



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
52948
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0927613	WC0847655	WC0847640
Sample Date		Client Info		13 May 2024	27 Dec 2023	03 Aug 2023
Machine Age	mls	Client Info		119647	89893	60916
Oil Age	mls	Client Info		29754	28977	28556
Filter Age	mls	Client Info		29754	28977	28556
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)	>65	28	35	46
Chromium	ppm	ASTM D5185(m)	>5	3	3	4
Nickel	ppm	ASTM D5185(m)	>3	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>35	12	26	64
Lead	ppm	ASTM D5185(m)	>10	<1	1	4
Copper	ppm	ASTM D5185(m)	>180	60	56	141
Tin	ppm	ASTM D5185(m)	>8	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

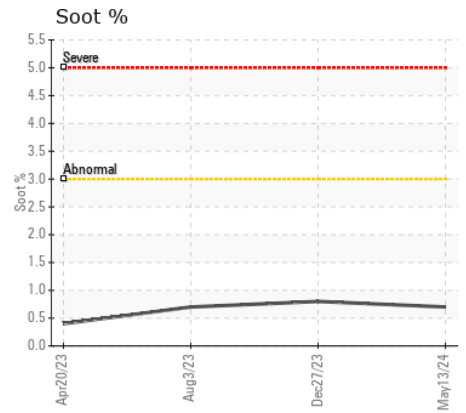
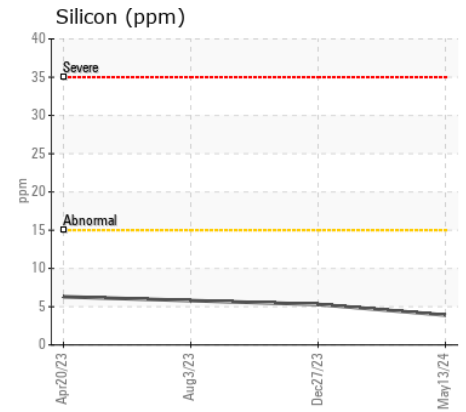
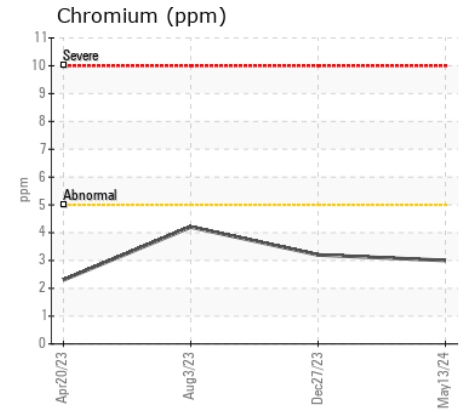
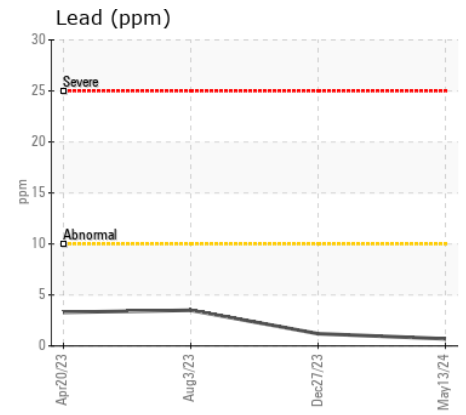
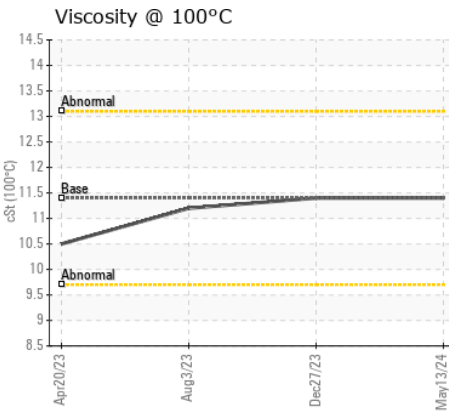
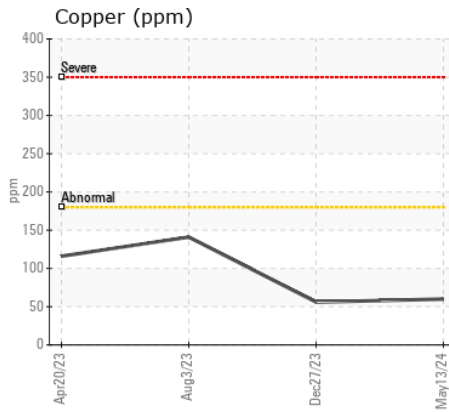
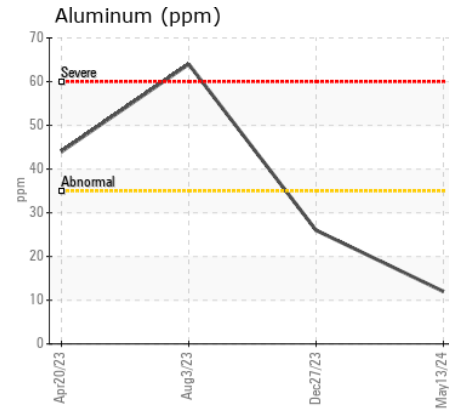
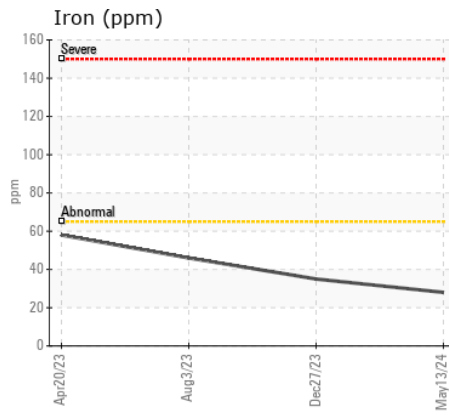
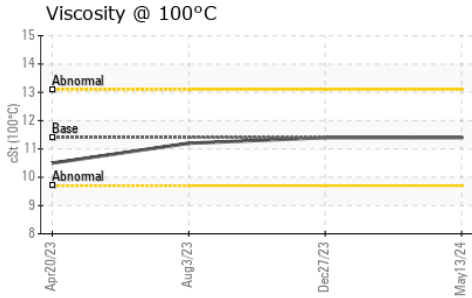
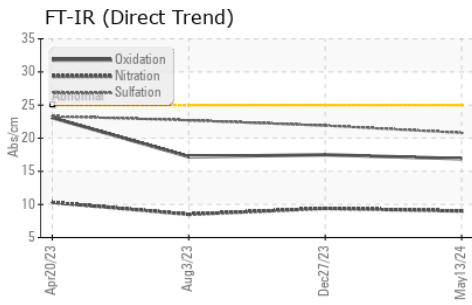
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	4	5	6
Potassium	ppm	ASTM D5185(m)	>20	20	50	135
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.7	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	9.0	9.4	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	21.9	22.7
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)		4	3	3
Boron	ppm	ASTM D5185(m)	1	3	4	5
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	1	60	60	58
Manganese	ppm	ASTM D5185(m)	1	<1	<1	2
Magnesium	ppm	ASTM D5185(m)	10	982	959	924
Calcium	ppm	ASTM D5185(m)	2942	1109	1153	1162
Phosphorus	ppm	ASTM D5185(m)	1102	936	954	980
Zinc	ppm	ASTM D5185(m)	1351	1154	1193	1151
Sulfur	ppm	ASTM D5185(m)	3903	1931	1987	1837
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	17.5	17.2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.4	11.4	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0927613 **Received** : 03 Jun 2024
Lab Number : 02639365 **Tested** : 03 Jun 2024
Unique Number : 5788527 **Diagnosed** : 03 Jun 2024 - Wes Davis
Test Package : MOB 1

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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.