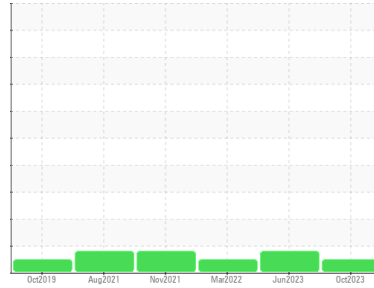


OIL ANALYSIS REPORT



Area
[W45138]
Machine Id
JOHN DEERE 844J DW844JX610102
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (--- QTS)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0180455	JR0165437	JR0125087
Sample Date	Client Info		13 Oct 2023	12 Jun 2023	17 Mar 2022
Machine Age	hrs	Client Info	19023	18900	17318
Oil Age	hrs	Client Info	2	0	0
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >51	6	▲ 94	32
Chromium	ppm	ASTM D5185m >11	0	1	<1
Nickel	ppm	ASTM D5185m >5	0	2	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >31	4	2	2
Lead	ppm	ASTM D5185m >26	1	23	5
Copper	ppm	ASTM D5185m >26	5	7	18
Tin	ppm	ASTM D5185m >4	1	4	2
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	269	19	113
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	231	291	265
Manganese	ppm	ASTM D5185m	5	<1	<1
Magnesium	ppm	ASTM D5185m	781	1066	850
Calcium	ppm	ASTM D5185m	1293	1222	1285
Phosphorus	ppm	ASTM D5185m	853	1230	1000
Zinc	ppm	ASTM D5185m	1020	1443	1161
Sulfur	ppm	ASTM D5185m	2974	3974	2583

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >22	10	9	8
Sodium	ppm	ASTM D5185m >31	4	3	0
Potassium	ppm	ASTM D5185m >20	3	2	1

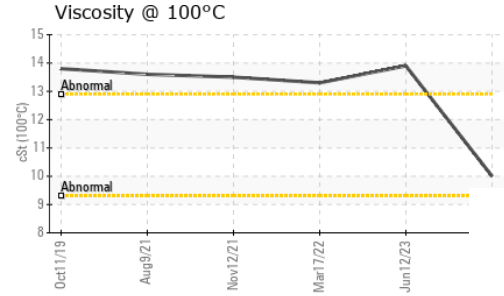
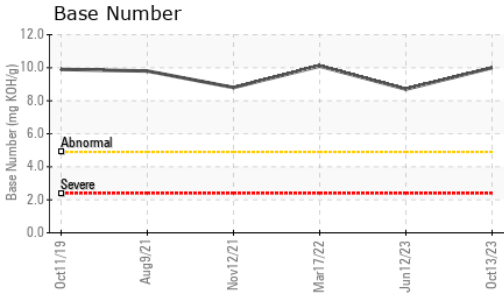
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0	0.9	0.6
Nitration	Abs/cm	*ASTM D7624 >20	5.4	9.2	8.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.6	23.7	22.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.0	19.8	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	8.7	10.1

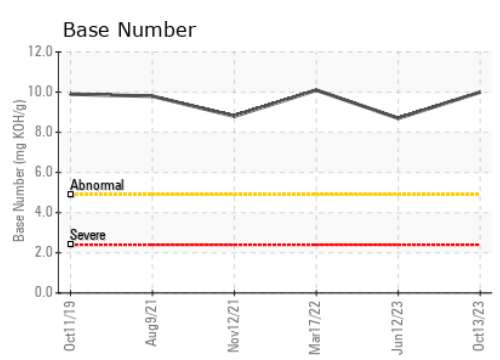
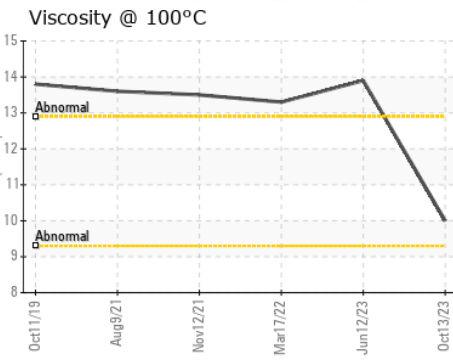
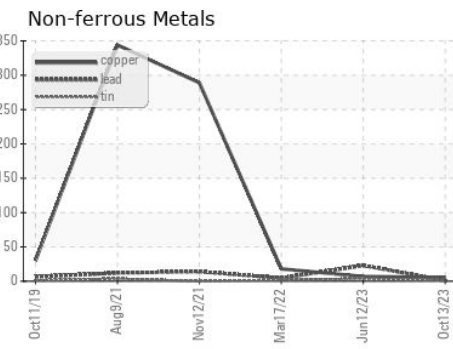
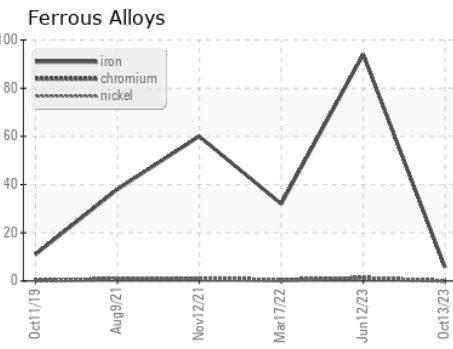
OIL ANALYSIS REPORT



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	10.0	13.9	13.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0180455 **Received** : 16 Oct 2023
Lab Number : **05979364** **Diagnosed** : 17 Oct 2023
Unique Number : 10696659 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

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)