

## **OIL ANALYSIS REPORT**

Sample Rating Trend





834025 Component Natural Gas Engine

{not provided} (--- GAL)

## DIAGNOSIS Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

There is no indication of any contamination in the oil.

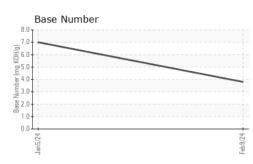
#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

L)			Jan2024	Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108286	GFL0098238	
Sample Date		Client Info		09 Feb 2024	05 Jan 2024	
Machine Age	hrs	Client Info		442	272	
Oil Age	hrs	Client Info		442	272	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	39	21	
Chromium	ppm	ASTM D5185m	>4	1	<1	
Nickel	ppm	ASTM D5185m	>2	2	<1	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	<1	0	
Aluminum	ppm	ASTM D5185m	>9	3	2	
Lead	ppm	ASTM D5185m	>30	2	<1	
Copper	ppm	ASTM D5185m	>35	19	10	
Tin	ppm	ASTM D5185m	>4	2	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		ام م داخم میں	limit/base	ourropt	Internet d	history2
ADDITIVES		method	iimii/base	current	history1	TIStoryz
Boron	ppm	ASTM D5185m	IIIII/Dase	6	12	
	ppm ppm		iimi/base			
Boron		ASTM D5185m	IImi/base	6	12	
Boron Barium	ppm	ASTM D5185m ASTM D5185m		6 17	12 2	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		6 17 51	12 2 51	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 17 51 14	12 2 51 8	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 17 51 14 714	12 2 51 8 842	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 17 51 14 714 1141	12 2 51 8 842 1134	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 17 51 14 714 1141 691	12 2 51 8 842 1134 862	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 17 51 14 714 1141 691 834 2561	12 2 51 8 842 1134 862 1031	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 17 51 14 714 1141 691 834 2561	12 2 51 8 842 1134 862 1031 2615	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 17 51 14 714 1141 691 834 2561 current	12 2 51 8 842 1134 862 1031 2615 history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >+100	6 17 51 14 714 1141 691 834 2561 <b>current</b> 32	12 2 51 8 842 1134 862 1031 2615 history1 21	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	limit/base >+100	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6	12 2 51 8 842 1134 862 1031 2615 history1 21 3	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3	    history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6 <u>current</u> 0	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3 history1 0.1	    history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base >20	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6 <u>current</u> 0 12.5 23.0	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3 history1 0.1 8.9	history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base >20 >30 limit/base	6 17 51 14 714 1141 691 834 2561 <u>current</u> 32 2 6 <u>current</u> 0 12.5 23.0	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3 history1 0.1 8.9 19.0	    history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	limit/base >+100 >20 limit/base >20 >30 limit/base	6 17 51 14 714 1141 691 834 2561 Current 32 2 6 Current 0 12.5 23.0 Current	12 2 51 8 842 1134 862 1031 2615 history1 21 3 3 3 history1 0.1 8.9 19.0 history1	     history2  history2  history2  history2  history2

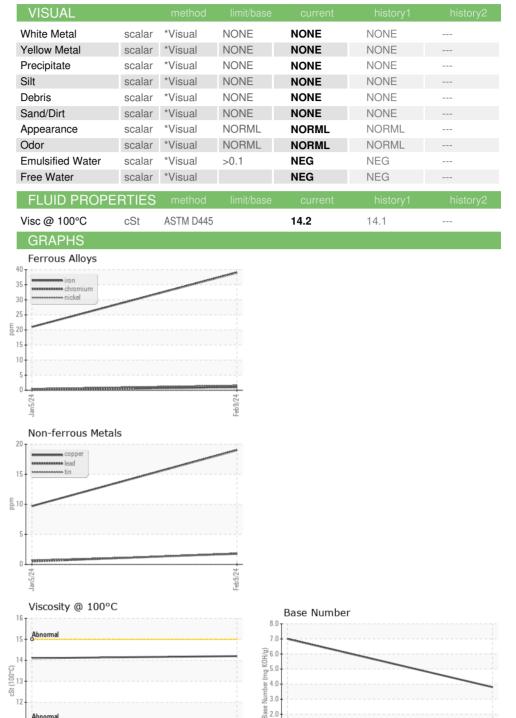


# **OIL ANALYSIS REPORT**



### Viscosity @ 100°C





1.0

0.0

an5/74

eb9/24

: 12 Feb 2024

: 12 Feb 2024



Unique Number : 10873128 : 12 Feb 2024 - Wes Davis Diagnosed Test Package : FLEET Contact: WILLIAM MILO Certificate L2367 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)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

A 11

an 5/74

: GFL0108286

10

Laboratory

Sample No.

Lab Number : 06085683

Submitted By: TECHNICIAN ACCOUNT

GFL Environmental - 652 - Fredericksburg Hauling

US 22408

T:

F:

10954 Houser Drive

Fredericksburg, VA

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