

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Machine Id **351126** Component **Diesel Engine** Fluid **SAE 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0107904		
Sample Date		Client Info		23 Apr 2024		
Machine Age	kms	Client Info		0		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	17		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>2	0		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>25	2		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	5		
Tin	ppm	ASTM D5185(m)	>15	0		
Antimony	ppm	ASTM D5185(m)		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)		6		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		59		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		897		
Calcium	ppm	ASTM D5185(m)		1013		
Phosphorus	ppm	ASTM D5185(m)		828		
Zinc	ppm	ASTM D5185(m)		1074		
Sulfur	ppm	ASTM D5185(m)		2337		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	ITS	method	limit/base		history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3		
Sodium	ppm	ASTM D5185(m)	>228	3		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	12.1		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.4		



Abnormal

35

31

<sub>ق</sub>25

14 13 **Д** 

()-001 11-Base 10-Abno

nr73/74

sqP 20 15 10 \$2/220

FT-IR (Direct Trend)

Oxidation

Nitration Sulfation

Viscosity @ 100°C

# **OIL ANALYSIS REPORT**

FLUID DEGRAI		method	limit/base	current	history1	histor
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.3		
VISUAL		method	limit/base	current	history1	histor
White Metal	scalar	Visual*	NONE	VLITE		
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 Free Water	scalar	Visual* Visual*	>0.2	NEG NEG		
	scalar		11 11 11			
FLUID PROPE		method	limit/base	current	history1	histor
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.6		
GRAPHS				Land (mark)		
Iron (ppm)			100	Lead (ppm)		
00 - Severe			80	Severe		
50 - Abnormal			E 60	Abnormal		
00 + <b>0</b> 50 +			40	T		
0			o			
Apr23/24			Apr23/24	Apr23/24		
			Apı			
Aluminum (ppm)			50	Chromium (p	pm)	
40 - Severe			40	Courses		
30 Abnormal			e <sup>30</sup>	Abnormal		
10			10			
Apr23/24			Apr23/24 -	Apr23/24		
Apré			Apr2	Apri		
Copper (ppm)				Silicon (ppm)		
			80			
300 - 7			60 E 40			
200 -			튭.40 20	Abhormai		
100-			20			
3/24 10			3/24	3/24		
Apr23/24			Apr23/24	Apr23/24		
Viscosity @ 100°C	2			Soot %		
14 Abnormal			6.0	Severe		
				7		
12 - Base 10 - Abnormal			2.0	Abnormal		
Abnormal						
- 1 1			0.0	1		
apr23/24			Apr23/24	Apr23/24		

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 310 - Winnipeg CALA Sample No. : GFL0107904 Received : 04 Jun 2024 #360 - 555 Hervo Street, Lab Number : 02639574 Tested : 05 Jun 2024 Winnipeg, MB ISO 17025:2017 Accredited Laboratory Unique Number : 5788736 : 05 Jun 2024 - Wes Davis CA R3T 3L6 Diagnosed Test Package : MOB 1 (Additional Tests: Visual) Contact: Joshua Lourenco To discuss this sample report, contact Customer Service at 1-800-268-2131. jlourenco@gflenv.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (204)987-9600 Validity of results and interpretation are based on the sample and information as supplied. F:

Report Id: GFL310 [WCAMIS] 02639574 (Generated: 06/05/2024 13:38:28) Rev: 1

Contact/Location: Joshua Lourenco - GFL310 Page 2 of 2