

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



JOHN DEERE 644K 1DW644KZAED661834

Front Axle

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

1ANS (G	IAL)					
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0197513	JR0167646	
Sample Date		Client Info		15 Jan 2024	18 May 2023	
Machine Age	hrs	Client Info		11098	10147	
Oil Age	hrs	Client Info		11098	1000	
Filter Age	hrs	Client Info		0	1000	
Oil Changed		Client Info		Not Changd	N/A	
Filter Changed		Client Info		Not Changd	Changed	
Sample Status				NORMAL	NORMAL	
PQ		ASTM D8184		18	12	
Iron	ppm	ASTM D5185m	>750	171	164	
Chromium	ppm	ASTM D5185m	>11	<1	<1	
Nickel	ppm	ASTM D5185m	>10	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>21	<1	<1	
Lead	ppm	ASTM D5185m	>49	18	18	
Copper	ppm	ASTM D5185m	>101	28	25	
Tin	ppm	ASTM D5185m	>10	2	4	
Vanadium	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185m	>31	9	9	
Potassium	ppm	ASTM D5185m	>20	<1	<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	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Sodium	ppm	ASTM D5185m	>51	6	5	
Boron	ppm	ASTM D5185m	6	11	4	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm		0	2	2	
	ppm	ASTM D5185m		1	2	
Manganese	PP				00	
Manganese Magnesium	ppm	ASTM D5185m	145	91	99	
		ASTM D5185m ASTM D5185m		91 2948	3256	
Magnesium	ppm		3570			
Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m	3570 1290	2948	3256	
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	3570 1290	2948 1069	3256 1034	
	Test Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	Sample Number Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status PQ Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Water Silt scalar Selit scalar Sand/Dirt scalar Appearance scalar Codor scalar Emulsified Water scalar Sodium ppm Boron ppm Barium ppm Molybdenum ppm	Test UOM Method Sample Number Client Info Sample Date Client Info Machine Age hrs Client Info Oil Age hrs Client Info Oil Age hrs Client Info Filter Age hrs Client Info Oil Changed Client Info Sample Status PQ ASTM D8184 Iron ppm ASTM D5185m Chromium ppm ASTM D5185m Titanium ppm ASTM D5185m Titanium ppm ASTM D5185m Aluminum ppm ASTM D5185m Lead ppm ASTM D5185m Copper ppm ASTM D5185m Tin ppm ASTM D5185m White Metal scalar *Visual Yellow Metal scalar *Visual Silicon ppm ASTM D5185m Water WC Method Silt scalar *Visual Sand/Dirt scalar *Visual Sodium ppm ASTM D5185m Boron ppm ASTM D5185m Boron ppm ASTM D5185m Barium ppm ASTM D5185m	Test UOM Method Limit/Abn Sample Number Client Info Sample Date Client Info Machine Age hrs Client Info Oil Age hrs Client Info Filter Age hrs Client Info Oil Changed Client Info Filter Changed Client Info Sample Status PQ ASTM D8184 Iron ppm ASTM D5185m >750 Chromium ppm ASTM D5185m >11 Nickel ppm ASTM D5185m >10 Titanium ppm ASTM D5185m >21 Lead ppm ASTM D5185m >21 Lead ppm ASTM D5185m >10 Tin ppm ASTM D5185m >101 Tin ppm ASTM D5185m >101 Tin ppm ASTM D5185m >10 Vanadium ppm ASTM D5185m >20 Water WC Method >0.1 Silt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NONE ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0	Test UOM Method Limit/Abn Current Sample Number Client Info JR0197513 Sample Date Client Info 15 Jan 2024 Machine Age hrs Client Info 11098 Oil Age hrs Client Info 0 Filter Age hrs Client Info Not Changd Filter Changed Client Info Not Changd Sample Status NORMAL NORMAL PQ ASTM D8184 18 Iron ppm ASTM D5185m >750 171 Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m >0 0 Aluminum ppm ASTM D5185m >21 <1	Test







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: JR0197513 : 06063043 : 10834425

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 17 Jan 2024 Diagnosed

: 18 Jan 2024 Diagnostician : Sean Felton

Test Package : CONST (Additional Tests: PQ)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: RALEIGH SHOP sean.betts@jamesriverequipment.com;catherine.anastasio@wearcheck.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)614-2260 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)779-5432

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JRE - GARNER

GARNER, NC

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