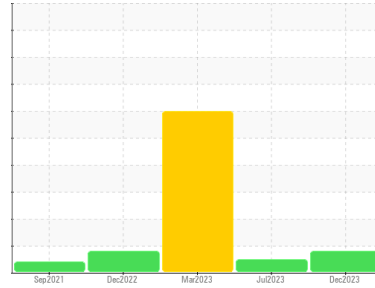


Machine Id  
**VOLVO VNL760 2246**

Component  
**Front Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



**DIAGNOSIS**

**Recommendation**

Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

**Wear**

Le taux de nickel est marginal. Les taux d'usure de tous les autres composants sont normaux.

**Contamination**

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile.

**Fluid Condition**

Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. L'état de l'huile permet d'en prolonger l'utilisation.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PC0073712</b>	PC0073720	PC0073722
Sample Date	Client Info		<b>01 Dec 2023</b>	31 Jul 2023	29 Mar 2023
Machine Age	kms	Client Info	<b>396932</b>	336001	279913
Oil Age	kms	Client Info	<b>109352</b>	48421	46133
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>MARGINAL</b>	NORMAL	SEVERE

**CONTAMINATION**

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

**WEAR METALS**

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>47</b>	21	26
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>▲ 2</b>	1	6
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>6</b>	4	8
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>14</b>	8	21
Tin	ppm	ASTM D5185(m)	>15	<b>2</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>1</b>	2	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>61</b>	60	66
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>950</b>	961	930
Calcium	ppm	ASTM D5185(m)	1050	<b>1100</b>	1094	1205
Phosphorus	ppm	ASTM D5185(m)	995	<b>922</b>	1041	1048
Zinc	ppm	ASTM D5185(m)	1180	<b>1187</b>	1208	1173
Sulfur	ppm	ASTM D5185(m)	2600	<b>2348</b>	2490	2559
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

**CONTAMINANTS**

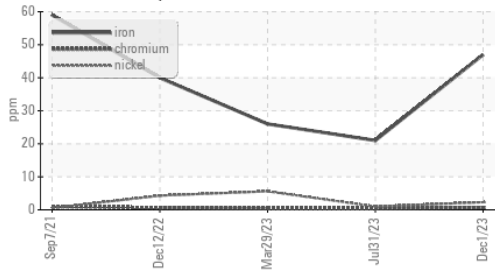
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	4	8
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>10</b>	6	24

**INFRA-RED**

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.8</b>	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.1</b>	9.2	9.9
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>24.3</b>	21.0	22.8

# OIL ANALYSIS REPORT

**▲ Ferrous Alloys**



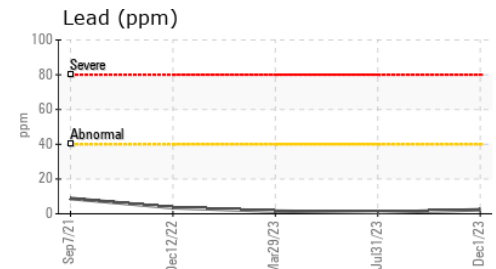
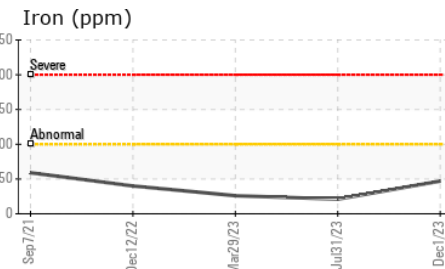
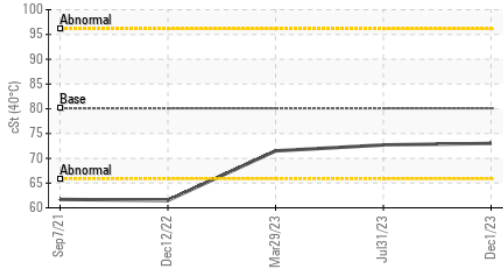
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.5</b>	16.0	16.8
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>7.06</b>	7.86	8.01

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

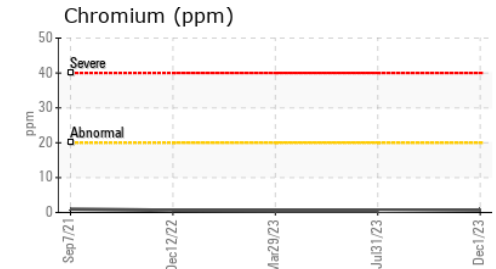
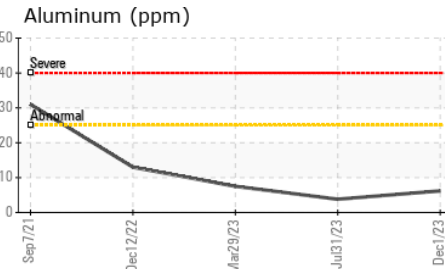
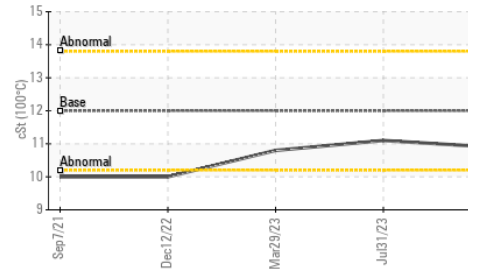
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>73.0</b>	72.7	71.5
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.9</b>	11.1	10.8
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>138</b>	143	139

**GRAPHS**

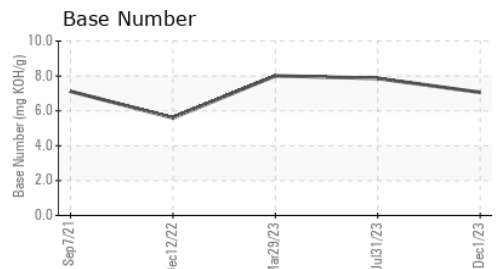
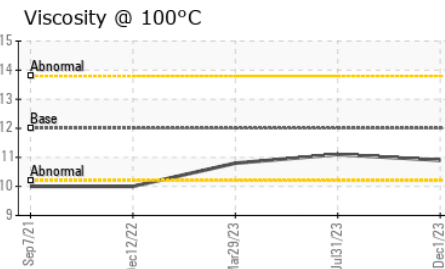
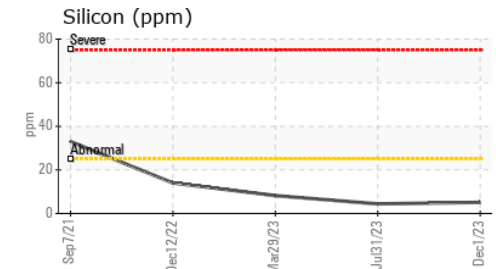
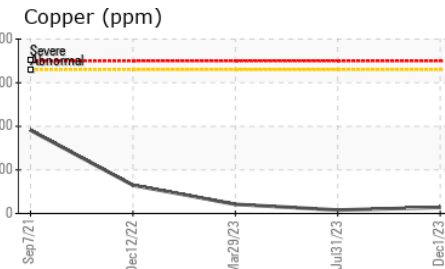
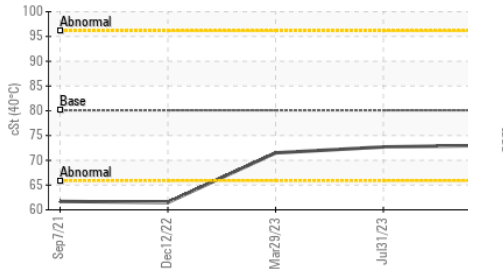
**Viscosity @ 40°C**



**Viscosity @ 100°C**



**Viscosity @ 40°C**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0073712 **Received** : 27 Dec 2023  
**Lab Number** : 02605158 **Diagnosed** : 28 Dec 2023  
**Unique Number** : 5698243 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: KV40, VI )

**HUILES DESROCHES INC.**  
 915 RUE PHILIPPE-PARADIS, LOCAL 115  
 QUEBEC, QC  
 CA G1N 4E3  
 Contact: David Labrecque  
 david.labrecque@groupe-des-roches.ca  
 T: (418)621-5150  
 F: (418)621-0822

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.