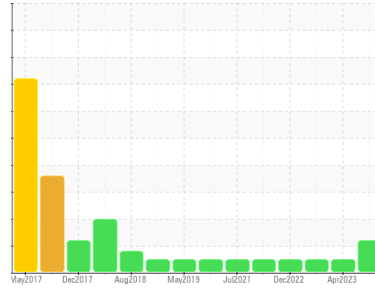




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

7821

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- 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	GFL0093906	GFL0077980	GFL0072843
Sample Date	Client Info	25 Sep 2023	22 Apr 2023	11 Mar 2023
Machine Age	hrs	18243	17828	17485
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >110	20	6	14
Chromium	ppm	ASTM D5185(m) >4	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >2	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	<1	<1
Silver	ppm	ASTM D5185(m) >2	<1	0	0
Aluminum	ppm	ASTM D5185(m) >25	2	2	3
Lead	ppm	ASTM D5185(m) >45	2	<1	<1
Copper	ppm	ASTM D5185(m) >85	1	<1	<1
Tin	ppm	ASTM D5185(m) >4	0	0	<1
Antimony	ppm	ASTM D5185(m)	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 2	2	2	3
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 50	55	55	58
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 950	881	917	926
Calcium	ppm	ASTM D5185(m) 1050	953	1039	1078
Phosphorus	ppm	ASTM D5185(m) 995	902	1028	1060
Zinc	ppm	ASTM D5185(m) 1180	1090	1111	1155
Sulfur	ppm	ASTM D5185(m) 2600	2259	2560	2588
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >30	8	4	6
Sodium	ppm	ASTM D5185(m)	9	4	8
Potassium	ppm	ASTM D5185(m) >20	1	<1	14
Fuel	%	ASTM D7593* >5	▲ 7.8	<1.0	<1.0

INFRA-RED

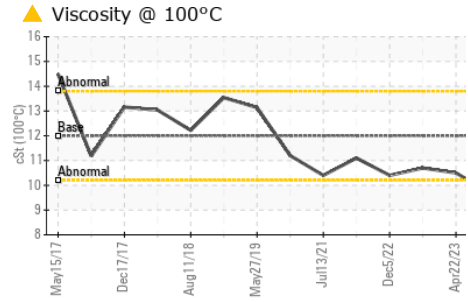
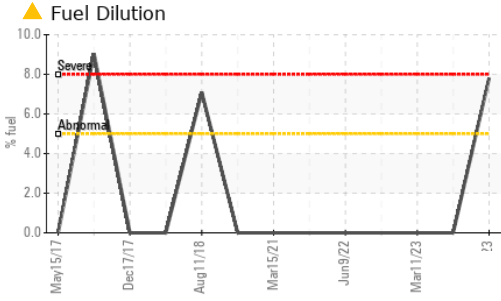
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	1.1	0.3	0.6
Nitration	Abs/cm	ASTM D7624* >20	10.2	6.5	8.4
Sulfation	Abs/.1mm	ASTM D7415* >30	23.9	19.4	20.1

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	22.8	14.8	15.4



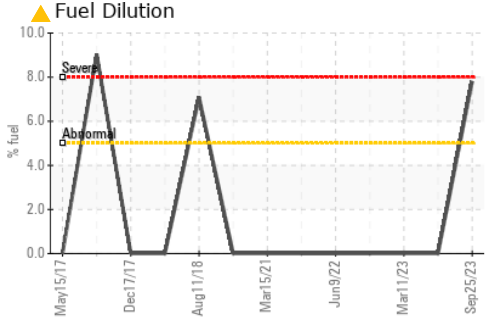
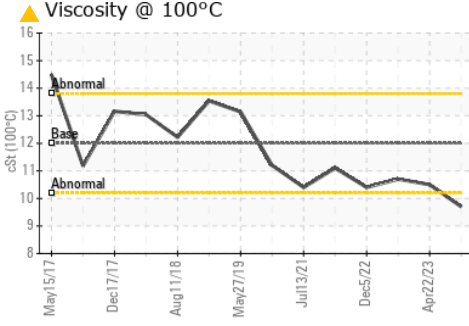
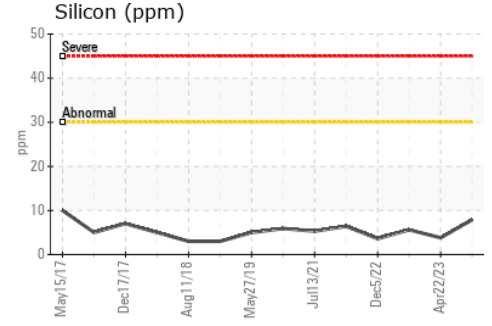
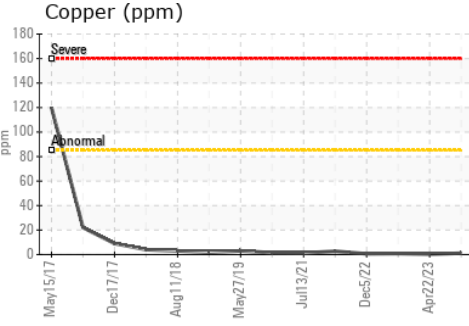
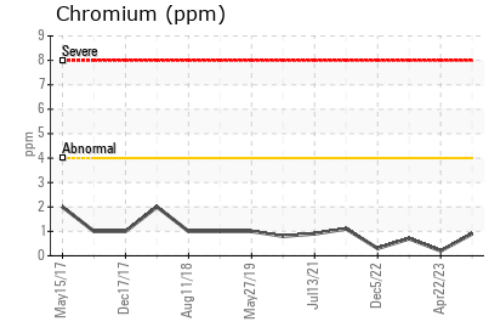
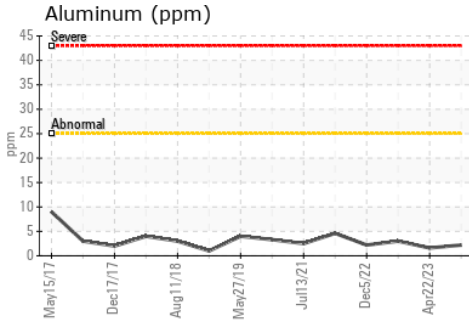
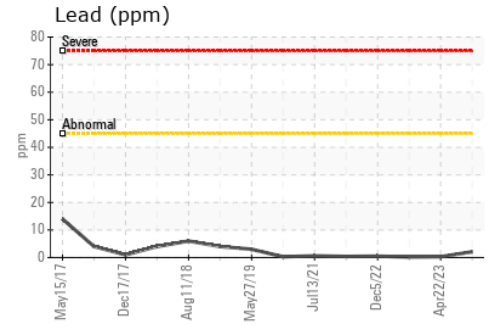
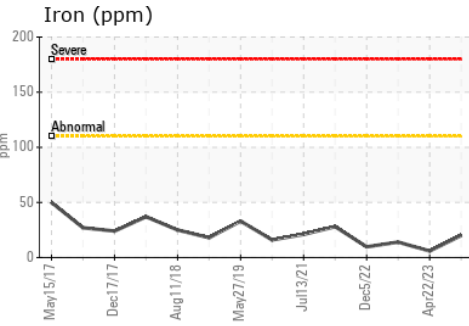
OIL ANALYSIS REPORT



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	▲ 9.7	10.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**
Sample No. : GFL0093906 **Received** : 03 Oct 2023 **8409 -15th Street NW**
Lab Number : 02586316 **Diagnosed** : 04 Oct 2023 **Edmonton, AB**
Unique Number : 5655382 **Diagnostician** : Wes Davis **CA T6P 0B8**
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) **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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