



Machine Id
413094
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107318	GFL0107284	GFL0079205
Sample Date		Client Info		06 May 2024	13 Feb 2024	22 Sep 2023
Machine Age	hrs	Client Info		1672	600	616
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	16	24	39
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	3	2	8
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	1
Aluminum	ppm	ASTM D5185(m)	>20	2	4	15
Lead	ppm	ASTM D5185(m)	>40	2	7	9
Copper	ppm	ASTM D5185(m)	>330	122	299	341
Tin	ppm	ASTM D5185(m)	>15	1	4	4
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

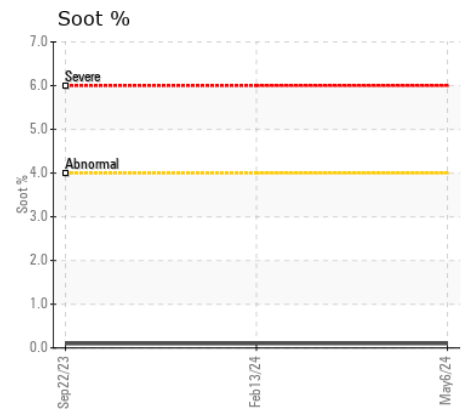
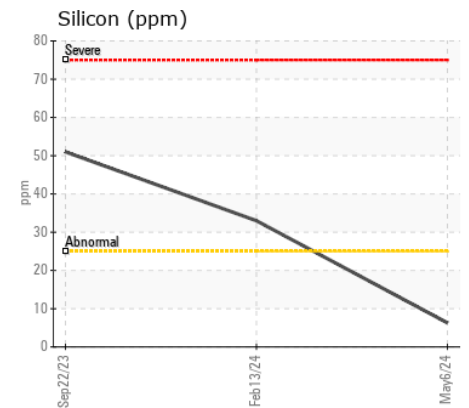
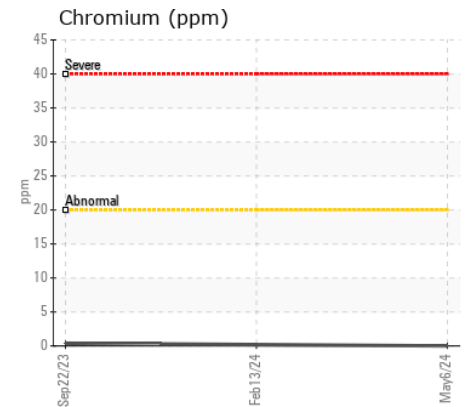
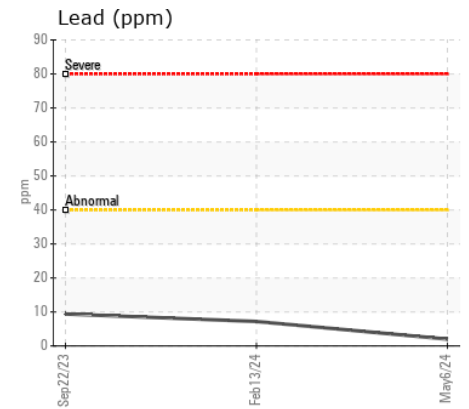
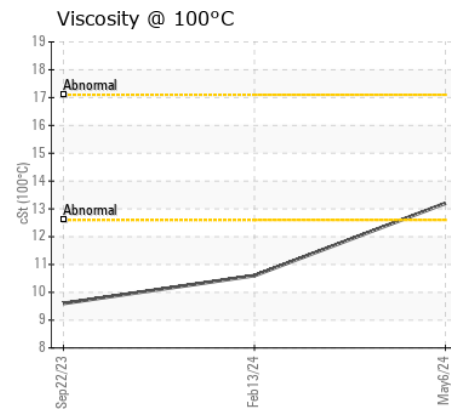
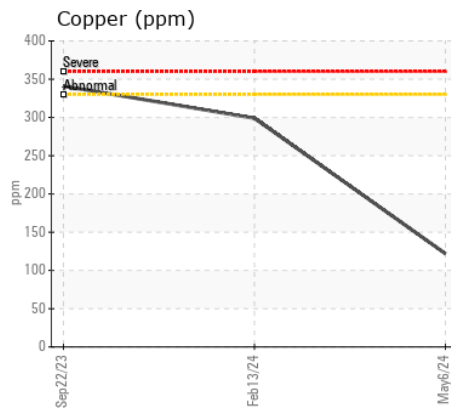
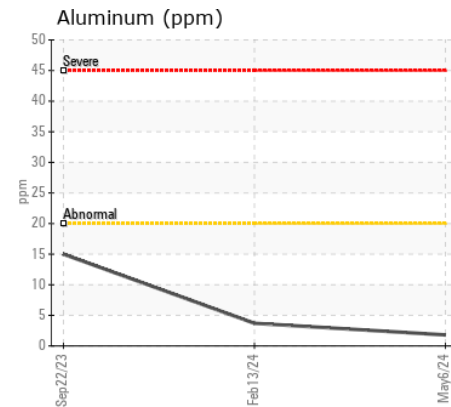
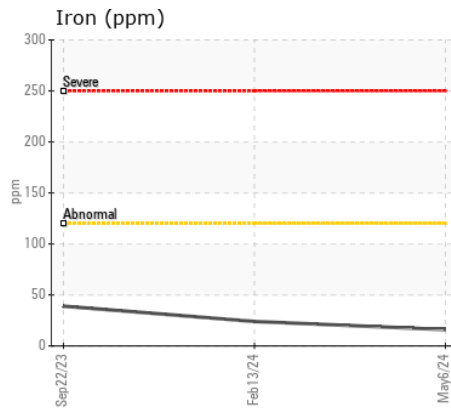
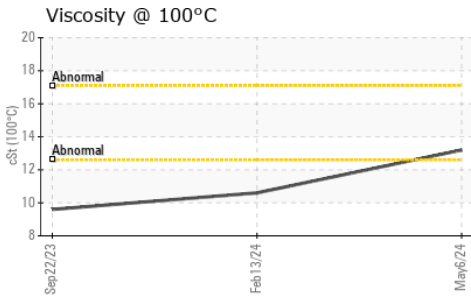
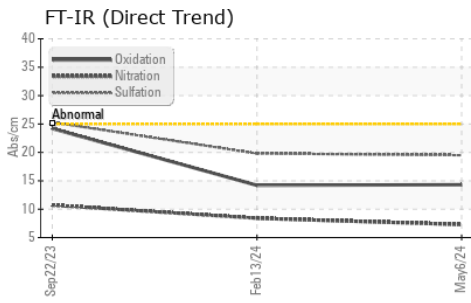
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	33	51
Potassium	ppm	ASTM D5185(m)	>20	3	6	40
Fuel		WC Method	>3.0	<1.0	0.9	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.3	8.4	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	19.8	25.3
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	3	4
Boron	ppm	ASTM D5185(m)		12	86	216
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		58	39	123
Manganese	ppm	ASTM D5185(m)		<1	3	5
Magnesium	ppm	ASTM D5185(m)		900	272	661
Calcium	ppm	ASTM D5185(m)		1157	1946	1439
Phosphorus	ppm	ASTM D5185(m)		987	826	667
Zinc	ppm	ASTM D5185(m)		1164	921	795
Sulfur	ppm	ASTM D5185(m)		2550	2901	1913
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	14.2	24.2
Visc @ 100°C	cSt	ASTM D7279(m)		13.2	▲ 10.6	9.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107318
Lab Number : 02634927
Unique Number : 5776080
Test Package : MOB 1

Received : 13 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis
GFL Environmental - 250 - Sault Ste Marie Hauling + MRF
 86 Sackville Rd,
 Sault Ste. Marie, ON
 CA P6B 4T6
 Contact: Mike Pelletier
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 T: (705)945-7554
 F: (705)945-7857

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.