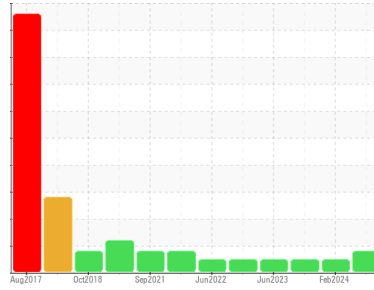




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
8129
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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		GFL0118967	GFL0102662	GFL0097631
Sample Date	Client Info		28 Apr 2024	25 Feb 2024	18 Nov 2023
Machine Age	hrs	Client Info	17140	16964	16452
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			MARGINAL	NORMAL	NORMAL

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)	>80	14	25	12
Chromium	ppm	ASTM D5185(m)	>5	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	2	3	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	0
Copper	ppm	ASTM D5185(m)	>150	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	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	2	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	56	55	55
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	898	873	879
Calcium	ppm	ASTM D5185(m)	1050	978	963	961
Phosphorus	ppm	ASTM D5185(m)	995	913	906	924
Zinc	ppm	ASTM D5185(m)	1180	1096	1071	1085
Sulfur	ppm	ASTM D5185(m)	2600	2303	2331	2358
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

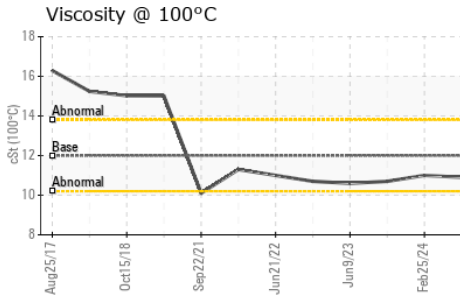
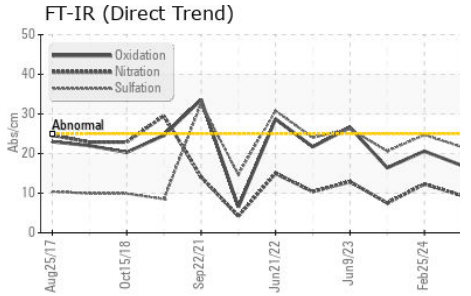
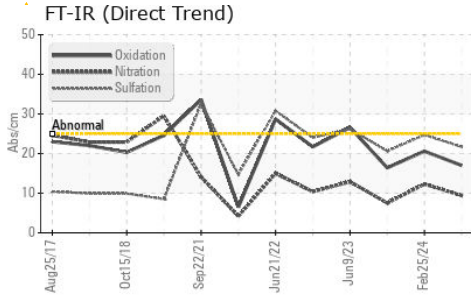
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Silicon	ppm	ASTM D5185(m)	>20	2	5	4
Sodium	ppm	ASTM D5185(m)		17	27	11
Potassium	ppm	ASTM D5185(m)	>20	<1	1	0
Fuel	%	ASTM D7593*	>5	▲ 4.5	<1.0	<1.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	1.2	2.1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	9.4	12.3	7.5
Sulfation	Abs./1mm	ASTM D7415*	>30	21.7	24.7	20.6



OIL ANALYSIS REPORT

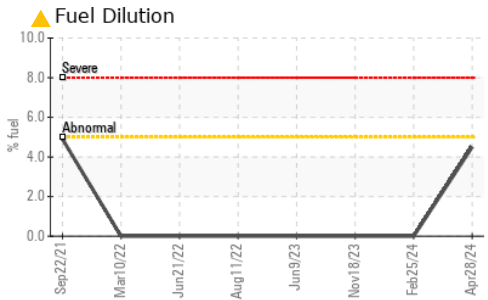
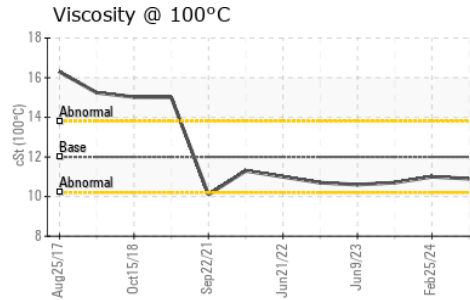
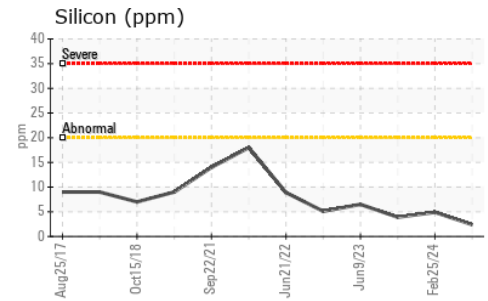
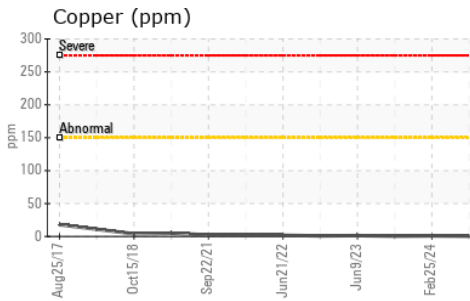
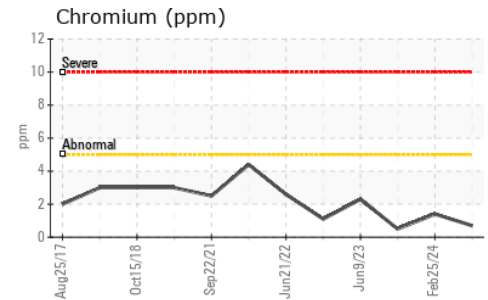
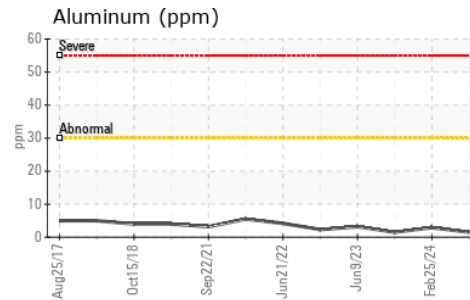
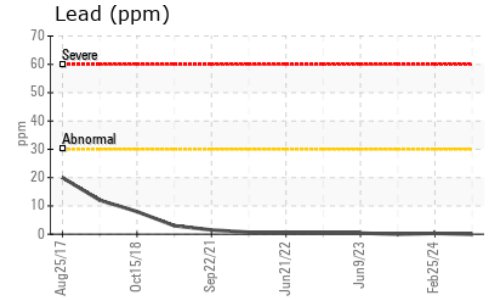
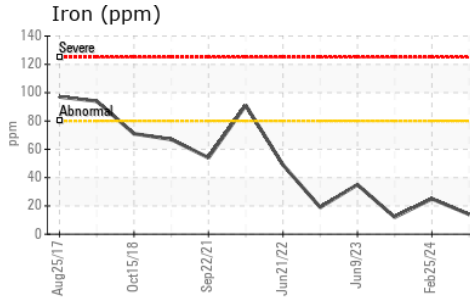


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	17.0	20.6	16.4

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	10.9	11.0	10.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118967
Lab Number : **02633078**
Unique Number : 5774231
Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel)

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.