



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		WC0905418	WC0895799	WC0873846
Sample Date		Client Info		22 Feb 2024	12 Jan 2024	22 Nov 2023
Machine Age	hrs	Client Info		27933	27475	27033
Oil Age	hrs	Client Info		458	447	559
Filter Age	hrs	Client Info		458	447	559
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

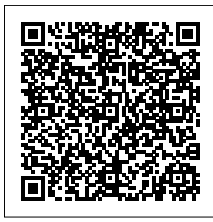
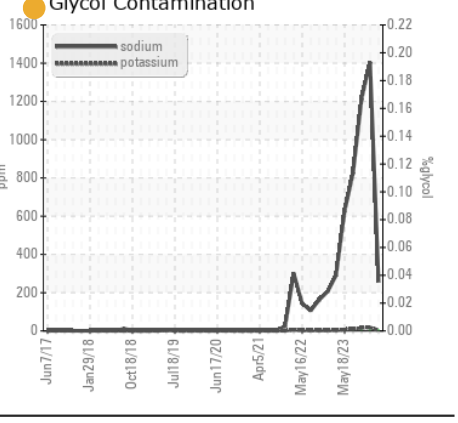
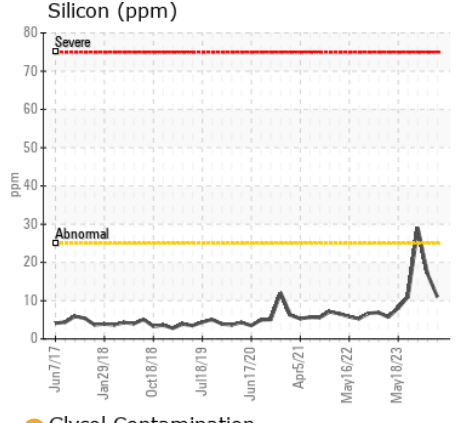
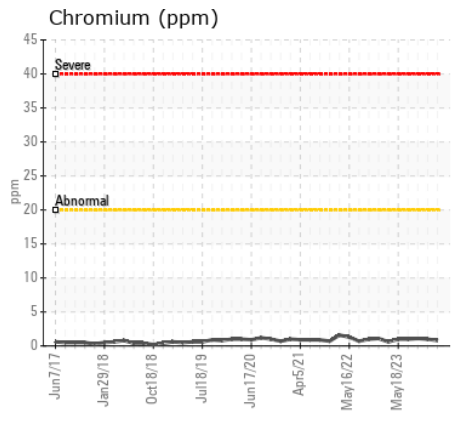
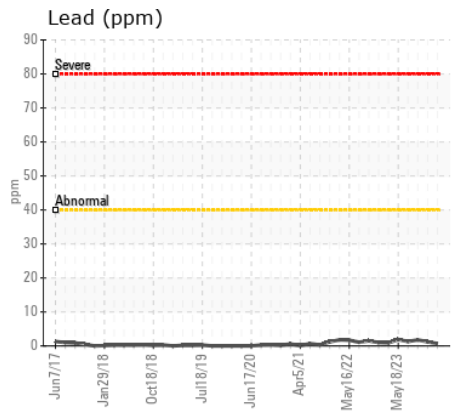
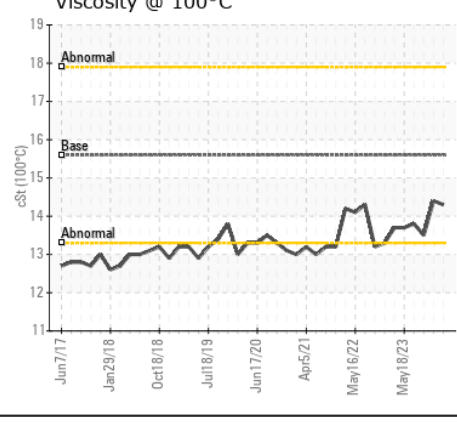
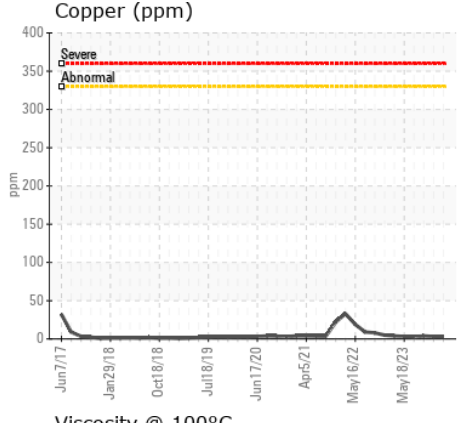
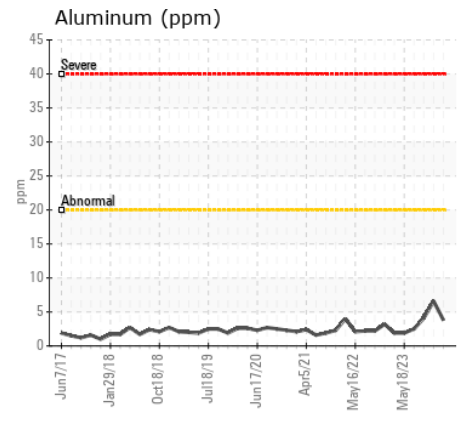
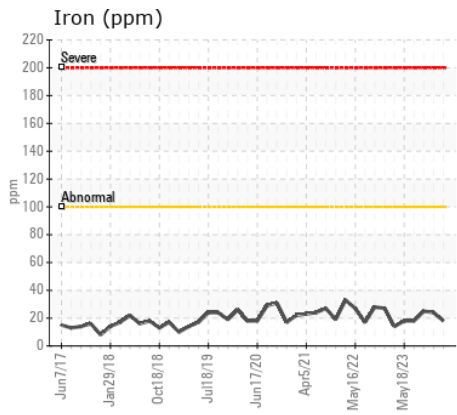
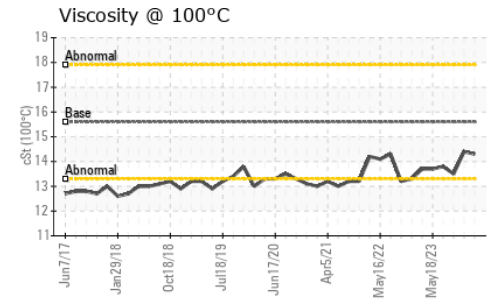
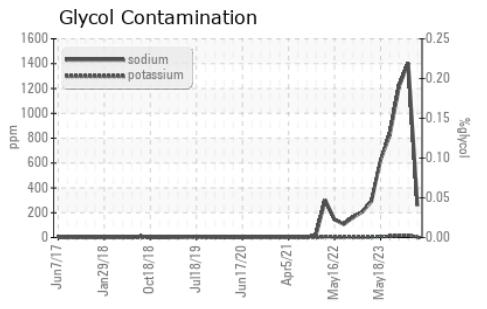
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	11	17	▲ 29
Potassium	ppm	ASTM D5185(m)	>20	3	18	15
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>3	0.2	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.5	14.1	13.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7	24.3	29.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		● 255	● 1405	● 1212
Boron	ppm	ASTM D5185(m)	0	5	24	19
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	67	107	102
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	952	881	878
Calcium	ppm	ASTM D5185(m)	1070	1033	1006	1001
Phosphorus	ppm	ASTM D5185(m)	1150	977	837	758
Zinc	ppm	ASTM D5185(m)	1270	1162	1116	1097
Sulfur	ppm	ASTM D5185(m)	2060	2657	2762	2523
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.8	22.6	▲ 32.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.3	14.4	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0905418 **Received** : 28 Feb 2024
Lab Number : 02618593 **Tested** : 28 Feb 2024
Unique Number : 5735703 **Diagnosed** : 29 Feb 2024 - 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.