



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
NAVISTAR 4957
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		WC0854866	WC0864015	WC0639109
Sample Date		Client Info		10 Jan 2024	20 Oct 2023	12 Nov 2021
Machine Age	mls	Client Info		35437	9968	95602
Oil Age	mls	Client Info		0	9968	0
Filter Age	mls	Client Info		0	9968	0
Oil Changed		Client Info		Changed	Changed	N/A
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)	>100	21	36	16
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	9	8	4
Lead	ppm	ASTM D5185(m)	>40	<1	2	4
Copper	ppm	ASTM D5185(m)	>330	3	19	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

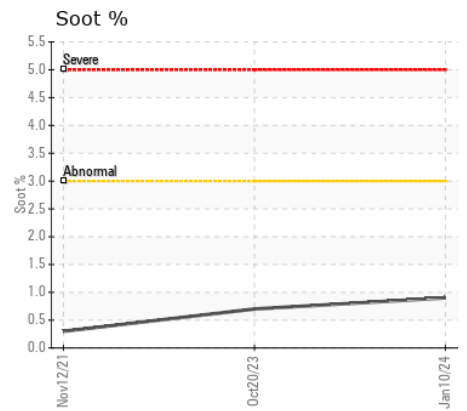
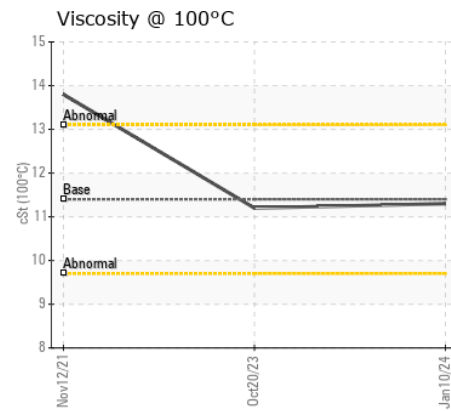
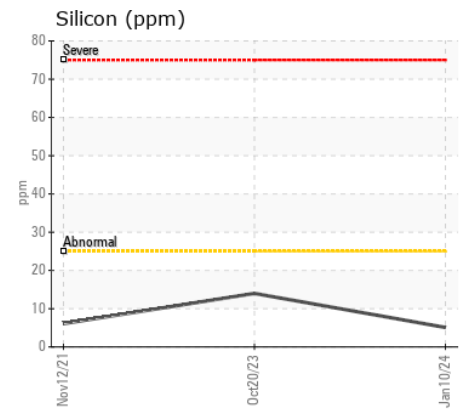
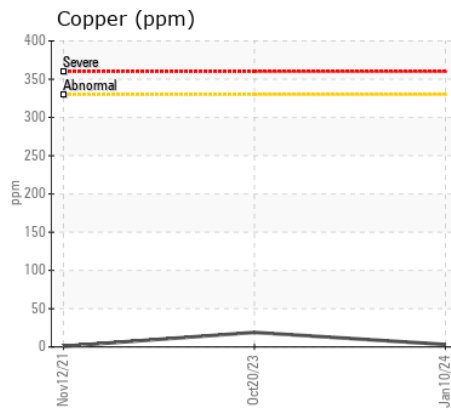
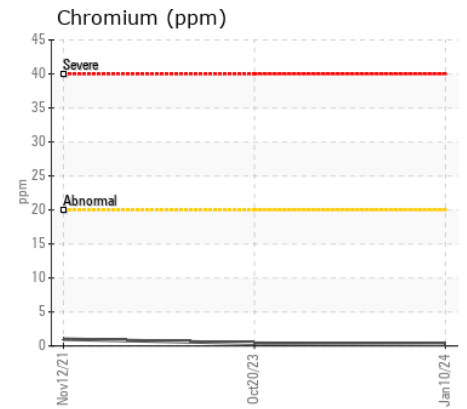
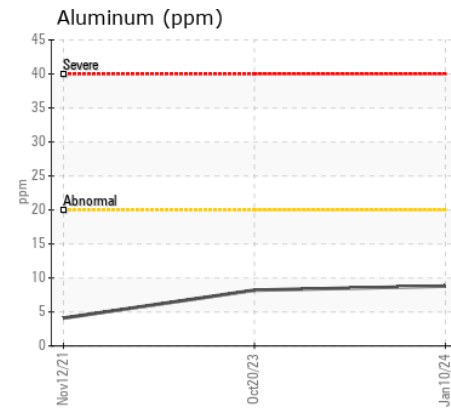
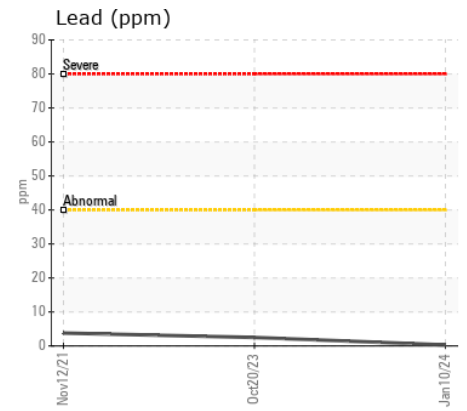
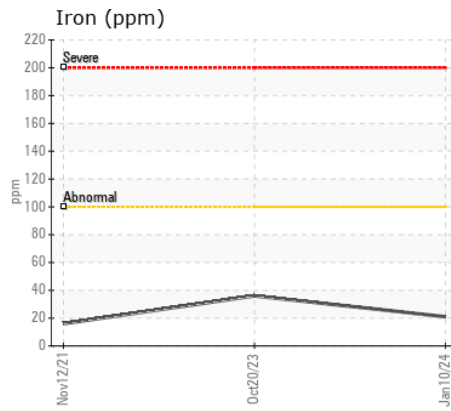
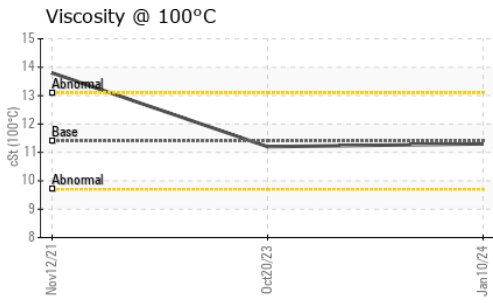
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	14	6
Potassium	ppm	ASTM D5185(m)	>20	20	28	5
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.9	0.7	0.3
Nitration	Abs/cm	ASTM D7624*	>20	6.7	6.6	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	21.4	20.8
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)		2	5	2
Boron	ppm	ASTM D5185(m)	1	9	93	1
Barium	ppm	ASTM D5185(m)	1	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	1	59	65	61
Manganese	ppm	ASTM D5185(m)	1	<1	3	<1
Magnesium	ppm	ASTM D5185(m)	10	899	411	1044
Calcium	ppm	ASTM D5185(m)	2942	1103	1849	1053
Phosphorus	ppm	ASTM D5185(m)	1102	1001	1062	1091
Zinc	ppm	ASTM D5185(m)	1351	1143	1278	1235
Sulfur	ppm	ASTM D5185(m)	3903	2729	2851	2635
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.6	16.0	15.8
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.3	11.2	13.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0854866 **Received** : 18 Jan 2024
Lab Number : 02609677 **Diagnosed** : 18 Jan 2024
Unique Number : 5710763 **Diagnostician** : 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.