

OIL ANALYSIS REPORT

Sample Rating Trend







SR 2-7
Component

Gearbox

GEAR OIL ISO 150 (1 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 150. Please confirm.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

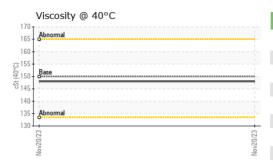
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2							
Sample Number Client Info WC0877651					Nov2023		
Sample Date Client Info 20 Nov 2023 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Oil Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method NoRMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM DS185(m) >20.0 188 Nickel ppm ASTM DS185(m) >15 2 Nickel ppm ASTM DS185(m) >15 <1 Titanium ppm ASTM DS185(m) >25 <1 Lead ppm ASTM DS185(m) >25 <1 Lead ppm ASTM DS185(m) >20 <1 Lead ppm ASTM DS185(m) >20 <1 Tin ppm ASTM DS185(m) >25 0 Antimony ppm ASTM DS185(m) >5 0 Antimony ppm ASTM DS185(m) >5 0 Beryllium ppm ASTM DS185(m) 0 Beryllium ppm ASTM DS185(m) 50 25 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM DS185(m) 50 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM DS185(m) 50 <1 AGTM DS185(m) 50 <1 AGTM DS185(m) 50 316 Calcium ppm ASTM DS185(m) 350 316 Calcium ppm ASTM DS185(m) 350 316 Calcium ppm ASTM DS185(m) 350 316 CONTAMINANTS method limit/base current history1 history2 CONTAMINANTS method limit/base current histo	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0	Sample Number		Client Info		WC0877651		
Oil Age hrs Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >200 188 Chromium ppm ASTM D5185(m) >15 2 Nickel ppm ASTM D5185(m) >15 <1	Sample Date		Client Info		20 Nov 2023		
Oil Changed Citient Info N/A	Machine Age	hrs	Client Info		0		
Sample Status	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >200 188 Chromium ppm ASTM D5185(m) >15 2 Nickel ppm ASTM D5185(m) >15 <1 Silver ppm ASTM D5185(m) >0 Aluminum ppm ASTM D5185(m) >20 <1 Lead ppm ASTM D5185(m) >20 <1 Copper ppm ASTM D5185(m) >20 <1 Antimony ppm ASTM D5185(m) >5 0 Vanadium ppm ASTM D5185(m) 0 Beryllium ppm <td>Oil Changed</td> <td></td> <td>Client Info</td> <td></td> <td>N/A</td> <td></td> <td></td>	Oil Changed		Client Info		N/A		
Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >200 188 Chromium ppm ASTM D5185(m) >15 <1 Nickel ppm ASTM D5185(m) 0 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) >225 <1 Lead ppm ASTM D5185(m) >200 <1 Copper ppm ASTM D5185(m) >20 <1 Tin ppm ASTM D5185(m) >5 0 Antimony ppm ASTM D5185(m) 5 0 Vanadium ppm ASTM D5185(m) </td <td>Sample Status</td> <td></td> <td></td> <td></td> <td>NORMAL</td> <td></td> <td></td>	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >200 188 Chromium ppm ASTM D5185(m) >15 2 Nickel ppm ASTM D5185(m) >15 <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG		
Chromium ppm ASTM D5188[m] > 1.5 2 Nickel ppm ASTM D5185[m] > 1.5 < 1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>200	188		
Titanium	Chromium	ppm	ASTM D5185(m)	>15	2		
Silver	Nickel	ppm	ASTM D5185(m)	>15	<1		
Aluminum	Titanium	ppm	ASTM D5185(m)		0		
Lead ppm ASTM D5185(m) >100 0 Copper ppm ASTM D5185(m) >200 <1	Silver	ppm	ASTM D5185(m)		0		
Copper ppm ASTM D5185(m) >200 <1 Tin ppm ASTM D5185(m) >25 0 Antimony ppm ASTM D5185(m) >5 0 Vanadium ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 50 25 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 50 25 Barium ppm ASTM D5185(m) 15 5 Molybdenum ppm ASTM D5185(m) 15 0 Manganese ppm ASTM D5185(m) 50 <1	Aluminum	ppm	ASTM D5185(m)	>25	<1		
Tin	Lead	ppm	ASTM D5185(m)	>100	0		
Antimony ppm ASTM D5185(m) >5 0 Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 50 25 Barium ppm ASTM D5185(m) 15 5 Molybdenum ppm ASTM D5185(m) 15 0 Magnesium ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 50 8 Phosphorus ppm ASTM D5185(m) 350 316 Sulfur ppm ASTM D5185(m) 12500 12930	Copper	ppm	ASTM D5185(m)	>200	<1		
Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 50 25 Barium ppm ASTM D5185(m) 15 5 Molybdenum ppm ASTM D5185(m) 15 0 Magnesium ppm ASTM D5185(m) 50 <1 Calcium ppm ASTM D5185(m) 50 8 Phosphorus ppm ASTM D5185(m) 100 21 Zinc ppm ASTM D5185(m) 12500 12930 Sulfur ppm ASTM D5185(m) >50 1 <td>Tin</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>>25</td> <td>0</td> <td></td> <td></td>	Tin	ppm	ASTM D5185(m)	>25	0		
Beryllium	Antimony	ppm	ASTM D5185(m)	>5	0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 50 25 Barium ppm ASTM D5185(m) 15 5 Molybdenum ppm ASTM D5185(m) 15 0 Manganese ppm ASTM D5185(m) 50 <1	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 50 25	Cadmium	ppm	ASTM D5185(m)		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 15 0 Manganese ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 50 <1 Calcium ppm ASTM D5185(m) 50 8 Phosphorus ppm ASTM D5185(m) 350 316 Zinc ppm ASTM D5185(m) 100 21 Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	Boron	ppm	ASTM D5185(m)	50	25		
Manganese ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 50 <1	Barium	ppm	ASTM D5185(m)	15	5		
Magnesium ppm ASTM D5185(m) 50 <1 Calcium ppm ASTM D5185(m) 50 8 Phosphorus ppm ASTM D5185(m) 350 316 Zinc ppm ASTM D5185(m) 100 21 Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)	15	0		
Calcium ppm ASTM D5185(m) 50 8 Phosphorus ppm ASTM D5185(m) 350 316 Zinc ppm ASTM D5185(m) 100 21 Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		3		
Phosphorus ppm ASTM D5185(m) 350 316 Zinc ppm ASTM D5185(m) 100 21 Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	Magnesium	ppm	ASTM D5185(m)	50			
Zinc ppm ASTM D5185(m) 100 21 Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	Calcium	ppm	ASTM D5185(m)	50	8		
Sulfur ppm ASTM D5185(m) 12500 12930 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2			ASTM D5185(m)				
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	-	ppm	ASTM D5185(m)	100	21		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	Sulfur	ppm	ASTM D5185(m)	12500	12930		
Silicon ppm ASTM D5185(m) >50 1 Sodium ppm ASTM D5185(m) 2	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 2	CONTAMINANTS	5	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>50	1		
Potassium ppm ASTM D5185(m) >20 <1	Sodium	ppm	ASTM D5185(m)		2		
	Potassium		ASTM D5185(m)	>20	<1		



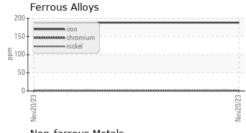
OIL ANALYSIS REPORT



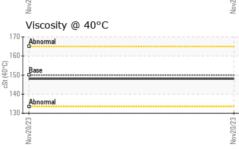
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	TEC	method	limit/bass	OLIVE ON T	history	hiotom/2
FLUID PROPER I	IEO	method				history2

FLUID PROPER	HES	method			history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	150	148		

SAMPLE IMAGES	method	imit/base	current	nistory i	nistory2
Color			المراجعة	no image	no image
Bottom				no image	no image



	Non-ferrous Metals	
0 -	.,	
8-	copper i	
6 -	**************************************	
4 -		
2+		
0 L		-
	Nov20/23	Nov2U/23
	8	copper tin





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5695767 Test Package : IND 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0877651 : 02602682

Received : 12 Dec 2023 Diagnosed : 12 Dec 2023 Diagnostician : Wes Davis

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.

EMF ELECTRICAL SERVICES

2690 SLOUGH STREET MISSISSAUGA, ON CA L4T 1G3 Contact: Wilson Wilson@emfelectrical.ca T: (905)405-8836