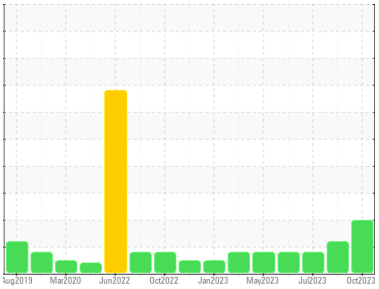
PROBLEM SUMMARY

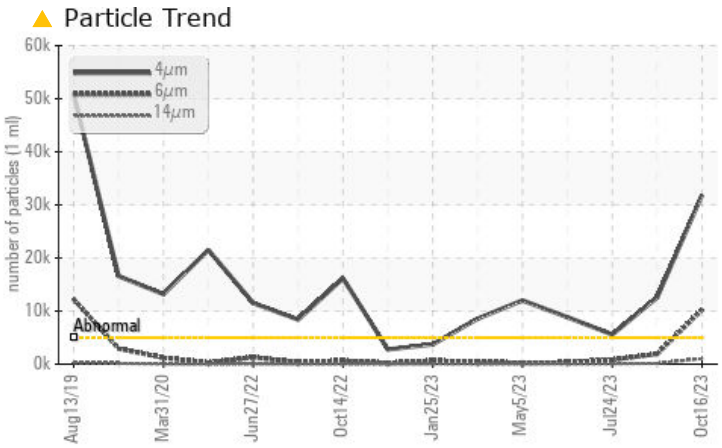
Sample Rating Trend



ISO

Area
[W47347]
Machine Id
JOHN DEERE 844K 1DW844KAEJF688182
Component
Hydraulic System
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Particles >4µm		ASTM D7647	>5000	▲ **31869**	▲ 12554	▲ 5586
Particles >6µm		ASTM D7647	>1300	▲ **10228**	▲ 1928	819
Particles >14µm		ASTM D7647	>160	▲ **1031**	142	76
Particles >21µm		ASTM D7647	>40	▲ **246**	22	20
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/21/17**	▲ 21/18/14	▲ 20/17/13

Customer Id: JAMASH
Sample No.: JR0179109
Lab Number: 05982320
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

01 Sep 2023 Diag: Don Baldridge

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

24 Jul 2023 Diag: Don Baldridge

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

view report

09 Jun 2023 Diag: Jonathan Hester

ISO

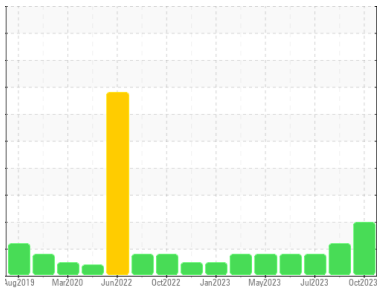
No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

view report

JAMES RIVER EQUIPMENT

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
[W47347]
Machine Id
JOHN DEERE 844K 1DW844KAEJF688182
Component
Hydraulic System
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0179109**	JR0180946	JR0165934
Sample Date		Client Info		**16 Oct 2023**	01 Sep 2023	24 Jul 2023
Machine Age	hrs	Client Info		**7945**	7475	6923
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**17**	16	16
Iron	ppm	ASTM D5185m	>20	**24**	23	22
Chromium	ppm	ASTM D5185m	>10	**9**	9	8
Nickel	ppm	ASTM D5185m	>10	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**2**	2	3
Lead	ppm	ASTM D5185m	>10	**0**	0	<1
Copper	ppm	ASTM D5185m	>75	**9**	9	9
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**137**	146	145
Barium	ppm	ASTM D5185m		**0**	7	2
Molybdenum	ppm	ASTM D5185m		**108**	110	113
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**345**	346	340
Calcium	ppm	ASTM D5185m		**1333**	1301	1371
Phosphorus	ppm	ASTM D5185m		**852**	795	849
Zinc	ppm	ASTM D5185m		**1042**	970	1018
Sulfur	ppm	ASTM D5185m		**2944**	3238	2911

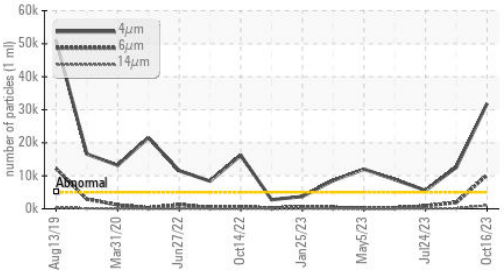
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**6**	6	6
Sodium	ppm	ASTM D5185m		**4**	4	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **31869**	▲ 12554	▲ 5586
Particles >6µm		ASTM D7647	>1300	▲ **10228**	▲ 1928	819
Particles >14µm		ASTM D7647	>160	▲ **1031**	142	76
Particles >21µm		ASTM D7647	>40	▲ **246**	22	20
Particles >38µm		ASTM D7647	>10	**7**	0	2
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **22/21/17**	▲ 21/18/14	▲ 20/17/13

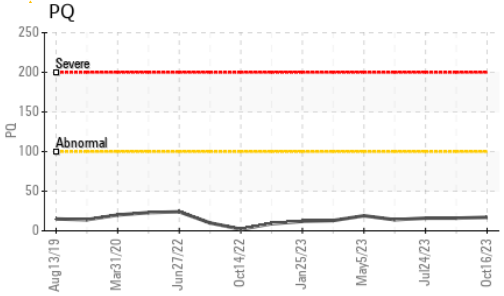
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.00**	1.01	1.08

OIL ANALYSIS REPORT

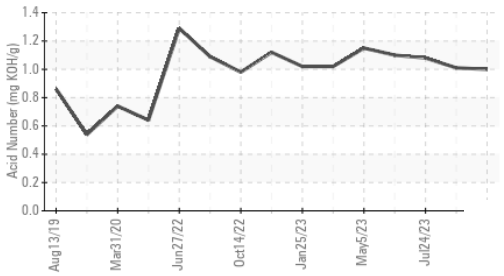
Particle Trend



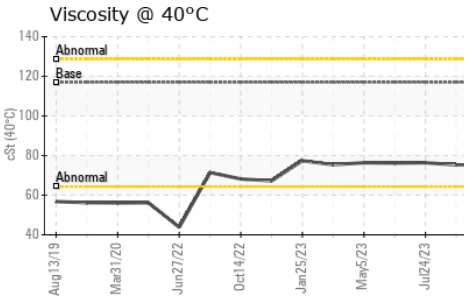
PQ



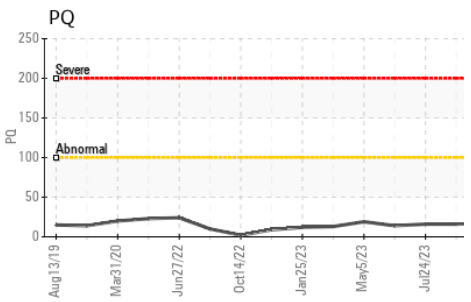
Acid Number



Viscosity @ 40°C



PQ



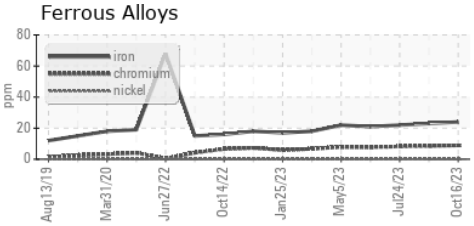
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	117	**75.2**	75.3	76.4

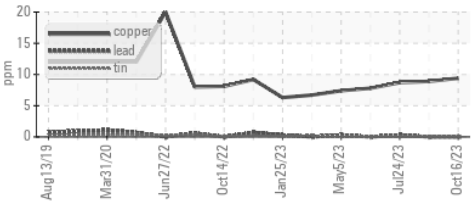
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

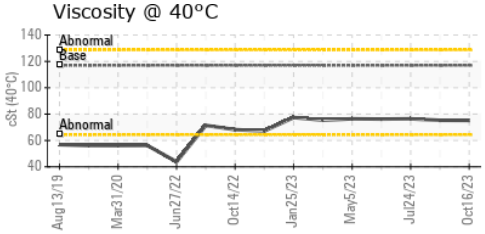
Ferrous Alloys



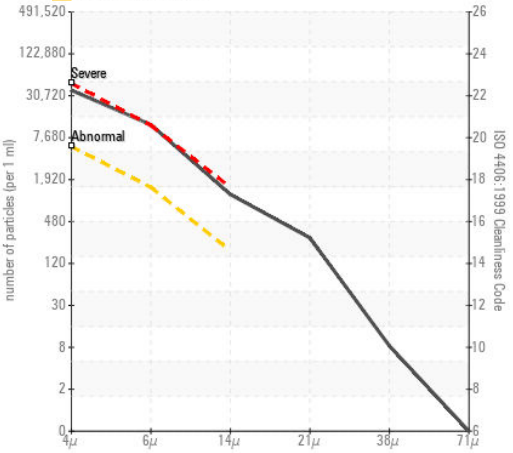
Non-ferrous Metals



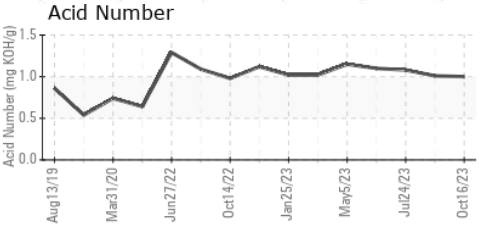
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0179109 **Received** : 18 Oct 2023
Lab Number : 05982320 **Diagnosed** : 20 Oct 2023
Unique Number : 10699615 **Diagnostician** : Jonathan Hester
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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