



POWER SYSTEMS
SYSTÈMES DE PUISSANCE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

GREY BRUCE [285519]

Machine Id

CUMMINS - F50789540 CUMMINS

Component

Diesel Engine

Fluid

CASTROL 15W40 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WA0020700	WA0019058	WA0017577
Sample Date		Client Info		03 Jun 2024	02 May 2023	03 May 2022
Machine Age		Client Info		989	954	903
Oil Age		Client Info		0	0	0
Filter Age		Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	3	4	3
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	2	3	4
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

There is no indication of any contamination in the oil.

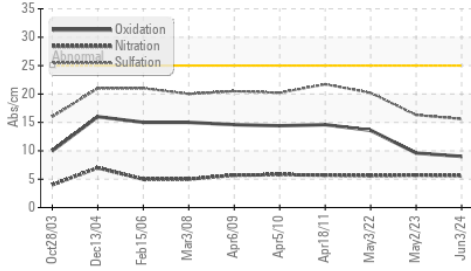
Silicon	ppm	ASTM D5185(m)	>25	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.6	5.7	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	15.6	16.3	20.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

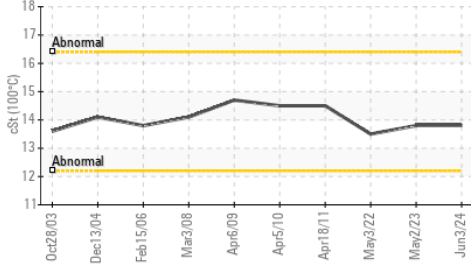
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>406	2	3	4
Boron	ppm	ASTM D5185(m)		4	3	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		2	8	53
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		39	113	903
Calcium	ppm	ASTM D5185(m)		2235	2314	1292
Phosphorus	ppm	ASTM D5185(m)		872	979	1119
Zinc	ppm	ASTM D5185(m)		1011	1040	1261
Sulfur	ppm	ASTM D5185(m)		3042	3154	2944
Oxidation	Abs/.1mm	ASTM D7414*	>25	9.0	9.6	13.6
Visc @ 100°C	cSt	ASTM D7279(m)		13.8	13.8	13.5

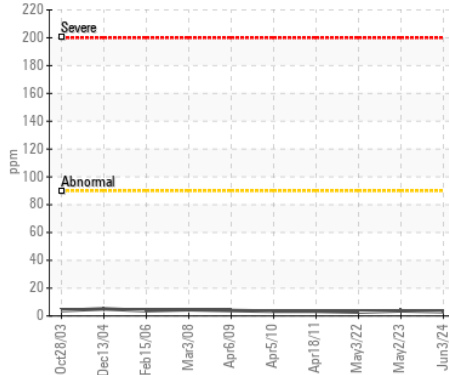
FT-IR (Direct Trend)



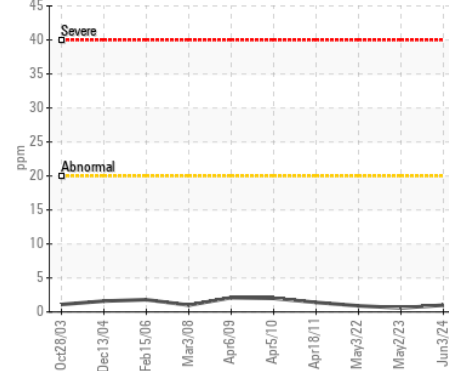
Viscosity @ 100°C



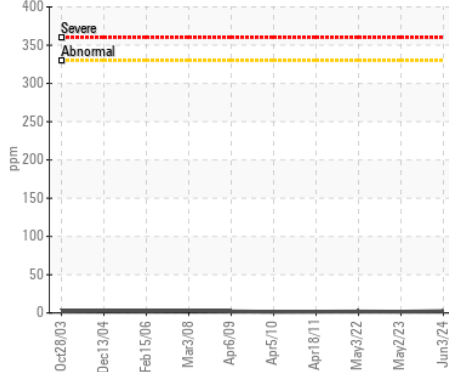
Iron (ppm)



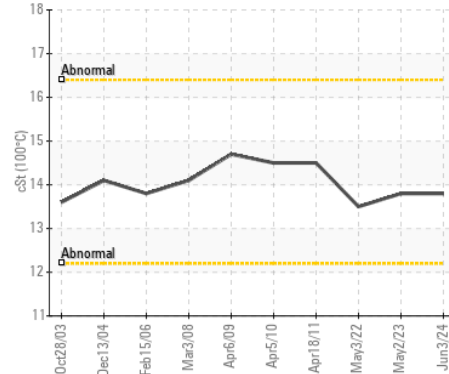
Aluminum (ppm)



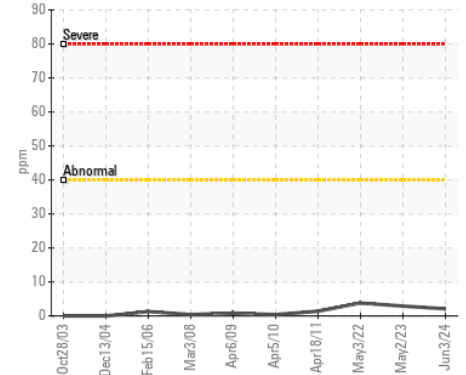
Copper (ppm)



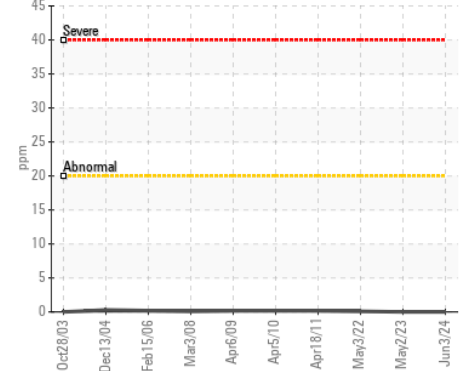
Viscosity @ 100°C



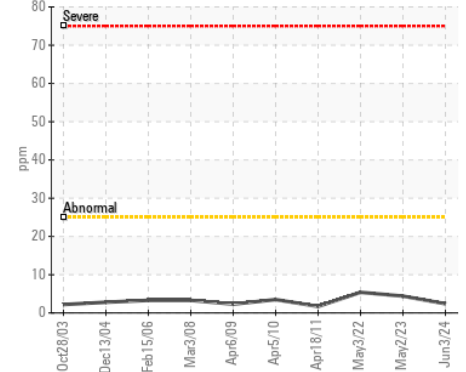
Lead (ppm)



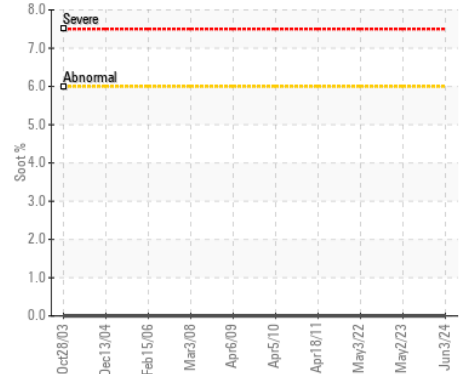
Chromium (ppm)



Silicon (ppm)



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0020700
Lab Number : 02645174
Unique Number : 5802713
Test Package : MOB 1
Received : 03 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Wes Davis

Wajax Power Systems
 10 Diesel Drive
 Toronto, ON
 CA M8W 2T8
 Contact: David Gilkes
 dgilkes@wajax.com
 T: (416)259-3281
 F: (416)251-6191

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.