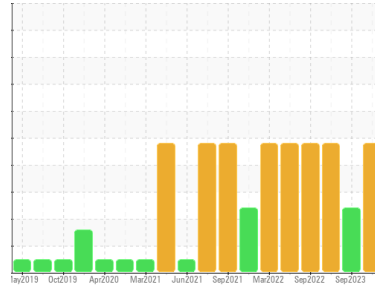




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area
52000 series
 Machine Id
Navistar 52825

Component
Diesel Engine
 Fluid

DIESEL ENGINE OIL SAE 10W30 (40 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		WC0864507	WC0848032	WC0753920
Sample Date	Client Info		07 Oct 2023	18 Sep 2023	26 Nov 2022
Machine Age	kms	Client Info	455612	450833	400755
Oil Age	kms	Client Info	26045	21266	21530
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	30	29	26
Chromium	ppm	ASTM D5185(m)	>20	1	1	2
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	4	3	4
Lead	ppm	ASTM D5185(m)	>40	6	8	2
Copper	ppm	ASTM D5185(m)	>330	3	4	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
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	1	2
Barium	ppm	ASTM D5185(m)	10	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	152	167	112
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)	450	933	893	957
Calcium	ppm	ASTM D5185(m)	3000	1017	999	1147
Phosphorus	ppm	ASTM D5185(m)	1150	944	893	1059
Zinc	ppm	ASTM D5185(m)	1350	1189	1147	1225
Sulfur	ppm	ASTM D5185(m)	4250	2578	2505	2672
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	15	17	12
Sodium	ppm	ASTM D5185(m)		▲ 1089	▲ 1192	▲ 363
Potassium	ppm	ASTM D5185(m)	>20	▲ 197	▲ 248	▲ 158
Glycol	%	ASTM D7922*		▲ 0.018	0.0	▲ 0.02

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	1.6	1
Nitration	Abs/cm	ASTM D7624*	>20	2.9	13.3	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	12.1	23.5	23.1

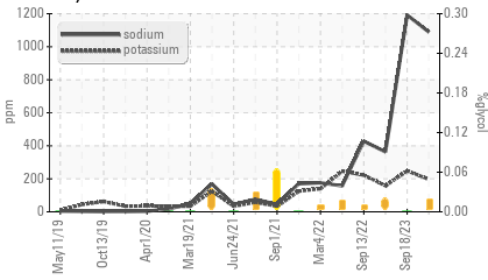
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	4.3	16.9	16.5

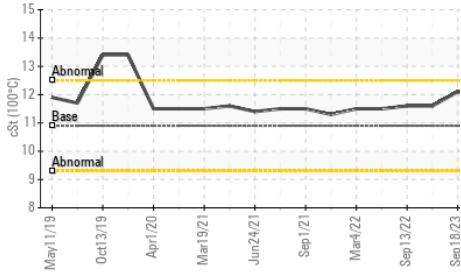


OIL ANALYSIS REPORT

▲ Glycol Contamination



Viscosity @ 100°C

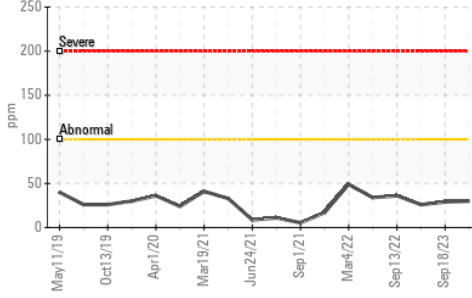


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

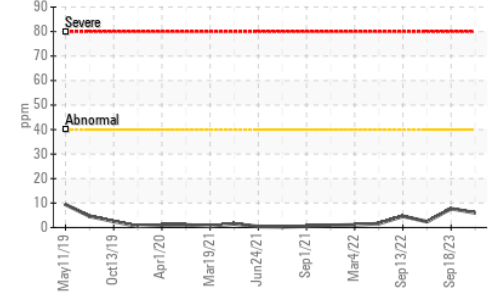
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	12.1	11.6

GRAPHS

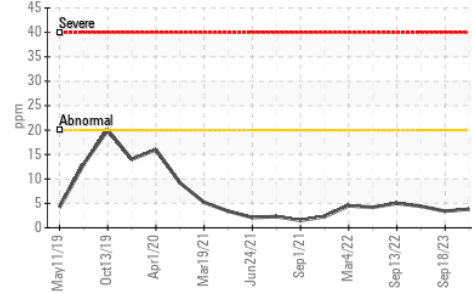
Iron (ppm)



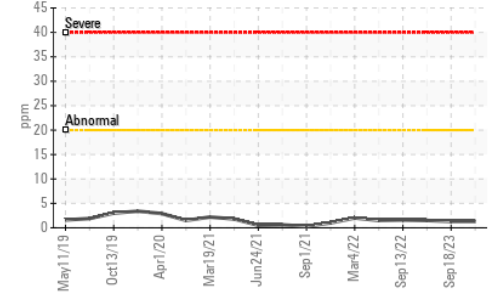
Lead (ppm)



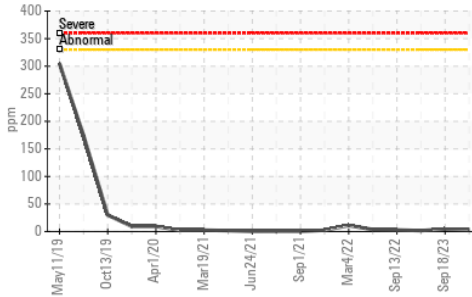
Aluminum (ppm)



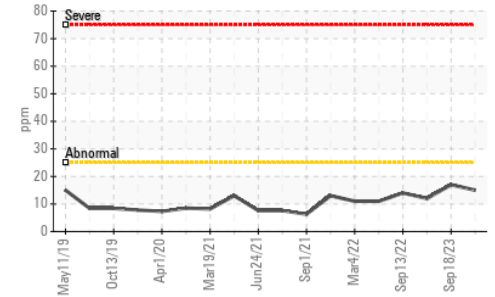
Chromium (ppm)



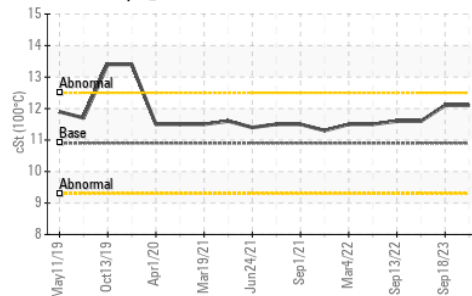
Copper (ppm)



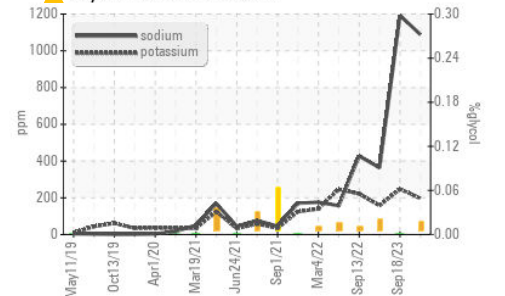
Silicon (ppm)



Viscosity @ 100°C



▲ Glycol Contamination



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0864507 **Received** : 11 Oct 2023 1335 SHAWSON DRIVE
Lab Number : 02588154 **Diagnosed** : 11 Oct 2023 MISSISSAUGA, ON
Unique Number : 5657220 **Diagnostician** : Wes Davis CA L4W 1C4
Test Package : MOB 1 (Additional Tests: Glycol) Contact: Travis Spence

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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