



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 52961
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		WC0935036	WC0879080	---
Sample Date		Client Info		18 May 2024	19 Dec 2023	---
Machine Age	kms	Client Info		206078	60929	---
Oil Age	kms	Client Info		53197	0	---
Filter Age	kms	Client Info		53197	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	19	23	---
Chromium	ppm	ASTM D5185(m)	>20	<1	1	---
Nickel	ppm	ASTM D5185(m)	>4	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	5	9	---
Lead	ppm	ASTM D5185(m)	>40	3	4	---
Copper	ppm	ASTM D5185(m)	>330	1	5	---
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

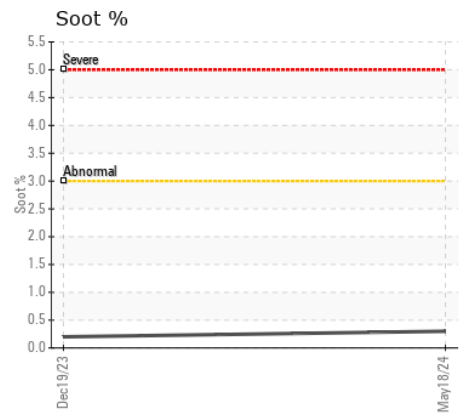
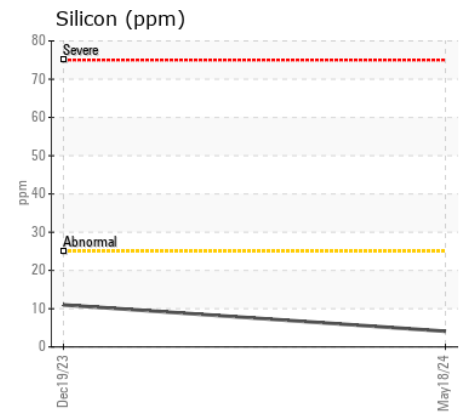
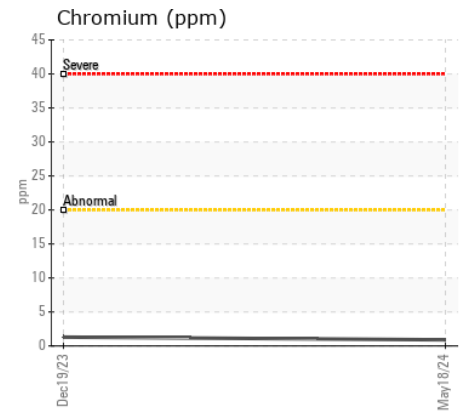
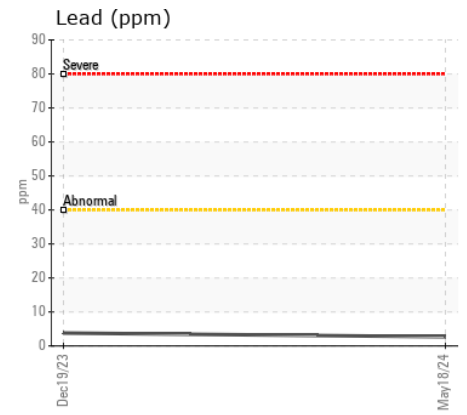
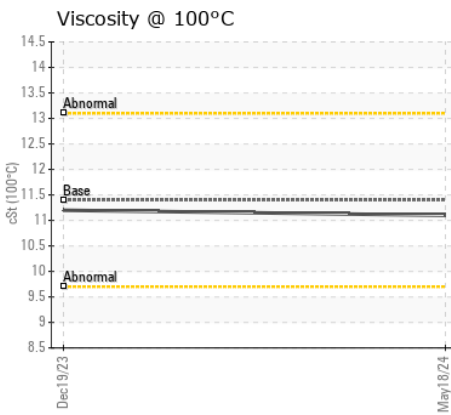
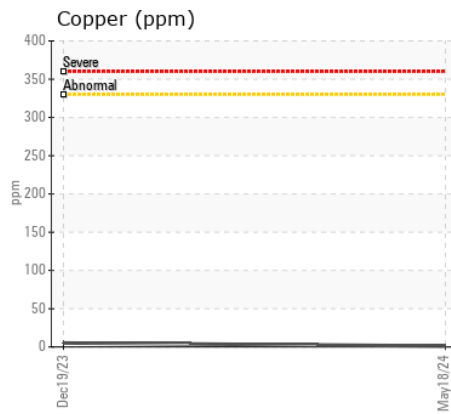
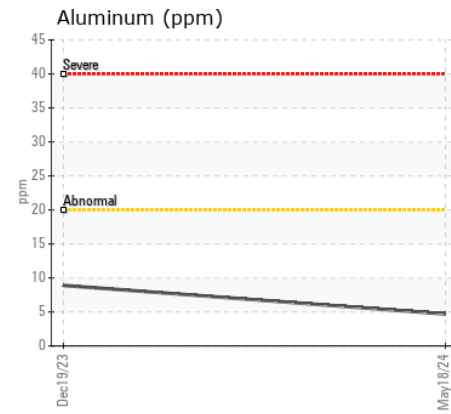
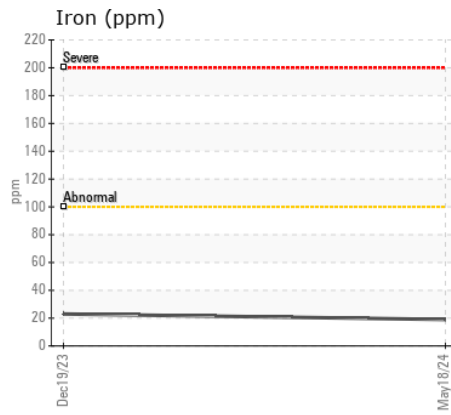
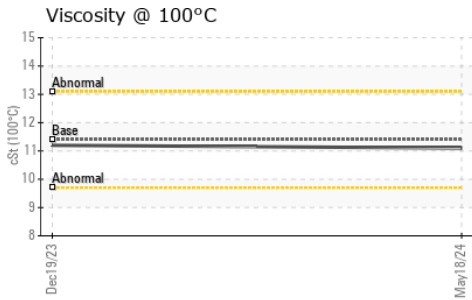
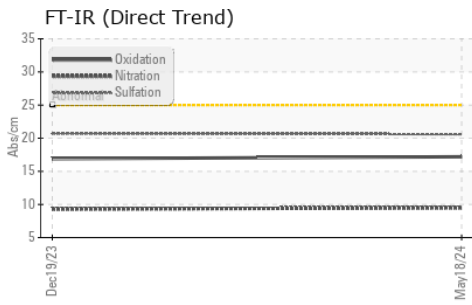
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	11	---
Potassium	ppm	ASTM D5185(m)	>20	5	16	---
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	0.3	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	9.5	9.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.7	---
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	---
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	5	6	---
Barium	ppm	ASTM D5185(m)	1	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	1	64	61	---
Manganese	ppm	ASTM D5185(m)	1	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	10	1018	932	---
Calcium	ppm	ASTM D5185(m)	2942	1127	1173	---
Phosphorus	ppm	ASTM D5185(m)	1102	1045	1019	---
Zinc	ppm	ASTM D5185(m)	1351	1255	1220	---
Sulfur	ppm	ASTM D5185(m)	3903	2515	2558	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	16.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.1	11.2	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0935036 **Received** : 06 Jun 2024
Lab Number : 02640142 **Tested** : 06 Jun 2024
Unique Number : 5789304 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

MANITOU LIN TRANSPORT
 75 MUMFORD ROAD
 LIVELY, ON
 CA P3Y 1L1
 Contact: Todd Smith
 tosmith@manitoulintransport.com
 T: (705)562-3302
 F: x:

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.