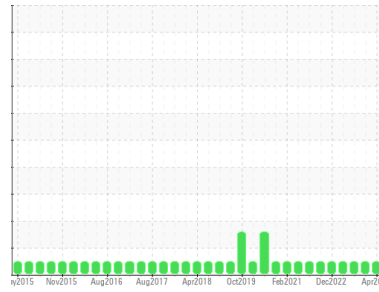




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**52000 series**  
 Machine Id  
**Navistar 52642**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (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>WC0915077</b>	WC0864524	WC0817352
Sample Date	Client Info		<b>11 Apr 2024</b>	13 Oct 2023	09 Jun 2023
Machine Age	mls	Client Info	<b>646616</b>	627715	606036
Oil Age	mls	Client Info	<b>18900</b>	21679	22057
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)	>90	<b>34</b>	27	33
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	3	4
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<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)	0	<b>3</b>	3	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>78</b>	78	81
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1276</b>	1244	1310
Calcium	ppm	ASTM D5185(m)	1070	<b>1425</b>	1316	1391
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1265</b>	1280	1399
Zinc	ppm	ASTM D5185(m)	1270	<b>1534</b>	1533	1554
Sulfur	ppm	ASTM D5185(m)	2060	<b>2724</b>	2769	2772
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

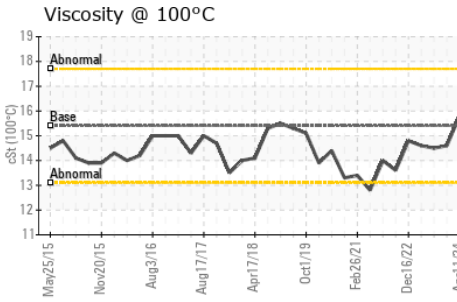
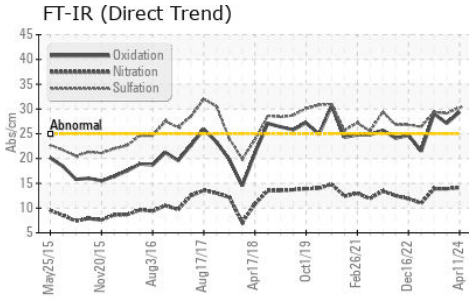
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	6
Sodium	ppm	ASTM D5185(m)		<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	2

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.8</b>	0.6	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>14.1</b>	13.9	13.9
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>30.3</b>	29.1	29.4



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2
Abs./1mm	ASTM D7414*	>25	27.1	29.0

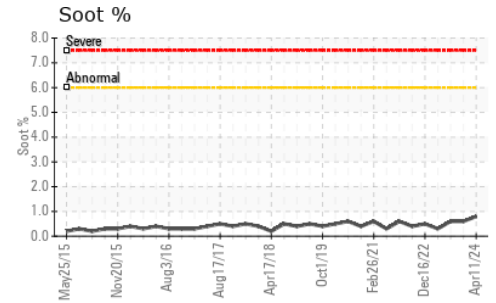
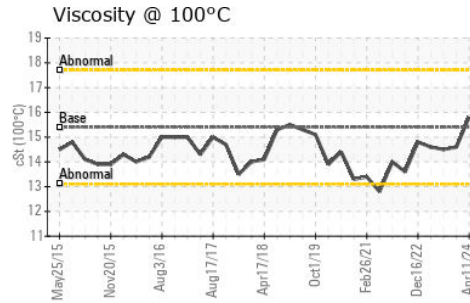
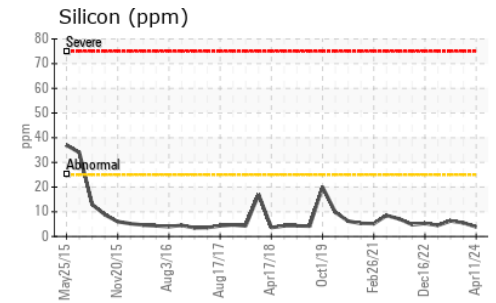
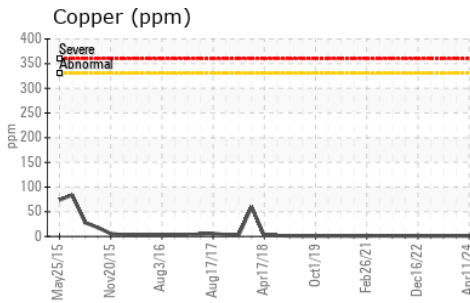
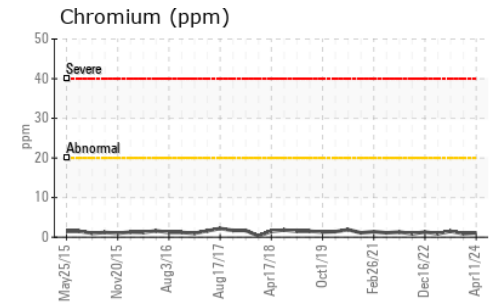
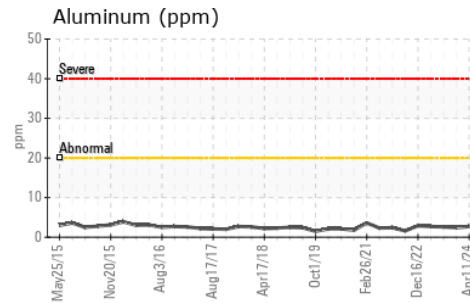
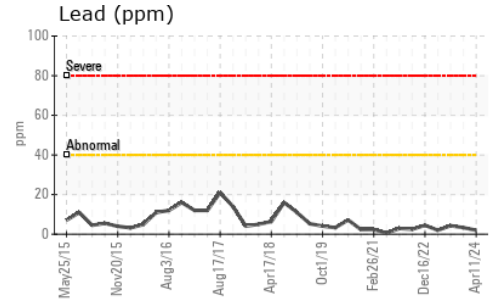
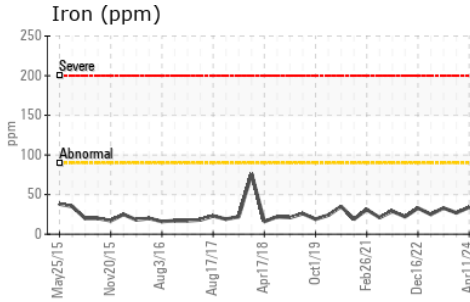
## VISUAL

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

## FLUID PROPERTIES

method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	15.4	14.6	14.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915077  
**Lab Number** : 02629573  
**Unique Number** : 5762705  
**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.

T: (905)564-6361