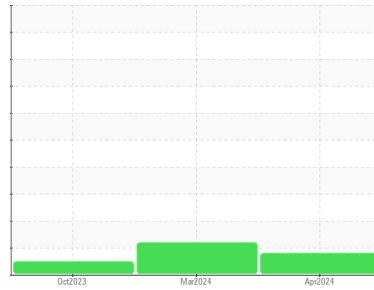


# OIL ANALYSIS REPORT



Machine Id  
**JOHN DEERE 644P 1DW644PAANLZ15485**  
 Component  
**Hydraulic System**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (27 GAL)**

### Sample Rating Trend



ISO



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0118285</b>	PCA0105140	PCA0096411
Sample Date	Client Info	<b>23 Apr 2024</b>	12 Mar 2024	04 Oct 2023
Machine Age	hrs	<b>4061</b>	3855	2000
Oil Age	hrs	<b>206</b>	3855	2000
Oil Changed	Client Info	<b>N/A</b>	Changed	Oil Added
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>4</b>	2	0
Chromium	ppm ASTM D5185m >10	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >10	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m	<b>1</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >10	<b>2</b>	0	0
Lead	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >75	<b>1</b>	1	<1
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 6	<b>107</b>	69	19
Barium	ppm ASTM D5185m 0	<b>1</b>	0	0
Molybdenum	ppm ASTM D5185m 0	<b>2</b>	<1	0
Manganese	ppm ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm ASTM D5185m 145	<b>23</b>	15	6
Calcium	ppm ASTM D5185m 3570	<b>2871</b>	2452	721
Phosphorus	ppm ASTM D5185m 1290	<b>1144</b>	897	734
Zinc	ppm ASTM D5185m 1640	<b>1269</b>	1124	978
Sulfur	ppm ASTM D5185m	<b>3224</b>	2907	1998

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>7</b>	6	3
Sodium	ppm ASTM D5185m	<b>0</b>	2	0
Potassium	ppm ASTM D5185m >20	<b>4</b>	0	5

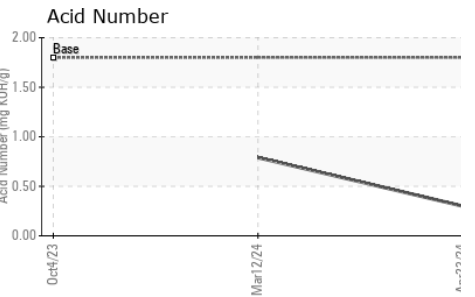
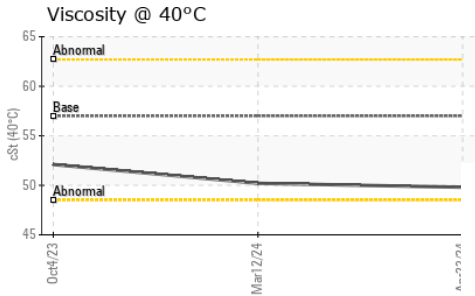
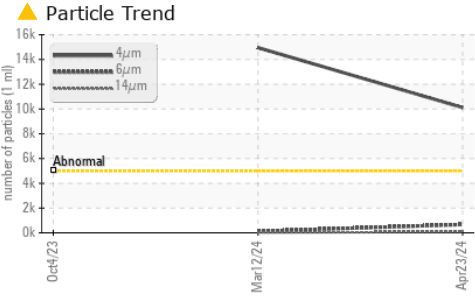
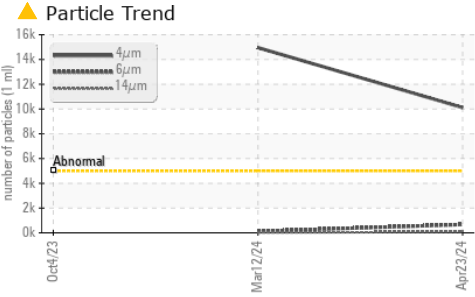
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 10114</b>	▲ 14957	---
Particles >6µm	ASTM D7647 >1300	<b>673</b>	120	---
Particles >14µm	ASTM D7647 >160	<b>73</b>	13	---
Particles >21µm	ASTM D7647 >40	<b>21</b>	5	---
Particles >38µm	ASTM D7647 >10	<b>1</b>	1	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	▲ 0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 21/17/13</b>	▲ 21/14/11	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.8	<b>0.30</b>	0.79	---

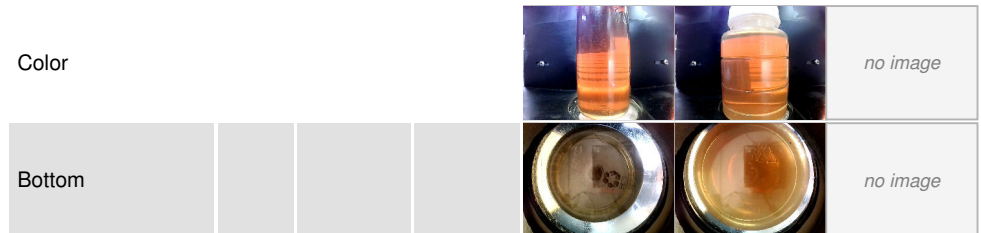
# OIL ANALYSIS REPORT



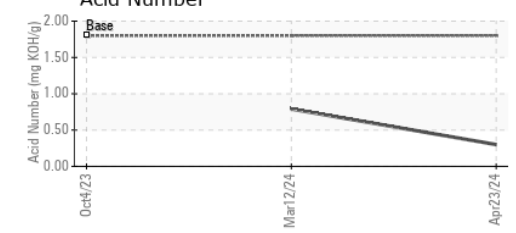
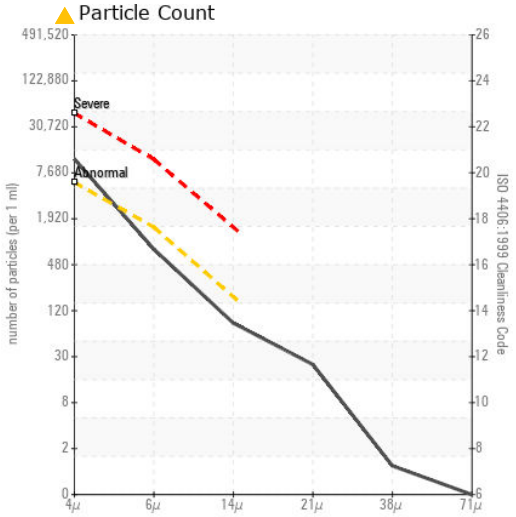
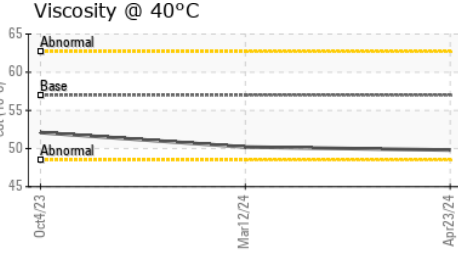
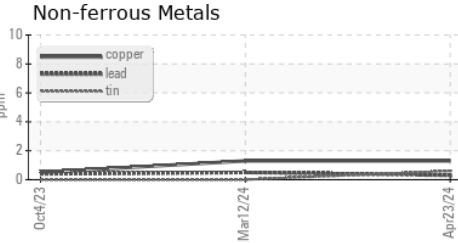
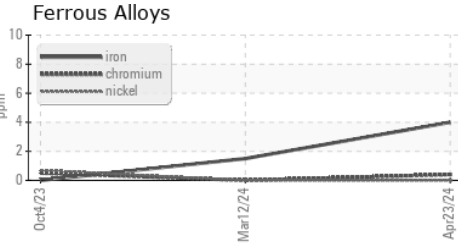
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	57.0	49.8	50.2	52.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0118285      **Received** : 13 May 2024  
**Lab Number** : 06177678      **Tested** : 14 May 2024  
**Unique Number** : 11023731      **Diagnosed** : 15 May 2024 - Don Baldrige  
**Test Package** : MOB 2

**CENTRAL VALLEY AG**  
 5707 LANGWORTH  
 OAKDALE, CA  
 US 95361  
 Contact: LAB TECH  
 m-labtech@outlook.com

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)