



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 52966
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0930270	WC0930266	---
Sample Date		Client Info		17 Jun 2024	03 Jun 2024	---
Machine Age	mls	Client Info		54436	48246	---
Oil Age	mls	Client Info		37894	31709	---
Filter Age	mls	Client Info		37894	31709	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	10	32	---
Chromium	ppm	ASTM D5185(m)	>20	<1	2	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	6	19	---
Lead	ppm	ASTM D5185(m)	>40	1	7	---
Copper	ppm	ASTM D5185(m)	>330	4	10	---
Tin	ppm	ASTM D5185(m)	>15	<1	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

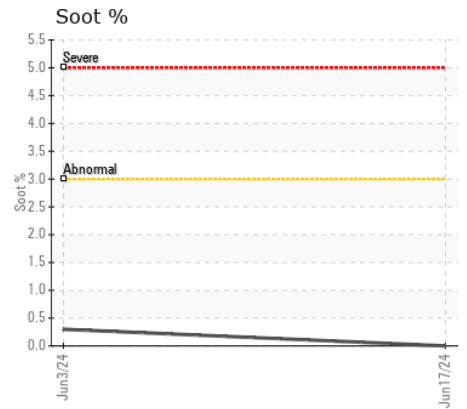
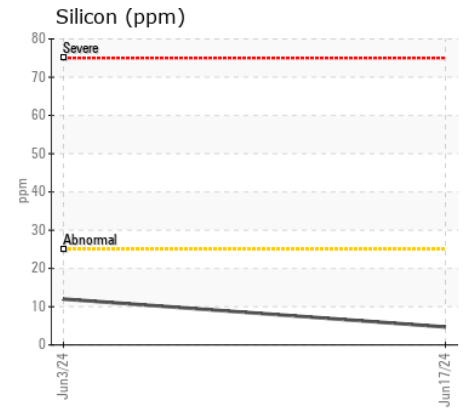
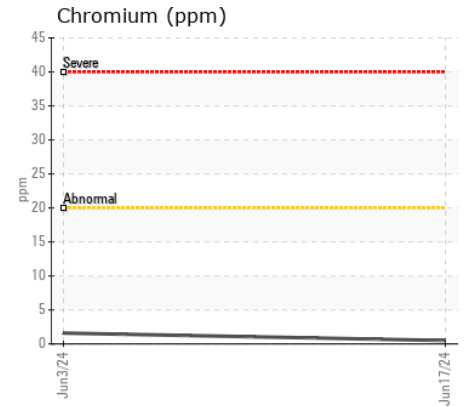
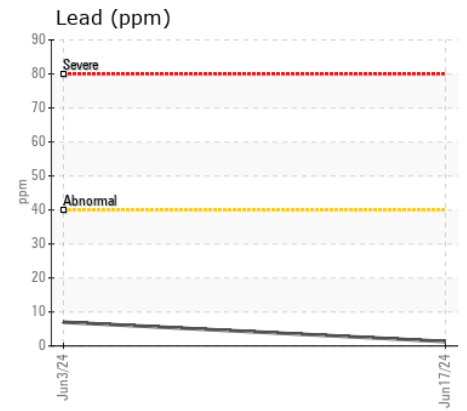
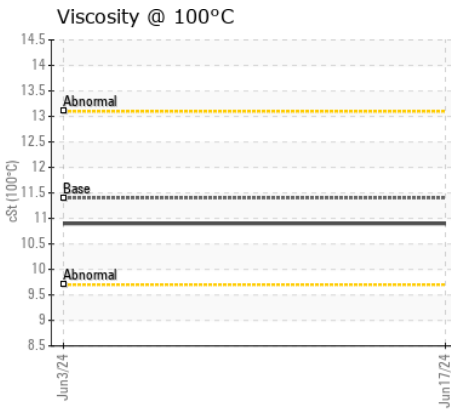
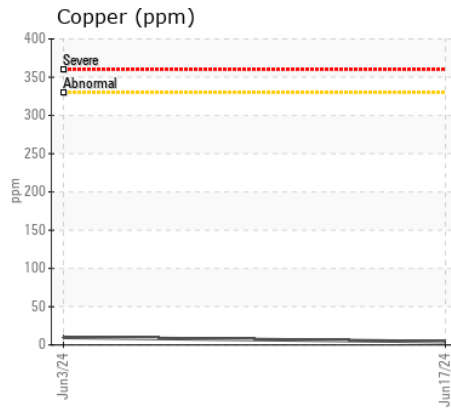
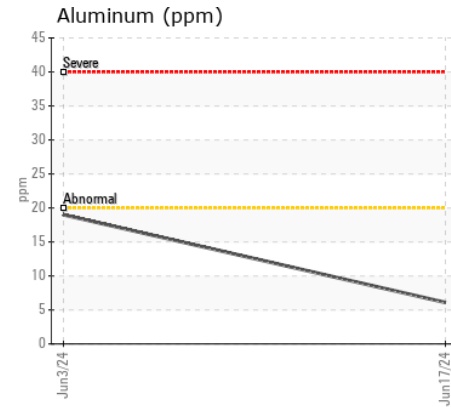
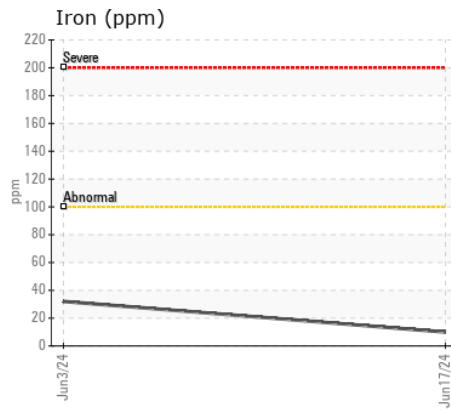
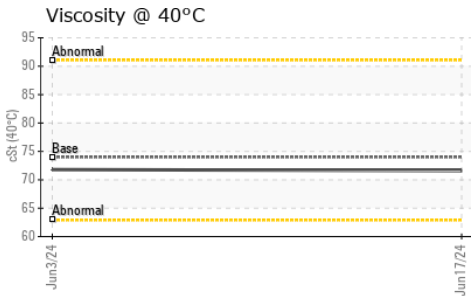
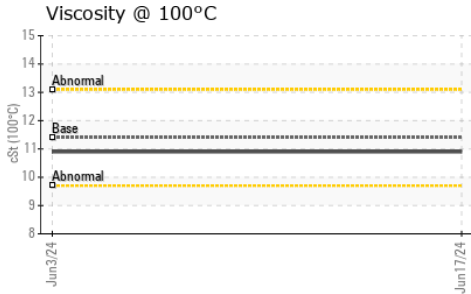
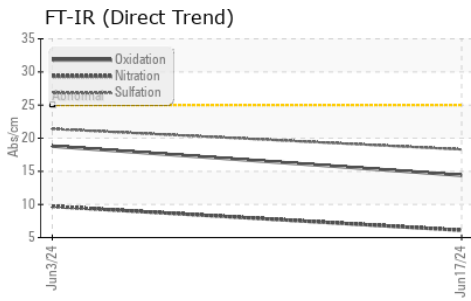
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	12	---
Potassium	ppm	ASTM D5185(m)	>20	12	48	---
Fuel		WC Method	>2.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	6.1	9.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	21.4	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	2	---
Boron	ppm	ASTM D5185(m)	1	8	8	---
Barium	ppm	ASTM D5185(m)	1	1	<1	---
Molybdenum	ppm	ASTM D5185(m)	1	59	62	---
Manganese	ppm	ASTM D5185(m)	1	<1	2	---
Magnesium	ppm	ASTM D5185(m)	10	933	933	---
Calcium	ppm	ASTM D5185(m)	2942	1062	1184	---
Phosphorus	ppm	ASTM D5185(m)	1102	971	970	---
Zinc	ppm	ASTM D5185(m)	1351	1169	1225	---
Sulfur	ppm	ASTM D5185(m)	3903	2565	2320	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.4	18.8	---
Visc @ 40°C	cSt	ASTM D7279(m)	74.0	71.6	71.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	10.9	10.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	146	141	141	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0930270 **Received** : 03 Jul 2024
Lab Number : 02645183 **Tested** : 03 Jul 2024
Unique Number : 5802722 **Diagnosed** : 03 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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.

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