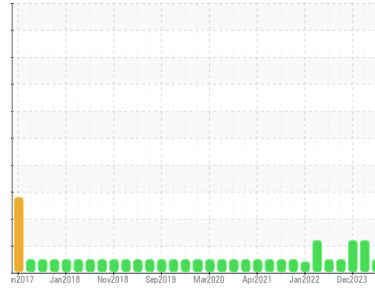




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**2656**

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

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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0109098</b>	GFL0086253	GFL0086183
Sample Date	Client Info	<b>18 Jan 2024</b>	20 Dec 2023	14 Dec 2023
Machine Age	hrs	<b>33927</b>	33778	33741
Oil Age	hrs	<b>33927</b>	33778	33741
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	ABNORMAL

## 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 >120	<b>14</b>	8	10
Chromium	ppm ASTM D5185m >20	<b>1</b>	0	<1
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	<1	2
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	3	3
Tin	ppm ASTM D5185m >15	<b>0</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>20</b>	16	19
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>55</b>	54	56
Manganese	ppm ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185m 1010	<b>711</b>	759	773
Calcium	ppm ASTM D5185m 1070	<b>1060</b>	1008	1019
Phosphorus	ppm ASTM D5185m 1150	<b>927</b>	936	865
Zinc	ppm ASTM D5185m 1270	<b>1100</b>	1101	1103
Sulfur	ppm ASTM D5185m 2060	<b>2880</b>	2769	2675

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>5</b>	2	5
Sodium	ppm ASTM D5185m	<b>3</b>	<1	<1
Potassium	ppm ASTM D5185m >20	<b>2</b>	0	1
Fuel	% ASTM D3524 >3.0	<b>1.4</b>	▲ 3.7	▲ 3.2

## INFRA-RED

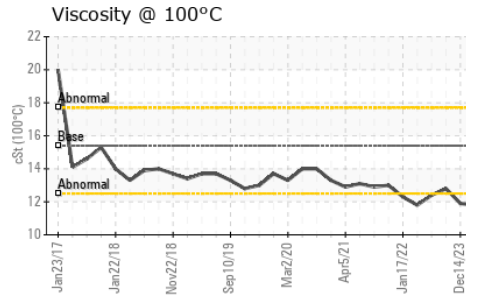
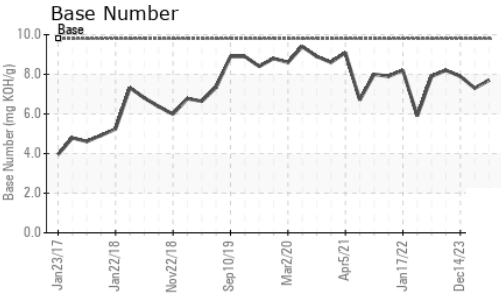
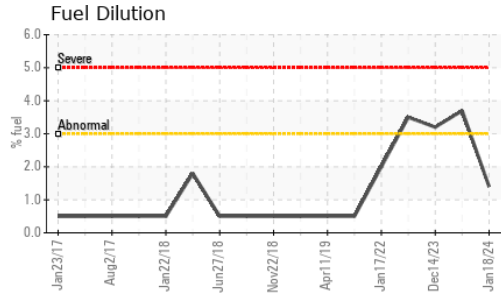
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.2</b>	1.1	1.1
Nitration	Abs/cm *ASTM D7624 >20	<b>6.4</b>	6.9	6.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>16.5</b>	18.3	18.3

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>12.0</b>	12.2	12.3
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.7</b>	7.3	7.9



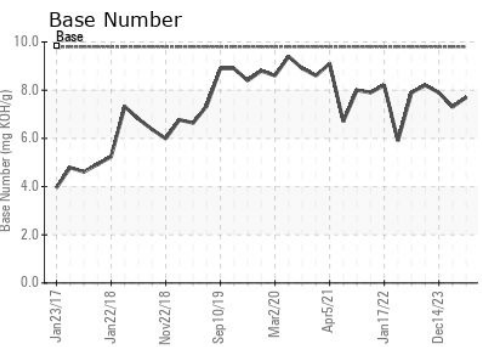
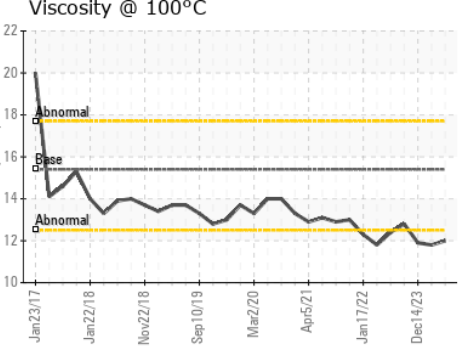
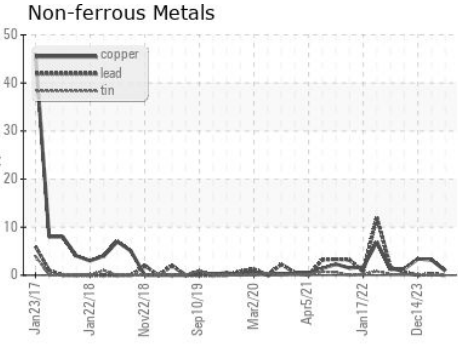
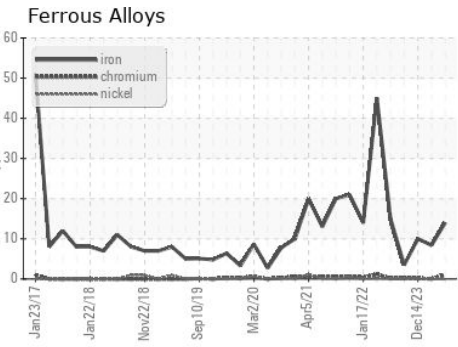
# OIL ANALYSIS REPORT



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	<b>12.0</b>	▲ 11.8	▲ 11.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109098 **Received** : 22 Jan 2024  
**Lab Number** : 06066608 **Diagnosed** : 24 Jan 2024  
**Unique Number** : 10843285 **Diagnostician** : 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)