

#### Machine Id **421008** Component **Front Differential** Fluid **GEAR OIL SAE 75W90 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 75W90. Please confirm.

#### **WEAR**

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

# CONTAMINATION

There is a moderate concentration of water present in the oil.

# **FLUID CONDITION**

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0082180		
Sample Date		Client Info		04 Jan 2024		
Machine Age	hrs	Client Info		10310		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
PQ		ASTM D8184*		213		
Iron	ppm	ASTM D5185(m)	>500	<u> </u>		
Chromium	ppm	ASTM D5185(m)	>10	9		
Nickel	ppm	ASTM D5185(m)	>10	2		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>25	8		
Lead	ppm	ASTM D5185(m)	>25	<1		
Copper	ppm	ASTM D5185(m)	>100	5		
Tin	ppm	ASTM D5185(m)	>10	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Ciliaan			. 75	00		
Silicon	ppm	ASTM D5185(m)	>75	22		
Potassium	ppm	ASTM D5185(m)	>20	11		
Water	%	ASTM D6304*	>.2	▲ 0.577		
ppm Water	ppm	ASTM D6304*	>2000	▲ 5776		
Silt	scalar	Visual*	NONE	VLITE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML			
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>.2	NEG		
Sodium	ppm	ASTM D5185(m)		2		
Boron	ppm	ASTM D5185(m)	400	44		
Barium	ppm	ASTM D5185(m)	200	0		
Molybdenum	ppm	ASTM D5185(m)	12	<1		
Manganese	ppm	ASTM D5185(m)		13		
Magnesium	ppm	ASTM D5185(m)	12	12		
Calcium	ppm	ASTM D5185(m)	150	27		
Phosphorus	ppm	ASTM D5185(m)	1650	1001		
Zinc	ppm	ASTM D5185(m)	125	30		
Sulfur	ppm	ASTM D5185(m)	22500	18726		
Viac @ 10%	oC+		100	00.2		

ASTM D7279(m) 109

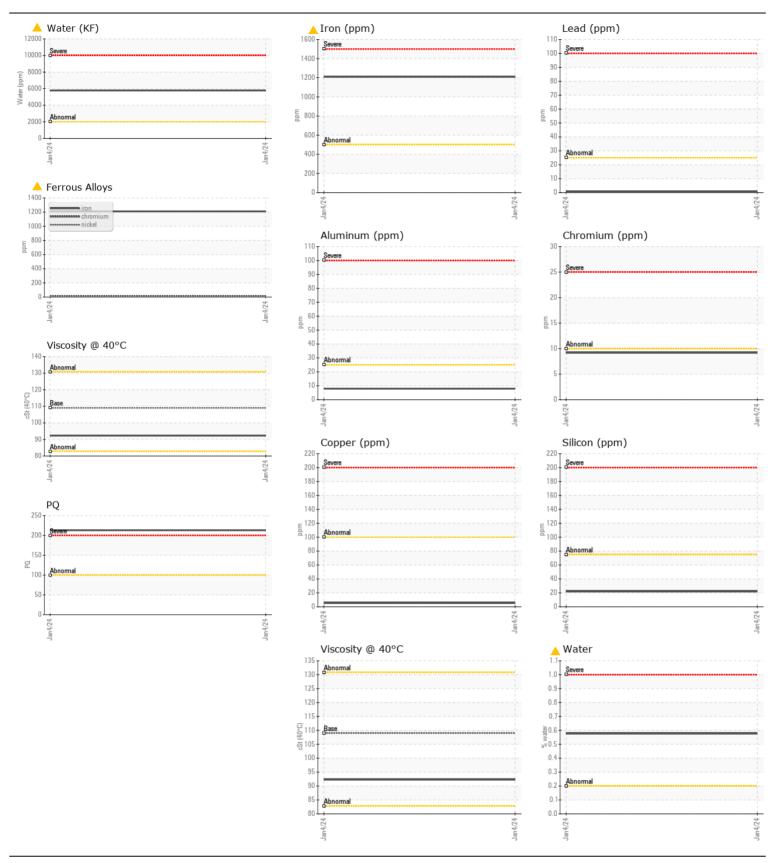
Visc @ 40°C

cSt

Contact/Location: Patrick Rutti - GFL593

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# WEAR ABNORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 593** CALA œ۲ Sample No. Recieved : 11 Jan 2024 4421 Boban Drive : GFL0082180 蹇 Lab Number Nanaimo, BC : 02608272 Diagnosed : 15 Jan 2024 ISO 17025:2017 : 5709358 Accredited : Kevin Marson CA V9T 6A6 Unique Number Diagnostician Laboratory Test Package : MOB 1 (Additional Tests: KF, PQ) Contact: Patrick Rutti To discuss this sample report, contact Customer Service at 1-800-268-2131. prutti@gflenv.com T: (250)739-3345 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: Validity of results and interpretation are based on the sample and information as supplied.