



# OIL ANALYSIS REPORT

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



Area  
**Store 4 - Fairmont**  
Machine Id  
**JOHN DEERE 850K 1T0850KXLDE249329**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0049406</b>	LEC0039490	LEC0026595
Sample Date		Client Info		<b>02 Jul 2024</b>	30 May 2023	18 Mar 2022
Machine Age	hrs	Client Info		<b>3845</b>	3576	2370
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 Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>19</b>	10	15
Iron	ppm	ASTM D5185m	>23	<b>4</b>	4	3
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	1	2
Lead	ppm	ASTM D5185m	>28	<b>3</b>	2	3
Copper	ppm	ASTM D5185m	>51	<b>23</b>	16	15
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

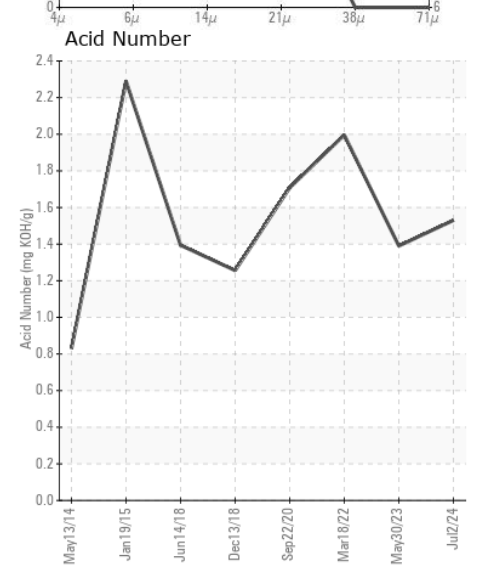
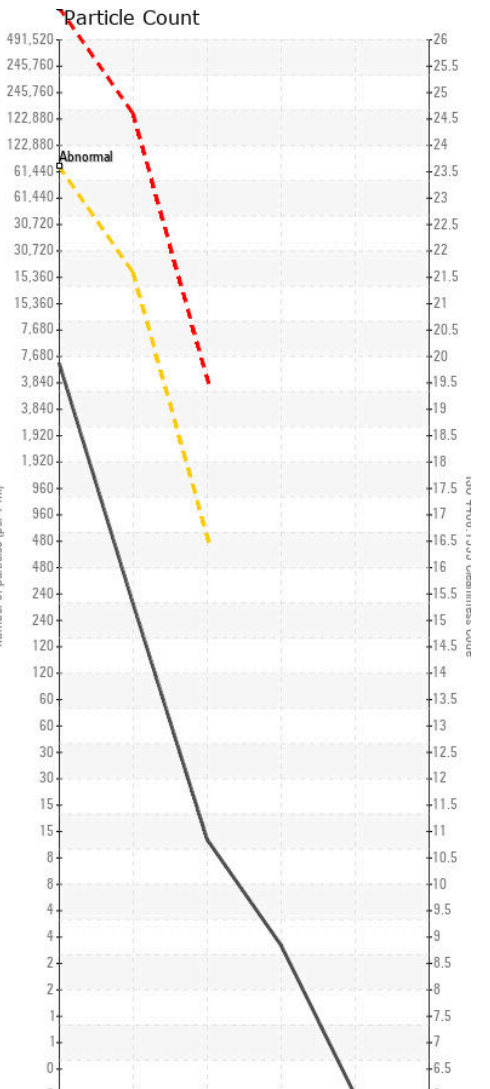
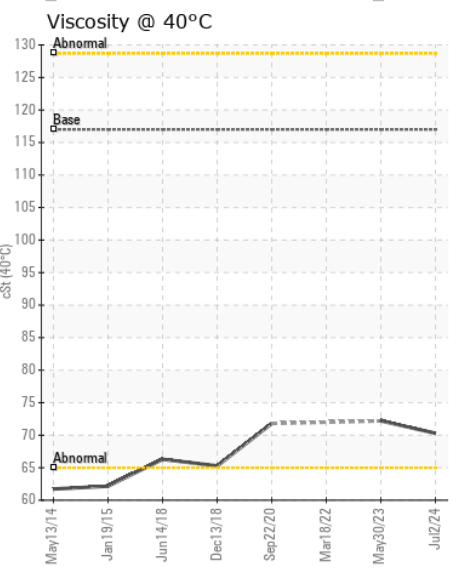
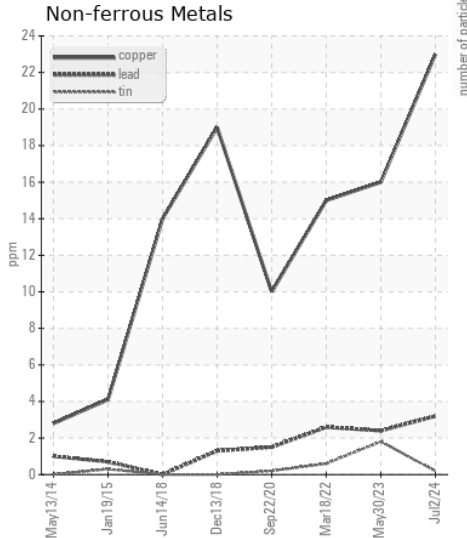
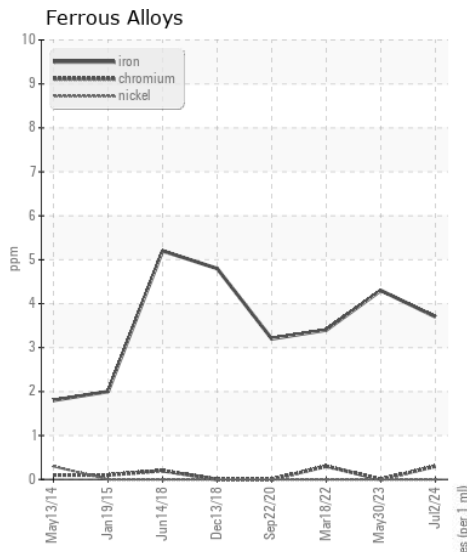
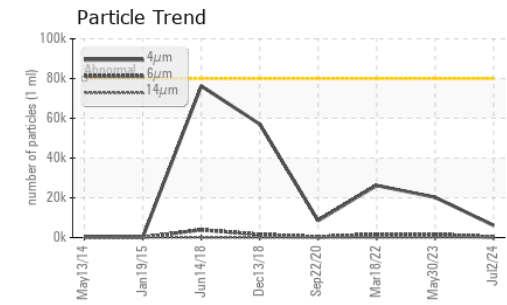
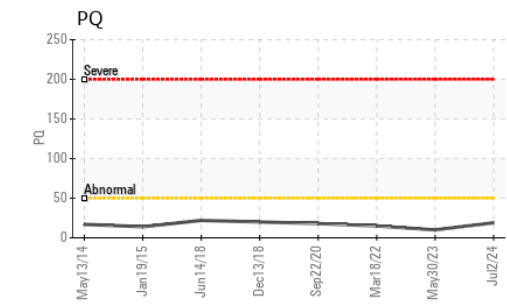
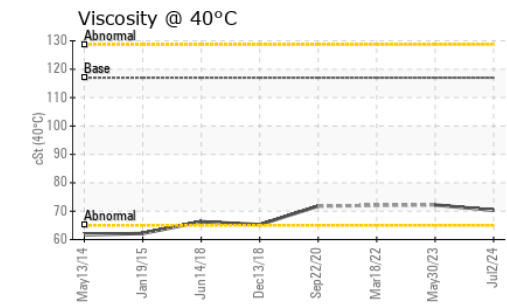
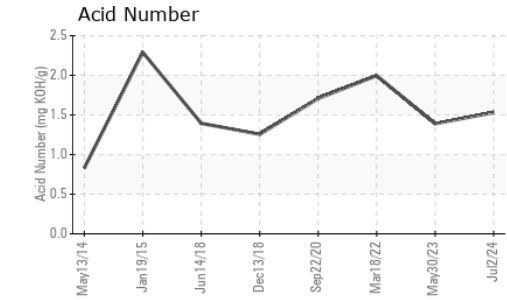
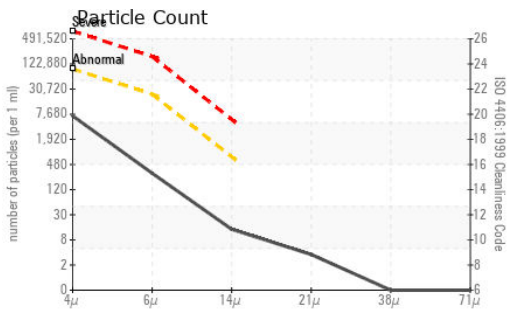
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>31	<b>9</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	0
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>6088</b>	20244	26221
Particles >6µm		ASTM D7647	>20000	<b>261</b>	1639	1718
Particles >14µm		ASTM D7647	>640	<b>12</b>	68	32
Particles >21µm		ASTM D7647	>160	<b>3</b>	13	7
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	2
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>20/15/11</b>	22/18/13	22/18/12
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>0</b>	0	2
Boron	ppm	ASTM D5185m		<b>157</b>	153	164
Barium	ppm	ASTM D5185m		<b>1</b>	7	0
Molybdenum	ppm	ASTM D5185m		<b>120</b>	102	114
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>475</b>	420	457
Calcium	ppm	ASTM D5185m		<b>1969</b>	1673	2090
Phosphorus	ppm	ASTM D5185m		<b>765</b>	811	959
Zinc	ppm	ASTM D5185m		<b>1073</b>	986	1069
Sulfur	ppm	ASTM D5185m		<b>2932</b>	3395	3122
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.53</b>	1.39	1.996
Visc @ 40°C	cSt	ASTM D445	117	<b>70.3</b>	72.2	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0049406 **Received** : 15 Jul 2024  
**Lab Number** : 06235808 **Tested** : 16 Jul 2024  
**Unique Number** : 11124642 **Diagnosed** : 16 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

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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