



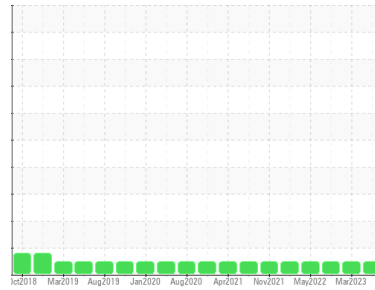
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**701064**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (32 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0088940</b>	GFL0074279	GFL0054544
Sample Date	Client Info	<b>02 Aug 2023</b>	01 Mar 2023	09 Sep 2022
Machine Age	hrs	Client Info	<b>0</b>	9347
Oil Age	hrs	Client Info	<b>0</b>	576
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >65	<b>6</b>	5	4
Chromium	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Titanium	ppm ASTM D5185(m) >5	<b>0</b>	<1	0
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >35	<b>3</b>	3	2
Lead	ppm ASTM D5185(m) >10	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >180	<b>2</b>	1	1
Tin	ppm ASTM D5185(m) >8	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185(m) >35	<b>0</b>	0	<1
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>4</b>	4	3
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>59</b>	60	56
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>978</b>	986	926
Calcium	ppm ASTM D5185(m) 1070	<b>1044</b>	1110	1038
Phosphorus	ppm ASTM D5185(m) 1150	<b>1059</b>	1120	1040
Zinc	ppm ASTM D5185(m) 1270	<b>1219</b>	1180	1138
Sulfur	ppm ASTM D5185(m) 2060	<b>2543</b>	2719	2469
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<b>2</b>	2	2
Sodium	ppm ASTM D5185(m)	<b>2</b>	1	2
Potassium	ppm ASTM D5185(m) >20	<b>4</b>	3	2

## INFRA-RED

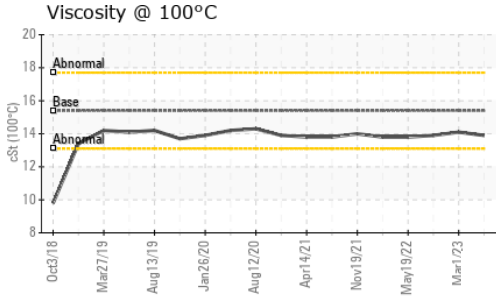
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.1</b>	0	0
Nitration	Abs/cm ASTM D7624* >20	<b>7.2</b>	6.8	6.7
Sulfation	Abs/.1mm ASTM D7415* >30	<b>19.6</b>	20.4	19.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>14.8</b>	14.8	14.5



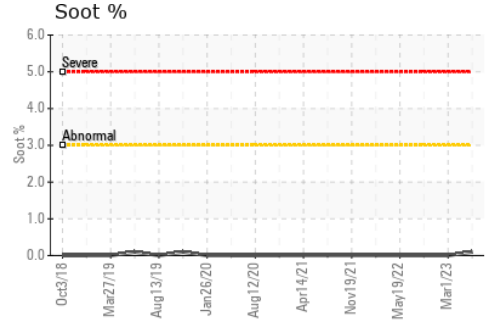
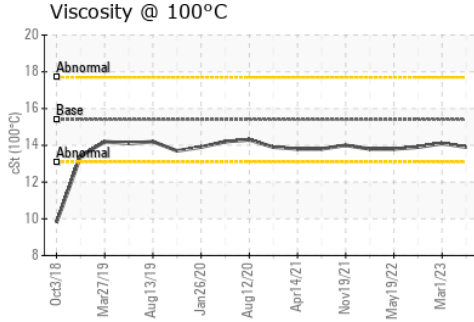
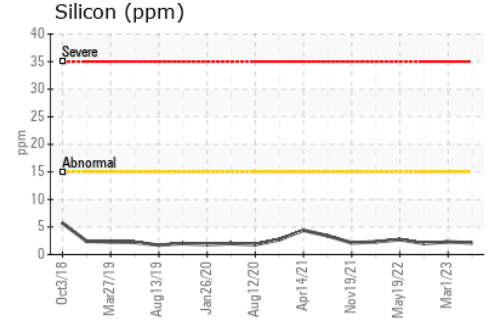
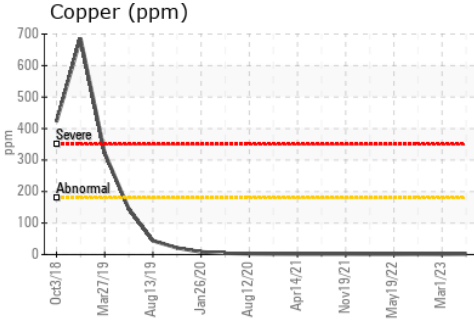
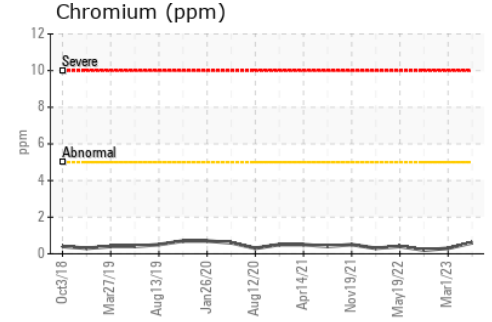
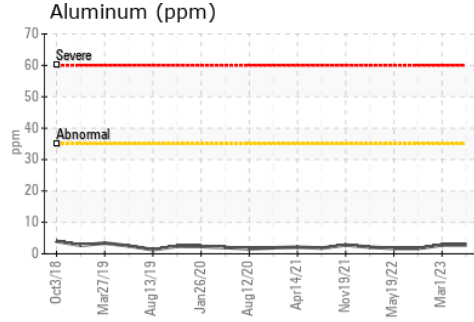
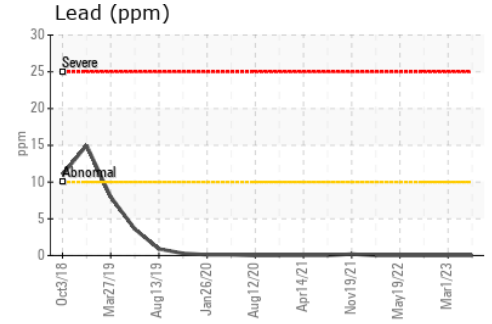
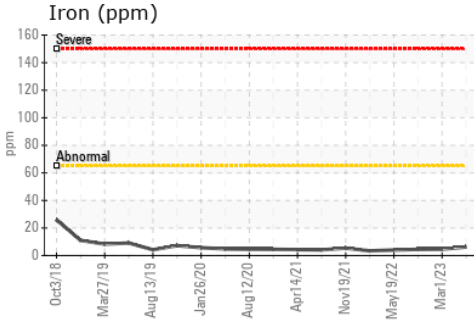
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	15.4	13.9	14.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088940 **Received** : 03 Aug 2023  
**Lab Number** : 02574003 **Diagnosed** : 03 Aug 2023  
**Unique Number** : 5619054 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 216**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.