

PROBLEM SUMMARY

Sample Rating Trend

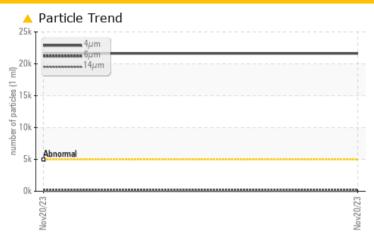
ISO

A-322

Component **Hydraulic System**

JOHN DEERE HYDRAU (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

PROBLEMATIC TES	T RESULTS				
Sample Status			ABNORMAL	 	
Particles >4µm	ASTM D7647	>5000	<u> </u>	 	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	22/14/11	 	

Customer Id: DUKRAL Sample No.: WC0828497 Lab Number: 06015016 Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

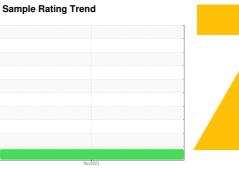
To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Resample			?	We recommend an early resample to monitor this condition.
Information Required			?	Please specify the component make and model with your next sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



ISO

Machine Id A-322 Component

Hydraulic System

JOHN DEERE HYDRAU (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

				Nov2023		
CAMPLE INCORN	AATIONI				In Contract of	la la tarre O
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0828497		
Sample Date		Client Info		20 Nov 2023		
Machine Age	hrs	Client Info		6566		
Oil Age	hrs	Client Info		566		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	12		
Chromium	ppm	ASTM D5185m	>10	2		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	1		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 55	history1	history2
	ppm ppm		limit/base			
Boron	• •	ASTM D5185m	limit/base	55		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	55 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	55 0 11		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	55 0 11		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		55 0 11 0 28		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87	55 0 11 0 28 569		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727	55 0 11 0 28 569 761		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727 900	55 0 11 0 28 569 761		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727 900 1500 limit/base	55 0 11 0 28 569 761 931 1863		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727 900 1500 limit/base	55 0 11 0 28 569 761 931 1863		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	87 727 900 1500 limit/base >20	55 0 11 0 28 569 761 931 1863 current		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	87 727 900 1500 limit/base >20	55 0 11 0 28 569 761 931 1863 current 6		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	87 727 900 1500 limit/base >20 >20	55 0 11 0 28 569 761 931 1863 current 6 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	87 727 900 1500 limit/base >20 >20 limit/base	55 0 11 0 28 569 761 931 1863 current 6 0 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	87 727 900 1500 limit/base >20 >20 limit/base >5000	55 0 11 0 28 569 761 931 1863 current 6 0 2 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300	55 0 11 0 28 569 761 931 1863 current 6 0 2 current 121613 137	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160	55 0 11 0 28 569 761 931 1863		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160 >40	55 0 11 0 28 569 761 931 1863 current 6 0 2 current 137 11 3		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	55 0 11 0 28 569 761 931 1863 current 6 0 2 current 21613 137 11 3 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10 >3	55 0 11 0 28 569 761 931 1863		

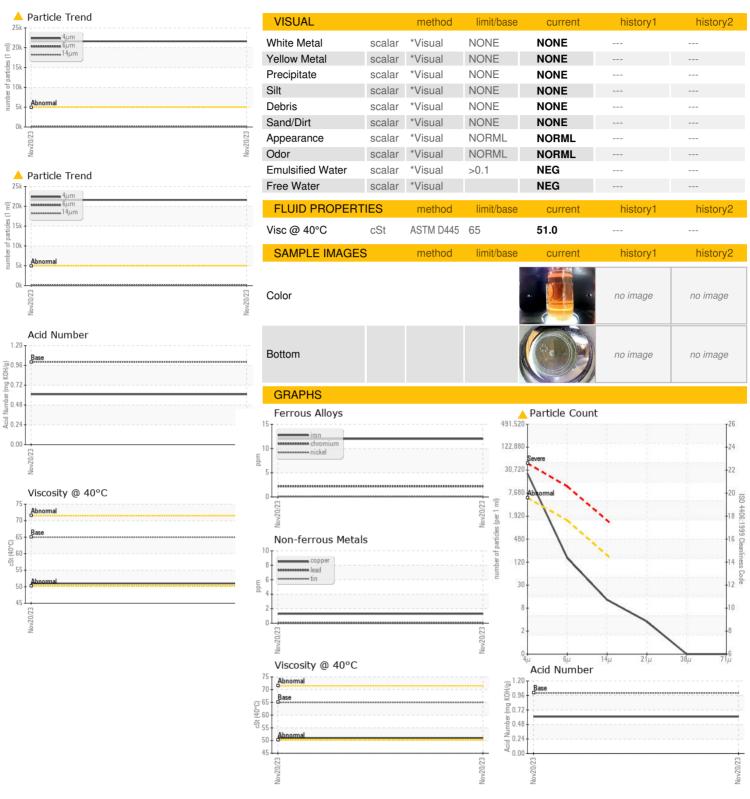
Acid Number (AN)

mg KOH/g ASTM D8045 1.0

Contact/Location: NICK DIXON - DUKRAL



OIL ANALYSIS REPORT





Certificate L2367

Laboratory Sample No. Lab Number Unique Number

: WC0828497 : 06015016 : 10754160 Test Package : CONST To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Nov 2023 Diagnosed : 24 Nov 2023

: Wes Davis Diagnostician

DUKE LAZZARA 4201 FAYETTEVILLE RD RALEIGH, NC US 27603

Contact: NICK DIXON

NICK.DIXON@DUKELAZZAM.COM T: (919)760-7797

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

Contact/Location: NICK DIXON - DUKRAL

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