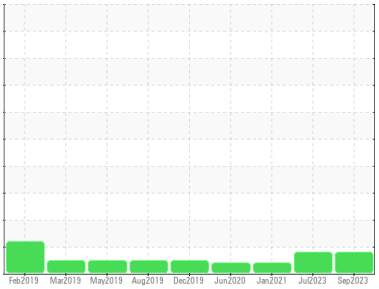
PROBLEM SUMMARY

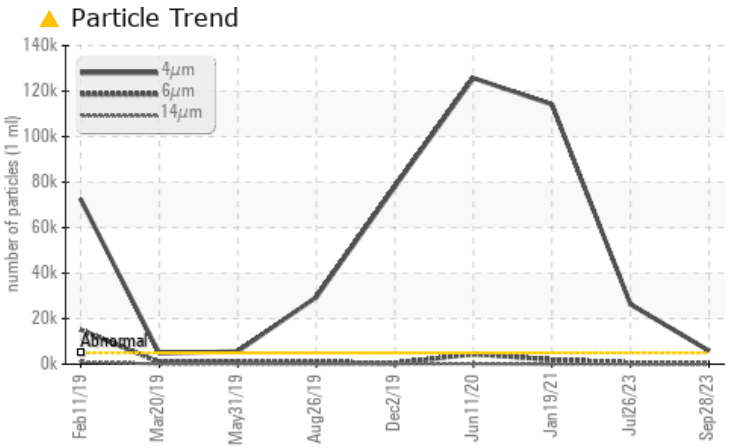
Sample Rating Trend



ISO

Area
POWHATAN
Machine Id
JOHN DEERE 944K M02-0898 - INVERTER 1DW944KXAJE688399
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	ATTENTION
Particles >4µm		ASTM D7647	>5000	▲ **5854**	▲ 26337	▲ 114151
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/16/12**	▲ 22/16/12	▲ 24/18/12

Customer Id: LUCMIL
Sample No.: JR0165533
Lab Number: 05968846
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

26 Jul 2023 Diag: Don Baldridge

ISO

Oil and filter change at the time of sampling has been noted. 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

19 Jan 2021 Diag: Don Baldridge

ISO

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate 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

11 Jun 2020 Diag: Don Baldridge

ISO

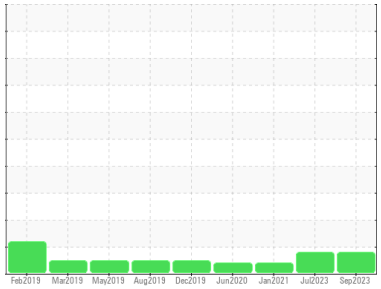
No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable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

view report

JAMES RIVER EQUIPMENT

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
POWHATAN
Machine Id
JOHN DEERE 944K M02-0898 - INVERTER 1DW944KXAJE688399
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

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 moderate 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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0165533**	JR0164244	JR0076176
Sample Date		Client Info		**28 Sep 2023**	26 Jul 2023	19 Jan 2021
Machine Age	hrs	Client Info		**8559**	8213	4029
Oil Age	hrs	Client Info		**346**	0	4029
Oil Changed		Client Info		**Not Changd**	Changed	Changed
Sample Status				**ATTENTION**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**19**	16	17
Iron	ppm	ASTM D5185m	>20	**15**	16	14
Chromium	ppm	ASTM D5185m	>10	**<1**	0	<1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**4**	2	2
Lead	ppm	ASTM D5185m	>10	**<1**	0	<1
Copper	ppm	ASTM D5185m	>75	**5**	6	8
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**51**	46	3
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**23**	22	1
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**361**	365	11
Calcium	ppm	ASTM D5185m	87	**511**	625	430
Phosphorus	ppm	ASTM D5185m	727	**788**	763	659
Zinc	ppm	ASTM D5185m	900	**1006**	984	848
Sulfur	ppm	ASTM D5185m	1500	**2709**	2751	1723

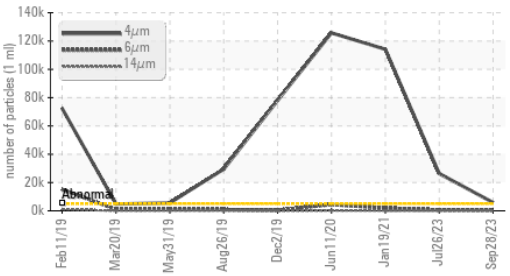
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**4**	4	3
Sodium	ppm	ASTM D5185m		**2**	4	7
Potassium	ppm	ASTM D5185m	>20	**1**	2	4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5854**	▲ 26337	▲ 114151
Particles >6µm		ASTM D7647	>1300	**456**	588	1989
Particles >14µm		ASTM D7647	>160	**23**	31	22
Particles >21µm		ASTM D7647	>40	**4**	7	6
Particles >38µm		ASTM D7647	>10	**0**	1	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/16/12**	▲ 22/16/12	▲ 24/18/12

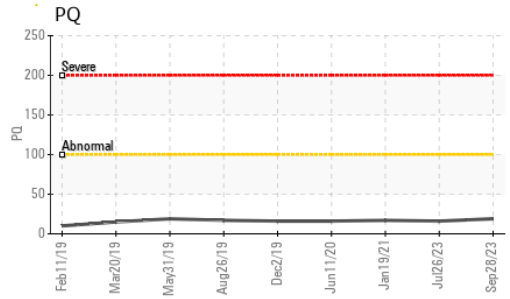
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.93**	0.80	0.636

OIL ANALYSIS REPORT

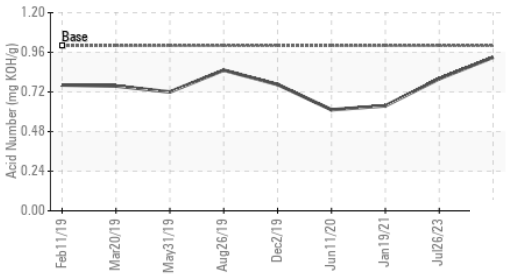
Particle Trend



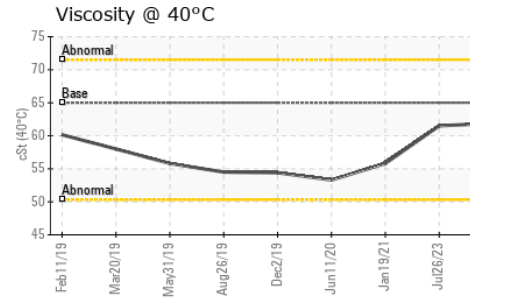
PQ



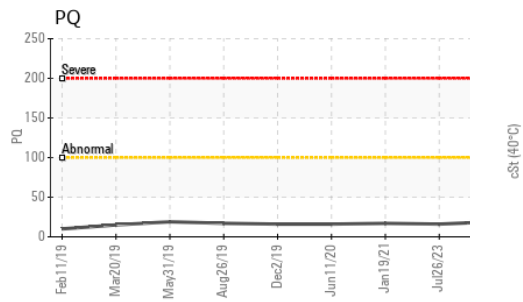
Acid Number



Viscosity @ 40°C

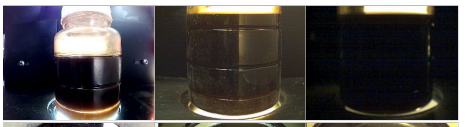
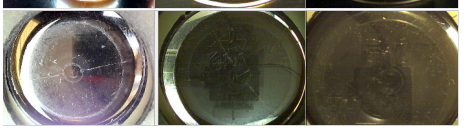


PQ



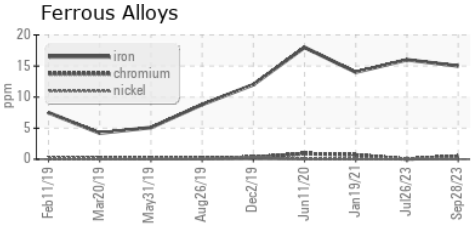
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	**61.9**	61.5	55.8

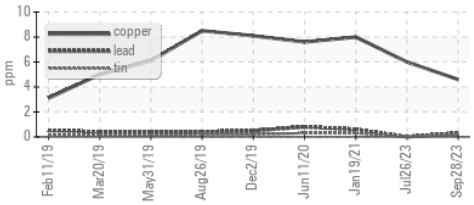
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

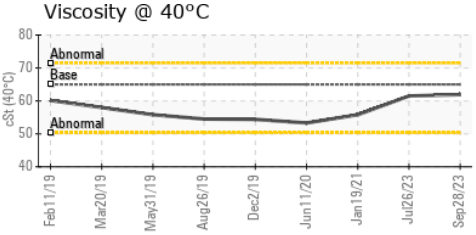
Ferrous Alloys



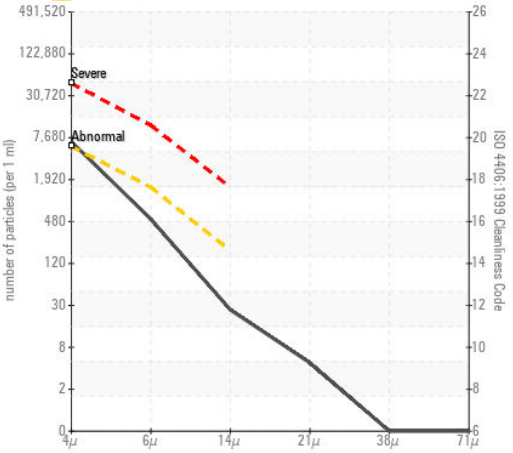
Non-ferrous Metals



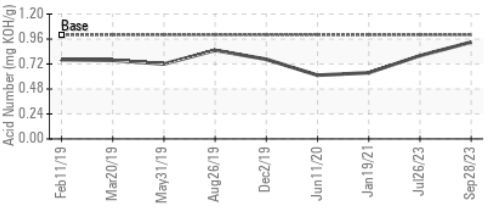
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0165533 **Received** : 04 Oct 2023
Lab Number : 05968846 **Diagnosed** : 06 Oct 2023
Unique Number : 10675397 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: PQ)

Certificate L2367

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)

LUCK STONE
19380 RICHMOND TURNPIKE
MILFORD, VA
US 22514
Contact: BRYAN MORRIS
bmorris@luckstone.com
T: (804)400-3630
F: x: