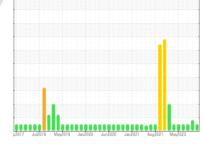


### **OIL ANALYSIS REPORT**

#### Sample Rating Trend

#### NORMAL





SAMPLE INFOF	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0109101	GFL0086184	GFL0086215
Sample Date		Client Info		11 Jan 2024	14 Dec 2023	12 Sep 2023
Machine Age	hrs	Client Info		19026	18868	14889
Oil Age	hrs	Client Info		19026	18868	18365
Oil Changed	1110	Client Info		N/A	N/A	N/A
Sample Status				NORMAL	MARGINAL	NORMAL
		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	1.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
		WC Method	>0.2	NEG	NEG	NEG
Glycol				-		
WEAR METAL	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	9	3	73
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	1	7
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>100	5	7	6
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		20	24	14
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	56	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	752	726	806
Calcium	ppm		1070	1071	1049	1113
Phosphorus	ppm	ASTM D5185m	1150	970	851	939
Zinc	ppm		1270	1132	1098	1135
Sulfur	ppm	ASTM D5185m	2060	2809	2702	3260
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	2	4
Sodium	ppm	ASTM D5185m		6	4	25
Potassium	ppm	ASTM D5185m	>20	2	<1	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.4	0.3	0.9
Nitration	Abs/cm	*ASTM D7624	>20	6.6	5.9	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	17.1	18.0
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.3	11.8	12.0
						~
Base Number (BN)	ma KOH/a	ASTM D2896	9.8	7.5	7.9	7.7

# AUTOCAR 10713

**Diesel Engine** 

Fluid PETRO CANADA DURON SHP 15W40 (7 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

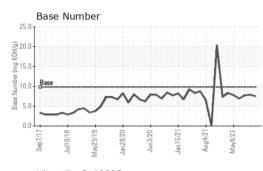
There is no indication of any contamination in the oil.

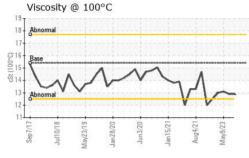
#### Fluid Condition

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

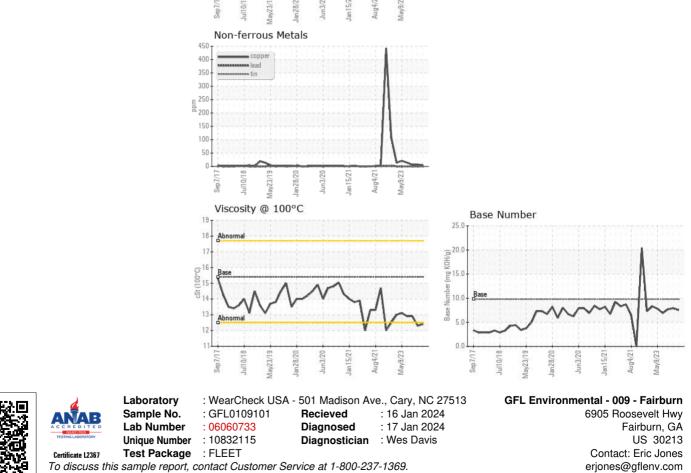


## **OIL ANALYSIS REPORT**





VISUAL		method	limit/base	current	history1	history2
Vhite Metal	scalar	*Visual	NONE	NONE	NONE	NONE
ellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
/isc @ 100°C	cSt	ASTM D445	15.4	12.4	12.3	12.9
GRAPHS						
Ferrous Alloys						
iron						
contraction chromium		AA .				
nickel		IVI	1			
+ + + + +						



\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: