



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA122792) 020

Machine Id
10579

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0126046	GFL0117867	GFL0103809
Sample Date		Client Info		12 Jul 2024	10 Apr 2024	22 Jan 2024
Machine Age	hrs	Client Info		24723	24238	23730
Oil Age	hrs	Client Info		688	508	688
Filter Age	hrs	Client Info		688	508	688
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	14	13	12
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	2	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>15	4	6	4
Lead	ppm	ASTM D5185m	>25	0	1	<1
Copper	ppm	ASTM D5185m	>100	<1	1	<1
Tin	ppm	ASTM D5185m	>4	0	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

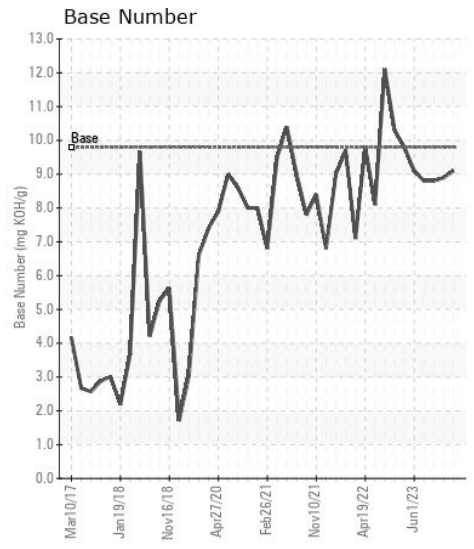
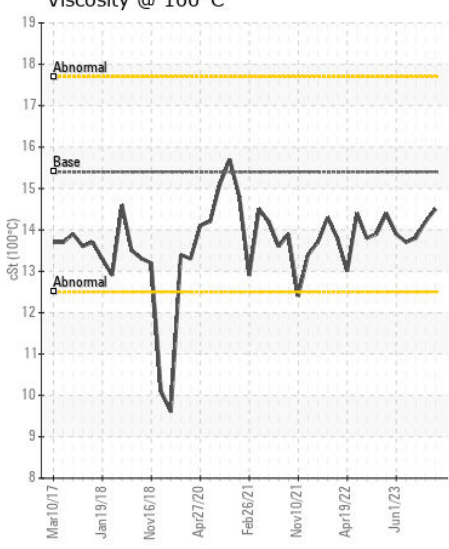
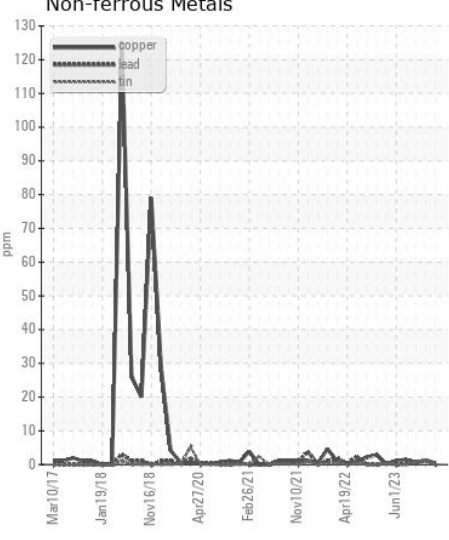
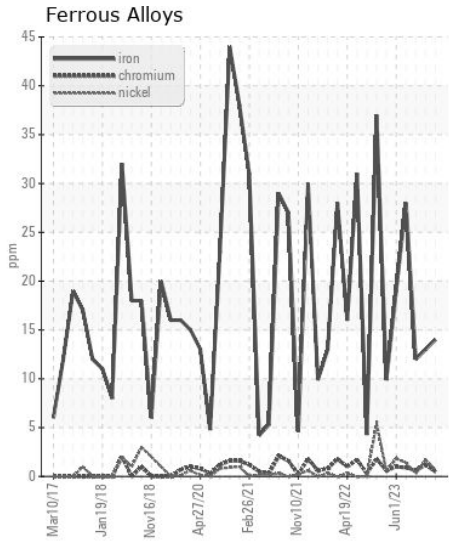
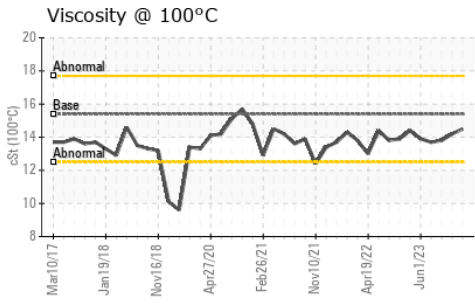
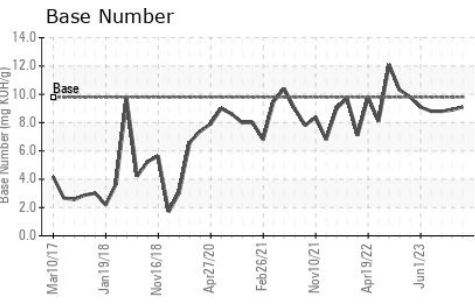
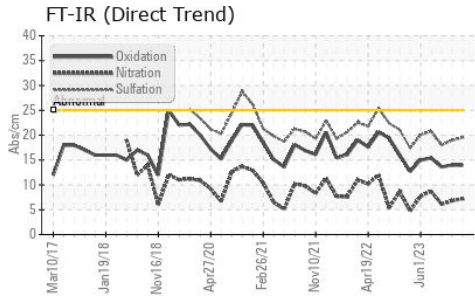
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	4
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.8	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.2	6.8	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.0	18.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		3	2	2
Boron	ppm	ASTM D5185m	0	7	5	6
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	60	59	58
Manganese	ppm	ASTM D5185m	0	0	1	<1
Magnesium	ppm	ASTM D5185m	1010	945	866	892
Calcium	ppm	ASTM D5185m	1070	1100	1105	1084
Phosphorus	ppm	ASTM D5185m	1150	954	1143	1003
Zinc	ppm	ASTM D5185m	1270	1273	1187	1195
Sulfur	ppm	ASTM D5185m	2060	2951	3459	2880
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	14.0	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.1	8.9	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	14.5	14.2	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0126046
Lab Number : 06237600
Unique Number : 11126434
Test Package : FLEET
Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

GFL Environmental - 020 - Alamance
 703 East Gilbreath St
 Graham, NC
 US 27253
 Contact: Jorge Costa
 jorge.costa@gflenv.com
 T:
 F: (336)229-0526

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)