



Machine Id
801045
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (19 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117873	GFL0111761	WC0875070
Sample Date		Client Info		06 May 2024	07 Feb 2024	23 Nov 2023
Machine Age	hrs	Client Info		11391	11391	10853
Oil Age	hrs	Client Info		600	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	20	16	20
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	5	3	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>150	1	<1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

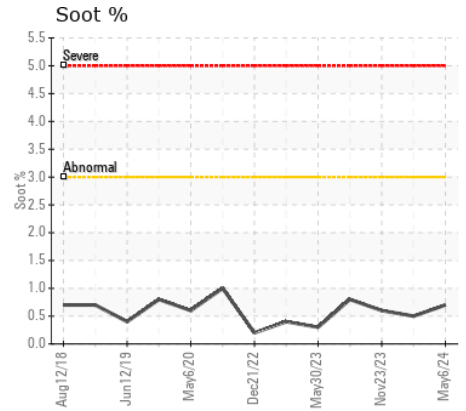
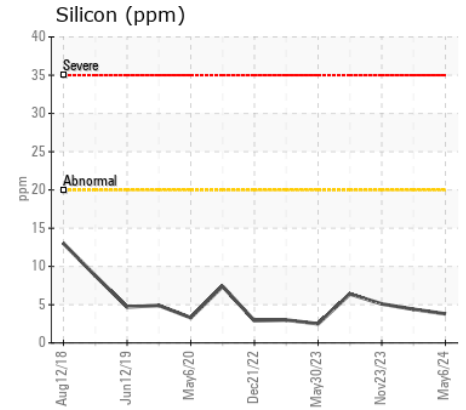
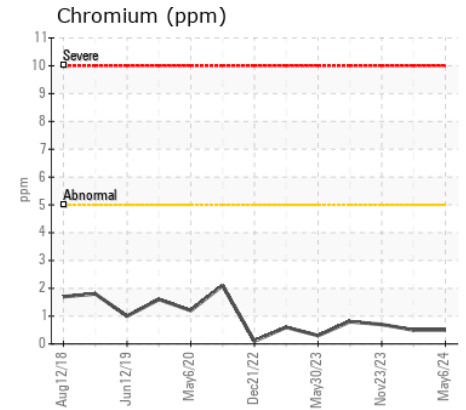
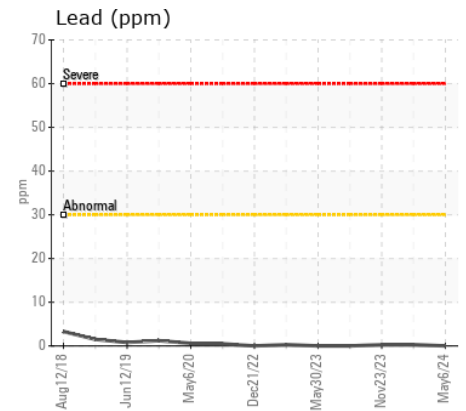
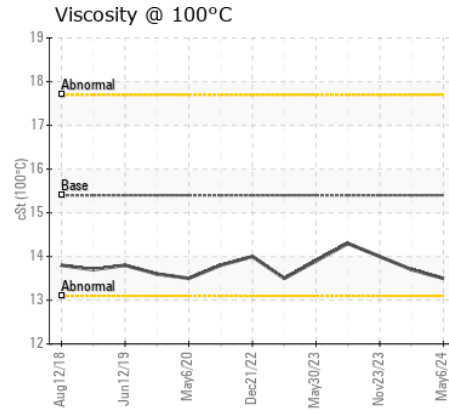
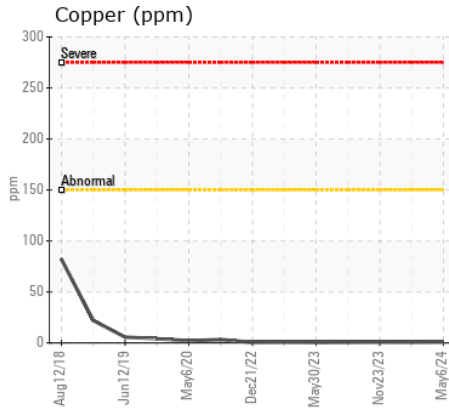
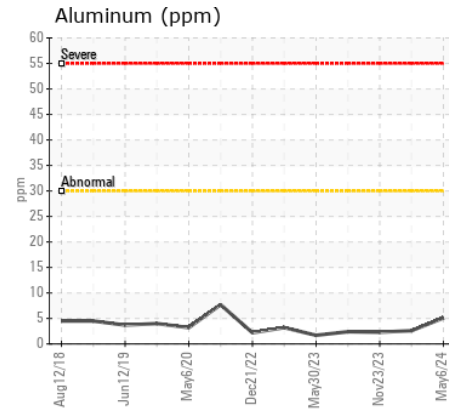
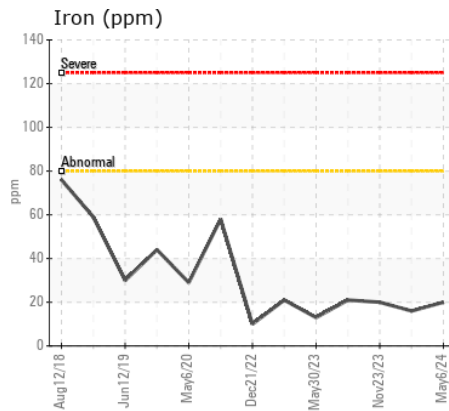
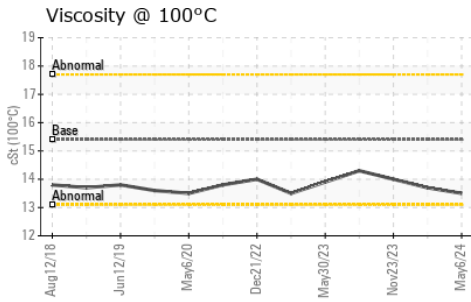
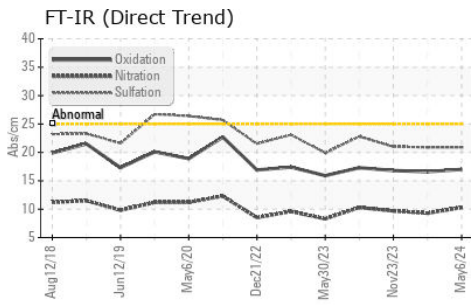
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	4	4	5
Potassium	ppm	ASTM D5185(m)	>20	10	3	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	0.7	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	10.3	9.3	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	20.9	21.0
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)		9	8	8
Boron	ppm	ASTM D5185(m)	0	8	40	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	63	60
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	933	878	977
Calcium	ppm	ASTM D5185(m)	1070	1048	1108	1088
Phosphorus	ppm	ASTM D5185(m)	1150	974	1028	1000
Zinc	ppm	ASTM D5185(m)	1270	1174	1203	1236
Sulfur	ppm	ASTM D5185(m)	2060	2432	2643	2433
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	16.6	16.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	13.7	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117873
Lab Number : 02633987
Unique Number : 5775140
Test Package : MOB 1

Received : 08 May 2024
Tested : 08 May 2024
Diagnosed : 08 May 2024 - Wes Davis

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@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.

T:
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