



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

Area  
**[05W44993]**  
 Machine Id  
**JOHN DEERE 000748**  
 Component  
**Hydraulic System**  
 Fluid  
**JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (55 GAL)**

### 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		<b>JR0203128</b>	JR0192432	JR0183932
Sample Date		Client Info		<b>23 Feb 2024</b>	17 Nov 2023	28 Aug 2023
Machine Age	hrs	Client Info		<b>1490</b>	967	468
Oil Age	hrs	Client Info		<b>1490</b>	967	0
Filter Age	hrs	Client Info		<b>523</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<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	>10	<b>0</b>	0	3
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>4</b>	4	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
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

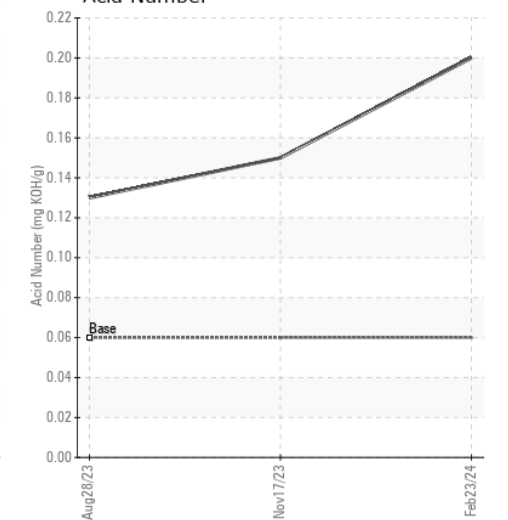
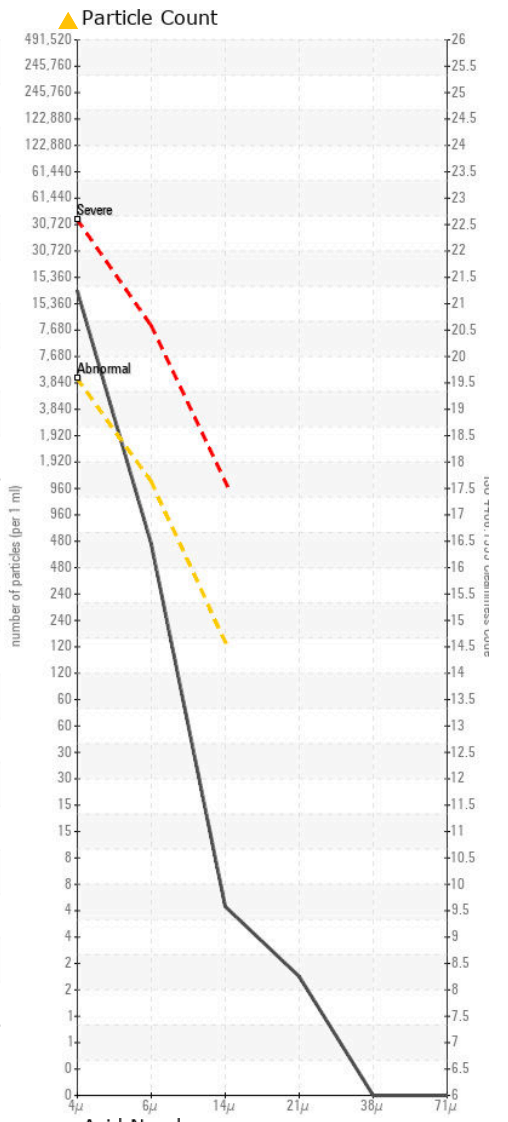
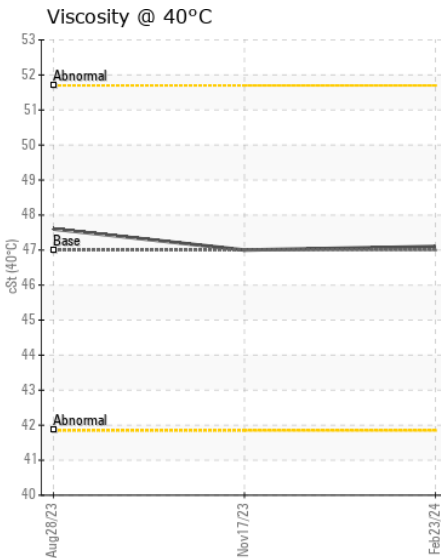
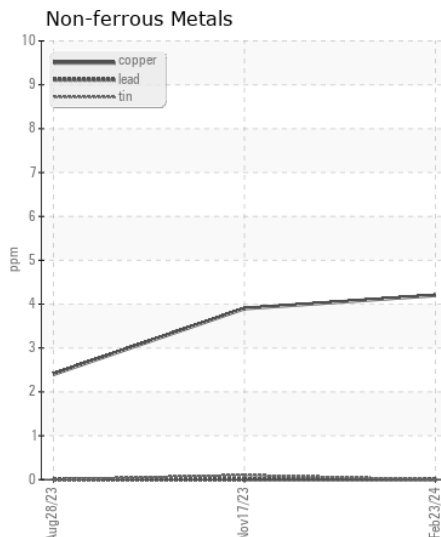
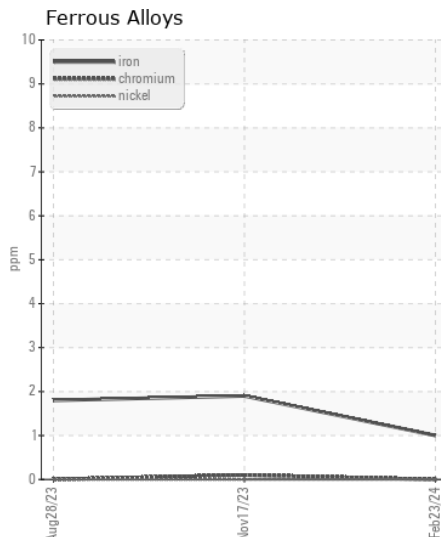
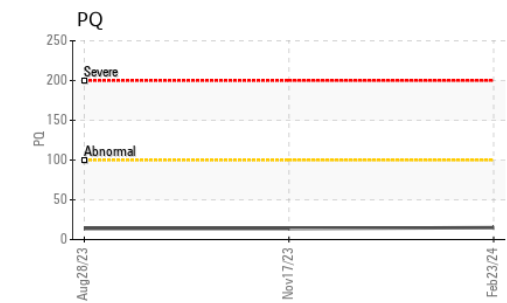
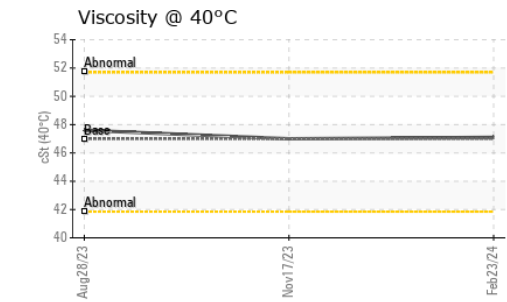
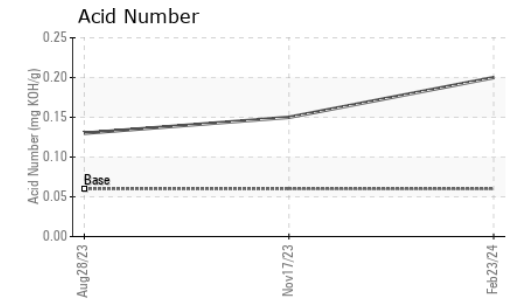
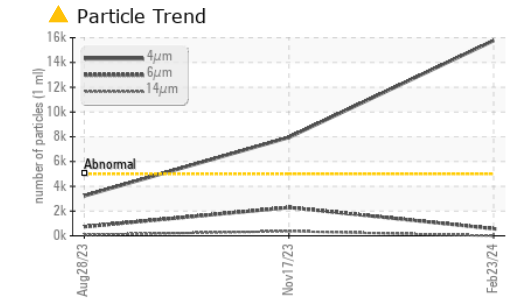
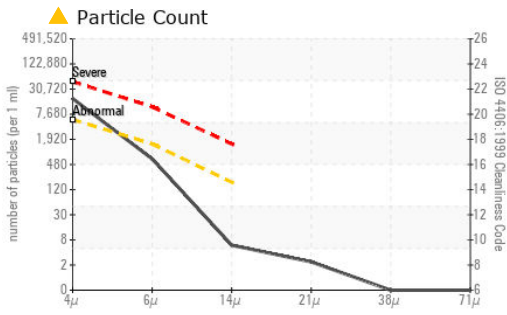
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 15769</b>	▲ 7952	3227
Particles >6µm		ASTM D7647	>1300	<b>575</b>	▲ 2294	735
Particles >14µm		ASTM D7647	>160	<b>5</b>	▲ 370	81
Particles >21µm		ASTM D7647	>40	<b>2</b>	▲ 94	25
Particles >38µm		ASTM D7647	>10	<b>0</b>	2	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/16/10</b>	▲ 20/18/16	19/17/14
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>2</b>	<1	<1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	2
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>20</b>	29	<1
Phosphorus	ppm	ASTM D5185m		<b>497</b>	522	570
Zinc	ppm	ASTM D5185m		<b>26</b>	44	17
Sulfur	ppm	ASTM D5185m		<b>110</b>	79	182
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.20</b>	0.15	0.13
Visc @ 40°C	cSt	ASTM D445	47	<b>47.1</b>	47.0	47.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203128 **Received** : 26 Feb 2024  
**Lab Number** : 06100062 **Tested** : 27 Feb 2024  
**Unique Number** : 10898292 **Diagnosed** : 27 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**B & S SITE DEVELOPMENT**  
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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)