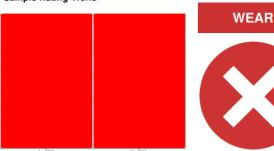


PROBLEM SUMMARY

Sample Rating Trend



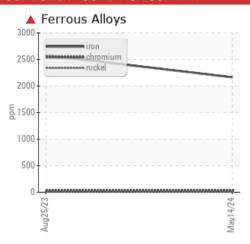
Machine Id

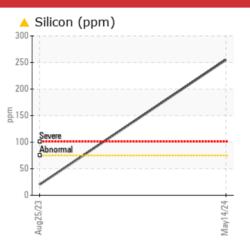
JOHN DEERE 331G 1T0331GKJNF426129

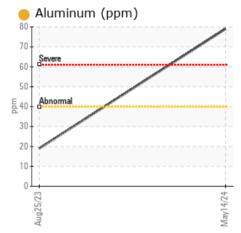
Right Final Drive

JOHN DEERE GL-5 80W90 (--- GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil 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	SEVERE			
Iron	ppm	ASTM D5185m	>750	2165	▲ 2581			
Chromium	ppm	ASTM D5185m	>9	3 0	4 37			
Silicon	ppm	ASTM D5185m	>75	255	20			

Customer Id: JAMASH Sample No.: JR0212153 **Lab Number:** 06181652 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	
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

WEAR



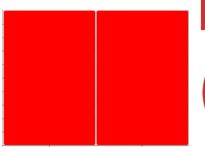
25 Aug 2023 Diag: Don Baldridge
The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Component wear metal level(s) high for break in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

JOHN DEERE 331G 1T0331GKJNF426129

Right Final Drive

JOHN DEERE GL-5 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil 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.

Gear wear is indicated. Component wear metal level(s) high for break in.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The condition of the oil is acceptable for the time in service.

		<u> </u>	Aug2023	May2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		JR0212153	JR0180930	
Sample Date		Client Info		14 May 2024	25 Aug 2023	
Machine Age	hrs	Client Info		1044	532	
Oil Age	hrs	Client Info		0	0	
Oil Changed	1110	Client Info		Changed	Changed	
Sample Status		Onone mno		SEVERE	SEVERE	
CONTAMINATION	M	method	limit/base	current	history1	history2
Water	'	WC Method	>0.075	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
						1113101 y 2
PQ		ASTM D8184	>1250	210	380	
Iron	ppm	ASTM D5185m	>750	2165	2581	
Chromium	ppm	ASTM D5185m	>9	3 0	▲ 37	
Nickel	ppm		>10	6	6	
Titanium	ppm	ASTM D5185m		6	<1	
Silver	ppm	ASTM D5185m		<1	0	
Aluminum	ppm	ASTM D5185m	>40	9 79	19	
Lead	ppm		>15	<1	0	
Copper	ppm	ASTM D5185m	>40	2	1	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ACTM DE10Em				
Gaarriani	ppiii	ASTM D5185m		<1	0	
ADDITIVES	ррш	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 2	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	limit/base	current 2 17	history1 4 81	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 17 3	history1 4 81 3	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 17 3 19	history1 4 81 3 23	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 17 3 19 14	history1 4 81 3 23 9	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 17 3 19 14 93	history1 4 81 3 23 9 43	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 2 17 3 19 14 93 333	history1 4 81 3 23 9 43 337	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 2 17 3 19 14 93 333 35	history1 4 81 3 23 9 43 337 40	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 2 17 3 19 14 93 333 35 19324	history1 4 81 3 23 9 43 337 40 19328	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 2 17 3 19 14 93 333 35 19324 current	history1 4 81 3 23 9 43 337 40 19328 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >75	current 2 17 3 19 14 93 333 35 19324 current ▲ 255	history1 4 81 3 23 9 43 337 40 19328 history1 20	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >75 >51	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8	history1 4 81 3 23 9 43 337 40 19328 history1 20 12	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >75 >51 >20	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >75 >51 >20 limit/base	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method *Visual	limit/base >75 >51 >20 limit/base NONE	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current NONE	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1 NONE	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual	limit/base >75 >51 >20 limit/base NONE NONE	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current NONE NONE	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1 NONE NONE	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual	limit/base >75 >51 >20 limit/base NONE NONE NONE	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current NONE NONE NONE	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1 NONE NONE NONE	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual	limit/base >75 >51 >20 limit/base NONE NONE NONE NONE	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current NONE NONE NONE NONE	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1 NONE NONE NONE NONE	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m METHOD ASTM D5185m METHOD *Visual *Visual *Visual *Visual *Visual	limit/base >75 >51 >20 limit/base NONE NONE NONE NONE NONE NONE	current 2 17 3 19 14 93 333 35 19324 current ▲ 255 8 32 current NONE NONE NONE NONE NONE NONE NONE	history1 4 81 3 23 9 43 337 40 19328 history1 20 12 56 history1 NONE NONE NONE NONE NONE NONE NONE	history2 history2 history2

Odor

Emulsified Water

scalar *Visual

scalar *Visual

*Visual

scalar

NORML

>0.075

NORML

NEG

NEG

NORML

cation: DAVID ZIEG .- JAMASH



OIL ANALYSIS REPORT





Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0212153 **Lab Number** : 06181652 Unique Number : 11032978

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: PQ)

: 16 May 2024 : 17 May 2024

: 20 May 2024 - Don Baldridge

Contact: DAVID ZIEG dzieg@jamesriverequipment.com T: (804)798-6001

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)

F: (804)798-0292 Contact/Location: DAVID ZIEG - JAMASH

JRE - ASHLAND

ASHLAND, VA

US 23005

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