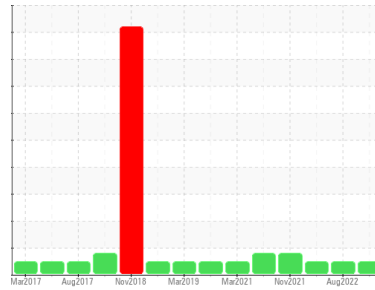




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4517**  
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>GFL0085802</b>	GFL0057726	GFL0038976
Sample Date	Client Info		<b>02 Aug 2023</b>	01 Aug 2022	04 Apr 2022
Machine Age	hrs	Client Info	<b>37616</b>	35839	35362
Oil Age	hrs	Client Info	<b>0</b>	0	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Not 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>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>120	<b>5</b>	19	24
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	2	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	3	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	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>4</b>	2	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>58</b>	53	56
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>951</b>	917	955
Calcium	ppm	ASTM D5185(m)	1050	<b>1028</b>	1013	1016
Phosphorus	ppm	ASTM D5185(m)	995	<b>1052</b>	930	996
Zinc	ppm	ASTM D5185(m)	1180	<b>1148</b>	1114	1147
Sulfur	ppm	ASTM D5185(m)	2600	<b>2610</b>	2456	2465
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	2	4
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

## INFRA-RED

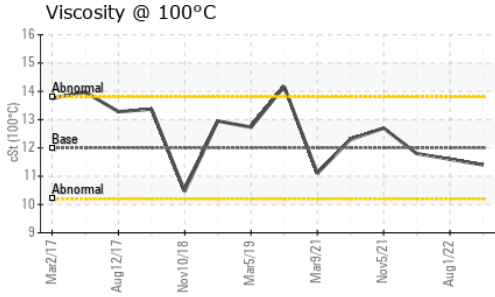
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.6</b>	2.9	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.3</b>	8.5	3.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.0</b>	23.6	14.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.6</b>	15.4	5.3



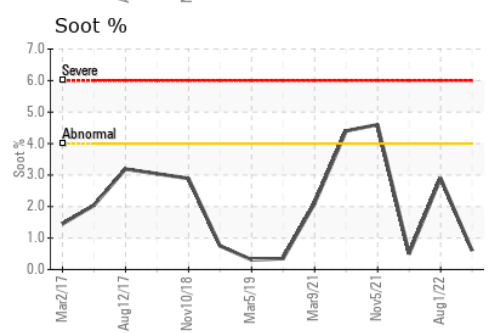
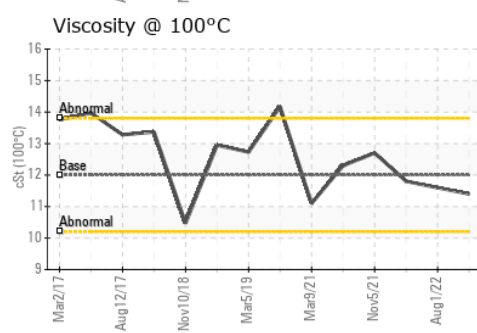
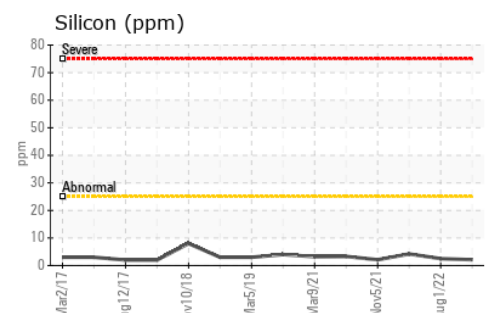
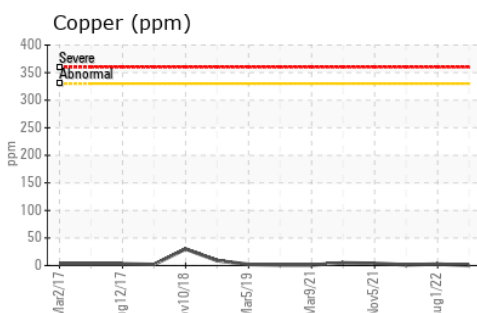
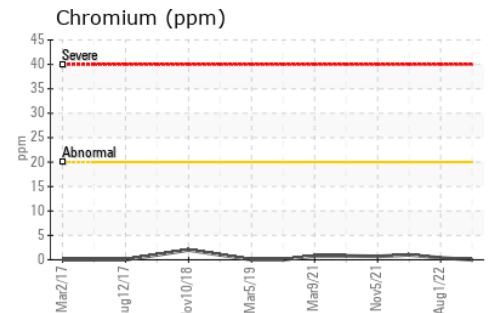
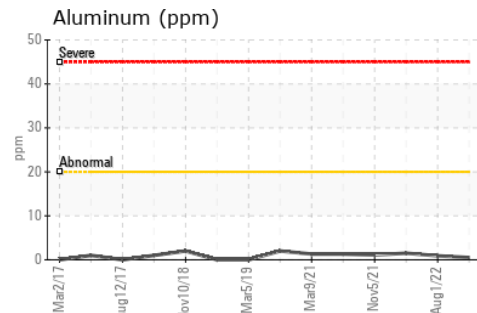
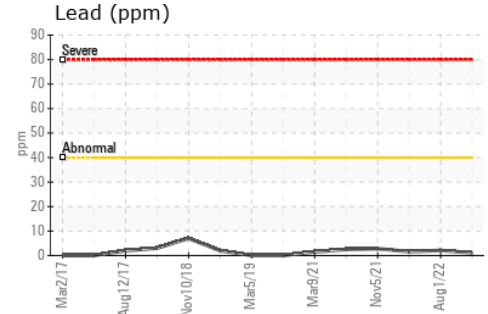
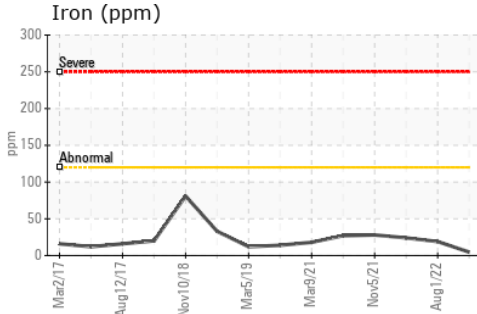
# OIL ANALYSIS REPORT



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)	12.00	11.4	11.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0085802 **Received** : 21 Aug 2023  
**Lab Number** : 02577005 **Diagnosed** : 21 Aug 2023  
**Unique Number** : 5630065 **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.

Contact: Tim Greig  
 tgreig@gflenv.com

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