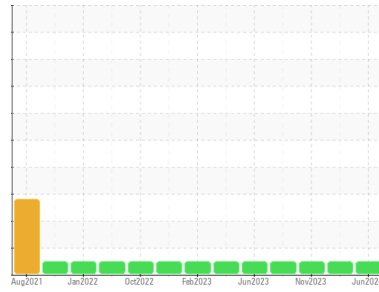




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
51000 series
 Machine Id
Navistar 51912
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 10W30 (36 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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		WC0948247	WC0805737	WC0828263
Sample Date	Client Info		11 Jun 2024	30 Jan 2024	28 Nov 2023
Machine Age	mls	Client Info	551258	484994	4552029
Oil Age	mls	Client Info	33587	29785	30152
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)	>165	24	16	12
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	6	5
Lead	ppm	ASTM D5185(m)	>150	1	<1	1
Copper	ppm	ASTM D5185(m)	>90	1	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
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)	1	1	4	2
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	1	61	59	58
Manganese	ppm	ASTM D5185(m)	1	<1	0	0
Magnesium	ppm	ASTM D5185(m)	10	995	961	951
Calcium	ppm	ASTM D5185(m)	2942	1099	1082	1030
Phosphorus	ppm	ASTM D5185(m)	1102	1017	984	940
Zinc	ppm	ASTM D5185(m)	1351	1256	1188	1186
Sulfur	ppm	ASTM D5185(m)	3903	2457	2540	2316
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

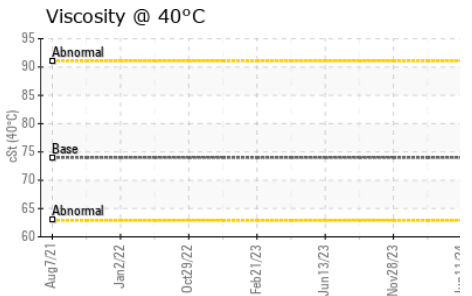
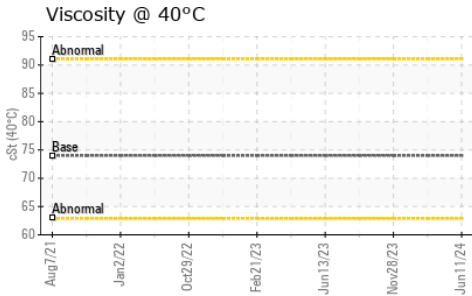
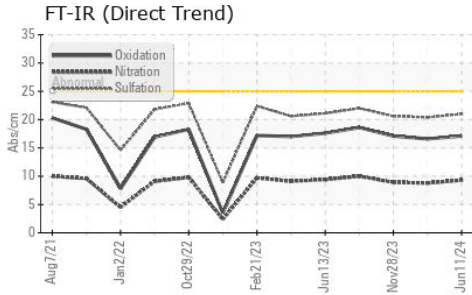
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	3	3	3
Sodium	ppm	ASTM D5185(m)		2	1	2
Potassium	ppm	ASTM D5185(m)	>20	1	3	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>7.5	0.3	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	9.3	8.8	8.9
Sulfation	Abs./1mm	ASTM D7415*	>30	21.0	20.4	20.6



OIL ANALYSIS REPORT

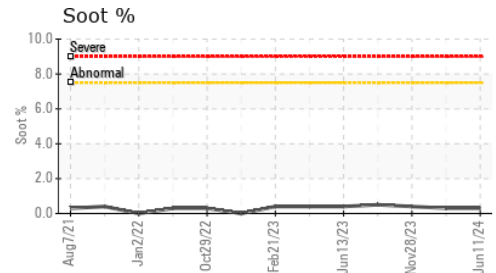
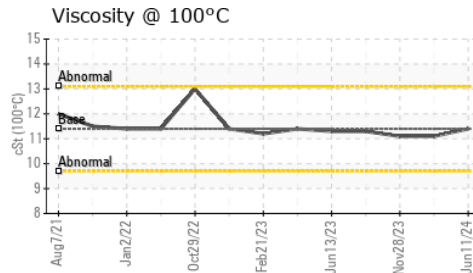
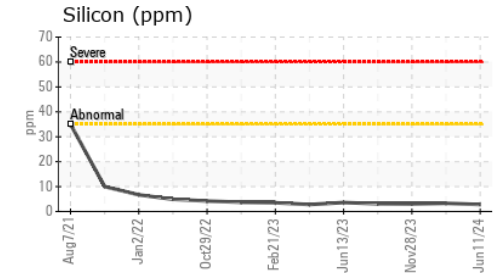
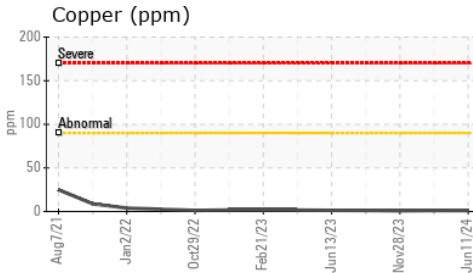
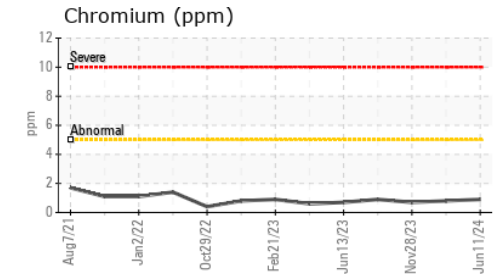
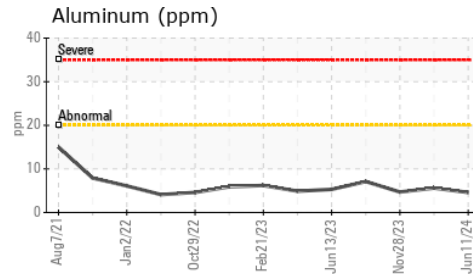
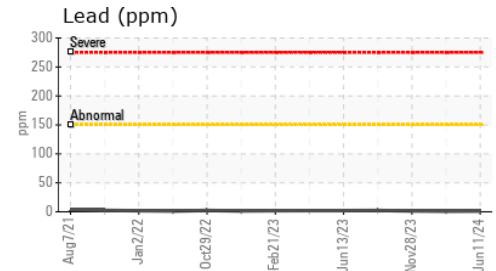
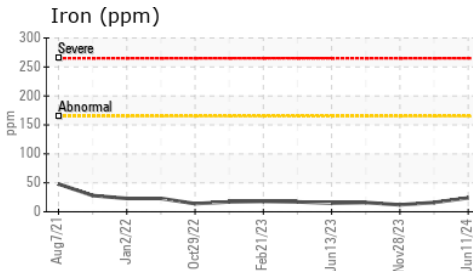


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	17.1	16.6	17.1

VISUAL	method	limit/base	current	history1	history2
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	NEG	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	74.0	75.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.4	11.1	11.1
Viscosity Index (VI)	Scale	ASTM D2270*	146	142	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0948247
Lab Number : 02642469
Unique Number : 5800008
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

MANITOULIN TRANSPORT (GARAGE)
 1335 SHAWSON DRIVE
 MISSISSAUGA, ON
 CA L4W 1C4
 Contact: Travis Spence
 tspence@manitoulintransport.com

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.

T:
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