James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 331G 1T0331GKLPF449953
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

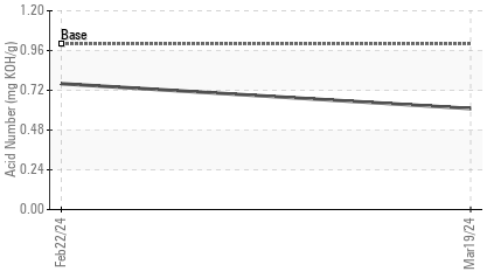
Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

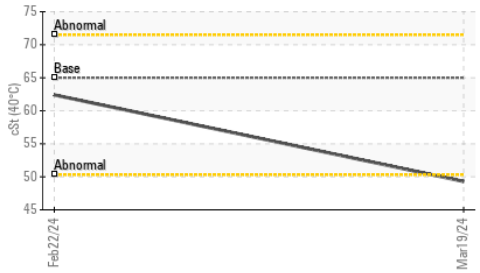
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206368	JR0204269	---
Sample Date		Client Info		19 Mar 2024	22 Feb 2024	---
Machine Age	hrs	Client Info		547	514	---
Oil Age	hrs	Client Info		547	514	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				ABNORMAL	SEVERE	---
PQ		ASTM D8184		15	11	---
Iron	ppm	ASTM D5185m	>20	23	0	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>10	1	0	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>75	6	0	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>20	2	0	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	---	▲ 50763	---
Particles >6µm		ASTM D7647	>1300	---	▲ 6760	---
Particles >14µm		ASTM D7647	>160	---	134	---
Particles >21µm		ASTM D7647	>40	---	18	---
Particles >38µm		ASTM D7647	>10	---	1	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	---	▲ 23/20/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	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		2	0	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		1	3	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		<1	15	---
Calcium	ppm	ASTM D5185m	87	74	120	---
Phosphorus	ppm	ASTM D5185m	727	532	608	---
Zinc	ppm	ASTM D5185m	900	713	829	---
Sulfur	ppm	ASTM D5185m	1500	1573	1488	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.61	0.76	---
Visc @ 40°C	cSt	ASTM D445	65	49.3	62.4	---

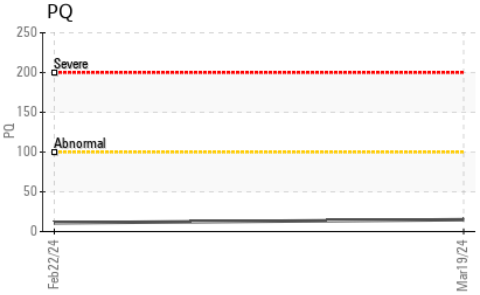
Acid Number



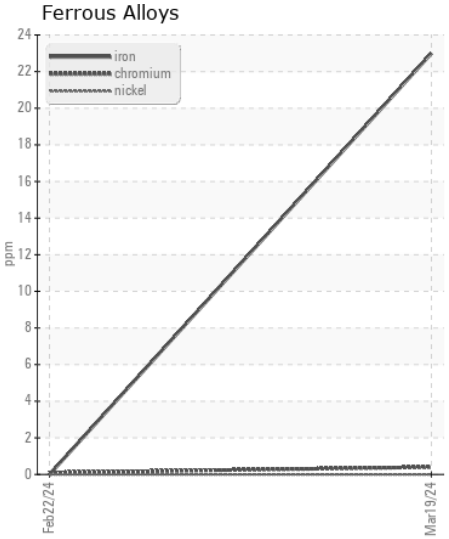
Viscosity @ 40°C



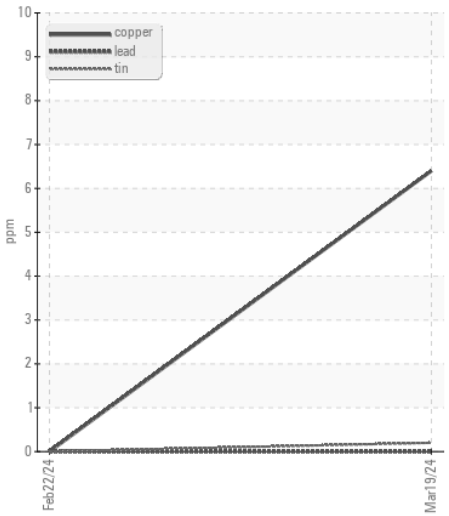
PQ



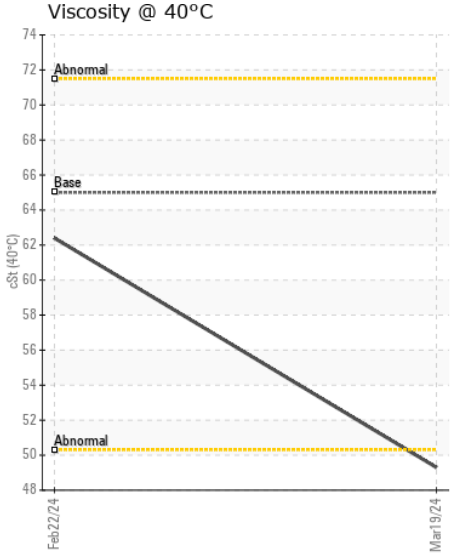
Ferrous Alloys



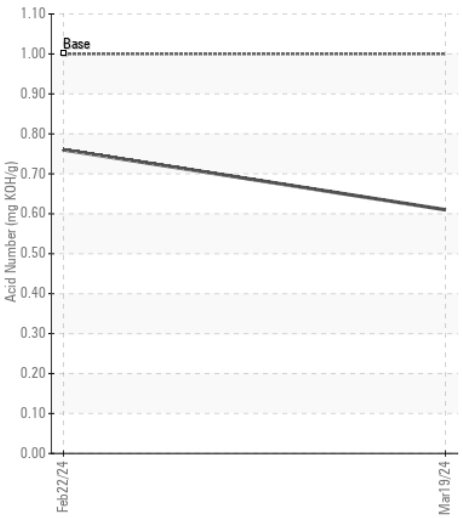
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206368 **Received** : 21 Mar 2024
Lab Number : 06124787 **Tested** : 24 Mar 2024
Unique Number : 10938938 **Diagnosed** : 24 Mar 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PQ)

CARLTON`S BACKHOE
9550 STATESVILLE ROAD
CHARLOTTE, NC
US 28269
Contact: LEO
T: (704)547-0211
F:

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