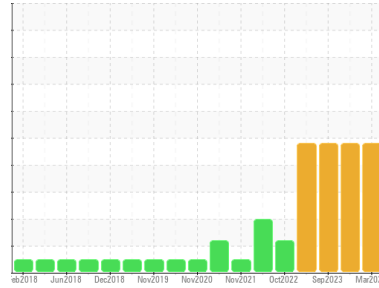




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area
3000 Series
 Machine Id
Navistar 3256

Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (26 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a light concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0899674	WC0864541	WC0837225
Sample Date	Client Info		07 Mar 2024	09 Nov 2023	04 Sep 2023
Machine Age	mls	Client Info	340311	319847	319747
Oil Age	mls	Client Info	20464	6726	18455
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	57	19	47
Chromium	ppm	ASTM D5185(m)	>5	2	<1	2
Nickel	ppm	ASTM D5185(m)	>4	2	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	10	4	7
Lead	ppm	ASTM D5185(m)	>25	0	0	0
Copper	ppm	ASTM D5185(m)	>100	2	1	4
Tin	ppm	ASTM D5185(m)	>4	<1	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)	250	1	2	1
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	71	63	69
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	450	974	968	1014
Calcium	ppm	ASTM D5185(m)	3000	1097	1013	1092
Phosphorus	ppm	ASTM D5185(m)	1150	961	1020	1060
Zinc	ppm	ASTM D5185(m)	1350	1239	1195	1268
Sulfur	ppm	ASTM D5185(m)	4250	2585	2510	2516
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	7	4	8
Sodium	ppm	ASTM D5185(m)		68	23	57
Potassium	ppm	ASTM D5185(m)	>20	110	38	94
Glycol	%	ASTM D7922*		0.028	0.012	0.017

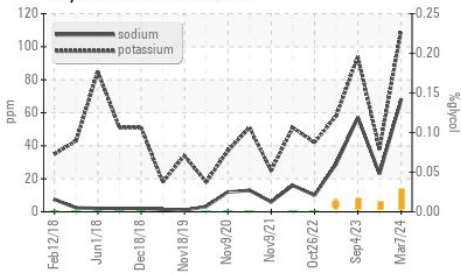
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0.7	0.2	0.6
Nitration	Abs/cm	ASTM D7624*	>20	13.5	8.3	12.4
Sulfation	Abs.1mm	ASTM D7415*	>30	23.9	19.8	22.5



OIL ANALYSIS REPORT

▲ Glycol Contamination



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Abs./1mm	ASTM D7414*	>25	21.6	15.7	20.3

VISUAL

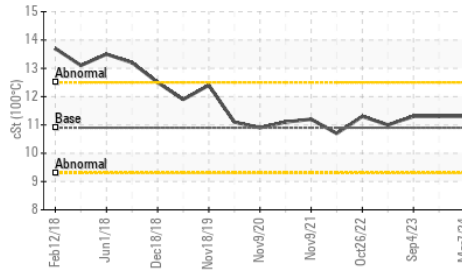
method	limit/base	current	history1	history2	
scalar	Visual*	>0.2	NEG	NEG	NEG
scalar	Visual*	NEG	NEG	NEG	

FLUID PROPERTIES

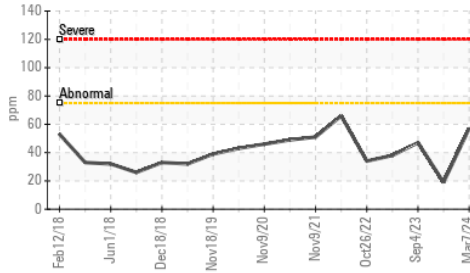
method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	10.9	11.3	11.3

GRAPHS

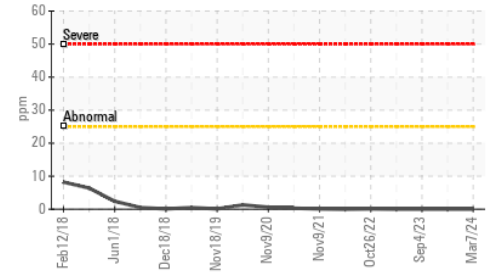
Viscosity @ 100°C



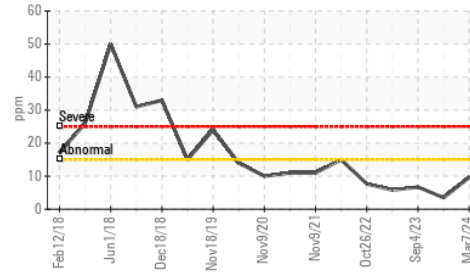
Iron (ppm)



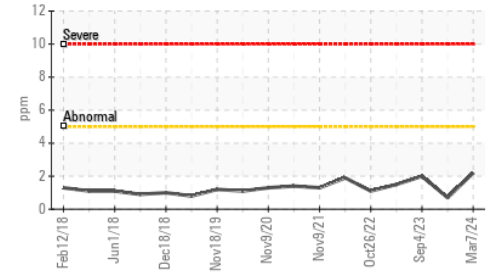
Lead (ppm)



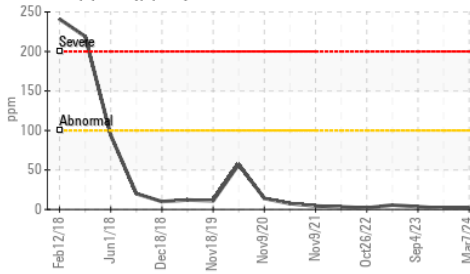
Aluminum (ppm)



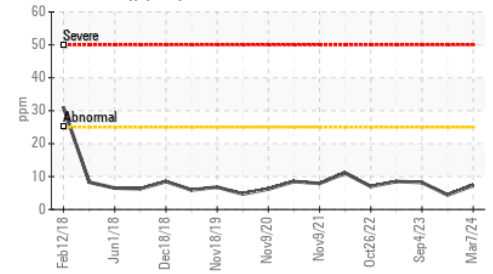
Chromium (ppm)



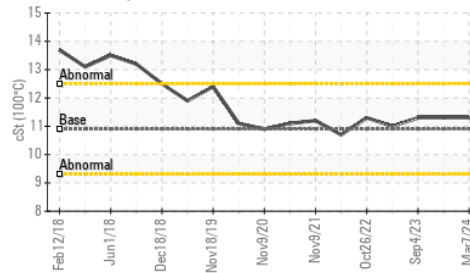
Copper (ppm)



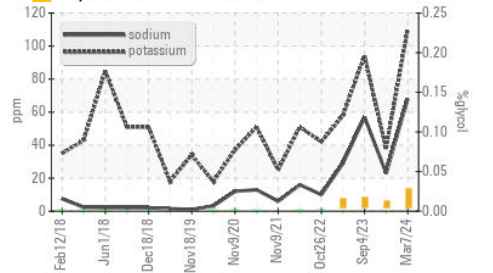
Silicon (ppm)



Viscosity @ 100°C



▲ Glycol Contamination



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899674
Lab Number : 02621692
Unique Number : 5746811
Test Package : MOB 1 (Additional Tests: Glycol)

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

Received : 13 Mar 2024
Tested : 13 Mar 2024
Diagnosed : 13 Mar 2024 - Wes Davis

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:
F: (905)564-6361