

Machine Id JOHN DEERE 8310 R 49005298 (S/N 1RW8310DCNB208637) Component

Hydraulic System

JOHN DEERE HY-GARD HYD/TRANS (119 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0208826		
	Sample Date		Client Info		13 Jun 2024		
	Machine Age	hrs	Client Info		2021		
	Oil Age	hrs	Client Info		2021		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	PQ		ASTM D8184		20		
	Iron	ppm	ASTM D5185m	>20	10		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	210	<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m	>10	2		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m	210	<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
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CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	4		
	Potassium	ppm	ASTM D5185m	>20	2		
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.	Water		WC Method	>0.1	NEG		
	Particles >4µm		ASTM D7647	>5000	3830		
	Particles >6µm		ASTM D7647	>1300	351		
	Particles >14µm		ASTM D7647	>160	4		
	Particles >21µm		ASTM D7647	>40	1		
	Particles >38µm		ASTM D7647	>10	0		
	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/9		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1		
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		<1		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m	0	<1		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	145	78		
	Calcium	ppm	ASTM D5185m		2876		
	Phosphorus	ppm	ASTM D5185m	1290	894		
	Zinc	ppm	ASTM D5185m	1640	1048		
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ppm Sulfur ppm ASTM D5185m

Acid Number (AN) mg KOH/g ASTM D8045 1.8

Visc @ 40°C cSt ASTM D445 57.0

3111

1.28

50.4



