

## **OIL ANALYSIS REPORT**

Sample Rating Trend



### Machine Id Component Gearbox Fluic GEAR OIL ISO 150 (--- LTR)

#### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

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

SAMPLE INFORMATION         method         limit/base         current         history1         history2           Sample Number         Client Info         20 Mar 2024         01 Dec 2023            Machine Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         N/A         N/A            Sample Status         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D585(m)         >200         38         357            Mckel         ppm         ASTM D585(m)         >51<0         <1            Nickel         ppm         ASTM D585(m)         >52<0         <1            Aurininum         ppm         ASTM D585(m)         >225 <th></th> <th></th> <th></th> <th>Dec2023</th> <th>Mar2024</th> <th></th> <th></th>				Dec2023	Mar2024		
Sample Date         Client Info         20 Mar 2024         01 Dec 2023            Machine Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Changed         Client Info         N/A         N/A         ABNORMAL            Sample Status         Imitibase         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            VEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM DS185(m)         >15         <1         3            Othornium         ppm         ASTM DS185(m)         >15         0         <1            Nickel         ppm         ASTM DS185(m)         >10         0         0            Aluminum         ppm         ASTM DS185(m)         >20         <1             Aluminum         ppm         ASTM DS185(m)         >20         <1             Copper	SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         0         0            Oil Age         hrs         Client Info         0         0            Oil Changed         Client Info         N/A         N/A            Sample Status         Imit base         NORMAL         ABNORMAL            CONTAMINATION         method         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM DS185(m)         >15         0         <1	Sample Number		Client Info		WC0909078	WC0877660	
Oil Age         hrs         Client Info         0         0            Oil Changed         Client Info         N/A         N/A         N/A            Sample Status         Image         NORMAL         ABNORMAL            CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >200         38         ▲         357            Chromium         ppm         ASTM D5185(m)         >15         0         <1	Sample Date		Client Info		20 Mar 2024	01 Dec 2023	
Oil Changed         Client Info         N/A         N/A         ABNORMAL            Sample Status         method         imit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         imit/base         current         history1         history2           Iron         ppm         ASTM D5155(m)         >200         38         357            Nickel         ppm         ASTM D5155(m)         >15         0         <1            Nickel         ppm         ASTM D5155(m)         >15         0         <1            Silver         ppm         ASTM D5155(m)         >25         0         <1            Copper         ppm         ASTM D5155(m)         >200         <1         1            Matimum         ppm         ASTM D5155(m)         >200         <1            Auminum         ppm         ASTM D5155(m)         >200         <1            Matimum         ppm         ASTM D5155(m)         >0         0	Machine Age	hrs	Client Info		0	0	
Oil Changed Sample Status         Client Info         N/A         N/A         ABNORMAL            CONTAMINATION         method         imit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         imit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >200         38         357            Chromium         ppm         ASTM D5185(m)         >15         0         <1	Oil Age	hrs	Client Info		0	0	
Sample Status         NORMAL         ABNORMAL            CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5165(m)         >200         38         357            Ohromium         ppm         ASTM D5165(m)         >15         0         <1	Oil Changed		Client Info		N/A	N/A	
Water         WC Method         >0.2         NEG         NEG            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >200         38         357            Chromium         ppm         ASTM D5185(m)         >15         <1	-				NORMAL	ABNORMAL	
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >200         38         357            Chromium         ppm         ASTM D5185(m)         >15         <1	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron         ppm         ASTM D5185(m)         >200         38         357            Chromium         ppm         ASTM D5185(m)         >15         <1	Water		WC Method	>0.2	NEG	NEG	
Chromium         ppm         ASTM D5185(m)         >15         <1         3            Nickel         ppm         ASTM D5185(m)         >15         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185(m)         >15         0         <1            Titanium         ppm         ASTM D5185(m)         0         0             Silver         ppm         ASTM D5185(m)         0         <1	Iron	ppm	ASTM D5185(m)	>200	38	<b>3</b> 57	
Titanium         ppm         ASTM D5185(m)         0         0            Silver         ppm         ASTM D5185(m)         0         <1	Chromium	ppm	ASTM D5185(m)	>15	<1	3	
Silver         ppm         ASTM D5185(m)         0         <1            Aluminum         ppm         ASTM D5185(m)         >25         0         <1	Nickel	ppm	ASTM D5185(m)	>15	0	<1	
Aluminum         ppm         ASTM D5185(m)         >25         0         <1            Lead         ppm         ASTM D5185(m)         >100         0         0            Copper         ppm         ASTM D5185(m)         >200         <1	Titanium	ppm	ASTM D5185(m)		0	0	
Lead         ppm         ASTM D5185(m)         >100         0         0            Copper         ppm         ASTM D5185(m)         >200         <1	Silver	ppm	ASTM D5185(m)		0	<1	
Copper         ppm         ASTM D5185(m)         >200         <1         1            Tin         ppm         ASTM D5185(m)         >25         0         <1	Aluminum	ppm	ASTM D5185(m)	>25	0	<1	
Tin         ppm         ASTM D5185(m)         >25         0         <1            Antimony         ppm         ASTM D5185(m)         >5         0         0            Vanadium         ppm         ASTM D5185(m)         >5         0         0            Beryllium         ppm         ASTM D5185(m)         0         0             Cadmium         ppm         ASTM D5185(m)         0         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Molybdenum         ppm         ASTM D5185(m)         15         9         9            Magnesium         ppm         ASTM D5185(m)         15         0         0            Calcium         ppm         ASTM D5185(m)         50         21         15            Magnesium         ppm         ASTM D5185(m)         50         2         15            Calcium         ppm         ASTM D5185(m)         100	Lead	ppm	ASTM D5185(m)	>100	0	0	
Antimony         ppm         ASTM D5185(m)         >5         0         0            Vanadium         ppm         ASTM D5185(m)         0         0            Beryllium         ppm         ASTM D5185(m)         0         0            Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         15         0         0            Calcium         ppm         ASTM D5185(m)         50         2         15            Phosphorus         ppm         ASTM D5185(m)         309         304            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130 <td>Copper</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;200</td> <td>&lt;1</td> <td>1</td> <td></td>	Copper	ppm	ASTM D5185(m)	>200	<1	1	
Vanadium         ppm         ASTM D5185(m)         0         0            Beryllium         ppm         ASTM D5185(m)         0         0            Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <1         <1         <           Calcium         ppm         ASTM D5185(m)         50         2         15            Calcium         ppm         ASTM D5185(m)         350         309         304            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130	Tin	ppm	ASTM D5185(m)	>25	0	<1	
Beryllium         ppm         ASTM D5185(m)         0            Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <11         <1            Calcium         ppm         ASTM D5185(m)         50         <1         <1         <           Magnesium         ppm         ASTM D5185(m)         50         2         15            Calcium         ppm         ASTM D5185(m)         350         309         304            Phosphorus         ppm         ASTM D5185(m)         12500         13164         12130            Sulfur         ppm         ASTM D5185(m)         >50         0         3 <td>Antimony</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;5</td> <td>0</td> <td>0</td> <td></td>	Antimony	ppm	ASTM D5185(m)	>5	0	0	
Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Manganese         ppm         ASTM D5185(m)         50         <1         <1         6            Magnesium         ppm         ASTM D5185(m)         50         <2         15            Calcium         ppm         ASTM D5185(m)         50         <2         15            Magnesium         ppm         ASTM D5185(m)         50         <2         15            Calcium         ppm         ASTM D5185(m)         350         309         304            Zinc         ppm         ASTM D5185(m)         12500         13164         12130            Sulfur         ppm         ASTM D5185(m)	Vanadium	ppm	ASTM D5185(m)		0	0	
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Manganese         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <1	Beryllium	ppm	ASTM D5185(m)		0	0	
Boron         ppm         ASTM D5185(m)         50         25         14            Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Manganese         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <1	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium         ppm         ASTM D5185(m)         15         9         9            Molybdenum         ppm         ASTM D5185(m)         15         0         0            Manganese         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185(m)         15         0         0            Manganese         ppm         ASTM D5185(m)         15         0         0            Magnesium         ppm         ASTM D5185(m)         50         <1         <1            Calcium         ppm         ASTM D5185(m)         50         2         15            Calcium         ppm         ASTM D5185(m)         350         309         304            Phosphorus         ppm         ASTM D5185(m)         100         12         32            Zinc         ppm         ASTM D5185(m)         12500         13164         12130            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >50         Q         3            Sodium         ppm         ASTM D5185(m)         >50         Q         3	Boron	ppm	ASTM D5185(m)	50	25	14	
Manganese         ppm         ASTM D5185(m)         <1         6            Magnesium         ppm         ASTM D5185(m)         50         <1	Barium	ppm	ASTM D5185(m)	15	9	9	
Magnesium         ppm         ASTM D5185(m)         50         <1         <1            Calcium         ppm         ASTM D5185(m)         50         2         15            Phosphorus         ppm         ASTM D5185(m)         350         309         304            Zinc         ppm         ASTM D5185(m)         100         12         32            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130            Lithium         ppm         ASTM D5185(m)         1         <1	Molybdenum	ppm	ASTM D5185(m)	15	0	0	
Calcium         ppm         ASTM D5185(m)         50         2         15            Phosphorus         ppm         ASTM D5185(m)         350         309         304            Zinc         ppm         ASTM D5185(m)         100         12         32            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130            Lithium         ppm         ASTM D5185(m)         12500         13164         12130            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >50         0         3            Sodium         ppm         ASTM D5185(m)         >50         4	Manganese	ppm	ASTM D5185(m)		<1	6	
Phosphorus         ppm         ASTM D5185(m)         350         309         304            Zinc         ppm         ASTM D5185(m)         100         12         32            Sulfur         ppm         ASTM D5185(m)         1200         13164         12130            Lithium         ppm         ASTM D5185(m)         12500         13164         12130            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >50         0         3            Sodium         ppm         ASTM D5185(m)         2         4	Magnesium	ppm	ASTM D5185(m)	50	<1	<1	
Zinc         ppm         ASTM D5185(m)         100         12         32            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130            Lithium         ppm         ASTM D5185(m)         1         <1         <1            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >50         0         3            Sodium         ppm         ASTM D5185(m)         2         4	Calcium	ppm	ASTM D5185(m)	50		15	
Zinc         ppm         ASTM D5185(m)         100         12         32            Sulfur         ppm         ASTM D5185(m)         12500         13164         12130            Lithium         ppm         ASTM D5185(m)         1         <1	Phosphorus		ASTM D5185(m)	350	309	304	
Lithium         ppm         ASTM D5185(m)         1         <1            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >50         0         3            Sodium         ppm         ASTM D5185(m)         2         4			ASTM D5185(m)	100	12	32	
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185(m)>5003SodiumppmASTM D5185(m)24	Sulfur	ppm	ASTM D5185(m)	12500	13164	12130	
Silicon         ppm         ASTM D5185(m)         >50         0         3            Sodium         ppm         ASTM D5185(m)         2         4	Lithium		ASTM D5185(m)		1	<1	
Sodium ppm ASTM D5185(m) 2 4	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) 2 4	Silicon	ppm	ASTM D5185(m)	>50	0	3	
			( )	>20	0	1	



# **OIL ANALYSIS REPORT**

	iscosity @	0 40°C						
170 165 d	bnormal		 					
160 -								
() 155 - 40 () 150 - 4 ts 145	lase		 	_	 -	-	 	
143								
140 - 135 -								
130	bnormal		 		 		 +	-
Dec1/2							Mar20/24	

	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	Precipitate	scalar	Visual*	NONE	NONE	NONE	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris	scalar	Visual*	NONE	NONE	LIGHT	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Mar20/24	Appearance	scalar	Visual*	NORML	NORML	NORML	
Marí	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.2	NEG	.2%	
	Free Water	scalar	Visual*		NEG	NEG	
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	150	148	159	
	SAMPLE IMAGES	3	method	limit/base	current	history1	history2
	Color						no image
	Bottom						no image
	PrtFilter				no image		no image
	GRAPHS						
	Ferrous Alloys			Mar20/24			
	Non-ferrous Metal	5		Mar20/24			
	Viscosity @ 40°C			Mar2024			
Unique Number Test Package	: WC0909078 : 02623859 : 5748978 : IND 1	02623859         Tested         : 21 Mar 2024           5748978         Diagnosed         : 21 Mar 2024 - Wes Davis				MISSI C Wilson@e	AL SERVICES JGH STREET SSAUGA, ON CA L4T 1G3 ontact: Wilson mfelectrical.ca

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.

CALA

ISO 17025:2017 Accredited Laboratory

F:

T: (905)405-8836