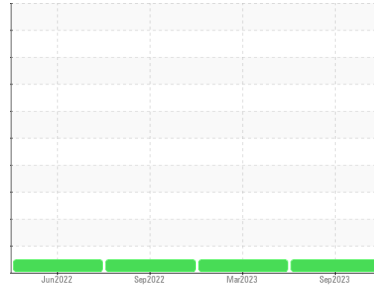




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
731082
 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		GFL0085894	GFL0064316	GFL0060987
Sample Date	Client Info		18 Sep 2023	29 Mar 2023	28 Sep 2022
Machine Age	hrs	Client Info	5282	4103	2972
Oil Age	hrs	Client Info	1200	1200	1000
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	14	13	10
Chromium	ppm	ASTM D5185(m)	>4	2	2	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	2	<1	<1
Copper	ppm	ASTM D5185(m)	>35	1	1	<1
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<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)	50	12	12	11
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	73	61	53
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	595	666	551
Calcium	ppm	ASTM D5185(m)	1510	1797	1848	1691
Phosphorus	ppm	ASTM D5185(m)	780	812	842	740
Zinc	ppm	ASTM D5185(m)	870	997	1094	932
Sulfur	ppm	ASTM D5185(m)	2040	2195	2292	2066
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	4	4	4
Sodium	ppm	ASTM D5185(m)		7	8	7
Potassium	ppm	ASTM D5185(m)	>20	12	1	0
Glycol	%	ASTM D7922*		0.0	0.0	---

INFRA-RED

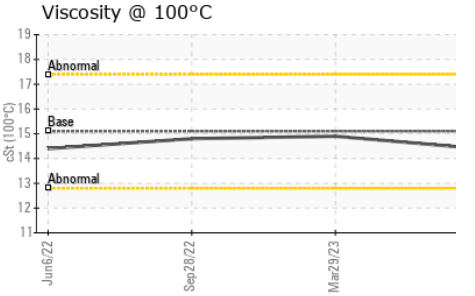
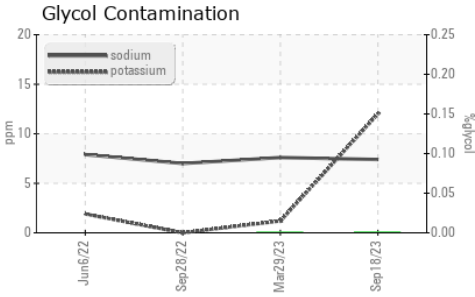
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.3	7.6	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.6	20.3	22.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.0	11.5	18.7



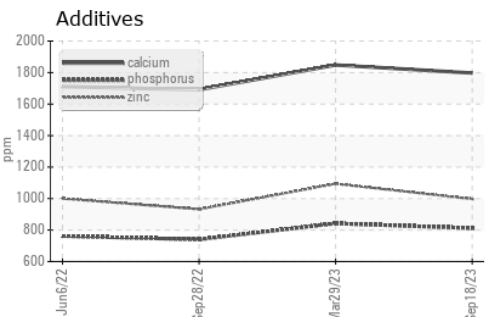
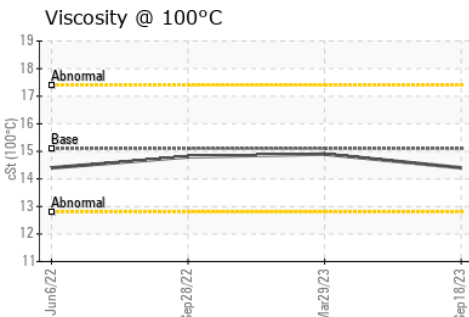
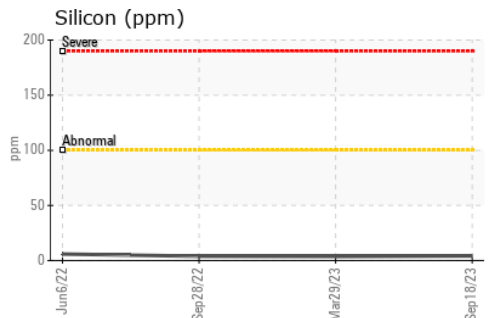
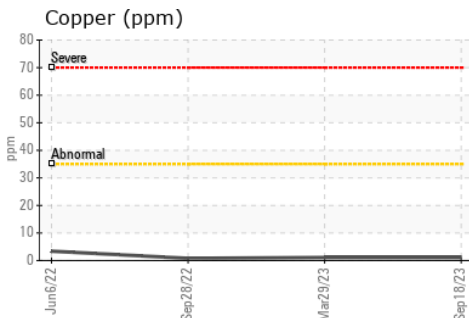
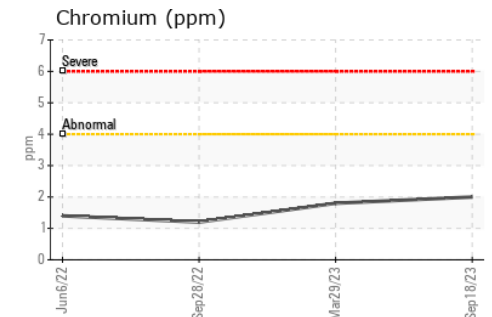
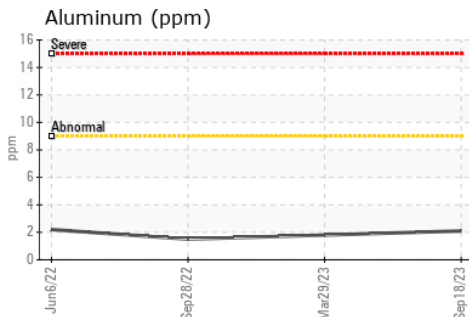
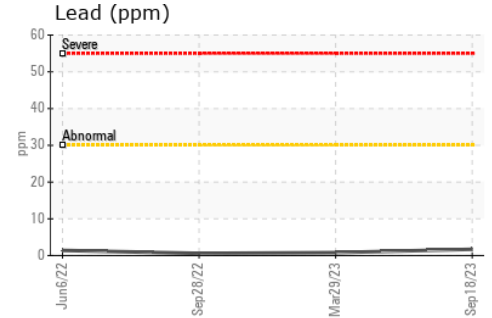
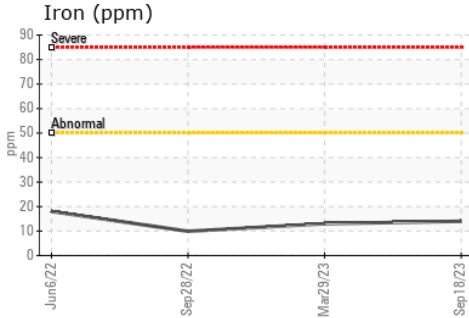
OIL ANALYSIS REPORT



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	14.4	14.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 209 - Hamilton**
Sample No. : GFL0085894 **Received** : 20 Sep 2023 **560 Seaman Street**
Lab Number : 02583868 **Diagnosed** : 20 Sep 2023 **Stoney Creek, ON**
Unique Number : 5644933 **Diagnostician** : Wes Davis **CA L8E 3X7**
Test Package : MOB 1 (Additional Tests: Glycol) **Contact: Fred Carleton**
fred.carleton@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.