WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

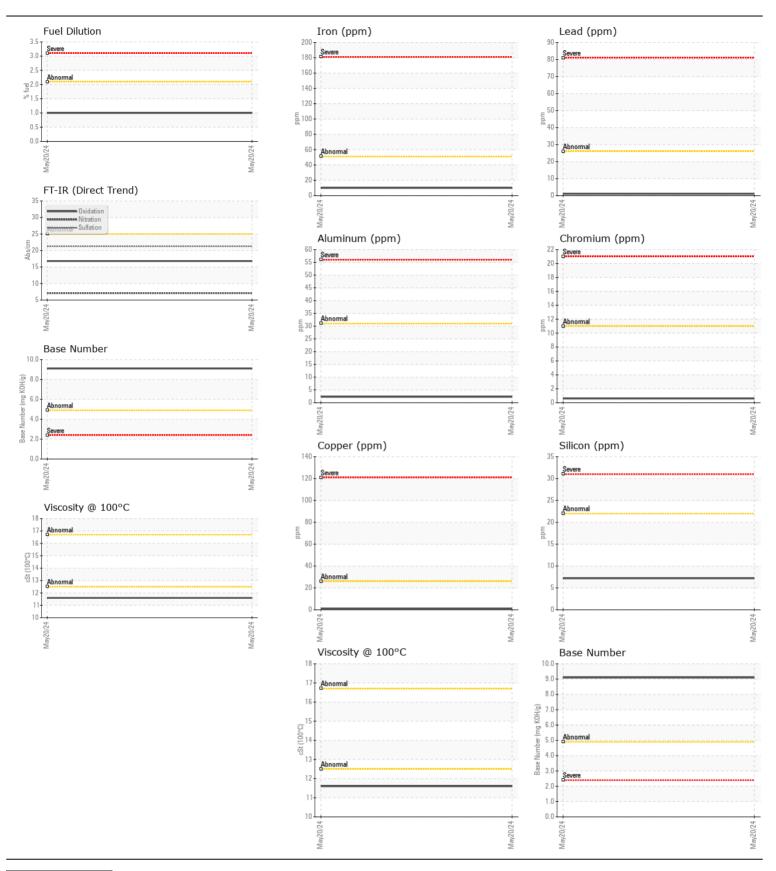


[W35648] JOHN DEERE 310SK 240081

Diesel Engine

{not provided} (--- GAL)

Test	{not provided} (GAL)							
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. Amount of the oil of the oil on your next sample. Amount of the oil of the oil on your next sample. Amount of the oil of oil of the o	RECOMMENDATION	Test	HOM	Method	Limit/Δhn	Current	History1	History2
No corrective action is recommended at this time. Resample at the most service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and		OOW		LIIIIU/ADII			
Machine Age his Cilent Info 0		•						
Col Age			hre			-		
Filter Age Dris Client Info Not Change Client Info Change Client Info Not Change Client Info Change Client Info Change Ch		•						
Cilchanged Cil								
Filter Changed Sample Status Sample Status			1115					
Normal N						•		
Iron		•		Client into				
All component wear rates are normal. Chromium ppm ppm ASTM D6185m 51 51 51 51 51 51 51		Sample Status				NORMAL		
All component wear rates are normal. Chromium ppm ppm ASTM D6185m 51 51 51 51 51 51 51	WEAR	Iron	mag	ASTM D5185m	>51	10		
Nicke								
Titanium ppm ASTM D5186m <1 Silver ppm ASTM D5186m >3 <1 ASTM D5186m >3 <1 ASTM D5186m >3 <1 ASTM D5186m >26 1 Copper ppm ASTM D5186m >26 1 Copper ppm ASTM D5186m >26 1 Tin ppm ASTM D5186m >26 1 Vanadium ppm ASTM D5186m >20 3 Valual NONE NONE Appearance scalar Visual NONE NONE Appearance scalar Visual NONE NONE Appearance scalar Visual NONE NONE ASTM D5186m 20 21 3 ASTM D5186m NONE ASTM D5186m NONE ASTM D5186m NONE ASTM D5186m 111 ASTM D5186m 111 ASTM D5186m 47 ASTM D5186m 1110 ASTM D5186m 3667 ASTM D5186m 36								
Silver ppm ASTM 05186m >3 <1			• •					
Aluminum ppm ASTM D5186m >26 1					>3			
Lead ppm ASTM DS185m >26 1			• •					
Copper								
Tin			• •					
Vanadium Vanadium								
White Metal Yellow Metal Scalar Visual NONE NONE NONE NONE					77			
Vallow Metal Scalar Visual NONE NO					NONE			
Silicon ppm ASTM D5185m >22 7								
Potassium ppm ASTM D5185m >20 3		Tellow Metal	Scalai	Visuai	NONL	INONE		
Potassium ppm ASTM D5185m >20 3	CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	7		
Fuel content negligible. No other contaminants were detected in the oil. Fuel % ASTM D3524 >2.1 1.0 Water WC Method NEG Soot % % *ASTM D7844 >3 0.4 Sulfation Abs/mm *ASTM D7845 >30 21.3 Silt Scalar * Visual NONE NONE NONE Debris Scalar * Visual NONE NONE NONE Appearance Scalar * Visual NORML NORML NORML NORML NORML Appearance Scalar * Visual NORML	33117.tmm12111311	Potassium	• •					
Water WC Method 0.21 NEG Glycol WC Method Soot % NEG WC Method Soot % NEG WC Method NEG WC Method Soot % NEG WC WC Method NEG WC	Fuel content negligible. No other contaminants were detected in the oil.							
Glycol								
Soot % % "ASTM D7844 >3 0.4 Nitration Abs/cm "ASTM D7624 >20 7.1 Sulfation Abs/.tmm "ASTM D7645 >30 21.3 Sulfation Abs/.tmm "ASTM D7415 >30 21.3 Sulfation Abs/.tmm "ASTM D7414 >3 0.4 Sulfation Abs/.tmm "ASTM D7414 >20 7.1 Sulfation Abs/.tmm "ASTM D7414 >20 7.1 Sulfation Abs/.tmm "ASTM D7414 >20 7.1 Sodium ASTM D785m 1812 Magnesium ppm ASTM D5185m 391 ASTM D5185m 391 Calcium ppm ASTM D5185m 391 ASTM D5185m 391 Calcium ppm ASTM D5185m 3667 Coxidation Abs/.tmm "ASTM D7414 >25 16.8 Coxidation Abs/.tmm "ASTM D7414 >25 16.8 Coxidation Abs/.tmm "ASTM D2896 9.1								
Nitration		-	%		>3			
Sulfation Abs/.fmm *ASTM D7415 >30 21.3								
Silt scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NORE								
Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML								
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM								
Appearance		Sand/Dirt						
Oddr		Appearance						
Emulsified Water scalar *Visual >0.21 NEG								
Sodium ppm ASTM D5185m >31 2		Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron ppm ASTM D5185m 111 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 47 Manganese ppm ASTM D5185m 47 Manganese ppm ASTM D5185m 47 Manganese ppm ASTM D5185m 391 Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service. Barium ppm ASTM D5185m 47 Molybdenum ppm ASTM D5185m 47 Manganese ppm ASTM D5185m 391 Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1	FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	2		
oil. The condition of the oil is acceptable for the time in service. Molybdenum ppm ASTM D5185m 47 Manganese ppm ASTM D5185m 47 Magnesium ppm ASTM D5185m 391 Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1	The DN requit indicates that there is quitable alkalinity remaining in the		ppm	ASTM D5185m				
Molybdenum ppm ASIM D5185m 47 Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 391 Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1	, ,	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 391 Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Molybdenum	ppm	ASTM D5185m		47		
Calcium ppm ASTM D5185m 1812 Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Manganese	ppm	ASTM D5185m		<1		
Phosphorus ppm ASTM D5185m 971 Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Magnesium	ppm	ASTM D5185m		391		
Zinc ppm ASTM D5185m 1170 Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Calcium	ppm	ASTM D5185m		1812		
Sulfur ppm ASTM D5185m 3667 Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Phosphorus	ppm	ASTM D5185m		971		
Oxidation Abs/.1mm *ASTM D7414 >25 16.8 Base Number (BN) mg KOH/g ASTM D2896 9.1		Zinc	ppm	ASTM D5185m		1170		
Base Number (BN) mg KOH/g ASTM D2896 9.1		Sulfur	ppm	ASTM D5185m		3667		
		Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8		
Visc @ 100°C cSt ASTM D445		Base Number (BN)	mg KOH/g	ASTM D2896		9.1		
		Visc @ 100°C	cSt	ASTM D445		11.6		





Certificate L2367

Laboratory Sample No. Unique Number : 11046708

Lab Number : 06189956

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0167067

Received **Tested** Diagnosed

: 23 May 2024 : 29 May 2024

: 29 May 2024 - Sean Felton Test Package: MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - FISHERSVILLE 98 EXPO ROAD FISHERSVILLE, VA

US 22939 Contact: MIKE JENKINS

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. MIKE.JENKINS@JAMESRIVEREQUIPMENT.COM T: (540)292-3494

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (540)337-1495

Contact/Location: MIKE JENKINS - JAMFIS