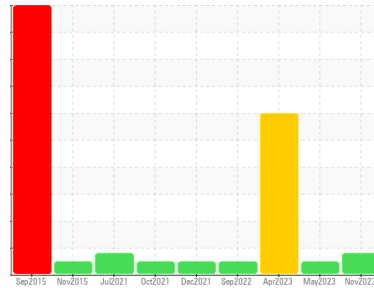




# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id  
**259**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON UHP 5W30 (40 GAL)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

### Wear

L'absence significative d'autres métaux d'usure indique que la présence du cuivre n'est pas due à de l'usure (i.e. système de refroidissement). 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

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. 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>WC0846906</b>	WC0820375	WC0776080
Sample Date	Client Info		<b>23 Nov 2023</b>	05 May 2023	12 Apr 2023
Machine Age	kms	Client Info	<b>869271</b>	832074	830378
Oil Age	kms	Client Info	<b>37197</b>	1696	23691
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	NORMAL	SEVERE

## 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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	<b>59</b>	11	47
Chromium	ppm	ASTM D5185(m)	>20	<b>10</b>	3	12
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>54</b>	15	69
Lead	ppm	ASTM D5185(m)	>30	<b>5</b>	3	12
Copper	ppm	ASTM D5185(m)	>30	<b>▲ 217</b>	147	▲ 493
Tin	ppm	ASTM D5185(m)	>15	<b>3</b>	0	<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)	0	<b>24</b>	50	27
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	64	<b>49</b>	57	59
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	1160	<b>648</b>	1060	1026
Calcium	ppm	ASTM D5185(m)	820	<b>1513</b>	915	1018
Phosphorus	ppm	ASTM D5185(m)	1160	<b>967</b>	1108	1103
Zinc	ppm	ASTM D5185(m)	1260	<b>1164</b>	1178	1215
Sulfur	ppm	ASTM D5185(m)	3000	<b>2293</b>	2914	2721
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>7</b>	5	10
Sodium	ppm	ASTM D5185(m)		<b>6</b>	4	8
Potassium	ppm	ASTM D5185(m)	>20	<b>71</b>	17	88

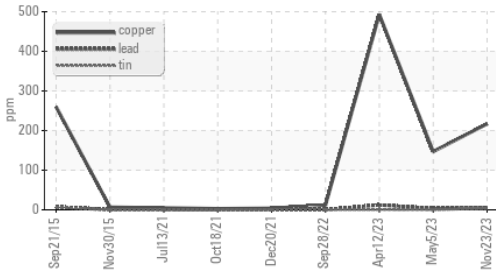
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1</b>	0	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.9</b>	7.0	11.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>25.3</b>	19.5	21.6



# OIL ANALYSIS REPORT

## Non-ferrous Metals



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm ASTM D7414*	>25	24.2	16.4	19.6
Base Number (BN)	mg KOH/g ASTM D2896*	11.0	8.76	9.94	8.87

## VISUAL

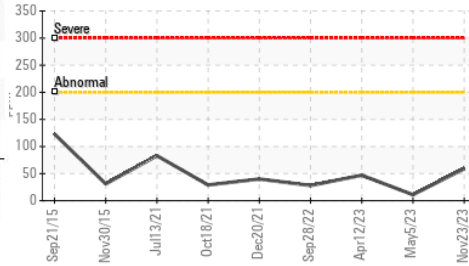
method	limit/base	current	history1	history2	
Emulsified Water	scalar Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

## FLUID PROPERTIES

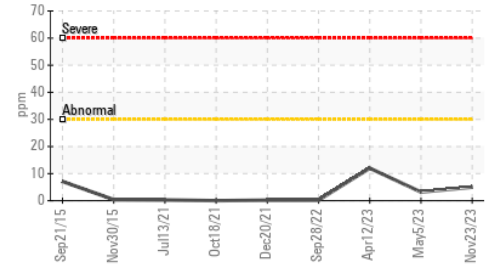
method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	11.9	12.1	11.4	12.0

## GRAPHS

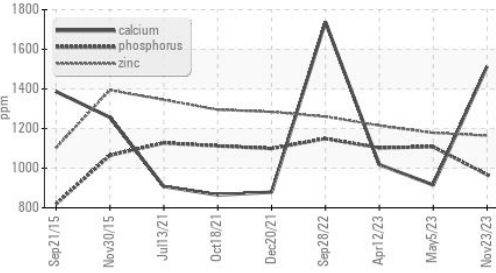
### Iron (ppm)



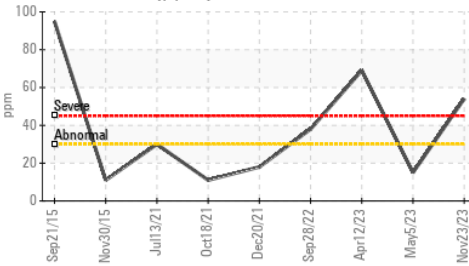
### Lead (ppm)



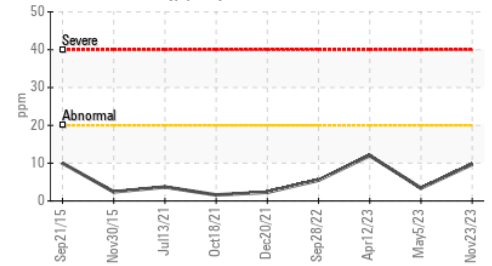
## Additives



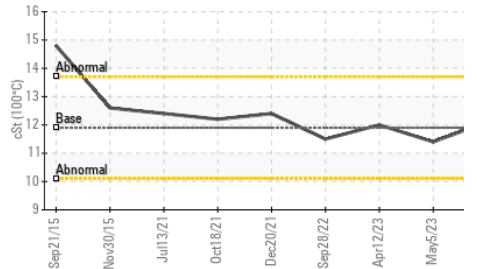
### Aluminum (ppm)



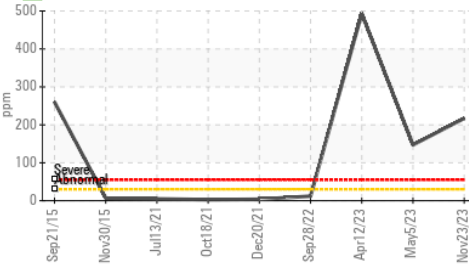
### Chromium (ppm)



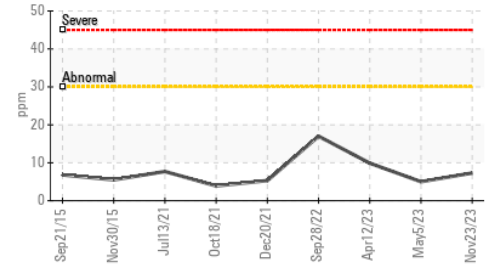
## Viscosity @ 100°C



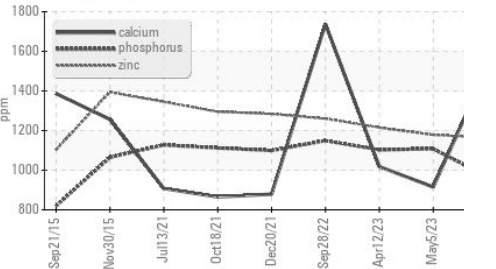
## Copper (ppm)



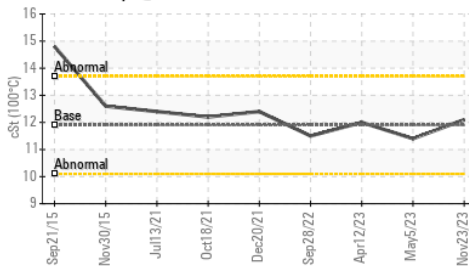
## Silicon (ppm)



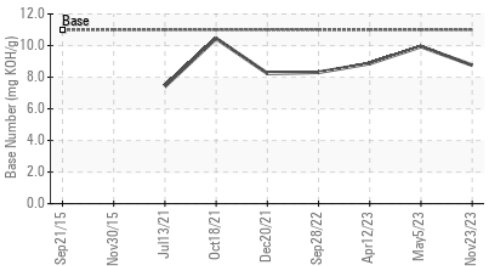
## Additives



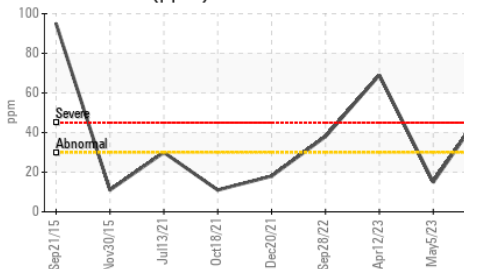
## Viscosity @ 100°C



## Base Number



## Aluminum (ppm)



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0846906  
**Lab Number** : 02606184  
**Unique Number** : 5707270  
**Test Package** : MOB 2

**Received** : 03 Jan 2024  
**Diagnosed** : 04 Jan 2024  
**Diagnostician** : Kevin Marson

**Levis - Transport Laberge**  
 3200 rue de l'etchemin  
 Levis, QC  
 CA G6W 7X6  
 Contact: Stephane Godbout  
 avisur@transportlaberge.com  
 T: (450)347-4336  
 F:

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.