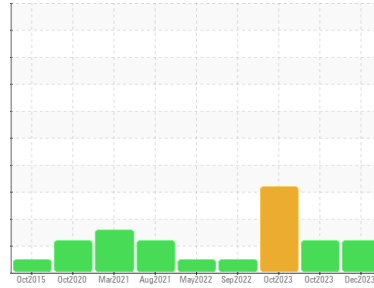




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
4501

Component
Front Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (40 LTR)

DIAGNOSIS

Recommendation

Check for low coolant level. 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

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0094383	GFL0094396	GFL0094400
Sample Date	Client Info	15 Dec 2023	20 Oct 2023	13 Oct 2023
Machine Age	hrs	20364	17366	17366
Oil Age	hrs	20364	17366	17366
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		---	ATTENTION	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >50	15	11	46
Chromium	ppm ASTM D5185(m) >4	<1	<1	3
Nickel	ppm ASTM D5185(m) >2	<1	0	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m) >3	<1	<1	<1
Aluminum	ppm ASTM D5185(m) >9	3	3	▲ 13
Lead	ppm ASTM D5185(m) >30	5	4	24
Copper	ppm ASTM D5185(m) >35	2	1	4
Tin	ppm ASTM D5185(m) >4	0	0	1
Antimony	ppm ASTM D5185(m)	0	0	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) 50	16	37	10
Barium	ppm ASTM D5185(m) 5	<1	<1	<1
Molybdenum	ppm ASTM D5185(m) 50	63	60	133
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 560	524	535	507
Calcium	ppm ASTM D5185(m) 1510	1494	1458	1481
Phosphorus	ppm ASTM D5185(m) 780	675	727	654
Zinc	ppm ASTM D5185(m) 870	873	851	906
Sulfur	ppm ASTM D5185(m) 2040	2121	2045	2341
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >+100	6	6	22
Sodium	ppm ASTM D5185(m)	▲ 1214	▲ 1075	▲ 4458
Potassium	ppm ASTM D5185(m) >20	89	80	▲ 521
Glycol	% ASTM D7922*	0.0	0.0	0.0

INFRA-RED

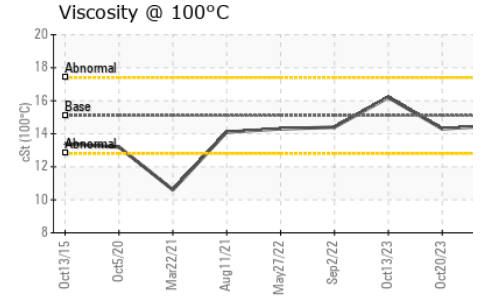
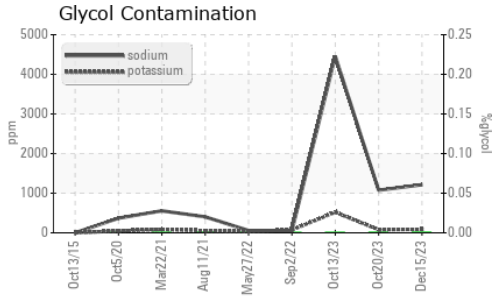
method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	0	0	0
Nitration	Abs/cm ASTM D7624*	12.1	9.4	21.9
Sulfation	Abs/.1mm ASTM D7415*	22.0	21.1	31.1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*	17.8	16.5	19.9



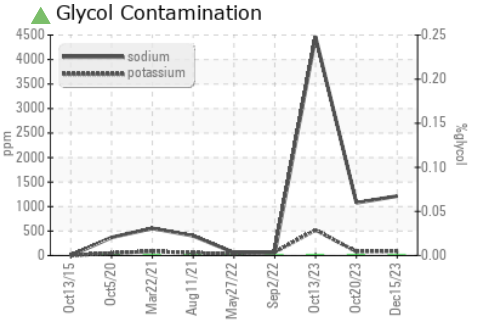
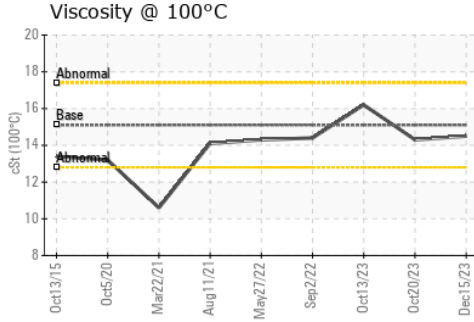
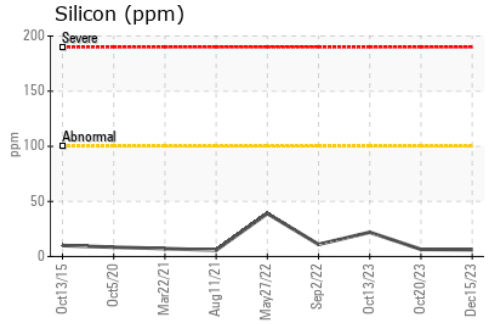
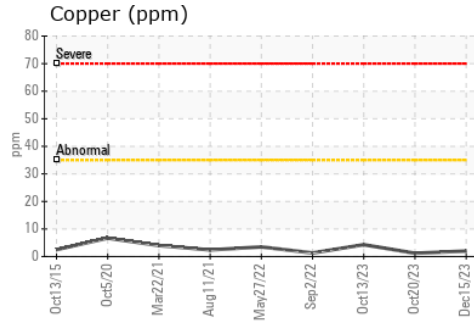
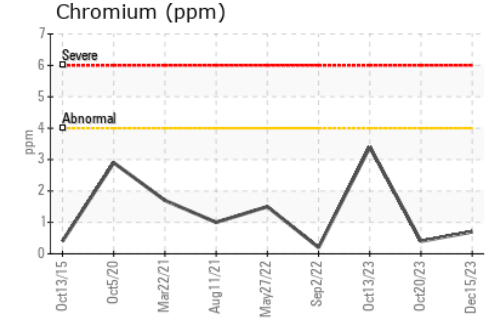
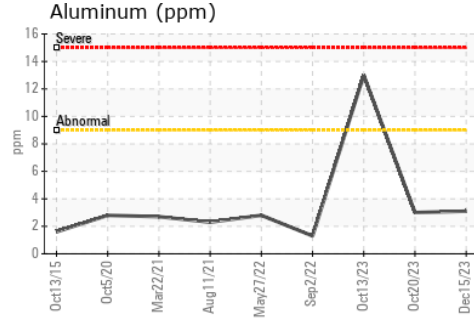
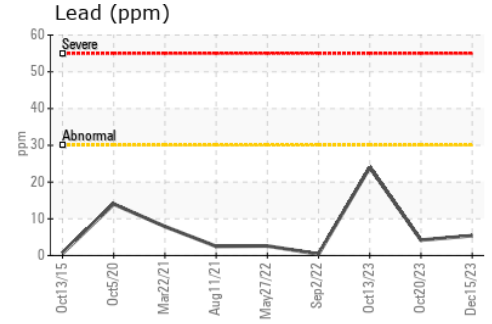
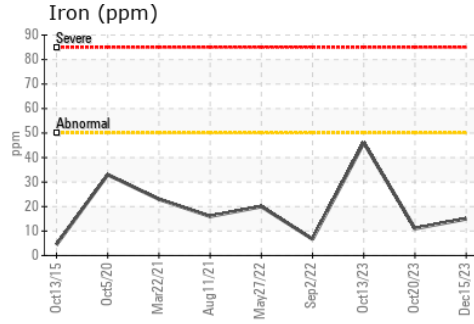
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.3	16.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094383
Lab Number : 02604085
Unique Number : 5697170
Test Package : MOB 1 (Additional Tests: Glycol)
Received : 19 Dec 2023
Diagnosed : 20 Dec 2023
Diagnostician : Kevin Marson
 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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