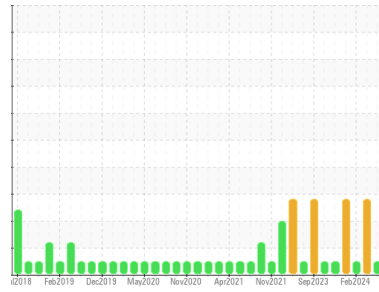




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(EMN864)**  
Machine Id  
**AUTOCAR 10854**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (7 GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0116768</b>	GFL0116759	GFL0109077
Sample Date	Client Info		<b>29 May 2024</b>	24 May 2024	08 Feb 2024
Machine Age	hrs	Client Info	<b>4617</b>	4606	4131
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>NORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >75	<b>5</b>	40	10
Chromium	ppm	ASTM D5185m >5	<b>0</b>	2	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	1	0
Aluminum	ppm	ASTM D5185m >15	<b>1</b>	7	6
Lead	ppm	ASTM D5185m >25	<b>0</b>	1	0
Copper	ppm	ASTM D5185m >100	<b>0</b>	2	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>4</b>	9	14
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	9
Molybdenum	ppm	ASTM D5185m 60	<b>55</b>	54	60
Manganese	ppm	ASTM D5185m 0	<b>0</b>	1	0
Magnesium	ppm	ASTM D5185m 1010	<b>831</b>	677	698
Calcium	ppm	ASTM D5185m 1070	<b>1083</b>	1055	1036
Phosphorus	ppm	ASTM D5185m 1150	<b>993</b>	839	796
Zinc	ppm	ASTM D5185m 1270	<b>1150</b>	1015	1047
Sulfur	ppm	ASTM D5185m 2060	<b>3417</b>	2844	2554

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	9	3
Sodium	ppm	ASTM D5185m	<b>1</b>	6	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	16
Fuel	%	ASTM D3524 >3.0	<b>0.7</b>	▲ 9.9	0.9

## INFRA-RED

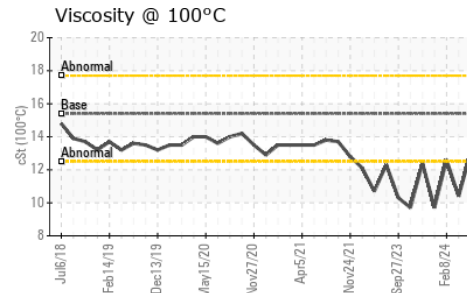
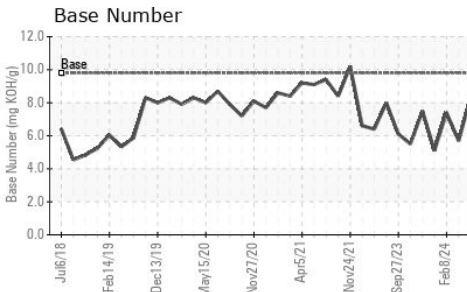
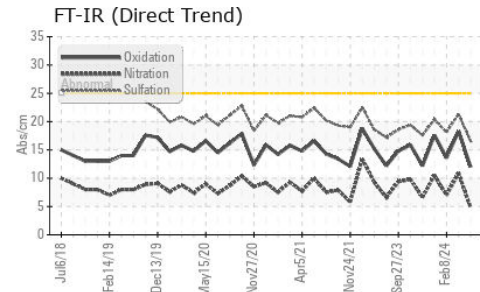
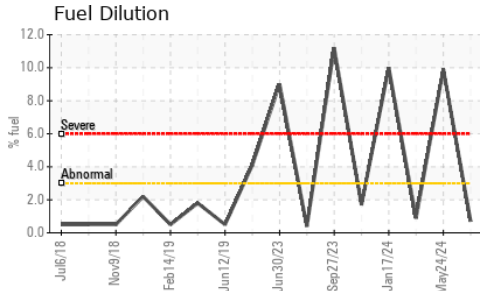
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.2</b>	1.1	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>4.8</b>	10.9	7.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>16.6</b>	21.3	18.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.0</b>	18.3	13.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.3</b>	5.7	7.4



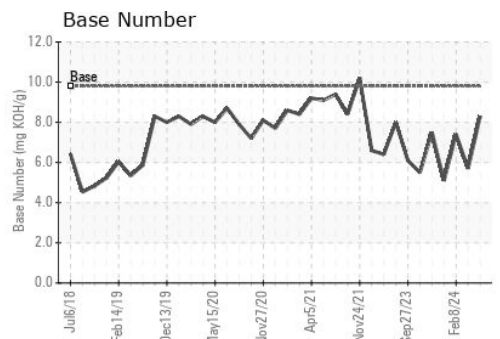
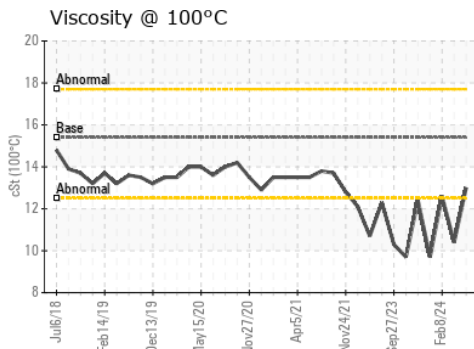
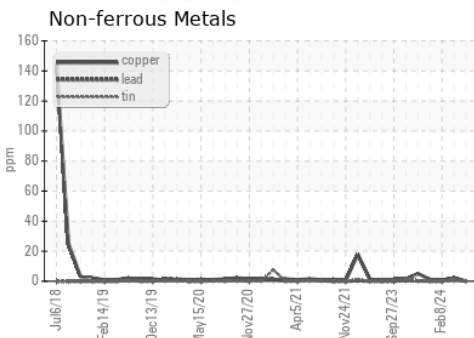
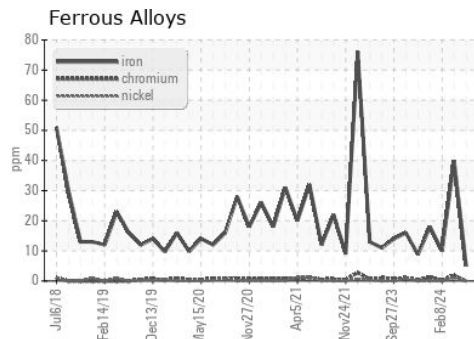
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	▲ 10.4	12.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116768 **Received** : 04 Jun 2024  
**Lab Number** : 06198853 **Tested** : 06 Jun 2024  
**Unique Number** : 11060976 **Diagnosed** : 06 Jun 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 009 - Fairburn**  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
 T: (678)630-9927  
 F:

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)