



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**1257**  
Component  
**Rear Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- 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>WC0905416</b>	WC0895798	WC0873852
Sample Date		Client Info		<b>22 Feb 2024</b>	10 Jan 2024	16 Nov 2023
Machine Age	kms	Client Info		<b>44934</b>	44465	897526
Oil Age	kms	Client Info		<b>474</b>	515	0
Filter Age	kms	Client Info		<b>474</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	MARGINAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>10</b>	11	11
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	0	<1
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

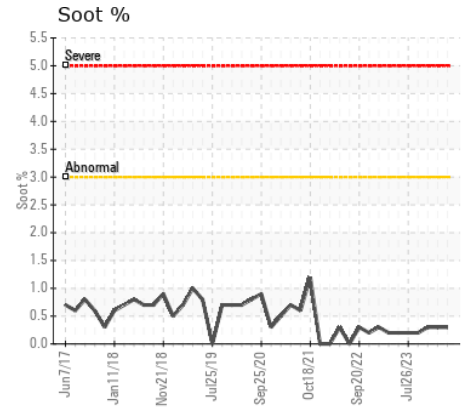
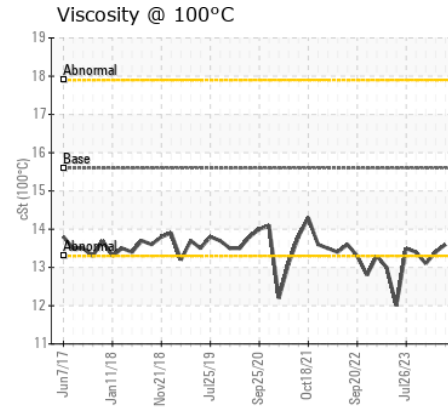
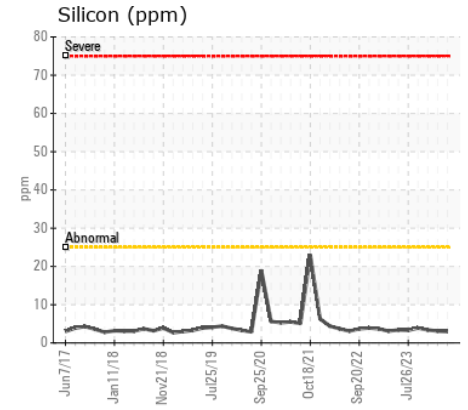
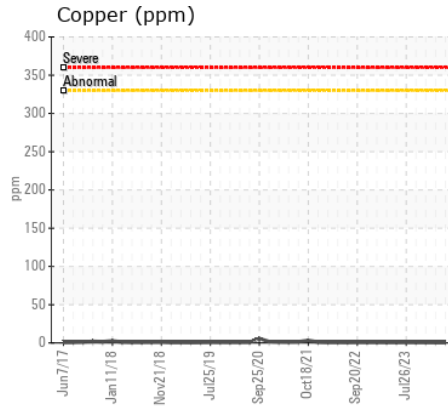
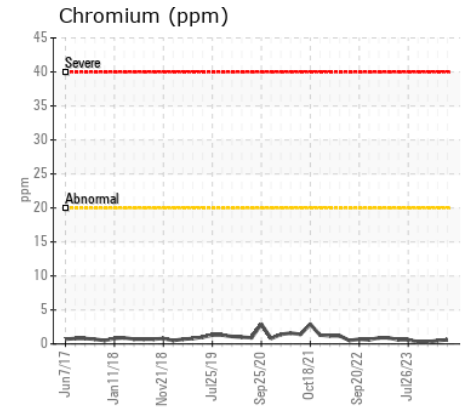
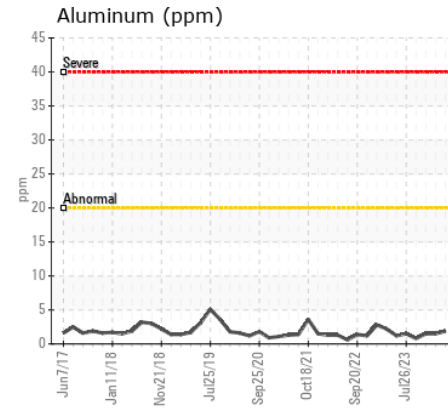
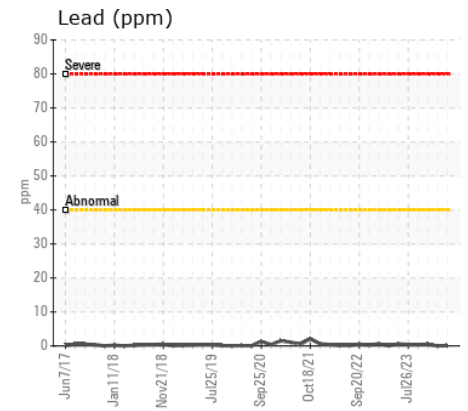
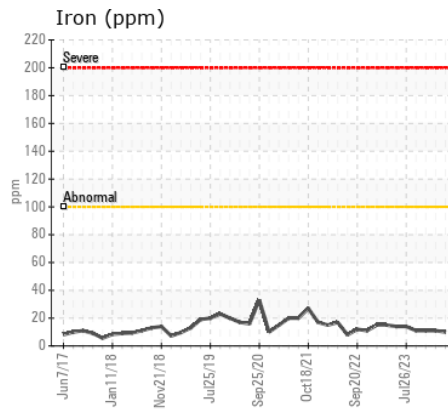
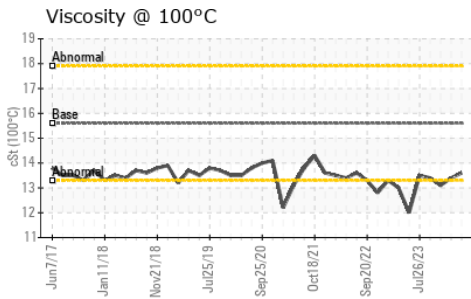
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.8</b>	9.5	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.6</b>	23.5	27.0
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>2</b>	1	3
Boron	ppm	ASTM D5185(m)	0	<b>1</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	57	56
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>927</b>	946	921
Calcium	ppm	ASTM D5185(m)	1070	<b>1131</b>	1029	1013
Phosphorus	ppm	ASTM D5185(m)	1150	<b>981</b>	982	935
Zinc	ppm	ASTM D5185(m)	1270	<b>1161</b>	1146	1120
Sulfur	ppm	ASTM D5185(m)	2060	<b>2791</b>	2605	2347
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.7</b>	23.9	30.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.6</b>	13.4	13.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0905416 **Received** : 28 Feb 2024  
**Lab Number** : 02618594 **Tested** : 28 Feb 2024  
**Unique Number** : 5735704 **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : MOB 1

**KINGSTON TRANSIT**  
 1181 JOHN COUNTER BLVD  
 KINGSTON, ON  
 CA K7K 6C7  
 Contact: Brent Gunter  
 bgunter@cityofkingston.ca  
 T: (613)546-4291  
 F: (613)542-1504

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.