



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[05W47824]
 Machine Id
JOHN DEERE 310E 1DW310EXHNF715994
 Component
Rear Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0225384	JR0211186	JR0196186
Sample Date		Client Info		26 Jun 2024	16 Apr 2024	15 Dec 2023
Machine Age	hrs	Client Info		2936	2479	1952
Oil Age	hrs	Client Info		984	527	972
Filter Age	hrs	Client Info		984	0	972
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		59	69	135
Iron	ppm	ASTM D5185m	>500	119	108	234
Chromium	ppm	ASTM D5185m	>10	<1	2	2
Nickel	ppm	ASTM D5185m	>10	5	5	9
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	1	3
Lead	ppm	ASTM D5185m	>25	10	7	▲ 20
Copper	ppm	ASTM D5185m	>100	82	56	140
Tin	ppm	ASTM D5185m	>10	4	4	7
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

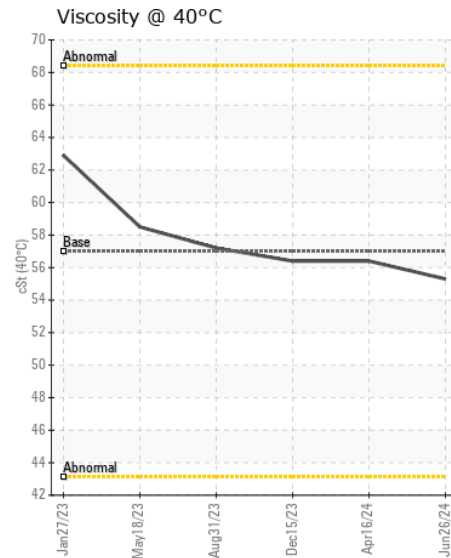
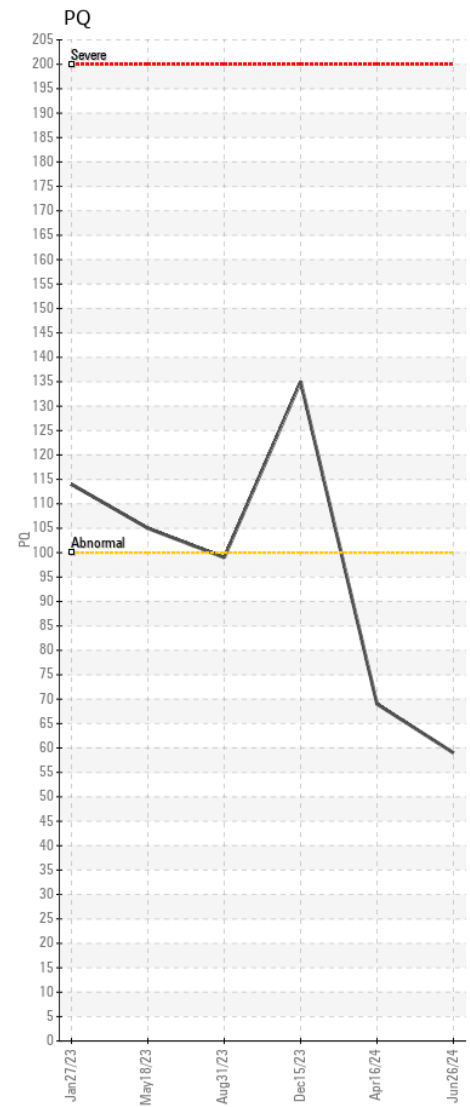
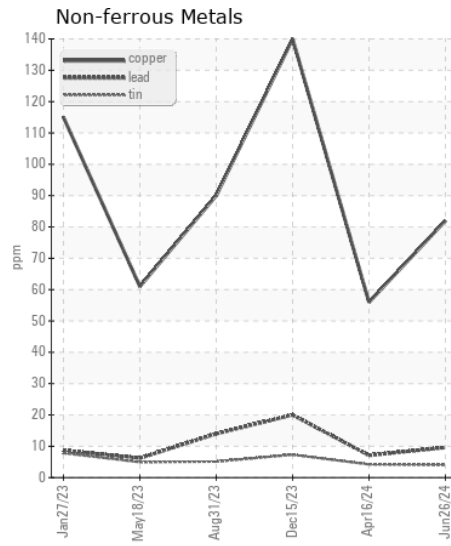
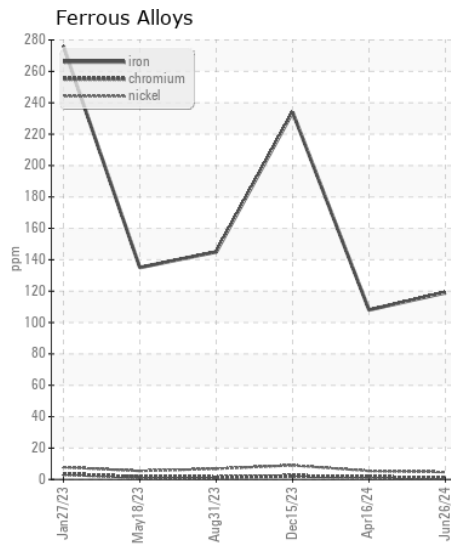
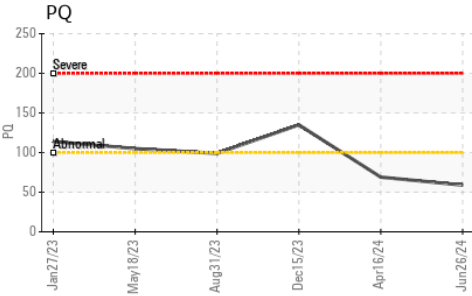
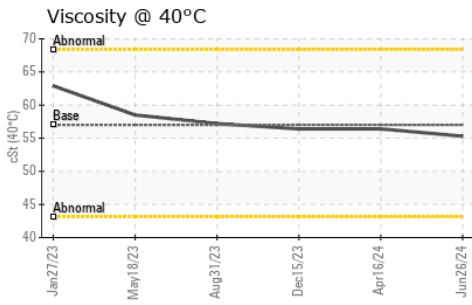
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	7	10	11
Potassium	ppm	ASTM D5185m	>20	2	2	<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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	3	11
Boron	ppm	ASTM D5185m	6	18	21	51
Barium	ppm	ASTM D5185m	0	1	1	2
Molybdenum	ppm	ASTM D5185m	0	4	6	4
Manganese	ppm	ASTM D5185m		10	12	25
Magnesium	ppm	ASTM D5185m	145	96	97	83
Calcium	ppm	ASTM D5185m	3570	3209	3279	3533
Phosphorus	ppm	ASTM D5185m	1290	999	1055	1129
Zinc	ppm	ASTM D5185m	1640	1192	1176	1347
Sulfur	ppm	ASTM D5185m		3617	4259	3716
Visc @ 40°C	cSt	ASTM D445	57.0	55.3	56.4	56.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0225384

Lab Number : 06222546

Unique Number : 11100743

Test Package : CONST (Additional Tests: PQ)

Received : 27 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 28 Jun 2024 - Wes Davis

B & S SITE DEVELOPMENT

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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)