



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 650K 256699
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (16 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205138	JR0138371	JR0100371
Sample Date		Client Info		21 Feb 2024	14 Dec 2022	21 Nov 2021
Machine Age	hrs	Client Info		5413	5177	4657
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	30	▲ 62	▲ 73
Chromium	ppm	ASTM D5185m	>11	1	3	2
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	9	7
Lead	ppm	ASTM D5185m	>26	2	18	26
Copper	ppm	ASTM D5185m	>26	2	5	8
Tin	ppm	ASTM D5185m	>4	1	1	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

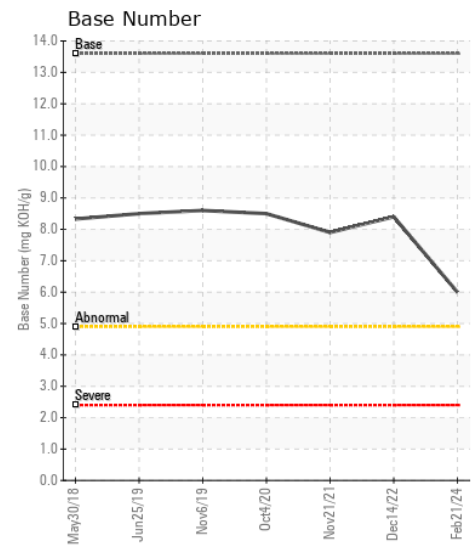
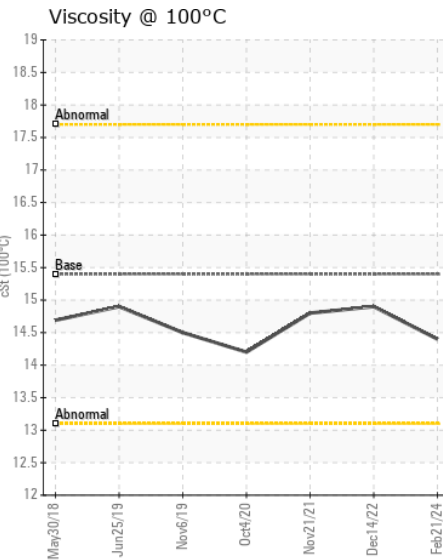
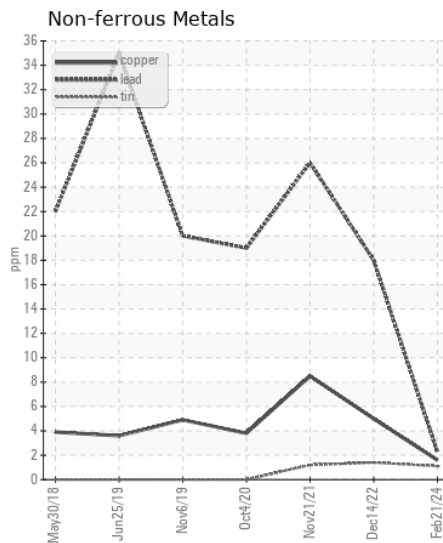
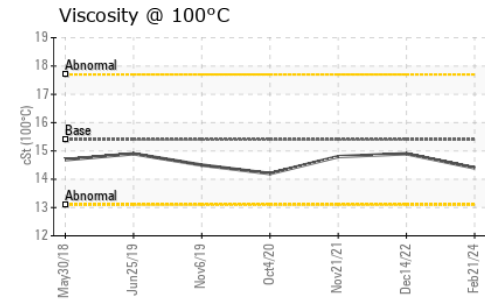
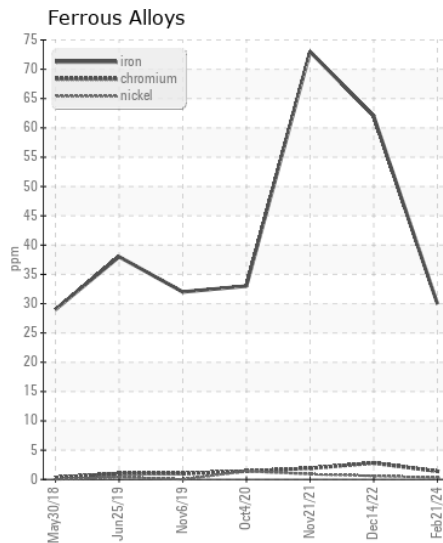
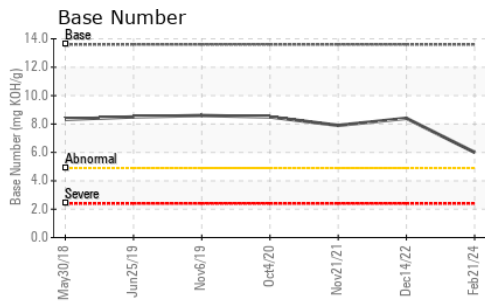
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	9	12	7
Potassium	ppm	ASTM D5185m	>20	0	<1	4
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	2.1	2.1
Nitration	Abs/cm	*ASTM D7624	>20	5.4	12.7	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.4	31.1	29.5
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	2	4
Boron	ppm	ASTM D5185m		175	92	28
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		203	254	32
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		673	843	732
Calcium	ppm	ASTM D5185m		1475	1571	1517
Phosphorus	ppm	ASTM D5185m		823	907	1075
Zinc	ppm	ASTM D5185m		999	1166	1215
Sulfur	ppm	ASTM D5185m		2855	3561	3292
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.3	22.7	19
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.0	8.4	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.9	14.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205138
Lab Number : 06097417
Unique Number : 10890270
Test Package : CONST (Additional Tests: TBN)

JRE - GREENSBORO
 411 SOUTH REGIONAL ROAD
 GREENSBORO, NC
 US 27409
 Contact: CHRIS FRAZIER
 cfrazier@jamesriverequipment.com

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)

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