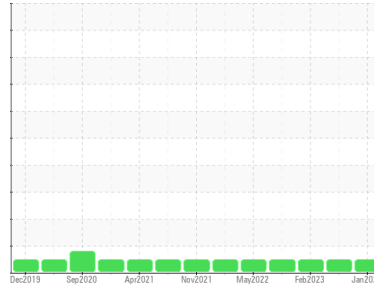




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**3000 Series**  
 Machine Id  
**Navistar 3822T**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (26 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>WC0886651</b>	WC0817394	WC0771272
Sample Date	Client Info		<b>20 Jan 2024</b>	13 May 2023	05 Feb 2023
Machine Age	mls	Client Info	<b>304759</b>	265609	245418
Oil Age	mls	Client Info	<b>19163</b>	20186	20389
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	0.0

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	<b>34</b>	37	48
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>8</b>	8	16
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>100	<b>2</b>	4	13
Tin	ppm	ASTM D5185(m)	>4	<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)	2	<b>1</b>	2	1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>61</b>	61	65
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>966</b>	983	1050
Calcium	ppm	ASTM D5185(m)	1050	<b>1098</b>	1106	1210
Phosphorus	ppm	ASTM D5185(m)	995	<b>945</b>	1034	1107
Zinc	ppm	ASTM D5185(m)	1180	<b>1201</b>	1210	1324
Sulfur	ppm	ASTM D5185(m)	2600	<b>2617</b>	2408	2595
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

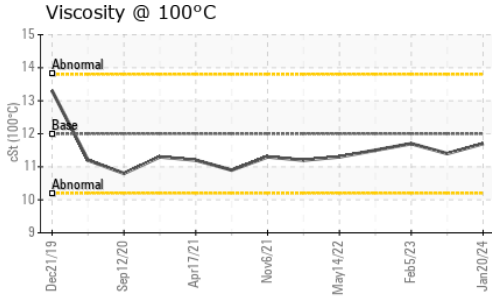
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	9	6
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	4
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	2	8

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.6</b>	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.5</b>	11.2	12.8
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>23.2</b>	22.0	23.8

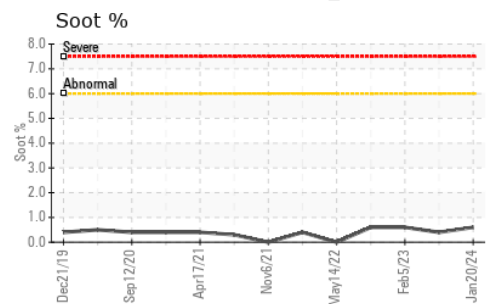
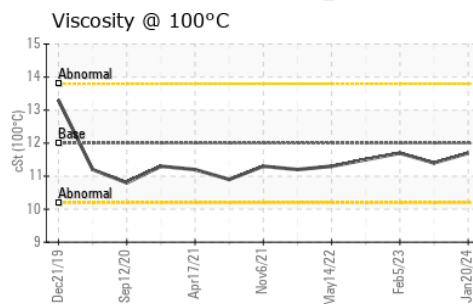
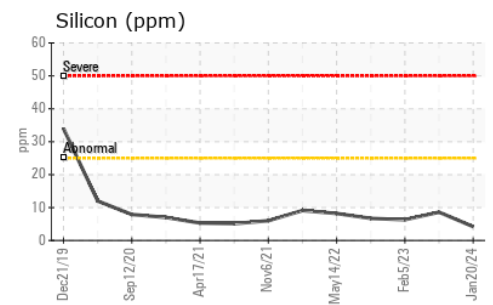
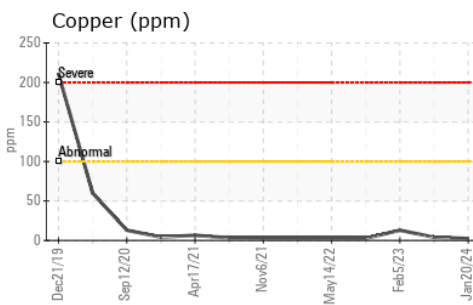
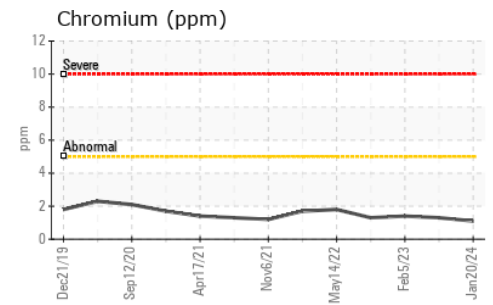
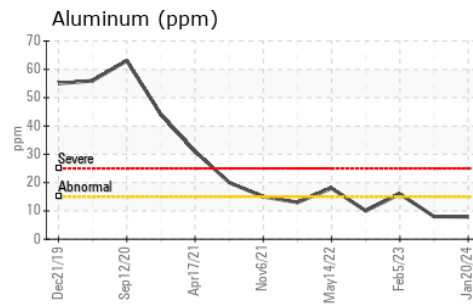
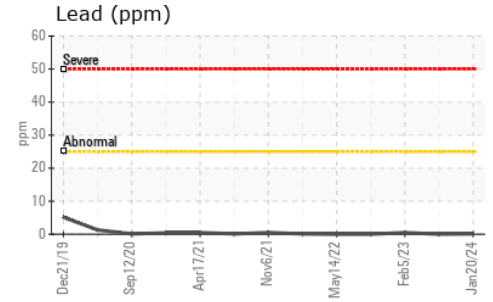
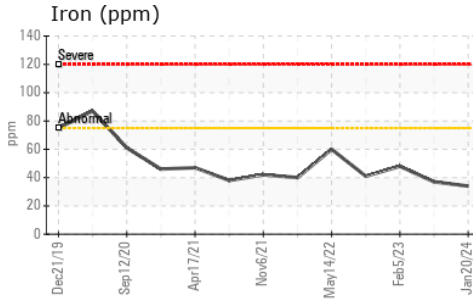


# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>21.2</b>	20.3	19.9
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>11.7</b>	11.4	11.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0886651 **Received** : 23 Jan 2024 1335 SHAWSON DRIVE  
**Lab Number** : **02610518** **Diagnosed** : 23 Jan 2024 MISSISSAUGA, ON  
**Unique Number** : 5711604 **Diagnostician** : Wes Davis 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.

Contact: Travis Spence  
tspence@manitoulintransport.com

T:  
F: (905)564-6361