



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 437E 1T0437EDCMF396473**  
 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		<b>JR0200429</b>	JR0200381	JR0180463
Sample Date		Client Info		<b>29 May 2024</b>	04 Mar 2024	29 Dec 2023
Machine Age	hrs	Client Info		<b>4695</b>	4200	3700
Oil Age	hrs	Client Info		<b>2700</b>	2200	1700
Filter Age	hrs	Client Info		<b>2700</b>	2200	1700
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>1</b>	1	1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	2
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>2</b>	4	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

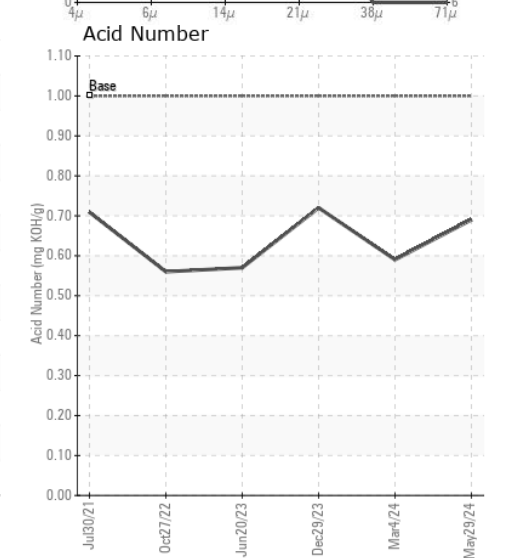
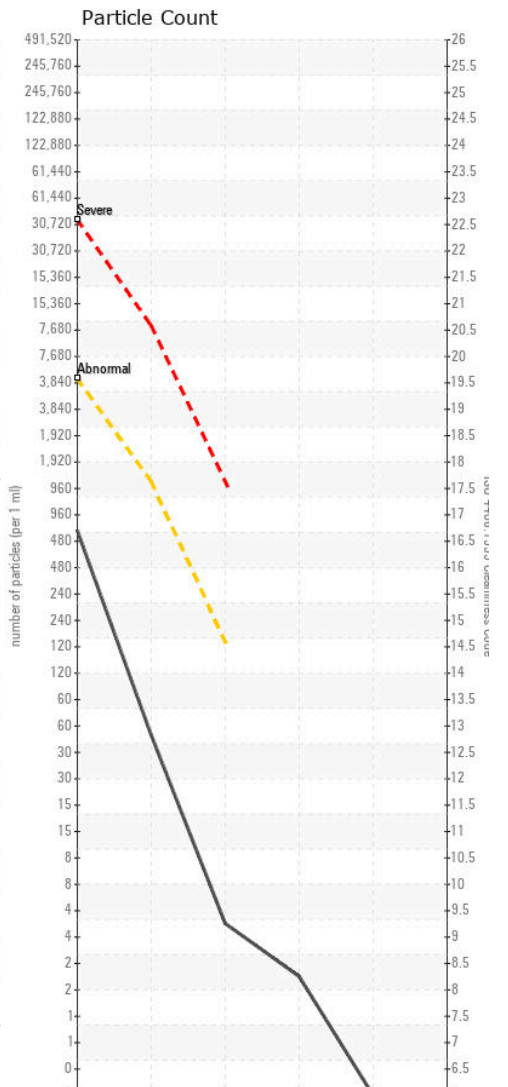
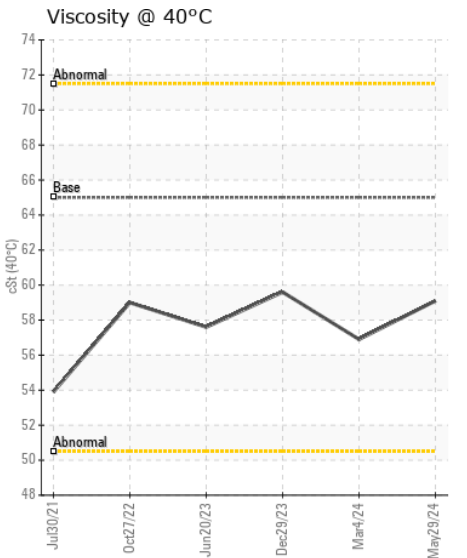
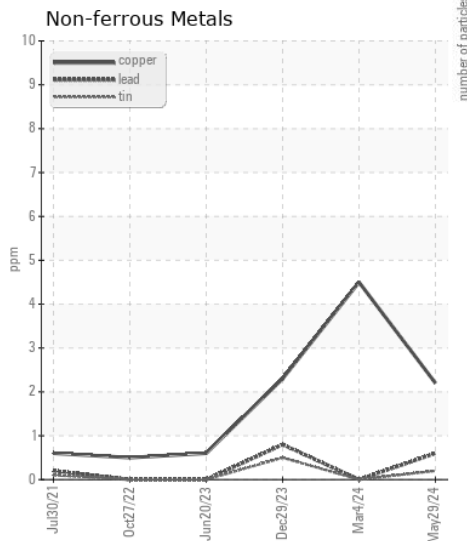
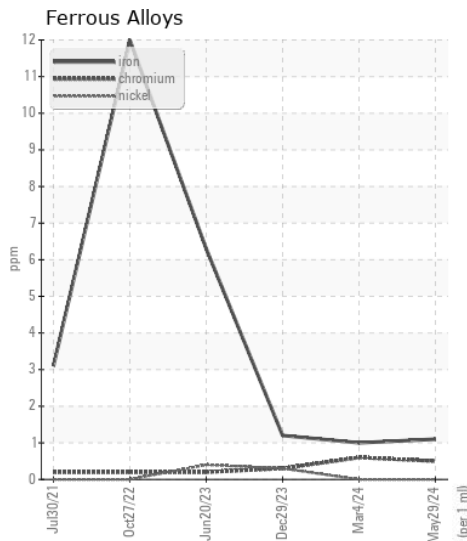
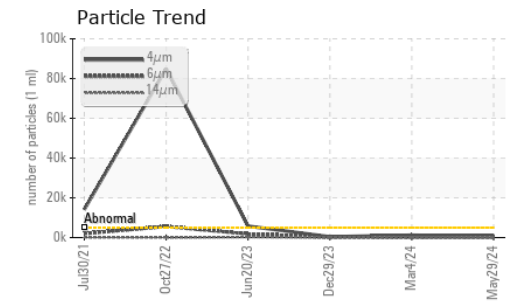
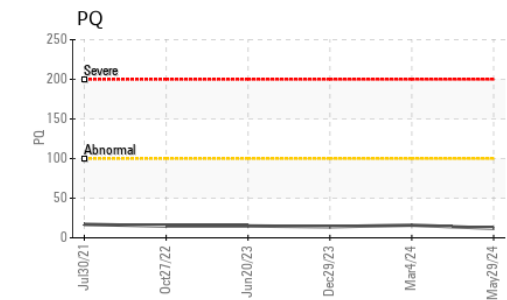
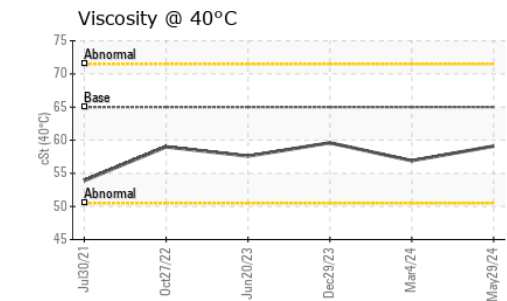
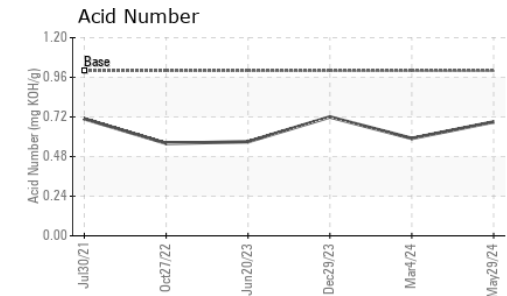
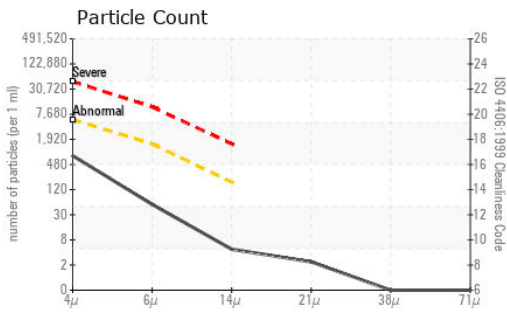
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>685</b>	1227	416
Particles >6µm		ASTM D7647	>1300	<b>47</b>	107	159
Particles >14µm		ASTM D7647	>160	<b>4</b>	15	18
Particles >21µm		ASTM D7647	>40	<b>2</b>	6	6
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/13/9</b>	17/14/11	16/14/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>0</b>	3	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	<1	11
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	0	2
Calcium	ppm	ASTM D5185m	87	<b>92</b>	84	93
Phosphorus	ppm	ASTM D5185m	727	<b>659</b>	589	711
Zinc	ppm	ASTM D5185m	900	<b>879</b>	727	870
Sulfur	ppm	ASTM D5185m	1500	<b>1707</b>	1666	1763
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.69</b>	0.59	0.72
Visc @ 40°C	cSt	ASTM D445	65	<b>59.1</b>	56.9	59.6



Certificate L2367

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

Sample No. : JR0200429

Lab Number : 06195324

Unique Number : 11057447

Test Package : CONST ( Additional Tests: PQ )

Received : 30 May 2024

Tested : 31 May 2024

Diagnosed : 31 May 2024 - Wes Davis

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)

JRE - ASHLAND

11047 LEADBETTER RD

ASHLAND, VA

US 23005

Contact: DAVID ZIEG

dzieg@jamesriverequipment.com

T: (804)798-6001

F: (804)798-0292