



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[43802798]

Machine Id

R274

Component

Diesel Engine

Fluid

CHEVRON DELO 400 SAE 10W30 (--- LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0553864	WC0553633	---
Sample Date		Client Info		18 Mar 2024	30 Aug 2021	---
Machine Age	kms	Client Info		254074	78536	---
Oil Age	kms	Client Info		44301	78536	---
Filter Age	kms	Client Info		0	78536	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m)	>90	▲ 106	62	---
Chromium	ppm	ASTM D5185(m)	>20	3	6	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	15	17	---
Lead	ppm	ASTM D5185(m)	>40	2	8	---
Copper	ppm	ASTM D5185(m)	>330	3	12	---
Tin	ppm	ASTM D5185(m)	>15	<1	2	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

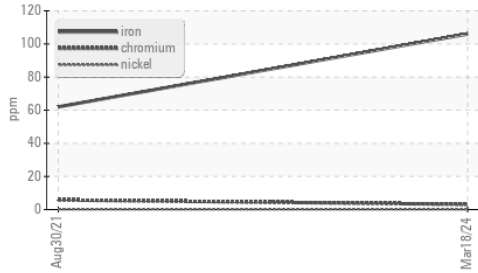
Silicon	ppm	ASTM D5185(m)	>25	5	13	---
Potassium	ppm	ASTM D5185(m)	>20	29	43	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>6	0.8	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	12.6	10.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.7	25.4	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

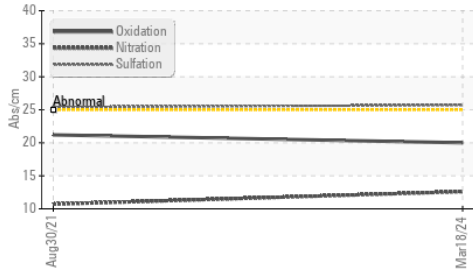
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		3	2	---
Boron	ppm	ASTM D5185(m)		20	77	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		6	100	---
Manganese	ppm	ASTM D5185(m)		1	2	---
Magnesium	ppm	ASTM D5185(m)		731	582	---
Calcium	ppm	ASTM D5185(m)		1406	1682	---
Phosphorus	ppm	ASTM D5185(m)	1260	679	788	---
Zinc	ppm	ASTM D5185(m)	1400	786	906	---
Sulfur	ppm	ASTM D5185(m)		2412	2165	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.0	21.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.1	11.2	13.1	---

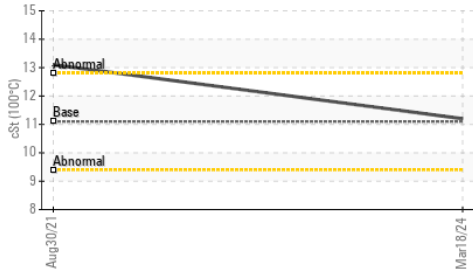
▲ Ferrous Alloys



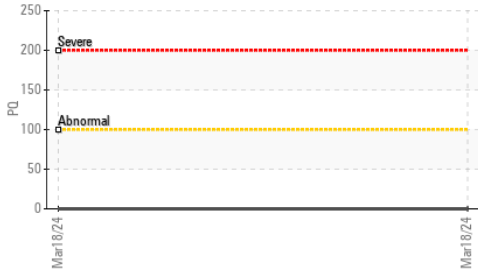
FT-IR (Direct Trend)



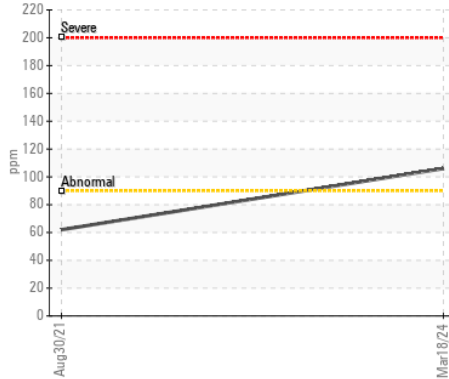
Viscosity @ 100°C



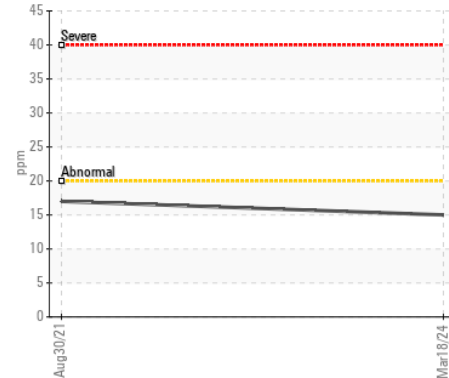
PQ



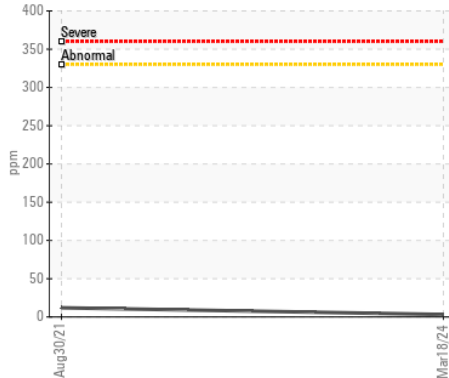
▲ Iron (ppm)



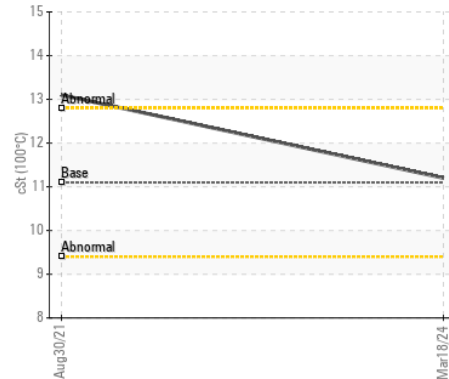
Aluminum (ppm)



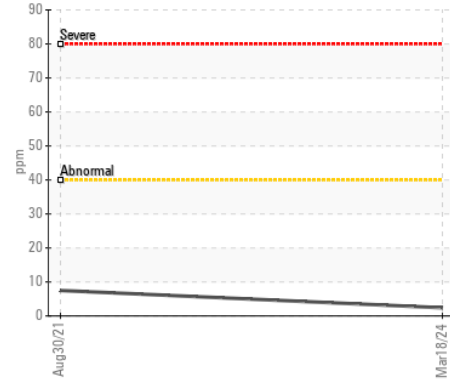
Copper (ppm)



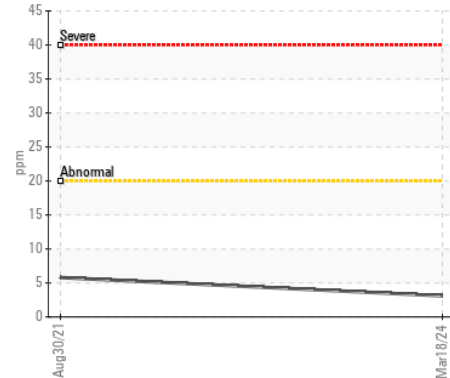
Viscosity @ 100°C



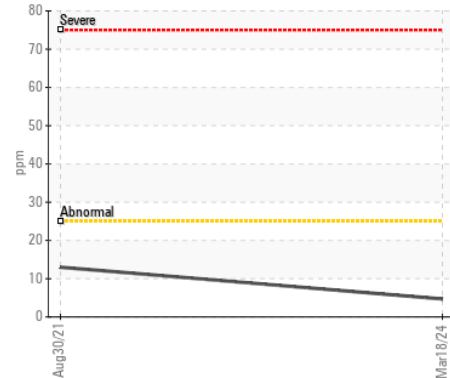
Lead (ppm)



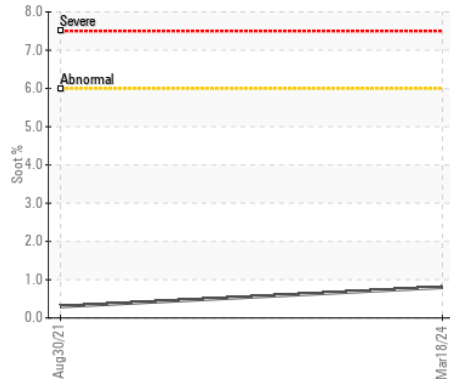
Chromium (ppm)



Silicon (ppm)



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0553864
Lab Number : 02627671
Unique Number : 5760803
Test Package : MOB 1 (Additional Tests: PQ)

RUSH TRUCK CENTRES OF CANADA
 1750 MCCONNELL AVE
 CORNWALL, ON
 CA K6H 5V3
 Contact: Service Manager
 cornwallservice@rushtruckcentres.ca

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.