



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E 1DW410EBEMF708701
 Component
Hydraulic System
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206522	JR0193172	JR0161272
Sample Date		Client Info		28 Feb 2024	20 Dec 2023	11 May 2023
Machine Age	hrs	Client Info		4707	4707	3473
Oil Age	hrs	Client Info		3473	1234	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	21	19	16
Iron	ppm	ASTM D5185m	>71	4	15	15
Chromium	ppm	ASTM D5185m	>11	0	<1	<1
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	0	7	5
Lead	ppm	ASTM D5185m	>13	0	0	<1
Copper	ppm	ASTM D5185m	>21	0	<1	1
Tin	ppm	ASTM D5185m	>5	0	<1	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

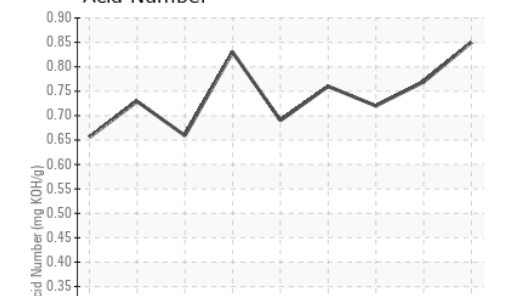
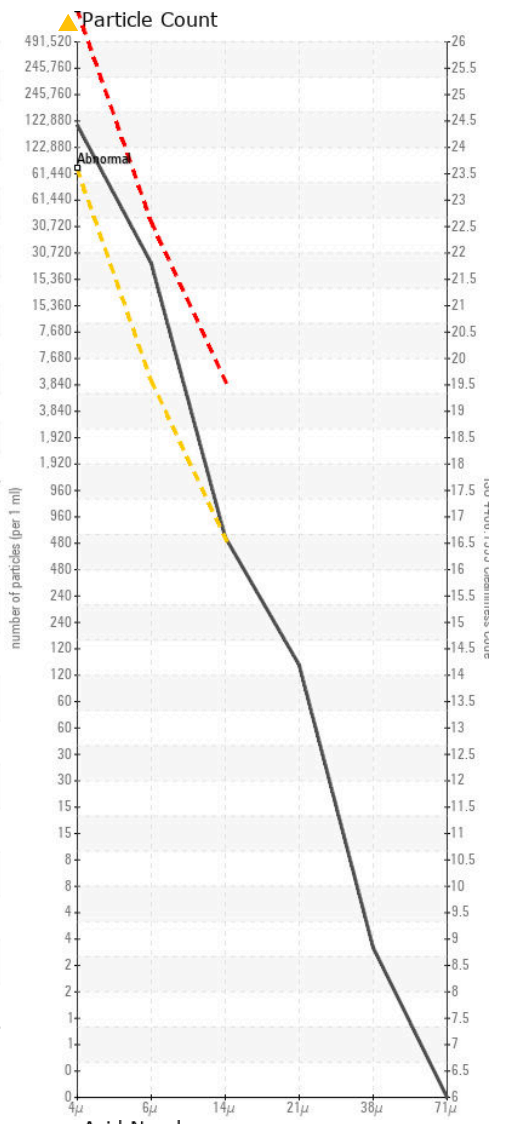
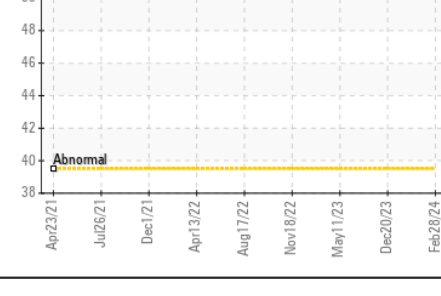
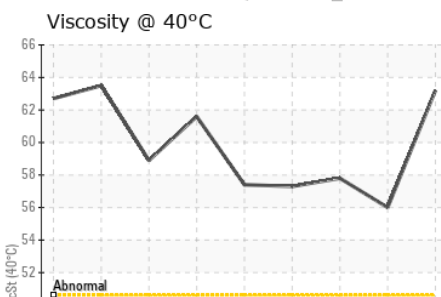
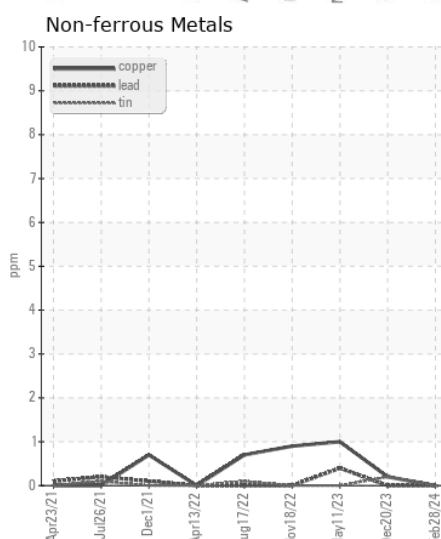
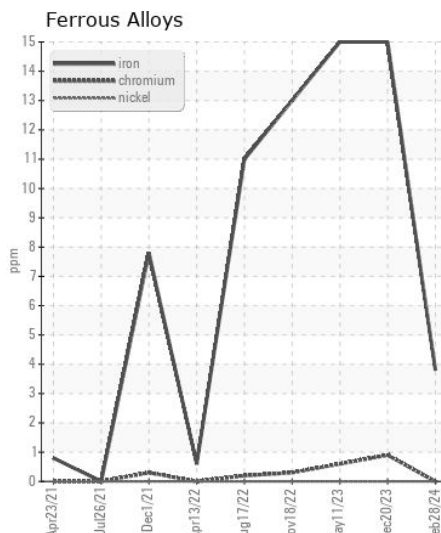
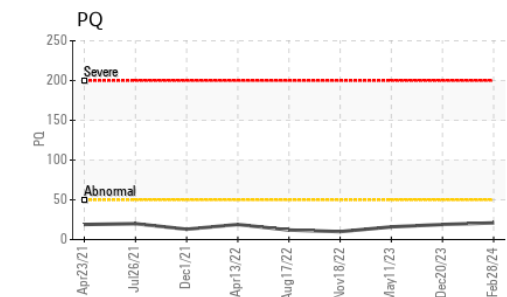
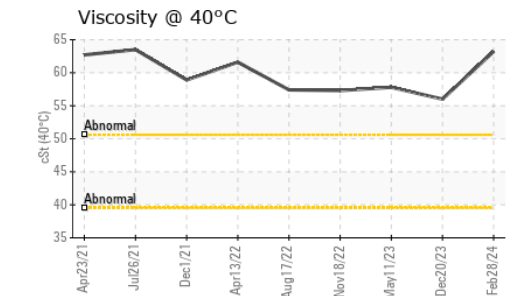
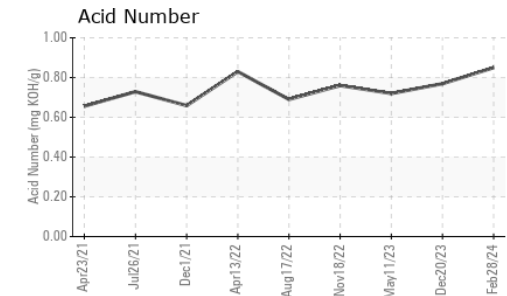
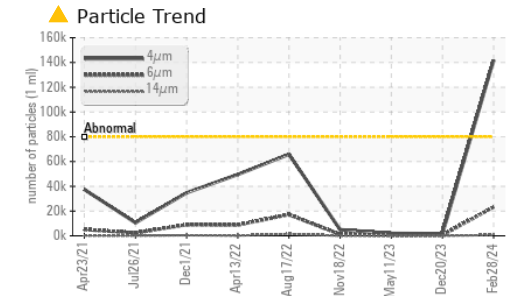
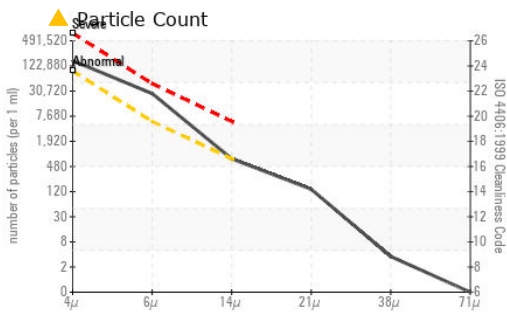
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>24	<1	7	6
Potassium	ppm	ASTM D5185m	>20	0	<1	4
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	▲ 141800	1817	1994
Particles >6µm		ASTM D7647	>5000	▲ 23245	564	403
Particles >14µm		ASTM D7647	>640	▲ 645	45	17
Particles >21µm		ASTM D7647	>160	121	11	3
Particles >38µm		ASTM D7647	>40	3	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	▲ 24/22/17	18/16/13	18/16/11
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	<1	1	0
Boron	ppm	ASTM D5185m		2	2	0
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		2	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		5	12	3
Calcium	ppm	ASTM D5185m		101	95	85
Phosphorus	ppm	ASTM D5185m		640	677	582
Zinc	ppm	ASTM D5185m		787	830	792
Sulfur	ppm	ASTM D5185m		1547	1730	1705
Acid Number (AN)	mg KOH/g	ASTM D8045		0.85	0.769	0.72
Visc @ 40°C	cSt	ASTM D445		63.2	56.0	57.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206522 **Received** : 01 Mar 2024
Lab Number : 06105952 **Tested** : 04 Mar 2024
Unique Number : 10909449 **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)