



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
4000 Series
 Machine Id
Navistar 4355
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (16 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915452	WC0828244	WC0794959
Sample Date		Client Info		14 Apr 2024	05 Nov 2023	09 Jun 2023
Machine Age	mls	Client Info		36740	59127	9000
Oil Age	mls	Client Info		4767	3819	0
Filter Age	mls	Client Info		0	3819	9000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	21	24	16
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	19	13	16
Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Copper	ppm	ASTM D5185(m)	>330	1	<1	2
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

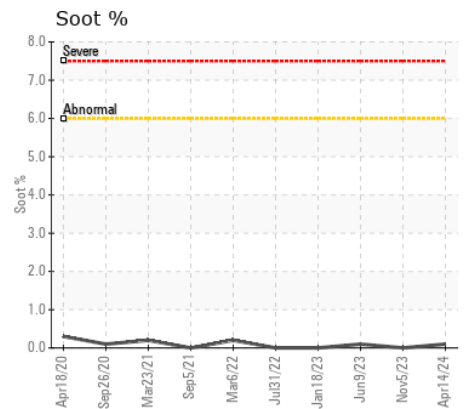
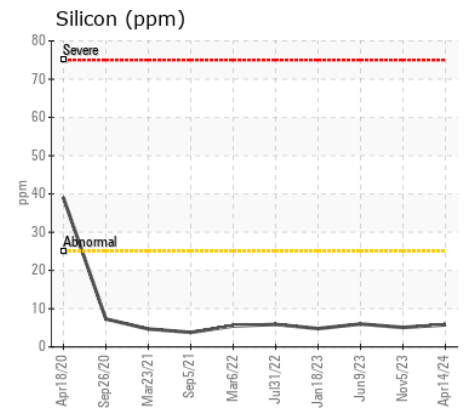
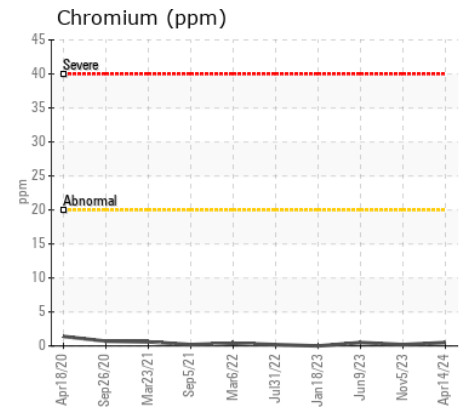
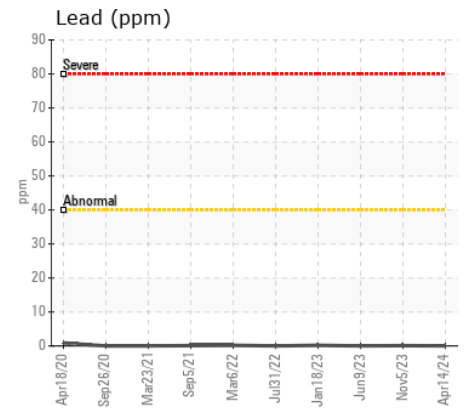
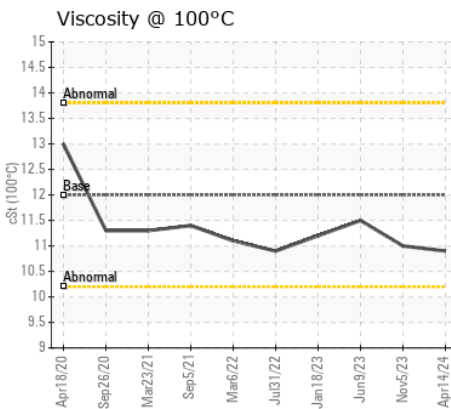
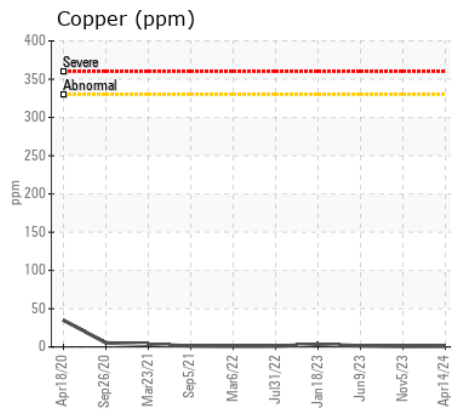
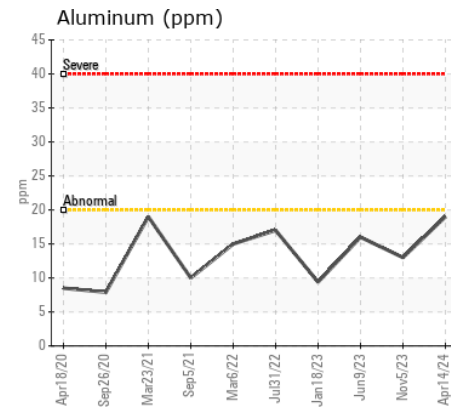
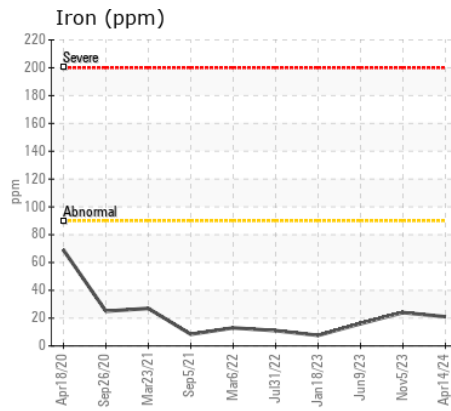
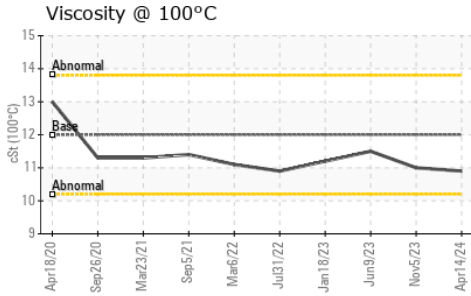
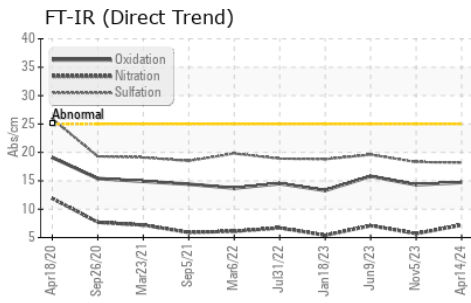
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	5	6
Potassium	ppm	ASTM D5185(m)	>20	29	20	20
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*	>6	0.1	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.2	5.7	7.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	18.3	19.6
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	4	4
Boron	ppm	ASTM D5185(m)	2	11	20	98
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	60	59	60
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	965	948	1096
Calcium	ppm	ASTM D5185(m)	1050	1064	1046	966
Phosphorus	ppm	ASTM D5185(m)	995	1025	1000	1115
Zinc	ppm	ASTM D5185(m)	1180	1202	1166	1228
Sulfur	ppm	ASTM D5185(m)	2600	2619	2628	2895
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	14.3	15.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.9	11.0	11.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915452 **Received** : 30 Apr 2024
Lab Number : 02632289 **Tested** : 30 Apr 2024
Unique Number : 5773442 **Diagnosed** : 30 Apr 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.