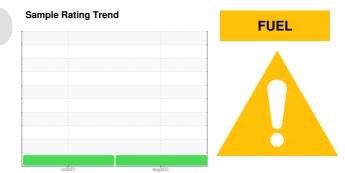


# **PROBLEM SUMMARY**





Machine Id 212031 Component **Diesel Engine** 

**DIESEL ENGINE OIL SAE 30 (--- GAL)** 

## **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.

## PROBLEMATIC TEST RESULTS

Sample Status				MARGINAL	MARGINAL	
Fuel	%	ASTM D3524	>5	<b>4.7</b>	<b>△</b> 3.0	

Customer Id: GFL816 **Sample No.:** GFL0086369 Lab Number: 05940104 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED	<b>ACTIONS</b>			
Action	Status	Date	Done By	Description
Alert			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.
Information Required			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.

## HISTORICAL DIAGNOSIS

30 Jul 2023 Diag: Wes Davis





No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Metal levels are typical for a new component breaking in. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





# **OIL ANALYSIS REPORT**





### **DIAGNOSIS**

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

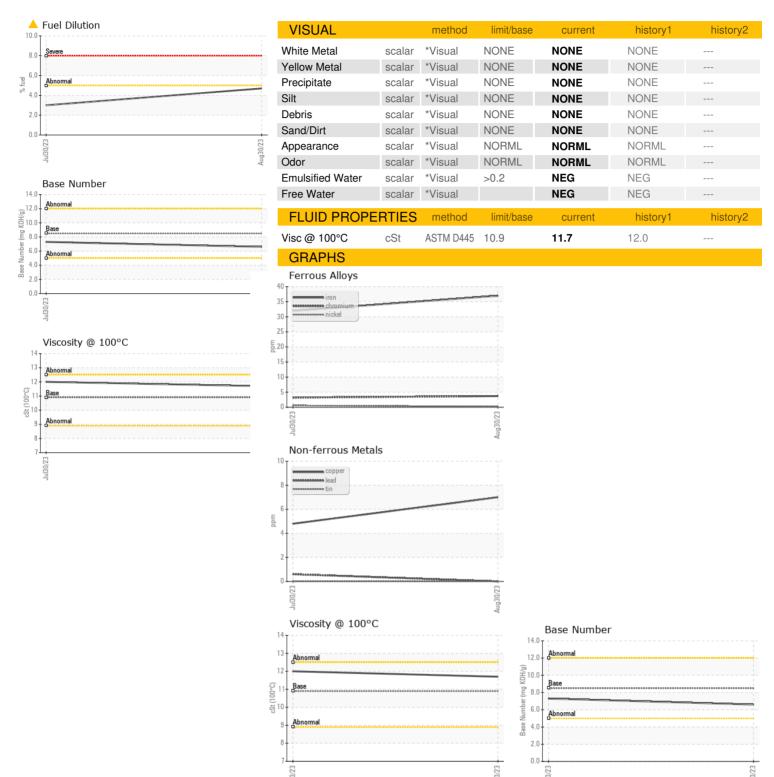
#### Fluid Condition

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

AE 30 ( GAL)			Jul2023	Aug2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0086369	GFL0074773	
Sample Date		Client Info		30 Aug 2023	30 Jul 2023	
Machine Age	hrs	Client Info		774	704	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				MARGINAL	MARGINAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>80	37	32	
Chromium	ppm	ASTM D5185m	>5	4	3	
Nickel	ppm	ASTM D5185m	>2	<1	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	<1	<1	
Aluminum	ppm	ASTM D5185m	>30	2	4	
_ead	ppm	ASTM D5185m	>30	0	<1	
Copper	ppm	ASTM D5185m	>150	7	5	
Γin	ppm	ASTM D5185m	>5	0	0	
/anadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	0	4	
Barium	ppm	ASTM D5185m	10	0	1	
	ppiii	/ TO THE DO TOOM				
Molybdenum		ASTM D5185m	100	60	60	
-	ppm	ASTM D5185m		60 2	60 2	
Manganese	ppm					
Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	100 450	2 806	2 769	
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000	2 806 1279	2 769 1302	
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150	2 806 1279 1018	2 769 1302 1018	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000	2 806 1279	2 769 1302	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350	2 806 1279 1018 1251	2 769 1302 1018 1231	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 limit/base	2 806 1279 1018 1251 3524	2 769 1302 1018 1231 3016	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >20	2 806 1279 1018 1251 3524 current	2 769 1302 1018 1231 3016 history1	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 450 3000 1150 1350 4250 limit/base >20	2 806 1279 1018 1251 3524 current	2 769 1302 1018 1231 3016 history1	   history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100  450 3000 1150 1350 4250  limit/base >20 >75 >20	2 806 1279 1018 1251 3524 current 6 2	2 769 1302 1018 1231 3016 history1 7 <1	  history2
Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	100  450 3000 1150 1350 4250  limit/base >20 >75 >20	2 806 1279 1018 1251 3524 current 6 2	2 769 1302 1018 1231 3016 history1 7 <1	   history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Euel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base	2 806 1279 1018 1251 3524  current 6 2 0  4.7  current	2 769 1302 1018 1231 3016 history1 7 <1 2 ▲ 3.0	history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Goot %	ppm	ASTM D5185m ASTM D7844	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base >3	2 806 1279 1018 1251 3524 current 6 2 0 ▲ 4.7 current	2 769 1302 1018 1231 3016 history1 7 <1 2  3.0 history1 0.4	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base >3	2 806 1279 1018 1251 3524  current 6 2 0  4.7  current	2 769 1302 1018 1231 3016 history1 7 <1 2 ▲ 3.0	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7824  *ASTM D7844 *ASTM D7624	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base >3 >20	2 806 1279 1018 1251 3524	2 769 1302 1018 1231 3016 history1 7 <1 2 ▲ 3.0 history1 0.4 9.6	history2 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m ASTM D7824  *ASTM D7844 *ASTM D7844 *ASTM D7844	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base >3 >20 >3 limit/base	2 806 1279 1018 1251 3524	2 769 1302 1018 1231 3016 history1 7 <1 2 ▲ 3.0 history1 0.4 9.6 19.9 history1	history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D3524  method *ASTM D7844 *ASTM D7624 *ASTM D76145	100  450 3000 1150 1350 4250  limit/base >20 >75 >20 >5  limit/base >3 >20 >30  limit/base >25	2 806 1279 1018 1251 3524 current 6 2 0 ▲ 4.7 current 0.5 10.4 20.7	2 769 1302 1018 1231 3016 history1 7 <1 2  ▲ 3.0 history1 0.4 9.6 19.9	history2 history2 history2 history2 history2



# **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** 

: GFL0086369 : 05940104

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 Aug 2023 Diagnosed : 10630716

: 01 Sep 2023 Diagnostician : Wes Davis Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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)

GFL Environmental - 816 - WCA of South Arkansas

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Contact: Mike Howell mike.howell@gflenv.com

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