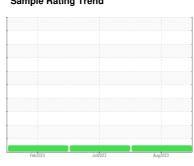


# **OIL ANALYSIS REPORT**

Sample Rating Trend







# <sup>Machine Id</sup> **427183 - SW4723**

Component

**Transmission (Manual)** 

NOT GIVEN (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the

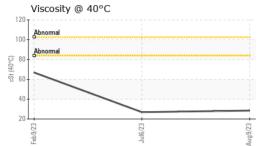
### **Fluid Condition**

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

Boron							
Client Info	SAMPLE INFOR	MATION					history2
Client Info		WATION		mmbasc			•
Machine Age   mis   Client Info   298070   293632   273859							
Oil Age	•	mle			_		
Cilient Info	•						
NORMAL   NORMAL   NORMAL   NORMAL   NORMAL		IIIIS					
WEAR METALS	-		Client into		_		
	·	C	method	limit/base			
Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         0           Tittanium         ppm         ASTM D5185m         >5         0         0         0           Silver         ppm         ASTM D5185m         >7         0         0         0           Aluminum         ppm         ASTM D5185m         >25         2         8         11           Lead         ppm         ASTM D5185m         >225         105         31         20           Copper         ppm         ASTM D5185m         >10         0         0         1           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           AADDITIVES         method         Imit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           AADDITIVES         method         Imit/base         current         history1         hist						· ·	
Nickel	-						
Description					-		
Silver				>5			
Astronome				. 7			
Lead							
Copper							
Tin							
Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         <1         0           Magnesium         ppm         ASTM D5185m         0         0         <1         0           Magnesium         ppm         ASTM D5185m         0         0         2         1           Calcium         ppm         ASTM D5185m         293         179         160         0           Phosphorus         ppm         ASTM D5185m         293         179         160         0           Zinc         ppm         ASTM D5185m         477         491         400         0           Zinc         ppm         ASTM D5185m         1567         2214         1607           CONTA	• •						
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         48         120         113           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         <1           Manganese         ppm         ASTM D5185m         0         0         <1           Magnesium         ppm         ASTM D5185m         293         179         160           Calcium         ppm         ASTM D5185m         293         179         160           Phosphorus         ppm         ASTM D5185m         477         491         400           Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5 <td></td> <td></td> <td></td> <td>&gt;10</td> <td></td> <td></td> <td></td>				>10			
ADDITIVES					-		
Boron		ppm	ASTM D5185m		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         0         <1           Manganese         ppm         ASTM D5185m         0         0         <1	Boron	ppm	ASTM D5185m				
Manganese         ppm         ASTM D5185m         0         0         <1           Magnesium         ppm         ASTM D5185m         0         0         2           Calcium         ppm         ASTM D5185m         293         179         160           Phosphorus         ppm         ASTM D5185m         477         491         400           Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         AS	Barium	ppm	ASTM D5185m		0	0	0
Magnesium         ppm         ASTM D5185m         0         0         2           Calcium         ppm         ASTM D5185m         293         179         160           Phosphorus         ppm         ASTM D5185m         477         491         400           Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE	Molybdenum	ppm	ASTM D5185m		0	0	<1
Calcium         ppm         ASTM D5185m         293         179         160           Phosphorus         ppm         ASTM D5185m         477         491         400           Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           VISUAL         method         limit/base         current         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Vellow Metal         scalar         *Visual         NONE	Manganese	ppm	ASTM D5185m		0	0	<1
Phosphorus         ppm         ASTM D5185m         477         491         400           Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           Potassium         ppm         ASTM D5185m         >20         0         0         1           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Yellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE	Magnesium	ppm	ASTM D5185m		0	0	2
Zinc         ppm         ASTM D5185m         4         12         26           Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5         8           Sodium         ppm         ASTM D5185m         >125         5         NONE         NONE	Calcium	ppm	ASTM D5185m		293	179	160
Sulfur         ppm         ASTM D5185m         1567         2214         1607           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >125         5         5         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           Potassium         ppm         ASTM D5185m         >20         0         0         1           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE	Phosphorus	ppm	ASTM D5185m		477	491	400
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 5 5 8 Sodium ppm ASTM D5185m >20 0 0 1  VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Zinc	ppm	ASTM D5185m		4	12	26
Silicon	Sulfur	ppm	ASTM D5185m		1567	2214	1607
Sodium	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 0 1  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE  Yellow Metal scalar *Visual NONE NONE NONE NONE NONE  Precipitate scalar *Visual NONE NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE NONE  Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Odor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >0.1 NEG NEG NEG  Free Water scalar *Visual NEG NEG NEG	Silicon	ppm	ASTM D5185m	>125	5	5	8
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Sodium	ppm	ASTM D5185m		<1	7	2
White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	0	0	1
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORML<	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORM	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water       scalar       *Visual       >0.1       NEG       NEG       NEG         Free Water       scalar       *Visual       NEG       NEG       NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1		NEG	NEG
FLUID PROPERTIES method limit/base current history1 history2	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2

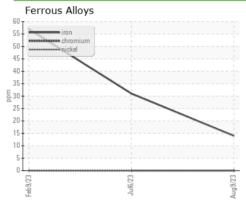


## **OIL ANALYSIS REPORT**

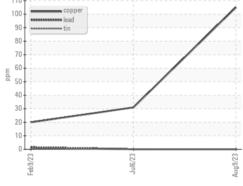


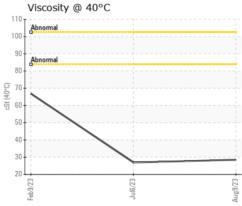


### **GRAPHS**



#### Non-ferrous Metals









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10605120

: 05925173

: GFL0089376 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Aug 2023 Diagnosed

: 16 Aug 2023 Diagnostician : Sean Felton

GFL Environmental - 983 - Sugar Land Hauling 16011 West Belfort Street

Sugar Land, TX US 77498 Contact: Gino Griego

ggriego@gflenv.com T:

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)