



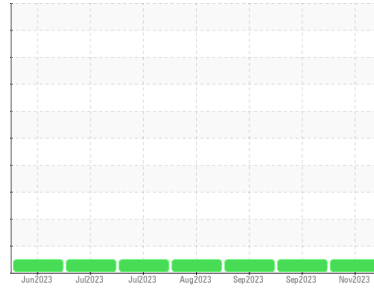
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**{UNASSIGNED}**  
 Machine Id  
**933043**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (7 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>GFL0101201</b>	GFL0094317	GFL0091414
Sample Date	Client Info		<b>17 Nov 2023</b>	27 Sep 2023	01 Sep 2023
Machine Age	hrs	Client Info	<b>1256</b>	961	788
Oil Age	hrs	Client Info	<b>468</b>	173	788
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>17</b>	21	74
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	2
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	3	14
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m >35	<b>4</b>	3	18
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	9	8
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 60	<b>61</b>	62	55
Manganese	ppm	ASTM D5185m 0	<b>2</b>	2	16
Magnesium	ppm	ASTM D5185m 1010	<b>906</b>	800	828
Calcium	ppm	ASTM D5185m 1070	<b>1135</b>	1067	1231
Phosphorus	ppm	ASTM D5185m 1150	<b>979</b>	917	715
Zinc	ppm	ASTM D5185m 1270	<b>1191</b>	1117	944
Sulfur	ppm	ASTM D5185m 2060	<b>2843</b>	2952	2593

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>8</b>	7	34
Sodium	ppm	ASTM D5185m	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	8	51

## INFRA-RED

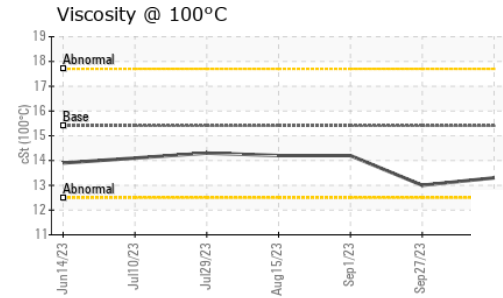
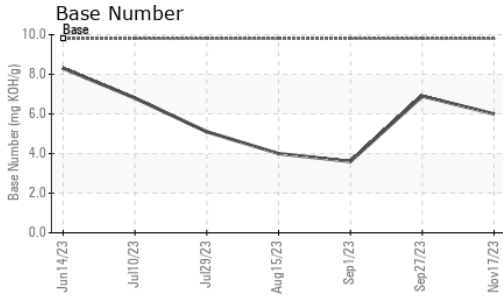
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.2</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	6.4	12.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.7</b>	16.5	23.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.3</b>	12.5	23.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.0</b>	6.9	3.6



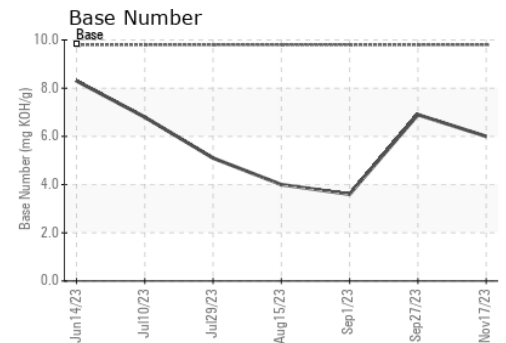
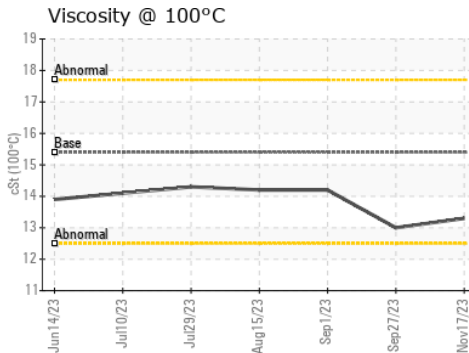
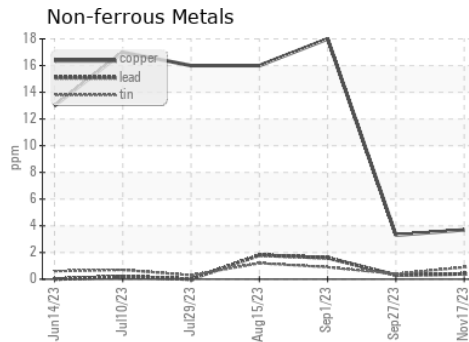
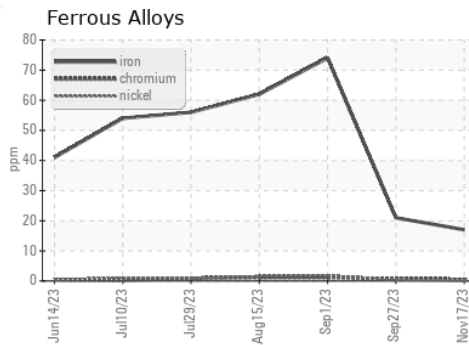
# OIL ANALYSIS REPORT



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	>0.1	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>	13.0	14.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101201 **Received** : 20 Nov 2023  
**Lab Number** : **06011905** **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10751049 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@gflenv.com

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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