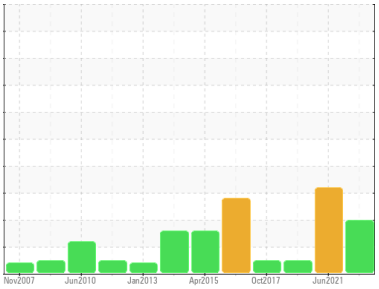
PROBLEM SUMMARY

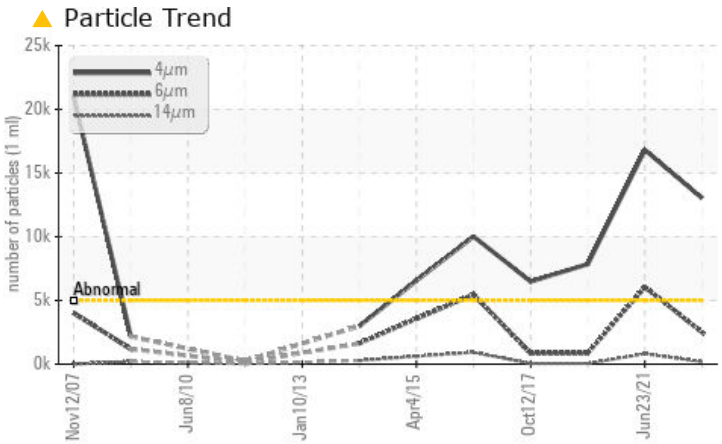
Sample Rating Trend



ISO

Machine Id
JOHN DEERE 000993
Component
Hydraulic System
Fluid
TDH FLUID SAE 75W80 (68 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Oil and 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	NORMAL
Particles >4µm		ASTM D7647	>5000	▲ **13032**	▲ 16819	7851
Particles >6µm		ASTM D7647	>1300	▲ **2505**	▲ 6050	863
Particles >14µm		ASTM D7647	>160	▲ **196**	▲ 816	55
Particles >21µm		ASTM D7647	>40	▲ **56**	▲ 307	15
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/15**	▲ 21/20/17	20/17/13

Customer Id: CJMHAM
Sample No.: WC0823936
Lab Number: 05997328
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

23 Jun 2021 Diag: Angela Borella

VISUAL METAL

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.Light concentration of visible metal present. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

12 Sep 2018 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

12 Oct 2017 Diag: Don Baldridge

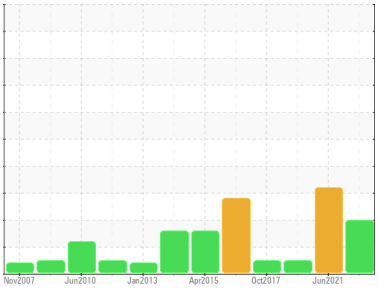
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
JOHN DEERE 000993
Component
Hydraulic System
Fluid
TDH FLUID SAE 75W80 (68 GAL)

DIAGNOSIS

▲ Recommendation
No corrective action is recommended at this time. Oil and 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0823936**	WC0583974	WCMC170781
Sample Date		Client Info		**20 Oct 2023**	23 Jun 2021	12 Sep 2018
Machine Age	hrs	Client Info		**7723**	7469	7024
Oil Age	hrs	Client Info		**1000**	500	0
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**10**	7	2
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>10	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**<1**	<1	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>10	**<1**	1	0
Copper	ppm	ASTM D5185m	>75	**5**	2	<1
Tin	ppm	ASTM D5185m	>10	**0**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	**6**	12	2
Barium	ppm	ASTM D5185m	10	**0**	0	0
Molybdenum	ppm	ASTM D5185m	10	**2**	2	<1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	100	**20**	16	<1
Calcium	ppm	ASTM D5185m	3500	**1780**	1883	134
Phosphorus	ppm	ASTM D5185m	1150	**720**	809	508
Zinc	ppm	ASTM D5185m	1150	**849**	842	226
Sulfur	ppm	ASTM D5185m	5000	**4930**	4380	695

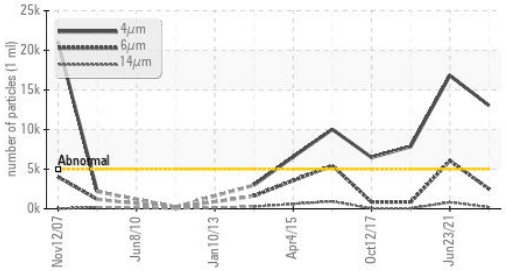
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**3**	3	<1
Sodium	ppm	ASTM D5185m		**0**	2	<1
Potassium	ppm	ASTM D5185m	>20	**2**	<1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **13032**	▲ 16819	7851
Particles >6µm		ASTM D7647	>1300	▲ **2505**	▲ 6050	863
Particles >14µm		ASTM D7647	>160	▲ **196**	▲ 816	55
Particles >21µm		ASTM D7647	>40	▲ **56**	▲ 307	15
Particles >38µm		ASTM D7647	>10	**2**	▲ 26	0
Particles >71µm		ASTM D7647	>3	**0**	2	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/15**	▲ 21/20/17	20/17/13

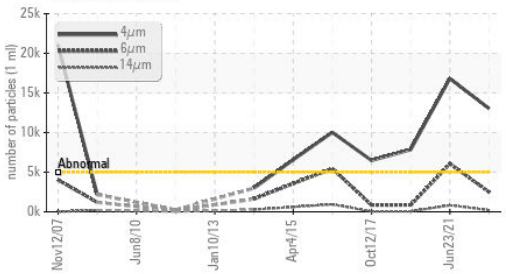
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	**0.98**	1.087	0.367

OIL ANALYSIS REPORT

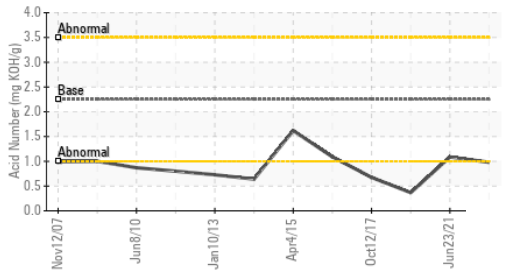
Particle Trend



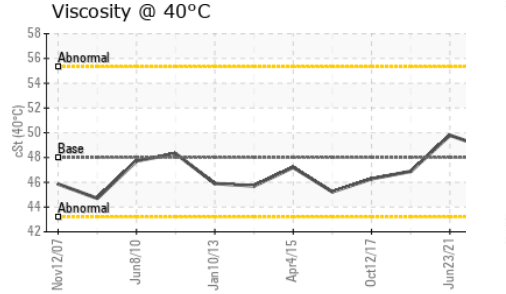
Particle Trend



Acid Number



Viscosity @ 40°C



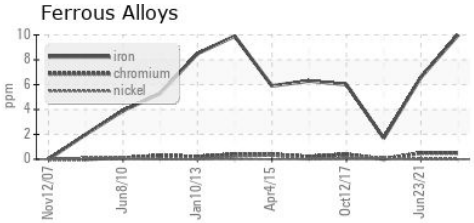
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	▲ LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	VLITE
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	48	**48.7**	49.8	46.88

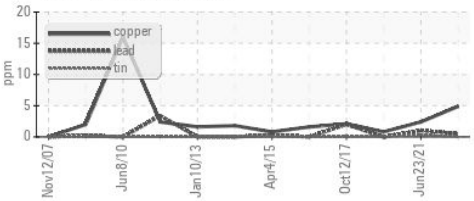
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

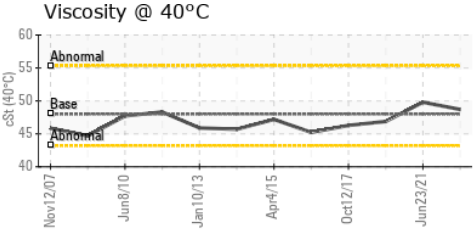
Ferrous Alloys



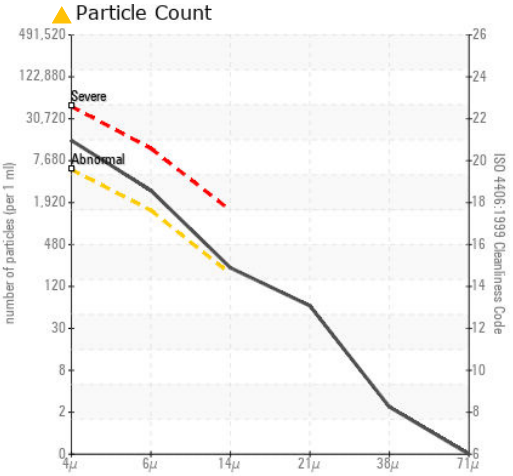
Non-ferrous Metals



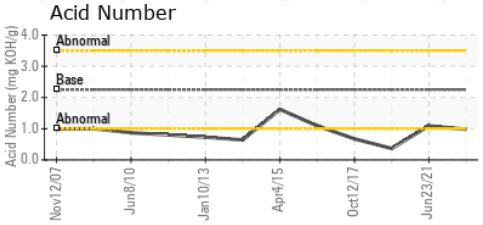
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0823936
Lab Number : 05997328
Unique Number : 10725688
Test Package : CONST

Received : 02 Nov 2023
Diagnosed : 05 Nov 2023
Diagnostician : 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)

CJ MILLER LLC
2903 DEDE RD
FINKSBURG, MD
US 21048
Contact: JOE ROSS
jross@cjmillerllc.com
T: (410)239-8006
F: (410)239-1051