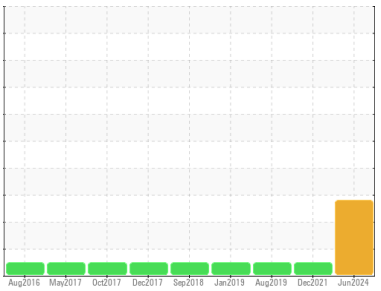
JAMES RIVER EQUIPMENT

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
JOHN DEERE 250D 1DW250DXKGE673411
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
An increase in the copper level is noted. All other 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		**JR0224975**	JR0106095	JRMC471506
Sample Date		Client Info		**24 Jun 2024**	06 Dec 2021	23 Aug 2019
Machine Age	hrs	Client Info		**4720**	4074	3521
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Changed	Not Changd
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.075	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**18**	16	16
Iron	ppm	ASTM D5185m	>23	**4**	20	14
Chromium	ppm	ASTM D5185m	>9	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>9	**1**	2	2
Lead	ppm	ASTM D5185m	>28	**0**	0	<1
Copper	ppm	ASTM D5185m	>51	**49**	11	8
Tin	ppm	ASTM D5185m	>5	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

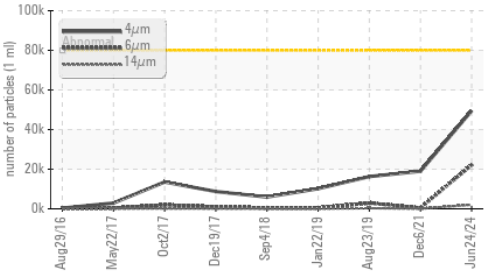
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**96**	102	102
Calcium	ppm	ASTM D5185m	87	**3504**	3588	3644
Phosphorus	ppm	ASTM D5185m	727	**1005**	1039	1060
Zinc	ppm	ASTM D5185m	900	**1206**	1253	1280
Sulfur	ppm	ASTM D5185m	1500	**3904**	3006	3157

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>31	**4**	4	3
Sodium	ppm	ASTM D5185m	>21	**4**	4	<1
Potassium	ppm	ASTM D5185m	>20	**3**	4	6

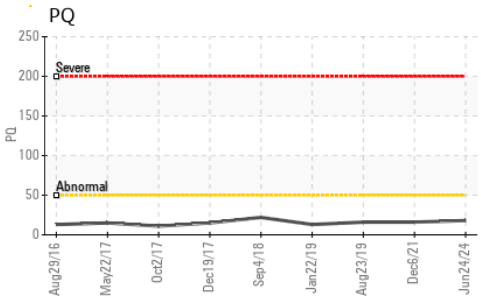
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**49478**	18993	16273
Particles >6µm		ASTM D7647	>20000	**22140**	471	2878
Particles >14µm		ASTM D7647	>640	**2065**	22	320
Particles >21µm		ASTM D7647	>160	**345**	6	99
Particles >38µm		ASTM D7647	>40	**7**	0	10
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	**23/22/18**	21/16/12	21/19/15

OIL ANALYSIS REPORT

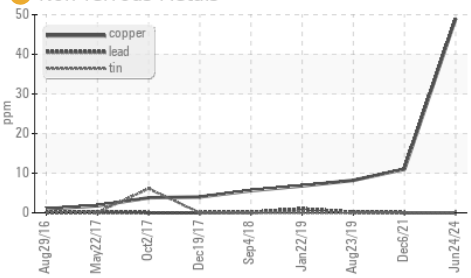
Particle Trend



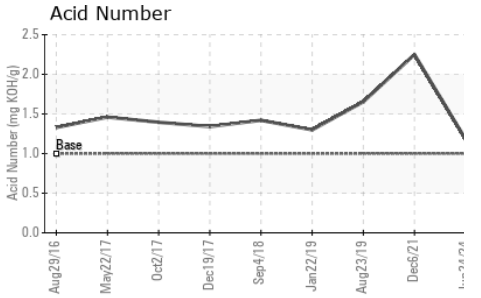
PQ



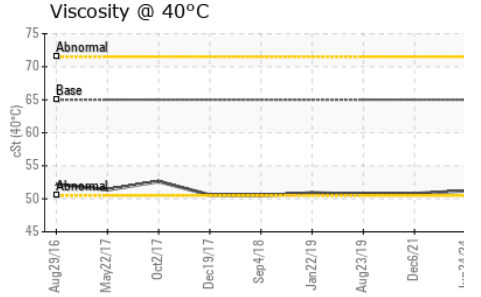
Non-ferrous Metals



Acid Number



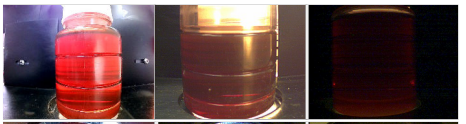
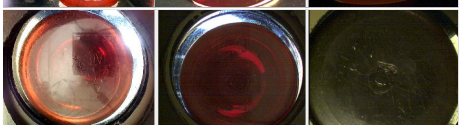
Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**1.18**	2.25	1.654

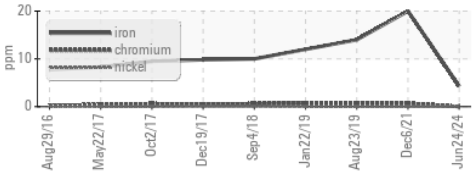
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	**51.2**	50.8	50.7

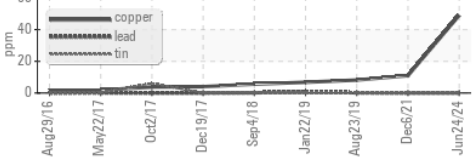
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

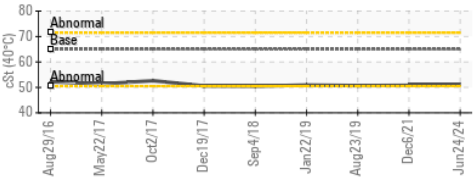
Ferrous Alloys



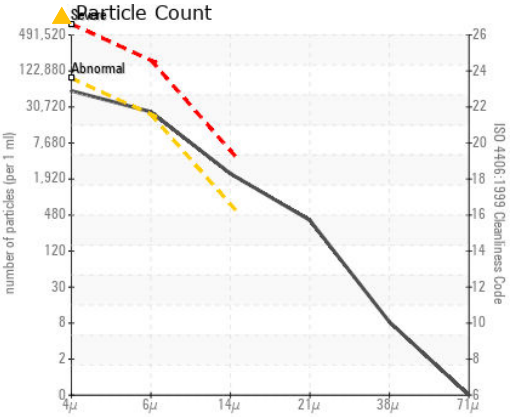
Non-ferrous Metals



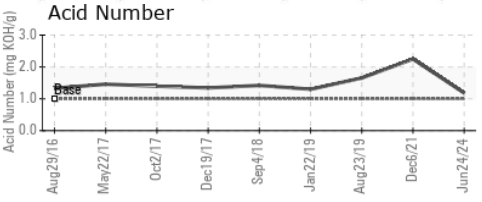
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224975
Lab Number : 06219597
Unique Number : 11097794
Test Package : CONST (Additional Tests: PQ)

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldridge

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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