



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**355**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## RECOMMENDATION

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0909620</b>	WC0906588	WC0846899
Sample Date		Client Info		<b>04 Jun 2024</b>	26 Feb 2024	29 Jan 2024
Machine Age	kms	Client Info		<b>794697</b>	770211	770193
Oil Age	kms	Client Info		<b>24771</b>	18	60046
Filter Age	kms	Client Info		<b>24771</b>	18	60046
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	SEVERE

## WEAR

Usure de piston.

Iron	ppm	ASTM D5185(m)	>165	<b>45</b>	20	117
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	<1	4
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>▲ 22</b>	8	▲ 44
Lead	ppm	ASTM D5185(m)	>150	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>90	<b>4</b>	2	10
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

Il n'y a aucun indice de contamination dans l'huile.

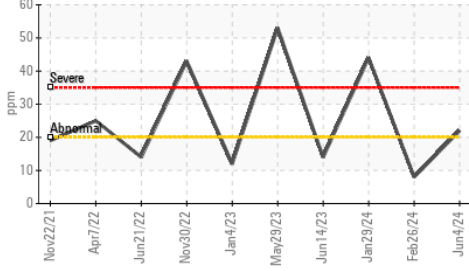
Silicon	ppm	ASTM D5185(m)	>35	<b>4</b>	5	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	<b>0.9</b>	0.2	1.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.3</b>	6.8	16.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>27.9</b>	20.6	34.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

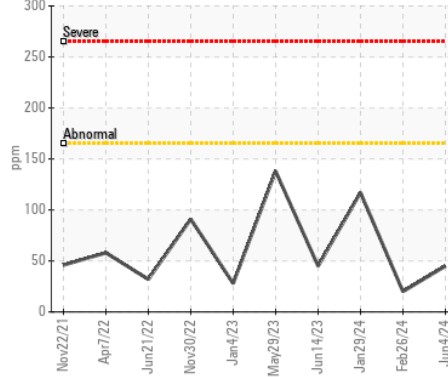
Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

Sodium	ppm	ASTM D5185(m)		<b>6</b>	3	7
Boron	ppm	ASTM D5185(m)	2	<b>11</b>	30	14
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>63</b>	57	66
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1066</b>	985	1198
Calcium	ppm	ASTM D5185(m)	1050	<b>1018</b>	942	984
Phosphorus	ppm	ASTM D5185(m)	995	<b>1035</b>	1025	1124
Zinc	ppm	ASTM D5185(m)	1180	<b>1254</b>	1150	1319
Sulfur	ppm	ASTM D5185(m)	2600	<b>2531</b>	2918	2704
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>26.3</b>	16.6	33.5
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>7.09</b>	10.07	7.13
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>12.8</b>	11.8	13.4

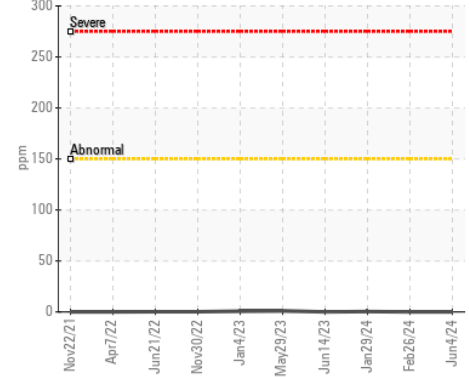
▲ Aluminum (ppm)



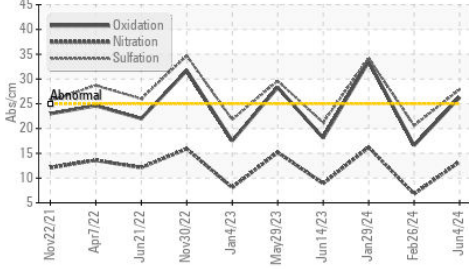
Iron (ppm)



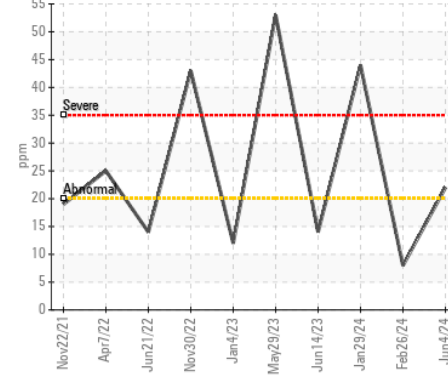
Lead (ppm)



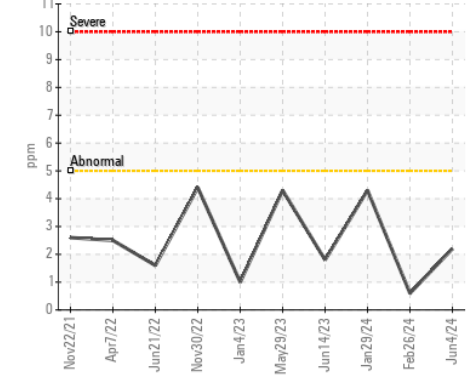
FT-IR (Direct Trend)



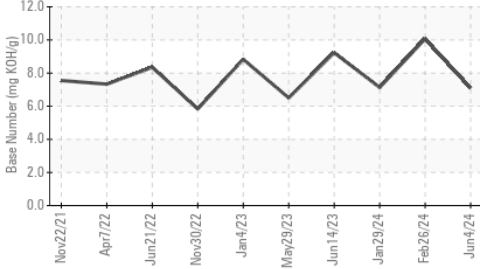
▲ Aluminum (ppm)



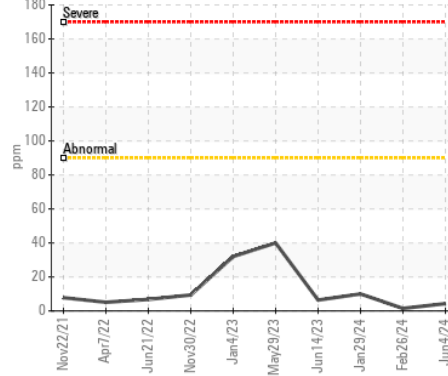
Chromium (ppm)



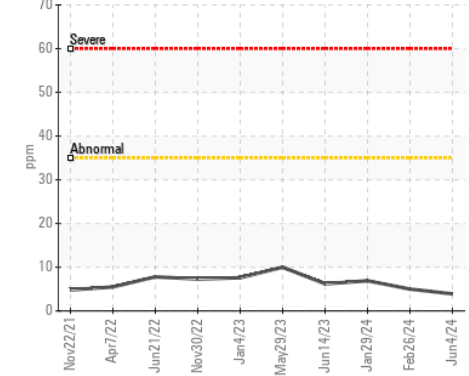
Base Number



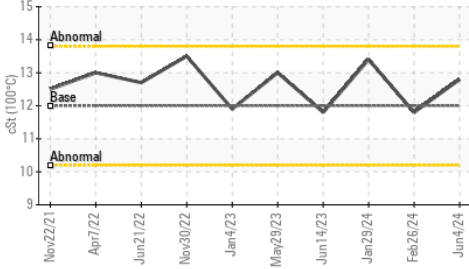
Copper (ppm)



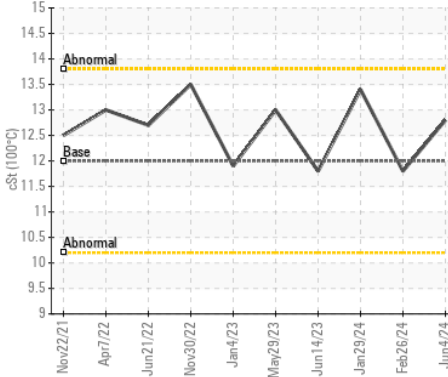
Silicon (ppm)



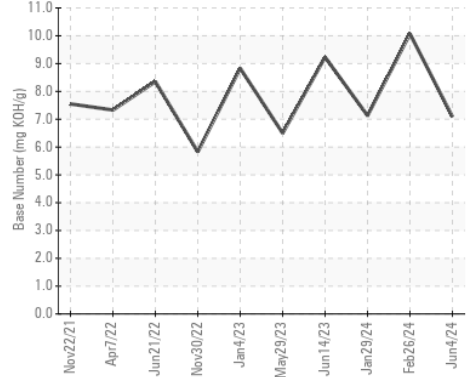
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0909620  
**Lab Number** : 02643101  
**Unique Number** : 5800640  
**Test Package** : MOB 2

**Received** : 20 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 21 Jun 2024 - Kevin Marson

**Levis - Transport Laberge**  
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 CA G6W 7X6  
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 avisieur@transportlaberge.com  
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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.