



# OIL ANALYSIS REPORT

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

Machine Id  
**JLG TH-07**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE (40 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0049414</b>	LEC0001170	LEC0010682
Sample Date		Client Info		<b>22 Apr 2024</b>	07 Jul 2021	02 Dec 2019
Machine Age	hrs	Client Info		<b>5109</b>	2793	1923
Oil Age	hrs	Client Info		<b>5109</b>	2793	1923
Filter Age	hrs	Client Info		<b>500</b>	1000	1923
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>13</b>	25	16
Iron	ppm	ASTM D5185m	>20	<b>0</b>	▲ 25	3
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	▲ 6	<1
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	▲ 43	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

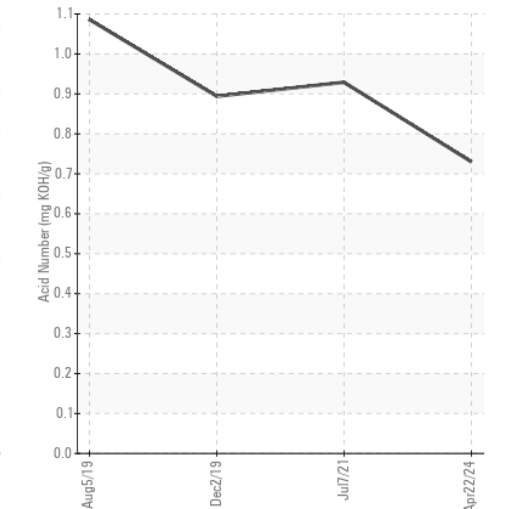
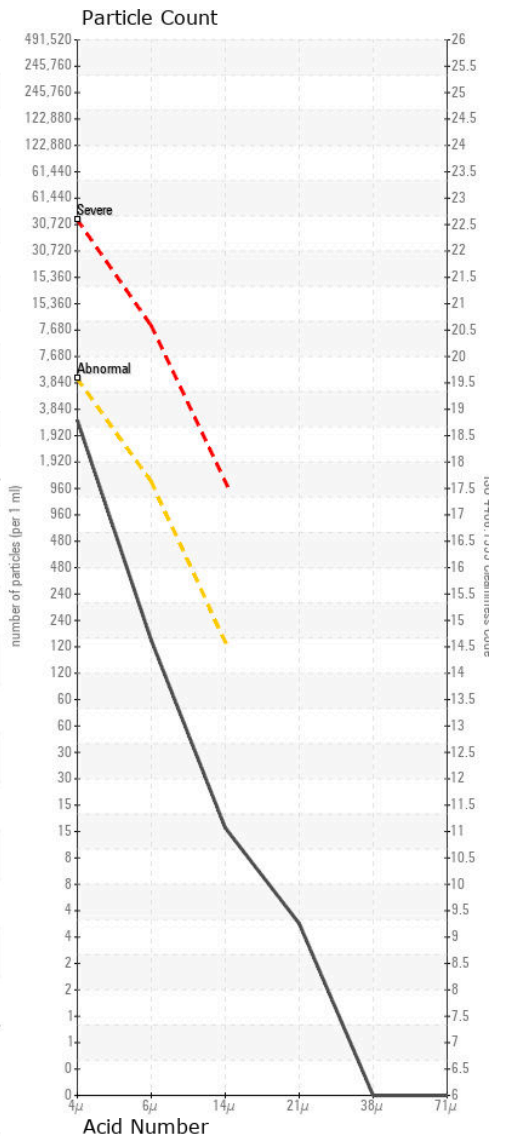
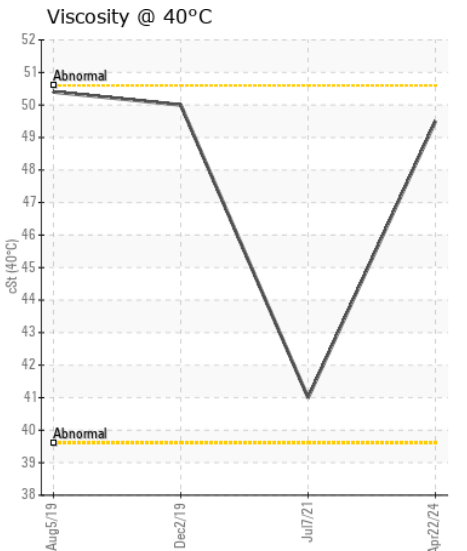
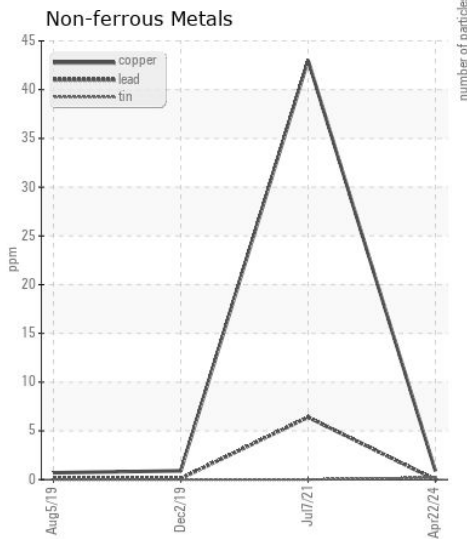
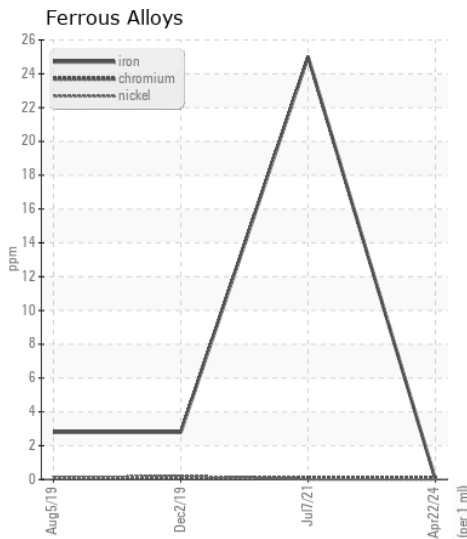
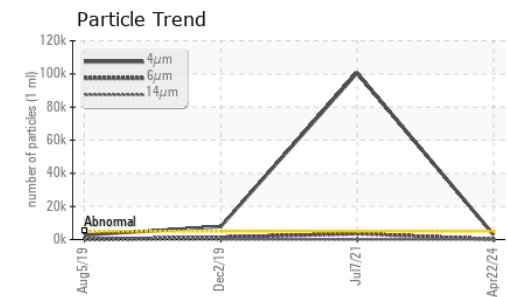
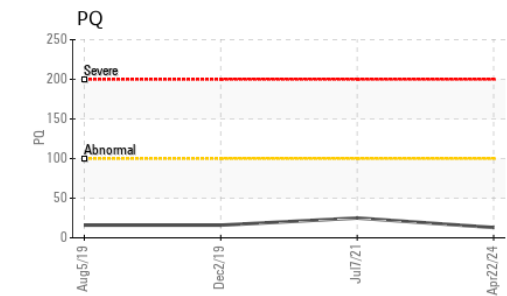
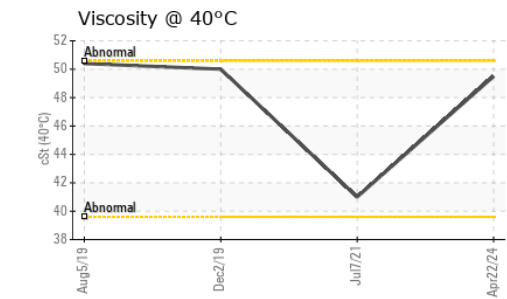
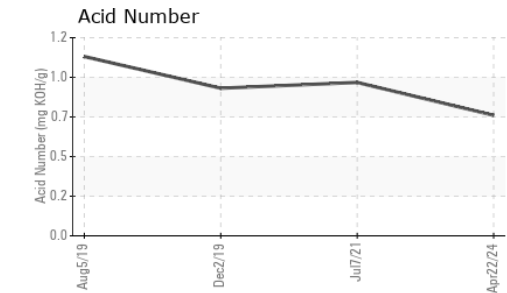
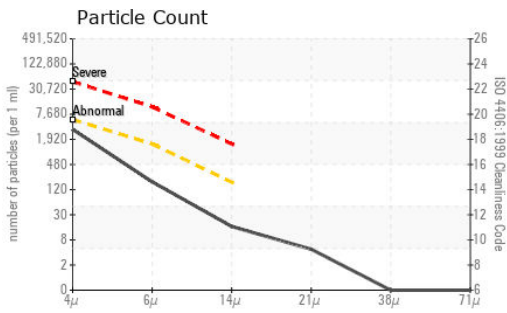
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>12</b>	8	13
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>2909</b>	▲ 100572	● 7841
Particles >6µm		ASTM D7647	>1300	<b>163</b>	▲ 3546	● 1335
Particles >14µm		ASTM D7647	>160	<b>14</b>	18	58
Particles >21µm		ASTM D7647	>40	<b>4</b>	4	24
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/11</b>	▲ 24/19/11	● 20/18/13
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>3</b>	2	1
Boron	ppm	ASTM D5185m		<b>83</b>	87	83
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>24</b>	44	21
Calcium	ppm	ASTM D5185m		<b>2689</b>	3552	2958
Phosphorus	ppm	ASTM D5185m		<b>983</b>	1061	1029
Zinc	ppm	ASTM D5185m		<b>1054</b>	1318	1150
Sulfur	ppm	ASTM D5185m		<b>6787</b>	5071	5345
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.73</b>	0.929	0.894
Visc @ 40°C	cSt	ASTM D445		<b>49.5</b>	41.0	50.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0049414 **Received** : 14 May 2024  
**Lab Number** : 06178591 **Tested** : 15 May 2024  
**Unique Number** : 11029917 **Diagnosed** : 15 May 2024 - Wes Davis  
**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)

**APEX PIPELINE**

P.O. BOX 580

NITRO, WV

US 25143

Contact: KELLY TUCKER

T: (304)204-0080

F: (304)204-0083