



Machine Id
801137
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096822	GFL0057427	GFL0057504
Sample Date		Client Info		01 Jun 2024	08 Jun 2023	24 Jan 2023
Machine Age	hrs	Client Info		18999	174766	15712
Oil Age	hrs	Client Info		1200	600	600
Filter Age	hrs	Client Info		1200	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	22	8	9
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>9	1	1	2
Lead	ppm	ASTM D5185(m)	>30	6	<1	<1
Copper	ppm	ASTM D5185(m)	>35	4	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	VLITE	---	---

CONTAMINATION

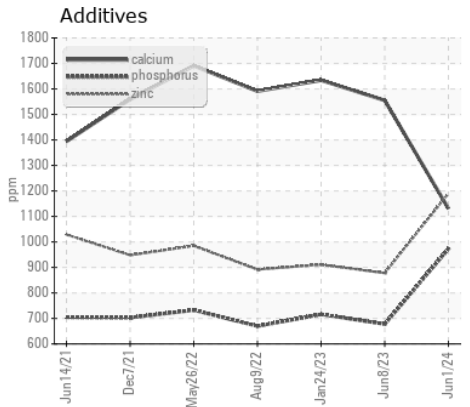
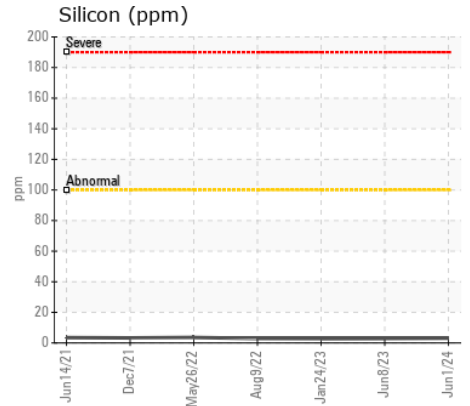
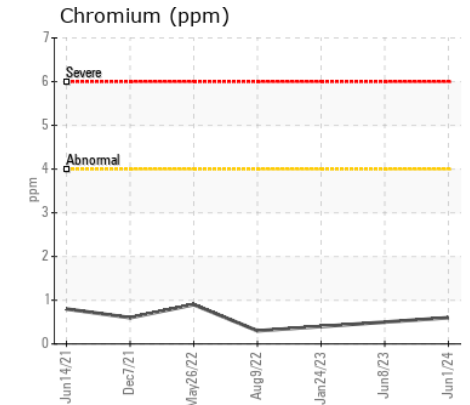
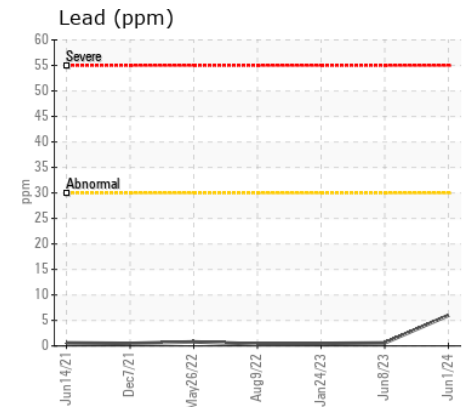
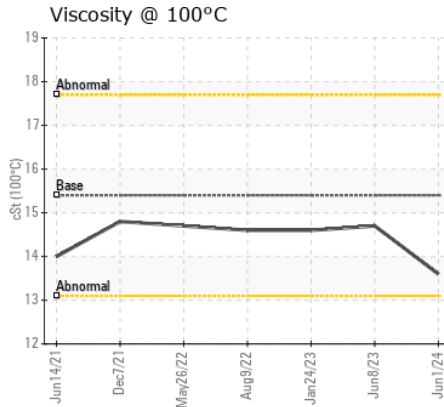
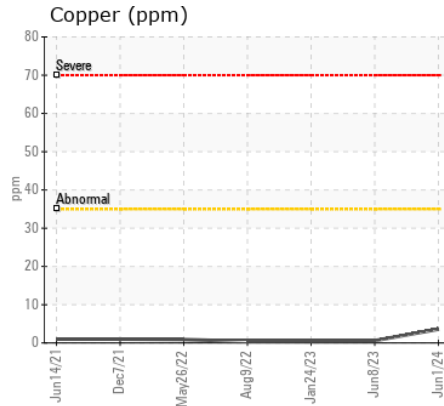
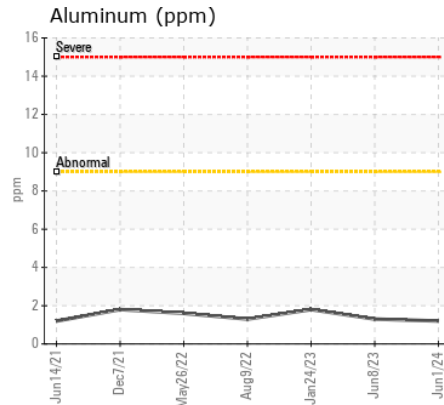
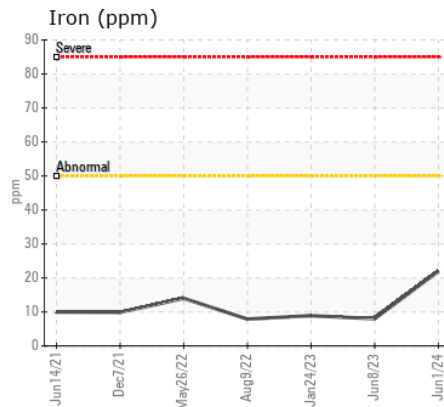
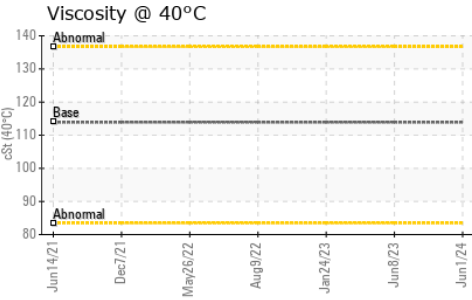
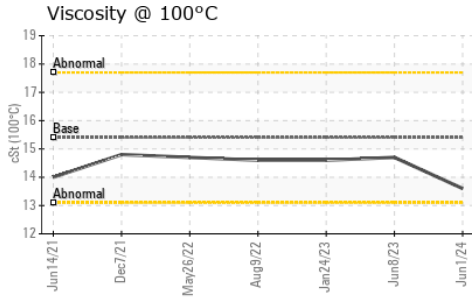
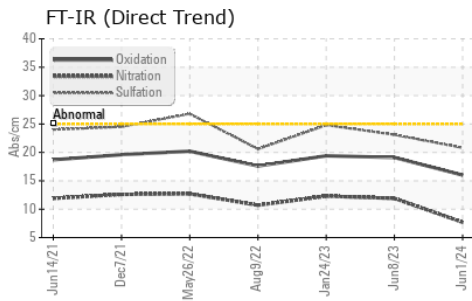
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	3	3	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0.5	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.7	11.9	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	23.1	24.8
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*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	7	4
Boron	ppm	ASTM D5185(m)	0	7	9	9
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	51	52
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	929	541	516
Calcium	ppm	ASTM D5185(m)	1070	1131	1555	1634
Phosphorus	ppm	ASTM D5185(m)	1150	973	678	716
Zinc	ppm	ASTM D5185(m)	1270	1190	878	911
Sulfur	ppm	ASTM D5185(m)	2060	2489	2002	2119
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.0	19.1	19.4
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	97.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.6	14.7	14.6
Viscosity Index (VI)	Scale	ASTM D2270*	142	139	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096822
Lab Number : 02642257
Unique Number : 5799796
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

GFL Environmental - 574 - Coquitlam
 70 Golden Drive,
 Coquitlam, BC
 CA V3K 6B5
 Contact: Sanjay Kisun
 skisun@gflenv.com
 T: (604)529-4030
 F: (604)529-4026

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.