



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
50152
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915470	WC0844353	WC0879104
Sample Date		Client Info		18 May 2024	19 Feb 2024	17 Nov 2023
Machine Age	kms	Client Info		30053	62806	32451
Oil Age	kms	Client Info		30053	30355	31160
Filter Age	kms	Client Info		30053	30355	31160
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>65	24	30	62
Chromium	ppm	ASTM D5185(m)	>5	2	2	4
Nickel	ppm	ASTM D5185(m)	>3	<1	<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	14	25	84
Lead	ppm	ASTM D5185(m)	>10	<1	4	5
Copper	ppm	ASTM D5185(m)	>180	59	195	208
Tin	ppm	ASTM D5185(m)	>8	<1	1	3
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

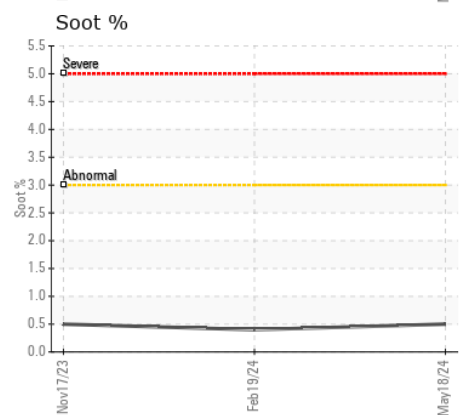
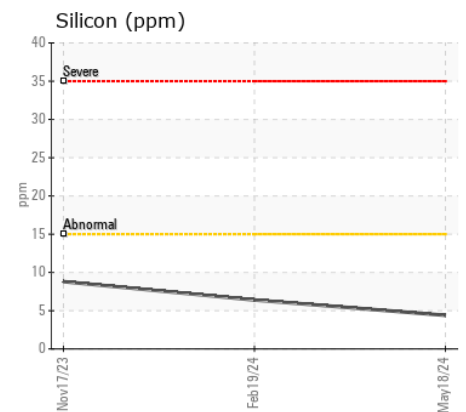
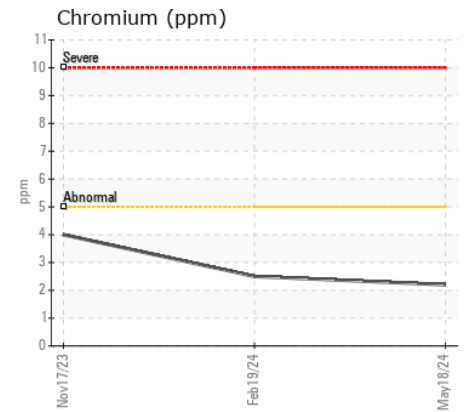
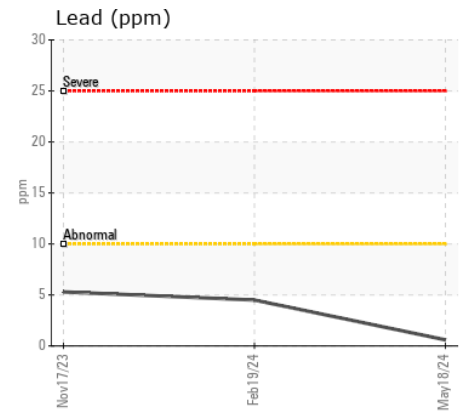
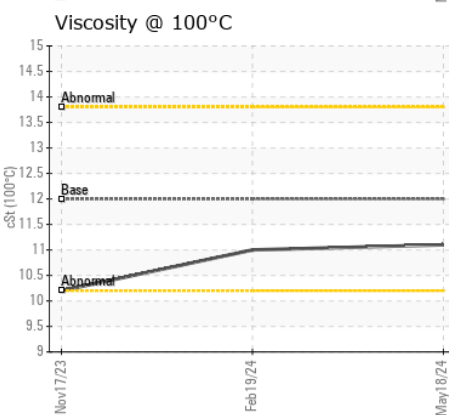
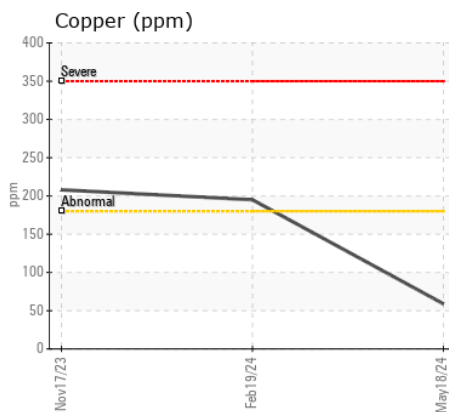
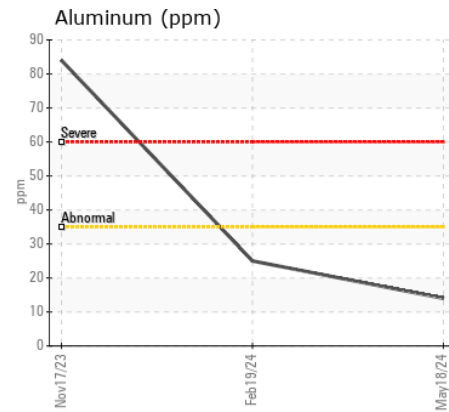
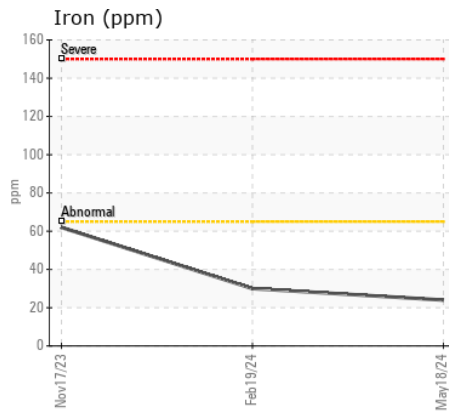
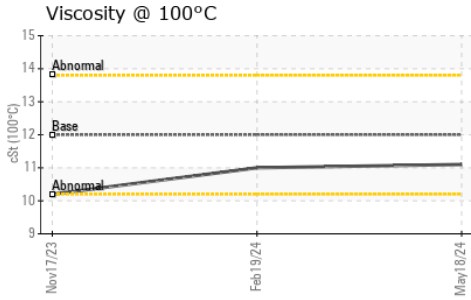
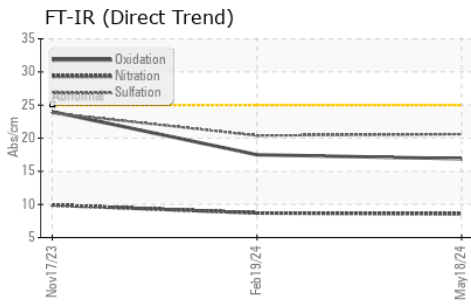
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	4	6	9
Potassium	ppm	ASTM D5185(m)	>20	25	48	186
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	0.5	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	8.6	8.7	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.4	23.8
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)		3	3	6
Boron	ppm	ASTM D5185(m)	2	4	7	30
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	62	57	41
Manganese	ppm	ASTM D5185(m)	0	<1	<1	4
Magnesium	ppm	ASTM D5185(m)	950	982	892	501
Calcium	ppm	ASTM D5185(m)	1050	1134	1188	1766
Phosphorus	ppm	ASTM D5185(m)	995	916	903	702
Zinc	ppm	ASTM D5185(m)	1180	1170	1084	830
Sulfur	ppm	ASTM D5185(m)	2600	1881	1982	1632
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	17.5	24.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	11.0	10.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915470 **Received** : 06 Jun 2024
Lab Number : 02640068 **Tested** : 06 Jun 2024
Unique Number : 5789230 **Diagnosed** : 06 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.