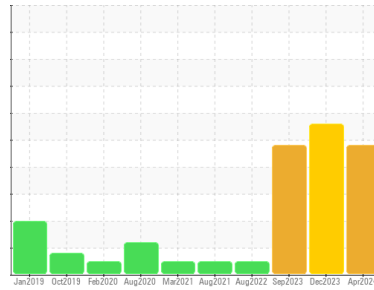




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area  
**3000 Series**  
 Machine Id  
**Navistar 3264**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (26 LTR)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0915072</b>	WC0886684	WC0805757
Sample Date	Client Info		<b>10 Apr 2024</b>	29 Dec 2023	04 Sep 2023
Machine Age	mls	Client Info	<b>234296</b>	217808	198440
Oil Age	mls	Client Info	<b>16488</b>	19368	16240
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>41</b>	68	47
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>12</b>	▲ 18	11
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>100	<b>11</b>	8	3
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)	2	<b>1</b>	<1	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>177</b>	85	64
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>916</b>	904	938
Calcium	ppm	ASTM D5185(m)	1050	<b>988</b>	1048	1024
Phosphorus	ppm	ASTM D5185(m)	995	<b>888</b>	846	1029
Zinc	ppm	ASTM D5185(m)	1180	<b>1138</b>	1135	1172
Sulfur	ppm	ASTM D5185(m)	2600	<b>2370</b>	2436	2437
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

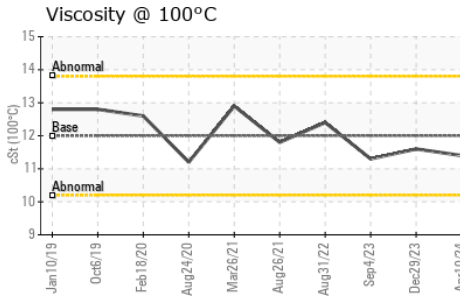
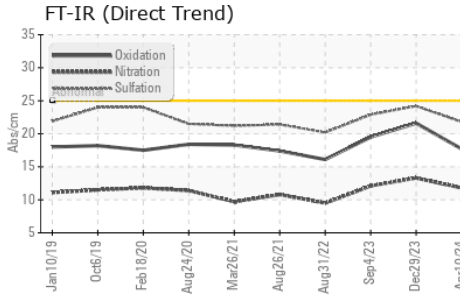
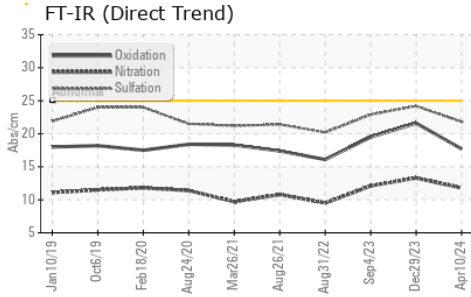
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>14</b>	24	10
Sodium	ppm	ASTM D5185(m)		● <b>742</b>	● 207	● 50
Potassium	ppm	ASTM D5185(m)	>20	▲ <b>101</b>	▲ 324	▲ 137
Glycol	%	ASTM D7922*		▲ <b>0.052</b>	▲ 0.029	▲ 0.071

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.5</b>	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.8</b>	13.3	12.1
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.8</b>	24.2	22.9



# OIL ANALYSIS REPORT

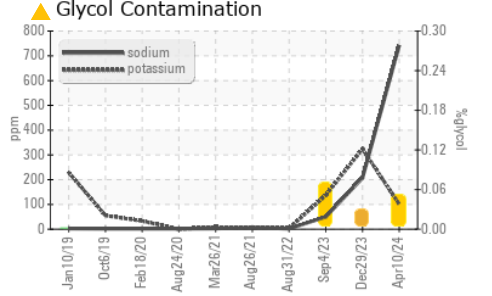
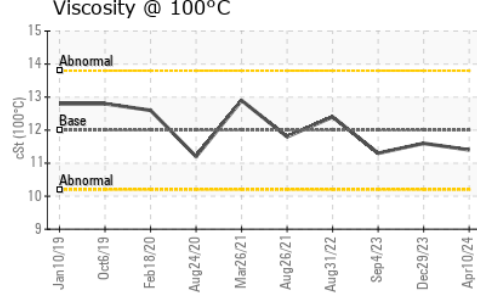
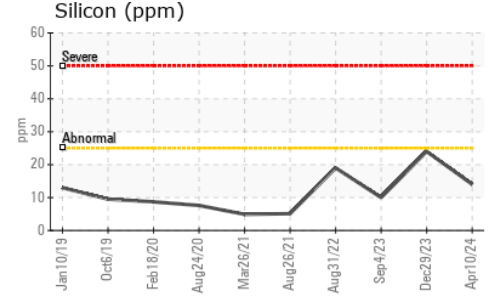
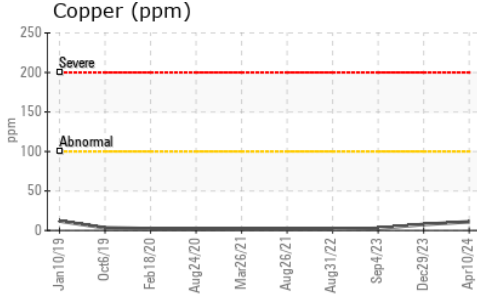
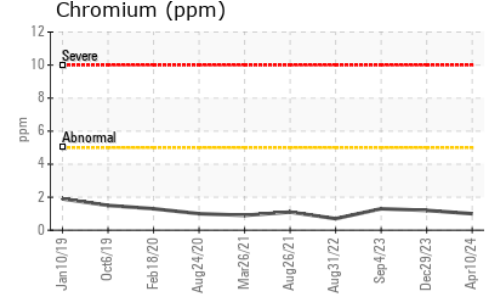
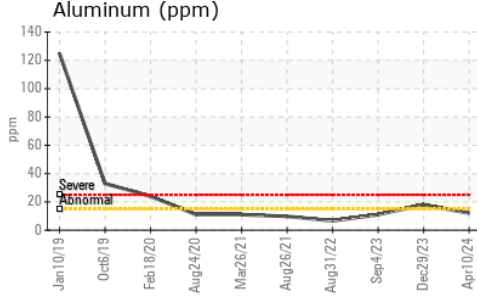
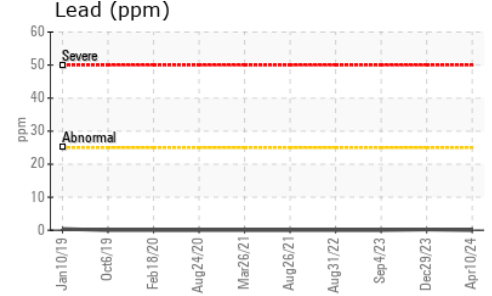
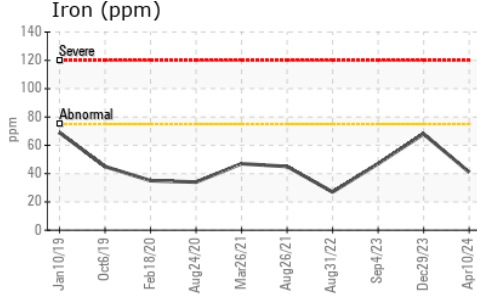


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	17.7	21.6	19.5

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.6	11.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915072  
**Lab Number** : 02629473  
**Unique Number** : 5762605  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**MANITOU LIN TRANSPORT (GARAGE)**  
 1335 SHAWSON DRIVE  
 MISSISSAUGA, ON  
 CA L4W 1C4  
 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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