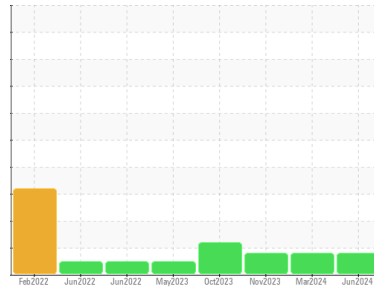




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

811048

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

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

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0118971	GFL0102620	GFL0097615
Sample Date	Client Info		10 Jun 2024	15 Mar 2024	06 Nov 2023
Machine Age	hrs	Client Info	129213	5054	4582
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	30	45	16
Chromium	ppm	ASTM D5185(m) >20	2	3	<1
Nickel	ppm	ASTM D5185(m) >4	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >3	1	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	2	2	2
Lead	ppm	ASTM D5185(m) >40	0	0	<1
Copper	ppm	ASTM D5185(m) >330	<1	1	<1
Tin	ppm	ASTM D5185(m) >15	0	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	1	0	3
Barium	ppm	ASTM D5185(m) 0	0	0	<1
Molybdenum	ppm	ASTM D5185(m) 50	55	58	54
Manganese	ppm	ASTM D5185(m) 0	<1	0	0
Magnesium	ppm	ASTM D5185(m) 950	866	933	877
Calcium	ppm	ASTM D5185(m) 1050	961	1028	952
Phosphorus	ppm	ASTM D5185(m) 995	933	933	923
Zinc	ppm	ASTM D5185(m) 1180	1088	1134	1078
Sulfur	ppm	ASTM D5185(m) 2600	2220	2136	2261
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

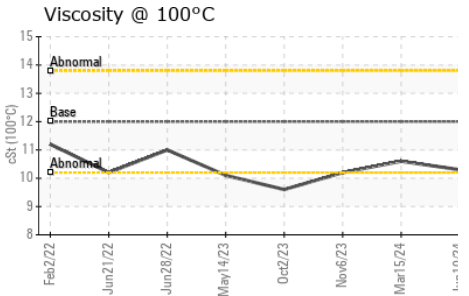
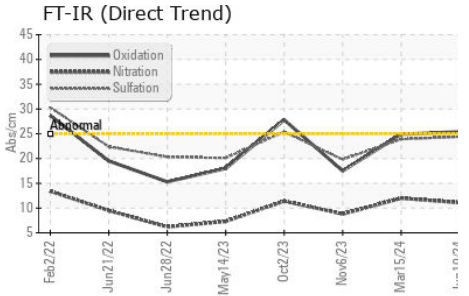
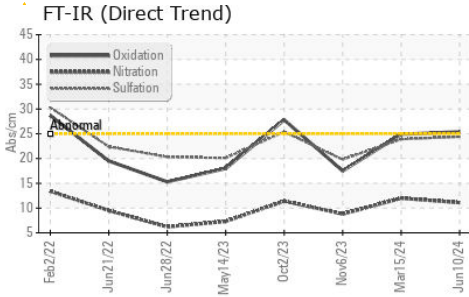
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	10	13	9
Sodium	ppm	ASTM D5185(m)	4	5	4
Potassium	ppm	ASTM D5185(m) >20	<1	<1	0
Fuel	%	ASTM D7593* >5	▲ 5.2	▲ 5.7	▲ 5.7

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.5	0.4	0.2
Nitration	Abs/cm	ASTM D7624* >20	11.1	12.0	8.8
Sulfation	Abs/.1mm	ASTM D7415* >30	24.4	23.9	19.8



OIL ANALYSIS REPORT

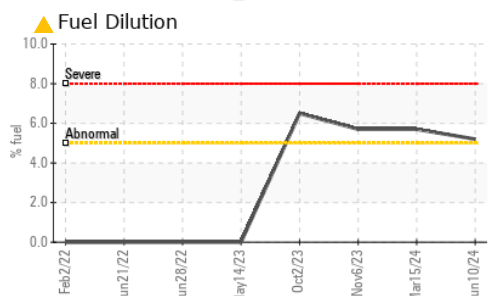
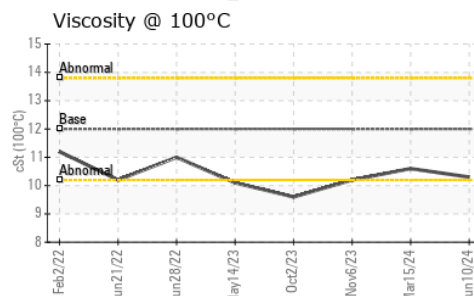
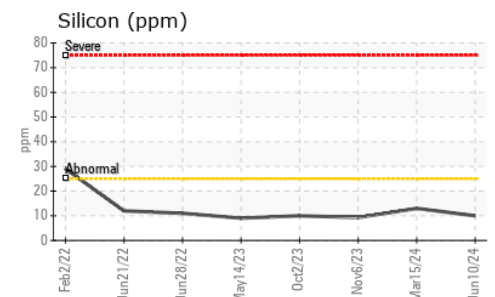
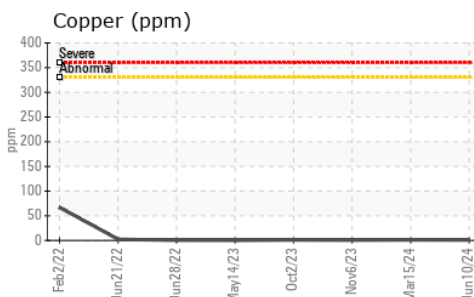
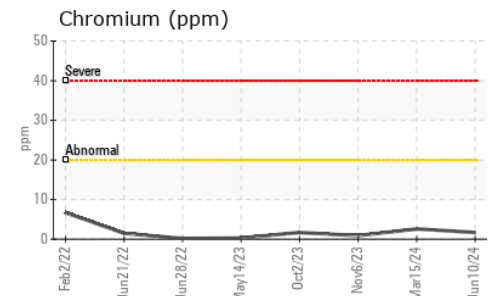
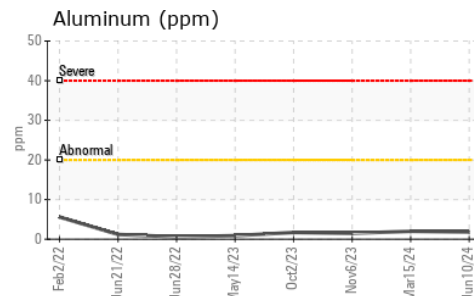
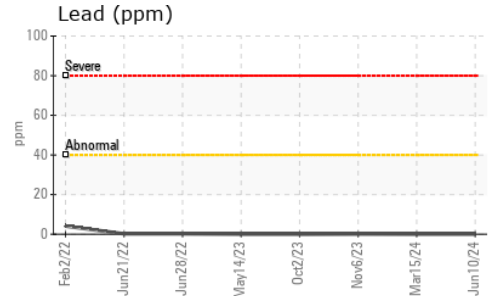
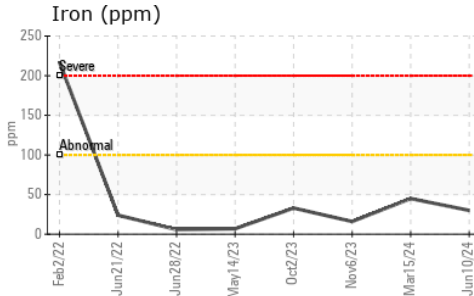


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	25.4	24.9	17.5

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	10.3	10.6	10.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118971
Lab Number : 02642759
Unique Number : 5800298
Test Package : MOB 1 (Additional Tests: PercentFuel)
Received : 19 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 21 Jun 2024 - Kevin Marson

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F:

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.