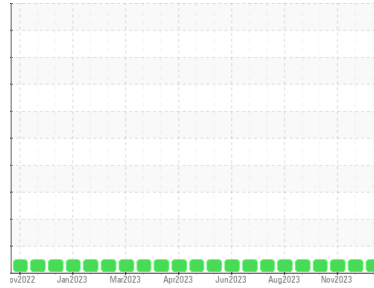




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(62A0YN3) ALEXANDER CITY**  
Machine Id  
**411000-411000**  
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>GFL0080727</b>	GFL0079752	GFL0092381
Sample Date	Client Info		<b>02 Jan 2024</b>	13 Dec 2023	27 Nov 2023
Machine Age	hrs	Client Info	<b>8284</b>	8183	8052
Oil Age	hrs	Client Info	<b>2448</b>	2347	2216
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
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>2</b>	6	2
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	3	1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m >330	<b>4</b>	2	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</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>16</b>	6	18
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>58</b>	62	65
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>879</b>	908	1045
Calcium	ppm	ASTM D5185m 1070	<b>1012</b>	1053	1234
Phosphorus	ppm	ASTM D5185m 1150	<b>1011</b>	876	1183
Zinc	ppm	ASTM D5185m 1270	<b>1186</b>	1187	1488
Sulfur	ppm	ASTM D5185m 2060	<b>3097</b>	2969	3740

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	11	4
Sodium	ppm	ASTM D5185m	<b>1</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	2

## INFRA-RED

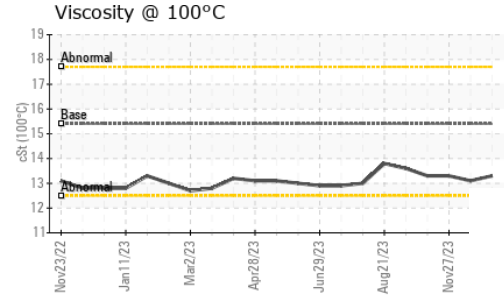
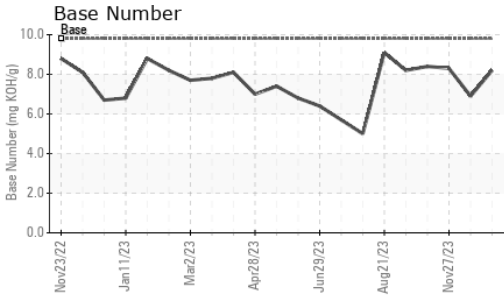
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.1</b>	0.4	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.9</b>	9.3	5.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.0</b>	18.7	17.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.0</b>	15.5	13.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.2</b>	6.9	8.3



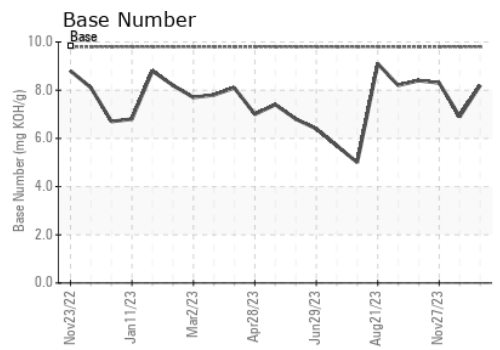
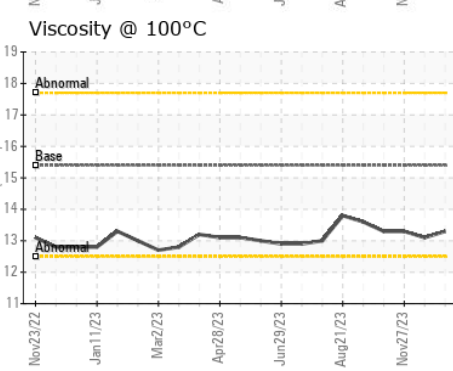
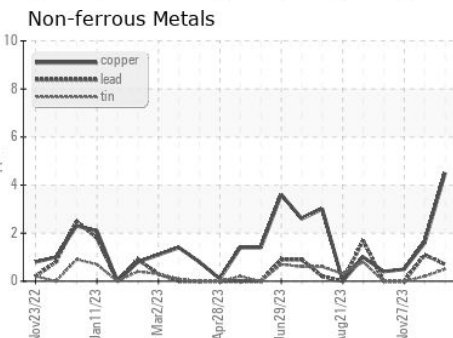
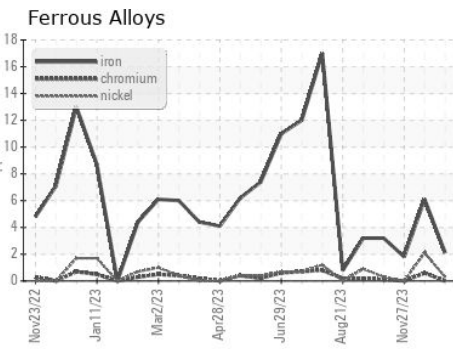
# OIL ANALYSIS REPORT



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>13.3</b>	13.1	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0080727 **Recieved** : 02 Feb 2024  
**Lab Number** : 06078974 **Diagnosed** : 05 Feb 2024  
**Unique Number** : 10861065 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee  
 Multiple Sites  
 Montgomery, AL  
 US 36108  
 Contact: RICHARD HATFIELD  
 rhatfield@gflenv.com  
 T:  
 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)