

Machine Id 3009154 (S/N 530611) Hydraulic System JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0208944	JR0201241	
Resample at the next service interval to monitor.	Sample Date		Client Info		19 Apr 2024	26 Feb 2024	
	Machine Age	hrs	Client Info		995	597	
	Oil Age	hrs	Client Info		995	597	
	Filter Age	hrs	Client Info		995	0	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	PQ		ASTM D8184		13	13	
	Iron	ppm	ASTM D5185m	>20	2	1	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	0	
	Nickel	ppm	ASTM D5185m	>10	0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>10	0	0	
	Lead	ppm	ASTM D5185m	>10	0	0	
	Copper	ppm	ASTM D5185m	>75	1	1	
	Tin	ppm	ASTM D5185m	>10	0	0	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		<1	<1	
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.	Potassium	ppm	ASTM D5185m	-	0	<1	
	Water		WC Method		NEG	NEG	
	Particles >4µm		ASTM D7647		768	3852	
	Particles >6µm		ASTM D7647		230	410	
	Particles >14µm		ASTM D7647		26	18	
	Particles >21µm		ASTM D7647		7	3	
	Particles >38µm		ASTM D7647		0	0	
	Particles >71µm		ASTM D7647		0	0	
	Oil Cleanliness		ISO 4406 (c)		17/15/12	19/16/11	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor Emulsified Water	scalar	*Visual *Visual	NORML	NORML NEG	NORML NEG	
		scalar	VISUAI	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0	<1	
	Boron	ppm	ASTM D5185m		0	0	
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		0	0	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		3	<1	
	Calcium	ppm	ASTM D5185m		27	4	
	Phosphorus	ppm	ASTM D5185m		441	516	
	7:					00	

Zinc

ASTM D5185m

ppm

Sulfur ppm ASTM D5185m

Acid Number (AN) mg KOH/g ASTM D8045 0.06

Visc @ 40°C cSt ASTM D445 47

26

97

0.19

46.8

34

133

0.18

46.8



