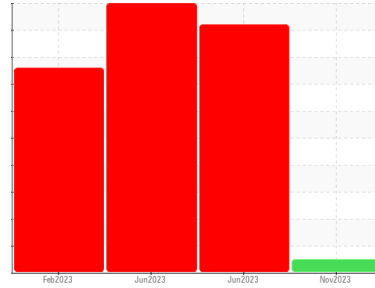




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

8135

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0101711	GFL0085950	GFL0085953
Sample Date	Client Info		25 Nov 2023	21 Jun 2023	16 Jun 2023
Machine Age	hrs	Client Info	473	68360	0
Oil Age	hrs	Client Info	0	0	6825
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	▲ 4.9	■ 13.4
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	80	2	6
Chromium	ppm	ASTM D5185(m)	>20	2	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	<1	1
Lead	ppm	ASTM D5185(m)	>40	3	<1	2
Copper	ppm	ASTM D5185(m)	>330	77	13	38
Tin	ppm	ASTM D5185(m)	>15	1	0	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)	2	5	2	5
Barium	ppm	ASTM D5185(m)	0	9	0	0
Molybdenum	ppm	ASTM D5185(m)	50	54	79	129
Manganese	ppm	ASTM D5185(m)	0	5	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	855	855	670
Calcium	ppm	ASTM D5185(m)	1050	1016	928	781
Phosphorus	ppm	ASTM D5185(m)	995	840	995	829
Zinc	ppm	ASTM D5185(m)	1180	1065	1084	885
Sulfur	ppm	ASTM D5185(m)	2600	2083	2467	2057
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

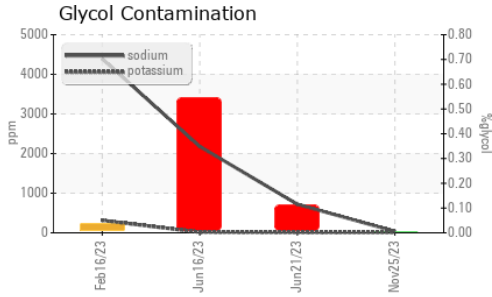
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	29	4	5
Sodium	ppm	ASTM D5185(m)		36	▲ 721	▲ 2179
Potassium	ppm	ASTM D5185(m)	>20	5	▲ 6	▲ 16
Glycol	%	ASTM D7922*		0.0	■ 0.112	■ 0.545

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.9	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.7	6.7	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	18.2	19.9



OIL ANALYSIS REPORT

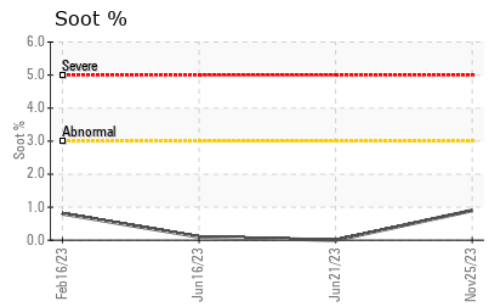
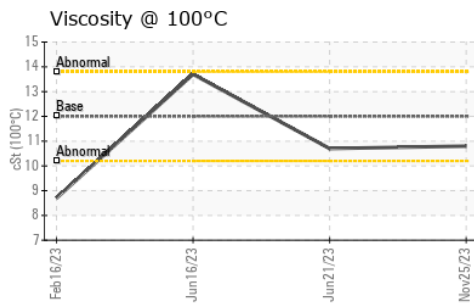
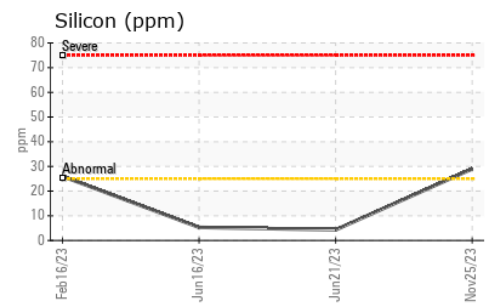
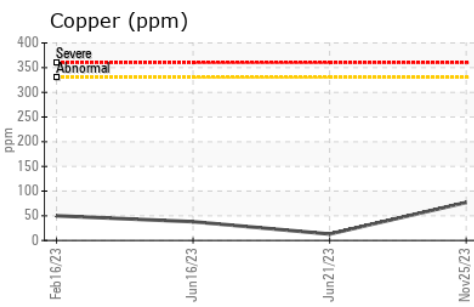
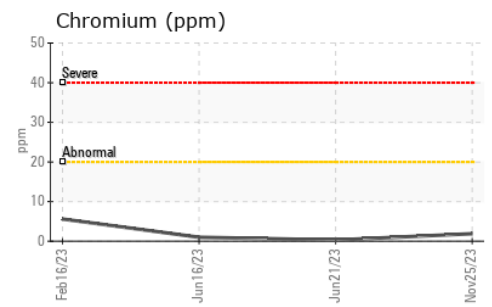
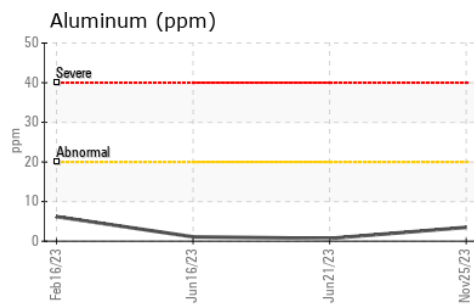
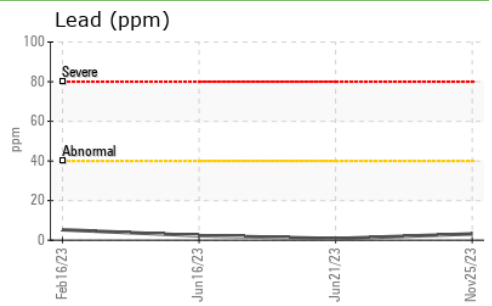
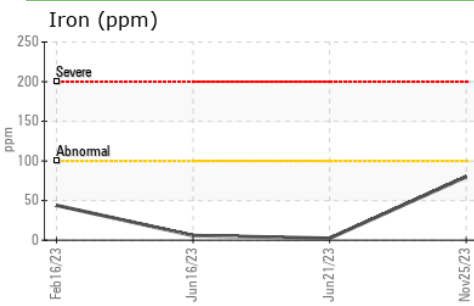
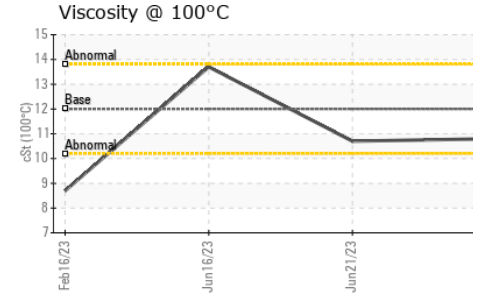


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	18.1	15.0	20.4

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)	12.00	10.8	10.7	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0101711 **Received** : 05 Dec 2023
Lab Number : 02600913 **Diagnosed** : 05 Dec 2023
Unique Number : 5693998 **Diagnostician** : Wes Davis
Test Package : MOB 1

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.

Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F: