



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXLMF710338

Component
Rear Differential

Fluid
JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Bearing and/or bushing wear is indicated. All other component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

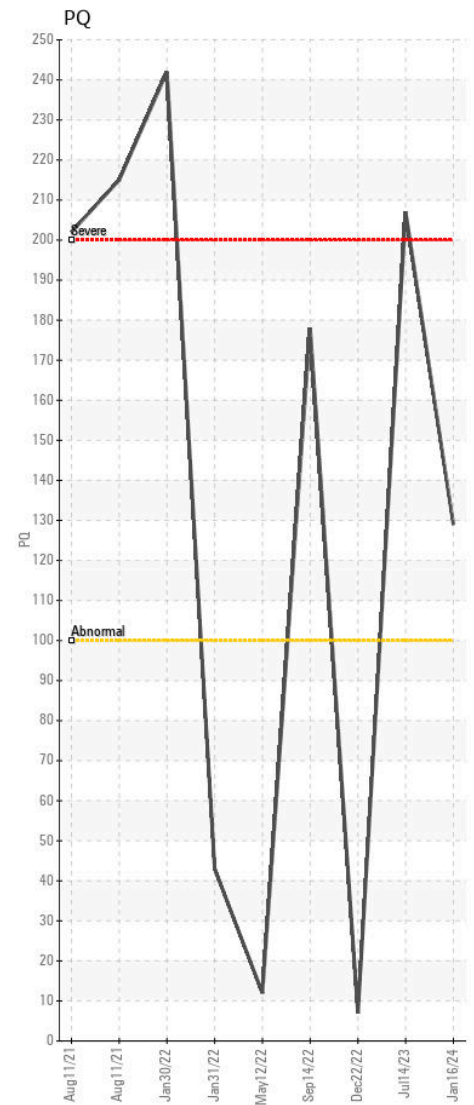
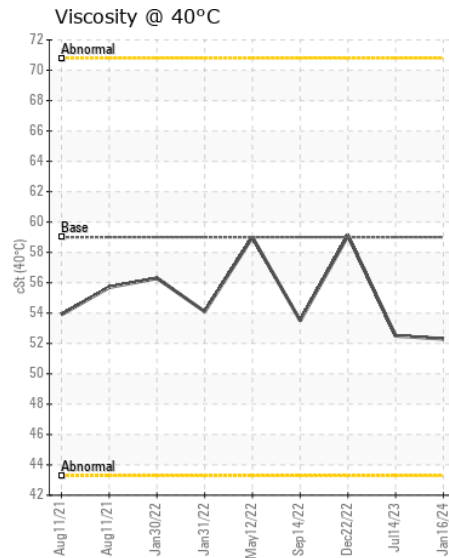
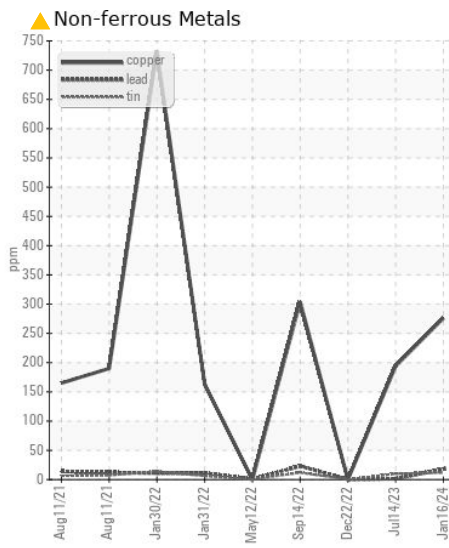
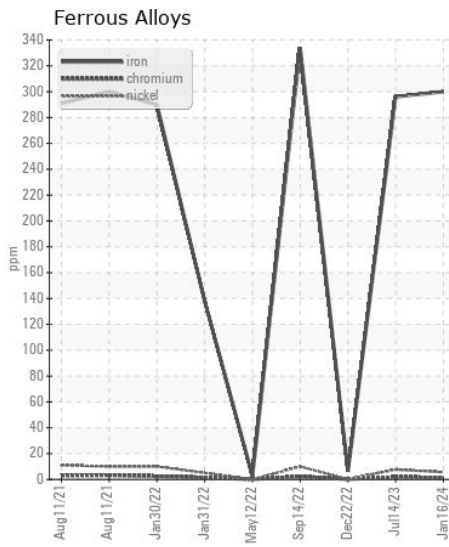
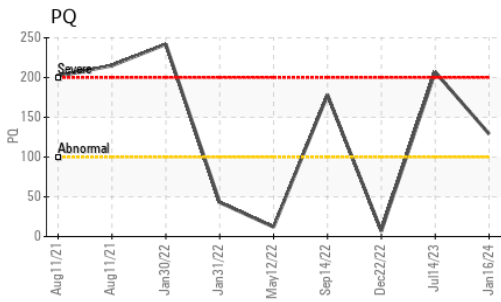
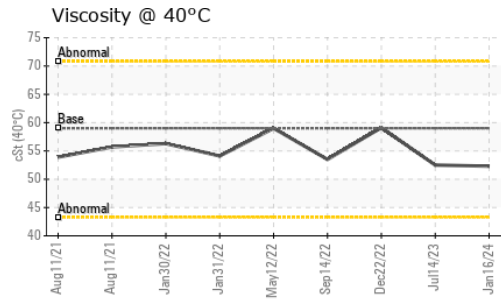
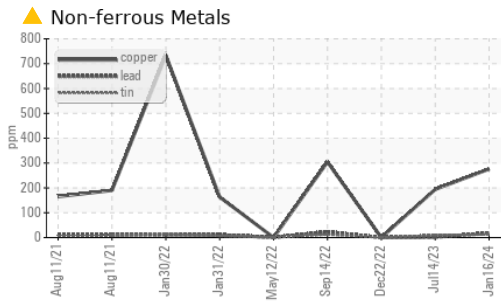
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0198392	JR0171092	JR0143263
Sample Date		Client Info		16 Jan 2024	14 Jul 2023	22 Dec 2022
Machine Age	hrs	Client Info		3758	3119	2447
Oil Age	hrs	Client Info		2692	2725	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	N/A
Filter Changed		Client Info		Not Changed	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

PQ		ASTM D8184		129	207	7
Iron	ppm	ASTM D5185m	>500	300	296	6
Chromium	ppm	ASTM D5185m	>10	1	2	<1
Nickel	ppm	ASTM D5185m	>10	6	8	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	4	1
Lead	ppm	ASTM D5185m	>25	18	1	0
Copper	ppm	ASTM D5185m	>100	▲ 276	▲ 194	0
Tin	ppm	ASTM D5185m	>10	▲ 12	10	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	14	14	6
Potassium	ppm	ASTM D5185m	>20	<1	1	1
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

Sodium	ppm	ASTM D5185m		6	9	0
Boron	ppm	ASTM D5185m		12	18	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		12	18	<1
Magnesium	ppm	ASTM D5185m		98	89	95
Calcium	ppm	ASTM D5185m		3510	3754	3405
Phosphorus	ppm	ASTM D5185m		1093	1108	979
Zinc	ppm	ASTM D5185m		1347	1326	1190
Sulfur	ppm	ASTM D5185m		3765	4412	4563
Visc @ 40°C	cSt	ASTM D445	59	52.3	52.5	59.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0198392 **Received** : 18 Jan 2024
Lab Number : 06064527 **Diagnosed** : 21 Jan 2024
Unique Number : 10835909 **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)