



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[A35845]
 Machine Id
JOHN DEERE 310E 1T0310ELKJG338907
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: A35845)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007710	WE0003406	WE0000235
Sample Date		Client Info		16 Jul 2024	10 Mar 2023	28 Dec 2021
Machine Age	hrs	Client Info		2190	1684	1332
Oil Age	hrs	Client Info		2190	1684	1332
Filter Age	hrs	Client Info		2190	500	1332
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	22	12	---
Iron	ppm	ASTM D5185m	>71	3	<1	2
Chromium	ppm	ASTM D5185m	>11	6	4	4
Nickel	ppm	ASTM D5185m	>6	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>11	4	<1	<1
Lead	ppm	ASTM D5185m	>13	<1	0	<1
Copper	ppm	ASTM D5185m	>21	3	4	7
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

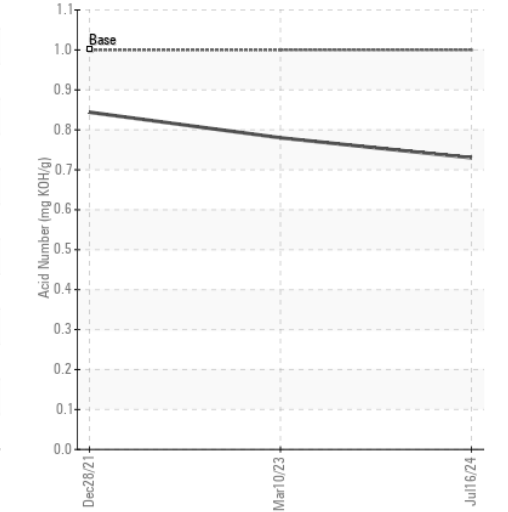
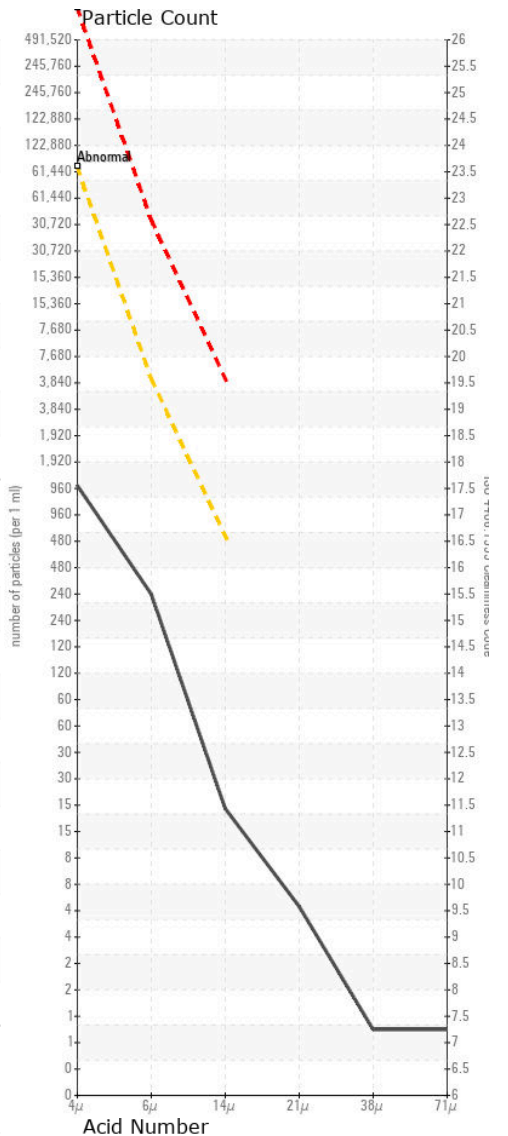
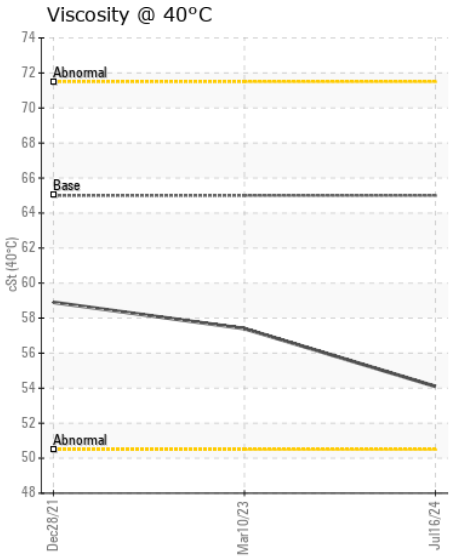
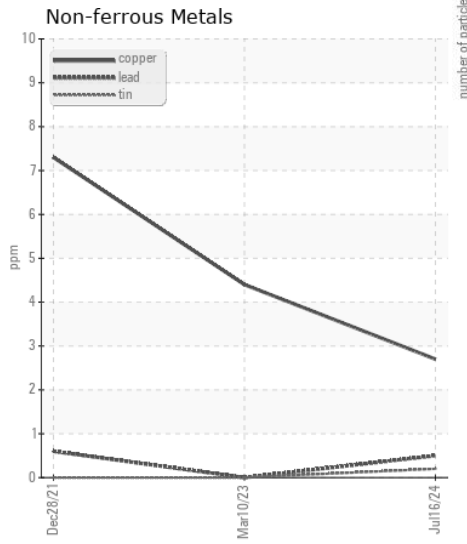
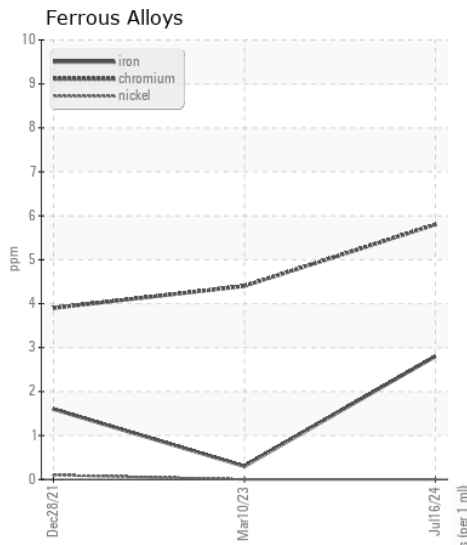
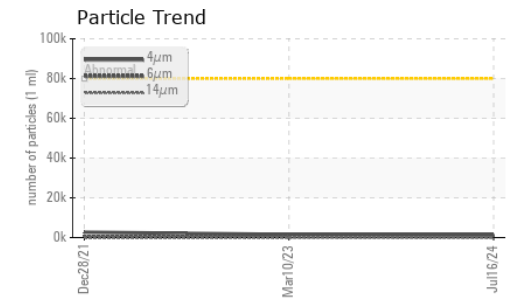
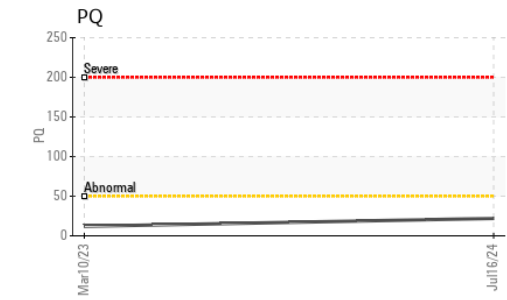
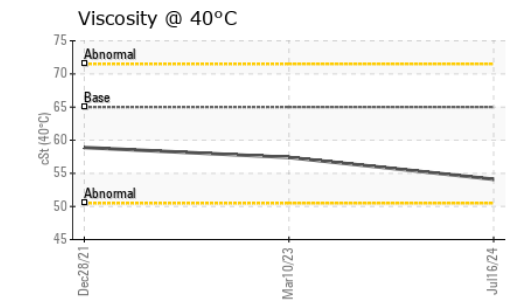
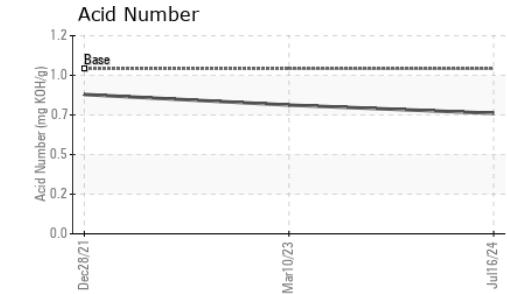
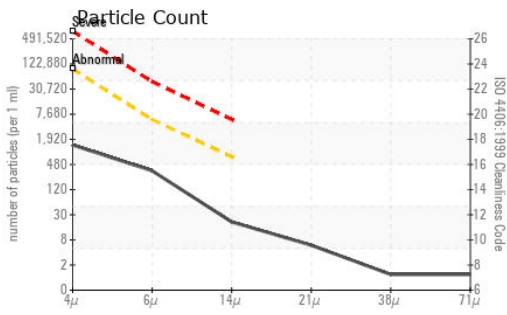
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	3	2	2
Potassium	ppm	ASTM D5185m	>20	5	1	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	1235	1597	2724
Particles >6µm		ASTM D7647	>5000	298	403	295
Particles >14µm		ASTM D7647	>640	18	20	3
Particles >21µm		ASTM D7647	>160	5	5	0
Particles >38µm		ASTM D7647	>40	1	1	0
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	17/15/11	18/16/11	19/15/9
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	0	1	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		2	2	3
Calcium	ppm	ASTM D5185m	87	352	150	80
Phosphorus	ppm	ASTM D5185m	727	576	527	531
Zinc	ppm	ASTM D5185m	900	833	761	804
Sulfur	ppm	ASTM D5185m	1500	1749	1452	1502
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.73	0.78	0.844
Visc @ 40°C	cSt	ASTM D445	65	54.1	57.4	58.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0007710

Lab Number : 06240188

Unique Number : 11129022

Test Package : CONST (Additional Tests: PQ)

Received : 18 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 20 Jul 2024 - Don Baldrige

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)

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