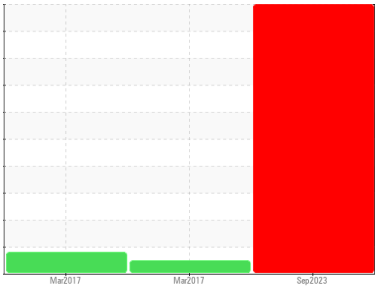
PROBLEM SUMMARY

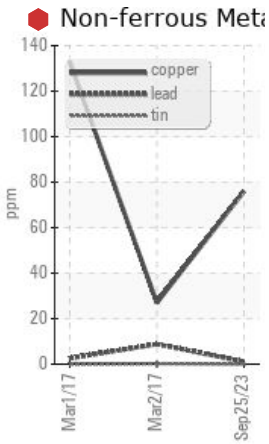
Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 672G 1DW672GXPA0633867
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (16 GAL)

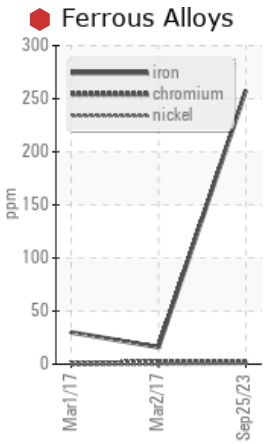
Sample Rating Trend

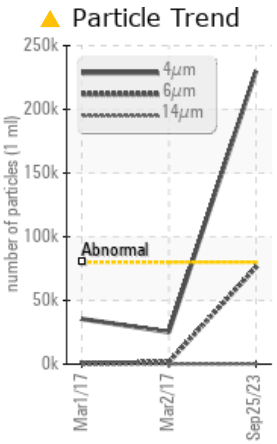


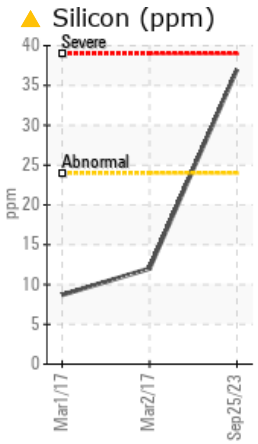
WEAR

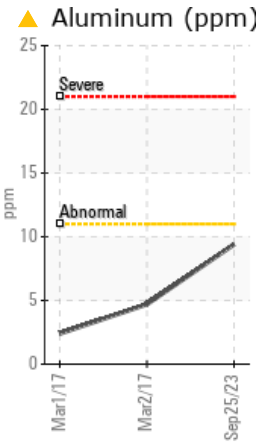
COMPONENT CONDITION SUMMARY











RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>71	**258**	16	30
Aluminum	ppm	ASTM D5185m	>11	**9**	5	2
Copper	ppm	ASTM D5185m	>21	**76**	27	133
Silicon	ppm	ASTM D5185m	>24	**37**	12	9
Particles >4µm		ASTM D7647	>80000	**229986**	25193	35469
Particles >6µm		ASTM D7647	>5000	**75955**	1488	621
Oil Cleanliness		ISO 4406 (c)	>23/19/16	**25/23/14**	22/18/14	22/16/12

Customer Id: LESMAROH
Sample No.: LEC0043921
Lab Number: 05963763
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

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

02 Mar 2017 Diag: Doug Bogart

NORMAL

Resample at the next service interval to monitor. NOTE: one of two samples received with same ID and sampling date.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

01 Mar 2017 Diag: Doug Bogart

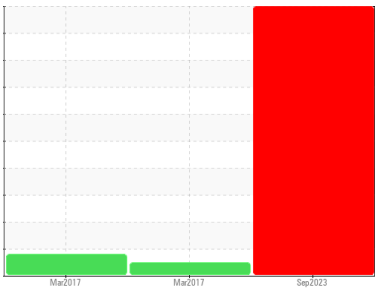
WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor. NOTE: one of two samples received with same ID and sampling date.The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. 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



WEAR

Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 672G 1DW672GXPA0633867
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (16 GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

The iron level is severe. The copper level is severe.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**LEC0043921**	LECP167188	LECP167187
Sample Date		Client Info		**25 Sep 2023**	02 Mar 2017	01 Mar 2017
Machine Age	hrs	Client Info		**4673**	3264	3264
Oil Age	hrs	Client Info		**3264**	3264	1892
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**SEVERE**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**59**	18	17
Iron	ppm	ASTM D5185m	>71	**258**	16	30
Chromium	ppm	ASTM D5185m	>11	**2**	2	<1
Nickel	ppm	ASTM D5185m	>6	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	2	0
Aluminum	ppm	ASTM D5185m	>11	**9**	5	2
Lead	ppm	ASTM D5185m	>13	**1**	9	3
Copper	ppm	ASTM D5185m	>21	**76**	27	133
Tin	ppm	ASTM D5185m	>5	**0**	<1	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	6	**2**	11	28
Barium	ppm	ASTM D5185m	0	**2**	0	0
Molybdenum	ppm	ASTM D5185m	0	**<1**	13	5
Manganese	ppm	ASTM D5185m		**3**	1	1
Magnesium	ppm	ASTM D5185m	145	**11**	351	50
Calcium	ppm	ASTM D5185m	3570	**1460**	2192	3479
Phosphorus	ppm	ASTM D5185m	1290	**1013**	940	1027
Zinc	ppm	ASTM D5185m	1640	**1004**	1224	1266
Sulfur	ppm	ASTM D5185m		**5456**	1273	2046

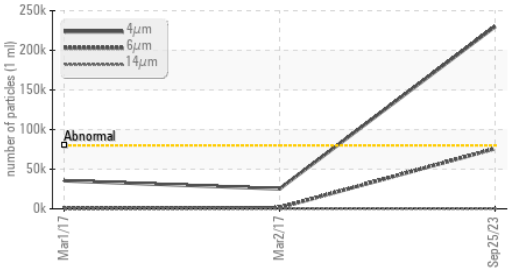
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>24	**37**	12	9
Sodium	ppm	ASTM D5185m	>21	**4**	2	5
Potassium	ppm	ASTM D5185m	>20	**11**	5	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**229986**	25193	35469
Particles >6µm		ASTM D7647	>5000	**75955**	1488	621
Particles >14µm		ASTM D7647	>640	**150**	133	26
Particles >21µm		ASTM D7647	>160	**31**	45	7
Particles >38µm		ASTM D7647	>40	**4**	5	0
Particles >71µm		ASTM D7647	>10	**2**	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	**25/23/14**	22/18/14	22/16/12

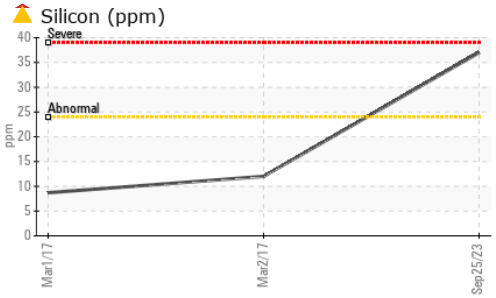
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	**1.676**	1.38	1.38

OIL ANALYSIS REPORT

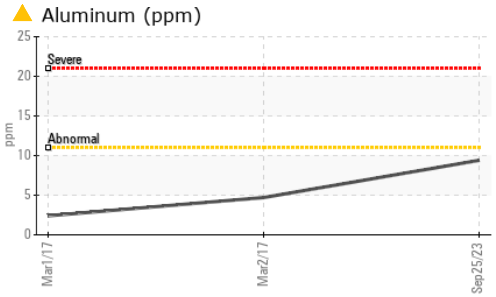
Particle Trend



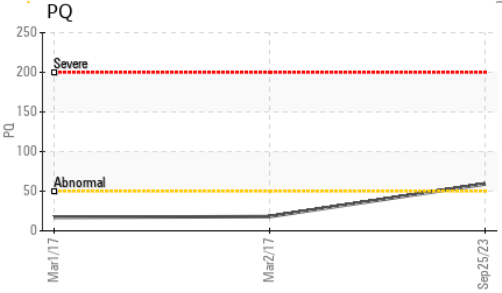
Silicon (ppm)



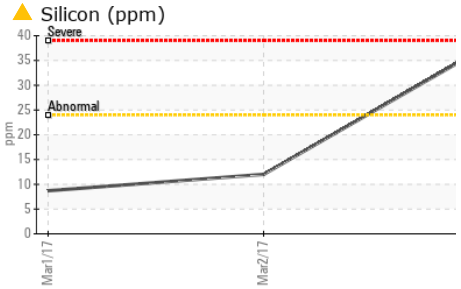
Aluminum (ppm)



PQ

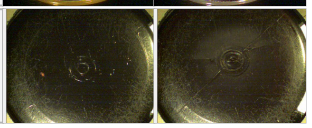


Silicon (ppm)



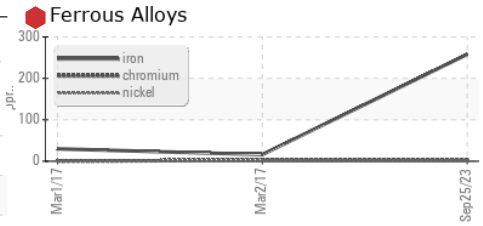
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.0	**46.3**	42.25	46.07

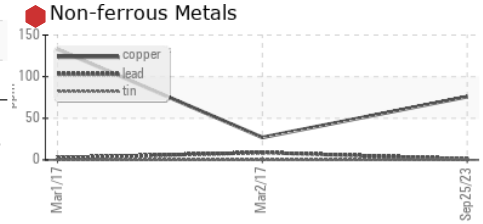
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*		
Bottom			*no image*		

GRAPHS

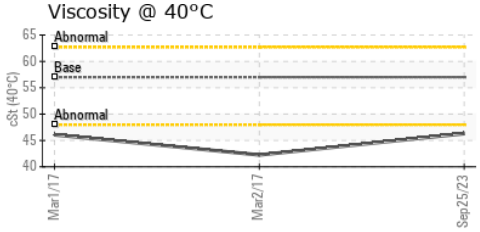
Ferrous Alloys



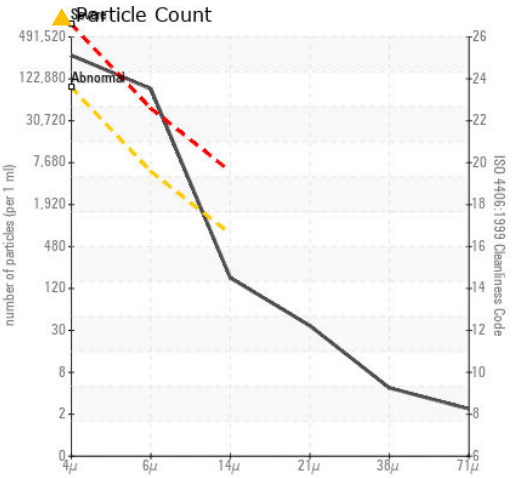
Non-ferrous Metals



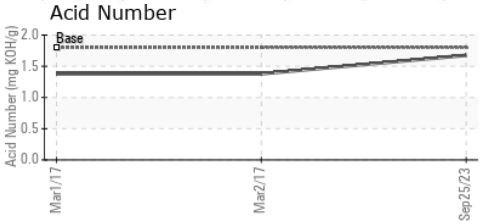
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0043921 **Received** : 28 Sep 2023
Lab Number : 05963763 **Diagnosed** : 04 Oct 2023
Unique Number : 10670314 **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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