



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



Machine Id  
**913136**  
Component  
**Front Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (38 LTR)**

**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>GFL0091124</b>	GFL0079106	GFL0079109
Sample Date		Client Info		<b>18 Dec 2023</b>	28 Aug 2023	27 Jun 2023
Machine Age	hrs	Client Info		<b>2006</b>	1414	918
Oil Age	hrs	Client Info		<b>592</b>	496	423
Filter Age	hrs	Client Info		<b>592</b>	496	423
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	NORMAL	NORMAL

**WEAR**

Usure de la soupape d'échappement.

Iron	ppm	ASTM D5185(m)	>120	<b>17</b>	15	15
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>22</b>	8	8
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)	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	2	5
Copper	ppm	ASTM D5185(m)	>330	<b>10</b>	65	197
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

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

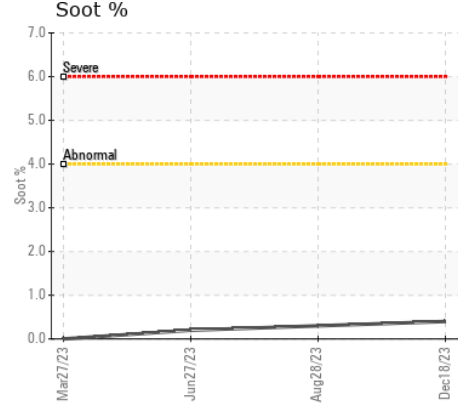
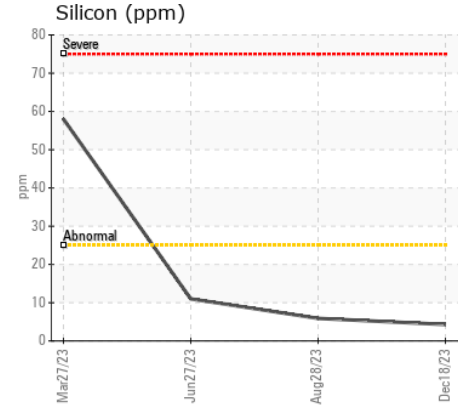
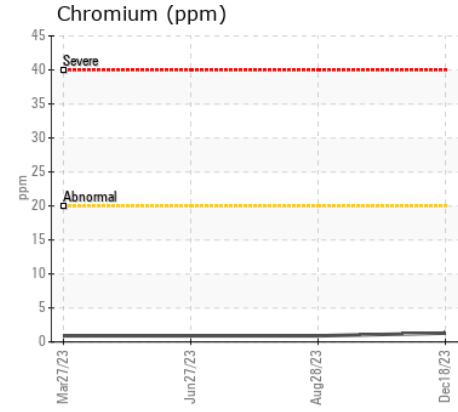
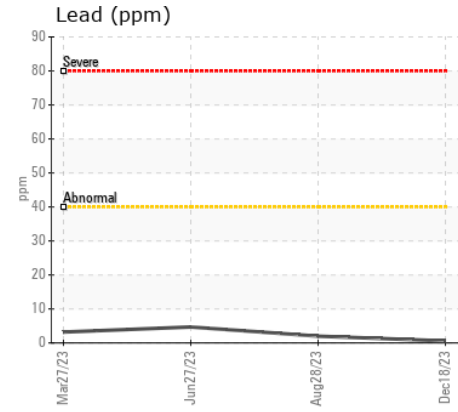
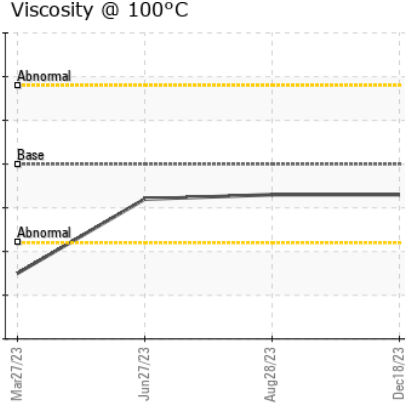
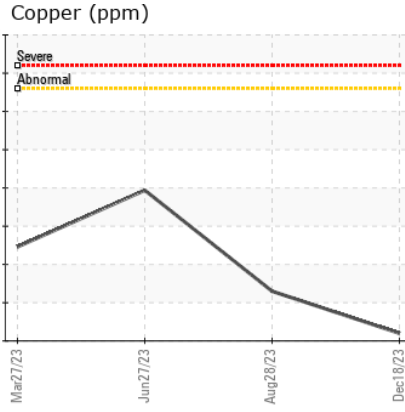
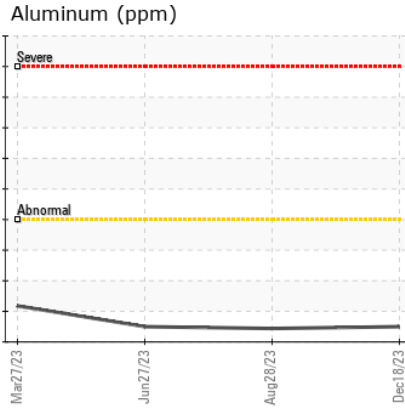
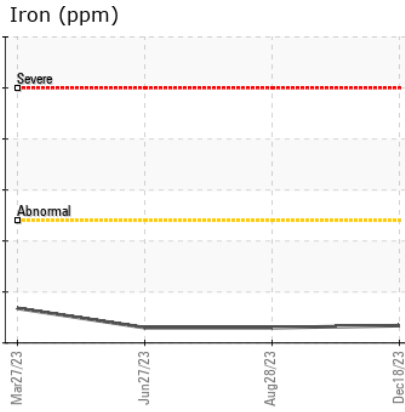
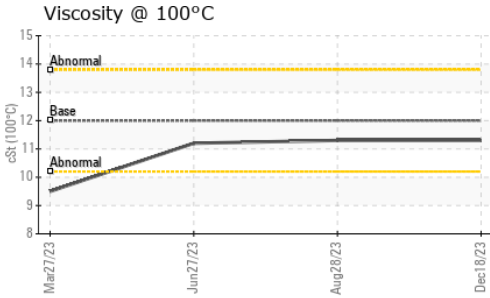
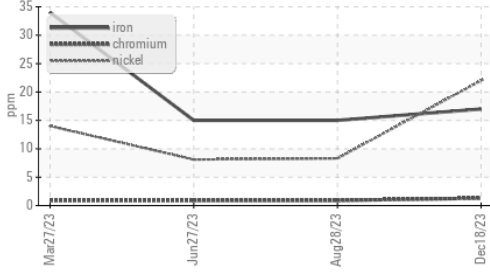
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	11
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	3	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>4	<b>0.4</b>	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.3</b>	9.3	9.1
Nitration(Diff)	Abs/cm	ASTM D7624*		<b>12.8</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	21.3	19.9
Sulfation(Diff)	Abs/cm	ASTM D7415*		<b>4.9</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	1
Boron	ppm	ASTM D5185(m)	2	<b>11</b>	13	33
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>70</b>	71	73
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	950	<b>639</b>	664	641
Calcium	ppm	ASTM D5185(m)	1050	<b>1442</b>	1431	1427
Phosphorus	ppm	ASTM D5185(m)	995	<b>934</b>	1013	1009
Zinc	ppm	ASTM D5185(m)	1180	<b>1140</b>	1154	1114
Sulfur	ppm	ASTM D5185(m)	2600	<b>2649</b>	2475	2589
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.9</b>	15.3	15.5
Oxidation(Diff)	Abs/cm	ASTM D7414*		<b>13.3</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.3</b>	11.3	11.2

**Ferrous Alloys**



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0091124 **Received** : 21 Dec 2023  
**Lab Number** : 02604595 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 5697680 **Diagnostician** : Bill Quesnel  
**Test Package** : MOB 1 ( Additional Tests: FT-IR(Diff) )

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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