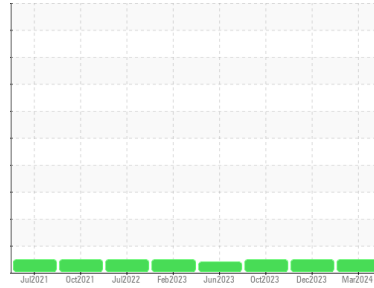




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**5592**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- 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>GFL0102616</b>	GFL0101695	GFL0097646
Sample Date	Client Info		<b>06 Mar 2024</b>	19 Dec 2023	11 Oct 2023
Machine Age	hrs	Client Info	<b>27612</b>	27049	148000
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</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 D5185(m)	>120	<b>11</b>	8	8
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
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>3</b>	3	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>4</b>	2	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
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)	2	<b>0</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	<b>61</b>	58	61
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>983</b>	949	987
Calcium	ppm	ASTM D5185(m)	1050	<b>1047</b>	1041	1081
Phosphorus	ppm	ASTM D5185(m)	995	<b>988</b>	983	981
Zinc	ppm	ASTM D5185(m)	1180	<b>1178</b>	1146	1217
Sulfur	ppm	ASTM D5185(m)	2600	<b>2440</b>	2593	2387
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

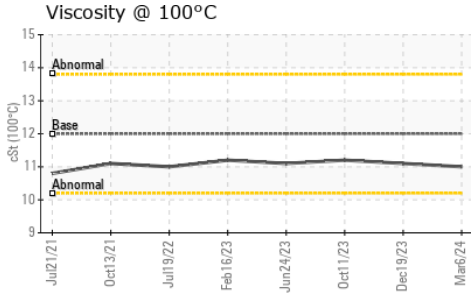
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	8	8
Sodium	ppm	ASTM D5185(m)		<b>58</b>	9	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	0.1	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	7.7	9.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.2</b>	18.6	21.5



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	15.3	18.0

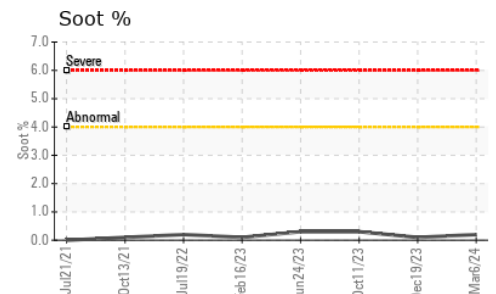
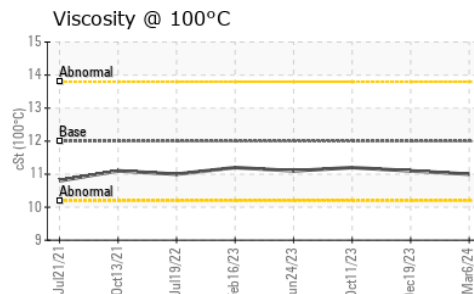
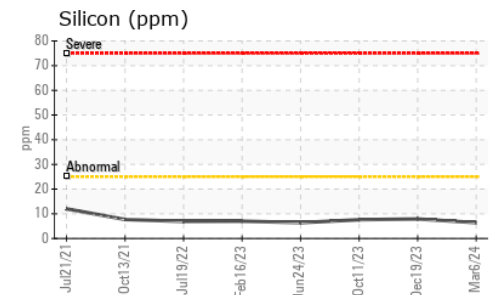
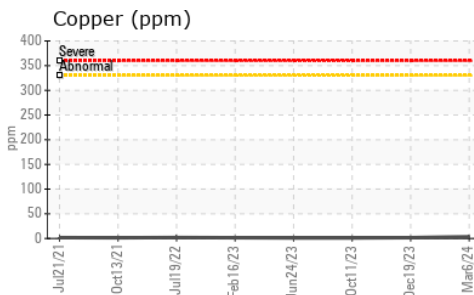
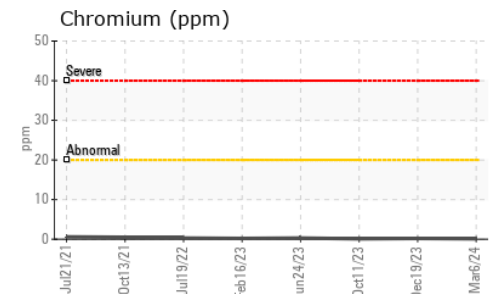
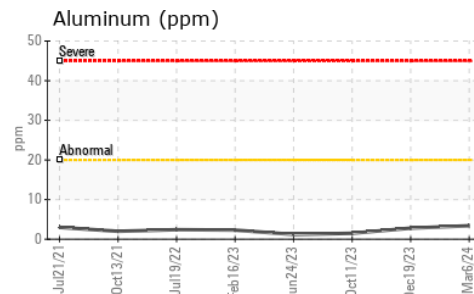
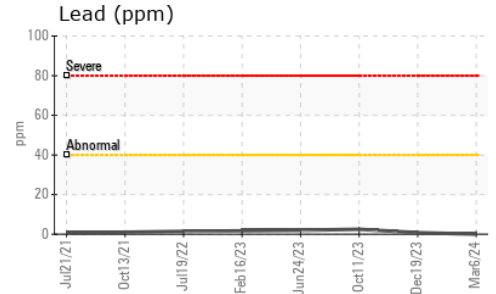
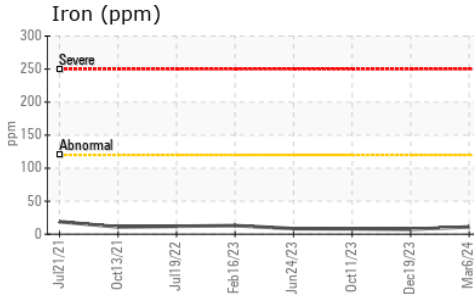
## VISUAL

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)	12.00	11.1	11.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0102616  
**Lab Number** : 02624201  
**Unique Number** : 5749320  
**Test Package** : MOB 1  
**Received** : 25 Mar 2024  
**Tested** : 25 Mar 2024  
**Diagnosed** : 25 Mar 2024 - Wes Davis

**GFL Environmental - 554 - Edmonton SW**  
 8409 - 15th Street NW  
 Edmonton, AB  
 CA T6P 0B8  
 Contact: Tim Greig  
 tgreig@gflenv.com  
 T: (780)231-0521  
 F:

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.