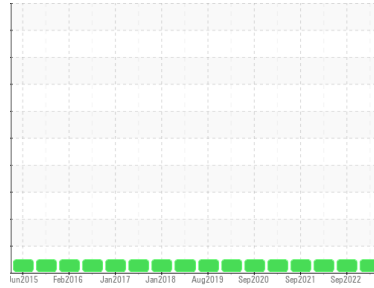




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**52000 series**  
 Machine Id  
**Navistar 52628**  
 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>WC0864526</b>	WC0738208	WC0671290
Sample Date	Client Info		<b>07 Jan 2024</b>	15 Sep 2022	20 Mar 2022
Machine Age	mls	Client Info	<b>354263</b>	305920	283296
Oil Age	mls	Client Info	<b>15215</b>	22624	18863
Oil Changed	Client Info		<b>Changed</b>	N/A	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>24</b>	34	32
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	6	4
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
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	7
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>71</b>	75	72
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1172</b>	1219	1182
Calcium	ppm	ASTM D5185(m)	1070	<b>1298</b>	1401	1286
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1223</b>	1357	1270
Zinc	ppm	ASTM D5185(m)	1270	<b>1443</b>	1528	1469
Sulfur	ppm	ASTM D5185(m)	2060	<b>2794</b>	2772	2692
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

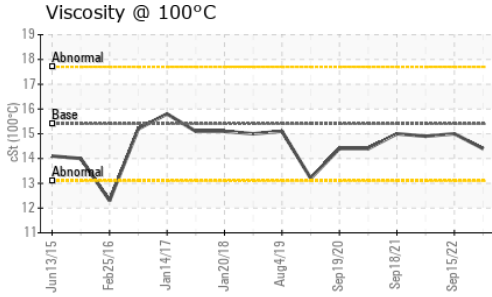
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	5	4
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.5</b>	0.2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.8</b>	8.7	14.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>28.2</b>	22.8	29.9



# OIL ANALYSIS REPORT

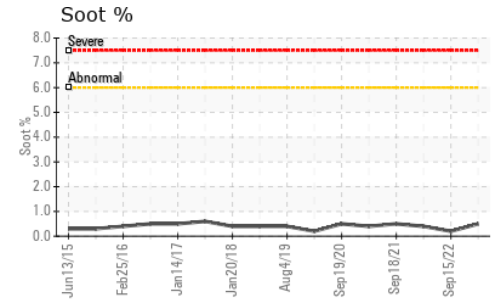
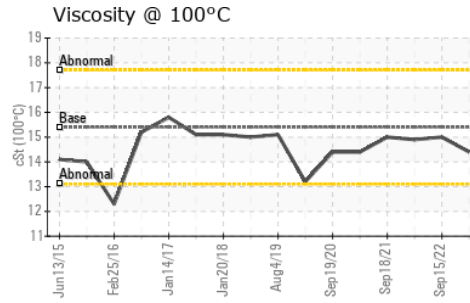
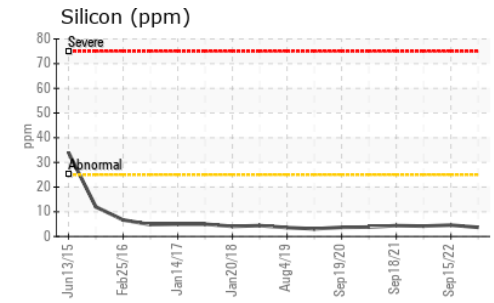
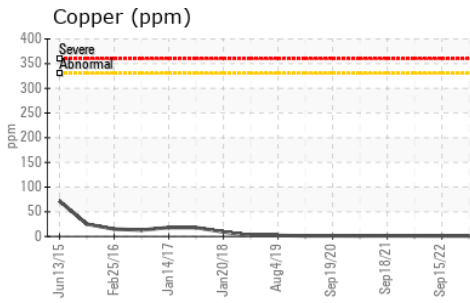
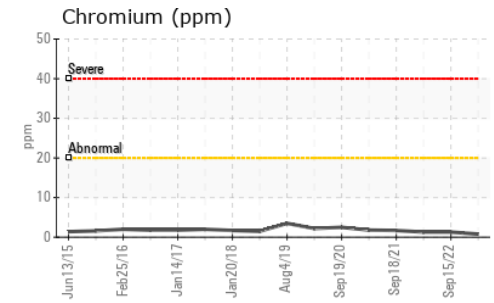
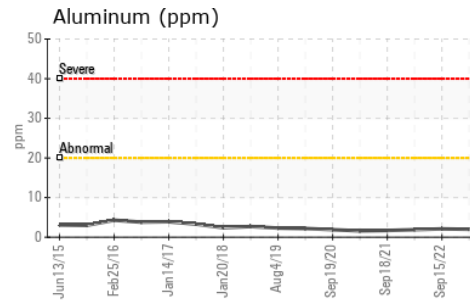
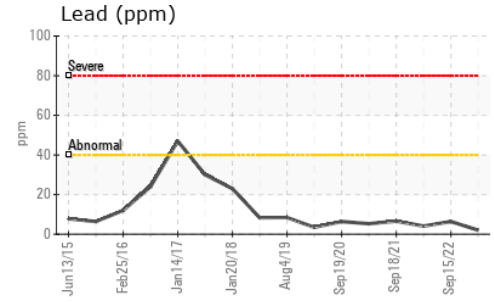
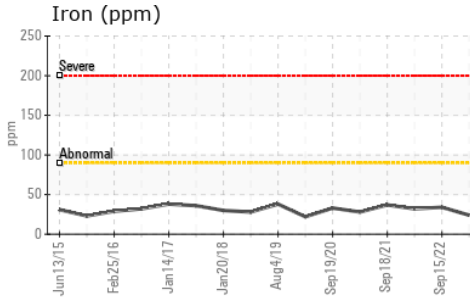


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>28.5</b>	16.9	29.0

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)	15.4	<b>14.4</b>	15.0	14.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0864526 **Received** : 09 Jan 2024 1335 SHAWSON DRIVE  
**Lab Number** : **02607441** **Diagnosed** : 09 Jan 2024 MISSISSAUGA, ON  
**Unique Number** : 5708527 **Diagnostician** : Kevin Marson CA L4W 1C4  
**Test Package** : MOB 1

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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