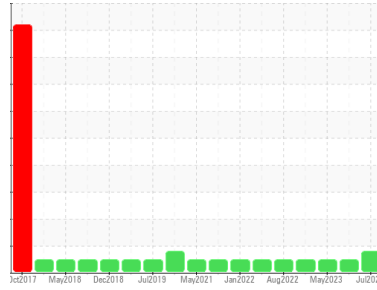




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
801071
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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		GFL0085932	GFL0077632	GFL0077622
Sample Date	Client Info		06 Jul 2023	05 Jun 2023	12 May 2023
Machine Age	hrs	Client Info	13772	304843	13412
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			MARGINAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >80	21	14	47
Chromium	ppm	ASTM D5185(m) >5	<1	<1	1
Nickel	ppm	ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	0	<1	0
Aluminum	ppm	ASTM D5185(m) >30	3	2	6
Lead	ppm	ASTM D5185(m) >30	0	0	0
Copper	ppm	ASTM D5185(m) >150	<1	<1	2
Tin	ppm	ASTM D5185(m) >5	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) 0	3	3	4
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	64	61	67
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	1072	1008	1072
Calcium	ppm	ASTM D5185(m) 1070	1135	1105	1276
Phosphorus	ppm	ASTM D5185(m) 1150	1135	1060	1156
Zinc	ppm	ASTM D5185(m) 1270	1305	1223	1319
Sulfur	ppm	ASTM D5185(m) 2060	2518	2438	2469
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	6	5	10
Sodium	ppm	ASTM D5185(m)	4	4	5
Potassium	ppm	ASTM D5185(m) >20	1	<1	1
Fuel	%	ASTM D7593* >5	▲ 3.9	<1.0	<1.0

INFRA-RED

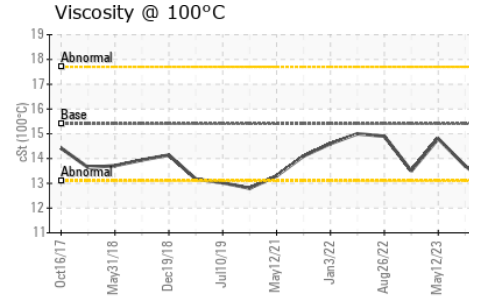
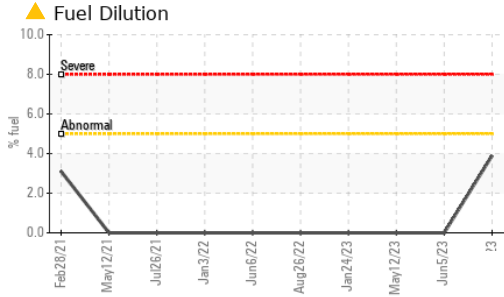
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.5	0.4	0.9
Nitration	Abs/cm	ASTM D7624* >20	9.8	9.1	13.0
Sulfation	Abs/.1mm	ASTM D7415* >30	23.2	22.0	26.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	21.6	19.8	27.1



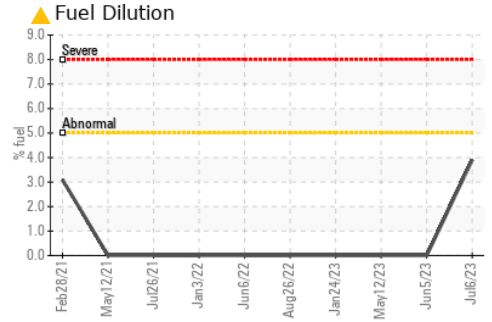
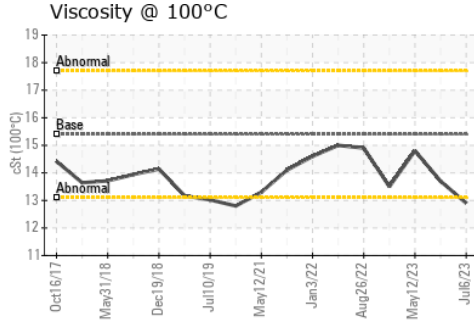
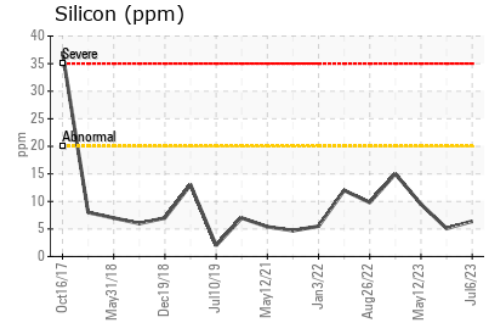
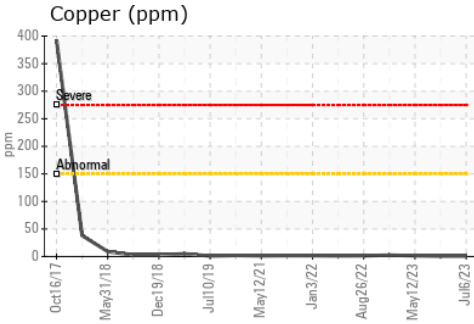
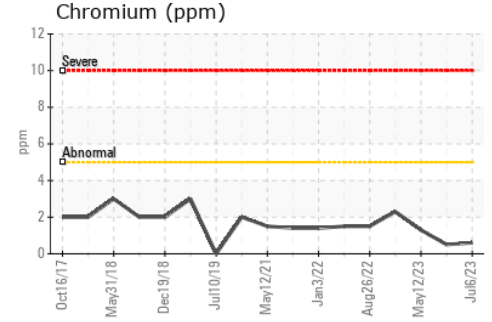
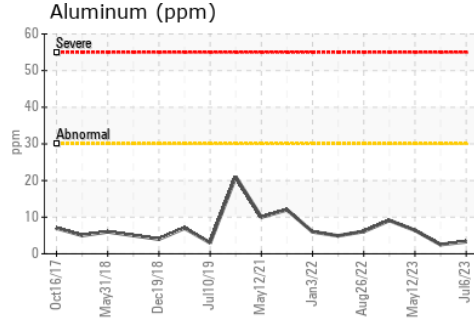
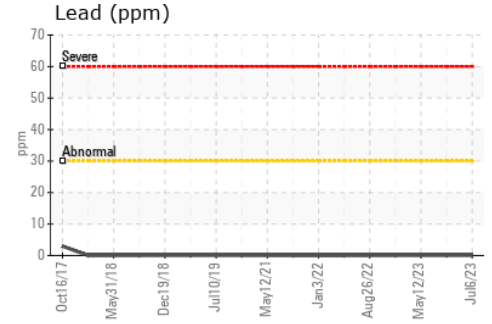
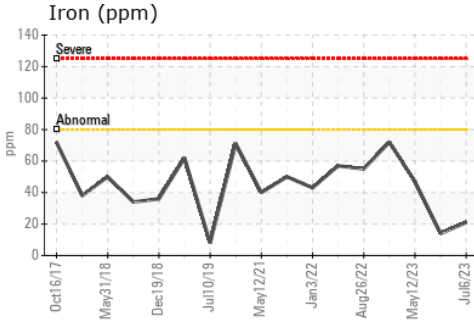
OIL ANALYSIS REPORT



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	12.9	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County
Sample No. : GFL0085932 **Received** : 13 Jul 2023
Lab Number : 02569628 **Diagnosed** : 14 Jul 2023
Unique Number : 5606674 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)
 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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