



Machine Id
819011
Component
Diesel 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		GFL0112444	GFL0084343	---
Sample Date		Client Info		15 Jun 2024	02 Sep 2023	---
Machine Age	hrs	Client Info		145446	122385	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	46	13	---
Chromium	ppm	ASTM D5185(m)	>5	1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	<1	0	---
Aluminum	ppm	ASTM D5185(m)	>30	4	2	---
Lead	ppm	ASTM D5185(m)	>30	0	0	---
Copper	ppm	ASTM D5185(m)	>150	5	1	---
Tin	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

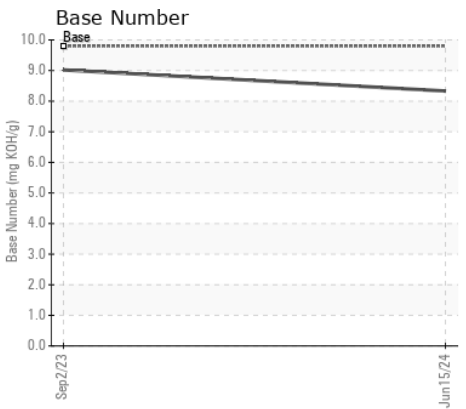
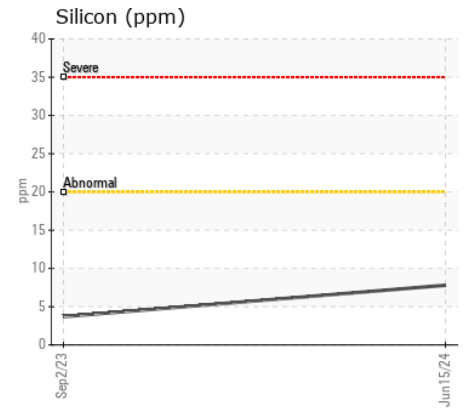
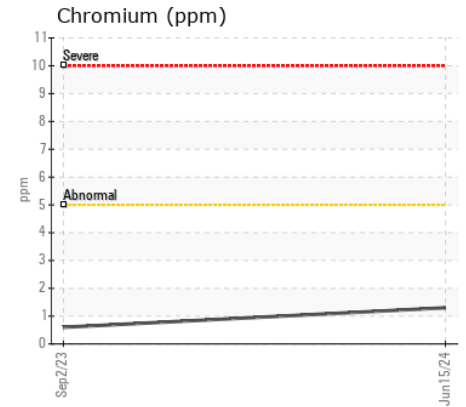
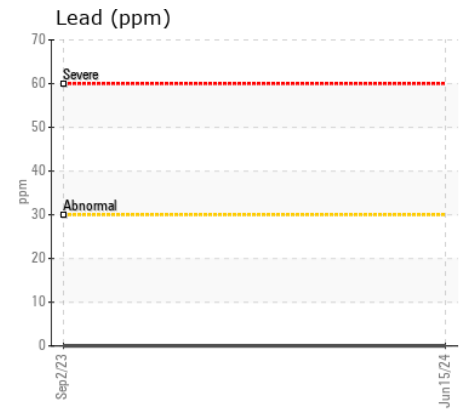
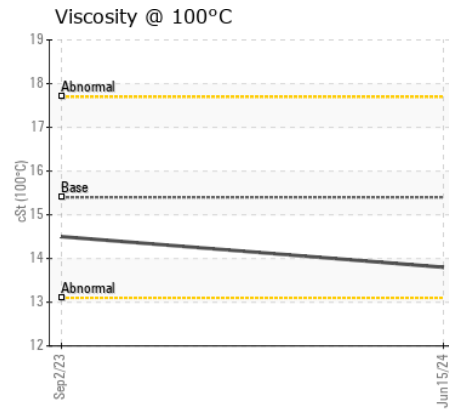
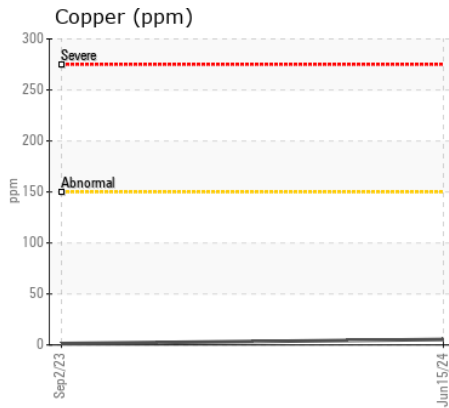
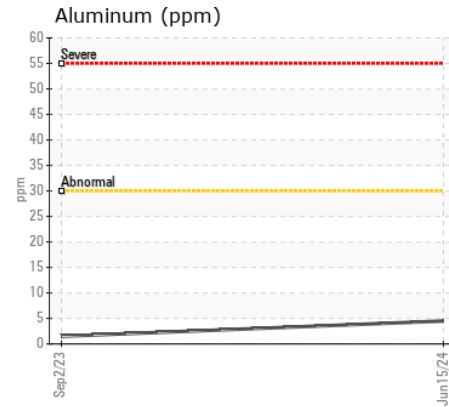
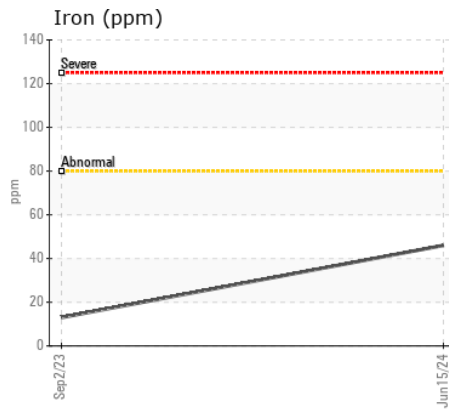
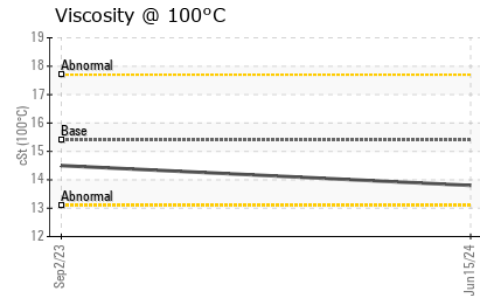
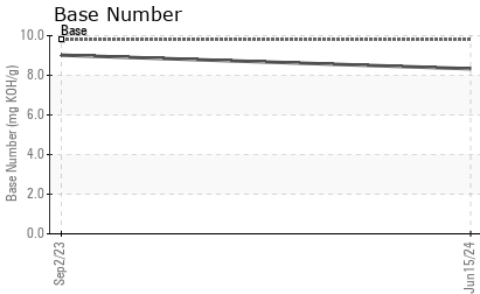
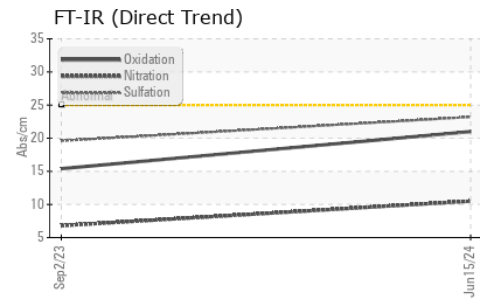
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	8	4	---
Potassium	ppm	ASTM D5185(m)	>20	4	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.8	0.4	---
Nitration	Abs/cm	ASTM D7624*	>20	10.5	6.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.2	19.6	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		3	4	---
Boron	ppm	ASTM D5185(m)	0	3	3	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	61	58	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	954	960	---
Calcium	ppm	ASTM D5185(m)	1070	1064	1056	---
Phosphorus	ppm	ASTM D5185(m)	1150	935	1055	---
Zinc	ppm	ASTM D5185(m)	1270	1173	1180	---
Sulfur	ppm	ASTM D5185(m)	2060	2317	2570	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.0	15.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	8.33	9.02	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	14.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**
Sample No. : GFL0112444 **Received** : 25 Jun 2024 **220 Carmek Blvd**
Lab Number : 02643950 **Tested** : 26 Jun 2024 **Rocky View County, AB**
Unique Number : 5801489 **Diagnosed** : 26 Jun 2024 - Wes Davis **CA T1X 1X1**
Test Package : MOB 2 **Contact: Jack Levesque**
jevesque@gflenv.com
T: (403)265-0044
F: (403)236-0565

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.