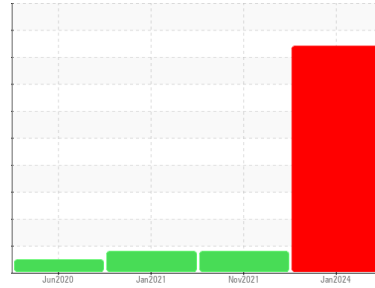




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
5650

Component
Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (44 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. 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

Test for glycol is positive. There is a high concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0092234	GFL0030427	GFL0010809
Sample Date	Client Info	26 Jan 2024	18 Nov 2021	26 Jan 2021
Machine Age	hrs	32855	29499	28124
Oil Age	hrs	675	500	600
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		SEVERE	MARGINAL	MARGINAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	▲ 3.8	▲ 2.8
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	4	7	3
Chromium	ppm ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm ASTM D5185(m) >4	0	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m) >3	0	0	<1
Aluminum	ppm ASTM D5185(m) >20	2	3	2
Lead	ppm ASTM D5185(m) >40	<1	2	0
Copper	ppm ASTM D5185(m) >330	5	77	4
Tin	ppm ASTM D5185(m) >15	0	<1	<1
Antimony	ppm ASTM D5185(m)	0	<1	0
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	30	1	2
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 60	70	77	54
Manganese	ppm ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	869	931	899
Calcium	ppm ASTM D5185(m) 1070	991	1002	1049
Phosphorus	ppm ASTM D5185(m) 1150	980	1025	949
Zinc	ppm ASTM D5185(m) 1270	1101	1164	1184
Sulfur	ppm ASTM D5185(m) 2060	2649	2422	2683
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

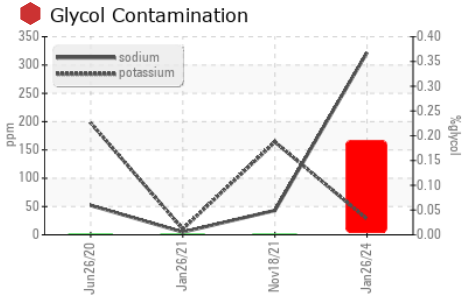
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	8	7	3
Sodium	ppm ASTM D5185(m)	▲ 322	43	5
Potassium	ppm ASTM D5185(m) >20	▲ 28	164	10
Glycol	% ASTM D7922*	● 0.19	0.0	0.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0	0	0
Nitration	Abs/cm ASTM D7624* >20	7.2	7.5	6.0
Sulfation	Abs./1mm ASTM D7415* >30	17.8	20.0	17.9



OIL ANALYSIS REPORT

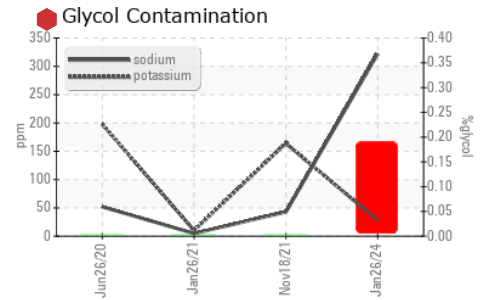
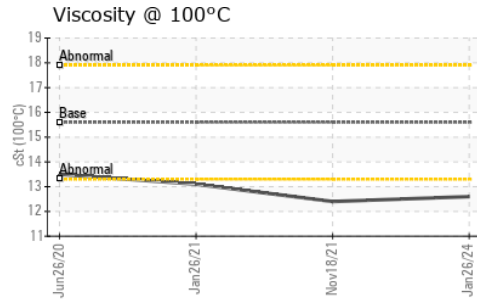
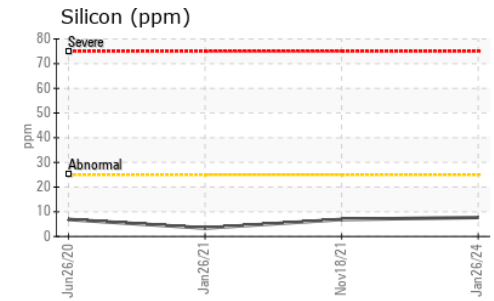
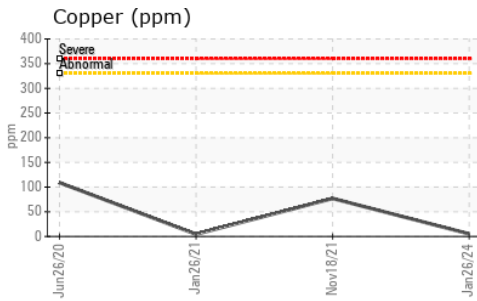
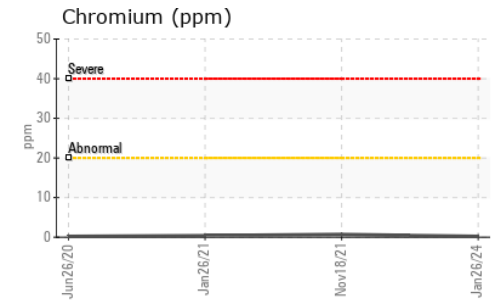
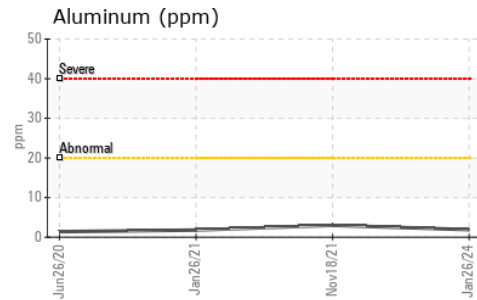
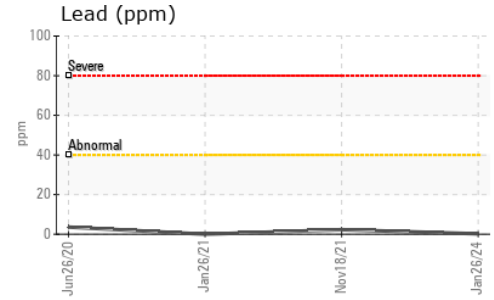
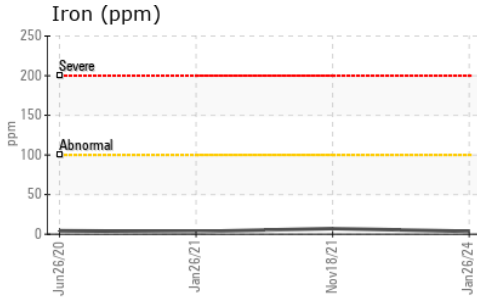
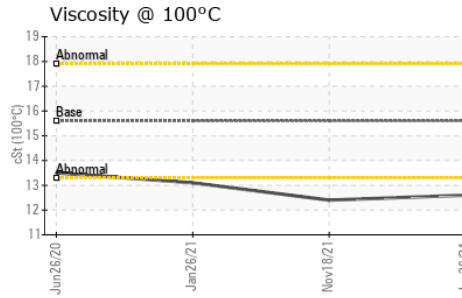


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.2	14.8	13.3

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	12.6	12.4	13.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0092234
Lab Number : 02615350
Unique Number : 5724445
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 F:

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.