WEAR CONTAMINATION FLUID CONDITION

SEVERE NORMAL NORMAL

Machine Id

901070

**Transmission (Auto)** 

ALLISON TES 295 (--- GAL)

The fluid 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.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0089851		
	Sample Date		Client Info		14 Mar 2024		
	Machine Age	hrs	Client Info		14043		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				SEVERE		
-	PQ		ASTM D8184*	>50	0		
	Iron	ppm	ASTM D5185(m)	>160	▲ 350		

## WEAR

Iron ppm levels are severe. Lead and copper ppm levels are abnormal. Clutch disc wear or oil cooler leaching indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

PQ		ASTM D8184*	>50	0		
Iron	ppm	ASTM D5185(m)	>160	<b>4</b> 350		
Chromium	ppm	ASTM D5185(m)	>5	2		
Nickel	ppm	ASTM D5185(m)	>5	2		
Titanium	ppm	ASTM D5185(m)		<1		
Silver	ppm	ASTM D5185(m)	>5	0		
Aluminum	ppm	ASTM D5185(m)	>50	29		
Lead	ppm	ASTM D5185(m)	>50	<b>△</b> 56		
Copper	ppm	ASTM D5185(m)	>225	<b>238</b>		
Tin	ppm	ASTM D5185(m)	>10	4		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
					l	

## CONTAMINATION

There is no indication of any contamination in the fluid.

Yellow Met	al scalar	Visual*	NONE	NONE	 
Silicon	ppm	ASTM D5185(m)	>20	14	 
Potassium	ppm	ASTM D5185(m)	>20	4	 
Water		WC Method	>0.1	NEG	 
Silt	scalar	Visual*	NONE	VLITE	 
Debris	scalar	Visual*	NONE	NONE	 
Sand/Dirt	scalar	Visual*	NONE	NONE	 
Appearanc	e scalar	Visual*	NORML	NORML	 
Odor	scalar	Visual*	NORML	NORML	 
Emulsified W	ater scalar	Visual*	>0.1	NEG	 
Sodium	ppm	ASTM D5185(m)		22	 
Boron	nnm	ACTM DE195(m)	150	111	

## **FLUID CONDITION**

Additive levels indicate the addition of a different brand, or type of fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

Emulsified Water	scalar	Visual*	>0.1	NEG	 
Sodium	ppm	ASTM D5185(m)		22	 
Boron	ppm	ASTM D5185(m)	150	111	 
Barium	ppm	ASTM D5185(m)	0	<1	 
Molybdenum	ppm	ASTM D5185(m)	0	<1	 
Manganese	ppm	ASTM D5185(m)		5	 
Magnesium	ppm	ASTM D5185(m)	0	13	 
Calcium	ppm	ASTM D5185(m)	40	105	 
Phosphorus	ppm	ASTM D5185(m)	320	397	 
Zinc	ppm	ASTM D5185(m)	5	161	 
Sulfur	ppm	ASTM D5185(m)	1050	2091	 
Visc @ 40°C	cSt	ASTM D7279(m)	38.9	34.4	 





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory

Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental DO NOT USE\_USE GFL582 : GFL0089851 Lab Number

: 02644925 Unique Number : 5802464 Test Package: MOB 1 (Additional Tests: PQ)

Received **Tested** Diagnosed

: 02 Jul 2024 : 03 Jul 2024

: 03 Jul 2024 - Kevin Marson

4624 Cumberland Road Cumberland, BC **CA VOR 1S0** Contact: Kyle Fallowfield kfallowfield@gflenv.com

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.

T: F: Validity of results and interpretation are based on the sample and information as supplied.