

Area  
**MICHAUDVILLE**

Machine Id  
**1209**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0083760</b>	PC0082295	PC0075869
Sample Date		Client Info		<b>14 Apr 2024</b>	15 Oct 2023	10 Oct 2023
Machine Age	hrs	Client Info		<b>17826</b>	17423	17362
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	4	10
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	6
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	3
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

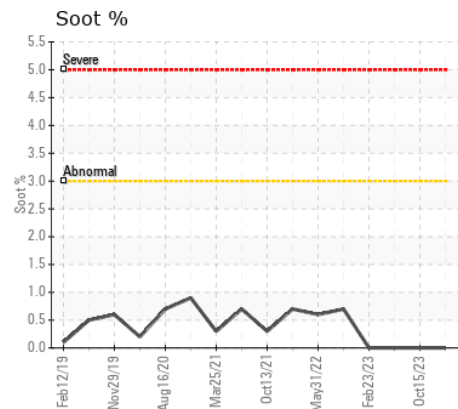
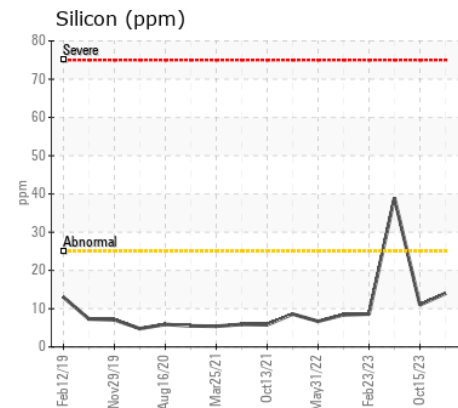
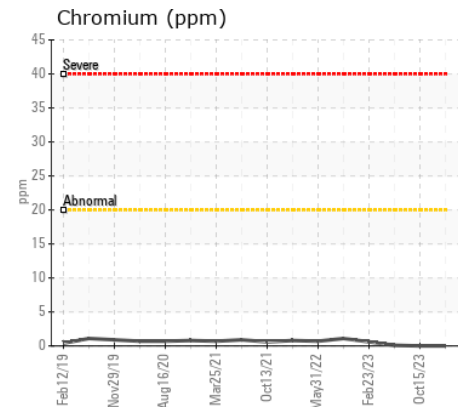
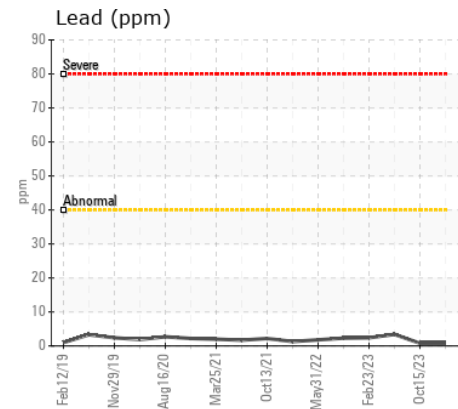
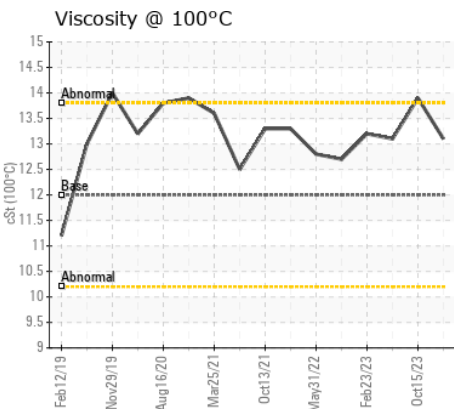
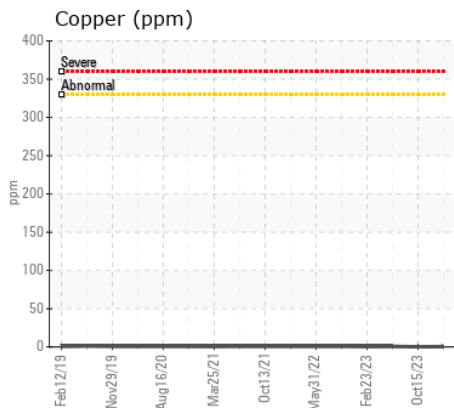
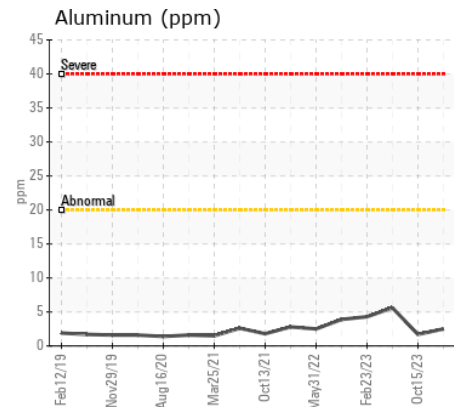
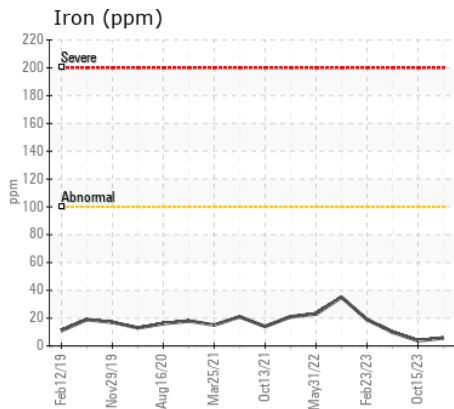
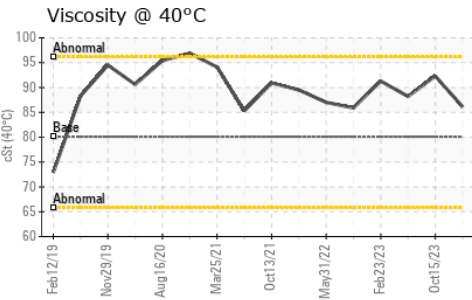
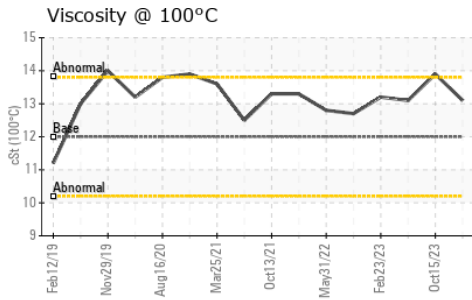
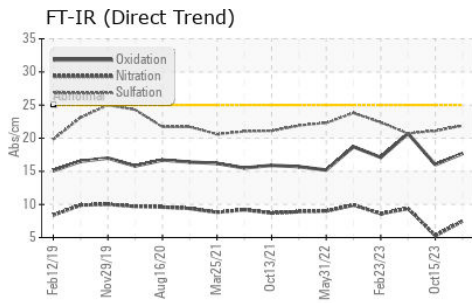
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>14</b>	11	▲ 39
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	2	18
Fuel		WC Method	>5	<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*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	5.3	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.9</b>	21.1	20.7
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	4
Boron	ppm	ASTM D5185(m)	2	<b>1</b>	1	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	<b>55</b>	53	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>920</b>	869	953
Calcium	ppm	ASTM D5185(m)	1050	<b>1278</b>	1238	1183
Phosphorus	ppm	ASTM D5185(m)	995	<b>1029</b>	1013	1043
Zinc	ppm	ASTM D5185(m)	1180	<b>1214</b>	1177	1253
Sulfur	ppm	ASTM D5185(m)	2600	<b>2641</b>	2705	2633
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.7</b>	16.0	20.7
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>86.1</b>	92.3	88.2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>13.1</b>	13.9	13.1
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>152</b>	153	148



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0083760  
**Lab Number** : 02628739  
**Unique Number** : 5761871  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**LES ENTREPRISES MICHAUVILLE INC.**  
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 MONT ST-HILAIRE, QC  
 CA J3H 0M6  
 Contact: Martin Trudel  
 mtrudel@michaudville.com

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.