



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
OR872
Component
Hydraulic System
Fluid
CAT TDTO 10W (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100561	GFL0100646	GFL0077026
Sample Date		Client Info		20 May 2024	01 Dec 2023	10 Aug 2023
Machine Age	hrs	Client Info		22057	21348	20882
Oil Age	hrs	Client Info		2000	1726	1260
Filter Age	hrs	Client Info		709	466	795
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	13	12	37
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	0	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	2	2	2
Lead	ppm	ASTM D5185(m)	>10	1	2	<1
Copper	ppm	ASTM D5185(m)	>75	5	5	11
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

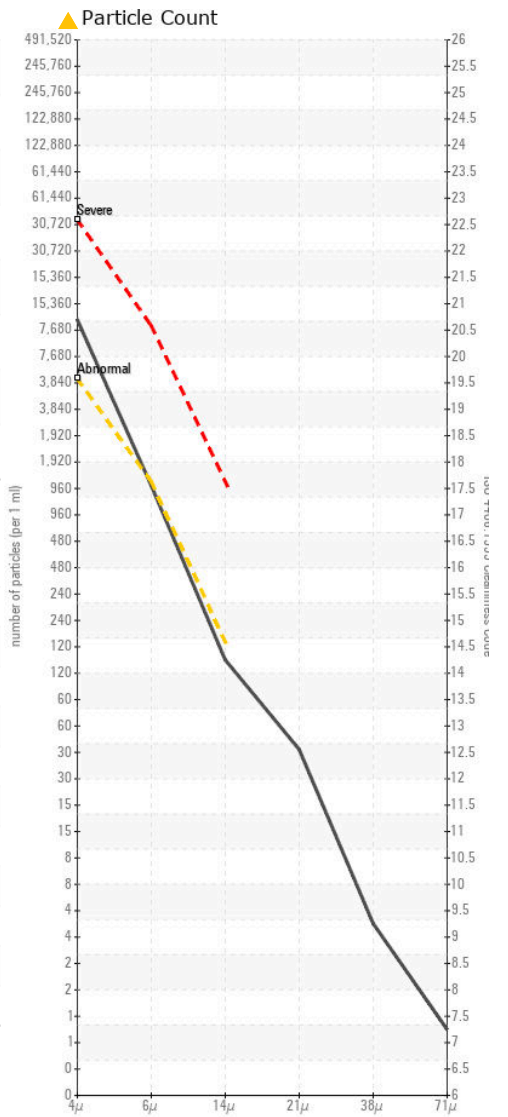
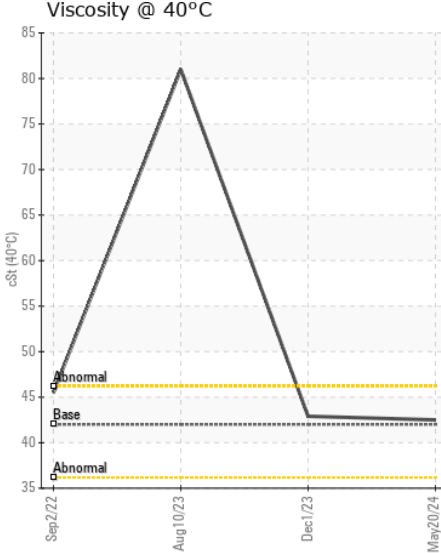
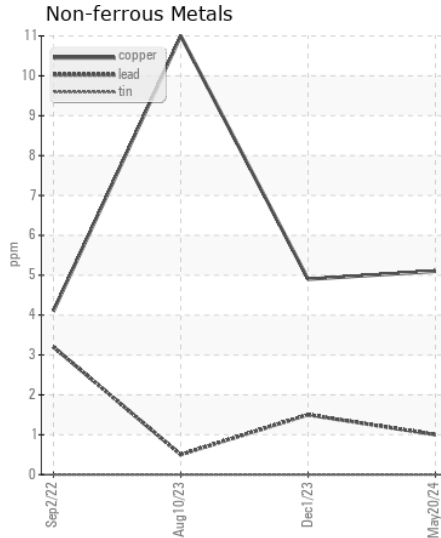
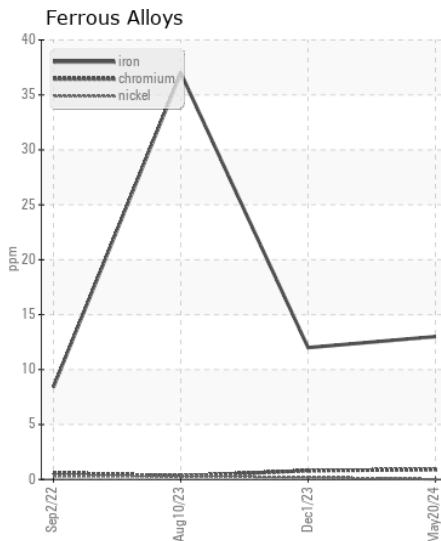
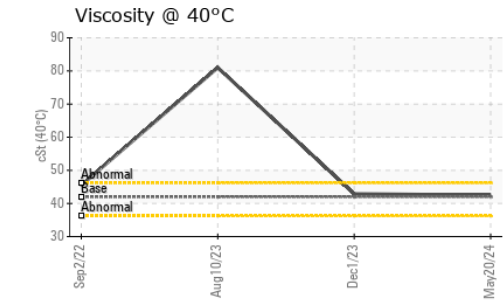
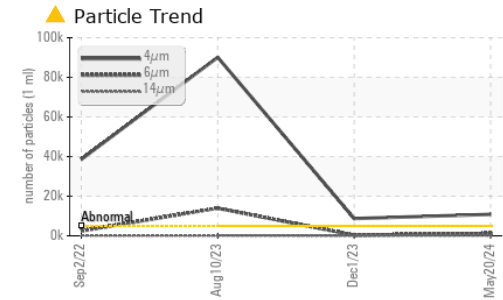
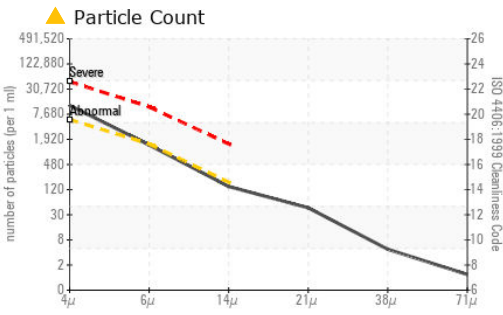
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	14	15	6
Potassium	ppm	ASTM D5185(m)	>20	6	<1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 10833	● 8711	▲ 90095
Particles >6µm		ASTM D7647	>1300	1233	334	▲ 13960
Particles >14µm		ASTM D7647	>160	126	31	132
Particles >21µm		ASTM D7647	>40	39	6	28
Particles >38µm		ASTM D7647	>10	4	1	2
Particles >71µm		ASTM D7647	>3	1	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/17/14	● 20/16/12	▲ 24/21/14
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	3	1
Boron	ppm	ASTM D5185(m)		2	3	2
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	<1
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)		17	16	10
Calcium	ppm	ASTM D5185(m)	2980	3252	3266	3051
Phosphorus	ppm	ASTM D5185(m)	1100	941	922	1067
Zinc	ppm	ASTM D5185(m)	1270	1136	1123	1209
Sulfur	ppm	ASTM D5185(m)		3566	3592	3605
Visc @ 40°C	cSt	ASTM D7279(m)	42.0	42.5	42.9	▲ 81.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100561
Lab Number : 02636959
Unique Number : 5786121
Test Package : MOB 1 (Additional Tests: PrtCount)
Received : 22 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Wes Davis

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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.