



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E 1DW410EBEMF708746

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- 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		JR0203843	JR0192521	JR0171475
Sample Date		Client Info		28 Feb 2024	21 Nov 2023	27 Jun 2023
Machine Age	hrs	Client Info		5035	4610	3944
Oil Age	hrs	Client Info		4369	666	3944
Filter Age	hrs	Client Info		0	0	3944
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	10	16	13
Iron	ppm	ASTM D5185m	>71	0	2	15
Chromium	ppm	ASTM D5185m	>11	0	<1	0
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	0	2	4
Lead	ppm	ASTM D5185m	>13	0	0	0
Copper	ppm	ASTM D5185m	>21	0	<1	<1
Tin	ppm	ASTM D5185m	>5	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

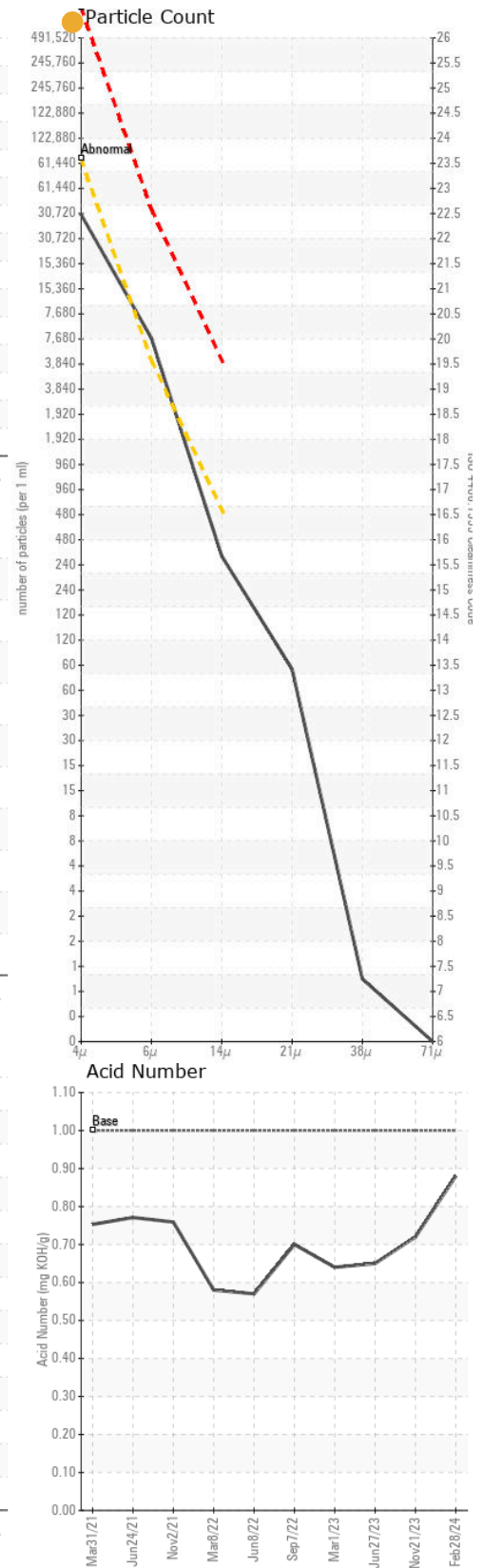
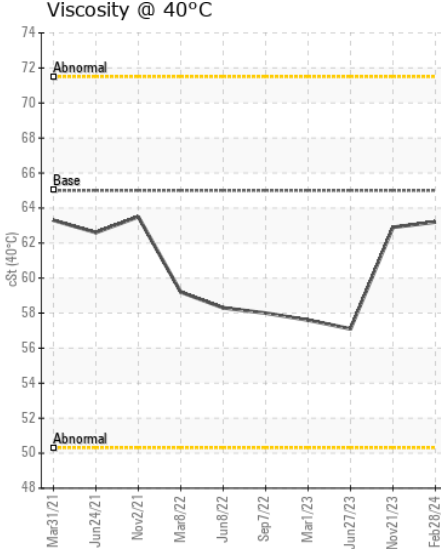
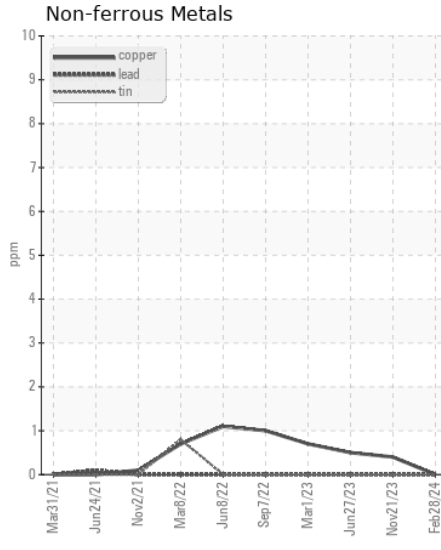
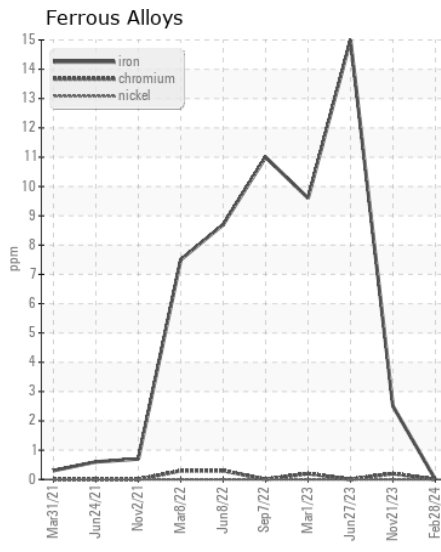
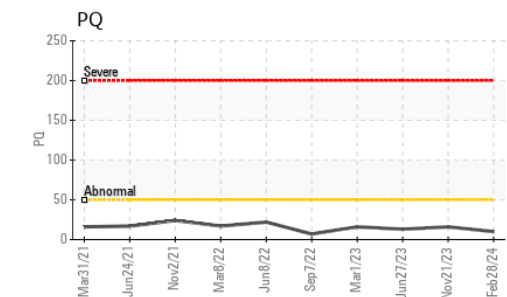
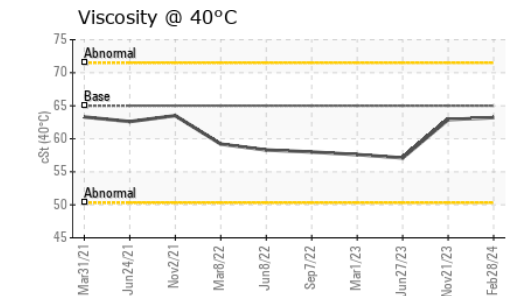
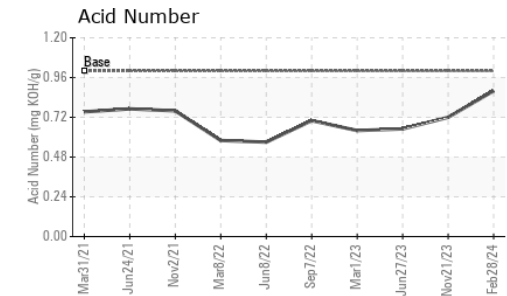
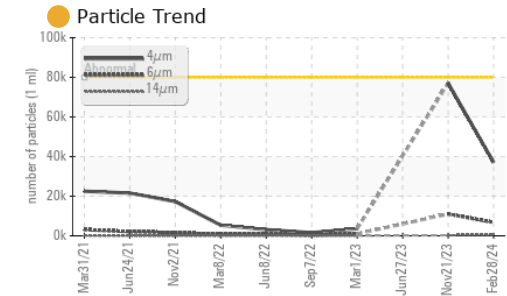
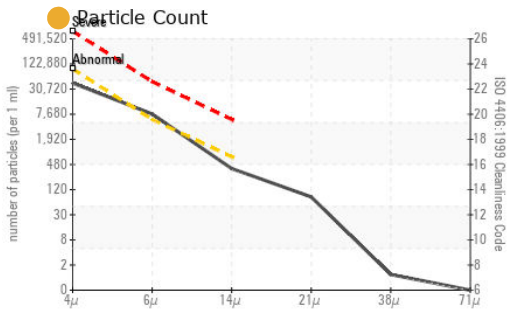
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>24	0	1	4
Potassium	ppm	ASTM D5185m	>20	0	1	3
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	37060	77045	---
Particles >6µm		ASTM D7647	>5000	6757	11017	---
Particles >14µm		ASTM D7647	>640	337	285	---
Particles >21µm		ASTM D7647	>160	71	66	---
Particles >38µm		ASTM D7647	>40	1	3	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	22/20/16	23/21/15	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
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	0	2
Boron	ppm	ASTM D5185m		2	3	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	5	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		5	15	6
Calcium	ppm	ASTM D5185m	87	100	136	84
Phosphorus	ppm	ASTM D5185m	727	638	706	603
Zinc	ppm	ASTM D5185m	900	782	891	827
Sulfur	ppm	ASTM D5185m	1500	1539	1668	1889
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.88	0.72	0.65
Visc @ 40°C	cSt	ASTM D445	65	63.2	62.9	57.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203843 **Received** : 01 Mar 2024
Lab Number : 06105955 **Tested** : 04 Mar 2024
Unique Number : 10909452 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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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)