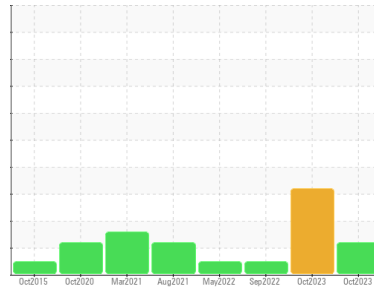




OIL ANALYSIS REPORT

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. We recommend that you drain the oil from the component if this has not already been done. 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	GFL0094396	GFL0094400	GFL0055412
Sample Date	Client Info	20 Oct 2023	13 Oct 2023	02 Sep 2022
Machine Age	hrs	17366	17366	17366
Oil Age	hrs	17366	17366	17366
Oil Changed	Client Info	N/A	N/A	Changed
Sample Status		ATTENTION	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >50	11	46	7
Chromium	ppm	ASTM D5185(m) >4	<1	3	<1
Nickel	ppm	ASTM D5185(m) >2	0	<1	0
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >9	3	▲ 13	1
Lead	ppm	ASTM D5185(m) >30	4	24	<1
Copper	ppm	ASTM D5185(m) >35	1	4	1
Tin	ppm	ASTM D5185(m) >4	0	1	0
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	37	10	12
Barium	ppm	ASTM D5185(m) 5	<1	<1	0
Molybdenum	ppm	ASTM D5185(m) 50	60	133	53
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 560	535	507	515
Calcium	ppm	ASTM D5185(m) 1510	1458	1481	1485
Phosphorus	ppm	ASTM D5185(m) 780	727	654	677
Zinc	ppm	ASTM D5185(m) 870	851	906	844
Sulfur	ppm	ASTM D5185(m) 2040	2045	2341	1988
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >+100	6	22	11
Sodium	ppm	ASTM D5185(m)	▲ 1075	▲ 4458	55
Potassium	ppm	ASTM D5185(m) >20	80	▲ 521	71
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

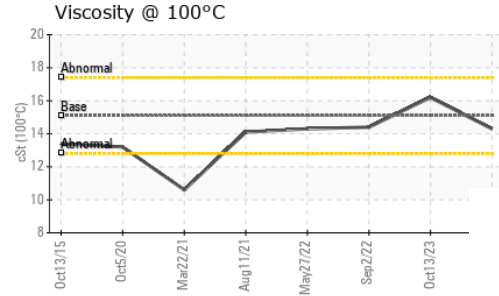
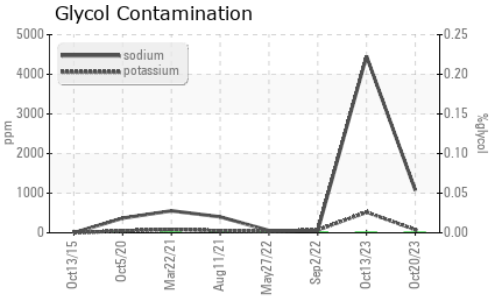
method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	0	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	9.4	21.9	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	31.1	22.6

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.5	19.9	19.0



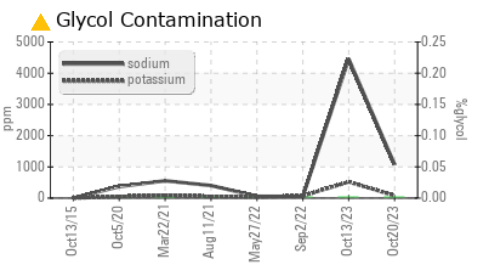
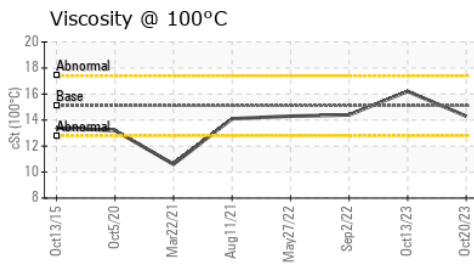
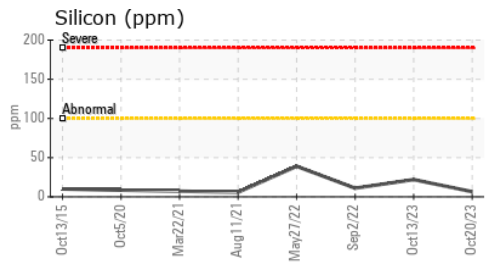
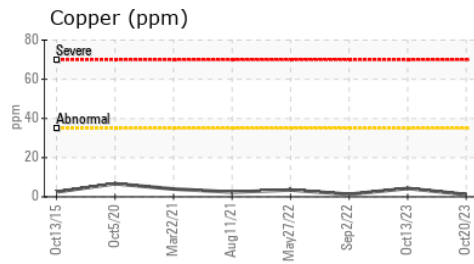
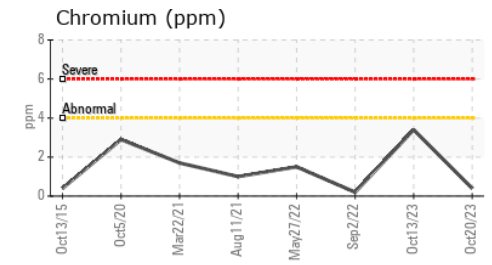
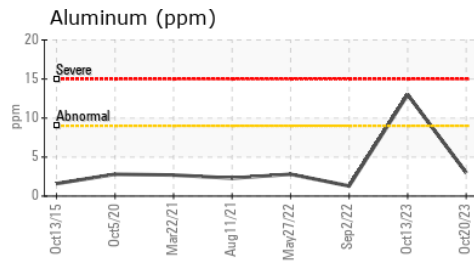
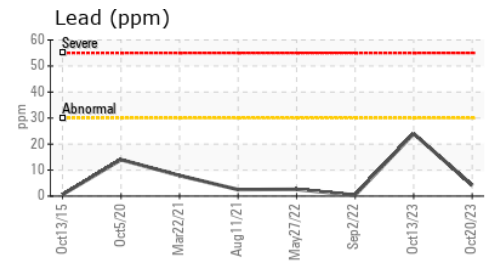
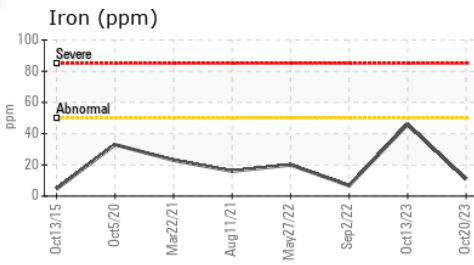
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML
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. : GFL0094396 **Received** : 23 Oct 2023
Lab Number : 02590971 **Diagnosed** : 23 Oct 2023
Unique Number : 5668050 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, Visual)
 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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