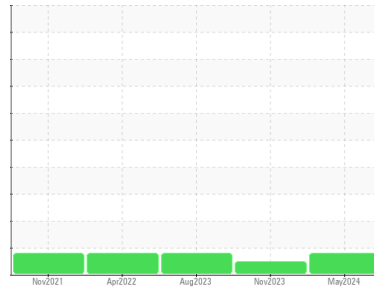


OIL ANALYSIS REPORT

Sample Rating Trend


WEAR


Machine Id

JOHN DEERE 843L 1DW843LBKMF710421

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

▲ 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

Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0211466	JR0179148	JR0164947
Sample Date	Client Info		24 May 2024	02 Nov 2023	11 Aug 2023
Machine Age	hrs	Client Info	3095	3451	3194
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >51	▲ 61	14	▲ 56
Chromium	ppm	ASTM D5185m >11	2	<1	2
Nickel	ppm	ASTM D5185m >5	7	1	5
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >31	3	4	5
Lead	ppm	ASTM D5185m >26	2	0	4
Copper	ppm	ASTM D5185m >26	10	2	12
Tin	ppm	ASTM D5185m >4	2	<1	1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	239	10
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	15	272	95
Manganese	ppm	ASTM D5185m	1	<1	2
Magnesium	ppm	ASTM D5185m	59	888	445
Calcium	ppm	ASTM D5185m	2455	1552	1672
Phosphorus	ppm	ASTM D5185m	919	978	932
Zinc	ppm	ASTM D5185m	1044	1228	1122
Sulfur	ppm	ASTM D5185m	3562	3455	3008

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >22	9	9	13
Sodium	ppm	ASTM D5185m >31	6	2	2
Potassium	ppm	ASTM D5185m >20	7	3	12

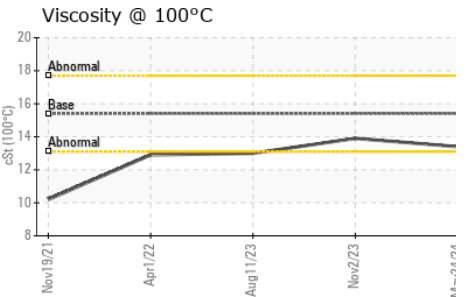
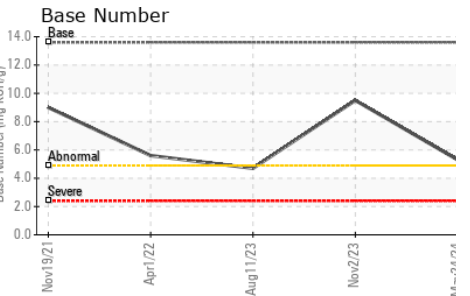
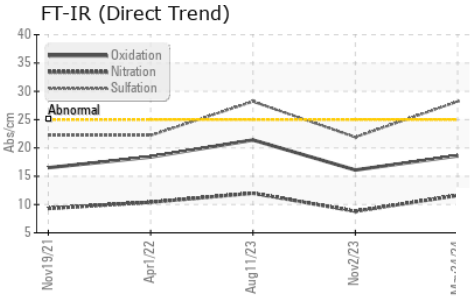
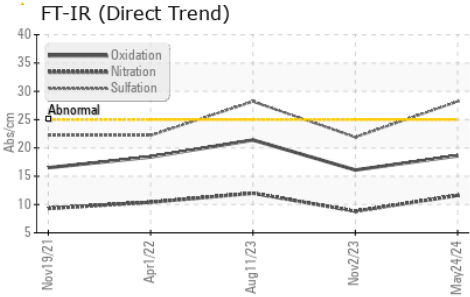
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.8	0.5	1.8
Nitration	Abs/cm	*ASTM D7624 >20	11.6	8.8	12.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.2	21.9	28.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.6	16.1	21.4
Base Number (BN)	mg KOH/g	ASTM D2896 13.6	5.3	9.5	4.7

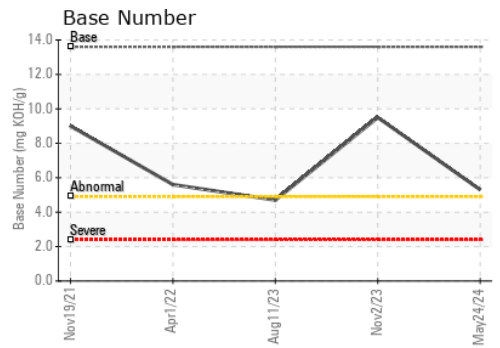
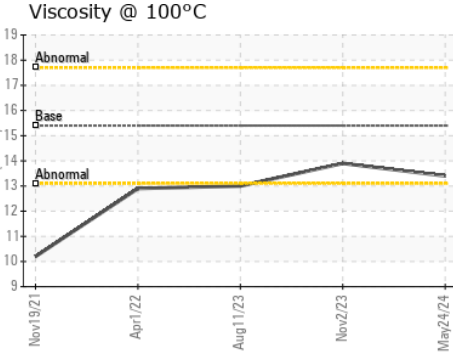
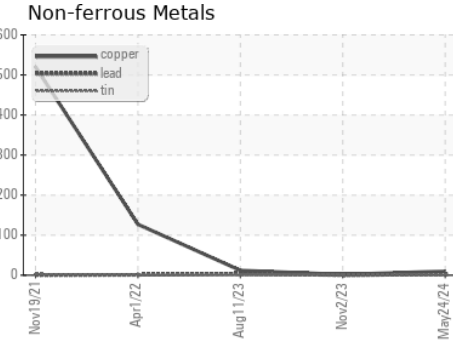
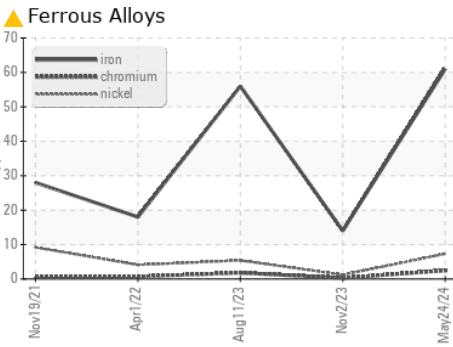
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.9	13.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211466 **Received** : 29 May 2024
Lab Number : 06194760 **Tested** : 30 May 2024
Unique Number : 11056883 **Diagnosed** : 31 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (804)798-6001

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (804)798-0292