



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXEMF711881
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224472	JR0132549	JR0132057
Sample Date		Client Info		03 Jul 2024	07 Oct 2022	21 Jun 2022
Machine Age	hrs	Client Info		3057	1453	1453
Oil Age	hrs	Client Info		0	1453	1453
Filter Age	hrs	Client Info		0	1453	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	18	9	19
Iron	ppm	ASTM D5185m	>71	2	3	4
Chromium	ppm	ASTM D5185m	>11	2	2	1
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	<1	<1	<1
Lead	ppm	ASTM D5185m	>13	0	0	0
Copper	ppm	ASTM D5185m	>21	0	1	1
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

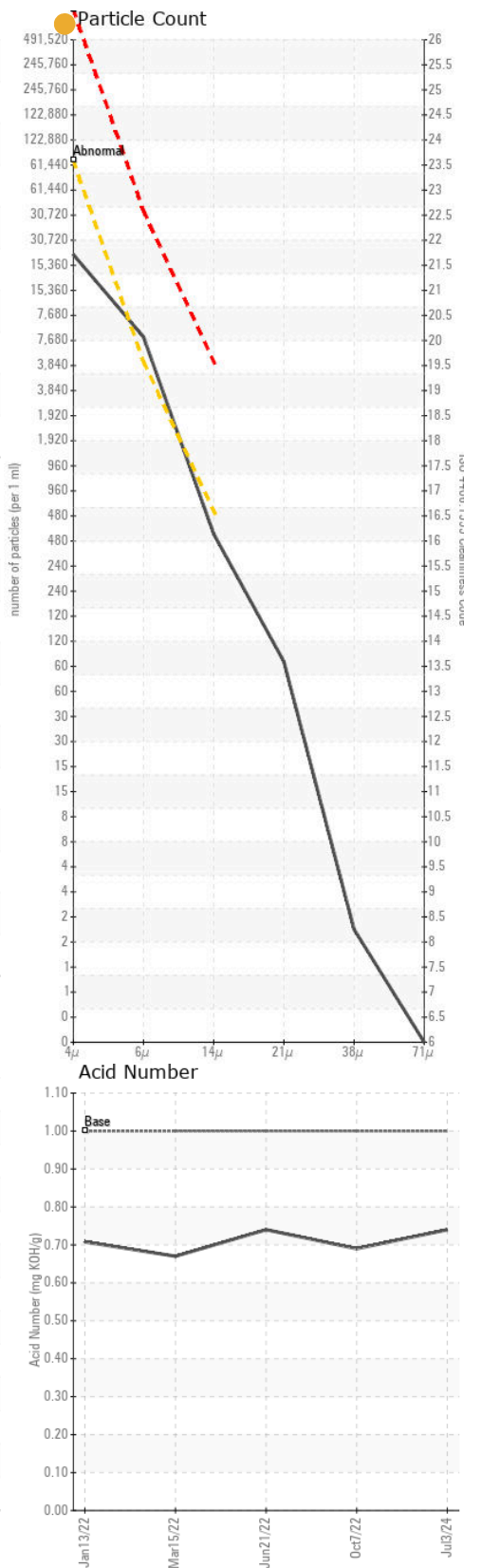
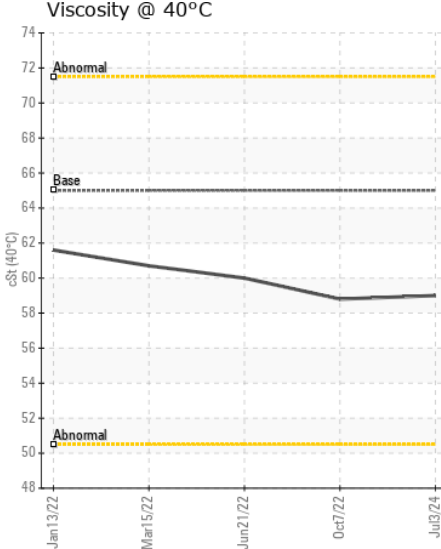
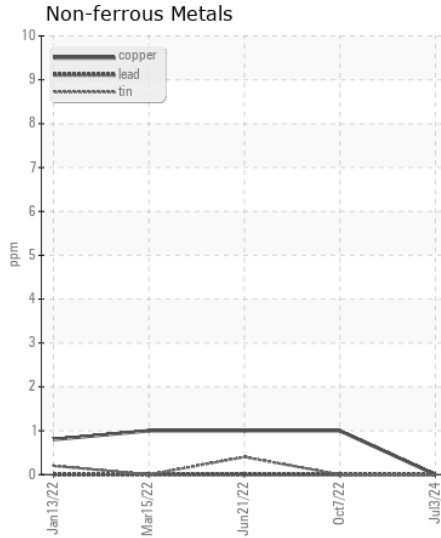
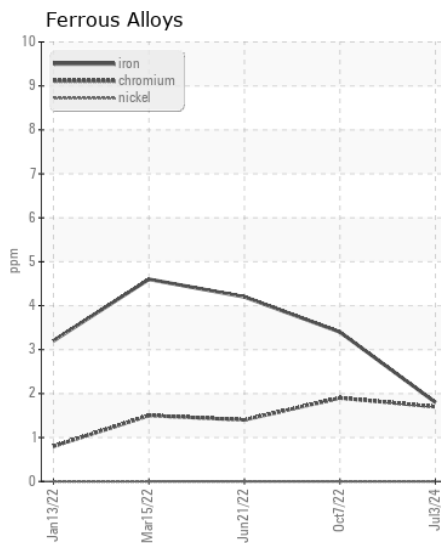
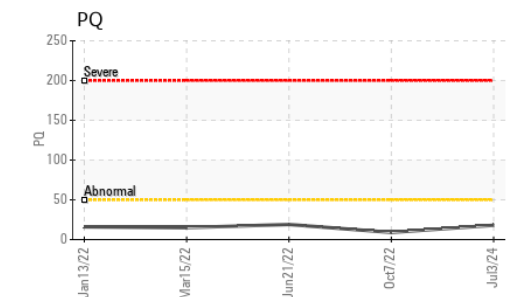
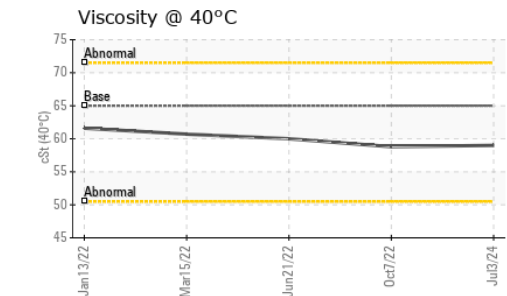
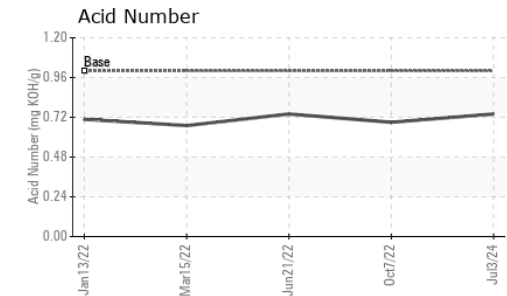
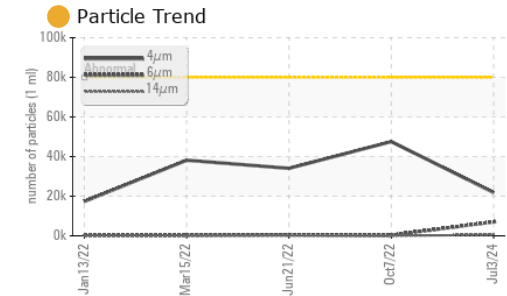
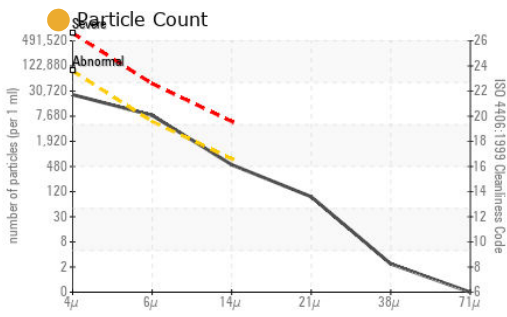
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>24	2	0	2
Potassium	ppm	ASTM D5185m	>20	5	1	3
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	21845	47565	34072
Particles >6µm		ASTM D7647	>5000	7013	274	584
Particles >14µm		ASTM D7647	>640	465	24	43
Particles >21µm		ASTM D7647	>160	80	6	9
Particles >38µm		ASTM D7647	>40	2	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	22/20/16	23/15/12	22/16/13
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	>0.075	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	2	2	2
Boron	ppm	ASTM D5185m		<1	0	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	1	1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		5	3	4
Calcium	ppm	ASTM D5185m	87	277	290	215
Phosphorus	ppm	ASTM D5185m	727	669	623	605
Zinc	ppm	ASTM D5185m	900	920	842	829
Sulfur	ppm	ASTM D5185m	1500	2112	2069	1706
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.74	0.69	0.74
Visc @ 40°C	cSt	ASTM D445	65	59.0	58.8	60.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224472 **Received** : 05 Jul 2024
Lab Number : 06228430 **Tested** : 08 Jul 2024
Unique Number : 11111923 **Diagnosed** : 08 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

L2 CONSTRUCTION
 1950 BELLWOOD RD
 RICHMOND, VA
 US 23237
 Contact: DANIEL LIPFORD
 daniell@l2constructionservices.com
 T: (804)275-2428
 F:

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)