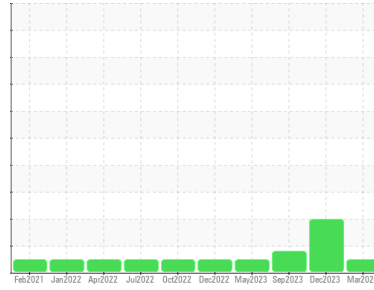




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**843M**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (8 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0116936</b>	GFL0107061	GFL0027497
Sample Date	Client Info	<b>21 Mar 2024</b>	20 Dec 2023	19 Sep 2023
Machine Age	hrs	<b>8595</b>	8740	8090
Oil Age	hrs	<b>600</b>	600	600
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changd
Sample Status		<b>NORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
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 >100	<b>3</b>	69	58
Chromium	ppm ASTM D5185m >20	<b>0</b>	1	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>&lt;1</b>	4	2
Lead	ppm ASTM D5185m >40	<b>0</b>	8	3
Copper	ppm ASTM D5185m >330	<b>3</b>	6	4
Tin	ppm ASTM D5185m >15	<b>0</b>	2	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>1</b>	0	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>56</b>	65	62
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>970</b>	982	981
Calcium	ppm ASTM D5185m 1070	<b>1081</b>	1131	1181
Phosphorus	ppm ASTM D5185m 1150	<b>1034</b>	998	985
Zinc	ppm ASTM D5185m 1270	<b>1207</b>	1296	1262
Sulfur	ppm ASTM D5185m 2060	<b>3681</b>	3070	3268

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>3</b>	9	9
Sodium	ppm ASTM D5185m	<b>2</b>	1	5
Potassium	ppm ASTM D5185m >20	<b>0</b>	2	0

## INFRA-RED

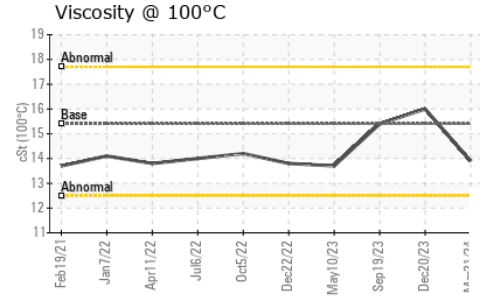
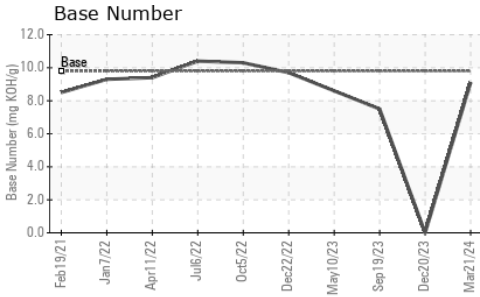
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	▲ 3	▲ 3.3
Nitration	Abs/cm *ASTM D7624 >20	<b>5.3</b>	11.8	18.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.0</b>	25.3	30.3

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.7</b>	18.5	27.1
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.1</b>	▲ 0.0	7.5



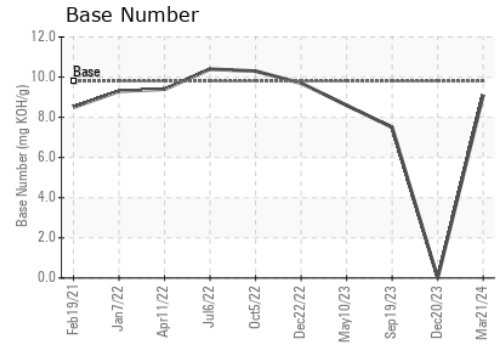
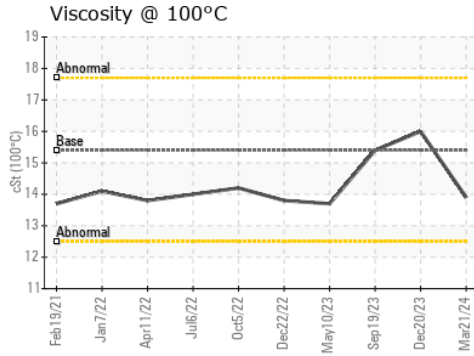
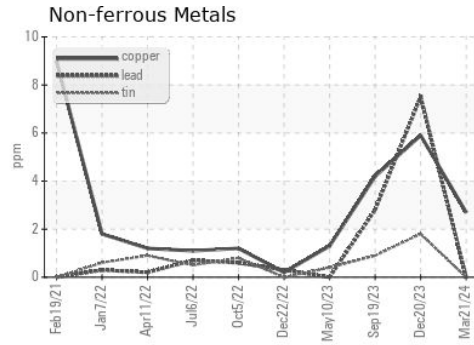
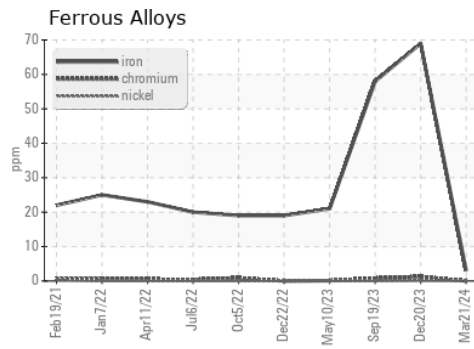
# OIL ANALYSIS REPORT



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	13.9	16.0

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0116936  
 Lab Number : 06129294  
 Unique Number : 10943445  
 Test Package : FLEET

Received : 26 Mar 2024  
 Tested : 27 Mar 2024  
 Diagnosed : 27 Mar 2024 - Wes Davis

GFL Environmental - 465 - Pontiac  
 888 Baldwin  
 Pontiac, MI  
 US 48340

Contact: Ricky Matthews  
 rickymathews@gflenv.com  
 T: (586)825-9514

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)

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