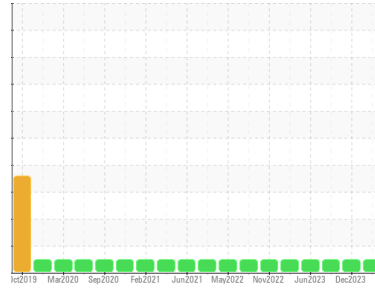




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**4000 Series**  
 Machine Id  
**Navistar 4322**  
 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>WC0915057</b>	WC0828272	WC0848011
Sample Date	Client Info		<b>23 Mar 2024</b>	15 Dec 2023	09 Sep 2023
Machine Age	mls	Client Info	<b>211819</b>	200711	190138
Oil Age	mls	Client Info	<b>11108</b>	10573	11585
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)	>75	<b>11</b>	11	12
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>7</b>	9	8
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>100	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	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)	2	<b>2</b>	1	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	61	60
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>983</b>	986	985
Calcium	ppm	ASTM D5185(m)	1050	<b>1035</b>	1085	1054
Phosphorus	ppm	ASTM D5185(m)	995	<b>1005</b>	1051	1067
Zinc	ppm	ASTM D5185(m)	1180	<b>1195</b>	1207	1211
Sulfur	ppm	ASTM D5185(m)	2600	<b>2543</b>	2793	2634
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

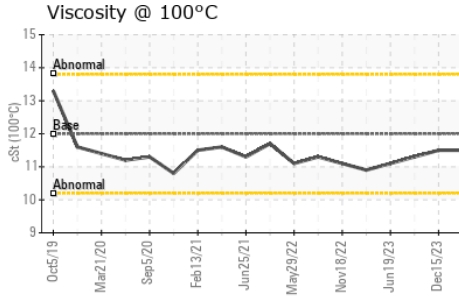
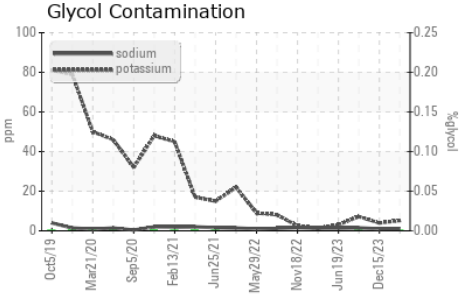
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	4
Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	4	7
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.1</b>	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.3</b>	7.2	7.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.5</b>	18.8	19.0



# OIL ANALYSIS REPORT

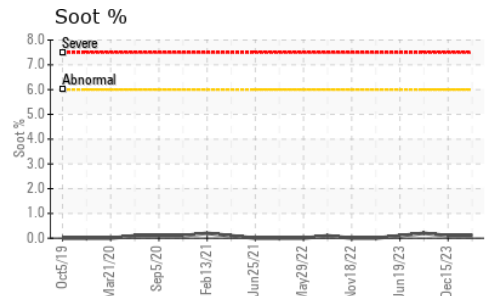
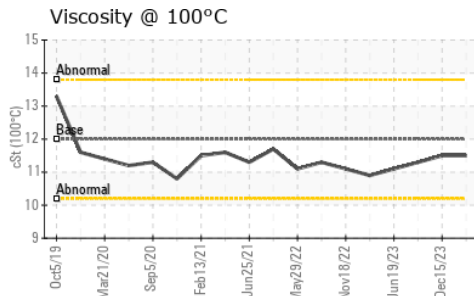
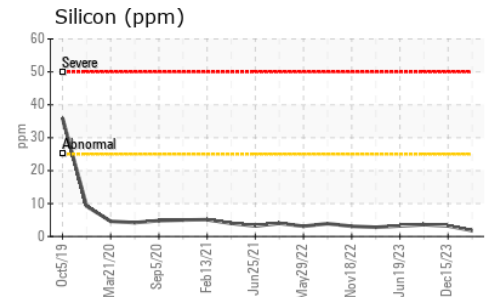
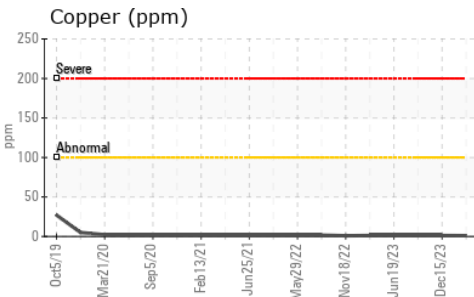
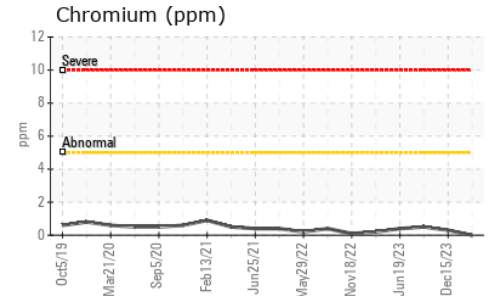
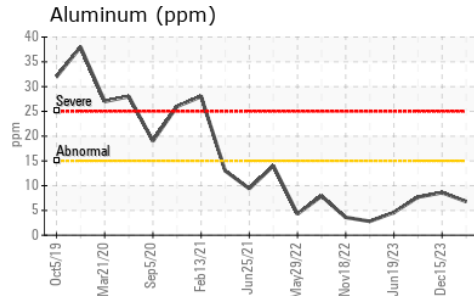
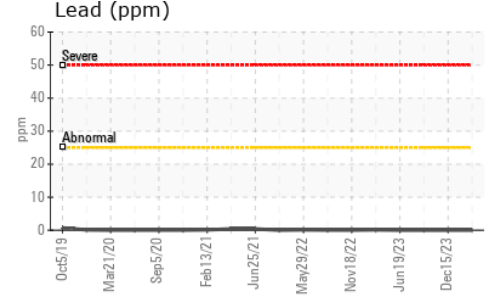
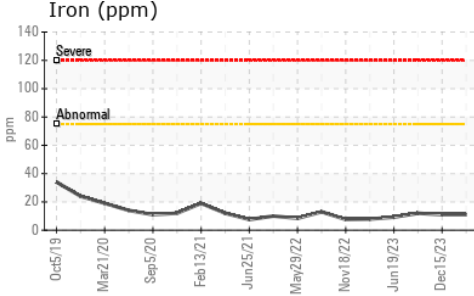


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.9</b>	15.3	15.5

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>11.5</b>	11.5	11.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915057  
**Lab Number** : 02626364  
**Unique Number** : 5759496  
**Test Package** : MOB 1 ( Additional Tests: Glycol )  
**Received** : 03 Apr 2024  
**Tested** : 03 Apr 2024  
**Diagnosed** : 03 Apr 2024 - Wes Davis

**MANITOULIN TRANSPORT (GARAGE)**  
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 MISSISSAUGA, ON  
 CA L4W 1C4  
 Contact: Travis Spence  
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 F: (905)564-6361

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.