



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
4000 Series
 Machine Id
Navistar 4278M
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (16 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915483	WC0879066	WC0794949
Sample Date		Client Info		19 Apr 2024	11 Dec 2023	14 Apr 2023
Machine Age	kms	Client Info		241533	381408	220723
Oil Age	kms	Client Info		4538	0	9192
Filter Age	kms	Client Info		4538	0	9192
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	43	21	24
Chromium	ppm	ASTM D5185(m)	>10	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	16	8	13
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>125	1	<1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

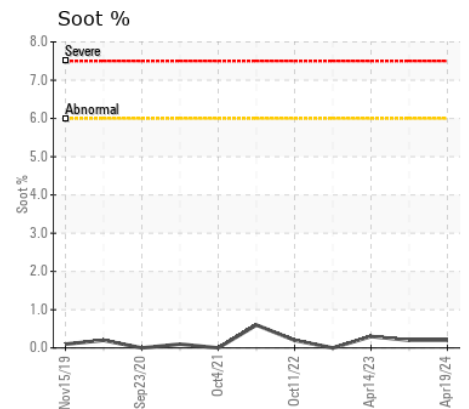
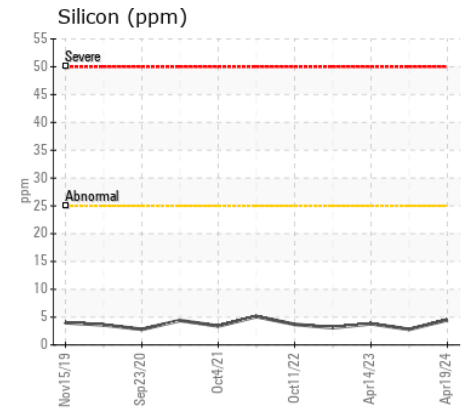
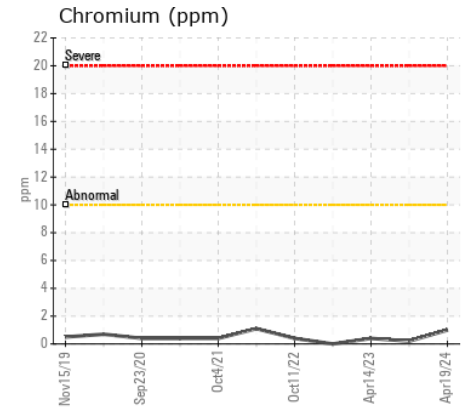
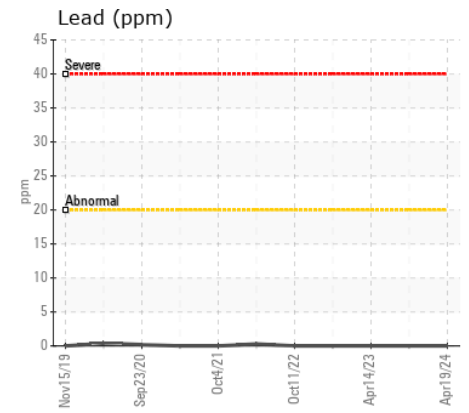
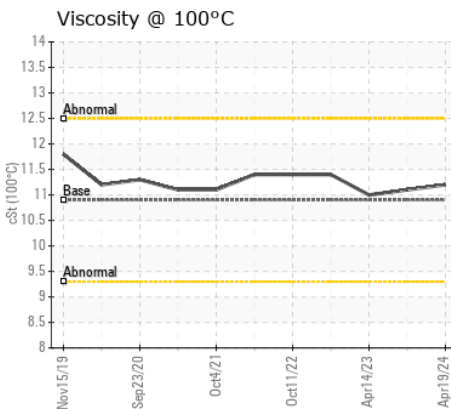
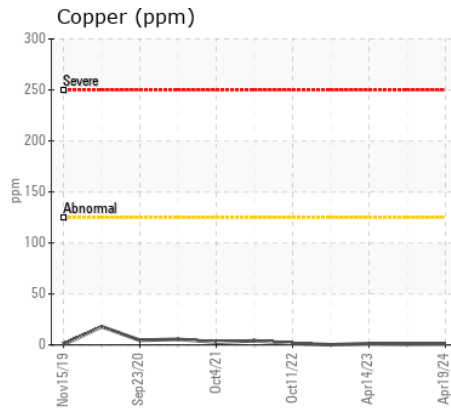
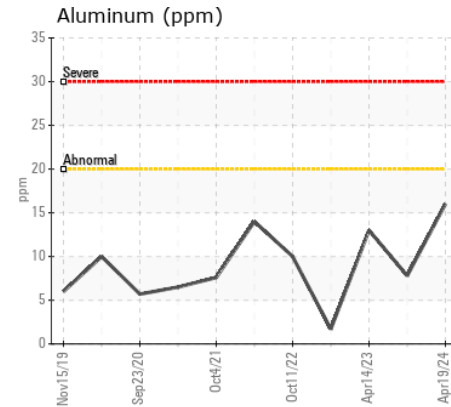
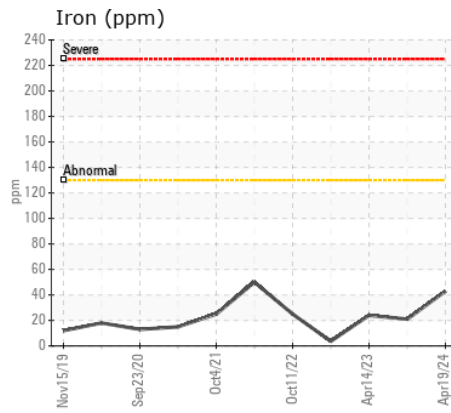
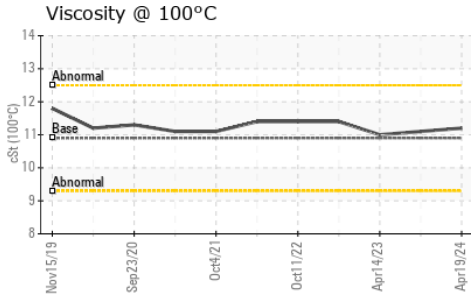
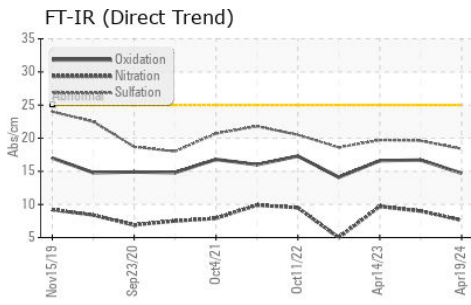
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	3	4
Potassium	ppm	ASTM D5185(m)	>20	3	2	4
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
Soot %	%	ASTM D7844*	>6	0.2	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	7.6	9.0	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4	19.6	19.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	3	3
Boron	ppm	ASTM D5185(m)	250	9	5	5
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	60	61	59
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	450	959	973	937
Calcium	ppm	ASTM D5185(m)	3000	1071	1080	1121
Phosphorus	ppm	ASTM D5185(m)	1150	1028	1013	1073
Zinc	ppm	ASTM D5185(m)	1350	1206	1208	1196
Sulfur	ppm	ASTM D5185(m)	4250	2581	2576	2616
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	16.7	16.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.2	11.1	11.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915483
Lab Number : 02632265
Unique Number : 5773418
Test Package : MOB 1

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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.