MOB I

WAJAX POWER SYSTEMS SYSTÈMES DE PUISSANCE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Area
TTR [275720]
Machine Id
KOHLER 093370
Component
Diesel Engine
Fluid
CASTROL 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

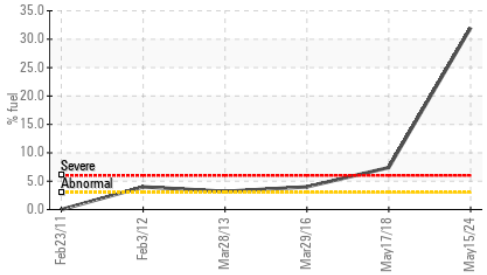
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

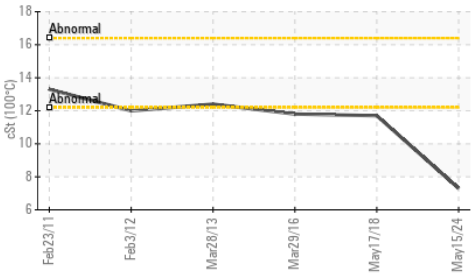
Visc @ 100°C is severely low. Phosphorus ppm levels are abnormally low. Zinc ppm levels are abnormally low. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WA0021255	WA0010733	WA0007222
Sample Date		Client Info		15 May 2024	17 May 2018	29 Mar 2016
Machine Age	hrs	Client Info		0	136	0
Oil Age	hrs	Client Info		0	0	1
Filter Age	hrs	Client Info		0	0	1
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185(m)	>90	6	4	8
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	2
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	4
Lead	ppm	ASTM D5185(m)	>40	<1	2	2
Copper	ppm	ASTM D5185(m)	>330	20	29	28
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	2	2	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel	%	ASTM D7593*	>3.0	▲ 32	▲ 7.4	▲ 4.0
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	6.8	6.1	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	16.7	18.5	20.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>406	1	3	3
Boron	ppm	ASTM D5185(m)		4	50	39
Barium	ppm	ASTM D5185(m)		0	<1	8
Molybdenum	ppm	ASTM D5185(m)		6	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		90	8	10
Calcium	ppm	ASTM D5185(m)		1658	2117	2382
Phosphorus	ppm	ASTM D5185(m)		▲ 672	946	990
Zinc	ppm	ASTM D5185(m)		▲ 752	1066	1165
Sulfur	ppm	ASTM D5185(m)		2168	3357	3523
Oxidation	Abs/.1mm	ASTM D7414*	>25	11.9	14.1	15.7
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 7.3	▲ 11.7	11.8

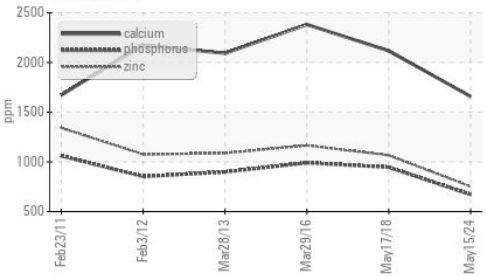
Fuel Dilution



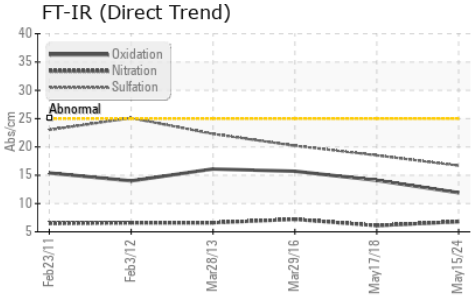
Viscosity @ 100°C



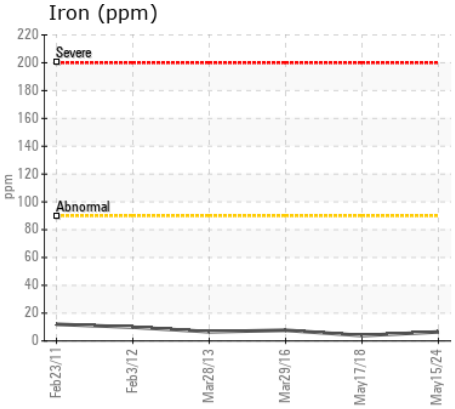
Additives



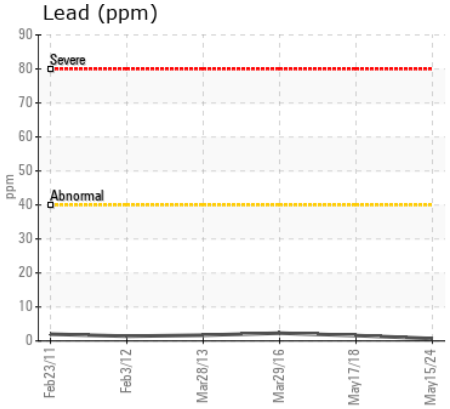
FT-IR (Direct Trend)



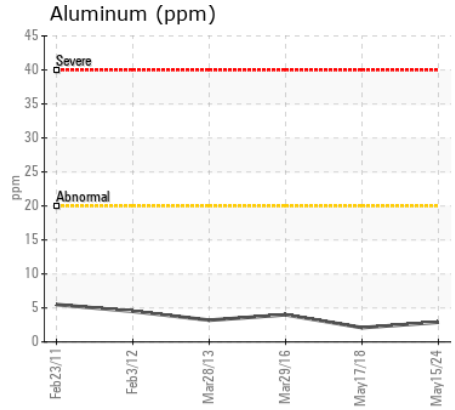
Iron (ppm)



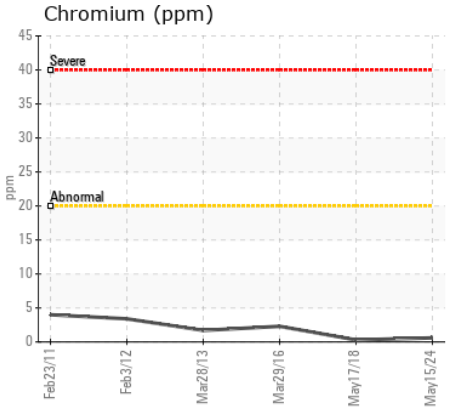
Lead (ppm)



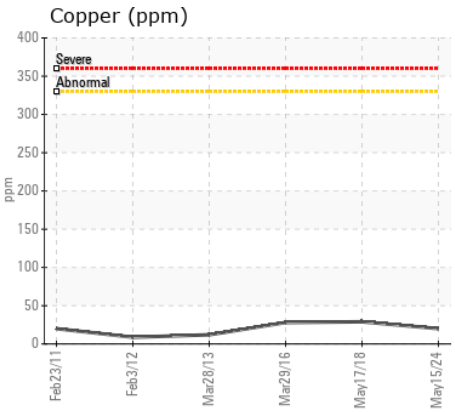
Aluminum (ppm)



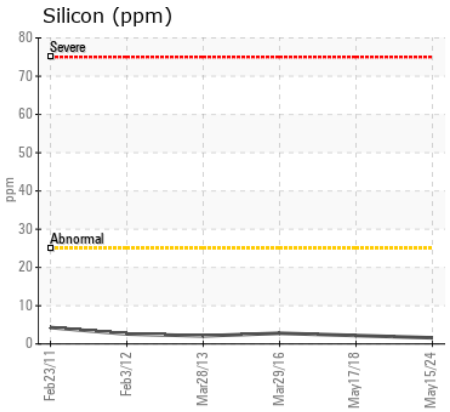
Chromium (ppm)



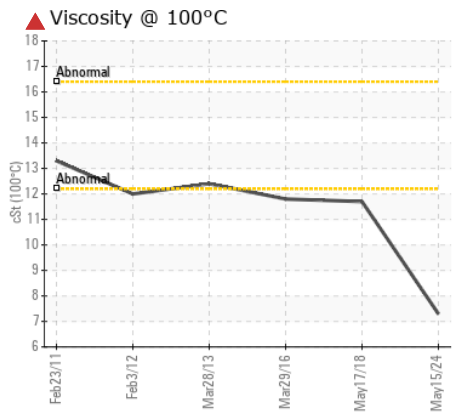
Copper (ppm)



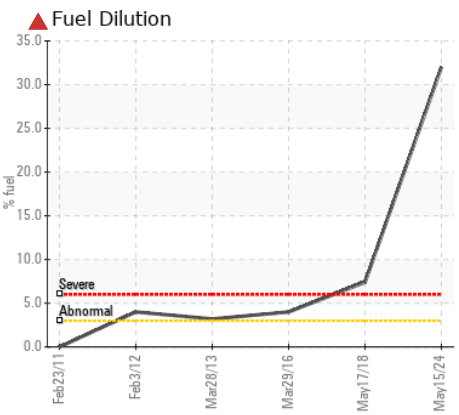
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0021255 **Received** : 05 Jun 2024
Lab Number : 02639815 **Tested** : 06 Jun 2024
Unique Number : 5788977 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

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.

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