



Machine Id  
**MACK 6450**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (38 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078634</b>	PC0071916	PC0068452
Sample Date		Client Info		<b>22 Feb 2024</b>	23 Aug 2023	12 Apr 2023
Machine Age	hrs	Client Info		<b>12122</b>	11147	10314
Oil Age	hrs	Client Info		<b>975</b>	833	762
Filter Age	hrs	Client Info		<b>975</b>	833	762
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**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>13</b>	14	12
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	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>6</b>	2	4
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185(m)	>330	<b>19</b>	2	3
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

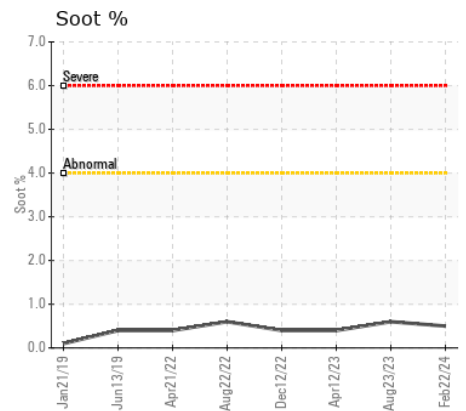
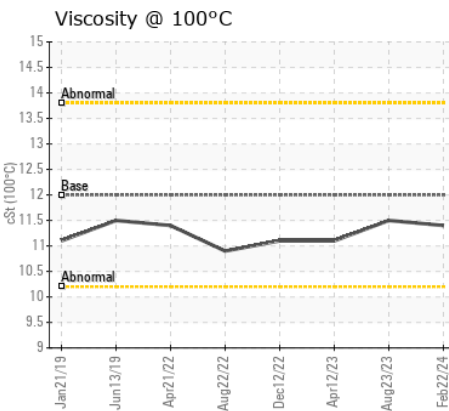
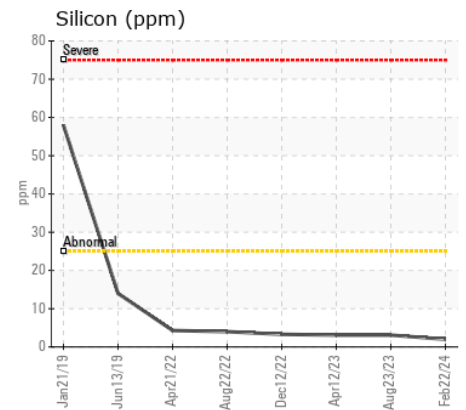
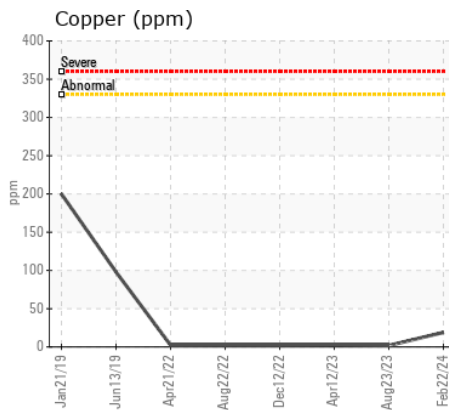
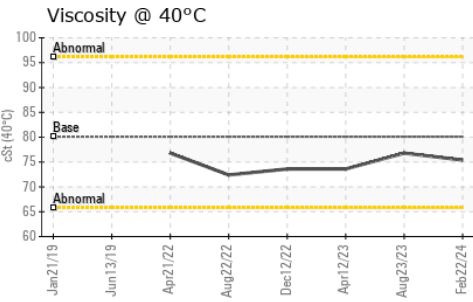
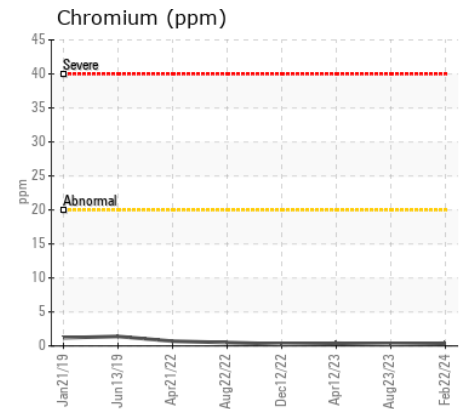
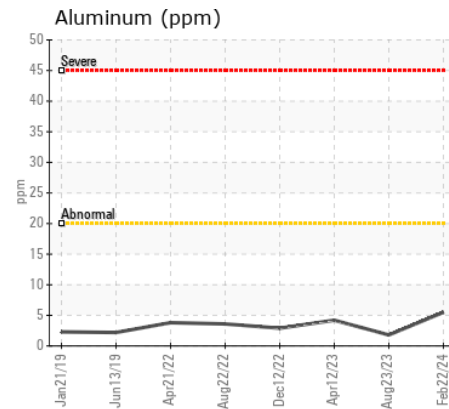
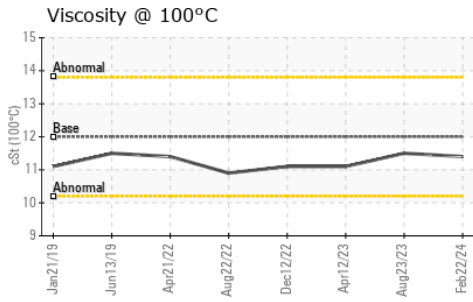
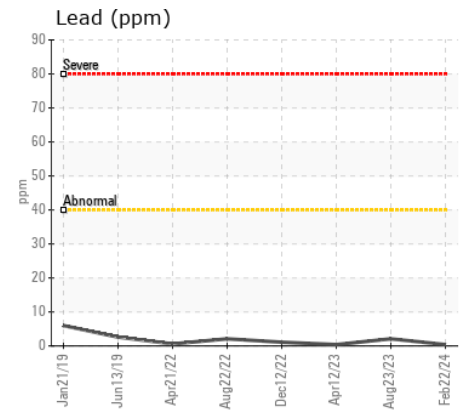
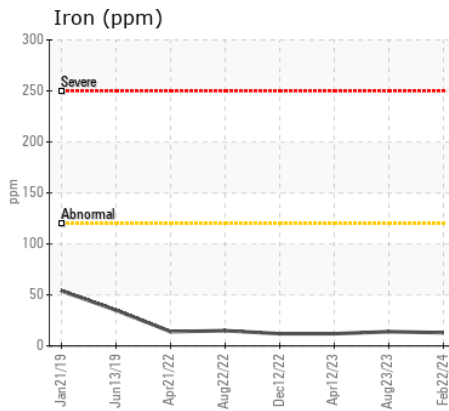
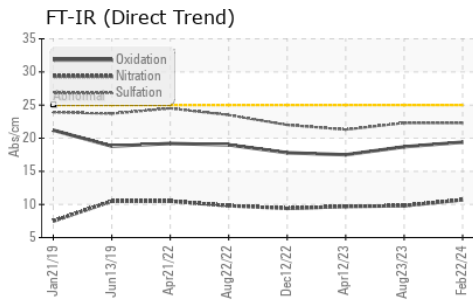
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	3
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>0.5</b>	0.6	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.7</b>	9.8	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.3</b>	22.3	21.3
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>9</b>	8	11
Boron	ppm	ASTM D5185(m)	2	<b>2</b>	2	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>63</b>	63	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>976</b>	1012	989
Calcium	ppm	ASTM D5185(m)	1050	<b>1079</b>	1097	1124
Phosphorus	ppm	ASTM D5185(m)	995	<b>909</b>	972	1031
Zinc	ppm	ASTM D5185(m)	1180	<b>1172</b>	1249	1223
Sulfur	ppm	ASTM D5185(m)	2600	<b>1935</b>	2135	2357
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.4</b>	18.7	17.5
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	<b>75.4</b>	76.8	73.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.4</b>	11.5	11.1
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>143</b>	142	141



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078634 **Received** : 16 Apr 2024  
**Lab Number** : **02629122** **Tested** : 16 Apr 2024  
**Unique Number** : 5762254 **Diagnosed** : 16 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

**Wasteco**  
 235 Curtis Drive  
 Guelph, ON  
 CA N1K 1Y3  
 Contact: Craig Albers  
 calbers@wasteco.com  
 T:  
 F: (519)836-4531

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.