



Machine Id
928002
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		GFL0113254	GFL0102882	GFL0090854
Sample Date		Client Info		27 Feb 2024	23 Nov 2023	15 Sep 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		10079	16281	8983
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	8	4	9
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<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

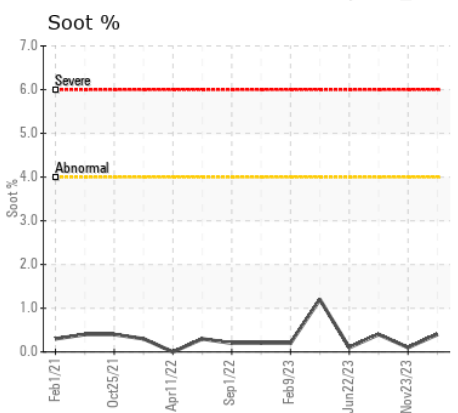
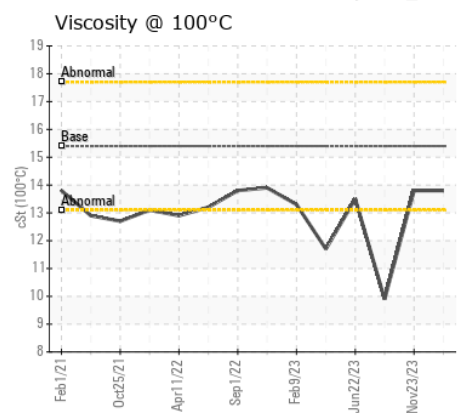
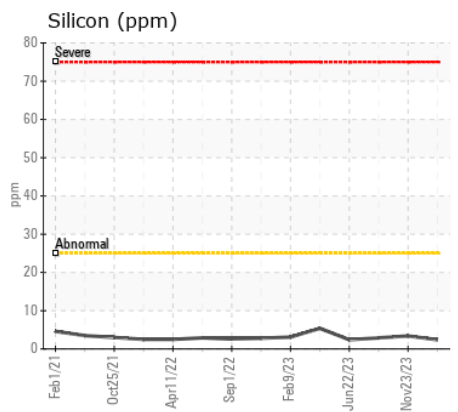
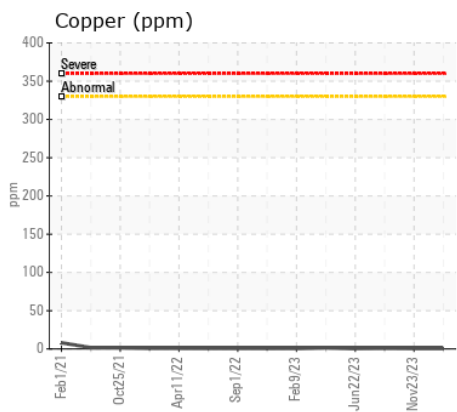
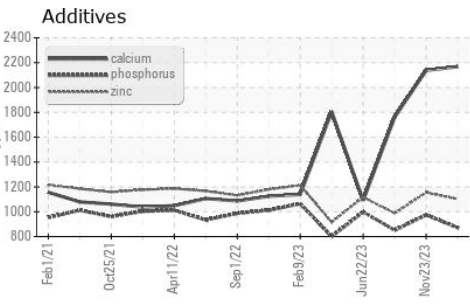
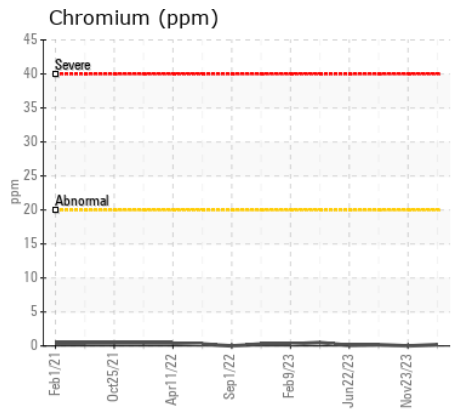
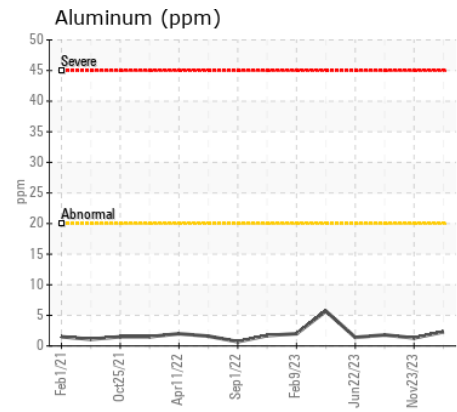
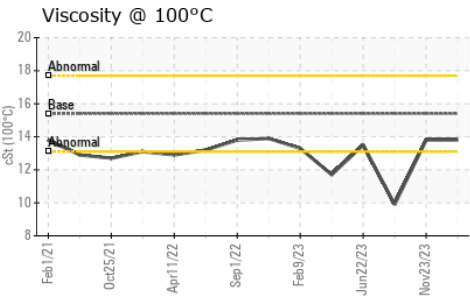
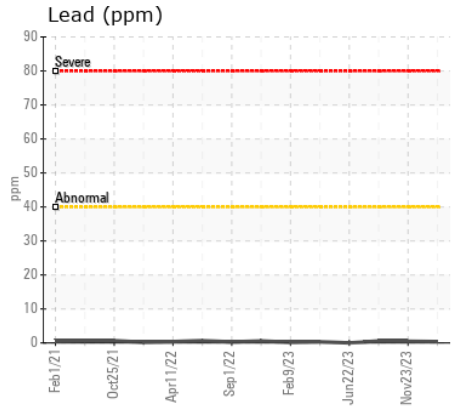
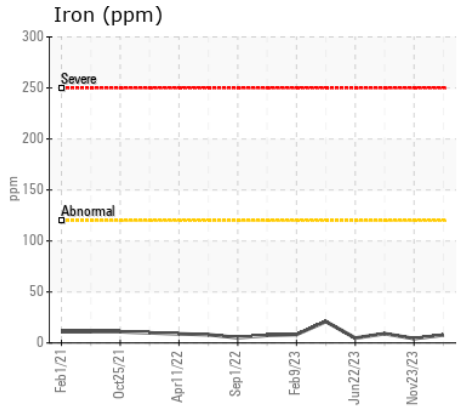
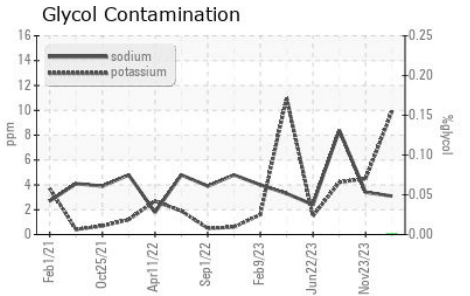
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	3
Potassium	ppm	ASTM D5185(m)	>20	10	4	4
Fuel		WC Method	>3.0	<1.0	1.7	▲ 13.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.4	0.1	0.4
Nitration	Abs/cm	ASTM D7624*	>20	9.1	9.1	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	23.4	22.2
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)		3	3	8
Boron	ppm	ASTM D5185(m)	0	65	97	34
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	4	12	8
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	57	67	106
Calcium	ppm	ASTM D5185(m)	1070	2168	2137	1761
Phosphorus	ppm	ASTM D5185(m)	1150	872	975	851
Zinc	ppm	ASTM D5185(m)	1270	1102	1154	987
Sulfur	ppm	ASTM D5185(m)	2060	2690	2843	2179
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.0	19.6	16.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	13.8	▲ 9.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113254 **Received** : 28 Feb 2024
Lab Number : 02618583 **Tested** : 28 Feb 2024
Unique Number : 5735693 **Diagnosed** : 28 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 246 - Windsor
 2700 Deziel Dr
 Windsor, ON
 CA N8W 5H8
 Contact: Dave Varga
 dvarga@gflenv.com
 T: (519)944-8009
 F:

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.