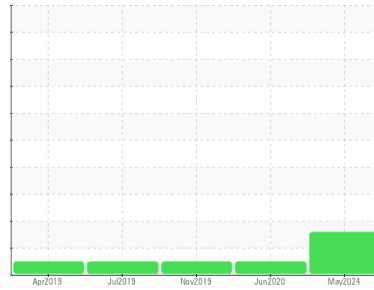


OIL ANALYSIS REPORT

Sample Rating Trend


WEAR


Area
[LEADING EDGE]
 Machine Id
JOHN DEERE 300G 1FF300GXCJF730943
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- QTS)

DIAGNOSIS

▲ Recommendation

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil. We recommend you service the filters on this component. We were unable to perform a particle count due to a high concentration of particles present in this sample.

▲ Wear

The iron level is abnormal. All other component wear rates are normal.

▲ Contamination

Moderate concentration of visible dirt/debris present in the oil.

▲ Fluid Condition

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0210856	JR0049591	JR0029174
Sample Date	Client Info		17 May 2024	11 Jun 2020	06 Nov 2019
Machine Age	hrs	Client Info	6700	2171	1530
Oil Age	hrs	Client Info	0	2171	1530
Oil Changed	Client Info		N/A	Not Changd	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	28	20	14	
Iron	ppm	ASTM D5185m	>32	▲ 40	6	5
Chromium	ppm	ASTM D5185m	>9	3	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>9	3	0	<1
Lead	ppm	ASTM D5185m	>28	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	19	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	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	<1	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		25	0	<1
Calcium	ppm	ASTM D5185m		433	7	3
Phosphorus	ppm	ASTM D5185m	827	475	467	466
Zinc	ppm	ASTM D5185m	0	▲ 308	10	29
Sulfur	ppm	ASTM D5185m	13	1307	123	142

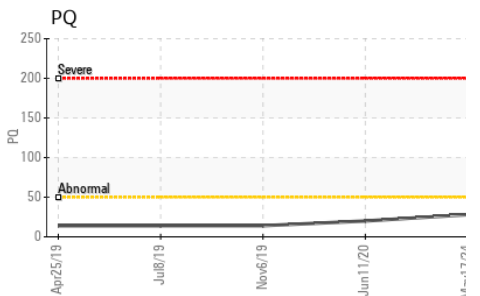
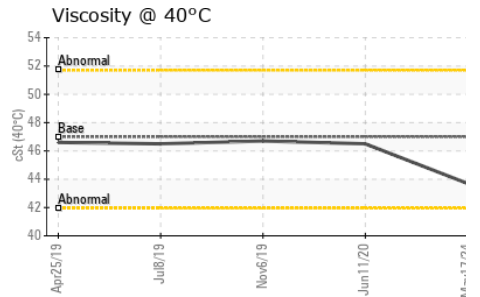
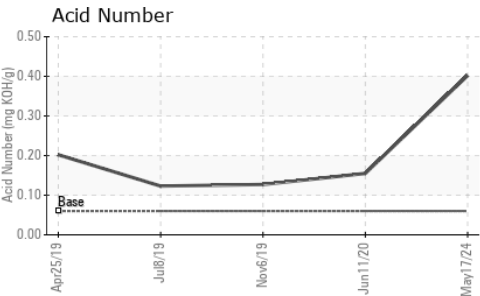
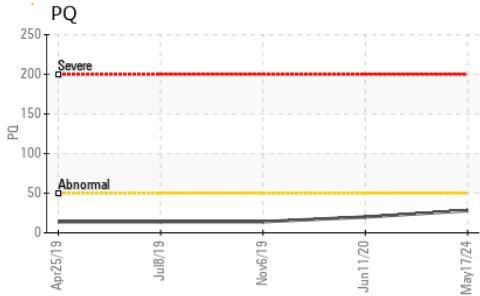
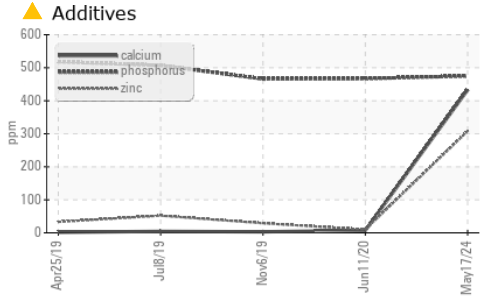
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>11	11	<1	<1
Sodium	ppm	ASTM D5185m	>21	<1	0	0
Potassium	ppm	ASTM D5185m	>20	4	<1	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	---	32880	24273
Particles >6µm	ASTM D7647	>20000	---	1651	1351
Particles >14µm	ASTM D7647	>640	---	37	23
Particles >21µm	ASTM D7647	>160	---	8	14
Particles >38µm	ASTM D7647	>40	---	0	0
Particles >71µm	ASTM D7647	>10	---	0	0
Oil Cleanliness	ISO 4406 (c)	>23/21/16	---	22/18/12	22/18/12

OIL ANALYSIS REPORT

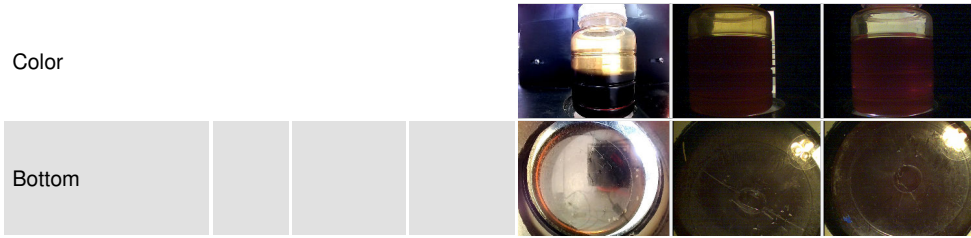


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.402	0.155	0.127

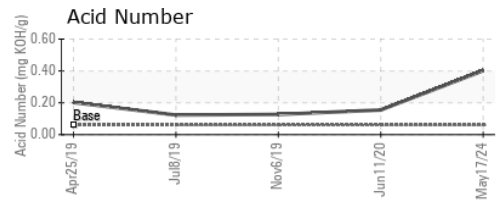
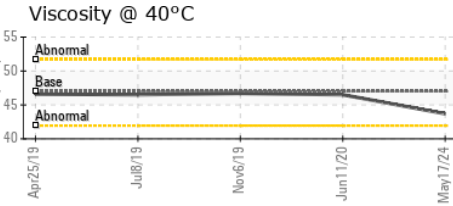
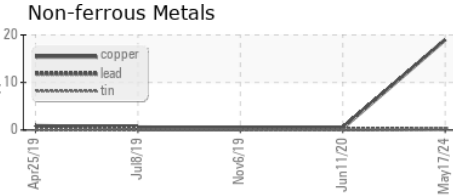
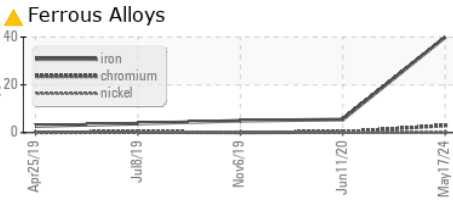
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	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	47	43.7	46.5	46.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0210856 **Received** : 20 May 2024
Lab Number : **06184189** **Tested** : 22 May 2024
Unique Number : 11035515 **Diagnosed** : 22 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

JRE - BURKEVILLE
 510 WEST COLONIAL DR
 BURKEVILLE, VA
 US 23922
 Contact: BRANDON BOLLING
 bbolling@jamesriverequipment.com
 T: (434)767-5578
 F: (434)767-3774

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)