James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 310E 1DW310EXCMF712103
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

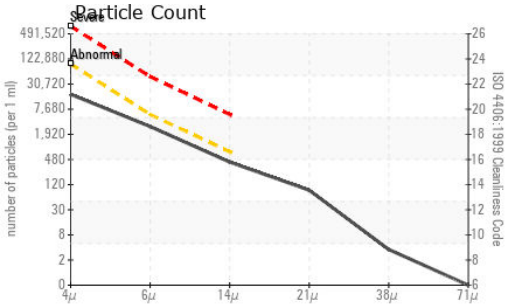
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

FLUID CONDITION

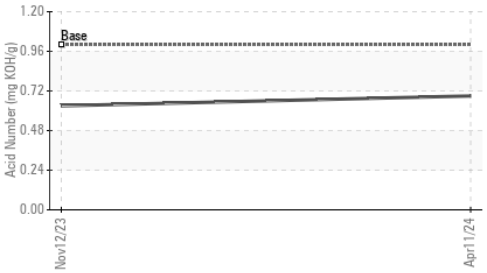
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0212990**	JR0190555	---
Sample Date		Client Info		**11 Apr 2024**	12 Nov 2023	---
Machine Age	hrs	Client Info		**1533**	1533	---
Oil Age	hrs	Client Info		**1533**	0	---
Filter Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Not Changd**	Not Changd	---
Filter Changed		Client Info		**Not Changd**	Not Changd	---
Sample Status				**NORMAL**	NORMAL	---
PQ		ASTM D8184	>50	**17**	11	---
Iron	ppm	ASTM D5185m	>71	**5**	5	---
Chromium	ppm	ASTM D5185m	>11	**1**	1	---
Nickel	ppm	ASTM D5185m	>6	**0**	0	---
Titanium	ppm	ASTM D5185m		**0**	<1	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>11	**1**	1	---
Lead	ppm	ASTM D5185m	>13	**<1**	0	---
Copper	ppm	ASTM D5185m	>21	**2**	2	---
Tin	ppm	ASTM D5185m	>5	**0**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
White Metal	scalar	*Visual	NONE	**NONE**	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185m	>24	**3**	3	---
Potassium	ppm	ASTM D5185m	>20	**4**	2	---
Water		WC Method	>0.075	**NEG**	NEG	---
Particles >4µm		ASTM D7647	>80000	**15131**	14609	---
Particles >6µm		ASTM D7647	>5000	**2587**	685	---
Particles >14µm		ASTM D7647	>640	**366**	80	---
Particles >21µm		ASTM D7647	>160	**78**	25	---
Particles >38µm		ASTM D7647	>40	**3**	1	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	**21/19/16**	21/17/13	---
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	>0.075	**NEG**	NEG	---
Sodium	ppm	ASTM D5185m	>21	**3**	2	---
Boron	ppm	ASTM D5185m		**3**	0	---
Barium	ppm	ASTM D5185m		**<1**	0	---
Molybdenum	ppm	ASTM D5185m		**3**	<1	---
Manganese	ppm	ASTM D5185m		**0**	0	---
Magnesium	ppm	ASTM D5185m		**7**	3	---
Calcium	ppm	ASTM D5185m	87	**95**	82	---
Phosphorus	ppm	ASTM D5185m	727	**556**	583	---
Zinc	ppm	ASTM D5185m	900	**719**	793	---
Sulfur	ppm	ASTM D5185m	1500	**1649**	1487	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.69**	0.63	---
Visc @ 40°C	cSt	ASTM D445	65	**61.8**	58.8	---

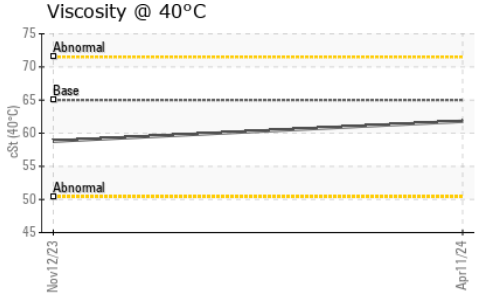
Particle Count



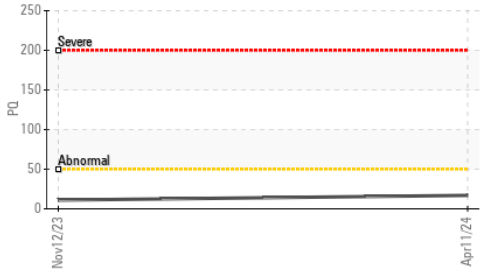
Acid Number



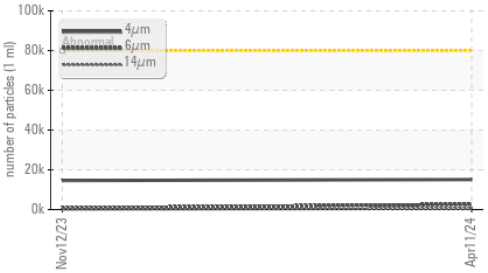
Viscosity @ 40°C



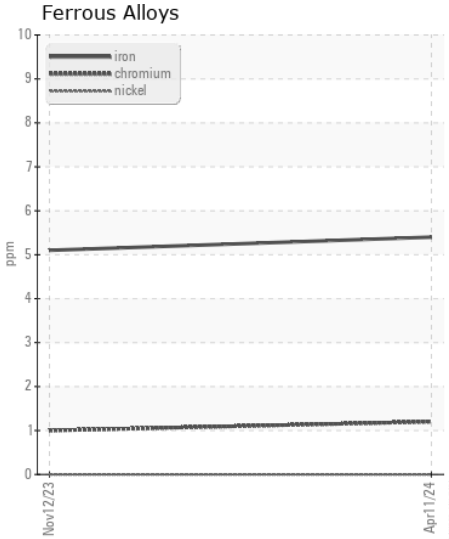
PQ



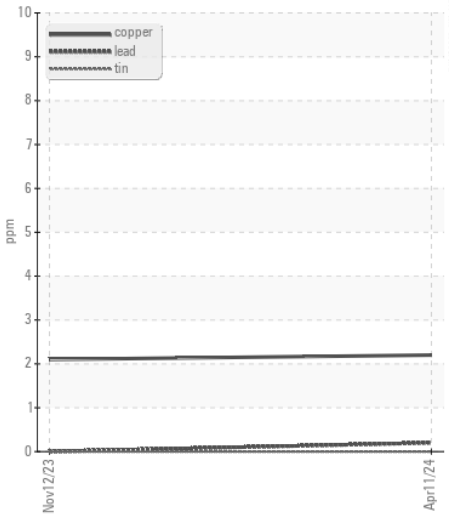
Particle Trend



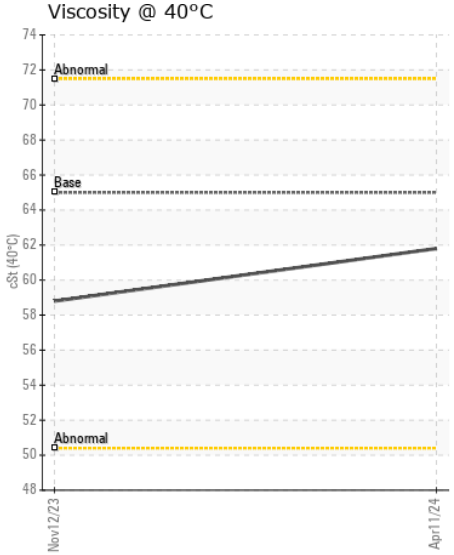
Ferrous Alloys



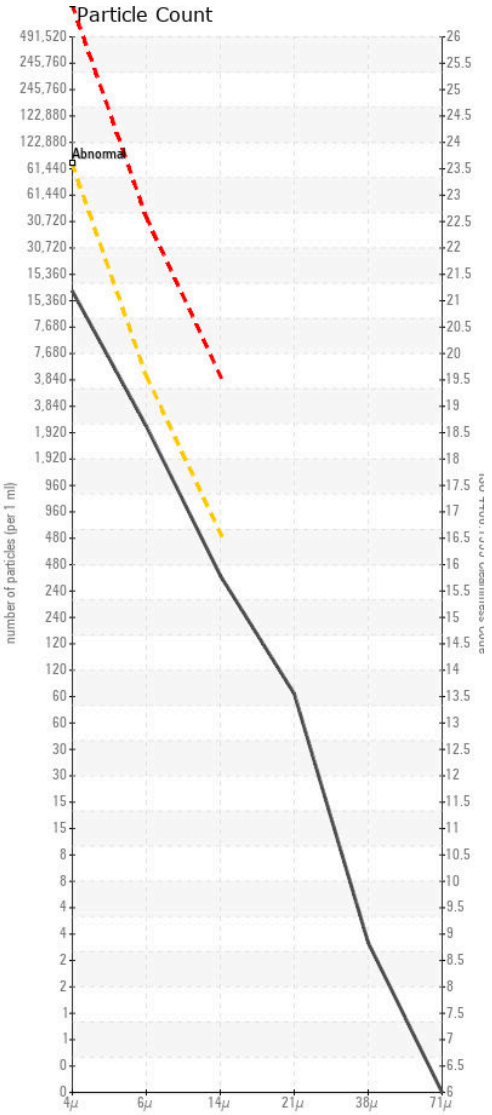
Non-ferrous Metals



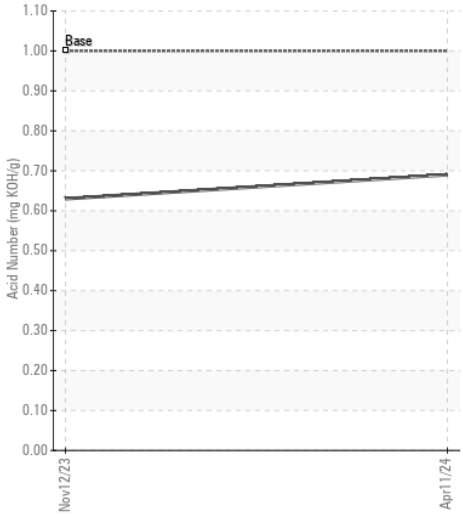
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212990
Lab Number : 06151881
Unique Number : 10981959
Test Package : CONST (Additional Tests: PQ)

Received : 17 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 19 Apr 2024 - Don Baldridge

Certificate L2367

JRE - GARNER
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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)