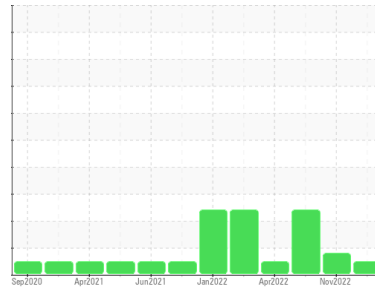




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
10951

Component
Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (8 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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	GFL0080548	GFL0050214	GFL0036609
Sample Date	Client Info	20 Jul 2023	15 Nov 2022	14 Apr 2022
Machine Age	hrs	42782	14057	14057
Oil Age	hrs	42782	150	435
Oil Changed	Client Info	Changed	Changed	Not Changed
Sample Status		NORMAL	ABNORMAL	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	9	69	35
Chromium	ppm	ASTM D5185m >20	<1	3	2
Nickel	ppm	ASTM D5185m >2	0	2	0
Titanium	ppm	ASTM D5185m >2	0	<1	<1
Silver	ppm	ASTM D5185m >2	0	<1	<1
Aluminum	ppm	ASTM D5185m >20	3	8	5
Lead	ppm	ASTM D5185m >40	0	0	0
Copper	ppm	ASTM D5185m >330	<1	4	1
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	7	15	29
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	60	51	45
Manganese	ppm	ASTM D5185m	<1	1	<1
Magnesium	ppm	ASTM D5185m	956	627	529
Calcium	ppm	ASTM D5185m	1252	1224	1309
Phosphorus	ppm	ASTM D5185m	1045	776	699
Zinc	ppm	ASTM D5185m	1326	1007	822
Sulfur	ppm	ASTM D5185m	3649	2897	1841

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	10	11
Sodium	ppm	ASTM D5185m	4	24	22
Potassium	ppm	ASTM D5185m >20	0	6	4
Fuel	%	ASTM D3524 >3.0	0.2	▲ 4.6	■ 18.4

INFRA-RED

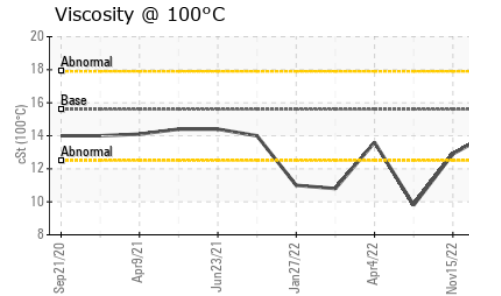
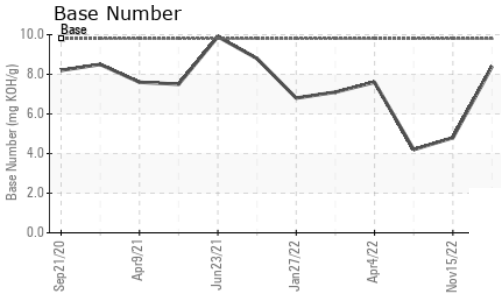
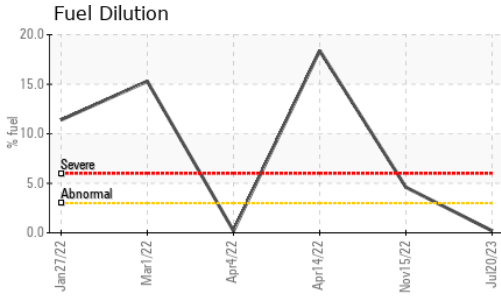
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >6	0.2	1	0.4
Nitration	Abs/cm	*ASTM D7624 >20	7.8	17.2	13.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.0	31.1	27.1

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.3	37.4	32.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.4	4.8	4.2



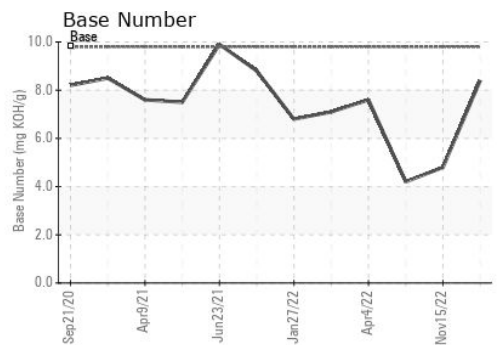
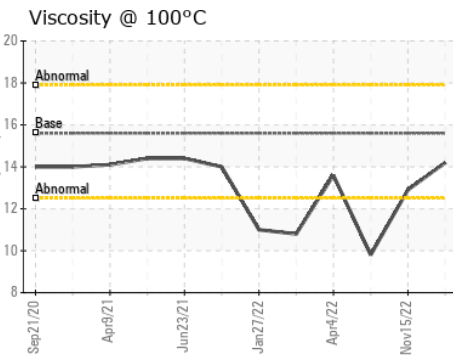
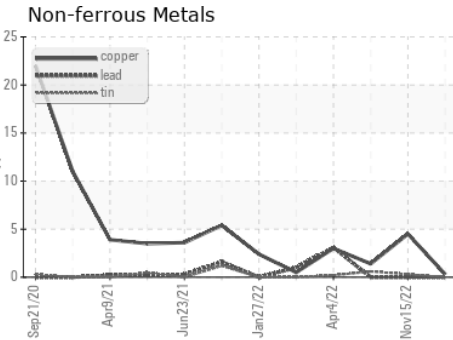
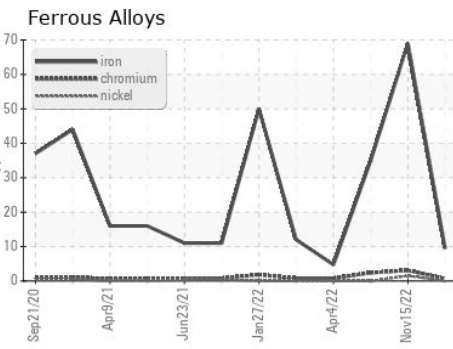
OIL ANALYSIS REPORT



PARAMETER	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	15.6	14.2	12.9 ▲ 9.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0080548 **Received** : 21 Jul 2023
Lab Number : 05904172 **Diagnosed** : 01 Aug 2023
Unique Number : 10565528 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 018 - Fayetteville
 4621 Marracco Drive
 Hope Mills, NC
 US 28348
 Contact: Robert Carter
 robert.carter@gflenv.com
 T: (910)596-1170
 F:

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)