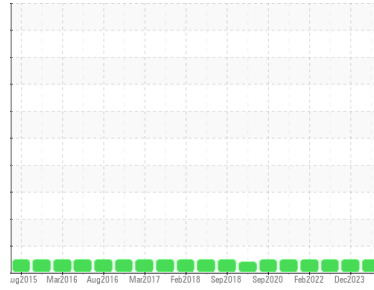




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**52000 series**  
 Machine Id  
**Navistar 52652**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (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

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0948303</b>	WC0864527	WC0771261
Sample Date	Client Info		<b>02 Jun 2024</b>	09 Dec 2023	22 Jan 2023
Machine Age	mls	Client Info	<b>462238</b>	436128	407981
Oil Age	mls	Client Info	<b>26110</b>	28227	27001
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>165	<b>31</b>	35	28
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	2	2
Lead	ppm	ASTM D5185(m)	>150	<b>3</b>	4	4
Copper	ppm	ASTM D5185(m)	>90	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	2	<b>2</b>	1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>63</b>	65	63
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1022</b>	1031	1022
Calcium	ppm	ASTM D5185(m)	1050	<b>1094</b>	1134	1188
Phosphorus	ppm	ASTM D5185(m)	995	<b>1040</b>	1058	1136
Zinc	ppm	ASTM D5185(m)	1180	<b>1255</b>	1290	1307
Sulfur	ppm	ASTM D5185(m)	2600	<b>2489</b>	2529	2587
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

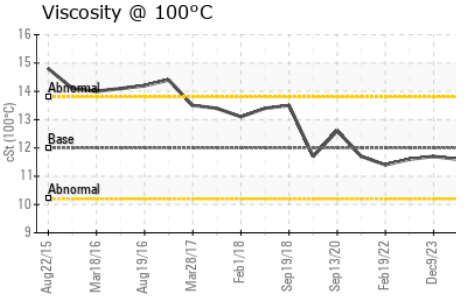
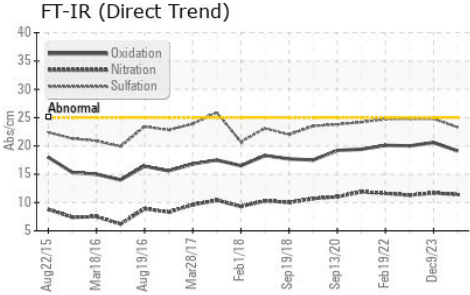
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	<b>3</b>	4	4
Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>7.5	<b>0.9</b>	1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.4</b>	11.7	11.3
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>23.3</b>	24.8	24.8



# OIL ANALYSIS REPORT

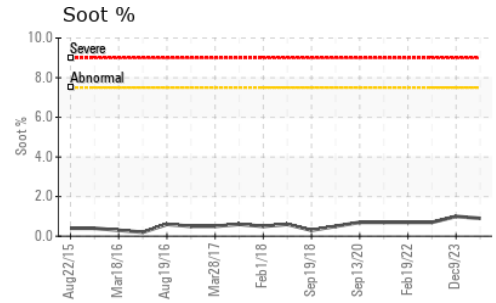
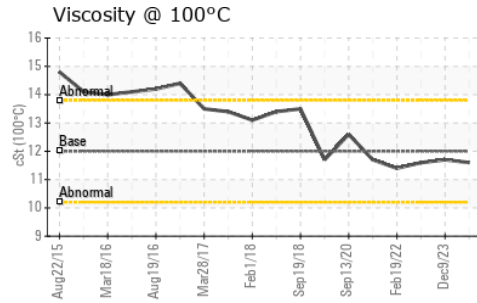
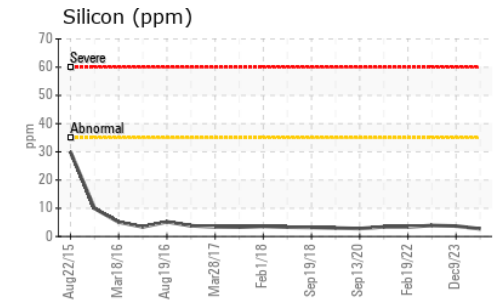
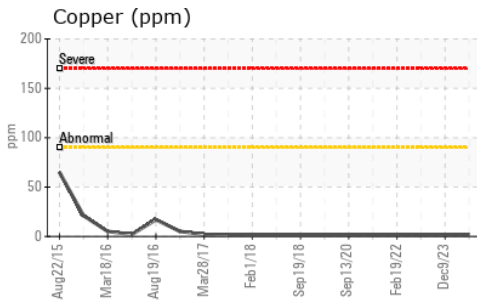
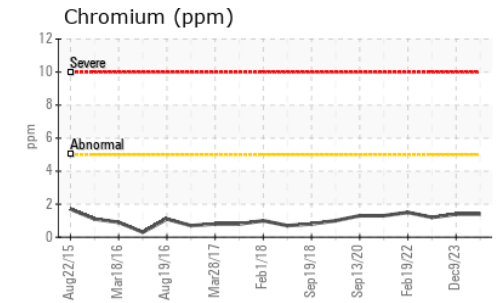
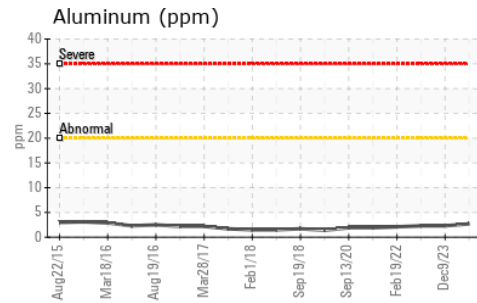
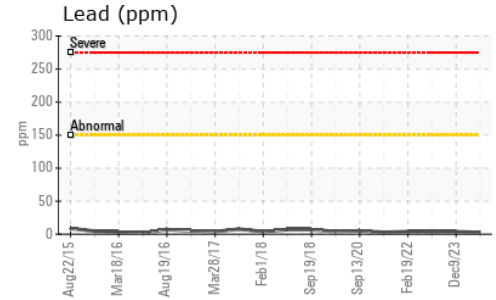
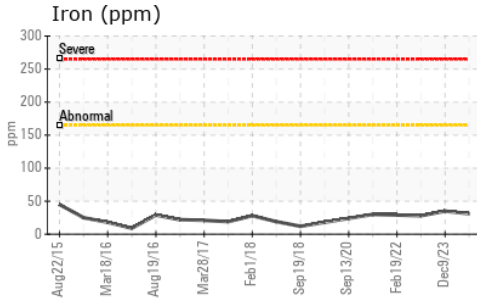


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.1</b>	20.6	20.0

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.6</b>	11.7	11.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0948303  
**Lab Number** : **02641035**  
**Unique Number** : 5798574  
**Test Package** : MOB 1

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

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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