



# RAPPORT D'ANALYSE D'HUILE

USURE	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
ÉTAT DU FLUIDE	<b>NORMAL</b>

Secteur

**3000 series**

Identité de la machine

**Navistar 3291**

Composant

**Moteur diesel**

Fluide

**PETRO CANADA DURON SHP 10W30 (26 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Numéro d'échant.		Client Info		<b>WC0813015</b>	WC0787322	WC0758594
Date d'échant.		Client Info		<b>08 Jun 2023</b>	14 May 2023	18 Jan 2023
Âge d la Machine	mls	Client Info		<b>539959</b>	510020	499851
Âge de l'huile	mls	Client Info		<b>21753</b>	18163	36435
Âge du filtre	mls	Client Info		<b>21753</b>	18163	36435
Huile changée		Client Info		<b>Changed</b>	Changed	Changed
Filtre changé		Client Info		<b>Changed</b>	Changed	Changed
Statut de l'échant.				<b>NORMAL</b>	NORMAL	NORMAL

## USURE

All component wear rates are normal.

Fer	ppm	ASTM D5185(m)	>100	<b>38</b>	28	36
Chrome	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titane	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Argent	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminium	ppm	ASTM D5185(m)	>20	<b>5</b>	3	4
Plomb	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Cuivre	ppm	ASTM D5185(m)	>330	<b>2</b>	1	2
Étain	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

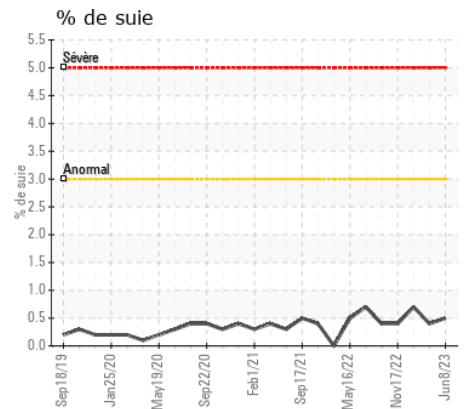
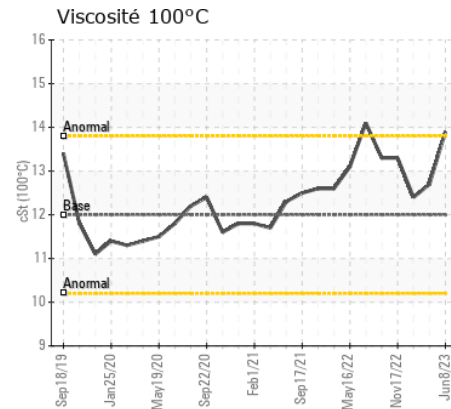
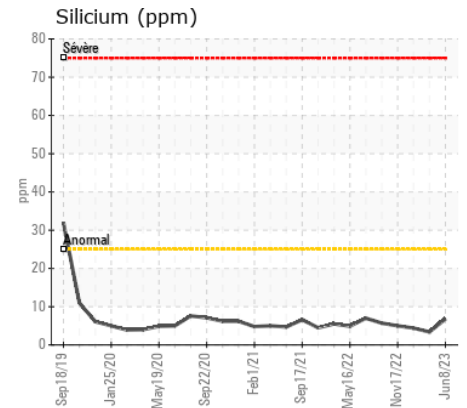
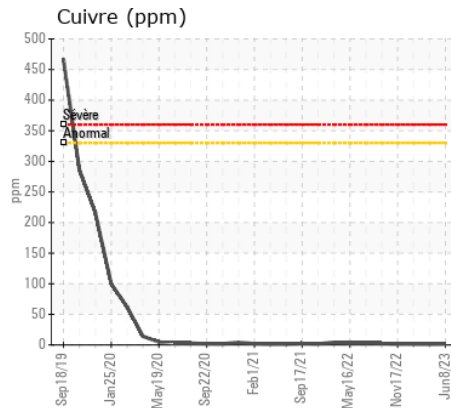
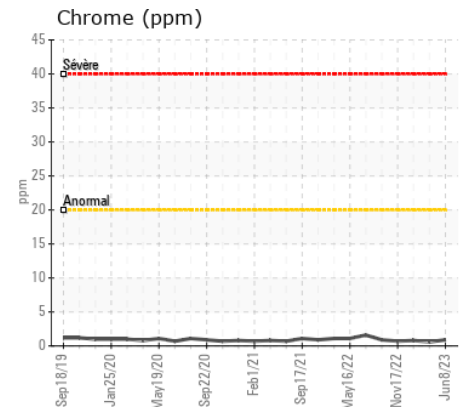
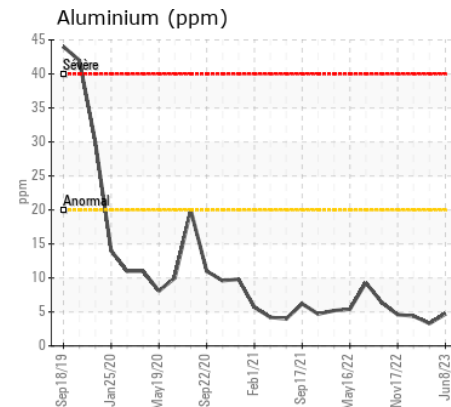
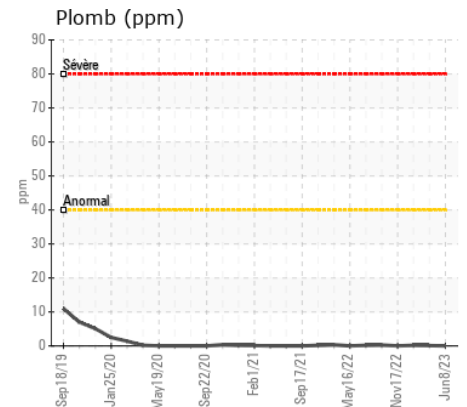
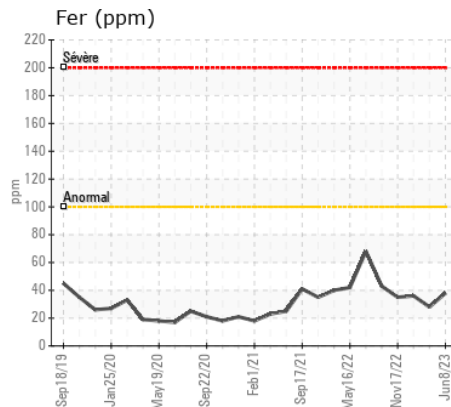
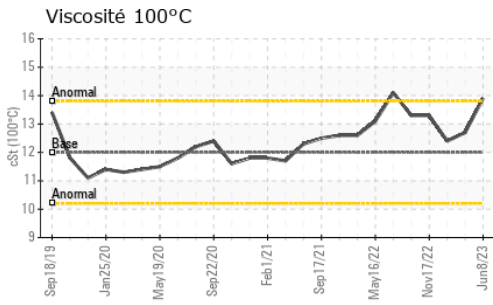
There is no indication of any contamination in the oil.

Silicium	ppm	ASTM D5185(m)	>25	<b>7</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	<1	3
Essence		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol		WC Method		<b>NEG</b>	NEG	NEG
% de suie	%	ASTM D7844*	>3	<b>0.5</b>	0.4	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>15.7</b>	13.2	15.4
Sulfatation	Abs/.1mm	ASTM D7415*	>30	<b>28.4</b>	25.2	29.4
Eau émulsifiée	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## ÉTAT DU FLUIDE

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>4</b>	3	2
Bore	ppm	ASTM D5185(m)	2	<b>3</b>	3	4
Baryum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdène	ppm	ASTM D5185(m)	50	<b>72</b>	67	68
Manganèse	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnésium	ppm	ASTM D5185(m)	950	<b>1193</b>	1110	1082
Calcium	ppm	ASTM D5185(m)	1050	<b>1286</b>	1311	1326
Phosphore	ppm	ASTM D5185(m)	995	<b>1207</b>	1203	1165
Zinc	ppm	ASTM D5185(m)	1180	<b>1447</b>	1401	1349
Soufre	ppm	ASTM D5185(m)	2600	<b>2525</b>	2665	2561
Oxydation	Abs/.1mm	ASTM D7414*	>25	<b>29.9</b>	26.2	30.0
Visc 100°C	cSt	ASTM D7279(m)	12.00	<b>13.9</b>	12.7	12.4



ISO 17025:2017  
Accredited  
Laboratory

**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : WC0813015  
**N° de laboratoire** : 02572124  
**Numéro unique** : 5617175  
**Analyse** : MOB 1

**Reçu** : 26 Jul 2023  
**Diagnostiqué** : 26 Jul 2023  
**Diagnostiqueur** : Wes Davis

**MANITOU LIN TRANSPORT**  
 1890 DES SOURCES BOULEVARD  
 POINTE CLAIRE, QC  
 CA H9R 5B1  
 Contact: Eric Marcelin  
 emarcelin@manitoulintransport.com  
 T: (514)694-5111  
 F: (514)694-9739

Pour discuter ce rapport, contacter le service à la clientèle au 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

La validez de los resultados y la interpretación se basan en la muestra y la información proporcionada.