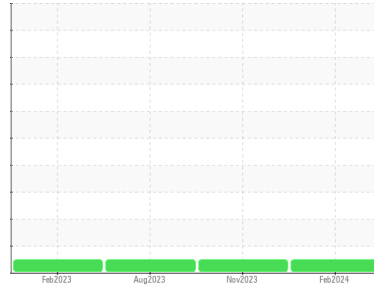




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**710034**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0108418</b>	GFL0098421	GFL0089493
Sample Date	Client Info		<b>06 Feb 2024</b>	13 Nov 2023	14 Aug 2023
Machine Age	hrs	Client Info	<b>6434</b>	5870	5314
Oil Age	hrs	Client Info	<b>6434</b>	5870	0
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 >80	<b>21</b>	20	19
Chromium	ppm	ASTM D5185m >5	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >30	<b>1</b>	2	2
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >150	<b>3</b>	2	3
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>10</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>65</b>	61	63
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1022</b>	931	1019
Calcium	ppm	ASTM D5185m 1070	<b>1114</b>	1067	1149
Phosphorus	ppm	ASTM D5185m 1150	<b>1053</b>	973	1066
Zinc	ppm	ASTM D5185m 1270	<b>1302</b>	1226	1316
Sulfur	ppm	ASTM D5185m 2060	<b>3153</b>	3063	3614

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>6</b>	6	6
Sodium	ppm	ASTM D5185m	<b>2</b>	4	7
Potassium	ppm	ASTM D5185m >20	<b>4</b>	6	1

## INFRA-RED

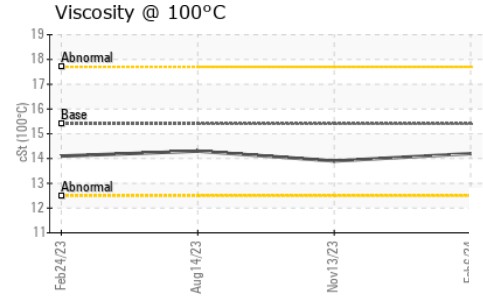
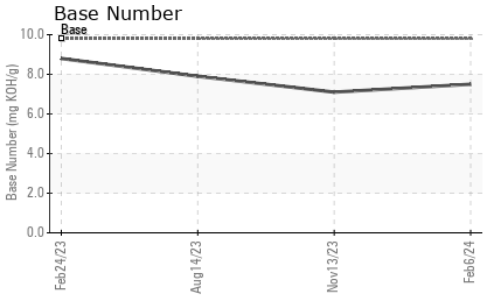
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.6</b>	10.4	9.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.3</b>	20.7	19.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.4</b>	18.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.5</b>	7.1	7.9



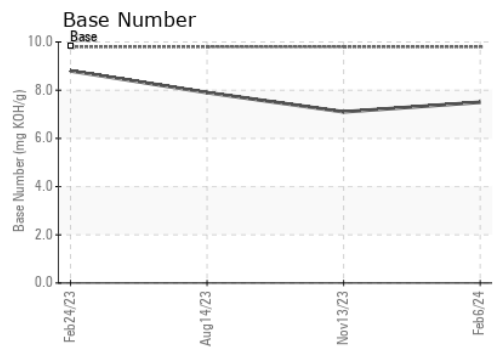
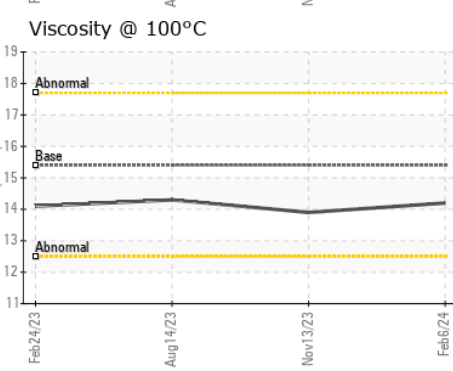
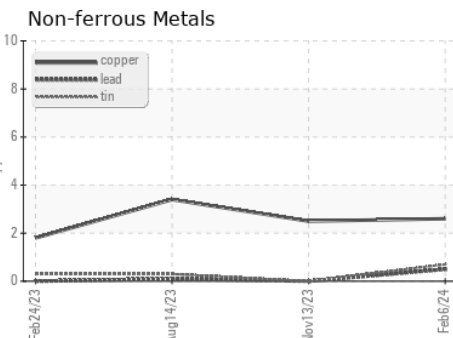
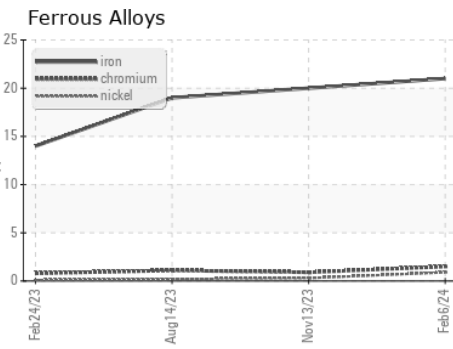
# OIL ANALYSIS REPORT



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>14.2</b>	13.9	14.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108418      **Received** : 09 Feb 2024  
**Lab Number** : **06085257**      **Tested** : 12 Feb 2024  
**Unique Number** : 10872702      **Diagnosed** : 12 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 918 - Hartland HC**  
 630 E Industrial Drive  
 Hartland, WI  
 US 53029  
 Contact: David McCall  
 david.mccall@gflenv.com  
 T: (262)369-3069  
 F:

Certificate L2367  
 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)