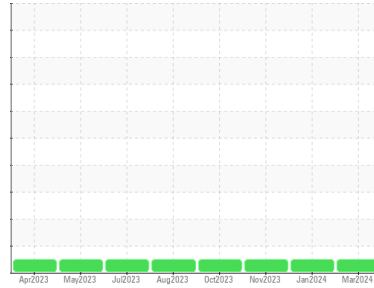




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
NAVISTAR 51952

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0893698	WC0893692	WC0857723
Sample Date	Client Info		31 Mar 2024	08 Jan 2024	20 Nov 2023
Machine Age	mls	Client Info	24182	184237	24330
Oil Age	mls	Client Info	24182	24184	24330
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	13	14	12
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	4
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	2	3	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	60	58
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	992	990	966
Calcium	ppm	ASTM D5185(m)	1050	1069	1091	1082
Phosphorus	ppm	ASTM D5185(m)	995	970	1012	983
Zinc	ppm	ASTM D5185(m)	1180	1190	1215	1194
Sulfur	ppm	ASTM D5185(m)	2600	2349	2548	2497
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

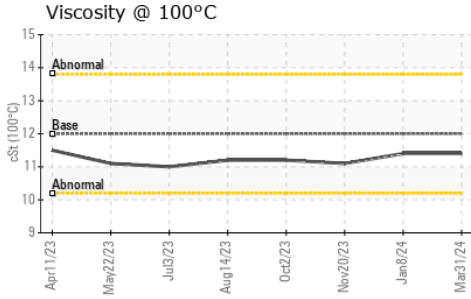
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	2	4	4
Sodium	ppm	ASTM D5185(m)		1	1	1
Potassium	ppm	ASTM D5185(m)	>20	2	3	7

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0.2	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.7	7.6	7.0
Sulfation	Abs./1mm	ASTM D7415*	>30	19.4	19.5	18.6



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2
Abs./1mm	ASTM D7414*	>25	15.7	14.4

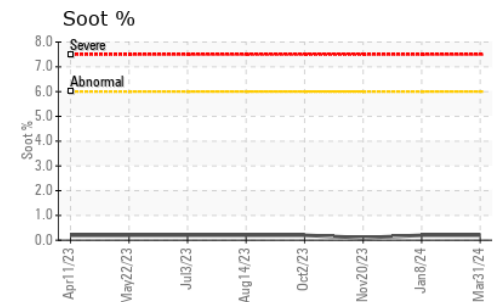
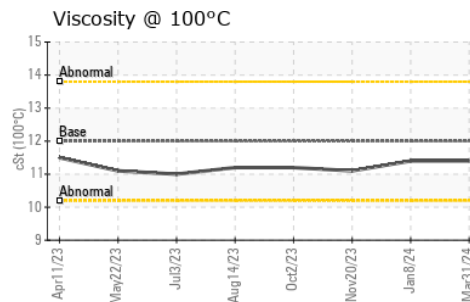
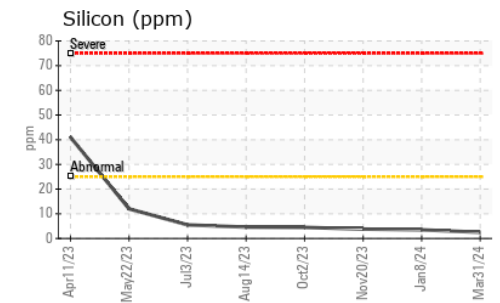
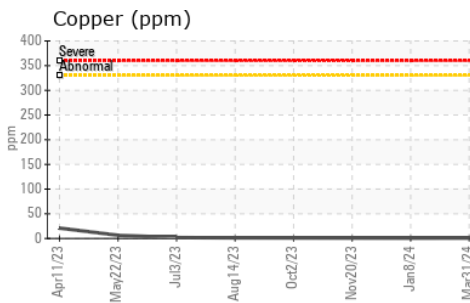
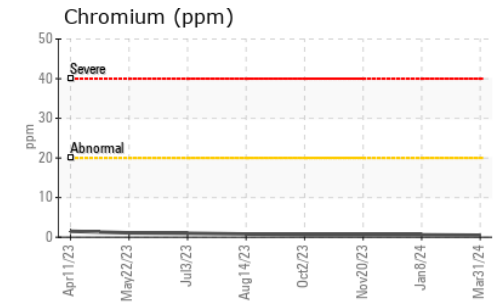
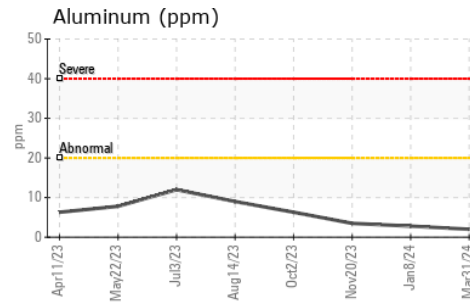
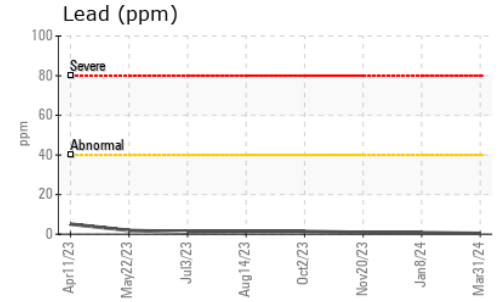
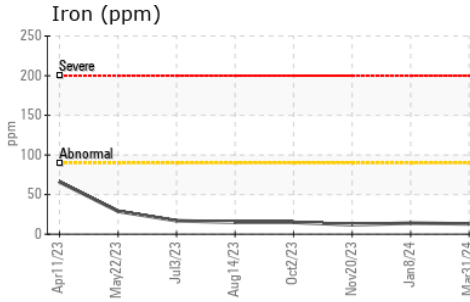
VISUAL

method	limit/base	current	history1	history2
scalar	Visual*	>0.2	NEG	NEG
scalar	Visual*	NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	12.00	11.4	11.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893698
Lab Number : 02625503
Unique Number : 5750622
Test Package : MOB 1
Received : 01 Apr 2024
Tested : 01 Apr 2024
Diagnosed : 01 Apr 2024 - Wes Davis

MANITOU LIN TRANSPORT
 161 MAIN STREET
 THUNDER BAY, ON
 CA P7B 6S5
 Contact: Ryan Hubbard
 rhubbard@manitoulintransport.com
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 F: (807)345-6731

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.