



# OIL ANALYSIS REPORT

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

Area  
**[G14050]**  
 Machine Id  
**JOHN DEERE 340488**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0006221</b>	---	---
Sample Date		Client Info		<b>09 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>5490</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Chngd</b>	---	---
Filter Changed		Client Info		<b>Not Chngd</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>13</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

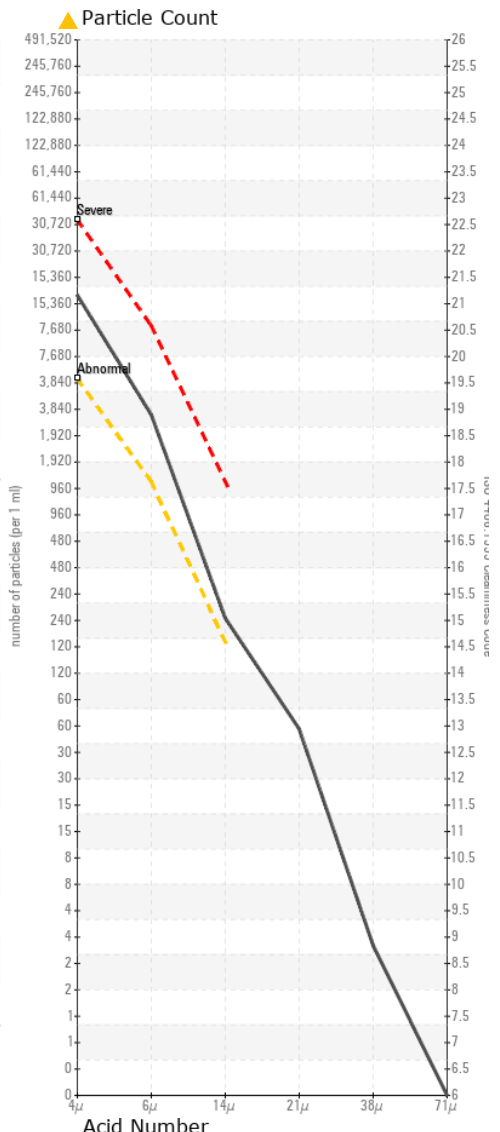
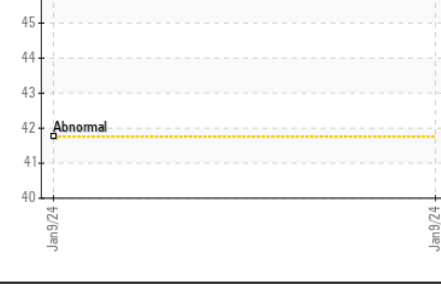
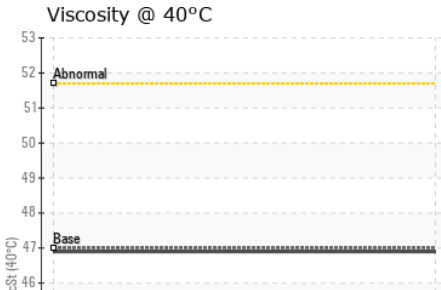
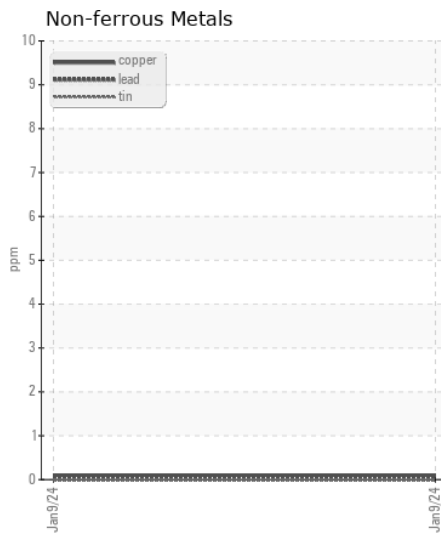
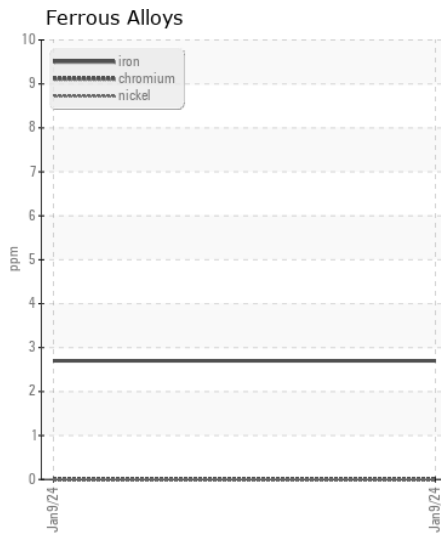
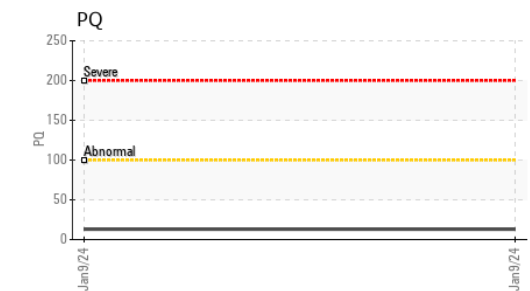
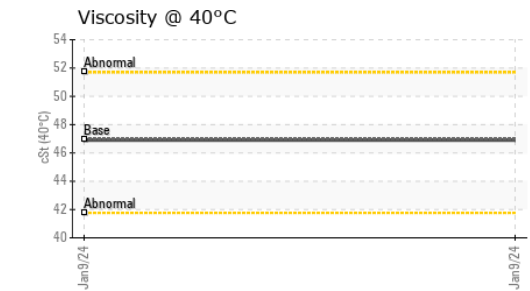
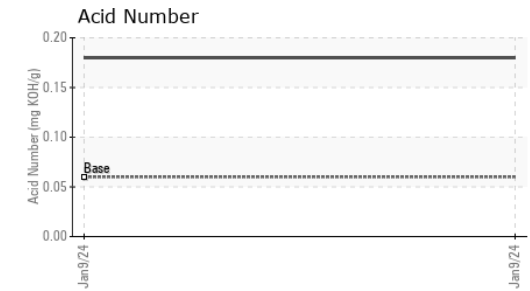
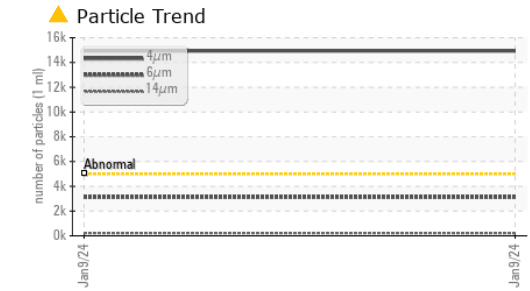
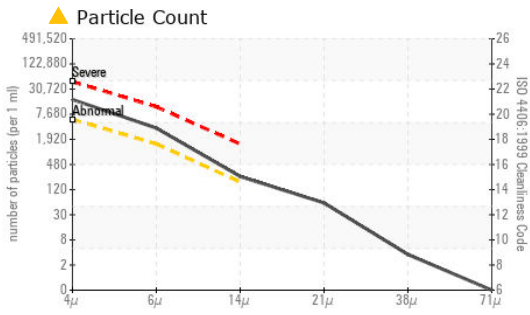
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 14930</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 3123</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 218</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 51</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>3</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/19/15</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

## 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>&lt;1</b>	---	---
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	---	---
Calcium	ppm	ASTM D5185m		<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m	827	<b>532</b>	---	---
Zinc	ppm	ASTM D5185m	0	<b>8</b>	---	---
Sulfur	ppm	ASTM D5185m	13	<b>23</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.18</b>	---	---
Visc @ 40°C	cSt	ASTM D445	47	<b>46.9</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0006221 **Received** : 16 Jan 2024  
**Lab Number** : 06060936 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832318 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PQ )

**WARRIOR TRACTOR AND EQUIPMENT - GRAYSVILLE**  
 4308 WATER TRAIL  
 GRAYSVILLE, AL  
 US 35073  
 Contact: BEN BYRKET  
 bbyrket@warriortractor.com  
 T: (205)675-9045  
 F:

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)