

[16W15380] Machine Id JLG GRADALL 0160011900 Component Front Axle

JOHN DEERE HY-GARD HYD/TRANS (21 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: 16W15380)

WEAR

All component wear rates are normal.

CONTAMINATION

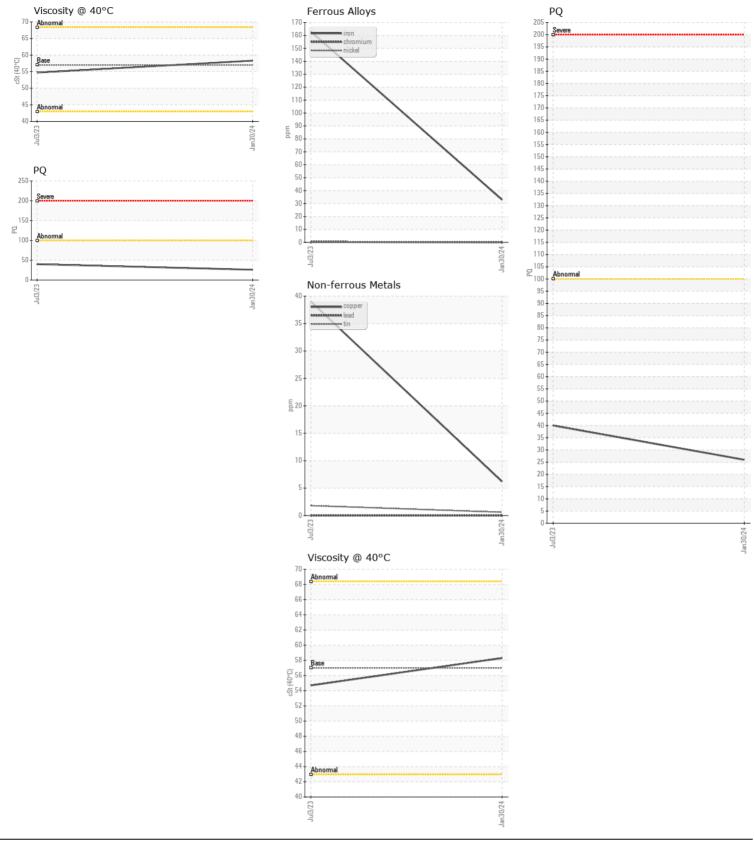
There is no indication of any contamination in the oil.

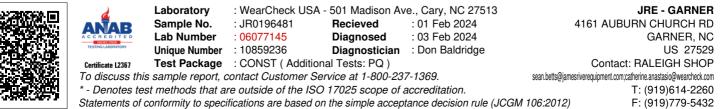
FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196481	JR0161180	
Sample Date		Client Info		30 Jan 2024	03 Jul 2023	
Machine Age	hrs	Client Info		1947	1665	
Oil Age	hrs	Client Info		282	1665	
Filter Age	hrs	Client Info		282	0	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		Changed	N/A	
Sample Status				NORMAL	NORMAL	
PQ		ASTM D8184		26	40	
Iron	ppm	ASTM D5185m	>500	33	163	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	<1	<1	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>50	6	39	
Tin	ppm	ASTM D5185m	>10	<1	2	
Vanadium	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon		ASTM D5185m	>75	6	8	
	ppm	ASTIVI DJIOJIII			0	
	nnm	ACTM DE105m	× 20	-	0	
Potassium	ppm	ASTM D5185m	>20	0		
Water		WC Method	>0.2	0 NEG	NEG	
Water Silt	scalar	WC Method *Visual	>0.2 NONE	0 NEG NONE	NEG NONE	
Water Silt Debris	scalar scalar	WC Method *Visual *Visual	>0.2 NONE NONE	0 NEG NONE NONE	NEG NONE NONE	
Water Silt Debris Sand/Dirt	scalar scalar scalar	WC Method *Visual *Visual *Visual	>0.2 NONE NONE NONE	0 NEG NONE NONE	NEG NONE NONE NONE	
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML	NEG NONE NONE NONE NORML	
Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORE NORML	NEG NONE NONE NORML NORML	
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML	NEG NONE NONE NONE NORML	
Water Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORE NORML	NEG NONE NONE NORML NORML	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG	NEG NONE NONE NORML NORML NEG	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORML NORML NEG 0	NEG NONE NONE NORML NORML NEG 3	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORML NORML NEG 0 5	NEG NONE NONE NORML NORML NEG 3 59	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2 6 0	0 NEG NONE NONE NORML NORML NEG 0 5 <1	NEG NONE NONE NORML NORML NEG 3 59 0	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2 6 0	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0	NEG NONE NONE NORML NORML NEG 3 59 0 6	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2 6 0 0	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0 <1	NEG NONE NONE NORML NORML NEG 3 59 0 6 1	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2 6 0 0	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0 <1 98	NEG NONE NONE NORML NORML NEG 3 59 0 6 1 1 118	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 6 0 0 145 3570 	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0 <1 98 3182	NEG NONE NONE NORML NORML NEG 3 59 0 6 1 118 3239	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 6 0 0 145 3570 1290 	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0 5 <1 0 <1 98 3182 943 1131	NEG NONE NONE NORML NORML NEG 3 59 0 6 1 118 3239 981 1190	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 6 0 0 145 3570 1290 	0 NEG NONE NONE NORML NORML NEG 0 5 <1 0 <1 98 3182 943	NEG NONE NONE NORML NORML NEG 3 59 0 6 1 1 118 3239 981	

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