



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 318G 1T0318GJAJJ340515
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0034994	JR0013545	---
Sample Date		Client Info		03 Mar 2020	21 Oct 2019	---
Machine Age	hrs	Client Info		1048	573	---
Oil Age	hrs	Client Info		500	573	---
Filter Age	hrs	Client Info		500	573	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	44	66	---
Chromium	ppm	ASTM D5185m	>11	1	1	---
Nickel	ppm	ASTM D5185m	>5	<1	1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	10	8	---
Lead	ppm	ASTM D5185m	>26	2	2	---
Copper	ppm	ASTM D5185m	>13	17	▲ 91	---
Tin	ppm	ASTM D5185m	>4	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

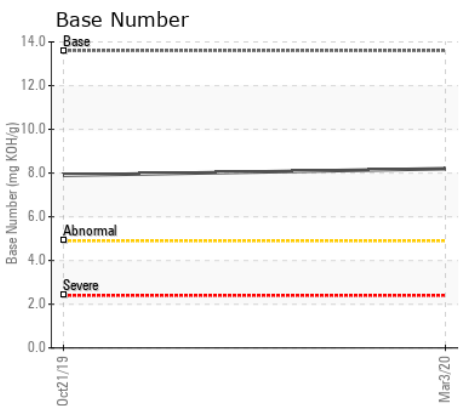
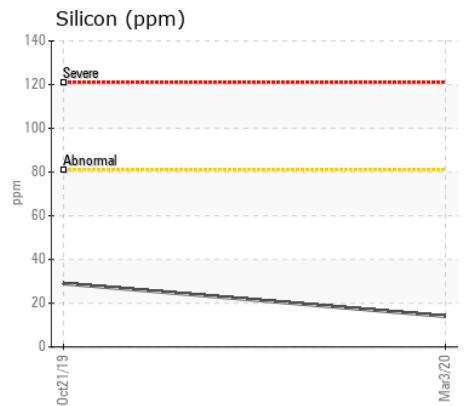
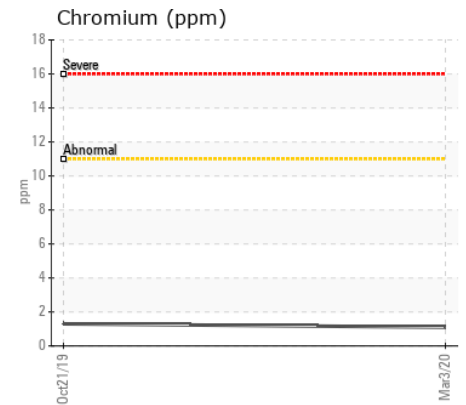
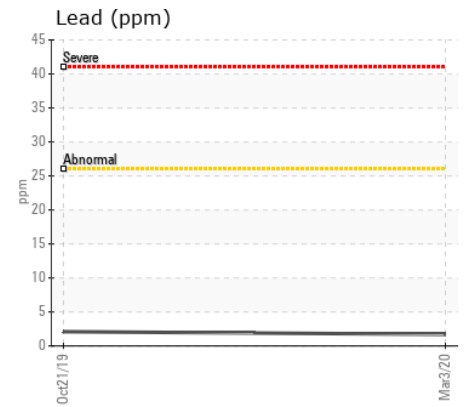
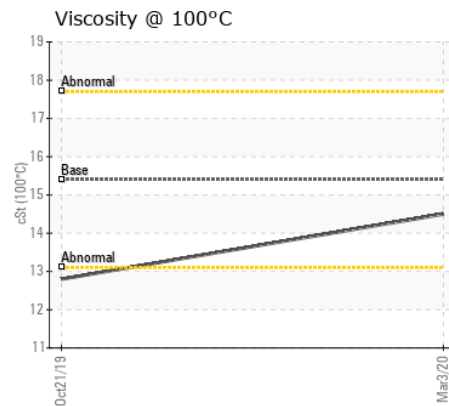
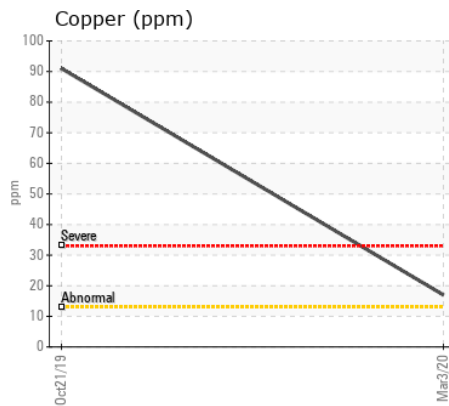
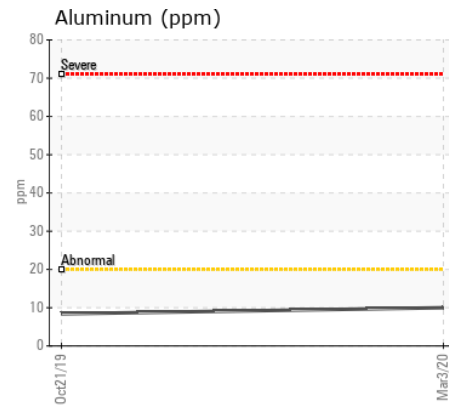
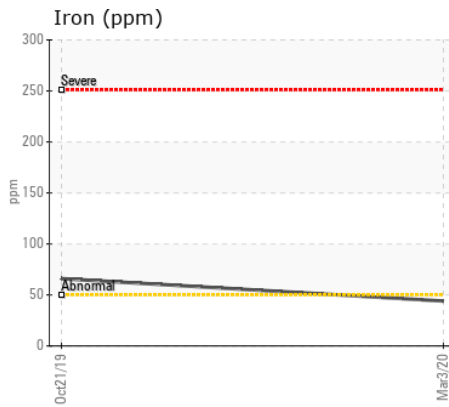
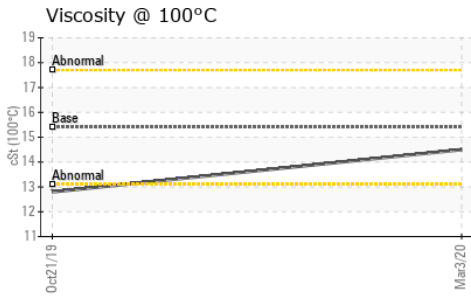
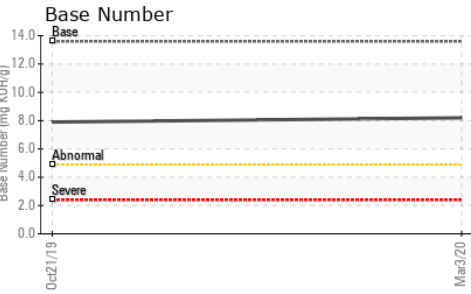
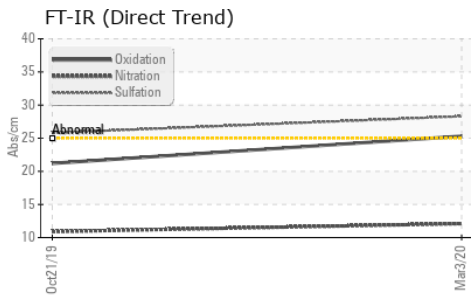
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>81	14	29	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>1.6	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.4	1.1	---
Nitration	Abs/cm	*ASTM D7624	>20	12.1	10.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.3	25.8	---
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	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	5	8	---
Boron	ppm	ASTM D5185m		139	110	---
Barium	ppm	ASTM D5185m		<1	1	---
Molybdenum	ppm	ASTM D5185m		248	192	---
Manganese	ppm	ASTM D5185m		<1	2	---
Magnesium	ppm	ASTM D5185m		768	574	---
Calcium	ppm	ASTM D5185m		1506	1920	---
Phosphorus	ppm	ASTM D5185m		836	720	---
Zinc	ppm	ASTM D5185m		1005	1083	---
Sulfur	ppm	ASTM D5185m		2358	2628	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.3	21.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	7.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.5	12.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0034994

Lab Number : 04927553

Unique Number : 8947645

Test Package : MOBCE (Additional Tests: TBN)

Received : 05 Mar 2020

Tested : 09 Mar 2020

Diagnosed : 09 Mar 2020 - Jonathan Hester

JRE - NEW BERN

3816 MARTIN LUTHER KING BLVD

NEW BERN, NC

US 28562

Contact: JEFF BROWN

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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)