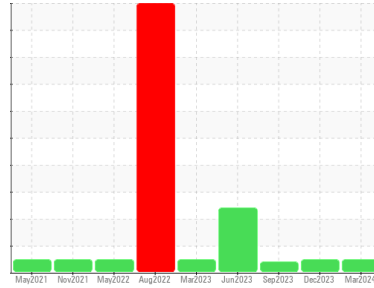




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4706M**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0107809</b>	GFL0107049	GFL0091466
Sample Date	Client Info		<b>04 Mar 2024</b>	20 Dec 2023	18 Sep 2023
Machine Age	hrs	Client Info	<b>10828</b>	10654	9994
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	0.7
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 >80	<b>76</b>	27	24
Chromium	ppm	ASTM D5185m >5	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>8</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>6</b>	0	0
Copper	ppm	ASTM D5185m >150	<b>2</b>	2	3
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	3	48
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>74</b>	63	32
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1332</b>	913	428
Calcium	ppm	ASTM D5185m 1070	<b>1461</b>	1081	1585
Phosphorus	ppm	ASTM D5185m 1150	<b>1287</b>	955	851
Zinc	ppm	ASTM D5185m 1270	<b>1677</b>	1206	1042
Sulfur	ppm	ASTM D5185m 2060	<b>3336</b>	2964	3324

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>12</b>	3	9
Sodium	ppm	ASTM D5185m	<b>5</b>	3	9
Potassium	ppm	ASTM D5185m >20	<b>6</b>	2	6

## INFRA-RED

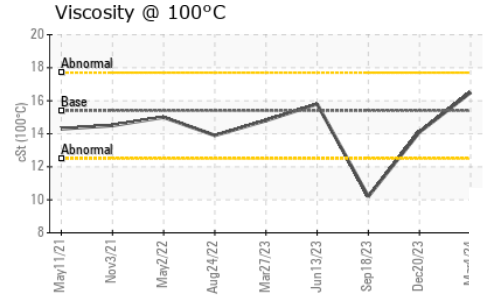
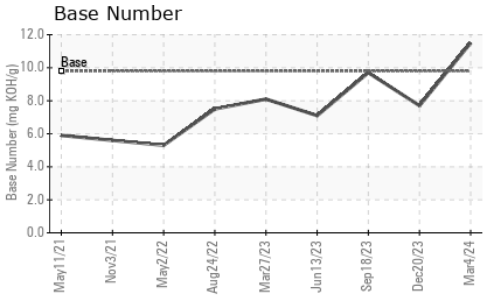
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.8	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.9</b>	9.7	6.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.6</b>	21.1	20.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.9</b>	17.6	18.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>11.5</b>	7.7	9.7



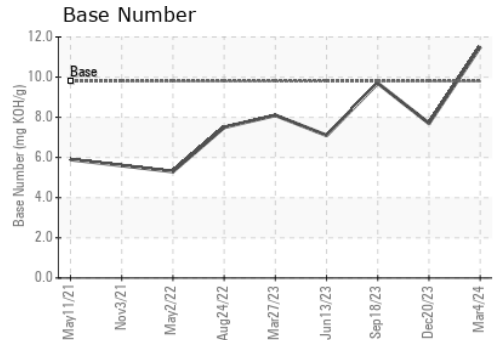
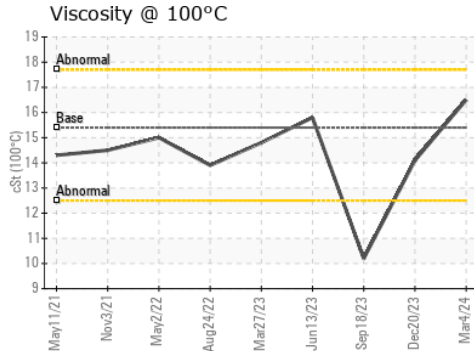
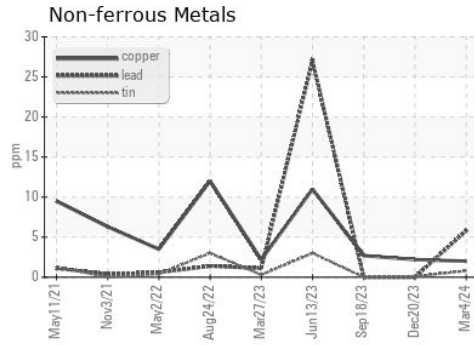
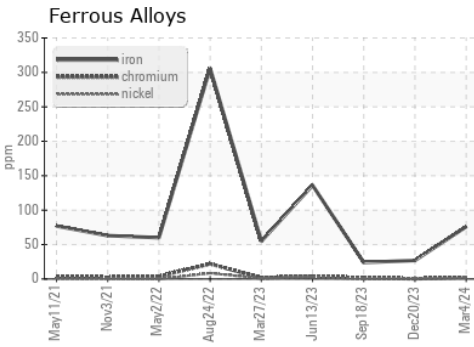
# OIL ANALYSIS REPORT



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	16.5	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107809  
**Lab Number** : 06112467  
**Unique Number** : 10915964  
**Test Package** : FLEET  
**Received** : 08 Mar 2024  
**Tested** : 08 Mar 2024  
**Diagnosed** : 11 Mar 2024 - Don Baldrige

**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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