



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

[LOGGERHEAD]

Machine Id
JOHN DEERE 437E 1T0437EDANF426020

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0222054	JR0164590	JR0162202
Sample Date		Client Info		08 Jul 2024	05 Jan 2024	22 Aug 2023
Machine Age	hrs	Client Info		3468	2436	1656
Oil Age	hrs	Client Info		0	2436	0
Filter Age	hrs	Client Info		0	2436	0
Oil Changed		Client Info		N/A	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	5	0	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	1
Aluminum	ppm	ASTM D5185m	>10	<1	0	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	6	4	4
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

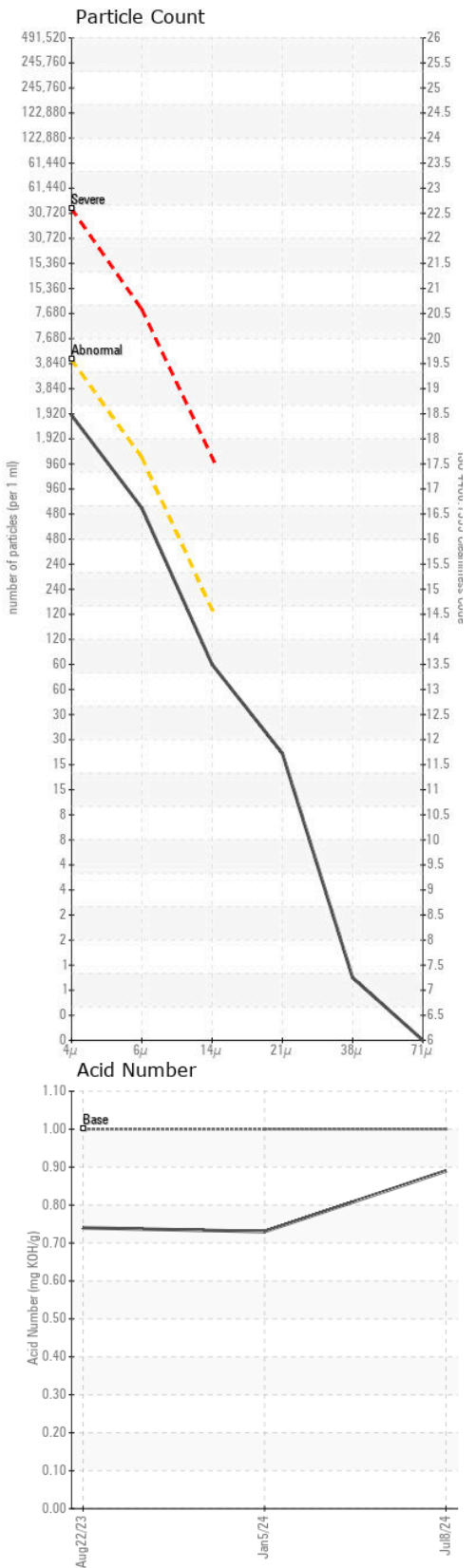
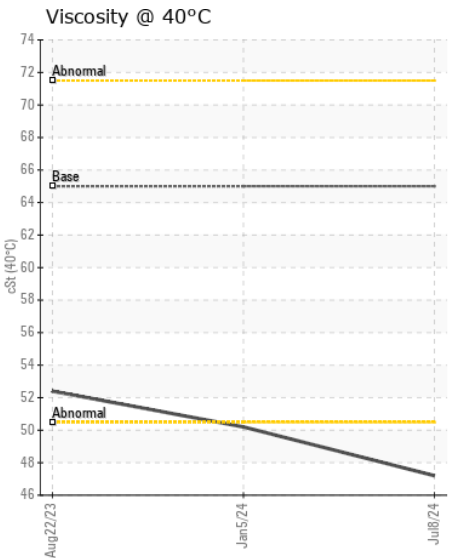
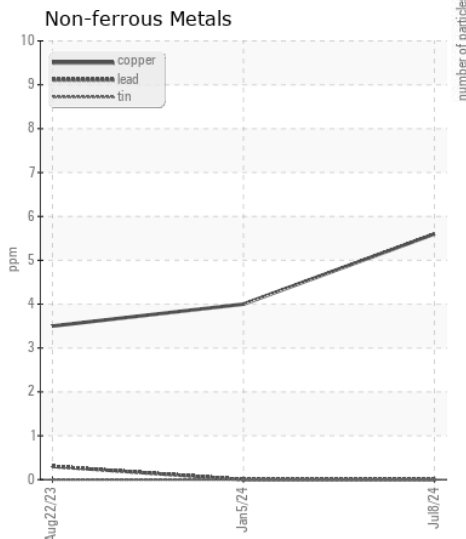
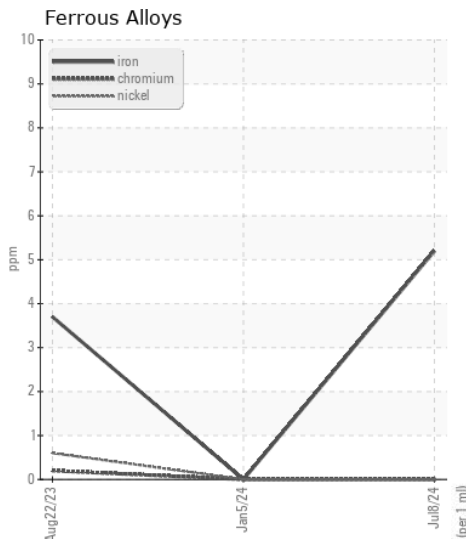
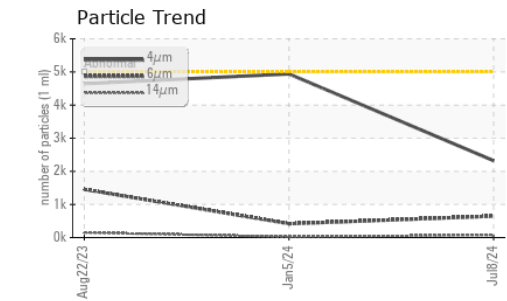
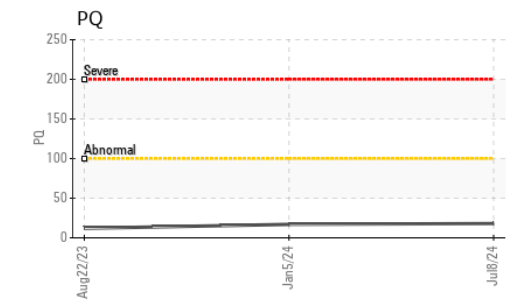
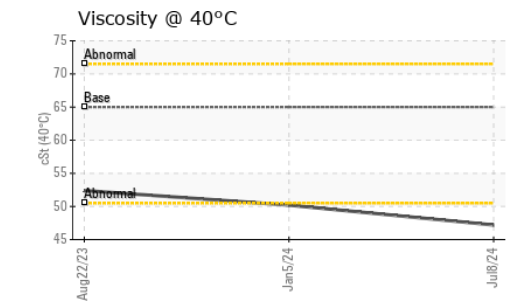
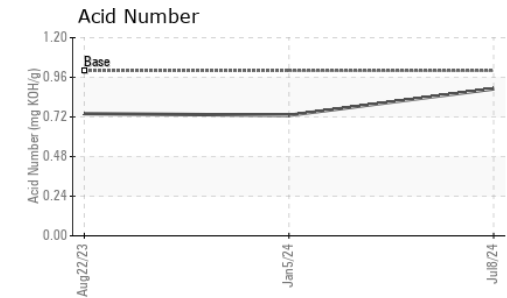
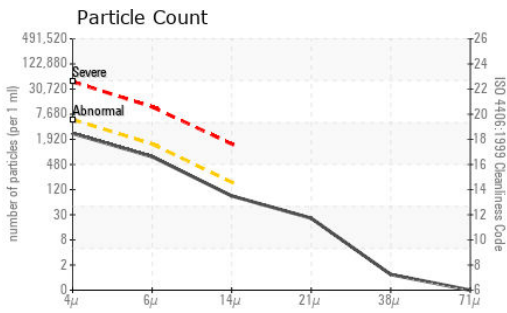
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	3	0	2
Potassium	ppm	ASTM D5185m	>20	3	2	5
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2321	4940	4645
Particles >6µm		ASTM D7647	>1300	648	418	1456
Particles >14µm		ASTM D7647	>160	75	21	151
Particles >21µm		ASTM D7647	>40	22	8	45
Particles >38µm		ASTM D7647	>10	1	1	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/17/13	19/16/12	19/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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		2	2	0
Boron	ppm	ASTM D5185m		<1	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		5	2	4
Calcium	ppm	ASTM D5185m	87	789	849	607
Phosphorus	ppm	ASTM D5185m	727	707	708	674
Zinc	ppm	ASTM D5185m	900	838	824	851
Sulfur	ppm	ASTM D5185m	1500	2480	2003	2031
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.89	0.73	0.74
Visc @ 40°C	cSt	ASTM D445	65	47.2	50.2	52.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222054 **Received** : 17 Jul 2024
Lab Number : 06239080 **Tested** : 18 Jul 2024
Unique Number : 11127914 **Diagnosed** : 19 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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