

Machine Id JOHN DEERE 544G 1YN544GAKPLA00129 onen

Transmission (Manual)

JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (--- GAL)

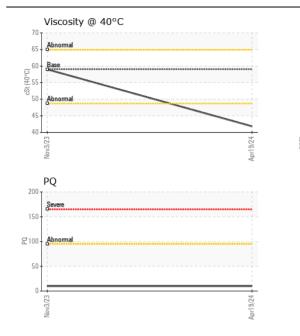
Sample Number Client Into JR0208240 JR0119147 Sample Date Client Into 19 Apr 203 10 Nor 2023 Machine Age Ints Client Into 1136 546 OI Age Ints Client Into 1136 546 OI Age Ints Client Into 0 0 Not Changed OI Changed Client Into Not Changed Not Changed Not Changed All component wear rates are normal. PQ ASTM D8164 -95 10 0 NokeL pp ASTM D8165 -95 0 0 NokeL pp ASTM D8165 -95 0 0 NokeL pp ASTM D8165 -95 0 0 NokeL pp ASTM D8165 -5 0 0 NokeL pp ASTM D8165 -25 0 <				· • • • •		·		
Sample Date Cilent Info 19 Apr 220 03 Nov 2023 Machine Age hrs Cilent Info 1136 546 Oil Changed Nov Cilent Info 1136 546 Filter Age hrs Cilent Info Not Changed Oil Changed Cilent Info Not Changed Not Changed Not Changed Sample Status Not Changed Not Changed Not Changed Not Changed All component wear rates are normal. PQ ASTM DBHS -56 0 0 Noted ppm ASTM DBHS 50 0 0 Noted ppm ASTM DBHS 50 0 0 Noted ppm ASTM DBHS 50 0 0 Noted ppm ASTM DBHS 20 0 0 Noted ppm ASTM DBHS 25 C1 <1	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info 19.47 203 103 Nov 2023 Machine Age hrs Client Info 1136 54.0 Oil Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Change Client Info 0 0 0 NortRMA NortRMA Biter Change Sample Status NortRMA NortRMA All component wear rates are normal. from pm ASM D818 5 0 0 Nicket pp ASM D818 5 0 0 All component wear rates are normal. from pm ASM D818 5 0 0 All component wear rates are normal. from pm ASM D818 0 All component wear rates are normal. from pm	Besample at the next service interval to monitor	Sample Number		Client Info		JR0206240	JR0189147	
Oil Age hrs Client ind Ista 54.6 ··· Filter Age hrs Client ind Not Changd		Sample Date		Client Info		19 Apr 2024	03 Nov 2023	
Filter Age OI Changed Ins Client Info Ins Not Changed Not Changed Nor Changed Not Changed Nor Changed Nor Changed <th></th> <th>Machine Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>1136</th> <th>546</th> <th></th>		Machine Age	hrs	Client Info		1136	546	
Oil Changed Client Info Not Changed		Oil Age	hrs	Client Info		1136	546	
Filter Changed Client Info Not Change N		Filter Age	hrs	Client Info		0	0	
Sample Status NORMAL		Oil Changed		Client Info		Not Changd	Not Changd	
WEAR PQ ASTM D8184 >95 10 10 All component wear rates are normal. Iron ppm ASTM D8185 >5 -1 0 Nickel ppm ASTM D8185 >5 0 0 Nickel ppm ASTM D8185 >5 0 0 Tanium ppm ASTM D8185 >7 0 0 Silver ppm ASTM D8185 >7 0 0 Aluminum ppm ASTM D8185 >25 <1 <1 Aluminum ppm ASTM D8185 >25 <1 <1 Copper ppm ASTM D8185 >0 0 0 Vanadum ppm ASTM D8185 >0 0 0 Tore is no indication of any contamination in the fluid. Silicon ppm ASTM D8185 >20 3 0		Filter Changed		Client Info		Not Changd	Not Changd	
Iron ppm ASTM 05185m >200 10 0 Chromium ppm ASTM 05185m >5 <1 0.0 Nickel ppm ASTM 05185m >5 0 0.0 Nickel ppm ASTM 05185m >5 0 0.0 All minum ppm ASTM 05185m >25 <1 <1 Aluminum ppm ASTM 05185m >25 <1 <1 Auminum ppm ASTM 05185m >20 0 0 Vanadum ppm ASTM 05185m >10 S1 Vanadum ppm ASTM 05185m >10<		Sample Status				NORMAL	NORMAL	
Iron ppm ASTM 05185m >200 10 0 Chromium ppm ASTM 05185m >5 <1 0.0 Nickel ppm ASTM 05185m >5 0 0.0 Nickel ppm ASTM 05185m >5 0 0.0 All minum ppm ASTM 05185m >25 <1 <1 Aluminum ppm ASTM 05185m >25 <1 <1 Auminum ppm ASTM 05185m >20 0 0 Vanadum ppm ASTM 05185m >10 S1 Vanadum ppm ASTM 05185m >10<							4.0	
Chromium ppm ASTM DS18m -5 <1	WEAR							
Nickel ppm ASTM D5185m >5 0 0 Titanium ppm ASTM D5185m -7 0 0 Silver ppm ASTM D5185m >7 0 0 Aluminum ppm ASTM D5185m >75 <1 <1 Aluminum ppm ASTM D5185m >75 <0 0 Copper ppm ASTM D5185m >25 <1 <1 0 Copper ppm ASTM D5185m >10 <1 0 Vanadium ppm ASTM D5185m >10 <1 0 Vandium Metal scalar "Visual NONE NONE NONE There is no indication of any contamination in the fluid. Silicon ppm ASTM D5185m >125 10 5 Sadd/Dirt scalar "Visual NONE NONE NORE NORE	All component wear rates are normal.		ppm					
Titanium pm ASTM D5186m · 0 0 · Silver ppm ASTM D5186m >7 0 0 Aluminum ppm ASTM D5186m >25 <1 < Lead ppm ASTM D5186m >25 6 0 Copper ppm ASTM D5186m >225 6 0 Tin ppm ASTM D5186m >225 6 0 Vanadium ppm ASTM D5186m >10 Vanadium ppm ASTM D5186m >10 Vanadium ppm ASTM D5186m >10 NONE NONE NONE There is no indication of any contamination in the fluid. Silicon ppm ASTM D5186m >20 3 0 Sand/Dirt scalar Visual NONE NONE NORE NORE								
Silver ppm ASTM D5185n >27 0 0 Aluminum ppm ASTM D5185n >25 <1 <1 <1 < Lead ppm ASTM D5185n >255 6 0 < Copper ppm ASTM D5185n >255 6 0 < Copper ppm ASTM D5185n >10 <1 0 < Tim ppm ASTM D5185n >10 <1 0 < Vanadium ppm ASTM D5185n >10 <1 0 < Vanadium ppm ASTM D5185n >125 10 5 Visual NONE NONE NONE NONE NONE NONE NONE There is no indication of any contamination in the fluid. Silicon ppm ASTM D5185n >125 10 5 Silicon pola scalar Visual NONE NONE					>5			
Aluminum ppm ASTM D518sn >25 <1					_			
Lead pm ASTM D5185m >45 0 0 Copper pm ASTM D5185m >225 6 0 Tin pm ASTM D5185m >10 <1 0 Vanadium ppm ASTM D5185m >10 <1 0 Vanadium ppm ASTM D5185m >10 <1 0 Vanadium ppm ASTM D5185m >10 NONE NONE Vallow Metal scalar 'Visual NONE NONE NONE There is no indication of any contamination in the fluid. Potassium pm ASTM D5185m >20 3 0 Water WC Method >0.1 NCRE NONE NONE Sand/Dirt scalar 'Visual NORE NORE NORE Appearance scalar 'Visual NORE NORE NORE			ppm					
Copper ppm ASTM D5185m >-225 6 0 Tin ppm ASTM D5185m >10 <1 0 < Vanadium ppm ASTM D5185m 0 0 < White Metal scalar 'Visual NONE NONE NONE NONE Vellow Metal scalar 'Visual NONE NONE NONE Stilicon ppm ASTM D5185m >10 5 None vellow Metal scalar 'Visual NONE NONE NONE There is no indication of any contamination in the fluid. Stilicon ppm ASTM D5185m >10 Scalar NONE NONE NONE								
Tin ppm ASTM D5185m >10 <1								
VanadiumppmASTM D5185m00White MetalscalarVisualNONE								
White Metal Yellow Metalscalar'VisualNONENONENONECONTAMINATIONSiliconppmASTM D5185m>12.5105There is no indication of any contamination in the fluid.PotassiumppmASTM D5185m>2.030WaterWC Method>0.1NONENONENONENONESiliconscalar'VisualNONENONENONENONEWaterWC Method>0.1NONENONENONESiliconscalar'VisualNONENONENONESand/Dirtscalar'VisualNONENONENONEAppearancescalar'VisualNORMNORMLNORMLAppearancescalar'VisualNORMNORMLNORMLModorscalar'VisualNORMNORMLNORMLAppearancescalar'VisualNORMNORMLNORMLModorscalar'VisualNORMNORMLNORMLMolybdenumppmASTM D5185m4<1MolybdenumppmASTM D5185m<10MaganesuppmASTM D5185m<10MagnesiumppmASTM D5185m<10MagnesiumppmASTM D5185m<10MolybdenumppmASTM					>10			
Yellow Metalscalar*VisualNONENONENONECONTAMINATIONSiliconppmASTM D5185m>125105There is no indication of any contamination in the fluid.PotassiumppmASTM D5185m>2030WaterWaterWC Method>0.1NEGNEGNEGSiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONELIGHTSand/Dirtscalar*VisualNORENONENONEOdorscalar*VisualNORENORENOREOdorscalar*VisualNORENORENOREThe condition of the fluid is acceptable for the time in service.SodiumppmASTM D5185m4<-1BoronppmASTM D5185m00MarganesepmASTM D5185m1<1MarganeseppmASTM D5185m32173126MarganesumppmASTM D5185m32173126MarganesumppmASTM D5185m32173126MarganesumppmASTM D5185m32173126Marganesumppm								
CONTAMINATIONSiliconppmASTM D5185m>1.25105PotassiumppmASTM D5185m>2030WaterWC Method>0.1NEGNEGSiliscalarVisualNONENONENONEIIGHTDebrisscalarVisualNONENONELIGHTSand/DirtscalarVisualNONENONENONEIIGHTOdorscalarVisualNORMNORMNORMNORMIIGHTOdorscalarVisualNORMNORMNORMIIGHTEmulsified WaterscalarVisualNORMNORMNORMIIGHTDebrisscalarVisualNORMNORMNORMIIGHTAppearancescalarVisualNORMNORMNORMIIGHTOdorscalarVisualNORMNORMNORMIIGHTThe condition of the fluid is acceptable for the time in service.SodiumppmASTM D5185m00BariumppmASTM D5185mII<1<1<1MagnesiumppmASTM D5185m<10MagnesiumppmASTM D5185m<10MagnesiumppmASTM D5185m<10MagnesiumppmASTM D5185m<1								
Potassium ppm ASTM D5185m >20 3 0 Water WC Method 0.1 NEG NEG NEG Sitt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE LIGHT Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORE NORE NORE Odor scalar *Visual NORE NORE NORE Emulsified Water scalar *Visual NORE NORE FLUID CONDITION NEG NEG NEG Boron ppm ASTM D5185m 23 <1 Molybdenum ppm ASTM D5185m 0 0		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium ppm ASTM D5185m >20 3 0 Water WC Method 0.01 NEG NEG NEG Sitt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE LIGHT Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORE NORE NORE Odor scalar *Visual NORE NORE NORE Emulsified Water scalar *Visual NORE NORE FLUID CONDITION NEG NEG NEG Boron ppm ASTM D5185m 23 <1 Molybdenum ppm ASTM D5185m 0 0 Maganese ppm ASTM D5185m <1 0	CONTAMINATION	Silicon	ppm	ASTM D5185m	>125	10	5	
Water WC Method >0.1 NEG NEG Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE LIGHT Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORM NORML NORML NORML Odor scalar *Visual NORM NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML FLUID CONDITION Sodium ppm ASTM D5185m 23 <1 Boron ppm ASTM D5185m 4 <1 Barium ppm ASTM D5185m 0 0				ASTM D5185m	>20		0	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONELIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORNORMLNORMLOdorscalar*VisualNORNORMLNORMLOdorscalar*VisualNORNORMLNORMLEmulsifiedWaterscalar*VisualNORNORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m23<1BoronppmASTM D5185mI4<1<BariumppmASTM D5185mI1<1MolybdenumppmASTM D5185mI1<1MaganeseppmASTM D5185mI9298CalciumppmASTM D5185mI32173126PhosphorusppmASTM D5185mI1015941	I here is no indication of any contamination in the fluid.	Water				NEG	NEG	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORML<Emulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185m23<1			scalar		NONE		NONE	
Appearance Odorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185mC23<1BoronppmASTM D5185mI4<1<IBariumppmASTM D5185mI00MolybdenumppmASTM D5185mI1<1IMagnesiumppmASTM D5185mI9298IICalciumppmASTM D5185mI32173126IIIPhosphorusppmASTM D5185mp1015941III		Debris	scalar	*Visual	NONE	NONE	LIGHT	
Appearance Odorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185mC23<1BoronppmASTM D5185mI4<1<IBariumppmASTM D5185mI00MolybdenumppmASTM D5185mI1<1IMagnesiumppmASTM D5185mI9298IICalciumppmASTM D5185mI32173126IIIPhosphorusppmASTM D5185mp1015941III		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185m23<1		Appearance	scalar	*Visual	NORML	NORML	NORML	
FLUID CONDITION Sodium ppm ASTM D5185m 23 <1		Odor	scalar	*Visual	NORML	NORML	NORML	
Boron ppm ASTM D5185m 4 <1		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Boron ppm ASTM D5185m 4 <1								
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 1 <1 Manganese ppm ASTM D5185m <1 0 Magnesium ppm ASTM D5185m <1 0 Calcium ppm ASTM D5185m 3217 3126 Phosphorus ppm ASTM D5185m 1015 941	FLUID CONDITION							
Molybdenum ppm ASTM D5185m 1 <1	The condition of the fluid is acceptable for the time in service.							
Manganese ppm ASTM D5185m <1								
Magnesium ppm ASTM D5185m 92 98 Calcium ppm ASTM D5185m 3217 3126 Phosphorus ppm ASTM D5185m 1015 941								
Calcium ppm ASTM D5185m 3217 3126 Phosphorus ppm ASTM D5185m 1015 941		0						
Phosphorus ppm ASTM D5185m 1015 941		-						
		Zinc	ppm	ASTM D5185m		1204	1218	
Sulfur ppm ASTM D5185m 3950 3305		Sultur	ppm	ASTM D5185m		3950	3305	
			-					

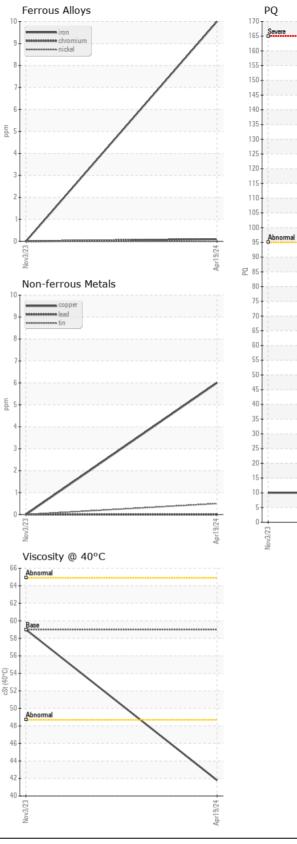
Visc @ 40°C

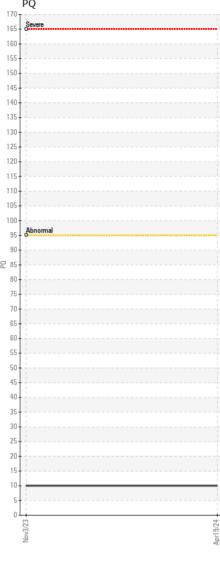
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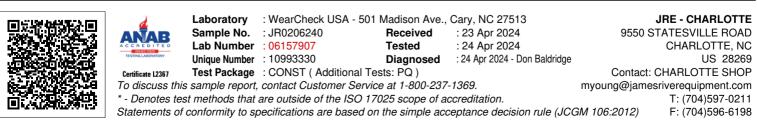
ASTM D445 59

41.8









Submitted By: Ray Benson Page 2 of 2