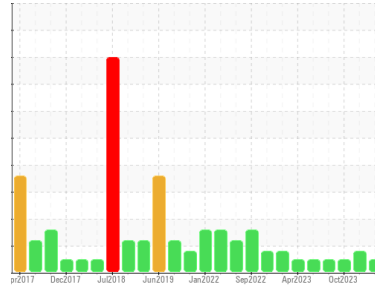




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4532**

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>GFL0102593</b>	GFL0101727	GFL0093895
Sample Date	Client Info		<b>07 Feb 2024</b>	30 Nov 2023	05 Oct 2023
Machine Age	hrs	Client Info	<b>27280</b>	26745	26233
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	MARGINAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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)	>110	<b>57</b>	63	66
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>5</b>	3	4
Lead	ppm	ASTM D5185(m)	>45	<b>1</b>	2	2
Copper	ppm	ASTM D5185(m)	>85	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</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>2</b>	3	7
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	61	62
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>945</b>	981	939
Calcium	ppm	ASTM D5185(m)	1050	<b>1063</b>	1078	1071
Phosphorus	ppm	ASTM D5185(m)	995	<b>981</b>	983	969
Zinc	ppm	ASTM D5185(m)	1180	<b>1164</b>	1194	1171
Sulfur	ppm	ASTM D5185(m)	2600	<b>2395</b>	2266	2239
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

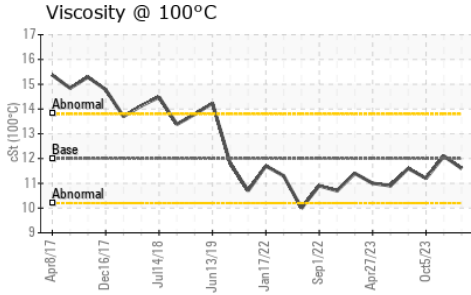
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>8</b>	10	9
Sodium	ppm	ASTM D5185(m)		<b>7</b>	8	8
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1.3</b>	1.3	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.3</b>	13.1	12.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.8</b>	26.6	27.7



# OIL ANALYSIS REPORT

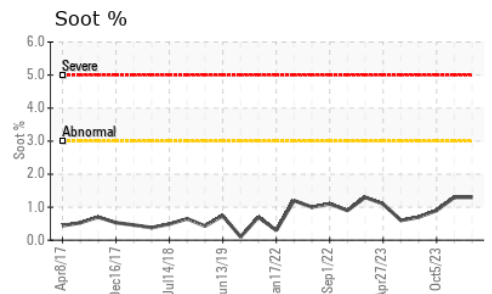
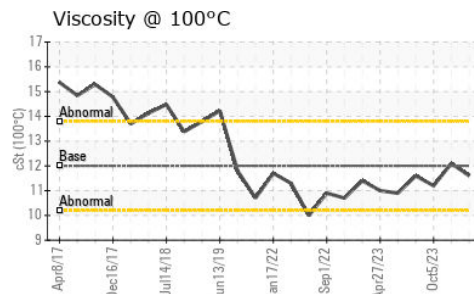
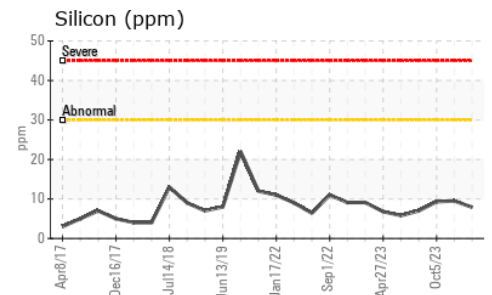
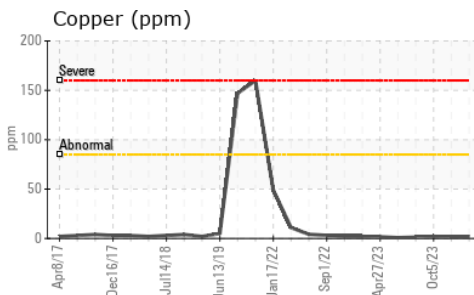
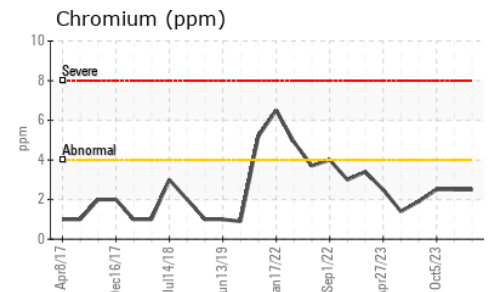
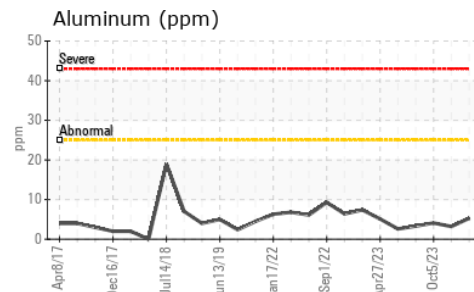
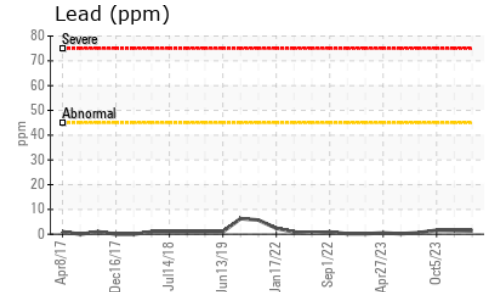
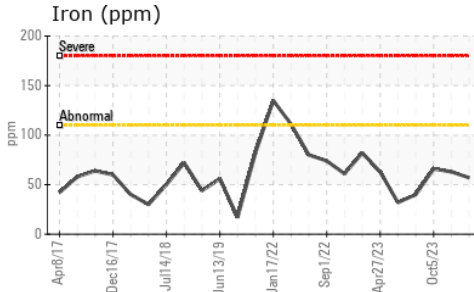


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>25.9</b>	26.3	30.0

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.6</b>	12.1	11.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0102593  
**Lab Number** : 02616540  
**Unique Number** : 5733650  
**Test Package** : MOB 1

**GFL Environmental - 554 - Edmonton SW**  
 8409 -15th Street NW  
 Edmonton, AB  
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 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.