



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area
[208085]
Machine Id
74917669

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



DIAGNOSIS

▲ Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

▲ Wear

Lead ppm levels are abnormal. Bearing wear is indicated.

▲ Contamination

Test for glycol is positive. There is a high concentration of glycol present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		CU0022681	---	---
Sample Date	Client Info		21 Mar 2024	---	---
Machine Age	hrs	Client Info	5500	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >75	7	---	---
Chromium	ppm	ASTM D5185(m) >5	0	---	---
Nickel	ppm	ASTM D5185(m) >4	0	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	0	---	---
Aluminum	ppm	ASTM D5185(m) >15	<1	---	---
Lead	ppm	ASTM D5185(m) >25	▲ 29	---	---
Copper	ppm	ASTM D5185(m) >100	83	---	---
Tin	ppm	ASTM D5185(m) >4	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	88	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 60	0	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 1010	704	---	---
Calcium	ppm	ASTM D5185(m) 1070	1161	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	957	---	---
Zinc	ppm	ASTM D5185(m) 1270	1088	---	---
Sulfur	ppm	ASTM D5185(m) 2060	2952	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

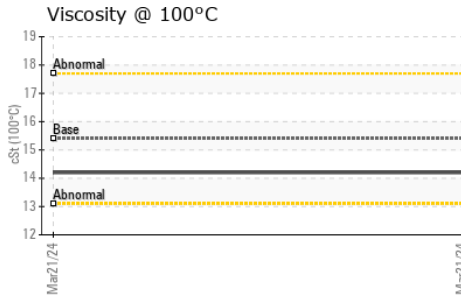
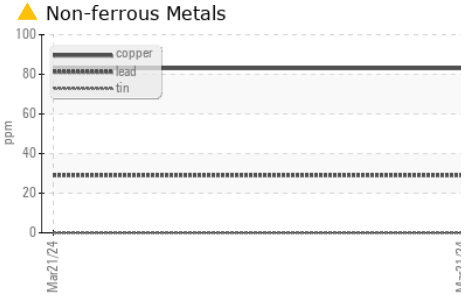
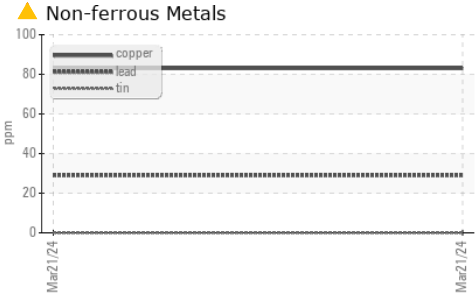
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	2	---	---
Sodium	ppm	ASTM D5185(m)	6	---	---
Potassium	ppm	ASTM D5185(m) >20	▲ 5	---	---
Glycol	%	ASTM D7922*	▲ 0.255	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	0.1	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.4	---	---
Sulfation	Abs.1mm	ASTM D7415* >30	20.8	---	---



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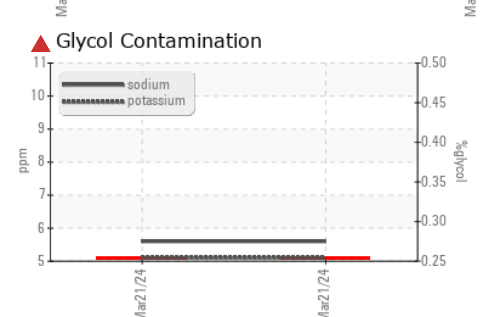
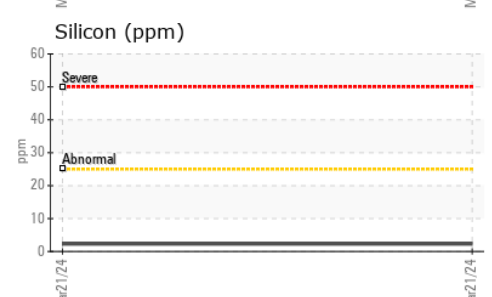
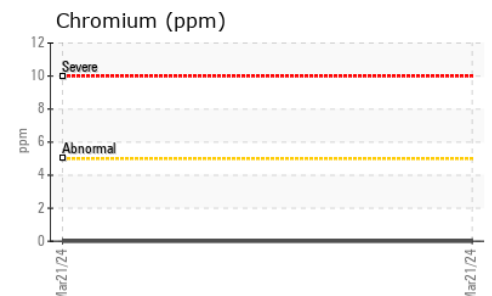
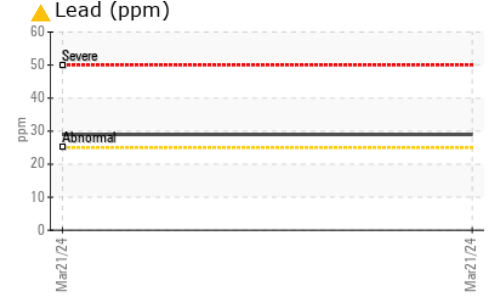
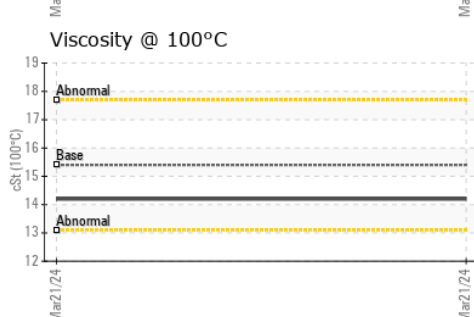
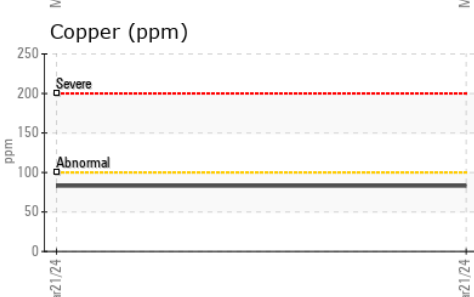
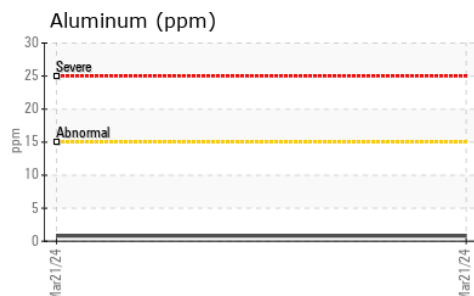
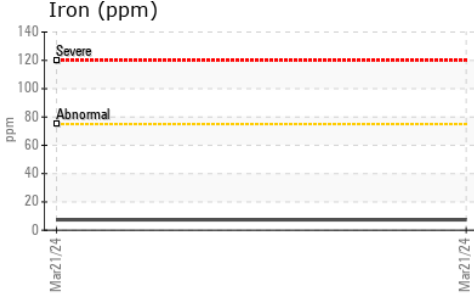


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	14.8	---	---

VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	>0.2	NEG	---	---
Free Water	scalar Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)	15.4	14.2	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022681 **Received** : 27 Mar 2024
Lab Number : **02624836** **Tested** : 27 Mar 2024
Unique Number : 5749955 **Diagnosed** : 27 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

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 7200 TRANS CANADA HWY.
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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.