



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

Area  
**[16W15552]**  
 Machine Id  
**HITACHI ZX210LC-6 1FFDC571PNF341046**  
 Component  
**Pump Drive**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: 16W15552 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0196453</b>	JR0185316	JR0161133
Sample Date		Client Info		<b>09 Feb 2024</b>	03 Oct 2023	19 Apr 2023
Machine Age	hrs	Client Info		<b>2000</b>	1488	1032
Oil Age	hrs	Client Info		<b>968</b>	456	1032
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>13</b>	16	12
Iron	ppm	ASTM D5185m	>500	<b>55</b>	47	46
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	1	1
Lead	ppm	ASTM D5185m		<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

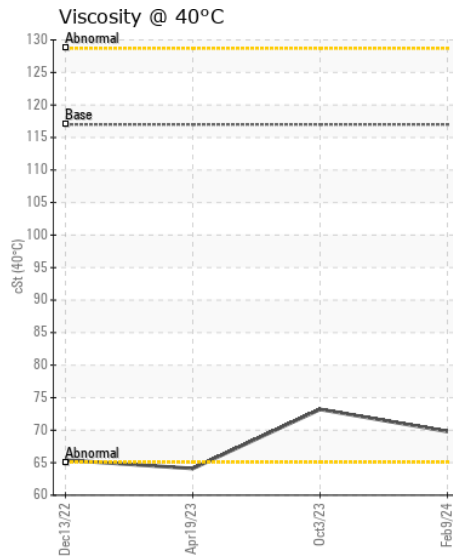
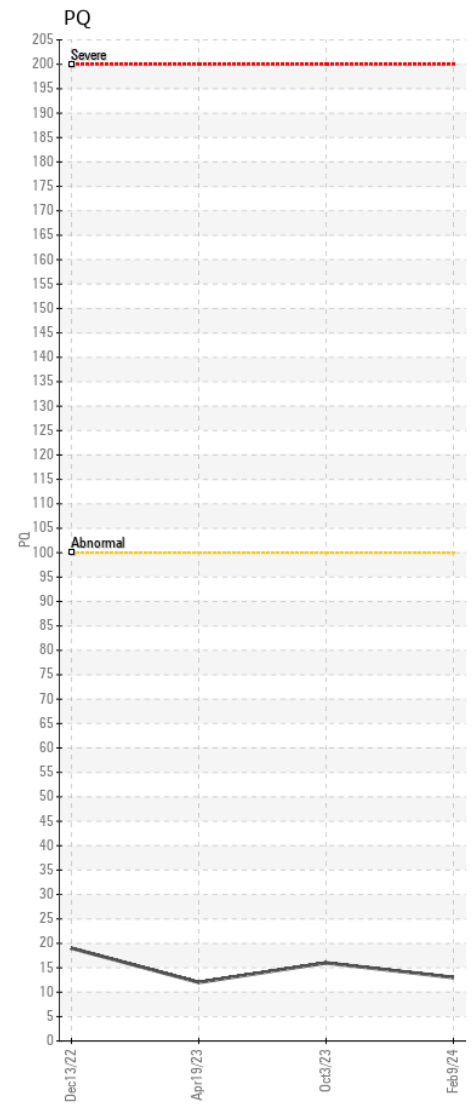
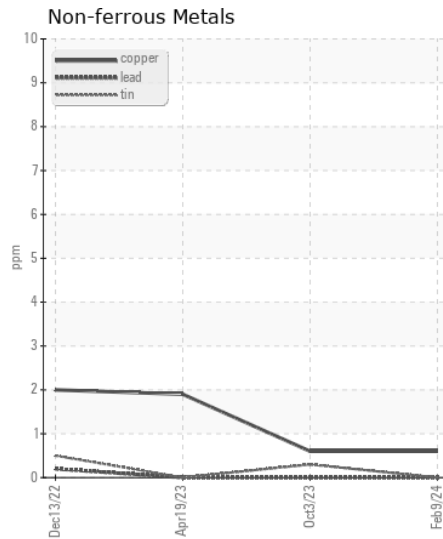
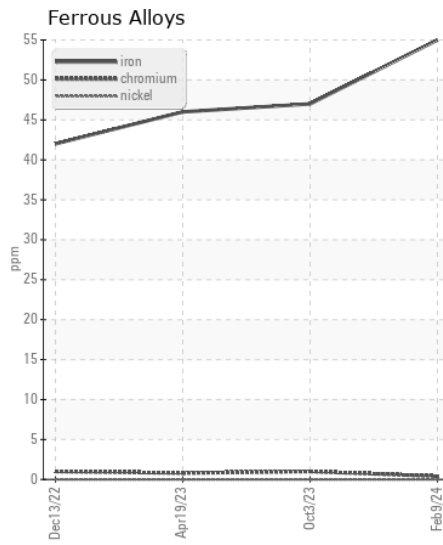
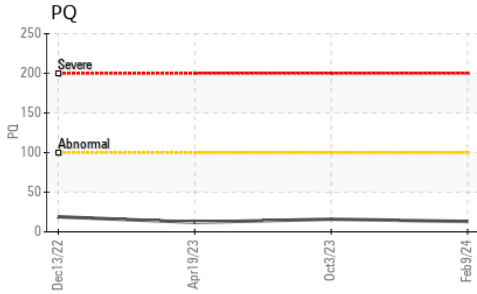
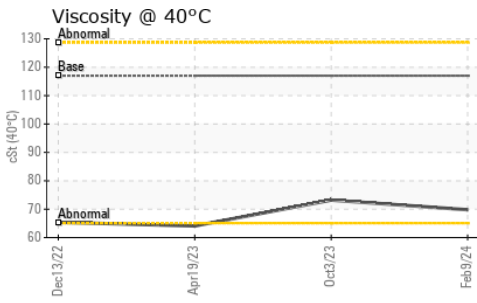
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>11</b>	10	11
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	<1	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
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	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	4
Boron	ppm	ASTM D5185m		<b>343</b>	354	63
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>279</b>	250	101
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	3
Magnesium	ppm	ASTM D5185m		<b>797</b>	800	19
Calcium	ppm	ASTM D5185m		<b>1539</b>	1606	3907
Phosphorus	ppm	ASTM D5185m		<b>908</b>	939	1103
Zinc	ppm	ASTM D5185m		<b>1100</b>	1074	1248
Sulfur	ppm	ASTM D5185m		<b>3822</b>	3607	9283
Visc @ 40°C	cSt	ASTM D445	117	<b>69.8</b>	73.2	64.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0196453 **Received** : 13 Feb 2024  
**Lab Number** : 06087626 **Tested** : 14 Feb 2024  
**Unique Number** : 10875071 **Diagnosed** : 14 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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