

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id **JOHN DEERE 310E 1DW310EXJNF713817** Component Center Axle

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

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

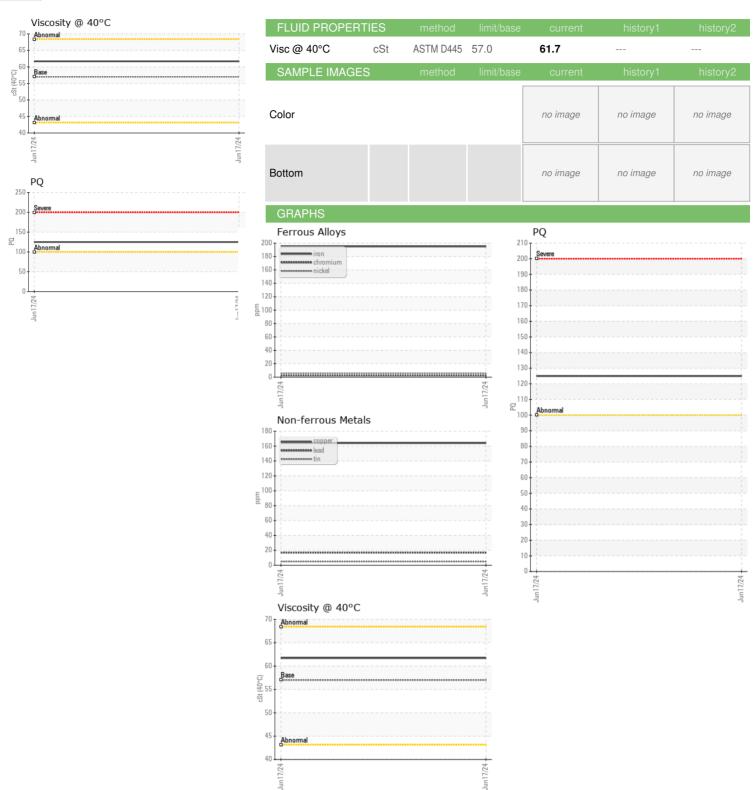
Fluid Condition

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

Sample Number	THID/INANS (
Sample Date Client Info 17 Jun 2024	SAMPLE INFORM	MOITA	method	limit/base	current	history1	history2
Machine Age hrs Client Info 440	Sample Number		Client Info		JR0211628		
Oil Changed	Sample Date		Client Info		17 Jun 2024		
Contament Cont	Machine Age	hrs	Client Info		440		
CONTAMINATION	Oil Age	hrs	Client Info		440		
CONTAMINATION method limit/base current history1 history Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history PQ ASTM D8184 125 Iron ppm ASTM D5185m >1501 195 Chromium ppm ASTM D5185m >10 6 Nickel ppm ASTM D5185m >10 6 Silver ppm ASTM D5185m >10 6 Silver ppm ASTM D5185m >1 17 Silver ppm ASTM D5185m >51 17 Aluminum ppm ASTM D5185m >10 5 Copper ppm ASTM D5185m >10 5 <td< td=""><td>Oil Changed</td><td></td><td>Client Info</td><td></td><th>Changed</th><td></td><td></td></td<>	Oil Changed		Client Info		Changed		
Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history PQ ASTM D8184 125 Iron ppm ASTM D5185m >1501 195 Chromium ppm ASTM D5185m >10 6 Nickel ppm ASTM D5185m >10 6 Titanium ppm ASTM D5185m >10 6 Aluminum ppm ASTM D5185m >21 3 Aluminum ppm ASTM D5185m >51 17 Caded ppm ASTM D5185m >10 5 Vanadium ppm ASTM D5185m >10 5 Cadmium ppm ASTM D5185m 6 104 </td <td>Sample Status</td> <td></td> <td></td> <td></td> <th>NORMAL</th> <td></td> <td></td>	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history1 PQ ASTM D8184 125 Iron ppm ASTM D5185m >1501 195 Chromium ppm ASTM D5185m >11 3 Nickel ppm ASTM D5185m >10 6 Silver ppm ASTM D5185m >10 6 Aluminum ppm ASTM D5185m >21 3 Aluminum ppm ASTM D5185m >51 17 Aluminum ppm ASTM D5185m >10 5 Aluminum ppm ASTM D5185m >10 5 Copper ppm ASTM D5185m >10 5 Vanadium ppm ASTM D5185m >10 5	CONTAMINATION	١	method	limit/base	current	history1	history2
PQ	Water		WC Method	>0.1	NEG		
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Chromium	PQ		ASTM D8184		125		
Nickel ppm	Iron	ppm	ASTM D5185m	>1501	195		
Titanium	Chromium	ppm	ASTM D5185m	>11	3		
Silver	Nickel		ASTM D5185m	>10	6		
Silver					_		
Aluminum							
Lead				>21			
Copper ppm ASTM D5185m >101 164 Tin ppm ASTM D5185m >10 5 Vanadium ppm ASTM D5185m <1							
Tin							
Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 5 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 <1 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 145 22 Calcium ppm ASTM D5185m 3570 3507 Phosphorus ppm ASTM D5185m 1290 1016 Zinc ppm ASTM D5185m 1290 1016 Sulfur ppm ASTM D5185m 351 22	• •				-		
Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 6 104 Barium ppm ASTM D5185m 0 5 Molybdenum ppm ASTM D5185m 0 <1				>10	_		
ADDITIVES							
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Barium ppm ASTM D5185m 0 5 Molybdenum ppm ASTM D5185m 0 <1						history1	history2
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Manganese ppm ASTM D5185m 7 Magnesium ppm ASTM D5185m 145 22 Calcium ppm ASTM D5185m 3570 3507 Phosphorus ppm ASTM D5185m 1290 1016 Zinc ppm ASTM D5185m 1640 1409 Sulfur ppm ASTM D5185m 3511 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >31 22 Sodium ppm ASTM D5185m >51 21 Potassium ppm ASTM D5185m >20 6 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE	Barium	ppm	ASTM D5185m	0	5		
Magnesium ppm ASTM D5185m 145 22 Calcium ppm ASTM D5185m 3570 3507 Phosphorus ppm ASTM D5185m 1290 1016 Zinc ppm ASTM D5185m 1640 1409 Sulfur ppm ASTM D5185m 3511 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >31 22 Sodium ppm ASTM D5185m >51 21 Potassium ppm ASTM D5185m >20 6 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE<	Molybdenum	ppm	ASTM D5185m	0	<1		
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Phosphorus ppm ASTM D5185m 1290 1016 Zinc ppm ASTM D5185m 1640 1409 Sulfur ppm ASTM D5185m 3511 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >31 22 Sodium ppm ASTM D5185m >51 21 Potassium ppm ASTM D5185m >20 6 VISUAL method limit/base current history1 history1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE	Magnesium	ppm	ASTM D5185m	145	22		
Zinc	Calcium	ppm	ASTM D5185m	3570	3507		
Sulfur ppm ASTM D5185m 3511 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >31 22 Sodium ppm ASTM D5185m >51 21 Potassium ppm ASTM D5185m >20 6 VISUAL method limit/base current history1 history1 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORML	Phosphorus	ppm	ASTM D5185m	1290	1016		
CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >31 22 Sodium ppm ASTM D5185m >51 21 Potassium ppm ASTM D5185m >20 6 VISUAL method limit/base current history history White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML	Zinc	ppm	ASTM D5185m	1640	1409		
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VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Silicon	ppm	ASTM D5185m	>31	22		
VISUAL method limit/base current history1 history1 White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Codor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Sodium	ppm	ASTM D5185m	>51	21		
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Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	White Metal	scalar	*Visual	NONE	MODER		
Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Yellow Metal	scalar	*Visual	NONE	NONE		
Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Precipitate	scalar	*Visual	NONE	NONE		
Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Silt	scalar	*Visual	NONE	NONE		
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG	Debris	scalar			NONE		
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Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG							
Emulsified Water scalar *Visual >0.1 NEG							
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From Water coalar Wiellal NEC Callys, DAVID AILG - JANVA	Free Water	scalar	*Visual	20.1	NEG		



OIL ANALYSIS REPORT





Laboratory Sample No.

: JR0211628 Lab Number : 06219967 Unique Number : 11098164

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Jun 2024 **Tested**

: 26 Jun 2024 Diagnosed

: 26 Jun 2024 - Sean Felton

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

Contact: DAVID ZIEG

F: (804)798-0292

Test Package : CONST (Additional Tests: PQ) Certificate 12367 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.

dzieg@jamesriverequipment.com T: (804)798-6001

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: JAMASH [WUSCAR] 06219967 (Generated: 06/27/2024 13:00:42) Rev: 1

Contact/Location: DAVID ZIEG - JAMASH