



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E 1DW410ETEFK697804
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- 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		JR0212737	JR0197425	JR0139244
Sample Date		Client Info		24 May 2024	07 Dec 2023	26 Aug 2022
Machine Age	hrs	Client Info		5520	5009	3982
Oil Age	hrs	Client Info		0	1027	3982
Filter Age	hrs	Client Info		0	1027	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				ABNORMAL	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	13	18	15
Iron	ppm	ASTM D5185m	>71	6	5	4
Chromium	ppm	ASTM D5185m	>11	2	1	<1
Nickel	ppm	ASTM D5185m	>6	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>11	1	1	2
Lead	ppm	ASTM D5185m	>13	<1	0	0
Copper	ppm	ASTM D5185m	>21	5	4	2
Tin	ppm	ASTM D5185m	>5	<1	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

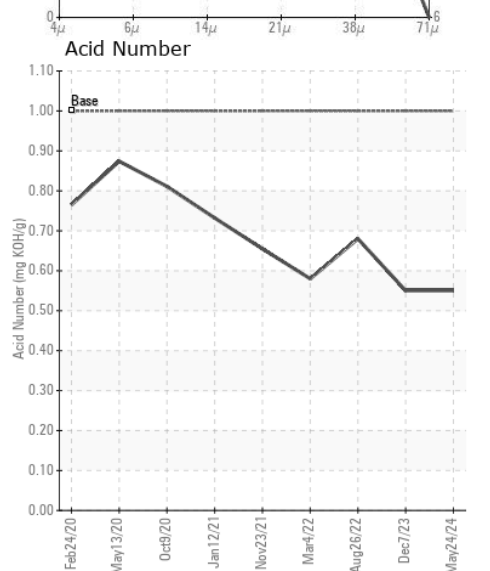
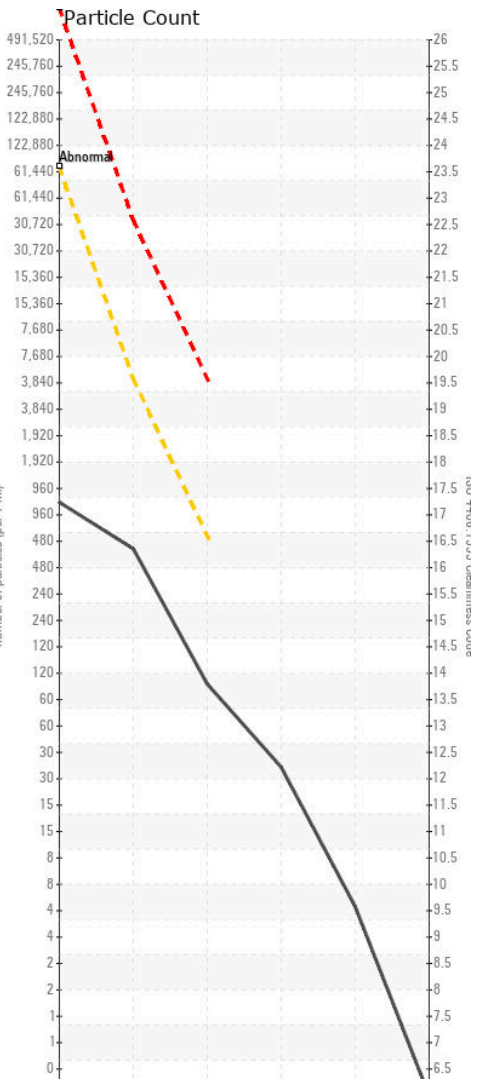
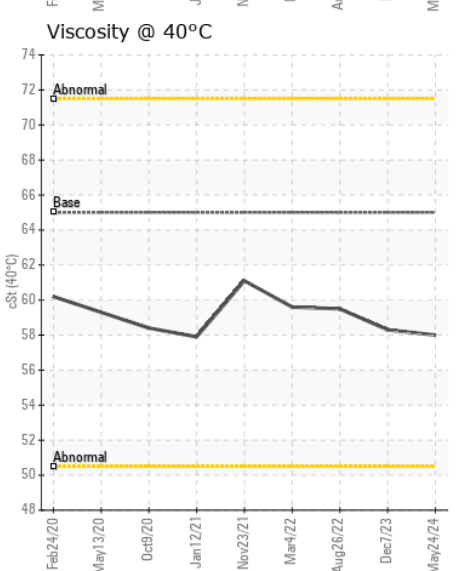
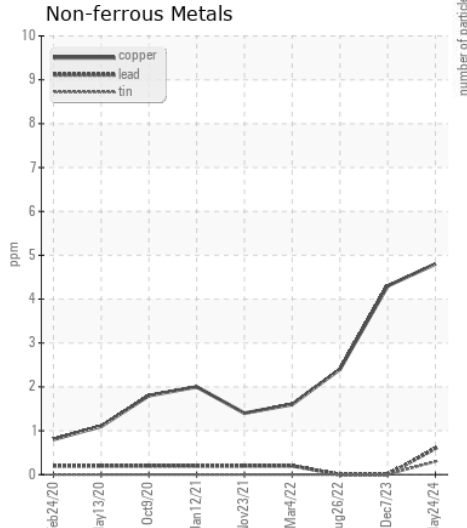
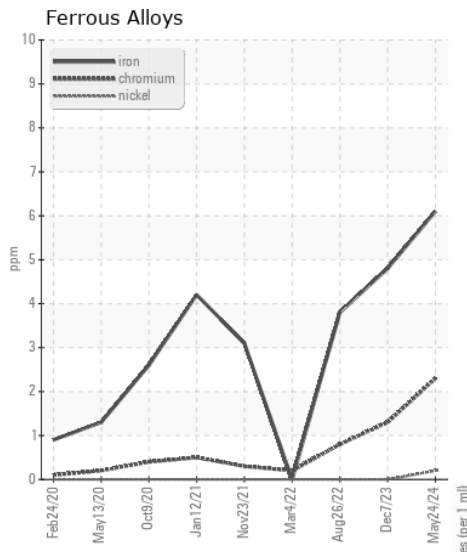
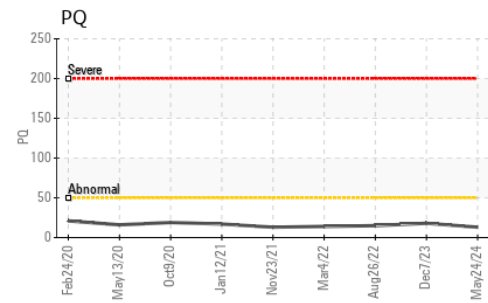
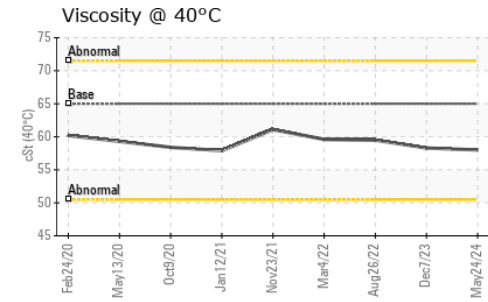
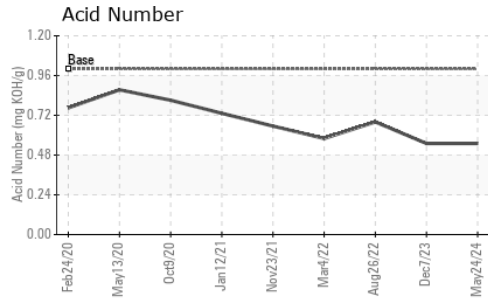
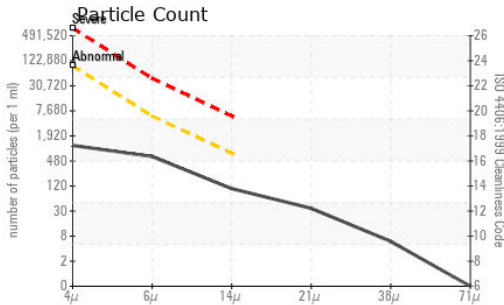
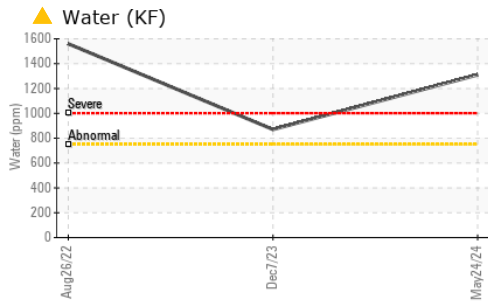
There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	5	4	4
Potassium	ppm	ASTM D5185m	>20	8	11	9
Water	%	ASTM D6304	>0.075	▲ 0.131	▲ 0.087	▲ 0.156
ppm Water	ppm	ASTM D6304	>750	▲ 1310	▲ 870	▲ 1560
Particles >4µm		ASTM D7647	>80000	992	622	8610
Particles >6µm		ASTM D7647	>5000	540	99	789
Particles >14µm		ASTM D7647	>640	92	10	23
Particles >21µm		ASTM D7647	>160	31	3	7
Particles >38µm		ASTM D7647	>40	5	1	3
Particles >71µm		ASTM D7647	>10	0	0	1
Oil Cleanliness		ISO 4406 (c)	>23/19/16	17/16/14	16/14/10	20/17/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	▲ 0.2%	0.2%	▲ 0.2%

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	12	16	21
Boron	ppm	ASTM D5185m		10	8	0
Barium	ppm	ASTM D5185m		0	3	<1
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		4	15	1
Calcium	ppm	ASTM D5185m	87	76	79	84
Phosphorus	ppm	ASTM D5185m	727	661	616	605
Zinc	ppm	ASTM D5185m	900	823	793	781
Sulfur	ppm	ASTM D5185m	1500	1695	1667	1503
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.55	0.55	0.68
Visc @ 40°C	cSt	ASTM D445	65	58.0	58.3	59.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212737 **Received** : 30 May 2024
Lab Number : 06195305 **Tested** : 05 Jun 2024
Unique Number : 11057428 **Diagnosed** : 05 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, 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)