

**OIL ANALYSIS REPORT** 

EX0300 Component

**Rear Left Planetary** 

NOT GIVEN (--- GAL)

# Sample Rating Trend **NORMAL**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 50 Gear Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

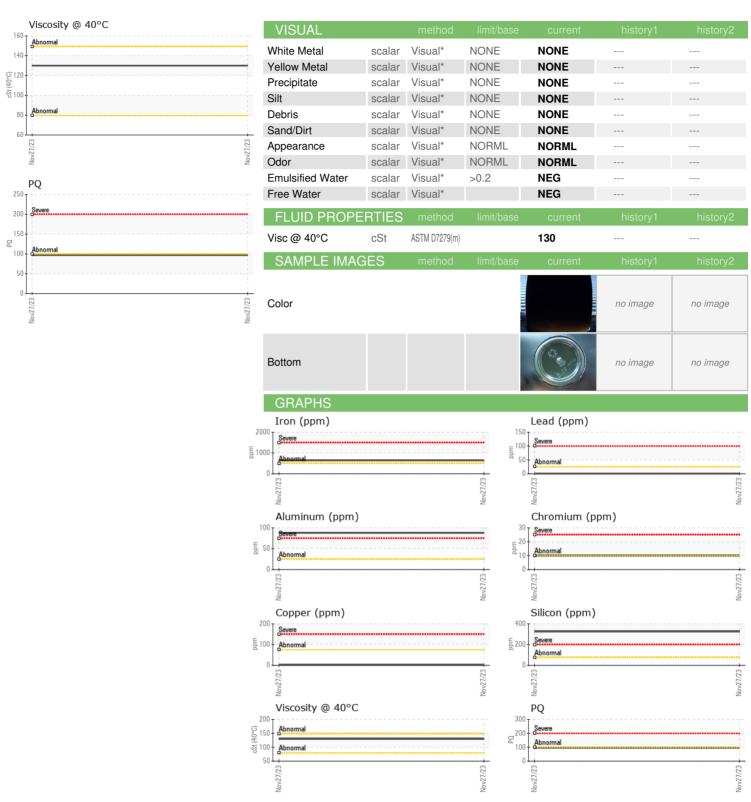
### **Fluid Condition**

The condition of the oil is acceptable for the time in service.

Sample Number   Client Info   GFL0094026							
Sample Number   Client Info   GFL0094026     Sample Date   Client Info   27 Nov 2023     Sample Date   Client Info   2019       Sample Date   Client Info   2019       Sample Date   Client Info   O       Sample Status   Client Info   Changed       Sample Status   Client Info   Changed       Sample Status   CONTAMINATION   method   limit/base   current   history1   history2   NEG         Sample Status   CONTAMINATION   method   limit/base   current   history1   history2   Sample Status   S			<u>,                                    </u>		Nov2023		
Sample Date   Client Info   27 Nov 2023	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age         kms         Client Info         2019             Oil Age         kms         Client Info         0             Oil Changed         Client Info         Changed             Sample Status         NORMAL             CONTAMINATION         method         limit/base         current         history1         history1           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185(m)         >10         10             Iron         ppm         ASTM D5185(m)         >25         88 <t< td=""><td>Sample Number</td><td></td><td>Client Info</td><td></td><td>GFL0094026</td><td></td><td></td></t<>	Sample Number		Client Info		GFL0094026		
Oil Age         kms         Client Info         0             Oil Changed         Client Info         Changed             Sample Status         NormAl             CONTAMINATION         method         limit/base         current         history1         history1           WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184*         97             Iron         ppm         ASTM D8185(m)         >500         643             Chromium         ppm         ASTM D8185(m)         >10         10             Nickel         ppm         ASTM D8185(m)         >10         8             Titanium         ppm         ASTM D8185(m)         >25         88             Silver         ppm         ASTM D5185(m)         >25         41             Aluminum         ppm         ASTM D5185(m)         >25         <1	Sample Date		Client Info		27 Nov 2023		
Oil Changed   Client Info   Changed             Sample Status   NORMAL           CONTAMINATION   method   limit/base   current   history1   history     Water   WC Method   >0.2   NEG         WEAR METALS   method   limit/base   current   history1   history     Water   WC Method   >0.2   NEG         WEAR METALS   method   limit/base   current   history1   history     Water   WC Method   >0.2   NEG         WEAR METALS   method   limit/base   current   history1   history     Water   PQ	Machine Age	kms	Client Info		2019		
NORMAL	Oil Age	kms	Client Info		0		
CONTAMINATION         method         limit/base         current         history1         history1           Water         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184*         97             Iron         ppm         ASTM D5185(m)         >500         643             Chromium         ppm         ASTM D5185(m)         >10         10             Chromium         ppm         ASTM D5185(m)         >10         8             Chromium         ppm         ASTM D5185(m)         >10         8             Chromium         ppm         ASTM D5185(m)         >1             Silver         ppm         ASTM D5185(m)         >25         88             Aluminum         ppm         ASTM D5185(m)         >25         <1	Oil Changed		Client Info		Changed		
Water         WC Method         >0.2         NEG            WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184*         97             Iron         ppm         ASTM D5185(m)         >500         643             Chromium         ppm         ASTM D5185(m)         >10         10              Nickel         ppm         ASTM D5185(m)         >10         8	Sample Status				NORMAL		
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
PQ	Water		WC Method	>0.2	NEG		
	WEAR METAL	S	method	limit/base	current	history1	history2
Chromium         ppm         ASTM D5185(m)         >10         10             Nickel         ppm         ASTM D5185(m)         >10         8             Titanium         ppm         ASTM D5185(m)         6             Silver         ppm         ASTM D5185(m)         >25         88             Aluminum         ppm         ASTM D5185(m)         >25         <1	PQ		ASTM D8184*		97		
Nickel	Iron	ppm	ASTM D5185(m)	>500	643		
Titanium	Chromium	ppm	ASTM D5185(m)	>10	10		
Silver	Nickel	ppm	ASTM D5185(m)	>10	8		
Aluminum	Titanium	ppm	ASTM D5185(m)		6		
Lead	Silver	ppm	ASTM D5185(m)		<1		
Copper         ppm         ASTM D5185(m)         >75         2             Tin         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         5         2             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Magnesium         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM	Aluminum	ppm	ASTM D5185(m)	>25	88		
Tin	Lead	ppm	ASTM D5185(m)	>25	<1		
Antimony ppm ASTM D5185(m) >5 2  Wanadium ppm ASTM D5185(m) 0  Beryllium ppm ASTM D5185(m) 0  Cadmium ppm ASTM D5185(m) 0  ADDITIVES method limit/base current history1 history  Boron ppm ASTM D5185(m) 172  Barium ppm ASTM D5185(m) 1  Molybdenum ppm ASTM D5185(m) 0  Manganese ppm ASTM D5185(m) 11  Magnesium ppm ASTM D5185(m) 11  Calcium ppm ASTM D5185(m) 11  Calcium ppm ASTM D5185(m) 14  Calcium ppm ASTM D5185(m) 31  Calcium ppm ASTM D5185(m) 31  Sulfur ppm ASTM D5185(m) 980  Sulfur ppm ASTM D5185(m) 27  Sulfur ppm ASTM D5185(m) 17760  Lithium ppm ASTM D5185(m) 17760  Lithium ppm ASTM D5185(m)	Copper	ppm	ASTM D5185(m)	>75	2		
Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Tin	ppm	ASTM D5185(m)	>10	0		
Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1 <td>Antimony</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;5</td> <td>2</td> <td></td> <td></td>	Antimony	ppm	ASTM D5185(m)	>5	2		
Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         31             Calcium         ppm         ASTM D5185(m)         980             Phosphorus         ppm         ASTM D5185(m)         27             Zinc         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         31             Calcium         ppm         ASTM D5185(m)         980             Phosphorus         ppm         ASTM D5185(m)         27             Zinc         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Beryllium	ppm	ASTM D5185(m)		0		
Boron         ppm         ASTM D5185(m)         172             Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         31             Calcium         ppm         ASTM D5185(m)         980             Phosphorus         ppm         ASTM D5185(m)         27             Zinc         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Cadmium	ppm	ASTM D5185(m)		0		
Barium         ppm         ASTM D5185(m)         1             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Boron	ppm	ASTM D5185(m)		172		
Manganese         ppm         ASTM D5185(m)         11             Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Barium	ppm	ASTM D5185(m)		1		
Magnesium         ppm         ASTM D5185(m)         14             Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Molybdenum	ppm	ASTM D5185(m)		0		
Calcium         ppm         ASTM D5185(m)         31             Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Manganese	ppm	ASTM D5185(m)		11		
Phosphorus         ppm         ASTM D5185(m)         980             Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Magnesium	ppm	ASTM D5185(m)		14		
Zinc         ppm         ASTM D5185(m)         27             Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Calcium	ppm	ASTM D5185(m)		31		
Sulfur         ppm         ASTM D5185(m)         17760             Lithium         ppm         ASTM D5185(m)         <1	Phosphorus	ppm	ASTM D5185(m)		980		
Lithium         ppm         ASTM D5185(m)         <1	Zinc	ppm	ASTM D5185(m)		27		
	Sulfur	ppm	ASTM D5185(m)		17760		
CONTAMINANTS method limit/base current history1 history	Lithium	ppm	ASTM D5185(m)		<1		
	CONTAMINAN	TS _	method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m) >75 <b>326</b>	Silicon	ppm	ASTM D5185(m)	>75	326		
Sodium         ppm         ASTM D5185(m)         20	Sodium	ppm	ASTM D5185(m)		20		
Potassium ppm ASTM D5185(m) >20 <b>42</b>	Potassium	ppm	ASTM D5185(m)	>20	42		



# **OIL ANALYSIS REPORT**





CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number **Unique Number** 

: GFL0094026 : 02601958

: 5695043

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

Received Diagnosed Diagnostician : Kevin Marson

: 08 Dec 2023 : 11 Dec 2023

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 968 - Boylston 151 Waste Management Road Hiwy 16 Boylston, NS

**CA B0H 1G0** Contact: Bruce Avery bruce.avery@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.

Test Package : MOB 1 ( Additional Tests: PQ )

T: F: