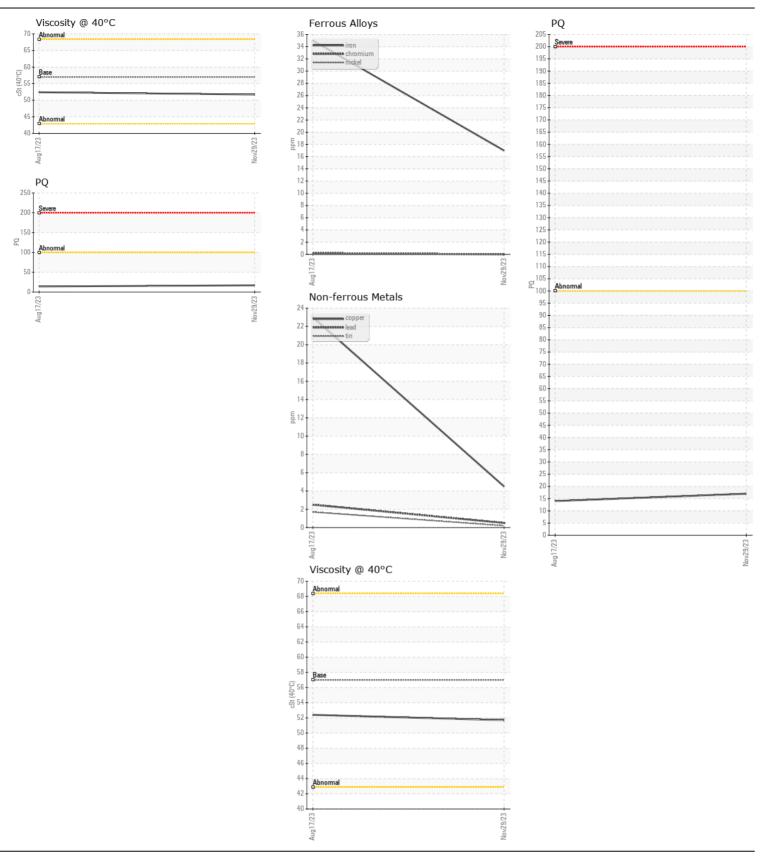


JOHN DEERE 410E-II 5465 (S/N 1DW410EBEMF709413) Component Rear Axle

JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

Beample at the next service interval to monitor. Sample Number Sample Date Ollent Info M0192715 JPD17866	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Dat Clent Info PRM 202 FT value23							-	
Machine AgeInsClient Info42028265OI AgeNrsClient Info10003625Filter AgeNrsClient Info00Sample' StatusClient InfoChangeNot ChangeWEARPQStatusNot NotNot NotAll component wear rates are normal.PQStatus10010NickedpmStatus10010NickedpmStatus10010NickedpmStatus10NickedpmStatus10NickedpmStatusNickedpmStatusNickedpmStatusNickedpmStatusNickedpmStatusAuminupmStatusNickedpmStatusCoppepmStatusNickescataNoteNoteNoteNoteNickescataStatusscataNoteNoteNoteNickescataNoteNoteNote <t< th=""><th>Resample at the next service interval to monitor.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Resample at the next service interval to monitor.							
Oil Age hrs Client Info 1000 3825 Filer Age hrs Client Info Changed Not Chan		•	hrs					
Filter Age filter		-						
Oil Changed Client Info Changed Not Changed Imaged Filter Changed Client Info Changed Not Changed Imaged Sample' Sample' Sample' Not Changed Not Changed Imaged All component wear rates are normal. PO ASTM 05184 >110 0 - Not Changed PO ASTM 05186 >150 17 35 - All component wear rates are normal. PO ASTM 05186 >11 0 - - Not Changed PO ASTM 05186 >11 0 - - All component wear rates are normal. PO ASTM 05186 >11 0 - - Note PO ASTM 05186 >11 0 - - - All minum pon ASTM 05186 >10 1 - - - Copper pon ASTM 05186 >10 1 1 - - Value pon ASTM 05186 >10 1 1 - - Value pon ASTM 05186 >10 1 1 - - Value pon ASTM 05186 >10 1<		-						
Filter Changed Sample Status Client Into Mot Changed NORMA Not Changed NORMA		-						
Sample StatusNORMAL <t< th=""><th></th><th>-</th><th></th><th></th><th></th><th>-</th><th>Not Changd</th><th></th></t<>		-				-	Not Changd	
Iron ppm XTM DD160m 117 35 All component wear rates are normal. Chromium ppm ASTM DD160m 10 0 0 0 Nickel ppm ASTM DD160m 10 0 0 0 0 Titanium ppm ASTM DD160m 20 0		-						
All conjponent weat facts are normal. Chromium ppm ASTM 05185m >11 0 <1	WEAR	PQ		ASTM D8184		17	14	
Chromium ppm ASIM Difision i.11 0 < r1		Iron	ppm	ASTM D5185m	>1501	17	35	
TitaniumppASTM DS185mc1c1c1c1c1c1SilverppASTM DS185mC00AluminumppmASTM DS185m5222LeadppmASTM DS185m51042.30CopperppmASTM DS185m51042.30TinppmASTM DS185m51042.30VanadiumppmASTM DS185m10VanadiumppmASTM DS185m40VanadiumppmASTM DS185mADNENONENONEValow Metalscalar'VisualNONENONENONEPotassiumppmASTM DS185mAMaterVisualNONENONENONENONEDebrisscalar'VisualNONENONENONEAppearancescalar'VisualNONENONENONEMatriscalar'VisualNONENONENONENONESolution of the oil is acceptable for the time in service.SolutionppmASTM DS185m523MagnaenseppmASTM DS185mASTM DS185mASTM AThe condition of the oil is acceptable for the	Al component wear rates are normal.	Chromium	ppm	ASTM D5185m	>11	0	<1	
Titanium ppm ASTM D5185n Silver ppm ASTM D5185n >21 0 0 0 Aluminum ppm ASTM D5185n >21 2 2 Lead ppm ASTM D5185n >101 4 23 Copper ppm ASTM D5185n >101 4 23 Tin ppm ASTM D5185n >101 4 23 Vanadium ppm ASTM D5185n >101 4 23 Value None NONE NONE NONE NONE NONE Value Scalar 'Visual NONE NONE NONE Silicon ppm ASTM D5185n >20 0 -1 Debris Scalar 'Visual NONE NONE NONE Sand/Dirt Scalar		Nickel				0	0	
Silver ppm ASTM 558m 0 0 0 Aluminum ppm ASTM 558m >51 2 2 Lead ppm ASTM 558m >51 <1 2 Copper ppm ASTM 558m >10 <1 2 Copper ppm ASTM 558m >10 <1 2 Vanadium ppm ASTM 558m >10 <1 2 Vanadium ppm ASTM 558m >10 <1 2 Vanadium ppm ASTM 558m >10 <1 0 Vanadium ppm ASTM 558m >10 NONE NONE Vanadium ppm ASTM 558m >20 0 <1 Vanadium port ASTM 558m >20 NONE NONE Silic scalar Visual NONE NONE <th></th> <th>Titanium</th> <th></th> <th>ASTM D5185m</th> <th></th> <th><1</th> <th><1</th> <th></th>		Titanium		ASTM D5185m		<1	<1	
LeadpmASTM D5185n>51<1						0	0	
Copper ppm ASTM D5185n >101 4 233 Tin ppm ASTM D5185n >10 <1 2 Vanadium ppm ASTM D5185n >10 <1 2 Vanadium ppm ASTM D5185n >10 RONE NONE Vanadium ppm ASTM D5185n >31 A Valow Metal scalar 'Visual NONE NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185n >31 A 4 Water Volual NONE NONE NONE NONE Sand/Dirit scalar 'Visual NONE NONE NONE Appearance scalar 'Visual NOR NORM NORM FLUID CONDITION Sodium ppm ASTM D5185n 0 0 <		Aluminum	ppm	ASTM D5185m	>21	2	2	
Tin ppm ASTM D5185m >10 <1		Lead	ppm	ASTM D5185m	>51	<1	2	
Vanadium White Metal White Metalscalar'Visual VisualNONE<1		Copper	ppm	ASTM D5185m	>101	4	23	
White Metalscalar"VisualNONENONENONEYellow Metalscalar"VisualNONENONENONENONENoneppmASTM D5185m>3144There is no indication of any contamination in the oil.PotassiumppmASTM D5185m>200<1WaterWC Method>0.1NCNENONENONENONENONESiltscalar"VisualNONENONENONENONEDebrisscalar"VisualNONENONENONEAgpearancescalar"VisualNORMNORMNONEAppearancescalar"VisualNORMNORMNORMThe condition of the oil is acceptable for the time in service.SodiumppmASTM D5185m>5123BarumppmASTM D5185m000MaganeseppmASTM D5185m129104MaganeseppmASTM D5185m1290104MaganeseppmASTM D5185m1290104MaganeseppmASTM D5185m1290104Colosimon ppmASTM D5185m1290104MagnesiumppmASTM D5185m1290104Magnesiumppm		Tin	ppm	ASTM D5185m	>10	<1	2	
Yellow Metalscalar*VisualNONENONENONENONECONTAMINATIONSiliconppmASTM D5/85m>3144PotassiumppmASTM D5/85m>200<1WaterWaterWC Method>0.1NEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLFLUID CONDITIONSodiumppmASTM D5/85m>5123The condition of the oil is acceptable for the time in service.SodiumppmASTM D5/85m01<1BariumppmASTM D5/85m014<1MalganesiumppmASTM D5/85m014<1MalganesiumppmASTM D5/85m0143634MalganesiumppmASTM D5/85m15498104MalganesiumppmASTM D5/85m1541533644MalganesiumppmASTM D5/85m154981046 <th></th> <th>Vanadium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th><1</th> <th>0</th> <th></th>		Vanadium	ppm	ASTM D5185m		<1	0	
Silicon ppm ASTM D5185m -31 4 4		White Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium pp ASTM D5185m >20 0 <1		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium pp ASTM D5185m >20 0 <1								
Water WC Method >.0.1 NEG NEG Silt scalar Visual NONE NONE NONE Debris scalar Visual NONE NONE NONE Sand/Dirt scalar Visual NONE NONE NONE Appearance scalar Visual NOR NORM NORML Odor scalar Visual NOR NORM NORML Odor scalar Visual NOR NORM NORML Emulsified Water scalar Visual NOR NORM NORML FLUID CONDITION Sodium ppm ASTM DS185m 0 1 Molybdenum ppm ASTM DS185m 0 0 0 Magnesium ppm ASTM DS185m 0 1 -1 Magnesium ppm ASTM DS185m 0 0 0 <th>CONTAMINATION</th> <th></th> <th>ppm</th> <th></th> <th></th> <th></th> <th></th> <th></th>	CONTAMINATION		ppm					
Siltscalar'VisualNONENONEDebrisscalar'VisualNONENONENONESand/Dirtscalar'VisualNONENONENONEAppearancescalar'VisualNORHNORHLNORHLOdorscalar'VisualNORHNORHLNORHLOdorscalar'VisualNORHNORHLEmulsified Waterscalar'VisualNORHNORHLSodiumppmASTM D5185m-5123.3BoronppmASTM D5185m0.41.0BariumppmASTM D5185m0.41.0MolybdenumppmASTM D5185m0.41.0MaganeseppmASTM D5185m1.459.81.04CalciumppmASTM D5185m1.459.841.04PhosphorusppmASTM D5185m1.2901.0331.076ZincppmASTM D5185m1.6401.2051.318SulfurppmASTM D5185m1.6401.2051.318	There is no indication of any contamination in the oil.		ppm					
Debrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLEmulsified Waterscalar*VisualNORNORMLNORMLNORMLFLUID CONDITIONSodiumppmASTM05185-5.123.2BoronppmASTM05185600BariumppmASTM0518501<1MolybdenumppmASTM05185000ManganeseppmASTM0518514598104CalciumppmASTM0518514598104PhosphorusppmASTM0518512910331076SulfurppmASTM0518516412051318								
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLEmulsified Waterscalar*Visualscilar*VisualNORNORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m>5123BoronppmASTM D5185m50000BariumppmASTM D5185m01<1<MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m1459810.4MangensiumppmASTM D5185m14598.410.4PhosphorusppmASTM D5185m14510.0310.7MangensiumppmASTM D5185m14.911.04MangensiumppmASTM D5185m14.910.4CalciumppmASTM D5185m14.910.0510.7MangensiumppmASTM D5185m14.012.0513.18MangensiumppmASTM D5185m14.012.0513.18MangensiumppmASTM D5185m16.4012.0513.18Mangensium<			scalar					
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMNORML <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>								
Normal Emulsified Waterscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185m>5123BoronppmASTM D5185m600BariumppmASTM D5185m01<1MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m14598104CalciumppmASTM D5185m14598104PhosphorusppmASTM D5185m12010331076ZincppmASTM D5185m16412051318SulfurppmASTM D5185m16412051318			scalar					
Emulsified Waterscalar*Visual>0.1NEGNEGFLUID CONDITIONSodiumppmASTM D5185m51123BoronppmASTM D5185m600BariumppmASTM D5185m01<1MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m000MagnesiumppmASTM D5185m14598104CalciumppmASTM D5185m157033443694PhosphorusppmASTM D5185m120010331076ZincppmASTM D5185m164012051318SulfurppmASTM D5185m532324373		••						
FLUID CONDITION Sodium ppm ASTM D5185m >51 2 3 Boron ppm ASTM D5185m 6 0 0 Barium ppm ASTM D5185m 0 1 <1< Molybdenum ppm ASTM D5185m 0 1 <1 Manganese ppm ASTM D5185m 145 98 104 Calcium ppm ASTM D5185m 145 98 104 Phosphorus ppm ASTM D5185m 145 98 104 Inc ppm ASTM D5185m 145 98 104 Calcium ppm ASTM D5185m 1450 98 1044 Inc ppm ASTM D5185m 1450 1043 1047 Sulfur ppm ASTM D5185m 1450 1033 10766 Sulfur ppm								
Boron ppm ASTM D5185m 6 0 0 Barium ppm ASTM D5185m 0 1 <1 Molybdenum ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnesee ppm ASTM D5185m 145 98 104 Magnesium ppm ASTM D5185m 145 98 104 Calcium ppm ASTM D5185m 145 98 104 Phosphorus ppm ASTM D5185m 1200 1033 1076 Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 1205 1318		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Barium ppm ASTM D5185m 0 1 <1	FLUID CONDITION	Sodium	ppm	ASTM D5185m	>51	2	3	
BariumppmASTM D5185m01<1	The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	6	0	0	
Manganese ppm ASTM D5185m 3 Magnesium ppm ASTM D5185m 145 98 104 Calcium ppm ASTM D5185m 3570 3344 3694 Phosphorus ppm ASTM D5185m 1200 1033 1076 Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 1232 4373		Barium	ppm	ASTM D5185m	0	1	<1	
Magnesium ppm ASTM D5185m 145 98 104 Calcium ppm ASTM D5185m 3570 3344 3694 Phosphorus ppm ASTM D5185m 1290 1033 1076 Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 3232 4373		Molybdenum	ppm	ASTM D5185m	0	0	0	
Calcium ppm ASTM D5185m 3570 3344 3694 Phosphorus ppm ASTM D5185m 1290 1033 1076 Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 3232 4373		Manganese	ppm	ASTM D5185m		<1	3	
Phosphorus ppm ASTM D5185m 1290 1033 1076 Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 3232 4373		Magnesium	ppm	ASTM D5185m	145	98	104	
Zinc ppm ASTM D5185m 1640 1205 1318 Sulfur ppm ASTM D5185m 1640 1318		Calcium	ppm	ASTM D5185m	3570	3344	3694	
Sulfur ppm ASTM D5185m 3232 4373		Phosphorus	ppm	ASTM D5185m	1290	1033	1076	
		Zinc	ppm	ASTM D5185m	1640	1205	1318	
Visc @ 40°C cSt ASTM D445 57.0 52.4		Sulfur	ppm	ASTM D5185m		3232	4373	
		Visc @ 40°C	cSt	ASTM D445	57.0	51.7	52.4	

Submitted By: Mike Young - CHARLOTTE SHOP



CK CONTRACTING Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0192715 Recieved : 10 Jan 2024 124-1 WOODING PL Lab Number : 06056893 KINGS MOUNTAIN, NC Diagnosed : 11 Jan 2024 : 10822842 Unique Number Diagnostician : Sean Felton US 28086 Test Package : CONST (Additional Tests: PQ) Contact: TAM WRIGHT Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. twright@ckcdllc.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (704)730-9948 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (704)730-9975

Submitted By: Mike Young - CHARLOTTE SHOP

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