WEAR CONTAMINATION FLUID CONDITION

SEVERE NORMAL NORMAL



Machine Id
OR874
Component
Front Differential

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number	00111	Client Info	Little	GFL0100616	GFL0054609	
	Sample Date		Client Info		19 May 2024	25 Jan 2023	
	Machine Age	hrs	Client Info		15203	13773	
	Oil Age	hrs	Client Info		1430	1096	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				SEVERE	ABNORMAL	
WEAR	PQ		ASTM D8184*		<b>1060</b>	214	
Iron ppm levels are severe. PQ levels are severe. Gear wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.	Iron	ppm	ASTM D5185(m)	>500	<b>▲</b> 2446	<u></u> 4 998	
	Chromium	ppm	ASTM D5185(m)		2	<1	
	Nickel	ppm	ASTM D5185(m)		<1	<1	
	Titanium	ppm	ASTM D5185(m)		<1	<1	
	Silver	ppm	ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)	>25	4	2	
	Lead	ppm	ASTM D5185(m)	>25	0	0	
	Copper	ppm	ASTM D5185(m)	>100	3	1	
	Tin	ppm	ASTM D5185(m)	>10	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>75	18	11	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	1	
	Water		WC Method	>.2	NEG	NEG	
	Silt	scalar	Visual*	NONE	VLITE	VLITE	
	Debris	scalar	Visual*	NONE	NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance		Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		6	5	
The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Boron	ppm	ASTM D5185(m)	110	84	74	
	Barium	ppm	ASTM D5185(m)	0.0	0	0	
	Molybdenum	ppm	ASTM D5185(m)		0	<1	
	Manganese	ppm	ASTM D5185(m)		17	7	
	Magnesium	ppm	ASTM D5185(m)		17	13	
	Calcium	ppm	ASTM D5185(m)		3593	3427	
	Phosphorus	ppm	ASTM D5185(m)		1169	1227	
	Zinc	ppm	ASTM D5185(m)		1259	1204	
	O If		ACTM DE10E(m)	0044	2000	2052	
	Sulfur	ppm	ASTM D5185(m)	2041	3098	2953	

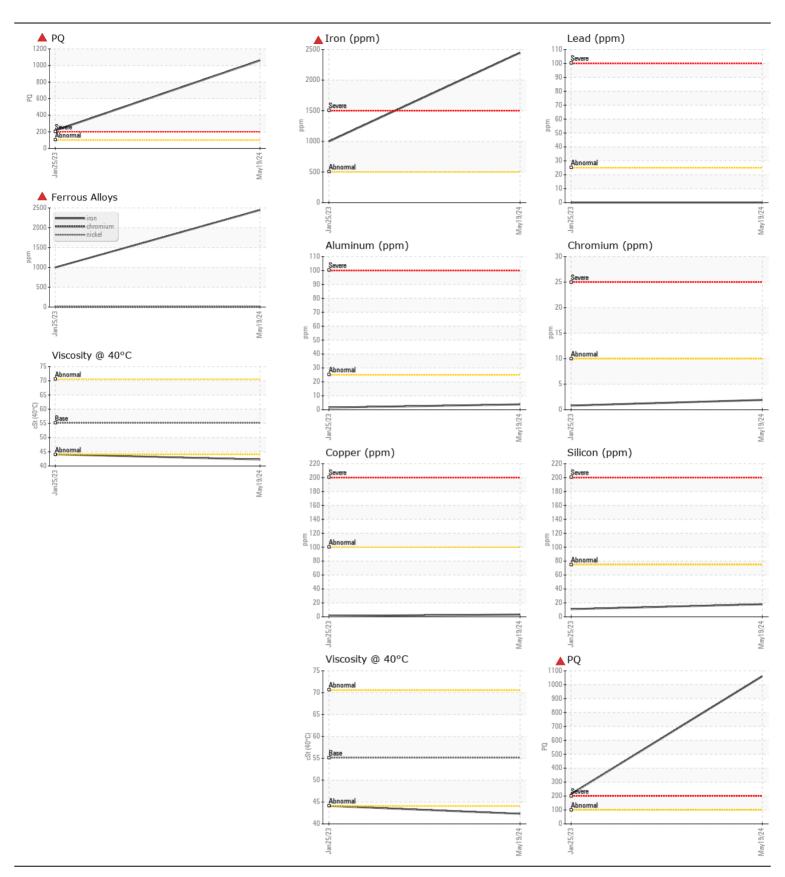
Visc @ 40°C

cSt

ASTM D7279(m) 55.14

44.1

42.3





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling : GFL0100616 : 02636998

Unique Number : 5786160 Test Package: MOB 1 (Additional Tests: PQ)

Received **Tested** Diagnosed

: 22 May 2024 : 22 May 2024

: 22 May 2024 - Kevin Marson

38950 Queens Way, Squamish, BC **CA V8B 0K8** Contact: Dean Imbeau dimbeau@gflenv.com T: (604)892-5604

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.

F: (604)892-5238