



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 650J 9X2 (S/N T0650JX115089)
 Component
Diesel Engine
 Fluid
JD TORQUE GUARD 10W30 (15 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0191252	JR0149504	JR0111804
Sample Date		Client Info		21 Dec 2023	16 Nov 2022	19 Nov 2021
Machine Age	hrs	Client Info		1849	1807	1803
Oil Age	hrs	Client Info		42	1782	21
Filter Age	hrs	Client Info		42	1782	21
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	3	3	3
Chromium	ppm	ASTM D5185m	>11	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	<1	0	1
Lead	ppm	ASTM D5185m	>26	<1	0	<1
Copper	ppm	ASTM D5185m	>26	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

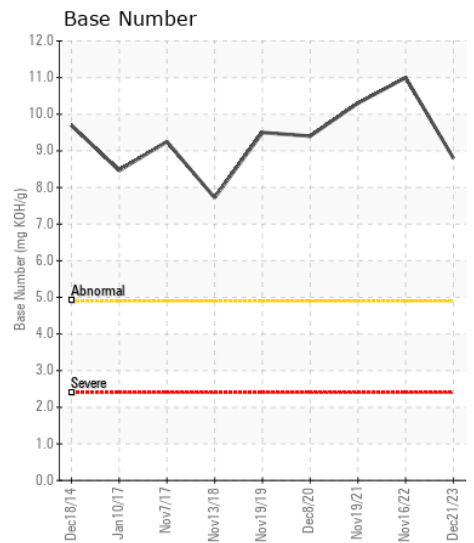
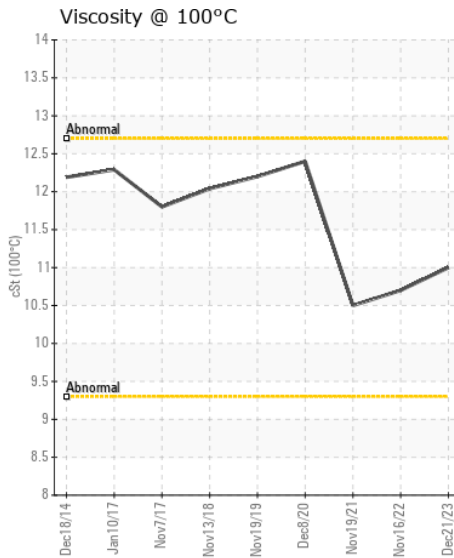
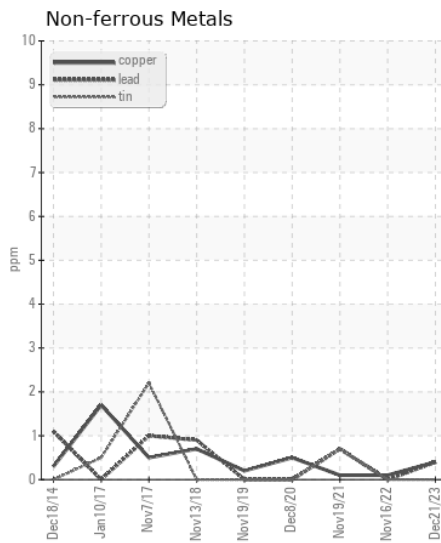
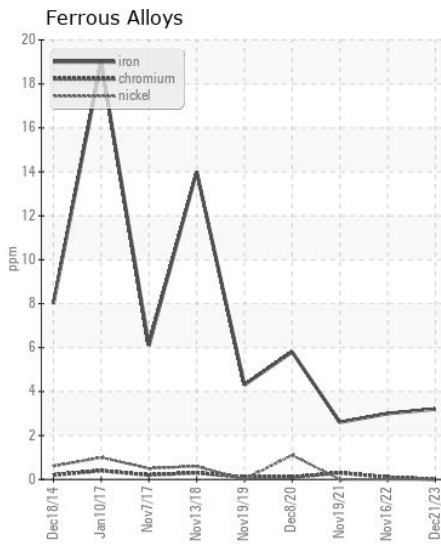
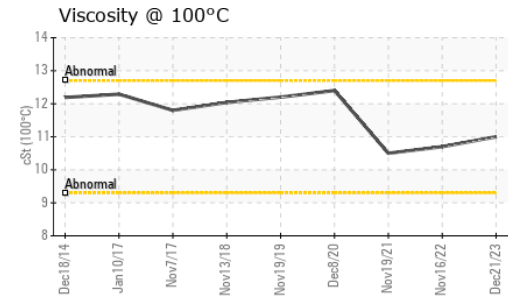
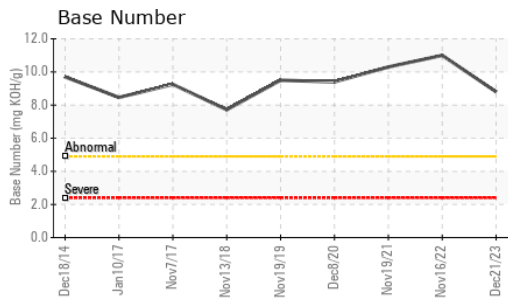
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	4	5	4
Potassium	ppm	ASTM D5185m	>20	1	2	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.3	5.2	4.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.5	14.6	14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	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	<1	0	0
Boron	ppm	ASTM D5185m		32	5	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	3	4
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		325	248	266
Calcium	ppm	ASTM D5185m		1964	2337	2330
Phosphorus	ppm	ASTM D5185m		1015	1100	1166
Zinc	ppm	ASTM D5185m		1231	1287	1277
Sulfur	ppm	ASTM D5185m		3623	4106	3252
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.6	9.4	9
Base Number (BN)	mg KOH/g	ASTM D2896		8.8	11.0	10.3
Visc @ 100°C	cSt	ASTM D445		11.0	10.7	10.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0191252 **Received** : 17 Jan 2024
Lab Number : 06062475 **Diagnosed** : 18 Jan 2024
Unique Number : 10833857 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

NORTH CAROLINA FOREST SERVICE
 133 Glenn Cave Road
 SYLVA, NC
 US 28779

Contact: GEOFF BRATLAND
 GEOFF.BRATLAND@NCAGR.GOV

T: (828)586-4007

F: (828)586-4008