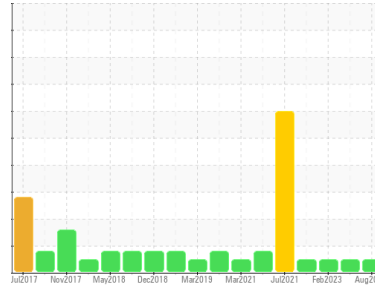




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4524**  
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>GFL0090629</b>	GFL0072829	GFL0072858
Sample Date	Client Info	<b>11 Aug 2023</b>	12 Mar 2023	18 Feb 2023
Machine Age	hrs	<b>30773</b>	7825	7781
Oil Age	hrs	<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
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>	3	15
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185(m) >5	<b>0</b>	0	<1
Titanium	ppm ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>3</b>	<1	1
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	0	0
Copper	ppm ASTM D5185(m) >330	<b>2</b>	<1	7
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) 2	<b>4</b>	3	3
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 50	<b>59</b>	58	58
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 950	<b>958</b>	962	972
Calcium	ppm ASTM D5185(m) 1050	<b>1053</b>	1104	1103
Phosphorus	ppm ASTM D5185(m) 995	<b>1070</b>	1097	1082
Zinc	ppm ASTM D5185(m) 1180	<b>1166</b>	1178	1182
Sulfur	ppm ASTM D5185(m) 2600	<b>2610</b>	2745	2669
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>4</b>	2	3
Sodium	ppm ASTM D5185(m)	<b>3</b>	2	3
Potassium	ppm ASTM D5185(m) >20	<b>3</b>	<1	<1

## INFRA-RED

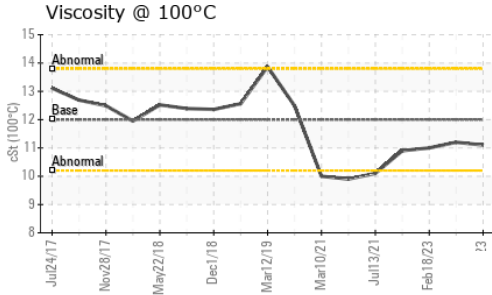
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >4	<b>0.3</b>	0	0.1
Nitration	Abs/cm ASTM D7624* >20	<b>8.6</b>	5.2	8.2
Sulfation	Abs/.1mm ASTM D7415* >30	<b>20.5</b>	20.1	21.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>16.2</b>	14.1	15.6



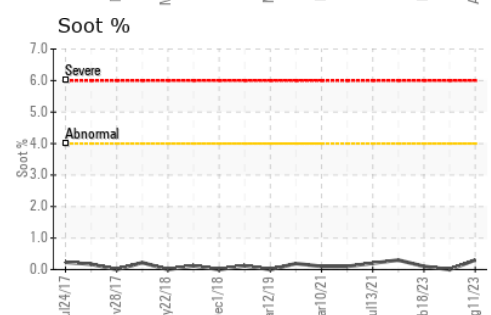
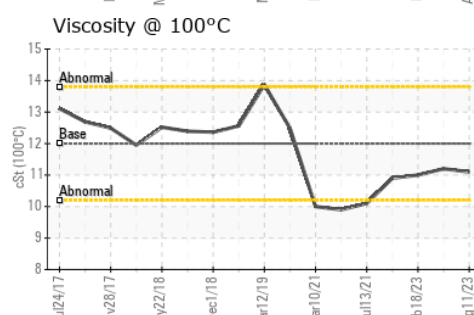
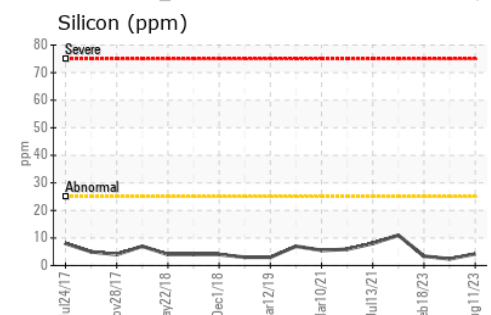
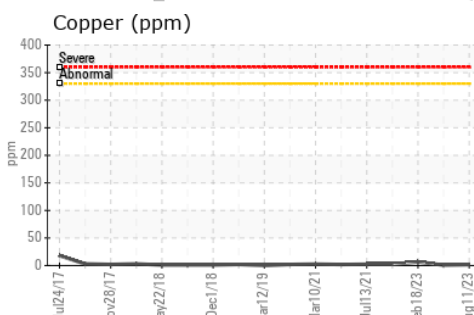
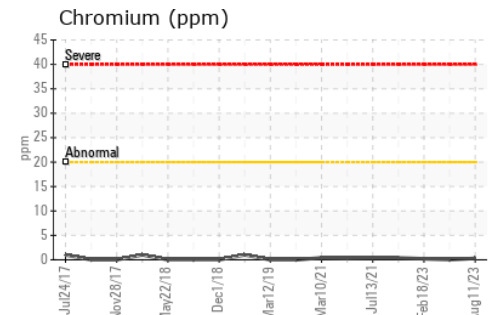
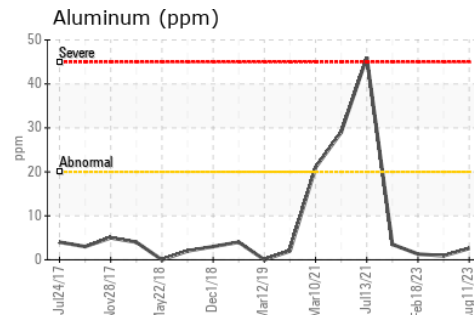
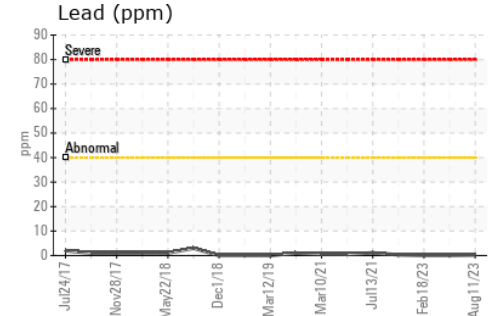
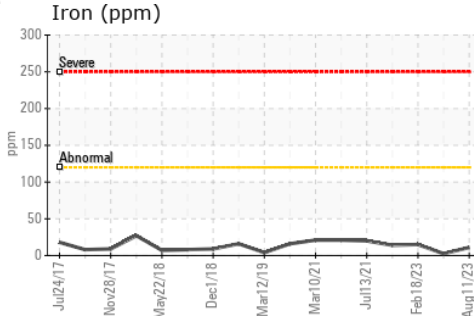
# OIL ANALYSIS REPORT



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	11.1	11.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0090629 **Received** : 21 Aug 2023  
**Lab Number** : 02577035 **Diagnosed** : 21 Aug 2023  
**Unique Number** : 5630095 **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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