



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



Machine Id  
**JOHN DEERE 410E-II 1DW410ELJMF710562**

Component  
**Hydraulic System**

Fluid  
**JOHN DEERE HYDRAU (46 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0203459</b>	JR0198056	JR0198051
Sample Date		Client Info		<b>09 Feb 2024</b>	25 Jan 2024	25 Jan 2024
Machine Age	hrs	Client Info		<b>3708</b>	3711	3710
Oil Age	hrs	Client Info		<b>0</b>	3663	3663
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>14</b>	15	18
Iron	ppm	ASTM D5185m	>71	<b>0</b>	2	3
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>0</b>	2	2
Lead	ppm	ASTM D5185m	>13	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>21	<b>0</b>	1	1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

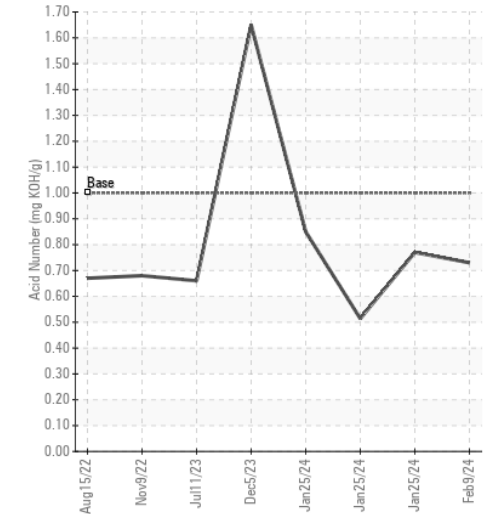
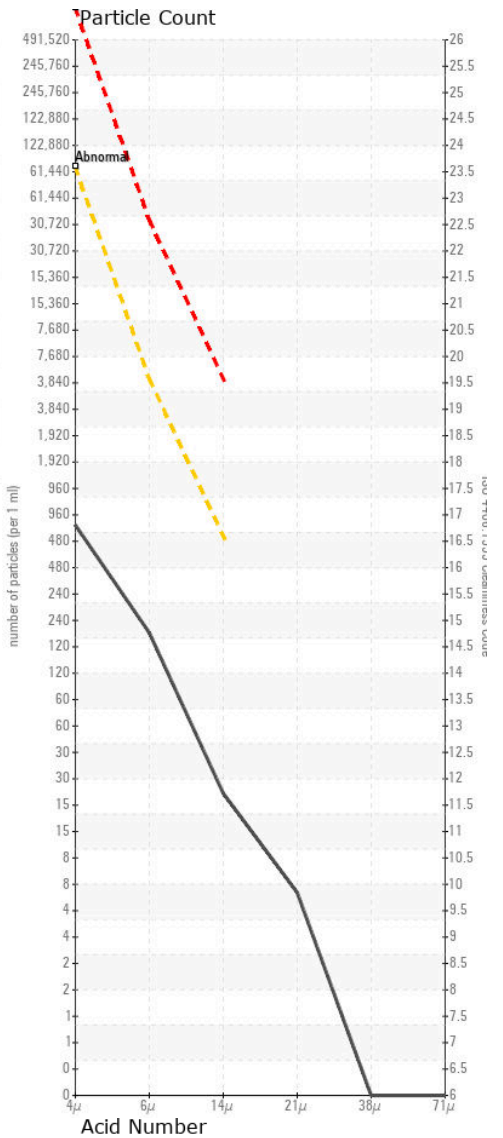
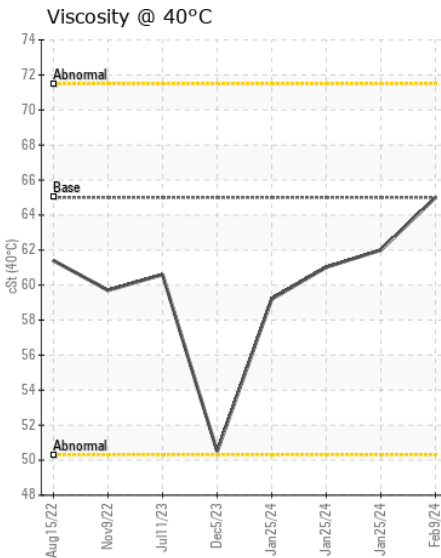
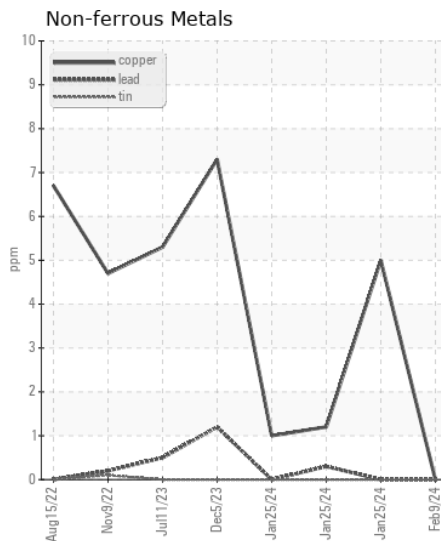
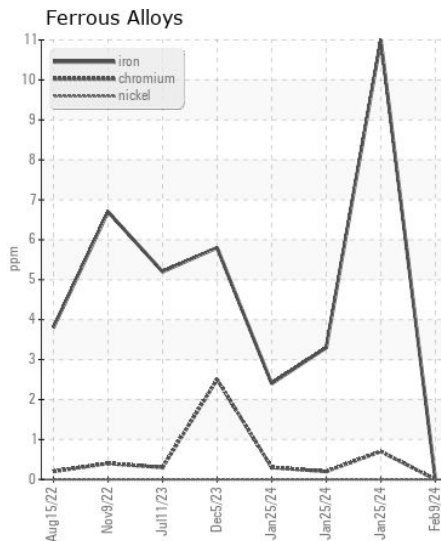
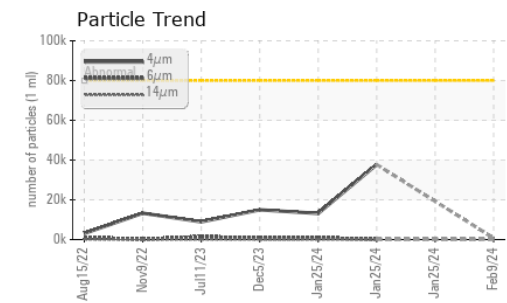
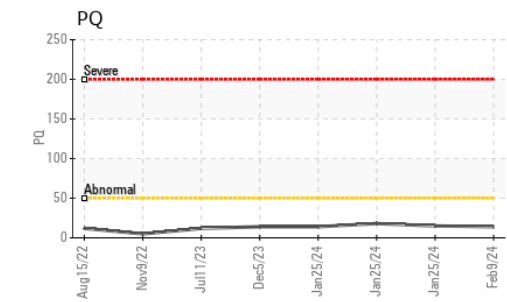
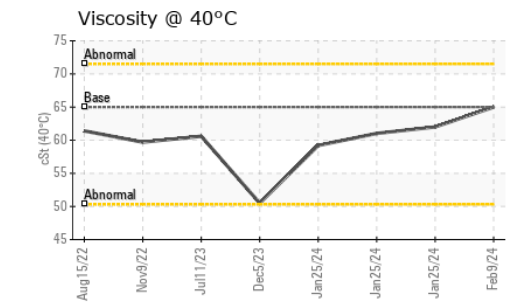
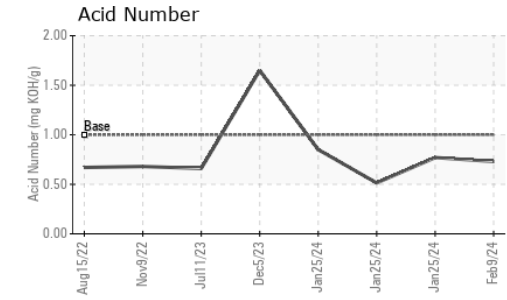
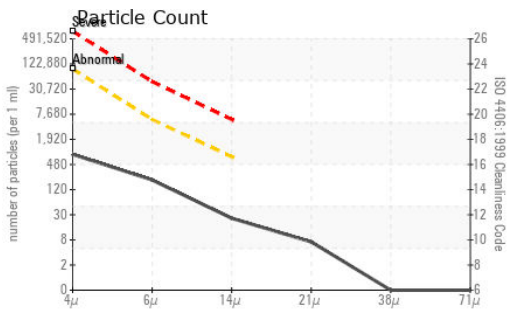
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>0</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	3
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>737</b>	13158	37733
Particles >6µm		ASTM D7647	>5000	<b>180</b>	853	156
Particles >14µm		ASTM D7647	>640	<b>22</b>	50	12
Particles >21µm		ASTM D7647	>160	<b>6</b>	9	6
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	2
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>17/15/12</b>	21/17/13	22/14/11
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	>0.075	<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	>21	<b>0</b>	0	1
Boron	ppm	ASTM D5185m		<b>0</b>	<1	7
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	3	6
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>2</b>	13	26
Calcium	ppm	ASTM D5185m	87	<b>100</b>	119	138
Phosphorus	ppm	ASTM D5185m	727	<b>661</b>	677	675
Zinc	ppm	ASTM D5185m	900	<b>838</b>	844	873
Sulfur	ppm	ASTM D5185m	1500	<b>1552</b>	1751	1652
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.73</b>	0.77	0.514
Visc @ 40°C	cSt	ASTM D445	65	<b>65.0</b>	62.0	61.02



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203459 **Received** : 13 Feb 2024  
**Lab Number** : 06087183 **Tested** : 14 Feb 2024  
**Unique Number** : 10874628 **Diagnosed** : 14 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)