



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



Area  
**[W49984]**  
 Machine Id  
**JOHN DEERE 824K 1DW824KXTHF680767**  
 Component  
**Hydraulic System**  
 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>JR0200465</b>	JR0199982	JR0180652
Sample Date		Client Info		<b>23 Feb 2024</b>	29 Jan 2024	20 Dec 2023
Machine Age	hrs	Client Info		<b>10186</b>	9797	9291
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	20	20
Iron	ppm	ASTM D5185m	>71	<b>28</b>	27	27
Chromium	ppm	ASTM D5185m	>11	<b>35</b>	31	34
Nickel	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>5</b>	5	4
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>21	<b>12</b>	11	12
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

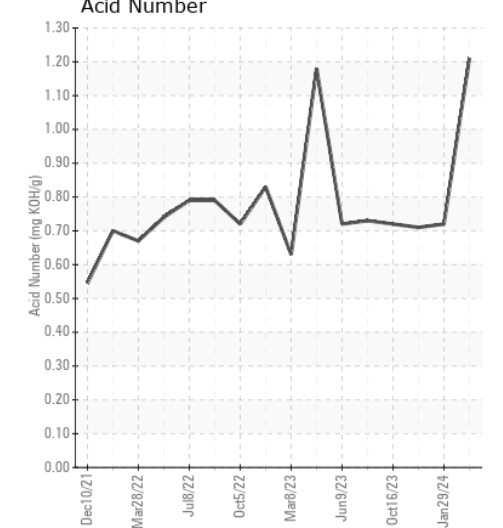
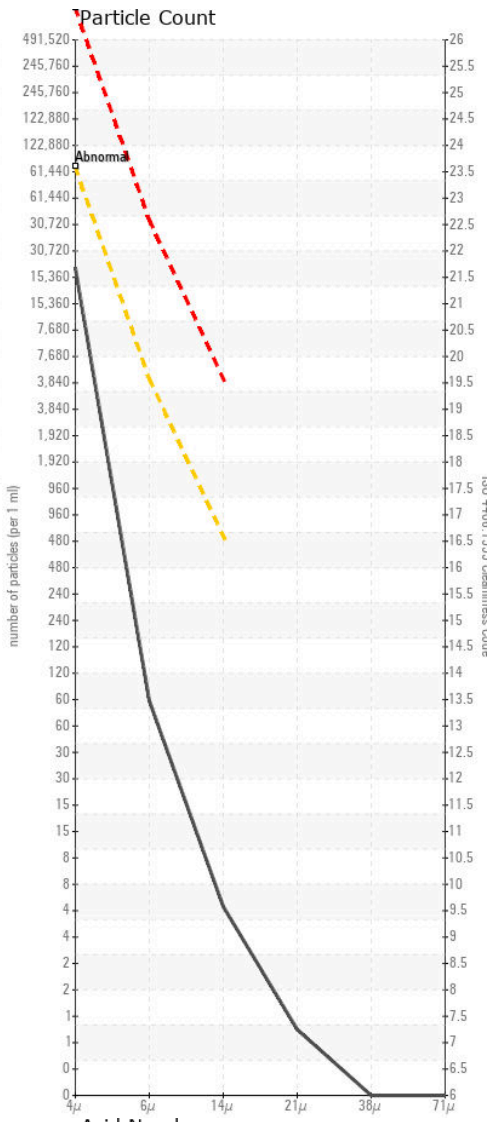
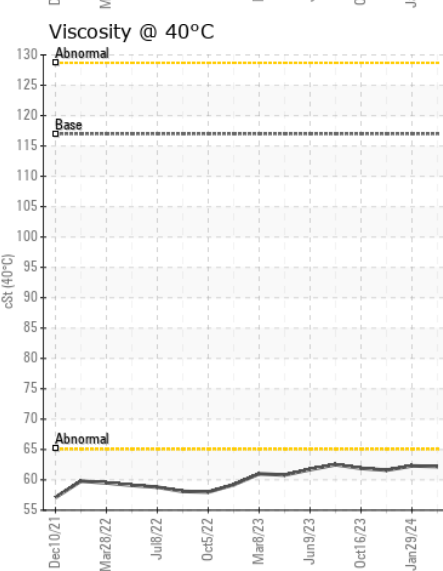
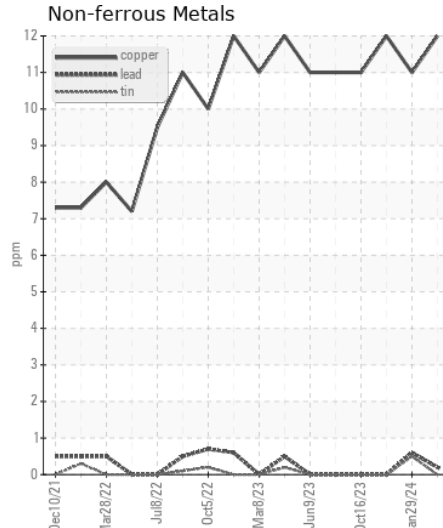
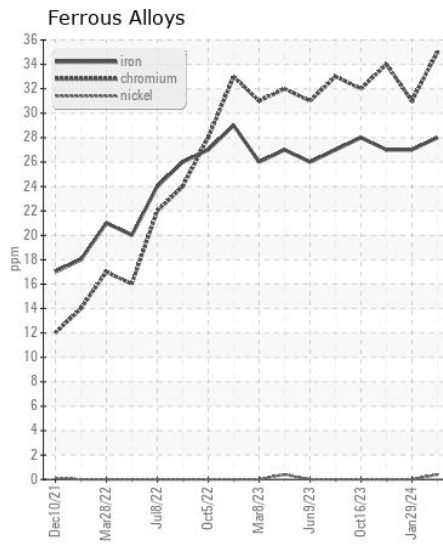
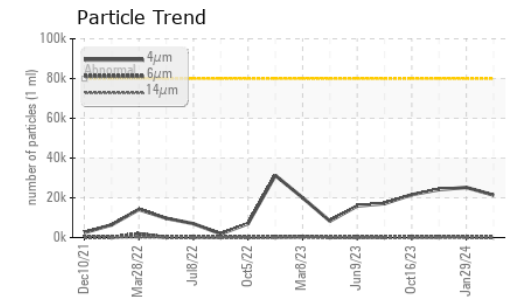
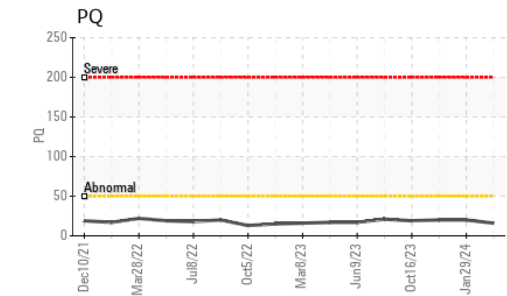
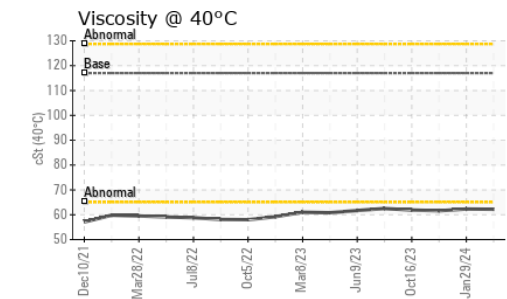
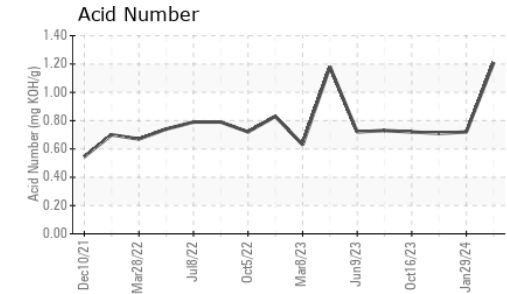
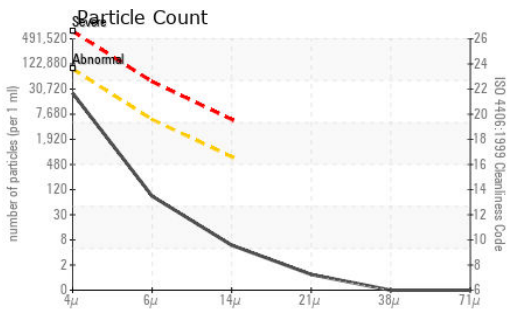
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>24	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>21346</b>	25212	24145
Particles >6µm		ASTM D7647	>5000	<b>74</b>	275	276
Particles >14µm		ASTM D7647	>640	<b>5</b>	17	19
Particles >21µm		ASTM D7647	>160	<b>1</b>	4	4
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>22/13/10</b>	22/15/11	22/15/11
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	>0.075	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>6</b>	5	5
Boron	ppm	ASTM D5185m		<b>33</b>	31	27
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>25</b>	26	22
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>178</b>	169	159
Calcium	ppm	ASTM D5185m		<b>542</b>	528	548
Phosphorus	ppm	ASTM D5185m		<b>665</b>	688	683
Zinc	ppm	ASTM D5185m		<b>873</b>	899	896
Sulfur	ppm	ASTM D5185m		<b>1930</b>	2045	2026
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.21</b>	0.72	0.71
Visc @ 40°C	cSt	ASTM D445	117	<b>62.2</b>	62.3	61.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0200465 **Received** : 28 Feb 2024  
**Lab Number** : 06102884 **Tested** : 29 Feb 2024  
**Unique Number** : 10901114 **Diagnosed** : 01 Mar 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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)