



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 450J T0450JX156983
Component
Hydraulic System
Fluid
{not provided} (25 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0194480	JR0158125	JR0100341
Sample Date		Client Info		10 Jan 2024	09 Mar 2023	22 Oct 2021
Machine Age	hrs	Client Info		6379	6286	5799
Oil Age	hrs	Client Info		0	0	18
Filter Age	hrs	Client Info		0	0	18
Oil Changed		Client Info		N/A	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The copper level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>50	17	13	18
Iron	ppm	ASTM D5185m	>23	7	3	5
Chromium	ppm	ASTM D5185m	>9	2	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	4	2	5
Lead	ppm	ASTM D5185m	>28	0	0	1
Copper	ppm	ASTM D5185m	>51	▲ 62	<1	8
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

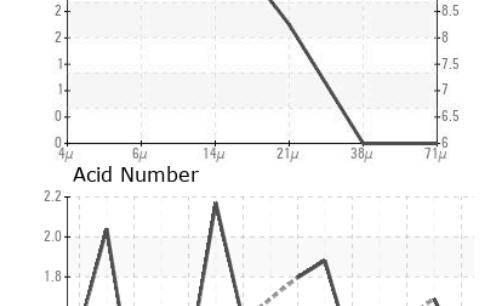
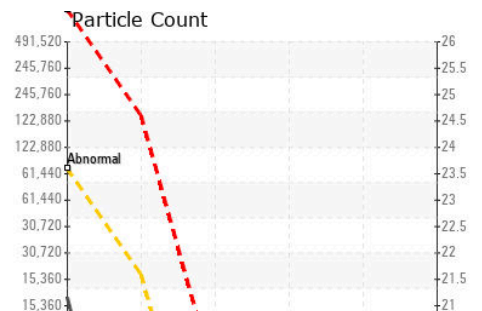
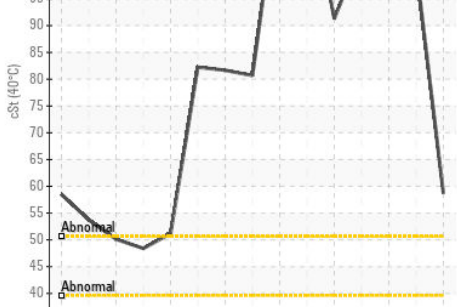
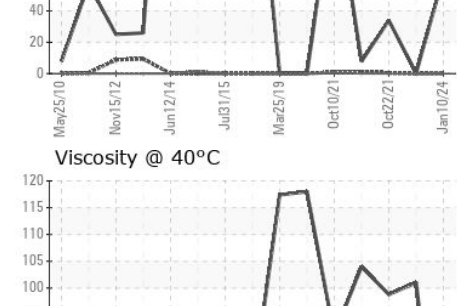
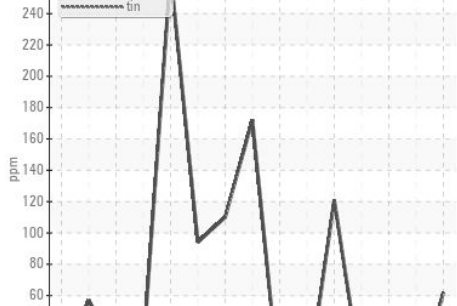
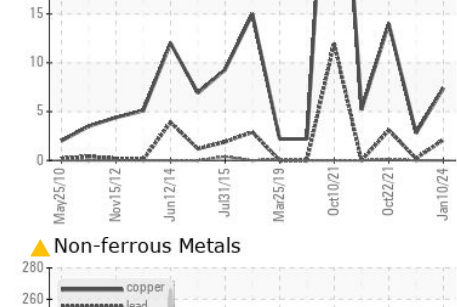
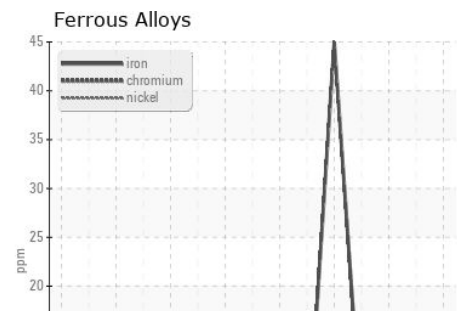
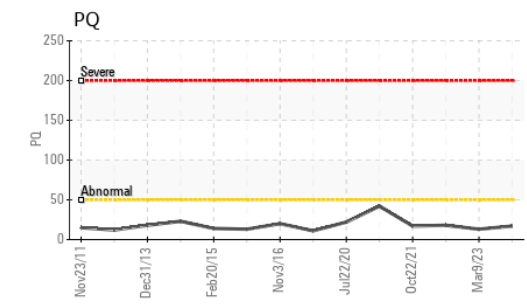
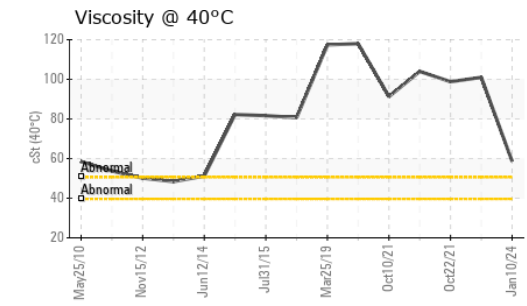
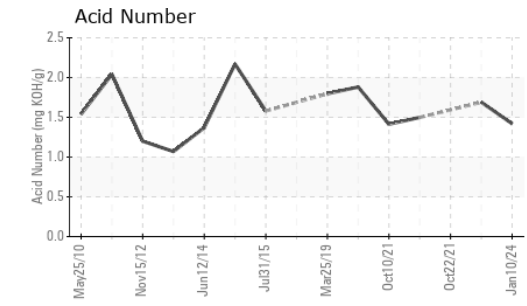
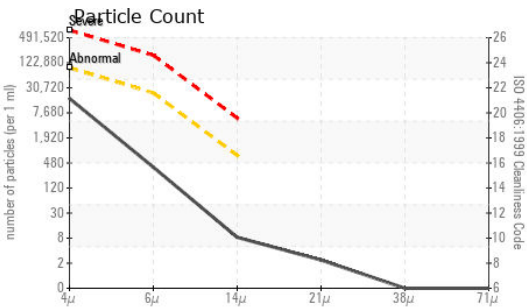
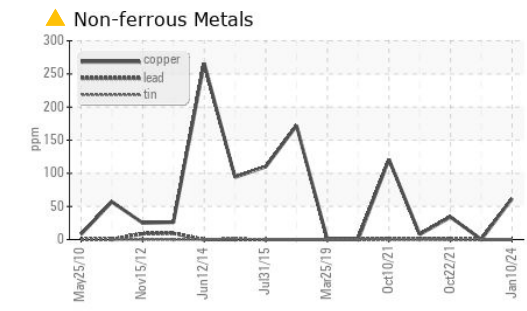
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	12	7	7
Potassium	ppm	ASTM D5185m	>20	3	1	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	14809	12779	---
Particles >6µm		ASTM D7647	>20000	334	1936	---
Particles >14µm		ASTM D7647	>640	7	103	---
Particles >21µm		ASTM D7647	>160	2	26	---
Particles >38µm		ASTM D7647	>40	0	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/16/10	21/18/14	---
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	0	1	2
Boron	ppm	ASTM D5185m		76	224	264
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		61	198	234
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		291	701	775
Calcium	ppm	ASTM D5185m		3547	1550	1585
Phosphorus	ppm	ASTM D5185m		1264	825	960
Zinc	ppm	ASTM D5185m		1449	1023	1033
Sulfur	ppm	ASTM D5185m		4900	3572	2798
Acid Number (AN)	mg KOH/g	ASTM D8045		1.42	1.69	---
Visc @ 40°C	cSt	ASTM D445		58.7	101	98.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0194480 **Received** : 11 Jan 2024
Lab Number : 06057983 **Diagnosed** : 12 Jan 2024
Unique Number : 10829365 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

HENNINGS CONSTRUCTION
 10011 NC HWY 67
 EAST BEND, NC
 US 27018
 Contact: SERVICE MANAGER

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)

T: (336)677-2444
F: