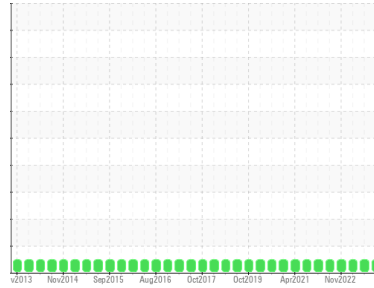




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
52000 series
 Machine Id
Navistar 52573
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W30 (40 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

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0817323	WC0837236	WC0785997
Sample Date	Client Info			26 Nov 2023	09 Aug 2023	01 Apr 2023
Machine Age	mls Client Info			706217	685683	663548
Oil Age	mls Client Info			20533	22135	645400
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	33	50	51
Chromium	ppm	ASTM D5185(m)	>5	<1	2	1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	1	2
Lead	ppm	ASTM D5185(m)	>150	3	3	3
Copper	ppm	ASTM D5185(m)	>90	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	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

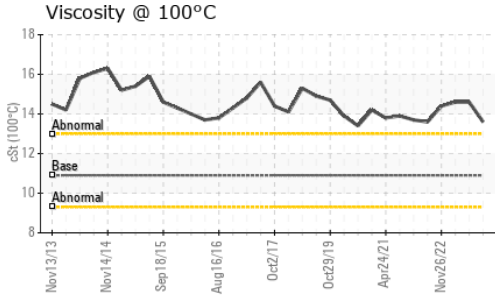
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	2	4	6
Barium	ppm	ASTM D5185(m)	10	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	100	67	75	74
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	1084	1224	1183
Calcium	ppm	ASTM D5185(m)	3000	1201	1298	1375
Phosphorus	ppm	ASTM D5185(m)	1150	1107	1295	1308
Zinc	ppm	ASTM D5185(m)	1350	1346	1463	1460
Sulfur	ppm	ASTM D5185(m)	4250	2610	2700	2787
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>35	3	5	5
Sodium	ppm	ASTM D5185(m)		2	2	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>7.5	0.5	0.7	0.3
Nitration	Abs/cm	ASTM D7624*	>20	12.0	14.0	10.8
Sulfation	Abs./1mm	ASTM D7415*	>30	25.8	30.1	27.7

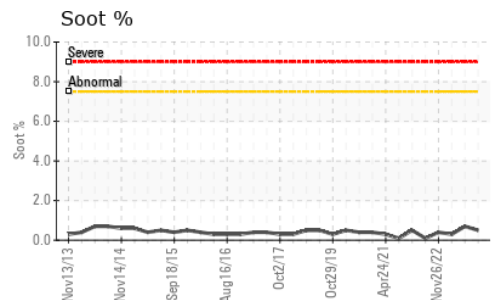
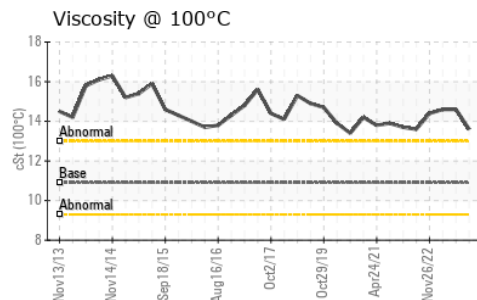
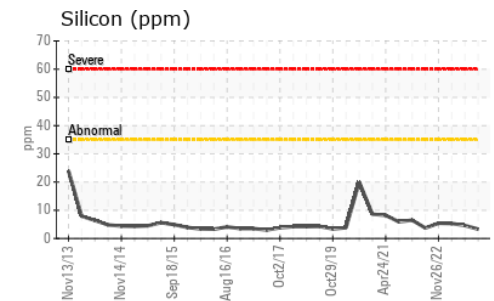
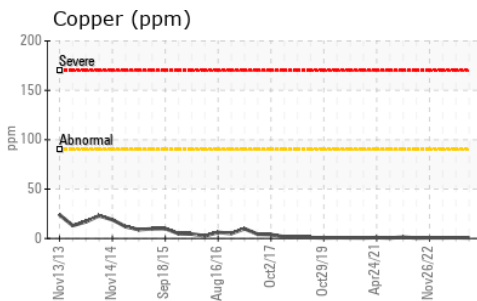
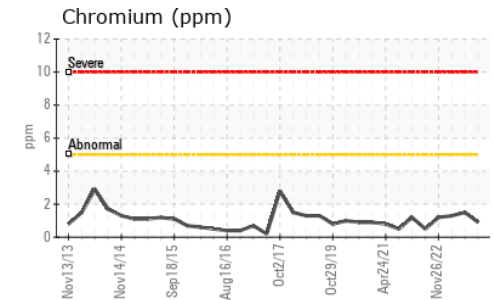
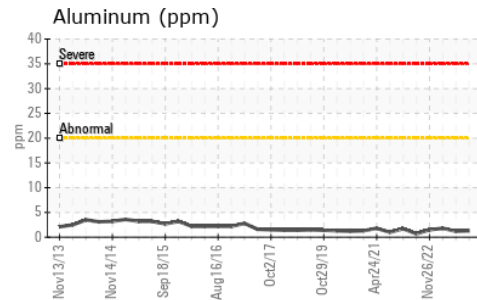
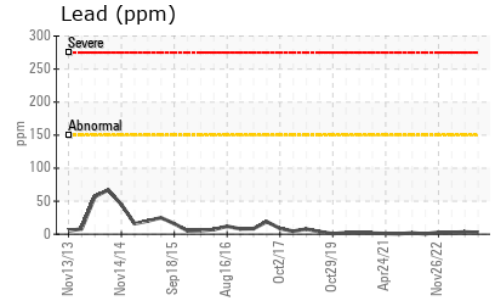
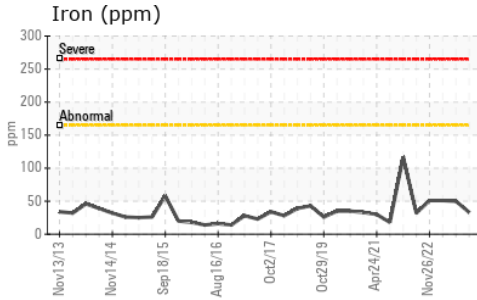


OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	24.2	28.3	21.1
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	13.6	14.6	14.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0817323 **Received** : 05 Dec 2023 1335 SHAWSON DRIVE
Lab Number : 02600884 **Diagnosed** : 06 Dec 2023 MISSISSAUGA, ON
Unique Number : 5693969 **Diagnostician** : Kevin Marson CA L4W 1C4
Test Package : MOB 1

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.

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 F: (905)564-6361