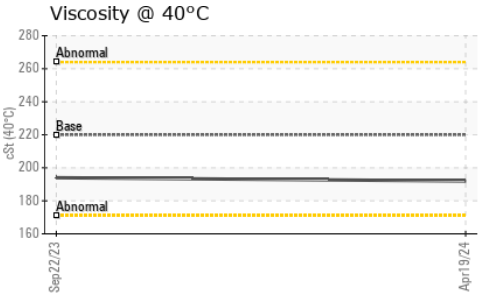
Copper (ppm)



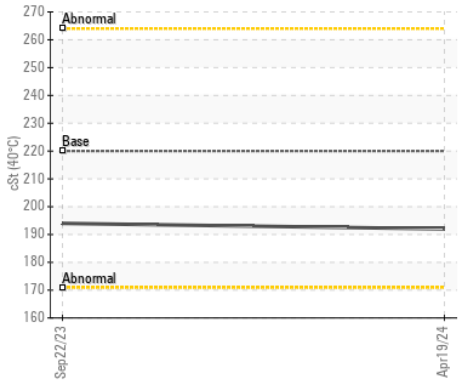
Silicon (ppm)



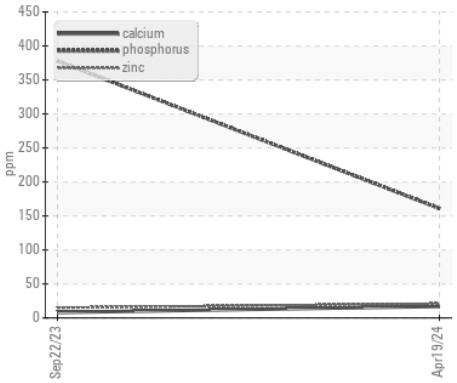
Viscosity @ 40°C



Viscosity @ 40°C



Additives



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0851987	**Received**	: 23 Apr 2024
Lab Number	: 02631026	**Tested**	: 23 Apr 2024
Unique Number	: 5772179	**Diagnosed**	: 23 Apr 2024 - Kevin Marson
Test Package	: MOB 1		

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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