



Machine Id  
**901049**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

### RECOMMENDATION

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0081999</b>	PC0073176	PC0071800
Sample Date		Client Info		<b>10 Jan 2024</b>	06 Sep 2023	19 Jun 2023
Machine Age	kms	Client Info		<b>213443</b>	201740	198578
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

Les taux d'usure de tous les composants sont normaux.

Iron	ppm	ASTM D5185(m)	>120	<b>11</b>	4	4
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

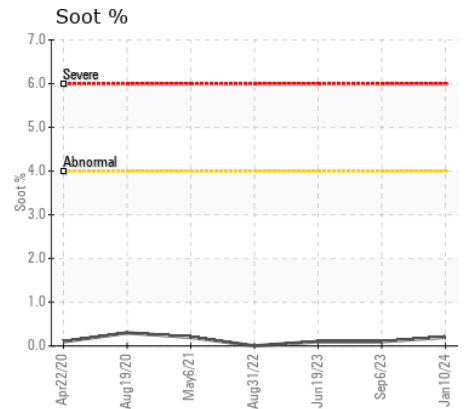
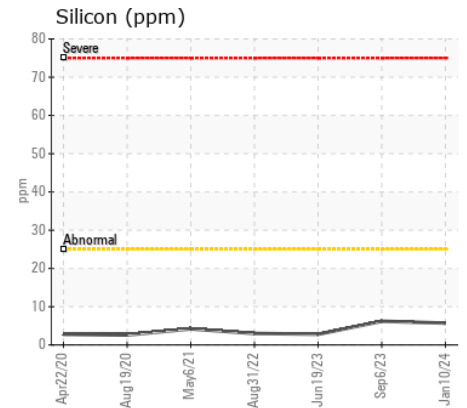
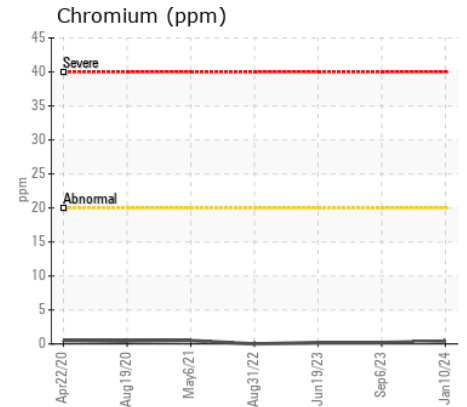
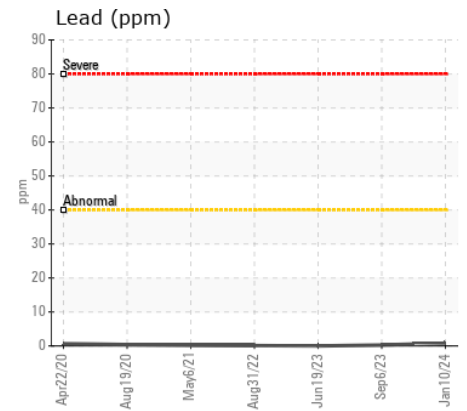
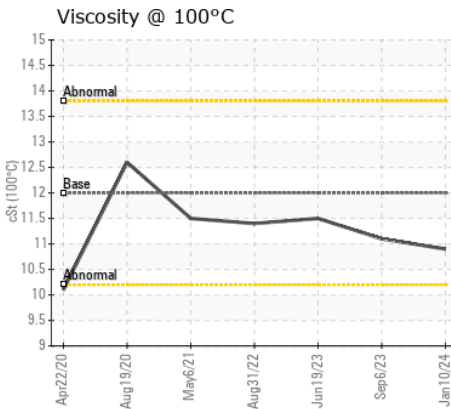
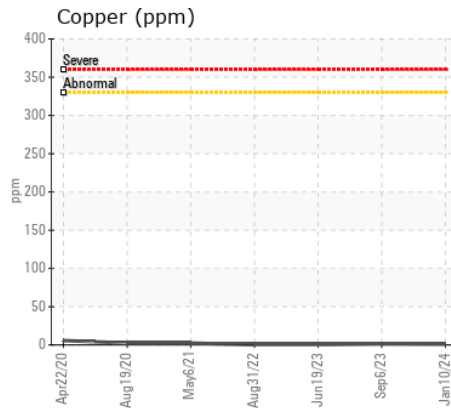
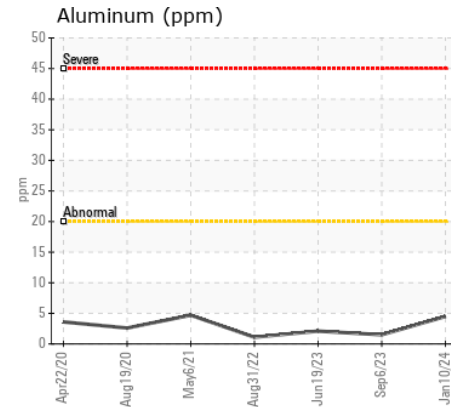
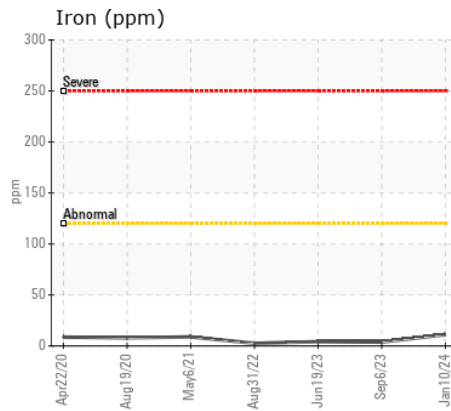
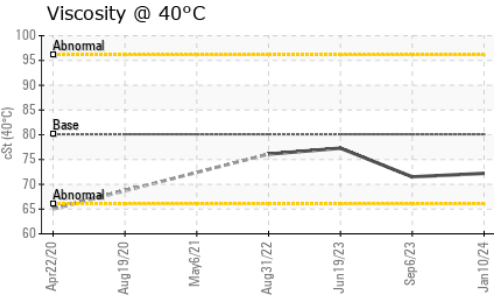
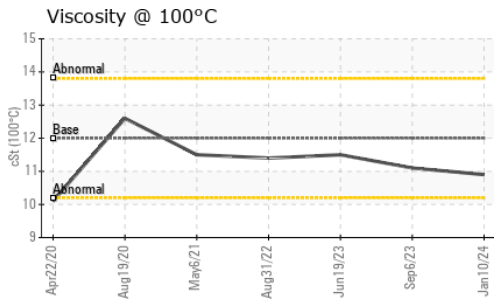
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	6	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
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*	>4	<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.9</b>	5.8	6.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.2</b>	19.2	19.4
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

L'état de l'huile est acceptable pour la durée de service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	13	2
Boron	ppm	ASTM D5185(m)	2	<b>5</b>	15	86
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	58	54
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>942</b>	887	394
Calcium	ppm	ASTM D5185(m)	1050	<b>1057</b>	1088	1763
Phosphorus	ppm	ASTM D5185(m)	995	<b>977</b>	1030	1090
Zinc	ppm	ASTM D5185(m)	1180	<b>1157</b>	1158	1168
Sulfur	ppm	ASTM D5185(m)	2600	<b>2532</b>	2630	2799
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	13.3	14.8
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>72.2</b>	71.5	77.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.9</b>	11.1	11.5
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>140</b>	146	140



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 737 - Quebec City Hauling  
**Sample No.** : PC0081999 **Received** : 12 Jan 2024 6205 Boul. Wilfrid Hamel, Quebec City, QC  
**Lab Number** : 02608378 **Diagnosed** : 15 Jan 2024 CA G2E 5G8  
**Unique Number** : 5709464 **Diagnostician** : Wes Davis Contact: Dave Beaulieu  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI ) davebeaulieu@matrec.ca

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.