



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



Machine Id  
**2023**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HYDRAU (120 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0195537</b>	JR0184584	JR0169989
Sample Date		Client Info		<b>16 Feb 2024</b>	08 Nov 2023	21 Aug 2023
Machine Age	hrs	Client Info		<b>3509</b>	3022	2472
Oil Age	hrs	Client Info		<b>500</b>	3000	0
Filter Age	hrs	Client Info		<b>500</b>	3000	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>16</b>	7	13
Iron	ppm	ASTM D5185m	>71	<b>4</b>	2	2
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>11	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>13	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>21	<b>2</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

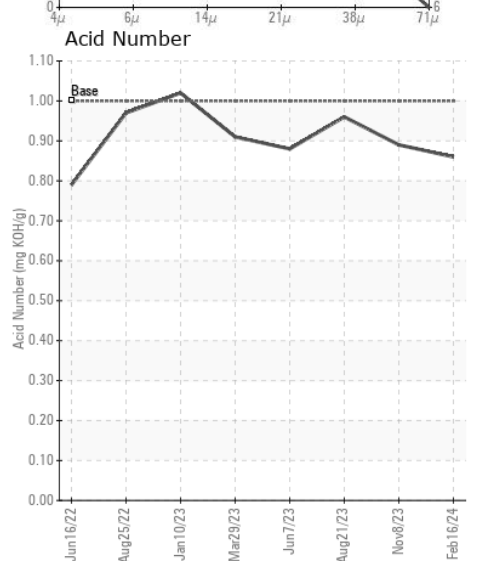
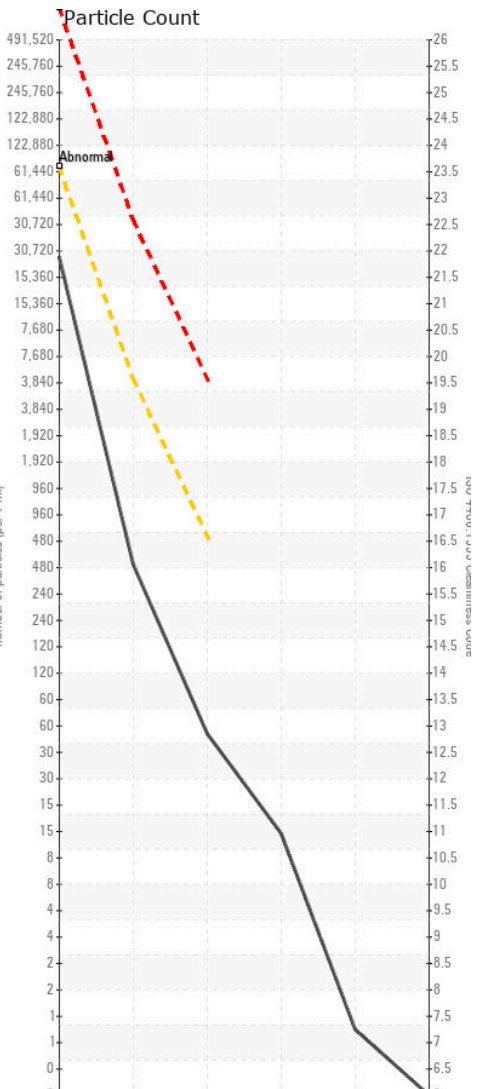
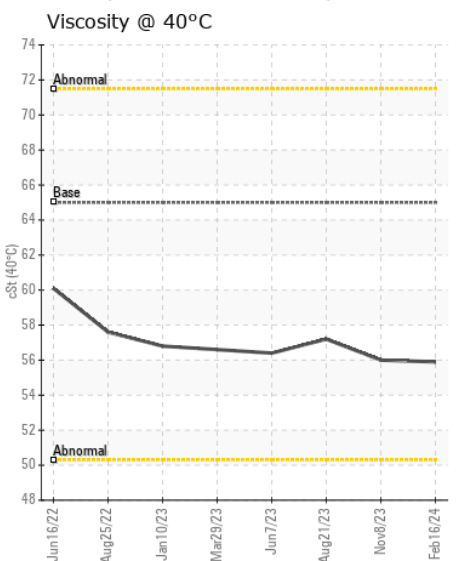
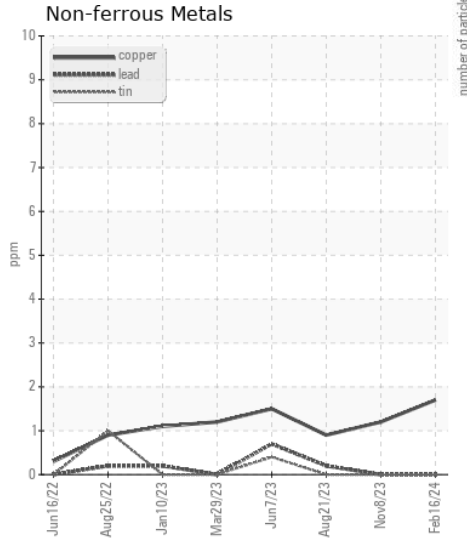
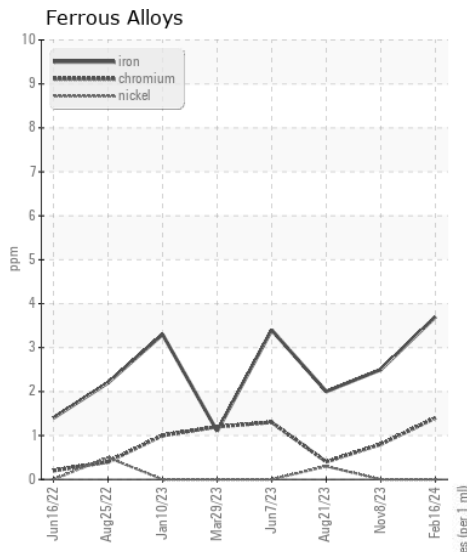
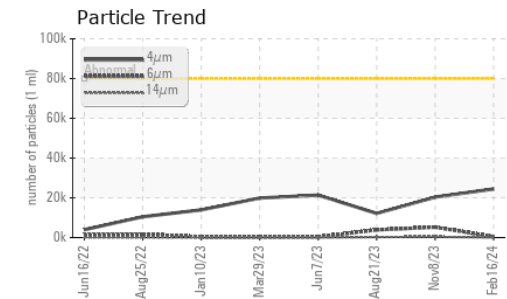
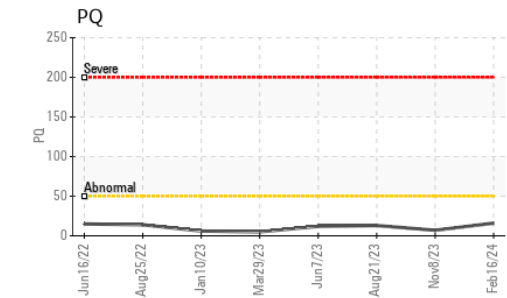
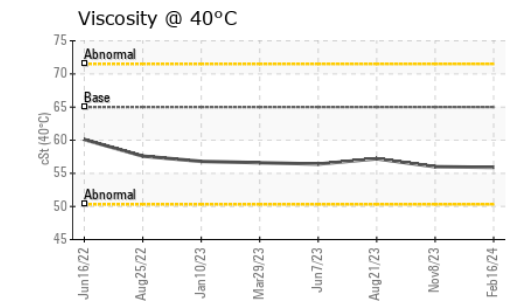
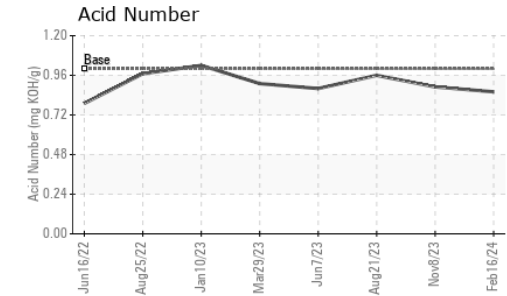
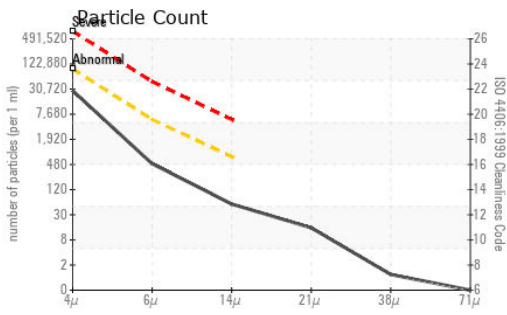
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	<b>6</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	6
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>24475</b>	20355	12155
Particles >6µm		ASTM D7647	>5000	<b>439</b>	▲ 5245	3886
Particles >14µm		ASTM D7647	>640	<b>48</b>	344	249
Particles >21µm		ASTM D7647	>160	<b>13</b>	65	45
Particles >38µm		ASTM D7647	>40	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	<b>22/16/13</b>	▲ 22/20/16	21/19/15
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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>2</b>	2	0
Boron	ppm	ASTM D5185m		<b>3</b>	2	<1
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
Molybdenum	ppm	ASTM D5185m		<b>1</b>	2	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>9</b>	0	8
Calcium	ppm	ASTM D5185m	87	<b>748</b>	783	799
Phosphorus	ppm	ASTM D5185m	727	<b>697</b>	707	673
Zinc	ppm	ASTM D5185m	900	<b>926</b>	1017	989
Sulfur	ppm	ASTM D5185m	1500	<b>1990</b>	2054	2306
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.86</b>	0.89	0.96
Visc @ 40°C	cSt	ASTM D445	65	<b>55.9</b>	56.0	57.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0195537 **Received** : 22 Feb 2024  
**Lab Number** : 06097613 **Tested** : 23 Feb 2024  
**Unique Number** : 10890466 **Diagnosed** : 23 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**PATRIOT DEVELOPMENT CORP**  
 22721 LADBROOK DRIVE STE 120  
 STERLING, VA  
 US 20166  
 Contact: ROBERT MOSS  
 robert.moss@patriotdev.net

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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F: