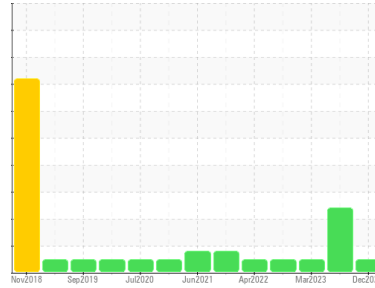




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**3000 Series**  
 Machine Id  
**Navistar 3265**  
 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

Test for glycol is negative. 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>WC0828269</b>	WC0817333	WC0785980
Sample Date	Client Info		<b>17 Dec 2023</b>	11 Nov 2023	11 Mar 2023
Machine Age	mls	Client Info	<b>279908</b>	275213	235135
Oil Age	mls	Client Info	<b>0</b>	20949	19405
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	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>17</b>	64	40
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>3</b>	8	10
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>100	<b>1</b>	3	3
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>7</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>64</b>	85	64
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>963</b>	921	966
Calcium	ppm	ASTM D5185(m)	1050	<b>1096</b>	1022	1132
Phosphorus	ppm	ASTM D5185(m)	995	<b>1019</b>	844	1061
Zinc	ppm	ASTM D5185(m)	1180	<b>1189</b>	1150	1216
Sulfur	ppm	ASTM D5185(m)	2600	<b>2808</b>	2438	2490
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

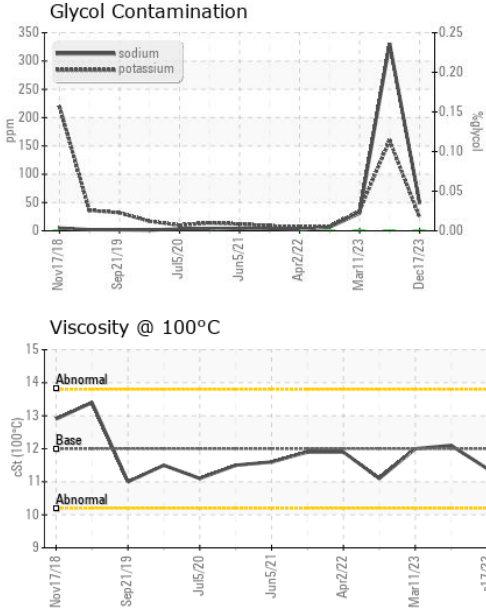
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	10	8
Sodium	ppm	ASTM D5185(m)		<b>48</b>	▲ 331	31
Potassium	ppm	ASTM D5185(m)	>20	<b>24</b>	▲ 160	35
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.1</b>	0.7	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	13.9	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.4</b>	28.5	26.5



# OIL ANALYSIS REPORT



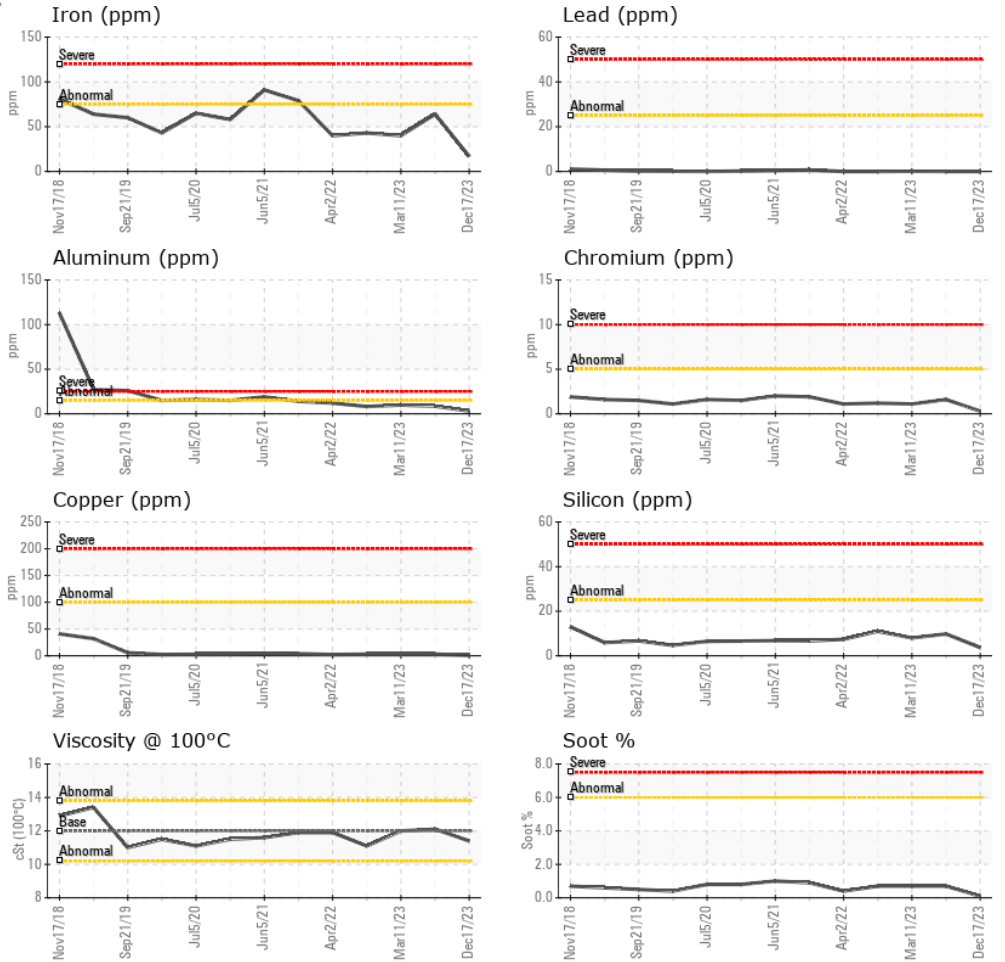
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.9</b>	28.6	21.9

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>11.4</b>	12.1	12.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**  
**Sample No.** : WC0828269 **Received** : 22 Dec 2023 1335 SHAWSON DRIVE  
**Lab Number** : 02604904 **Diagnosed** : 22 Dec 2023 MISSISSAUGA, ON  
**Unique Number** : 5697989 **Diagnostician** : Wes Davis CA L4W 1C4  
**Test Package** : MOB 1 ( Additional Tests: Glycol, Visual ) 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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