



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 544K 1DW544KZTCE647975

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		JR0212163	JR0125114	JR0088457
Sample Date		Client Info		23 May 2024	14 Mar 2022	13 Jul 2021
Machine Age	hrs	Client Info		6938	6442	6141
Oil Age	hrs	Client Info		0	2400	2000
Filter Age	hrs	Client Info		0	2400	2000
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>71	21	15	15
Chromium	ppm	ASTM D5185m	>11	3	2	3
Nickel	ppm	ASTM D5185m	>6	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		1	<1	<1
Aluminum	ppm	ASTM D5185m	>11	4	5	4
Lead	ppm	ASTM D5185m	>13	1	1	1
Copper	ppm	ASTM D5185m	>21	4	4	4
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

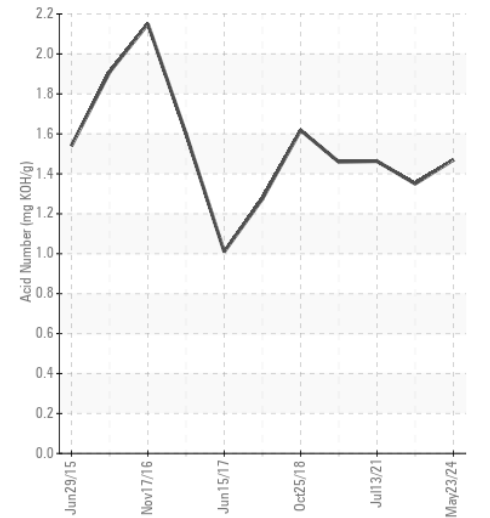
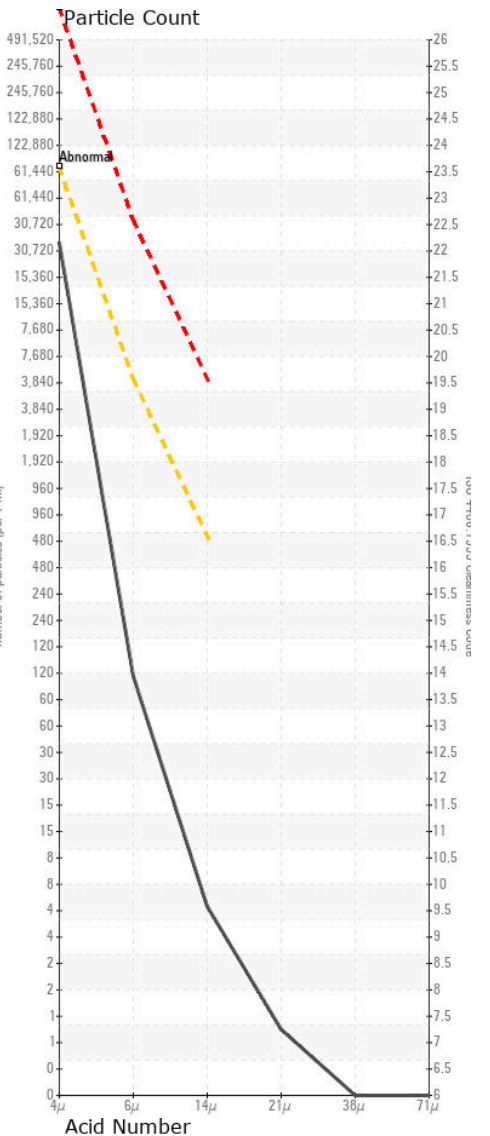
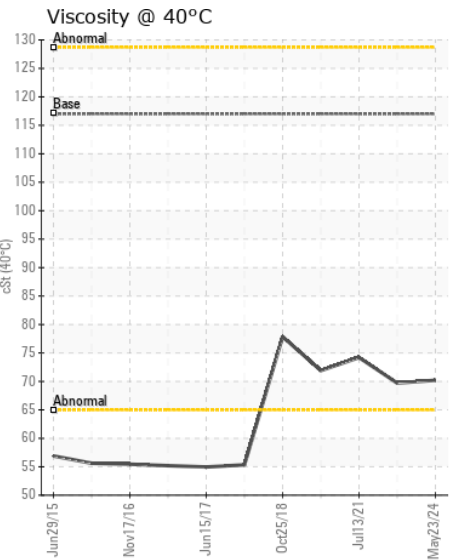
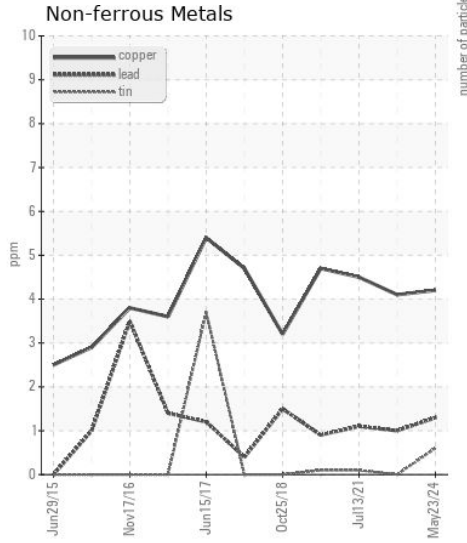
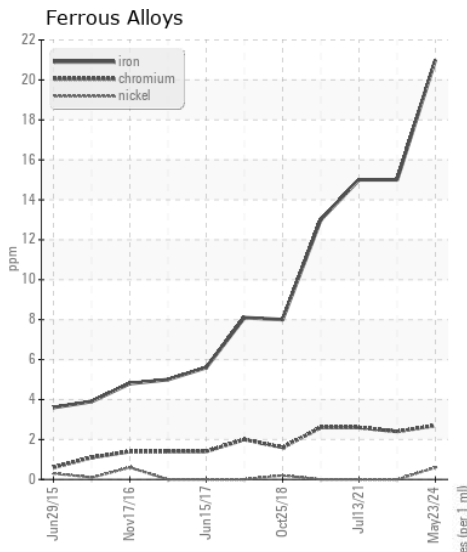
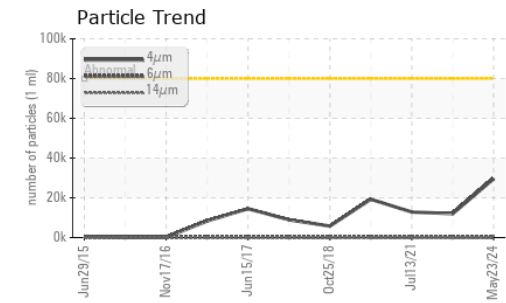
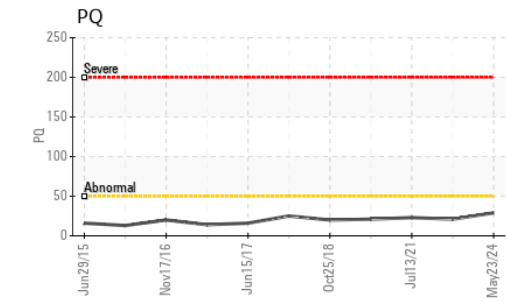
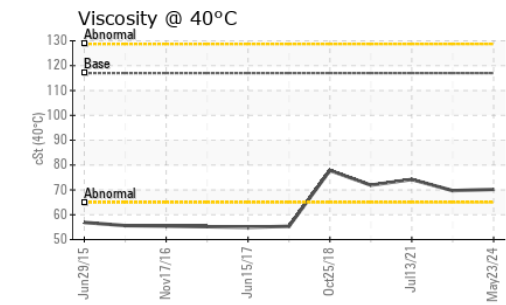
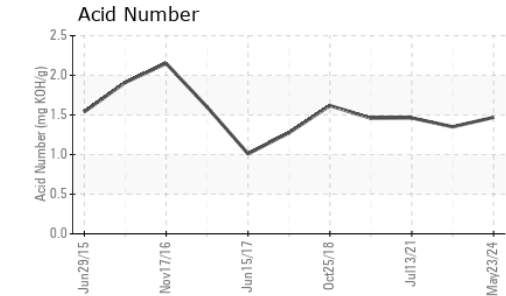
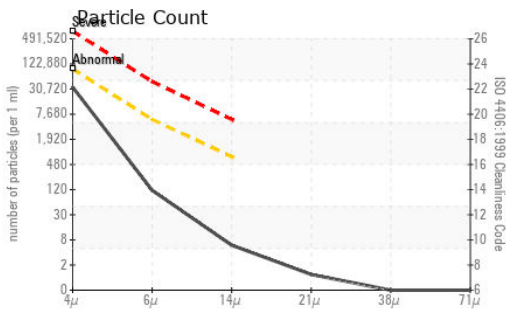
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	7	10	9
Potassium	ppm	ASTM D5185m	>20	3	3	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	29595	12009	12860
Particles >6µm		ASTM D7647	>5000	102	144	88
Particles >14µm		ASTM D7647	>640	5	18	9
Particles >21µm		ASTM D7647	>160	1	5	4
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	22/14/10	21/14/11	21/14/10
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	7	5	8
Boron	ppm	ASTM D5185m		116	138	281
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		86	106	142
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		288	365	494
Calcium	ppm	ASTM D5185m		1531	1716	1404
Phosphorus	ppm	ASTM D5185m		512	925	863
Zinc	ppm	ASTM D5185m		923	1077	996
Sulfur	ppm	ASTM D5185m		1880	2554	2288
Acid Number (AN)	mg KOH/g	ASTM D8045		1.47	1.35	1.463
Visc @ 40°C	cSt	ASTM D445	117	70.2	69.7	74.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212163
Lab Number : 06194609
Unique Number : 11056732
Test Package : CONST (Additional Tests: PQ)

Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 31 May 2024 - Don Baldrige

JRE - ASHLAND
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 US 23005
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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)