



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXCKF697088
Component
Front Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0194881	JR0187132	JR0157869
Sample Date		Client Info		31 Jan 2024	15 Oct 2023	28 Apr 2023
Machine Age	hrs	Client Info		6439	6228	5725
Oil Age	hrs	Client Info		0	0	516
Filter Age	hrs	Client Info		0	0	516
Oil Changed		Client Info		N/A	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		122	180	176
Iron	ppm	ASTM D5185m	>500	360	575	▲ 536
Chromium	ppm	ASTM D5185m	>10	<1	2	1
Nickel	ppm	ASTM D5185m	>10	1	3	3
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	2
Lead	ppm	ASTM D5185m	>25	5	0	0
Copper	ppm	ASTM D5185m	>100	75	202	189
Tin	ppm	ASTM D5185m	>10	2	6	6
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

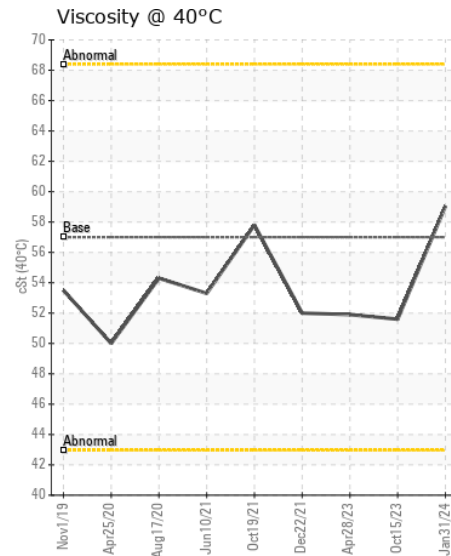
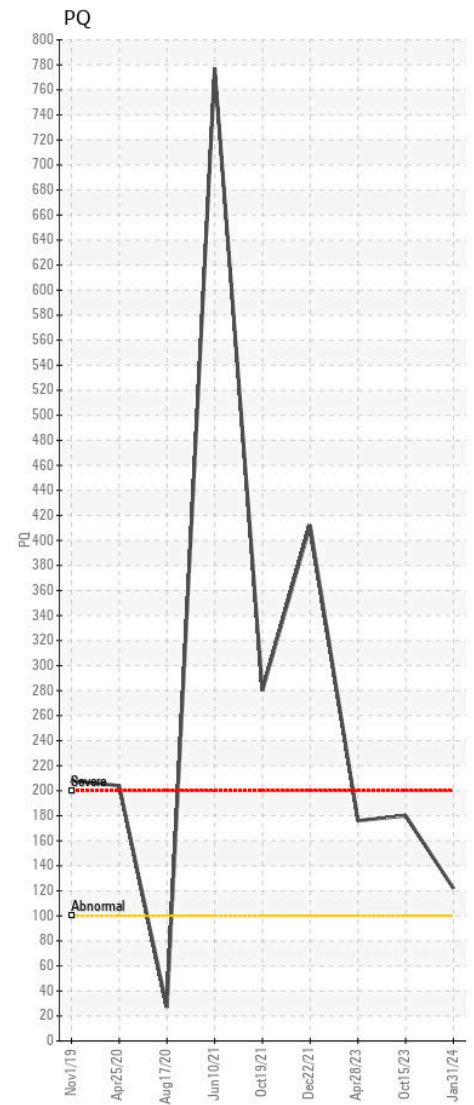
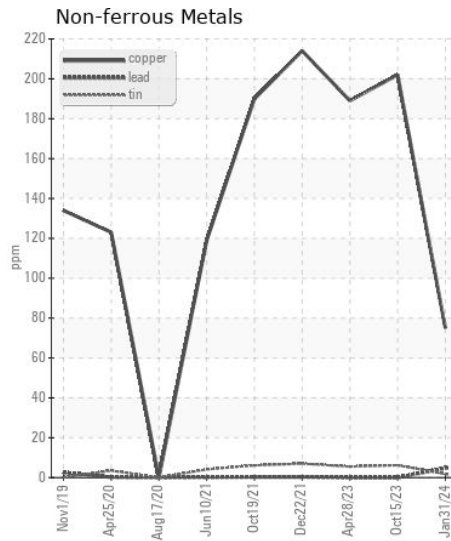
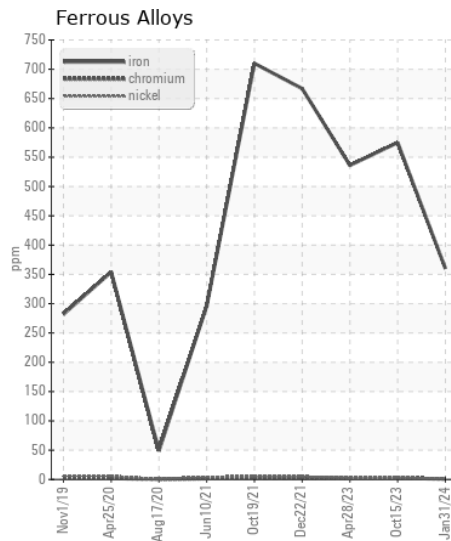
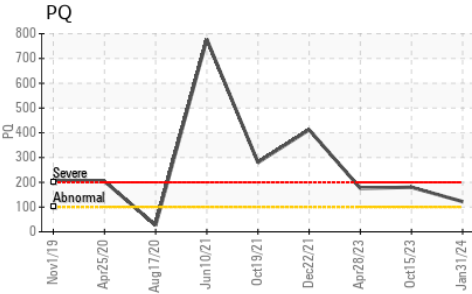
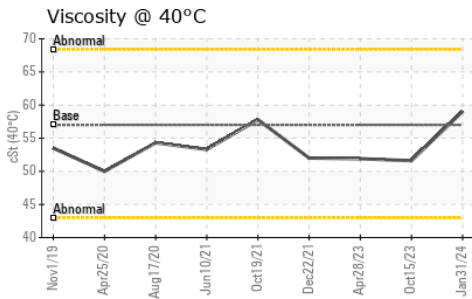
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	8	13	12
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	MODER
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		0	2	<1
Boron	ppm	ASTM D5185m	6	28	6	5
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	26	<1	2
Manganese	ppm	ASTM D5185m		4	8	8
Magnesium	ppm	ASTM D5185m	145	157	89	104
Calcium	ppm	ASTM D5185m	3570	3163	3261	3564
Phosphorus	ppm	ASTM D5185m	1290	978	955	1091
Zinc	ppm	ASTM D5185m	1640	1198	1257	1386
Sulfur	ppm	ASTM D5185m		3693	3533	4029
Visc @ 40°C	cSt	ASTM D445	57.0	59.04	51.6	51.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0194881 **Received** : 01 Feb 2024
Lab Number : 06077180 **Diagnosed** : 06 Feb 2024
Unique Number : 10859271 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

JRE - GREENSBORO
 411 SOUTH REGIONAL ROAD
 GREENSBORO, NC
 US 27409
 Contact: JUSTIN WILLIAMS
 justin.williams@jamesriverequipment.com
 T: (336)668-2762
 F: (336)665-9556

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)