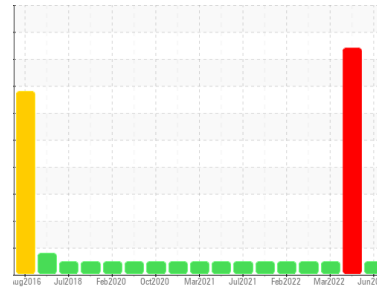




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(YA130687)
 Machine Id
AUTOCAR 10638
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (30 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

No evidence of coolant present in the oil. 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		GFL0119668	GFL0111359	GFL0046015
Sample Date	Client Info		11 Jun 2024	03 Feb 2024	23 Mar 2022
Machine Age	hrs	Client Info	0	0	89701
Oil Age	hrs	Client Info	0	0	68596
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	SEVERE	NORMAL

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	16	18	9
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	2	1
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>100	<1	4	<1
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	11	16	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	73	56
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	942	914	962
Calcium	ppm	ASTM D5185m	1070	1108	992	1151
Phosphorus	ppm	ASTM D5185m	1150	1031	924	1023
Zinc	ppm	ASTM D5185m	1270	1286	1186	1204
Sulfur	ppm	ASTM D5185m	2060	3050	2891	2680

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	5	11	3
Sodium	ppm	ASTM D5185m		35	440	4
Potassium	ppm	ASTM D5185m	>20	38	436	0
Fuel	%	ASTM D3524	>3.0	<1.0	<1.0	<1.0
Glycol	%	*ASTM D2982		NEG	0.10	NEG

INFRA-RED

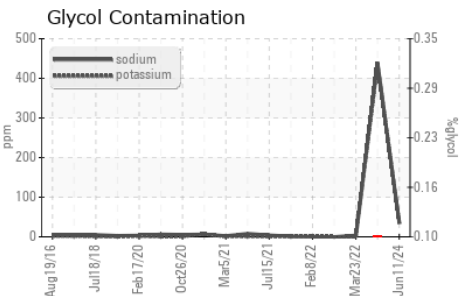
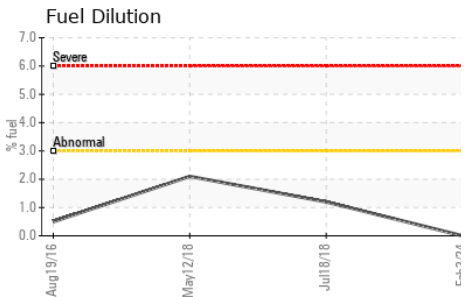
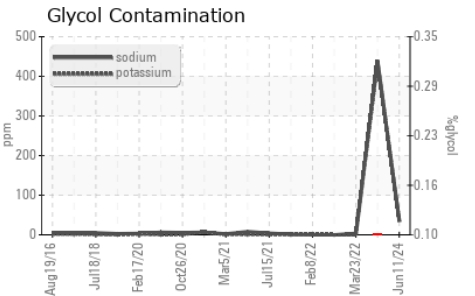
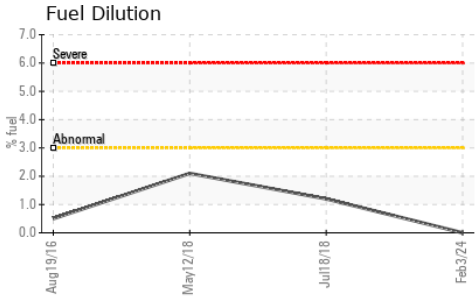
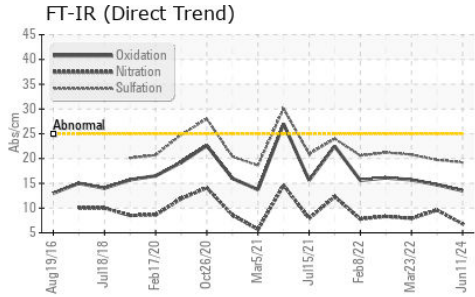
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.6	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.8	9.6	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.7	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.5	14.7	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.7	8.6	9.6



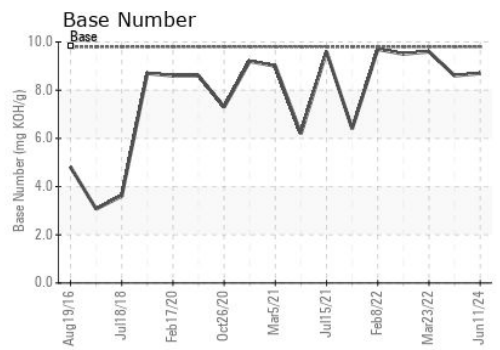
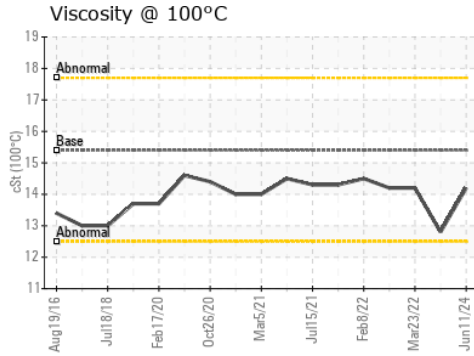
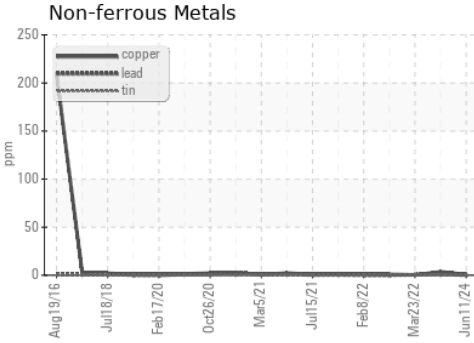
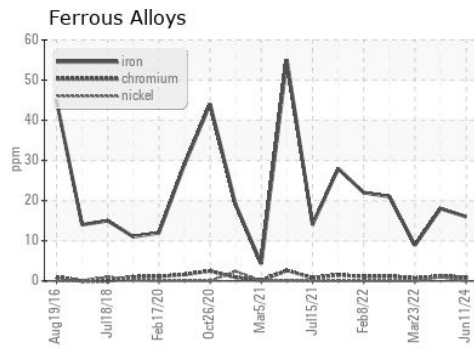
OIL ANALYSIS REPORT



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	14.2	12.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119668
Lab Number : **06216485**
Unique Number : 11089349
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 004 - Newport - Central Coast
 427 Roberts Road
 Newport, NC
 US 28570
 Contact: Marquis Williams
 marquis.williams@gflenv.com

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)