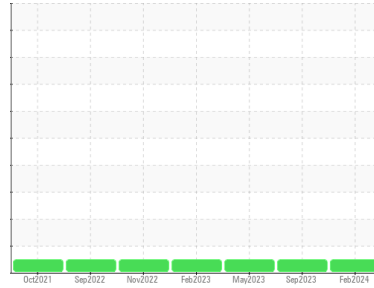




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**928055**

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>GFL0107705</b>	GFL0091501	GFL0081244	
Sample Date	Client Info	<b>05 Feb 2024</b>	12 Sep 2023	04 May 2023	
Machine Age	hrs	Client Info	<b>1931</b>	12378	12264
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## 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 >110	<b>8</b>	11	14
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>&lt;1</b>	3	<1
Lead	ppm ASTM D5185m >45	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >85	<b>&lt;1</b>	<1	2
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	2
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>2</b>	4	2
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>64</b>	60	60
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>1017</b>	1021	899
Calcium	ppm ASTM D5185m 1070	<b>1103</b>	1169	1052
Phosphorus	ppm ASTM D5185m 1150	<b>1043</b>	1055	1007
Zinc	ppm ASTM D5185m 1270	<b>1306</b>	1317	1231
Sulfur	ppm ASTM D5185m 2060	<b>3208</b>	3833	2981

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>5</b>	4	6
Sodium	ppm ASTM D5185m	<b>12</b>	6	4
Potassium	ppm ASTM D5185m >20	<b>1</b>	2	1

## INFRA-RED

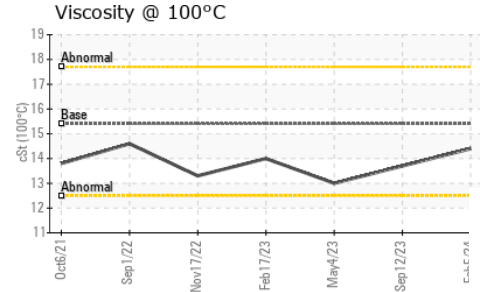
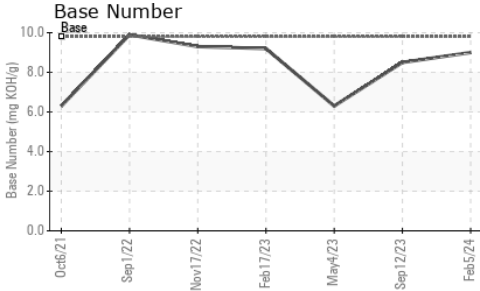
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.3	0.4
Nitration	Abs/cm *ASTM D7624 >20	<b>5.0</b>	5.5	9.4
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.9</b>	17.7	21.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.3</b>	13.1	17.7
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.0</b>	8.5	6.3



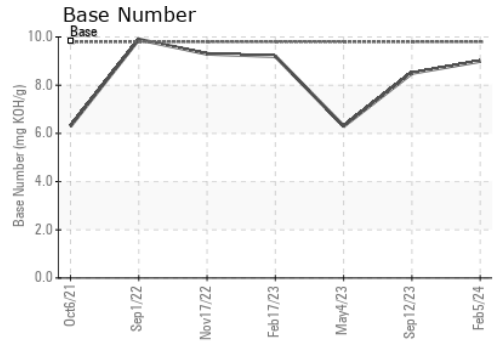
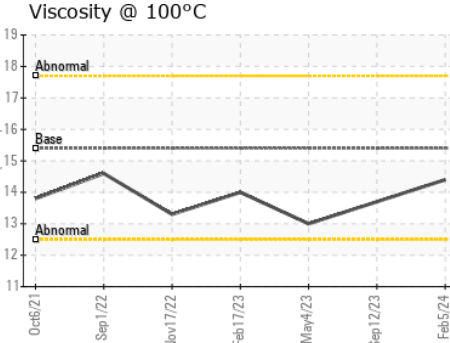
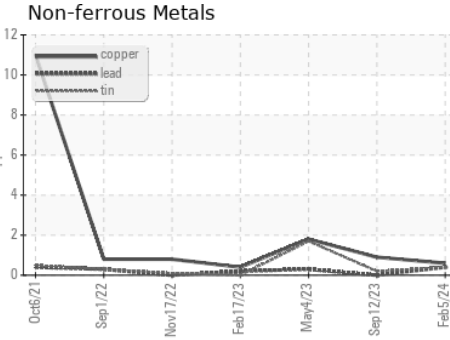
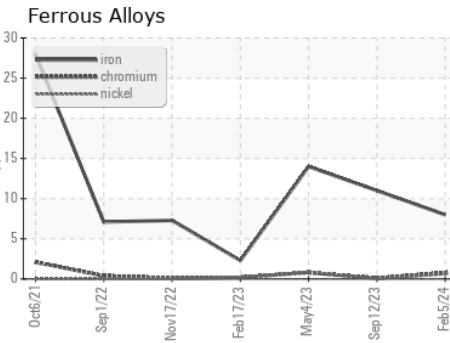
# OIL ANALYSIS REPORT



PARAMETER	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>14.4</b>	13.7	13.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107705  
**Lab Number** : 06085291  
**Unique Number** : 10872736  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 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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