

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

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14 13 **Д**

()-001 11-Base 10-Abno

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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 + 0 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 ³⁰	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