



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[W64407]
 Machine Id
JOHN DEERE 410E 1DW410EBCNF713870
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (20 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W64407)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0192745	JR0177342	JR0142007
Sample Date		Client Info		21 Feb 2024	28 Aug 2023	30 Mar 2023
Machine Age	hrs	Client Info		2529	1984	1432
Oil Age	hrs	Client Info		483	1035	0
Filter Age	hrs	Client Info		483	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ATTENTION	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	21	16	6
Iron	ppm	ASTM D5185m	>71	34	7	<1
Chromium	ppm	ASTM D5185m	>11	<1	<1	0
Nickel	ppm	ASTM D5185m	>6	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	1	<1	0
Lead	ppm	ASTM D5185m	>13	2	0	0
Copper	ppm	ASTM D5185m	>21	9	3	0
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

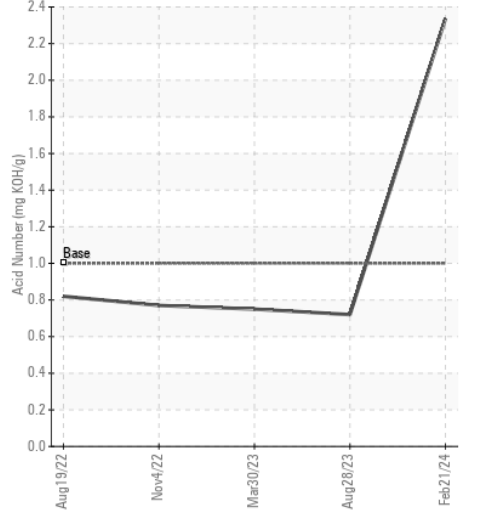
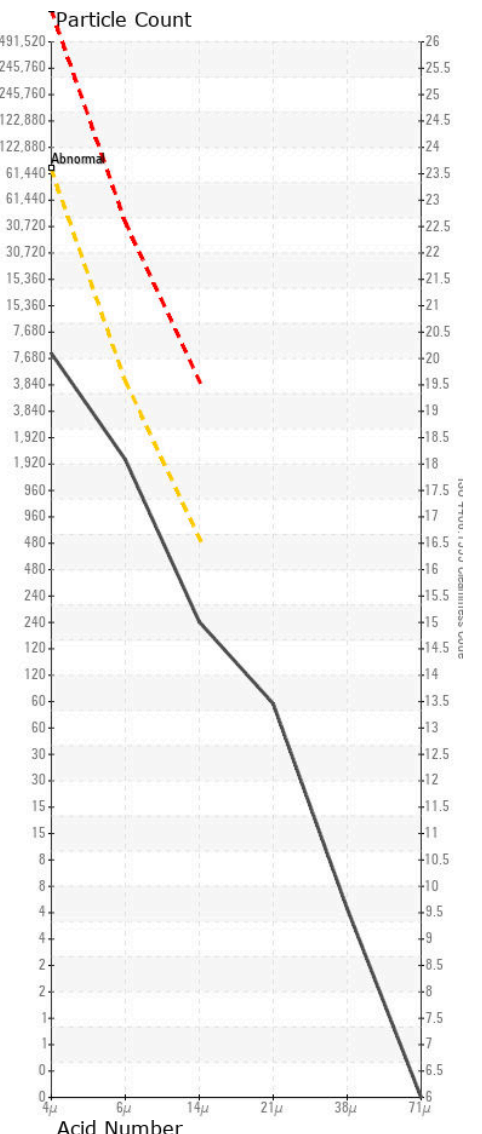
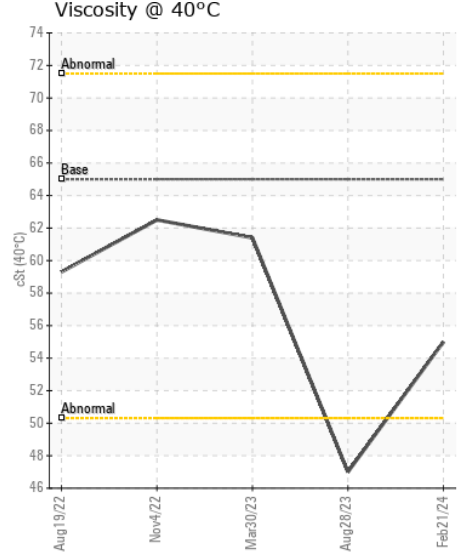
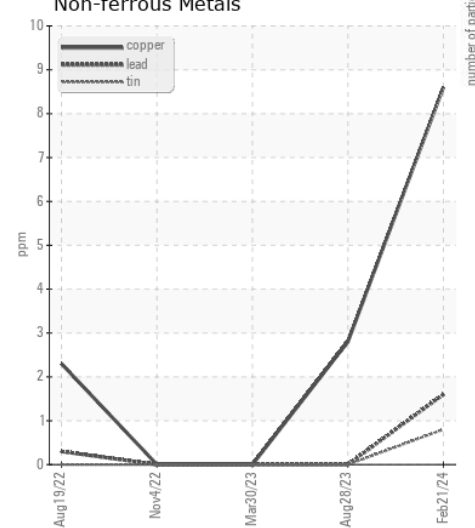
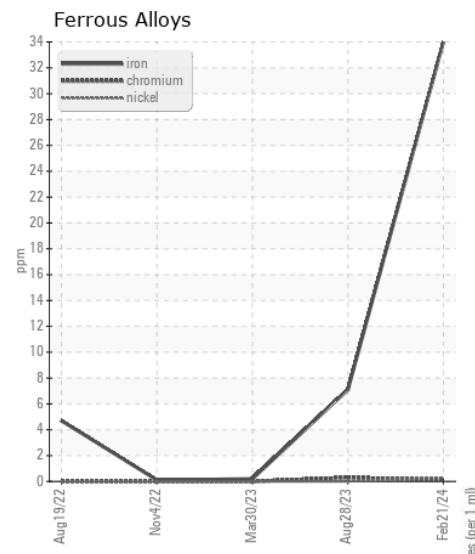
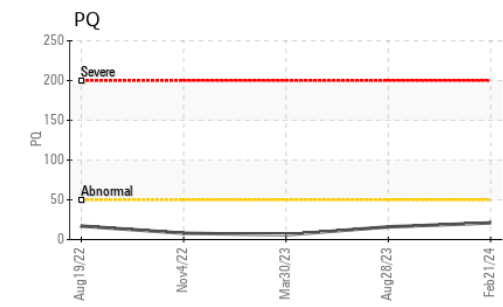
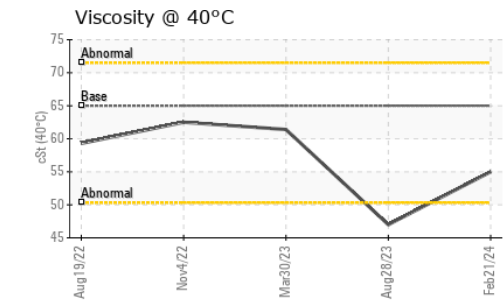
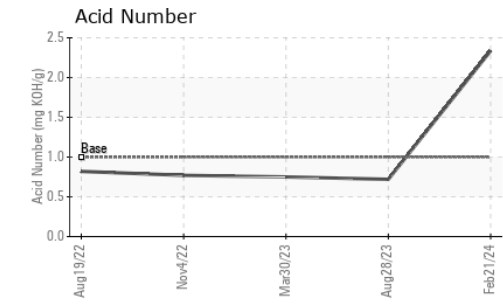
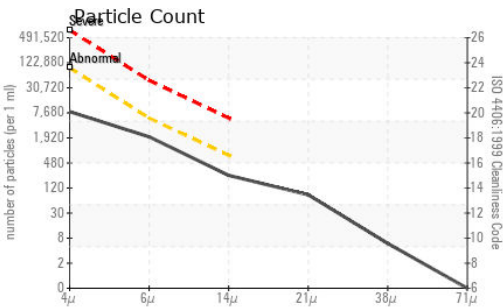
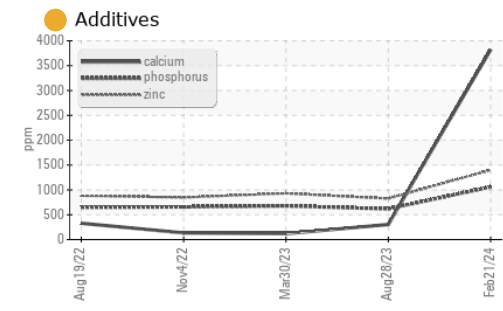
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	12	<1	<1
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	7153	8230	39815
Particles >6µm		ASTM D7647	>5000	1783	2466	5380
Particles >14µm		ASTM D7647	>640	213	198	79
Particles >21µm		ASTM D7647	>160	73	49	9
Particles >38µm		ASTM D7647	>40	5	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	20/18/15	20/18/15	22/20/13
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

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	0	1	0
Boron	ppm	ASTM D5185m		<1	0	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	2	3
Manganese	ppm	ASTM D5185m		1	0	<1
Magnesium	ppm	ASTM D5185m		108	11	9
Calcium	ppm	ASTM D5185m	87	3821	304	118
Phosphorus	ppm	ASTM D5185m	727	1058	617	677
Zinc	ppm	ASTM D5185m	900	1398	825	930
Sulfur	ppm	ASTM D5185m	1500	4485	1945	1779
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	2.336	0.72	0.75
Visc @ 40°C	cSt	ASTM D445	65	55.0	47.0	61.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0192745 **Received** : 23 Feb 2024
Lab Number : 06099375 **Tested** : 01 Mar 2024
Unique Number : 10897605 **Diagnosed** : 01 Mar 2024 - Doug Bogart
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)