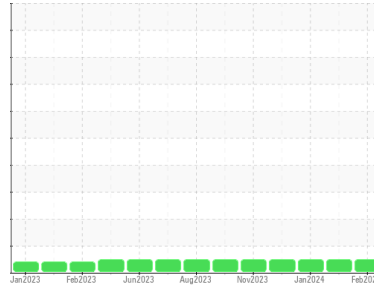




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**913145**

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>GFL0078314</b>	GFL0078300	GFL0099269
Sample Date	Client Info		<b>27 Feb 2024</b>	20 Feb 2024	29 Jan 2024
Machine Age	hrs	Client Info	<b>2653</b>	2612	2473
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
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>	7	8
Chromium	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	3	3
Lead	ppm	ASTM D5185m >45	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >85	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	6	<1
Barium	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 60	<b>64</b>	60	57
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1162</b>	893	954
Calcium	ppm	ASTM D5185m 1070	<b>1283</b>	1041	993
Phosphorus	ppm	ASTM D5185m 1150	<b>1259</b>	991	909
Zinc	ppm	ASTM D5185m 1270	<b>1533</b>	1148	1194
Sulfur	ppm	ASTM D5185m 2060	<b>3811</b>	3177	2924

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>4</b>	6	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>3</b>	5	6

## INFRA-RED

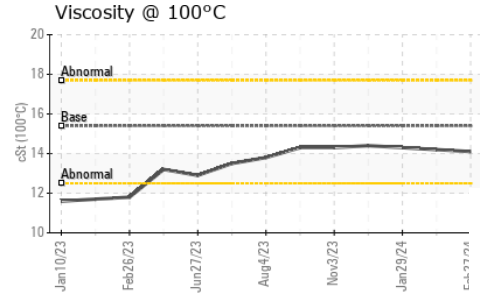
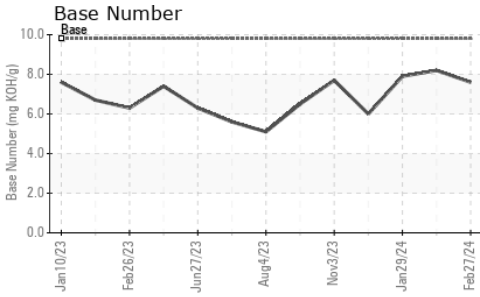
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.7</b>	6.7	6.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.3</b>	18.5	18.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.1</b>	14.6	14.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.6</b>	8.2	7.9



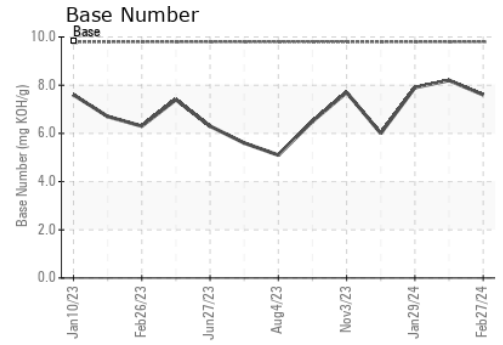
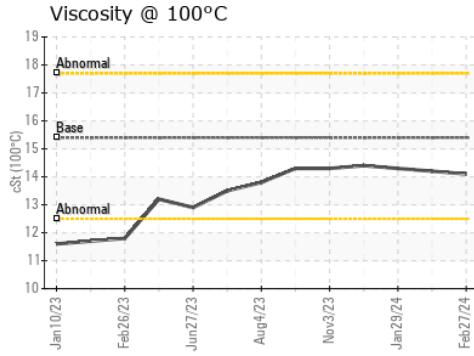
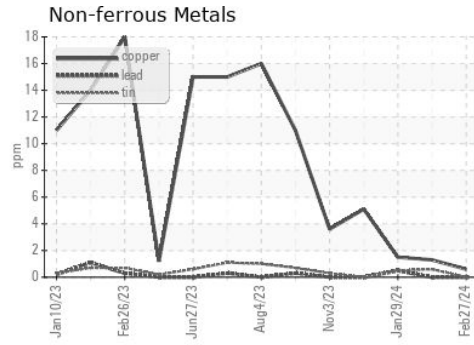
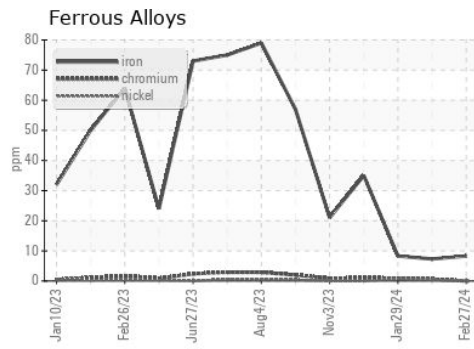
# OIL ANALYSIS REPORT



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>14.1</b>	14.2	14.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0078314  
**Lab Number** : **06106642**  
**Unique Number** : 10910139  
**Test Package** : FLEET

**Received** : 01 Mar 2024  
**Tested** : 04 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Wes Davis

**GFL Environmental - 844 - Princeton Hauling**  
 10129 Highway 62 West  
 Princeton, KY  
 US 42445

Contact: ROBERT THIBAUT  
 robert.thibault@gflenv.com

T: (931)237-6045

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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