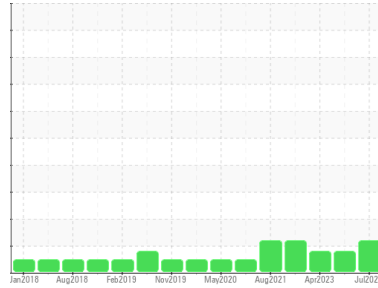




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**801027**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (22 LTR)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0086487</b>	GFL0081991	GFL0081975
Sample Date	Client Info		<b>20 Jul 2023</b>	10 May 2023	27 Apr 2023
Machine Age	hrs	Client Info	<b>38463</b>	12105	38463
Oil Age	hrs	Client Info	<b>0</b>	0	8472
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	MARGINAL	ABNORMAL

## 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) >80	<b>27</b>	8	31
Chromium	ppm	ASTM D5185(m) >5	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >30	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m) >30	<b>0</b>	0	0
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>	<1	<1
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>8</b>	15	6
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>57</b>	58	57
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>904</b>	926	897
Calcium	ppm	ASTM D5185(m) 1070	<b>987</b>	1109	1079
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1003</b>	1087	1028
Zinc	ppm	ASTM D5185(m) 1270	<b>1129</b>	1205	1133
Sulfur	ppm	ASTM D5185(m) 2060	<b>2255</b>	2662	2301
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>	3	7
Sodium	ppm	ASTM D5185(m)	<b>15</b>	7	20
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	2
Fuel	%	ASTM D7593* >5	<b>▲ 7.2</b>	▲ 2.9	▲ 7

## INFRA-RED

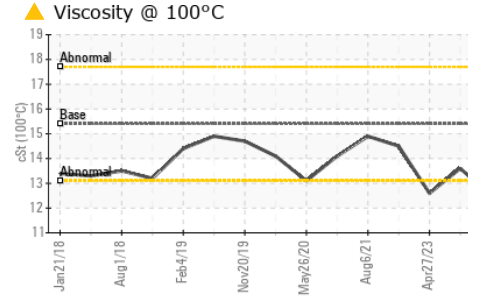
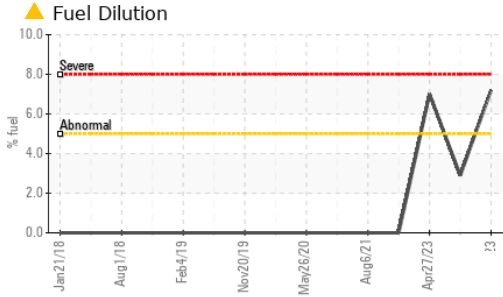
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.5</b>	0.1	0.5
Nitration	Abs/cm	ASTM D7624* >20	<b>12.1</b>	7.2	12.5
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>23.5</b>	19.6	24.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>22.4</b>	15.4	23.9



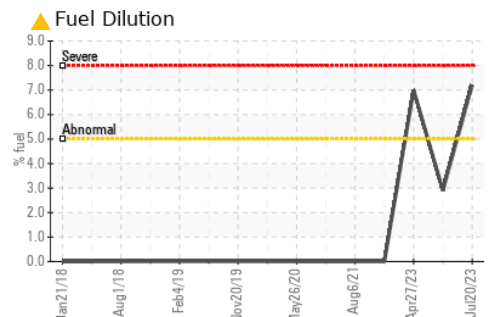
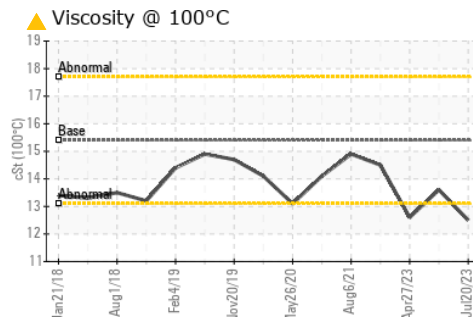
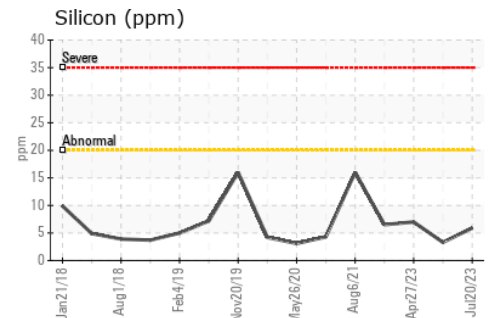
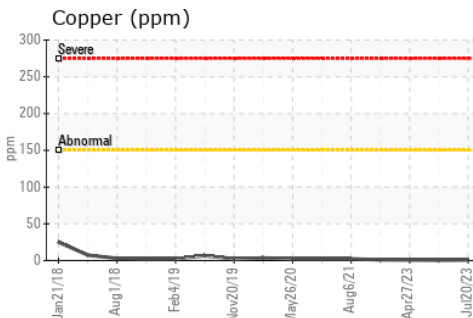
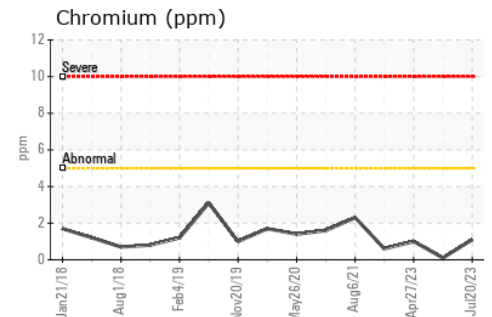
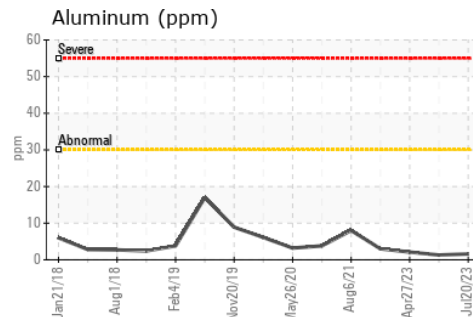
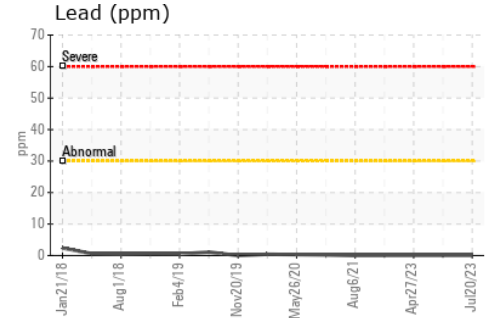
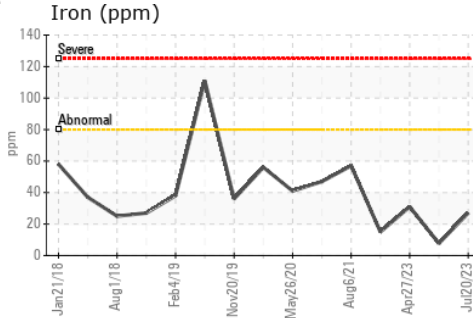
# OIL ANALYSIS REPORT



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)	15.4	▲ 12.5	13.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0086487  
**Lab Number** : 02571830  
**Unique Number** : 5616881  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 217 - Aurora**  
 14131 BAYVIEW AVE, AURORA YARD  
 AURORA, ON  
 CA L4G 0K6  
 Contact: Mike Havens  
 MHavens@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.

T:  
 F: (905)713-2445