



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 51955
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		WC0930269	WC0857676	WC0788115
Sample Date		Client Info		23 Apr 2024	14 Dec 2023	15 May 2023
Machine Age	mls	Client Info		210889	143446	38046
Oil Age	mls	Client Info		30997	31630	38046
Filter Age	mls	Client Info		30997	31630	38046
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)	>100	22	20	81
Chromium	ppm	ASTM D5185(m)	>20	2	1	3
Nickel	ppm	ASTM D5185(m)	>4	2	1	1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	6	11	21
Lead	ppm	ASTM D5185(m)	>40	<1	2	5
Copper	ppm	ASTM D5185(m)	>330	<1	1	18
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

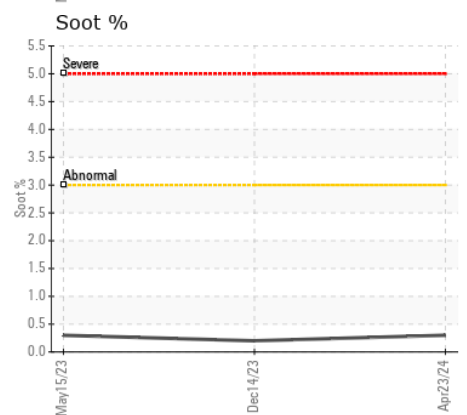
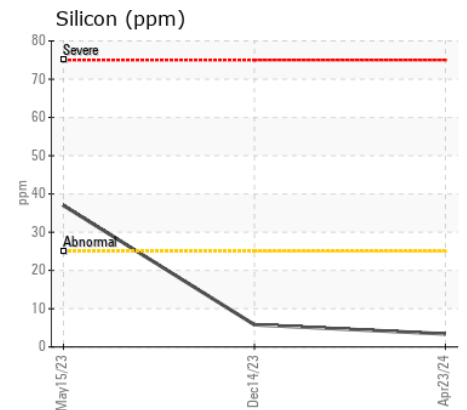
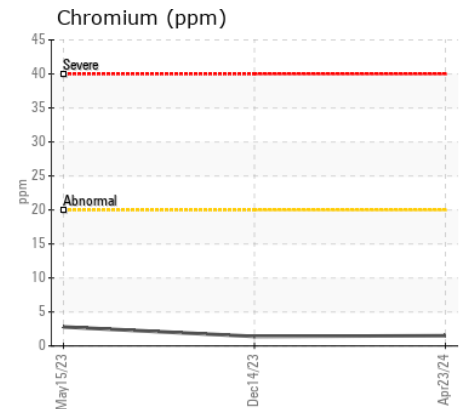
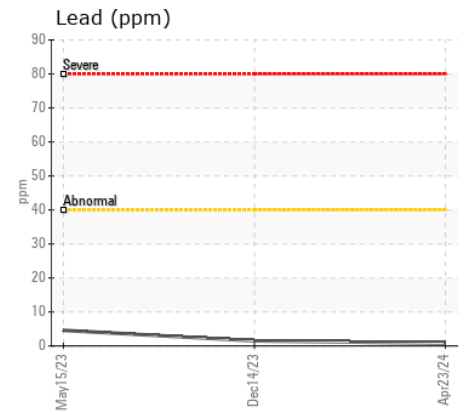
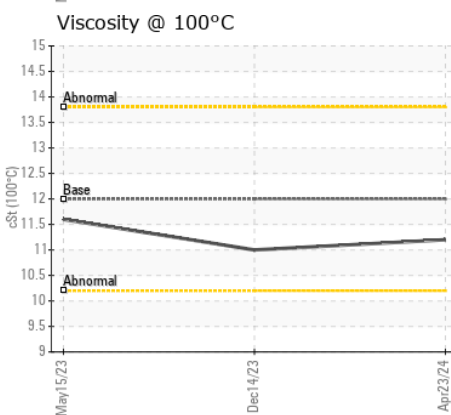
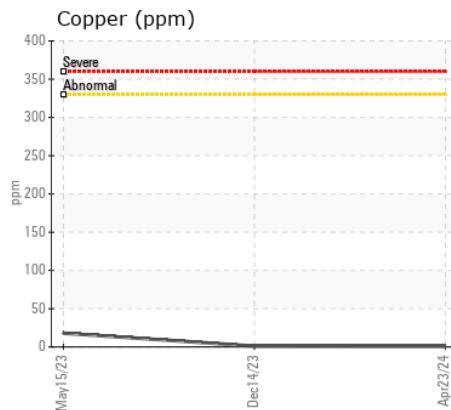
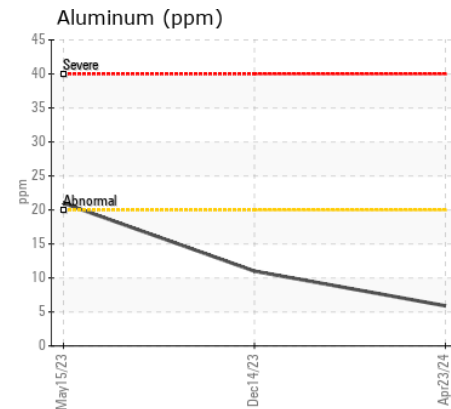
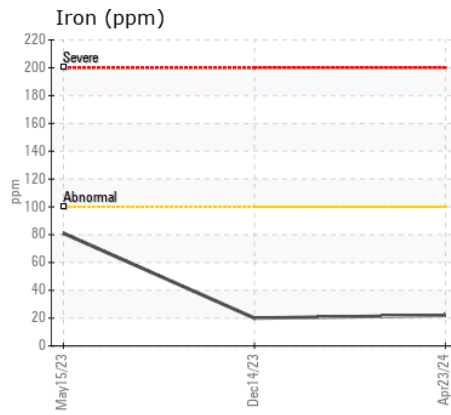
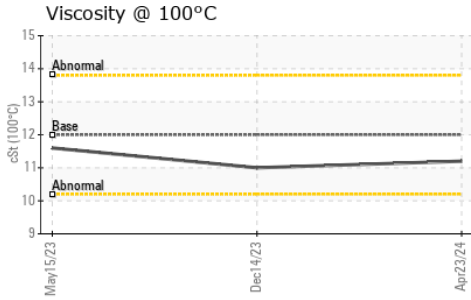
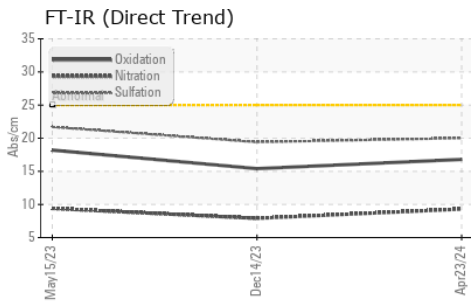
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	6	37
Potassium	ppm	ASTM D5185(m)	>20	10	20	72
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	9.3	7.9	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0	19.4	21.7
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)		2	2	4
Boron	ppm	ASTM D5185(m)	2	4	4	40
Barium	ppm	ASTM D5185(m)	0	0	<1	5
Molybdenum	ppm	ASTM D5185(m)	50	61	63	67
Manganese	ppm	ASTM D5185(m)	0	<1	0	6
Magnesium	ppm	ASTM D5185(m)	950	969	998	448
Calcium	ppm	ASTM D5185(m)	1050	1071	1099	1731
Phosphorus	ppm	ASTM D5185(m)	995	956	1012	1019
Zinc	ppm	ASTM D5185(m)	1180	1220	1229	1205
Sulfur	ppm	ASTM D5185(m)	2600	2390	2468	2374
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.8	15.4	18.2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	11.0	11.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0930269 **Received** : 03 Jul 2024
Lab Number : **02645178** **Tested** : 03 Jul 2024
Unique Number : 5802717 **Diagnosed** : 03 Jul 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.