



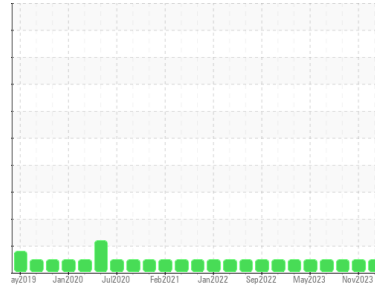
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**401213**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (36 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>GFL0097570</b>	GFL0097528	GFL0088952
Sample Date	Client Info		<b>03 Feb 2024</b>	30 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info	<b>15002</b>	14405	13837
Oil Age	hrs	Client Info	<b>597</b>	568	576
Oil Changed	Client Info		<b>Changed</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>	2.3	<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 D5185(m) >120	<b>6</b>	7	8
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185(m) >330	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<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>3</b>	4	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m) 60	<b>57</b>	57	60
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 1010	<b>939</b>	913	949
Calcium	ppm	ASTM D5185(m) 1070	<b>1062</b>	1020	1057
Phosphorus	ppm	ASTM D5185(m) 1150	<b>984</b>	944	968
Zinc	ppm	ASTM D5185(m) 1270	<b>1165</b>	1140	1179
Sulfur	ppm	ASTM D5185(m) 2060	<b>2593</b>	2302	2369
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

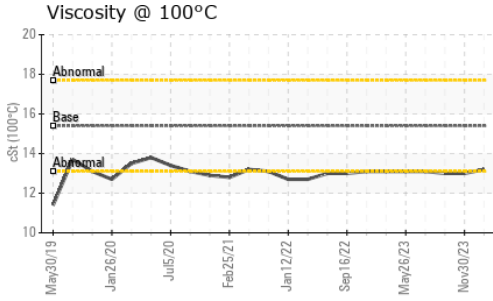
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	3	4
Sodium	ppm	ASTM D5185(m)	<b>3</b>	4	5
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0.3</b>	0.3	0.4
Nitration	Abs/cm	ASTM D7624* >20	<b>8.9</b>	8.5	8.3
Sulfation	Abs./1mm	ASTM D7415* >30	<b>20.3</b>	20.2	20.6



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## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	17.0	17.0

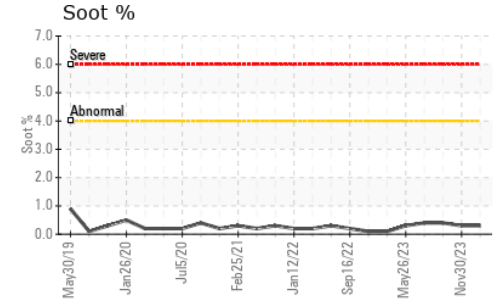
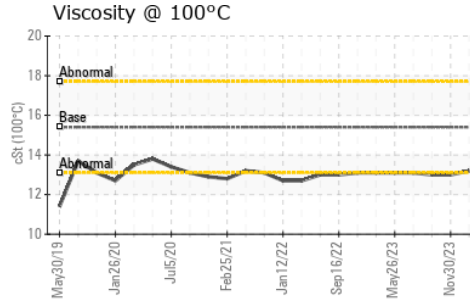
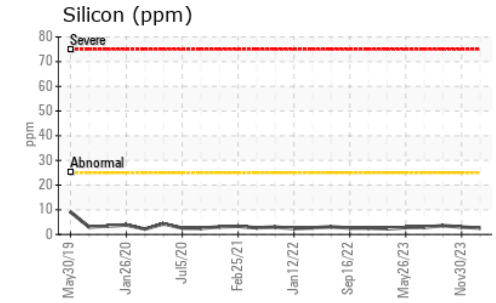
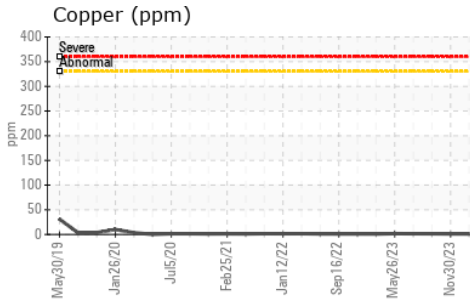
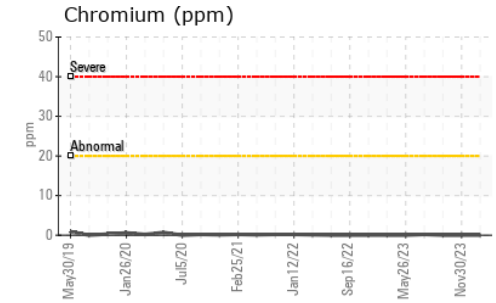
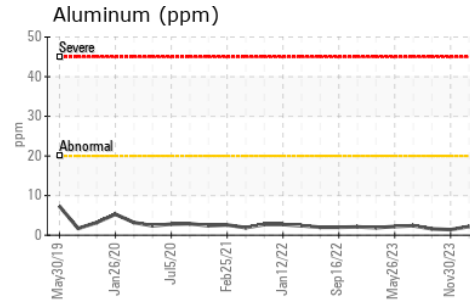
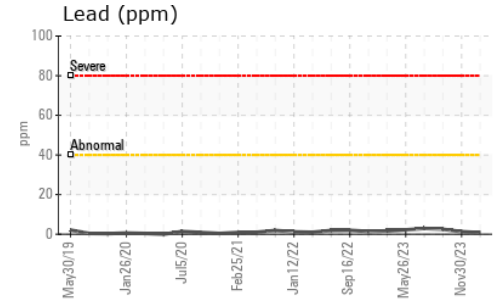
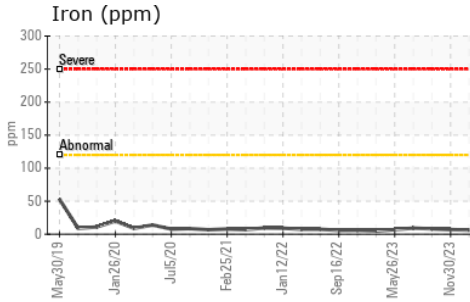
## VISUAL

method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	>0.2	NEG	NEG
Free Water	scalar Visual*	NEG	NEG	NEG

## FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)	15.4	13.0	13.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0097570 **Received** : 06 Feb 2024  
**Lab Number** : 02613640 **Diagnosed** : 06 Feb 2024  
**Unique Number** : 5722735 **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.