

## Machine Id JOHN DEERE C319965 (S/N RW7230P030296) Component Hydraulic System Fluid JOHN DEERE HY-GARD HYD/TRANS (--- GAL) RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.



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

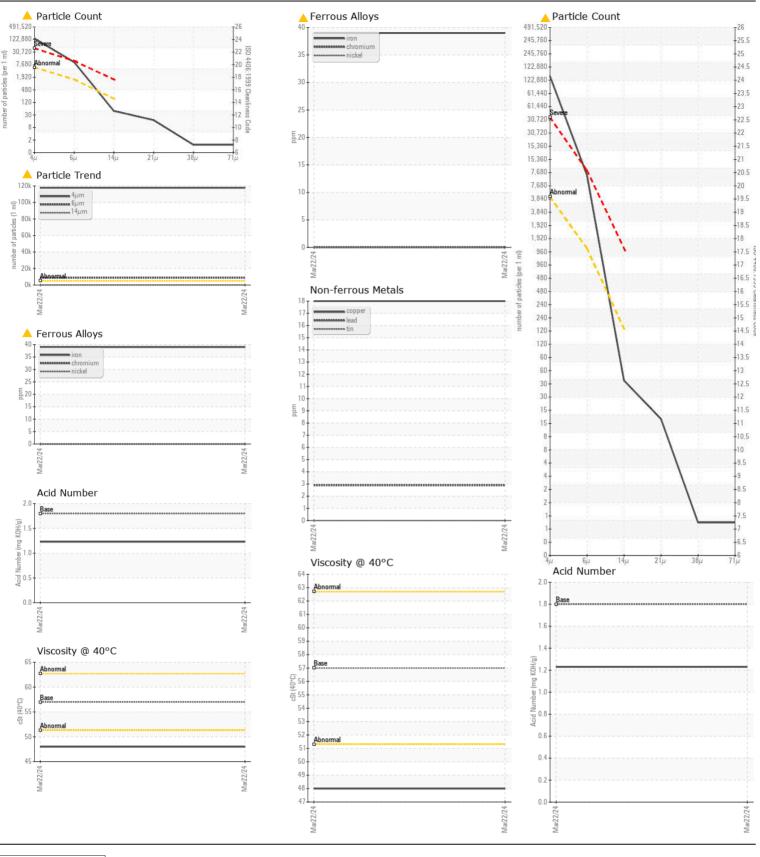
## CONTAMINATION

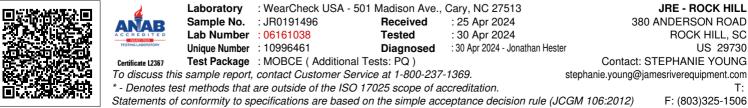
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0191496		
Sample Date		Client Info		22 Mar 2024		
Machine Age	hrs	Client Info		12309		
Oil Age	hrs	Client Info		12309		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
PQ		ASTM D8184		21		
Iron	ppm	ASTM D5185m	>20	<u> </u>		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	1		
Lead	ppm	ASTM D5185m	>10	3		
Copper	ppm	ASTM D5185m	>75	18		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Cillinea						
Silicon	ppm	ASTM D5185m	>20	7		
Potassium	ppm	ASTM D5185m	>20	8		
Water		WC Method	>0.1	NEG		
Particles >4µm		ASTM D7647	>5000	A 117739		
Particles >6µm		ASTM D7647	>1300	A 8838		
Particles >14µm		ASTM D7647	>160 >40	41		
Particles >21µm		ASTM D7647		15 1		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	-		
Oil Cleanliness	la -	ISO 4406 (c)		A 24/20/13		
Silt	scalar	*Visual	NONE NONE	NONE		
Debris Sand/Dirt	scalar scalar	*Visual *Visual		NONE		
Appearance	scalar	*Visual	NONE	NONE NORML		
Appearance Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NORML		
	Scalal	visuai	>0.1	NEG		
Sodium	ppm	ASTM D5185m		4		
Boron	ppm	ASTM D5185m	6	39		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m		9		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	145	57		
Calcium	ppm	ASTM D5185m	3570	2858		
Phosphorus	ppm	ASTM D5185m	1290	1109		
Zinc	ppm	ASTM D5185m	1640	1322		
Sulfur	ppm	ASTM D5185m	-	4858		
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	1.23		
Visc @ 40°C	cSt	ASTM D445	57.0	48.0		





Submitted By: STEPHANIE YOUNG Page 2 of 2