

## **OIL ANALYSIS REPORT**

Sample Rating Trend





Machine Id 714008 Component Diesel Engine

Fluid SAE 10W30 (--- GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

## Wear

Metal levels are typical for a new component breaking in.

#### 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 INFORM	<b>/</b> ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0127609		
Sample Date		Client Info		05 Jul 2024		
Machine Age	kms	Client Info		8225		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	26		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>5	3		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>20	6		
Lead	ppm	ASTM D5185(m)	>40	3		
Copper	ppm	ASTM D5185(m)	>330	133		
Tin	ppm	ASTM D5185(m)	>15	2		
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)		232		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		125		
Manganese	ppm	ASTM D5185(m)		4		
Magnesium	ppm	ASTM D5185(m)		659		
Calcium	ppm	ASTM D5185(m)		1387		
Phosphorus	ppm	ASTM D5185(m)		648		
Zinc	ppm	ASTM D5185(m)		746		
Sulfur	ppm	ASTM D5185(m)		1845		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	79		
Sodium	ppm	ASTM D5185(m)	>228	3		
Potassium	ppm	ASTM D5185(m)	>20	9		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>4	0.1		
Nitration	Abs/cm	ASTM D7624*	>20	10.0		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.7		



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21 cst (100°C) Base

# **OIL ANALYSIS REPORT**

FI-IR (Direct Irend)	- <u>-</u> -	FLUID DEGR	ADATION	method	limit/base	current	history1
Oxidation Witration Sulfation	(	Dxidation	Abs/.1mm	ASTM D7414*	>25	23.8	
Abnormal	-	VISUAL		method	limit/base	current	history1
	- N	White Metal	scalar	Visual*	NONE	VLITE	
	`	Yellow Metal	scalar	Visual*	NONE	NONE	
	F	Precipitate	scalar	Visual*	NONE	NONE	
5/24	5/24	Silt	scalar	Visual*	NONE	NONE	
Jul.	վոր	Debris	scalar	Visual*	NONE	NONE	
V/	ę	Sand/Dirt	scalar	Visual*	NONE	NONE	
	/	Appearance	scalar	Visual*	NORML	NORML	
Abnormal	(	Odor	scalar	Visual*	NORML	NORML	
	E	Emulsified Water	scalar	Visual*	>0.2	NEG	
Base	F	Free Water	scalar	Visual*		NEG	
Ahomal	i.	FLUID PROP	ERTIES	method	limit/base	current	history1
d'	Ň	/isc @ 100°C	cSt	ASTM D7279(m)	11.0	9.5	
/24	/24	GRAPHS					
2 <sup>In</sup>	luf	Iron (ppm)				Lead (ppm)	
	300	Severe			100	L Severe	
	200				80	- 0	
	mqq	Abnormal			E 40	Abnormal	
	100	•			20		
	0	4			- 0	-	
		Jul5/2			Jul5/2	Jul5/2	
					,		,
	50	Aluminum (ppm	)		50	Chromium (pp	m)
	40				40	Severe	
	E 30	-			30		
	<sup>□</sup> 20				<sup>2</sup> 20	- Abnormal	
	10				10		
	0	5/24			5/24	5/24	
		lul			Jul	lul	
		Copper (ppm)				Silicon (ppm)	
	400	Severe Abnormal			80	Severe	
	300				60		
	튭 200	-			<u>특</u> 40	Abnormal	
	100				20	-	
	0	*				5	
		Jul5/2			Jul5/2	Jul5/2	
		Viscosity @ 100	°C			Soot %	
	14	Abnormal			8.0	Smuara	
	<u>ନ</u> 12	D			6.0 »e	- O	
	5t (100	Base			104.0 S	Abnormal - 0	
	·영 10	Abnormal			2.0		
	8					L	

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 221 - Windsor CALA Sample No. : GFL0127609 Received : 17 Jul 2024 905 Tecumseh Road W Lab Number : 02648382 Tested : 17 Jul 2024 Windsor, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5813934 CA N8W 4J5 Diagnosed : 18 Jul 2024 - Kevin Marson Test Package : MOB 1 (Additional Tests: Visual) Contact: Pamela-Jean Butler To discuss this sample report, contact Customer Service at 1-800-268-2131. pamelajean.butler@gflenv.com T: (519)948-8126 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. F:

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Contact/Location: Pamela-Jean Butler - GFL221 Page 2 of 2

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