



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

[W49096]

Machine Id

JOHN DEERE 844K 1DW844KAEJF688182

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		JR0165981	JR0179109	JR0180946
Sample Date		Client Info		12 Jan 2024	16 Oct 2023	01 Sep 2023
Machine Age	hrs	Client Info		8426	7945	7475
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	25	24	23
Chromium	ppm	ASTM D5185m	>10	10	9	9
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	2	2
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	10	9	9
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

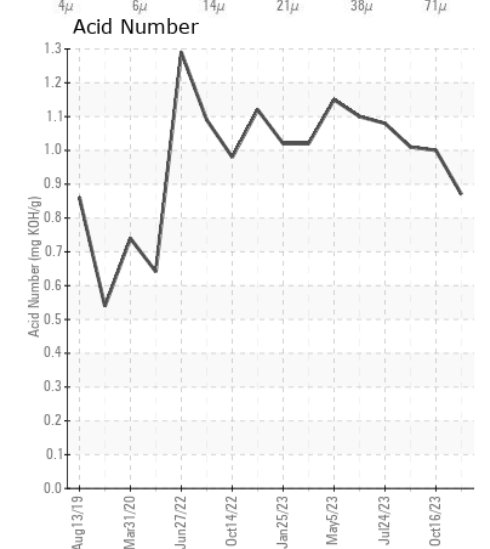
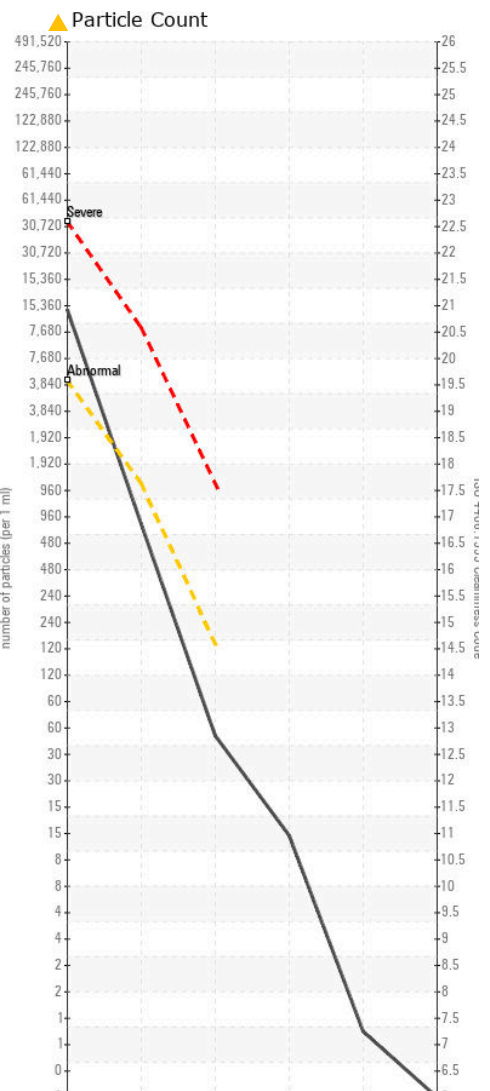
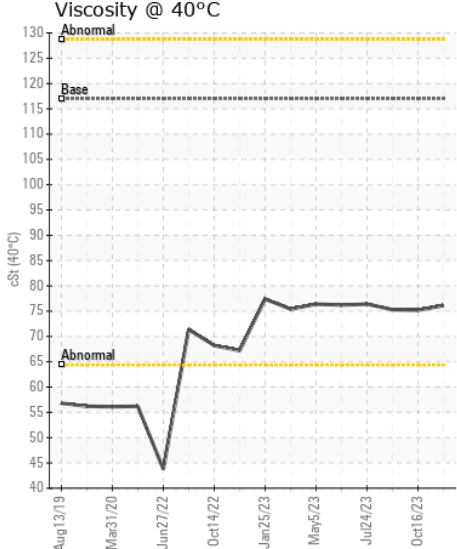
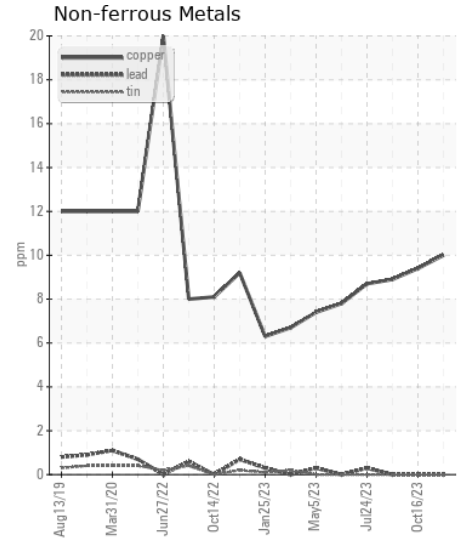
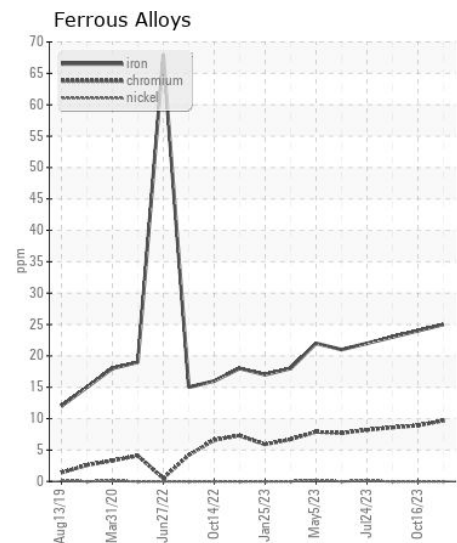
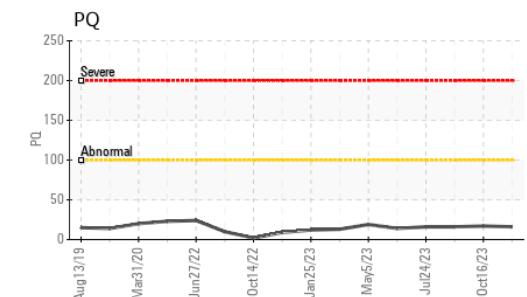
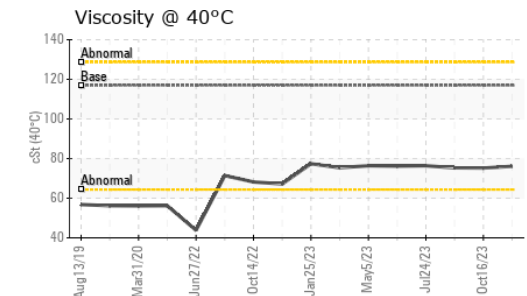
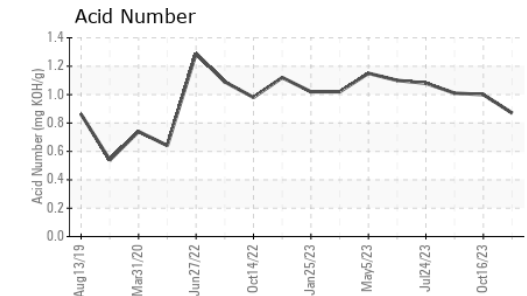
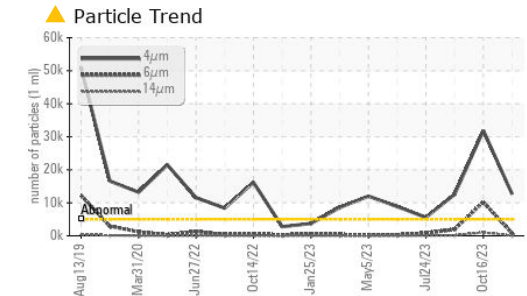
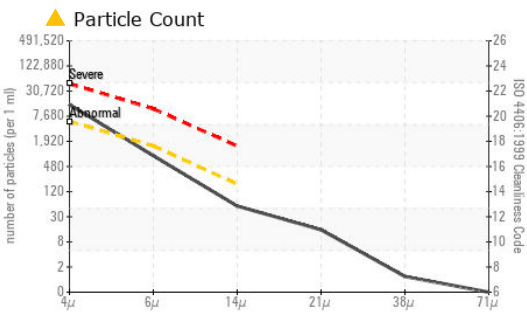
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	6	6	6
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 12666	▲ 31869	▲ 12554
Particles >6µm		ASTM D7647	>1300	765	▲ 10228	▲ 1928
Particles >14µm		ASTM D7647	>160	48	▲ 1031	142
Particles >21µm		ASTM D7647	>40	13	▲ 246	22
Particles >38µm		ASTM D7647	>10	1	7	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/17/13	▲ 22/21/17	▲ 21/18/14
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	>0.1	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		4	4	4
Boron	ppm	ASTM D5185m		130	137	146
Barium	ppm	ASTM D5185m		0	0	7
Molybdenum	ppm	ASTM D5185m		108	108	110
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		336	345	346
Calcium	ppm	ASTM D5185m		1431	1333	1301
Phosphorus	ppm	ASTM D5185m		825	852	795
Zinc	ppm	ASTM D5185m		1001	1042	970
Sulfur	ppm	ASTM D5185m		3025	2944	3238
Acid Number (AN)	mg KOH/g	ASTM D8045		0.87	1.00	1.01
Visc @ 40°C	cSt	ASTM D445	117	76.1	75.2	75.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0165981 **Received** : 17 Jan 2024
Lab Number : 06062544 **Diagnosed** : 18 Jan 2024
Unique Number : 10833926 **Diagnostician** : 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)