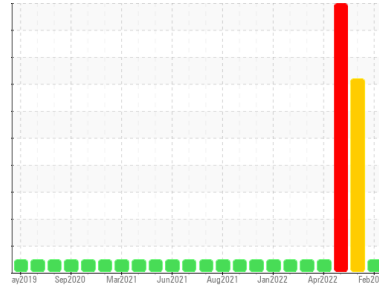




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(YA146824)
Machine Id
AUTOCAR 10908

Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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	GFL0111388	GFL0051497	GFL0059036	
Sample Date	Client Info	28 Feb 2024	05 Dec 2022	17 Oct 2022	
Machine Age	hrs	Client Info	10723	0	9351
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	Changed	
Sample Status		NORMAL	SEVERE	SEVERE	

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>75	2	73	57
Chromium	ppm	ASTM D5185m	>5	0	2	3
Nickel	ppm	ASTM D5185m	>4	0	2	2
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>15	<1	11	8
Lead	ppm	ASTM D5185m	>25	0	<1	3
Copper	ppm	ASTM D5185m	>100	1	34	▲ 90
Tin	ppm	ASTM D5185m	>4	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	11	3	183
Barium	ppm	ASTM D5185m	0	0	0	9
Molybdenum	ppm	ASTM D5185m	60	54	59	204
Manganese	ppm	ASTM D5185m	0	0	2	2
Magnesium	ppm	ASTM D5185m	1010	899	799	722
Calcium	ppm	ASTM D5185m	1070	999	940	954
Phosphorus	ppm	ASTM D5185m	1150	986	756	665
Zinc	ppm	ASTM D5185m	1270	1158	1032	1037
Sulfur	ppm	ASTM D5185m	2060	2836	2605	3010

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	4	11	▲ 127
Sodium	ppm	ASTM D5185m		4	● 113	▲ 5536
Potassium	ppm	ASTM D5185m	>20	0	▲ 111	▲ 869
Fuel	%	ASTM D3524	>3.0	0.5	▲ 9.0	<1.0
Glycol	%	*ASTM D2982		NEG	▲ 0.06	▲ 0.20

INFRA-RED

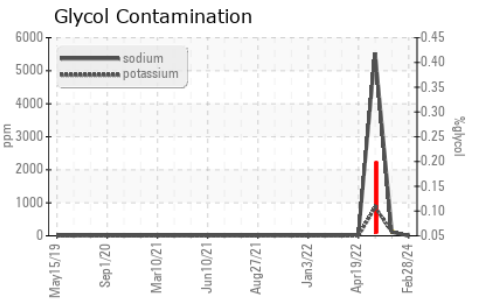
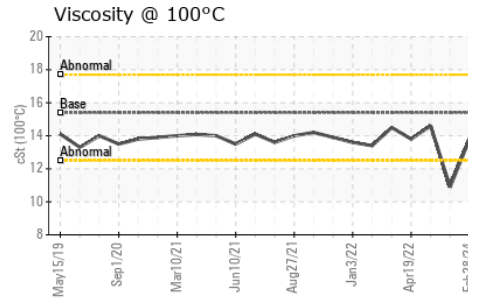
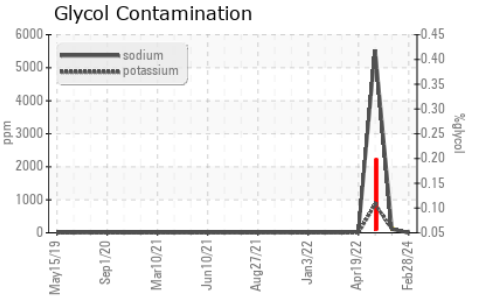
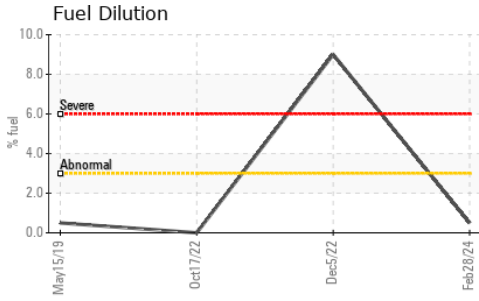
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>6	0.1	1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	4.6	14.3	19.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.4	24.8	31

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	24.9	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.4	6.9	32.5



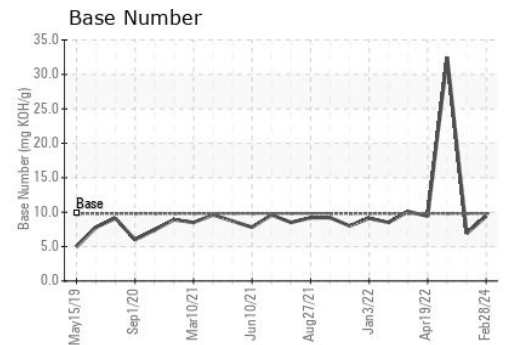
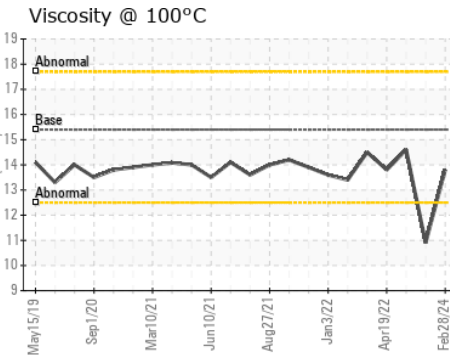
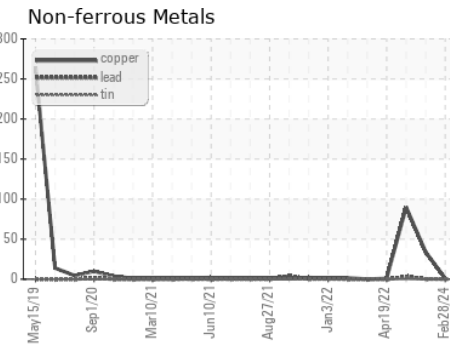
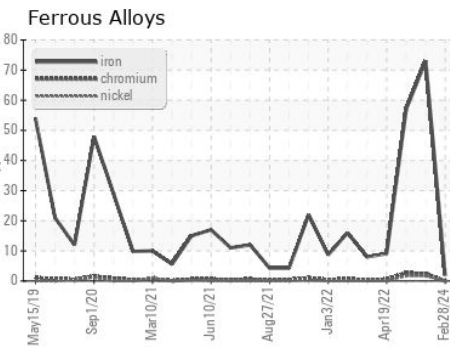
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	▲ 10.9	14.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0111388

Lab Number : 06109908

Unique Number : 10913405

Test Package : FLEET (Additional Tests: PercentFuel)

Received : 06 Mar 2024

Tested : 11 Mar 2024

Diagnosed : 11 Mar 2024 - Jonathan Hester

GFL Environmental - 004 - Newport - Central Coast

427 Roberts Road

Newport, NC

US 28570

Contact: Marquis Williams

marquis.williams@gflenv.com

T:

F: (252)223-6010

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)