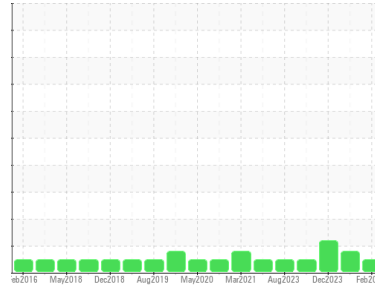




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**7980**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (19 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>GFL0111750</b>	WC0875109	WC0875105
Sample Date	Client Info		<b>22 Feb 2024</b>	13 Dec 2023	06 Dec 2023
Machine Age	hrs	Client Info	<b>13026</b>	194946	194946
Oil Age	hrs	Client Info	<b>0</b>	194946	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	MARGINAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	▲ 2.2	▲ 7.5
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)	>80	<b>18</b>	6	21
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	1	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>5	<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)	0	<b>10</b>	24	39
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	60	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>911</b>	910	793
Calcium	ppm	ASTM D5185(m)	1070	<b>1017</b>	1010	1005
Phosphorus	ppm	ASTM D5185(m)	1150	<b>990</b>	972	899
Zinc	ppm	ASTM D5185(m)	1270	<b>1144</b>	1166	1094
Sulfur	ppm	ASTM D5185(m)	2060	<b>2598</b>	2582	2312
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

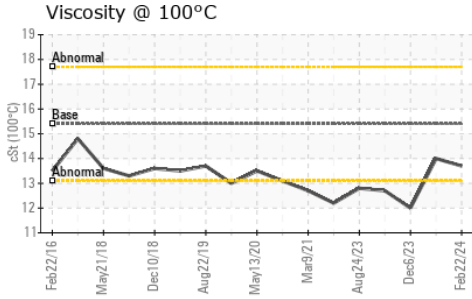
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>6</b>	4	5
Sodium	ppm	ASTM D5185(m)		<b>4</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	5.4	9.3
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.1</b>	18.2	20.2



# OIL ANALYSIS REPORT

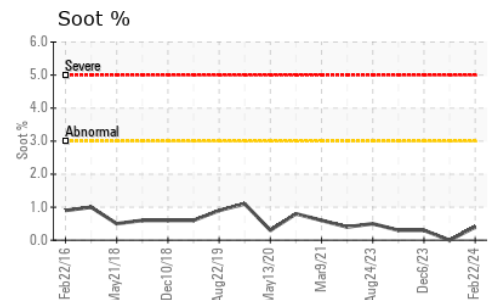
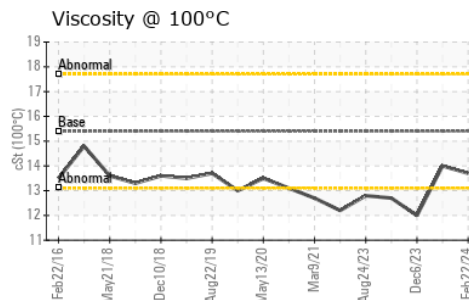
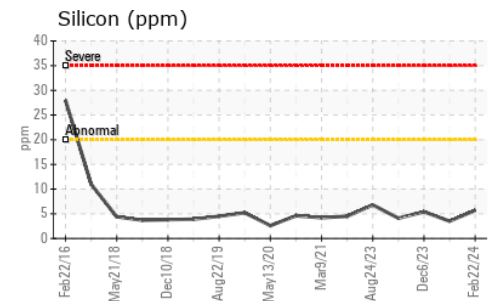
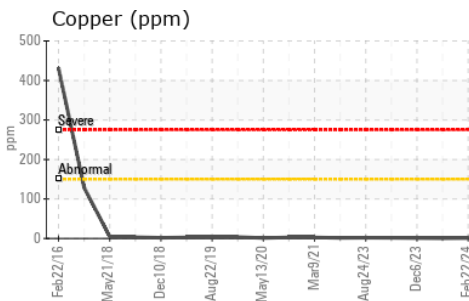
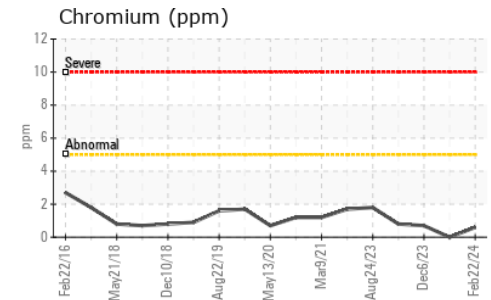
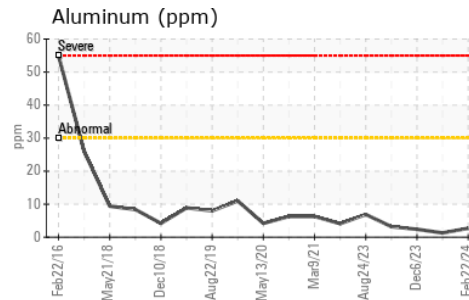
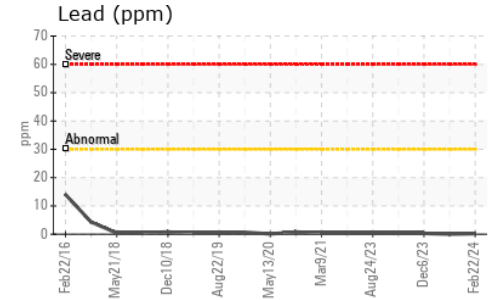
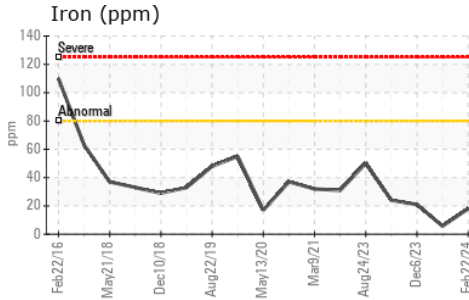


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.8</b>	13.7	17.4

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)	15.4	<b>13.7</b>	14.0	▲ 12.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0111750  
**Lab Number** : **02617969**  
**Unique Number** : 5735079  
**Test Package** : MOB 1  
**Received** : 26 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 26 Feb 2024 - Wes Davis

**GFL Environmental - 217 - Aurora**  
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 AURORA, ON  
 CA L4G 0K6  
 Contact: Mike Havens  
 MHavens@gflenv.com  
 T:  
 F: (905)713-2445

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.