



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 550K 1T0550KXKEE265236

Component
Hydraulic System

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204789	JR0173991	JR0099794
Sample Date		Client Info		29 Feb 2024	18 May 2023	17 Nov 2021
Machine Age	hrs	Client Info		5106	4620	4115
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The copper level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>50	16	12	17
Iron	ppm	ASTM D5185m	>23	14	11	7
Chromium	ppm	ASTM D5185m	>9	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>9	6	5	2
Lead	ppm	ASTM D5185m	>28	2	1	5
Copper	ppm	ASTM D5185m	>51	▲ 69	▲ 52	17
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

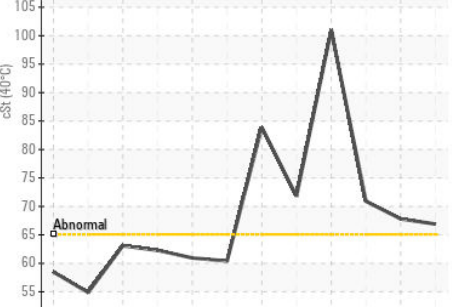
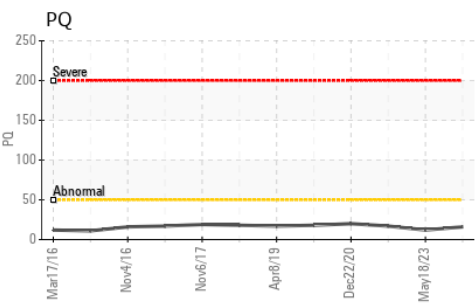
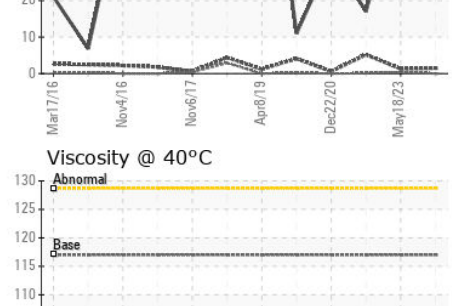
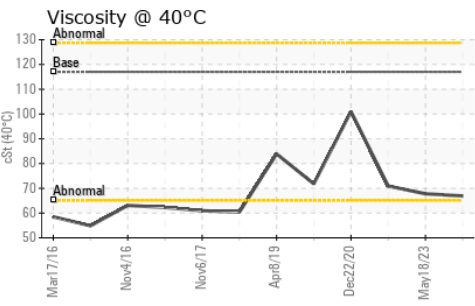
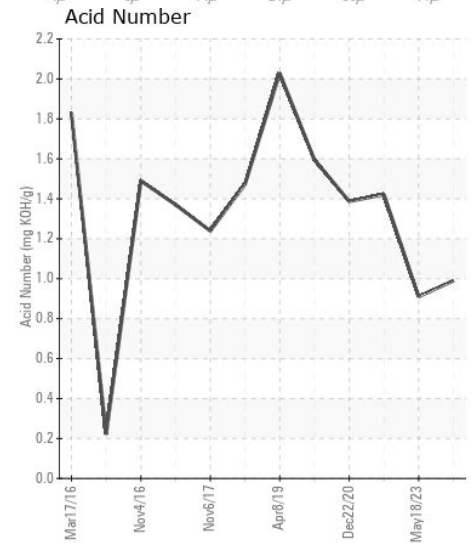
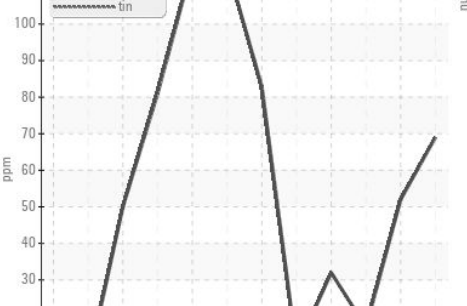
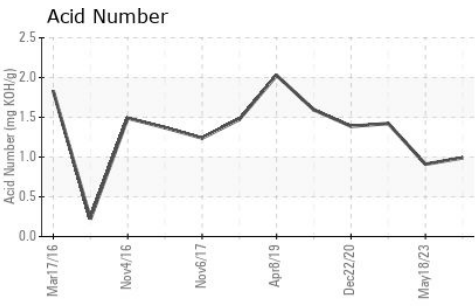
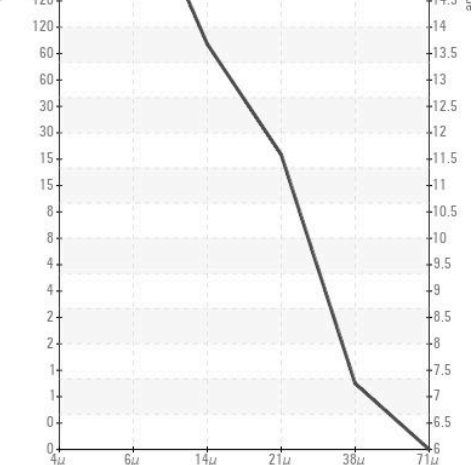
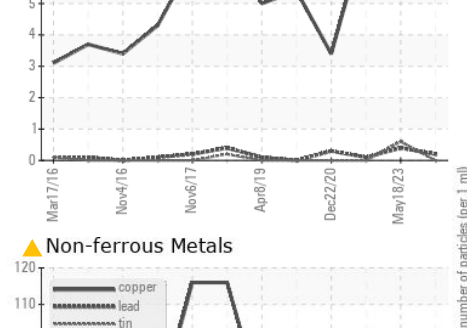
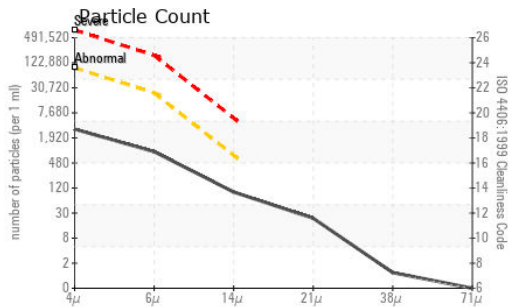
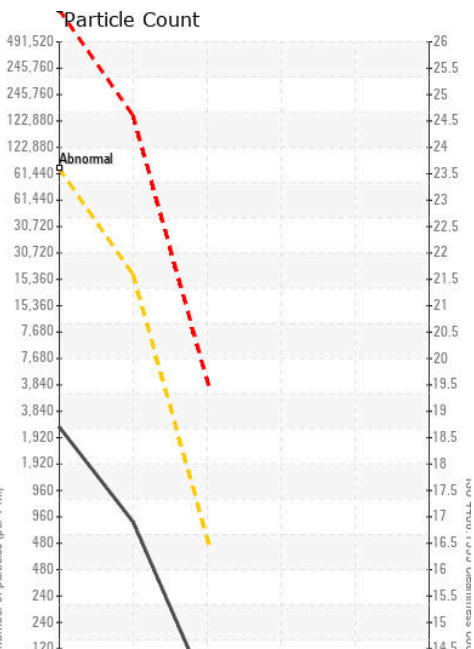
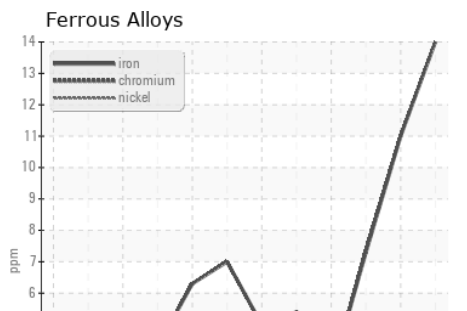
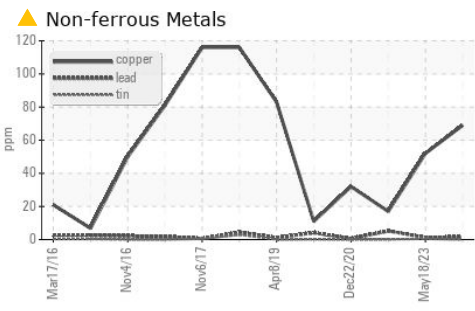
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	10	7	6
Potassium	ppm	ASTM D5185m	>20	0	2	3
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	2725	2302	970
Particles >6µm		ASTM D7647	>20000	787	369	173
Particles >14µm		ASTM D7647	>640	85	22	21
Particles >21µm		ASTM D7647	>160	20	4	6
Particles >38µm		ASTM D7647	>40	1	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/17/14	18/16/12	17/15/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	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	2	2	4
Boron	ppm	ASTM D5185m		77	81	206
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		71	71	161
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		227	252	578
Calcium	ppm	ASTM D5185m		524	556	1745
Phosphorus	ppm	ASTM D5185m		694	731	941
Zinc	ppm	ASTM D5185m		802	926	1105
Sulfur	ppm	ASTM D5185m		1965	2568	2740
Acid Number (AN)	mg KOH/g	ASTM D8045		0.99	0.91	1.422
Visc @ 40°C	cSt	ASTM D445	117	66.9	67.8	70.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204789 **Received** : 01 Mar 2024
Lab Number : 06105965 **Tested** : 04 Mar 2024
Unique Number : 10909462 **Diagnosed** : 05 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)