



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 410E 1DW410ETJFF689563
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0217634	JR0170297	JR0137920
Sample Date		Client Info		09 May 2024	31 Jul 2023	05 Apr 2023
Machine Age	hrs	Client Info		5027	4560	4506
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	20	14	11
Iron	ppm	ASTM D5185m	>71	5	13	12
Chromium	ppm	ASTM D5185m	>11	<1	1	1
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>11	2	3	1
Lead	ppm	ASTM D5185m	>13	0	0	0
Copper	ppm	ASTM D5185m	>21	2	0	1
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

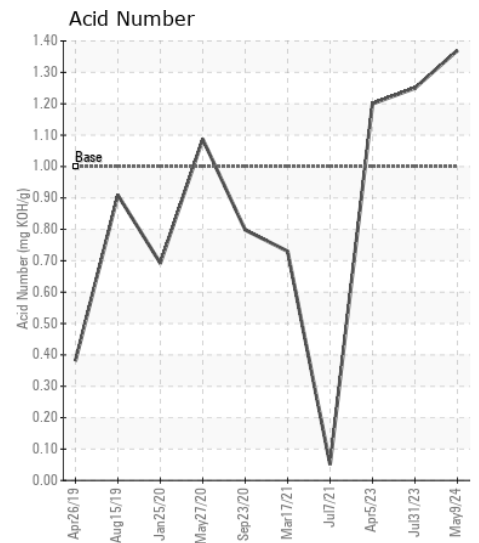
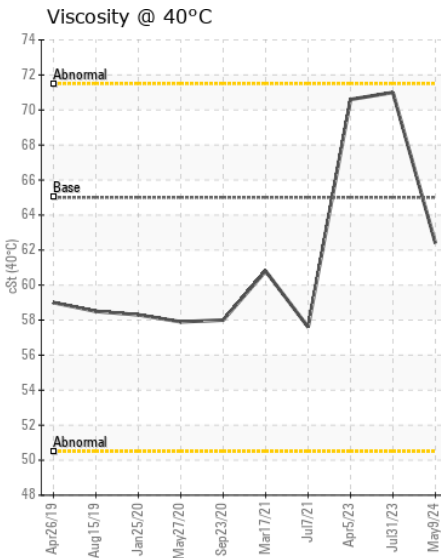
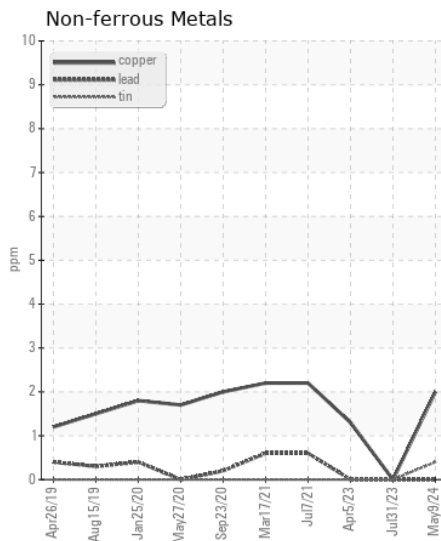
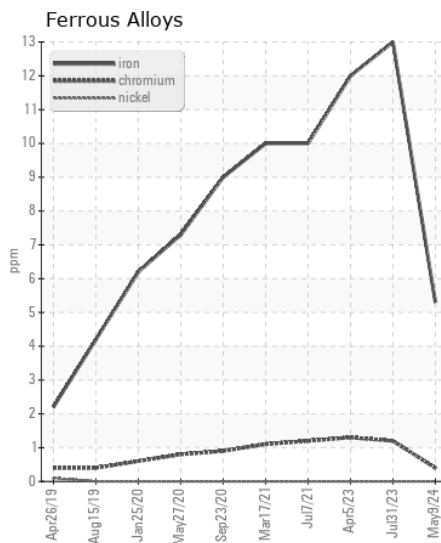
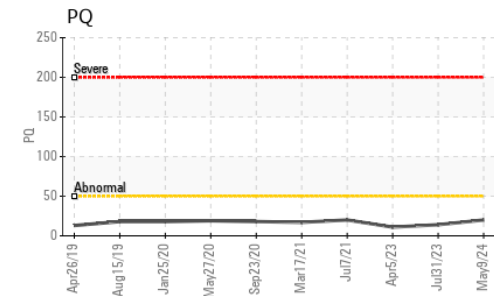
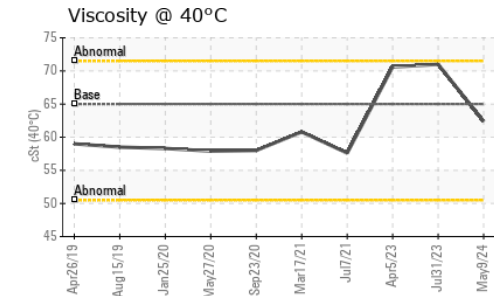
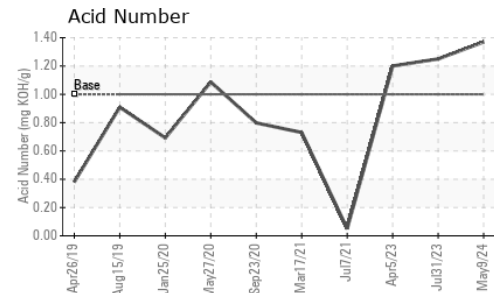
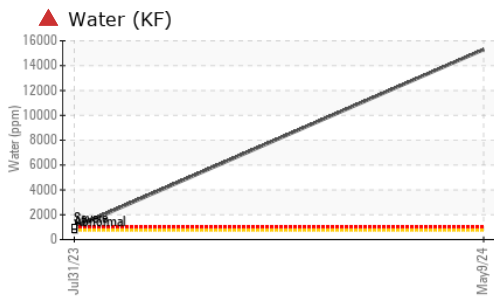
Appearance is milky. There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>24	3	6	6
Potassium	ppm	ASTM D5185m	>20	2	0	2
Water	%	ASTM D6304	>0.075	▲ 1.53	▲ 0.096	---
ppm Water	ppm	ASTM D6304	>750	▲ 15300	▲ 960	---
Particles >4µm		ASTM D7647	>80000	---	16037	3332
Particles >6µm		ASTM D7647	>5000	---	1303	32
Particles >14µm		ASTM D7647	>640	---	74	4
Particles >21µm		ASTM D7647	>160	---	14	1
Particles >38µm		ASTM D7647	>40	---	0	0
Particles >71µm		ASTM D7647	>10	---	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	---	21/18/13	19/12/9
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	● MILKY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	▲ 0.2%	0.2%	NEG

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<1	0	2
Boron	ppm	ASTM D5185m		38	156	139
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		25	124	121
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		148	413	366
Calcium	ppm	ASTM D5185m	87	212	778	768
Phosphorus	ppm	ASTM D5185m	727	795	784	742
Zinc	ppm	ASTM D5185m	900	947	999	955
Sulfur	ppm	ASTM D5185m	1500	2682	2913	2523
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	1.37	1.25	1.20
Visc @ 40°C	cSt	ASTM D445	65	62.4	71.0	70.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217634 **Received** : 10 May 2024
Lab Number : 06175343 **Tested** : 14 May 2024
Unique Number : 11021396 **Diagnosed** : 14 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PQ)

JRE - MANASSAS PARK
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 US 20111
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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)