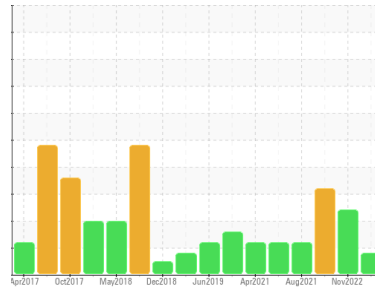




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**7822**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>GFL0085926</b>	GFL0059962	GFL0053084
Sample Date	Client Info	<b>04 May 2023</b>	20 Nov 2022	23 May 2022
Machine Age	hrs	Client Info	0	17194
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	Changed
Sample Status		<b>MARGINAL</b>	SEVERE	ATTENTION

## CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >110	<b>8</b>	62	47
Chromium	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	3	4
Lead	ppm	ASTM D5185(m) >45	<b>&lt;1</b>	3	1
Copper	ppm	ASTM D5185(m) >85	<b>2</b>	81	21
Tin	ppm	ASTM D5185(m) >4	<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>2</b>	5	▲ 61
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	2	▲ 18
Molybdenum	ppm	ASTM D5185(m) 50	<b>55</b>	44	▲ 4
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	2	6
Magnesium	ppm	ASTM D5185(m) 950	<b>925</b>	774	▲ 658
Calcium	ppm	ASTM D5185(m) 1050	<b>969</b>	911	1299
Phosphorus	ppm	ASTM D5185(m) 995	<b>1018</b>	873	▲ 696
Zinc	ppm	ASTM D5185(m) 1180	<b>1130</b>	939	▲ 751
Sulfur	ppm	ASTM D5185(m) 2600	<b>2503</b>	2081	2497
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>4</b>	15	25
Sodium	ppm	ASTM D5185(m)	<b>3</b>	9	13
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	2	5
Fuel	%	ASTM D7593* >5	▲ <b>4</b>	◆ 12.2	▲ 4.8

## INFRA-RED

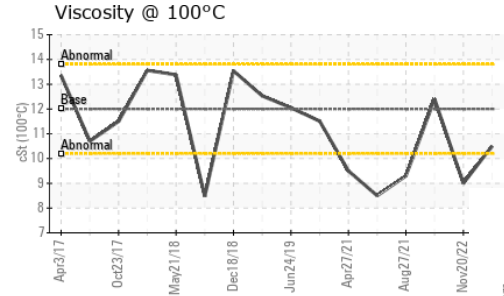
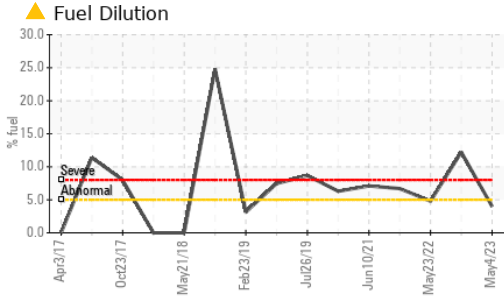
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	<b>0.2</b>	1.2	0.4
Nitration	Abs/cm	ASTM D7624* >20	<b>5.8</b>	11.0	9.2
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>19.2</b>	25.6	21.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>15.5</b>	24.9	14.4



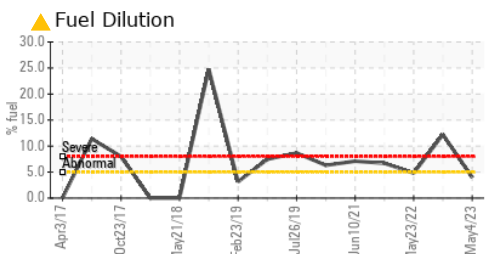
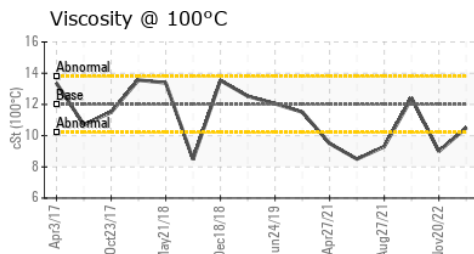
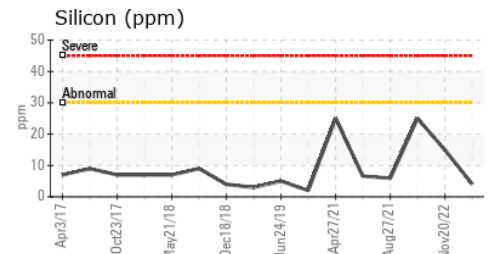
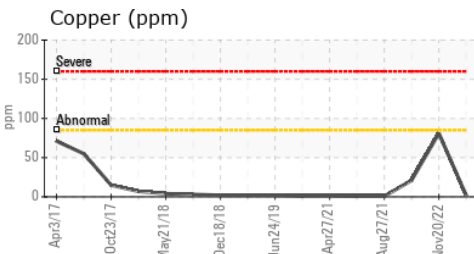
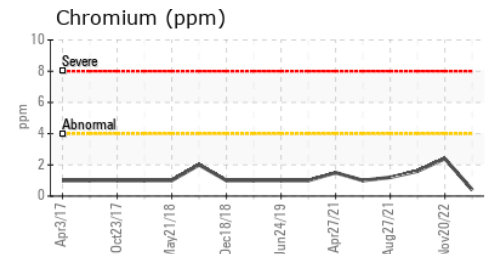
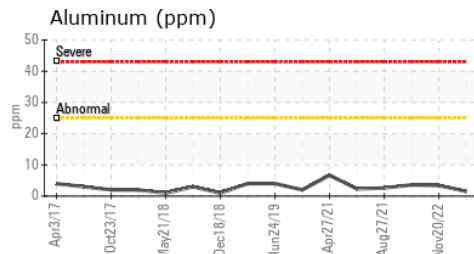
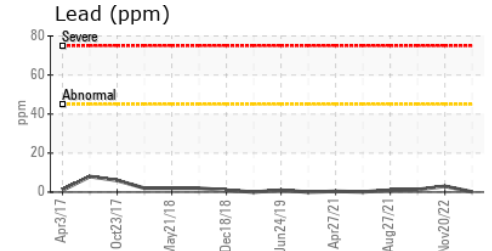
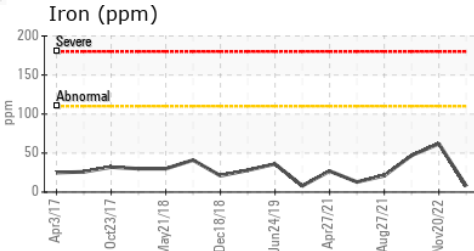
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML
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	10.5	▲ 9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0085926 **Received** : 13 Jul 2023 8409 -15th Street NW  
**Lab Number** : 02569625 **Diagnosed** : 14 Jul 2023 Edmonton, AB  
**Unique Number** : 5606671 **Diagnostician** : Wes Davis CA T6P 0B8  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, Visual ) Contact: Tim Greig  
 tgreig@gflenv.com

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.

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