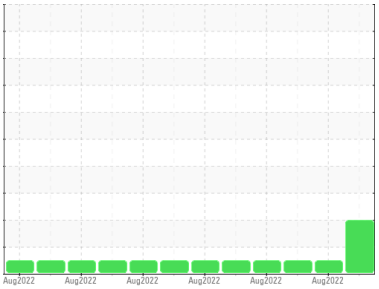
PROBLEM SUMMARY

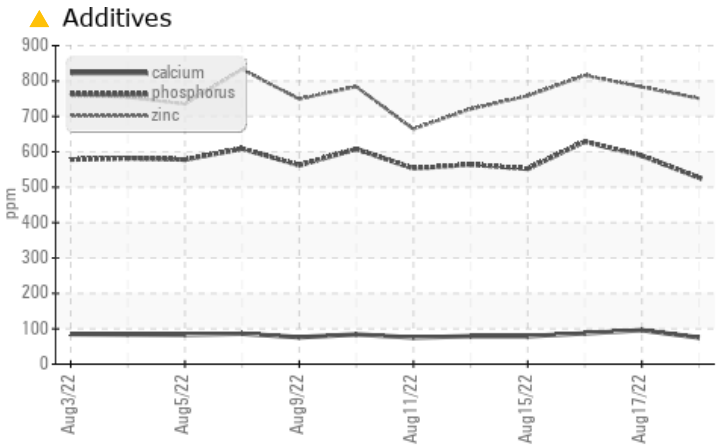
Sample Rating Trend



ADDITIVES

Area
WCLSNC
Machine Id
QC HY NC 08012022
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Magnesium	ppm	ASTM D5185m		**2**	3	1
Calcium	ppm	ASTM D5185m		**75**	96	87
Phosphorus	ppm	ASTM D5185m		**527**	589	629
Zinc	ppm	ASTM D5185m		**751**	783	816
Sulfur	ppm	ASTM D5185m		**1414**	1534	1666

Customer Id: WEACARQA
Sample No.: WC0727764
Lab Number: 05620708
Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:
System Automation +1 905-569-8600 x230
Kevin.Marson@wearcheck.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

17 Aug 2022 Diag: Jonathan Hester

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

16 Aug 2022 Diag: Jonathan Hester

NORMAL

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

view report

15 Aug 2022 Diag: Jonathan Hester

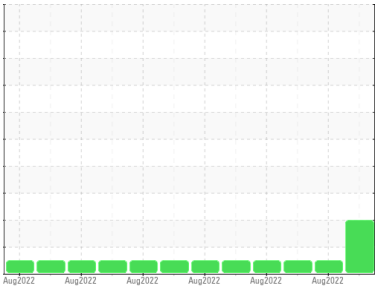
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are 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



ADDITIVES

Area
WCLSNC
Machine Id
QC HY NC 08012022
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0727764**	WC0727762	WC0727761
Sample Date		Client Info		**18 Aug 2022**	17 Aug 2022	16 Aug 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**7**	17	18
Iron	ppm	ASTM D5185m		**11**	12	14
Chromium	ppm	ASTM D5185m		**<1**	<1	<1
Nickel	ppm	ASTM D5185m		**<1**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m		**2**	1	<1
Lead	ppm	ASTM D5185m		**<1**	1	2
Copper	ppm	ASTM D5185m		**7**	8	8
Tin	ppm	ASTM D5185m		**0**	<1	<1
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		**<1**	2	2
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		▲ **2**	3	1
Calcium	ppm	ASTM D5185m		▲ **75**	96	87
Phosphorus	ppm	ASTM D5185m		▲ **527**	589	629
Zinc	ppm	ASTM D5185m		▲ **751**	783	816
Sulfur	ppm	ASTM D5185m		▲ **1414**	1534	1666

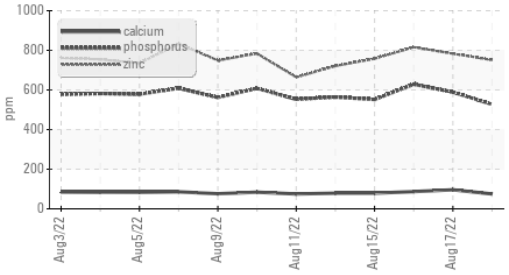
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**2**	2	2
Sodium	ppm	ASTM D5185m		**0**	0	1
Potassium	ppm	ASTM D5185m		**1**	<1	1
Water	%	ASTM D6304		**0.009**	0.011	0.009
ppm Water	ppm	ASTM D6304		**96.3**	111.1	99.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**658**	1507	1135
Particles >6µm		ASTM D7647		**74**	169	251
Particles >14µm		ASTM D7647		**12**	21	40
Particles >21µm		ASTM D7647		**7**	3	23
Particles >38µm		ASTM D7647		**6**	0	18
Particles >71µm		ASTM D7647		**4**	0	13
Oil Cleanliness		ISO 4406 (c)		**17/13/11**	18/15/12	19/16/13

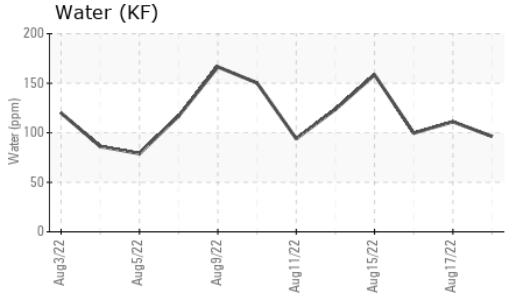
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.59**	0.69	0.62

OIL ANALYSIS REPORT

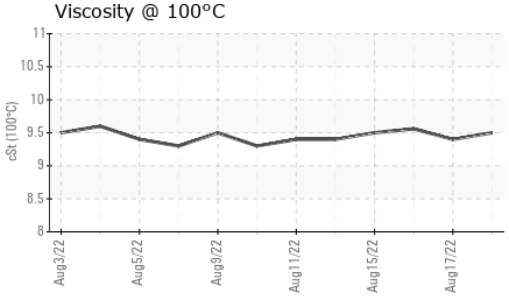
Additives



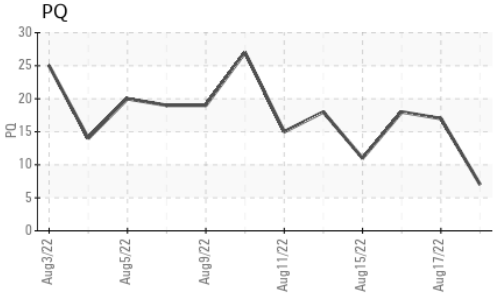
Water (KF)



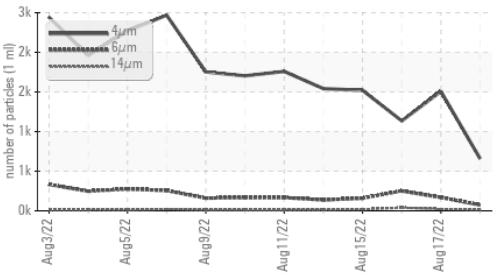
Viscosity @ 100°C



PQ

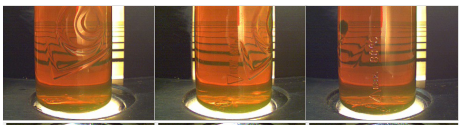
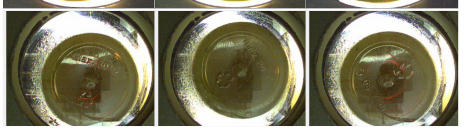


Particle Trend



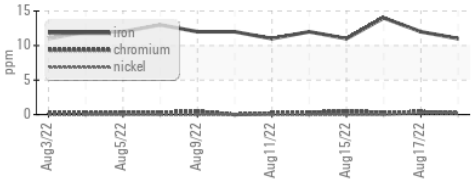
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**54.7**	54.6	55.11
Visc @ 100°C	cSt	ASTM D445		**9.5**	9.4	9.56
Viscosity Index (VI)	Scale	ASTM D2270		**158**	155	158

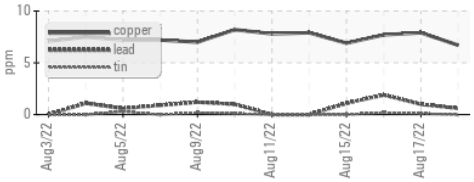
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

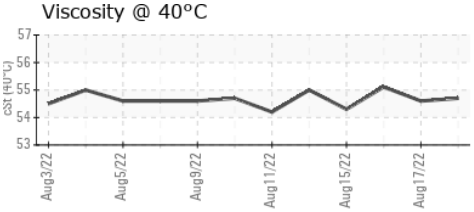
Ferrous Alloys



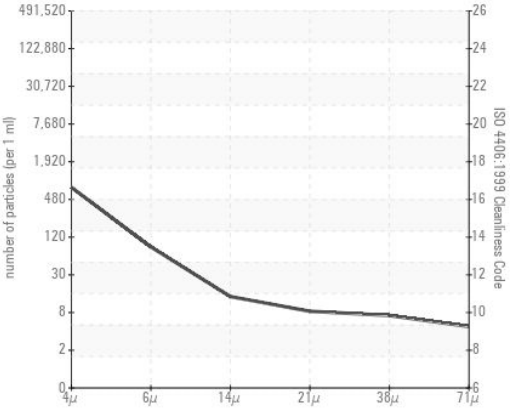
Non-ferrous Metals



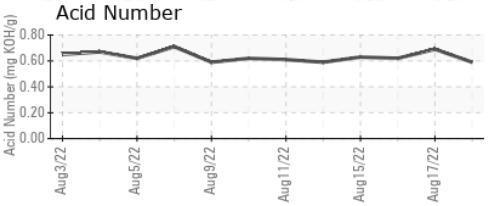
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0727764 **Received** : 18 Aug 2022
Lab Number : 05620708 **Diagnosed** : 02 Oct 2023
Unique Number : 10100215 **Diagnostician** : System
Test Package : PLANT (Additional Tests: KV100, VI)

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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Cary, NC
US 27513
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