



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**4900 series**  
 Machine Id  
**Navistar 4945**  
 Component  
**Diesel Engine**  
 Fluid  
**SAE 10W40 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0935015</b>	WC0864017	WC0813097
Sample Date		Client Info		<b>04 Jul 2024</b>	21 Oct 2023	15 May 2023
Machine Age	mls	Client Info		<b>30000</b>	222881	0
Oil Age	mls	Client Info		<b>30000</b>	9264	8984
Filter Age	mls	Client Info		<b>30000</b>	9264	8984
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>19</b>	16	17
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	5	1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

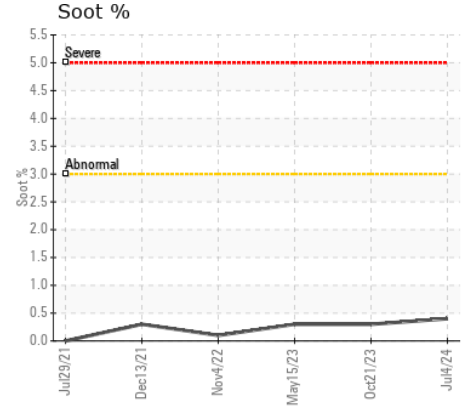
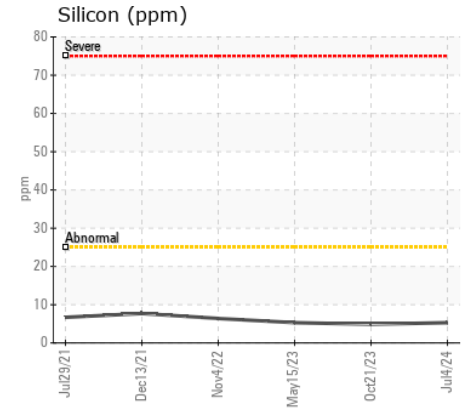
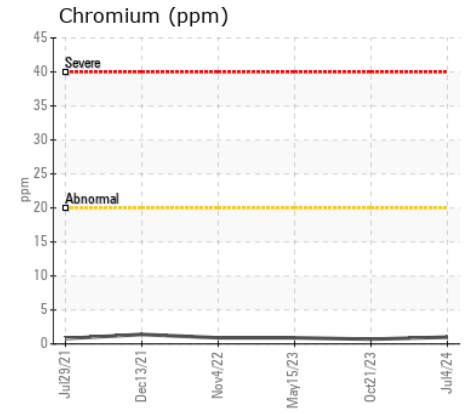
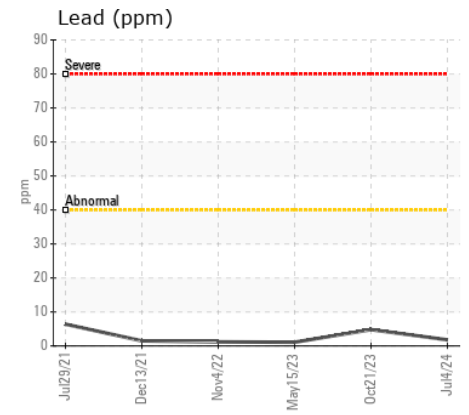
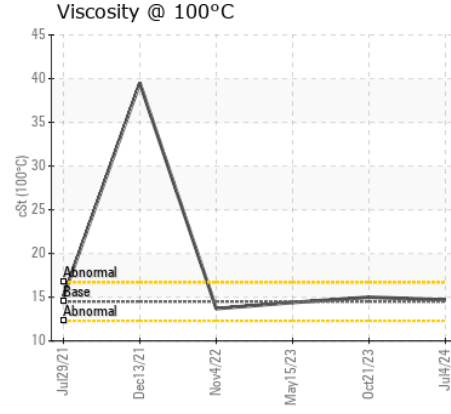
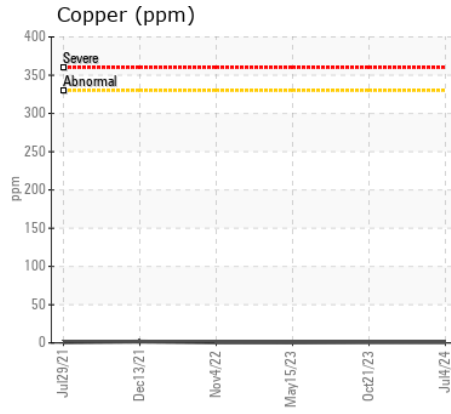
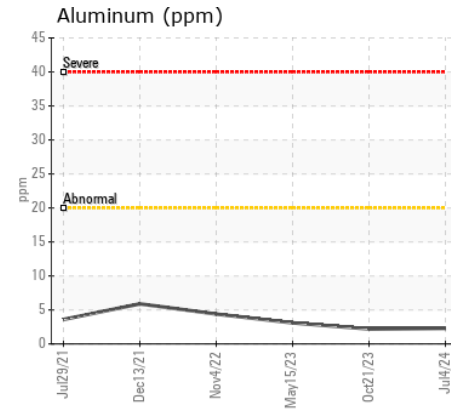
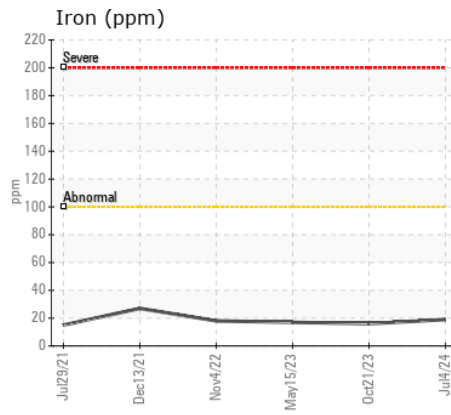
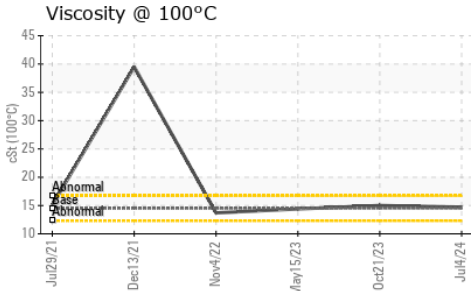
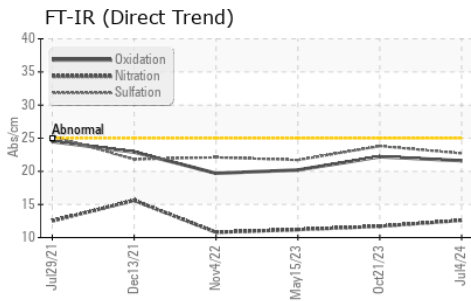
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	5	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.6</b>	11.7	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.7</b>	23.8	21.7
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>401	<b>2</b>	3	2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>63</b>	65	63
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>1019</b>	1061	1033
Calcium	ppm	ASTM D5185(m)		<b>1108</b>	1134	1162
Phosphorus	ppm	ASTM D5185(m)		<b>1013</b>	1086	1147
Zinc	ppm	ASTM D5185(m)		<b>1215</b>	1299	1254
Sulfur	ppm	ASTM D5185(m)		<b>2575</b>	2657	2700
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.6</b>	22.2	20.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>14.7</b>	15.0	14.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0935015 **Received** : 05 Jul 2024  
**Lab Number** : 02645785 **Tested** : 05 Jul 2024  
**Unique Number** : 5803324 **Diagnosed** : 05 Jul 2024 - Wes Davis  
**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.