



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXCMF710030
Component
Front Differential
Fluid
Differential Oil (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0193181	JR0188446	JR0162405
Sample Date		Client Info		02 Jan 2024	13 Sep 2023	10 Apr 2023
Machine Age	hrs	Client Info		3931	3502	2962
Oil Age	hrs	Client Info		3391	540	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		102	19	88
Iron	ppm	ASTM D5185m	>500	197	25	153
Chromium	ppm	ASTM D5185m	>10	1	<1	1
Nickel	ppm	ASTM D5185m	>10	5	<1	3
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	1	2
Lead	ppm	ASTM D5185m	>25	<1	15	0
Copper	ppm	ASTM D5185m	>100	138	3	104
Tin	ppm	ASTM D5185m	>10	6	<1	4
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	MODER

CONTAMINATION

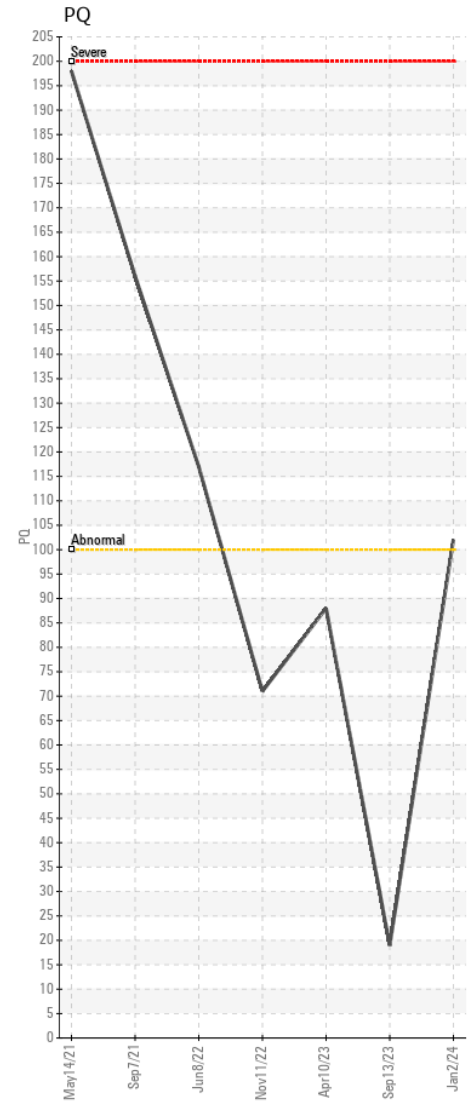
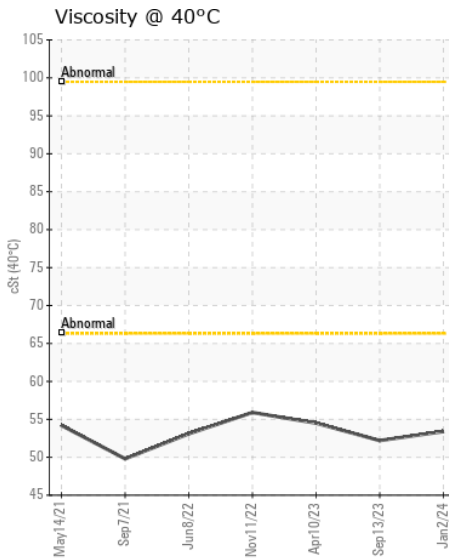
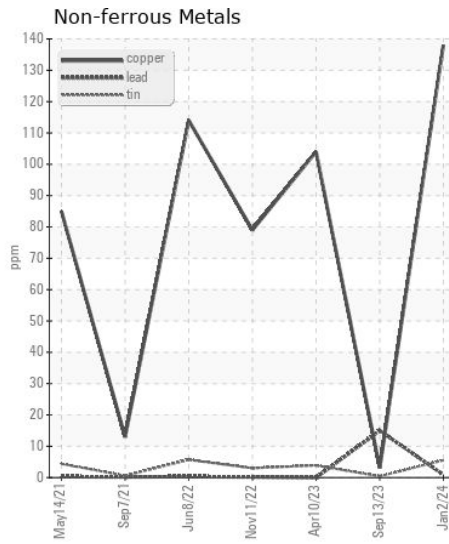
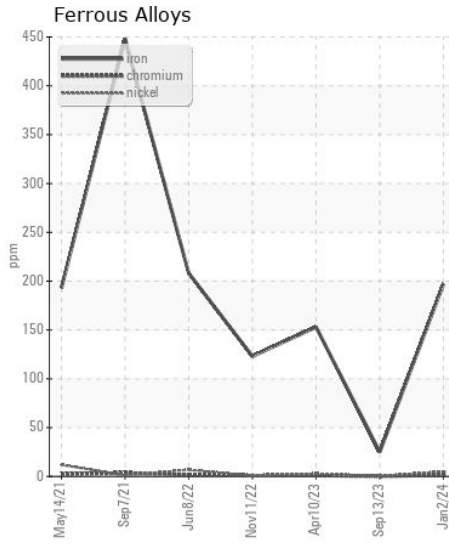
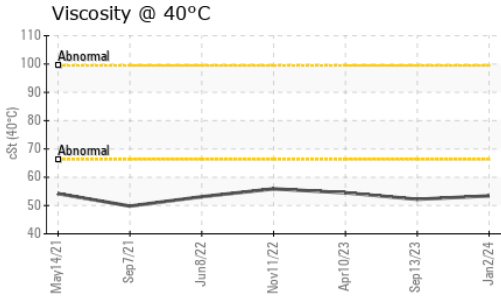
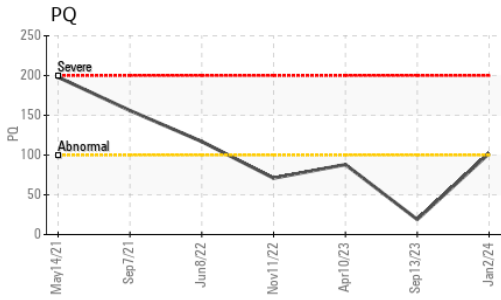
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	12	3	11
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	4	3
Boron	ppm	ASTM D5185m		0	2	6
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		9	1	9
Magnesium	ppm	ASTM D5185m		99	102	96
Calcium	ppm	ASTM D5185m		3260	3605	3445
Phosphorus	ppm	ASTM D5185m		991	1068	1000
Zinc	ppm	ASTM D5185m		1318	1285	1249
Sulfur	ppm	ASTM D5185m		3733	4478	4167
Visc @ 40°C	cSt	ASTM D445		53.4	52.2	54.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0193181 **Received** : 12 Jan 2024
Lab Number : 06059460 **Diagnosed** : 15 Jan 2024
Unique Number : 10830842 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)