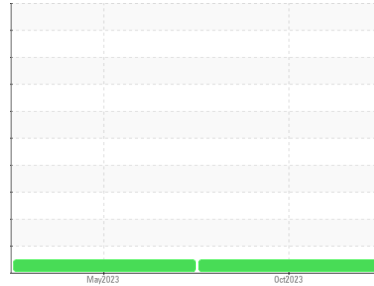




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
833113
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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		GFL0097648	GFL0077995	---
Sample Date	Client Info		15 Oct 2023	16 May 2023	---
Machine Age	days	Client Info	0	443	---
Oil Age	days	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			NORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	24	54	---
Chromium	ppm	ASTM D5185(m)	>5	1	1	---
Nickel	ppm	ASTM D5185(m)	>4	1	1	---
Titanium	ppm	ASTM D5185(m)	>5	0	<1	---
Silver	ppm	ASTM D5185(m)	>3	<1	1	---
Aluminum	ppm	ASTM D5185(m)	>25	5	6	---
Lead	ppm	ASTM D5185(m)	>40	1	2	---
Copper	ppm	ASTM D5185(m)	>150	5	20	---
Tin	ppm	ASTM D5185(m)	>4	<1	1	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	50	6	12	---
Barium	ppm	ASTM D5185(m)	5	<1	3	---
Molybdenum	ppm	ASTM D5185(m)	50	61	55	---
Manganese	ppm	ASTM D5185(m)	0	2	12	---
Magnesium	ppm	ASTM D5185(m)	560	663	820	---
Calcium	ppm	ASTM D5185(m)	1510	1778	1305	---
Phosphorus	ppm	ASTM D5185(m)	780	785	748	---
Zinc	ppm	ASTM D5185(m)	870	1002	874	---
Sulfur	ppm	ASTM D5185(m)	2040	2008	1947	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	11	38	---
Sodium	ppm	ASTM D5185(m)		11	5	---
Potassium	ppm	ASTM D5185(m)	>20	5	8	---
Glycol	%	ASTM D7922*		0.0	---	---

INFRA-RED

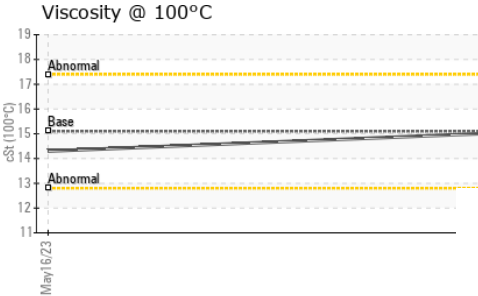
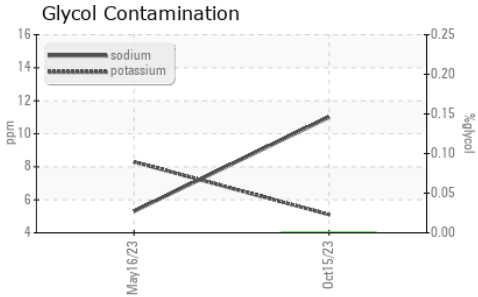
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.5	12.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.2	23.6	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1	20.9	---



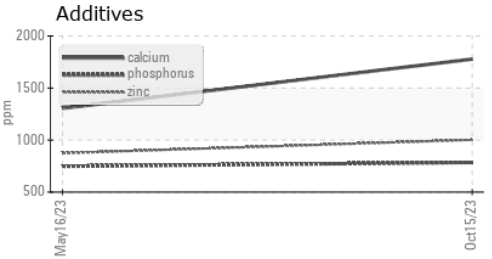
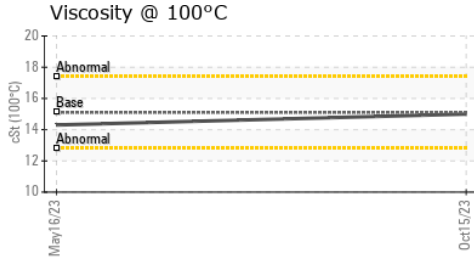
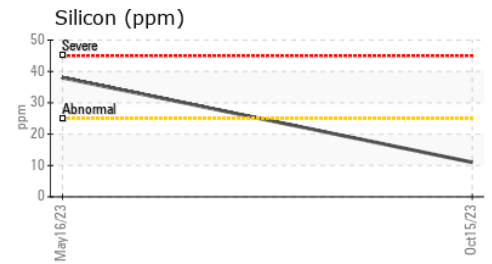
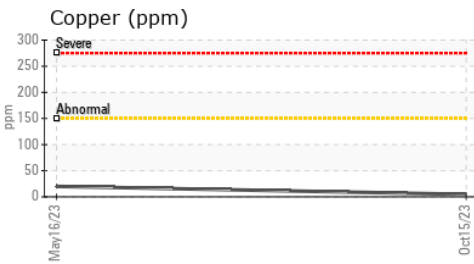
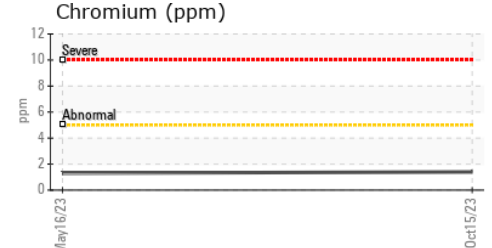
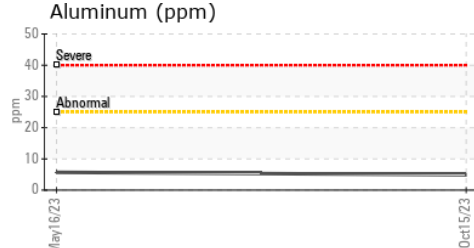
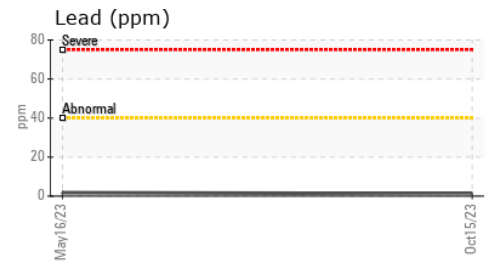
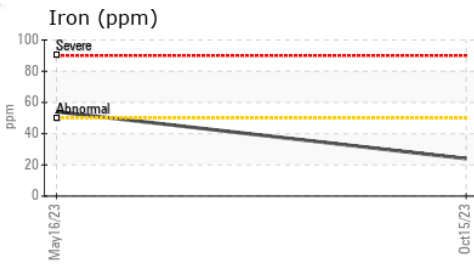
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
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	---
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	15.0	14.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0097648 **Received** : 16 Oct 2023 **8409 -15th Street NW**
Lab Number : 02589214 **Diagnosed** : 16 Oct 2023 **Edmonton, AB**
Unique Number : 5658280 **Diagnostician** : Kevin Marson **CA T6P 0B8**
Test Package : MOB 1 (Additional Tests: Glycol, Visual) **Contact: Antonio De Rosa**
aderosa@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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