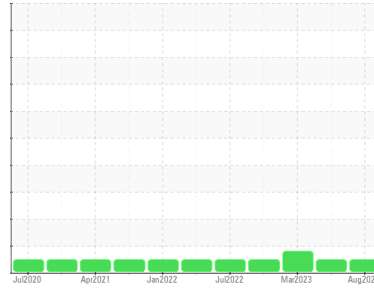




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**401211**  
 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>GFL0091732</b>	GFL0084241	GFL0080295	
Sample Date	Client Info	<b>28 Aug 2023</b>	12 Jun 2023	29 Mar 2023	
Machine Age	kms	Client Info	<b>354495</b>	348023	339839
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	MARGINAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	▲ 2.5
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >120	<b>4</b>	8	20
Chromium	ppm ASTM D5185(m) >20	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185(m) >5	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	2	3
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	<1	1
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	2
Tin	ppm ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	0
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>6</b>	3	2
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>59</b>	58	59
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>938</b>	953	951
Calcium	ppm ASTM D5185(m) 1070	<b>1011</b>	1001	1095
Phosphorus	ppm ASTM D5185(m) 1150	<b>1029</b>	1031	1021
Zinc	ppm ASTM D5185(m) 1270	<b>1155</b>	1152	1183
Sulfur	ppm ASTM D5185(m) 2060	<b>2540</b>	2481	2591
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>3</b>	3	3
Sodium	ppm ASTM D5185(m)	<b>3</b>	6	9
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	1	0

## INFRA-RED

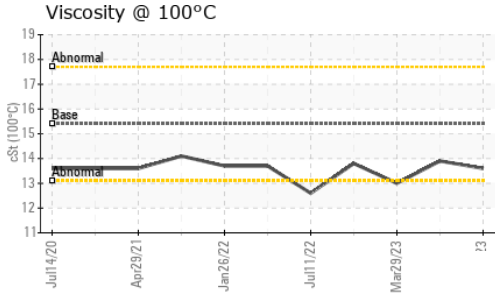
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >4	<b>0</b>	0.2	0.4
Nitration	Abs/cm ASTM D7624* >20	<b>6.8</b>	7.8	11.4
Sulfation	Abs/.1mm ASTM D7415* >30	<b>18.0</b>	18.9	23.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>14.2</b>	15.5	18.0



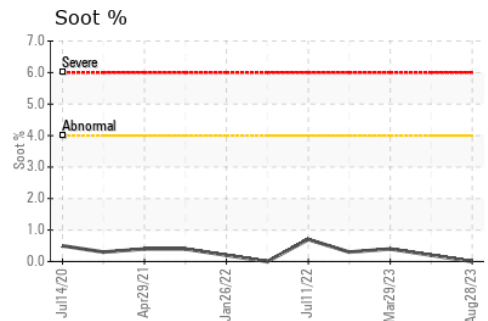
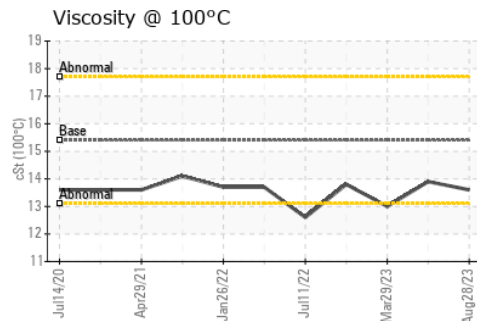
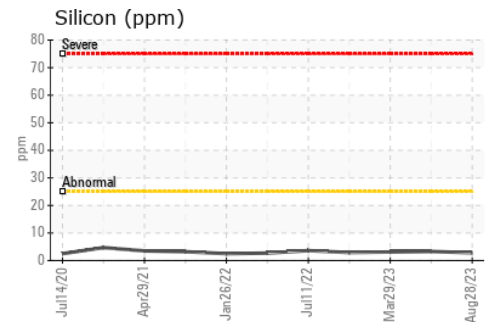
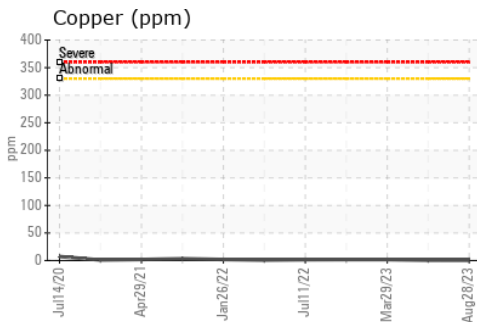
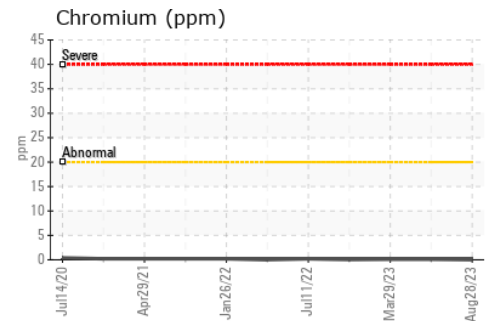
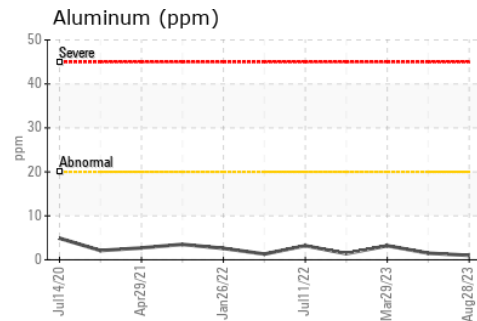
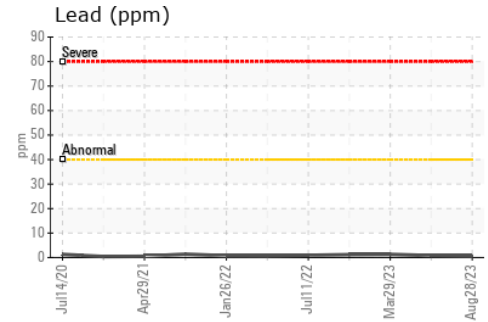
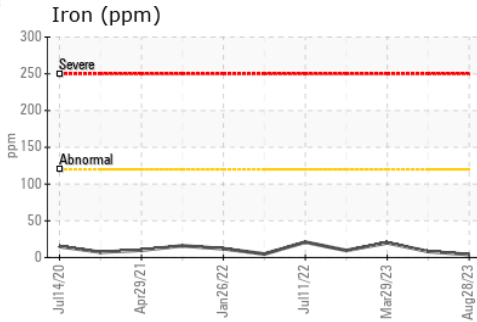
# OIL ANALYSIS REPORT



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	13.6	13.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 252 - GTA Hauling  
**Sample No.** : GFL0091732 **Received** : 18 Sep 2023  
**Lab Number** : 02583071 **Diagnosed** : 18 Sep 2023  
**Unique Number** : 5644136 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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.

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