



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
[809304]
 Machine Id
COMMAND POST 101
 Component
Diesel Engine
 Fluid
SAE 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812446	---	---
Sample Date		Client Info		29 Dec 2023	---	---
Machine Age	kms	Client Info		8280	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	19	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	1	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	18	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

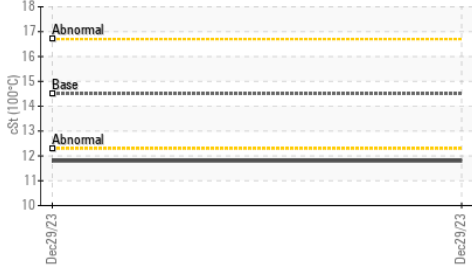
Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>3.0	0.5	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	6.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

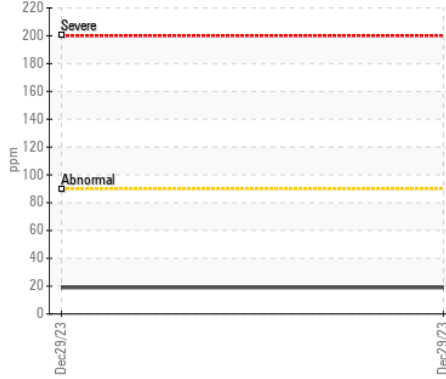
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>57	1	---	---
Boron	ppm	ASTM D5185(m)		2	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		59	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		872	---	---
Calcium	ppm	ASTM D5185(m)		1158	---	---
Phosphorus	ppm	ASTM D5185(m)		1024	---	---
Zinc	ppm	ASTM D5185(m)		1196	---	---
Sulfur	ppm	ASTM D5185(m)		2635	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	▲ 11.8	---	---

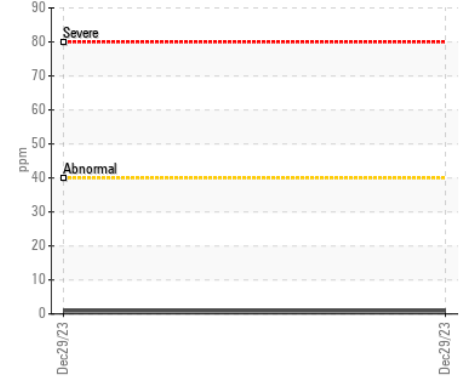
▲ Viscosity @ 100°C



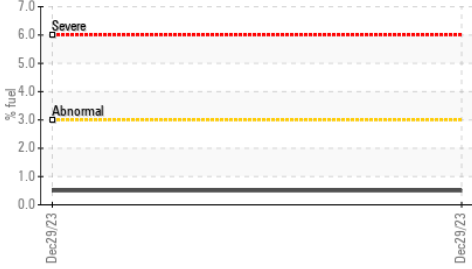
Iron (ppm)



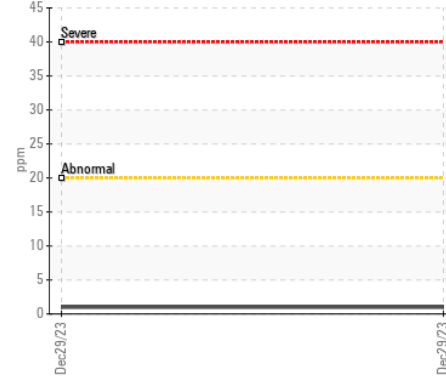
Lead (ppm)



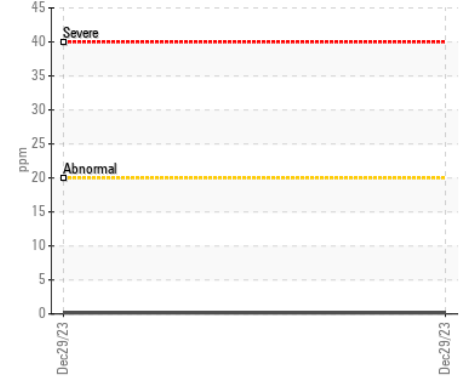
Fuel Dilution



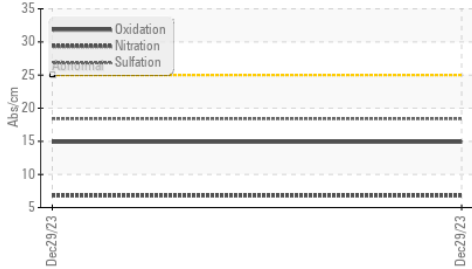
Aluminum (ppm)



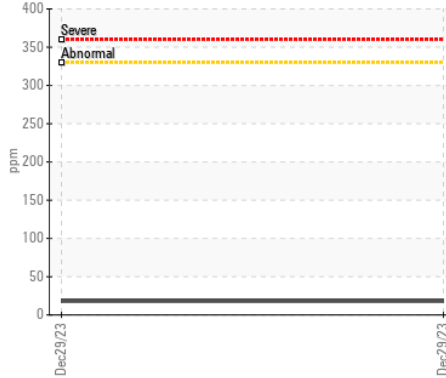
Chromium (ppm)



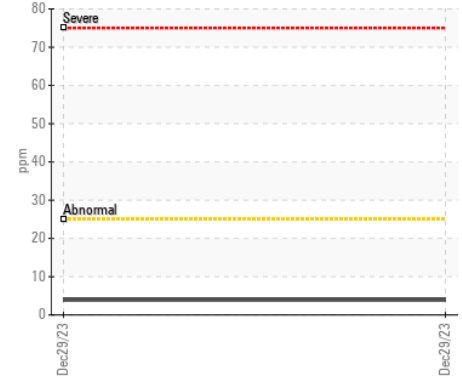
FT-IR (Direct Trend)



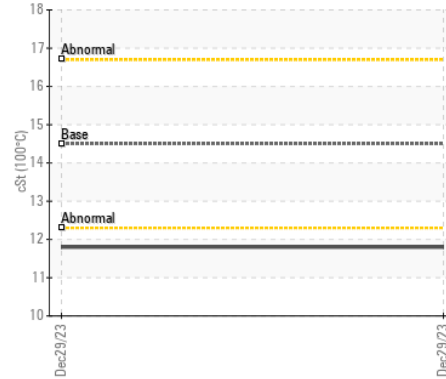
Copper (ppm)



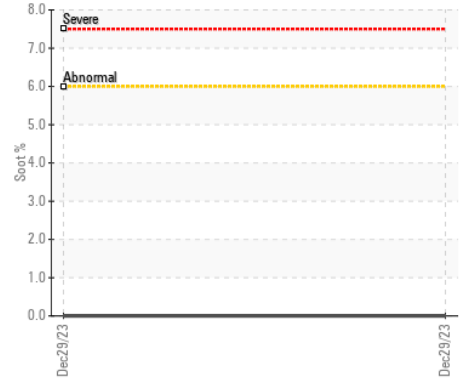
Silicon (ppm)



▲ Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0812446 **Received** : 10 Jun 2024
Lab Number : 02640647 **Tested** : 11 Jun 2024
Unique Number : 5789809 **Diagnosed** : 11 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

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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.