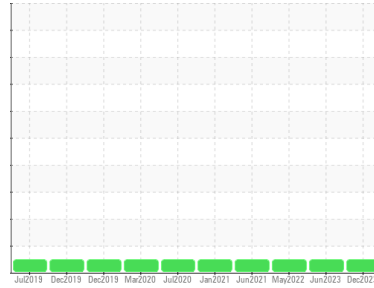




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**4000 Series**  
 Machine Id  
**Navistar 4298**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (16 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>WC0864520</b>	WC0817374	WC0694059
Sample Date	Client Info			<b>06 Dec 2023</b>	07 Jun 2023	17 May 2022
Machine Age	mls	Client Info		<b>135232</b>	124199	90366
Oil Age	mls	Client Info		<b>11033</b>	9957	10833
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>130	<b>43</b>	27	28
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;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>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>6</b>	6	11
Lead	ppm	ASTM D5185(m)	>20	<b>2</b>	0	0
Copper	ppm	ASTM D5185(m)	>125	<b>114</b>	2	2
Tin	ppm	ASTM D5185(m)	>4	<b>0</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

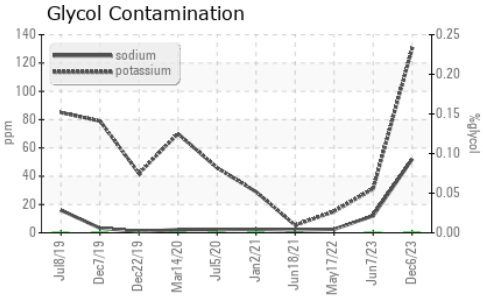
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<b>3</b>	5	5
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>71</b>	67	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>974</b>	1040	1031
Calcium	ppm	ASTM D5185(m)	1050	<b>1094</b>	1118	1099
Phosphorus	ppm	ASTM D5185(m)	995	<b>962</b>	1147	1121
Zinc	ppm	ASTM D5185(m)	1180	<b>1211</b>	1245	1274
Sulfur	ppm	ASTM D5185(m)	2600	<b>2363</b>	2557	2643
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>8</b>	6	5
Sodium	ppm	ASTM D5185(m)		<b>52</b>	12	2
Potassium	ppm	ASTM D5185(m)	>20	<b>130</b>	31	15
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.6</b>	0.5	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.4</b>	10.9	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.2</b>	21.6	21.9



# OIL ANALYSIS REPORT

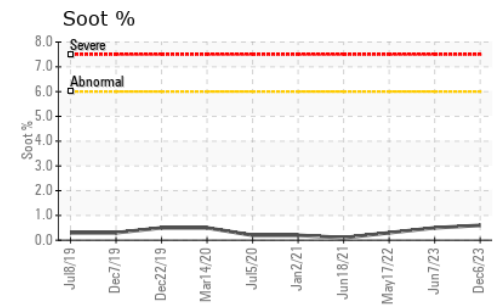
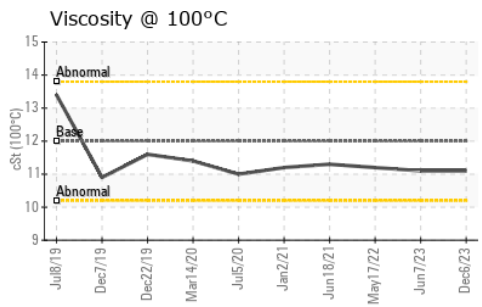
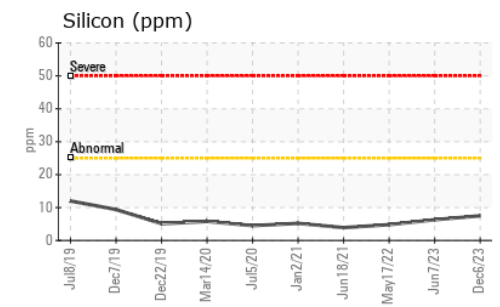
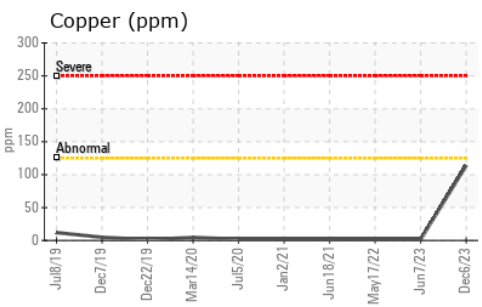
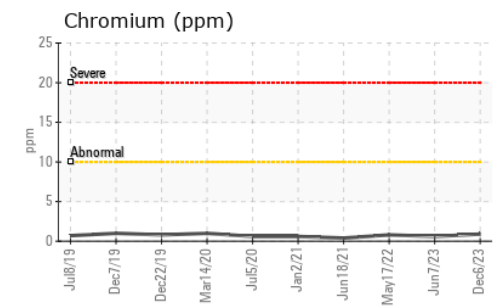
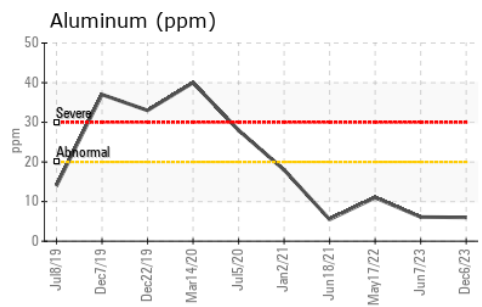
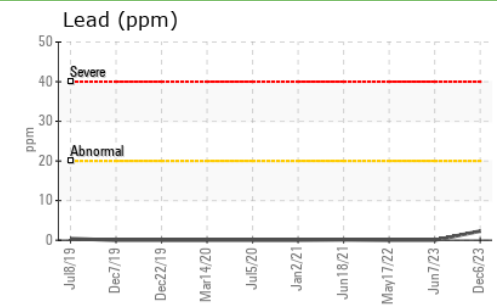
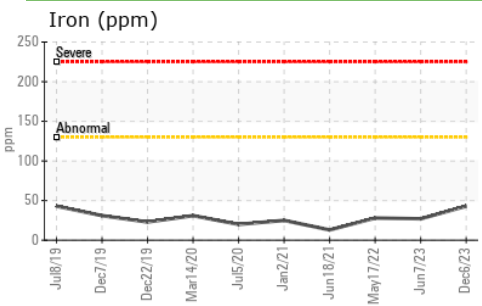
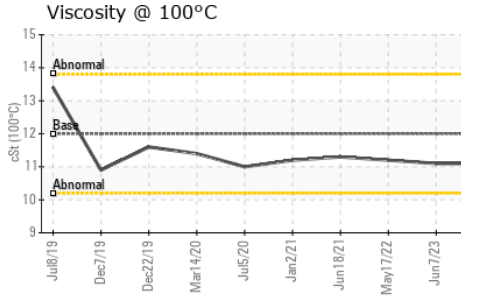


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.4</b>	19.6	17.4

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>11.1</b>	11.1	11.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0864520 **Received** : 12 Dec 2023 1335 SHAWSON DRIVE  
**Lab Number** : 02602516 **Diagnosed** : 12 Dec 2023 MISSISSAUGA, ON  
**Unique Number** : 5695601 **Diagnostician** : Wes Davis CA L4W 1C4  
**Test Package** : MOB 1 ( Additional Tests: Glycol ) Contact: Travis Spence

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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