



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



Machine Id  
**JOHN DEERE 644 P 1DW644PACMLZ10775**

Component  
**Hydraulic System**

Fluid  
**JOHN DEERE HYDRAU (--- 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>JR0201000</b>	JR0154702	---
Sample Date		Client Info		<b>18 Jan 2024</b>	03 Feb 2023	---
Machine Age	hrs	Client Info		<b>1528</b>	1009	---
Oil Age	hrs	Client Info		<b>1528</b>	1009	---
Filter Age	hrs	Client Info		<b>0</b>	1009	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Not Changd	---
Sample Status				<b>ABNORMAL</b>	ATTENTION	---

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>16</b>	12	---
Iron	ppm	ASTM D5185m	>20	<b>0</b>	3	---
Chromium	ppm	ASTM D5185m	>10	<b>4</b>	2	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

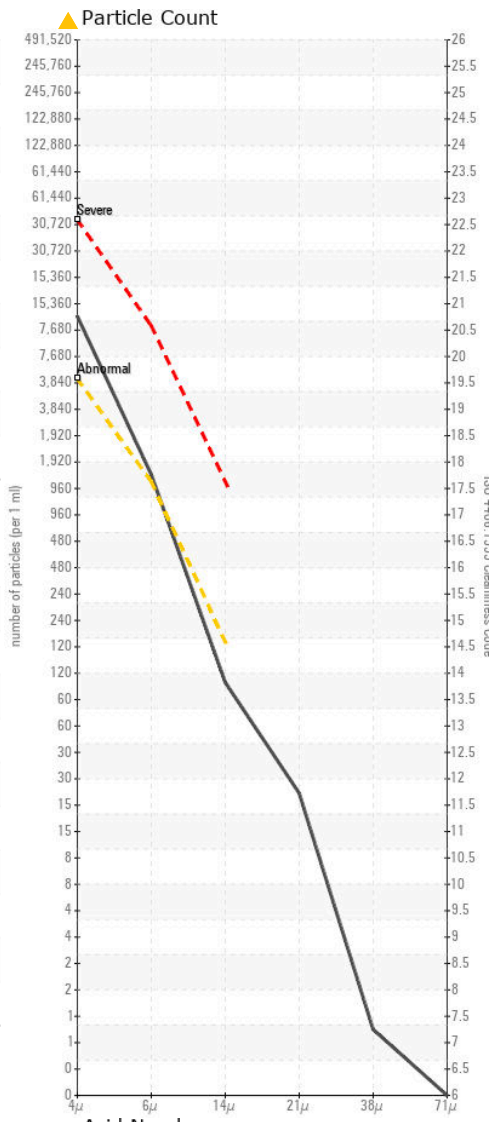
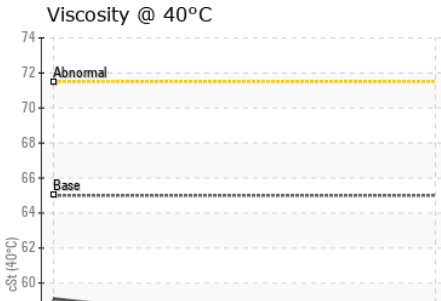
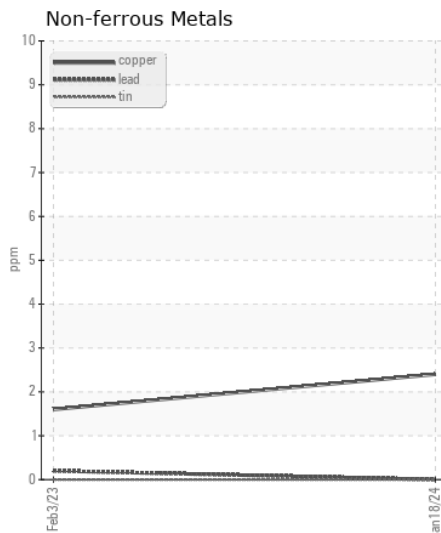
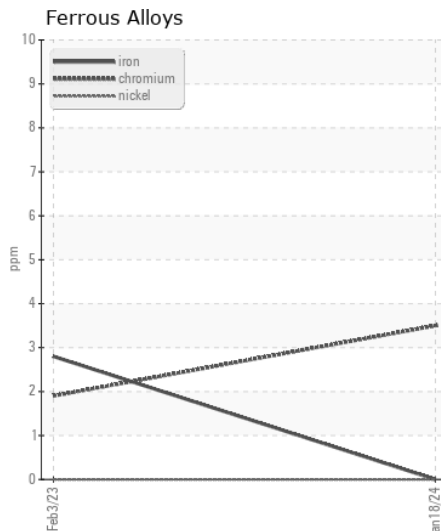
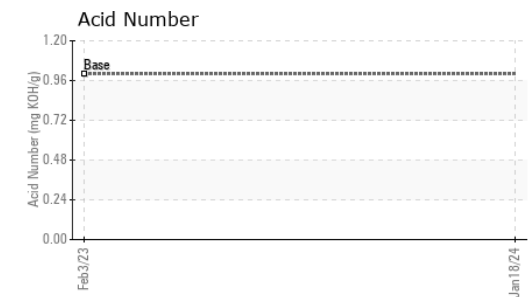
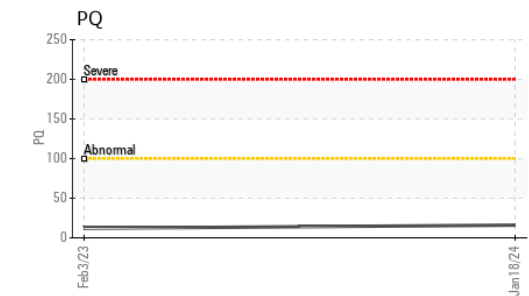
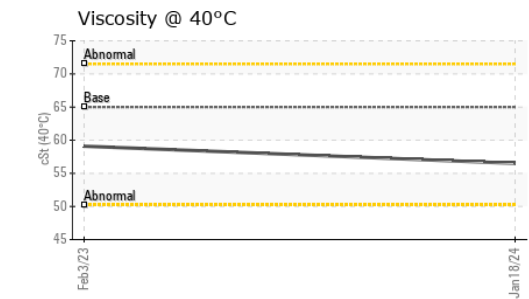
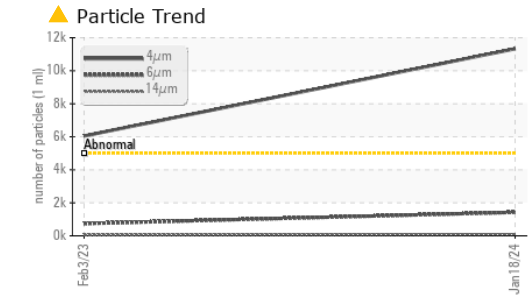
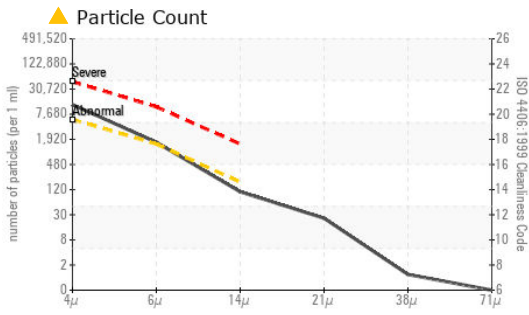
Insufficient sample was received to conduct all the routine laboratory tests. There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 11331</b>	▲ 6047	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 1425</b>	741	---
Particles >14µm		ASTM D7647	>160	<b>94</b>	47	---
Particles >21µm		ASTM D7647	>40	<b>22</b>	9	---
Particles >38µm		ASTM D7647	>10	<b>1</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/18/14</b>	▲ 20/17/13	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

### FLUID CONDITION

The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	2	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>1</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>15</b>	0	---
Calcium	ppm	ASTM D5185m	87	<b>101</b>	86	---
Phosphorus	ppm	ASTM D5185m	727	<b>575</b>	558	---
Zinc	ppm	ASTM D5185m	900	<b>752</b>	779	---
Sulfur	ppm	ASTM D5185m	1500	<b>1479</b>	1610	---
Visc @ 40°C	cSt	ASTM D445	65	<b>56.5</b>	59.1	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0201000 **Received** : 19 Jan 2024  
**Lab Number** : 06065519 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10836901 **Diagnostician** : Doug Bogart  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GARNER**  
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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)