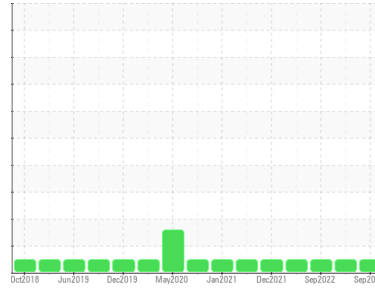




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**3000 Series**  
 Machine Id  
**Navistar 3278**  
 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>WC0848057</b>	WC0785953	WC0738221
Sample Date	Client Info			<b>30 Sep 2023</b>	19 Feb 2023	30 Sep 2022
Machine Age	mls Client Info			<b>242062</b>	257031	735092
Oil Age	mls Client Info			<b>18876</b>	21939	20685
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
Glycol	WC Method			<b>NEG</b>	NEG	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	<b>45</b>	45	40
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</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>3</b>	11	8
Lead	ppm	ASTM D5185(m)	>25	<b>8</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</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)	2	<b>2</b>	4	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>68</b>	73	59
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1101</b>	1182	932
Calcium	ppm	ASTM D5185(m)	1050	<b>1202</b>	1366	1059
Phosphorus	ppm	ASTM D5185(m)	995	<b>1129</b>	1236	1043
Zinc	ppm	ASTM D5185(m)	1180	<b>1367</b>	1466	1174
Sulfur	ppm	ASTM D5185(m)	2600	<b>2530</b>	2691	2384
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

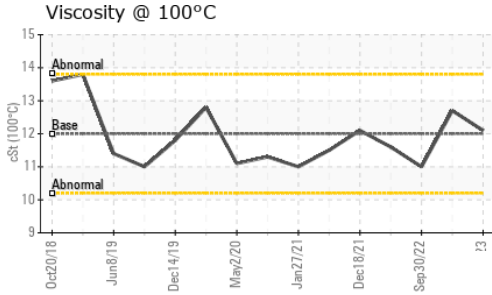
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	5	6
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.5</b>	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.7</b>	13.5	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.0</b>	26.9	22.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.1</b>	24.8	21.6



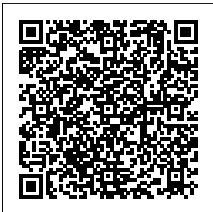
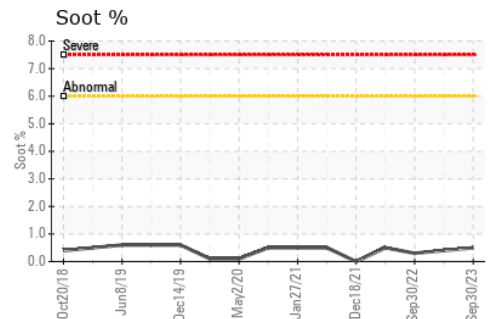
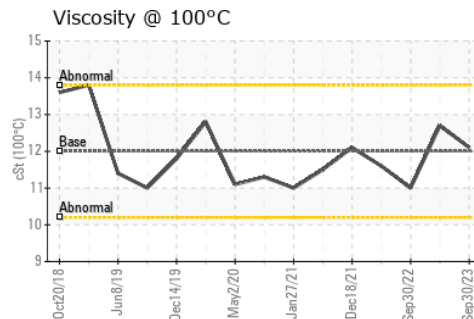
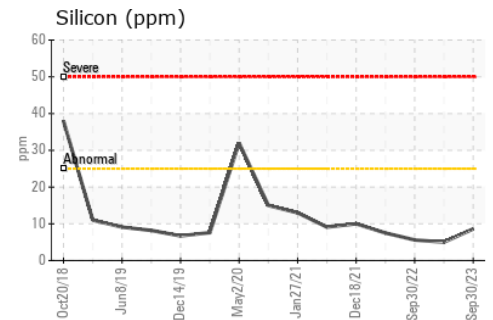
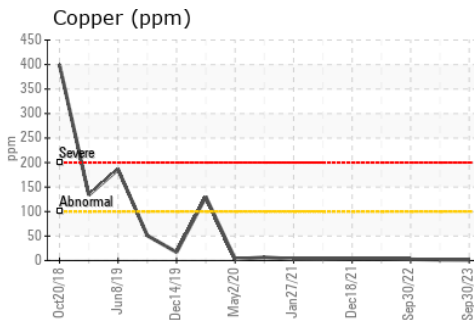
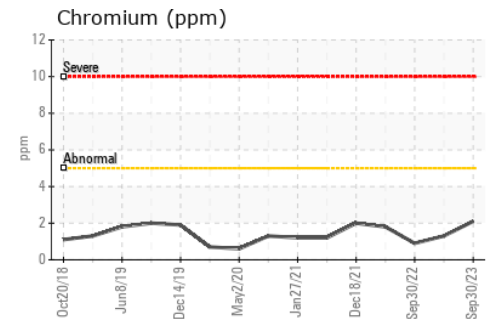
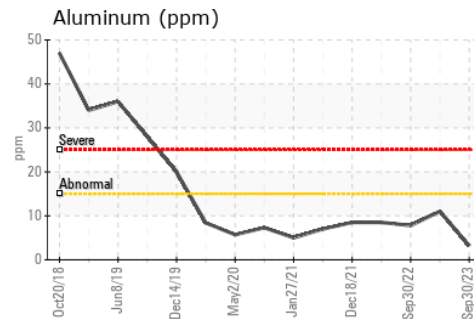
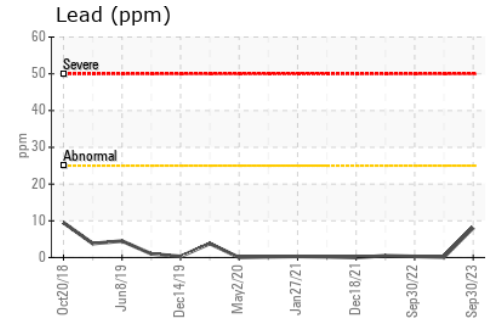
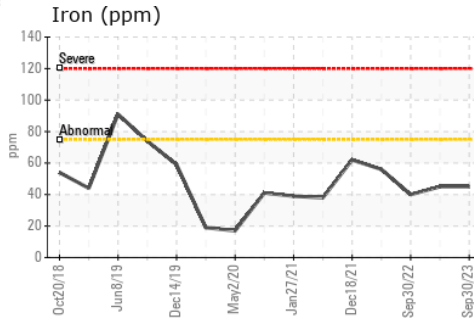
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	12.1	12.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0848057 **Received** : 03 Oct 2023 1335 SHAWSON DRIVE  
**Lab Number** : 02586355 **Diagnosed** : 03 Oct 2023 MISSISSAUGA, ON  
**Unique Number** : 5655421 **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.

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