



Machine Id
731128
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112539	GFL0112543	GFL0097595
Sample Date		Client Info		03 Apr 2024	03 Apr 2024	02 Nov 2023
Machine Age	hrs	Client Info		6345	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	6	19	21
Chromium	ppm	ASTM D5185(m)	>20	0	1	2
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	1	3	9
Lead	ppm	ASTM D5185(m)	>40	<1	10	15
Copper	ppm	ASTM D5185(m)	>330	<1	2	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

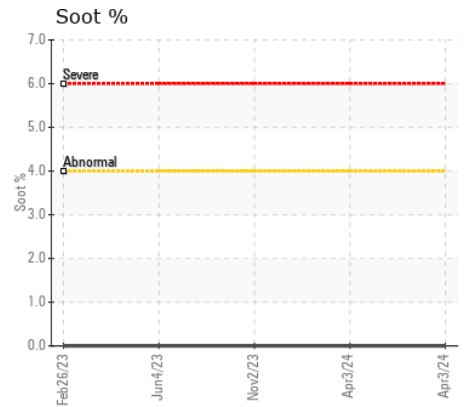
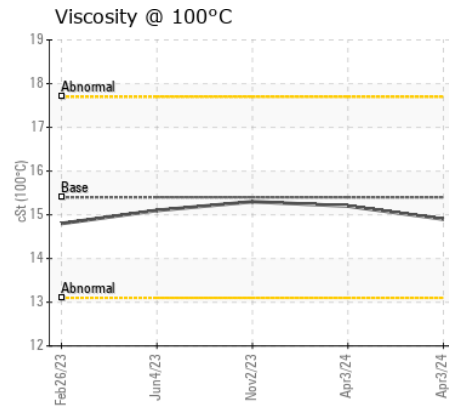
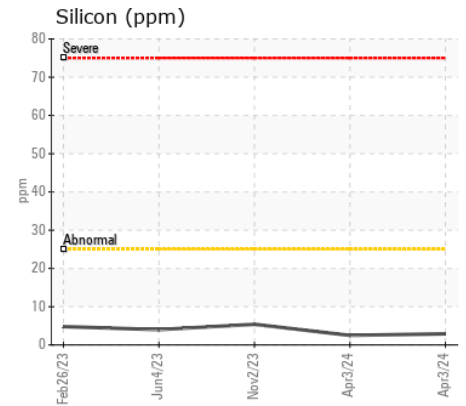
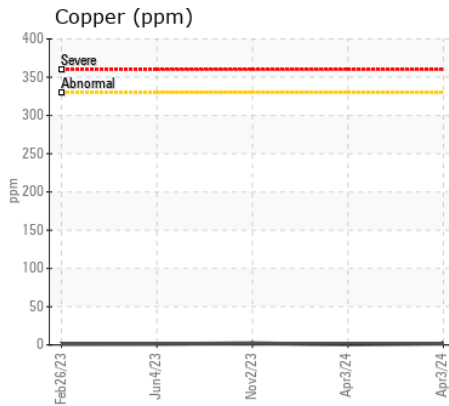
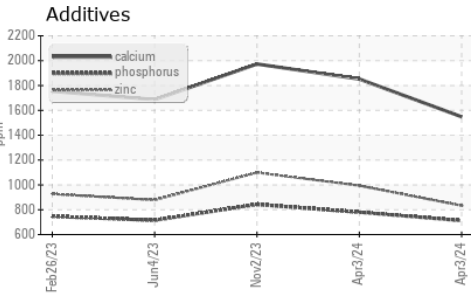
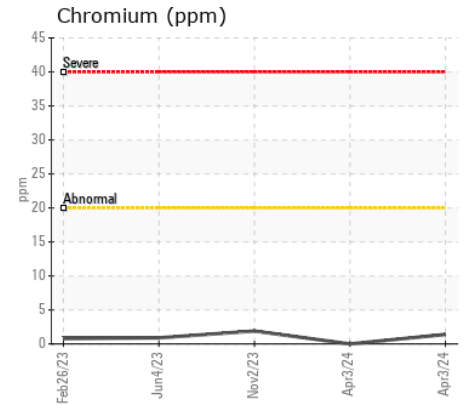
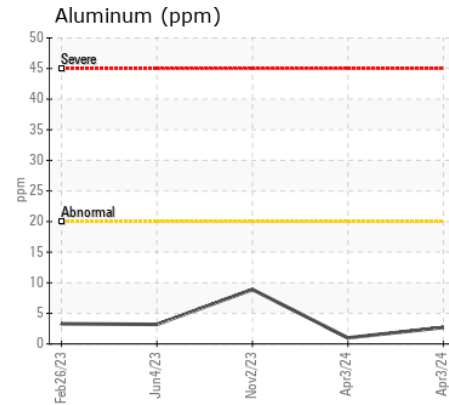
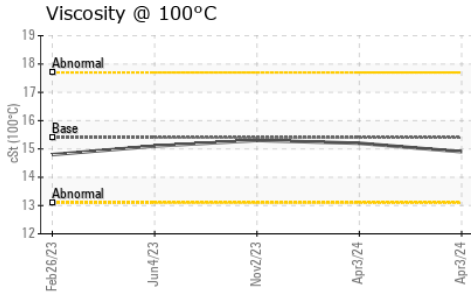
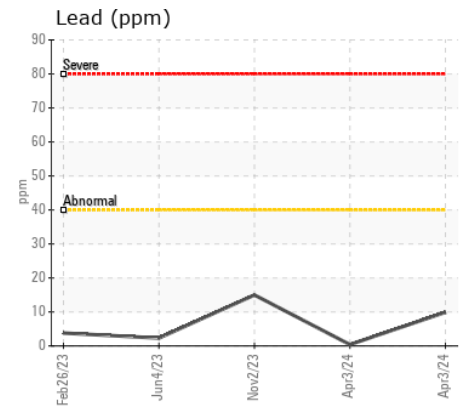
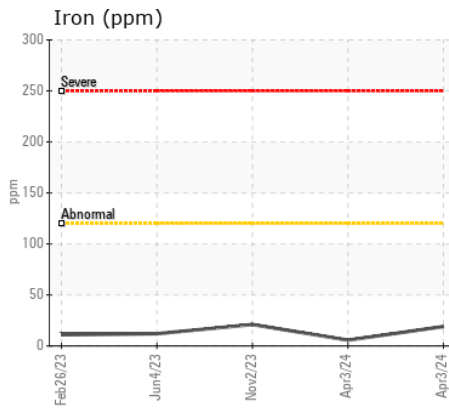
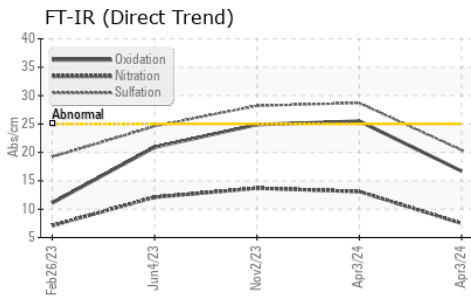
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	5
Potassium	ppm	ASTM D5185(m)	>20	<1	4	17
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>4	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.5	13.1	13.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	28.7	28.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		5	12	14
Boron	ppm	ASTM D5185(m)	0	32	9	10
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	48	60	65
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	554	639	692
Calcium	ppm	ASTM D5185(m)	1070	1548	1852	1973
Phosphorus	ppm	ASTM D5185(m)	1150	712	780	843
Zinc	ppm	ASTM D5185(m)	1270	833	994	1099
Sulfur	ppm	ASTM D5185(m)	2060	1976	2013	2187
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	25.5	24.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.9	15.2	15.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112539
Lab Number : 02627573
Unique Number : 5760705
Test Package : MOB 1

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Jennifer Walker
 jenniferwalker@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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