



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 410L 1T0410LXJKF358237
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- QTS)

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		JR0224964	JR0181911	JR0139897
Sample Date		Client Info		19 Jun 2024	31 Jul 2023	31 Aug 2022
Machine Age	hrs	Client Info		1958	1908	1470
Oil Age	hrs	Client Info		0	1000	0
Filter Age	hrs	Client Info		0	500	0
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The iron level is abnormal. All other component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	▲ 21	▲ 26	17
Chromium	ppm	ASTM D5185m	>10	2	2	1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	3	3	2
Lead	ppm	ASTM D5185m	>10	1	<1	0
Copper	ppm	ASTM D5185m	>75	4	4	5
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

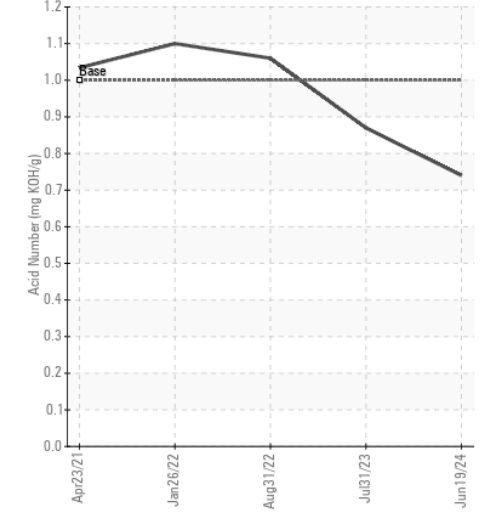
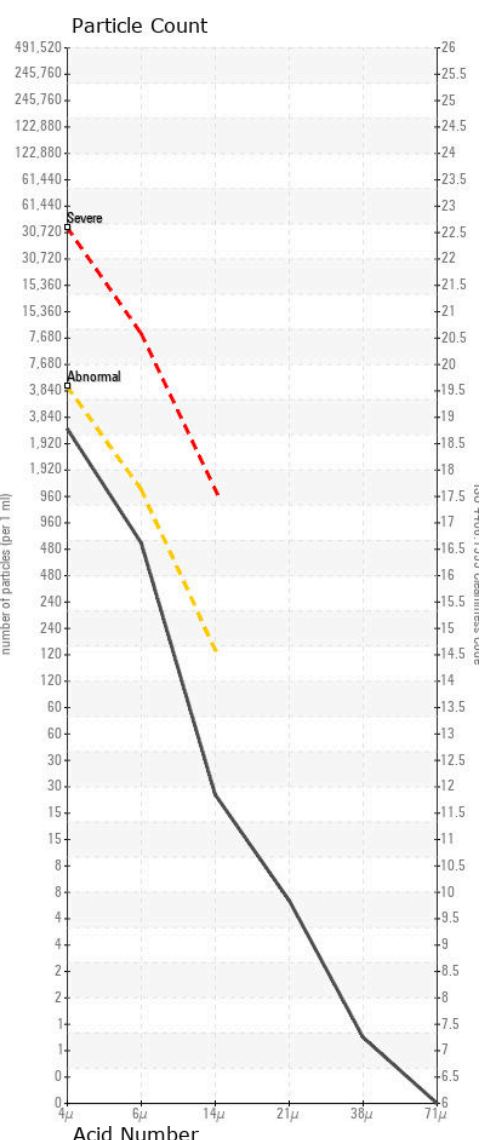
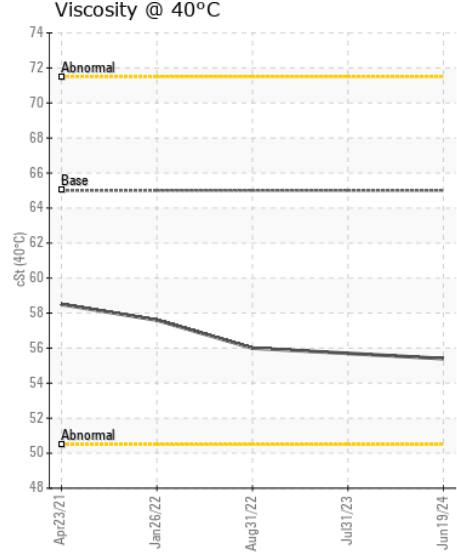
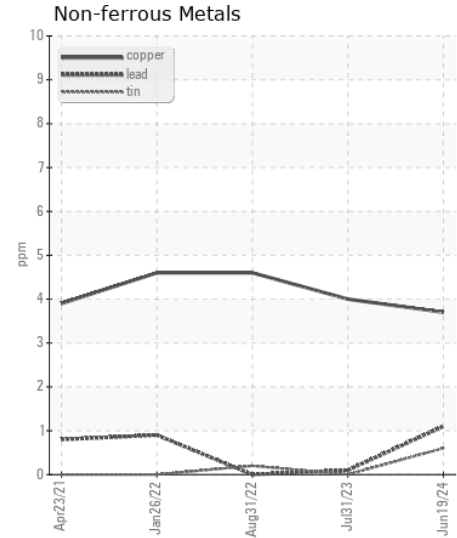
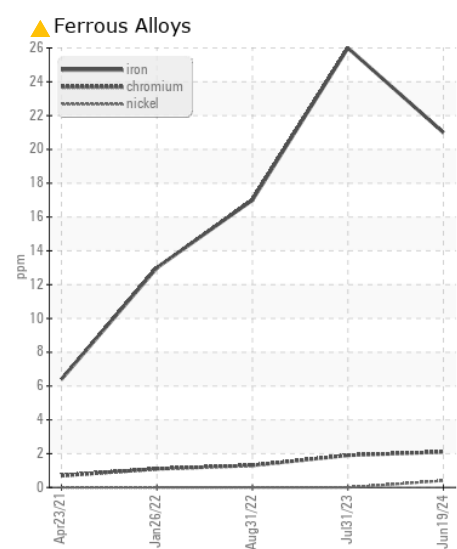
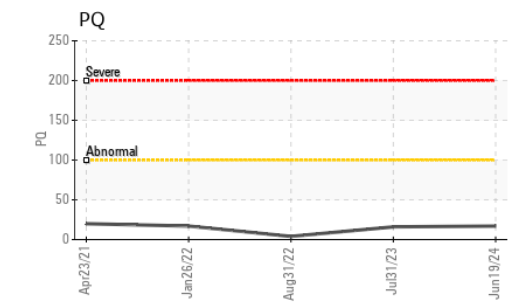
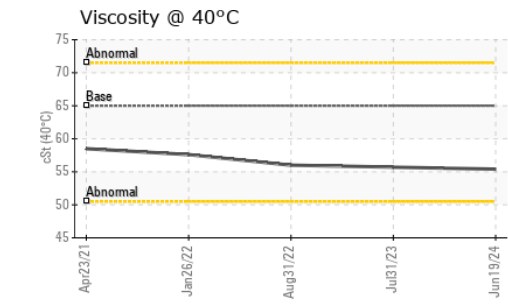
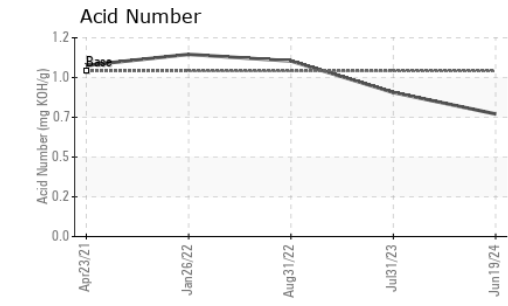
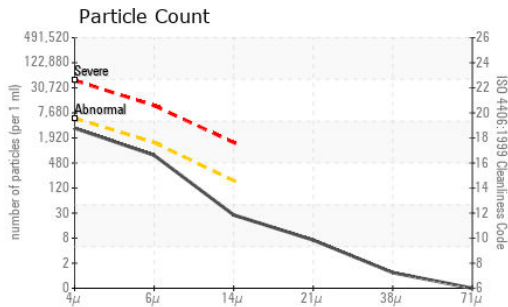
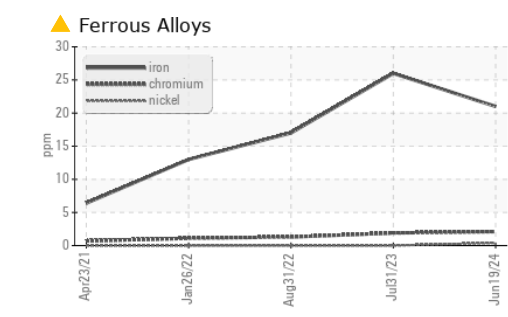
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	6	6
Potassium	ppm	ASTM D5185m	>20	4	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2883	2300	▲ 14033
Particles >6µm		ASTM D7647	>1300	646	367	603
Particles >14µm		ASTM D7647	>160	24	24	14
Particles >21µm		ASTM D7647	>40	6	8	4
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/12	18/16/12	▲ 21/16/11
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	>0.1	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		0	2	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	<1
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		6	0	<1
Calcium	ppm	ASTM D5185m	87	161	96	77
Phosphorus	ppm	ASTM D5185m	727	618	594	548
Zinc	ppm	ASTM D5185m	900	857	924	819
Sulfur	ppm	ASTM D5185m	1500	1628	1967	1507
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.74	0.87	1.06
Visc @ 40°C	cSt	ASTM D445	65	55.4	55.7	56.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224964 **Received** : 21 Jun 2024
Lab Number : 06216766 **Tested** : 24 Jun 2024
Unique Number : 11089630 **Diagnosed** : 24 Jun 2024 - Don Baldrige
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)