



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E-II 1DW410ELJMF710562

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (46 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0175623	JR0152569	JR0139144
Sample Date		Client Info		11 Jul 2023	09 Nov 2022	15 Aug 2022
Machine Age	hrs	Client Info		2986	3243	2060
Oil Age	hrs	Client Info		3243	200	0
Filter Age	hrs	Client Info		0	200	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D8184	>50	12	5	12
Chromium	ppm	ASTM D5185m	>71	5	7	4
Nickel	ppm	ASTM D5185m	>11	<1	<1	<1
Titanium	ppm	ASTM D5185m	>6	0	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>11	0	0	<1
Lead	ppm	ASTM D5185m	>13	2	<1	1
Copper	ppm	ASTM D5185m	>21	<1	<1	0
Tin	ppm	ASTM D5185m	>5	5	5	7
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	<1	0	0
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

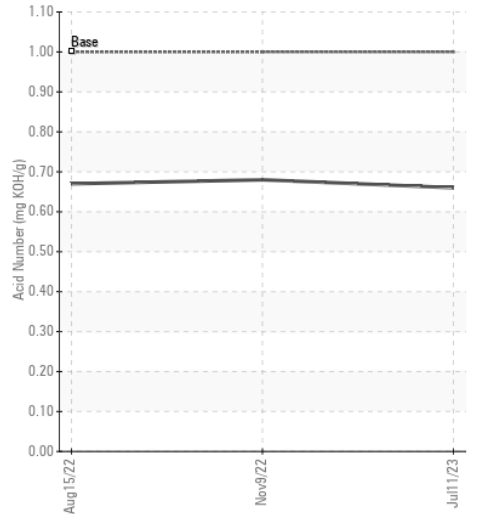
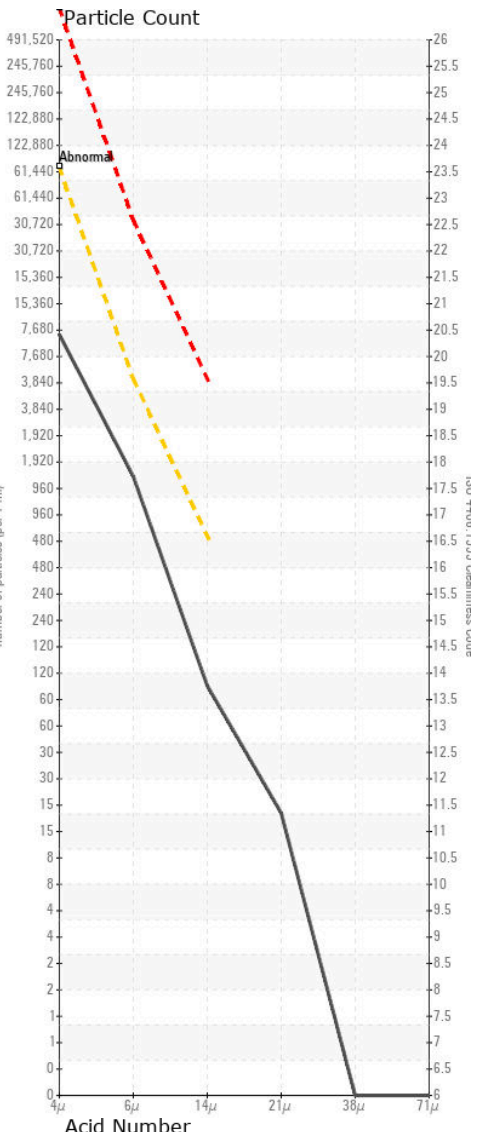
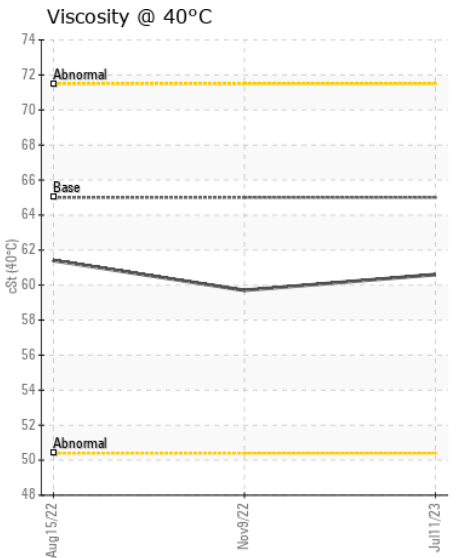
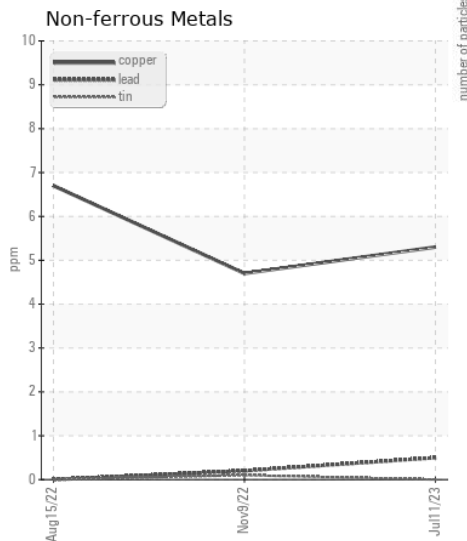
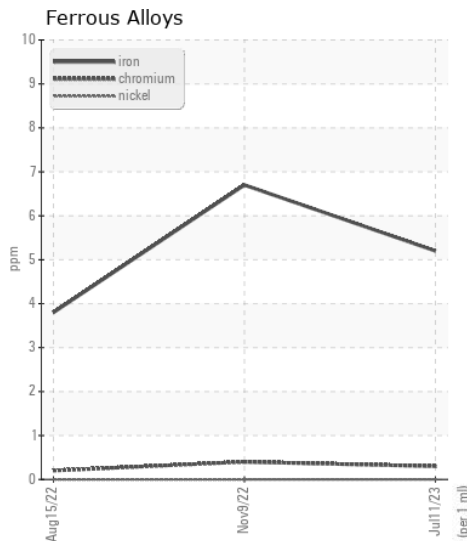
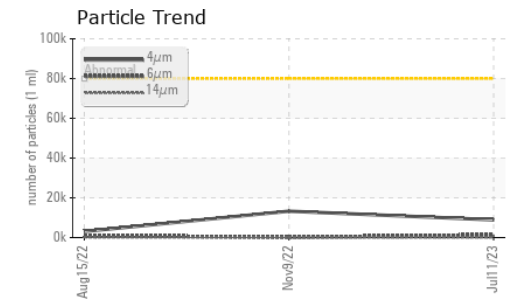
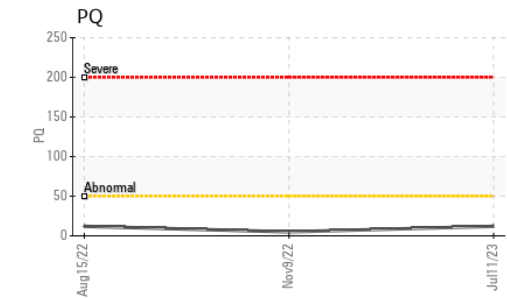
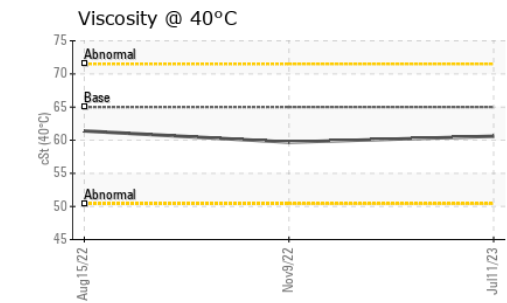
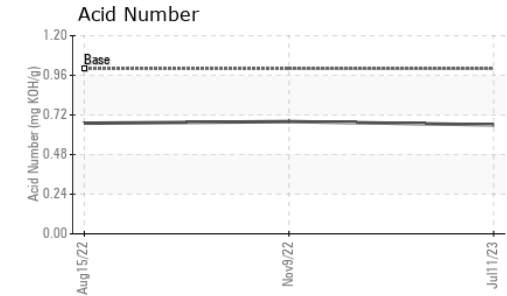
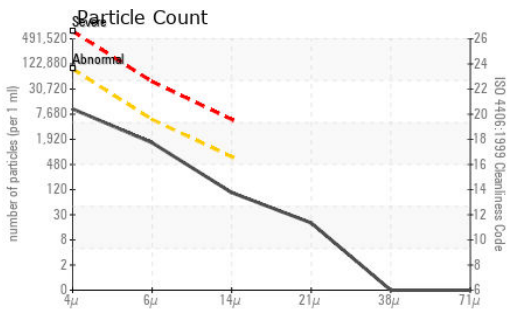
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>24	2	1	1
Potassium	ppm	ASTM D5185m	>20	7	5	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	8915	13278	3077
Particles >6µm		ASTM D7647	>5000	1392	144	1045
Particles >14µm		ASTM D7647	>640	90	19	97
Particles >21µm		ASTM D7647	>160	17	6	14
Particles >38µm		ASTM D7647	>40	0	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	20/18/14	21/14/11	19/17/14
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 oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	3	0	2
Boron	ppm	ASTM D5185m		4	9	6
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		8	10	5
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		27	30	16
Calcium	ppm	ASTM D5185m	87	133	175	123
Phosphorus	ppm	ASTM D5185m	727	590	645	658
Zinc	ppm	ASTM D5185m	900	826	885	882
Sulfur	ppm	ASTM D5185m	1500	1962	2076	1820
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.66	0.68	0.67
Visc @ 40°C	cSt	ASTM D445	65	60.6	59.7	61.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0175623 **Received** : 13 Jul 2023
Lab Number : 05897329 **Tested** : 14 Jul 2023
Unique Number : 10553139 **Diagnosed** : 14 Jul 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - CHARLOTTE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269
 Contact: CHARLOTTE SHOP
 myoung@jamesriverequipment.com
 T: (704)597-0211
 F: (704)596-6198

Certificate L2367
 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)