



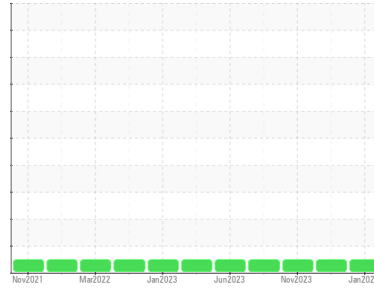
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(99293V)**  
Machine Id  
**428040-402374**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (10 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>GFL0101980</b>	GFL0101954	GFL0101969
Sample Date	Client Info	<b>26 Jan 2024</b>	22 Dec 2023	30 Nov 2023
Machine Age	hrs	<b>15378</b>	15159	15018
Oil Age	hrs	<b>219</b>	616	475
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Not Chngd
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<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 >120	<b>4</b>	7	6
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	2	1
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	0	<1
Tin	ppm ASTM D5185m >15	<b>0</b>	0	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>2</b>	<1	2
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>60</b>	47	65
Manganese	ppm ASTM D5185m 0	<b>0</b>	0	0
Magnesium	ppm ASTM D5185m 1010	<b>1025</b>	878	968
Calcium	ppm ASTM D5185m 1070	<b>1133</b>	1049	1169
Phosphorus	ppm ASTM D5185m 1150	<b>1092</b>	851	1084
Zinc	ppm ASTM D5185m 1270	<b>1329</b>	1137	1263
Sulfur	ppm ASTM D5185m 2060	<b>3272</b>	2678	3009

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>3</b>	4	4
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	2	0
Potassium	ppm ASTM D5185m >20	<b>0</b>	0	2

## INFRA-RED

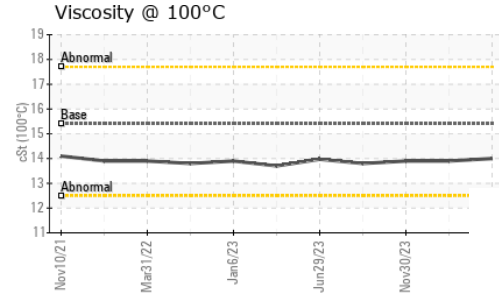
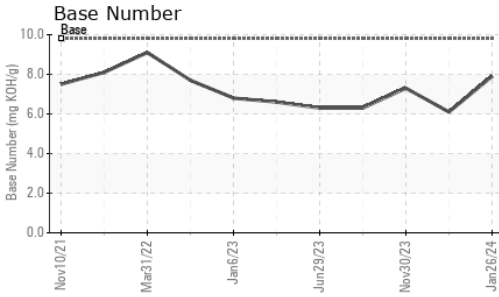
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.2</b>	0.3	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>6.9</b>	9.6	8.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.2</b>	19.8	19.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.5</b>	16.8	15.8
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.9</b>	6.1	7.3



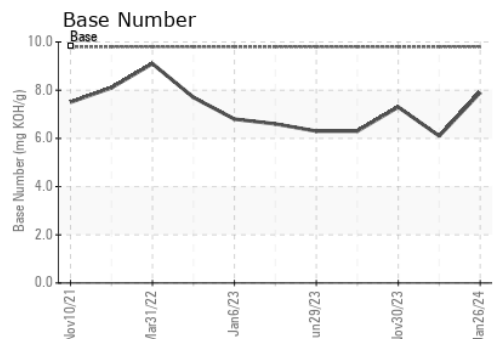
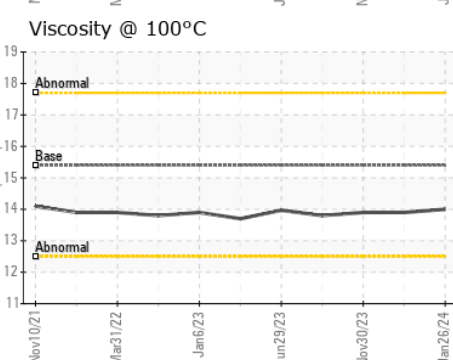
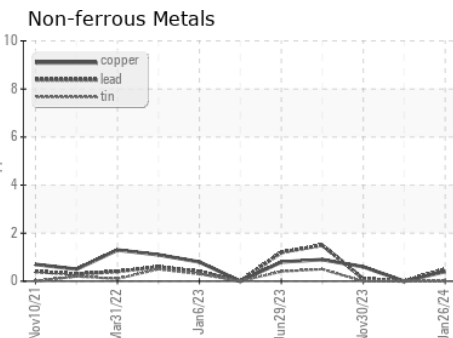
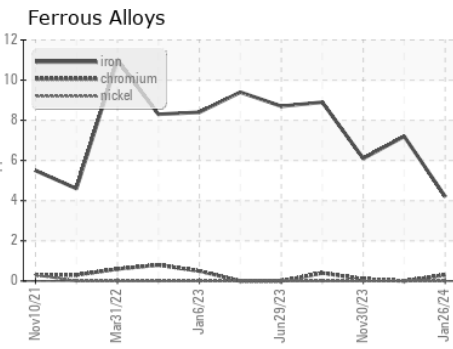
# OIL ANALYSIS REPORT



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>14.0</b>	13.9

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101980 **Received** : 29 Jan 2024  
**Lab Number** : 06072474 **Diagnosed** : 30 Jan 2024  
**Unique Number** : 10849151 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 894 - Ada Hauling**  
 1904 North Broadway, Suite D  
 Ada, OK  
 US 74820  
 Contact: Johnny Spurlock  
 jspurlock@gflenv.com  
 T: (405)664-4476  
 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)