



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
701043
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0097445	GFL0085677	GFL0077317
Sample Date		Client Info		09 Jan 2024	10 Oct 2023	11 Jul 2023
Machine Age	hrs	Client Info		602	602	602
Oil Age	hrs	Client Info		602	602	602
Filter Age	hrs	Client Info		602	602	602
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	18	20	14
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	<1	1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

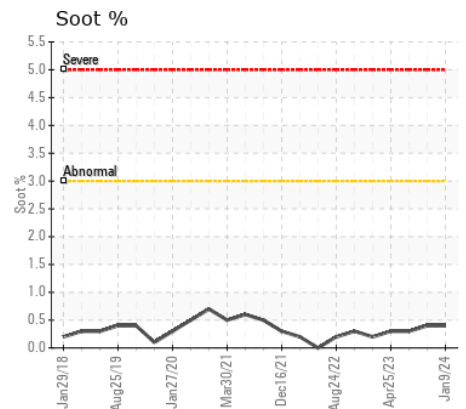
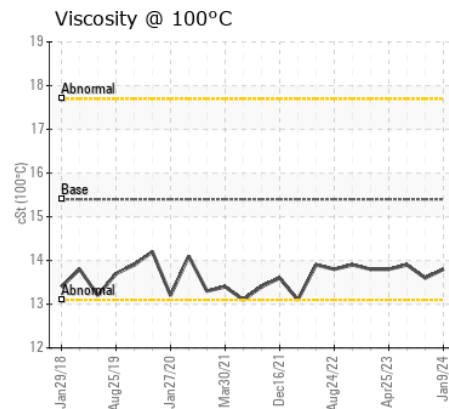
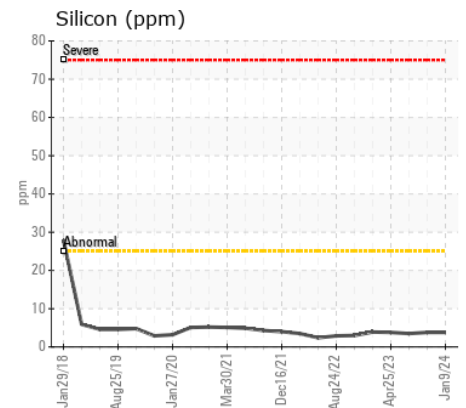
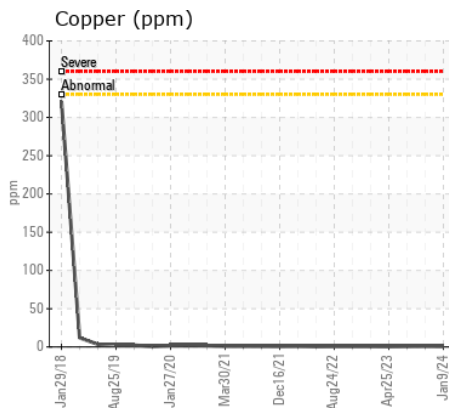
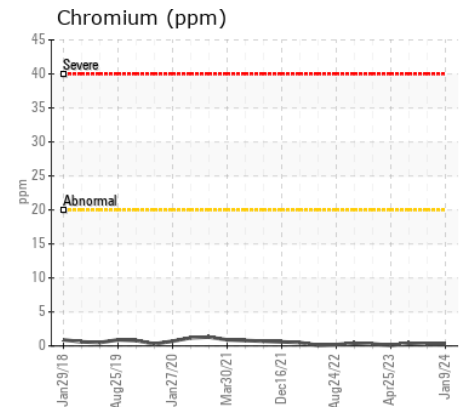
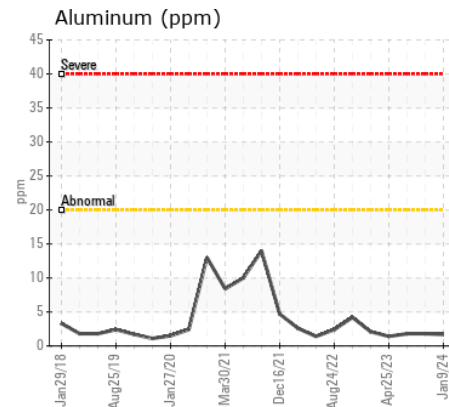
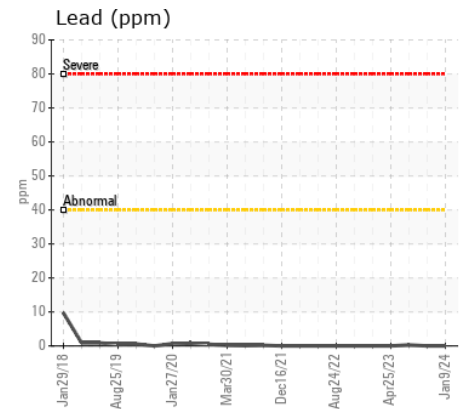
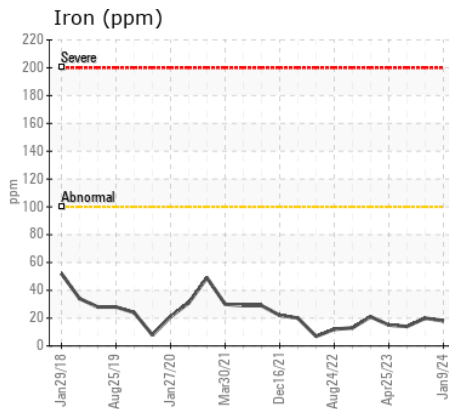
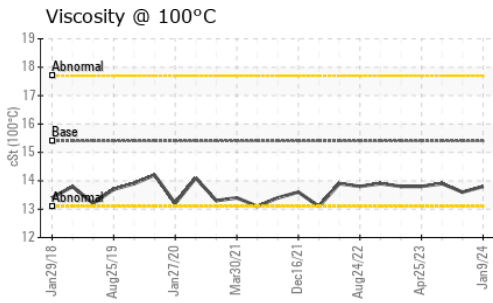
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	5	2	2
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	0.4	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	10.7	10.1	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.2	22.1	21.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	58	61	57
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	927	962	952
Calcium	ppm	ASTM D5185(m)	1070	1037	1044	1013
Phosphorus	ppm	ASTM D5185(m)	1150	965	965	1012
Zinc	ppm	ASTM D5185(m)	1270	1150	1199	1181
Sulfur	ppm	ASTM D5185(m)	2060	2423	2300	2341
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.6	18.8	18.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	13.6	13.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**
Sample No. : GFL0097445 **Received** : 11 Jan 2024 905 Tecumseh Road W
Lab Number : 02608109 **Diagnosed** : 11 Jan 2024 Windsor, ON
Unique Number : 5709195 **Diagnostician** : Wes Davis CA N8W 4J5
Test Package : MOB 1 **Contact:** Rhys Marotte
 rmarotte@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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