



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**1510**  
Component  
**Rear Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

## RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0895799</b>	WC0873846	WC0841025
Sample Date		Client Info		<b>12 Jan 2024</b>	22 Nov 2023	19 Jul 2023
Machine Age	hrs	Client Info		<b>27475</b>	27033	26474
Oil Age	hrs	Client Info		<b>447</b>	559	482
Filter Age	hrs	Client Info		<b>447</b>	559	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>24</b>	25	18
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>7</b>	4	2
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	2	1
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	4	3
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

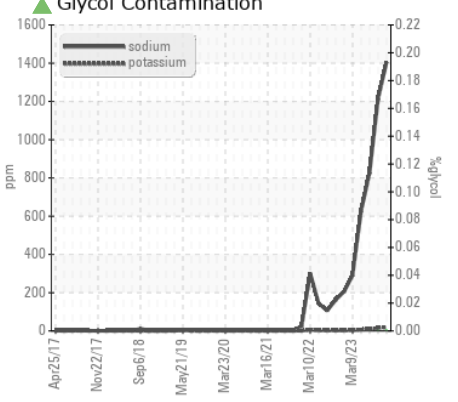
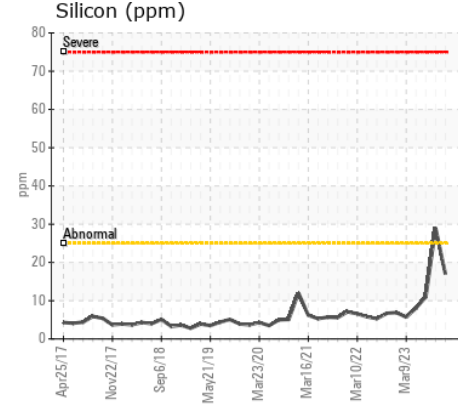
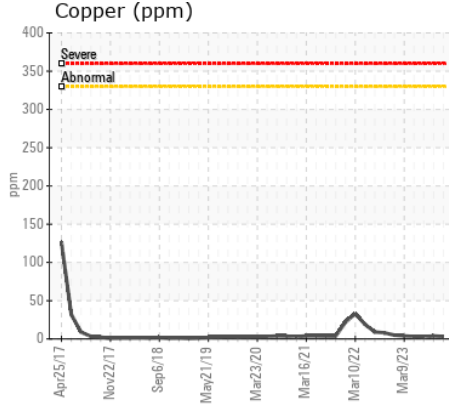
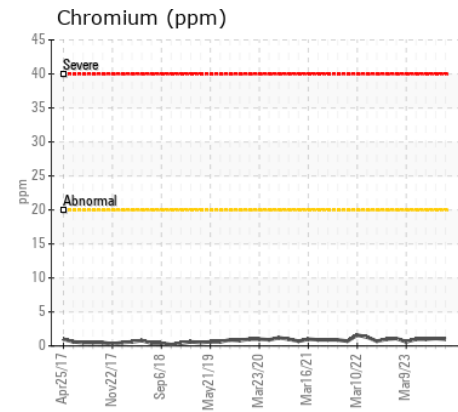
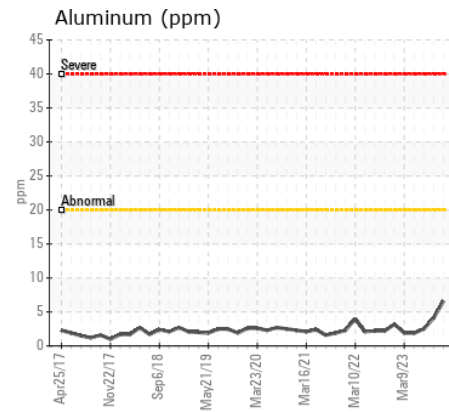
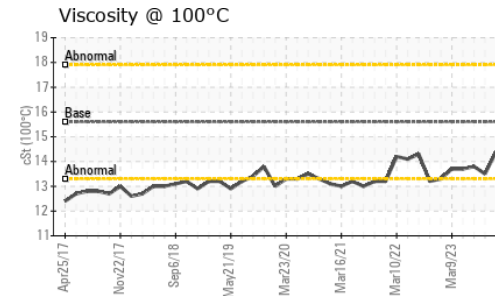
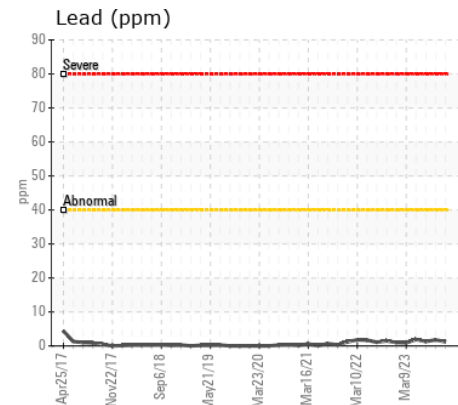
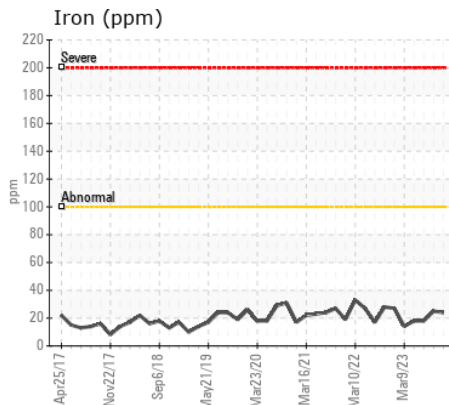
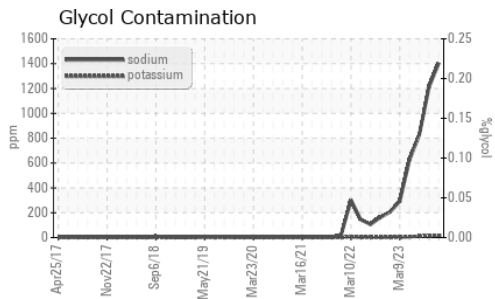
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>17</b>	▲ 29	11
Potassium	ppm	ASTM D5185(m)	>20	<b>18</b>	15	10
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>14.1</b>	13.8	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>24.3</b>	29.3	28.4
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		▲ <b>1405</b>	▲ 1212	▲ 826
Boron	ppm	ASTM D5185(m)	0	<b>24</b>	19	11
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>107</b>	102	86
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>881</b>	878	934
Calcium	ppm	ASTM D5185(m)	1070	<b>1006</b>	1001	1007
Phosphorus	ppm	ASTM D5185(m)	1150	<b>837</b>	758	887
Zinc	ppm	ASTM D5185(m)	1270	<b>1116</b>	1097	1110
Sulfur	ppm	ASTM D5185(m)	2060	<b>2762</b>	2523	2549
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.6</b>	▲ 32.7	29.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>14.4</b>	13.5	13.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0895799 **Received** : 22 Jan 2024  
**Lab Number** : 02610129 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711215 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

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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.