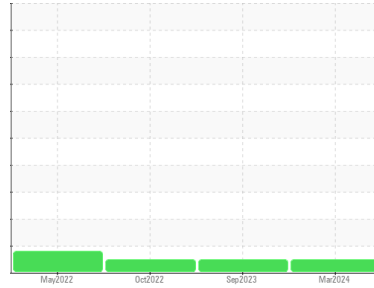




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
257007

Component
Diesel Engine

Fluid
PETRO CANADA DURON UHP 5W30 (--- 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0112477	GFL0091607	GFL0060238
Sample Date	Client Info		11 Mar 2024	12 Sep 2023	21 Oct 2022
Machine Age	kms	Client Info	230826	7709	189505
Oil Age	kms	Client Info	0	600	25686
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
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	29	47	96
Chromium	ppm	ASTM D5185(m)	>20	1	2	2
Nickel	ppm	ASTM D5185(m)	>4	<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)	>20	4	4	7
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	16	28	36
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)	0	22	15	24
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	64	61	67	100
Manganese	ppm	ASTM D5185(m)	0	0	<1	2
Magnesium	ppm	ASTM D5185(m)	1160	1133	1114	1019
Calcium	ppm	ASTM D5185(m)	820	835	813	942
Phosphorus	ppm	ASTM D5185(m)	1160	983	982	981
Zinc	ppm	ASTM D5185(m)	1260	1216	1179	1165
Sulfur	ppm	ASTM D5185(m)	3000	2703	2419	2464
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

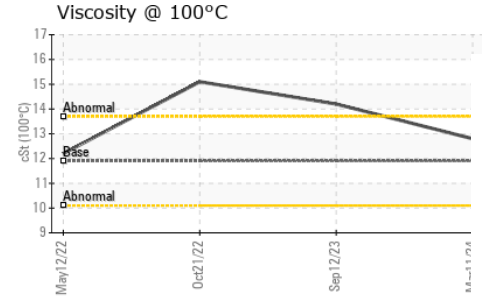
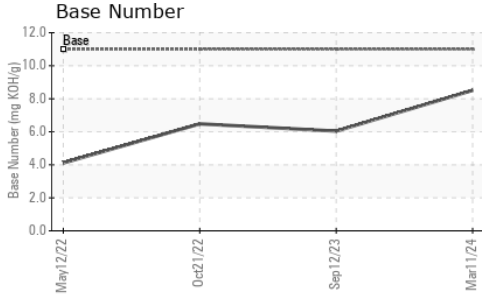
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	6	11	11
Sodium	ppm	ASTM D5185(m)		5	7	8
Potassium	ppm	ASTM D5185(m)	>20	1	1	1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.4	15.9	18.0
Sulfation	Abs./1mm	ASTM D7415*	>30	26.2	30.9	34.8



OIL ANALYSIS REPORT

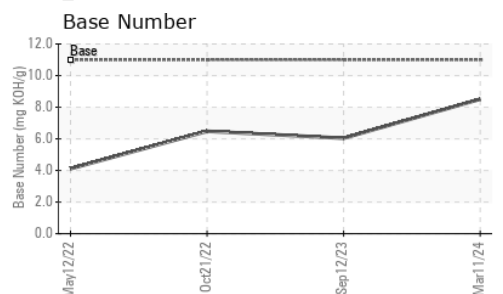
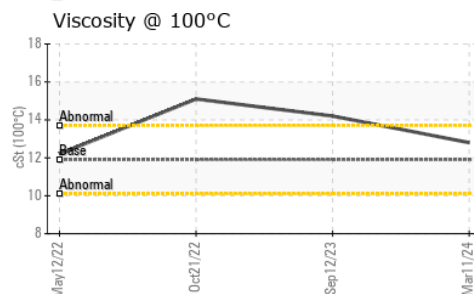
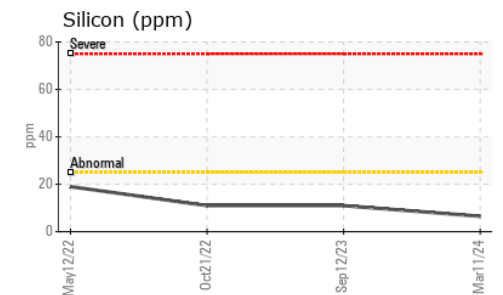
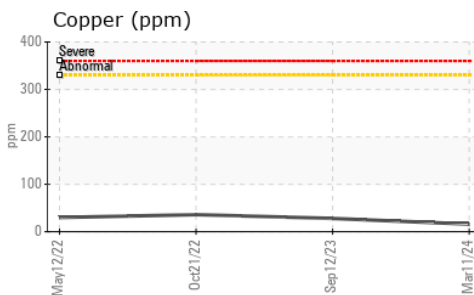
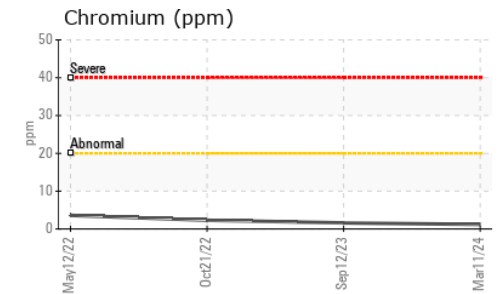
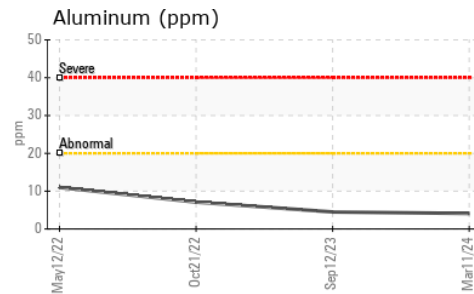
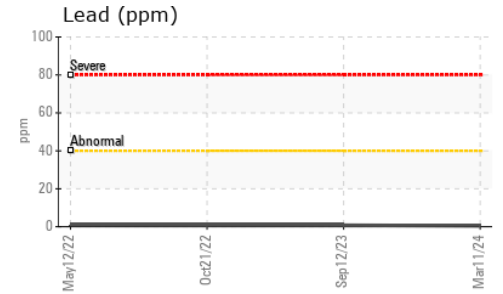
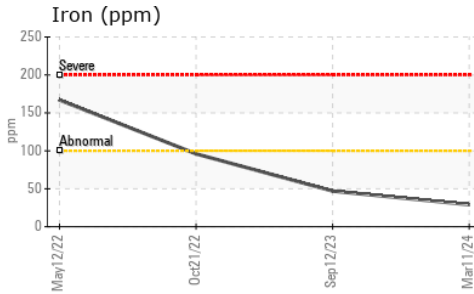


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	26.8	35.6	40.9
Base Number (BN)	mg KOH/g	ASTM D2896*	11.0	8.51	6.04	6.48

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)	11.9	12.8	14.2	15.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112477
Lab Number : 02621413
Unique Number : 5746532
Test Package : MOB 2
Received : 12 Mar 2024
Tested : 13 Mar 2024
Diagnosed : 14 Mar 2024 - Kevin Marson

GFL Environmental - 550 - Rocky View County
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 Rocky View County, AB
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 calgarymaintenance@gflenv.com
 T:
 F: (403)369-6163

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.