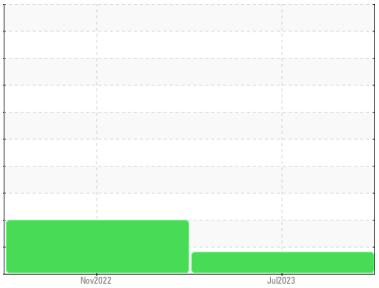
PROBLEM SUMMARY

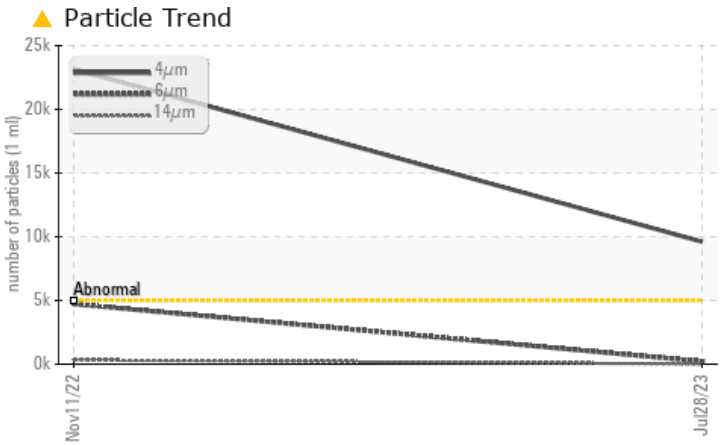
Sample Rating Trend



ISO

Machine Id
TB115
Component
Hydraulic System
Fluid
SHELL TELLUS 46 (--- LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ABNORMAL	---
Particles >4µm		ASTM D7647	>5000	▲ **9611**	▲ 23155	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/15/10**	▲ 22/19/16	---

Customer Id: GFL286
Sample No.: PC0077044
Lab Number: 02578822
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
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gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

11 Nov 2022 Diag: Kevin Marson

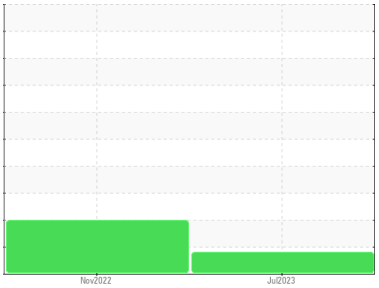
ISO

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >21µm are notably high. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
TB115
Component
Hydraulic System
Fluid
SHELL TELLUS 46 (--- LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0077044**	PC0062003	---
Sample Date		Client Info		**28 Jul 2023**	11 Nov 2022	---
Machine Age	hrs	Client Info		**1105**	139	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	Not Changd	---
Sample Status				**ATTENTION**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**2**	<1	---
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	---
Nickel	ppm	ASTM D5185(m)	>10	**0**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	<1	---
Lead	ppm	ASTM D5185(m)	>10	**0**	3	---
Copper	ppm	ASTM D5185(m)	>75	**<1**	<1	---
Tin	ppm	ASTM D5185(m)	>10	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0.0	**<1**	<1	---
Barium	ppm	ASTM D5185(m)	0	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	---
Manganese	ppm	ASTM D5185(m)		**0**	0	---
Magnesium	ppm	ASTM D5185(m)	11	**41**	41	---
Calcium	ppm	ASTM D5185(m)	35	**20**	20	---
Phosphorus	ppm	ASTM D5185(m)	266	**352**	360	---
Zinc	ppm	ASTM D5185(m)	276	**311**	303	---
Sulfur	ppm	ASTM D5185(m)	1847	**765**	767	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

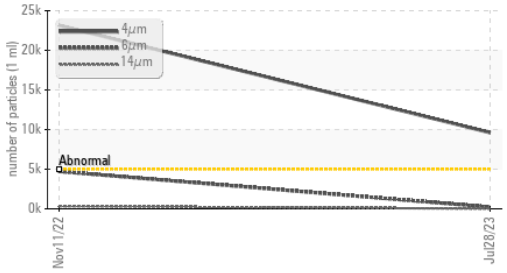
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Sodium	ppm	ASTM D5185(m)		**<1**	<1	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **9611**	▲ 23155	---
Particles >6µm		ASTM D7647	>1300	**216**	▲ 4715	---
Particles >14µm		ASTM D7647	>160	**7**	▲ 321	---
Particles >21µm		ASTM D7647	>40	**2**	▲ 78	---
Particles >38µm		ASTM D7647	>10	**0**	4	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/15/10**	▲ 22/19/16	---

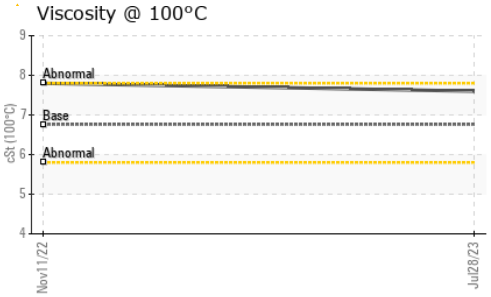
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.36	**0.49**	0.40	---

OIL ANALYSIS REPORT

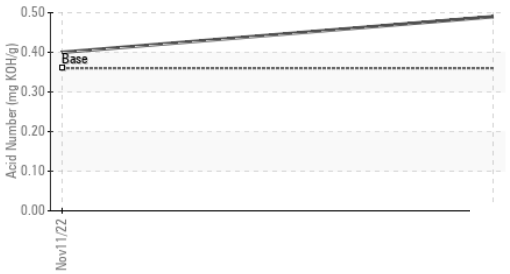
Particle Trend



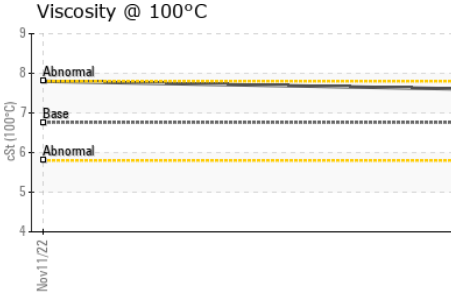
Viscosity @ 100°C



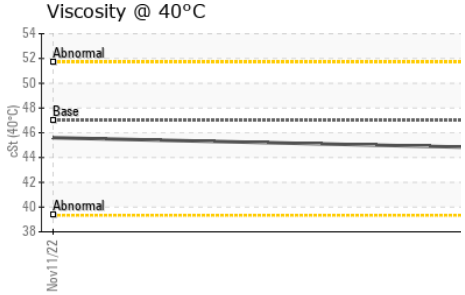
Acid Number



Viscosity @ 100°C

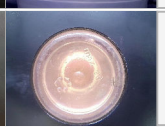


Viscosity @ 40°C



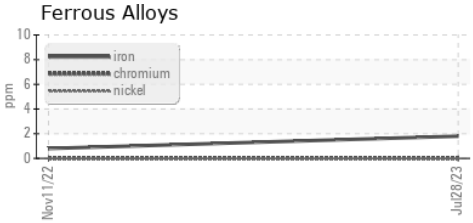
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.99	**44.8**	45.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.76	**7.6**	7.8	---
Viscosity Index (VI)	Scale	ASTM D2270*	96	**137**	140	---

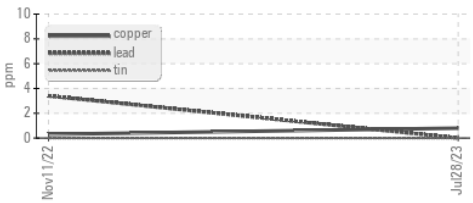
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

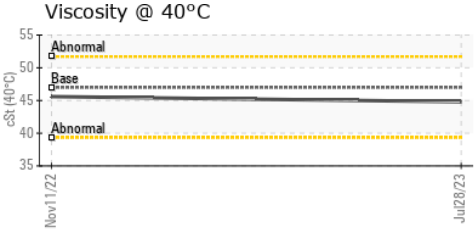
Ferrous Alloys



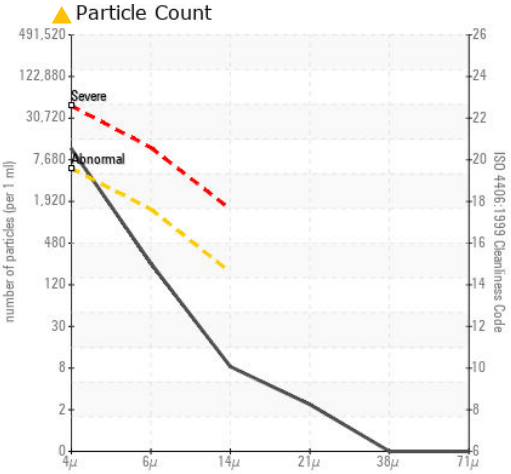
Non-ferrous Metals



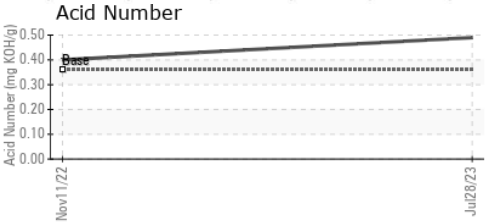
Viscosity @ 40°C



Particle Count



Acid Number



CALA Testing Accreditation No. 1005078
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
Sample No. : PC0077044 **Received** : 28 Aug 2023
Lab Number : 02578822 **Diagnosed** : 29 Aug 2023
Unique Number : 5631882 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, TAN Man, VI)

151 Ram Forest Rd,
Stouffville, ON
CA L4A 2G8
Contact: Shannon Abbott
sabbott@gipi.com
T: (905)750-5900
F:

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.