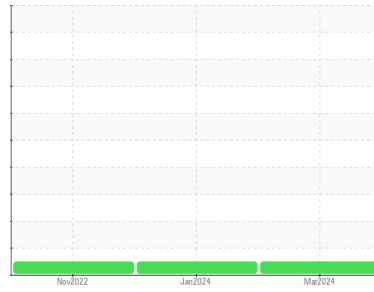




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(SB14137)**

Machine Id  
**920021**

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>GFL0059598</b>	GFL0069997	GFL0059610
Sample Date	Client Info		<b>25 Mar 2024</b>	18 Jan 2024	07 Nov 2022
Machine Age	hrs	Client Info	<b>7535</b>	7082	5014
Oil Age	hrs	Client Info	<b>600</b>	600	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 >100	<b>&lt;1</b>	9	14
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	3	4
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	3	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	2	25
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>63</b>	54	42
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>1083</b>	919	531
Calcium	ppm	ASTM D5185m 1070	<b>1200</b>	1039	1604
Phosphorus	ppm	ASTM D5185m 1150	<b>1167</b>	996	752
Zinc	ppm	ASTM D5185m 1270	<b>1380</b>	1159	905
Sulfur	ppm	ASTM D5185m 2060	<b>4027</b>	2890	2533

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	2	6
Sodium	ppm	ASTM D5185m	<b>0</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	1

## INFRA-RED

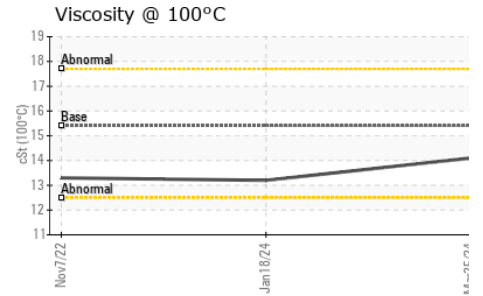
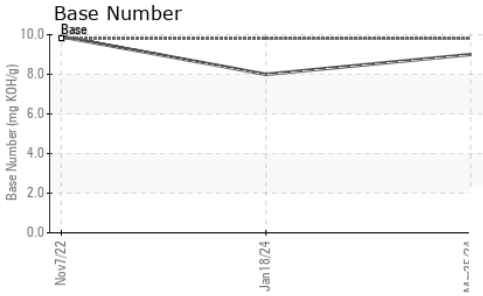
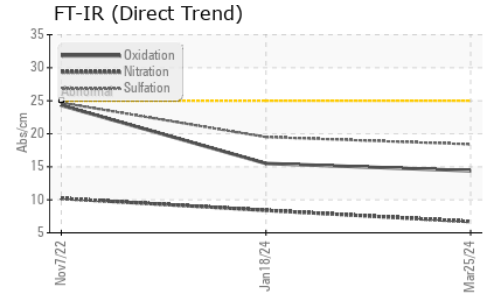
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.7</b>	8.4	10.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.4</b>	19.5	24.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.4</b>	15.5	24.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.0</b>	8.0	9.9



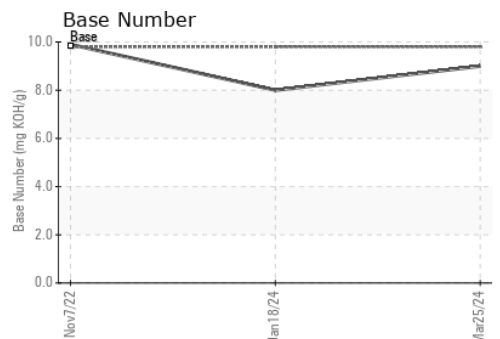
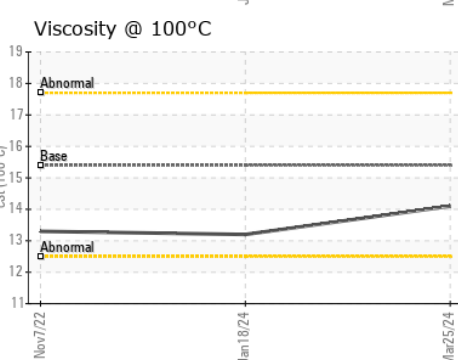
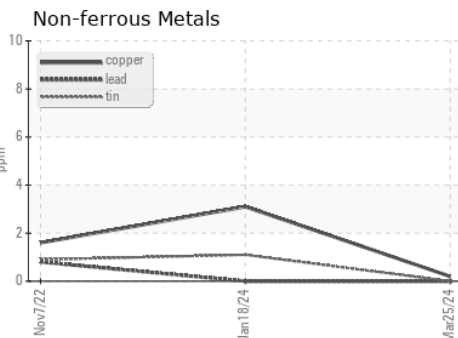
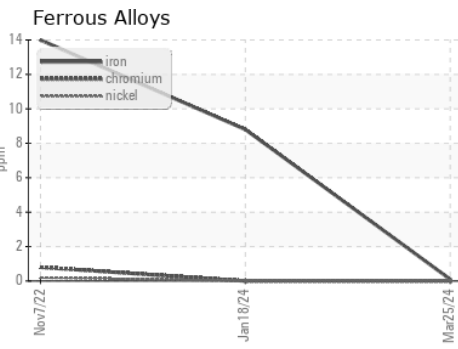
# OIL ANALYSIS REPORT



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	14.1	13.2	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0059598      **Received** : 09 Apr 2024  
**Lab Number** : 06142736      **Tested** : 09 Apr 2024  
**Unique Number** : 10967544      **Diagnosed** : 09 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 902 - Chilton HC**  
 428 High St  
 Chilton, WI  
 US 53014

Certificate L2367      **Contact:** Keith Mueller  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.      keith.mueller@gflenv.com  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.      T: (920)374-1404  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)      F: