



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
834094

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108088	GFL0102477	GFL0102537
Sample Date		Client Info		06 Jan 2024	20 Dec 2023	25 Nov 2023
Machine Age	hrs	Client Info		593	285	139
Oil Age	hrs	Client Info		285	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	56	48	42
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	2	1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	26	13	9
Lead	ppm	ASTM D5185m	>40	<1	1	0
Copper	ppm	ASTM D5185m	>330	16	16	16
Tin	ppm	ASTM D5185m	>15	1	1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

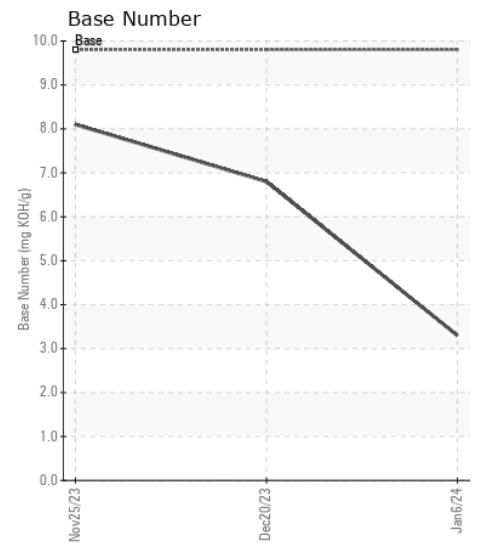
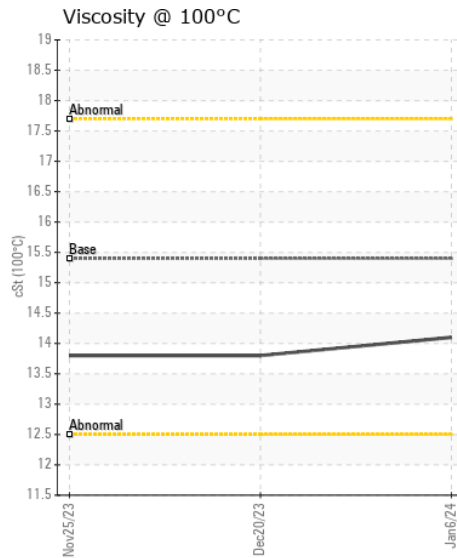
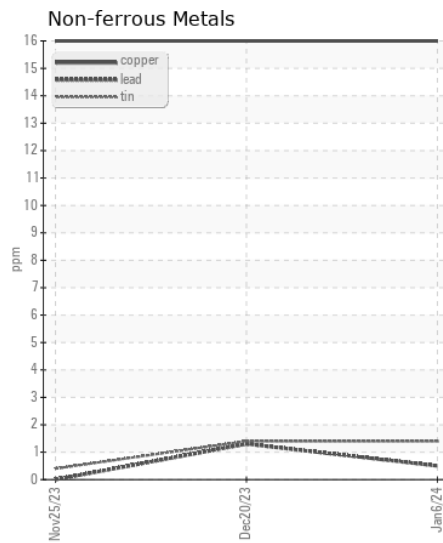
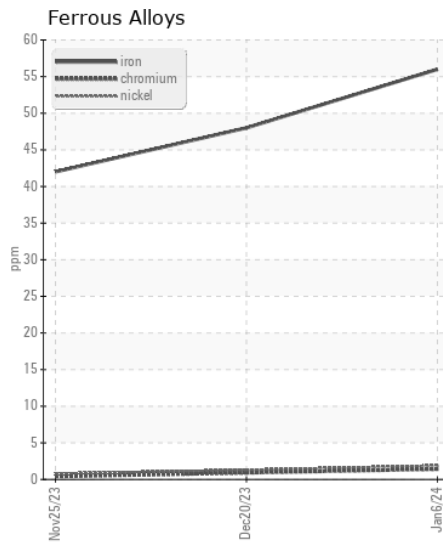
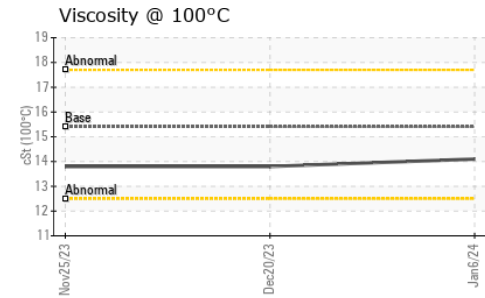
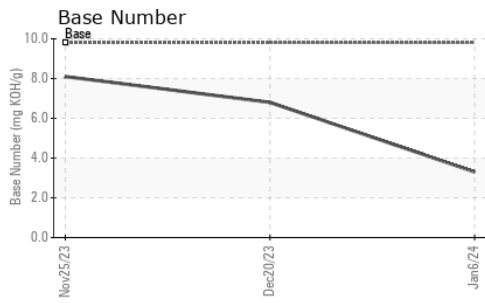
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	32	35	34
Potassium	ppm	ASTM D5185m	>20	99	▲ 60	▲ 58
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	12.0	10.5	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	20.4	20.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		5	6	8
Boron	ppm	ASTM D5185m	0	17	32	47
Barium	ppm	ASTM D5185m	0	1	2	9
Molybdenum	ppm	ASTM D5185m	60	60	57	56
Manganese	ppm	ASTM D5185m	0	13	13	12
Magnesium	ppm	ASTM D5185m	1010	782	821	694
Calcium	ppm	ASTM D5185m	1070	1141	1169	1144
Phosphorus	ppm	ASTM D5185m	1150	702	820	717
Zinc	ppm	ASTM D5185m	1270	919	977	847
Sulfur	ppm	ASTM D5185m	2060	2329	2596	2510
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	18.0	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	3.3	6.8	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	13.8	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108088
Lab Number : 06088015
Unique Number : 10875460
Test Package : FLEET

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: JOHNNY PEREZ
 johnny.perez@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)

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F: