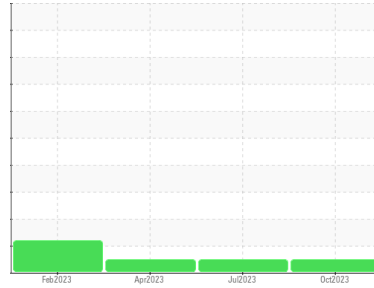


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE 410E 1DW410ELLPF716386**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

**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			<b>JR0179286</b>	JR0164934	JR0147627
Sample Date	Client Info			<b>03 Oct 2023</b>	13 Jul 2023	24 Apr 2023
Machine Age	hrs	Client Info		<b>1983</b>	1470	1002
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>12</b>	12	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>6</b>	5	3
Copper	ppm	ASTM D5185m	>330	<b>14</b>	34	115
Tin	ppm	ASTM D5185m	>15	<b>4</b>	4	6
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

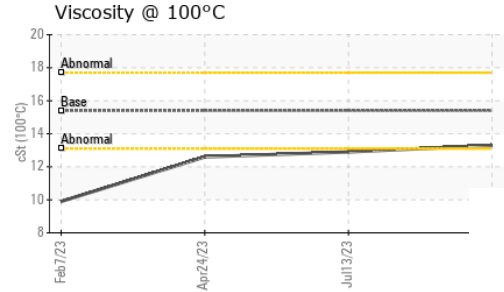
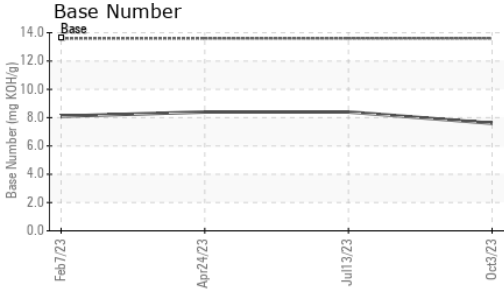
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>114</b>	184	152
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>237</b>	265	238
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m		<b>921</b>	915	831
Calcium	ppm	ASTM D5185m		<b>1448</b>	1562	1388
Phosphorus	ppm	ASTM D5185m		<b>943</b>	930	874
Zinc	ppm	ASTM D5185m		<b>1182</b>	1141	1120
Sulfur	ppm	ASTM D5185m		<b>3295</b>	3756	3022

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	6
Sodium	ppm	ASTM D5185m		<b>4</b>	16	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	5	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	9.3	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	22.7	22.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.3</b>	16.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.6</b>	8.4	8.4

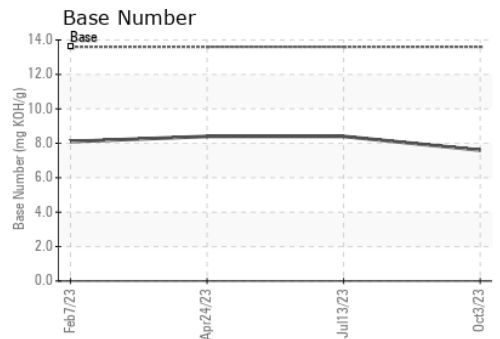
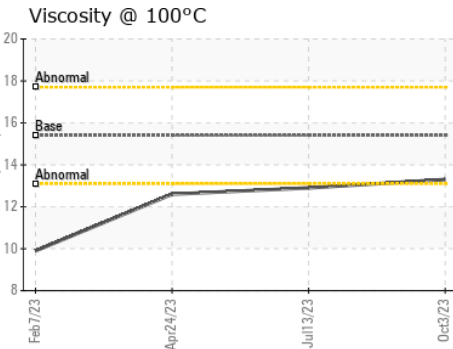
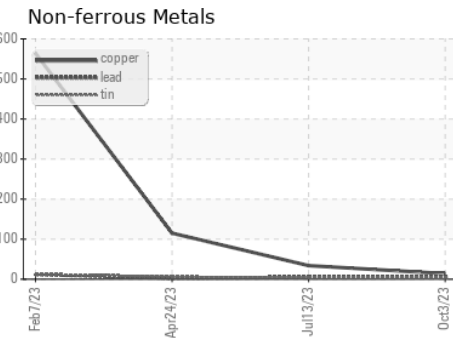
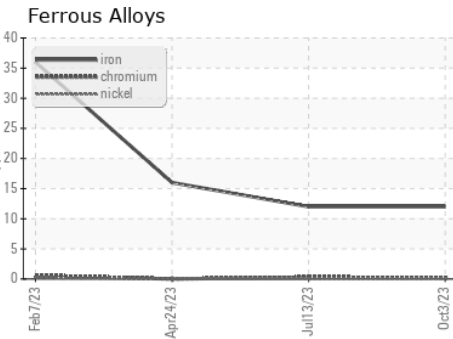
# OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	12.9	12.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0179286      **Received** : 04 Oct 2023  
**Lab Number** : **05968681**      **Diagnosed** : 05 Oct 2023  
**Unique Number** : 10675232      **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)

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