



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[1267826]
Machine Id
213016
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		GFL0113088	GFL0096676	GFL0083403
Sample Date		Client Info		23 May 2024	28 Nov 2023	27 Jun 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	27	35	105
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	2
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	4	12
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	9	47
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

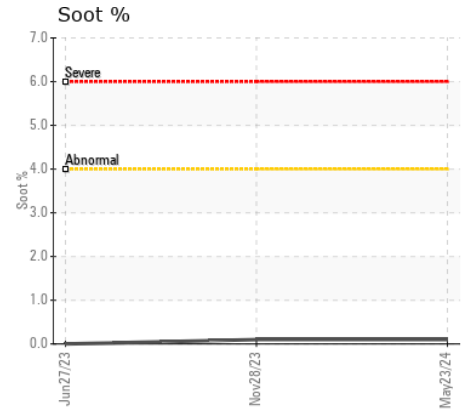
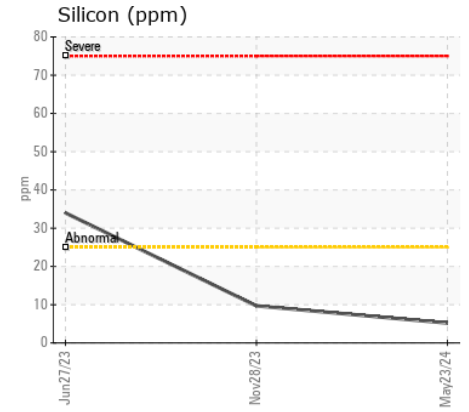
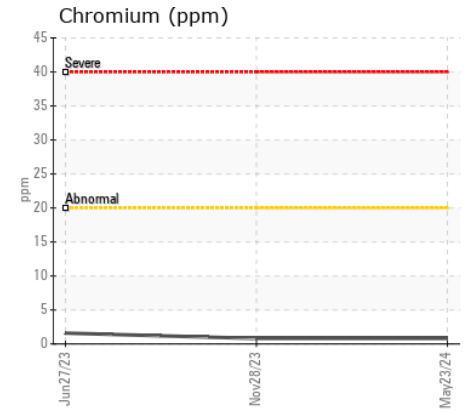
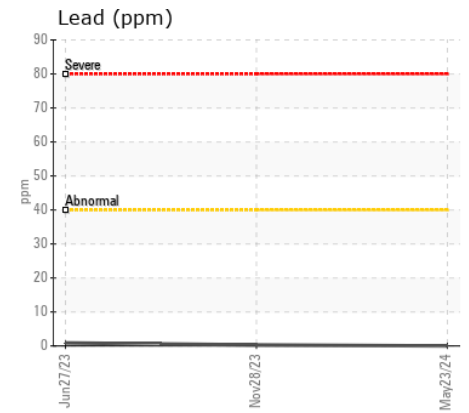
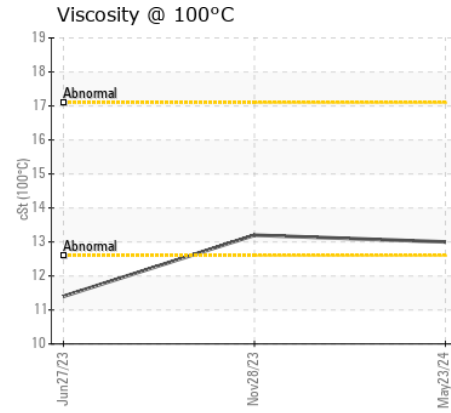
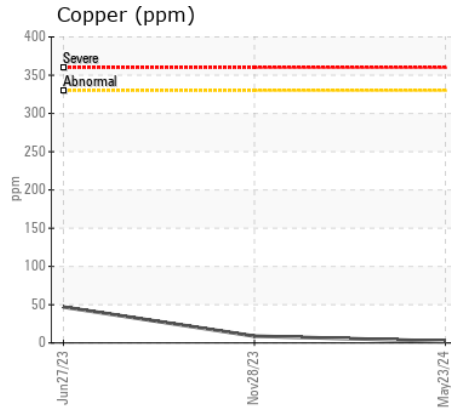
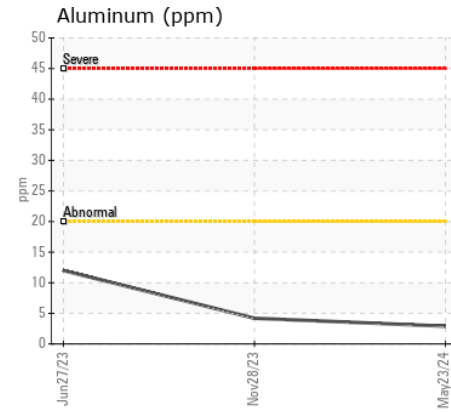
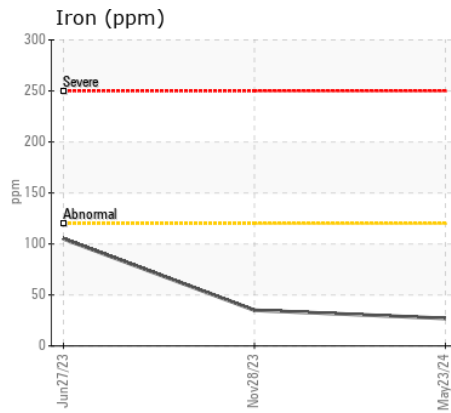
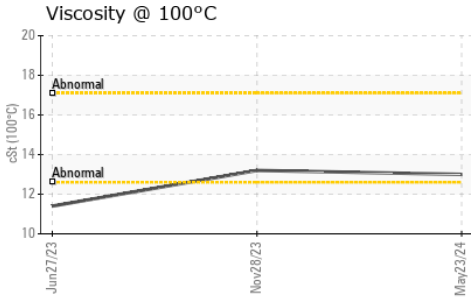
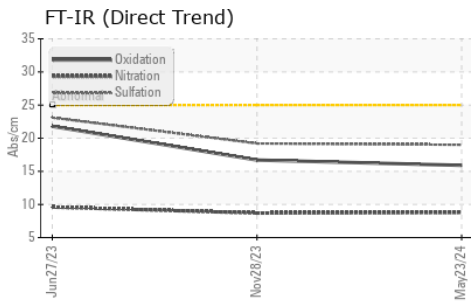
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	10	▲ 34
Potassium	ppm	ASTM D5185(m)	>20	3	6	30
Fuel		WC Method	>3.0	<1.0	<1.0	1.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	8.8	8.7	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	19.2	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)		2	2	6
Boron	ppm	ASTM D5185(m)		6	7	49
Barium	ppm	ASTM D5185(m)		<1	<1	7
Molybdenum	ppm	ASTM D5185(m)		58	56	46
Manganese	ppm	ASTM D5185(m)		<1	<1	6
Magnesium	ppm	ASTM D5185(m)		932	905	593
Calcium	ppm	ASTM D5185(m)		1043	1105	1845
Phosphorus	ppm	ASTM D5185(m)		953	962	798
Zinc	ppm	ASTM D5185(m)		1151	1125	901
Sulfur	ppm	ASTM D5185(m)		2418	2574	1963
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9	16.7	21.8
Visc @ 100°C	cSt	ASTM D7279(m)		13.0	13.2	▲ 11.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113088
Lab Number : 02637413
Unique Number : 5786575
Test Package : MOB 1
Received : 24 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Wes Davis

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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.