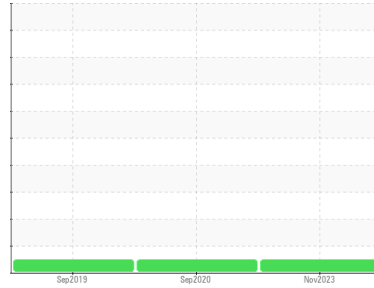


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
QUEEN COUNTY DEPOT [6100213697]
Machine Id
16701006212

Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WA0020813	WA0015530	WA0012502
Sample Date	Client Info			29 Nov 2023	29 Sep 2020	19 Sep 2019
Machine Age	hrs	Client Info		116	59	52
Oil Age	hrs	Client Info		3	7	52
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

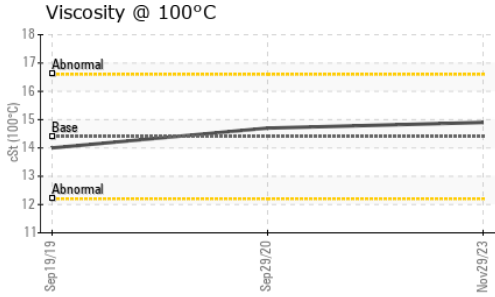
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	1	2	3
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	2
Lead	ppm	ASTM D5185(m)	>40	0	2	<1
Copper	ppm	ASTM D5185(m)	>330	<1	5	17
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	3	32	130
Barium	ppm	ASTM D5185(m)	10	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	5	57	47
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	86	969	896
Calcium	ppm	ASTM D5185(m)	3000	2148	1125	1346
Phosphorus	ppm	ASTM D5185(m)	1150	843	958	761
Zinc	ppm	ASTM D5185(m)	1350	981	1156	846
Sulfur	ppm	ASTM D5185(m)	4250	2925	2681	2159
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	4	3
Sodium	ppm	ASTM D5185(m)	>158	2	2	<1
Potassium	ppm	ASTM D5185(m)	>20	2	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.0	5.6	8.1
Sulfation	Abs./1mm	ASTM D7415*	>30	15.7	18.2	19.4

OIL ANALYSIS REPORT

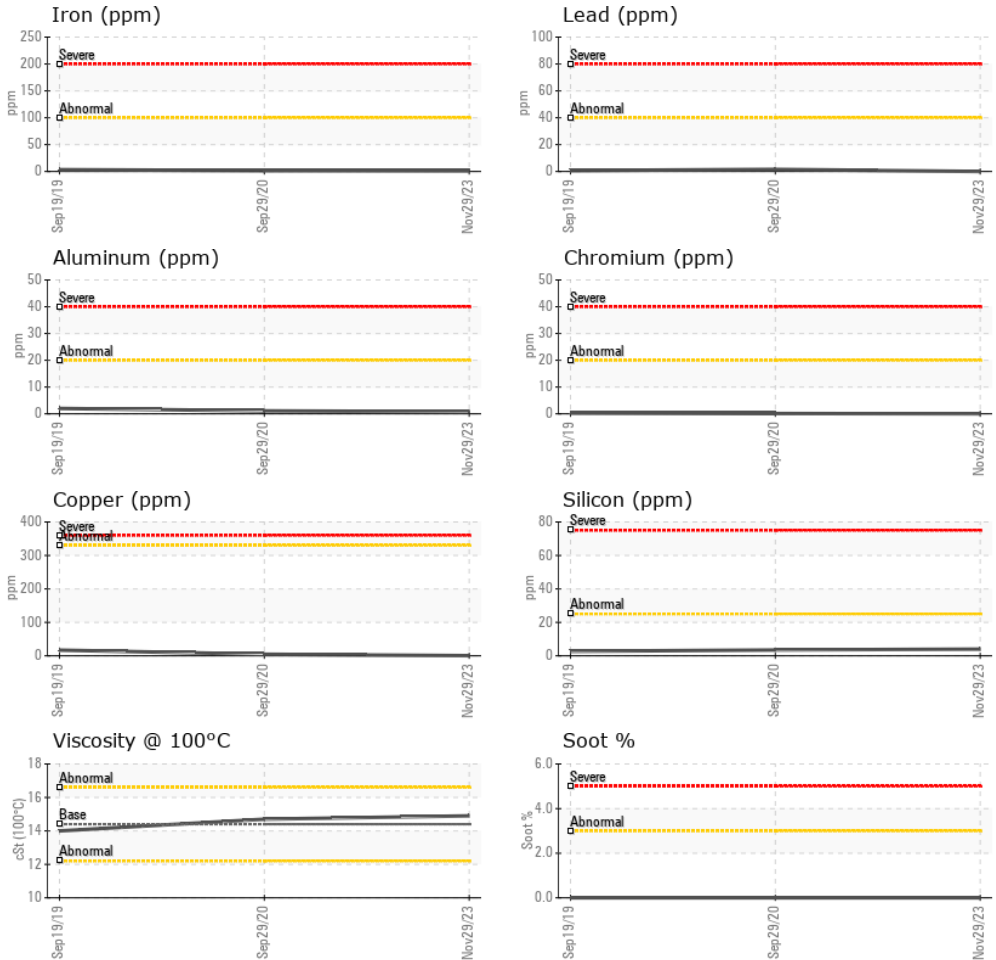


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	9.0	14.3	18.1

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.9	14.7	14.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0020813 **Received** : 08 Dec 2023
Lab Number : 02601765 **Diagnosed** : 08 Dec 2023
Unique Number : 5694850 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

Wajax Power Systems
 485 VENTURE DR
 MONCTON, NB
 CA E1H 2P4
 Contact: Doug Balsler
 dbalsler@wajax.com
 T: (506)855-5371
 F: (506)870-4448

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.