



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 544 P 1DW544PACNLZ14328**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0209482</b>	JR0191126	JR0136321
Sample Date		Client Info		<b>14 Apr 2024</b>	16 Nov 2023	20 Dec 2022
Machine Age	hrs	Client Info		<b>1456</b>	1107	509
Oil Age	hrs	Client Info		<b>349</b>	598	509
Filter Age	hrs	Client Info		<b>0</b>	598	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>5</b>	12	5
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	2	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	2
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	2
Copper	ppm	ASTM D5185m	>26	<b>4</b>	▲ 53	28
Tin	ppm	ASTM D5185m	>4	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

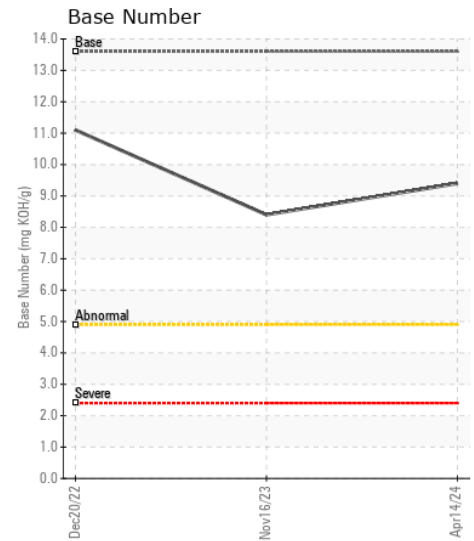
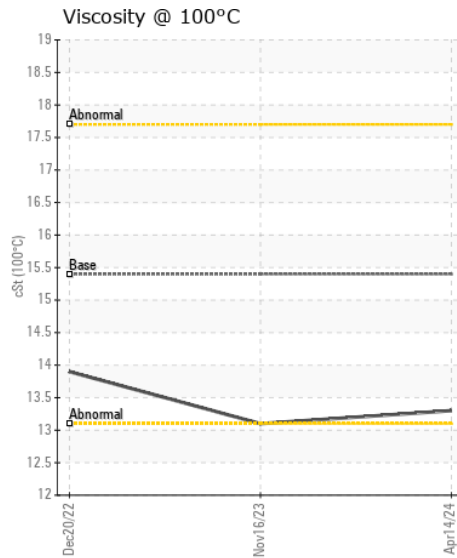
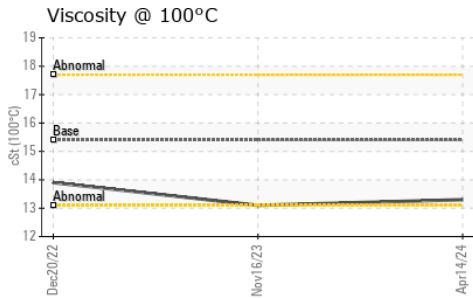
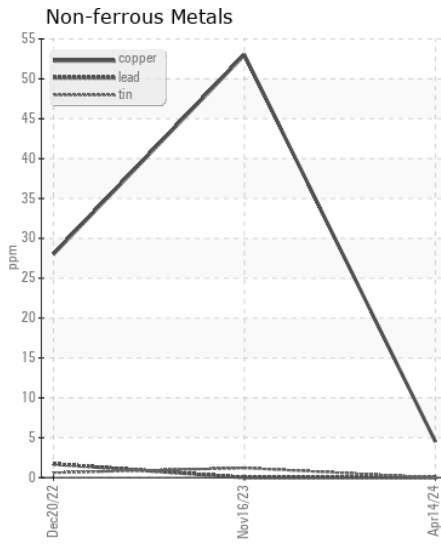
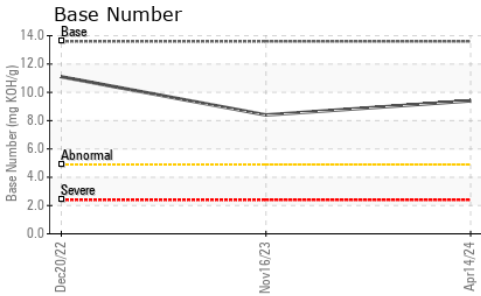
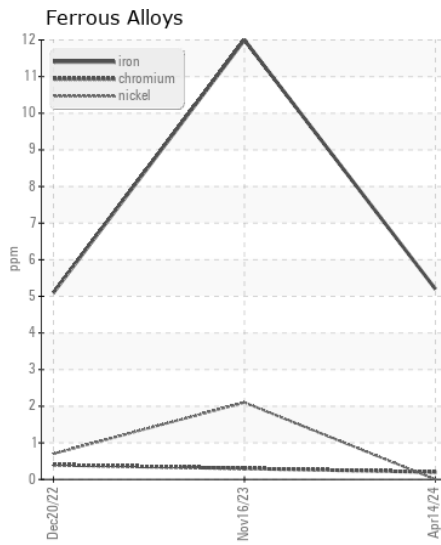
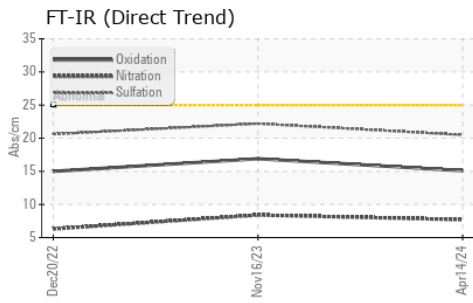
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>6</b>	6	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	3
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	8.4	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	22.2	20.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	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	<b>1</b>	2	2
Boron	ppm	ASTM D5185m		<b>269</b>	209	249
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>263</b>	241	230
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>804</b>	830	842
Calcium	ppm	ASTM D5185m		<b>1432</b>	1421	1494
Phosphorus	ppm	ASTM D5185m		<b>1007</b>	861	893
Zinc	ppm	ASTM D5185m		<b>1108</b>	1071	1115
Sulfur	ppm	ASTM D5185m		<b>3130</b>	2870	3627
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.1</b>	16.9	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.4</b>	8.4	11.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.1	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0209482 **Received** : 17 Apr 2024  
**Lab Number** : 06151746 **Tested** : 18 Apr 2024  
**Unique Number** : 10981824 **Diagnosed** : 19 Apr 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529

Contact: RALEIGH SHOP  
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.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)

T: (919)614-2260  
 F: (919)779-5432