



Machine Id
MACK 901147
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122249	GFL0082586	GFL0037490
Sample Date		Client Info		17 Jun 2024	06 Jun 2023	05 Jan 2022
Machine Age	hrs	Client Info		13034	244226	174363
Oil Age	hrs	Client Info		622	0	0
Filter Age	hrs	Client Info		622	0	0
Oil Changed		Client Info		Changed	N/A	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	7	8	11
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	4	1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

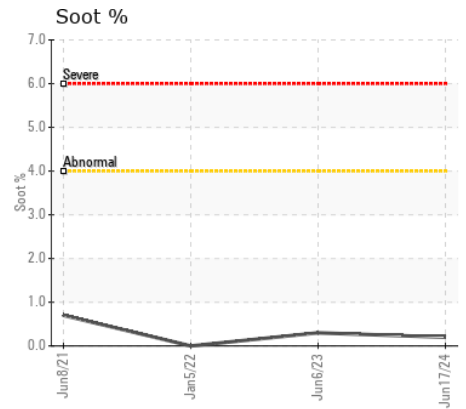
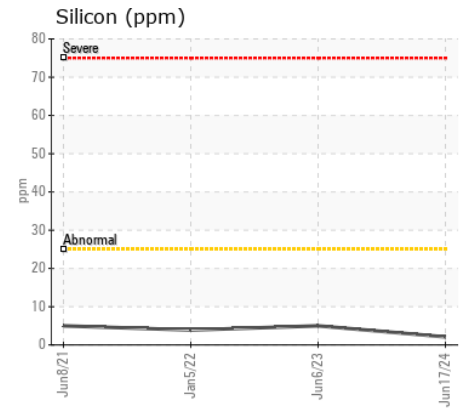
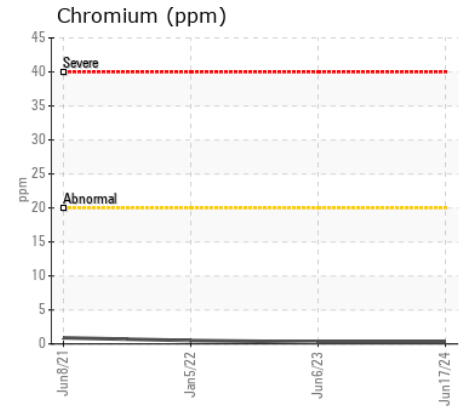
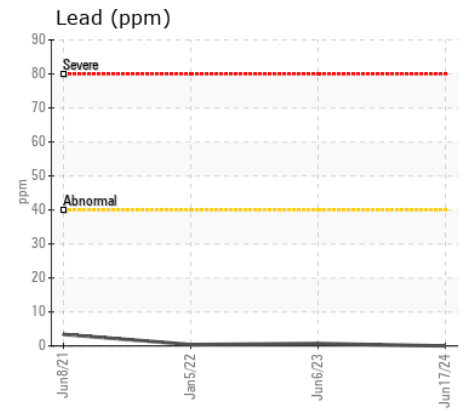
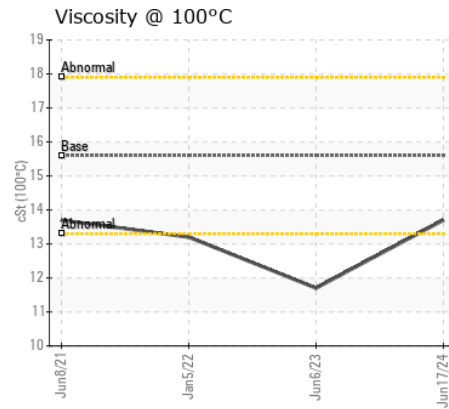
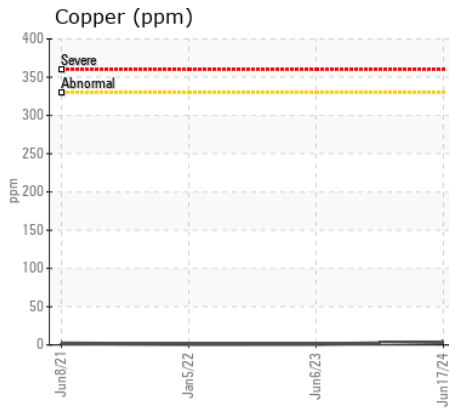
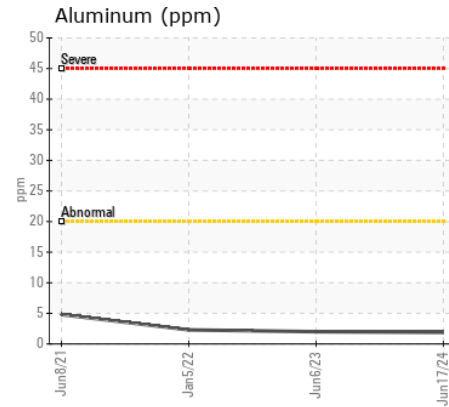
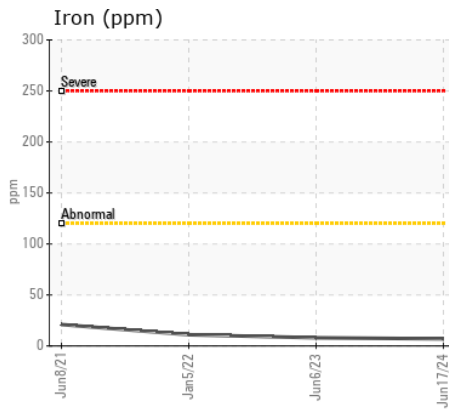
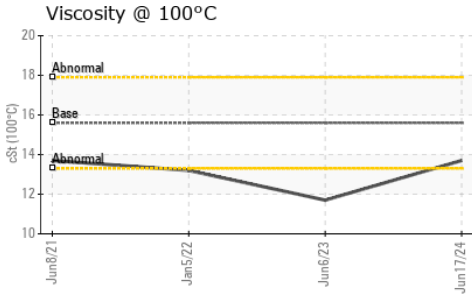
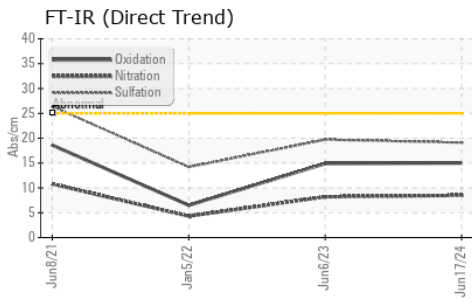
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	5	4
Potassium	ppm	ASTM D5185(m)	>20	2	<1	2
Fuel		WC Method	>3.0	<1.0	0.7	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.2	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	8.5	8.2	4.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1	19.7	14.2
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		3	4	4
Boron	ppm	ASTM D5185(m)	0	2	10	22
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	60	53
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	964	840	740
Calcium	ppm	ASTM D5185(m)	1070	1044	1176	1336
Phosphorus	ppm	ASTM D5185(m)	1150	966	1005	979
Zinc	ppm	ASTM D5185(m)	1270	1178	1122	1115
Sulfur	ppm	ASTM D5185(m)	2060	2426	2516	2462
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.0	14.9	6.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.7	▲ 11.7	13.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122249 **Received** : 28 Jun 2024
Lab Number : 02644532 **Tested** : 28 Jun 2024
Unique Number : 5802071 **Diagnosed** : 28 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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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.