



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
7112
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (22 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107122	WC0875100	GFL0086477
Sample Date		Client Info		19 Jan 2024	27 Nov 2023	09 Jun 2023
Machine Age	hrs	Client Info		12479	12336	0
Oil Age	hrs	Client Info		0	220	0
Filter Age	hrs	Client Info		0	220	0
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 D5185(m)	>75	40	45	39
Chromium	ppm	ASTM D5185(m)	>5	1	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	10	7	7
Lead	ppm	ASTM D5185(m)	>25	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

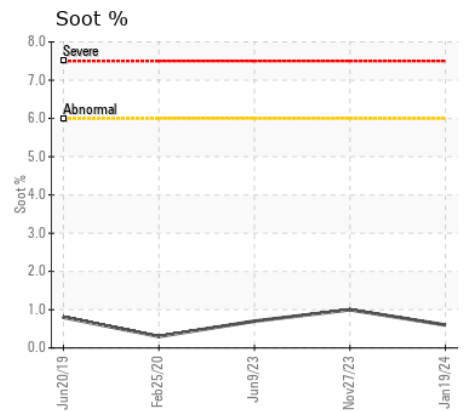
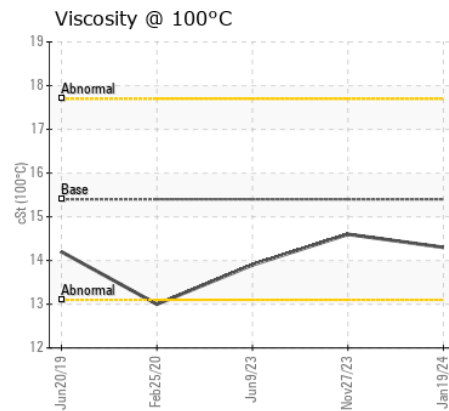
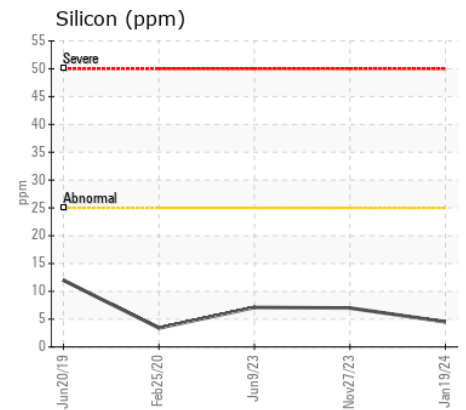
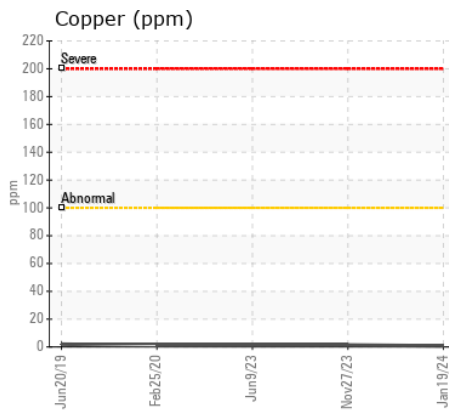
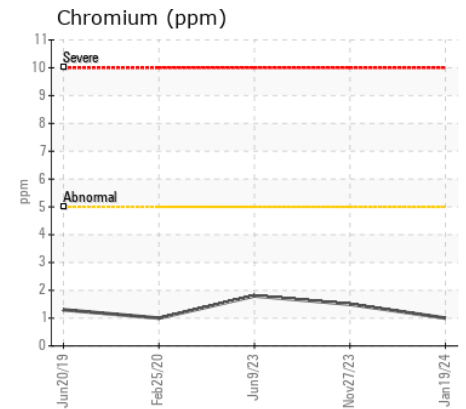
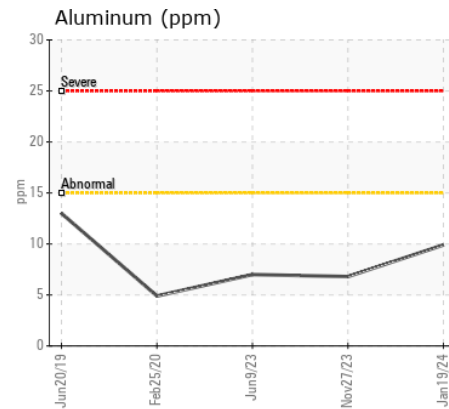
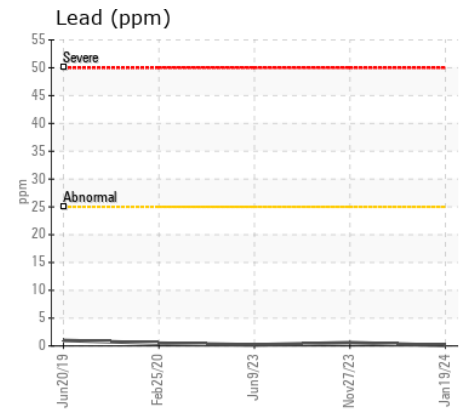
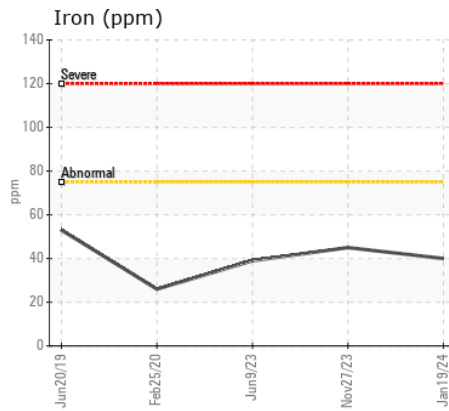
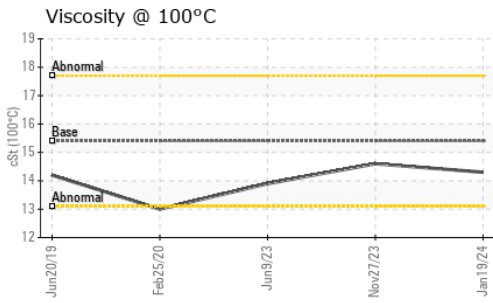
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	7
Potassium	ppm	ASTM D5185(m)	>20	13	9	10
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	0.6	1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	9.6	11.0	11.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	23.2	23.1
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)		5	5	8
Boron	ppm	ASTM D5185(m)	0	16	4	10
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	60	60	60
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	925	962	925
Calcium	ppm	ASTM D5185(m)	1070	1059	1089	1248
Phosphorus	ppm	ASTM D5185(m)	1150	1013	1003	1081
Zinc	ppm	ASTM D5185(m)	1270	1177	1234	1258
Sulfur	ppm	ASTM D5185(m)	2060	2648	2387	2556
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	19.7	20.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.3	14.6	13.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107122 **Received** : 23 Jan 2024
Lab Number : 02610500 **Diagnosed** : 23 Jan 2024
Unique Number : 5711586 **Diagnostician** : Wes Davis
Test Package : MOB 1

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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.