WEAR CONTAMINATION **FLUID CONDITION** **ABNORMAL NORMAL NORMAL**

[47004]

HAMM H12I H2840096

Rear Differential

JOHN DEERE GL-5 80W90 (10 QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0217622	JR0153289	JR0137212
	Sample Date		Client Info		30 May 2024	21 Mar 2023	26 Jul 2022
	Machine Age	hrs	Client Info		1629	945	498
	Oil Age	hrs	Client Info		684	0	498
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Not Changd	Changed	Not Changd
	Filter Changed		Client Info		N/A	Changed	N/A
	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR	PQ		ASTM D8184		209	136	139
Bearing and/or bushing wear is indicated.	Iron	ppm	ASTM D5185m	>500	240	144	79
	Chromium	ppm	ASTM D5185m	>10	2	1	<1
	Nickel	ppm	ASTM D5185m	>10	<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m	>25	4	4	3
	Lead	ppm	ASTM D5185m	>25	<1	0	<1
	Copper	ppm	ASTM D5185m	>100	<u>▲</u> 158	126	103
	Tin	ppm	ASTM D5185m	>10	10	7	5
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	24	22	19
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3	<1	2
	Water		WC Method	>.2	NEG	NEG	NEG
	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	>.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		13	13	10
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		12	3	5
	Barium	ppm	ASTM D5185m		7	2	<1
	Molybdenum	ppm	ASTM D5185m		8	<1	<1
	Manganese	ppm	ASTM D5185m		9	7	6
	Magnesium	ppm	ASTM D5185m		30	4	5
	Calcium	ppm	ASTM D5185m		87	35	55
	Phosphorus	ppm	ASTM D5185m		2440	2201	2174
	Zinc	ppm	ASTM D5185m		200	141	104
	Sulfur	ppm	ASTM D5185m		30093	30079	29775
		_					

Visc @ 40°C

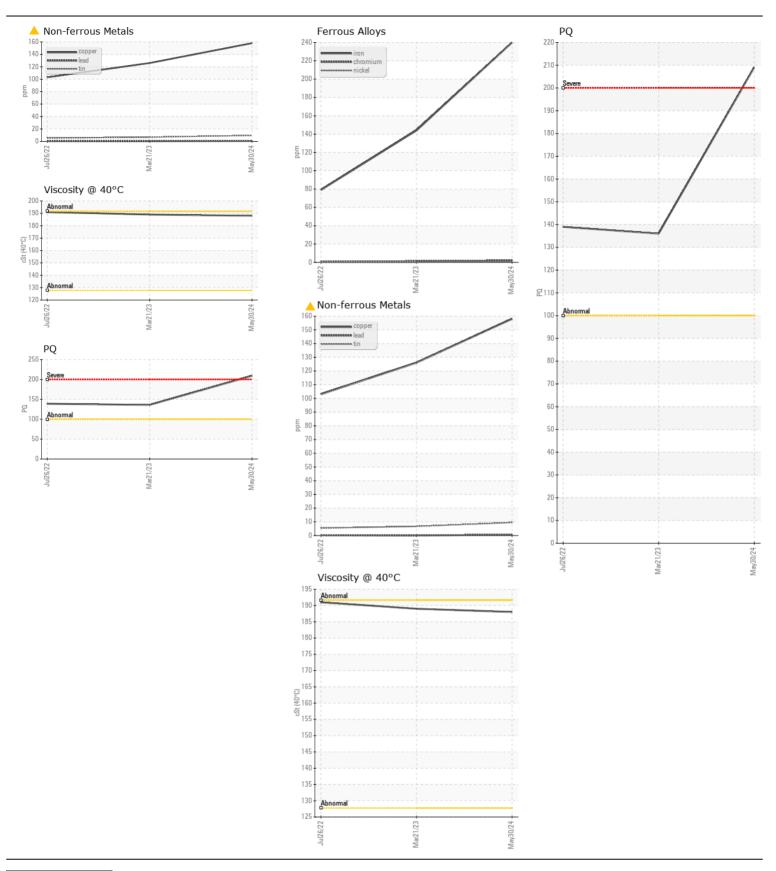
cSt

ASTM D445

189

188

191







Certificate L2367

Laboratory Sample No.

: JR0217622 Lab Number : 06196930 Unique Number : 11059053

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested**

: 31 May 2024 : 03 Jun 2024

: 03 Jun 2024 - Sean Felton

Diagnosed

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)

B & S SITE DEVLEOPMENT

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