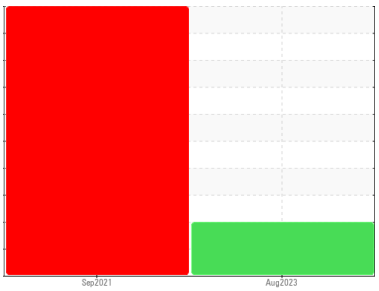
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
901115
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The oil 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		**GFL0084027**	GFL0020578	---
Sample Date		Client Info		**03 Aug 2023**	07 Sep 2021	---
Machine Age	hrs	Client Info		**3323**	0	---
Oil Age	hrs	Client Info		**1200**	0	---
Oil Changed		Client Info		**Changed**	Not Changd	---
Sample Status				**SEVERE**	SEVERE	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**7**	9	---
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	---
Nickel	ppm	ASTM D5185(m)	>10	**0**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	<1	---
Silver	ppm	ASTM D5185(m)		**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	2	---
Lead	ppm	ASTM D5185(m)	>10	**<1**	<1	---
Copper	ppm	ASTM D5185(m)	>75	**4**	3	---
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	---

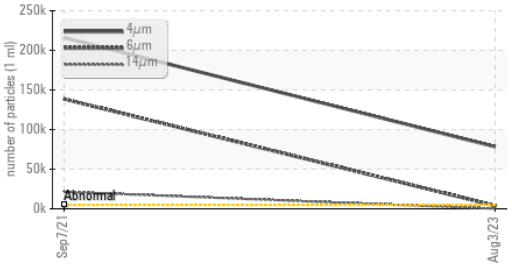
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	**1**	2	---
Barium	ppm	ASTM D5185(m)	5	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	5	**<1**	1	---
Manganese	ppm	ASTM D5185(m)		**0**	0	---
Magnesium	ppm	ASTM D5185(m)	25	**8**	12	---
Calcium	ppm	ASTM D5185(m)	200	**75**	94	---
Phosphorus	ppm	ASTM D5185(m)	300	**358**	351	---
Zinc	ppm	ASTM D5185(m)	370	**421**	409	---
Sulfur	ppm	ASTM D5185(m)	2500	**775**	777	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**<1**	6	---
Sodium	ppm	ASTM D5185(m)		**<1**	<1	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	---

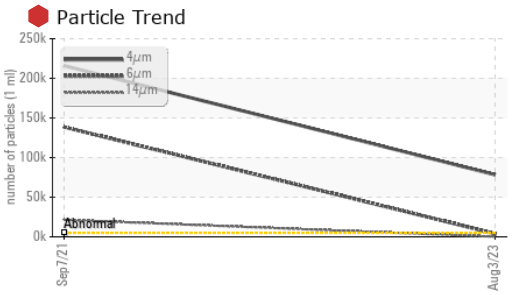
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**78294**	216007	---
Particles >6µm		ASTM D7647	>1300	**3931**	138542	---
Particles >14µm		ASTM D7647	>160	**81**	21412	---
Particles >21µm		ASTM D7647	>40	**27**	6319	---
Particles >38µm		ASTM D7647	>10	**5**	747	---
Particles >71µm		ASTM D7647	>3	**1**	96	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**23/19/14**	25/24/22	---

OIL ANALYSIS REPORT

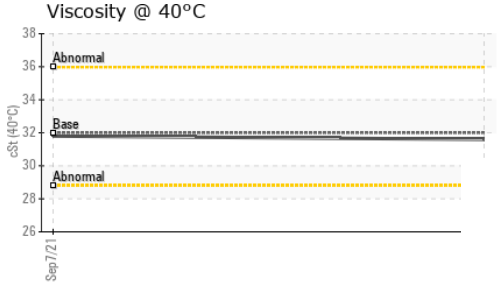
Particle Trend



Particle Trend



Viscosity @ 40°C



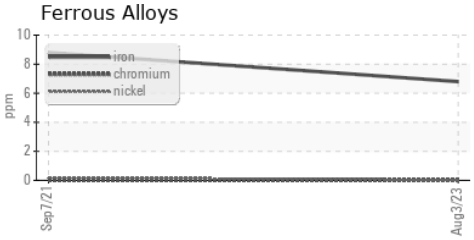
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**VLITE**	LIGHT	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	LIGHT	---
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)	32	**31.6**	31.8	---

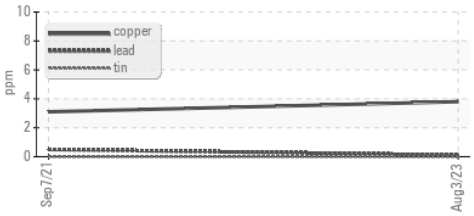
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

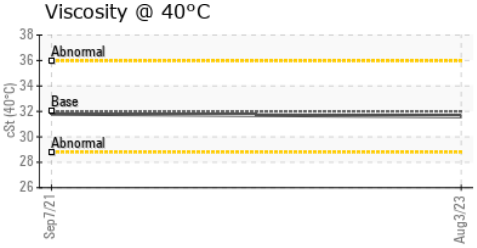
Ferrous Alloys



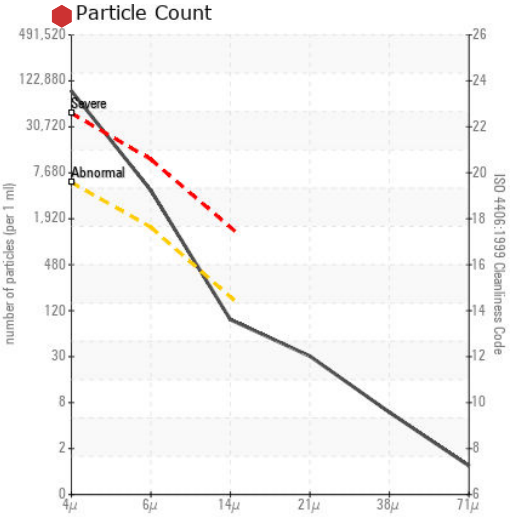
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 573 - Vancouver Hauling**
Sample No. : GFL0084027 **Received** : 08 Sep 2023
Lab Number : 02581173 **Diagnosed** : 11 Sep 2023
Unique Number : 5642238 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: PrtCount)

70 Golden Drive,
Coquitlam, BC
CA V3K 6B5
Contact: Catia Klagenberg Alves
cklagenbergalves@gflenv.com
T:
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.