



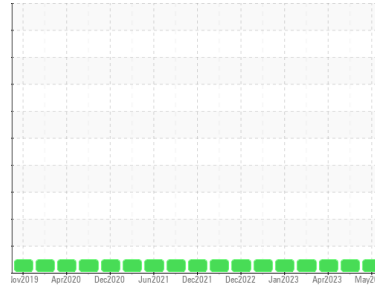
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
3066A
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- 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	history 1	history 2
Sample Number	Client Info		GFL0079963	GFL0074036	GFL0073978
Sample Date	Client Info		31 May 2023	25 Apr 2023	06 Apr 2023
Machine Age	hrs	Client Info	20985	20799	20719
Oil Age	hrs	Client Info	0	19687	0
Oil Changed	Client Info		Not Chngd	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >120	8	23	30
Chromium	ppm	ASTM D5185m >20	<1	<1	1
Nickel	ppm	ASTM D5185m >5	<1	<1	<1
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	5	12
Lead	ppm	ASTM D5185m >40	<1	0	8
Copper	ppm	ASTM D5185m >330	1	4	139
Tin	ppm	ASTM D5185m >15	0	<1	2
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 2	16	20	142
Barium	ppm	ASTM D5185m 0	0	2	0
Molybdenum	ppm	ASTM D5185m 50	48	64	214
Manganese	ppm	ASTM D5185m 0	<1	<1	2
Magnesium	ppm	ASTM D5185m 950	608	769	702
Calcium	ppm	ASTM D5185m 1050	1437	1239	1770
Phosphorus	ppm	ASTM D5185m 995	872	981	914
Zinc	ppm	ASTM D5185m 1180	1133	1264	1145
Sulfur	ppm	ASTM D5185m 2600	3536	3353	3789

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	7	9	10
Sodium	ppm	ASTM D5185m	3	10	3
Potassium	ppm	ASTM D5185m >20	4	1	32

INFRA-RED

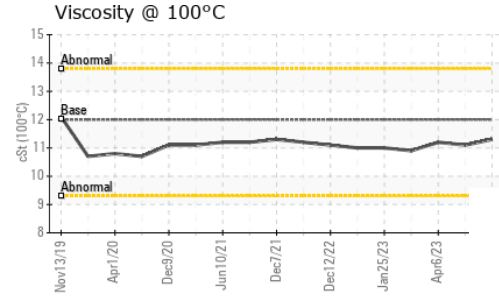
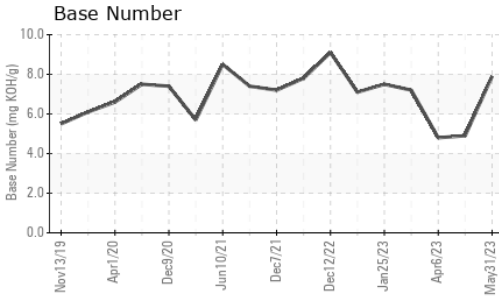
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >4	0.4	0.9	0.8
Nitration	Abs/cm	*ASTM D7624 >20	6.8	8.7	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.0	19.9	19.3

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.6	15.8	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	7.9	4.9	4.8



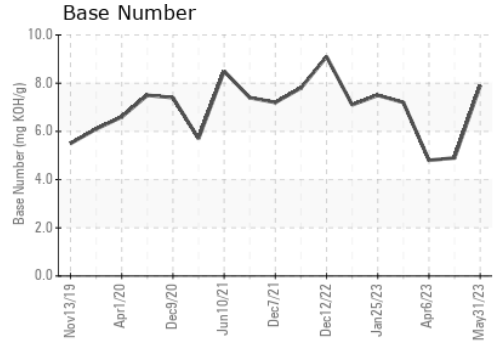
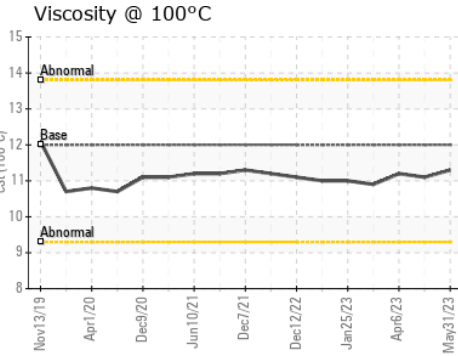
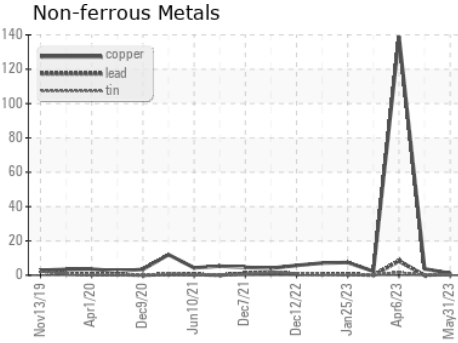
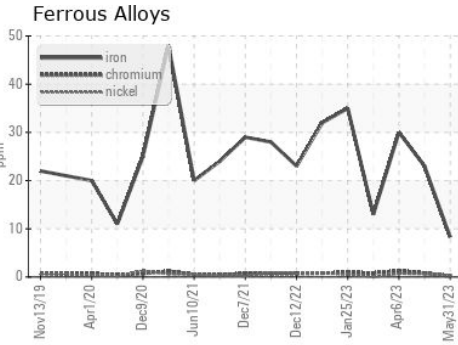
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.1	11.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079963
Lab Number : 05894809
Unique Number : 10550619
Test Package : FLEET

GFL Environmental - 123 - Best Way Disposal
 650 Santa Fe St
 Colorado Springs, CO
 US 80903
 Contact: JASON KING
 JASON.KING@GFLENV.COM
 T: (800)207-6618
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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)