



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W46735]
 Machine Id
JOHN DEERE 410E 1DW410ETJFF689563
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218407	JR0214320	JR0217634
Sample Date		Client Info		29 May 2024	15 May 2024	09 May 2024
Machine Age	hrs	Client Info		5227	5209	5027
Oil Age	hrs	Client Info		1	1	0
Filter Age	hrs	Client Info		1	1	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	13	15	20
Iron	ppm	ASTM D5185m	>71	1	<1	5
Chromium	ppm	ASTM D5185m	>11	<1	0	<1
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>11	<1	0	2
Lead	ppm	ASTM D5185m	>13	<1	0	0
Copper	ppm	ASTM D5185m	>21	<1	<1	2
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

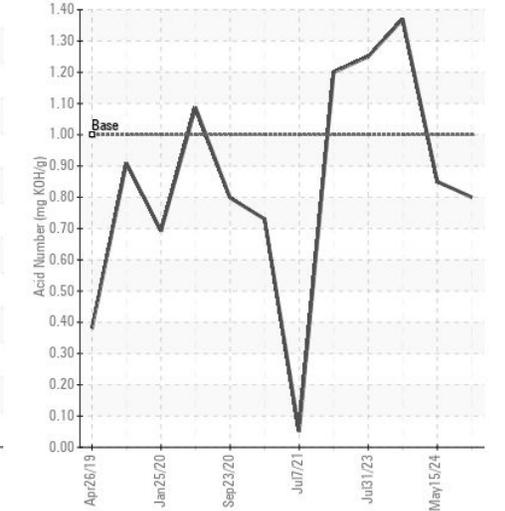
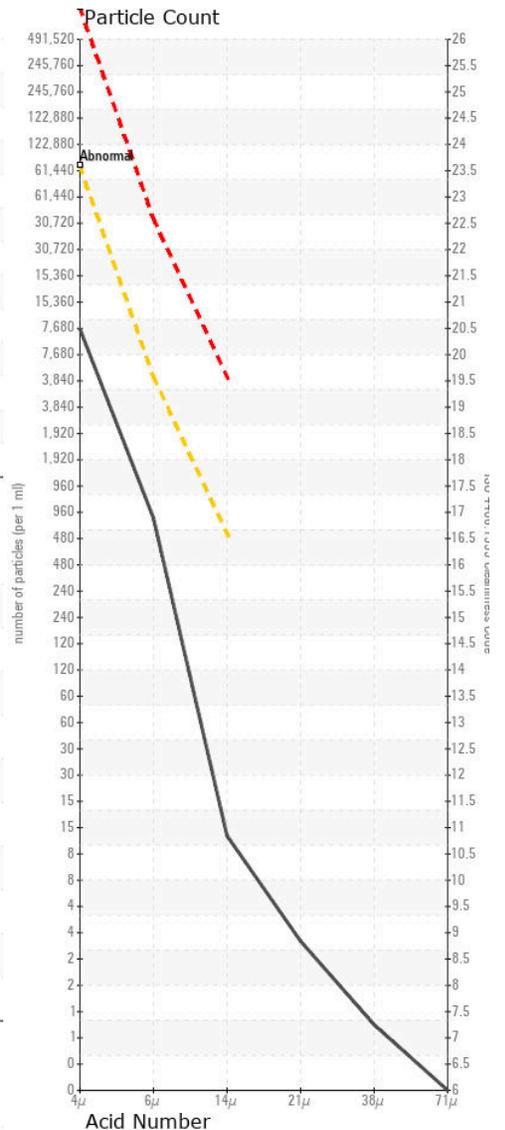
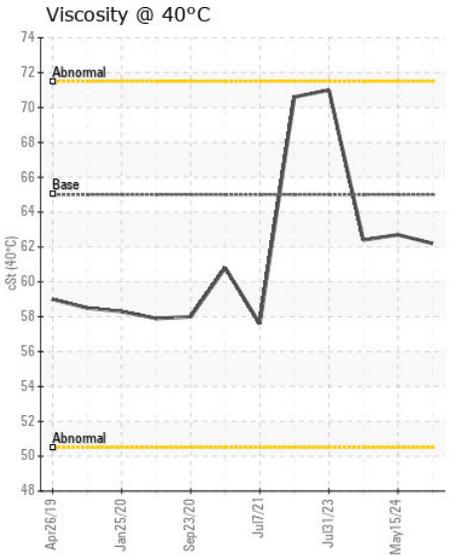
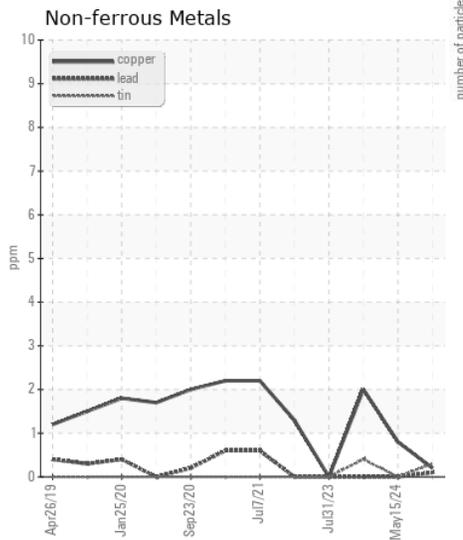
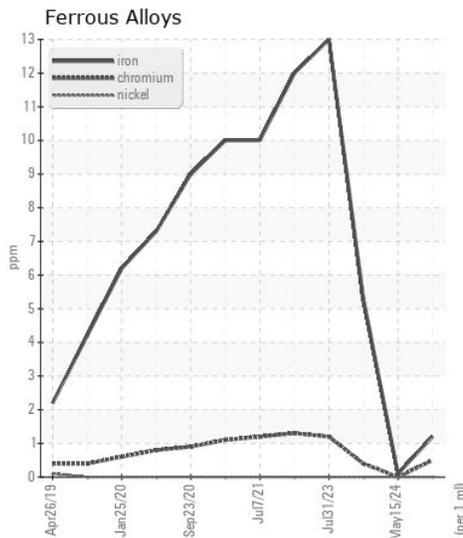
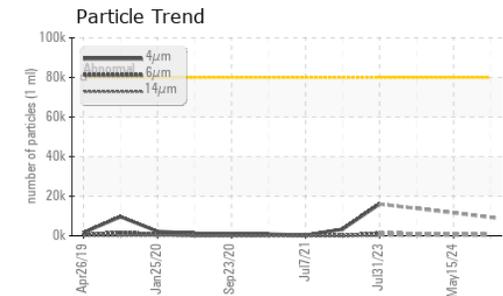
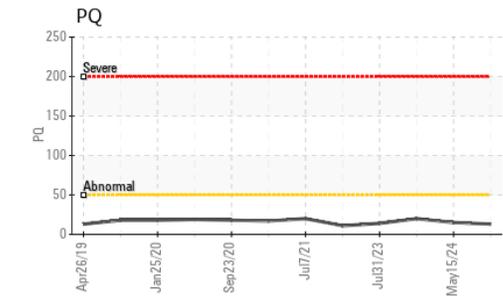
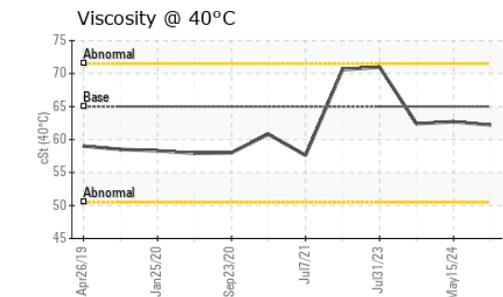
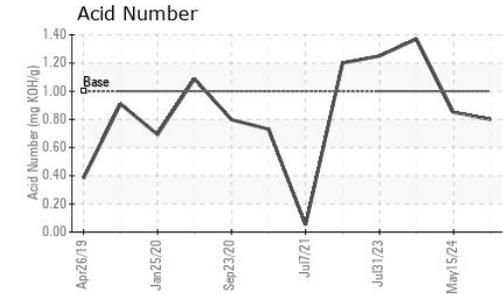
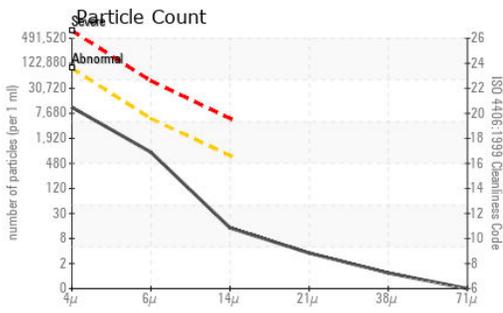
No evidence of water present in the oil. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	2	<1	3
Potassium	ppm	ASTM D5185m	>20	1	0	2
Water	%	ASTM D6304	>0.075	NEG	▲ 0.182	▲ 1.53
ppm Water	ppm	ASTM D6304	>750	---	▲ 1820	▲ 15300
Particles >4µm		ASTM D7647	>80000	9371	---	---
Particles >6µm		ASTM D7647	>5000	780	---	---
Particles >14µm		ASTM D7647	>640	12	---	---
Particles >21µm		ASTM D7647	>160	3	---	---
Particles >38µm		ASTM D7647	>40	1	---	---
Particles >71µm		ASTM D7647	>10	0	---	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	20/17/11	---	---
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	● HAZY	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	▲ 0.2%	▲ 0.2%

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	0	1	<1
Boron	ppm	ASTM D5185m		<1	0	38
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	25
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		14	14	148
Calcium	ppm	ASTM D5185m	87	185	173	212
Phosphorus	ppm	ASTM D5185m	727	991	655	795
Zinc	ppm	ASTM D5185m	900	1293	816	947
Sulfur	ppm	ASTM D5185m	1500	2651	1870	2682
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.80	0.85	1.37
Visc @ 40°C	cSt	ASTM D445	65	62.2	62.7	62.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218407 **Received** : 30 May 2024
Lab Number : 06195318 **Tested** : 03 Jun 2024
Unique Number : 11057441 **Diagnosed** : 03 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

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)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
 dvest@jamesriverequipment.com
 T: (703)631-8500
 F: (703)631-4715