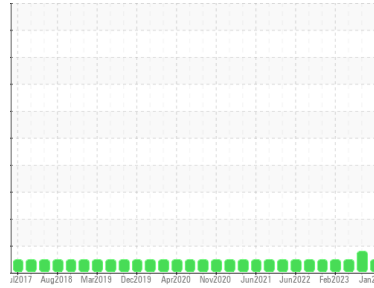




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Toronto Shunt**  
 Machine Id  
**Autocar 5008**

Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (16 LTR)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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>WC0886643</b>	WC0817336	WC0797651
Sample Date	Client Info			<b>07 Jan 2024</b>	05 Nov 2023	06 May 2023
Machine Age	hrs	Client Info		<b>25505</b>	24947	23098
Oil Age	hrs	Client Info		<b>76</b>	493	53
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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)	>130	<b>13</b>	16	10
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
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)	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>125	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	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

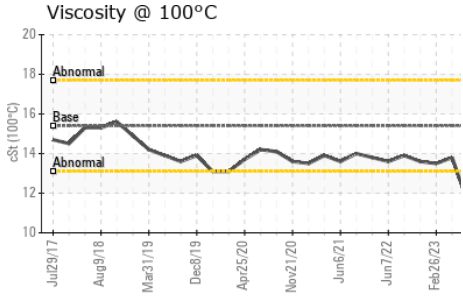
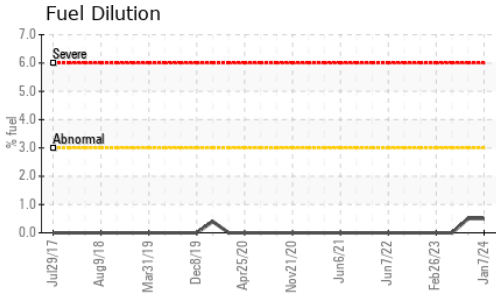
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>4</b>	2	8
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>61</b>	62	60
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>994</b>	1027	958
Calcium	ppm	ASTM D5185(m)	1070	<b>1134</b>	1084	1083
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1079</b>	1075	1069
Zinc	ppm	ASTM D5185(m)	1270	<b>1229</b>	1258	1165
Sulfur	ppm	ASTM D5185(m)	2060	<b>2820</b>	2697	2630
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>3</b>	3	2
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Fuel	%	ASTM D7593*	>3.0	<b>0.5</b>	0.5	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.7</b>	0.6	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.2</b>	6.6	5.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.0</b>	19.1	18.3



# OIL ANALYSIS REPORT

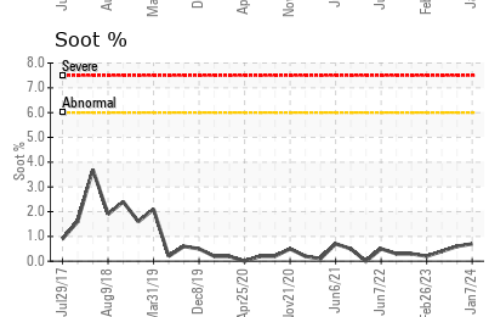
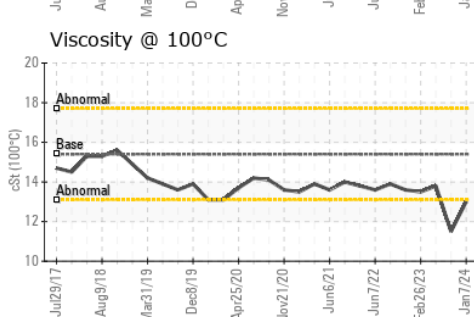
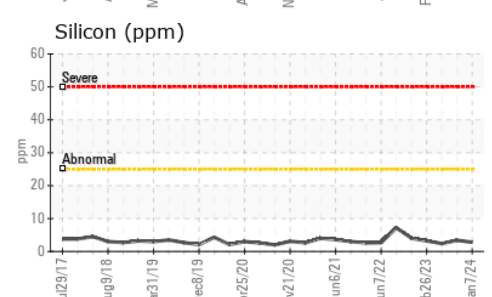
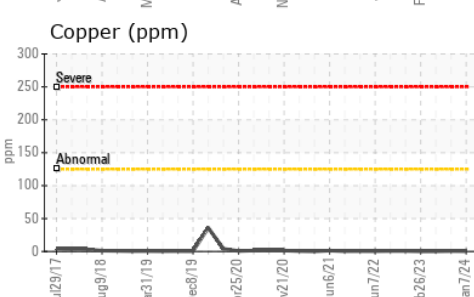
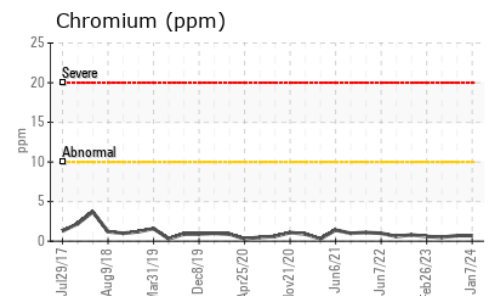
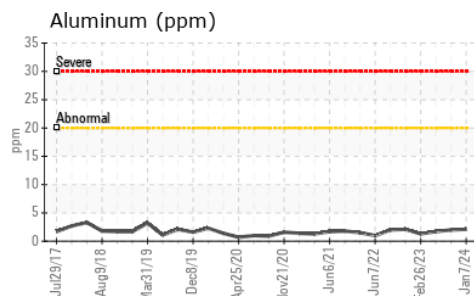
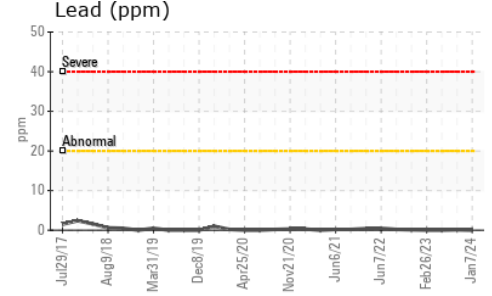
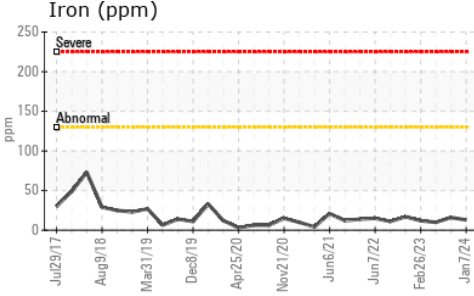


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.1</b>	14.2	13.3

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>13.0</b>	▲ 11.5	13.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0886643 **Received** : 09 Jan 2024 **1335 SHAWSON DRIVE**  
**Lab Number** : 02607454 **Diagnosed** : 10 Jan 2024 **MISSISSAUGA, ON**  
**Unique Number** : 5708540 **Diagnostician** : Wes Davis **CA L4W 1C4**  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel ) **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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