



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 318D 1T0318DAKDG241161
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0226506	---	---
Sample Date		Client Info		16 Jul 2024	---	---
Machine Age	hrs	Client Info		2624	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

PQ		ASTM D8184	>50	19	---	---
Iron	ppm	ASTM D5185m	>71	51	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>6	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>11	6	---	---
Lead	ppm	ASTM D5185m	>13	3	---	---
Copper	ppm	ASTM D5185m	>21	33	---	---
Tin	ppm	ASTM D5185m	>5	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

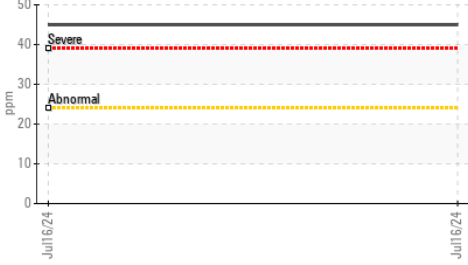
Silicon	ppm	ASTM D5185m	>24	▲ 45	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Water		WC Method	>0.075	NEG	---	---
Particles >4µm		ASTM D7647	>80000	2743	---	---
Particles >6µm		ASTM D7647	>5000	870	---	---
Particles >14µm		ASTM D7647	>640	82	---	---
Particles >21µm		ASTM D7647	>160	19	---	---
Particles >38µm		ASTM D7647	>40	0	---	---
Particles >71µm		ASTM D7647	>10	0	---	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	19/17/14	---	---
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	>0.075	NEG	---	---

FLUID CONDITION

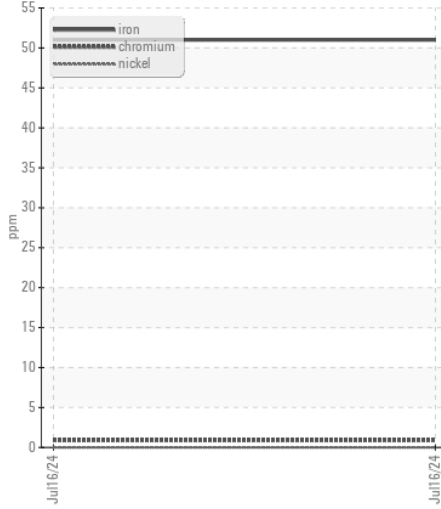
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	4	---	---
Boron	ppm	ASTM D5185m		56	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		50	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		264	---	---
Calcium	ppm	ASTM D5185m		988	---	---
Phosphorus	ppm	ASTM D5185m		693	---	---
Zinc	ppm	ASTM D5185m		766	---	---
Sulfur	ppm	ASTM D5185m		2682	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.67	---	---
Visc @ 40°C	cSt	ASTM D445		43.2	---	---

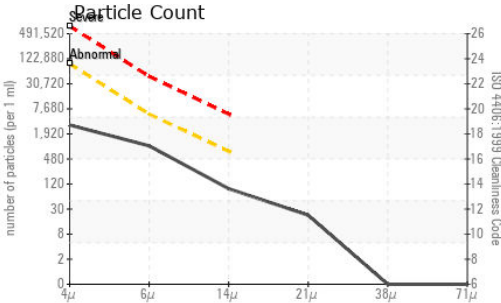
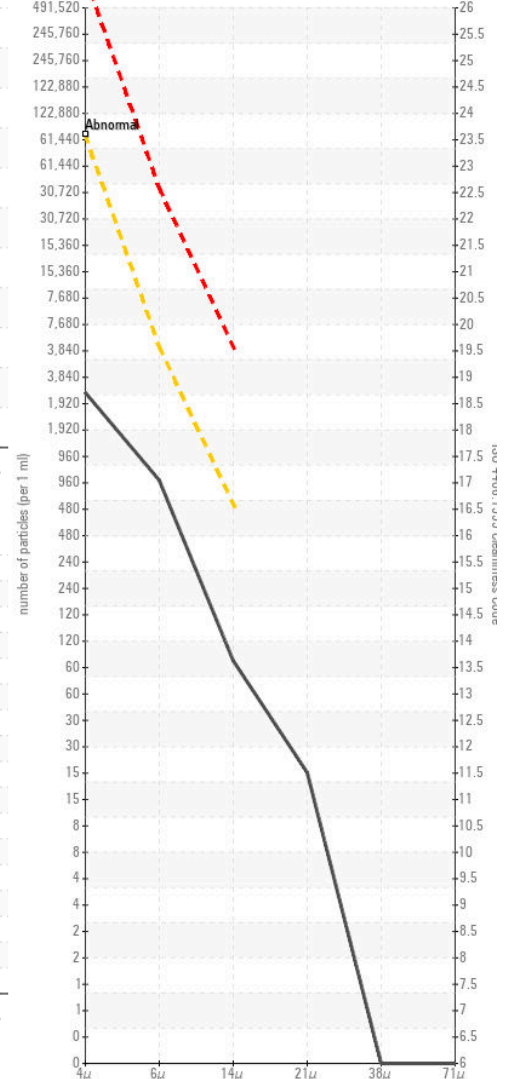
▲ Silicon (ppm)



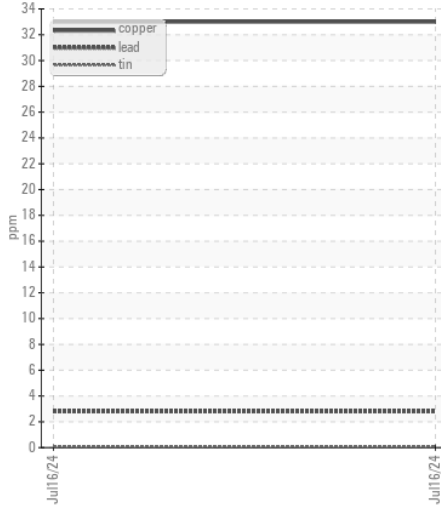
Ferrous Alloys



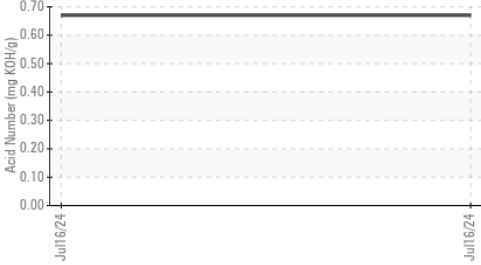
Particle Count



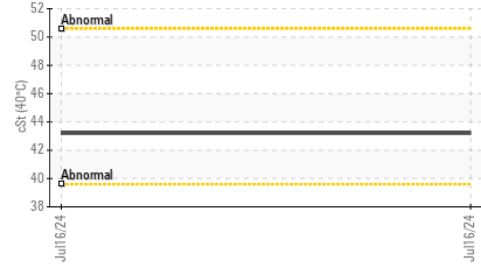
Non-ferrous Metals



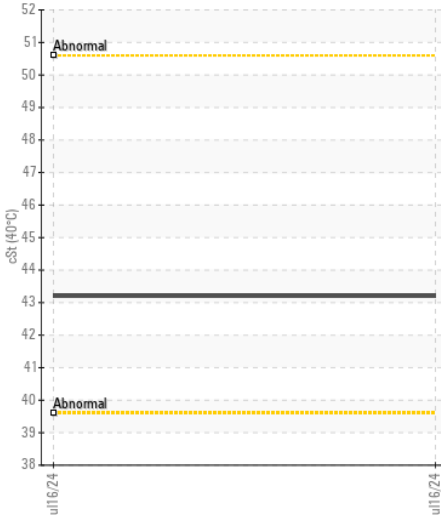
Acid Number



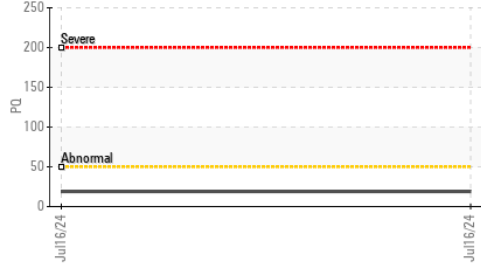
Viscosity @ 40°C



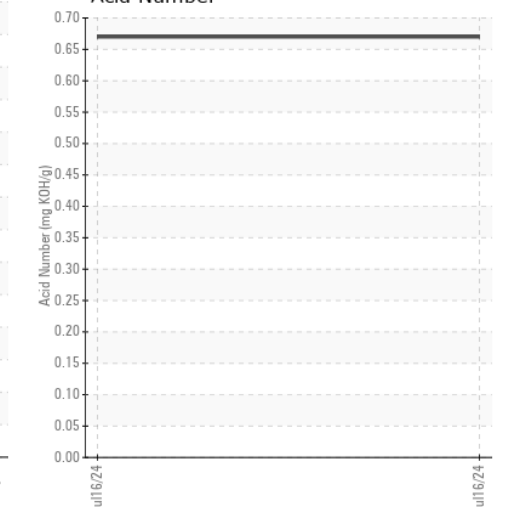
Viscosity @ 40°C



PQ



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0226506 **Received** : 17 Jul 2024
Lab Number : 06239031 **Tested** : 18 Jul 2024
Unique Number : 11127865 **Diagnosed** : 18 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111
 Contact: DON VEST
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 F: (703)631-4715

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)