James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
JOHN DEERE 35G 1FF035GXLMK295067
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

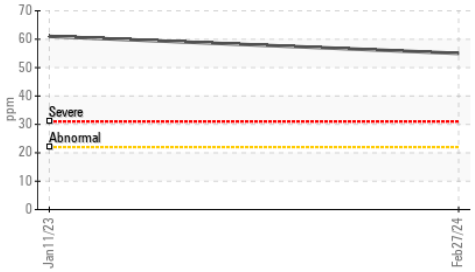
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206447	JR0138498	---
Sample Date		Client Info		27 Feb 2024	11 Jan 2023	---
Machine Age	hrs	Client Info		419	236	---
Oil Age	hrs	Client Info		419	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				ABNORMAL	ATTENTION	---
Iron	ppm	ASTM D5185m	>51	71	44	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	5	4	---
Lead	ppm	ASTM D5185m	>26	5	4	---
Copper	ppm	ASTM D5185m	>26	14	18	---
Tin	ppm	ASTM D5185m	>4	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>22	▲ 55	61	---
Potassium	ppm	ASTM D5185m	>20	1	4	---
Fuel	%	ASTM D3524	>2.1	<1.0	1.7	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.4	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.2	15.6	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>31	18	19	---
Boron	ppm	ASTM D5185m		38	52	---
Barium	ppm	ASTM D5185m		11	20	---
Molybdenum	ppm	ASTM D5185m		109	117	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		38	21	---
Calcium	ppm	ASTM D5185m		4517	4137	---
Phosphorus	ppm	ASTM D5185m		1157	1135	---
Zinc	ppm	ASTM D5185m		1581	1301	---
Sulfur	ppm	ASTM D5185m		7274	6498	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.1	8.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	11.9	12.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	9.5	10.2	---

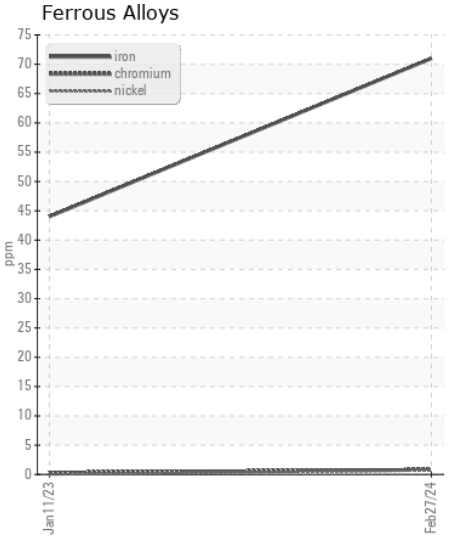
Report Id: JAMCHA [WUSCAR] 06104176 (Generated: 03/02/2024 12:04:04) Rev: 1

Submitted By: Mike Young - CHARLOTTE SHOP

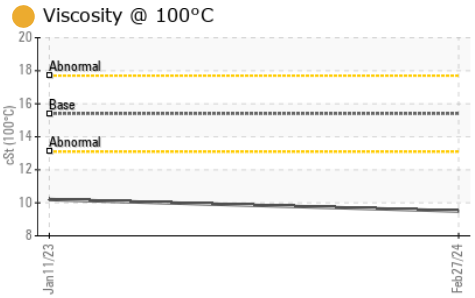
Silicon (ppm)



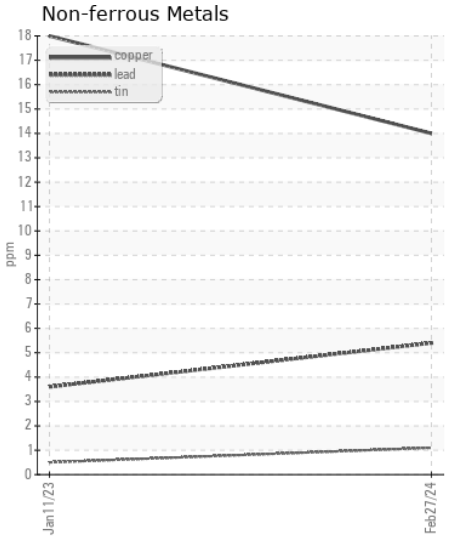
Ferrous Alloys



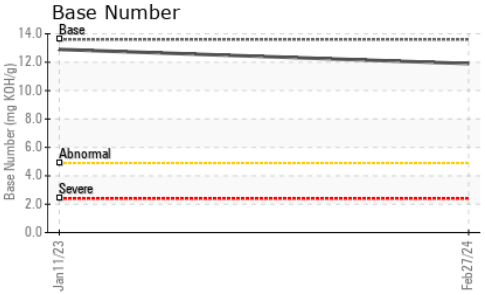
Viscosity @ 100°C



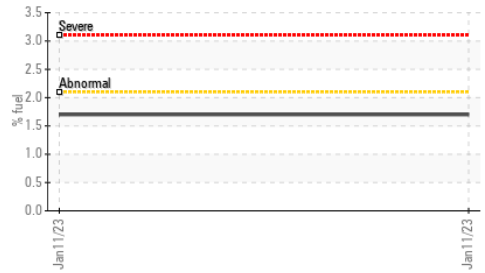
Non-ferrous Metals



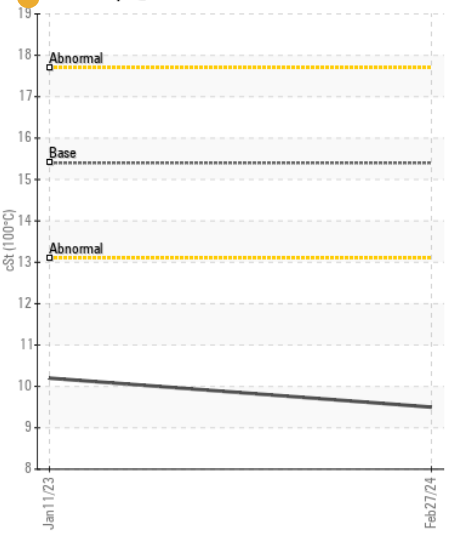
Base Number



Fuel Dilution



Viscosity @ 100°C



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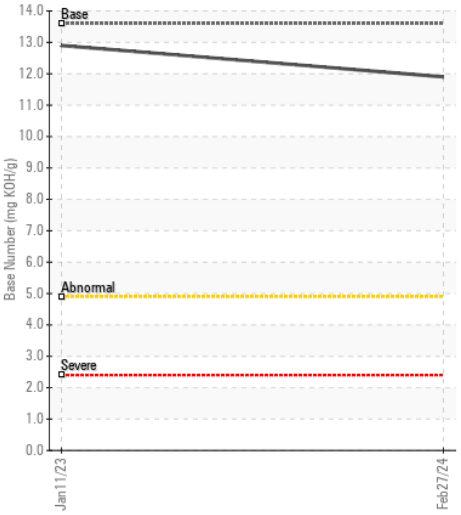

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206447
Lab Number : 06104176
Unique Number : 10902406
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 29 Feb 2024
Tested : 02 Mar 2024
Diagnosed : 02 Mar 2024 - Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

JRE - CHARLOTTE
9550 STATESVILLE ROAD
CHARLOTTE, NC
US 28269
Contact: CHARLOTTE SHOP
myoung@jamesriverequipment.com
T: (704)597-0211
F: (704)596-6198